

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9172 - L2 Version 2
Chandra X-Ray Center

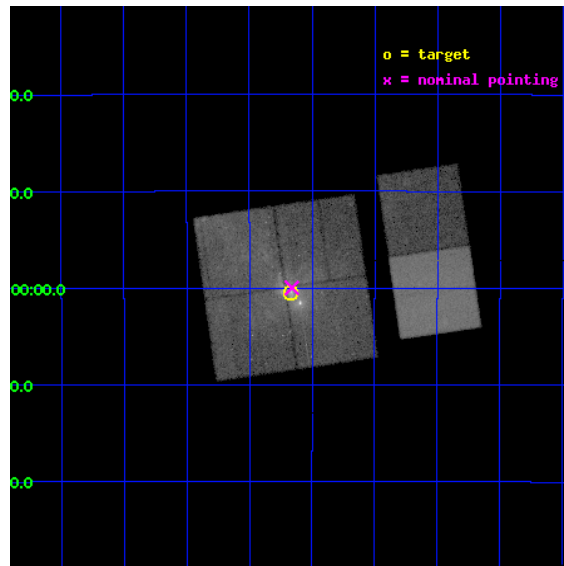
L2 Processing Date : May 15 2012

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1 Front

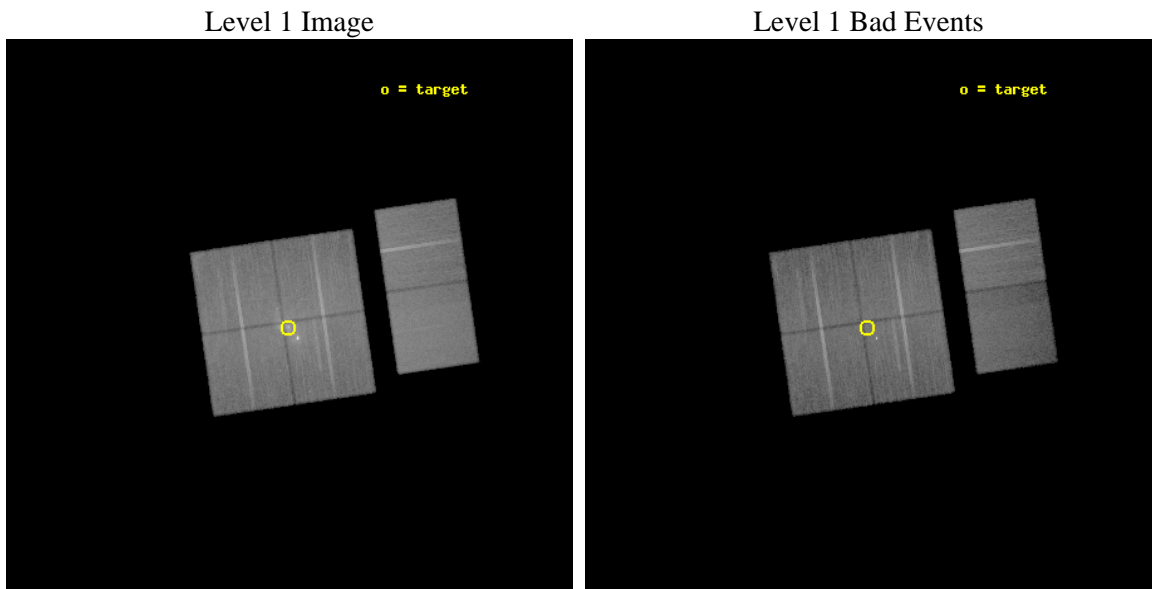
| | | |
|----------|--|---|
| seq_num | 701614 | Sequence number |
| obs_id | 9172 | Observation id |
| title | Simultaneous Chandra, VLT, and APEX Observations of Sgr A* | Proposa |
| observer | Prof Farhad Yusef-Zadeh | Principal investigator |
| object | Sgr A* | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 266.416667 | Observer's specified target RA [deg] |
| dec_targ | -29.007806 | Observer's specified target Dec [deg] |
| ra_nom | 266.41520973463 | Nominal RA [deg] |
| dec_nom | -28.999811008009 | Nominal Dec [deg] |
| roll_nom | 81.707983891254 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 27788.799896538 | Sum of GTIs [s] |
| livetime | 27436.921379842 | Livetime [s] |
| ontime0 | 27785.558896244 | Sum of GTIs [s] |
| ontime1 | 27788.799896538 | Sum of GTIs [s] |
| ontime2 | 27785.558896244 | Sum of GTIs [s] |
| ontime3 | 27788.799896538 | Sum of GTIs [s] |
| ontime6 | 27788.799896538 | Sum of GTIs [s] |
| ontime7 | 27788.799896538 | Sum of GTIs [s] |
| l2events | 338894 | Number of level 2 events |



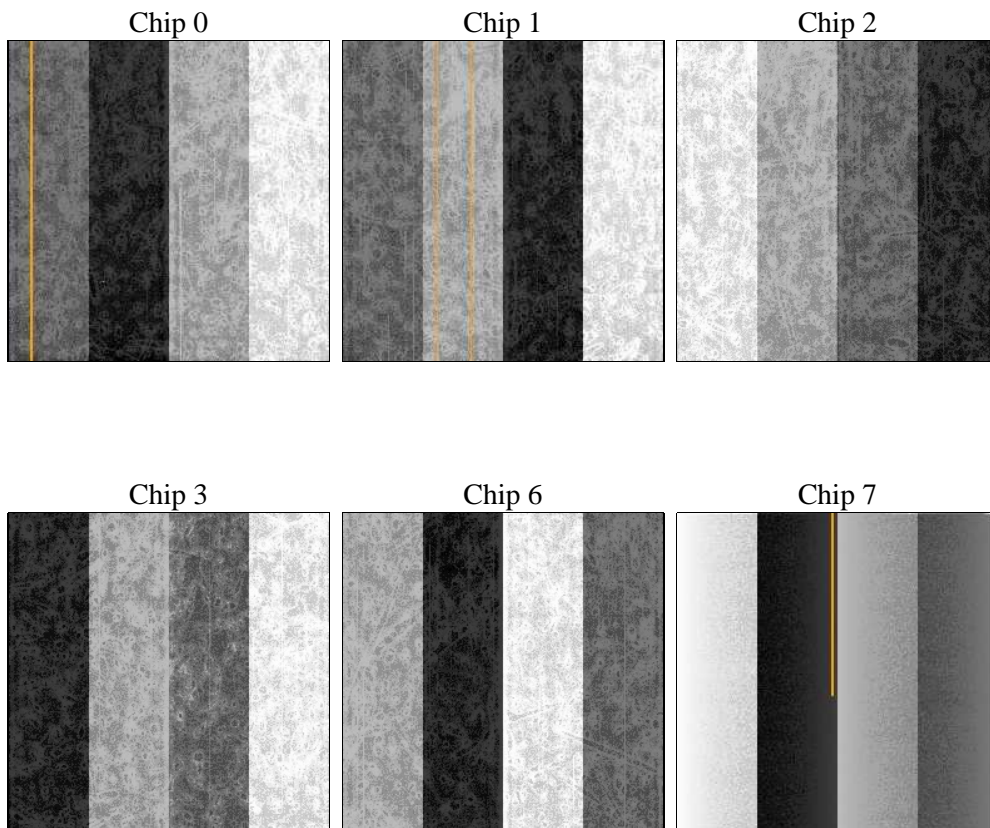
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 27746.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 27788.799896538 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime0 | 27785.558896244 | Sum of GTIs [s] |
| date | 2012-05-14T23:28:14 | Date and time of file creation | ontime1 | 27788.799896538 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 27785.558896244 | Sum of GTIs [s] |
| | | | ontime3 | 27788.799896538 | Sum of GTIs [s] |
| | | | ontime6 | 27788.799896538 | Sum of GTIs [s] |
| | | | ontime7 | 27788.799896538 | Sum of GTIs [s] |
| | | | l1events | 1477695 | Number of level 1 events |

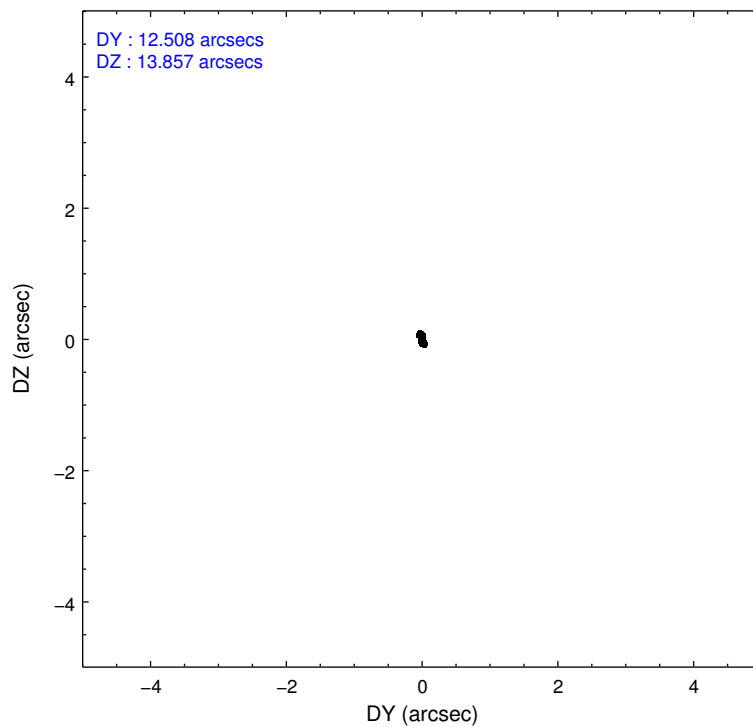
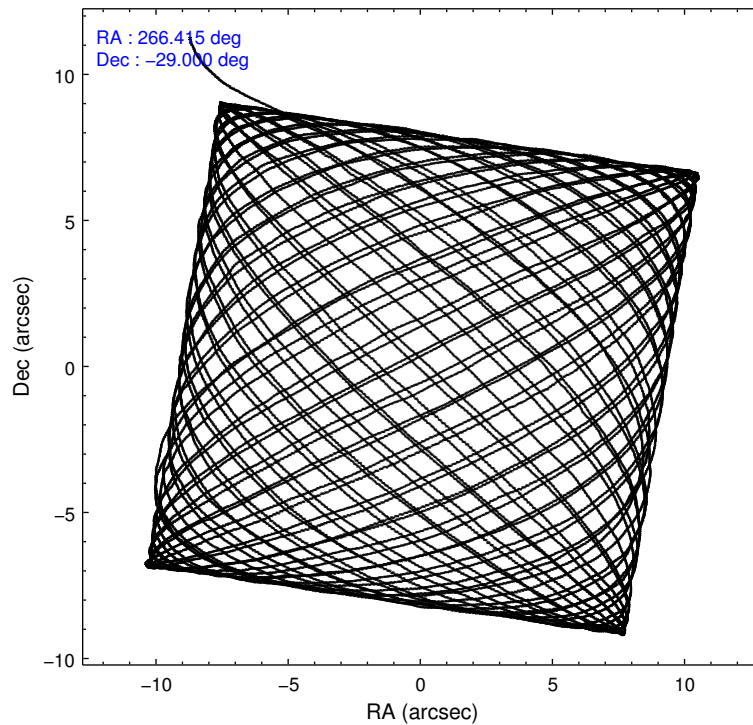
2.1.4 Events

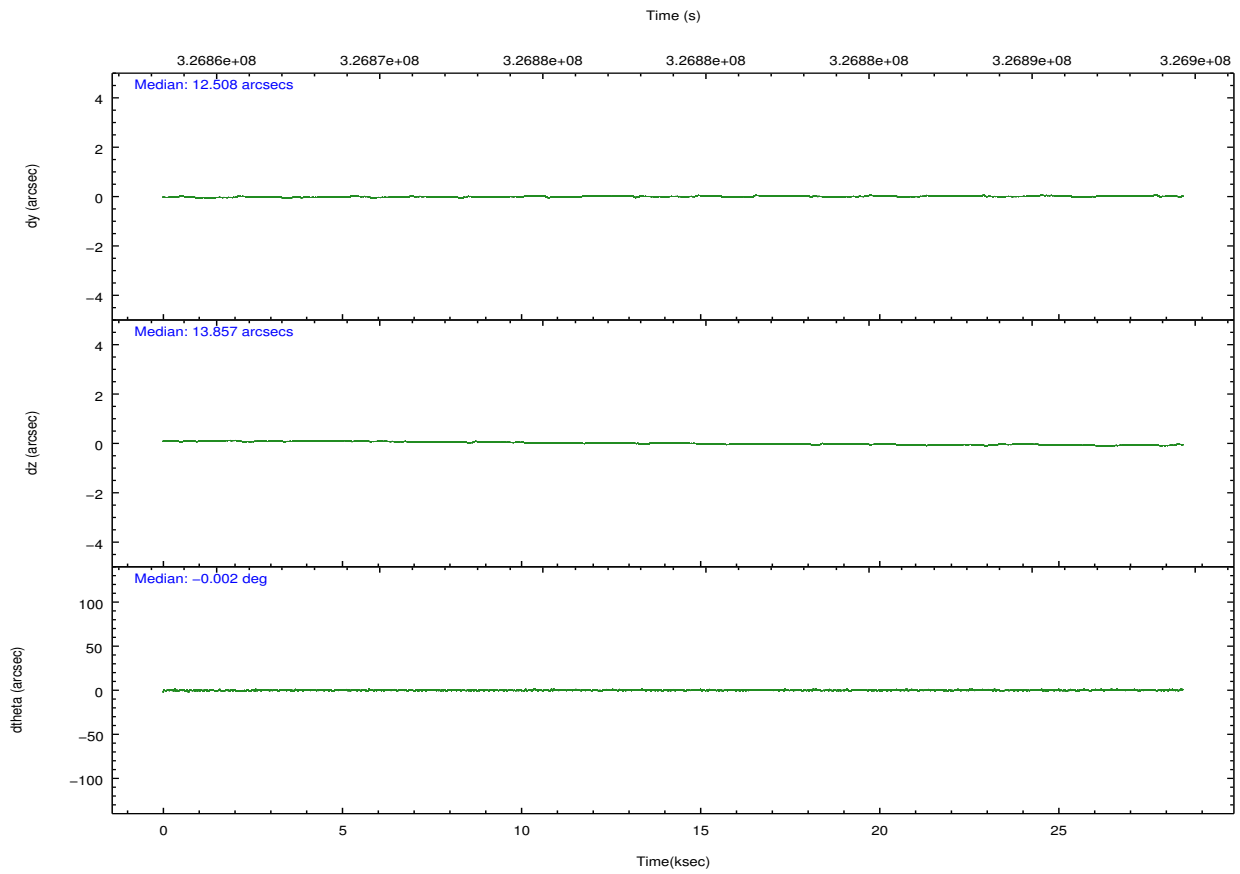
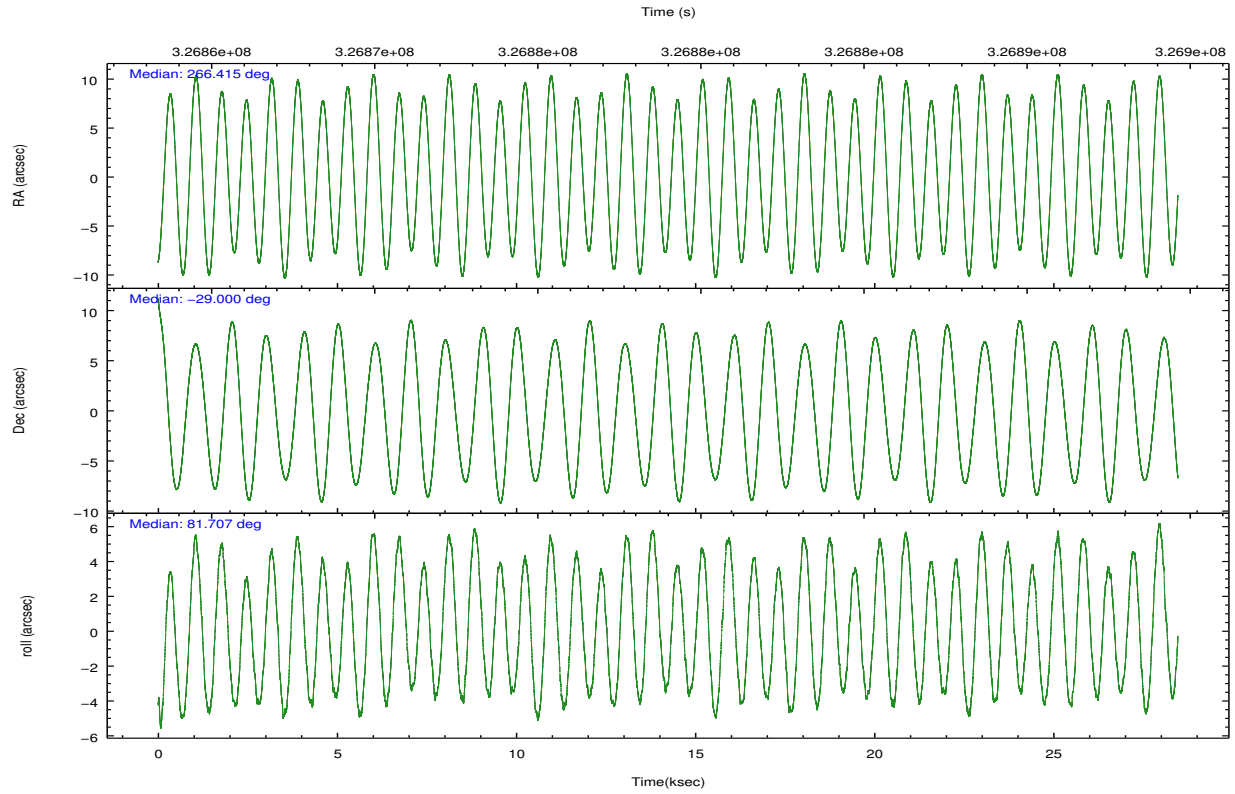
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 247343 | 228704 | 249776 | 262283 | 233831 | 255758 | grade 0 events | 35650 | 26373 | 22250 | 35928 | 11574 | 11716 |
| rejected events | 185365 | 178609 | 207120 | 197144 | 205659 | 135839 | | 14% | 11% | 8% | 13% | 4% | 4% |
| rejected % | 74% | 78% | 82% | 75% | 87% | 53% | grade 1 events | 311 | 228 | 233 | 1069 | 140 | 328 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 10761 | 9187 | 8184 | 11056 | 5838 | 24590 |
| | | | | | | | | 4% | 4% | 3% | 4% | 2% | 9% |
| | | | | | | | grade 3 events | 4288 | 3865 | 3225 | 4760 | 2723 | 11160 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 4% |
| | | | | | | | grade 4 events | 4244 | 3746 | 3400 | 4720 | 2627 | 11111 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 4% |
| | | | | | | | grade 5 events | 7939 | 8642 | 7584 | 10208 | 9302 | 26608 |
| | | | | | | | | 3% | 3% | 3% | 3% | 3% | 10% |
| | | | | | | | grade 6 events | 7047 | 6935 | 5601 | 8684 | 5417 | 61356 |
| | | | | | | | | 2% | 3% | 2% | 3% | 2% | 23% |
| | | | | | | | grade 7 events | 177103 | 169728 | 199299 | 185858 | 196210 | 108889 |
| | | | | | | | | 71% | 74% | 79% | 70% | 83% | 42% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | CCD I0 on | Y | Y |
| Observation mode | POINTING | POINTING | CCD I1 on | Y | Y |
| [deg] Pointing RA | 266.426972 | 266.4152097346268 | CCD I2 on | Y | Y |
| [deg] Pointing Dec | -29.025324 | -28.99981100800858 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 81.504999 | 81.7079838912541 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001439871863259334 | CCD S2 on | O2 | Y |
| [mm] SIM translation stage pos | -233.592463 | -233.5899487761303 | CCD S3 on | O1 | Y |
| [mm] SIM translation stage offset | 0 | -0.002504226799430853 | CCD S4 on | N | N |
| Phase constraints | Y | Y | CCD S5 on | N | N |
| [d] Phase period | 0.997270 | 0.997270 | Number of optional ACIS chips dropped | 0 | 0 |
| [d] Phase epoch (MJD) | 54587.160000 | 54587.160000 | On-chip summing requested | N | N |
| Phase start | 0.000000 | 0.000000 | Subarray requested | NONE | NONE |
| Phase end | 0.334000 | 0.334000 | Alternating exposures requested | N | N |
| Phase start error | 0.020000 | 0.020000 | [s] Primary exposure time | 0.000000 | 3.2 |
| Phase end error | 0.020000 | 0.020000 | | | |
| [s] Observation start time (MET) | 326865485.184000 | 326864206.41601 | | | |
| Observation start date | 2008-05-11T03:57:00 | 2008-05-11T03:36:46 | | | |
| [s] Observation end time (MET) | 326893231.184000 | 326893465.55494 | | | |
| Observation end date | 2008-05-11T11:39:26 | 2008-05-11T11:44:25 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





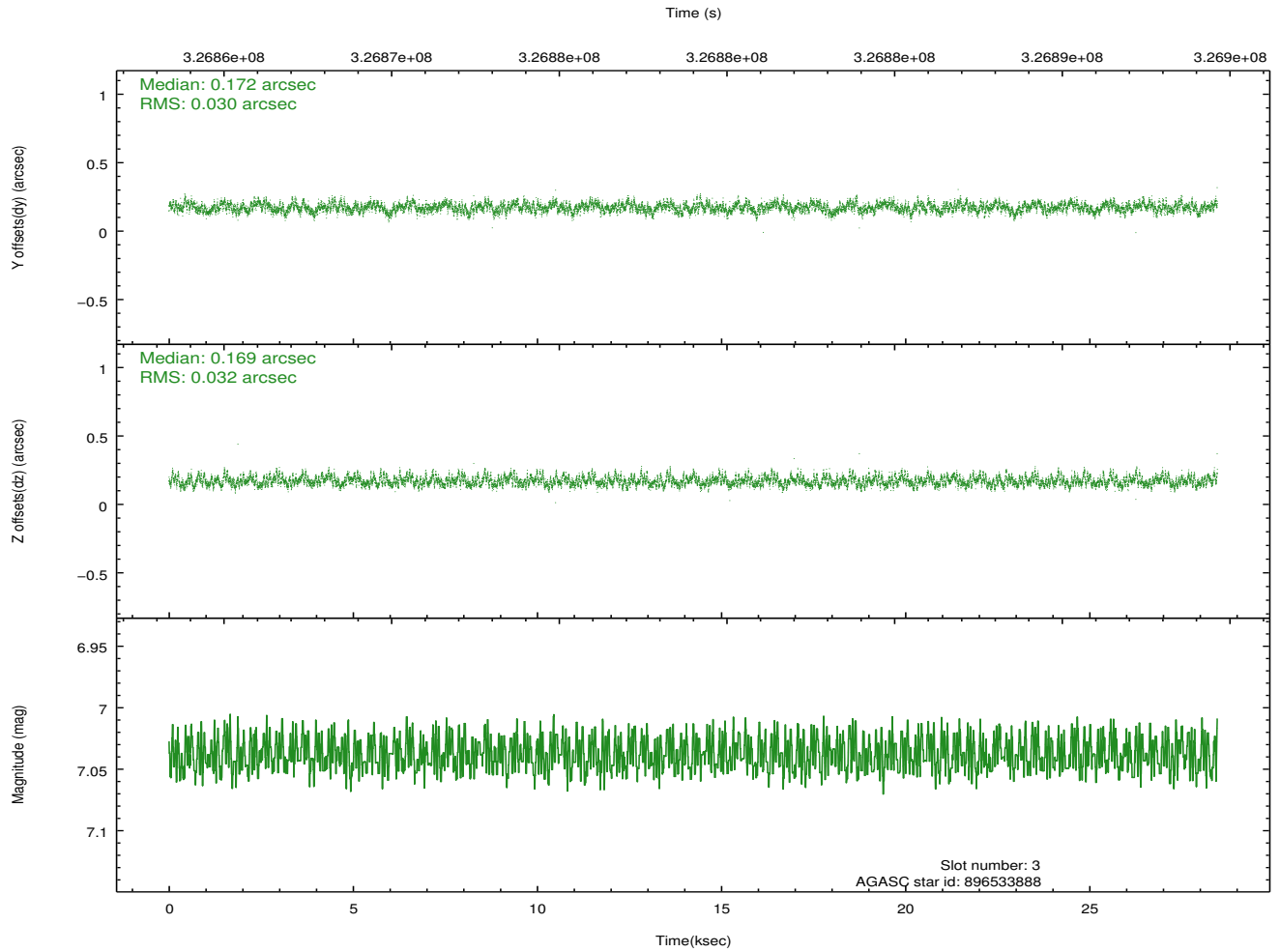
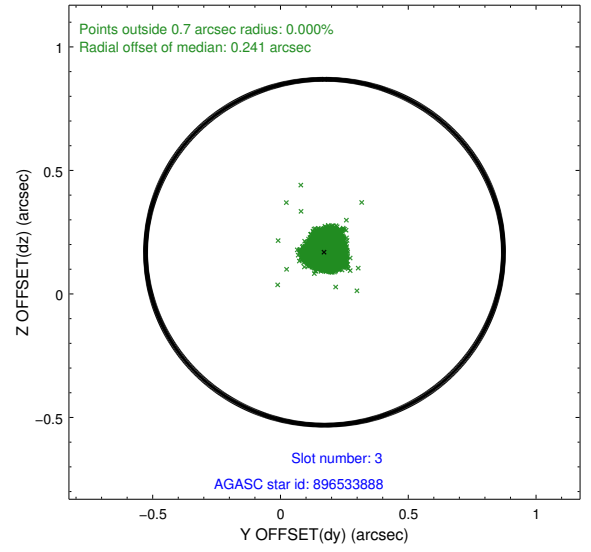
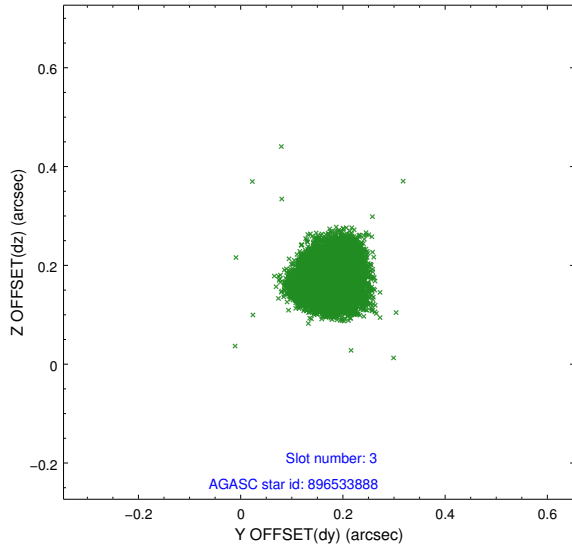
Slot Statistics

| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.03 | 6944 | 0.011 | 0.031 | 0.006 | 0.011 | 0.000000 | 0.000000 | 927.04 | -837.34 |
| 1 | FID | ACIS-I-5 | 7.02 | 6944 | -0.171 | 0.033 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1821.22 | 1060.08 |
| 2 | FID | ACIS-I-6 | 7.03 | 6942 | 0.069 | 0.007 | 0.007 | 0.012 | 0.000000 | 0.000000 | 392.52 | 1704.67 |
| 3 | GUIDE | 896533888 | 7.04 | 13888 | 0.172 | 0.169 | 0.047 | 0.075 | 266.666434 | -29.392757 | -1197.90 | -938.18 |
| 4 | GUIDE | 896534664 | 8.19 | 13885 | -0.385 | -0.070 | 0.059 | 0.098 | 266.405570 | -28.407461 | 2189.38 | 395.58 |
| 5 | GUIDE | 896537776 | 7.53 | 13889 | 0.330 | 0.181 | 0.049 | 0.076 | 266.655684 | -29.665673 | -2174.51 | -1048.07 |
| 6 | GUIDE | 896403224 | 8.28 | 13884 | 0.205 | -0.235 | 0.072 | 0.112 | 265.612825 | -29.438915 | -1858.67 | 2302.91 |
| 7 | GUIDE | 896538696 | 6.89 | 13888 | -0.329 | -0.048 | 0.041 | 0.066 | 266.298470 | -28.325572 | 2430.60 | 775.11 |

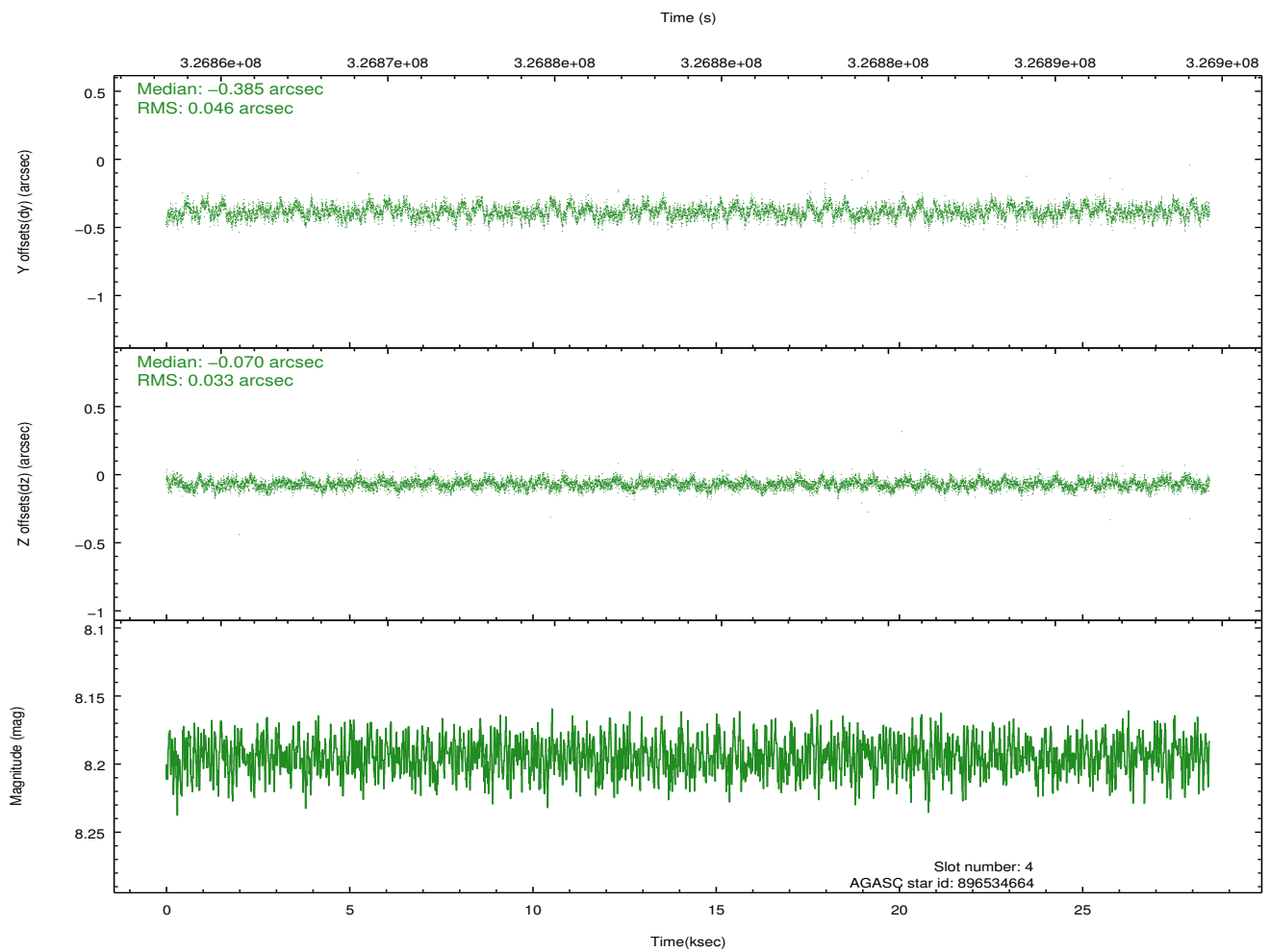
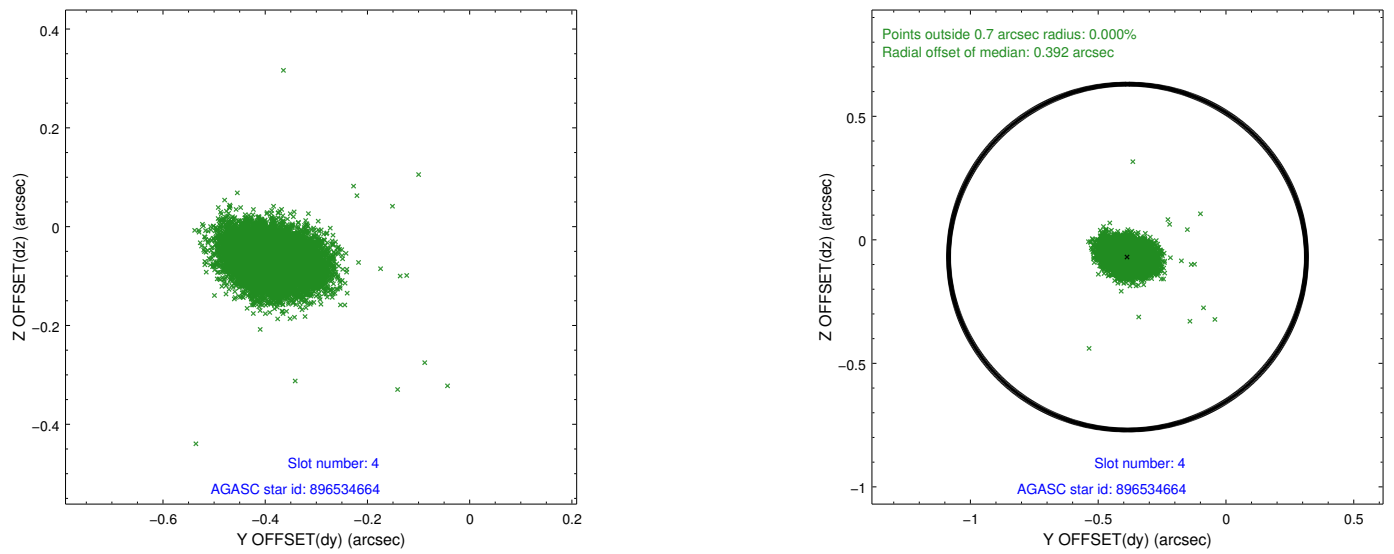
∞

2.4 Star Slots

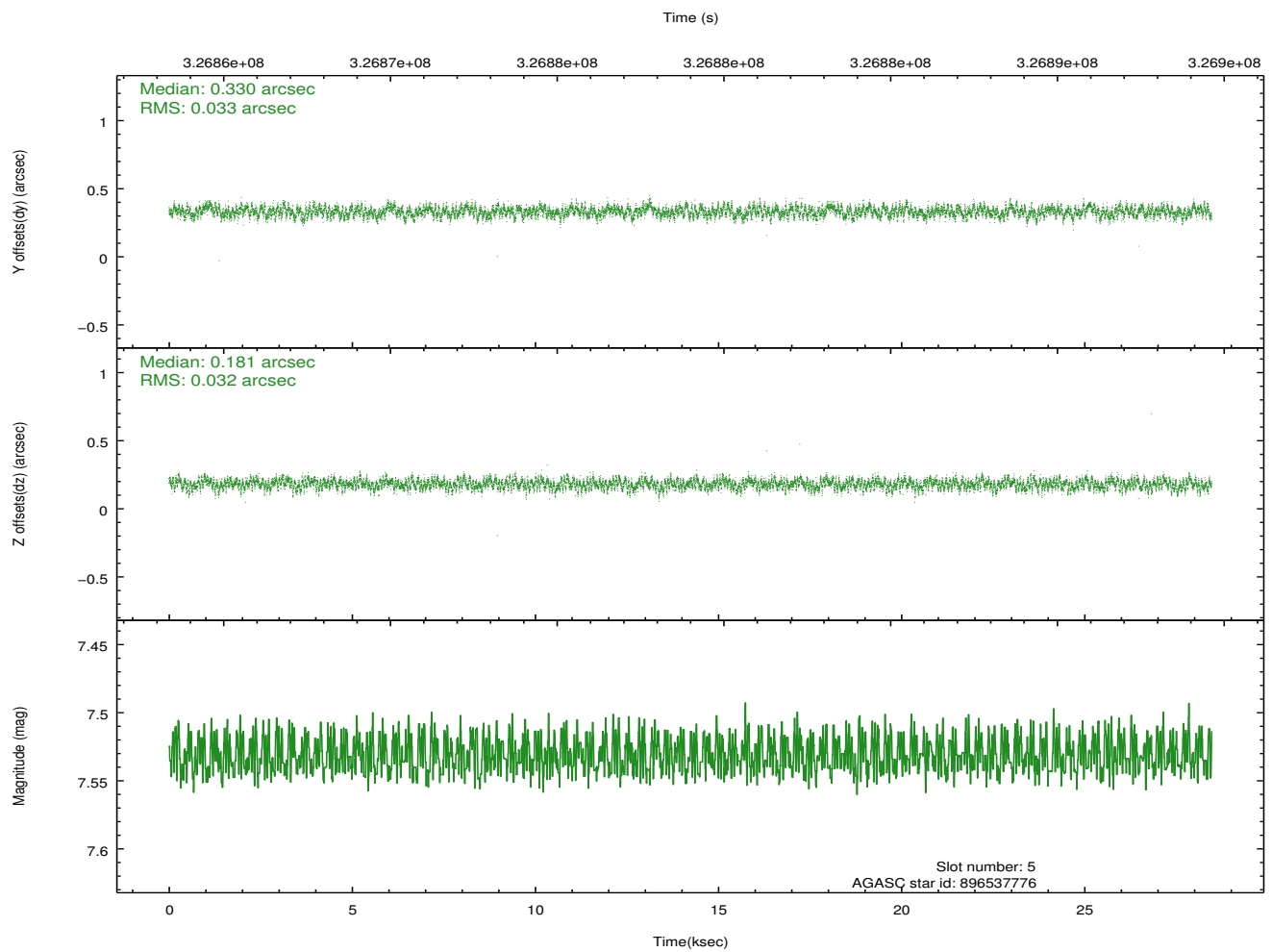
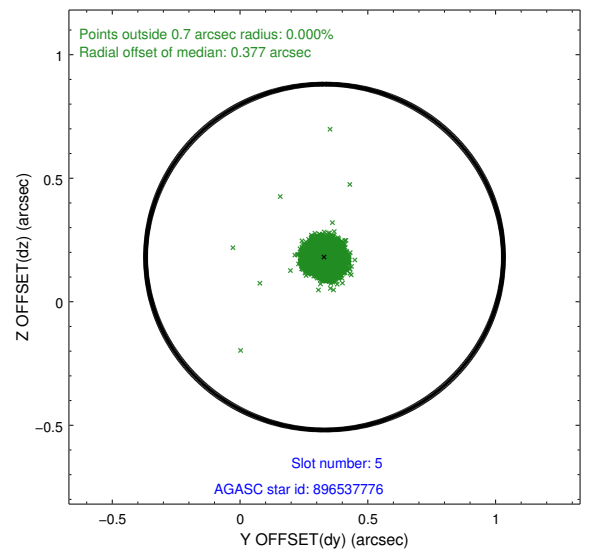
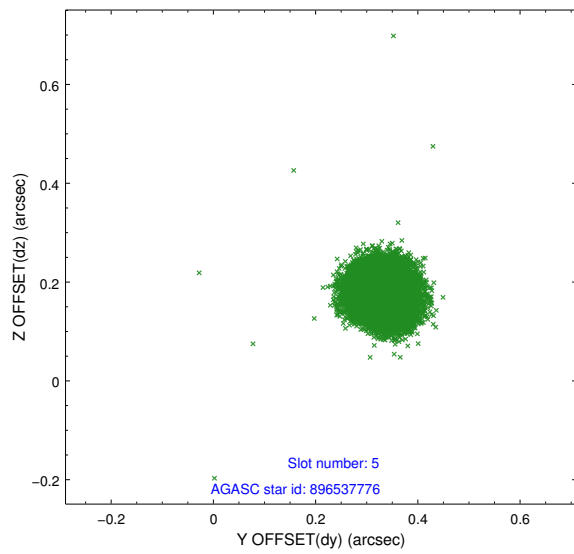
2.4.1 Slot 3



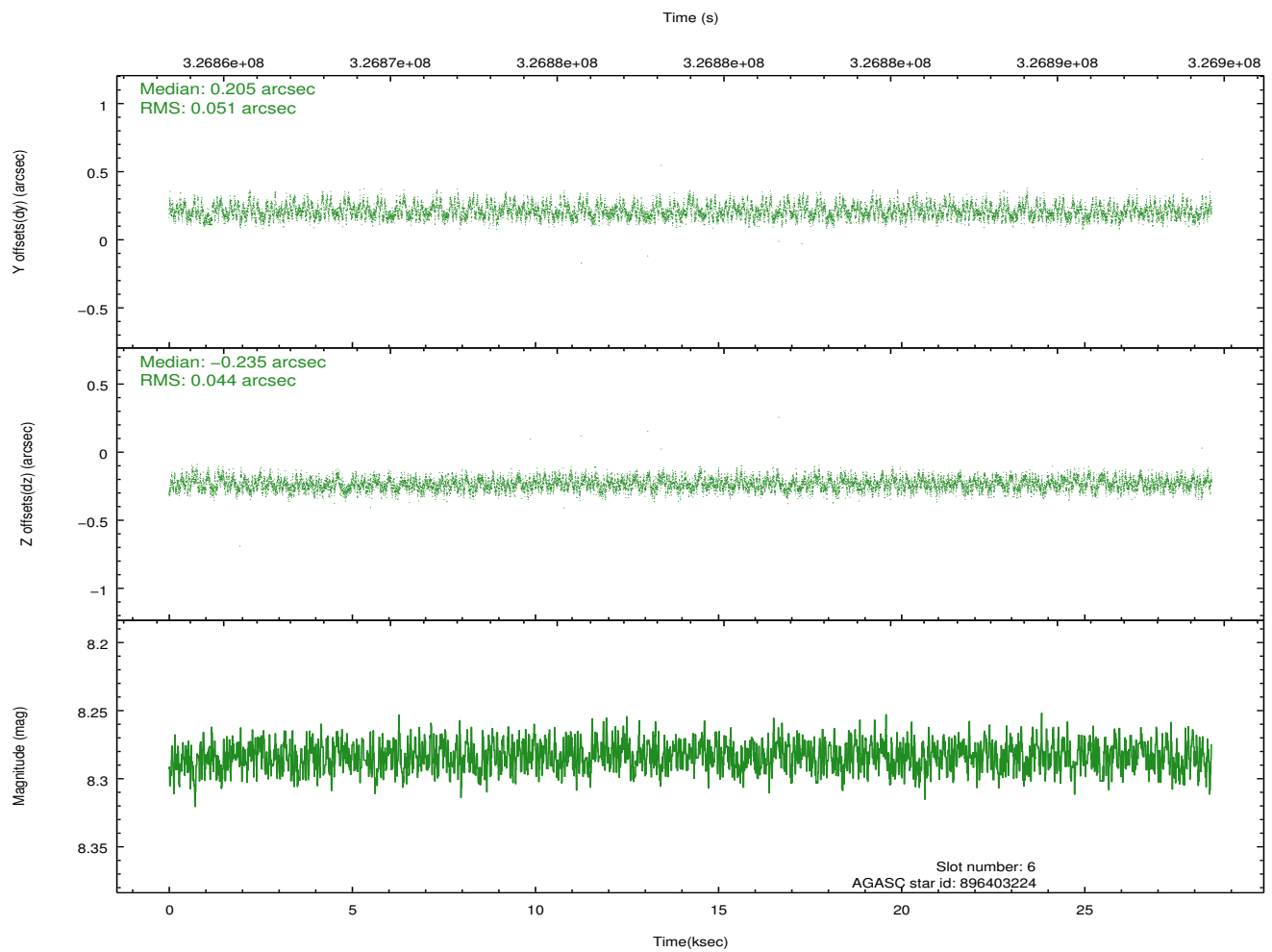
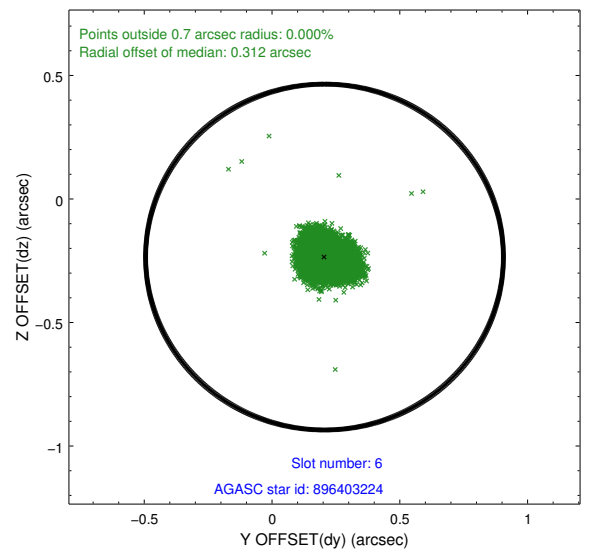
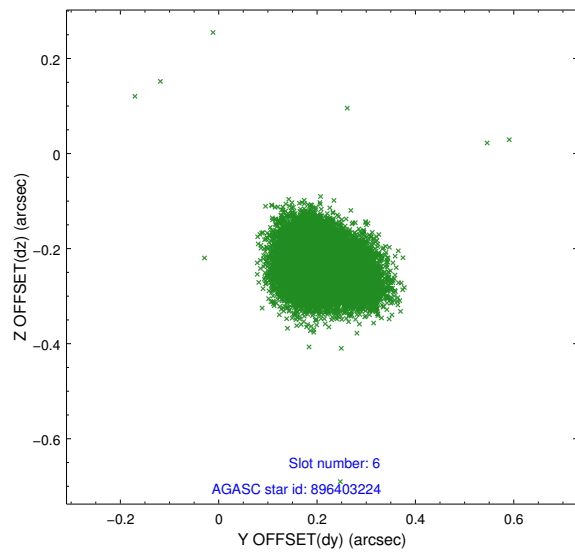
2.4.2 Slot 4



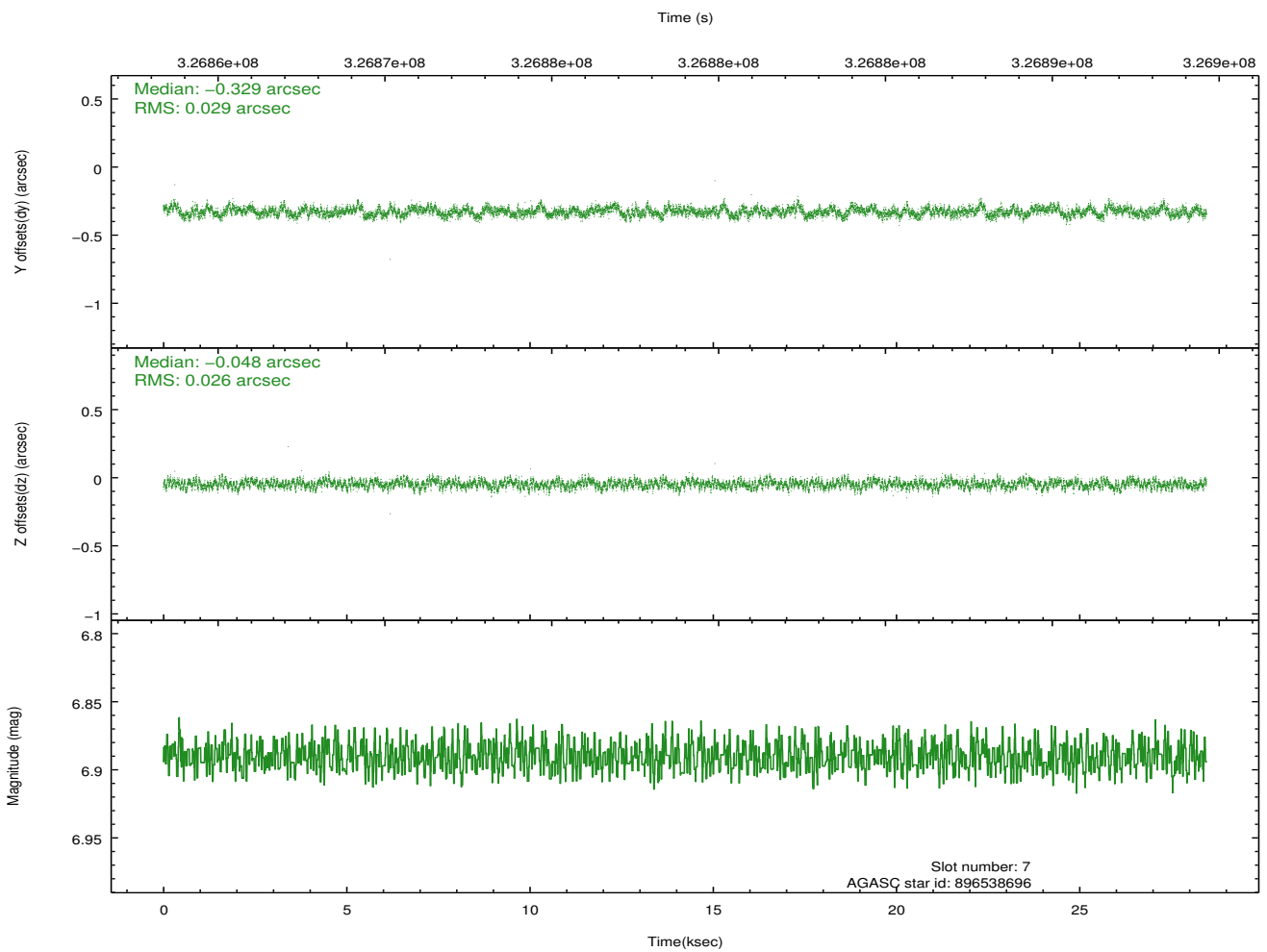
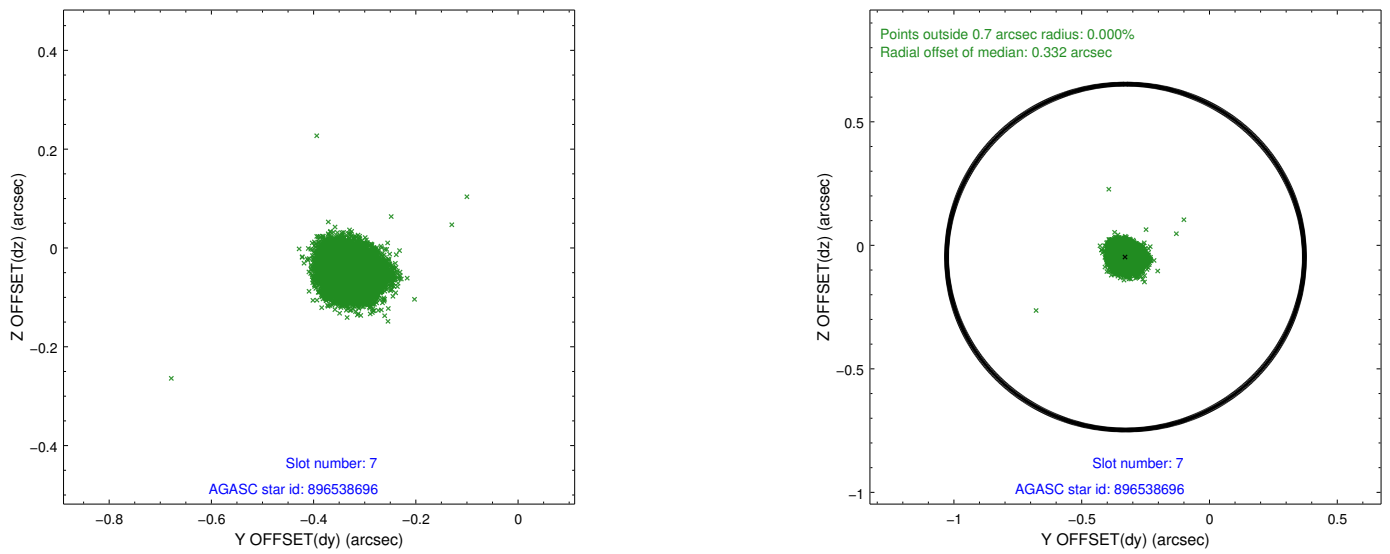
2.4.3 Slot 5



2.4.4 Slot 6

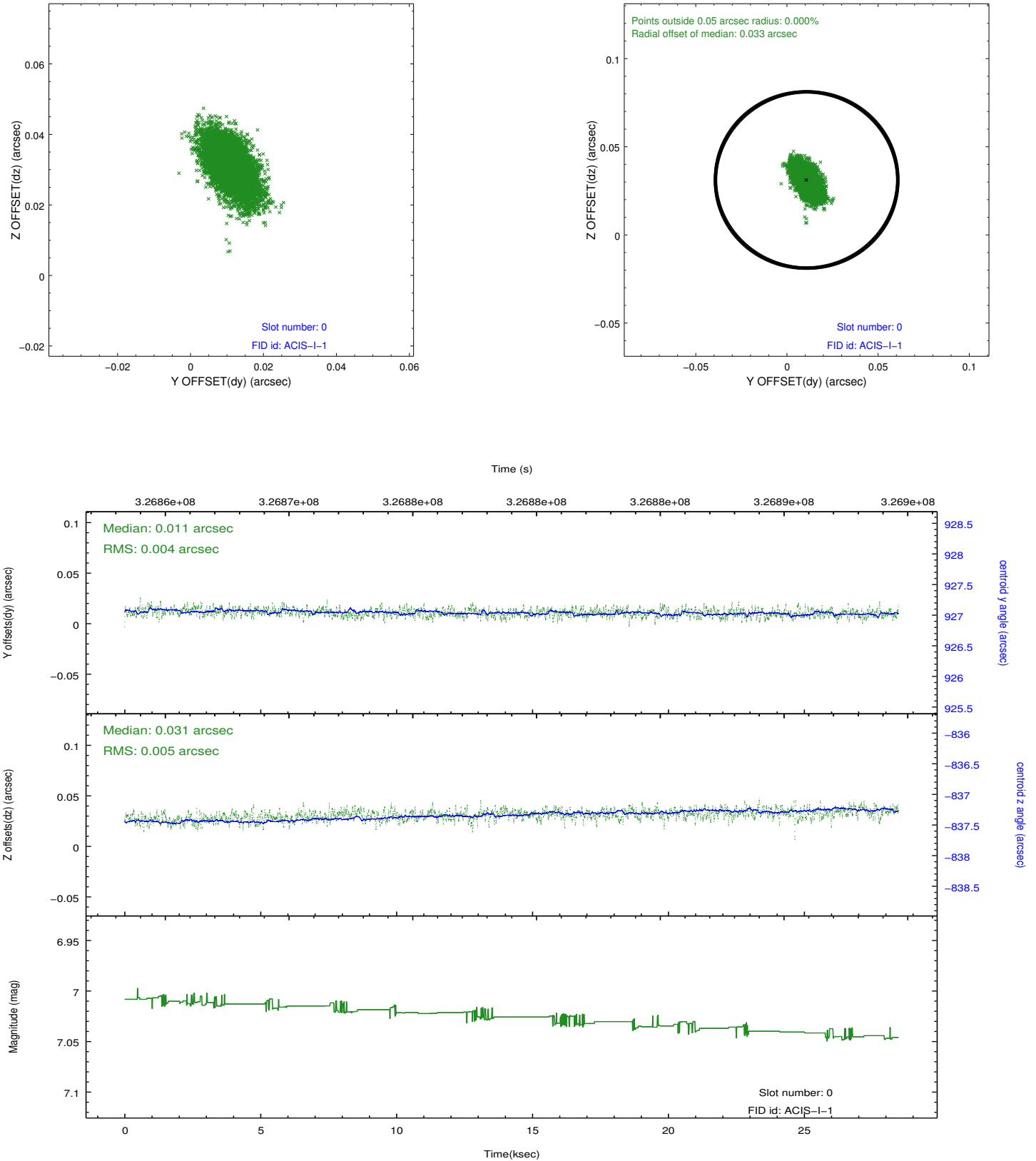


2.4.5 Slot 7

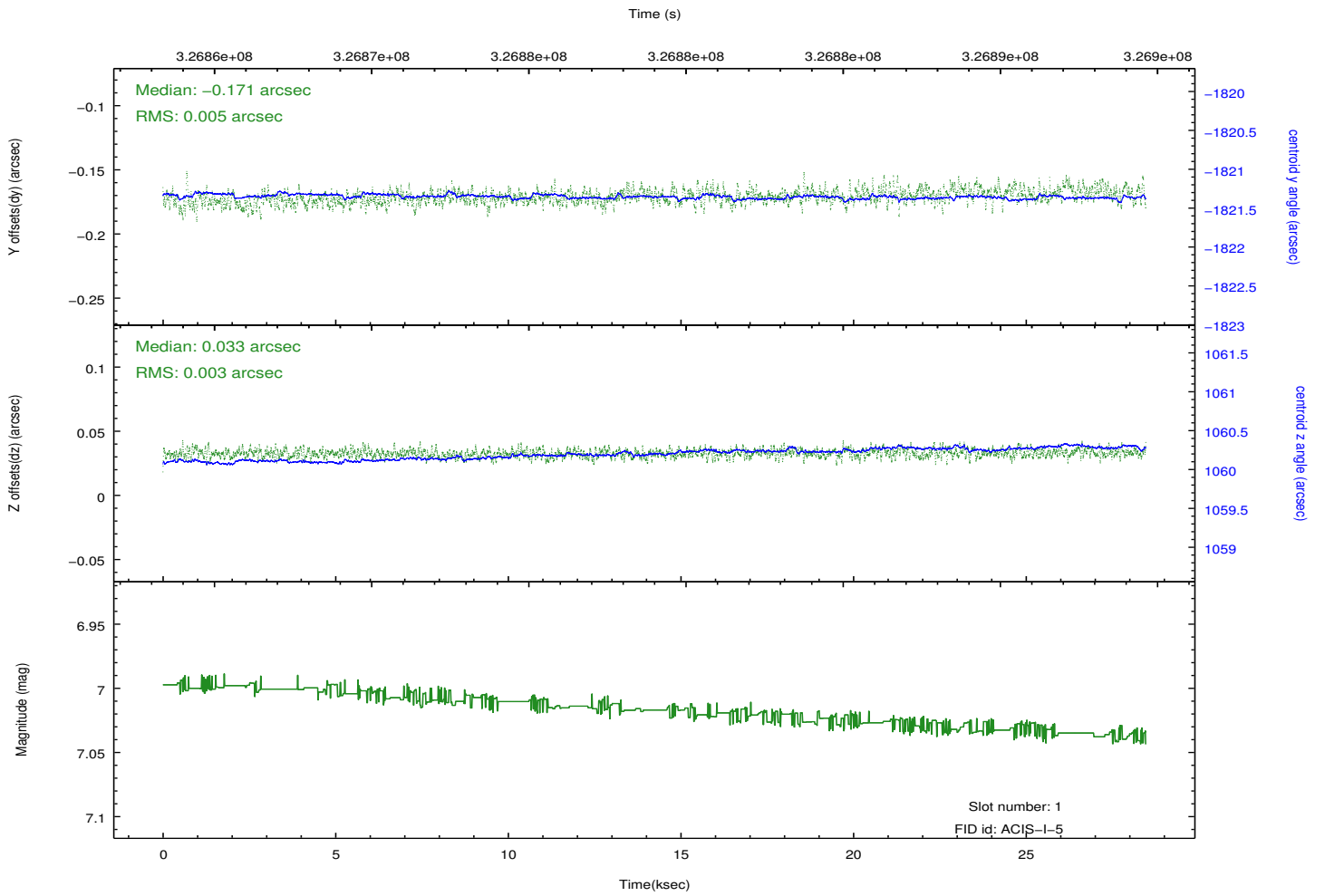
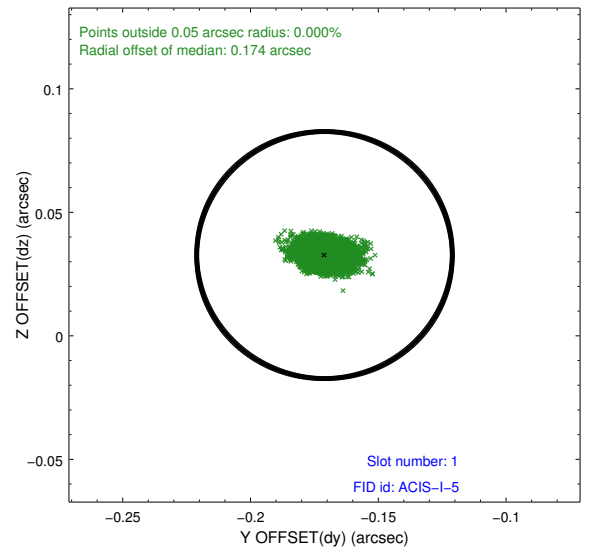
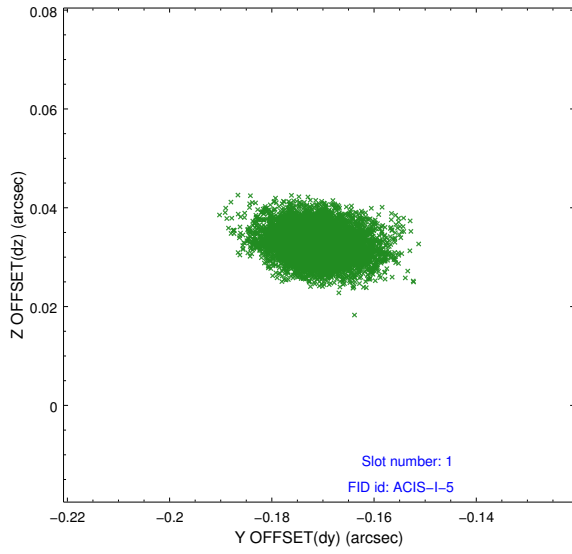


2.5 FID Slots

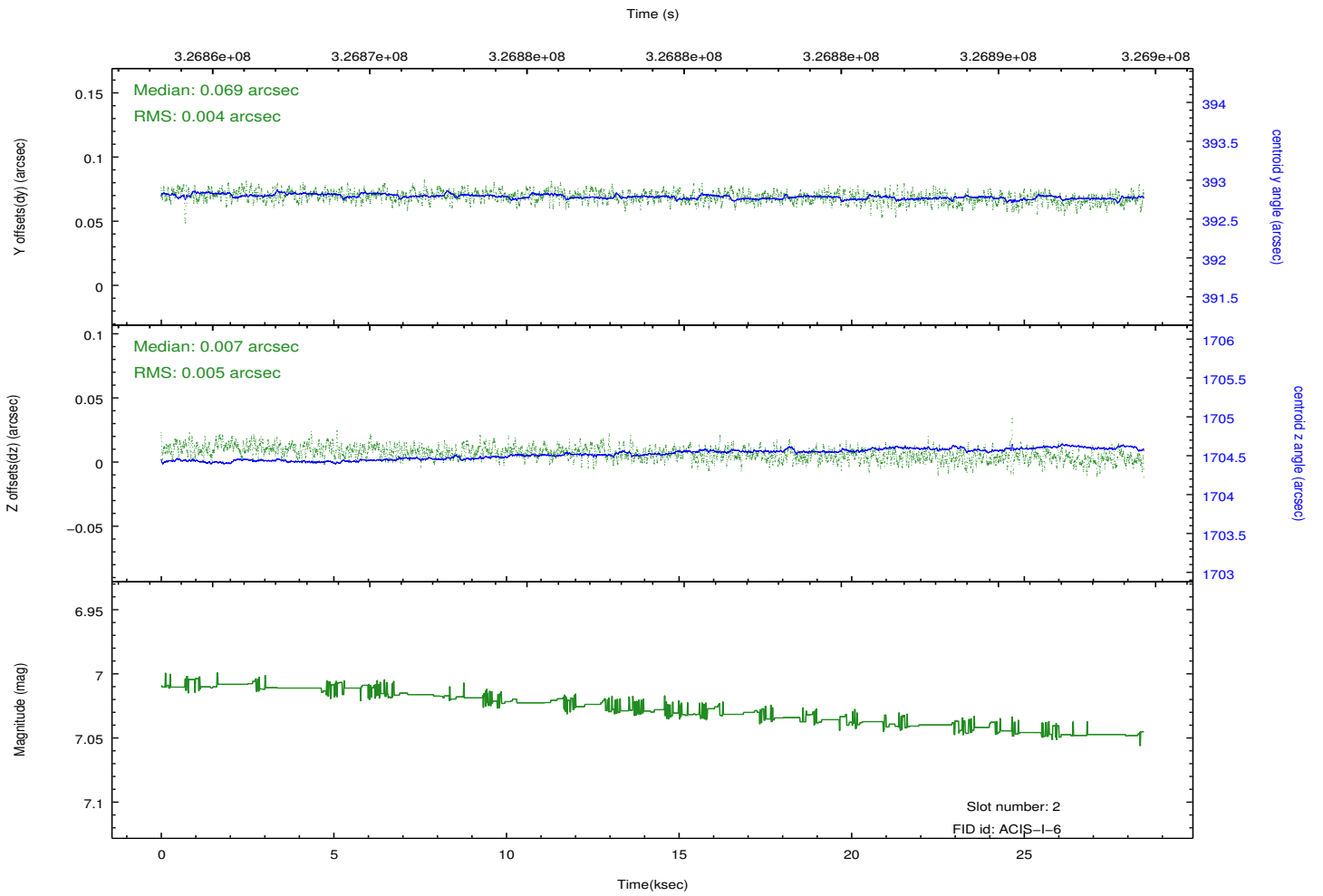
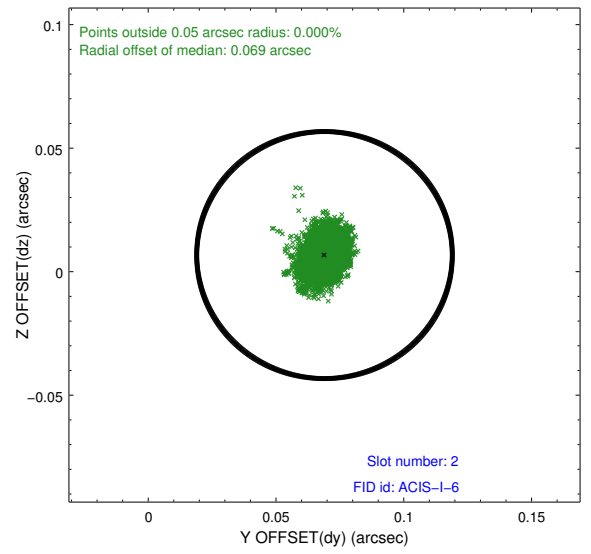
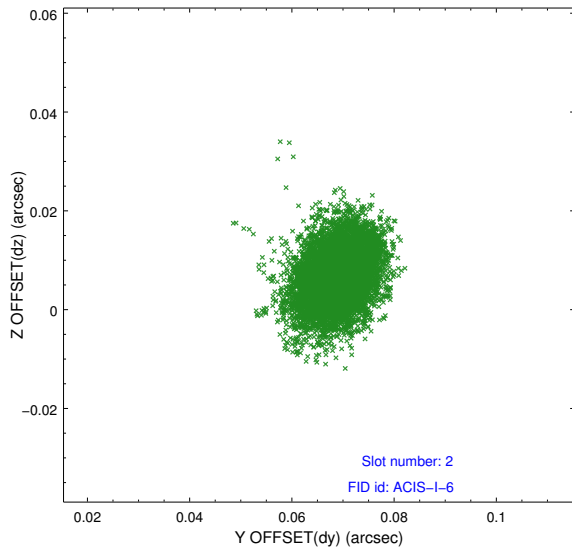
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.05.21 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 27.7887998 |

A.2 Comments