

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 6754 - L2 Version 2
Chandra X-Ray Center

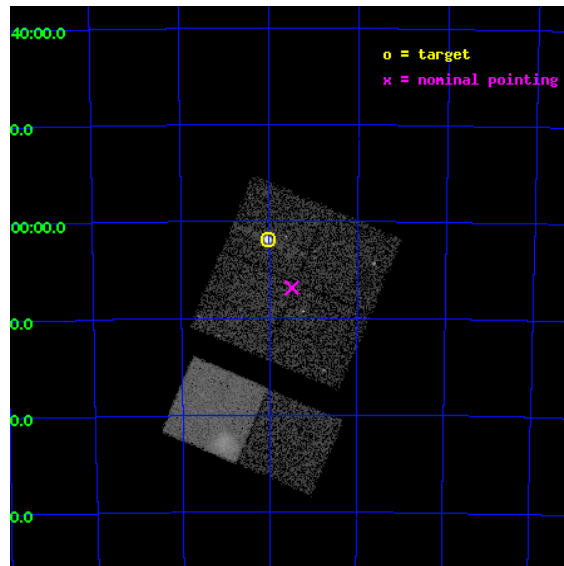
L2 Processing Date : Mar 28 2012

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1 Front

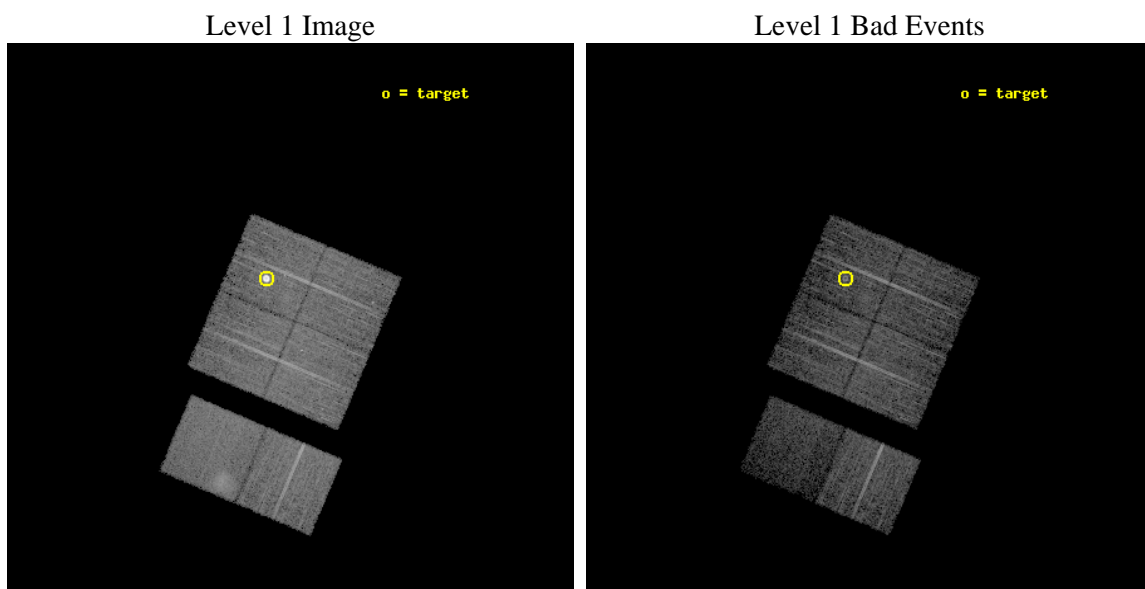
| | | |
|----------|---|---|
| seq_num | 590437 | Sequence number |
| obs_id | 6754 | Observation id |
| title | AO7 ACIS-I Calibration Observations of E0102-72 | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | E0102-72[I1,-120,-4.0,-3.68,0] | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 16.01 | Observer's specified target RA [deg] |
| dec_targ | -72.032028 | Observer's specified target Dec [deg] |
| ra_nom | 15.872514831801 | Nominal RA [deg] |
| dec_nom | -72.114417908664 | Nominal Dec [deg] |
| roll_nom | 202.93071315407 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 7254.3591222167 | Sum of GTIs [s] |
| livetime | 7162.5000589605 | Livetime [s] |
| ontime0 | 7257.5999729633 | Sum of GTIs [s] |
| ontime1 | 7254.3591222167 | Sum of GTIs [s] |
| ontime2 | 7257.5999729633 | Sum of GTIs [s] |
| ontime3 | 7257.5999729633 | Sum of GTIs [s] |
| ontime6 | 7257.5999729633 | Sum of GTIs [s] |
| ontime7 | 7257.5999729633 | Sum of GTIs [s] |
| l2events | 66948 | Number of level 2 events |



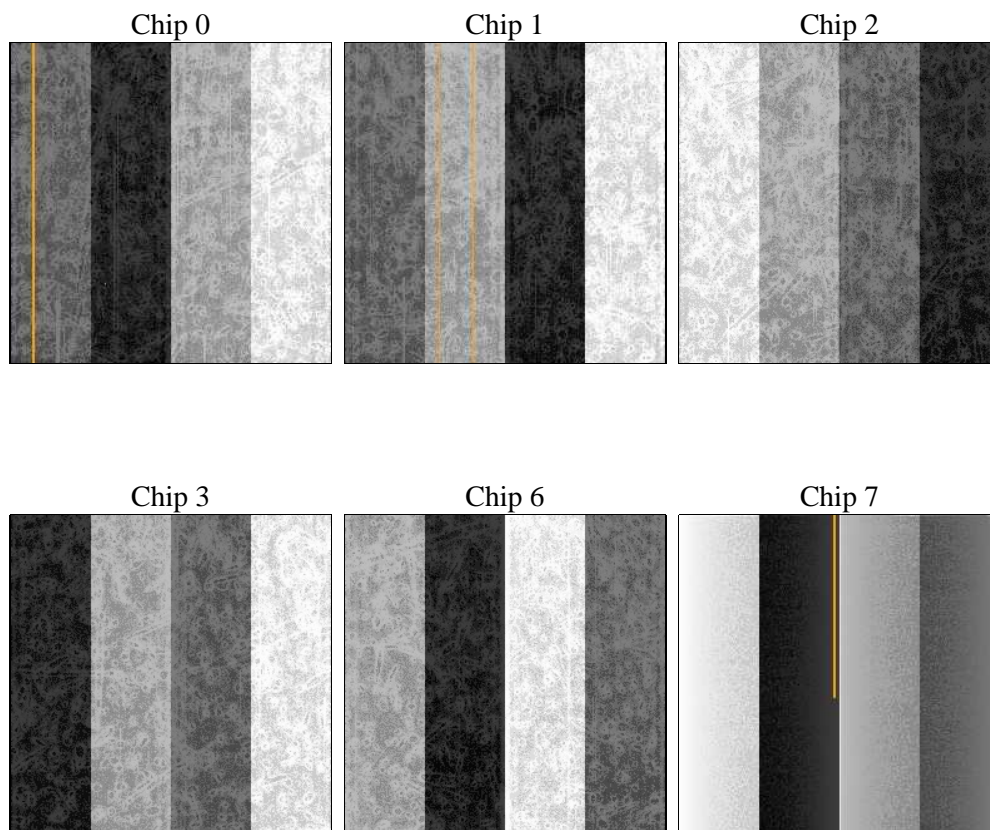
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 7500.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 7254.3591222167 | Sum of GTIs [s] |
| caldsver | 4.4.8 | | ontime0 | 7257.5999729633 | Sum of GTIs [s] |
| date | 2012-03-28T03:16:33 | Date and time of file creation | ontime1 | 7254.3591222167 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 7257.5999729633 | Sum of GTIs [s] |
| | | | ontime3 | 7257.5999729633 | Sum of GTIs [s] |
| | | | ontime6 | 7257.5999729633 | Sum of GTIs [s] |
| | | | ontime7 | 7257.5999729633 | Sum of GTIs [s] |
| | | | l1events | 315544 | Number of level 1 events |

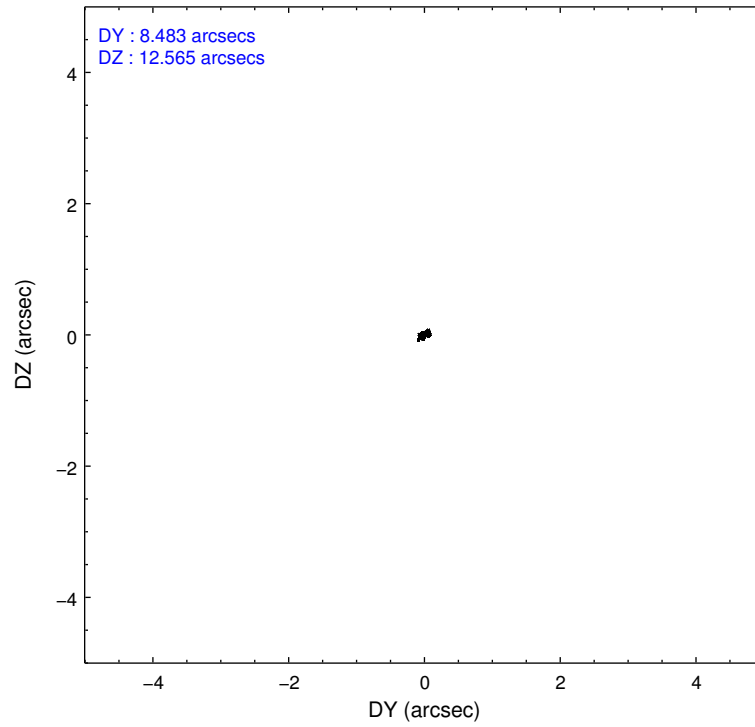
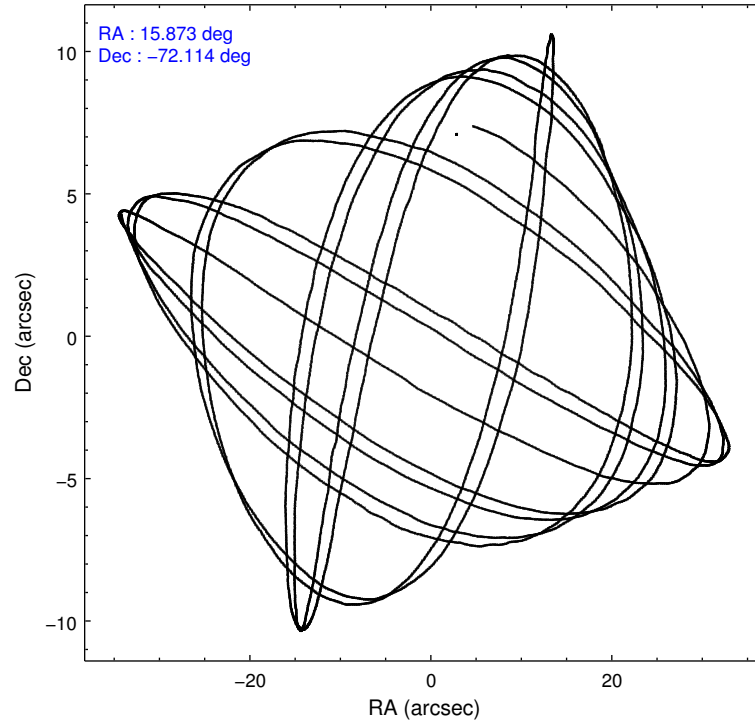
2.1.4 Events

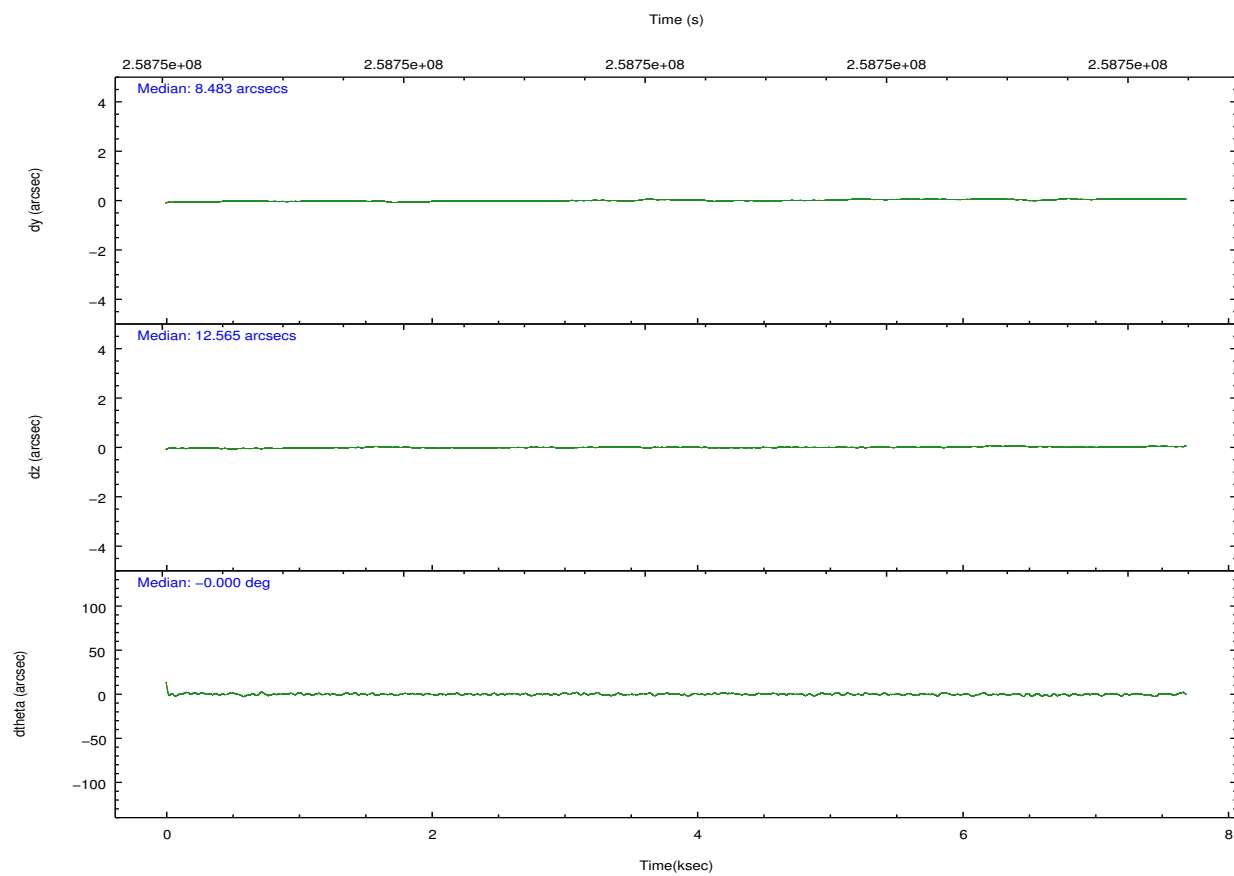
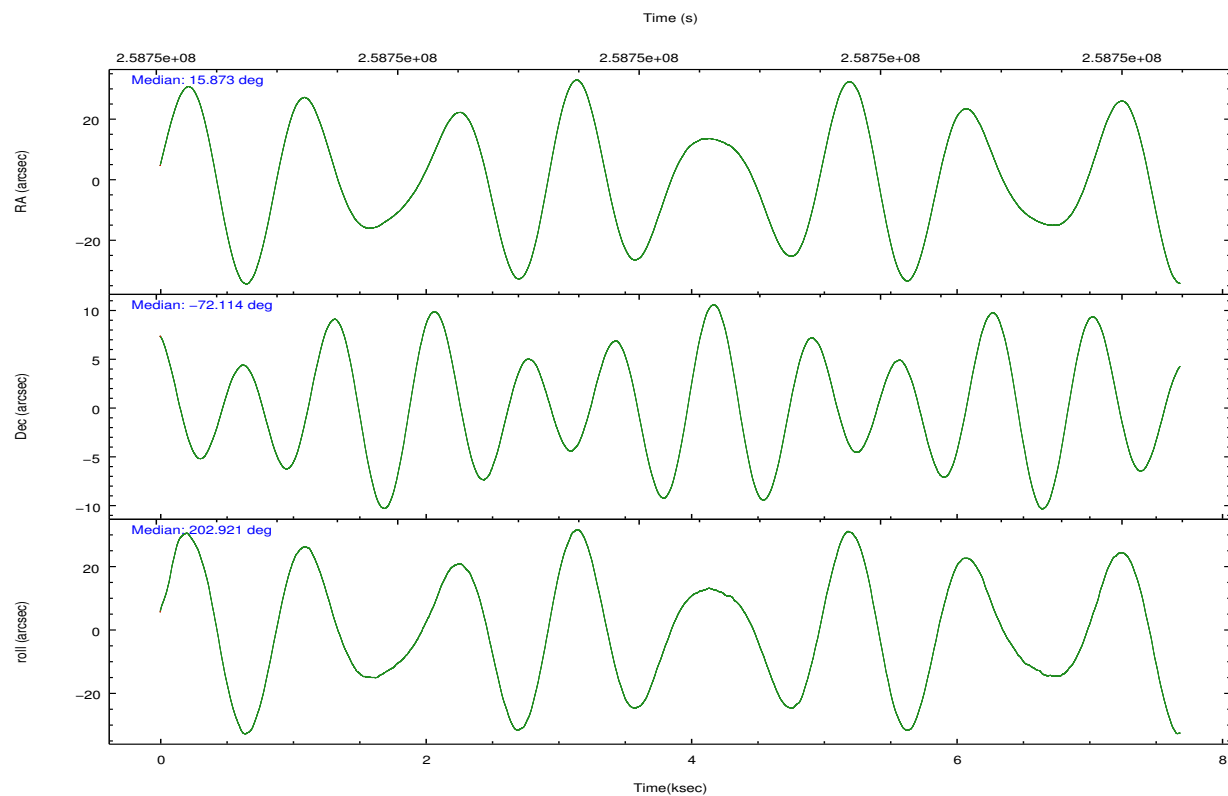
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 45431 | 66876 | 55275 | 47939 | 50200 | 49823 | grade 0 events | 1962 | 20464 | 2169 | 2227 | 1940 | 3452 |
| rejected events | 40283 | 40853 | 49979 | 42753 | 45024 | 23496 | | 4% | 30% | 3% | 4% | 3% | 6% |
| rejected % | 88% | 61% | 90% | 89% | 89% | 47% | grade 1 events | 28 | 194 | 29 | 24 | 24 | 49 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1202 | 2557 | 1275 | 1057 | 1091 | 5786 |
| | | | | | | | | 2% | 3% | 2% | 2% | 2% | 11% |
| | | | | | | | grade 3 events | 586 | 961 | 490 | 503 | 545 | 2717 |
| | | | | | | | | 1% | 1% | 0% | 1% | 1% | 5% |
| | | | | | | | grade 4 events | 480 | 919 | 558 | 551 | 580 | 2639 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 5 events | 1296 | 1687 | 1352 | 1651 | 1684 | 5084 |
| | | | | | | | | 2% | 2% | 2% | 3% | 3% | 10% |
| | | | | | | | grade 6 events | 922 | 1137 | 808 | 852 | 1021 | 11753 |
| | | | | | | | | 2% | 1% | 1% | 1% | 2% | 23% |
| | | | | | | | grade 7 events | 38955 | 38957 | 48594 | 41074 | 43315 | 18343 |
| | | | | | | | | 85% | 58% | 87% | 85% | 86% | 36% |

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 | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 15.925832 | 15.8725148318008 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -72.092463 | -72.11441790866351 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 202.772767 | 202.9307131540652 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 247190464.184000 | 247190464.184000 | | | |
| [s] Window stop time (MET) | 260150465.184000 | 260150465.184000 | | | |
| [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) | 258746596.184000 | 258746219.43268 | | | |
| Observation start date | 2006-03-14T18:02:11 | 2006-03-14T17:56:59 | | | |
| [s] Observation end time (MET) | 258754096.184000 | 258754229.80806 | | | |
| Observation end date | 2006-03-14T20:07:11 | 2006-03-14T20:10:29 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



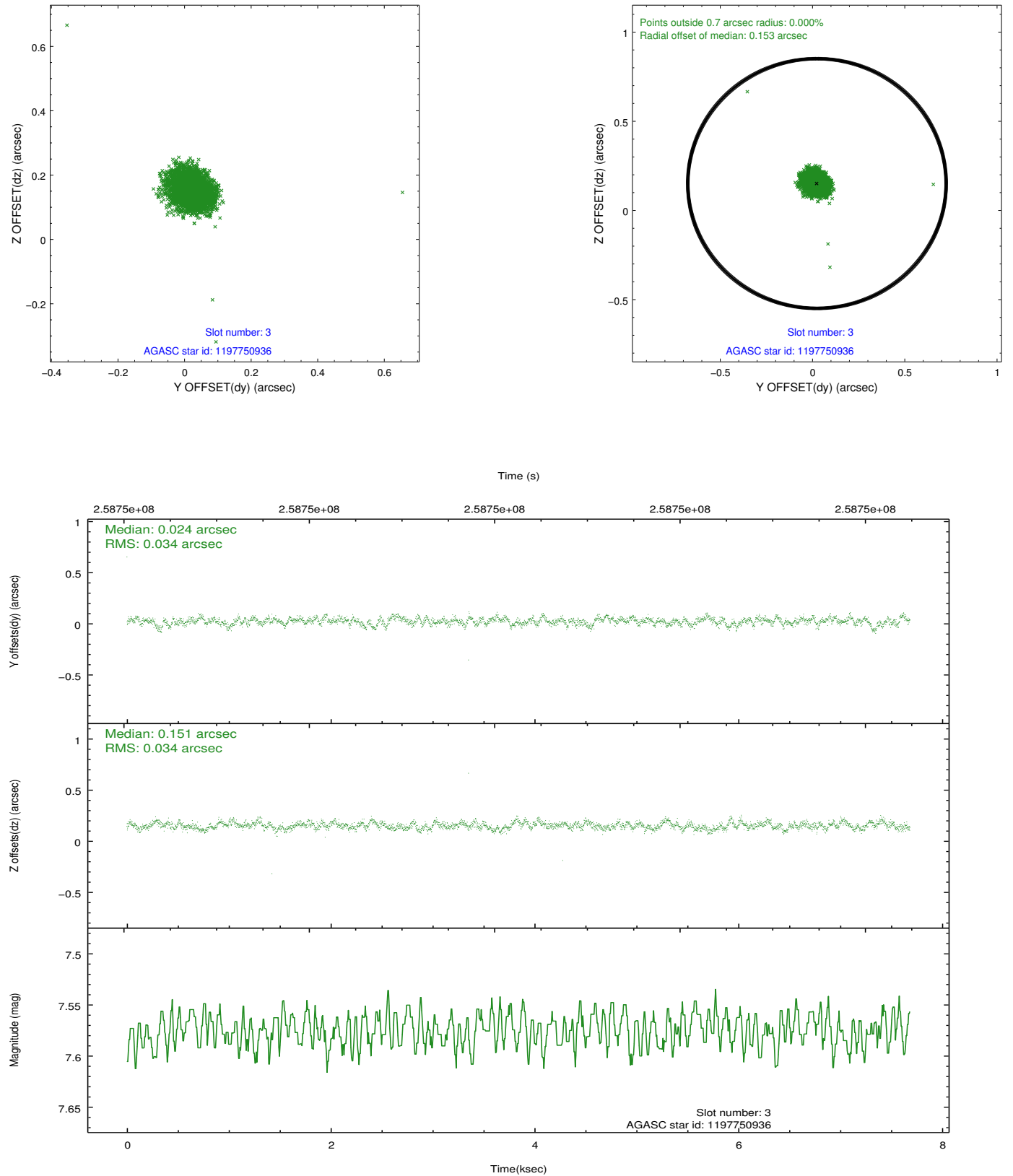


Slot Statistics

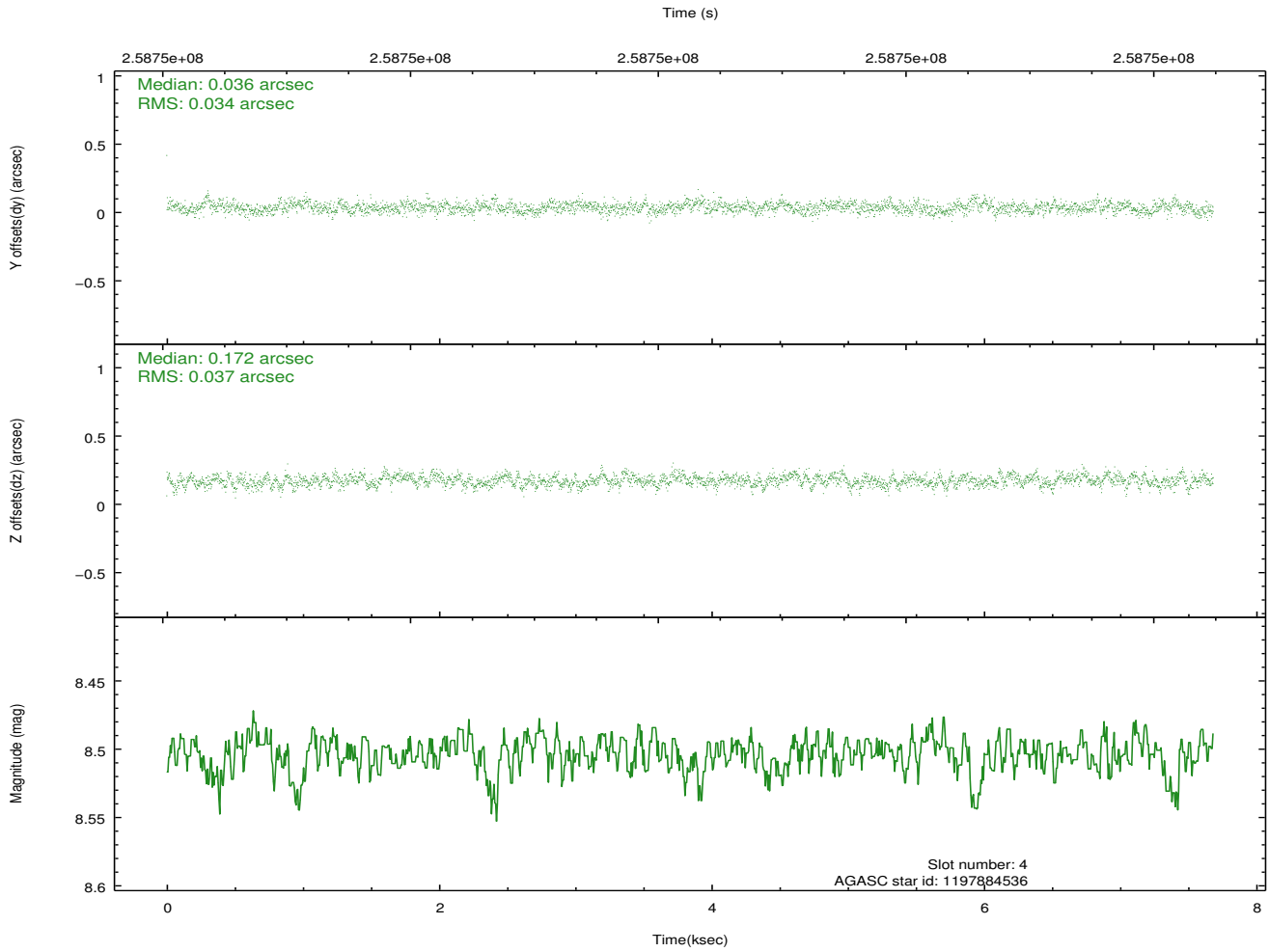
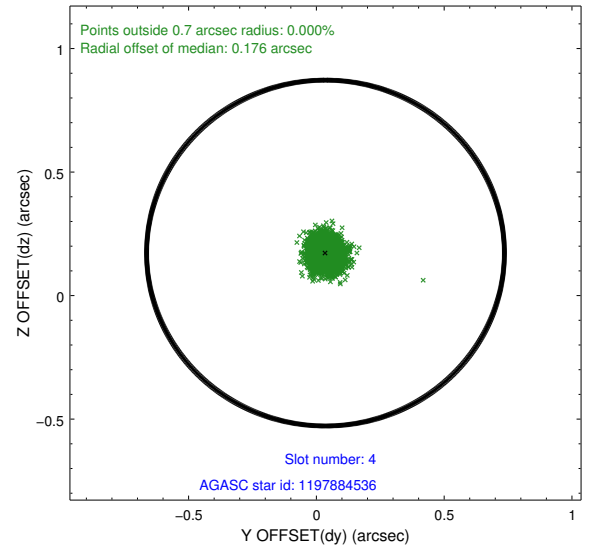
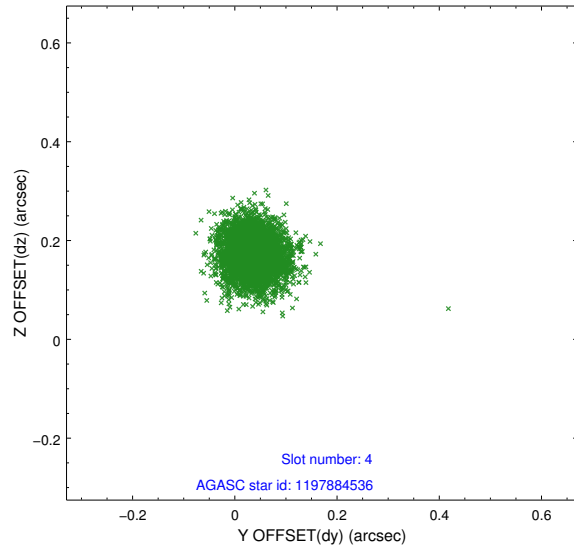
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 1875 | -0.042 | 0.048 | 0.009 | 0.015 | 0.000000 | 0.000000 | 931.08 | -836.08 |
| 1 | FID | ACIS-I-2 | 7.13 | 1874 | -0.170 | -0.087 | 0.007 | 0.011 | 0.000000 | 0.000000 | -762.73 | -842.97 |
| 2 | FID | ACIS-I-4 | 7.19 | 1875 | 0.114 | 0.106 | 0.006 | 0.012 | 0.000000 | 0.000000 | 2150.85 | 1063.36 |
| 3 | GUIDE | 1197750936 | 7.57 | 3749 | 0.024 | 0.151 | 0.047 | 0.078 | 15.387940 | -71.549550 | -189.64 | -2036.36 |
| 4 | GUIDE | 1197884536 | 8.50 | 3747 | 0.036 | 0.172 | 0.053 | 0.085 | 17.160729 | -71.835289 | -1630.26 | -304.71 |
| 5 | GUIDE | 1197885328 | 7.23 | 3747 | 0.098 | 0.096 | 0.055 | 0.087 | 16.283090 | -71.733943 | -871.32 | -1033.01 |
| 6 | GUIDE | 1198189696 | 7.36 | 3749 | -0.149 | -0.134 | 0.059 | 0.095 | 15.223750 | -72.697522 | 1537.61 | 1721.56 |
| 7 | GUIDE | 1198283128 | 7.77 | 3748 | -0.012 | -0.284 | 0.053 | 0.084 | 17.272580 | -72.642428 | -560.60 | 2400.46 |

2.4 Star Slots

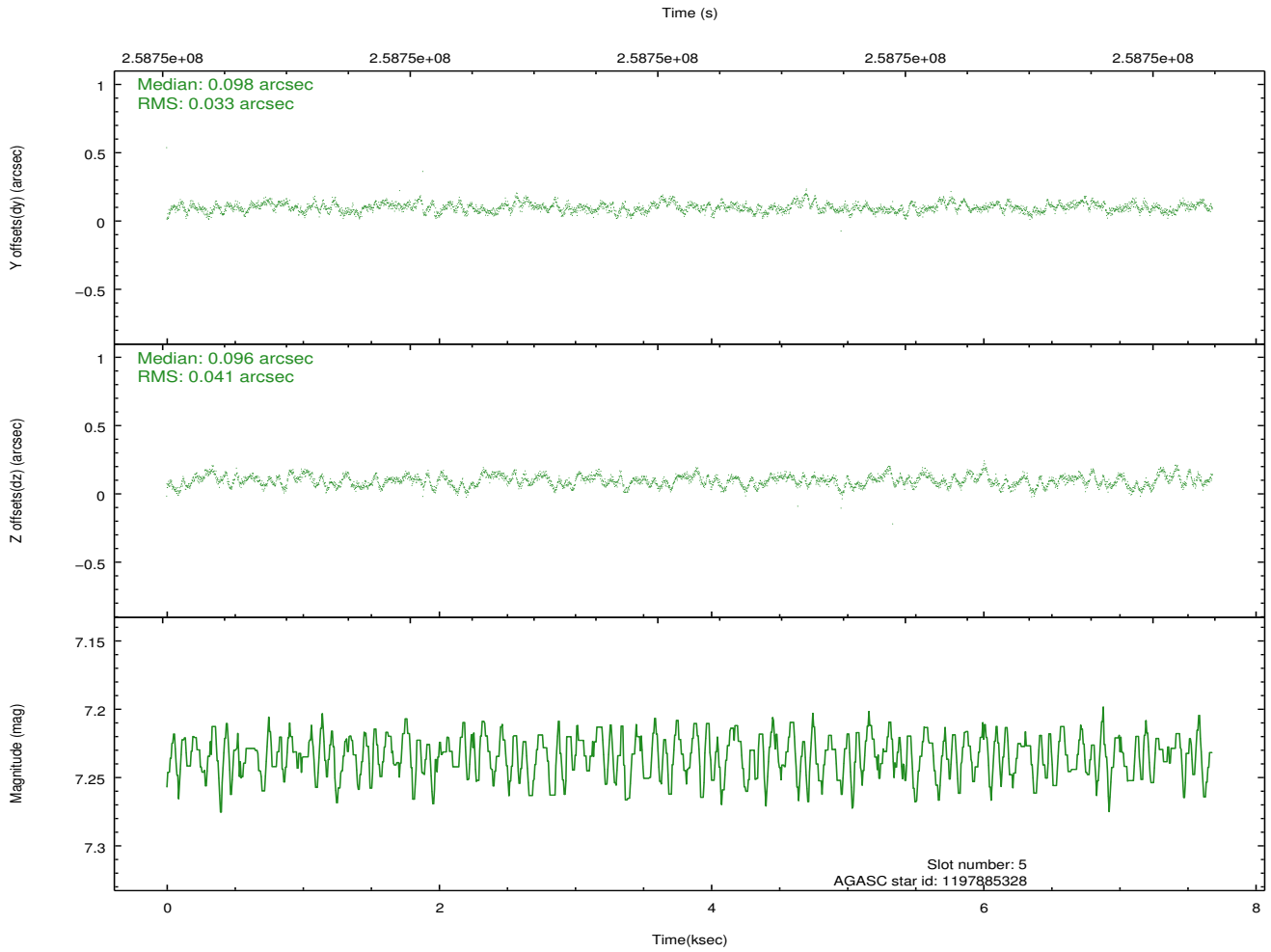
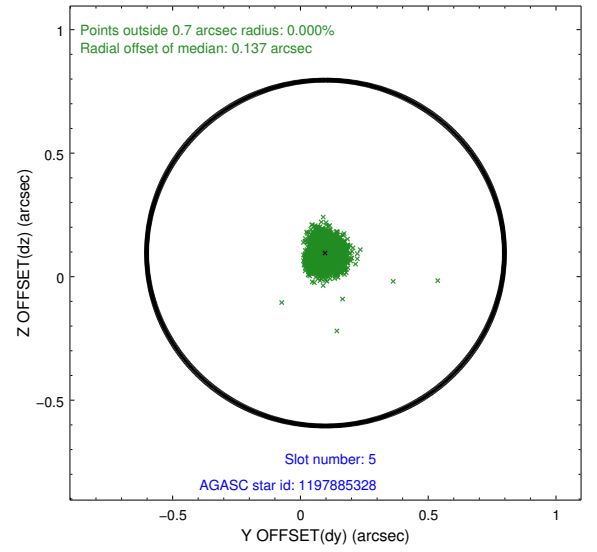
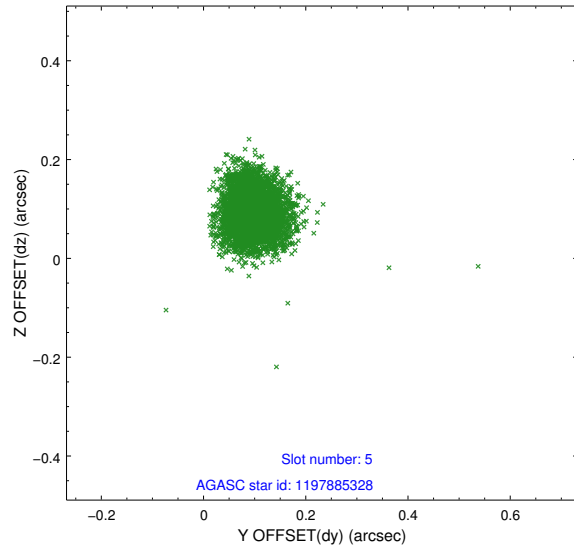
2.4.1 Slot 3



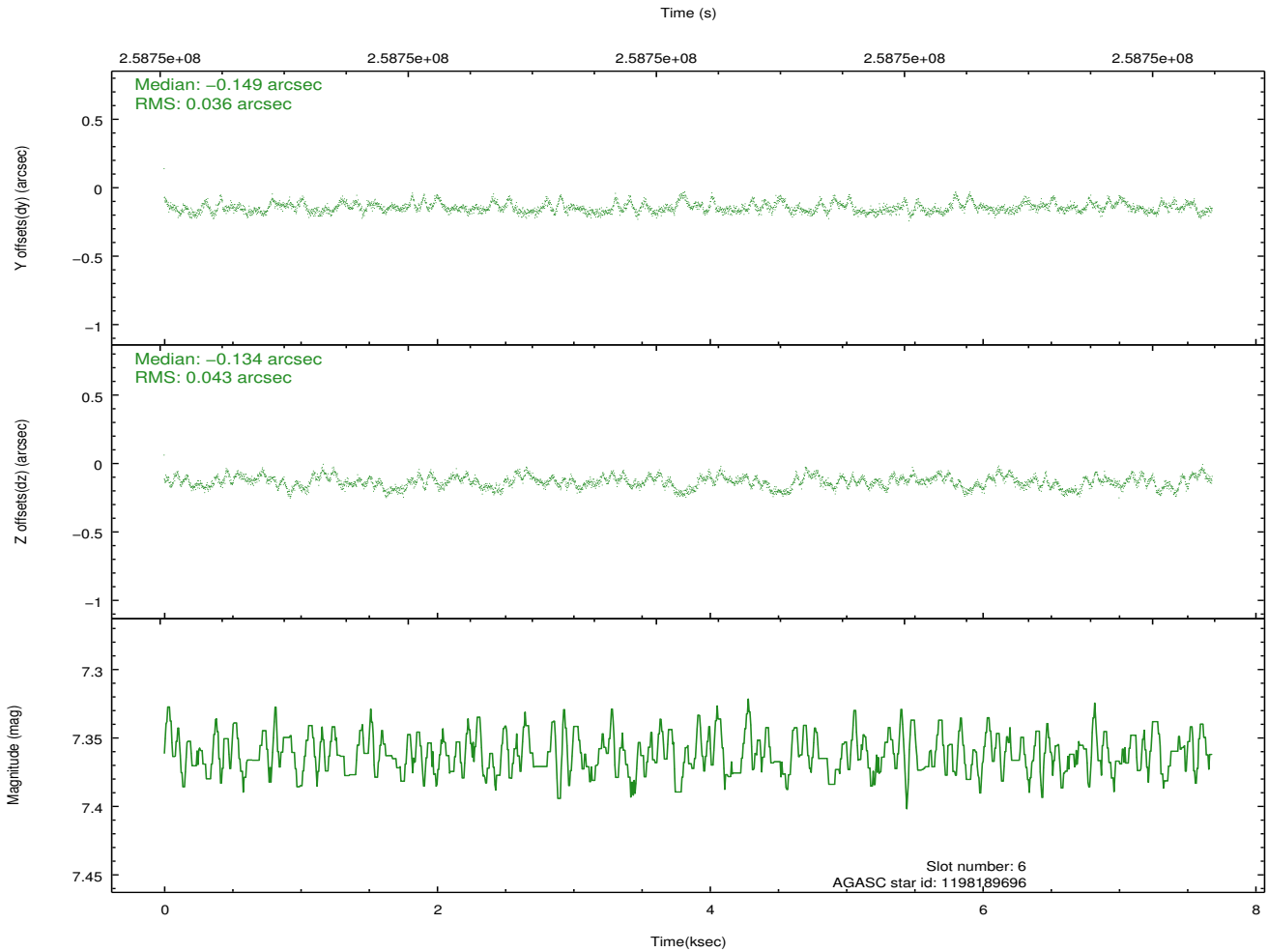
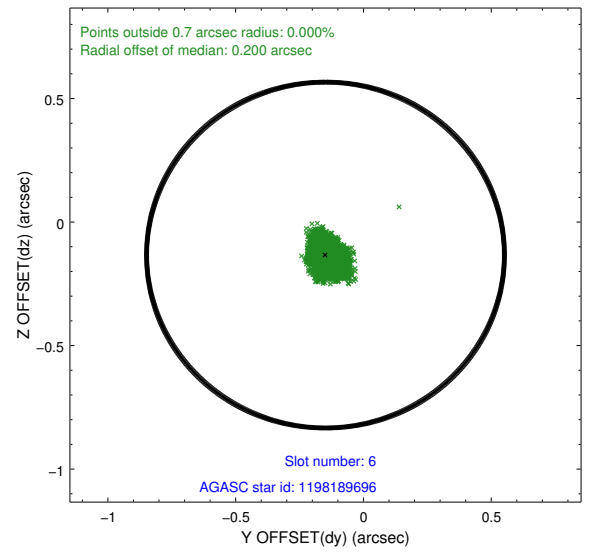
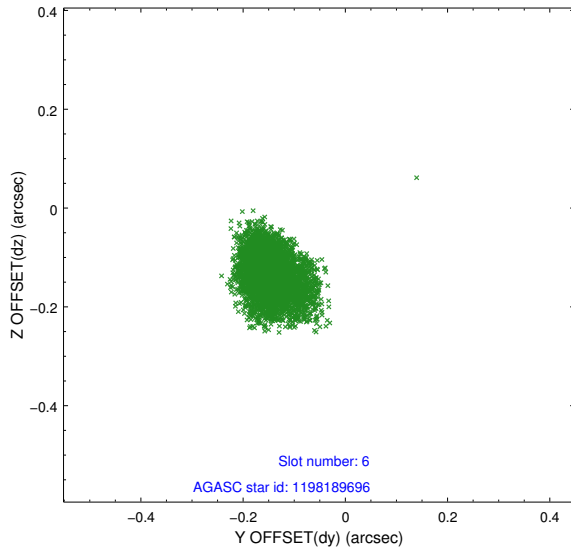
2.4.2 Slot 4



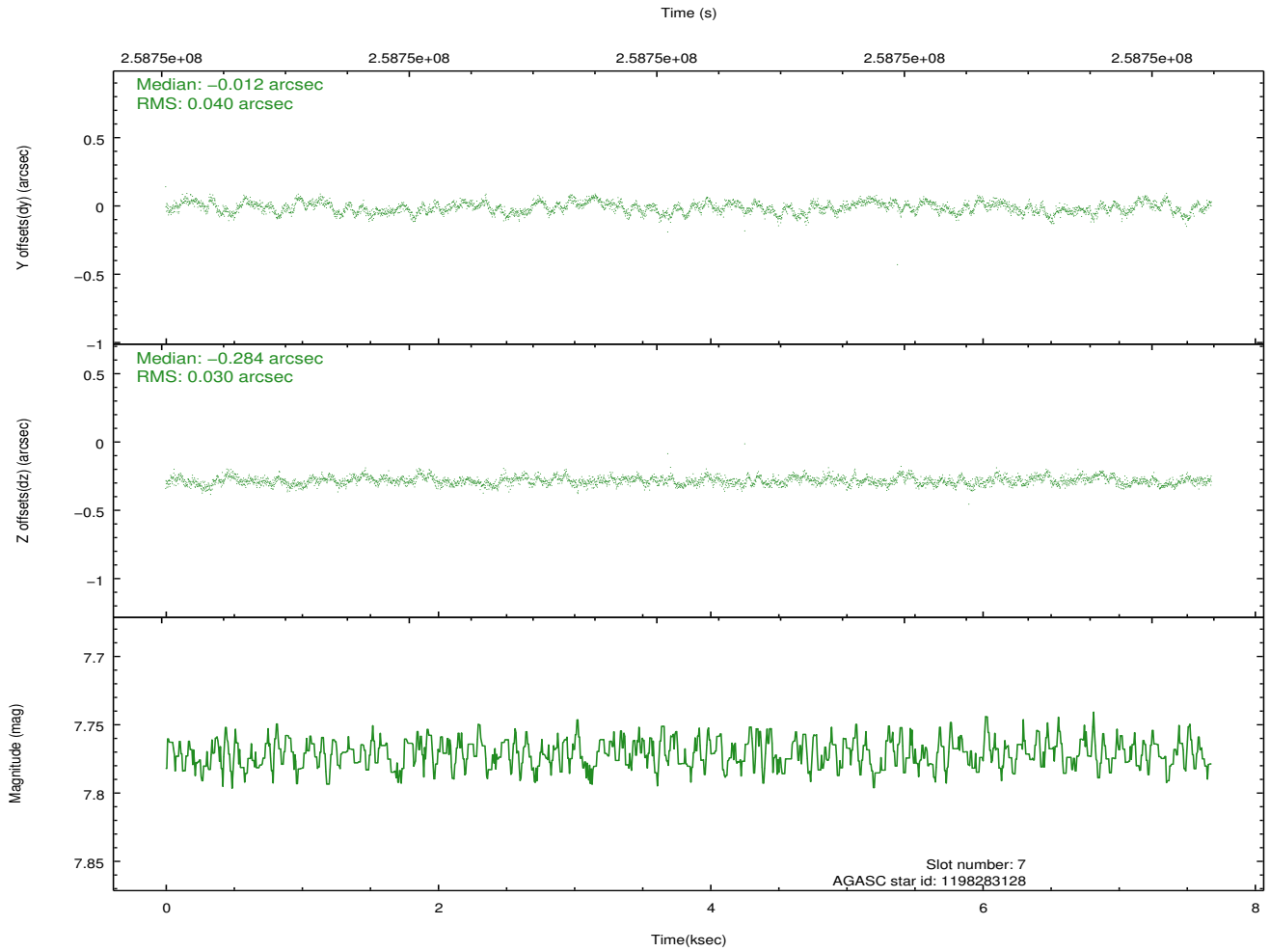
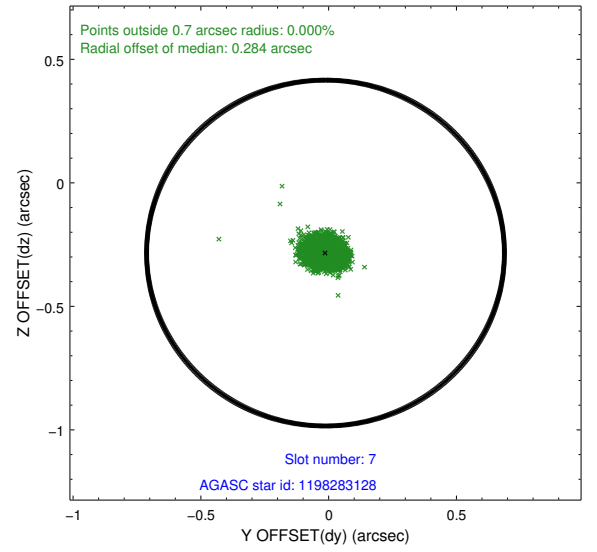
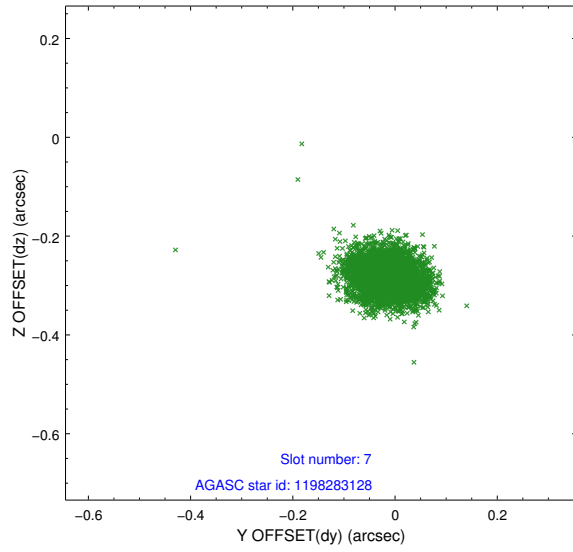
2.4.3 Slot 5



2.4.4 Slot 6

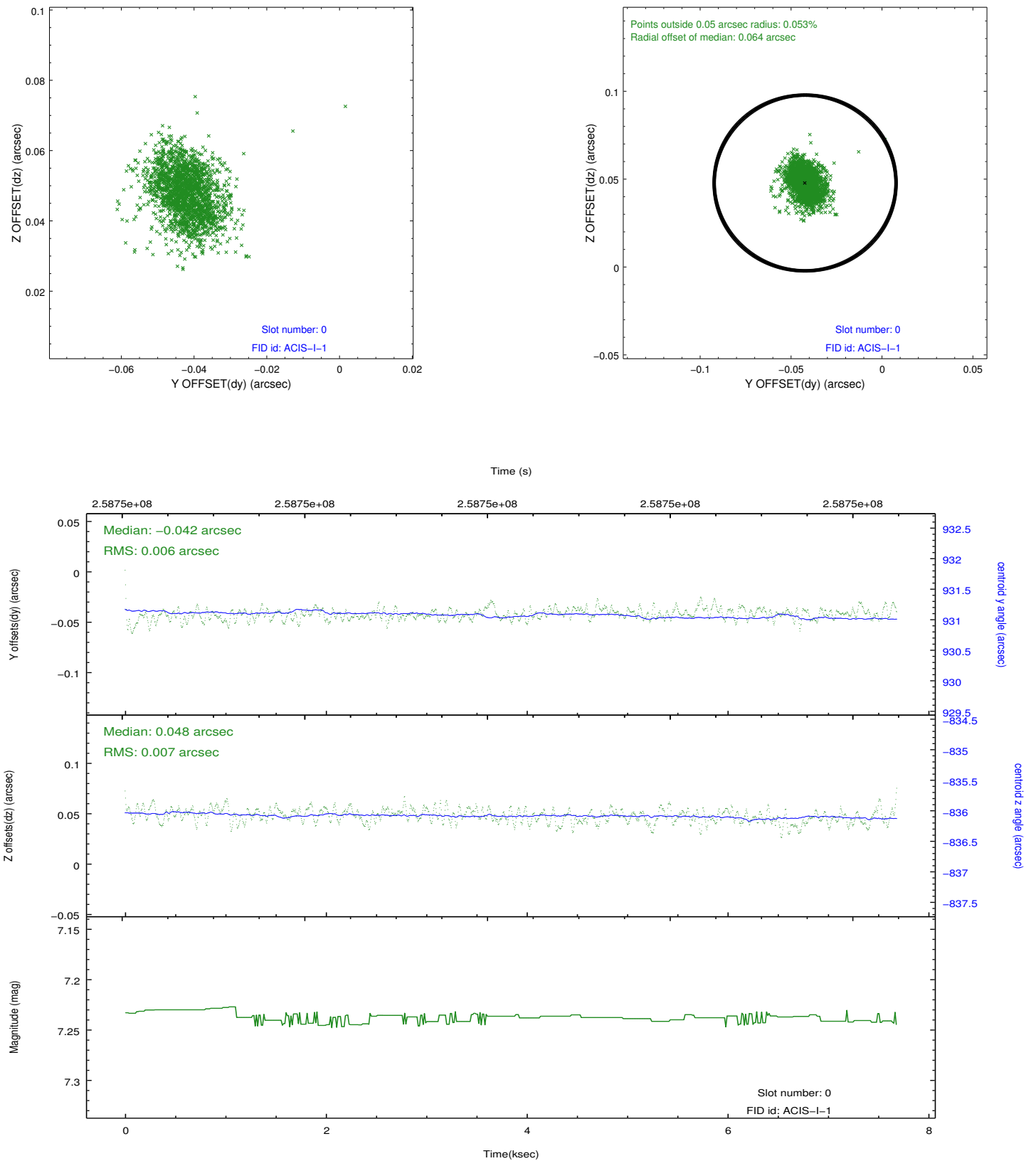


2.4.5 Slot 7

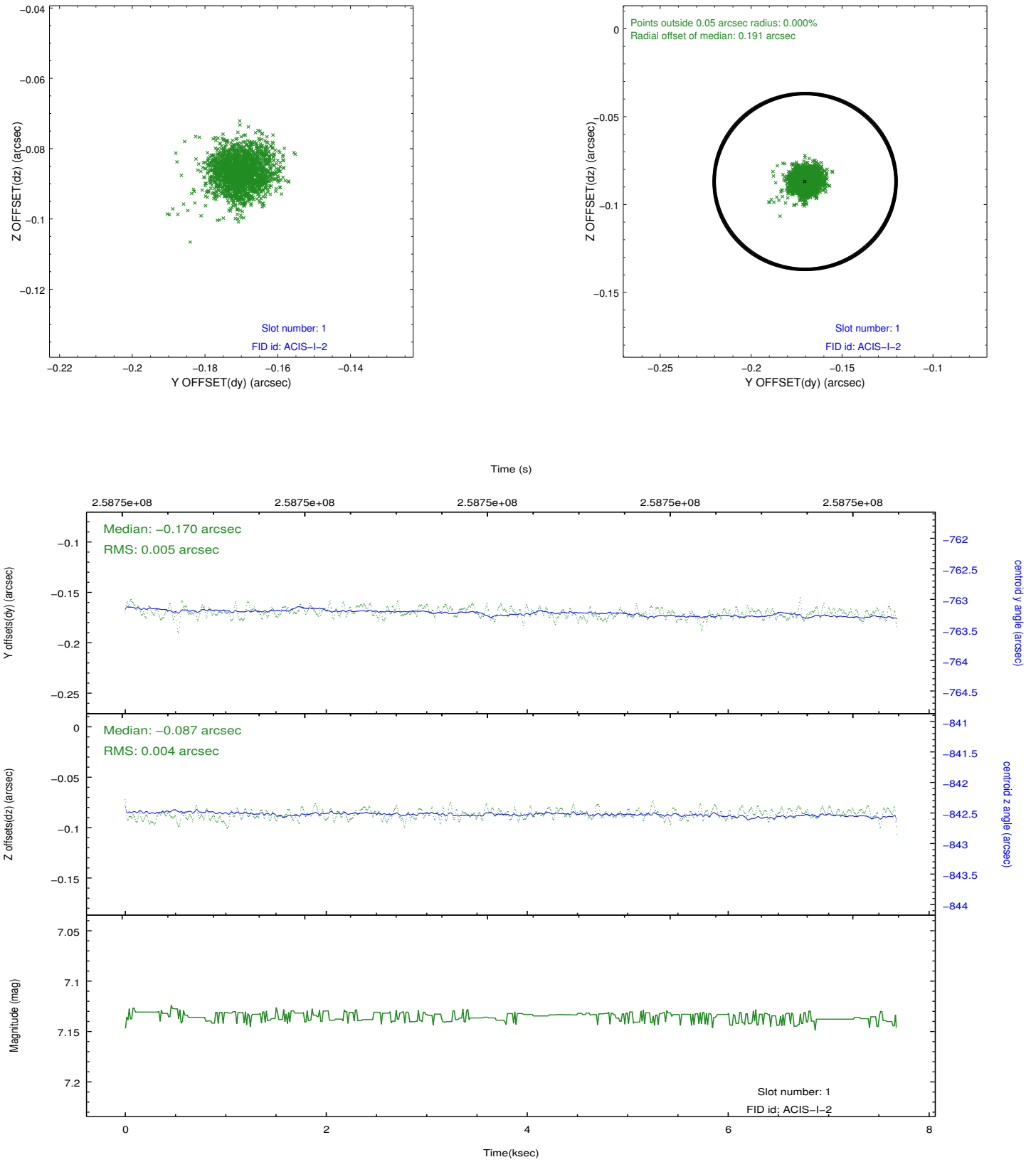


2.5 FID Slots

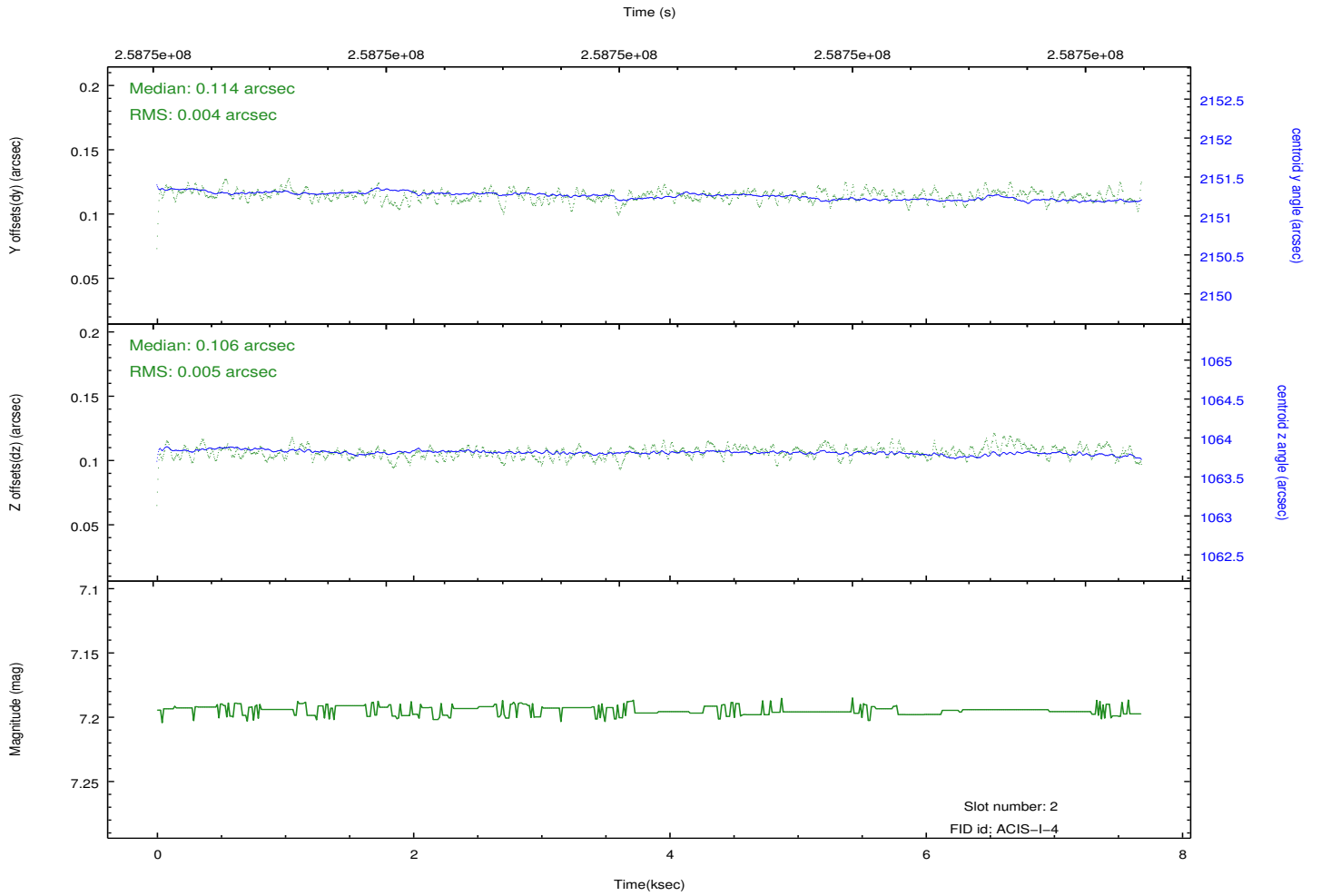
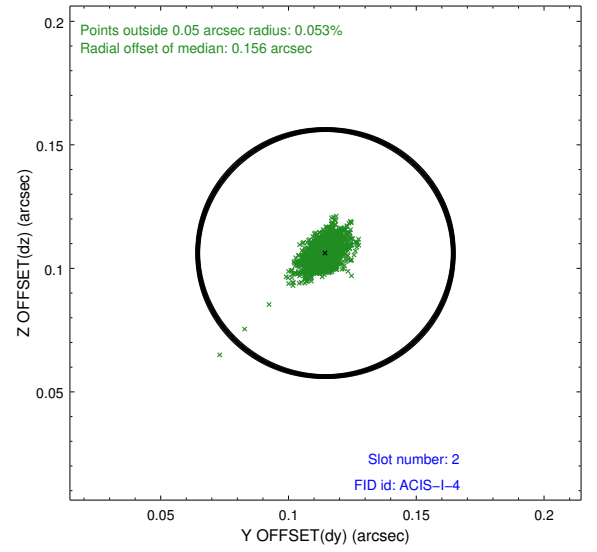
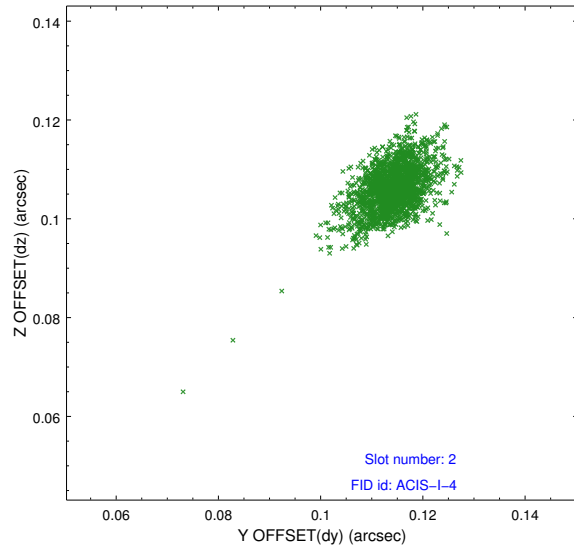
2.5.1 Slot 0



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) | 2012.03.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.25435912 |

A.2 Comments

Window constraint satisfied.