

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 16705 - L2 Version 1
Chandra X-Ray Center

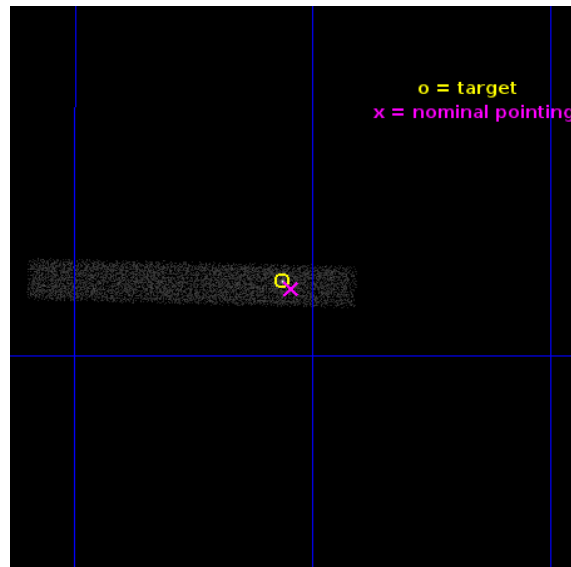
L2 Processing Date : Jul 29 2015

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1 Front

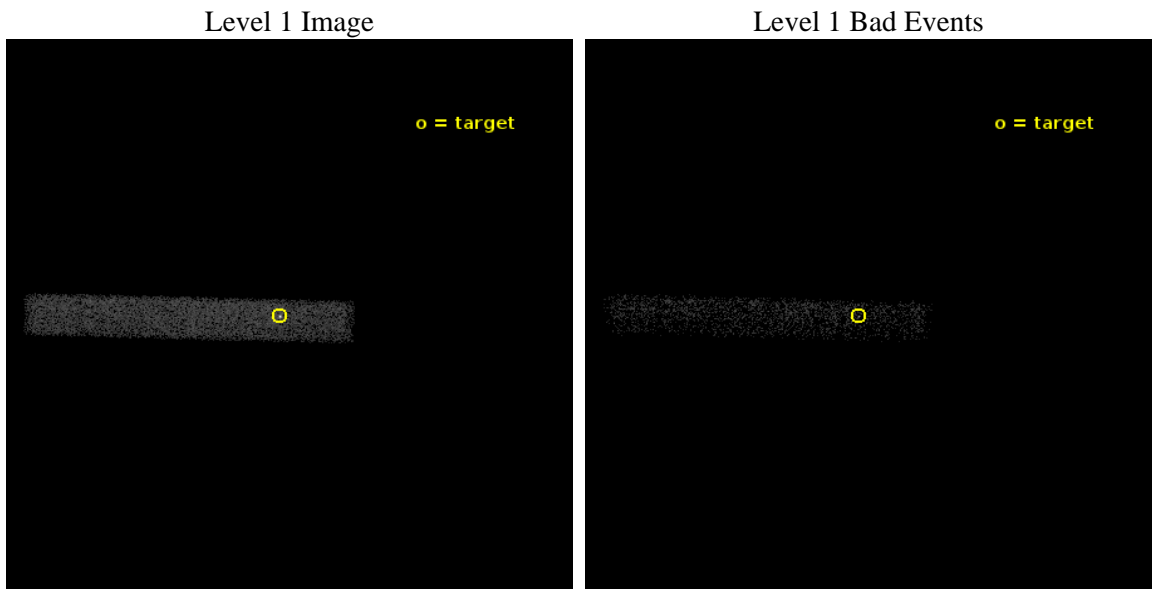
| | | |
|----------|---|---|
| seq_num | 401627 | Sequence number |
| obs_id | 16705 | Observation id |
| title | Following a black hole X-ray transient through the transition into quiescence | Proposal title |
| observer | Dr. RICHARD PLOTKIN | Principal investigator |
| object | V404Cyg | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 306.015958 | Observer's specified target RA [deg] |
| dec_targ | 33.867281 | Observer's specified target Dec [deg] |
| ra_nom | 306.01098150582 | Nominal RA [deg] |
| dec_nom | 33.863755339076 | Nominal Dec [deg] |
| roll_nom | 181.50025223782 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 19769.598821521 | Sum of GTIs [s] |
| livetime | 17929.982606132 | Livetime [s] |
| ontime7 | 19769.598821521 | Sum of GTIs [s] |
| l2events | 12379 | Number of level 2 events |



2 OBI

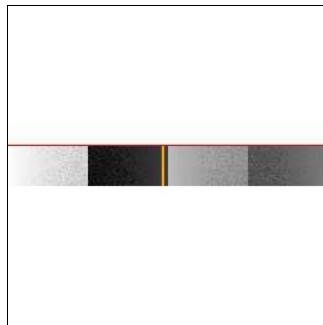
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 19916.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.4.1 | Processing system revision | ontime | 19769.598821521 | Sum of GTIs [s] |
| caldsver | 4.6.8 | | ontime7 | 19769.598821521 | Sum of GTIs [s] |
| date | 2015-07-29T15:22:55 | Date and time of file creation | l1events | 22368 | Number of level 1 events |
| revision | 1 | Processing version of data | | | |

2.1.4 Events

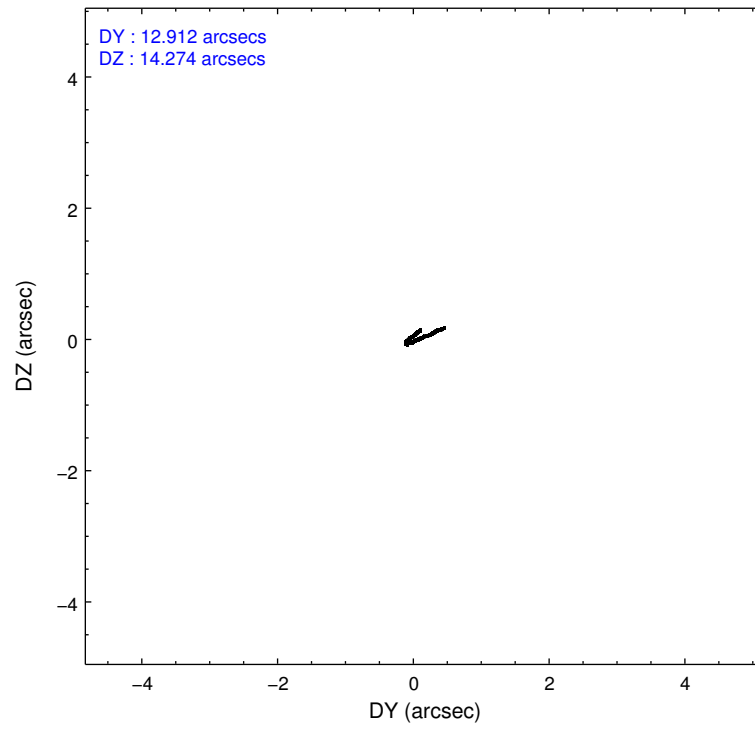
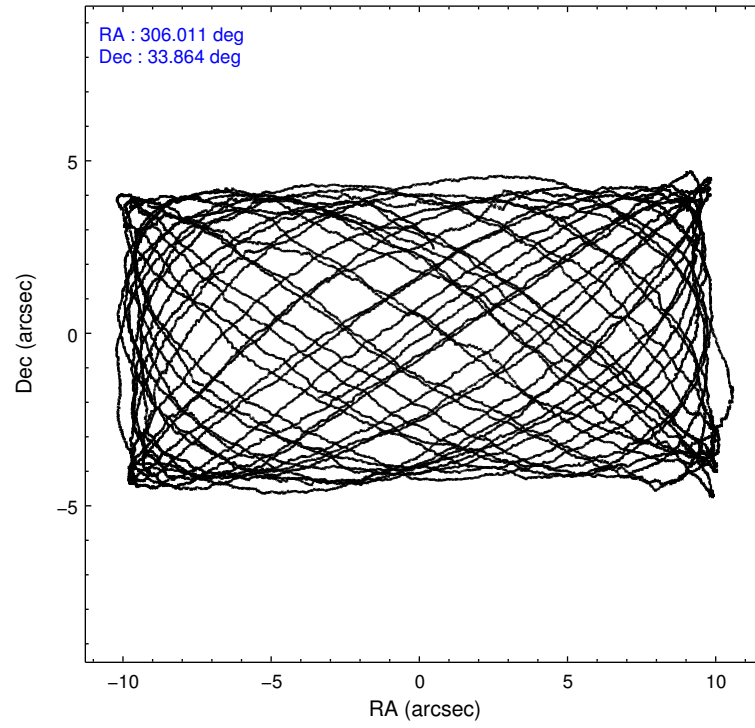
| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 22368 |
| rejected events | 9593 |
| rejected % | 42% |

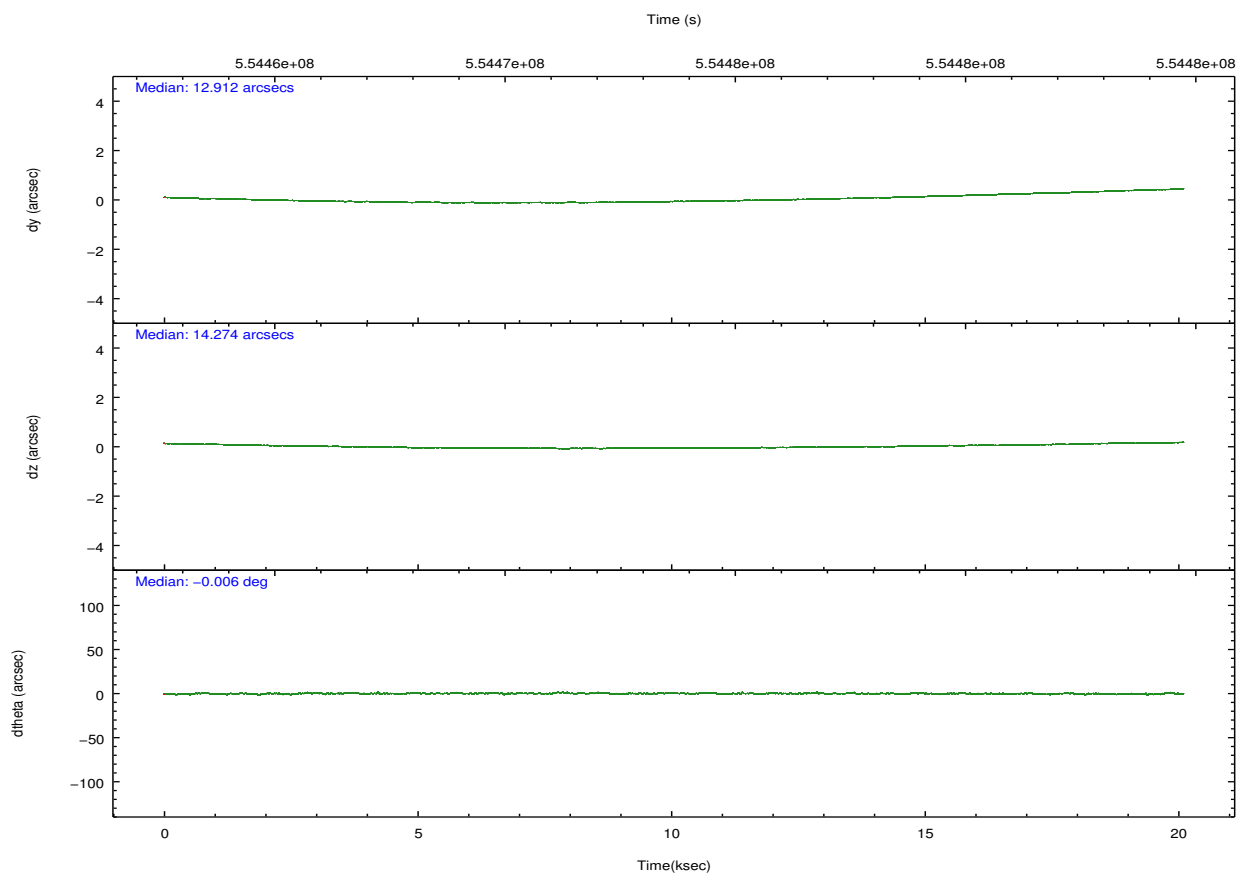
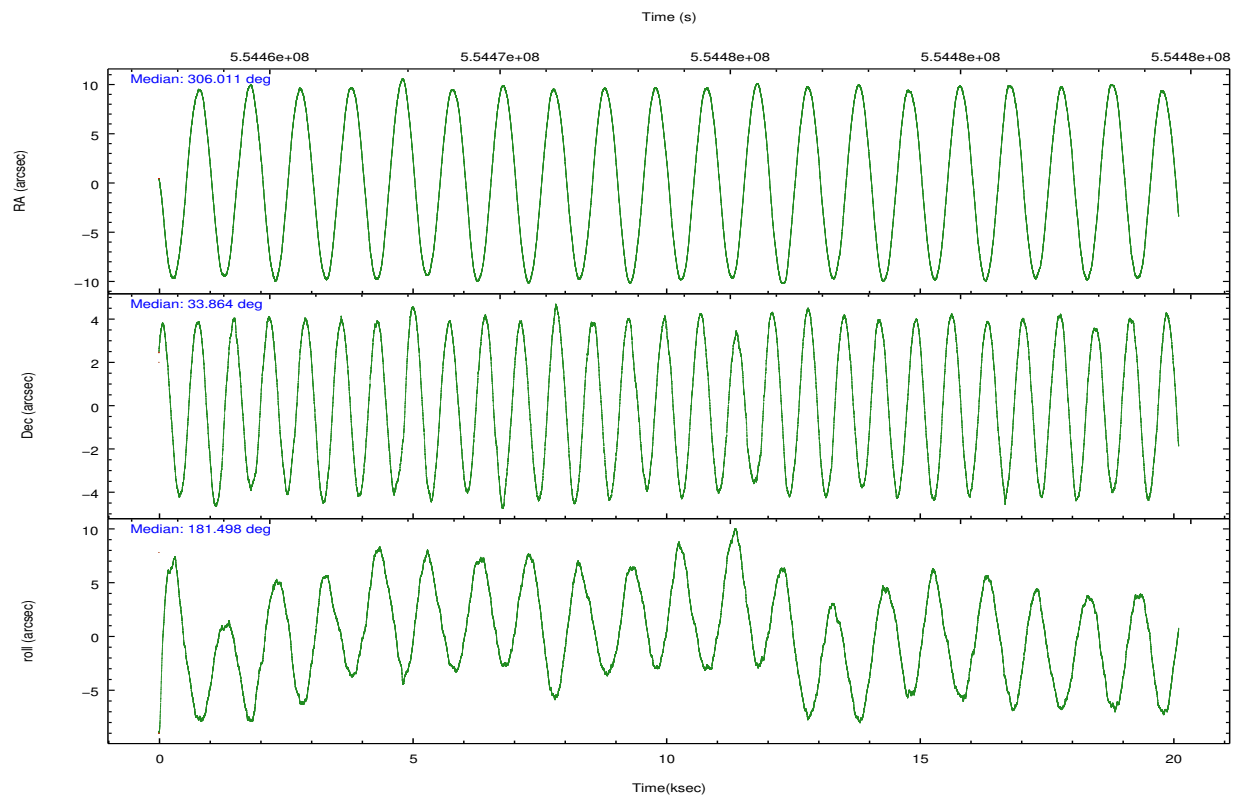
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 1785 |
| | 7% |
| grade 1 events | 32 |
| | 0% |
| grade 2 events | 2638 |
| | 11% |
| grade 3 events | 1611 |
| | 7% |
| grade 4 events | 1581 |
| | 7% |
| grade 5 events | 1863 |
| | 8% |
| grade 6 events | 5160 |
| | 23% |
| grade 7 events | 7698 |
| | 34% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-7 | ACIS-7 | 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 | 306.038941 | 306.0109815058174 | Subarray requested | CUSTOM | 1/8 |
| [deg] Pointing Dec | 33.878389 | 33.86375533907561 | Subarray start row | 449 | 449 |
| [deg] Pointing Roll | 181.328040 | 181.5002522378224 | Subarray row count | 128 | 128 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | [s] Primary exposure time | 0.000000 | 0.4 |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 554463795.184000 | 554463419.63581 | | | |
| Observation start date | 2015-07-28T09:42:07 | 2015-07-28T09:36:59 | | | |
| [s] Observation end time (MET) | 554483711.184000 | 554483845.3245 | | | |
| Observation end date | 2015-07-28T15:14:03 | 2015-07-28T15:17:25 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





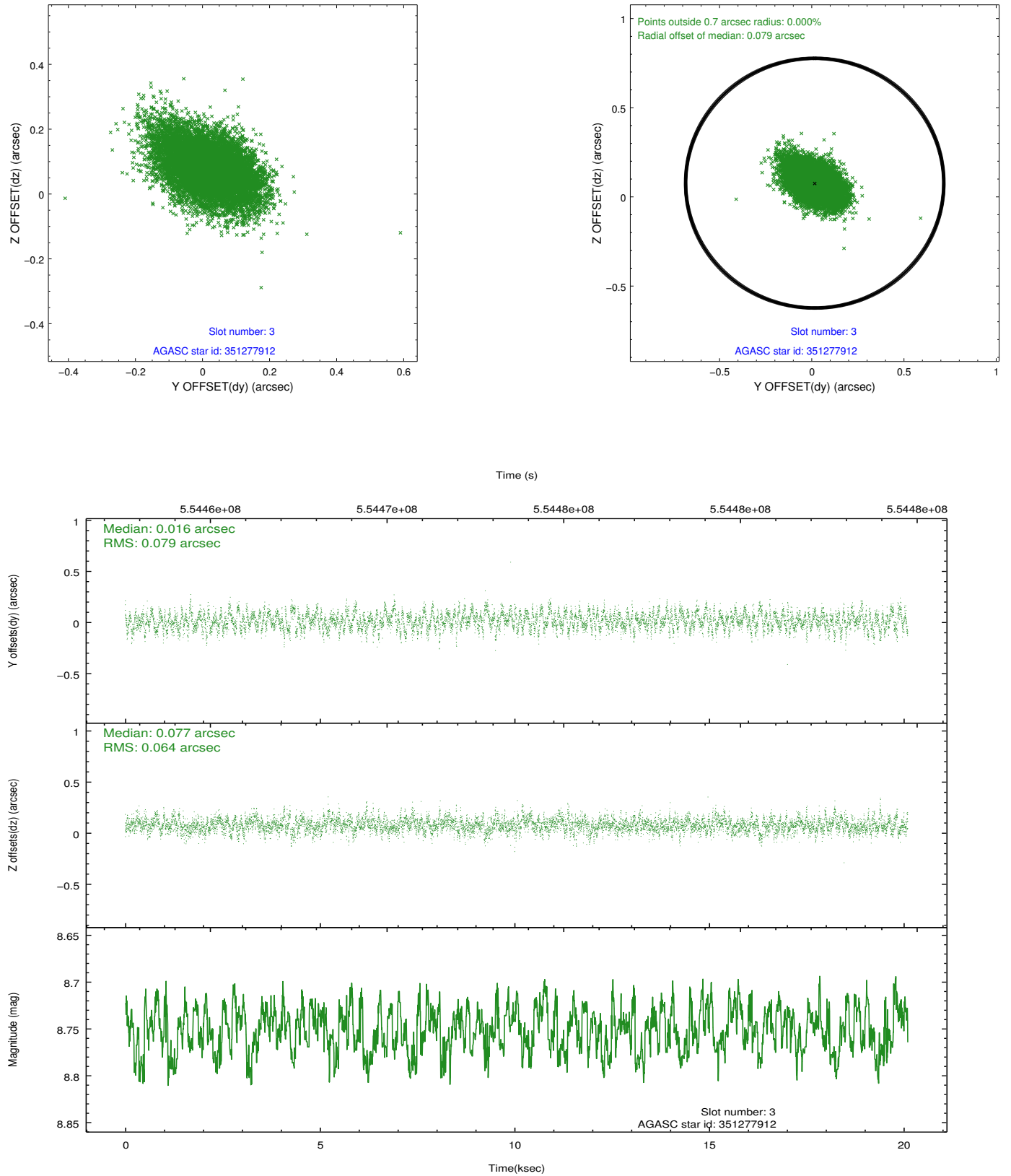
Slot Statistics

| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | | ACIS-S-1 | 7.19 | 4905 | 0.071 | -0.021 | 0.009 | 0.015 | 0.000000 | 0.000000 | 930.25 | -1731.29 |
| 1 | FID | | ACIS-S-4 | 7.18 | 4905 | 0.207 | -0.015 | 0.010 | 0.019 | 0.000000 | 0.000000 | 2147.87 | 172.71 |
| 2 | FID | | ACIS-S-5 | 7.20 | 4905 | -0.305 | 0.048 | 0.010 | 0.020 | 0.000000 | 0.000000 | -1818.79 | 166.50 |
| 3 | GUIDE | used | 351277912 | 8.75 | 9803 | 0.016 | 0.077 | 0.107 | 0.180 | 305.316013 | 34.433041 | 2100.32 | -2053.03 |
| 4 | GUIDE | used | 351279832 | 8.65 | 9806 | -0.064 | 0.124 | 0.130 | 0.205 | 305.274374 | 34.407915 | 2226.81 | -1966.55 |
| 5 | GUIDE | used | 352981624 | 8.60 | 9806 | 0.190 | 0.051 | 0.089 | 0.144 | 306.081516 | 34.222239 | -154.29 | -1234.35 |
| 6 | GUIDE | used | 352985512 | 8.90 | 9804 | 0.105 | 0.055 | 0.088 | 0.148 | 306.411799 | 34.272698 | -1141.12 | -1395.15 |
| 7 | GUIDE | used | 351282120 | 9.31 | 9800 | -0.249 | -0.312 | 0.171 | 0.250 | 305.232648 | 33.763598 | 2422.33 | 349.91 |

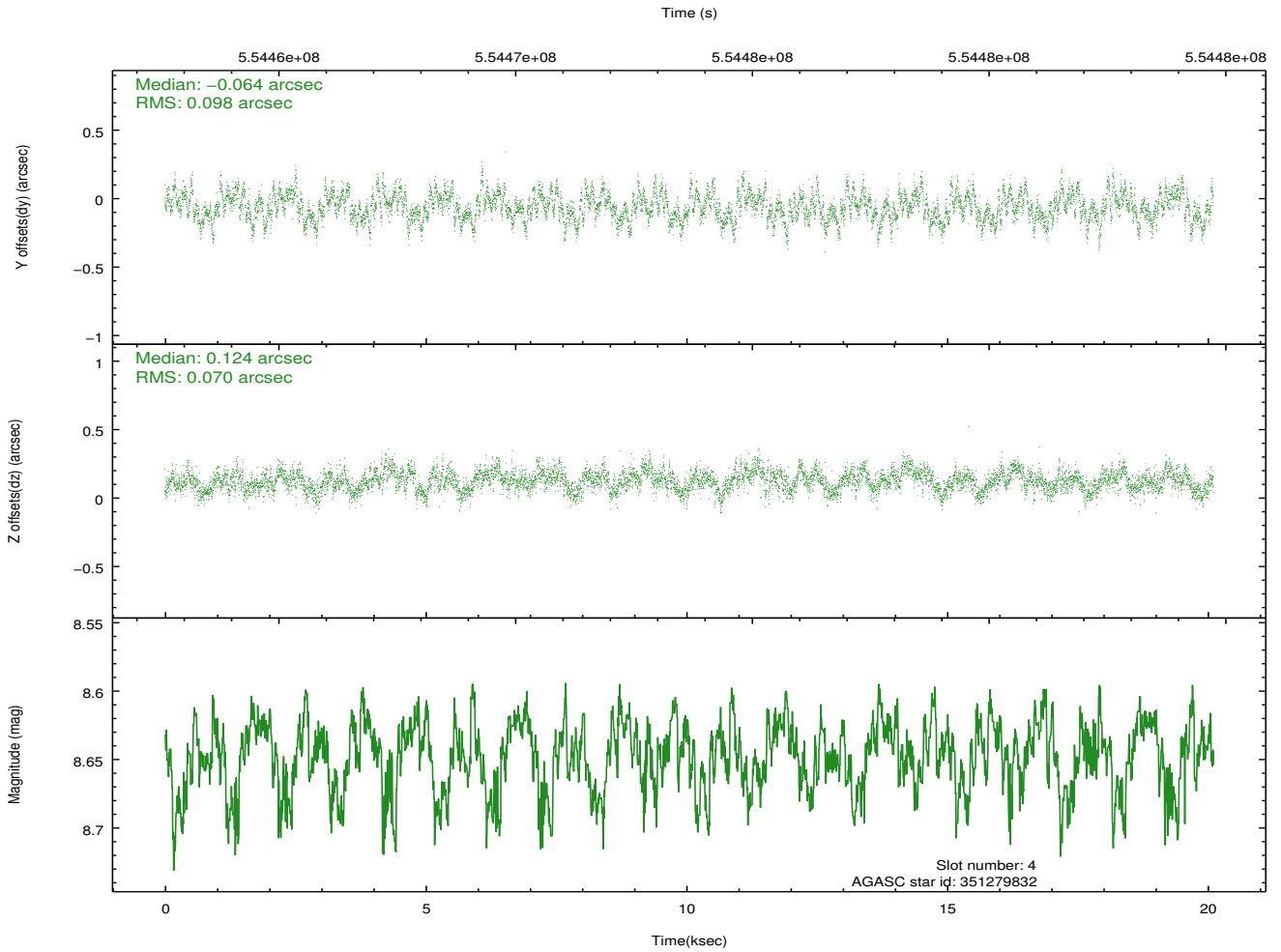
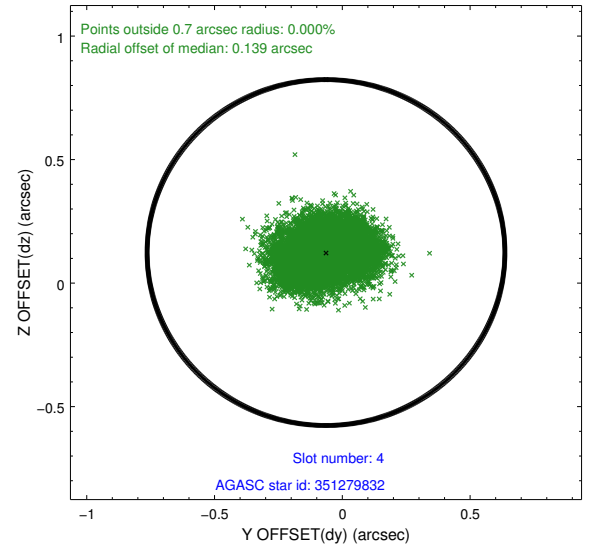
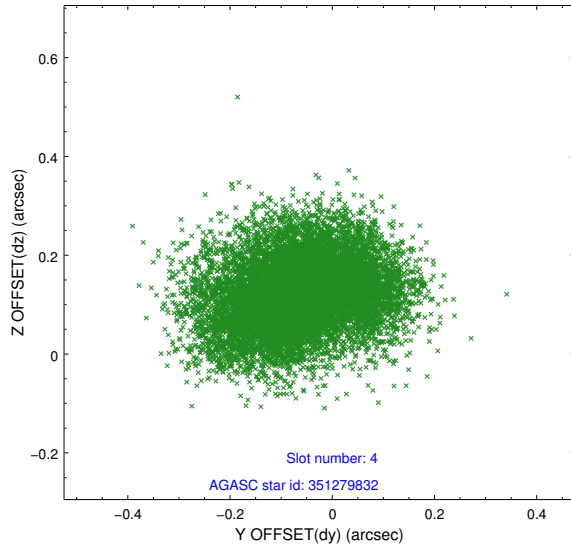
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2.4 Star Slots

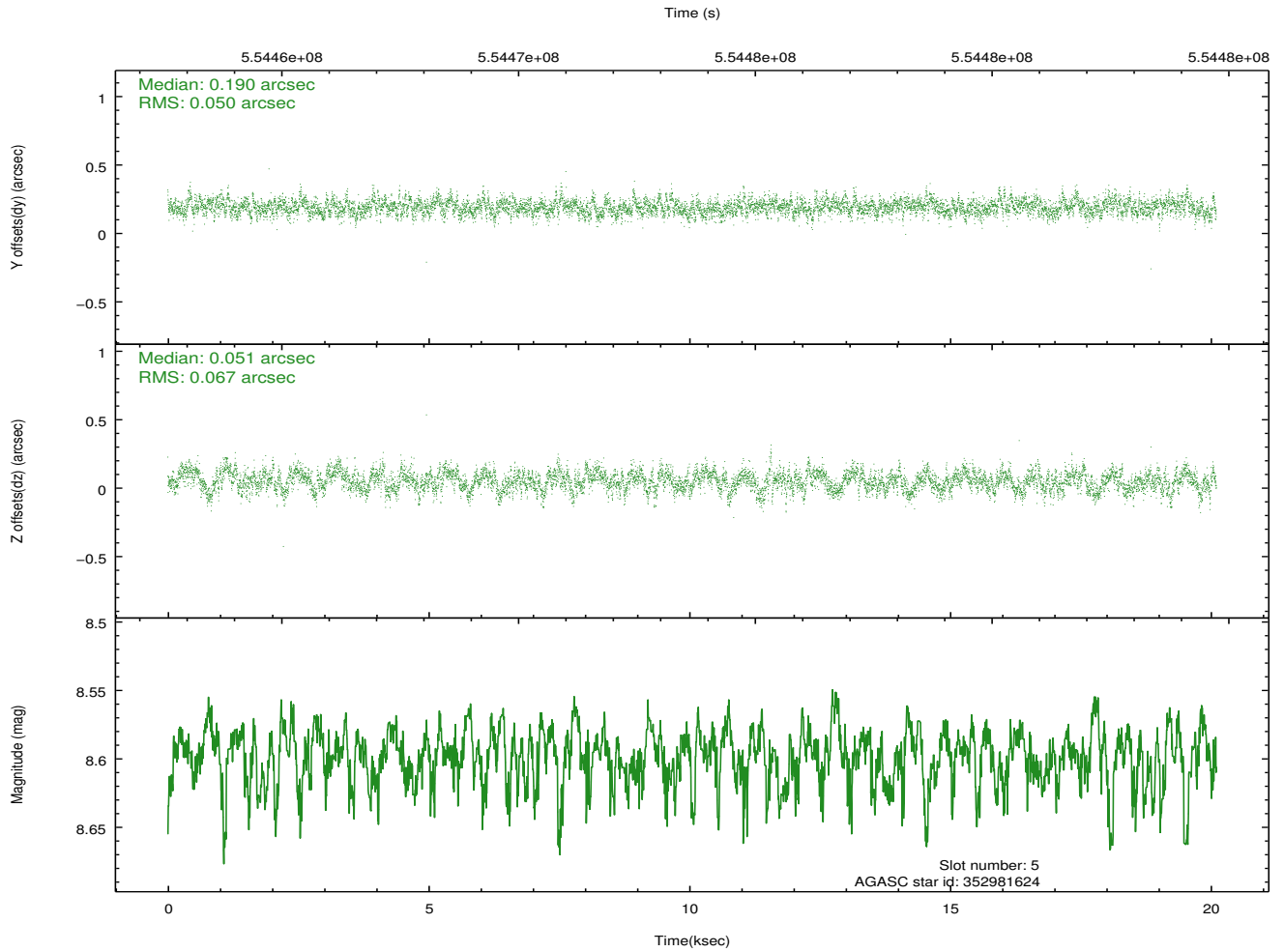
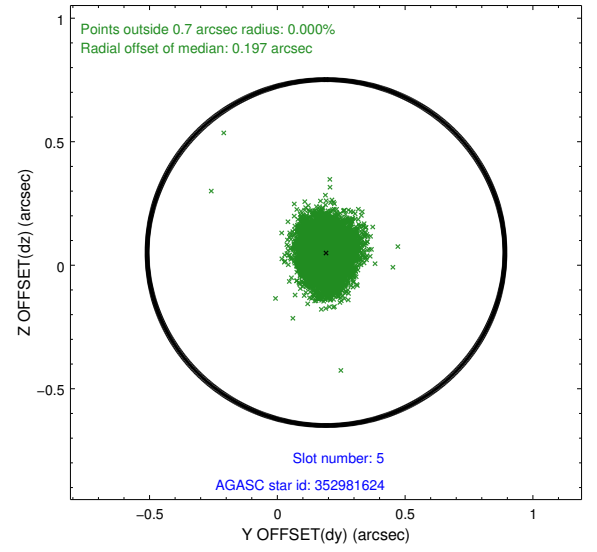
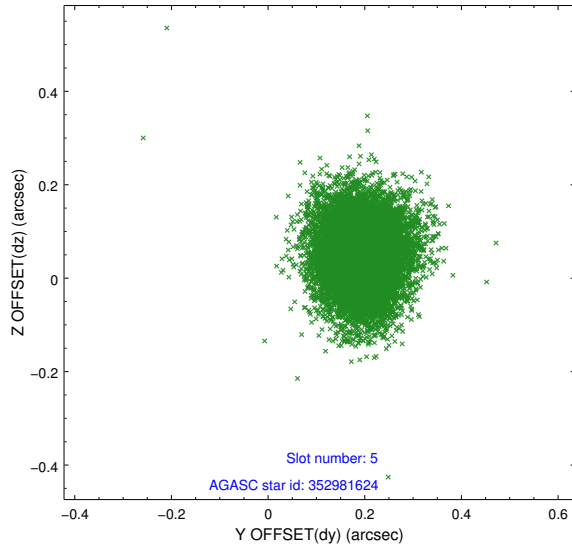
2.4.1 Slot 3



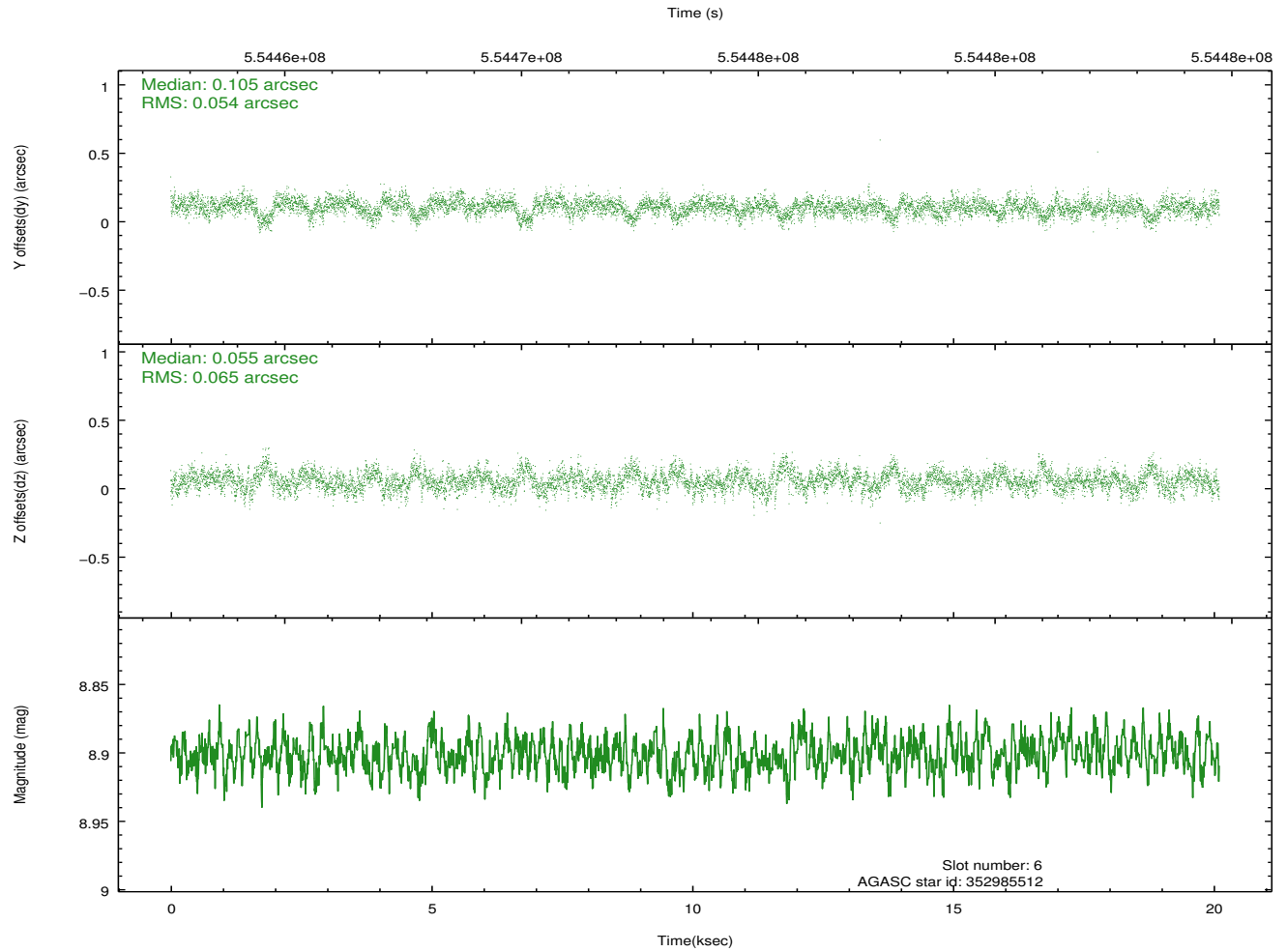
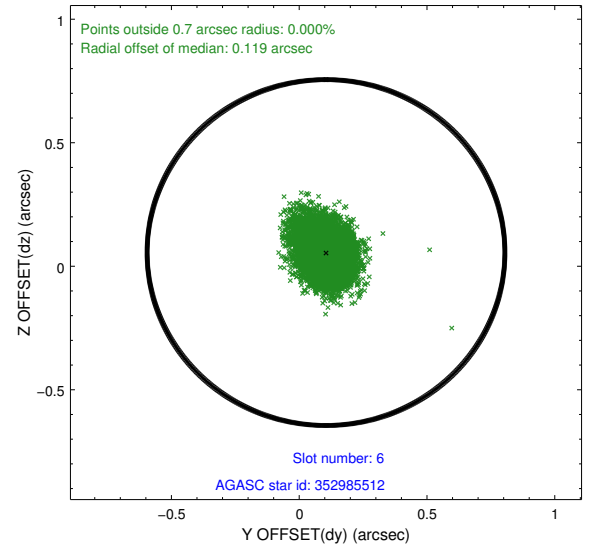
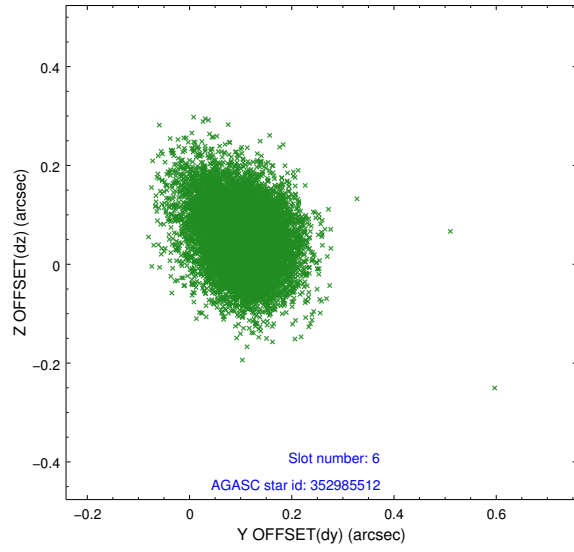
2.4.2 Slot 4



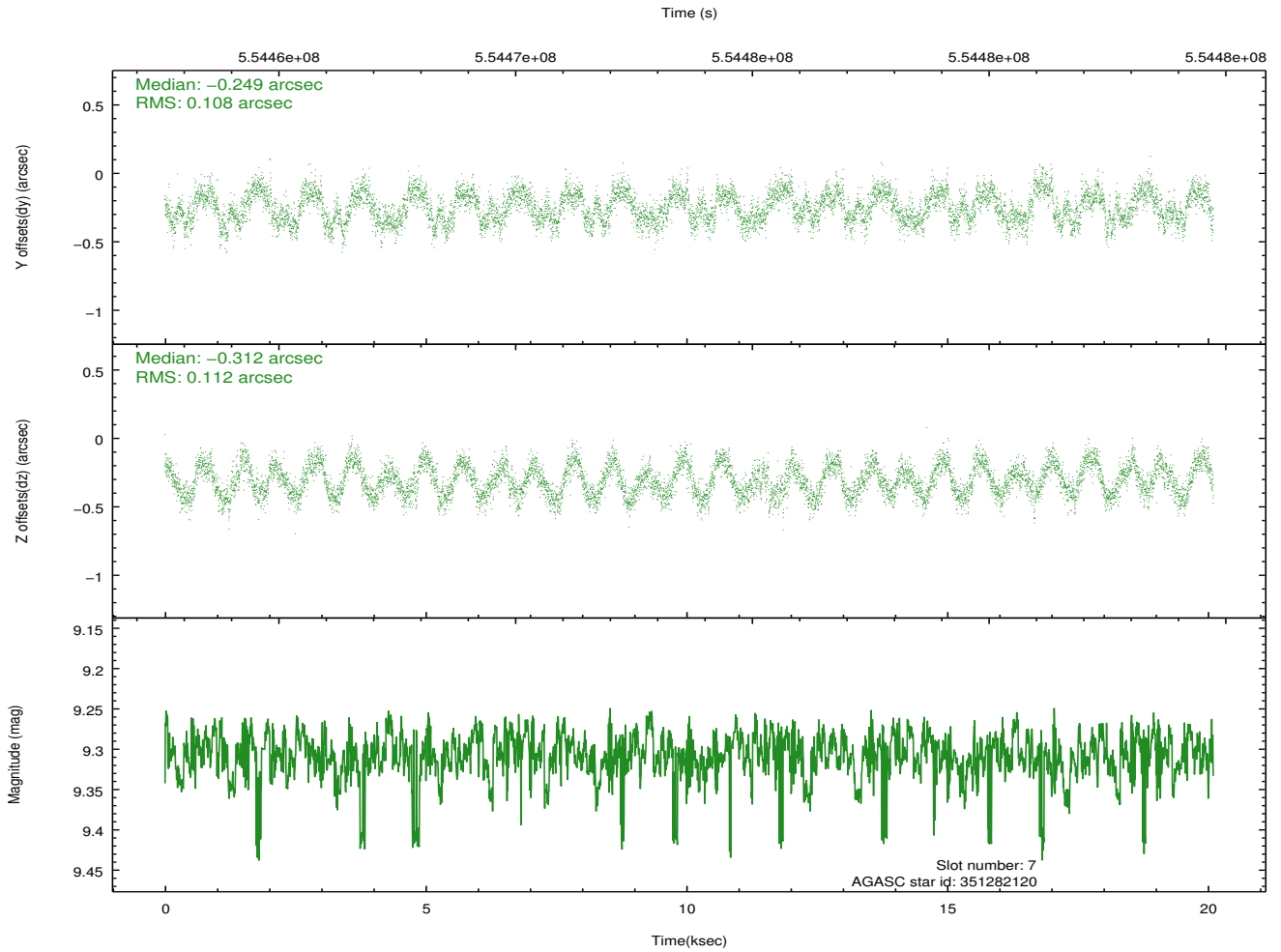
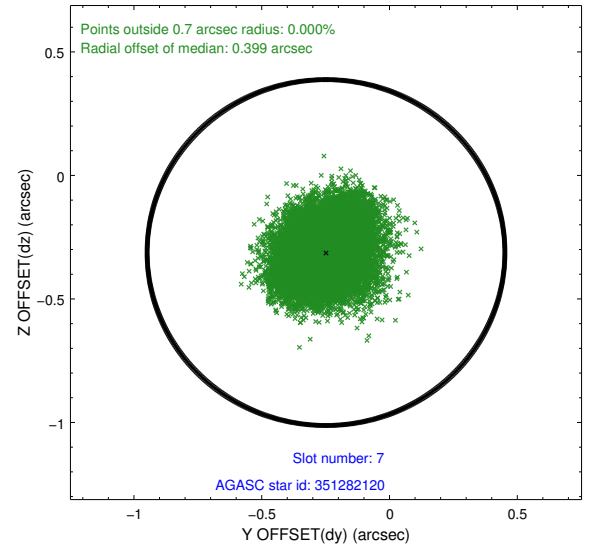
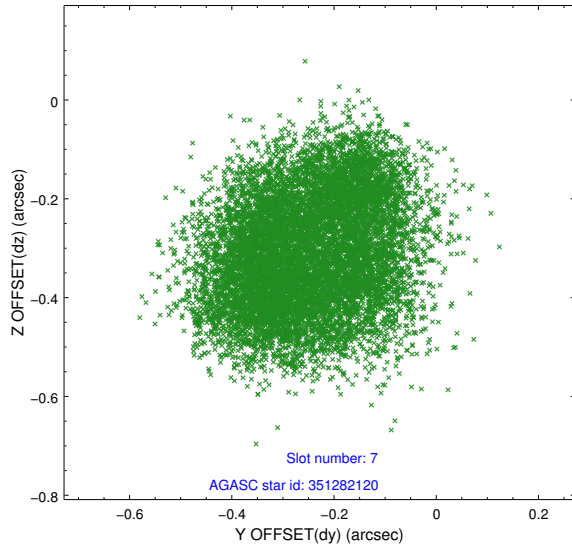
2.4.3 Slot 5



2.4.4 Slot 6

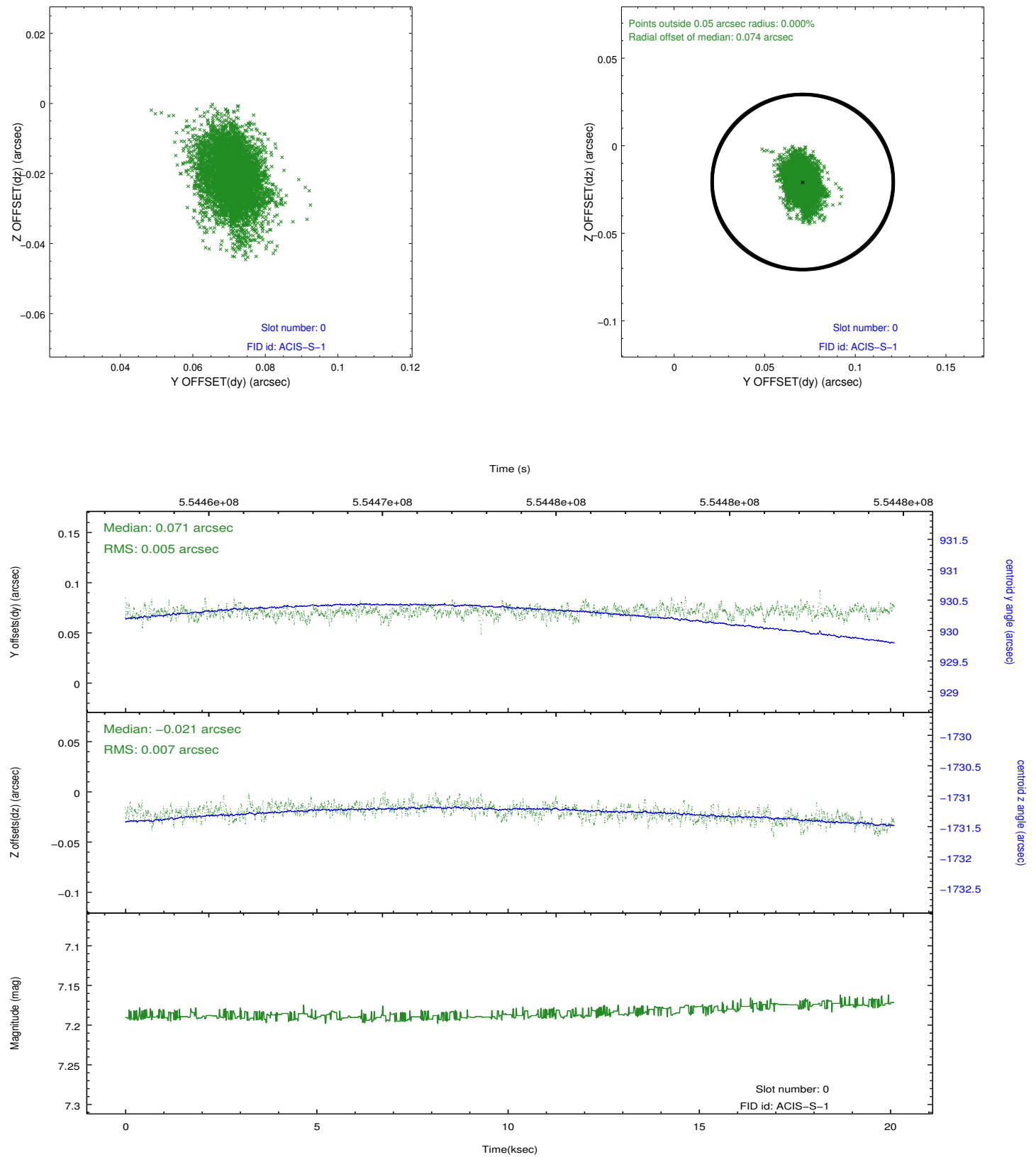


2.4.5 Slot 7

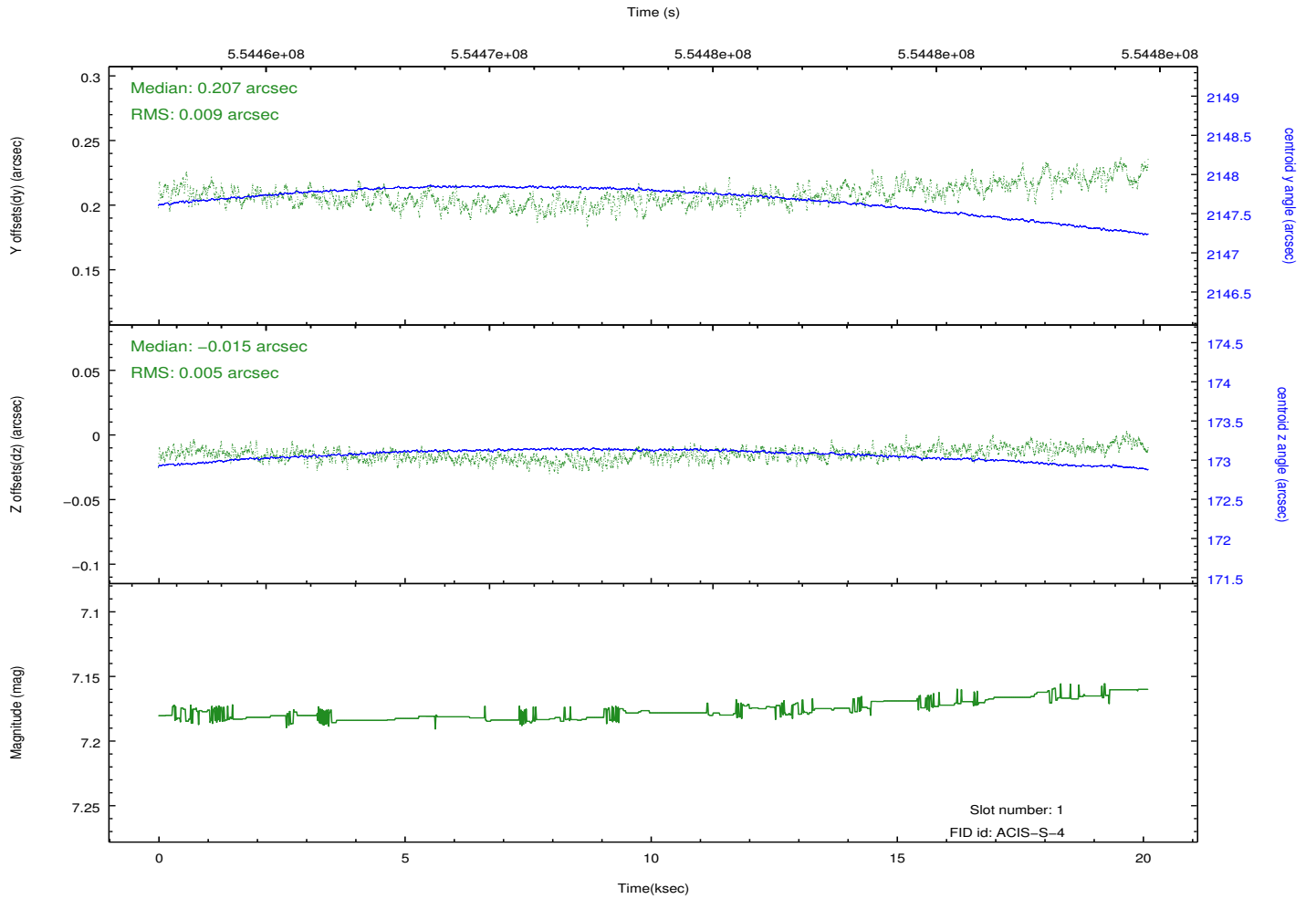
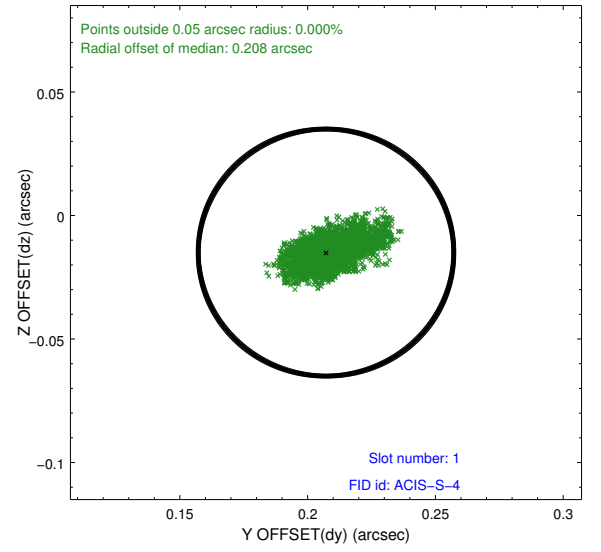
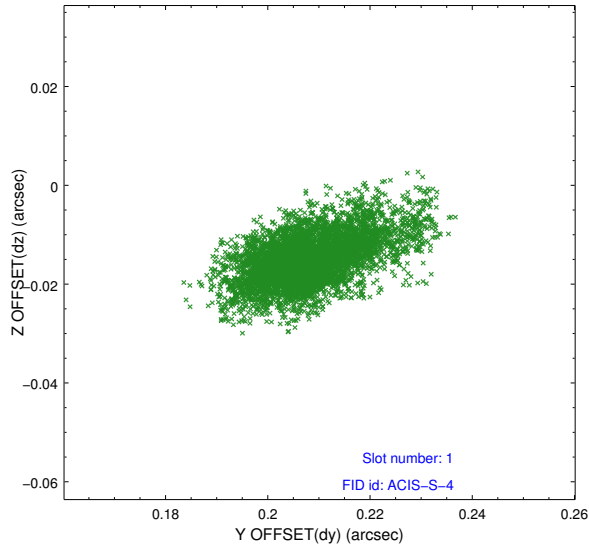


2.5 FID Slots

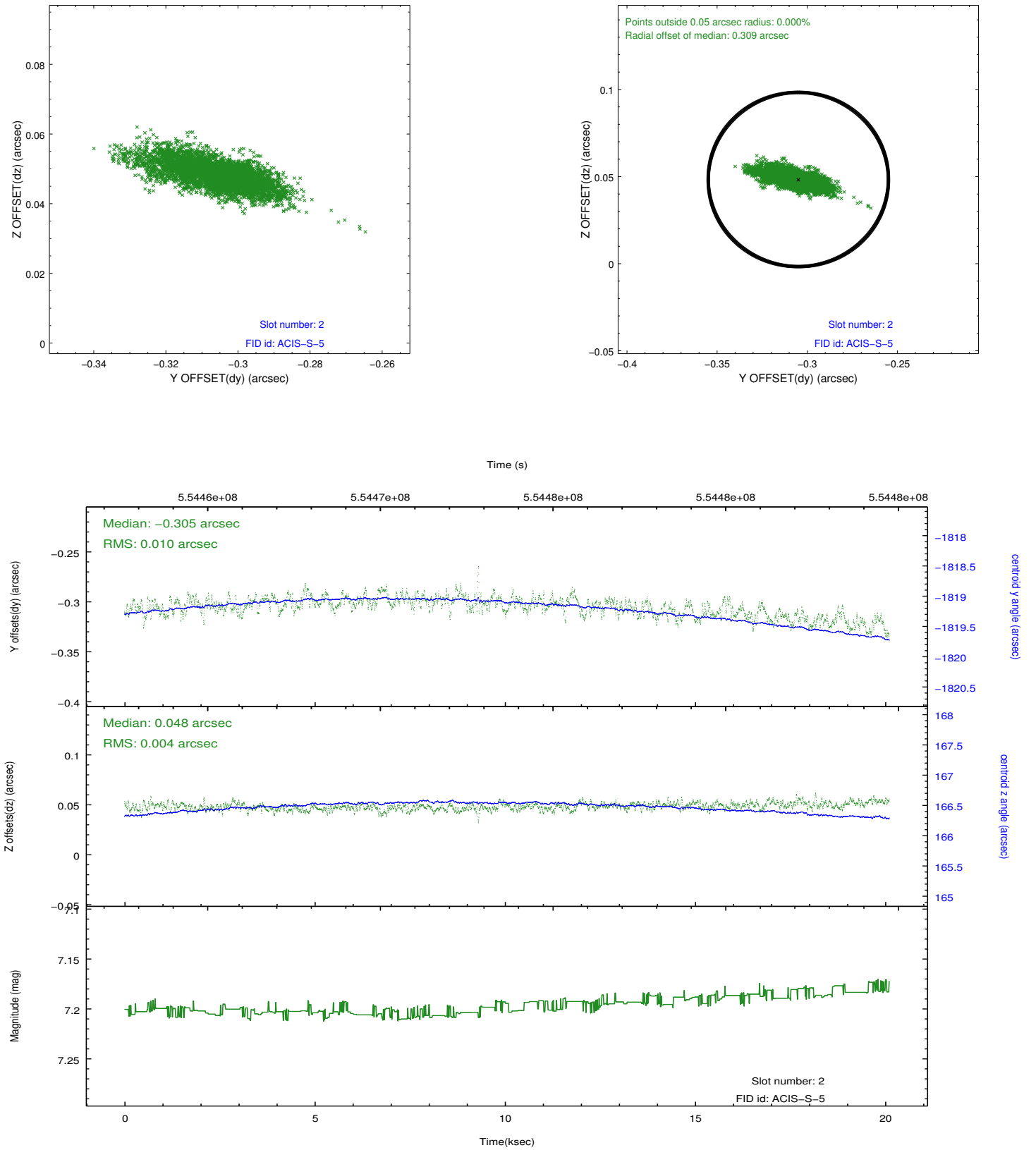
2.5.1 Slot 0



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) | 2015.07.30 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 19.769598821521 |

A.2 Comments

Joint Proposal: NRAO. Monitor constraint met.