

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 7258 - L2 Version 2
Chandra X-Ray Center

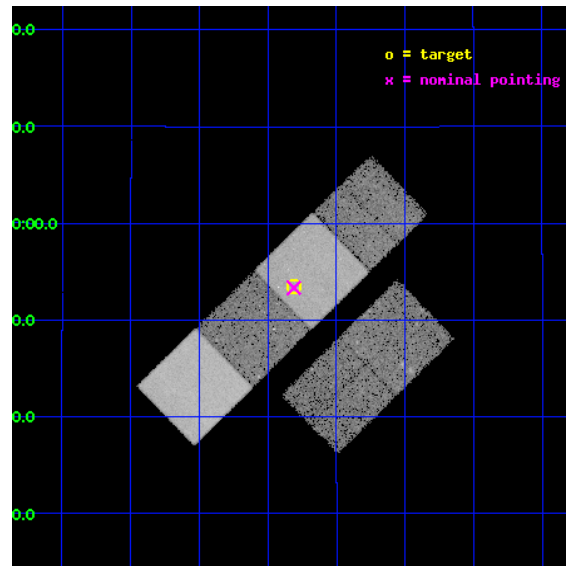
L2 Processing Date : Mar 22 2012

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1 Front

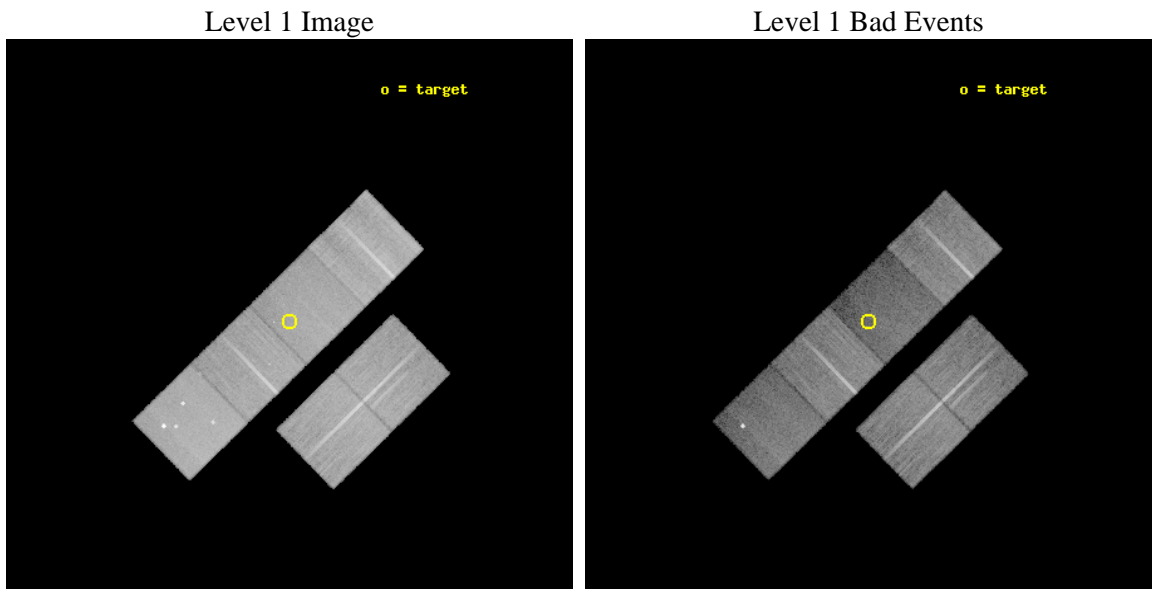
| | | |
|----------|--|---|
| seq_num | 500688 | Sequence number |
| obs_id | 7258 | Observation id |
| title | A Day in the Life of a Short Gamma-Ray Burst | Proposal title |
| observer | Prof. David Burrows | Principal investigator |
| object | GRB 051221 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 328.702917 | Observer's specified target RA [deg] |
| dec_targ | 16.891167 | Observer's specified target Dec [deg] |
| ra_nom | 328.70261064583 | Nominal RA [deg] |
| dec_nom | 16.889092955606 | Nominal Dec [deg] |
| roll_nom | 315.63391388749 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 24950.399907053 | Sum of GTIs [s] |
| livetime | 24634.462920102 | Livetime [s] |
| ontime2 | 24950.399907053 | Sum of GTIs [s] |
| ontime3 | 24943.912267864 | Sum of GTIs [s] |
| ontime5 | 24950.399907053 | Sum of GTIs [s] |
| ontime6 | 24950.399907053 | Sum of GTIs [s] |
| ontime7 | 24950.399907053 | Sum of GTIs [s] |
| ontime8 | 24950.353168428 | Sum of GTIs [s] |
| l2events | 220390 | Number of level 2 events |



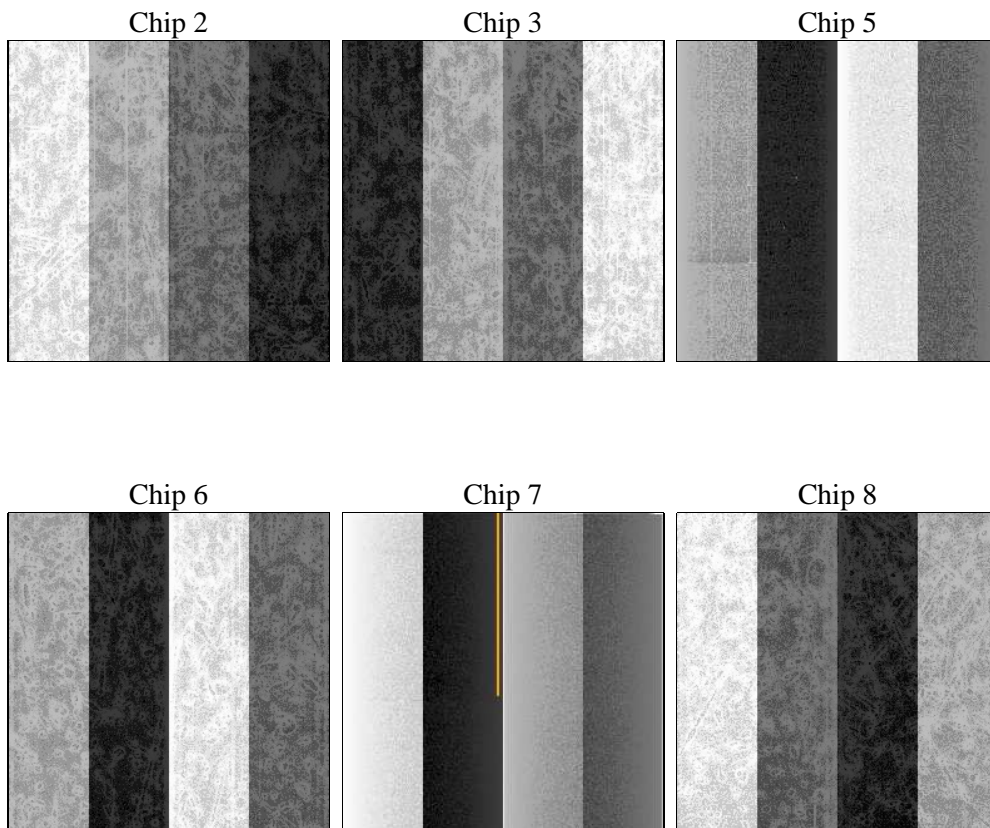
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 25000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 24950.399907053 | Sum of GTIs [s] |
| caldsver | 4.4.8 | | ontime2 | 24950.399907053 | Sum of GTIs [s] |
| date | 2012-03-22T02:58:43 | Date and time of file creation | ontime3 | 24943.912267864 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 24950.399907053 | Sum of GTIs [s] |
| | | | ontime6 | 24950.399907053 | Sum of GTIs [s] |
| | | | ontime7 | 24950.399907053 | Sum of GTIs [s] |
| | | | ontime8 | 24950.353168428 | Sum of GTIs [s] |
| | | | l1events | 1033169 | Number of level 1 events |

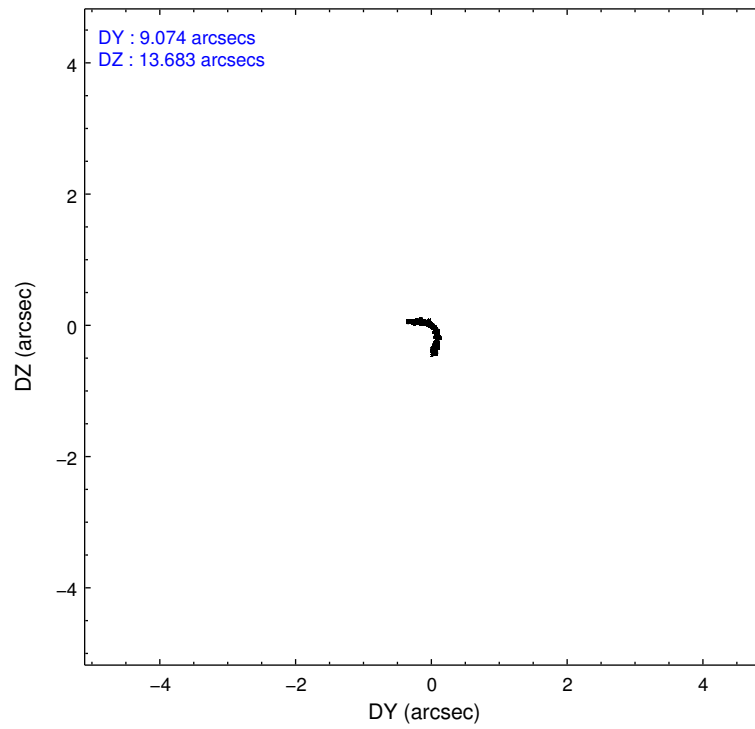
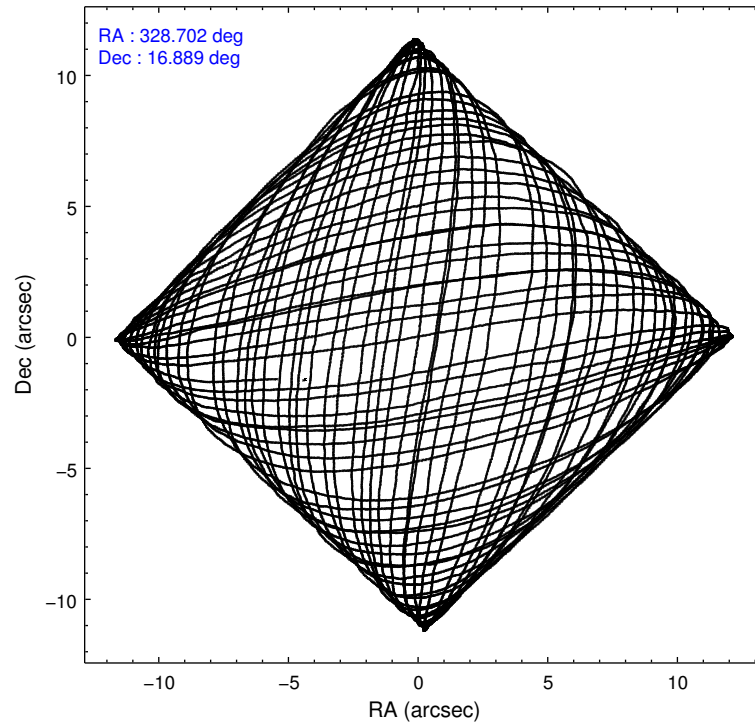
2.1.4 Events

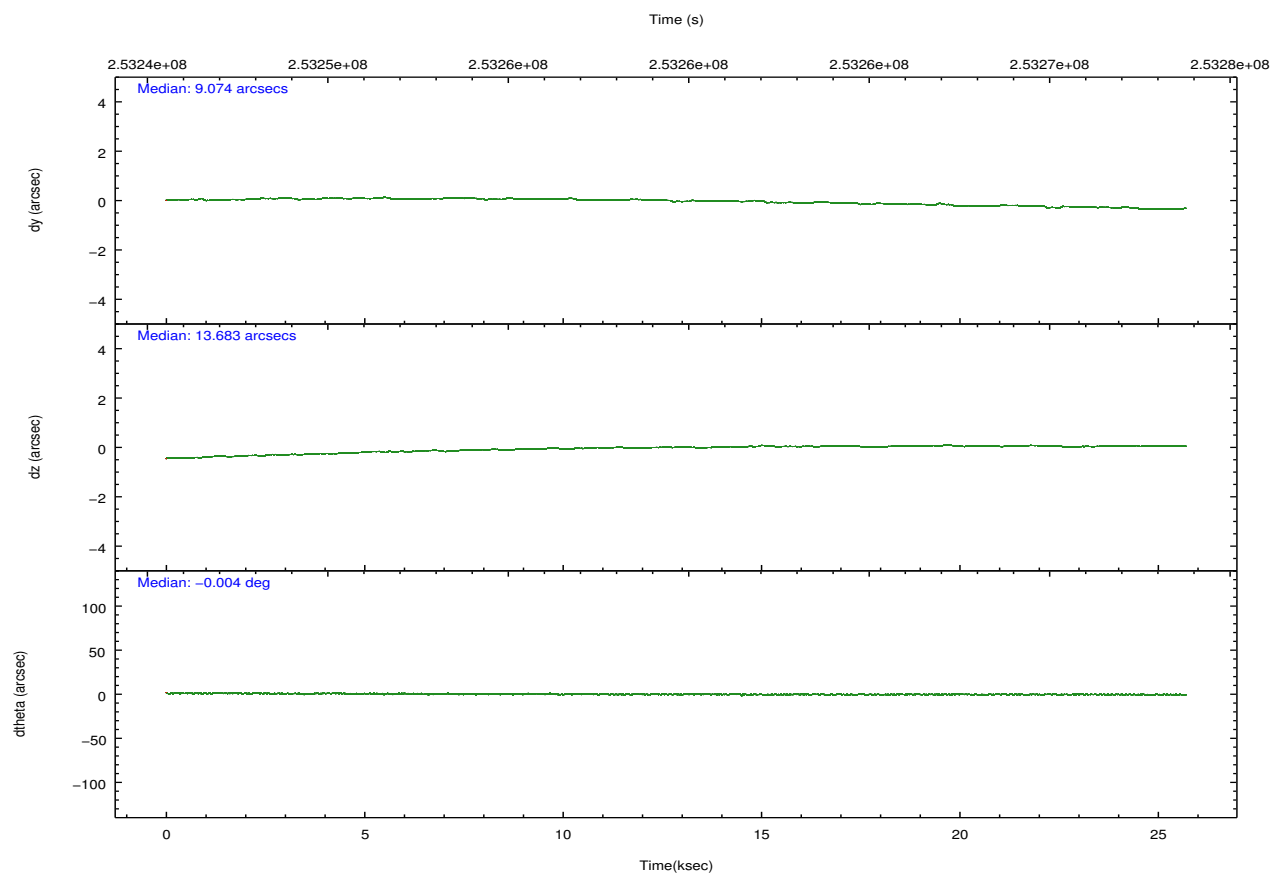
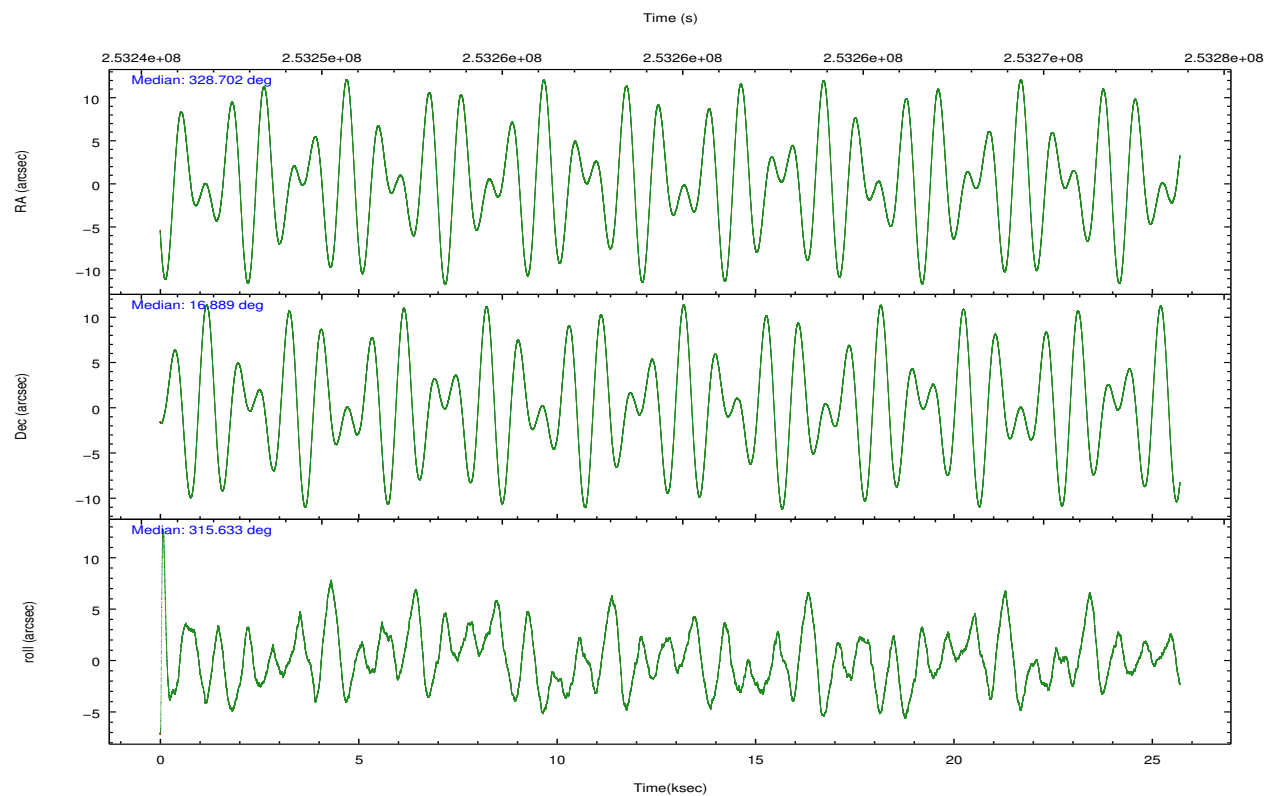
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|-------|--------|-------|--------|
| level 1 events | 174128 | 151663 | 200276 | 158130 | 149477 | 199495 | grade 0 events | 5541 | 5773 | 12526 | 6277 | 7330 | 13015 |
| rejected events | 159050 | 136774 | 94525 | 141786 | 75755 | 152799 | | 3% | 3% | 6% | 3% | 4% | 6% |
| rejected % | 91% | 90% | 47% | 89% | 50% | 76% | grade 1 events | 91 | 87 | 213 | 73 | 159 | 135 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3621 | 3052 | 31892 | 3439 | 15583 | 11032 |
| | | | | | | | | 2% | 2% | 15% | 2% | 10% | 5% |
| | | | | | | | grade 3 events | 1648 | 1745 | 5120 | 1781 | 7169 | 5242 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 1626 | 1676 | 4571 | 1657 | 6983 | 4651 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 4164 | 5343 | 16797 | 5436 | 16488 | 8226 |
| | | | | | | | | 2% | 3% | 8% | 3% | 11% | 4% |
| | | | | | | | grade 6 events | 2643 | 2650 | 51667 | 3192 | 36678 | 12759 |
| | | | | | | | | 1% | 1% | 25% | 2% | 24% | 6% |
| | | | | | | | grade 7 events | 154794 | 131337 | 77490 | 136275 | 59087 | 144435 |
| | | | | | | | | 88% | 86% | 38% | 86% | 39% | 72% |

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 | 328.674958 | 328.7026106458273 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 16.895504 | 16.88909295560571 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 315.485338 | 315.6339138874895 | [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 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 253247495.184000 | 253246277.76485 | | | |
| Observation start date | 2006-01-10T02:30:30 | 2006-01-10T02:11:17 | | | |
| [s] Observation end time (MET) | 253272495.184000 | 253273447.9536 | | | |
| Observation end date | 2006-01-10T09:27:10 | 2006-01-10T09:44:07 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



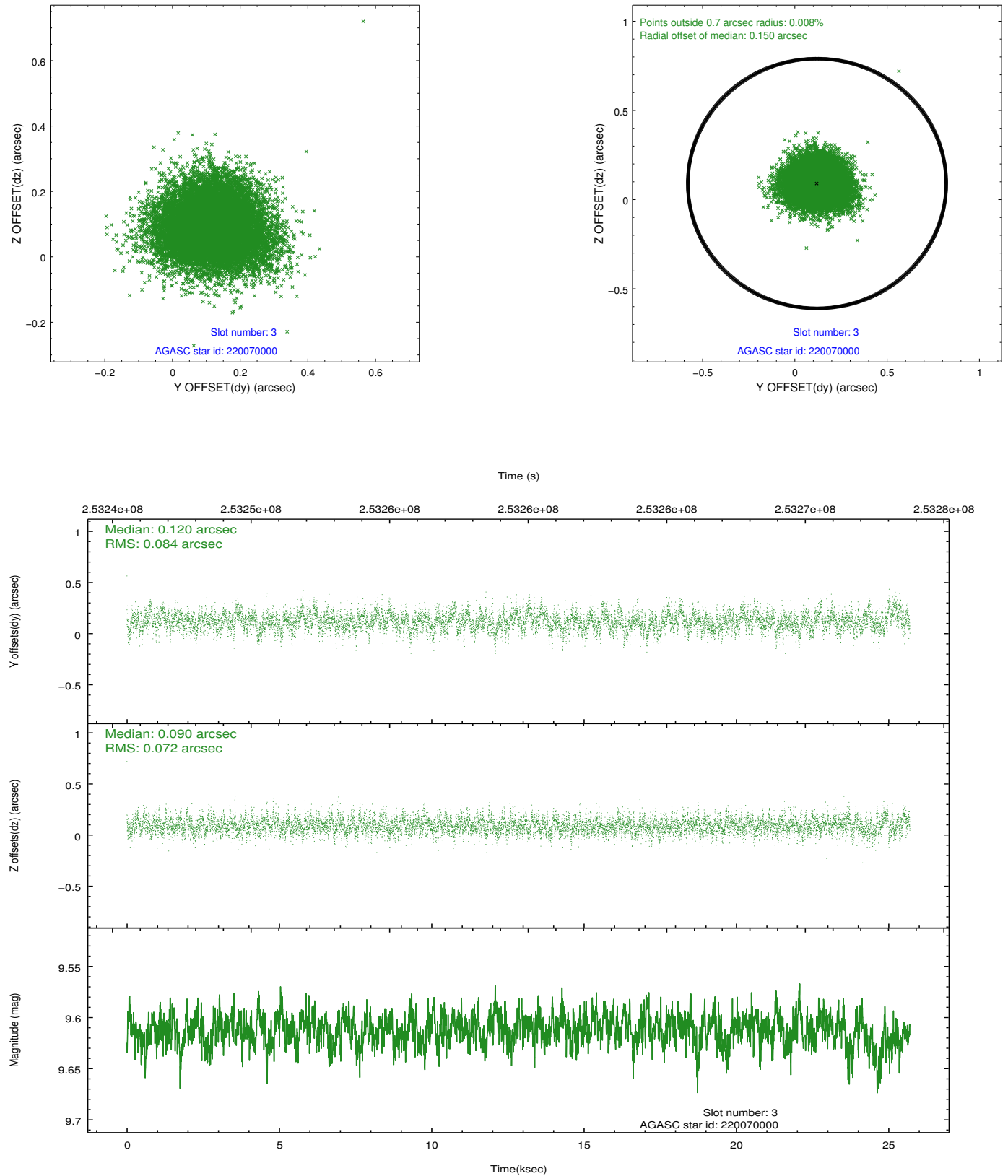


Slot Statistics

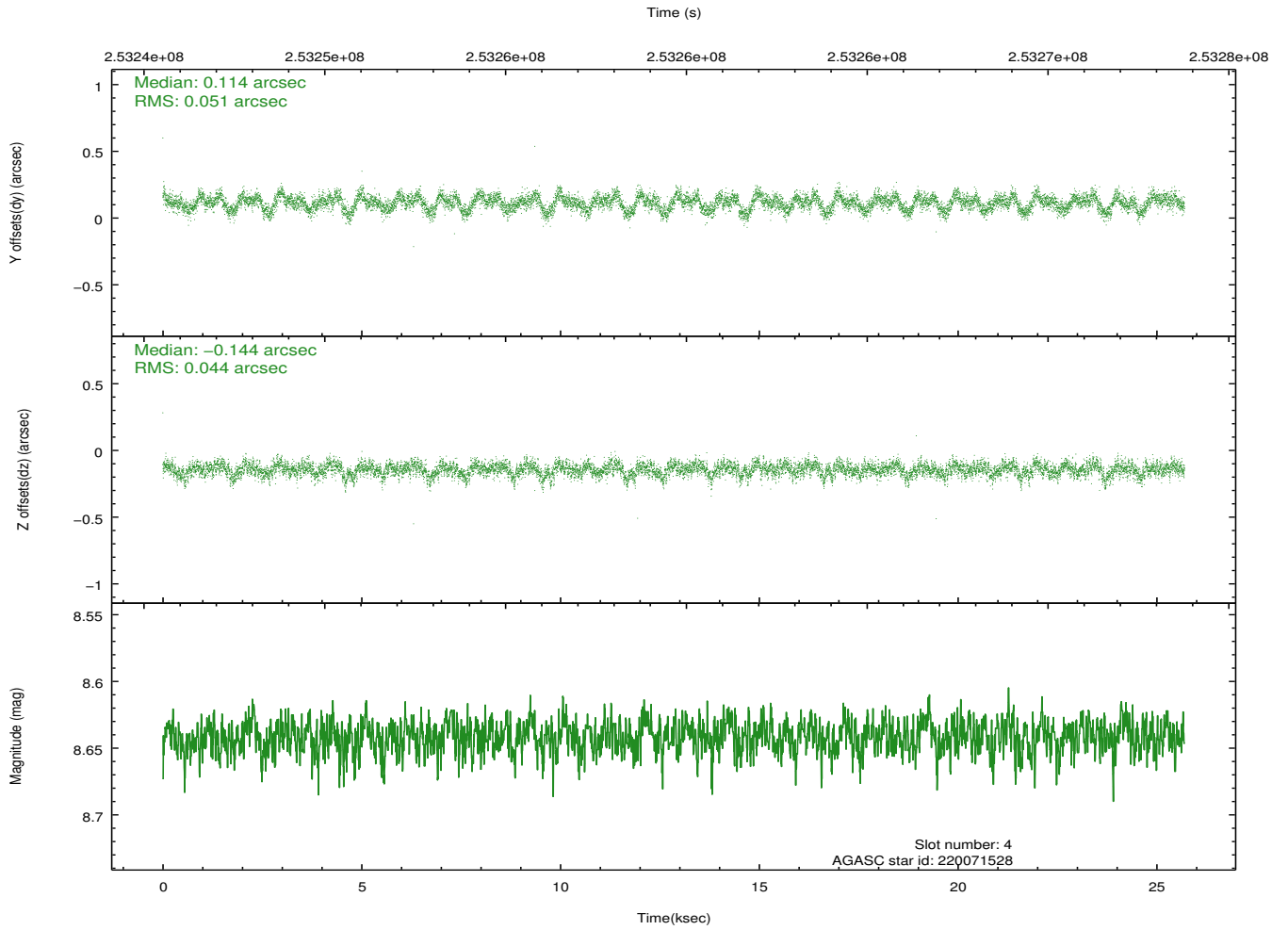
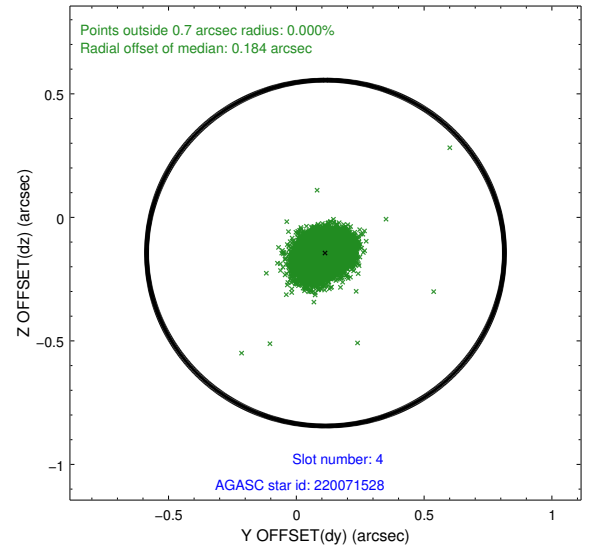
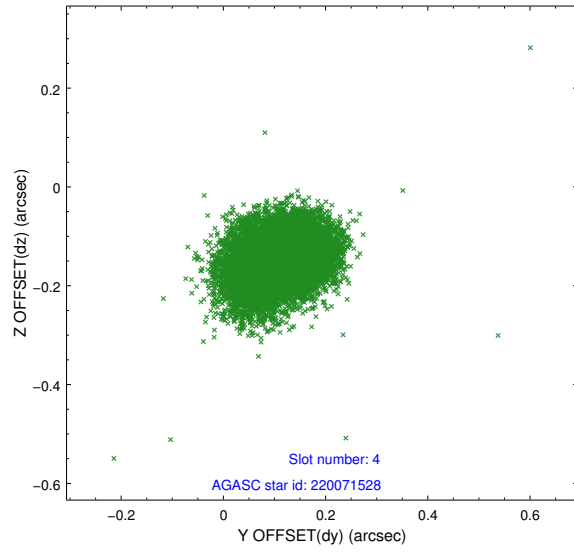
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 6269 | -0.017 | -0.047 | 0.007 | 0.012 | 0.000000 | 0.000000 | -761.85 | -1735.00 |
| 1 | FID | ACIS-S-4 | 7.19 | 6269 | 0.125 | 0.021 | 0.007 | 0.014 | 0.000000 | 0.000000 | 2151.52 | 173.42 |
| 2 | FID | ACIS-S-5 | 7.23 | 6268 | -0.139 | 0.035 | 0.008 | 0.014 | 0.000000 | 0.000000 | -1814.66 | 167.24 |
| 3 | GUIDE | 220070000 | 9.61 | 12524 | 0.120 | 0.090 | 0.118 | 0.189 | 329.283110 | 16.602011 | 2235.21 | 720.45 |
| 4 | GUIDE | 220071528 | 8.64 | 12534 | 0.114 | -0.144 | 0.071 | 0.117 | 328.933551 | 16.712940 | 1096.83 | 156.97 |
| 5 | GUIDE | 220595632 | 9.30 | 12518 | -0.090 | 0.119 | 0.094 | 0.150 | 328.930788 | 17.108977 | 89.01 | 1165.93 |
| 6 | GUIDE | 220608024 | 9.75 | 12530 | -0.079 | 0.016 | 0.149 | 0.223 | 328.017372 | 16.973507 | -1813.16 | -1383.43 |
| 7 | GUIDE | 220608440 | 9.56 | 12500 | -0.061 | -0.073 | 0.103 | 0.170 | 328.040690 | 17.032344 | -1904.46 | -1176.90 |

2.4 Star Slots

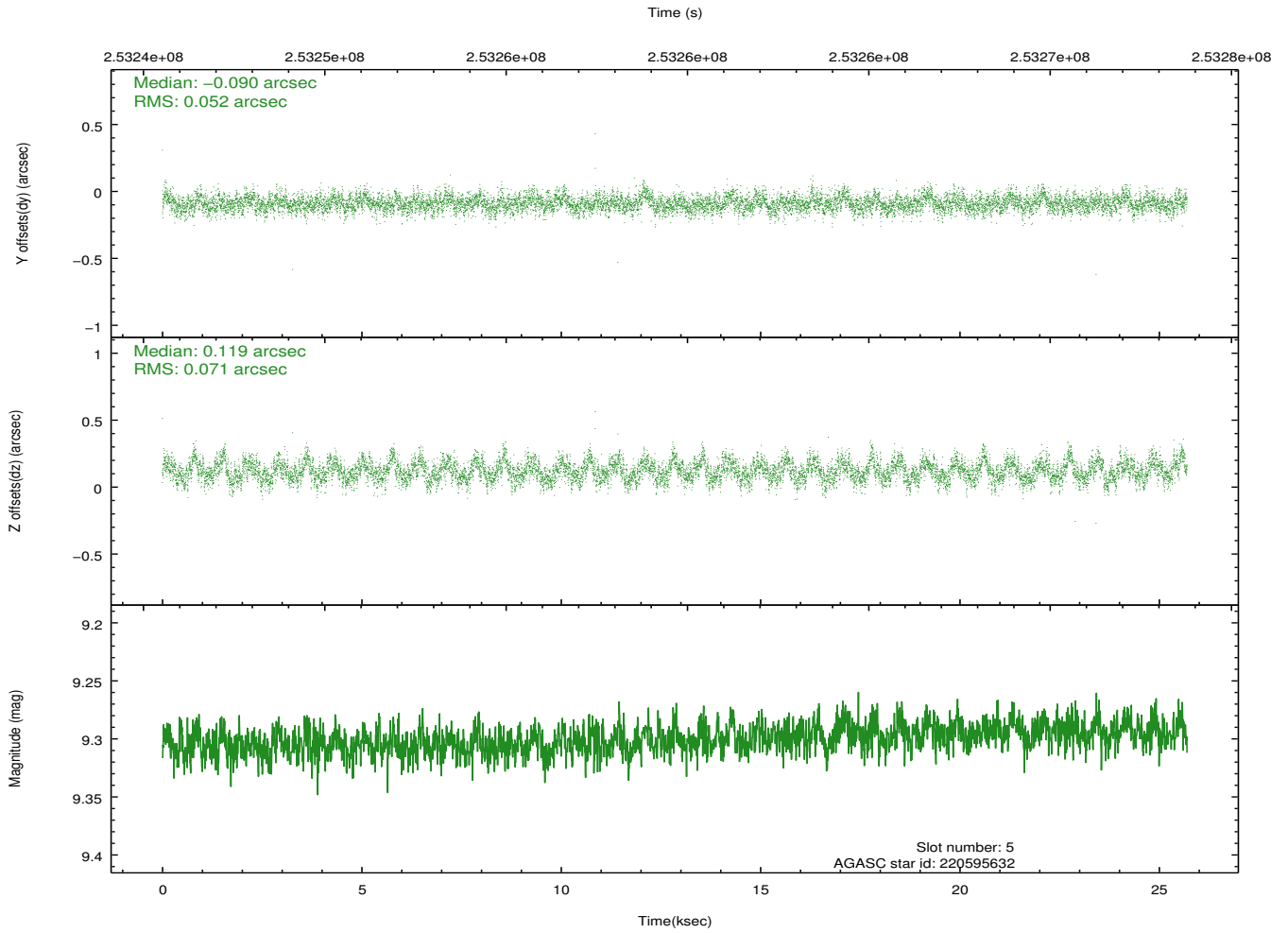
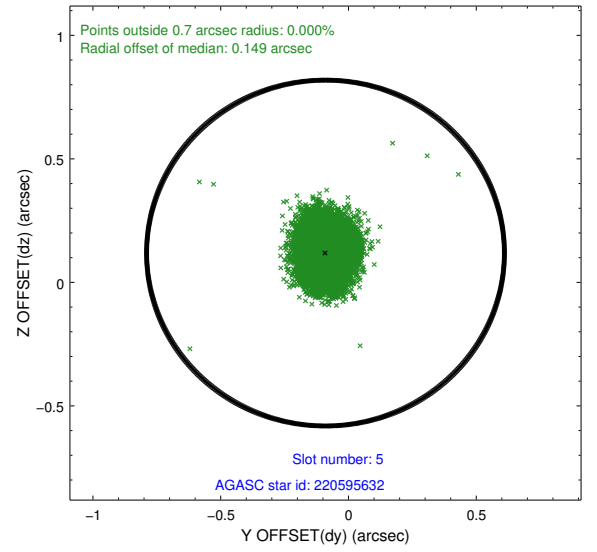
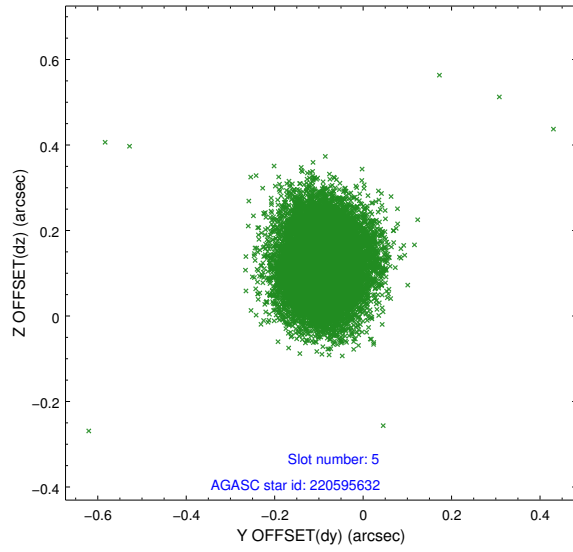
2.4.1 Slot 3



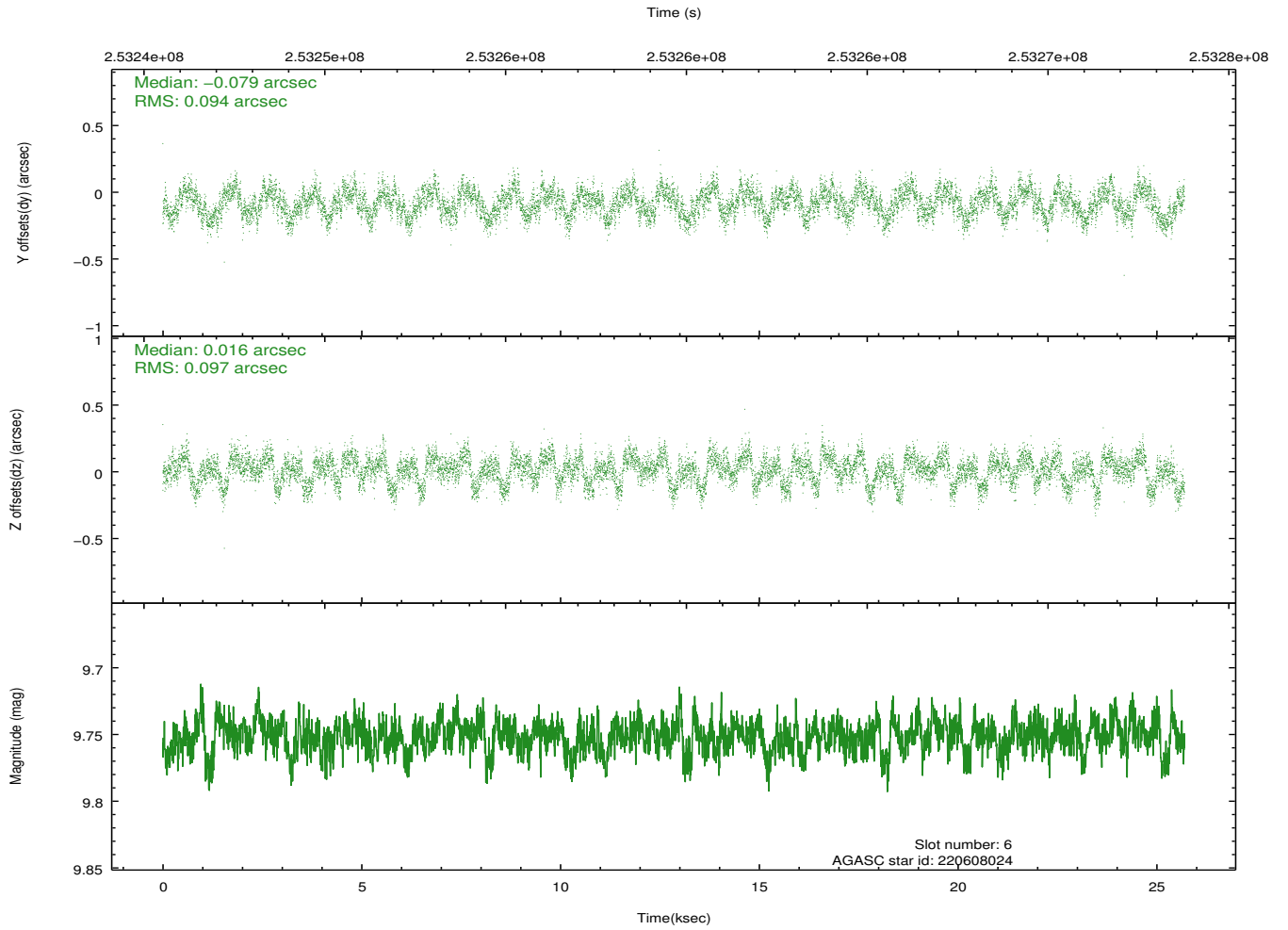
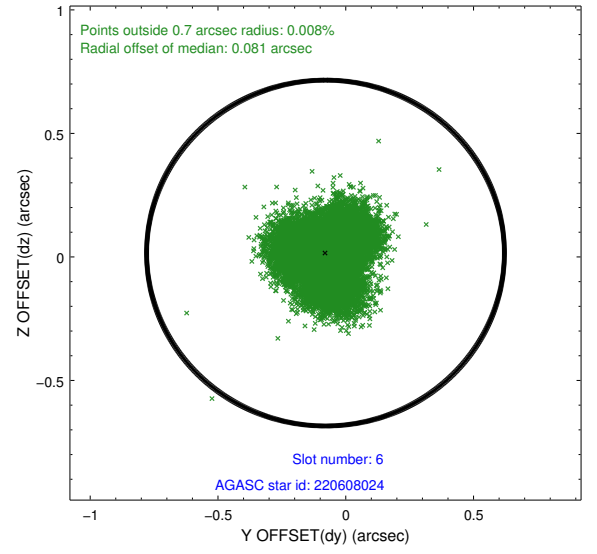
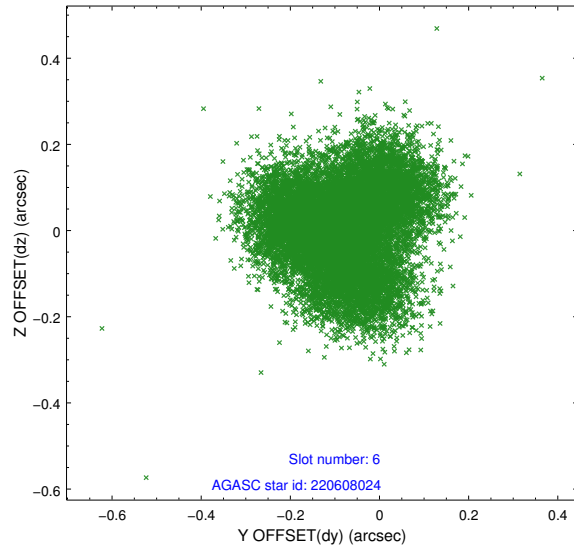
2.4.2 Slot 4



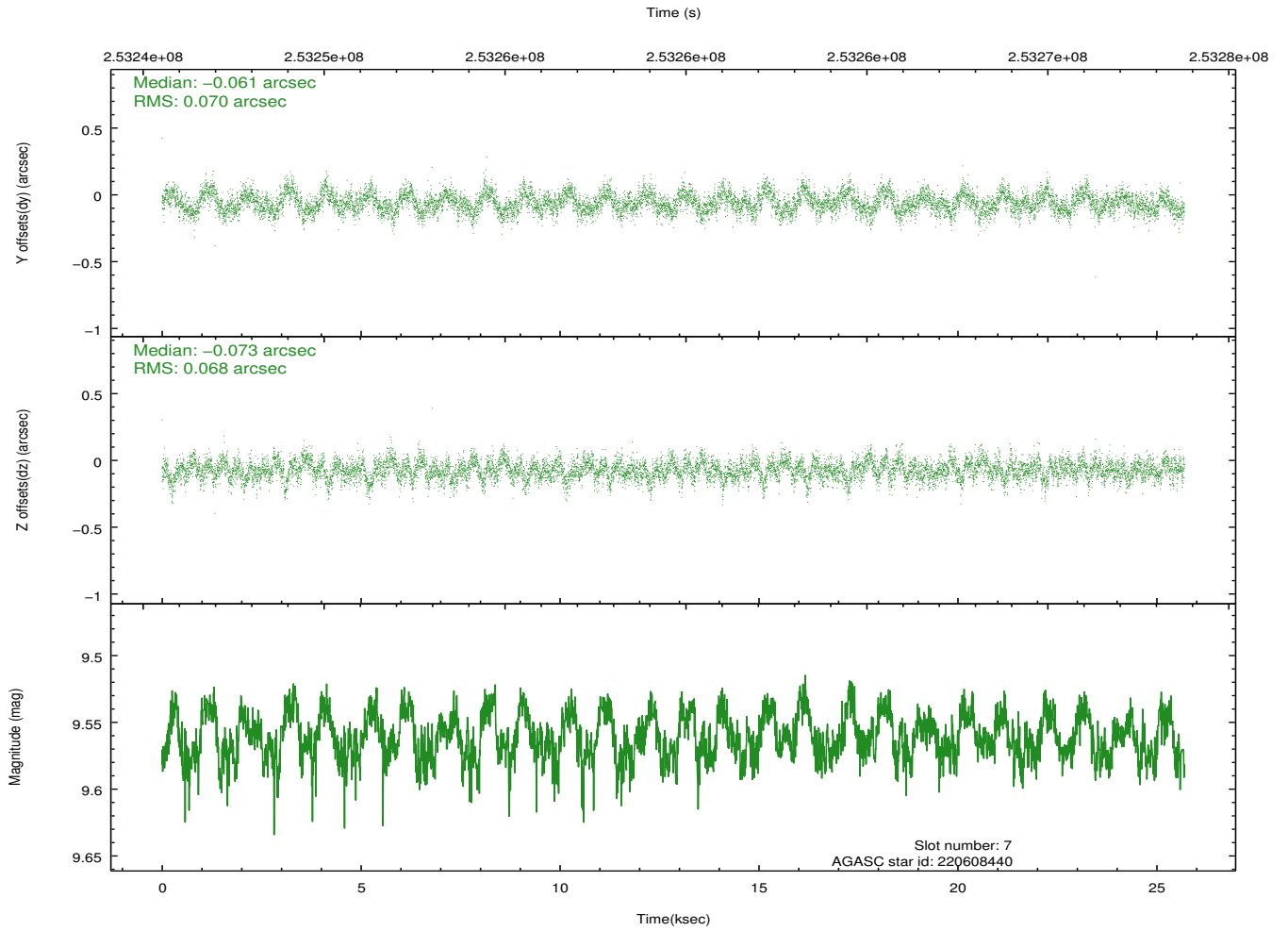
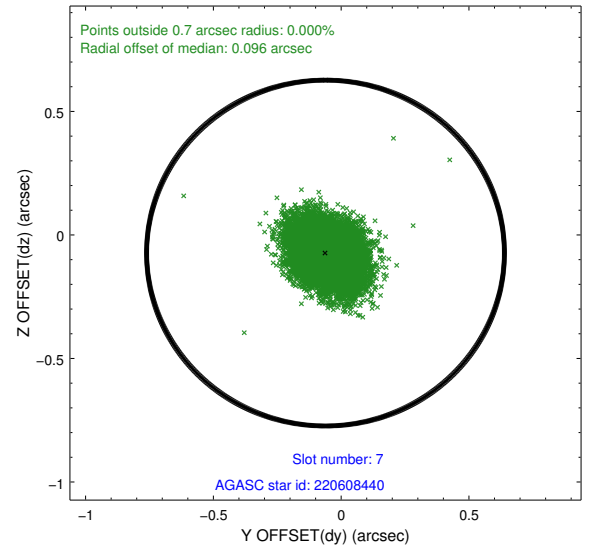
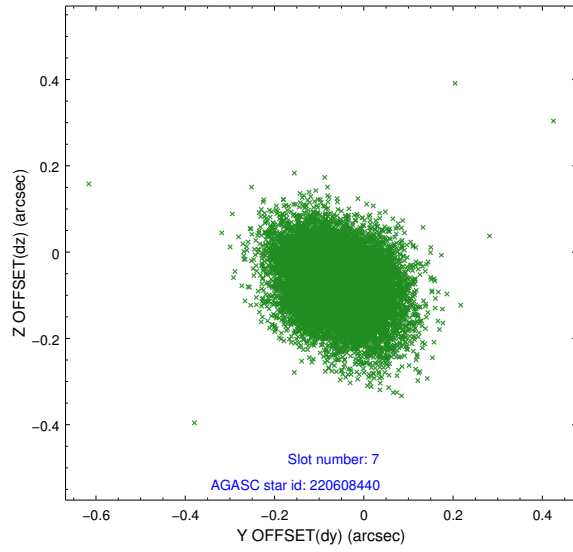
2.4.3 Slot 5



2.4.4 Slot 6

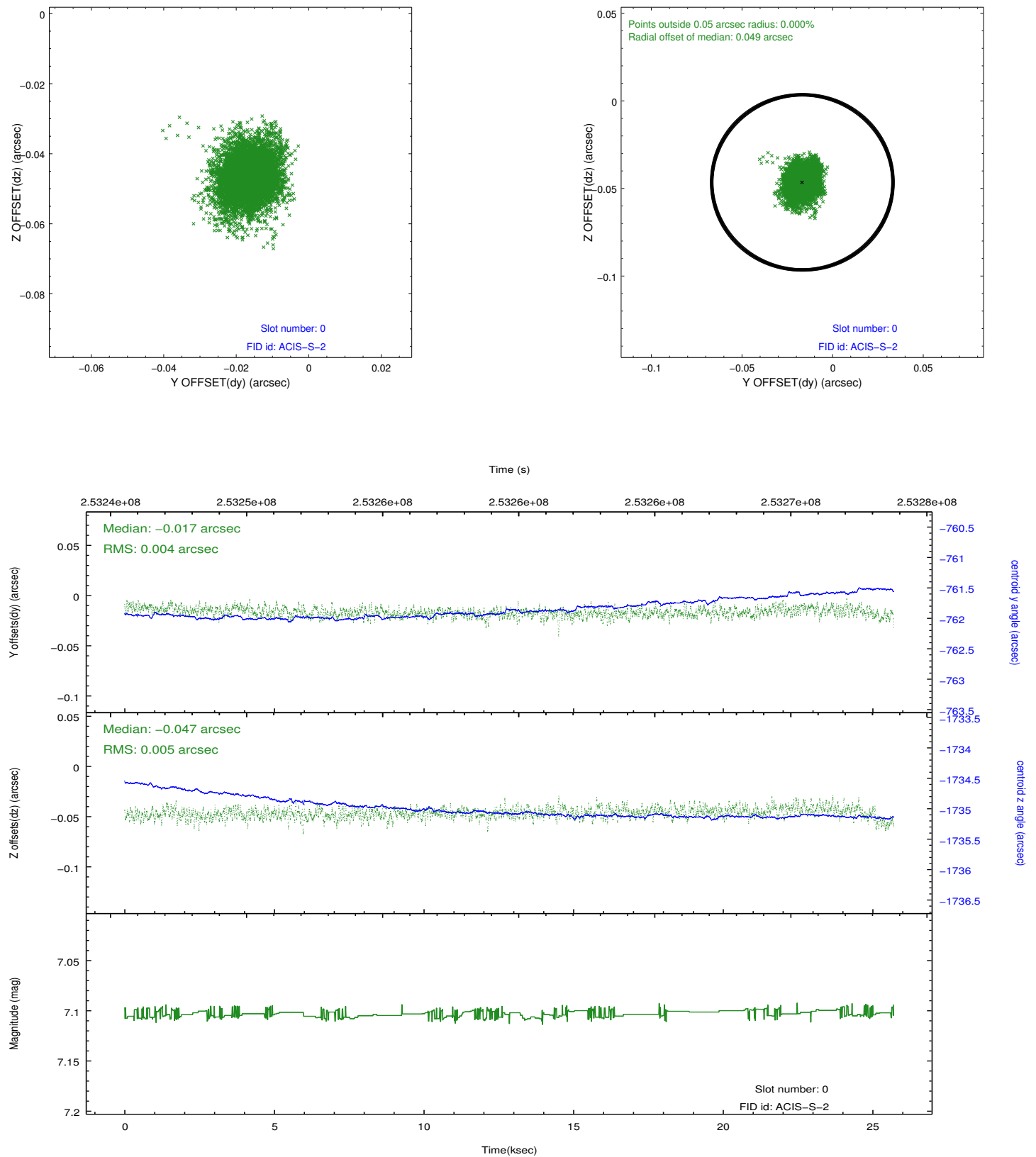


2.4.5 Slot 7

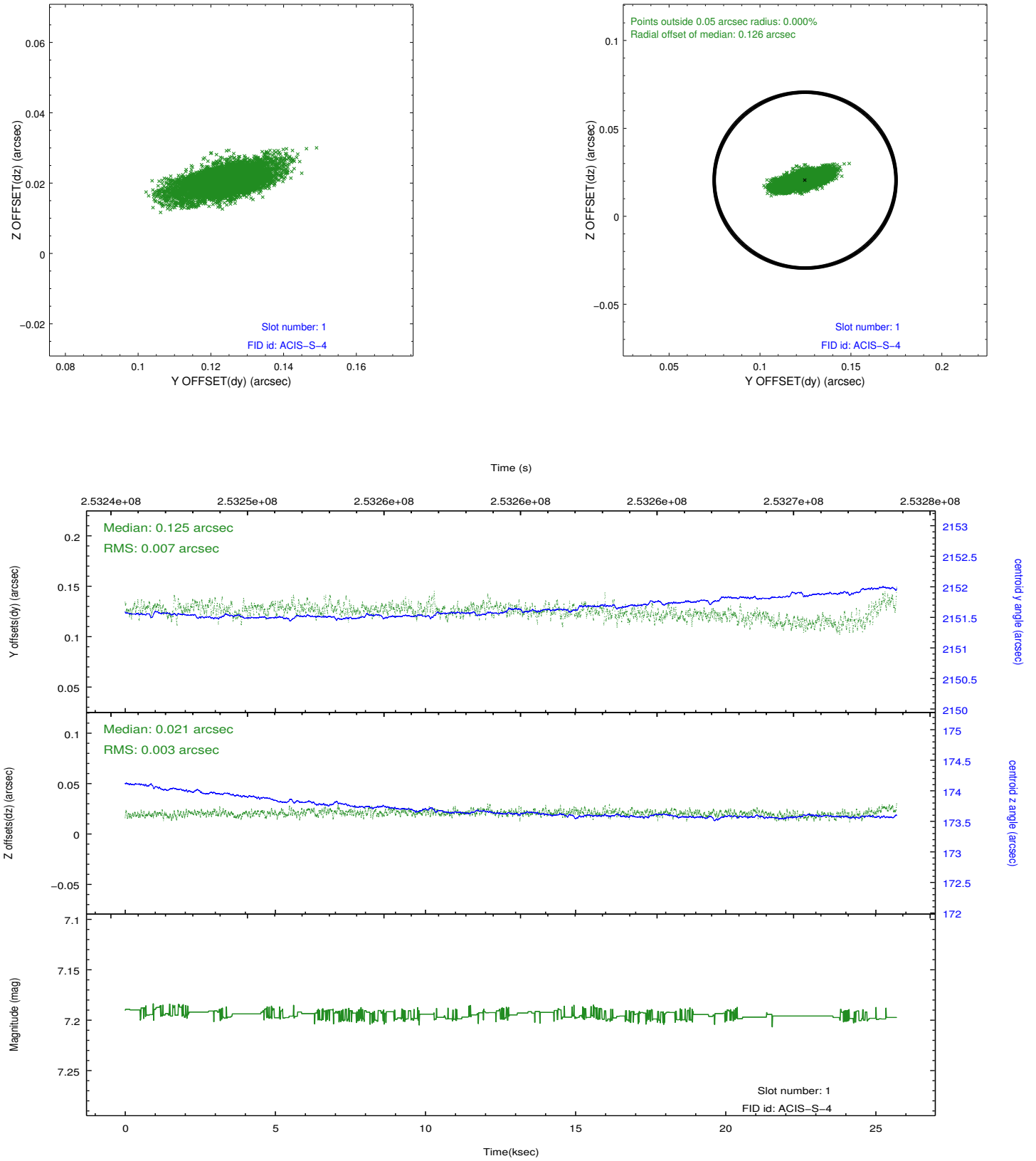


2.5 FID Slots

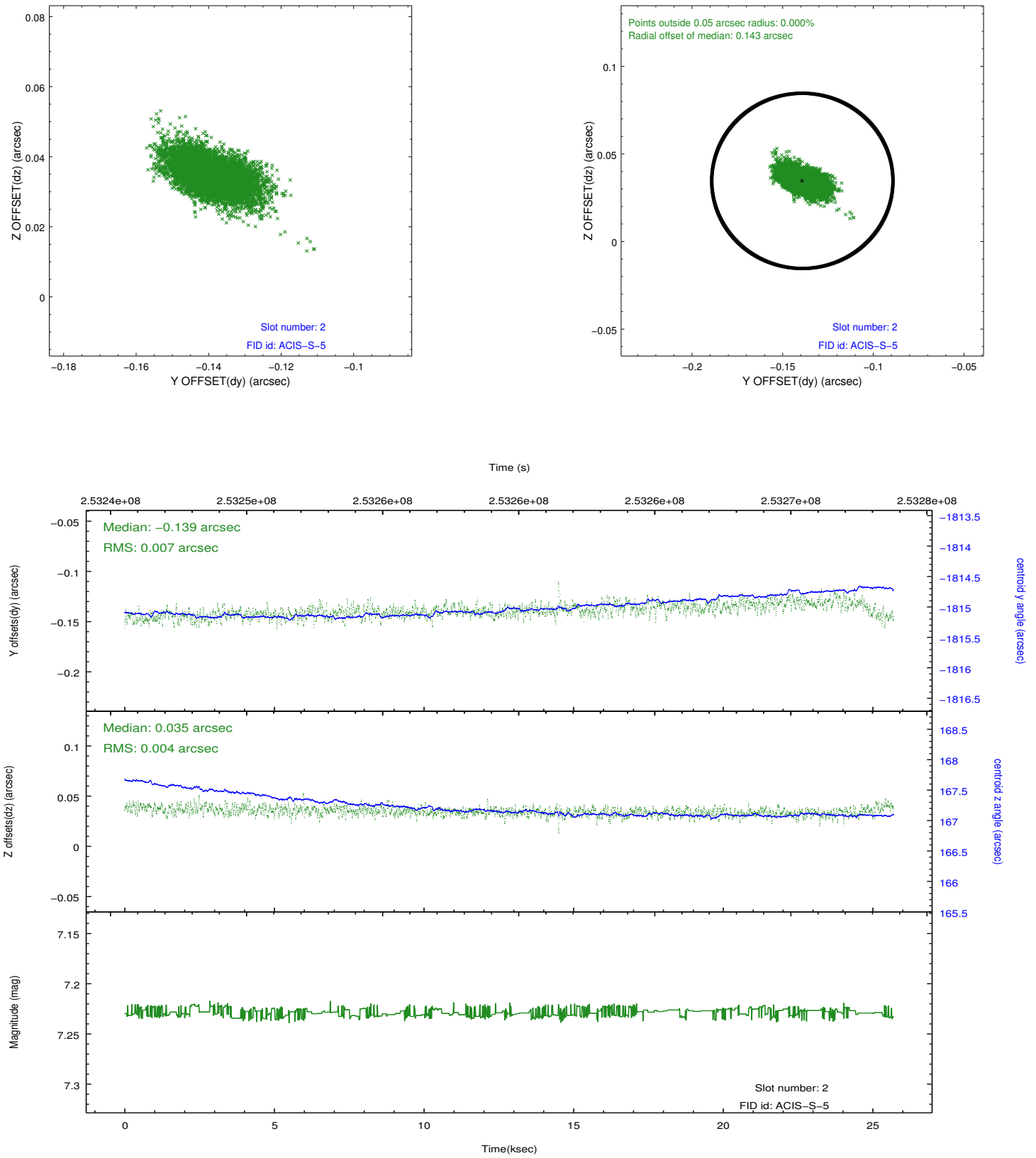
2.5.1 Slot 0



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) | 2012.03.22 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 24.9503999 |

A.2 Comments