

V&V Reference Report

L2 ASCDS Version : 8.5.1

Observation 6203 - L2 Version 3
Chandra X-Ray Center

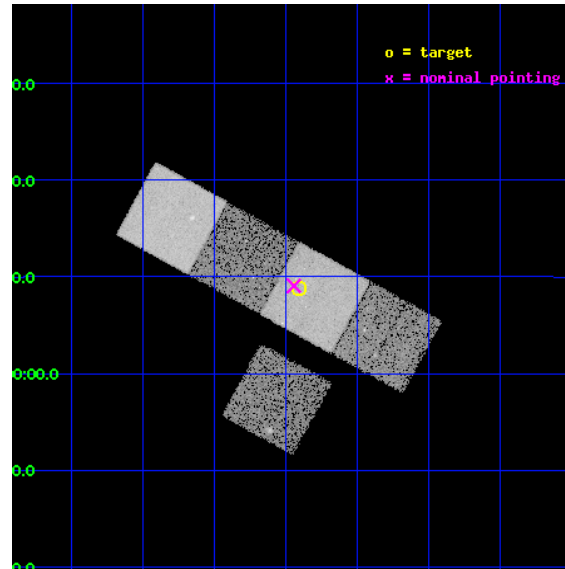
L2 Processing Date : Dec 16 2012

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

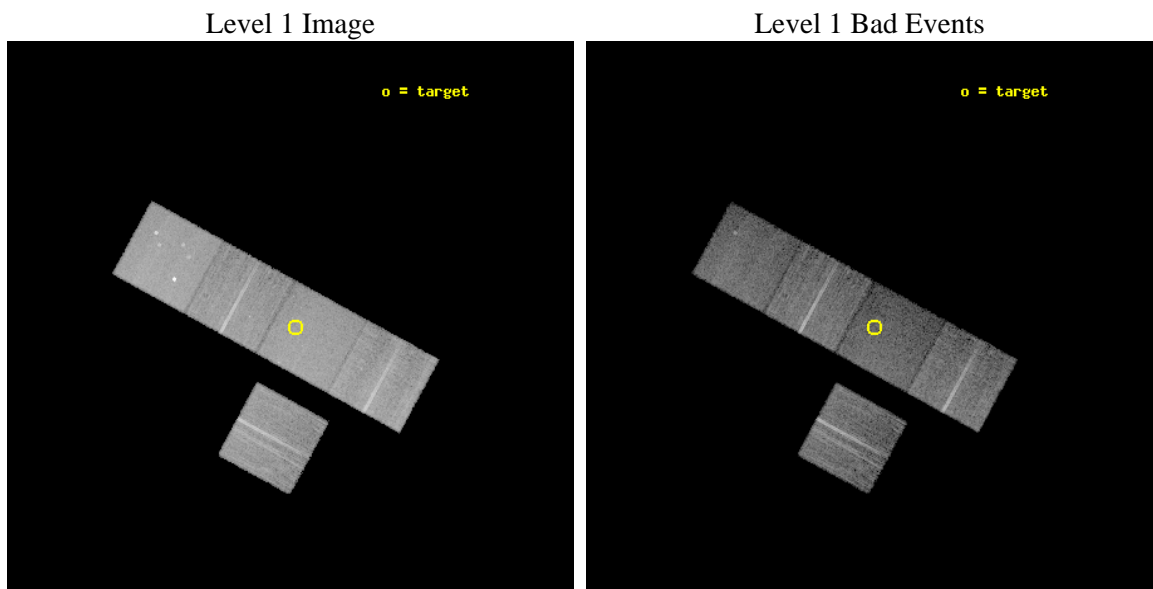
| | | |
|----------|----------------------------------|---|
| seq_num | 800501 | Sequence number |
| obs_id | 6203 | Observation id |
| title | HI-Deficient Ultracompact Groups | Proposal title |
| observer | Prof Trevor Ponman | Principal investigator |
| object | HCG 40 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 144.727083 | Observer's specified target RA [deg] |
| dec_targ | -4.851944 | Observer's specified target Dec [deg] |
| ra_nom | 144.73628475681 | Nominal RA [deg] |
| dec_nom | -4.8488489560066 | Nominal Dec [deg] |
| roll_nom | 28.657405674981 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 15239.599970669 | Sum of GTIs [s] |
| livetime | 15040.483377821 | Livetime [s] |
| ontime3 | 15239.599970669 | Sum of GTIs [s] |
| ontime5 | 15239.599970669 | Sum of GTIs [s] |
| ontime6 | 15233.317970216 | Sum of GTIs [s] |
| ontime7 | 15239.599970669 | Sum of GTIs [s] |
| ontime8 | 15239.599970669 | Sum of GTIs [s] |
| l2events | 131094 | Number of level 2 events |



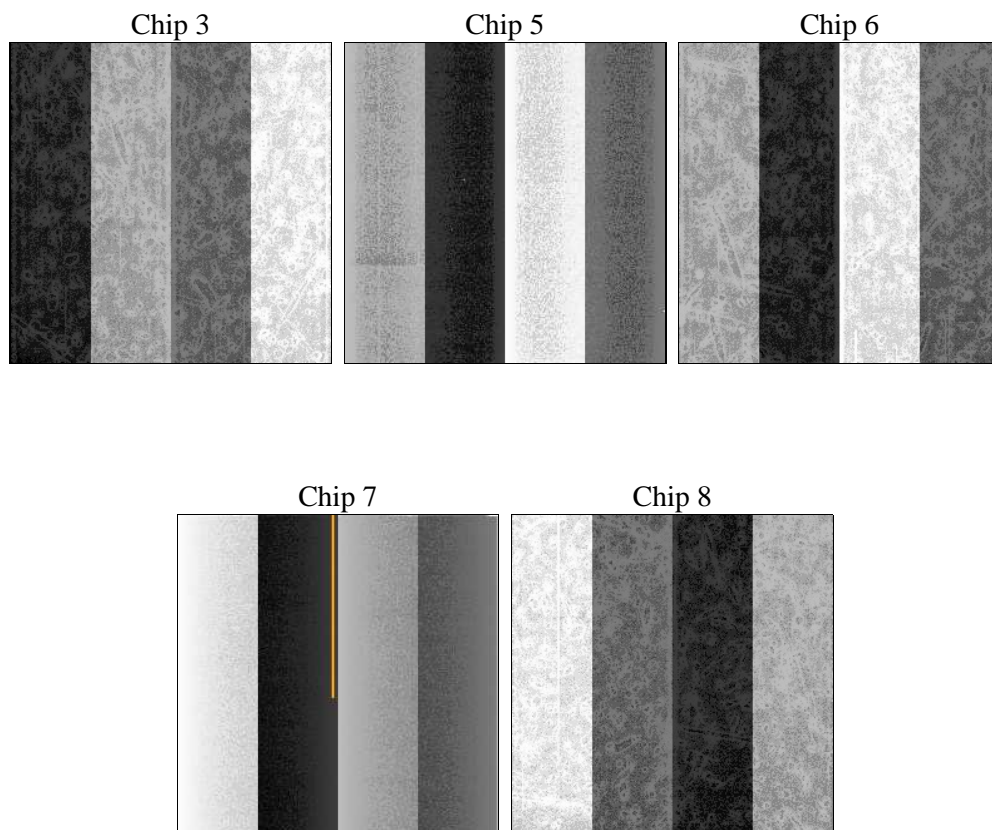
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 15060.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1 | Processing system revision | ontime | 15239.599970669 | Sum of GTIs [s] |
| caldsver | 4.5.5 | | ontime3 | 15239.599970669 | Sum of GTIs [s] |
| date | 2012-12-16T12:31:39 | Date and time of file creation | ontime5 | 15239.599970669 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 15233.317970216 | Sum of GTIs [s] |
| | | | ontime7 | 15239.599970669 | Sum of GTIs [s] |
| | | | ontime8 | 15239.599970669 | Sum of GTIs [s] |
| | | | l1events | 572194 | Number of level 1 events |

2.1.4 Events

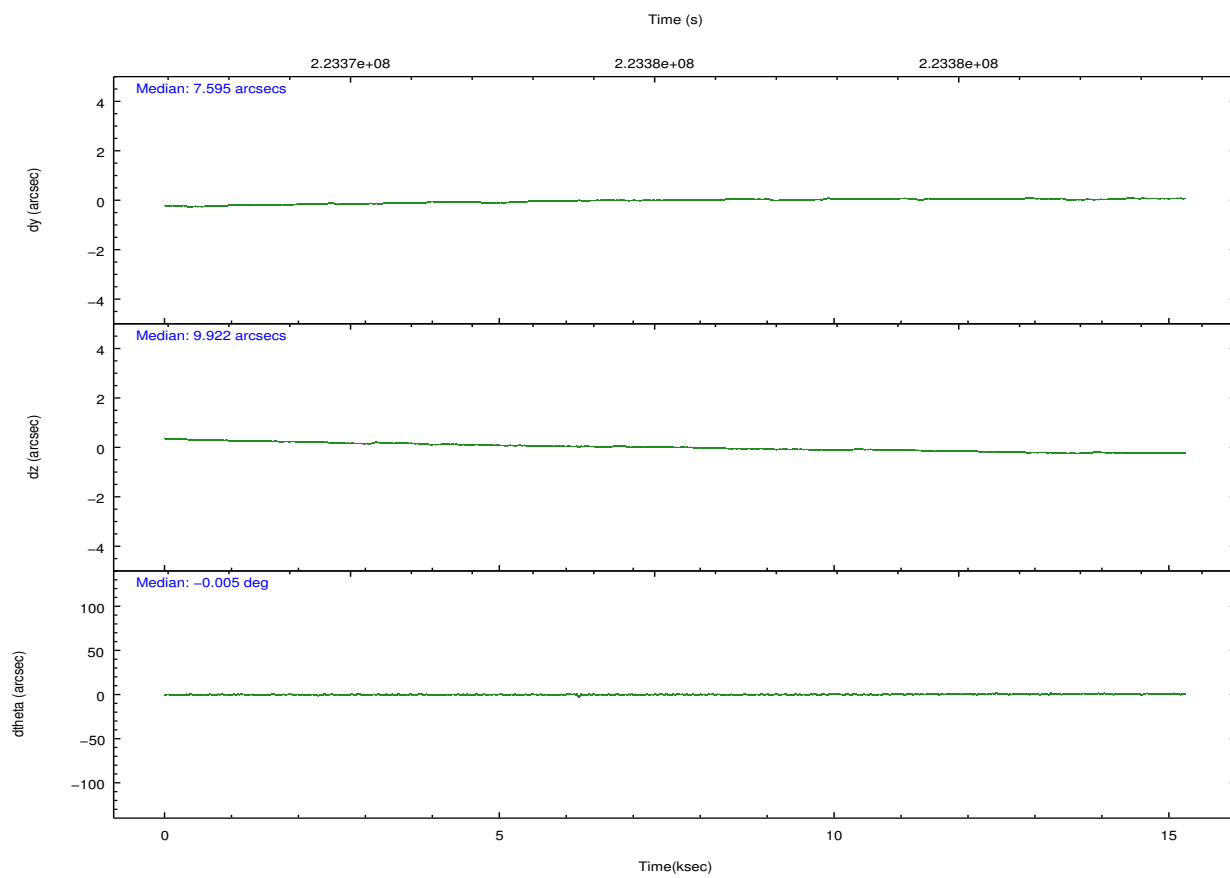
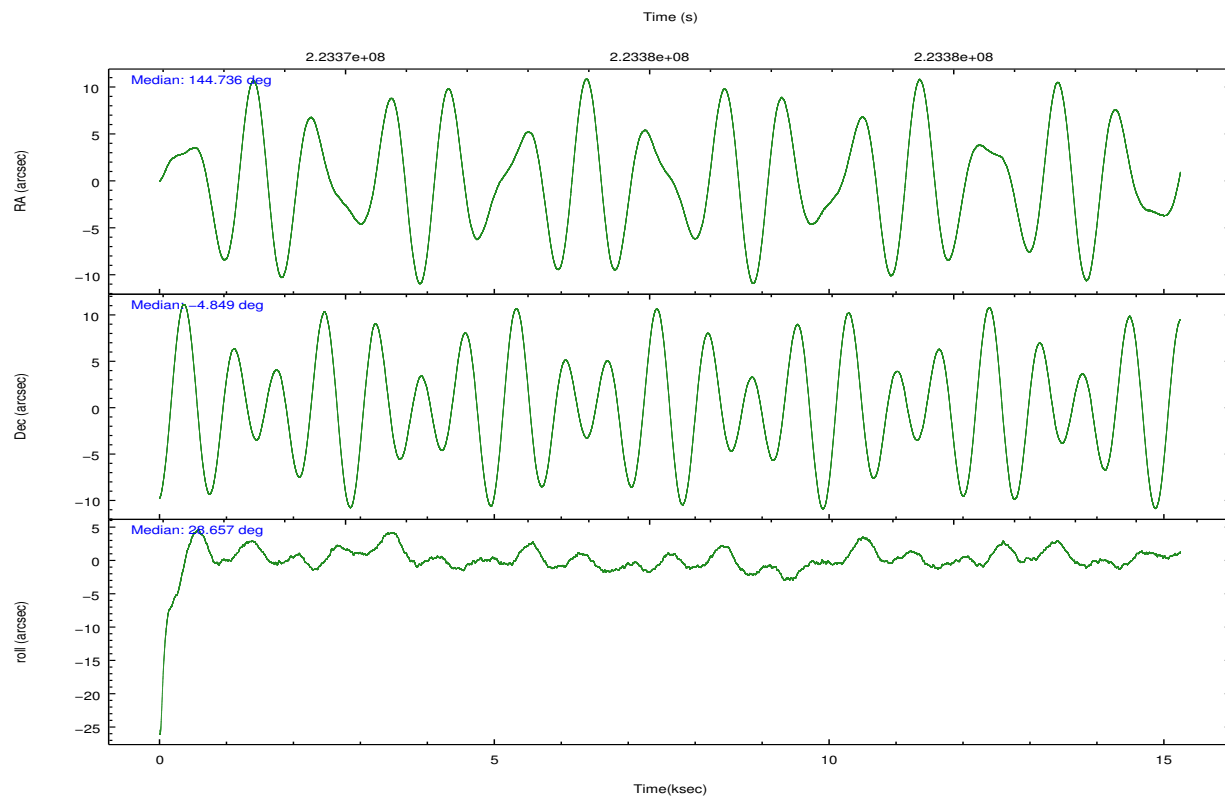
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|--------|--------|--------|--------|
| level 1 events | 99504 | 138769 | 101028 | 111020 | 121873 |
| rejected events | 90547 | 73572 | 90978 | 63603 | 94895 |
| rejected % | 90% | 53% | 90% | 57% | 77% |

| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 3434 | 9546 | 3820 | 4708 | 8819 |
| | 3% | 6% | 3% | 4% | 7% |
| grade 1 events | 41 | 122 | 42 | 114 | 85 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2014 | 20264 | 2233 | 10238 | 6550 |
| | 2% | 14% | 2% | 9% | 5% |
| grade 3 events | 1124 | 2908 | 1136 | 4820 | 3084 |
| | 1% | 2% | 1% | 4% | 2% |
| grade 4 events | 1086 | 2813 | 1210 | 4923 | 2897 |
| | 1% | 2% | 1% | 4% | 2% |
| grade 5 events | 3907 | 11025 | 3996 | 11889 | 5523 |
| | 3% | 7% | 3% | 10% | 4% |
| grade 6 events | 1930 | 34295 | 2342 | 25978 | 7590 |
| | 1% | 24% | 2% | 23% | 6% |
| grade 7 events | 85968 | 57796 | 86249 | 48350 | 87325 |
| | 86% | 41% | 85% | 43% | 71% |

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 | 144.722389 | 144.7362847568114 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -4.872313 | -4.848848956006599 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 28.499594 | 28.65740567498057 | [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 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 223367901.184000 | 223366368.14713 | | | |
| Observation start date | 2005-01-29T06:37:17 | 2005-01-29T06:12:48 | | | |
| [s] Observation end time (MET) | 223382961.184000 | 223383769.57292 | | | |
| Observation end date | 2005-01-29T10:48:17 | 2005-01-29T11:02:49 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect

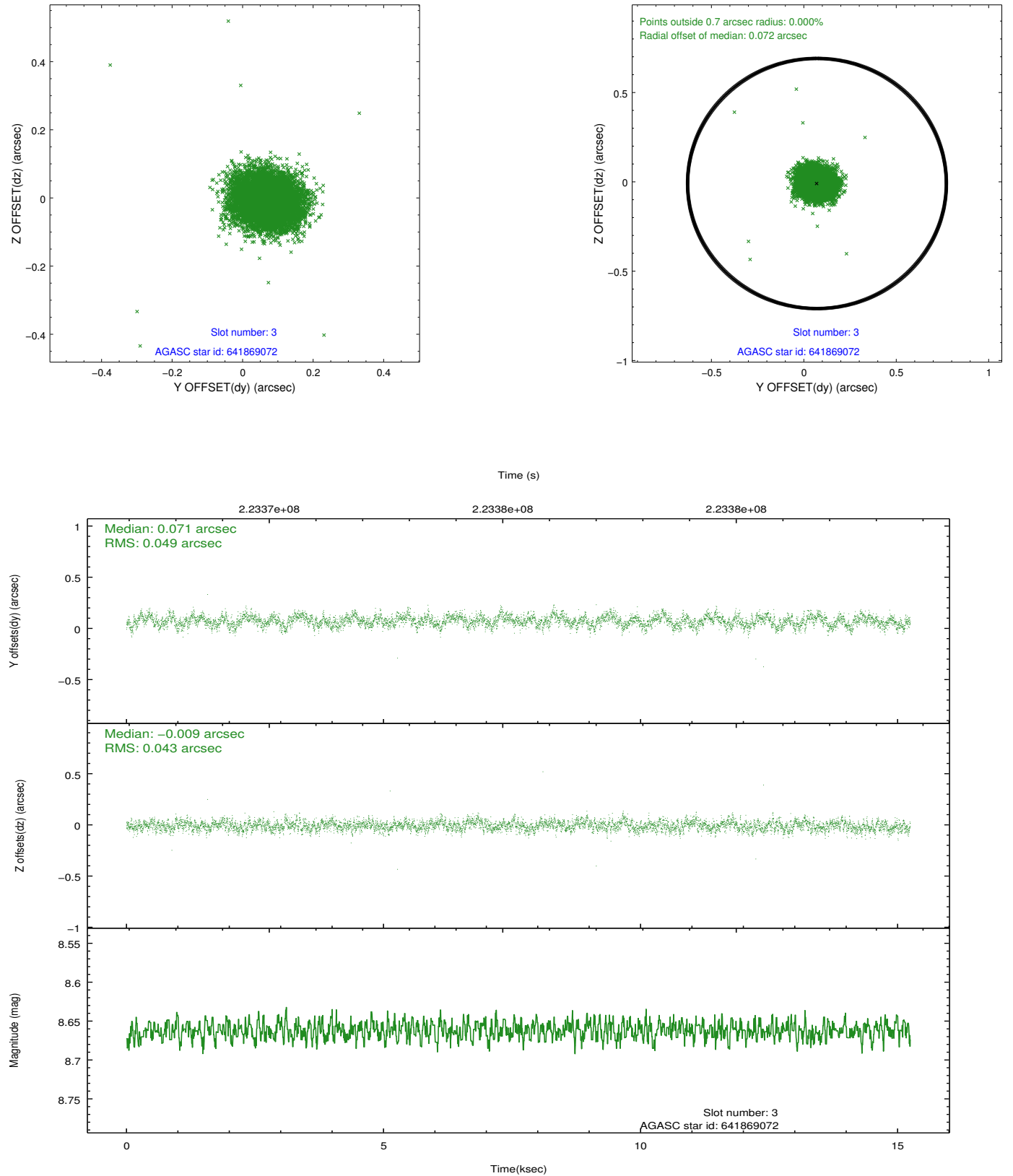


Slot Statistics

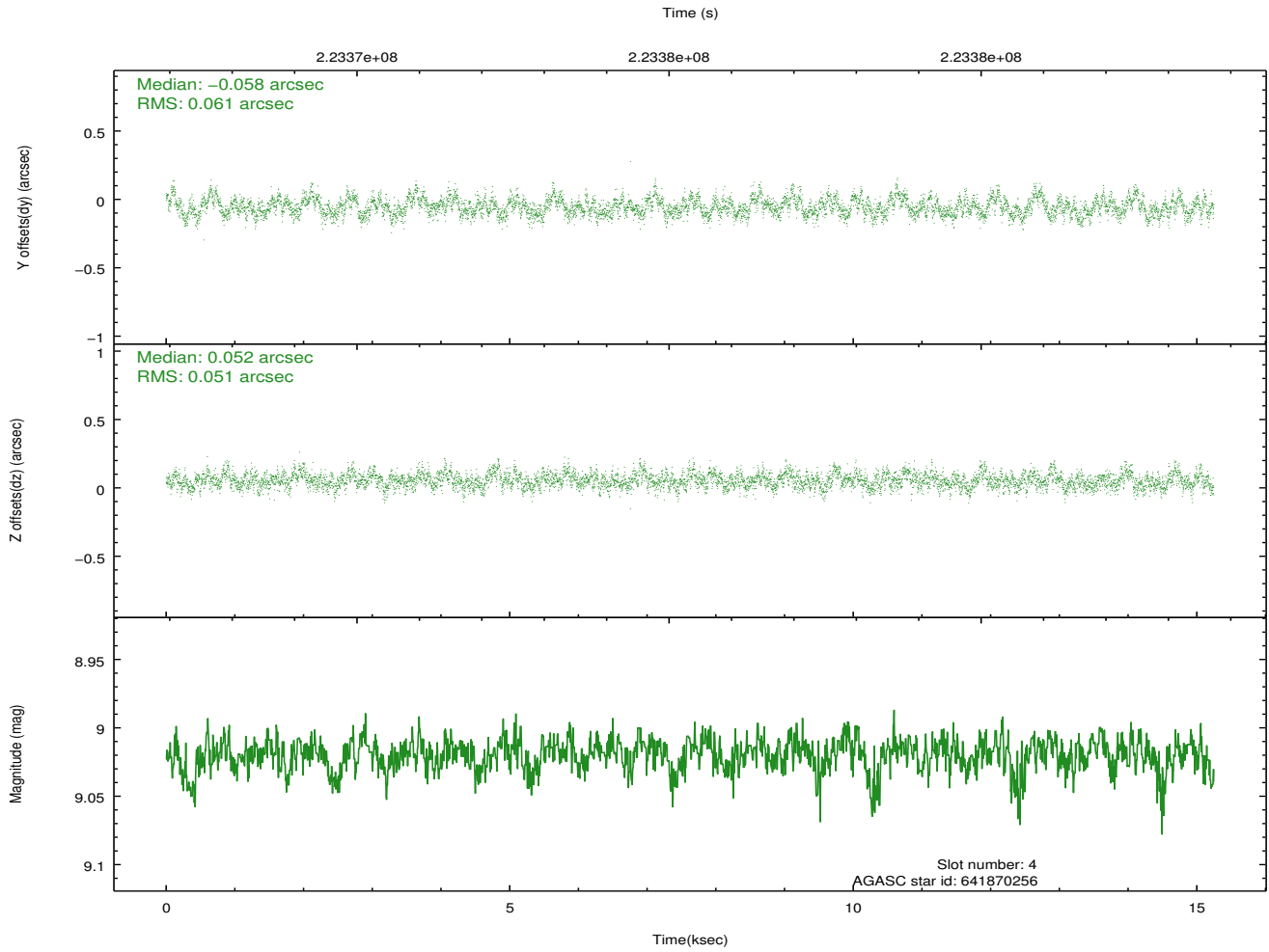
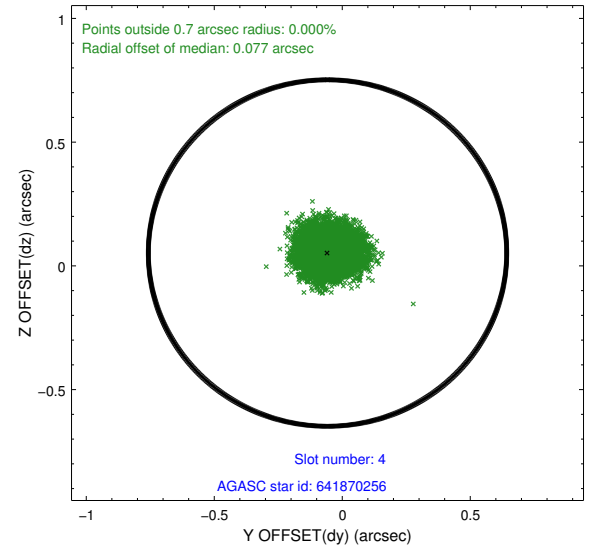
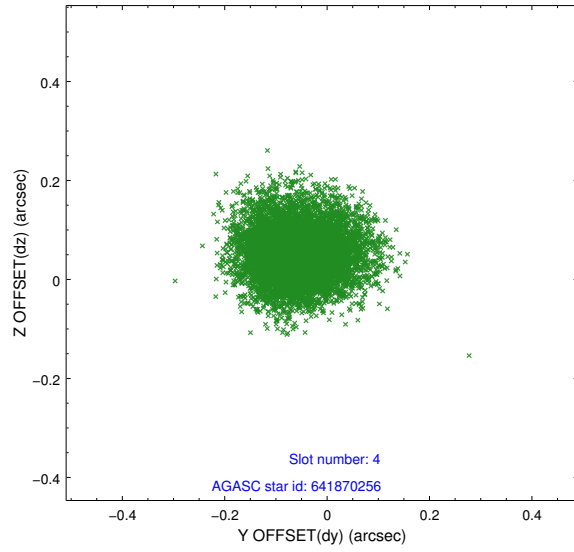
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 3719 | -0.043 | -0.028 | 0.010 | 0.015 | 0.000000 | 0.000000 | -760.33 | -1731.22 |
| 1 | FID | ACIS-S-4 | 7.21 | 3718 | 0.102 | 0.029 | 0.012 | 0.023 | 0.000000 | 0.000000 | 2152.91 | 177.09 |
| 2 | FID | ACIS-S-5 | 7.23 | 3717 | -0.087 | 0.008 | 0.010 | 0.016 | 0.000000 | 0.000000 | -1812.88 | 170.98 |
| 3 | GUIDE | 641869072 | 8.66 | 7436 | 0.071 | -0.009 | 0.068 | 0.110 | 144.906831 | -4.212729 | 1715.06 | 1770.71 |
| 4 | GUIDE | 641870256 | 9.02 | 7429 | -0.058 | 0.052 | 0.085 | 0.137 | 144.908269 | -4.267747 | 1625.22 | 1594.50 |
| 5 | GUIDE | 641871288 | 7.99 | 7434 | -0.000 | -0.083 | 0.062 | 0.098 | 144.780319 | -4.378727 | 1030.79 | 1462.29 |
| 6 | GUIDE | 642002944 | 9.31 | 7433 | -0.047 | 0.013 | 0.095 | 0.154 | 145.178833 | -4.409438 | 2234.90 | 682.37 |
| 7 | GUIDE | 642261760 | 7.62 | 7437 | 0.031 | 0.028 | 0.063 | 0.102 | 144.550271 | -5.166538 | -1047.31 | -636.42 |

2.4 Star Slots

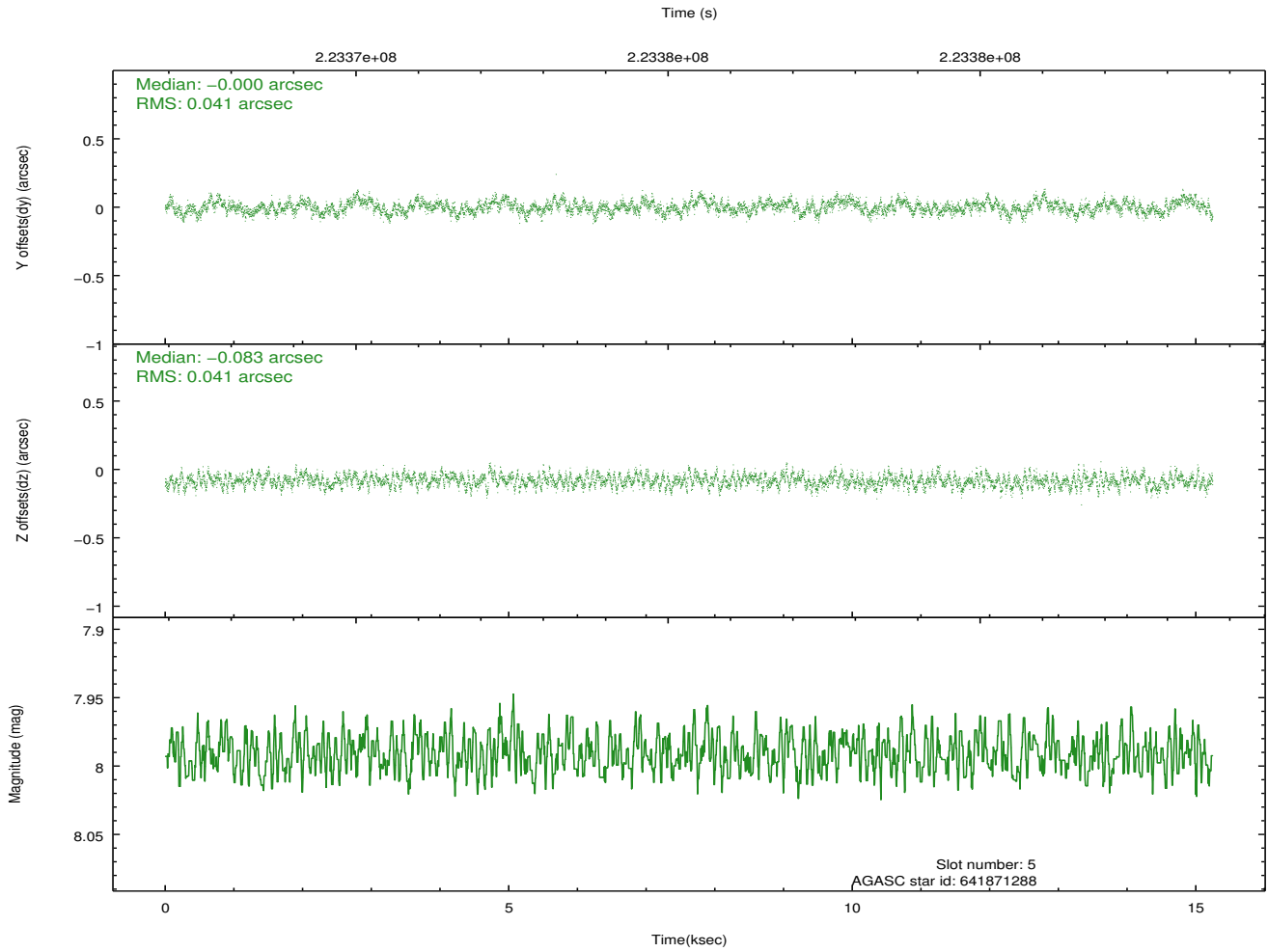
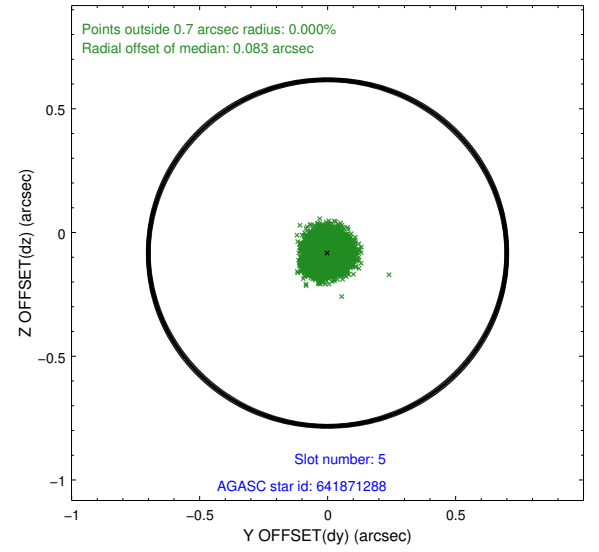
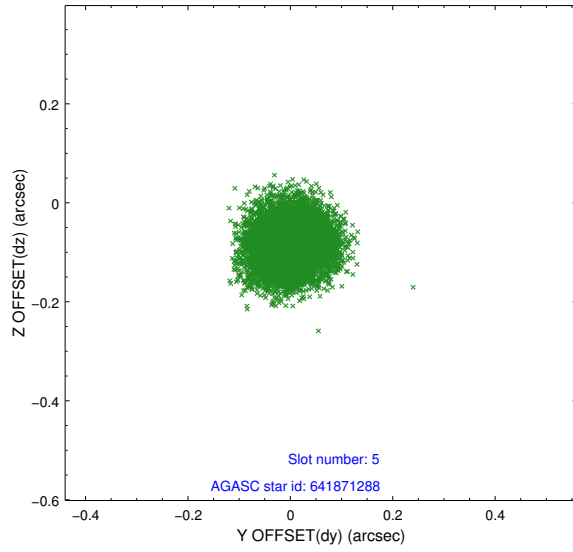
2.4.1 Slot 3



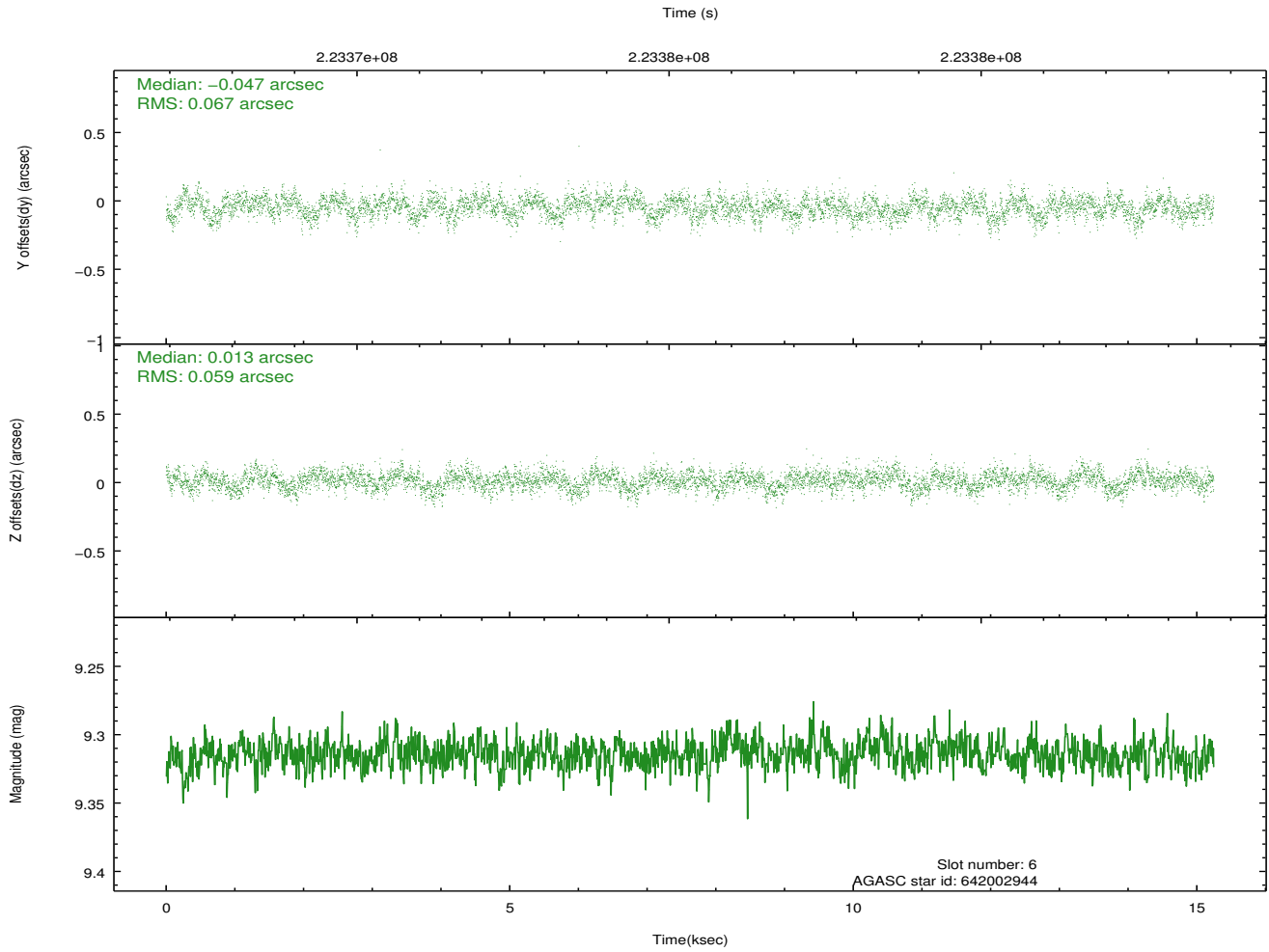
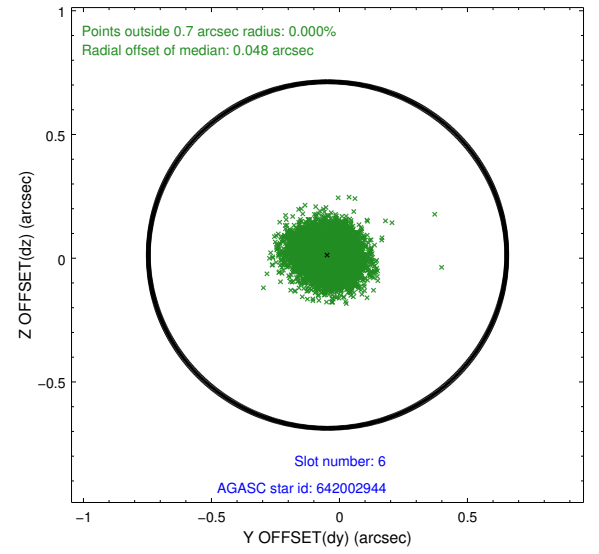
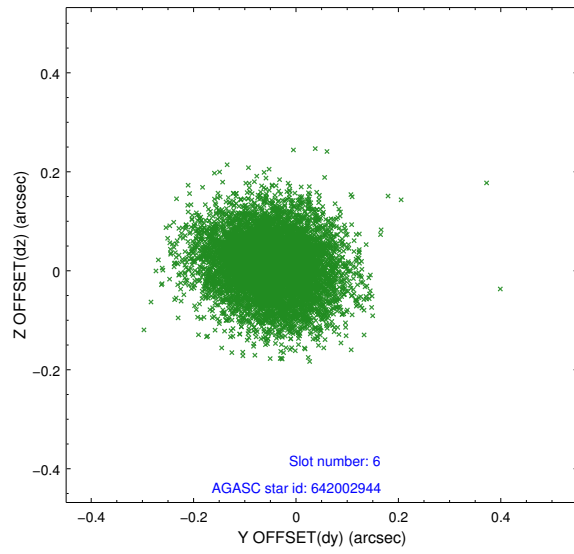
2.4.2 Slot 4



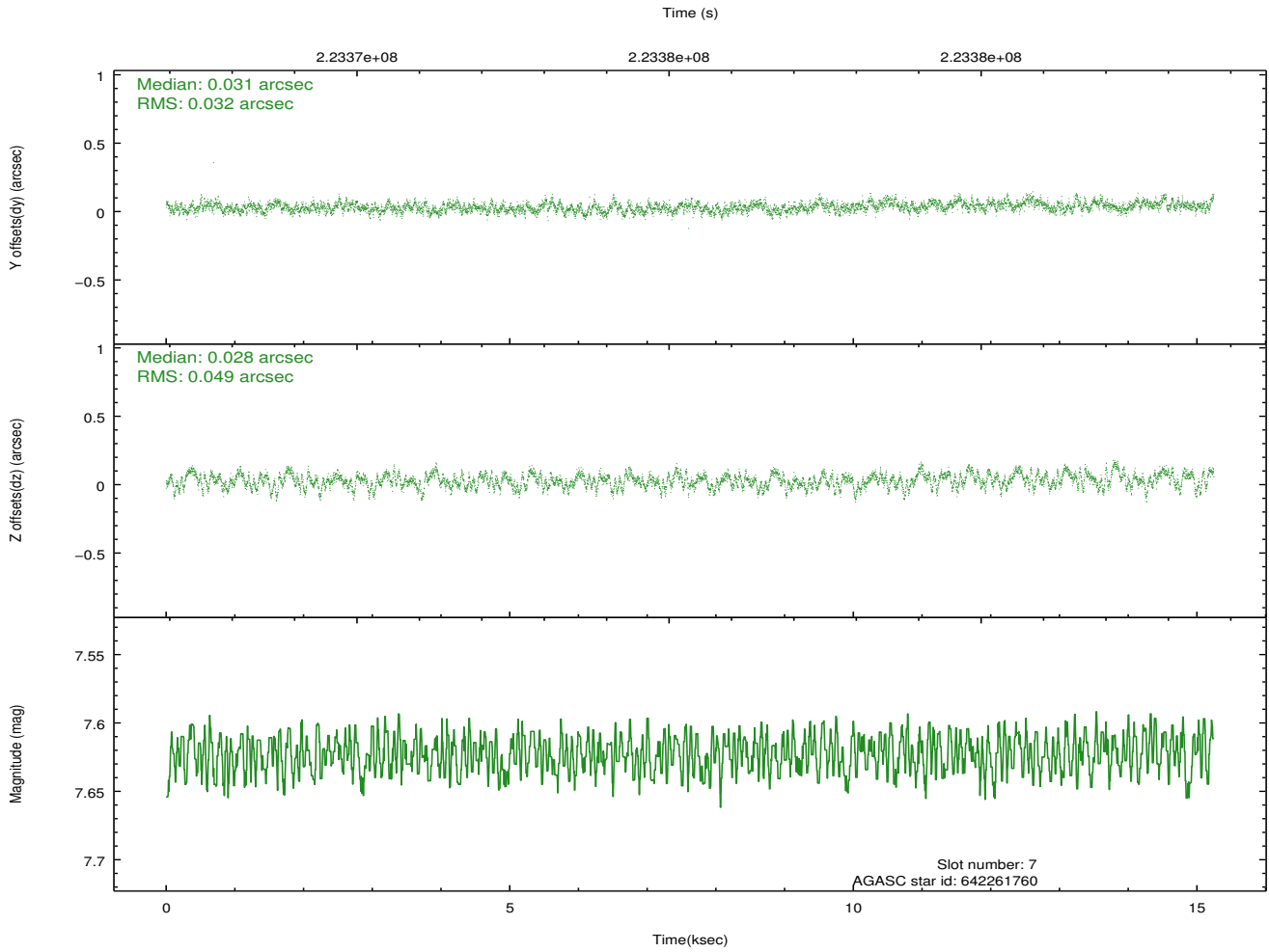
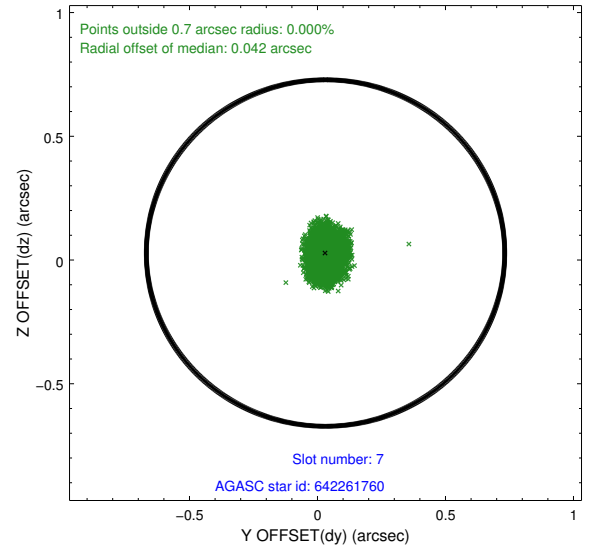
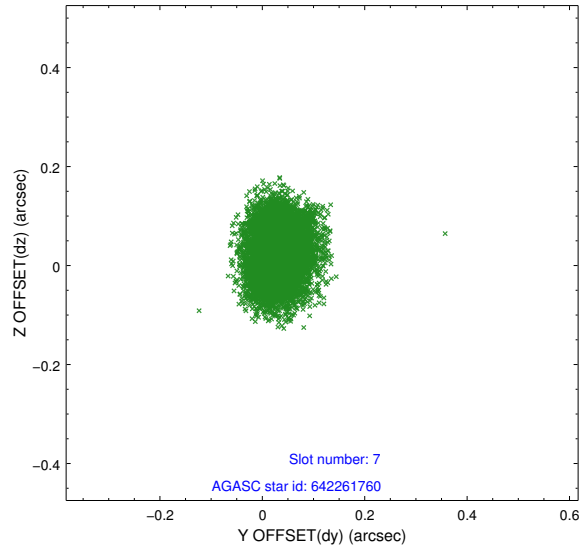
2.4.3 Slot 5



2.4.4 Slot 6

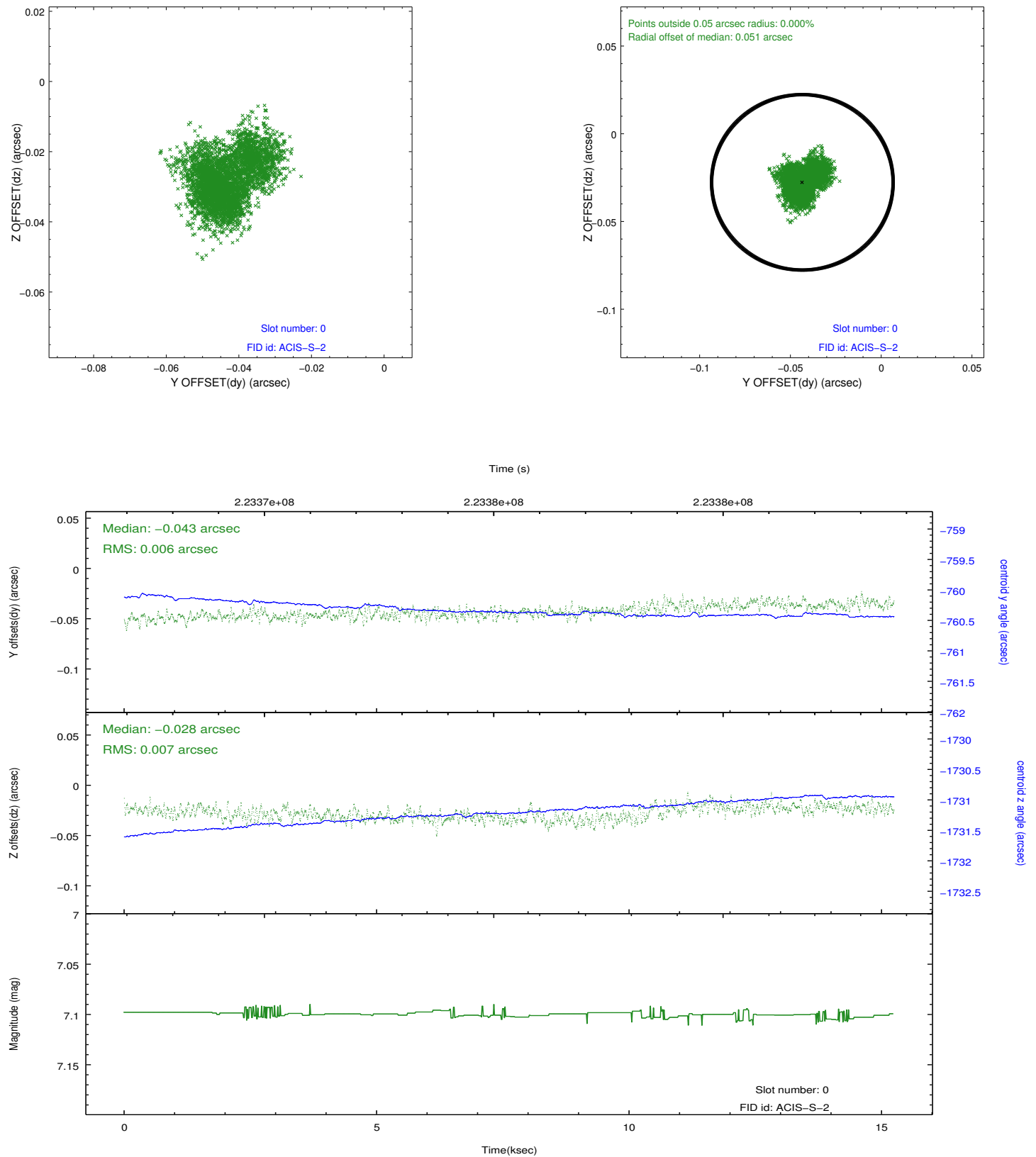


2.4.5 Slot 7

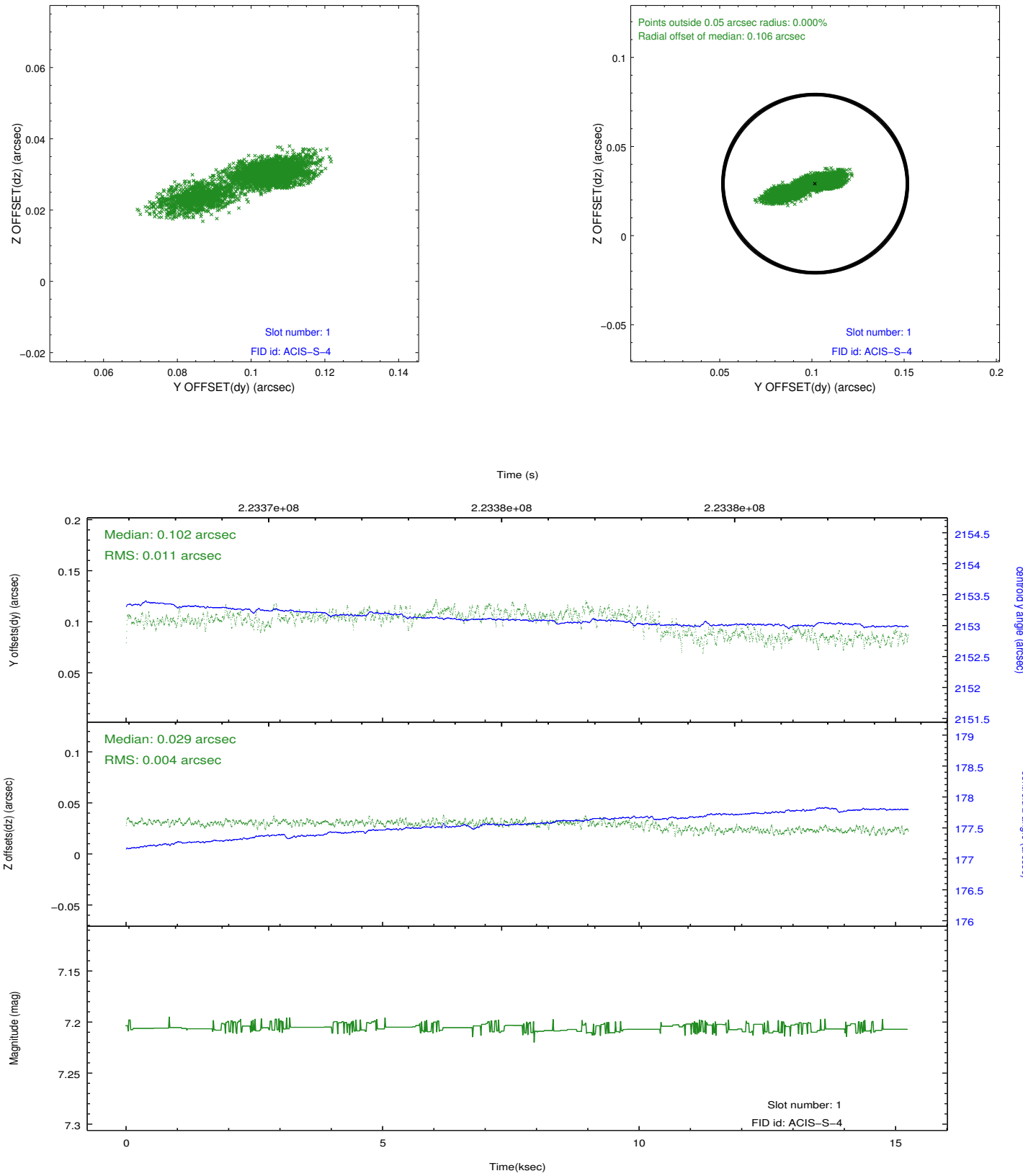


2.5 FID Slots

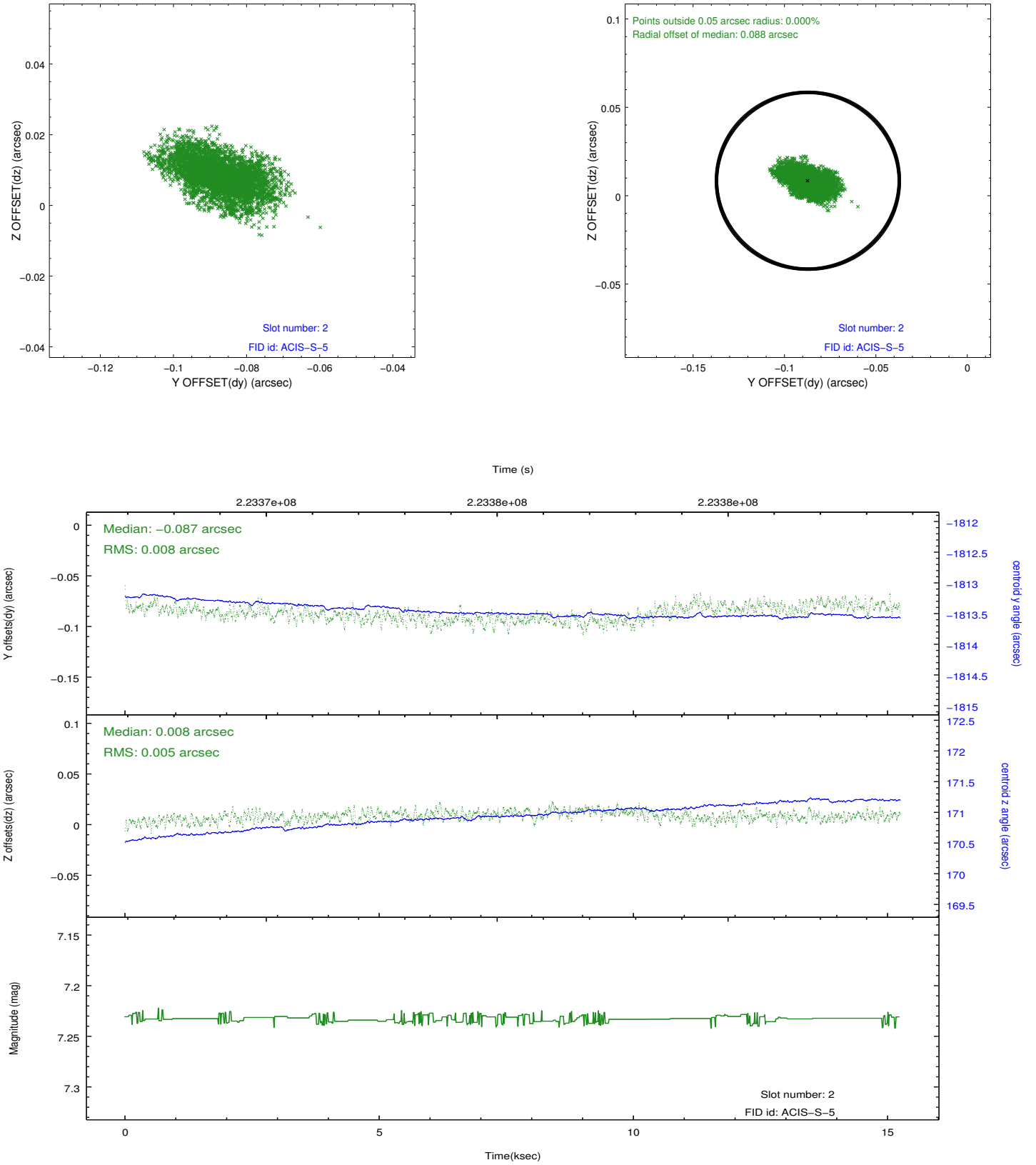
2.5.1 Slot 0



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) | 2013.01.09 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 15.23959 |

A.2 Comments