

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7287 - L2 Version 2
Chandra X-Ray Center

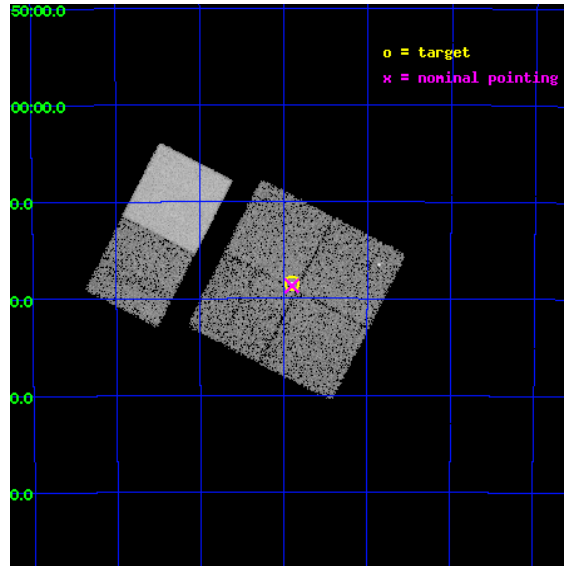
L2 Processing Date : Apr 4 2012

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

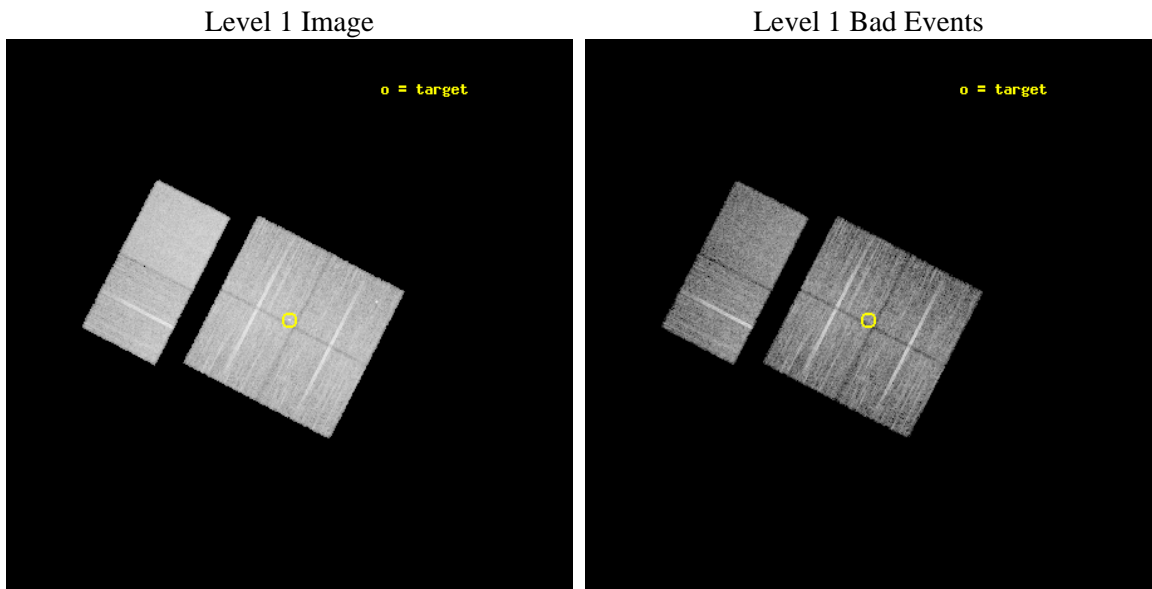
| | | |
|----------|---|---|
| seq_num | 500694 | Sequence number |
| obs_id | 7287 | Observation id |
| title | A new magnetar in a young supernova remnant | Proposal title |
| observer | Prof. Bryan Gaensler | Principal investigator |
| object | 1E 1547.0-5408 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 237.725 | Observer's specified target RA [deg] |
| dec_targ | -54.307 | Observer's specified target Dec [deg] |
| ra_nom | 237.72558245674 | Nominal RA [deg] |
| dec_nom | -54.311625216036 | Nominal Dec [deg] |
| roll_nom | 297.28529371886 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 9654.3999640346 | Sum of GTIs [s] |
| livetime | 9532.1501385082 | Livetime [s] |
| ontime0 | 9654.3999640346 | Sum of GTIs [s] |
| ontime1 | 9654.3999640346 | Sum of GTIs [s] |
| ontime2 | 9654.3999640346 | Sum of GTIs [s] |
| ontime3 | 9654.3999640346 | Sum of GTIs [s] |
| ontime6 | 9654.3999640346 | Sum of GTIs [s] |
| ontime7 | 9654.3999640346 | Sum of GTIs [s] |
| l2events | 95546 | Number of level 2 events |



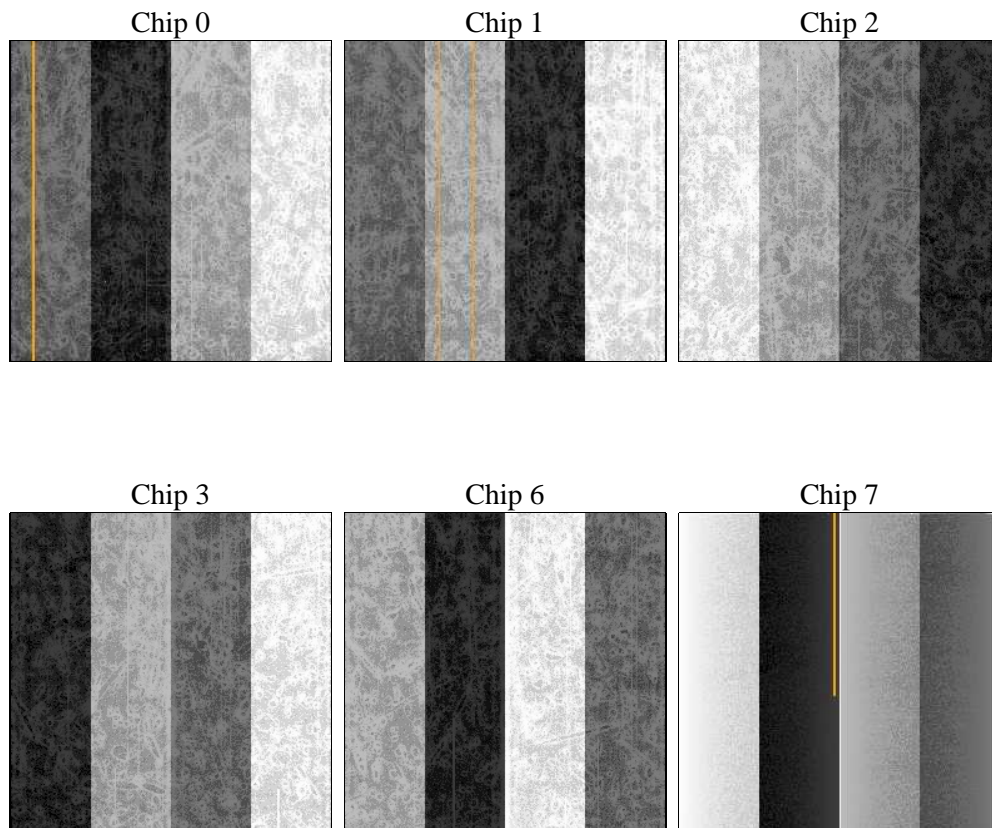
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 9900.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 9654.3999640346 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime0 | 9654.3999640346 | Sum of GTIs [s] |
| date | 2012-04-04T19:29:19 | Date and time of file creation | ontime1 | 9654.3999640346 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 9654.3999640346 | Sum of GTIs [s] |
| | | | ontime3 | 9654.3999640346 | Sum of GTIs [s] |
| | | | ontime6 | 9654.3999640346 | Sum of GTIs [s] |
| | | | ontime7 | 9654.3999640346 | Sum of GTIs [s] |
| | | | l1events | 553412 | Number of level 1 events |

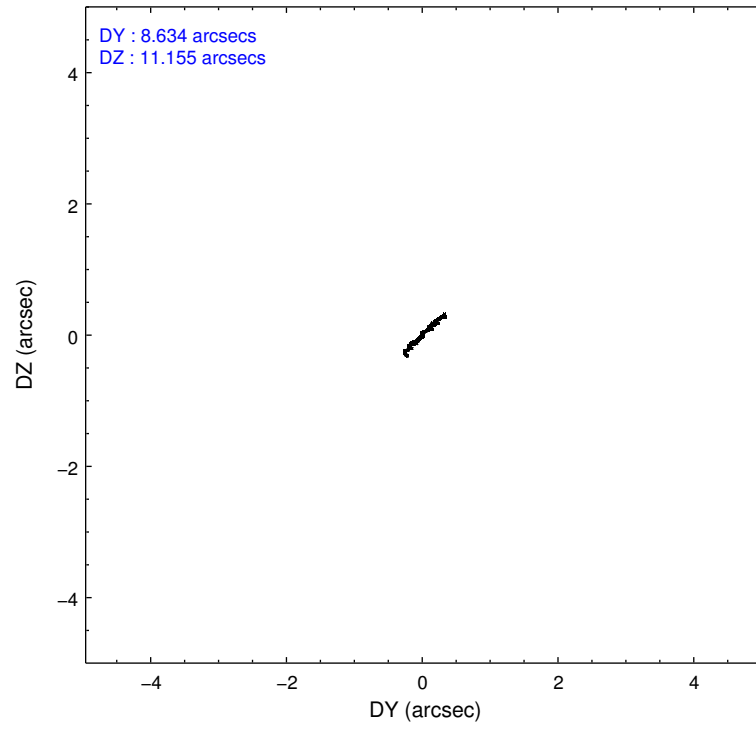
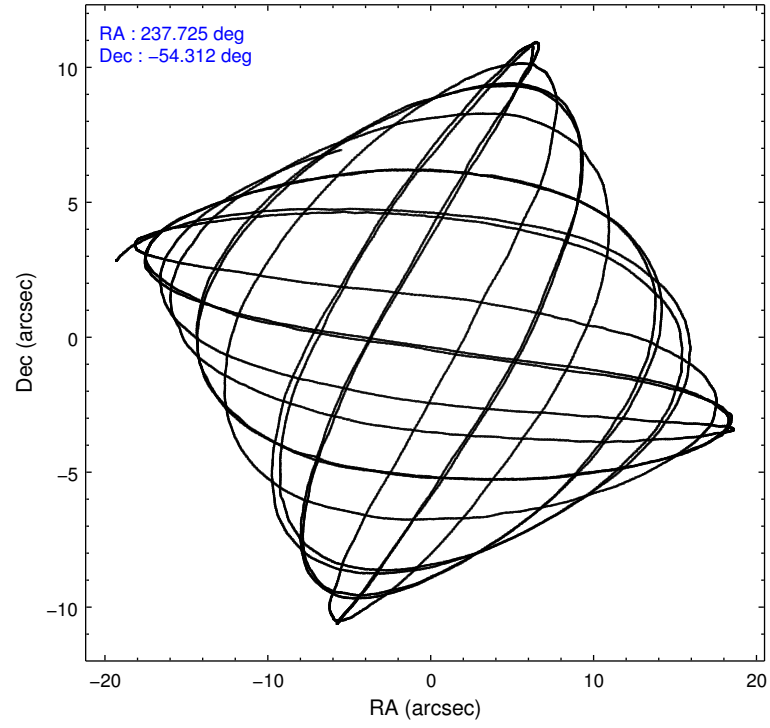
2.1.4 Events

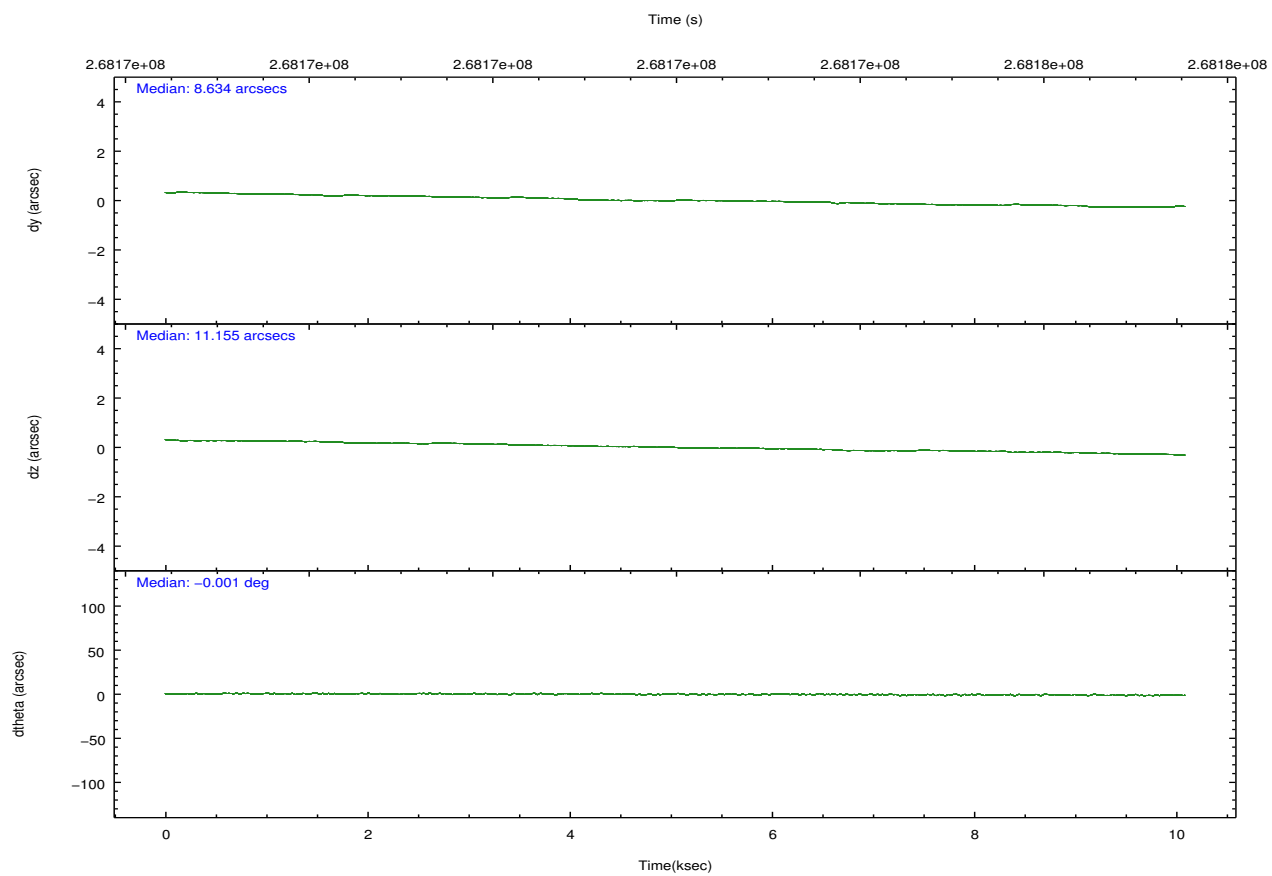
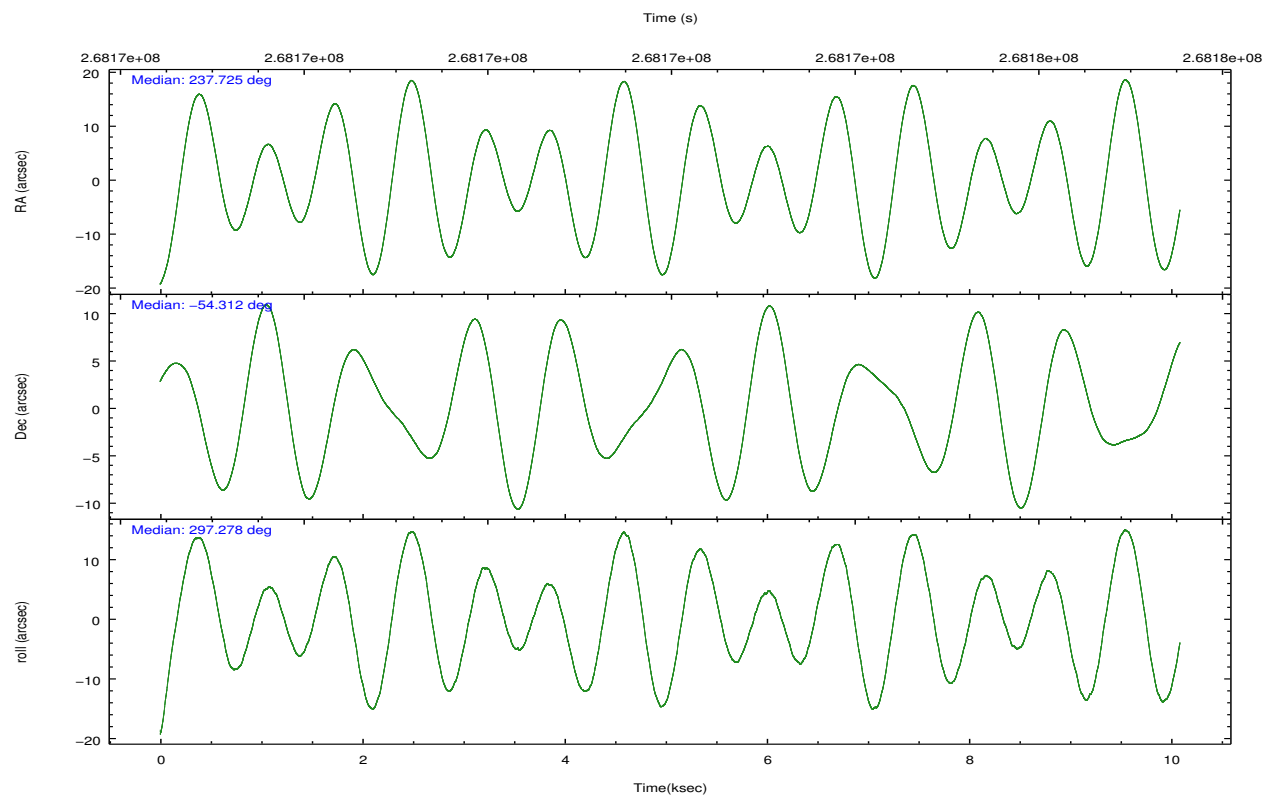
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|--------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 82358 | 78940 | 92512 | 88281 | 90851 | 120470 | grade 0 events | 4556 | 4726 | 4645 | 4981 | 4279 | 4323 |
| rejected events | 71806 | 67208 | 82072 | 77348 | 80071 | 70700 | | 5% | 5% | 5% | 5% | 4% | 3% |
| rejected % | 87% | 85% | 88% | 87% | 88% | 58% | grade 1 events | 49 | 46 | 55 | 68 | 48 | 118 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2331 | 2592 | 2095 | 2091 | 2320 | 10064 |
| | | | | | | | | 2% | 3% | 2% | 2% | 2% | 8% |
| | | | | | | | grade 3 events | 965 | 1094 | 982 | 1000 | 1072 | 4264 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 950 | 1093 | 988 | 1049 | 954 | 4315 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 3354 | 3707 | 3388 | 3980 | 4256 | 11378 |
| | | | | | | | | 4% | 4% | 3% | 4% | 4% | 9% |
| | | | | | | | grade 6 events | 1753 | 2230 | 1733 | 1813 | 2159 | 26813 |
| | | | | | | | | 2% | 2% | 1% | 2% | 2% | 22% |
| | | | | | | | grade 7 events | 68400 | 63452 | 78626 | 73299 | 75763 | 59195 |
| | | | | | | | | 83% | 80% | 84% | 83% | 83% | 49% |

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 | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 237.686014 | 237.7255824567376 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -54.296907 | -54.31162521603551 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 297.044476 | 297.2852937188621 | [s] Primary exposure time | 0.000000 | 3.2 |
| [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) | 268167123.184000 | 268166290.1847 | | | |
| Observation start date | 2006-07-01T18:50:58 | 2006-07-01T18:38:10 | | | |
| [s] Observation end time (MET) | 268177023.184000 | 268178435.41027 | | | |
| Observation end date | 2006-07-01T21:35:58 | 2006-07-01T22:00:35 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



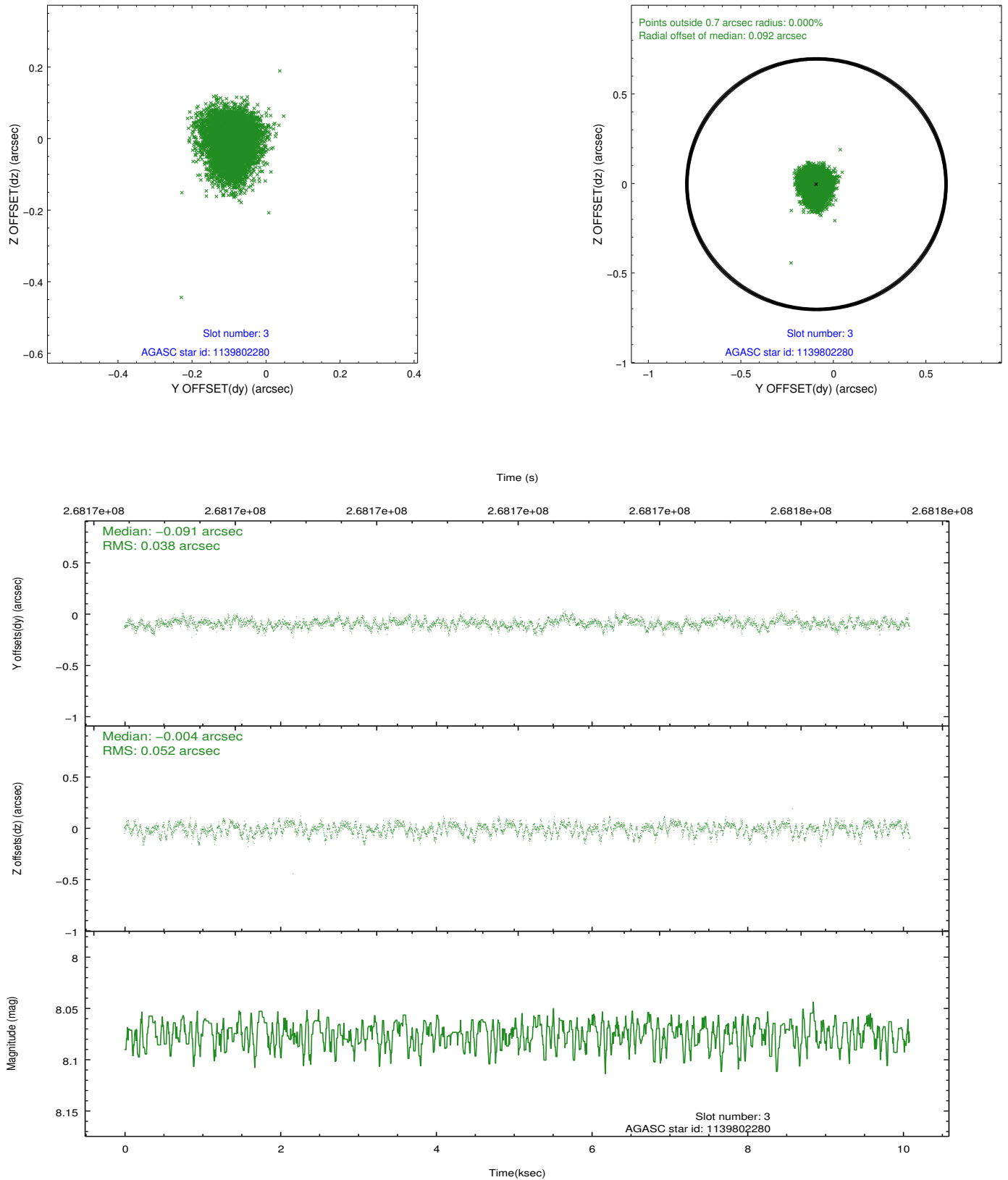


Slot Statistics

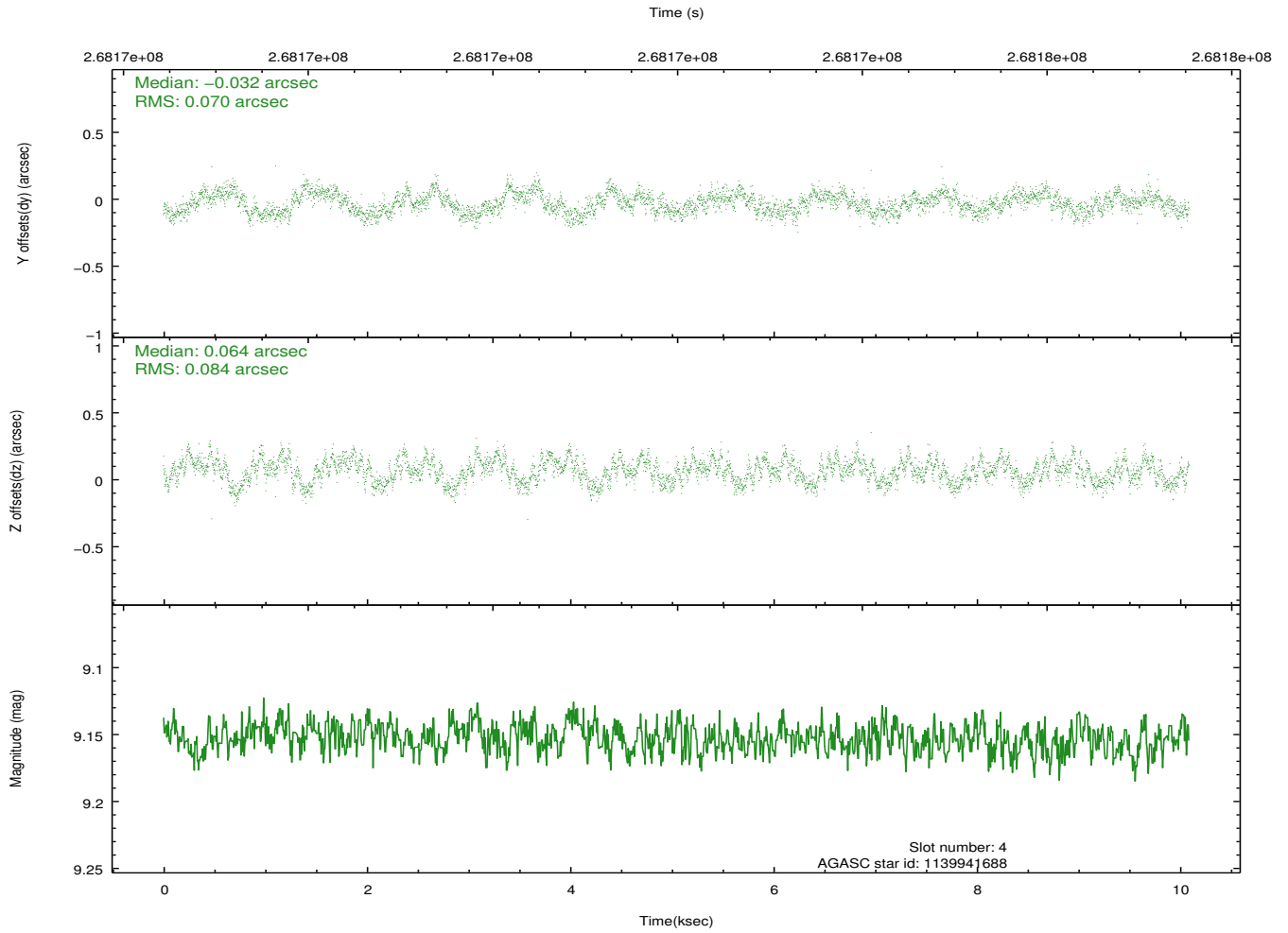
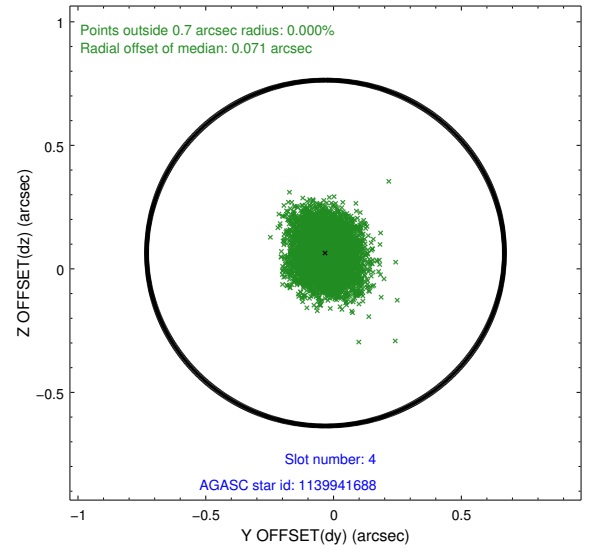
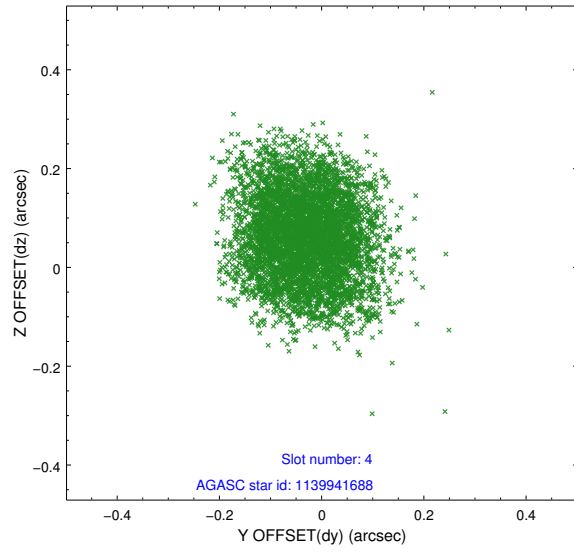
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 2461 | 0.056 | -0.055 | 0.009 | 0.015 | 0.000000 | 0.000000 | 931.03 | -834.73 |
| 1 | FID | ACIS-I-5 | 7.23 | 2461 | -0.207 | 0.053 | 0.009 | 0.017 | 0.000000 | 0.000000 | -1817.02 | 1062.64 |
| 2 | FID | ACIS-I-6 | 7.25 | 2461 | 0.061 | 0.073 | 0.006 | 0.010 | 0.000000 | 0.000000 | 396.05 | 1707.73 |
| 3 | GUIDE | 1139802280 | 8.07 | 4920 | -0.091 | -0.004 | 0.069 | 0.109 | 236.525595 | -54.011505 | -2012.84 | -1728.41 |
| 4 | GUIDE | 1139941688 | 9.15 | 4916 | -0.032 | 0.064 | 0.119 | 0.183 | 238.371800 | -54.158507 | 219.75 | 1510.63 |
| 5 | GUIDE | 1139944912 | 7.66 | 4916 | -0.060 | 0.041 | 0.072 | 0.124 | 238.160189 | -53.437493 | -2290.30 | 2311.38 |
| 6 | GUIDE | 1140458608 | 8.43 | 4921 | 0.022 | -0.073 | 0.060 | 0.095 | 237.337107 | -54.507511 | 345.26 | -994.32 |
| 7 | GUIDE | 1140462520 | 8.16 | 4921 | 0.155 | -0.024 | 0.066 | 0.107 | 237.718666 | -54.642458 | 1139.47 | -504.82 |

2.4 Star Slots

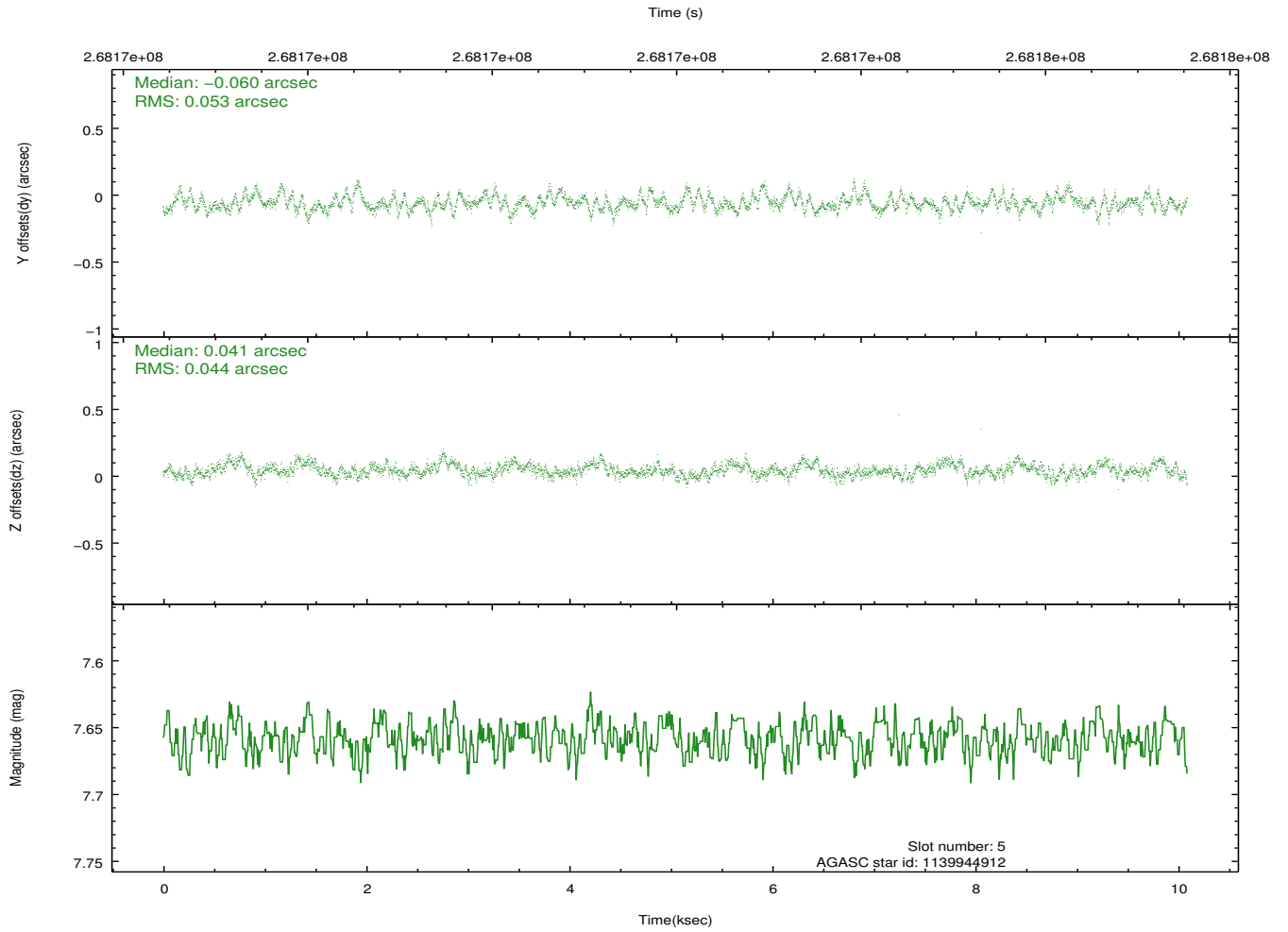
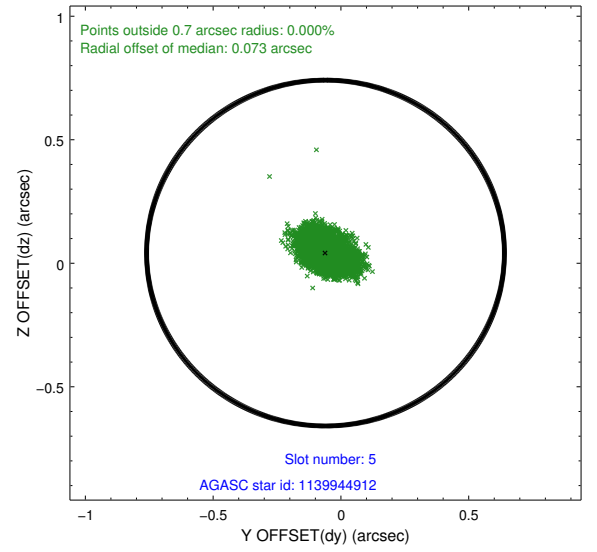
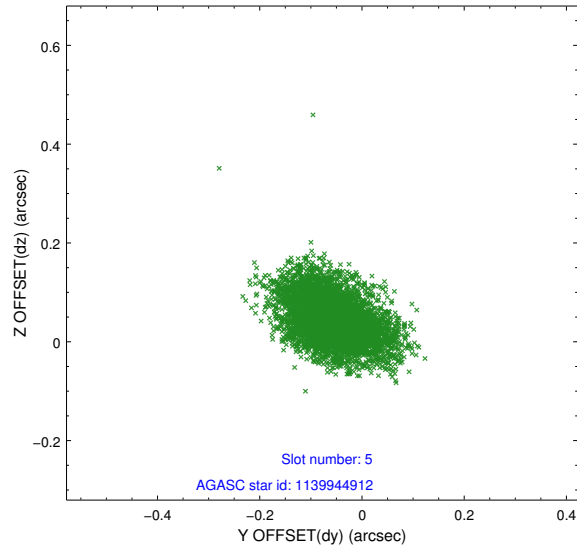
2.4.1 Slot 3



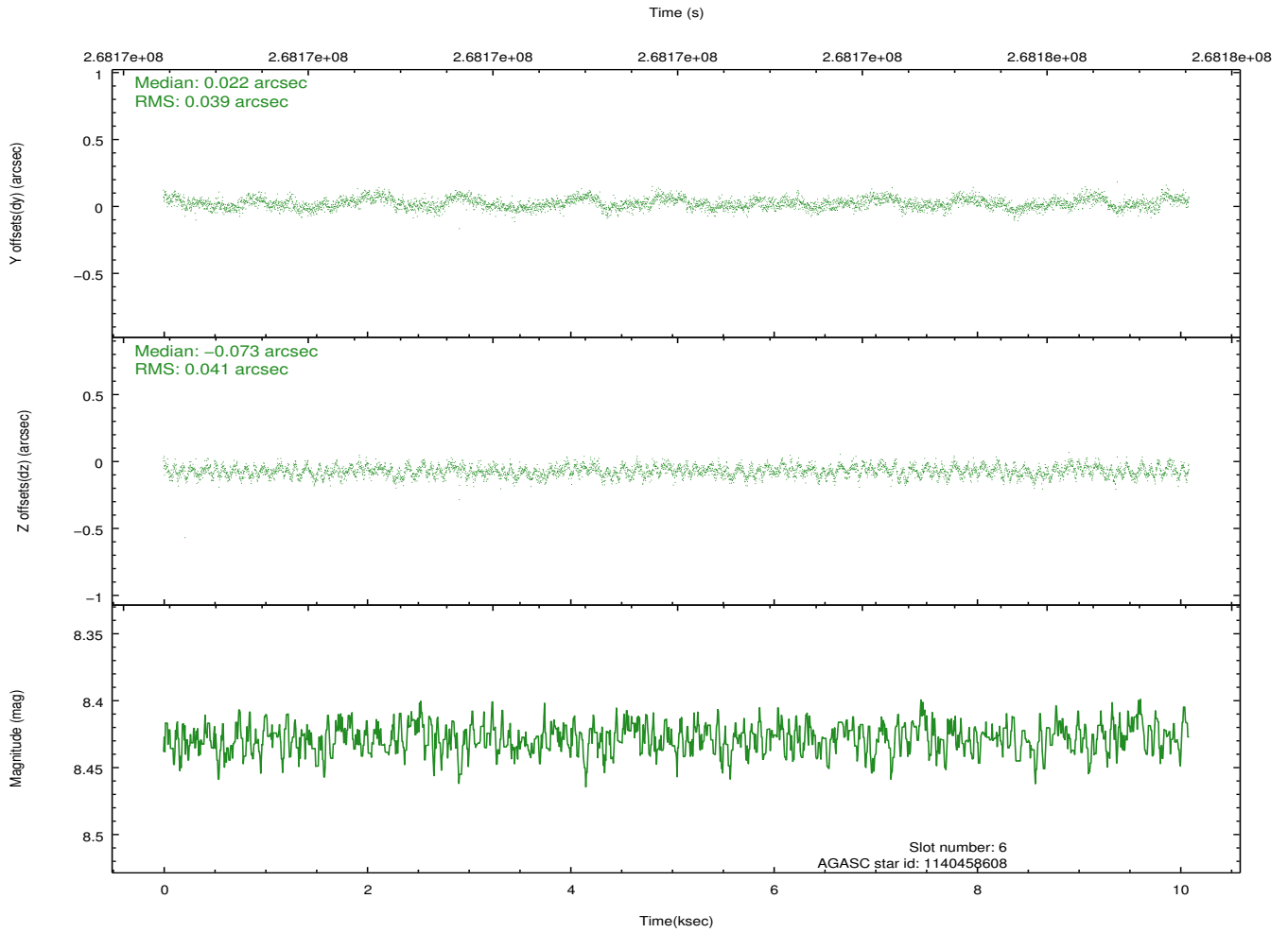
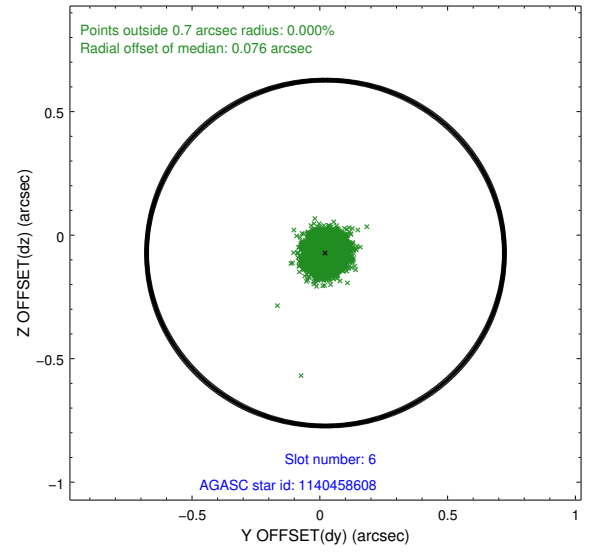
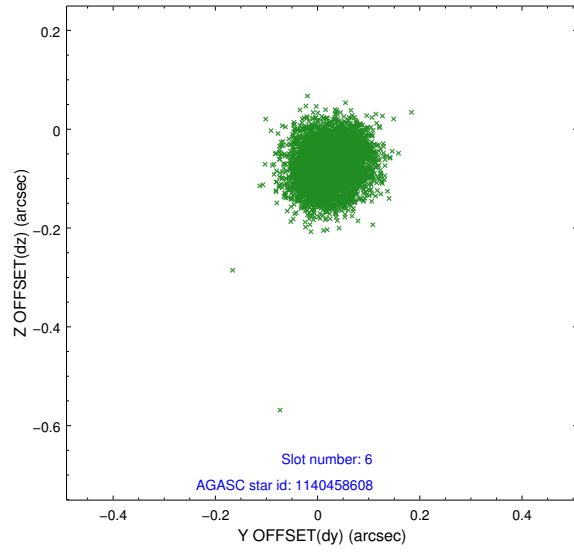
2.4.2 Slot 4



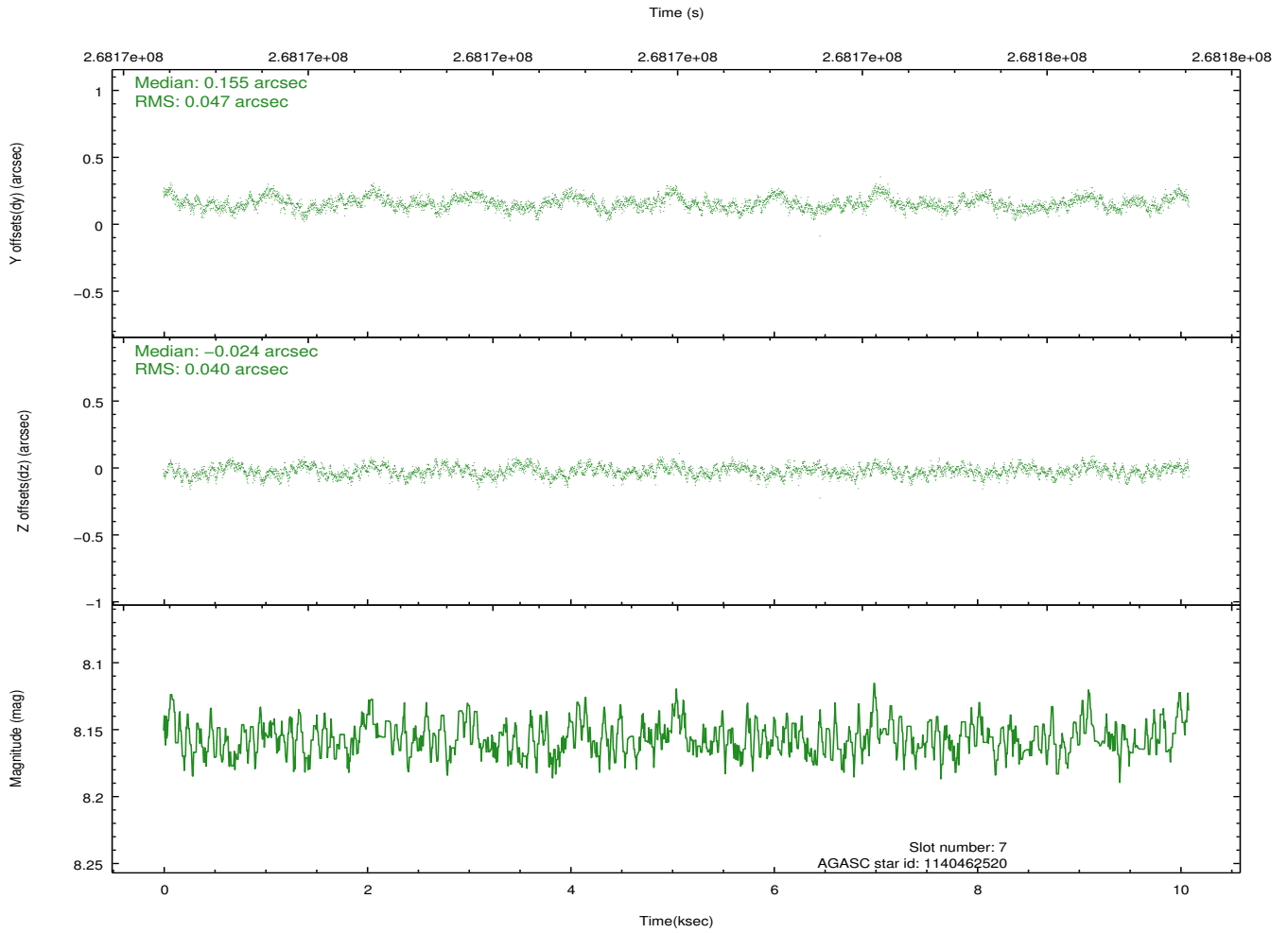
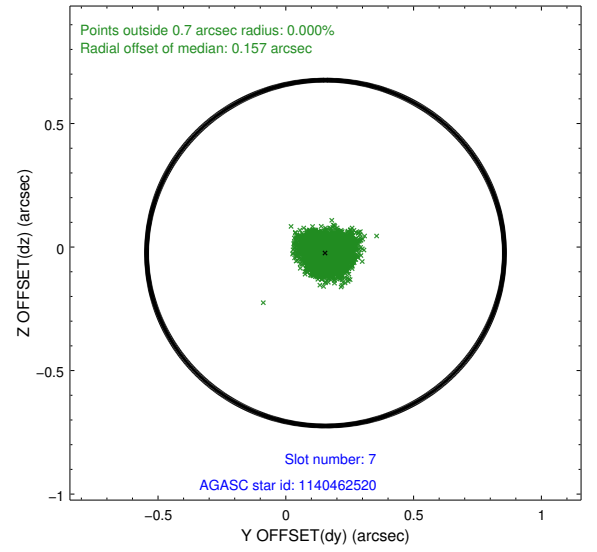
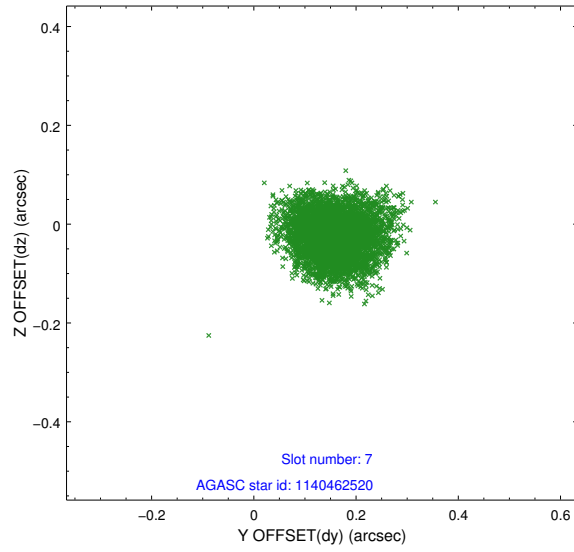
2.4.3 Slot 5



2.4.4 Slot 6

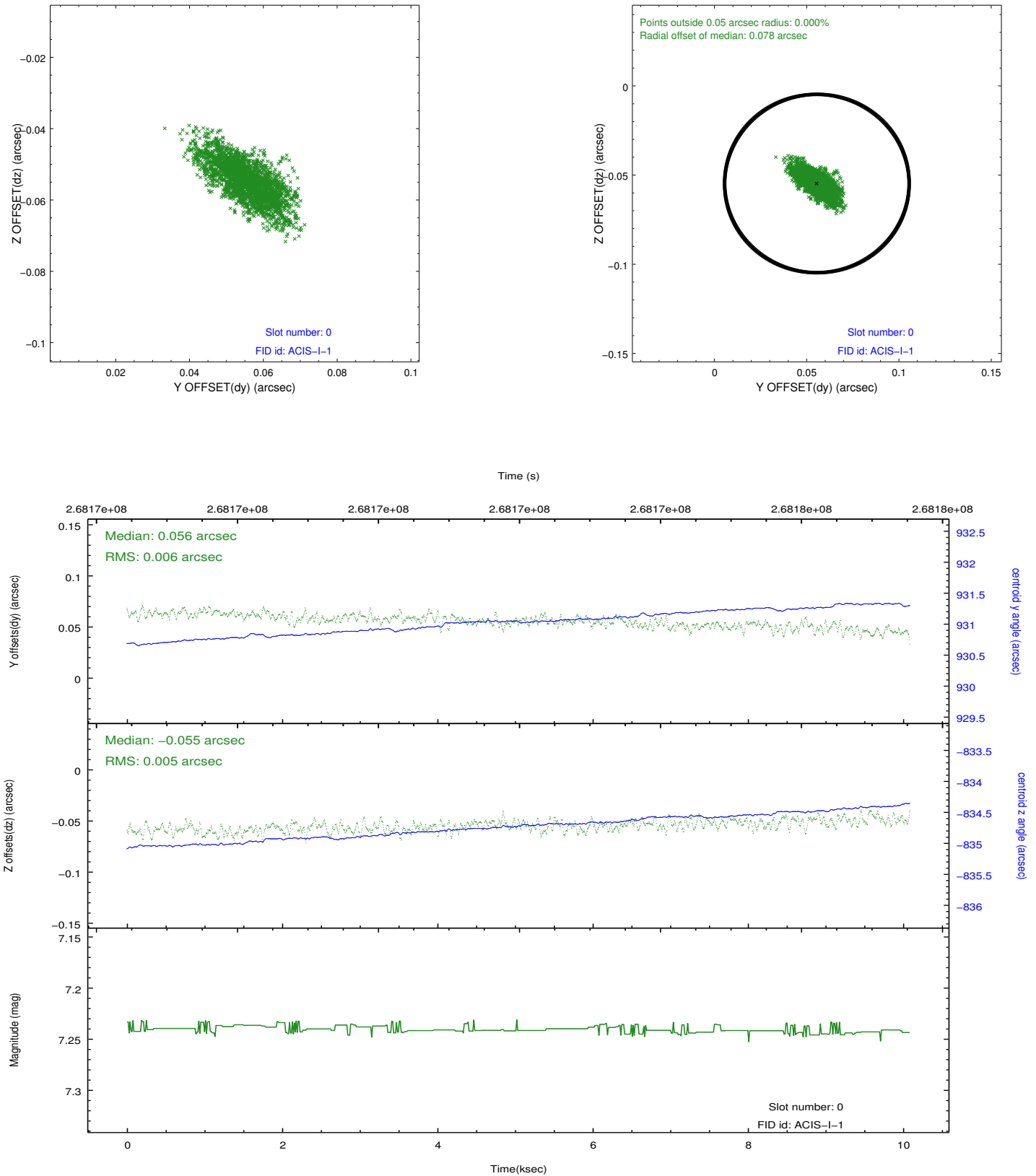


2.4.5 Slot 7

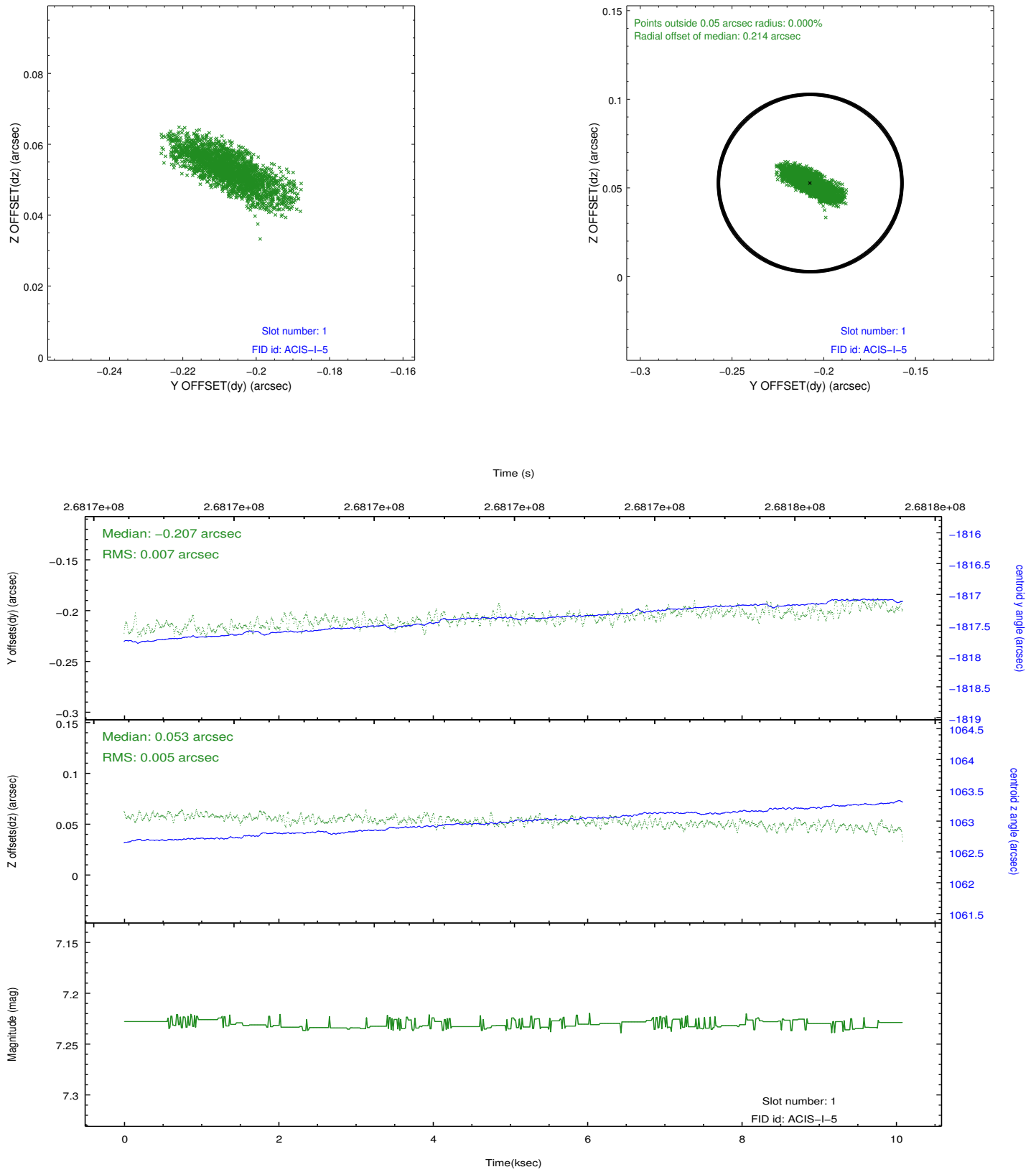


2.5 FID Slots

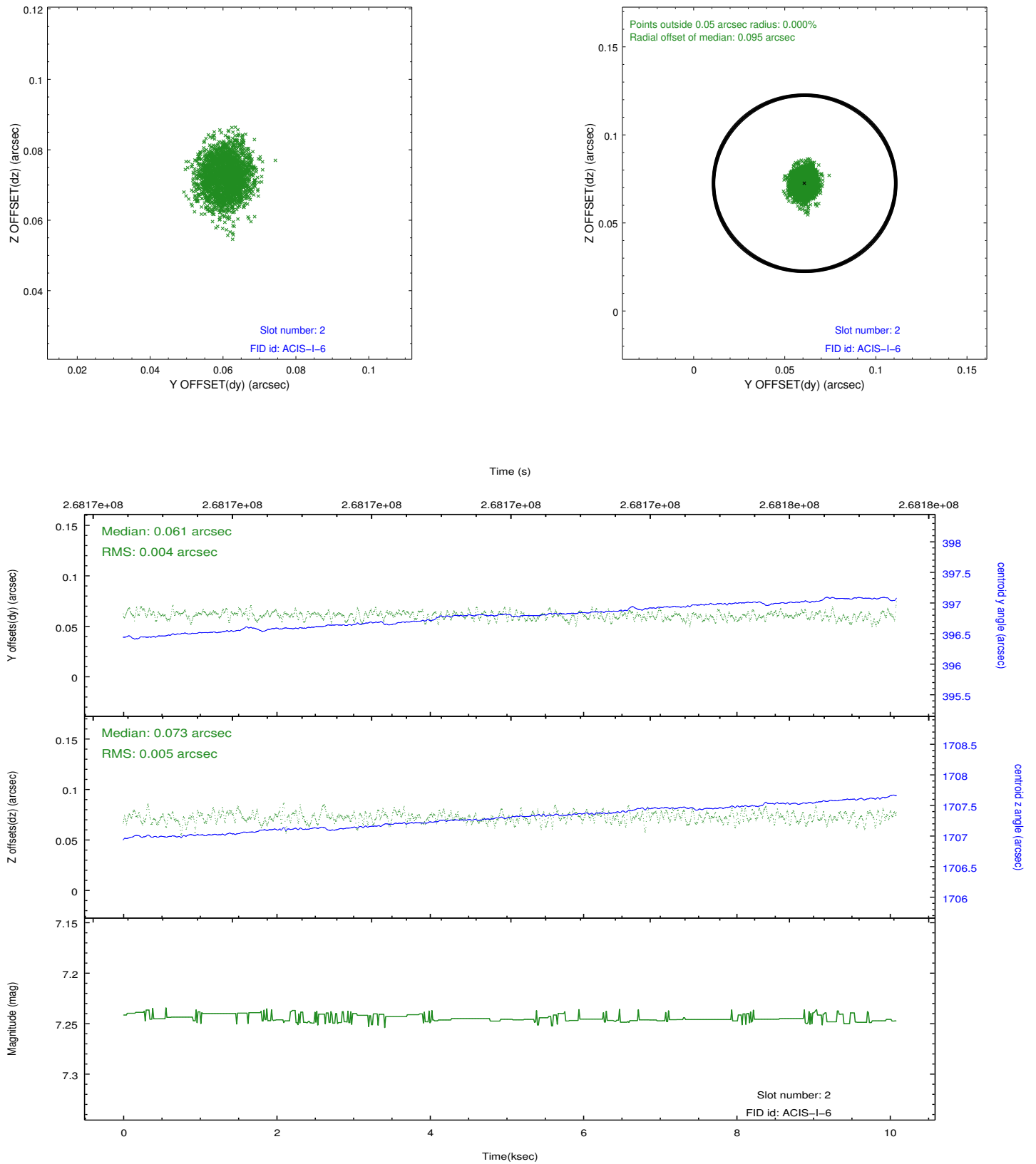
2.5.1 Slot 0



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) | 2012.04.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 9.65439996 |

A.2 Comments

Joint proposal with XMM.