

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4117 - L2 Version 3
Chandra X-Ray Center

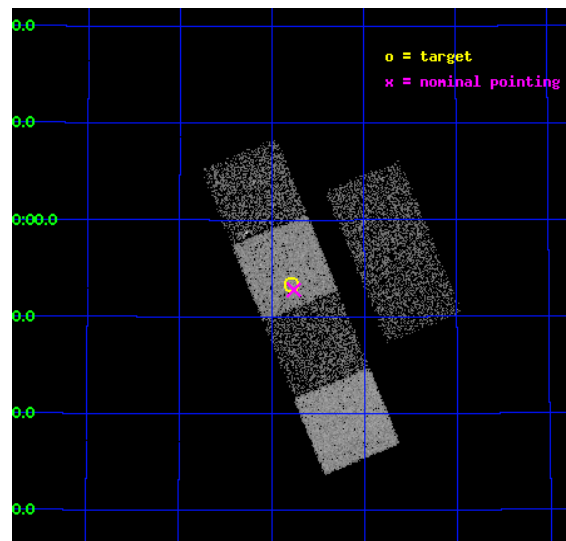
L2 Processing Date : Oct 24 2012

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1 Front

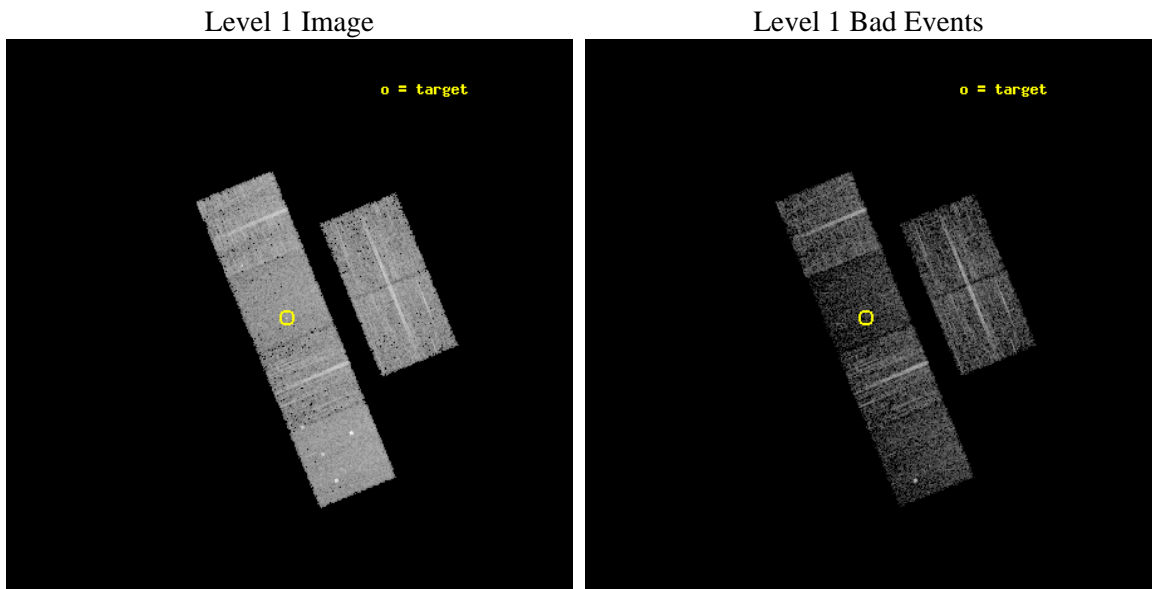
| | | |
|----------|--|---|
| seq_num | 700796 | Sequence number |
| obs_id | 4117 | Observation id |
| title | WHAT KIND OF JETS DOES NATURE MAKE? X-RAY CHARACTERIZATION OF THE FIRST FLAT SPECTRUM SAMPLE | Proposal title |
| observer | Dr. Giovanni Fossati | Principal investigator |
| object | TXS 0726+499 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 112.448333 | Observer's specified target RA [deg] |
| dec_targ | 49.888083 | Observer's specified target Dec [deg] |
| ra_nom | 112.44035193592 | Nominal RA [deg] |
| dec_nom | 49.879892642855 | Nominal Dec [deg] |
| roll_nom | 247.68445859553 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 5961.5999777913 | Sum of GTIs [s] |
| livetime | 5886.110609228 | Livetime [s] |
| ontime2 | 5961.5999777913 | Sum of GTIs [s] |
| ontime3 | 5961.5999777913 | Sum of GTIs [s] |
| ontime5 | 5961.5999777913 | Sum of GTIs [s] |
| ontime6 | 5955.1181170046 | Sum of GTIs [s] |
| ontime7 | 5961.5999777913 | Sum of GTIs [s] |
| ontime8 | 5961.5999777913 | Sum of GTIs [s] |
| l2events | 40826 | Number of level 2 events |



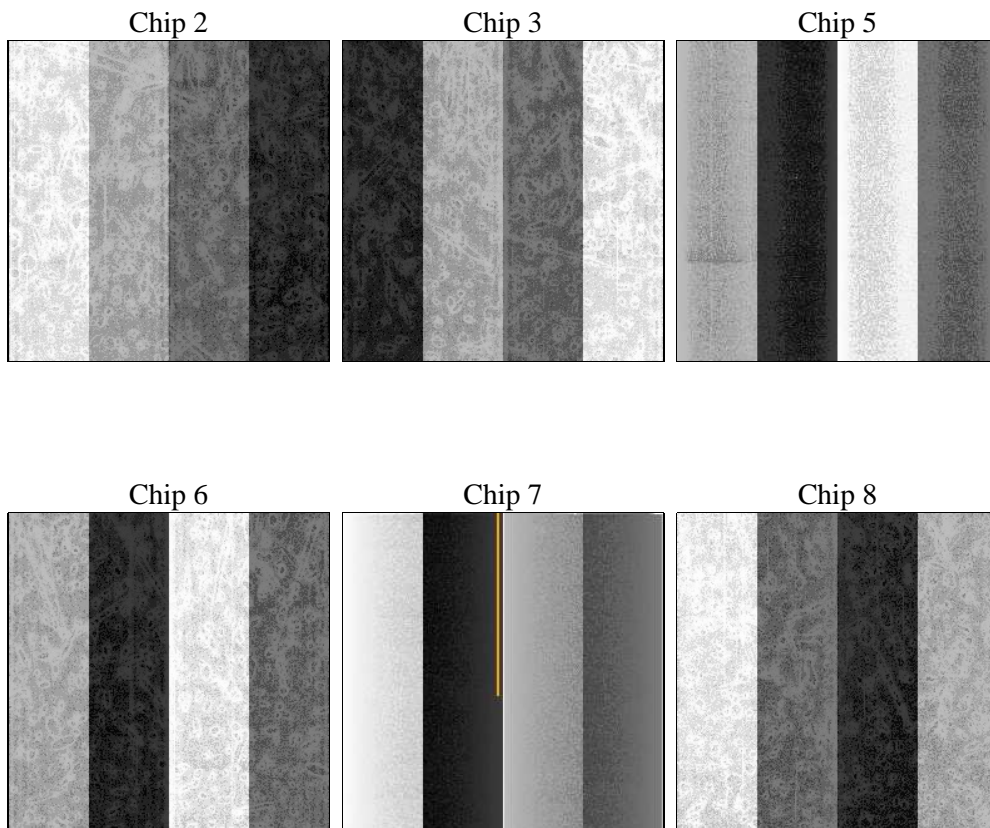
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 6000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 5961.5999777913 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime2 | 5961.5999777913 | Sum of GTIs [s] |
| date | 2012-10-24T12:56:43 | Date and time of file creation | ontime3 | 5961.5999777913 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 5961.5999777913 | Sum of GTIs [s] |
| | | | ontime6 | 5955.1181170046 | Sum of GTIs [s] |
| | | | ontime7 | 5961.5999777913 | Sum of GTIs [s] |
| | | | ontime8 | 5961.5999777913 | Sum of GTIs [s] |
| | | | l1events | 192286 | Number of level 1 events |

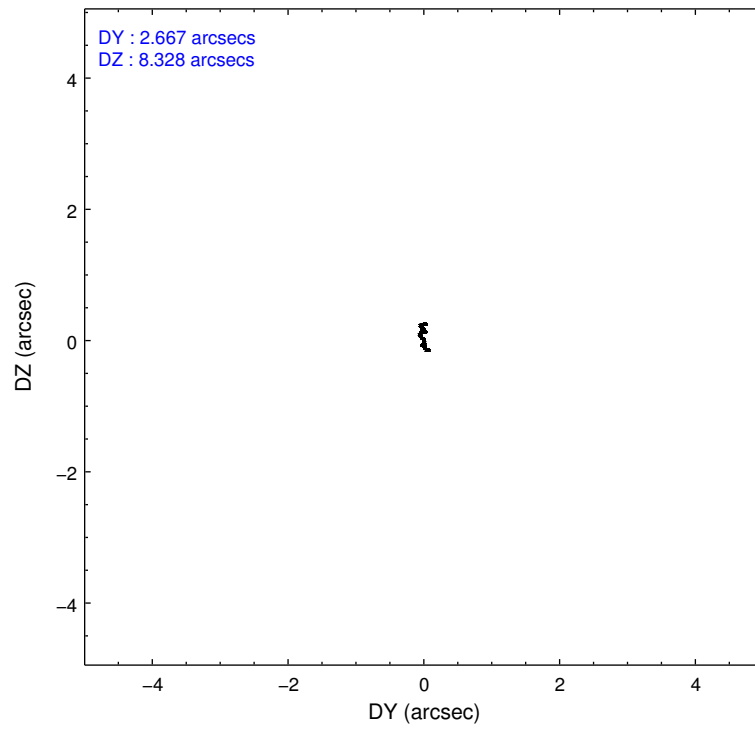
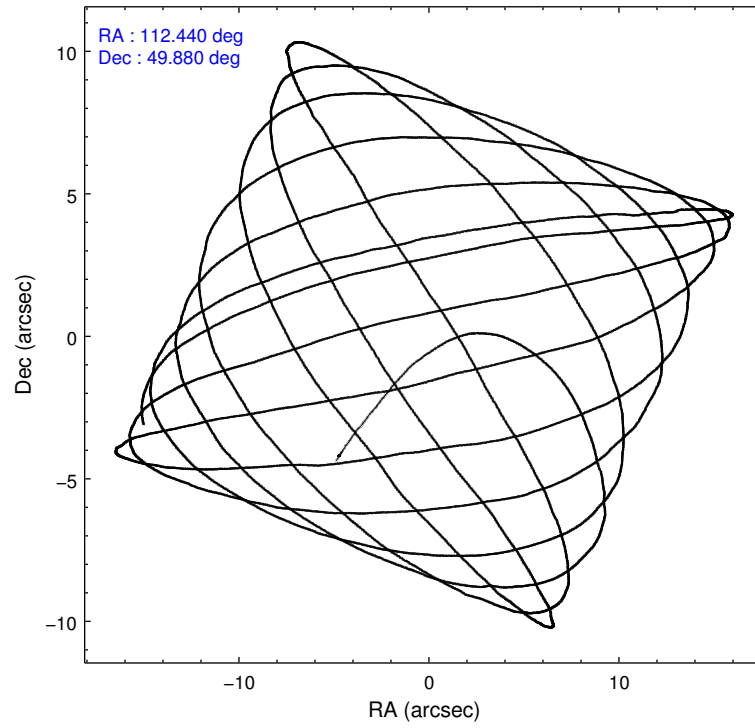
2.1.4 Events

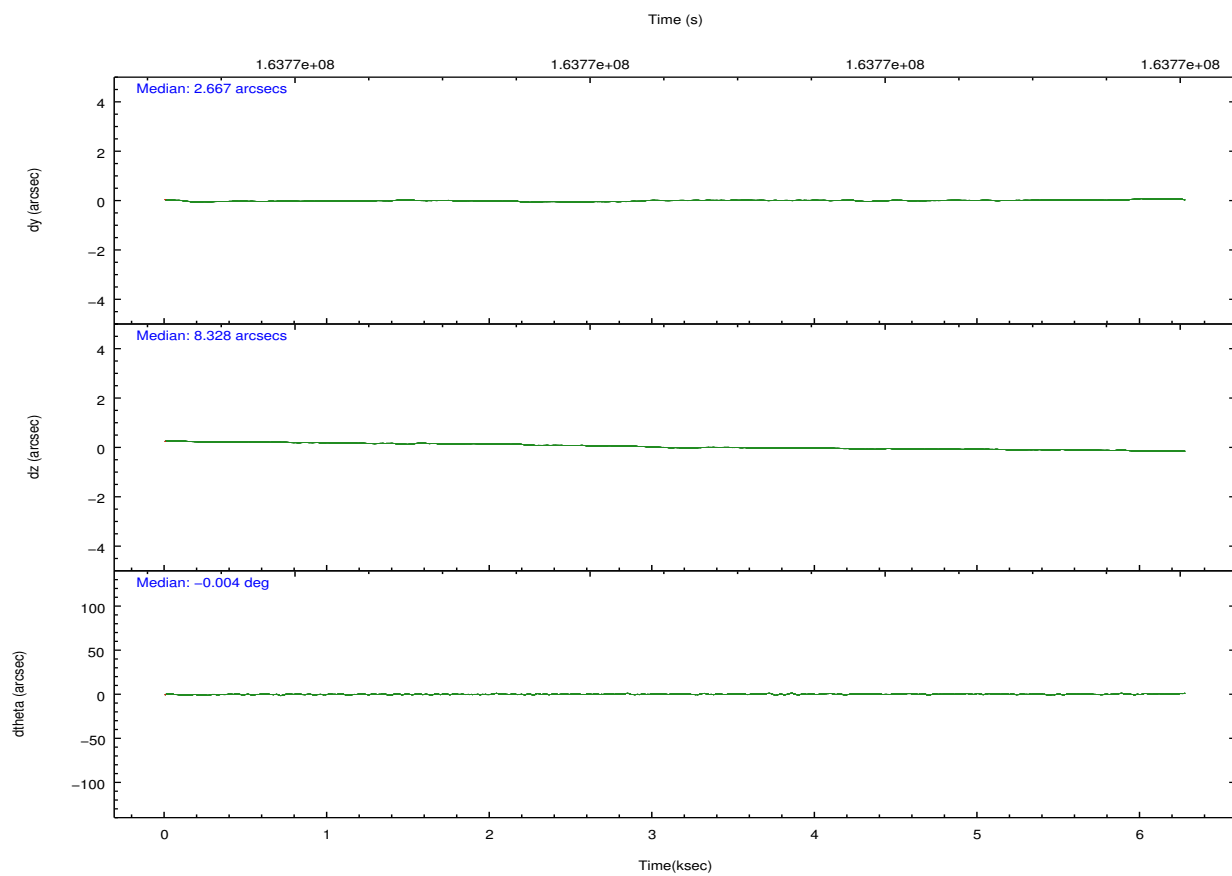
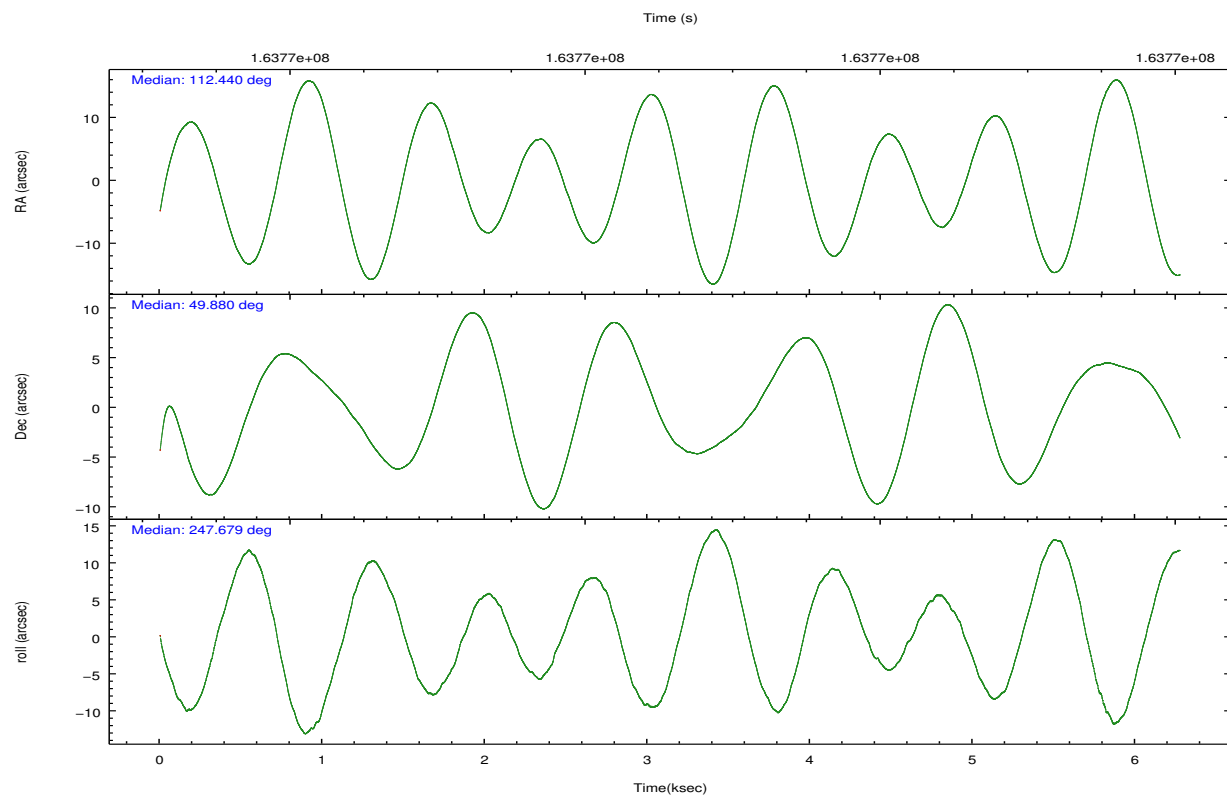
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 31554 | 28043 | 37121 | 29813 | 27802 | 37953 | grade 0 events | 1039 | 1058 | 2679 | 1053 | 1397 | 2552 |
| rejected events | 28806 | 25223 | 17274 | 26869 | 14079 | 29167 | | 3% | 3% | 7% | 3% | 5% | 6% |
| rejected % | 91% | 89% | 46% | 90% | 50% | 76% | grade 1 events | 14 | 14 | 57 | 14 | 26 | 20 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 621 | 583 | 5816 | 625 | 2841 | 1887 |
| | | | | | | | | 1% | 2% | 15% | 2% | 10% | 4% |
| | | | | | | | grade 3 events | 327 | 305 | 1015 | 356 | 1354 | 1039 |
| | | | | | | | | 1% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 320 | 352 | 901 | 354 | 1399 | 990 |
| | | | | | | | | 1% | 1% | 2% | 1% | 5% | 2% |
| | | | | | | | grade 5 events | 860 | 880 | 3141 | 957 | 3026 | 1409 |
| | | | | | | | | 2% | 3% | 8% | 3% | 10% | 3% |
| | | | | | | | grade 6 events | 442 | 524 | 9450 | 557 | 6739 | 2321 |
| | | | | | | | | 1% | 1% | 25% | 1% | 24% | 6% |
| | | | | | | | grade 7 events | 27931 | 24327 | 14062 | 25897 | 11020 | 27735 |
| | | | | | | | | 88% | 86% | 37% | 86% | 39% | 73% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | 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 | 112.434067 | 112.4403519359207 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 49.906856 | 49.8798926428545 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 247.532630 | 247.6844585955322 | [s] Primary exposure time | 0.000000 | 3.2 |
| [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) | 163765720.184000 | 163764712.69392 | | | |
| Observation start date | 2003-03-11T10:27:36 | 2003-03-11T10:11:52 | | | |
| [s] Observation end time (MET) | 163771720.184000 | 163772465.28175 | | | |
| Observation end date | 2003-03-11T12:07:36 | 2003-03-11T12:21:05 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



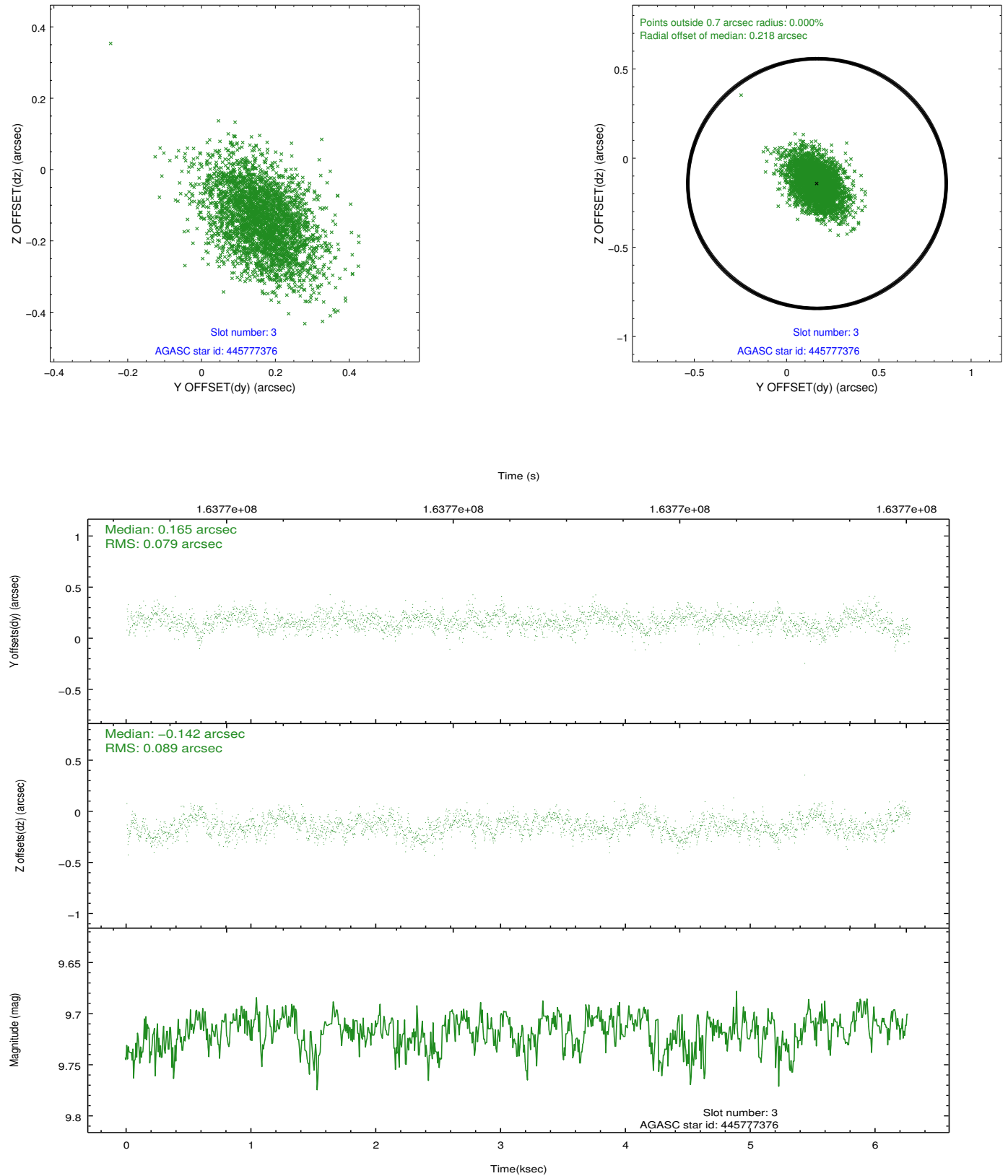


Slot Statistics

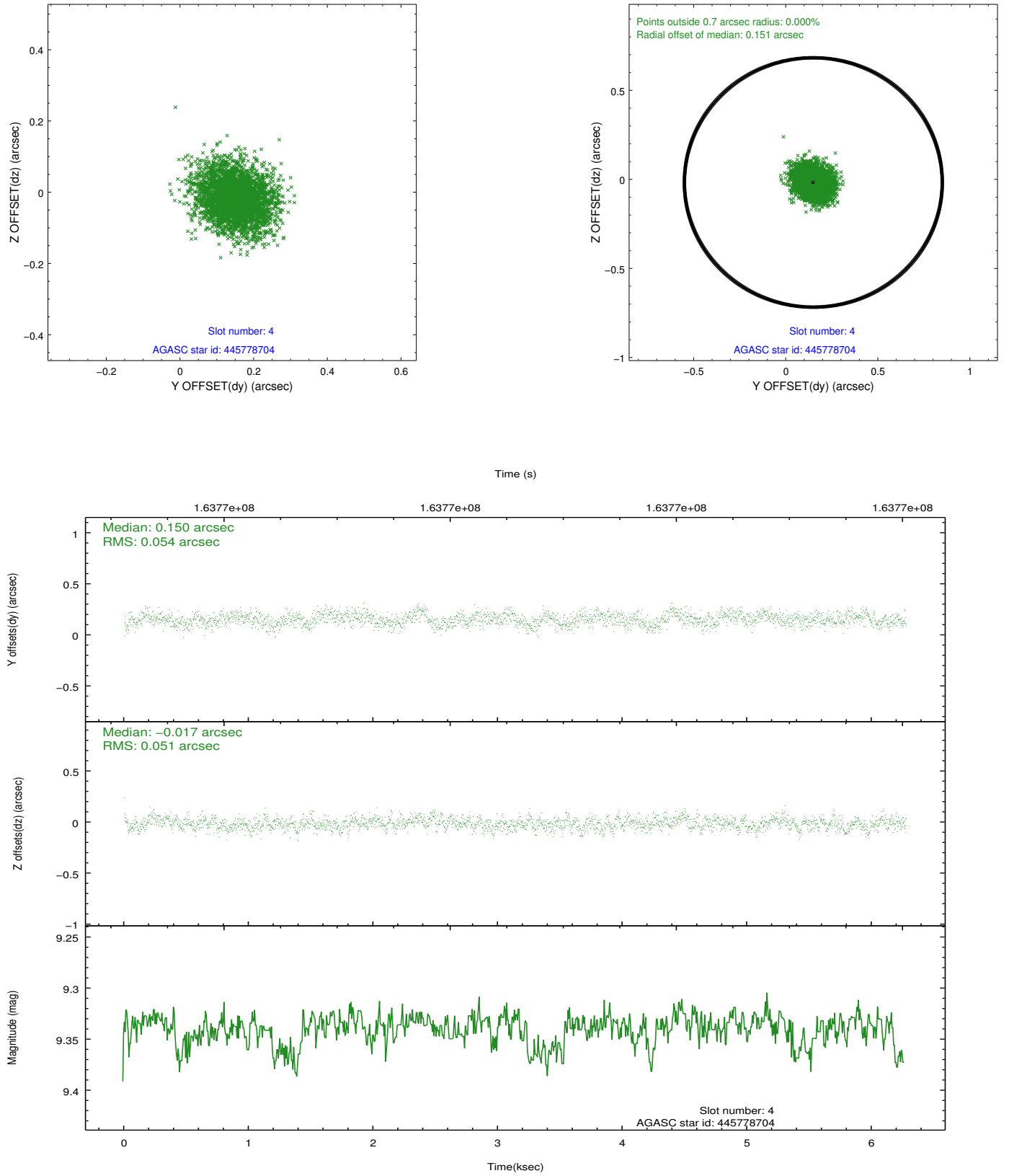
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 1531 | -0.022 | -0.014 | 0.007 | 0.011 | 0.000000 | 0.000000 | -755.32 | -1729.53 |
| 1 | FID | ACIS-S-4 | 7.20 | 1531 | -0.010 | 0.015 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2157.55 | 178.01 |
| 2 | FID | ACIS-S-5 | 7.24 | 1531 | 0.000 | 0.008 | 0.007 | 0.010 | 0.000000 | 0.000000 | -1806.93 | 172.75 |
| 3 | GUIDE | 445777376 | 9.72 | 3060 | 0.165 | -0.142 | 0.125 | 0.211 | 111.422184 | 49.500134 | 2242.96 | -1632.71 |
| 4 | GUIDE | 445778704 | 9.34 | 3058 | 0.150 | -0.017 | 0.080 | 0.127 | 111.950387 | 49.446617 | 1961.23 | -414.75 |
| 5 | GUIDE | 447217776 | 9.45 | 3061 | -0.083 | 0.093 | 0.085 | 0.134 | 113.360537 | 50.161746 | -1676.30 | 1618.70 |
| 6 | GUIDE | 445775944 | 9.73 | 3060 | -0.136 | -0.026 | 0.111 | 0.176 | 112.003381 | 50.607375 | -1957.51 | -1873.89 |
| 7 | GUIDE | 446831360 | 9.28 | 3059 | -0.087 | 0.090 | 0.132 | 0.214 | 113.165215 | 49.501450 | 687.00 | 2133.69 |

2.4 Star Slots

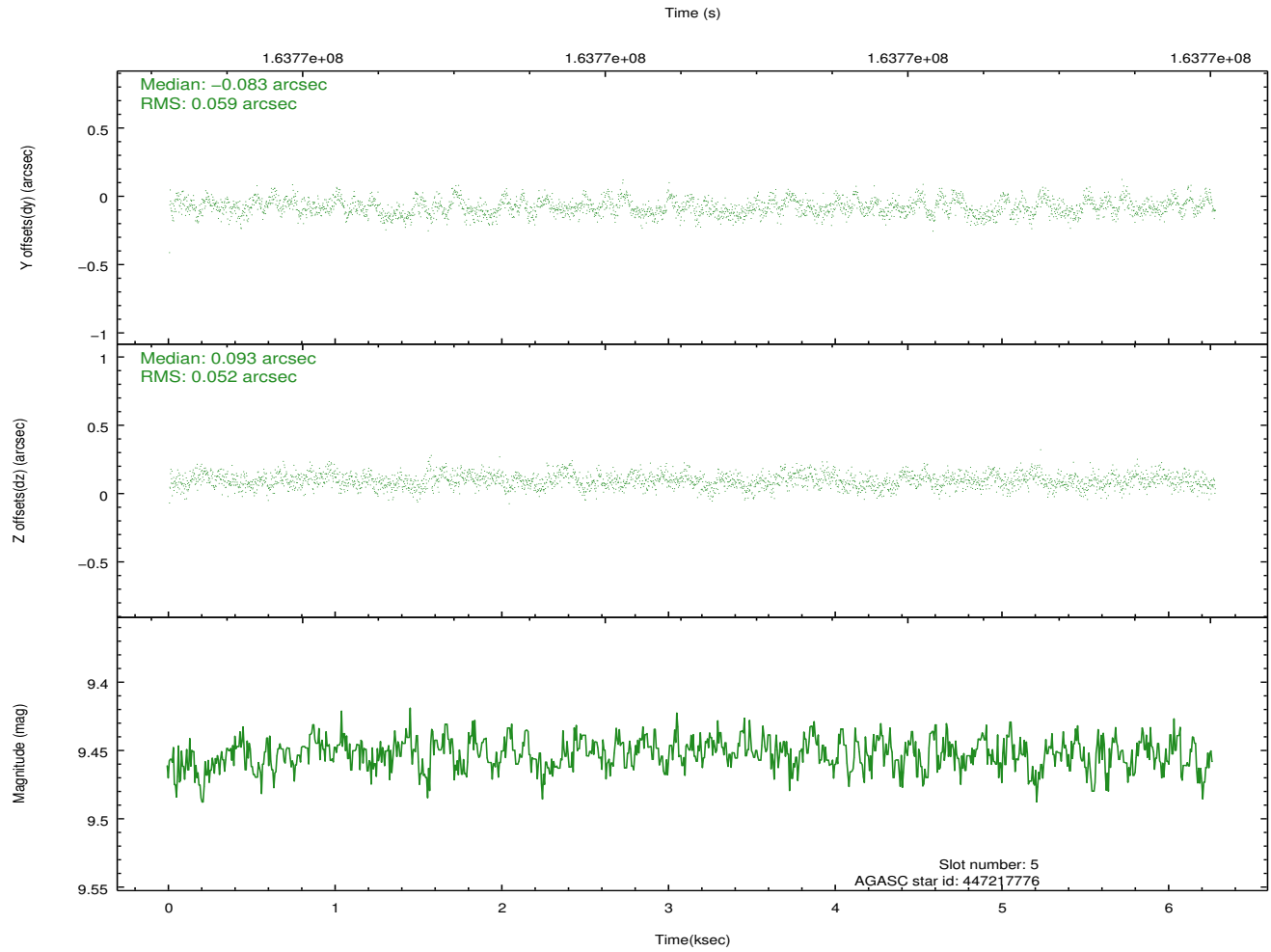
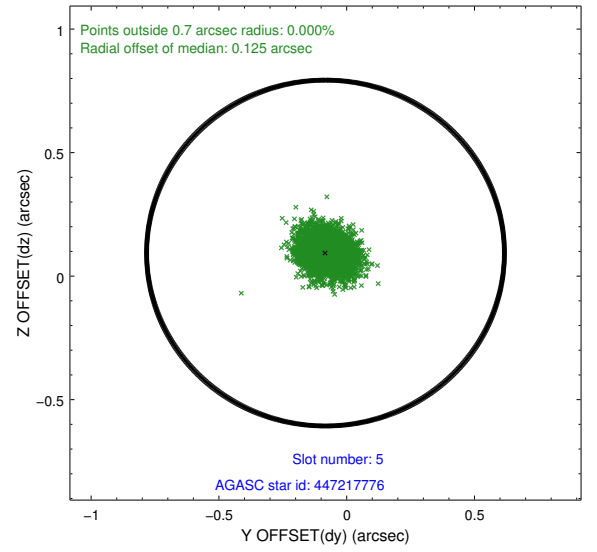
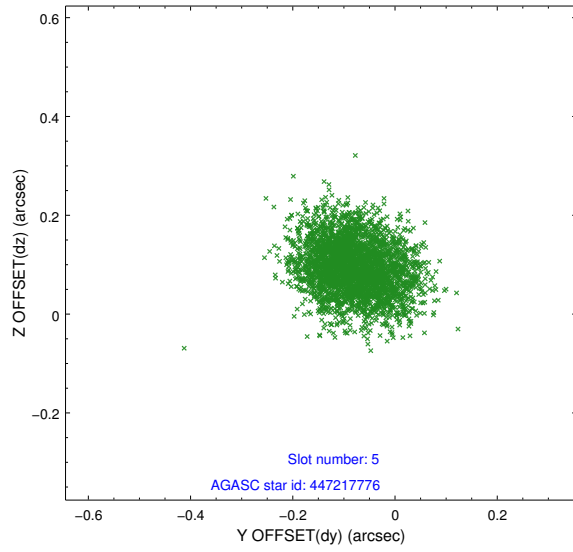
2.4.1 Slot 3



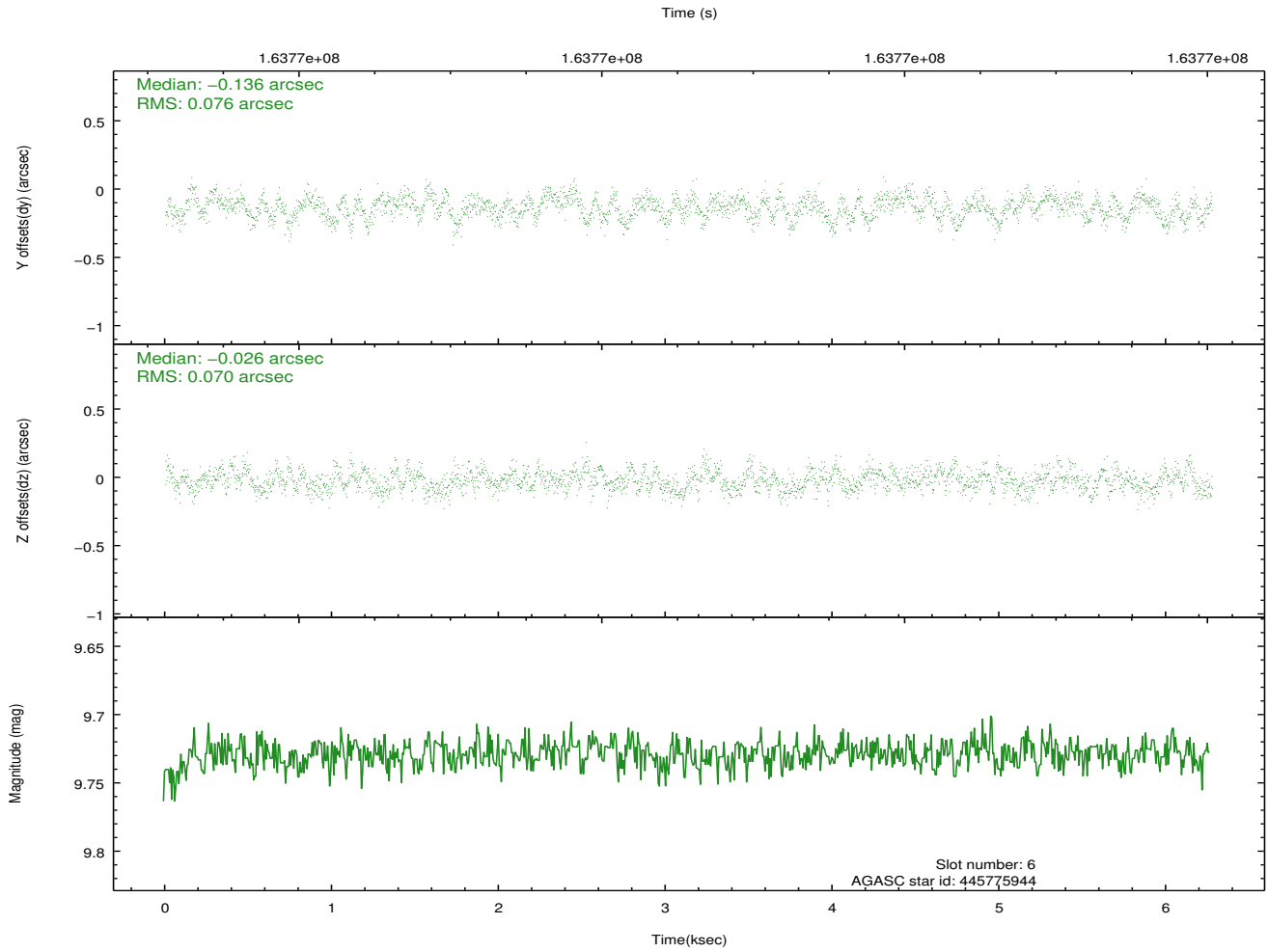
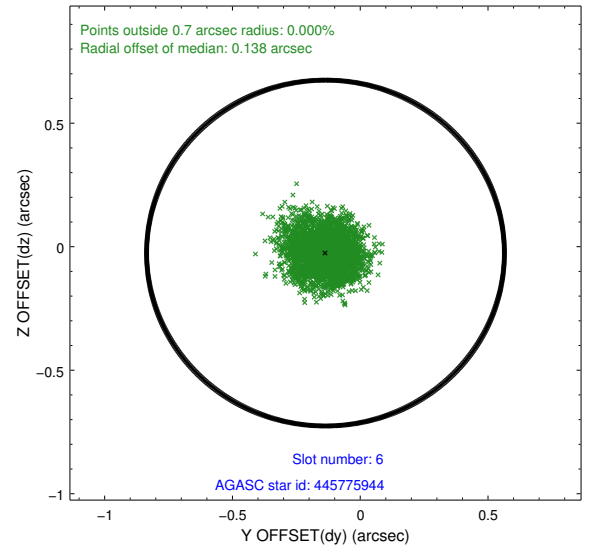
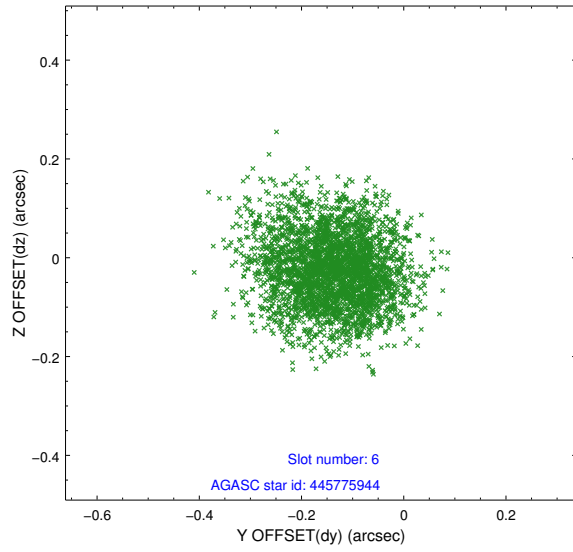
2.4.2 Slot 4



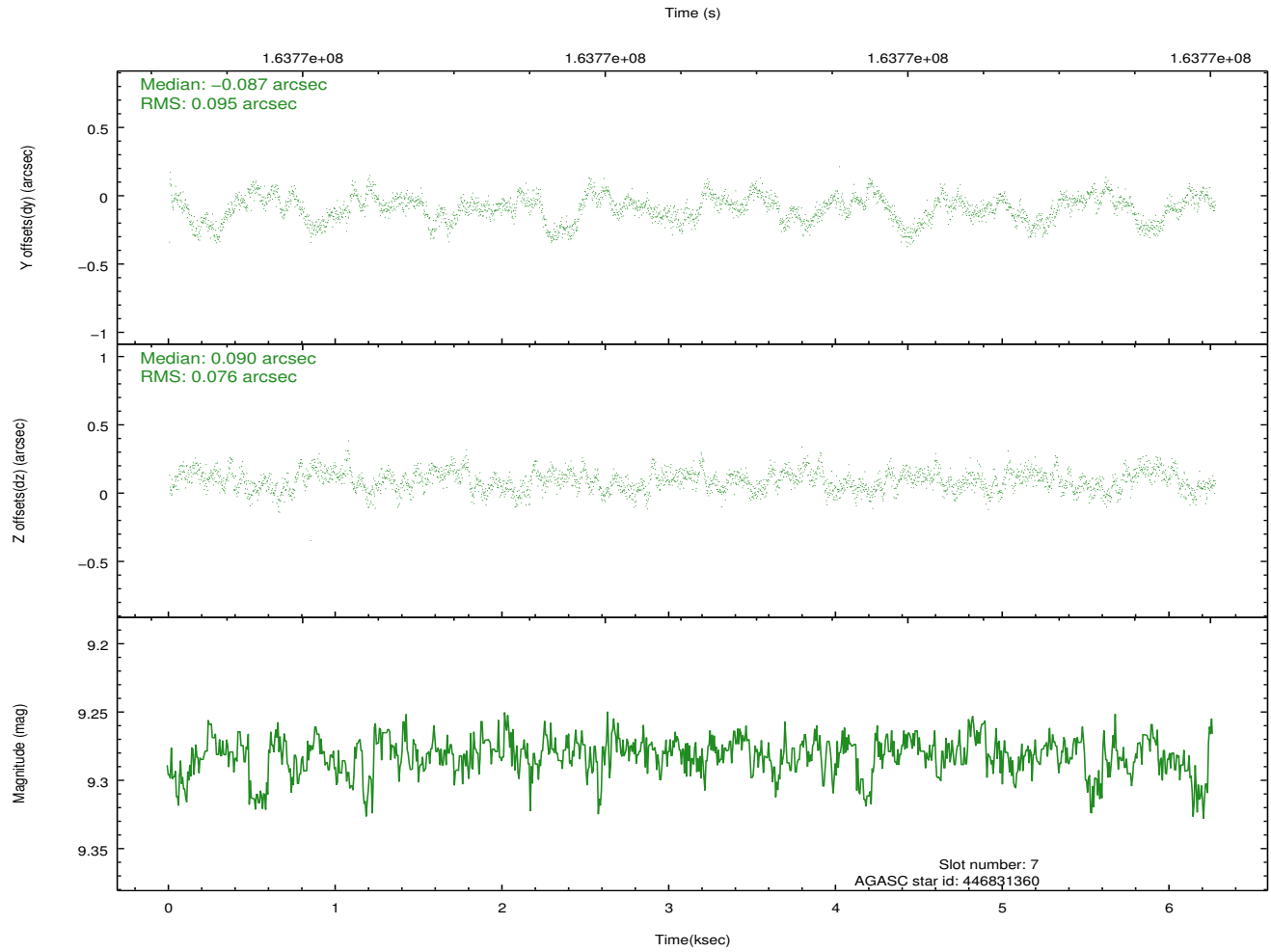
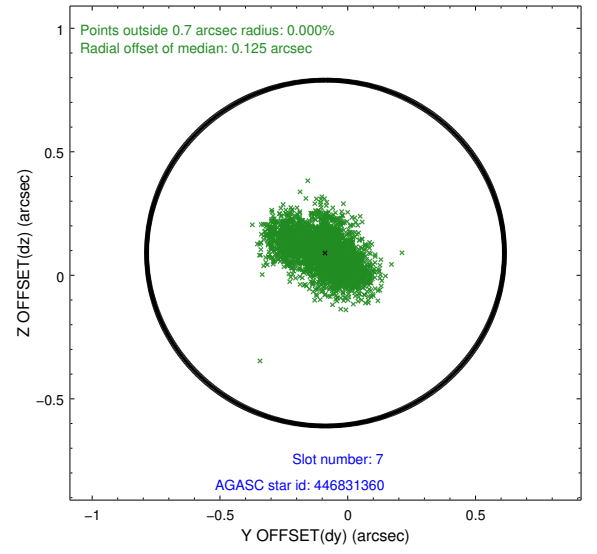
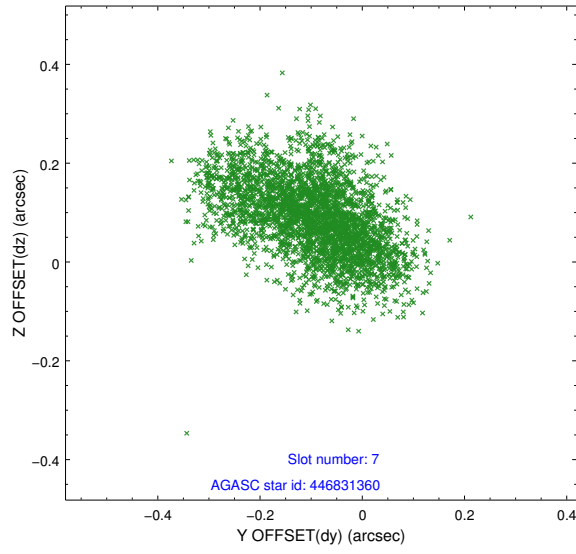
2.4.3 Slot 5



2.4.4 Slot 6

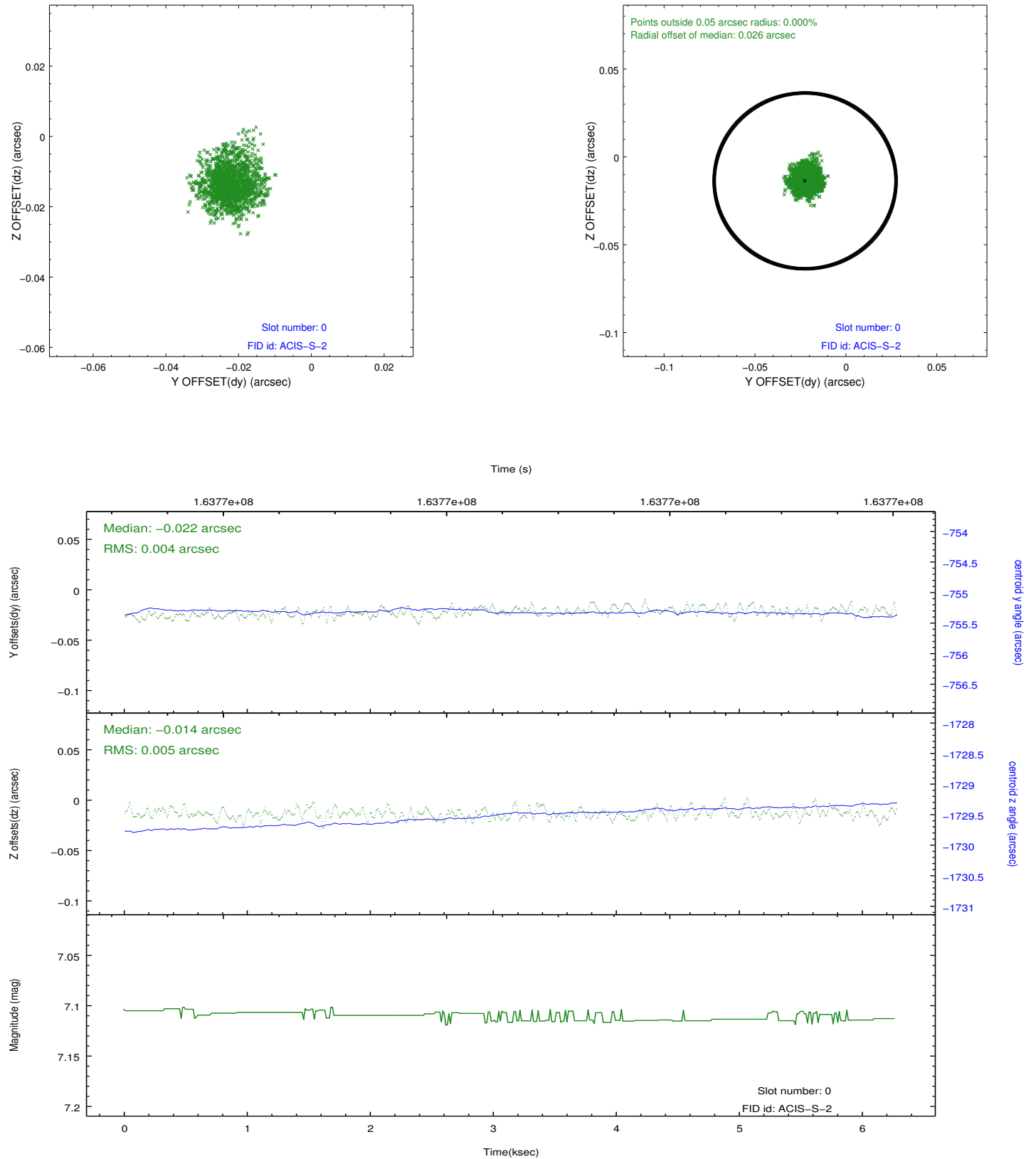


2.4.5 Slot 7

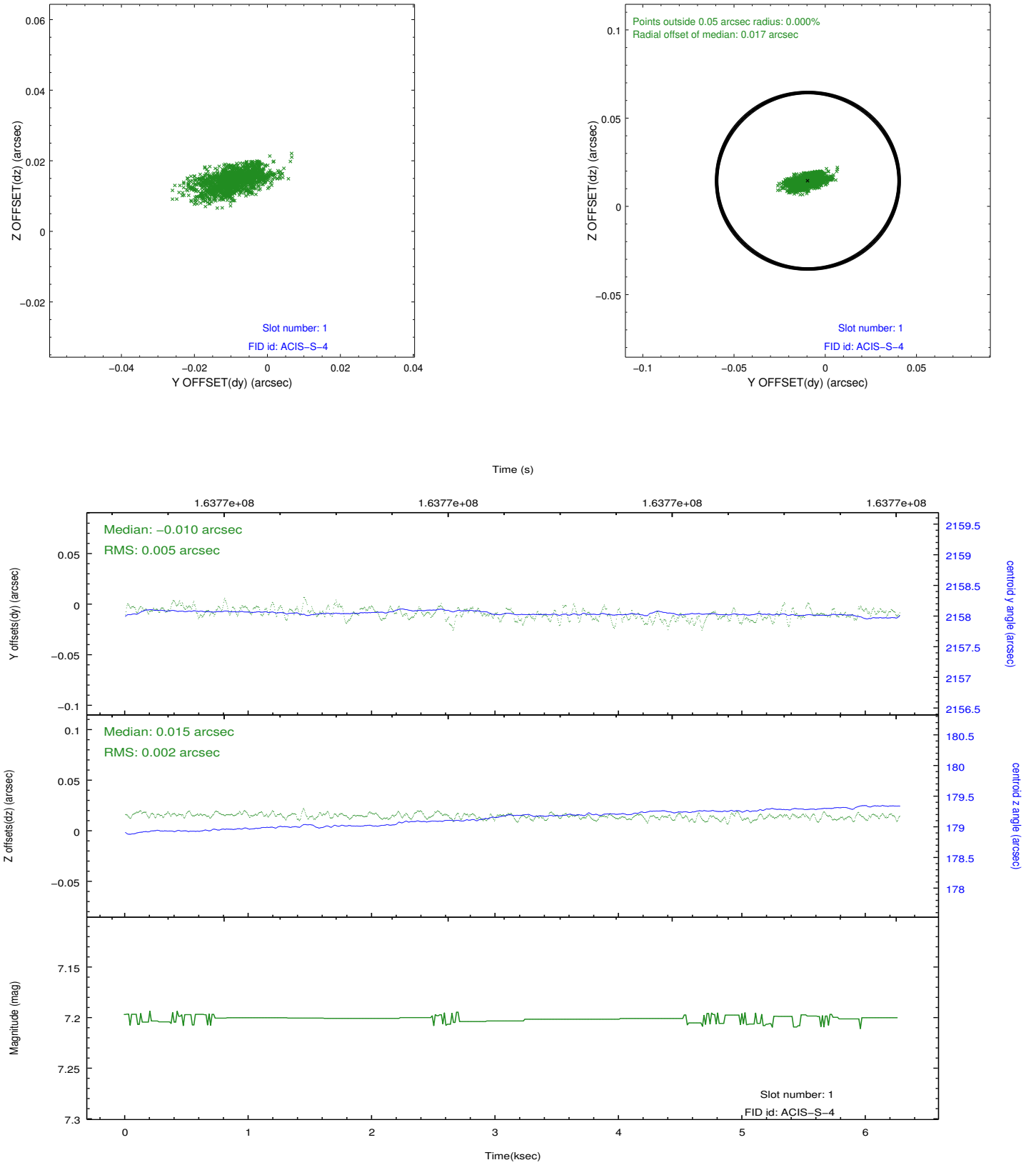


2.5 FID Slots

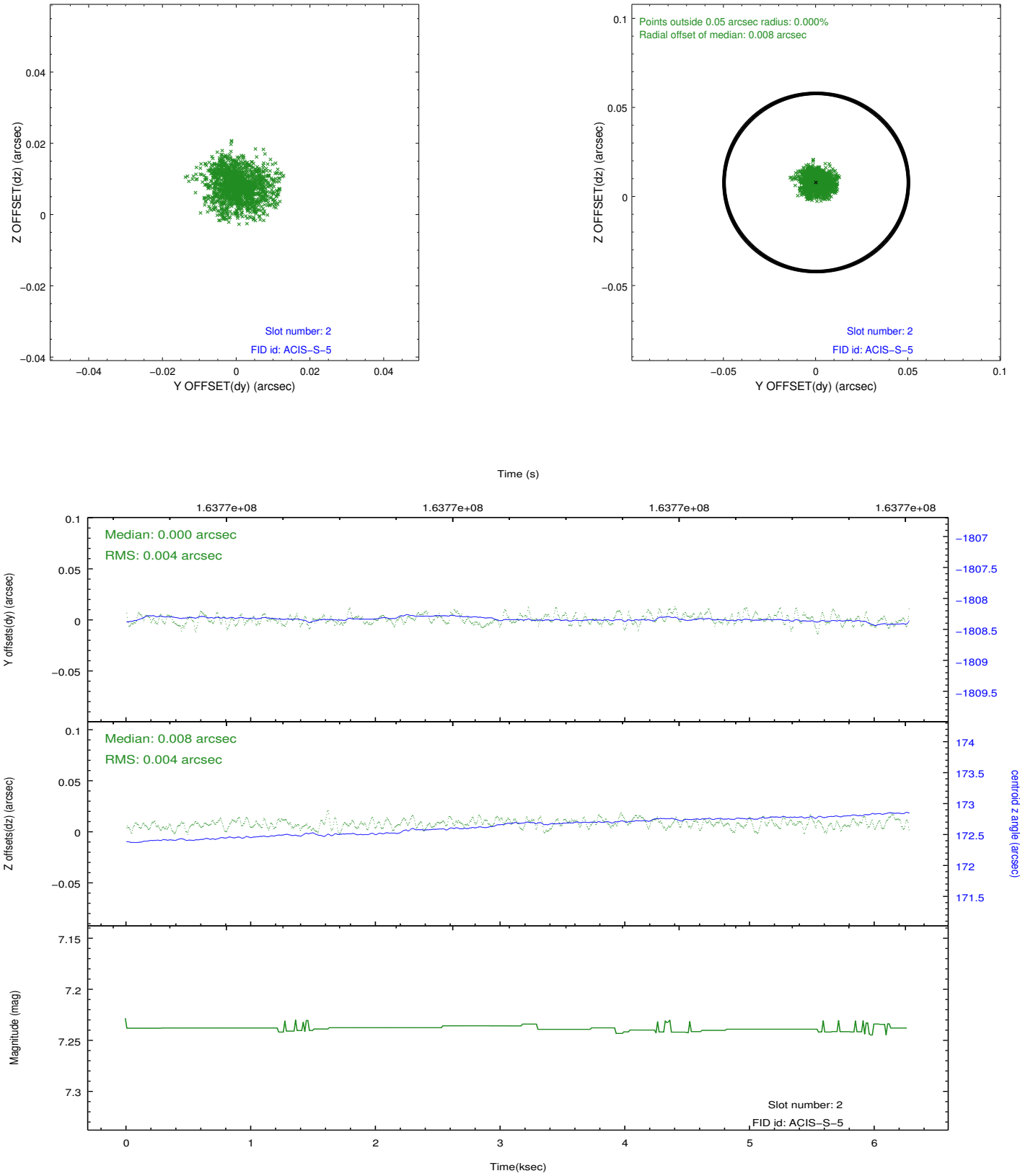
2.5.1 Slot 0



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) | 2012.11.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.965 |

A.2 Comments