

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13962 - L2 Version 1
Chandra X-Ray Center

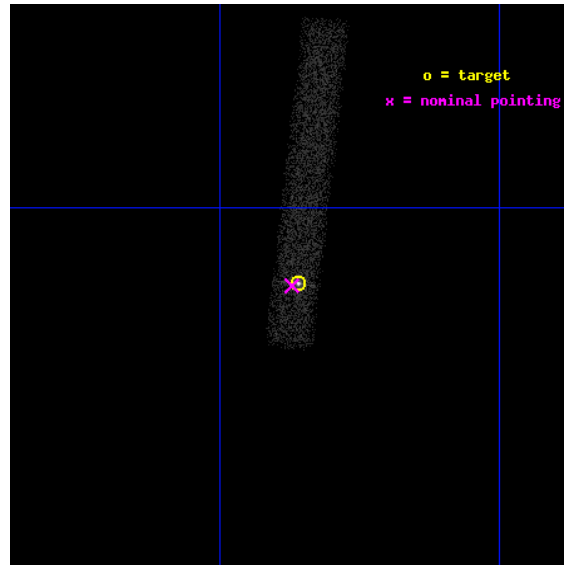
L2 Processing Date : Apr 11 2012

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1 Front

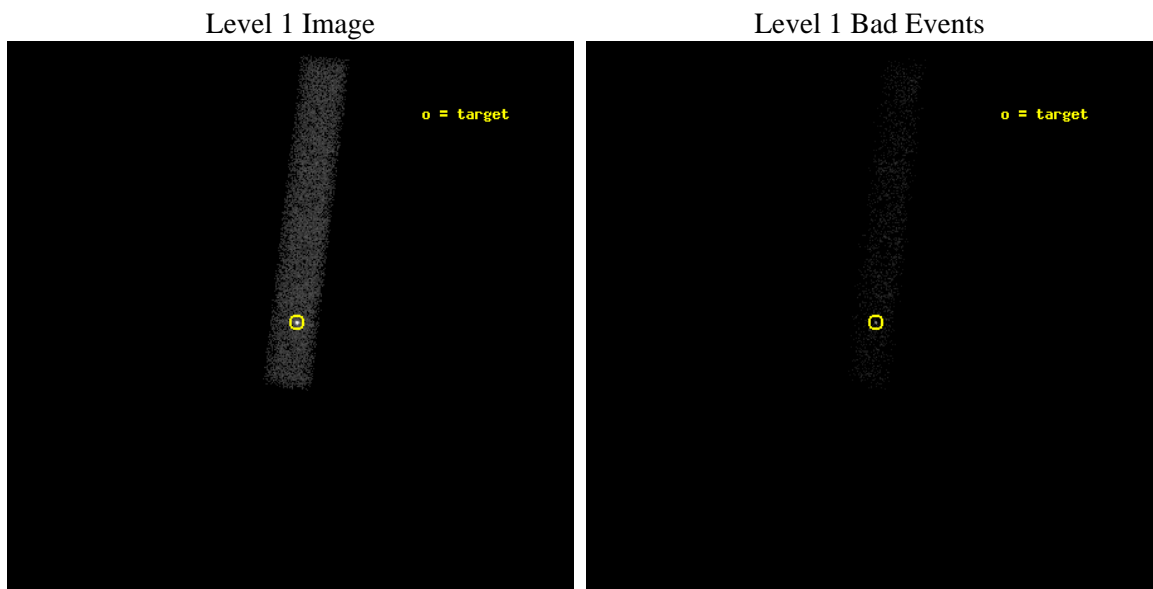
| | | |
|----------|---|---|
| seq_num | 702684 | Sequence number |
| obs_id | 13962 | Observation id |
| title | Energy Dependent Microlensing in X-rays | Proposal title |
| observer | Prof. Xinyu Dai | Principal investigator |
| object | RXJ1131-1231 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 172.965 | Observer's specified target RA [deg] |
| dec_targ | -12.5325 | Observer's specified target Dec [deg] |
| ra_nom | 172.96782429001 | Nominal RA [deg] |
| dec_nom | -12.533840162506 | Nominal Dec [deg] |
| roll_nom | 276.6637254915 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 15068.79910183 | Sum of GTIs [s] |
| livetime | 13666.605388926 | Livetime [s] |
| ontime7 | 15068.79910183 | Sum of GTIs [s] |
| l2events | 15727 | Number of level 2 events |



2 OBI

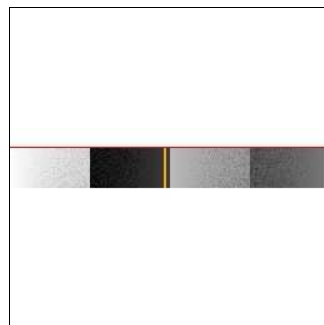
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 15000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 15068.79910183 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime7 | 15068.79910183 | Sum of GTIs [s] |
| date | 2012-04-11T21:13:22 | Date and time of file creation | l1events | 23959 | Number of level 1 events |
| revision | 1 | Processing version of data | | | |

2.1.4 Events

| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 23959 |
| rejected events | 7926 |
| rejected % | 33% |

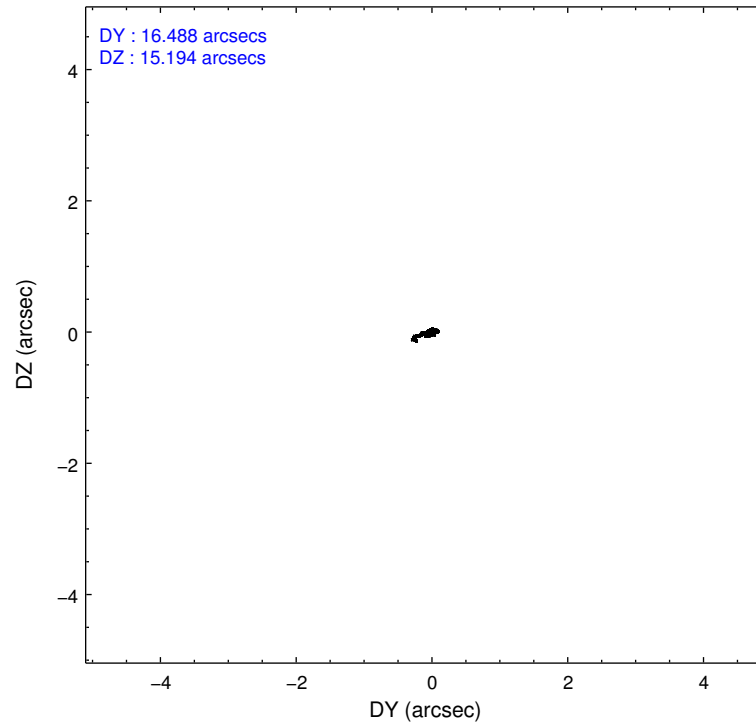
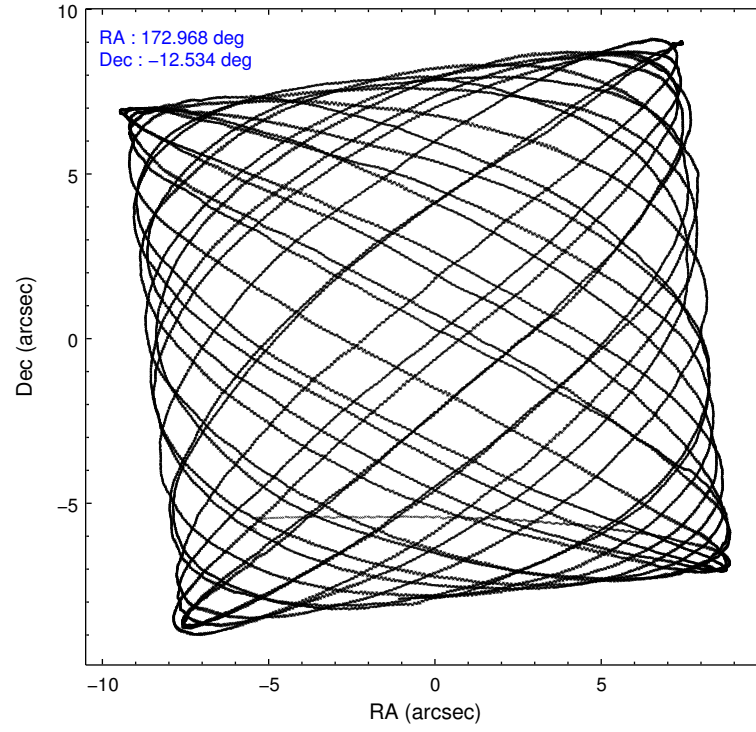
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 3199 |
| | 13% |
| grade 1 events | 48 |
| | 0% |
| grade 2 events | 3702 |
| | 15% |
| grade 3 events | 2056 |
| | 8% |
| grade 4 events | 1999 |
| | 8% |
| grade 5 events | 1630 |
| | 6% |
| grade 6 events | 5079 |
| | 21% |
| grade 7 events | 6246 |
| | 26% |

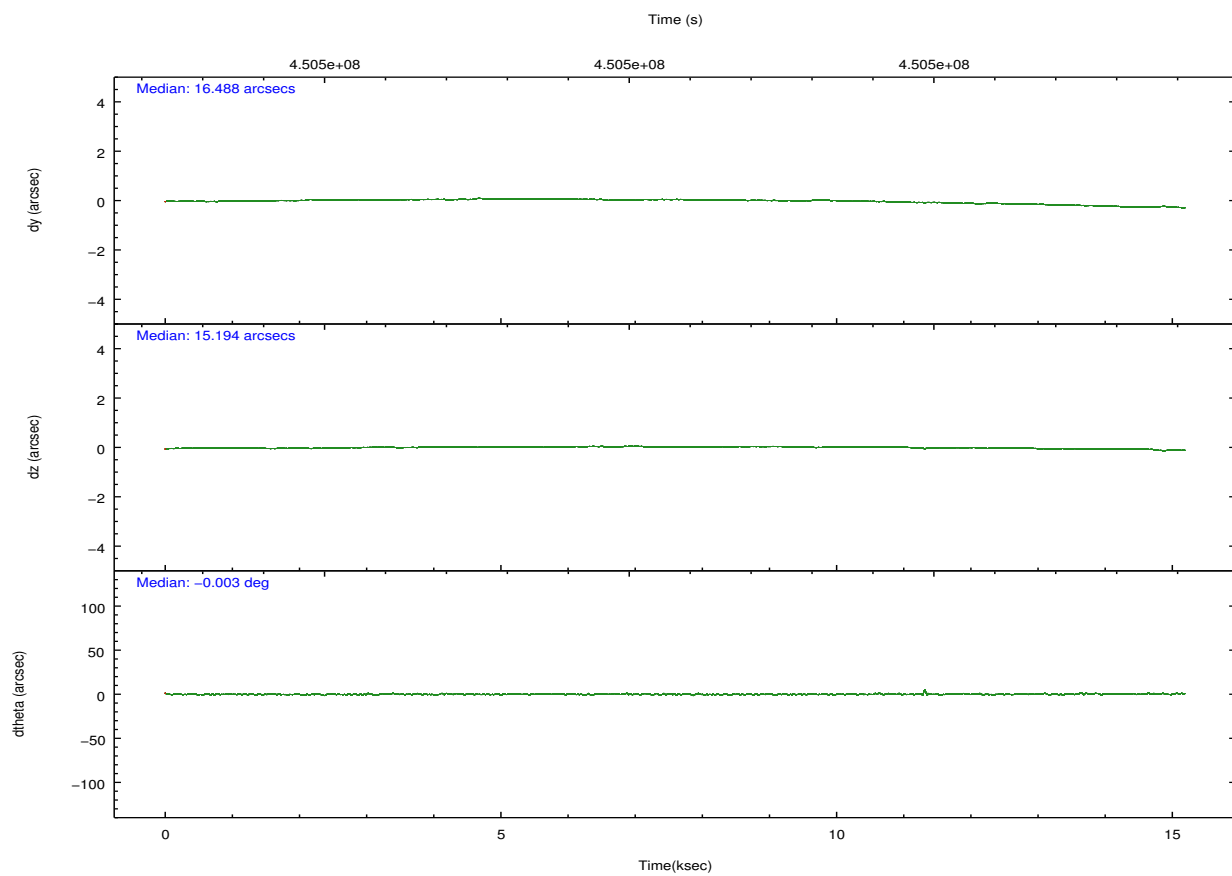
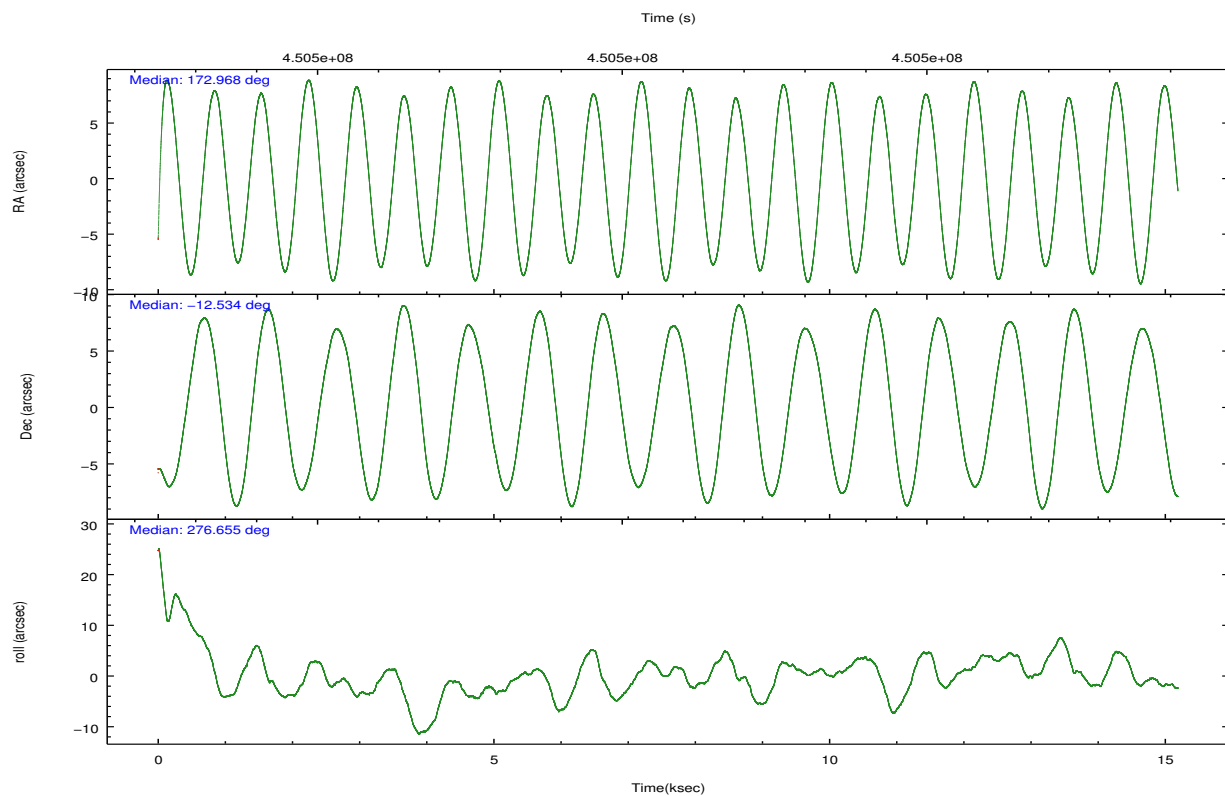
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-7 | ACIS-7 |
| Grating | NONE | NONE |
| Data mode | VFAINT | VFAINT |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 172.950762 | 172.9678242900087 |
| [deg] Pointing Dec | -12.512107 | -12.53384016250606 |
| [deg] Pointing Roll | 276.503387 | 276.6637254914958 |
| [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) | 450493340.184000 | 450492306.2705 |
| Observation start date | 2012-04-11T01:01:14 | 2012-04-11T00:45:06 |
| [s] Observation end time (MET) | 450508340.184000 | 450508962.52139 |
| Observation end date | 2012-04-11T05:11:14 | 2012-04-11T05:22:42 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | CUSTOM | 1/8 |
| Subarray start row | 449 | 449 |
| Subarray row count | 128 | 128 |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 0.000000 | 0.4 |

2.3 Aspect



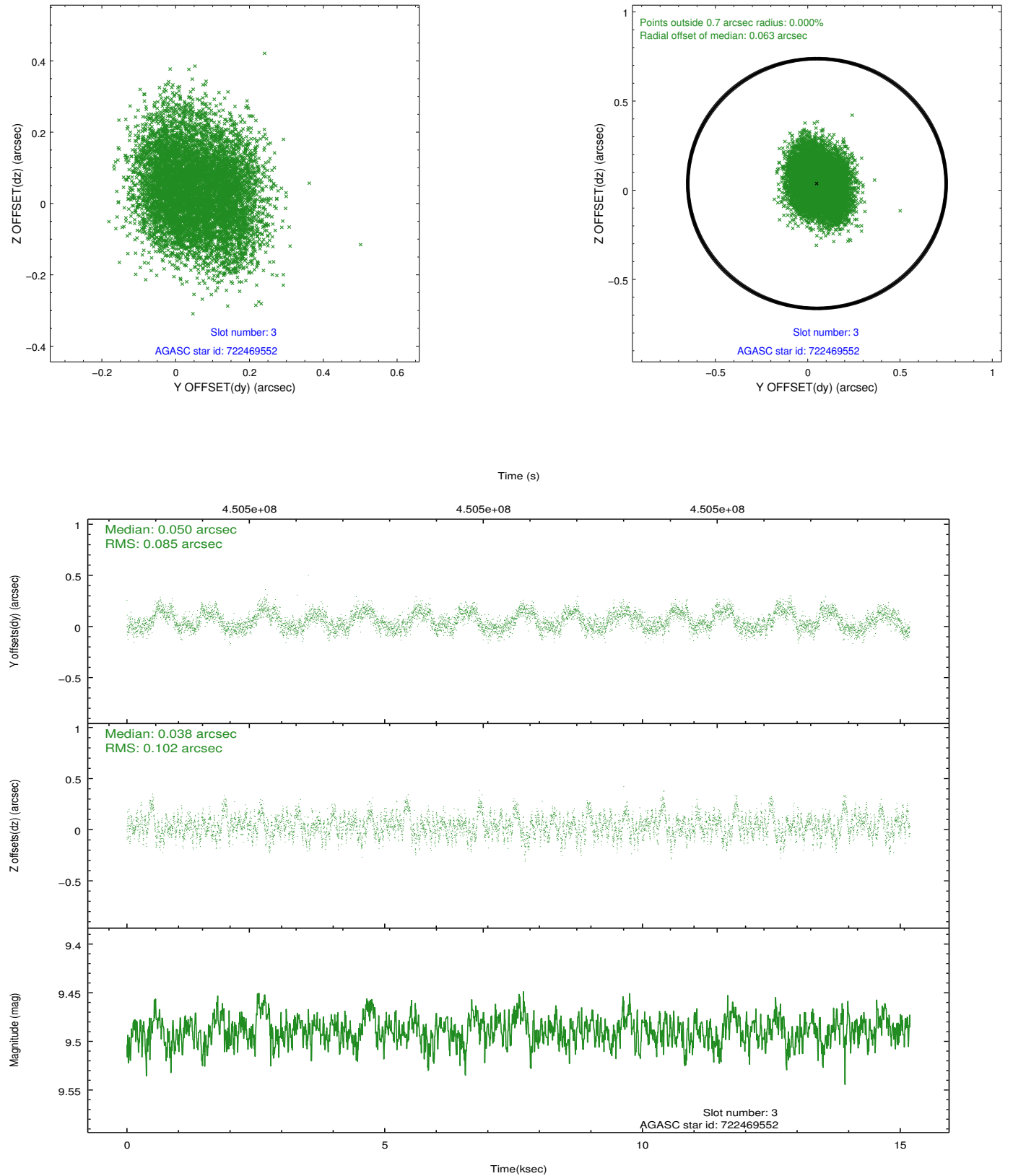


Slot Statistics

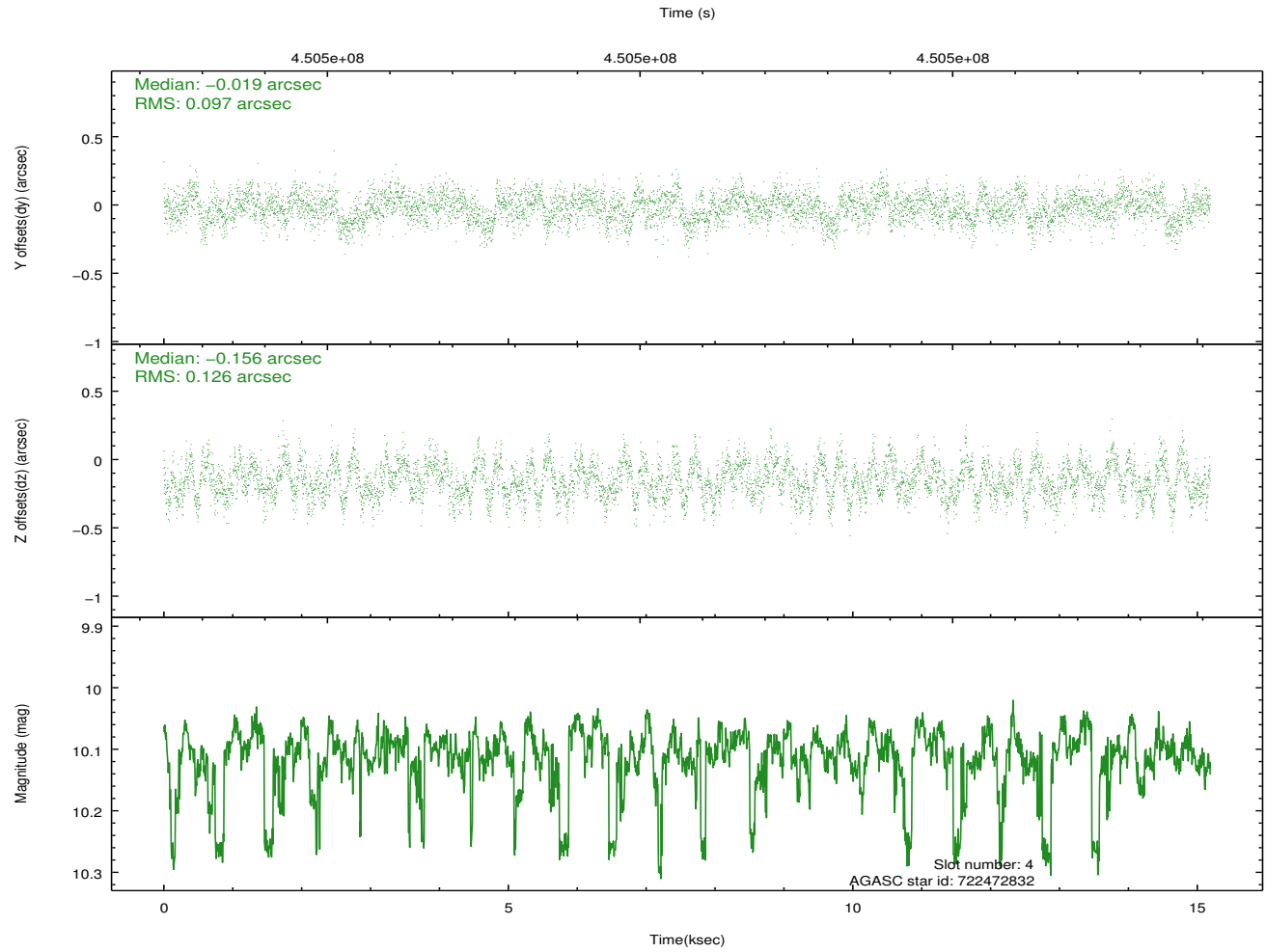
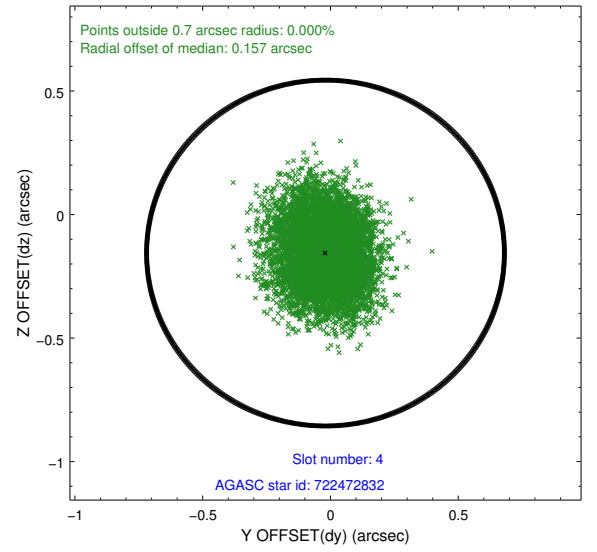
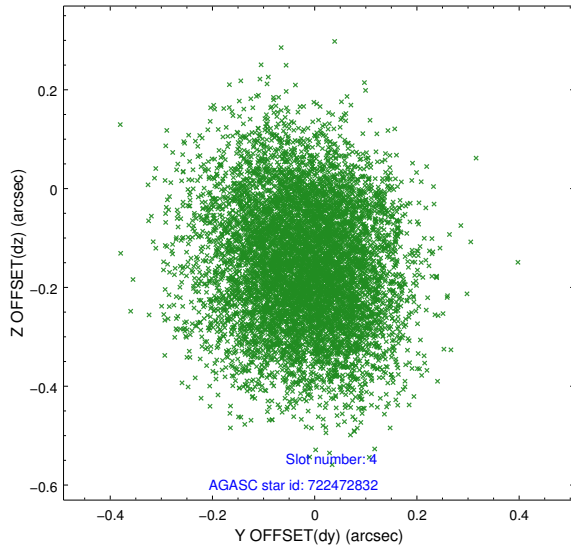
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.02 | 3705 | 0.082 | -0.034 | 0.008 | 0.013 | 0.000000 | 0.000000 | 926.57 | -1732.27 |
| 1 | FID | ACIS-S-2 | 6.94 | 3705 | -0.194 | -0.051 | 0.006 | 0.011 | 0.000000 | 0.000000 | -769.45 | -1737.07 |
| 2 | FID | ACIS-S-4 | 7.02 | 3703 | 0.086 | 0.090 | 0.006 | 0.010 | 0.000000 | 0.000000 | 2143.77 | 171.64 |
| 3 | GUIDE | 722469552 | 9.49 | 7405 | 0.050 | 0.038 | 0.142 | 0.225 | 172.271393 | -12.124699 | -1653.01 | -2218.30 |
| 4 | GUIDE | 722472832 | 10.11 | 7364 | -0.019 | -0.156 | 0.171 | 0.272 | 173.078970 | -12.015349 | -1725.74 | 650.51 |
| 5 | GUIDE | 722473176 | 9.46 | 7401 | 0.027 | 0.254 | 0.109 | 0.179 | 172.599746 | -12.066793 | -1731.72 | -1046.40 |
| 6 | GUIDE | 722871728 | 9.63 | 7384 | -0.073 | -0.156 | 0.153 | 0.251 | 173.202235 | -12.568355 | 301.38 | 854.65 |
| 7 | GUIDE | 722873464 | 7.32 | 7407 | 0.015 | 0.016 | 0.077 | 0.121 | 172.661543 | -13.050266 | 1811.70 | -1226.48 |

2.4 Star Slots

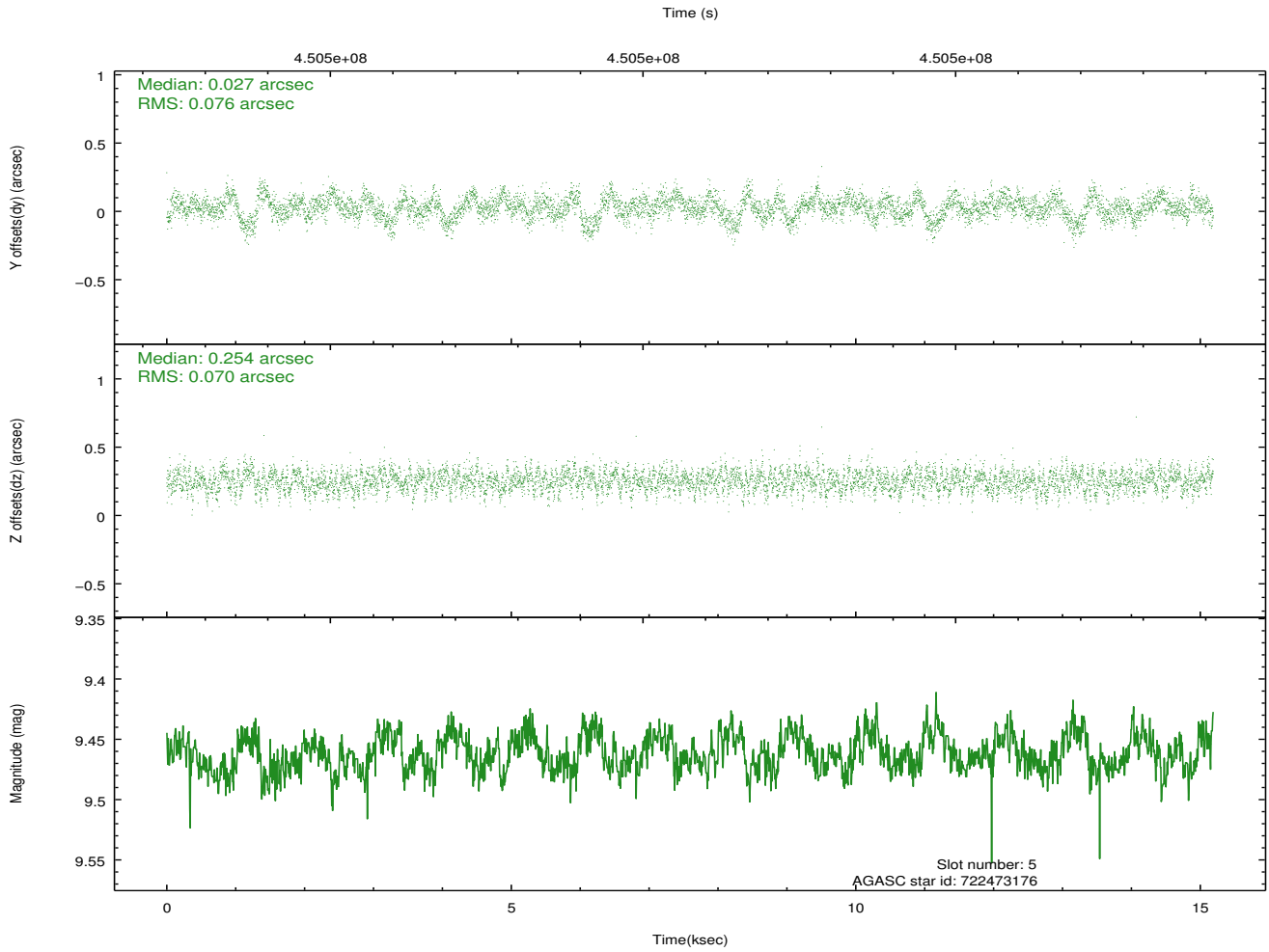
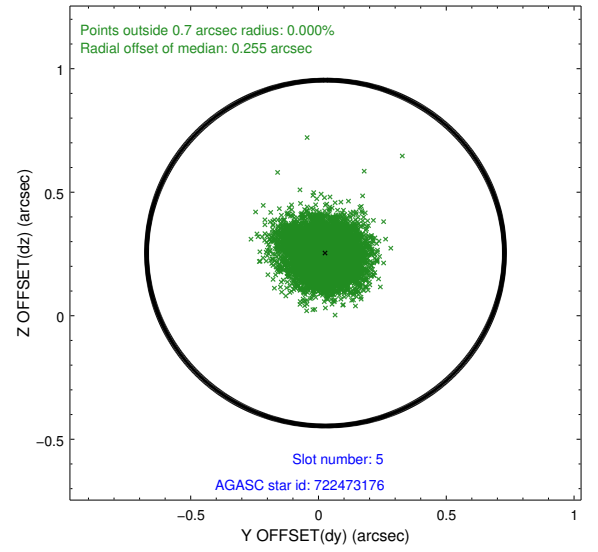
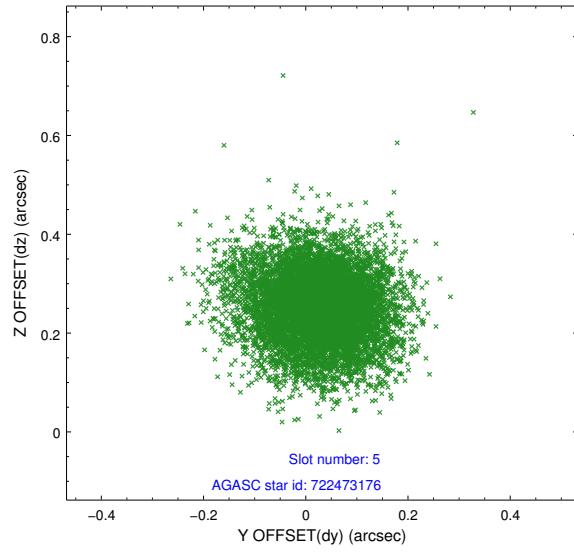
2.4.1 Slot 3



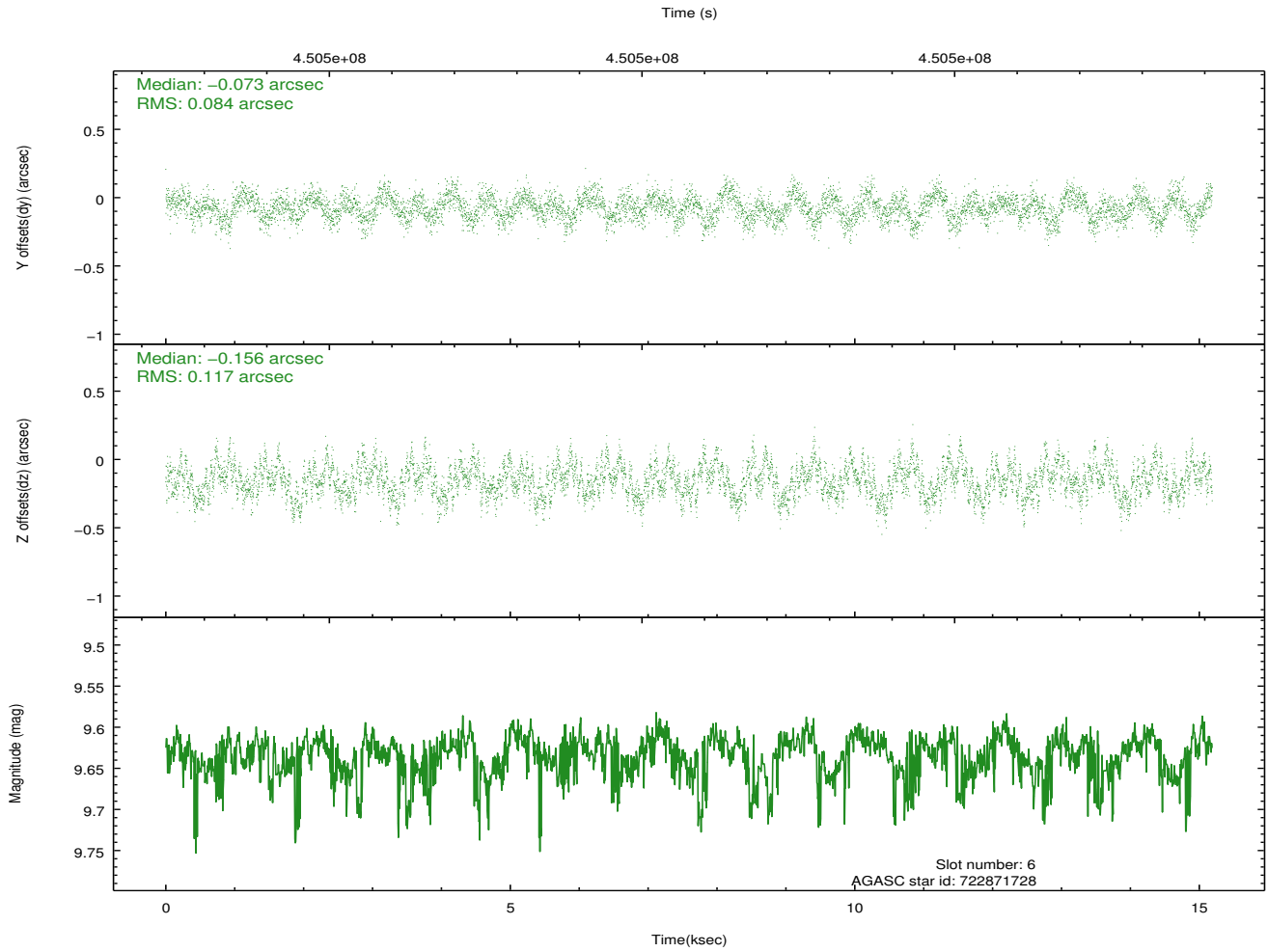
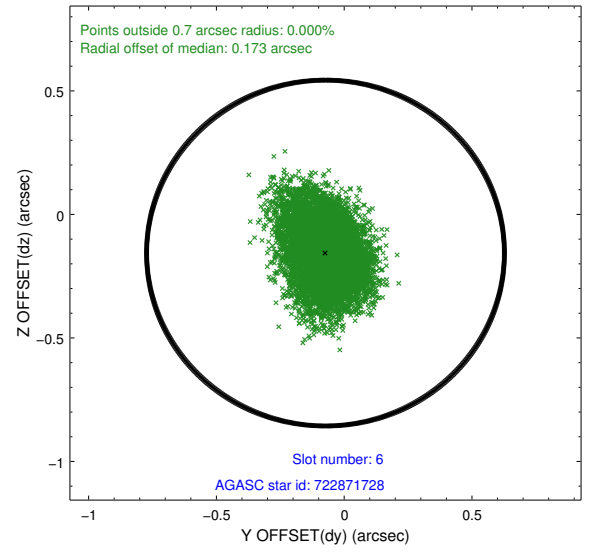
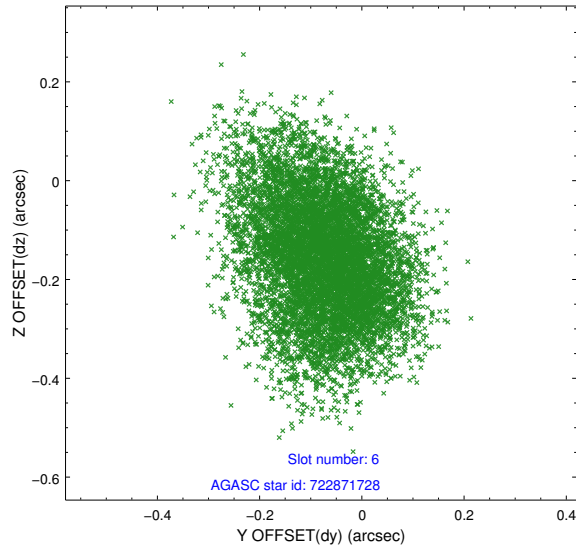
2.4.2 Slot 4



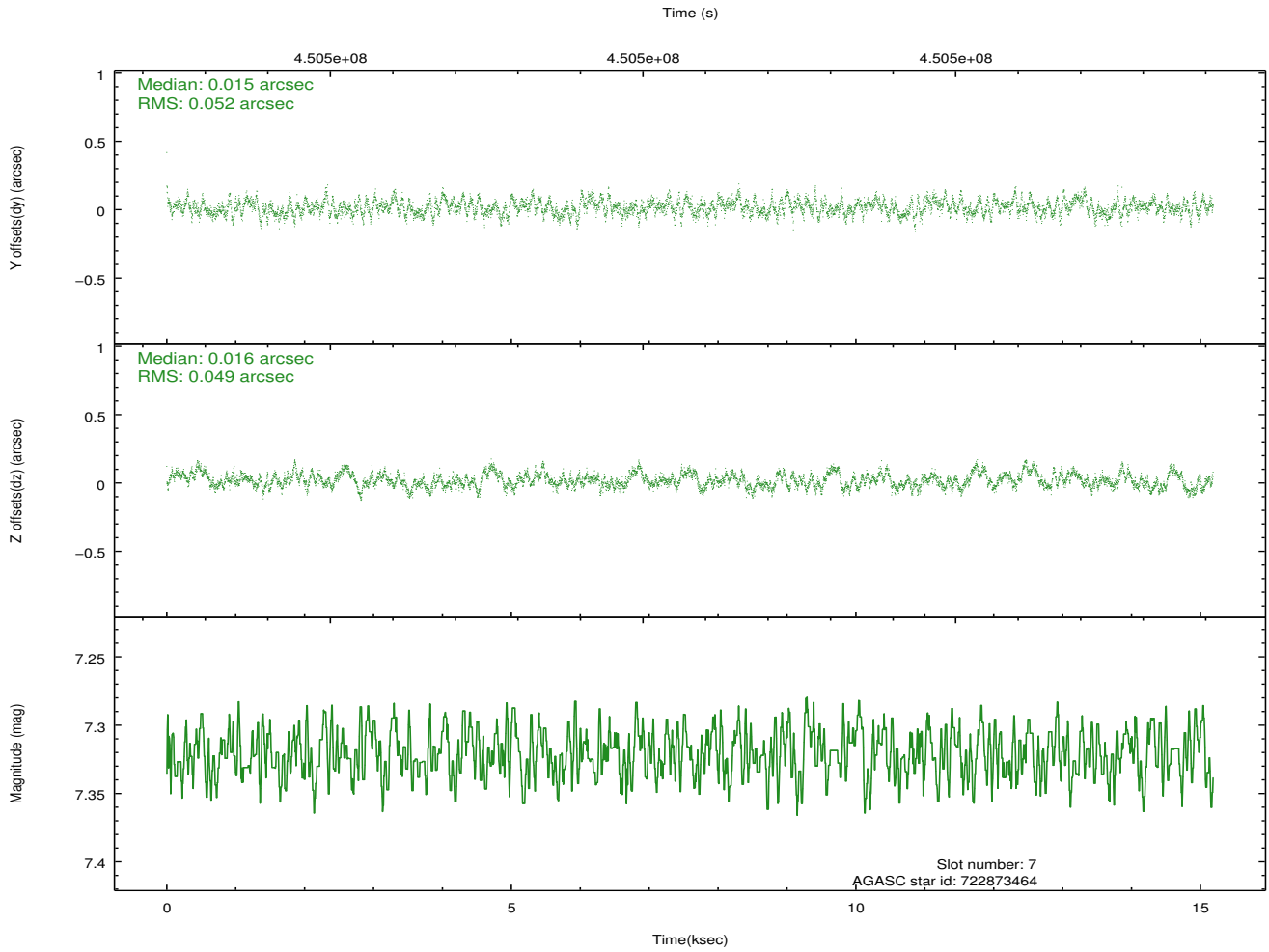
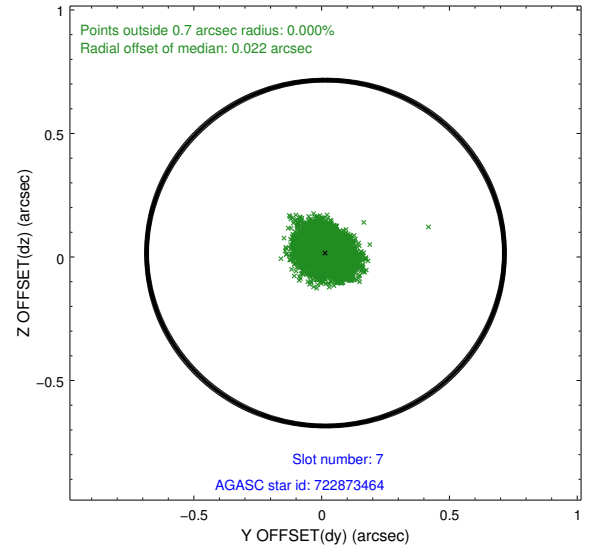
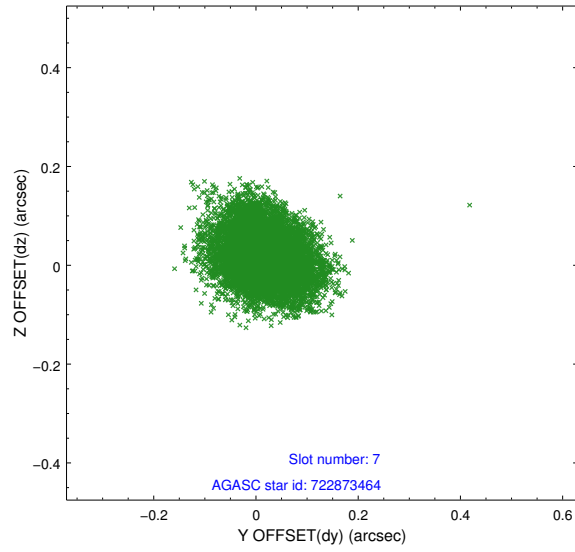
2.4.3 Slot 5



2.4.4 Slot 6

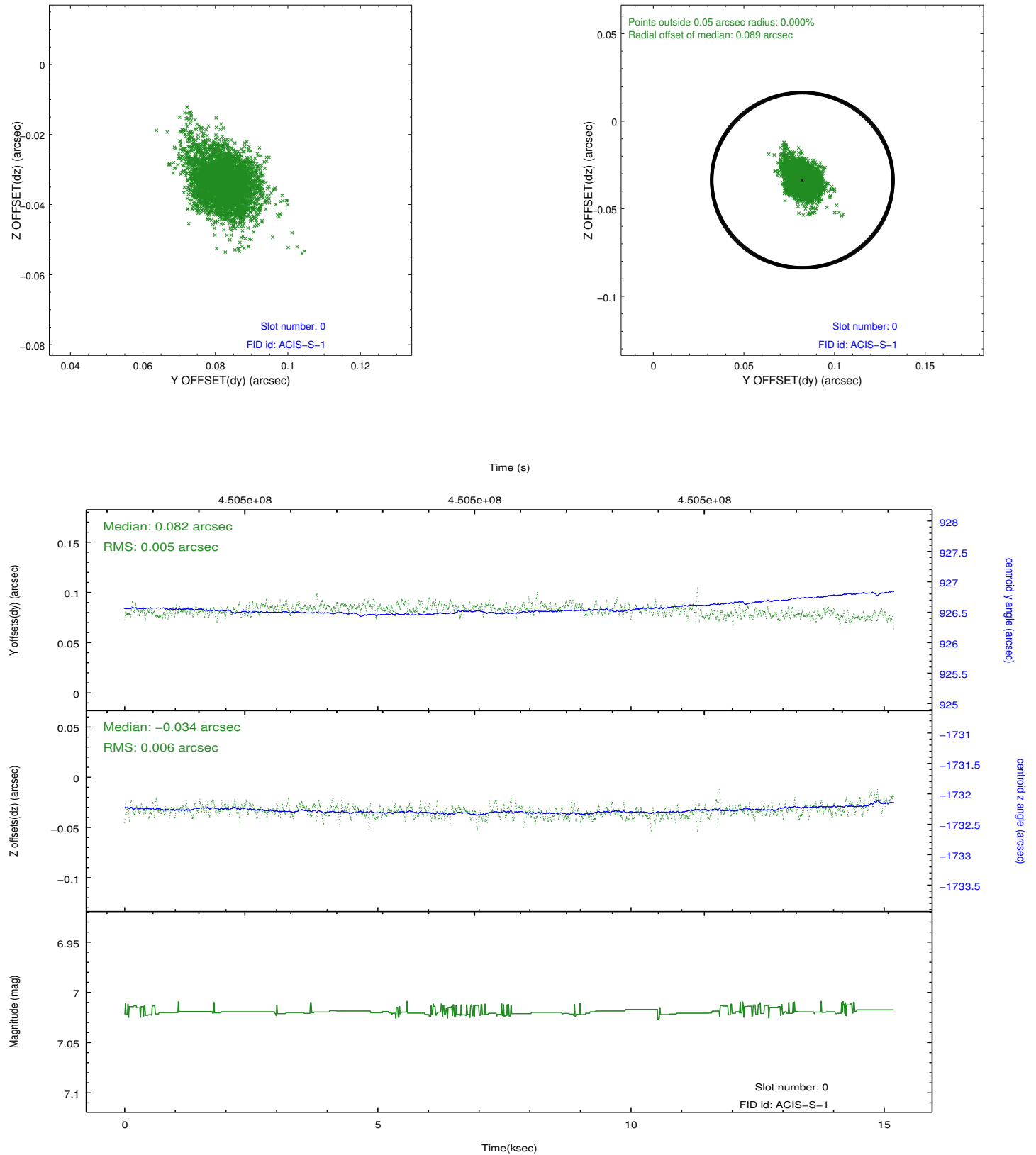


2.4.5 Slot 7

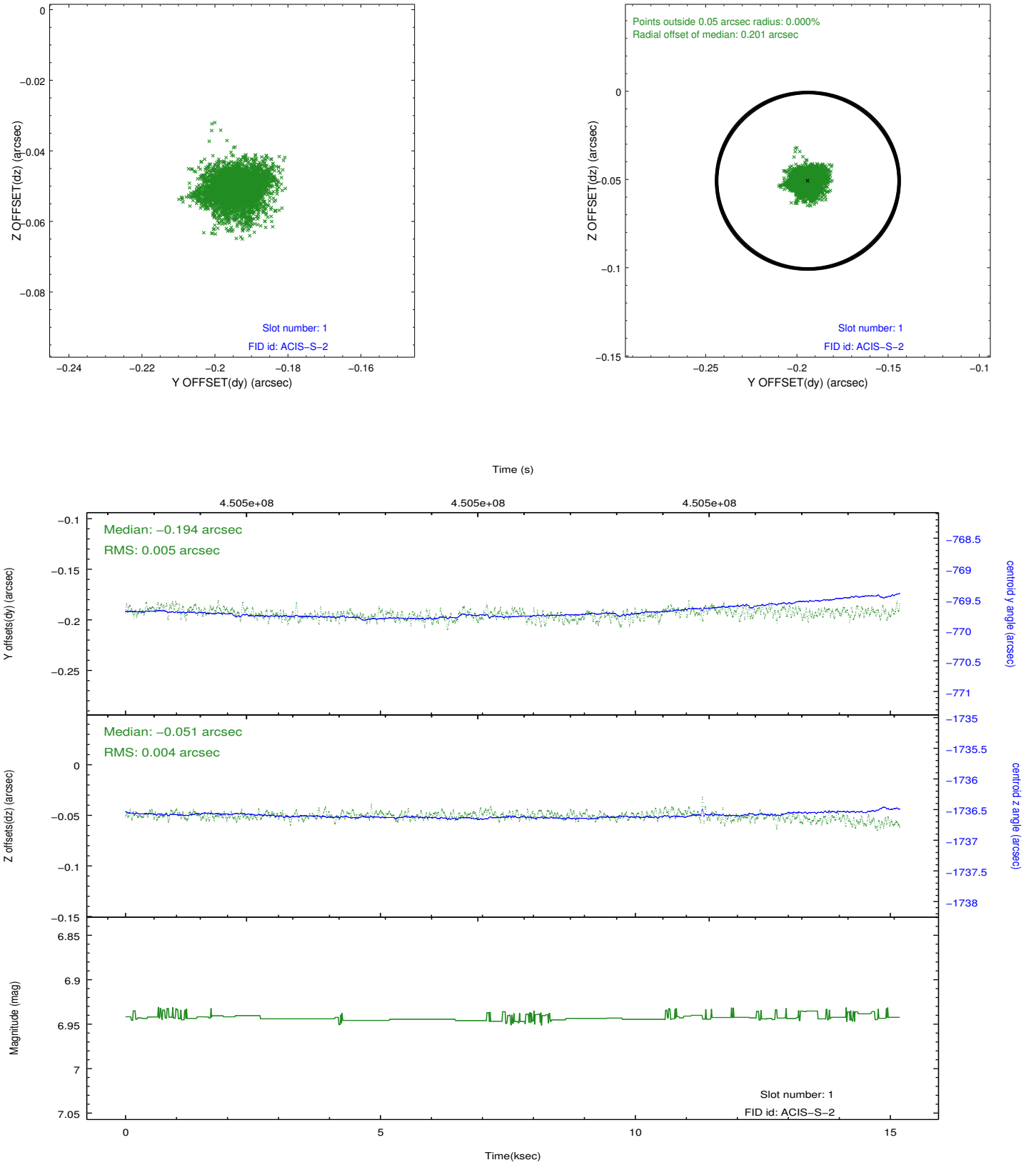


2.5 FID Slots

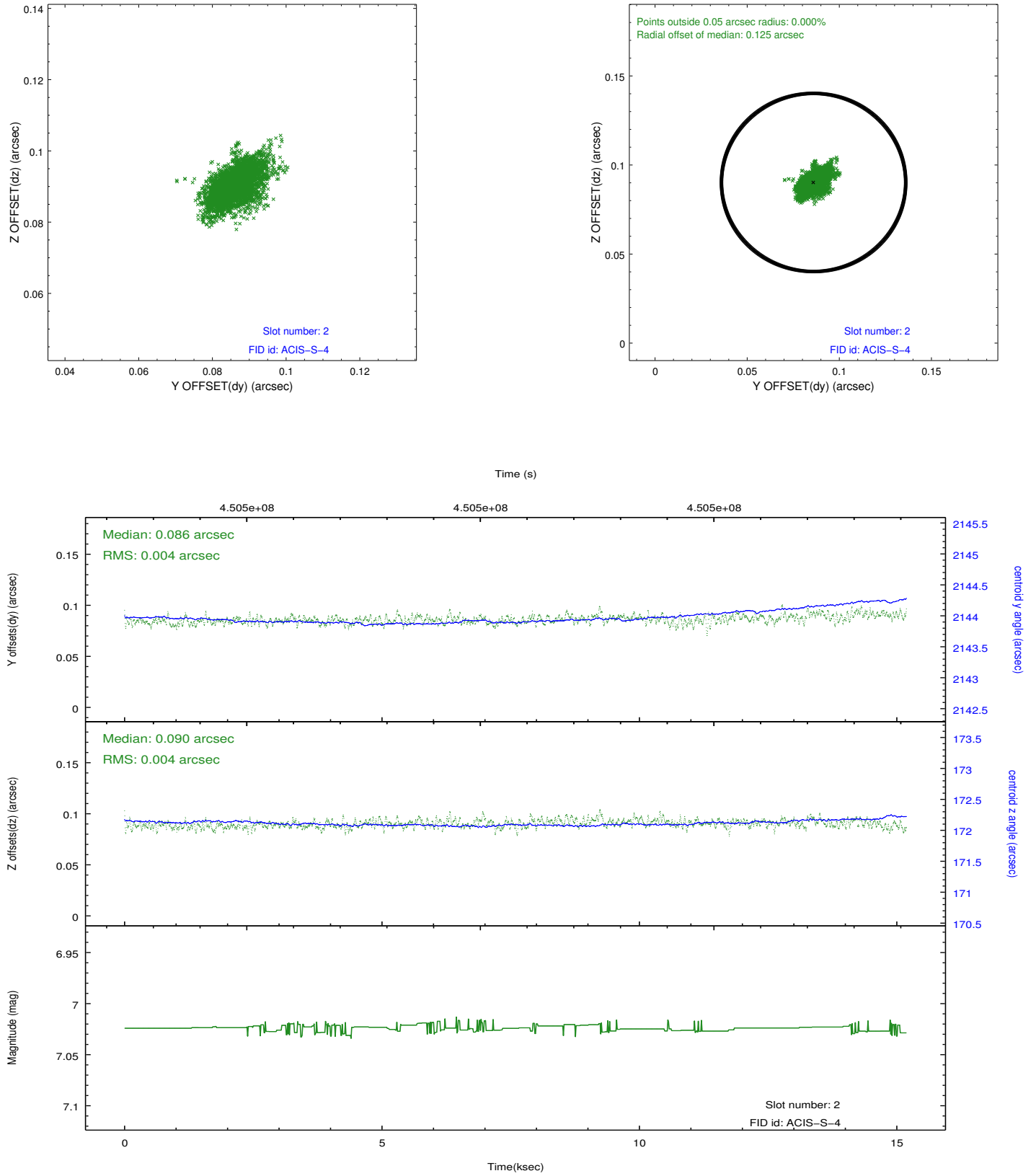
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.04.12 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 15.06879910183 |

A.2 Comments