

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 7141 - L2 Version 2
Chandra X-Ray Center

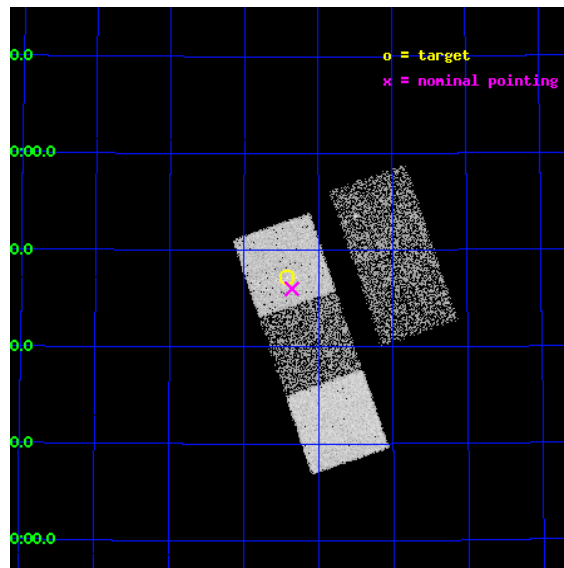
L2 Processing Date : Apr 2 2012

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1 Front

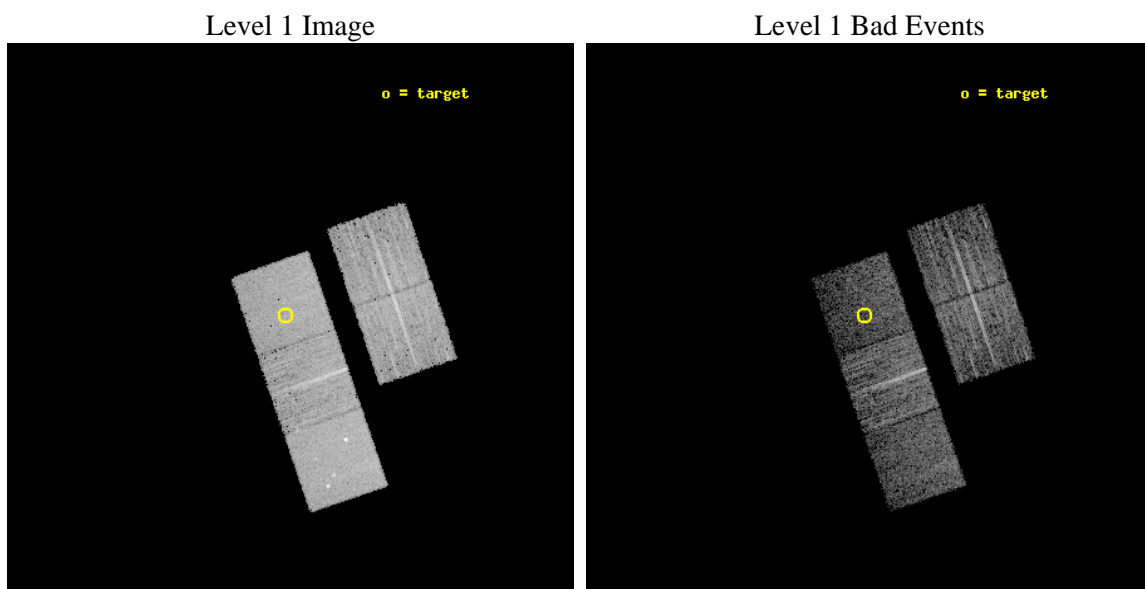
| | | |
|----------|---|---|
| seq_num | 600579 | Sequence number |
| obs_id | 7141 | Observation id |
| title | The evolving ULX populations of early-type galaxies | Proposal title |
| observer | Dr Philip Humphrey | Principal investigator |
| object | NGC 3610 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 169.605417 | Observer's specified target RA [deg] |
| dec_targ | 58.786111 | Observer's specified target Dec [deg] |
| ra_nom | 169.58922403996 | Nominal RA [deg] |
| dec_nom | 58.767155602411 | Nominal Dec [deg] |
| roll_nom | 251.06961847417 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 4990.6113090813 | Sum of GTIs [s] |
| livetime | 4925.4052982936 | Livetime [s] |
| ontime2 | 4990.4471490681 | Sum of GTIs [s] |
| ontime3 | 4990.4881890714 | Sum of GTIs [s] |
| ontime5 | 4990.570269078 | Sum of GTIs [s] |
| ontime6 | 4990.5292290747 | Sum of GTIs [s] |
| ontime7 | 4990.6113090813 | Sum of GTIs [s] |
| l2events | 52189 | Number of level 2 events |



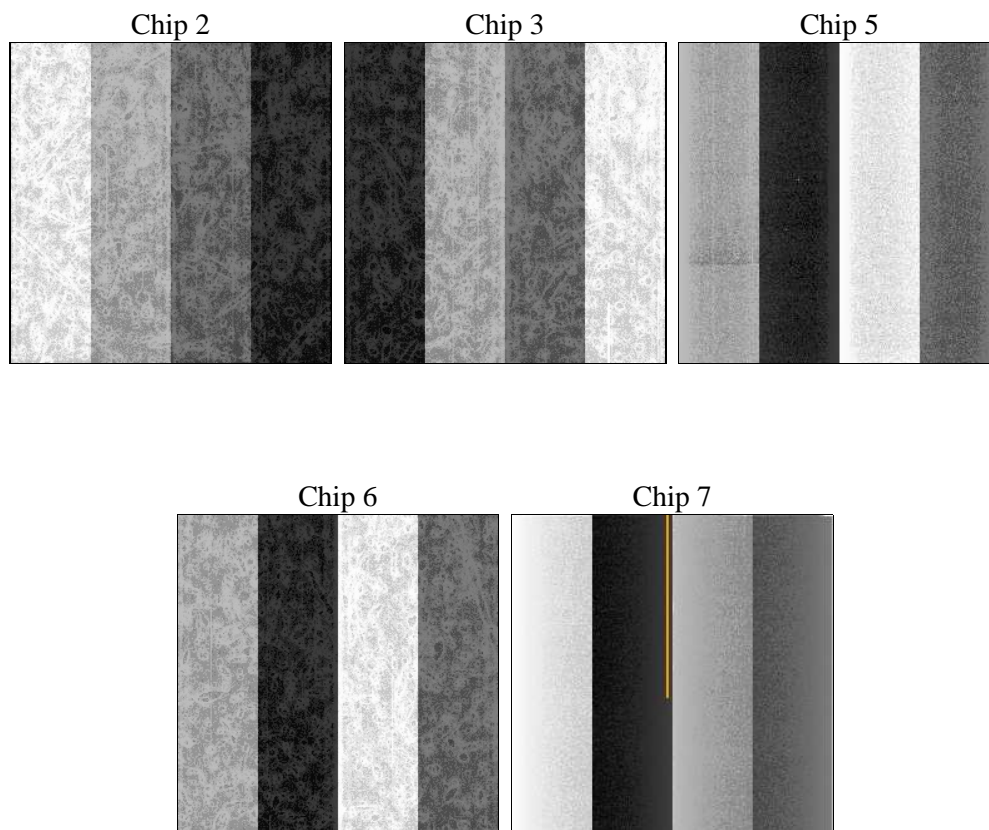
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 4952.923000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 4990.6113090813 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime2 | 4990.4471490681 | Sum of GTIs [s] |
| date | 2012-04-02T19:28:27 | Date and time of file creation | ontime3 | 4990.4881890714 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 4990.570269078 | Sum of GTIs [s] |
| | | | ontime6 | 4990.5292290747 | Sum of GTIs [s] |
| | | | ontime7 | 4990.6113090813 | Sum of GTIs [s] |
| | | | l1events | 210548 | Number of level 1 events |

2.1.4 Events

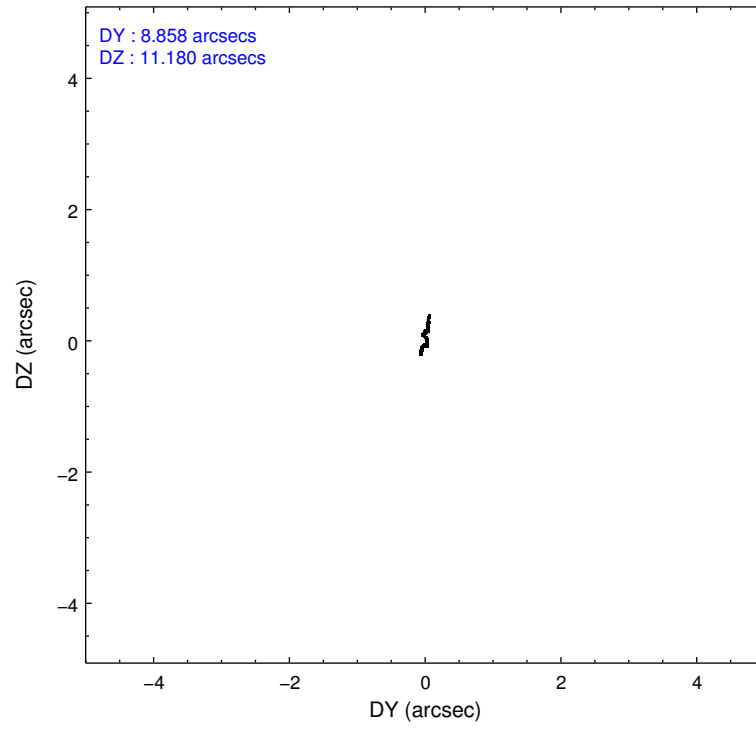
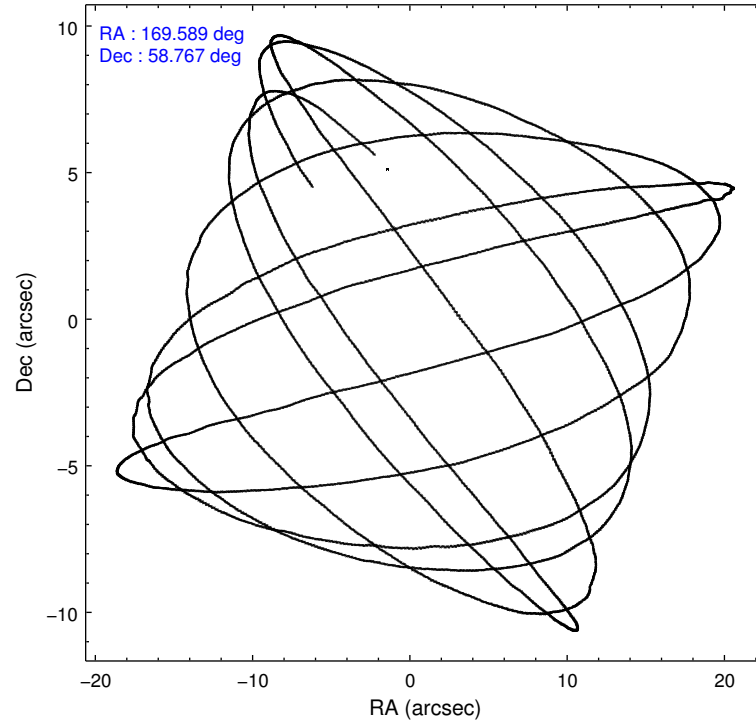
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 39583 | 35952 | 52538 | 40693 | 41782 |
| rejected events | 35818 | 32449 | 26149 | 36804 | 22589 |
| rejected % | 90% | 90% | 49% | 90% | 54% |

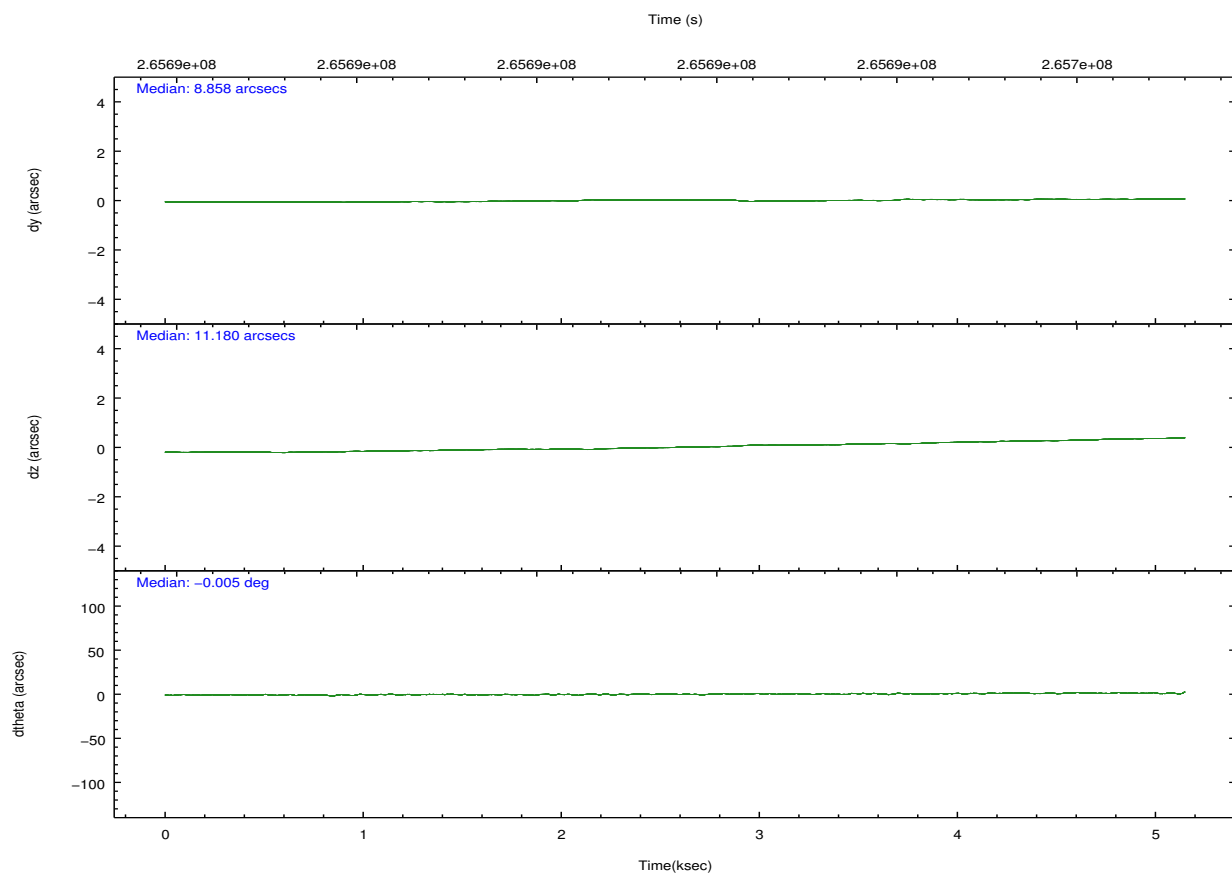
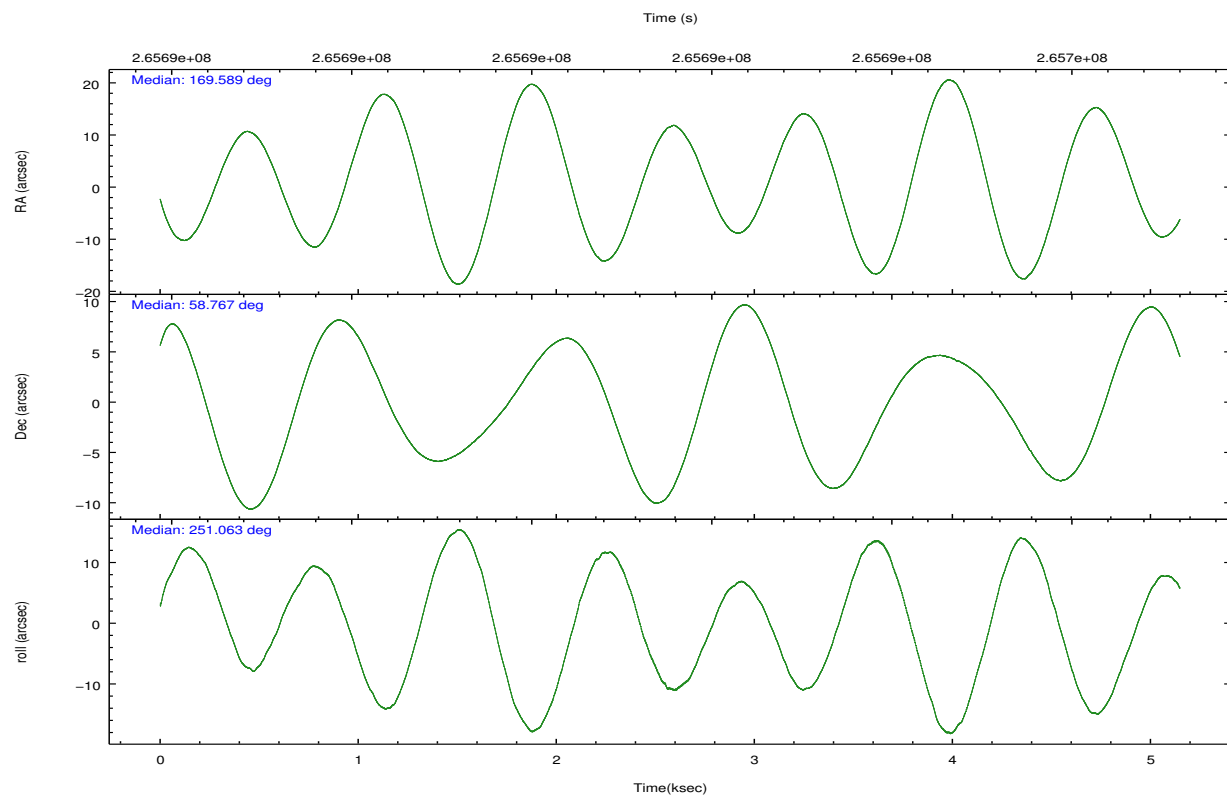
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 1395 | 1247 | 3035 | 1443 | 1746 |
| | 3% | 3% | 5% | 3% | 4% |
| grade 1 events | 19 | 25 | 51 | 12 | 54 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 883 | 704 | 7718 | 831 | 3834 |
| | 2% | 1% | 14% | 2% | 9% |
| grade 3 events | 410 | 431 | 1156 | 426 | 1815 |
| | 1% | 1% | 2% | 1% | 4% |
| grade 4 events | 425 | 410 | 1106 | 426 | 1795 |
| | 1% | 1% | 2% | 1% | 4% |
| grade 5 events | 1188 | 1467 | 4156 | 1582 | 4342 |
| | 3% | 4% | 7% | 3% | 10% |
| grade 6 events | 654 | 711 | 13398 | 764 | 10015 |
| | 1% | 1% | 25% | 1% | 23% |
| grade 7 events | 34609 | 30957 | 21918 | 35209 | 18181 |
| | 87% | 86% | 41% | 86% | 43% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-23567 | ACIS-23567 | 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 | 169.578525 | 169.5892240399598 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 58.793761 | 58.76715560241053 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 250.922151 | 251.0696184741695 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.145094680475 | | | |
| [mm] SIM translation stage offset | 0 | 0.01257209746719923 | | | |
| [s] Observation start time (MET) | 265690389.184000 | 265689451.36884 | | | |
| Observation start date | 2006-06-03T02:52:04 | 2006-06-03T02:37:31 | | | |
| [s] Observation end time (MET) | 265695342.184000 | 265695570.10662 | | | |
| Observation end date | 2006-06-03T04:14:37 | 2006-06-03T04:19:30 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



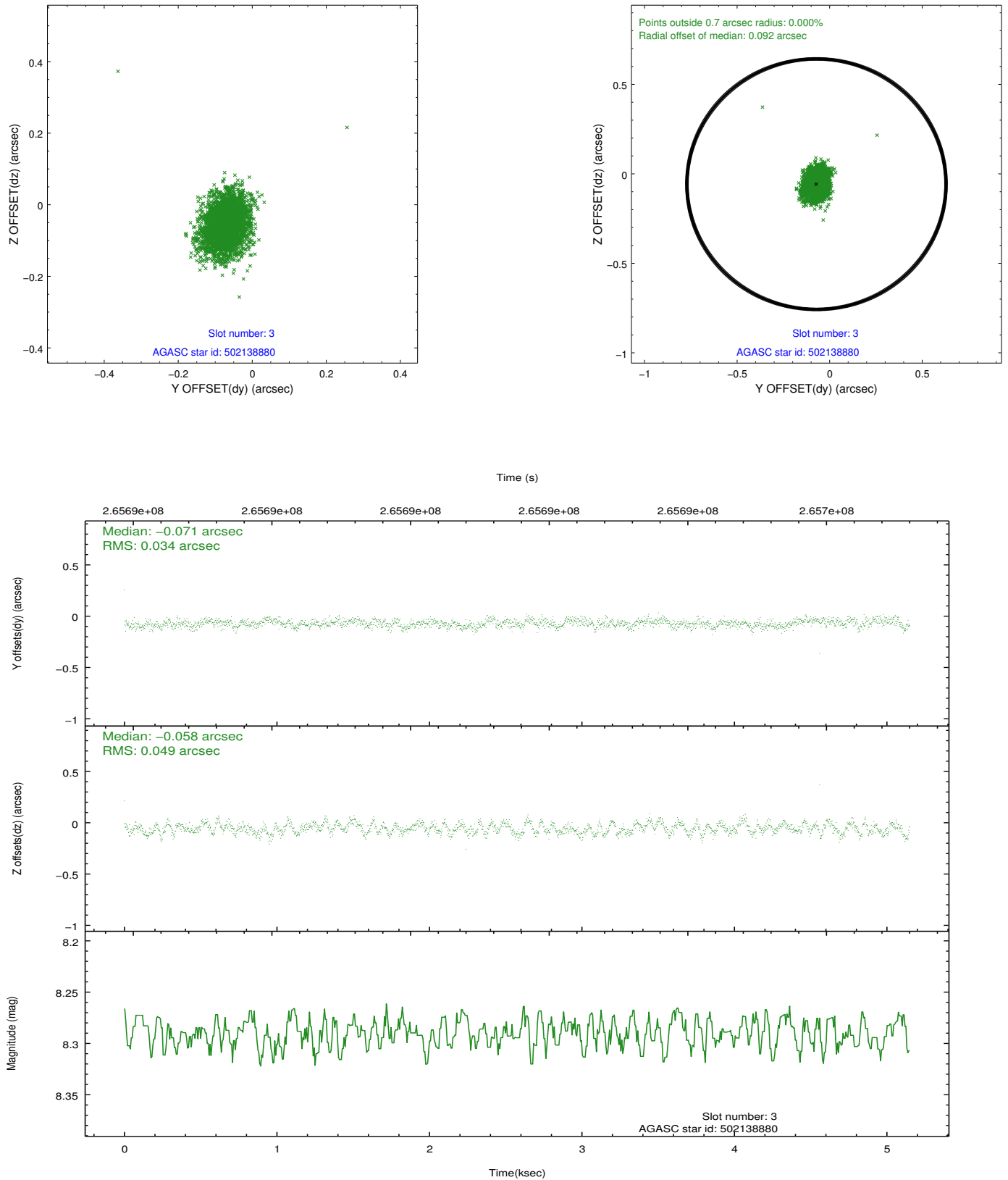


Slot Statistics

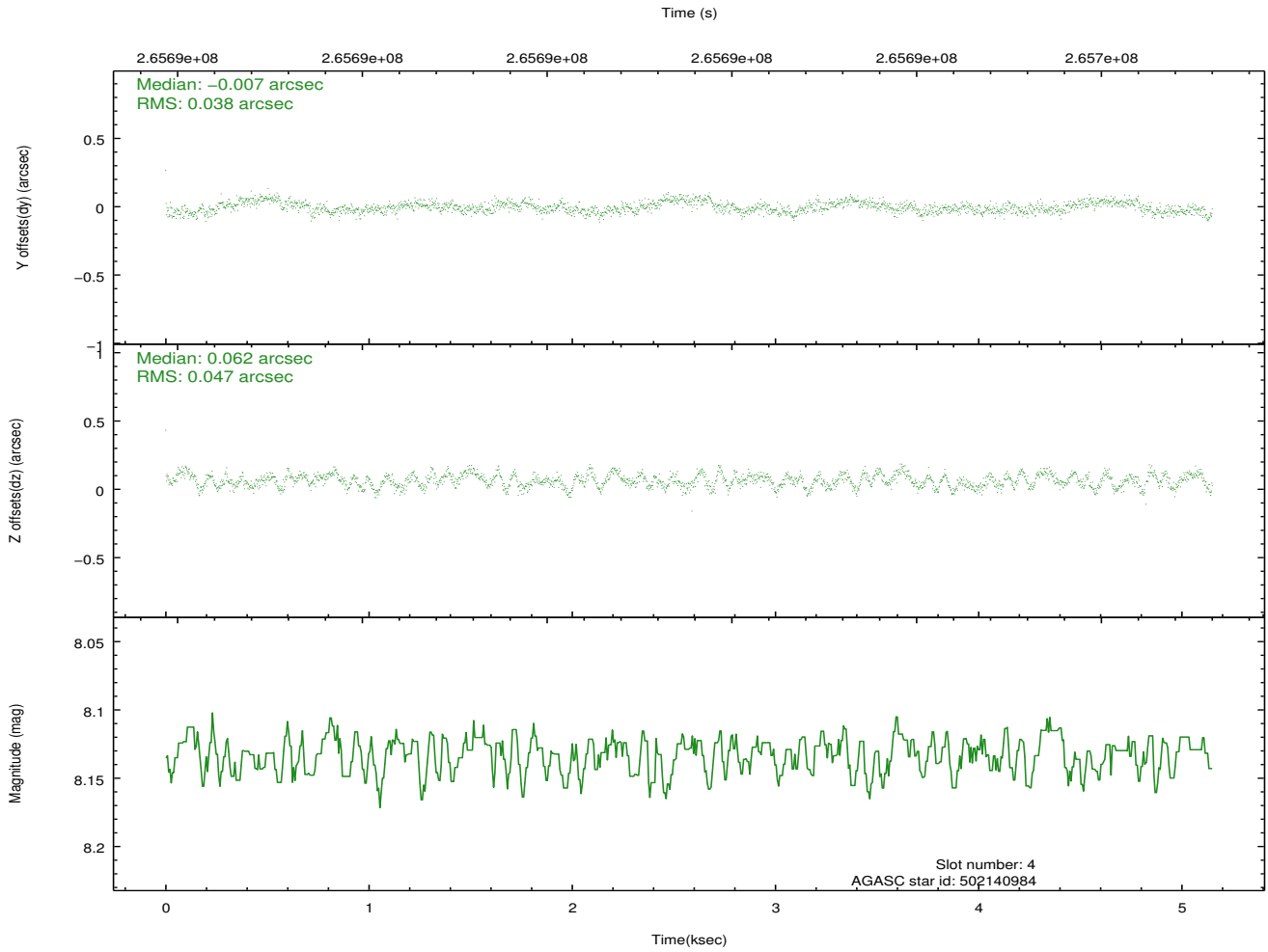
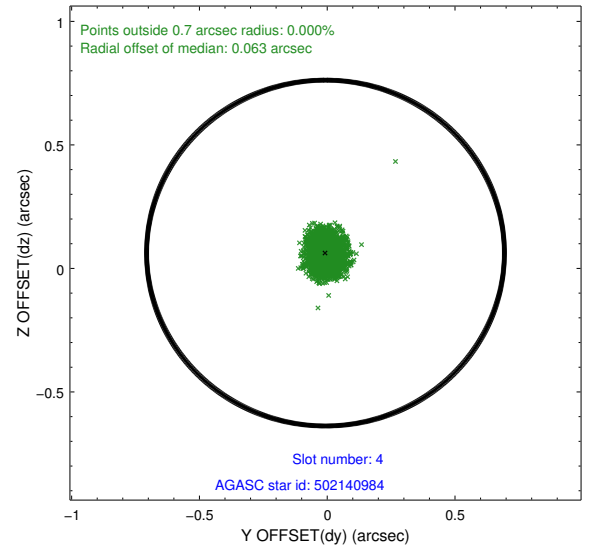
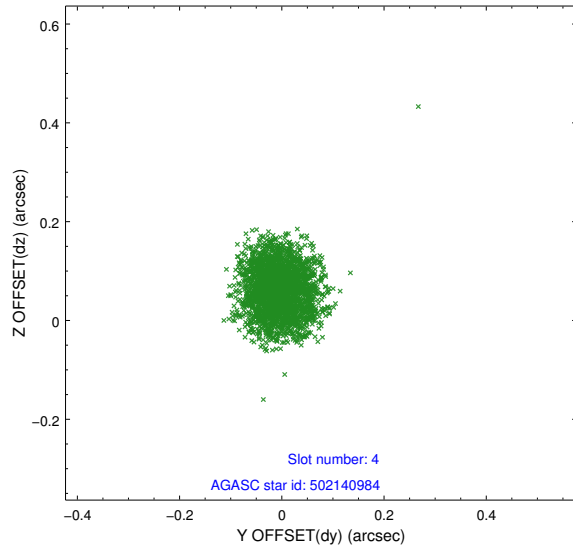
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 1257 | -0.039 | -0.019 | 0.007 | 0.012 | 0.000000 | 0.000000 | -761.67 | -1732.42 |
| 1 | FID | ACIS-S-4 | 7.21 | 1256 | 0.151 | 0.024 | 0.005 | 0.009 | 0.000000 | 0.000000 | 2151.23 | 174.93 |
| 2 | FID | ACIS-S-5 | 7.23 | 1257 | -0.143 | 0.004 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1813.13 | 169.86 |
| 3 | GUIDE | 502138880 | 8.29 | 2513 | -0.071 | -0.058 | 0.062 | 0.101 | 168.983612 | 59.120997 | -758.14 | -1425.15 |
| 4 | GUIDE | 502140984 | 8.13 | 2512 | -0.007 | 0.062 | 0.065 | 0.100 | 169.162311 | 58.945065 | -264.04 | -909.52 |
| 5 | GUIDE | 502141944 | 7.59 | 2513 | -0.045 | -0.112 | 0.055 | 0.089 | 169.786228 | 58.886871 | -443.35 | 255.31 |
| 6 | GUIDE | 502141352 | 7.86 | 2513 | 0.022 | 0.105 | 0.064 | 0.102 | 168.898541 | 58.214901 | 2385.25 | -538.71 |
| 7 | GUIDE | 502141424 | 8.83 | 2511 | 0.097 | 0.001 | 0.100 | 0.161 | 170.796377 | 58.588126 | -65.40 | 2394.64 |

2.4 Star Slots

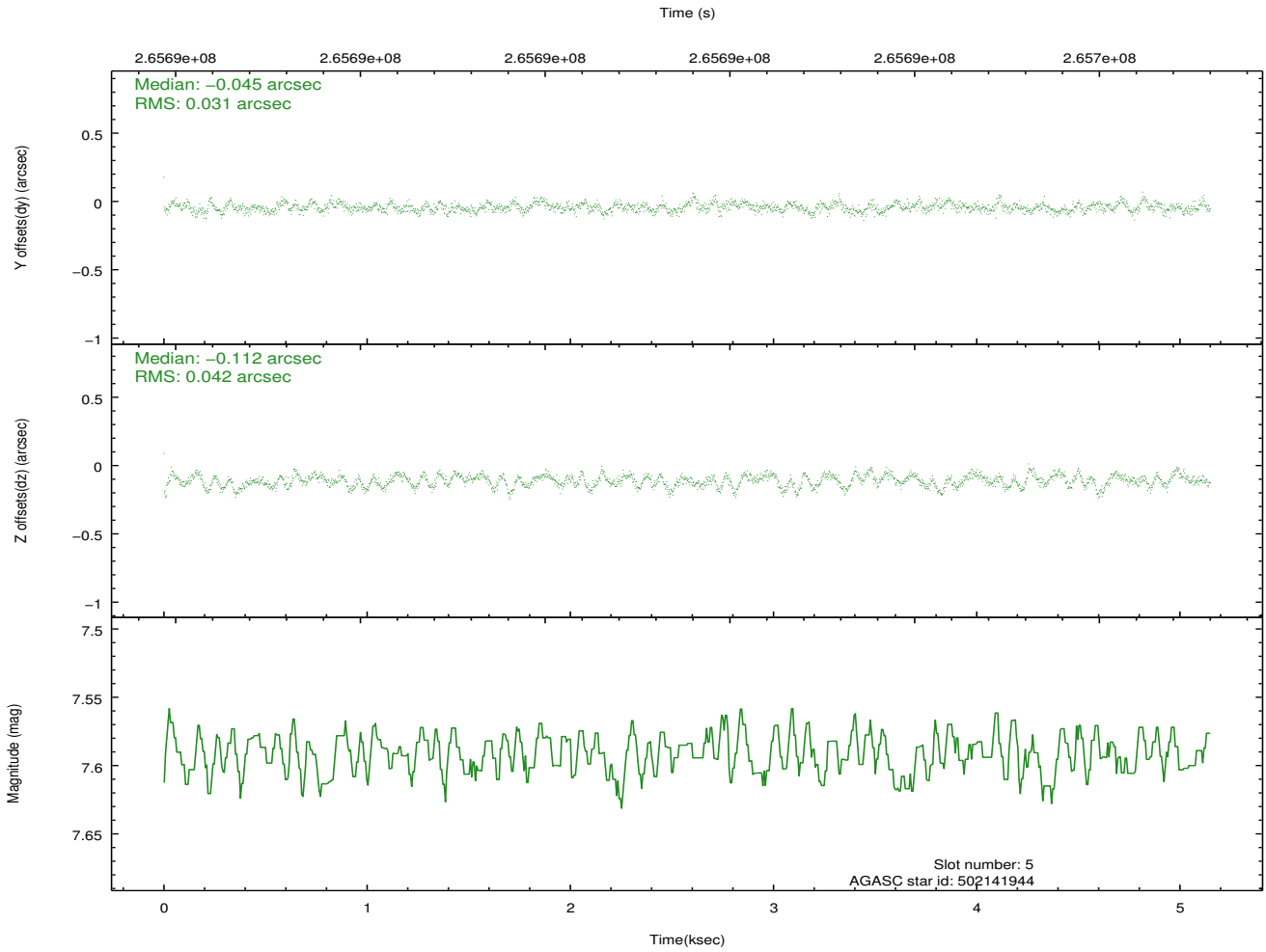
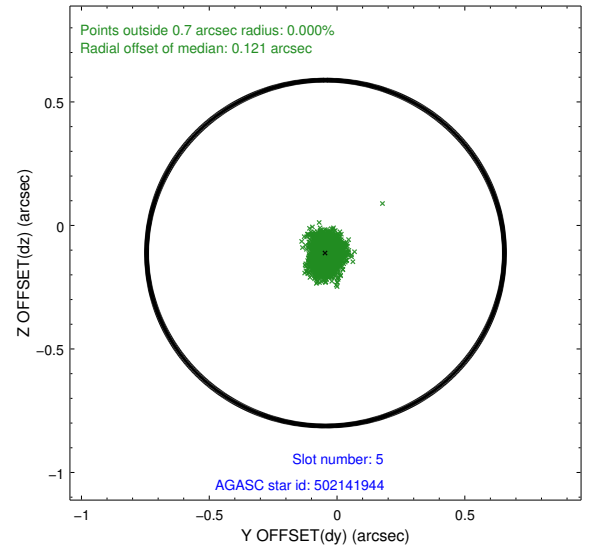
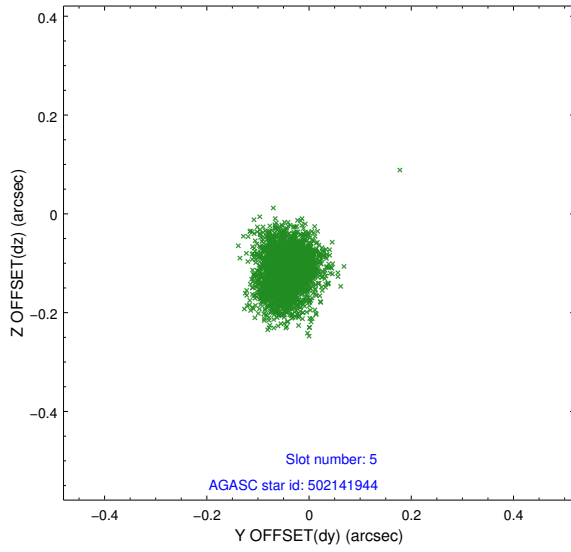
2.4.1 Slot 3



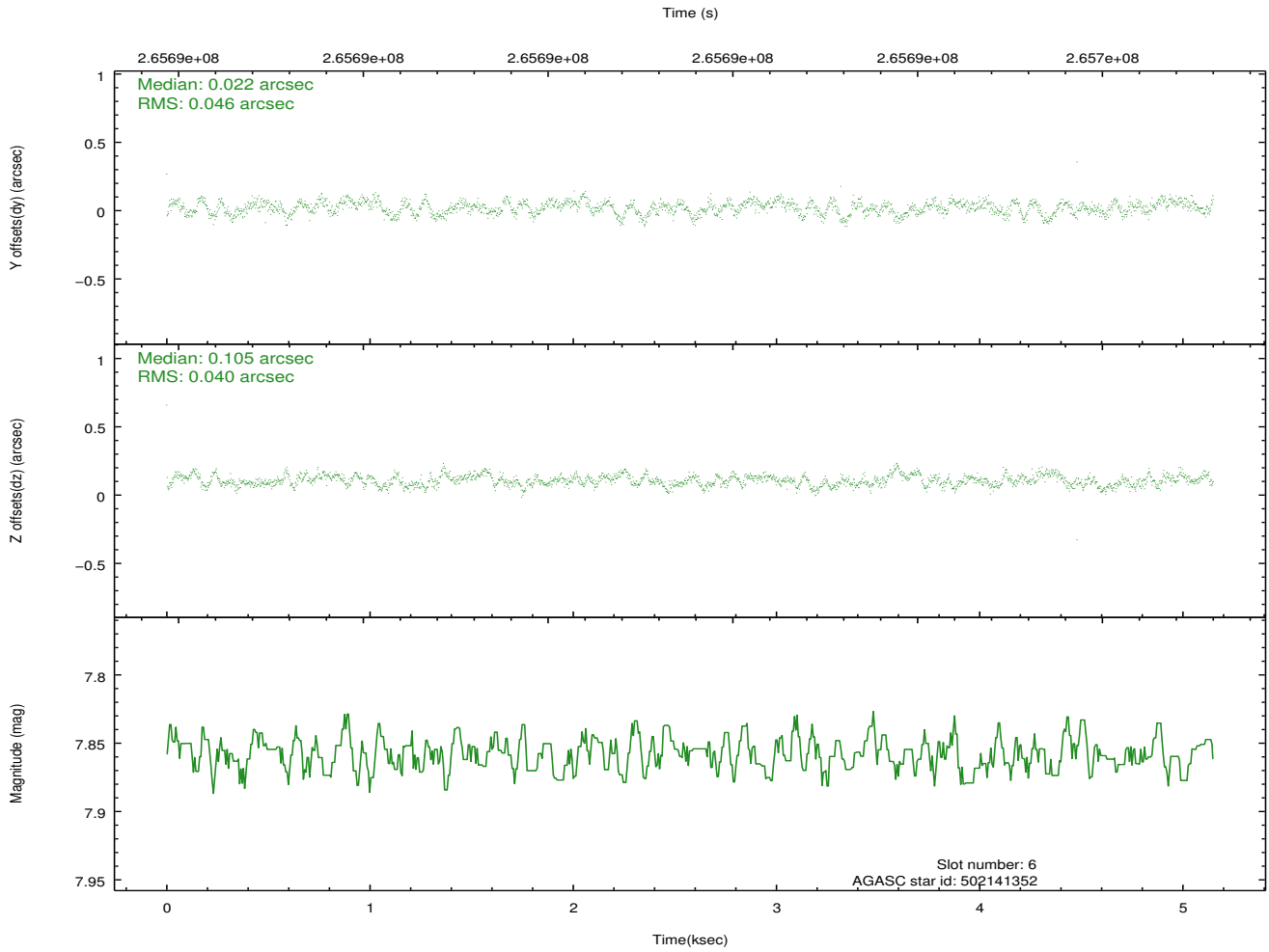
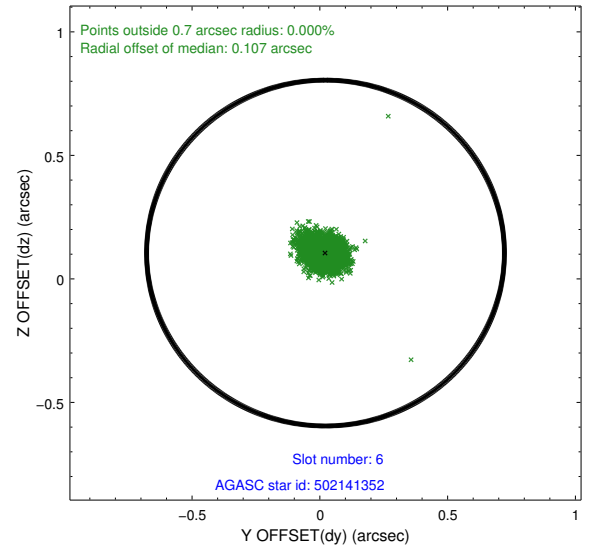
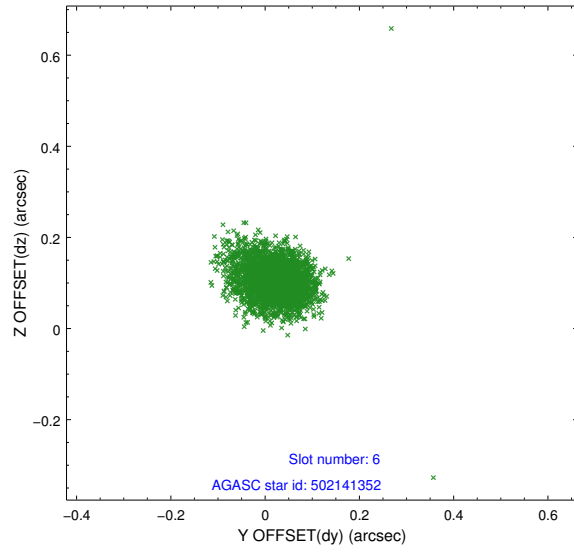
2.4.2 Slot 4



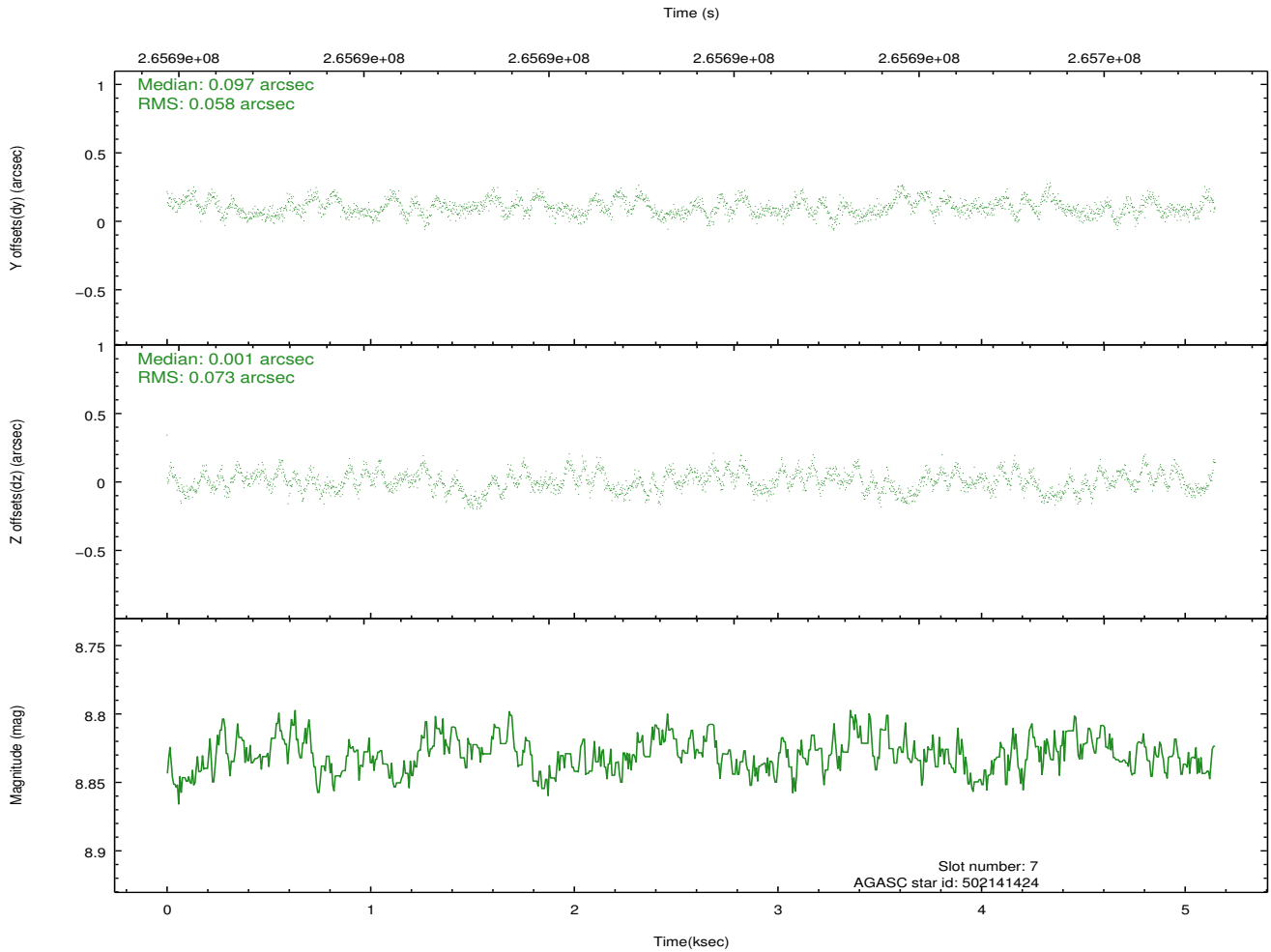
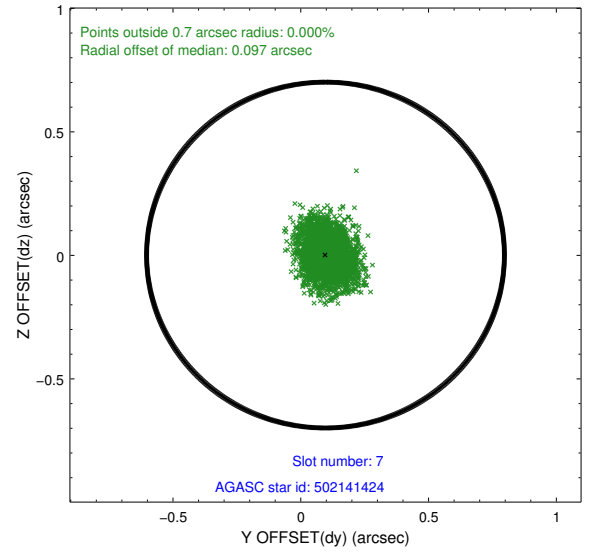
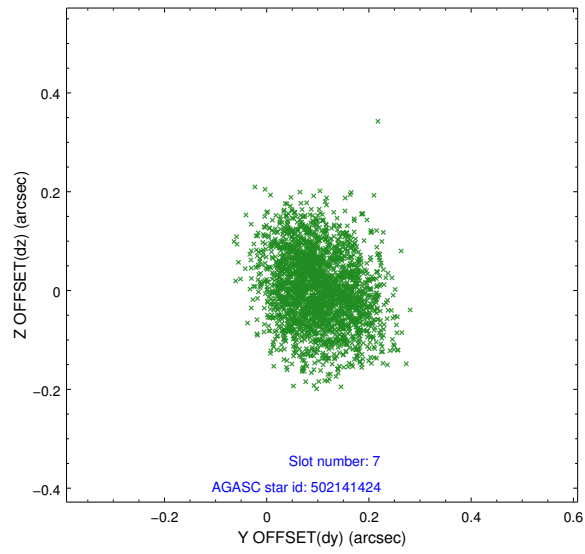
2.4.3 Slot 5



2.4.4 Slot 6

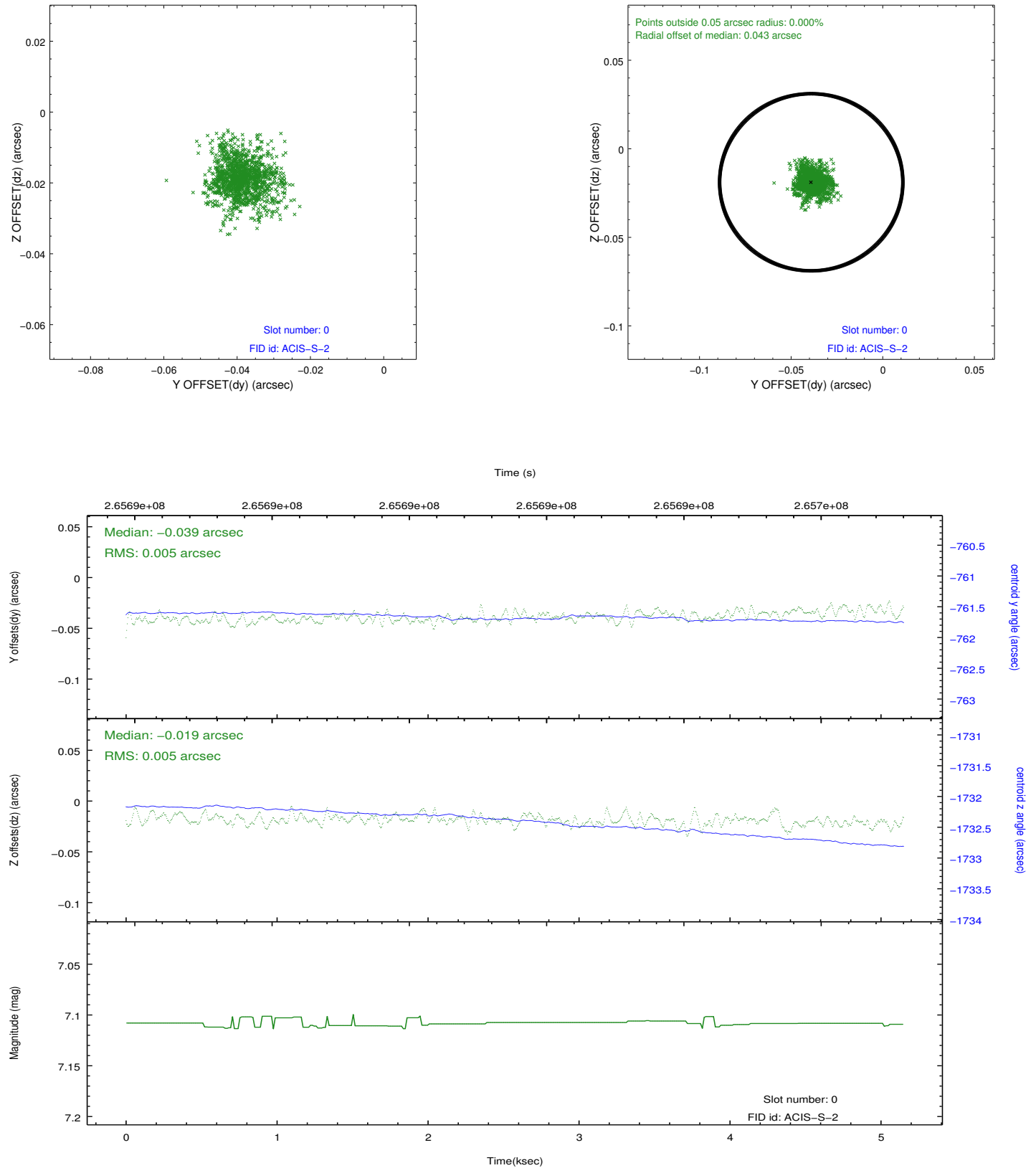


2.4.5 Slot 7

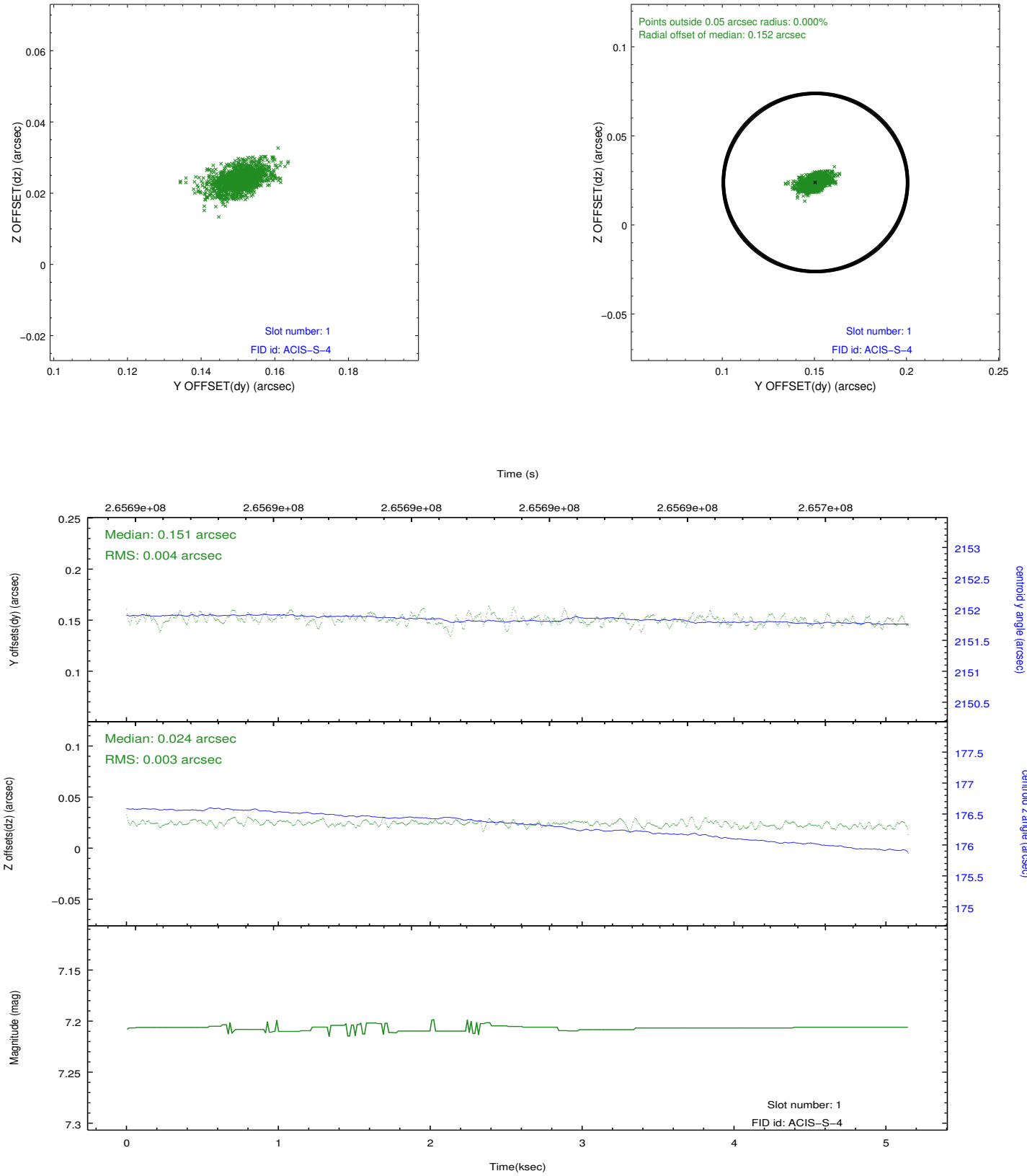


2.5 FID Slots

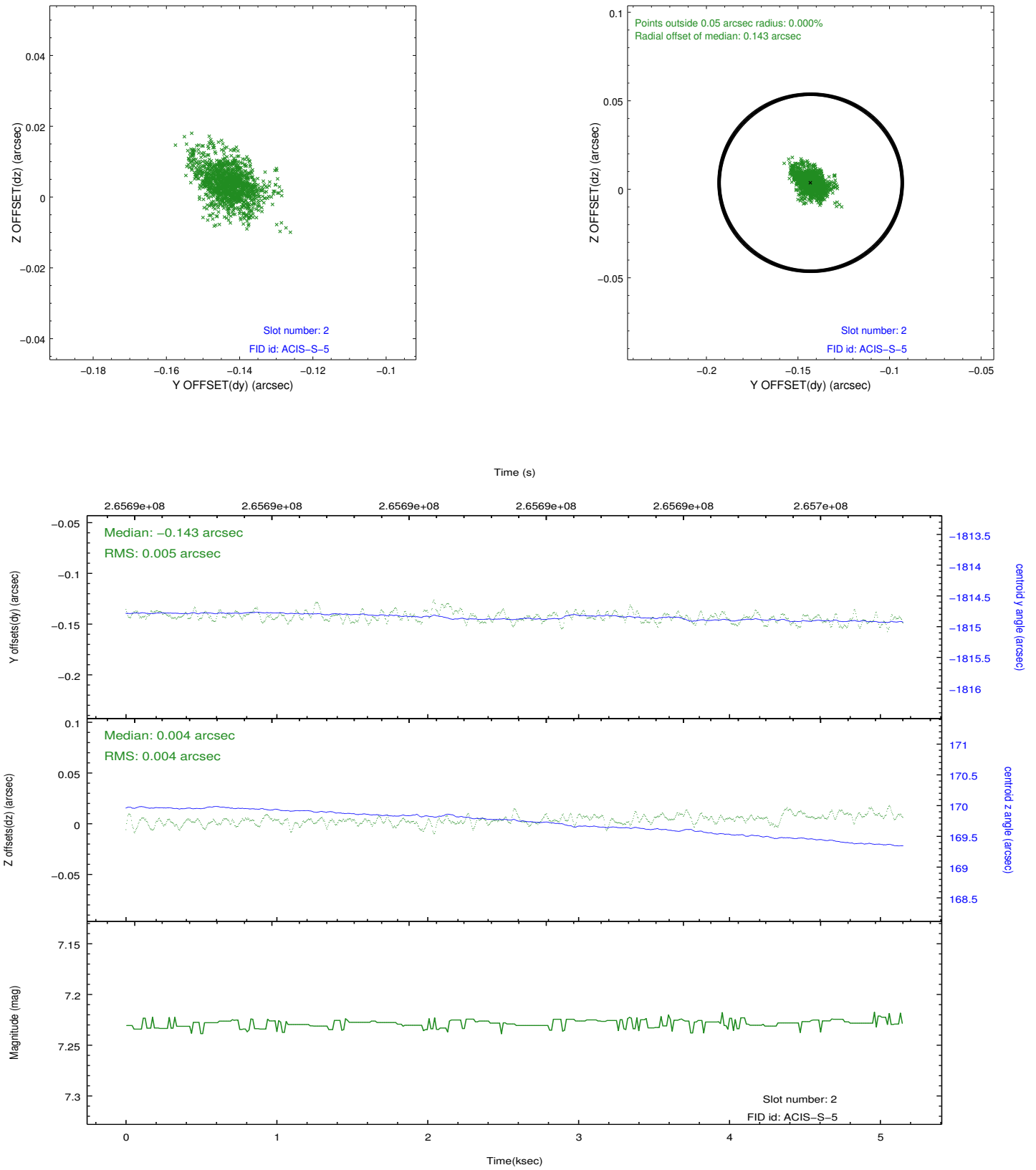
2.5.1 Slot 0



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) | 2012.04.04 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.99099999 |

A.2 Comments