

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11757 - L2 Version 2
Chandra X-Ray Center

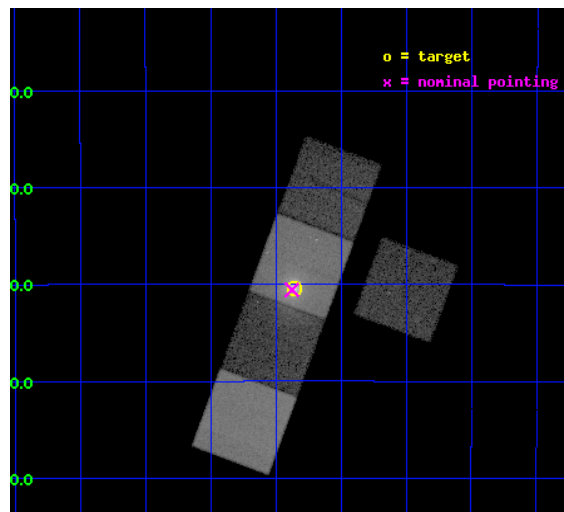
L2 Processing Date : Jun 12 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

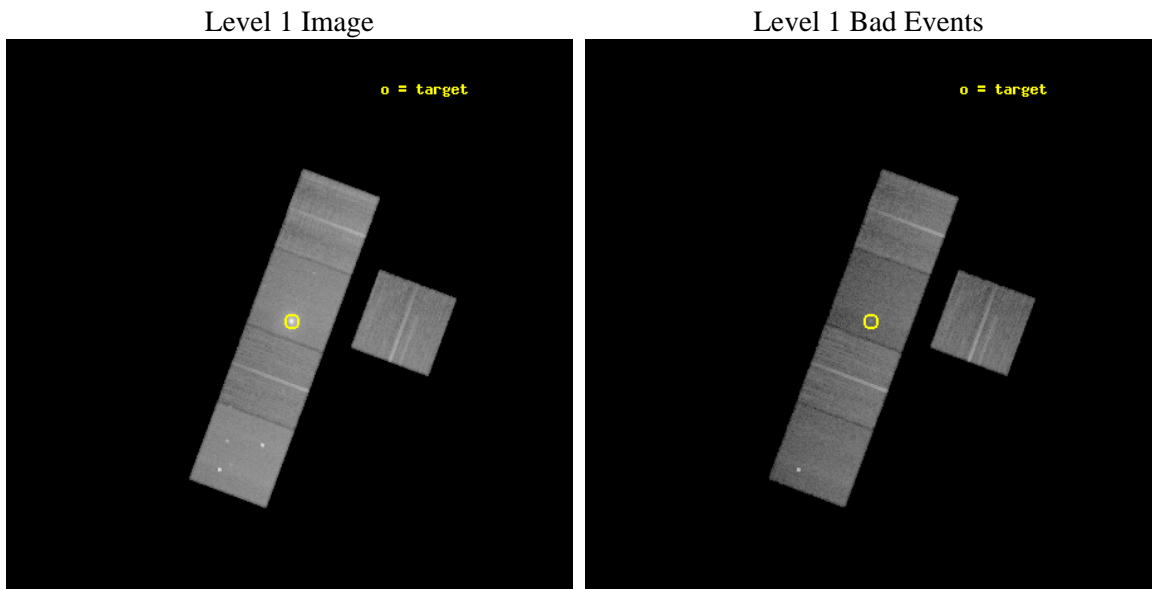
| | | |
|----------|---|---|
| seq_num | 800897 | Sequence number |
| obs_id | 11757 | Observation id |
| title | The Strongest Cool Core Cluster in the REXCESS X-ray Cluster Sample | |
| observer | Prof Megan Donahue | Principal investigator |
| object | RXJ2014.8-2430 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 303.715417 | Observer's specified target RA [deg] |
| dec_targ | -24.506361 | Observer's specified target Dec [deg] |
| ra_nom | 303.71964172322 | Nominal RA [deg] |
| dec_nom | -24.509356302729 | Nominal Dec [deg] |
| roll_nom | 290.36383815216 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 20177.900155187 | Sum of GTIs [s] |
| livetime | 19914.261034905 | Livetime [s] |
| ontime3 | 20174.759144843 | Sum of GTIs [s] |
| ontime5 | 20177.900155187 | Sum of GTIs [s] |
| ontime6 | 20177.900155187 | Sum of GTIs [s] |
| ontime7 | 20177.900155187 | Sum of GTIs [s] |
| ontime8 | 20174.759174526 | Sum of GTIs [s] |
| l2events | 316077 | Number of level 2 events |



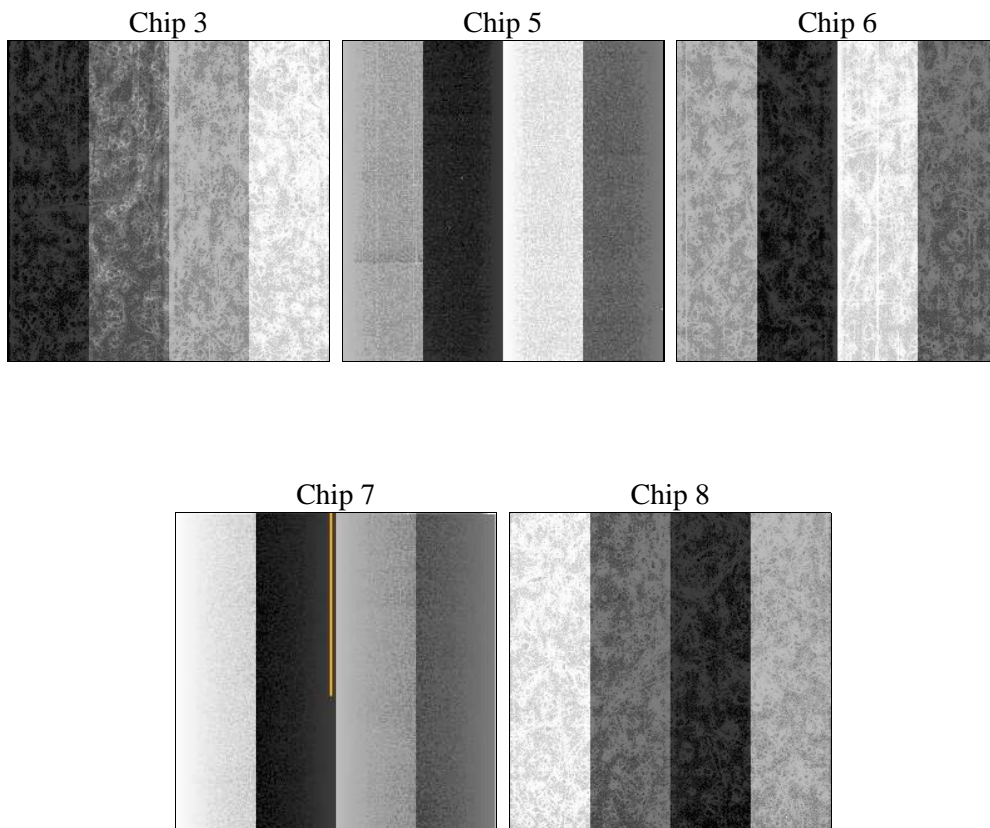
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 20000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 20177.900155187 | Sum of GTIs [s] |
| caldbver | 4.4.10 | | ontime3 | 20174.759144843 | Sum of GTIs [s] |
| date | 2012-06-12T14:09:30 | Date and time of file creation | ontime5 | 20177.900155187 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime6 | 20177.900155187 | Sum of GTIs [s] |
| | | | ontime7 | 20177.900155187 | Sum of GTIs [s] |
| | | | ontime8 | 20174.759174526 | Sum of GTIs [s] |
| | | | l1events | 1108731 | Number of level 1 events |

2.1.4 Events

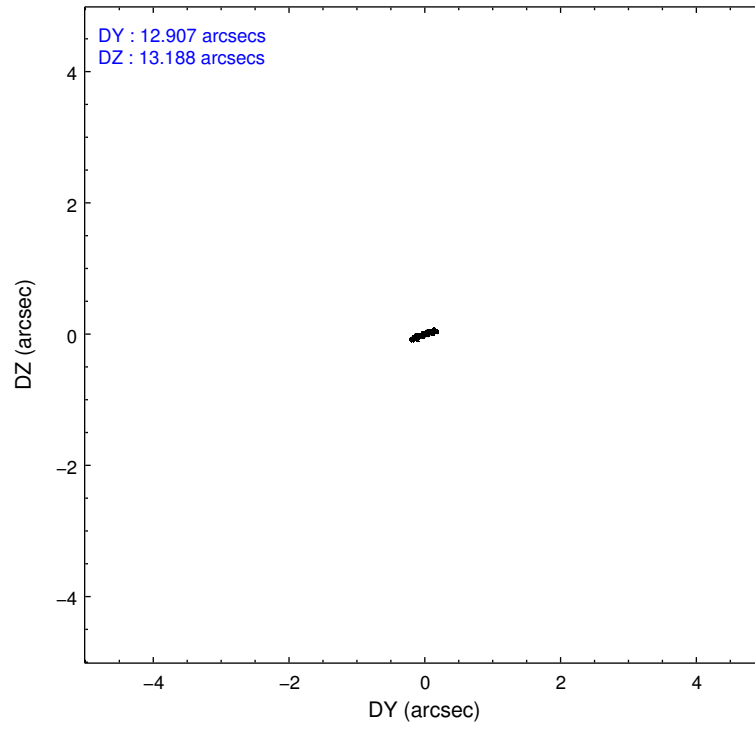
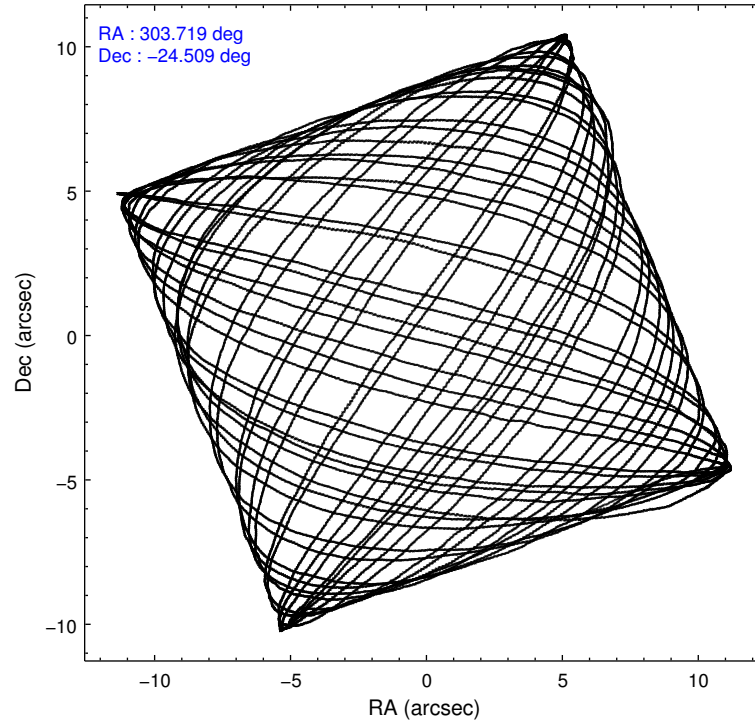
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 175650 | 260892 | 184250 | 262771 | 225168 |
| rejected events | 158422 | 132771 | 162316 | 114904 | 168973 |
| rejected % | 90% | 50% | 88% | 43% | 75% |

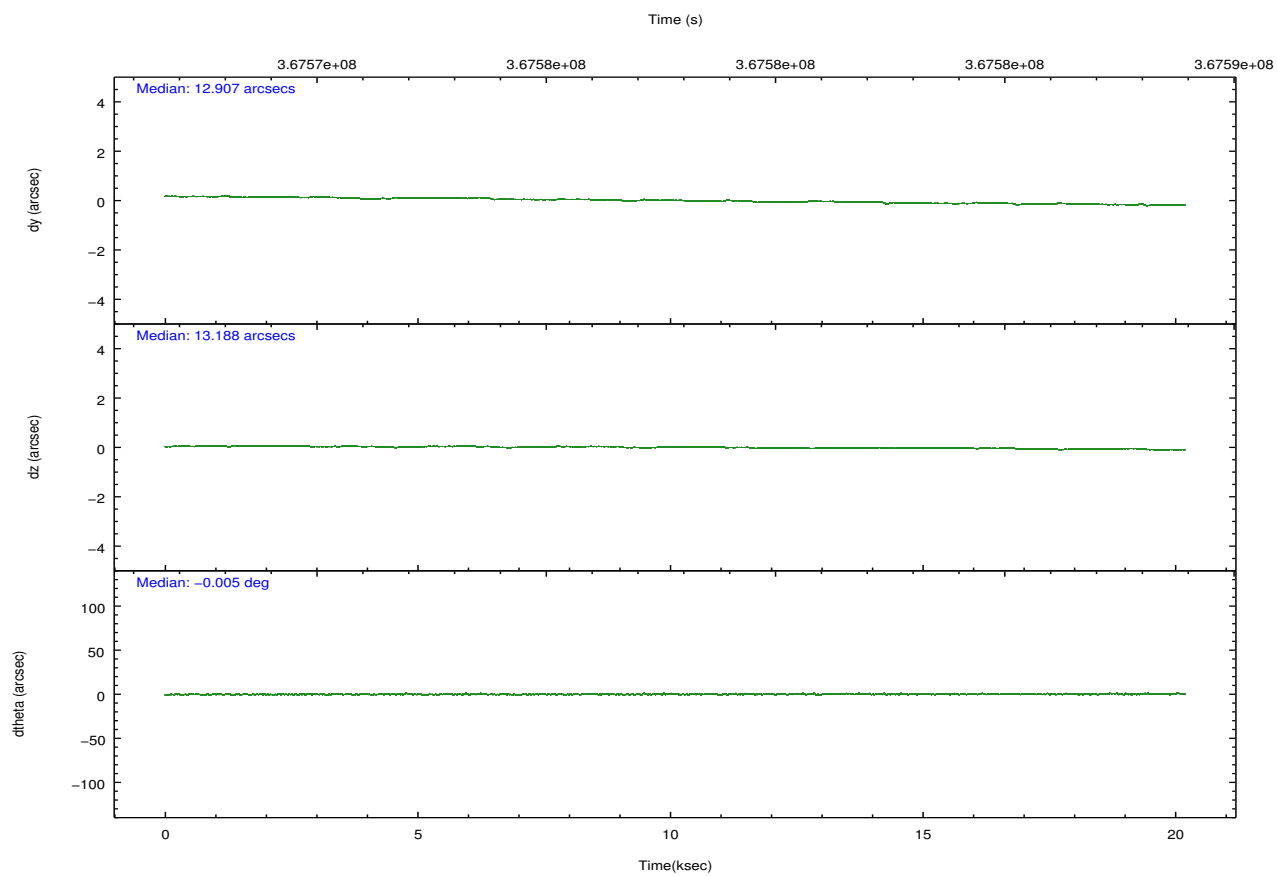
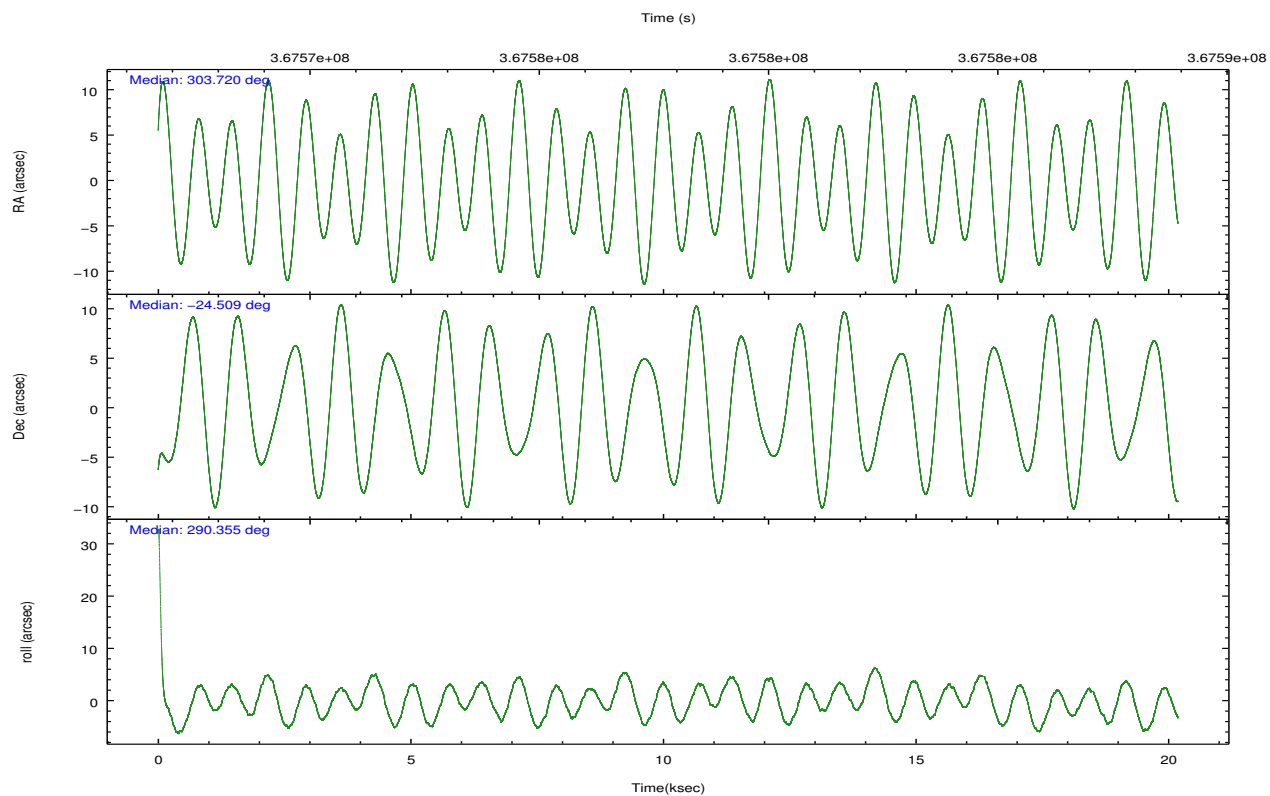
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|-------|--------|
| grade 0 events | 6276 | 14087 | 9152 | 23305 | 16727 |
| | 3% | 5% | 4% | 8% | 7% |
| grade 1 events | 97 | 486 | 100 | 320 | 210 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 3878 | 39615 | 4544 | 34085 | 13090 |
| | 2% | 15% | 2% | 12% | 5% |
| grade 3 events | 1929 | 5019 | 2082 | 15013 | 6266 |
| | 1% | 1% | 1% | 5% | 2% |
| grade 4 events | 1943 | 4727 | 2104 | 14664 | 5698 |
| | 1% | 1% | 1% | 5% | 2% |
| grade 5 events | 7377 | 20397 | 7479 | 21576 | 10546 |
| | 4% | 7% | 4% | 8% | 4% |
| grade 6 events | 3444 | 66271 | 4301 | 62462 | 15068 |
| | 1% | 25% | 2% | 23% | 6% |
| grade 7 events | 150706 | 110290 | 154488 | 91346 | 157563 |
| | 85% | 42% | 83% | 34% | 69% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-35678 | ACIS-35678 | 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 | 303.696222 | 303.719641723225 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -24.492183 | -24.50935630272931 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 290.197471 | 290.3638381521604 | [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 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 367567895.184000 | 367566768.5766 | | | |
| Observation start date | 2009-08-25T06:10:29 | 2009-08-25T05:52:48 | | | |
| [s] Observation end time (MET) | 367587895.184000 | 367589014.15271 | | | |
| Observation end date | 2009-08-25T11:43:49 | 2009-08-25T12:03:34 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



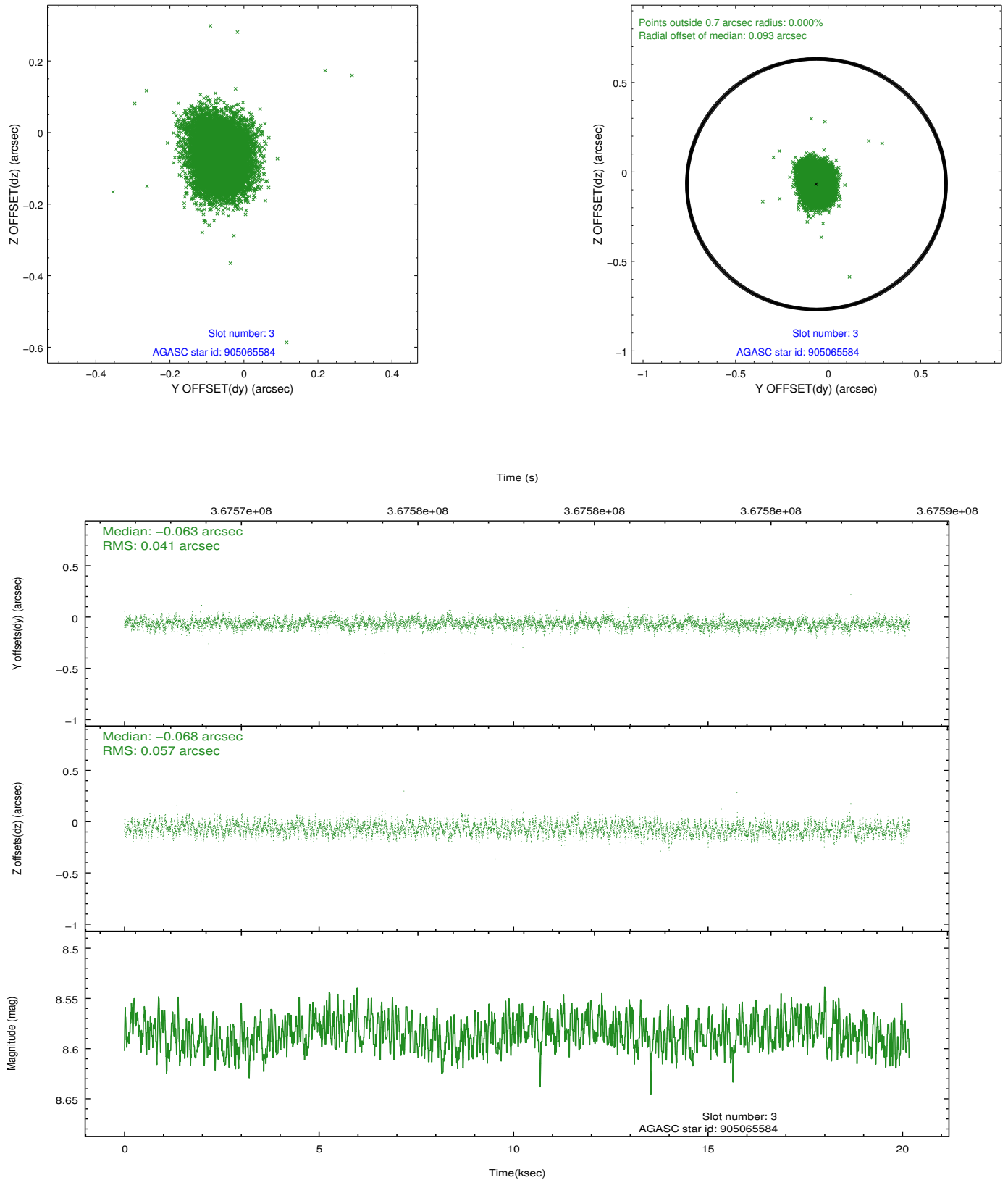


Slot Statistics

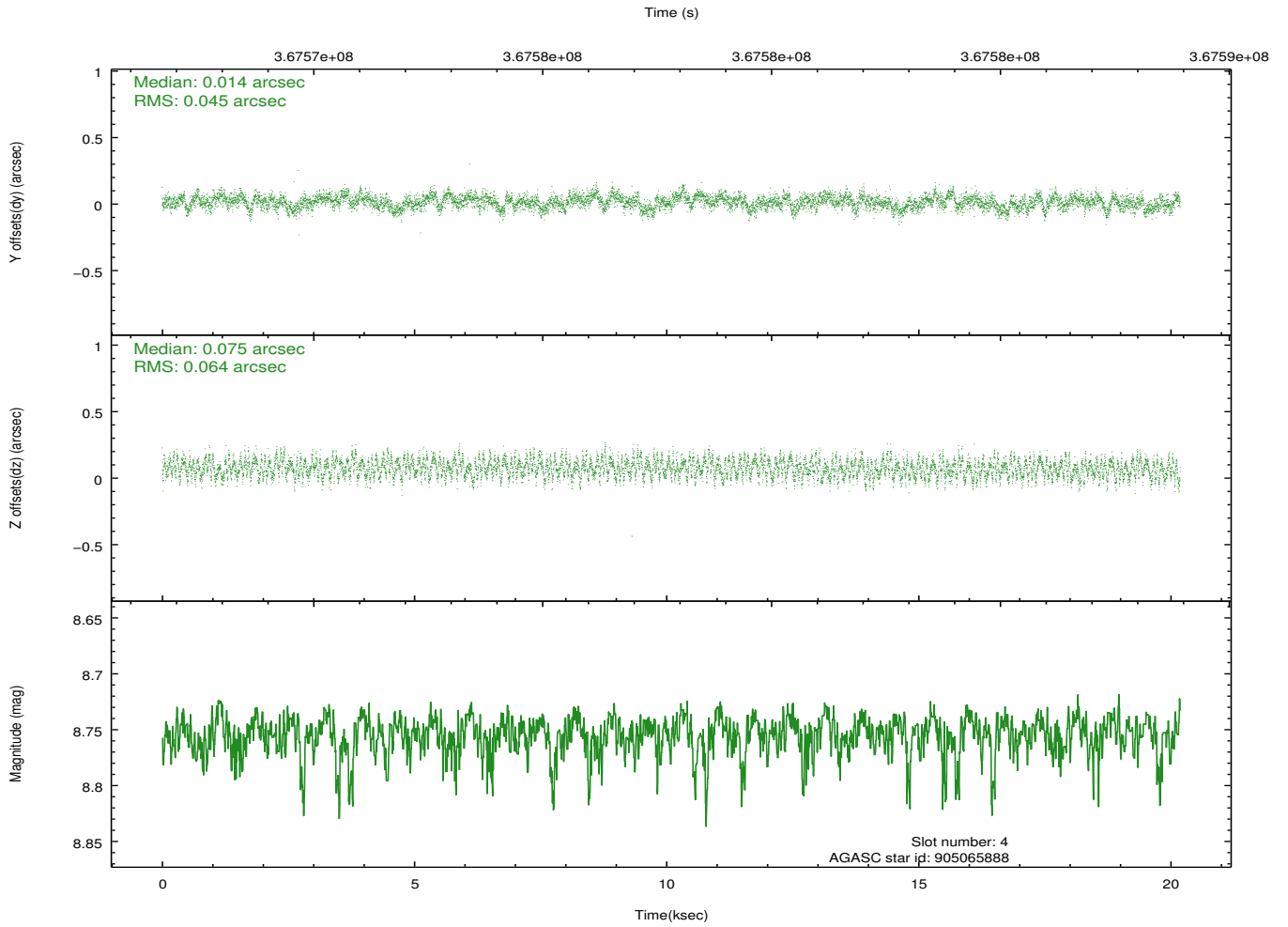
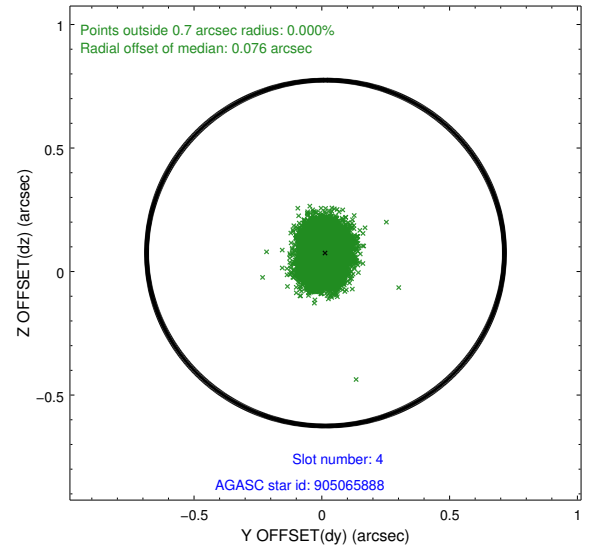
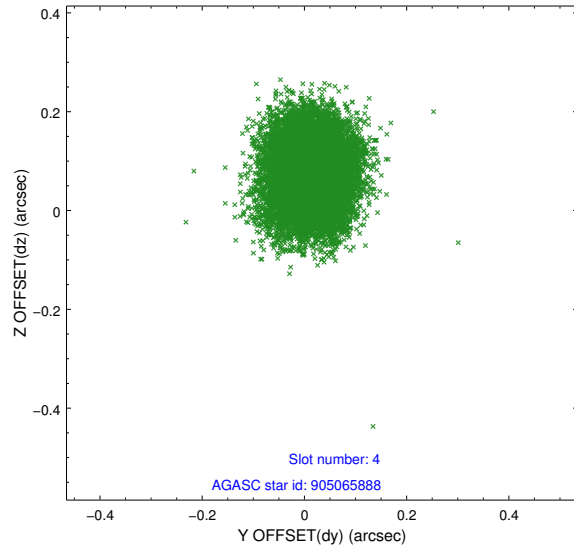
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.02 | 4924 | 0.093 | -0.044 | 0.013 | 0.023 | 0.000000 | 0.000000 | 930.31 | -1730.14 |
| 1 | FID | ACIS-S-5 | 7.06 | 4924 | -0.138 | 0.069 | 0.008 | 0.013 | 0.000000 | 0.000000 | -1818.81 | 167.35 |
| 2 | FID | ACIS-S-6 | 7.17 | 4924 | 0.023 | -0.012 | 0.010 | 0.017 | 0.000000 | 0.000000 | 395.60 | 811.43 |
| 3 | GUIDE | 905065584 | 8.59 | 9847 | -0.063 | -0.068 | 0.075 | 0.119 | 302.869582 | -24.226900 | -1825.00 | -2219.99 |
| 4 | GUIDE | 905065888 | 8.75 | 9839 | 0.014 | 0.075 | 0.084 | 0.131 | 303.002939 | -24.278183 | -1502.81 | -1871.06 |
| 5 | GUIDE | 905197216 | 8.13 | 9848 | -0.095 | 0.022 | 0.060 | 0.098 | 304.047459 | -23.834728 | -1821.04 | 1902.14 |
| 6 | GUIDE | 905584160 | 7.96 | 9845 | -0.014 | 0.083 | 0.060 | 0.095 | 303.197113 | -24.804412 | 494.82 | -1919.12 |
| 7 | GUIDE | 905717120 | 9.00 | 9838 | 0.158 | -0.112 | 0.079 | 0.128 | 303.795024 | -24.447088 | -40.15 | 359.94 |

2.4 Star Slots

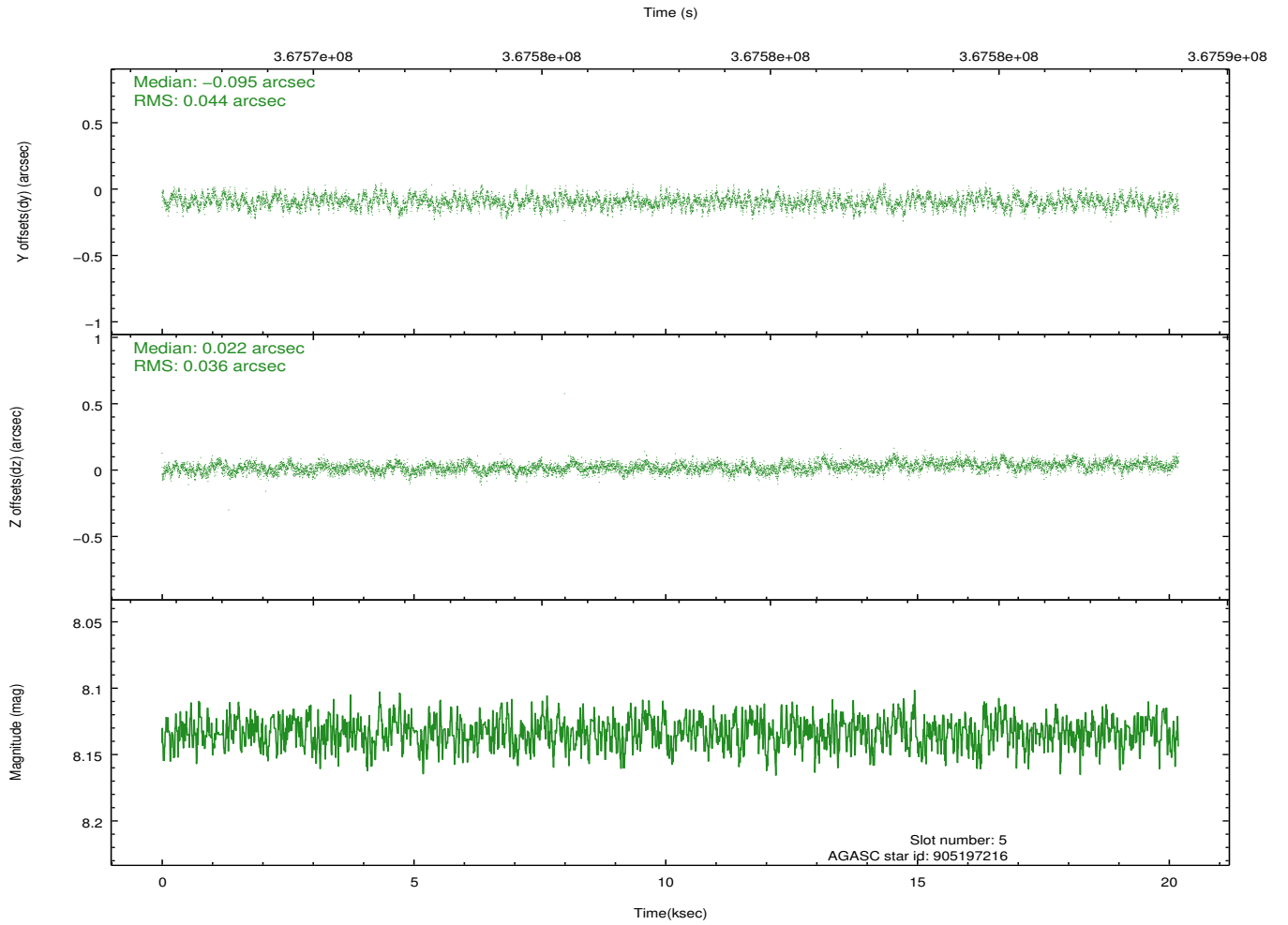
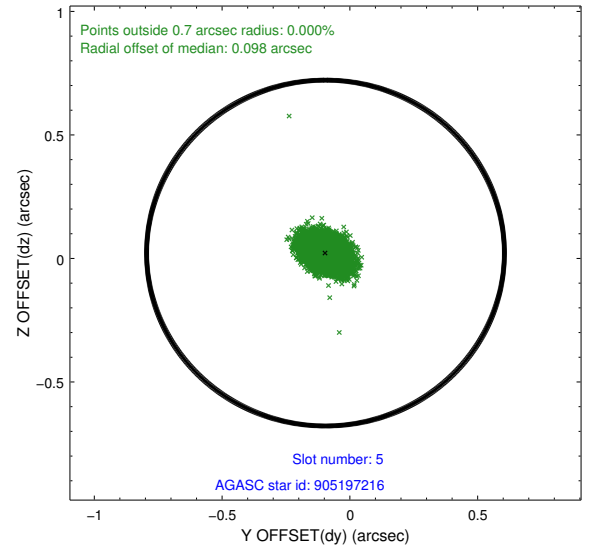
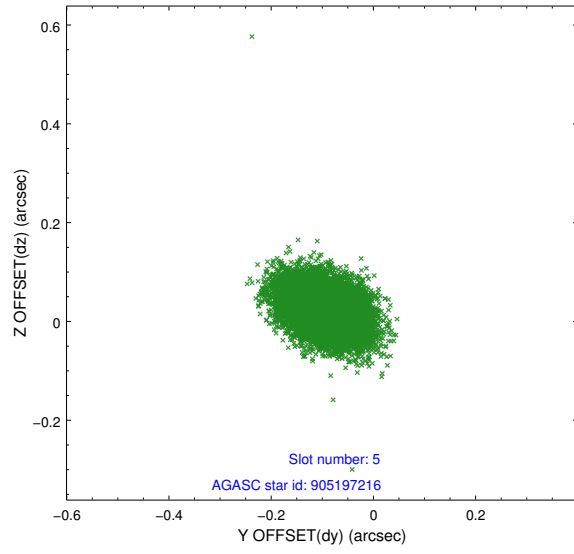
2.4.1 Slot 3



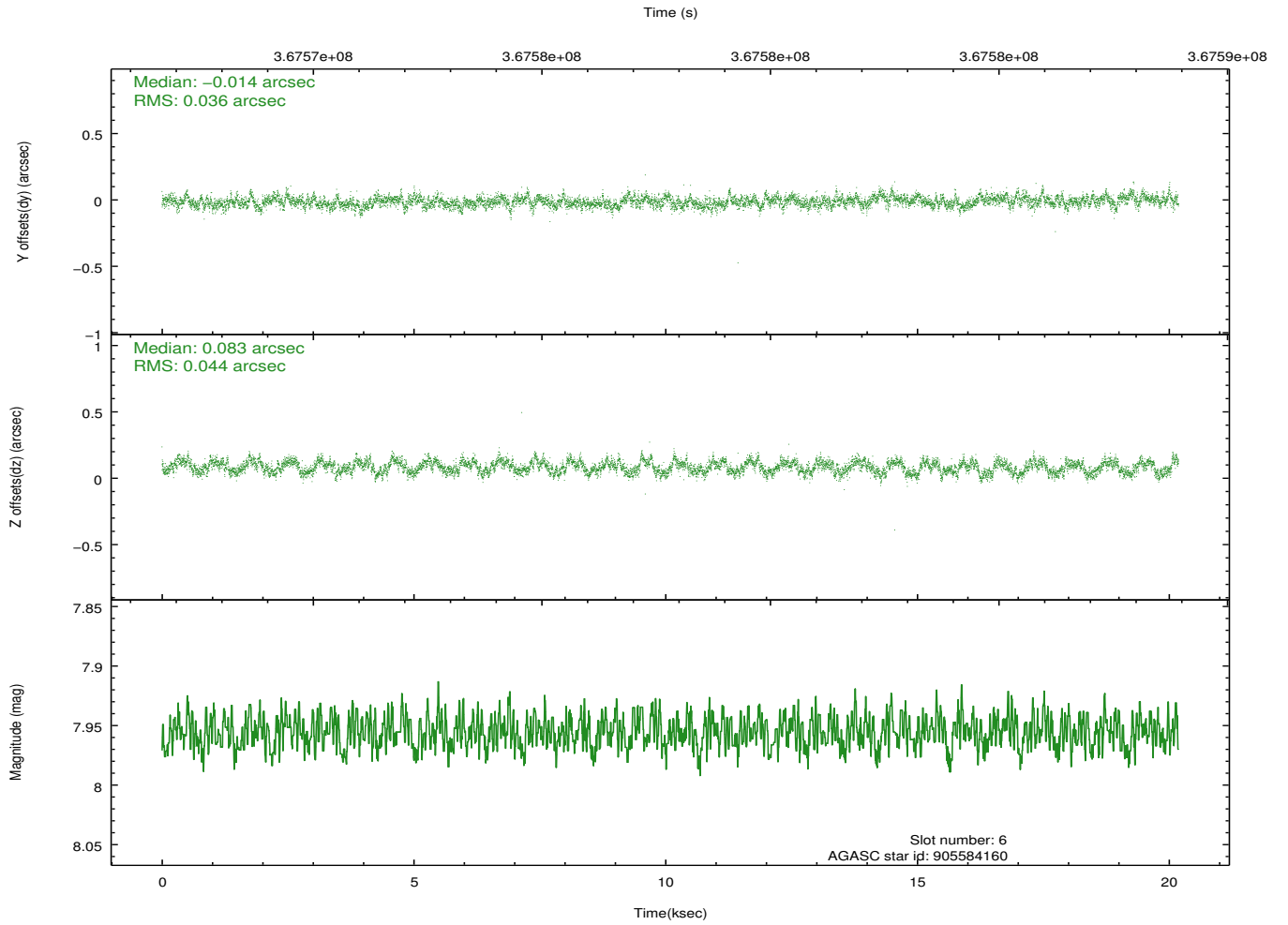
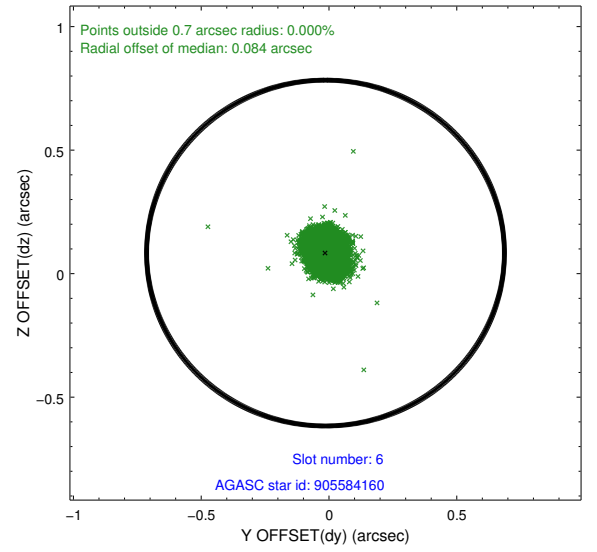
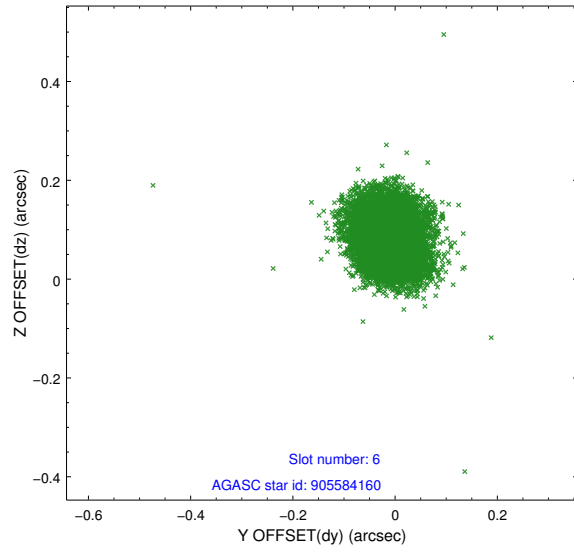
2.4.2 Slot 4



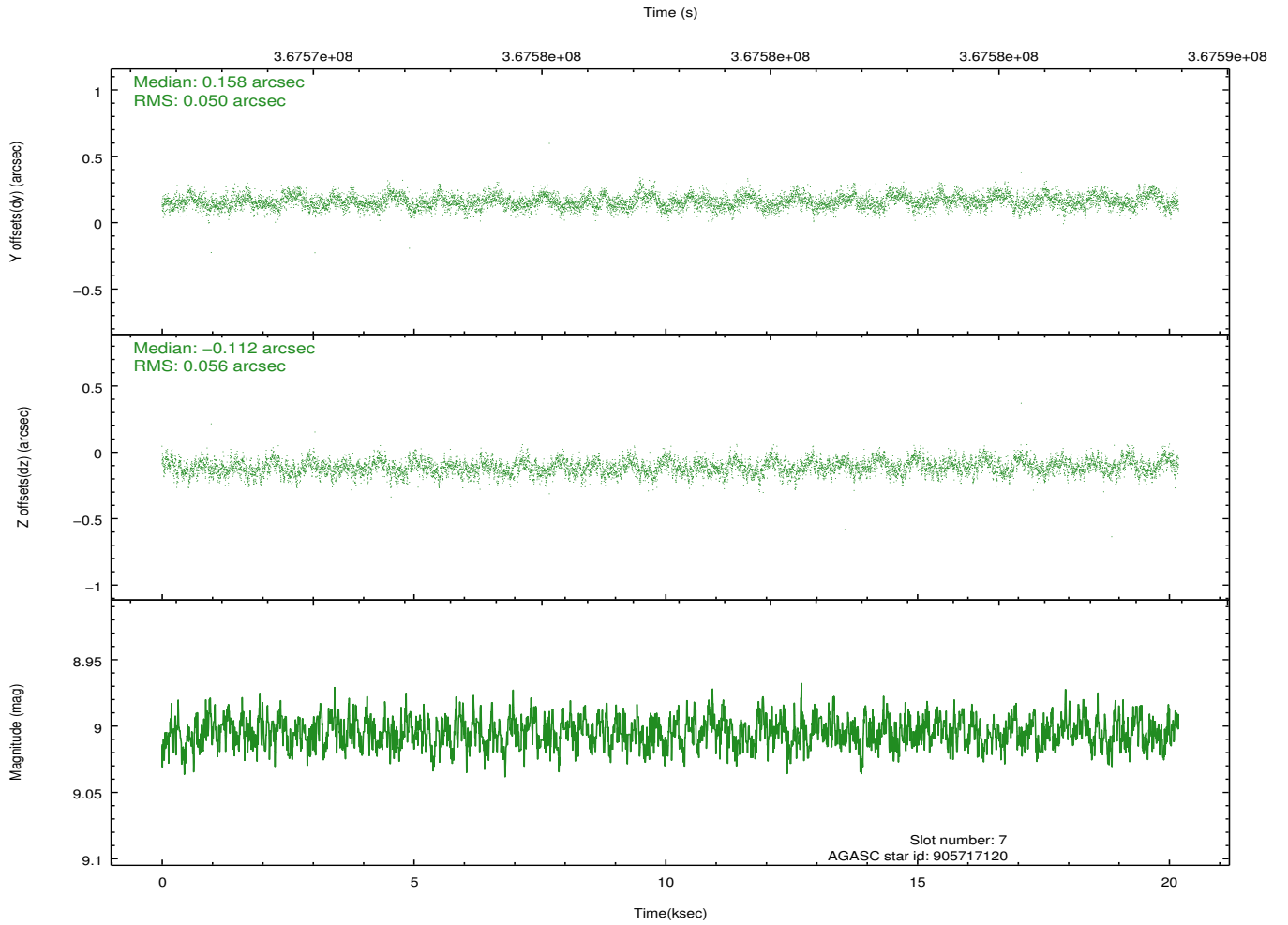
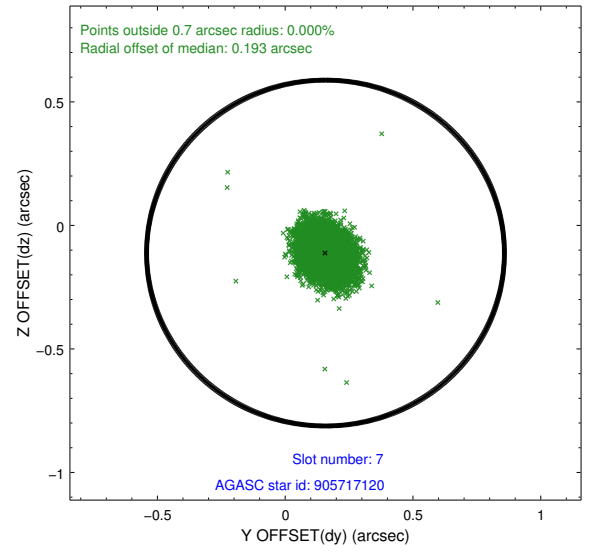
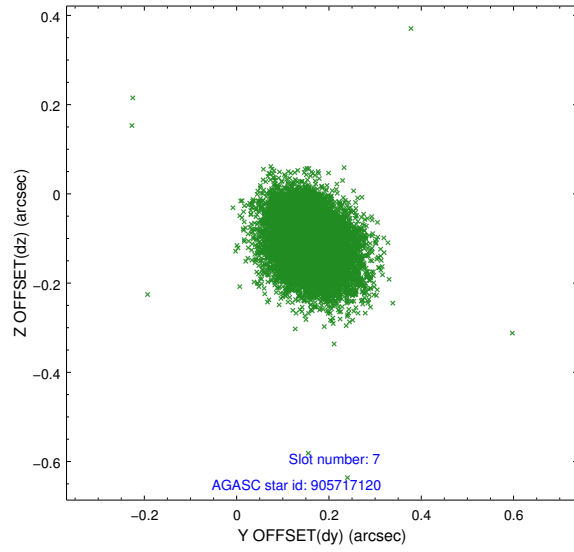
2.4.3 Slot 5



2.4.4 Slot 6

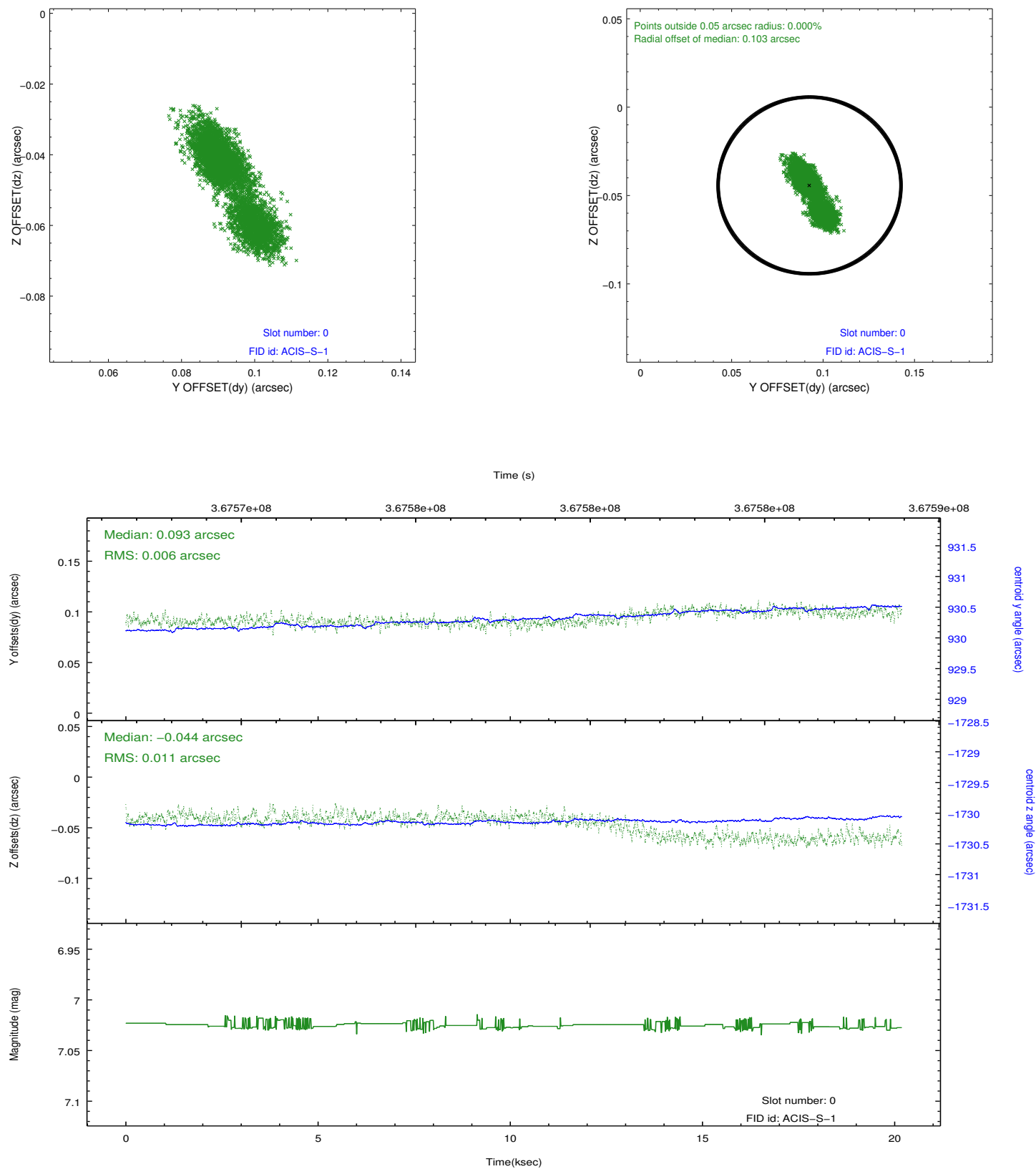


2.4.5 Slot 7

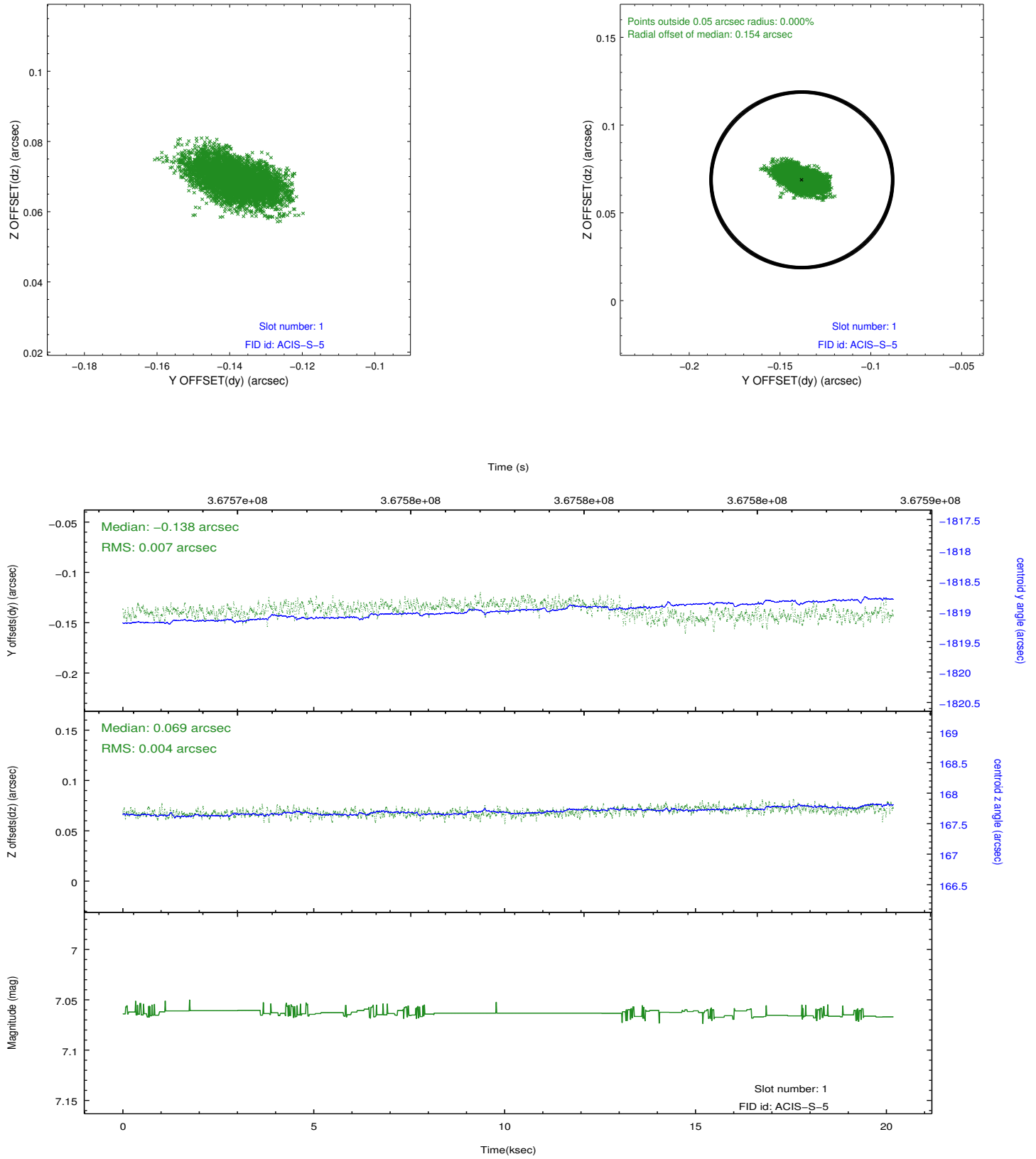


2.5 FID Slots

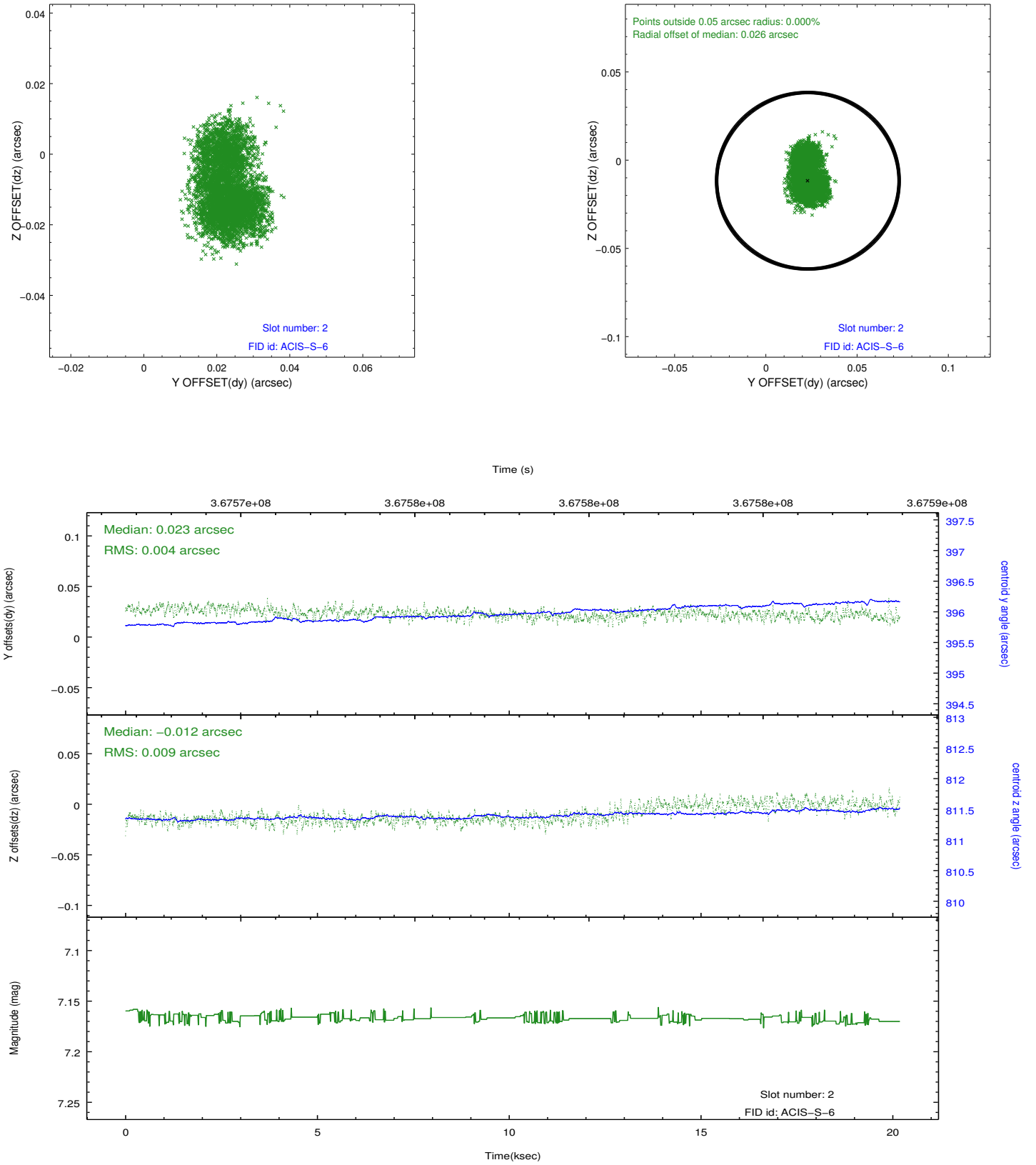
2.5.1 Slot 0



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) | 2012.06.15 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 20.177900155187 |

A.2 Comments