

V&V Reference Report

L2 ASCDS Version : 10.3.1

Observation 15726 - L2 Version 1
Chandra X-Ray Center

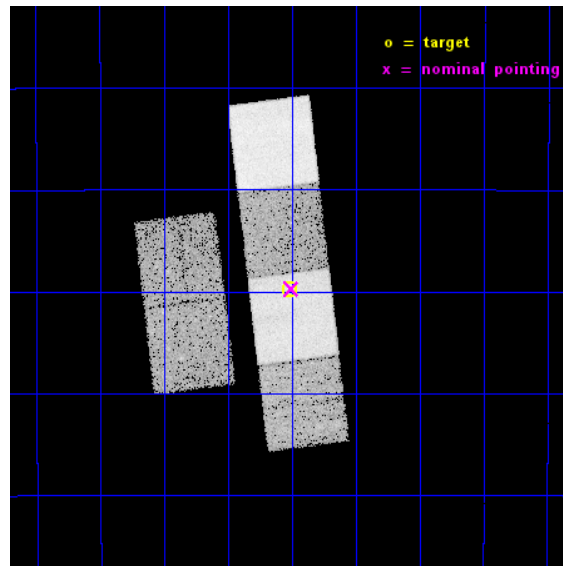
L2 Processing Date : Dec 6 2014

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1 Front

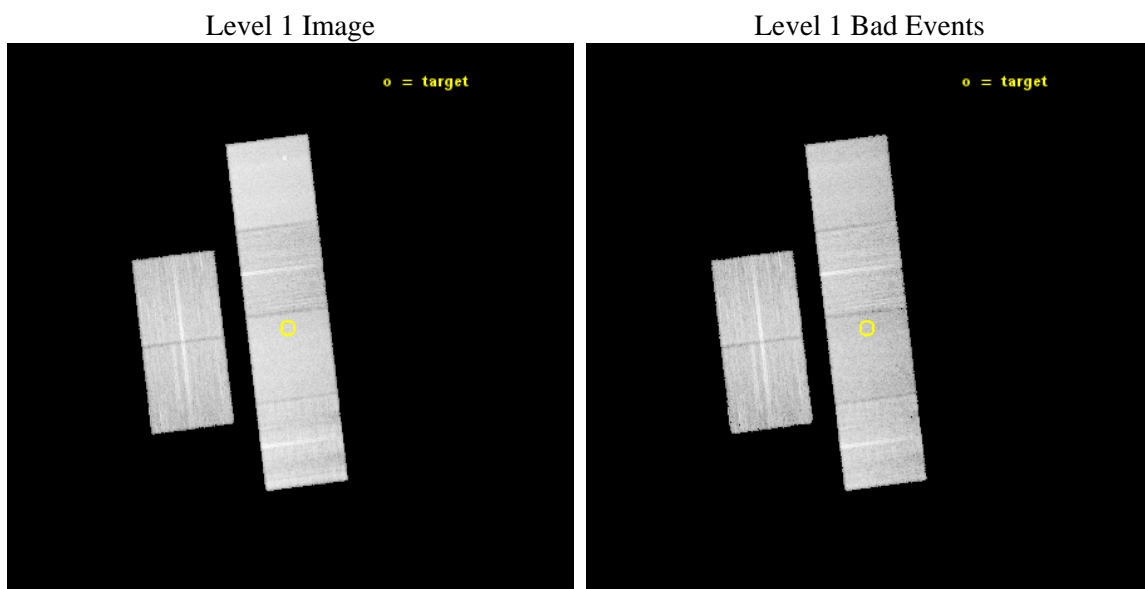
| | | |
|----------|--|---|
| seq_num | 200939 | Sequence number |
| obs_id | 15726 | Observation id |
| title | X-ray Emission from a Radio-Loud Hyperactive L Dwarf | Proposal titl |
| observer | Dr. Carl Melis | Principal investigator |
| object | 2MASS 1315-2649 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 198.87875 | Observer's specified target RA [deg] |
| dec_targ | -26.830917 | Observer's specified target Dec [deg] |
| ra_nom | 198.87610119514 | Nominal RA [deg] |
| dec_nom | -26.828889420163 | Nominal Dec [deg] |
| roll_nom | 82.934050620793 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 24963.199907064 | Sum of GTIs [s] |
| livetime | 24647.100838807 | Livetime [s] |
| ontime2 | 24963.199907064 | Sum of GTIs [s] |
| ontime3 | 24959.958936632 | Sum of GTIs [s] |
| ontime5 | 24963.199907064 | Sum of GTIs [s] |
| ontime6 | 24963.199907064 | Sum of GTIs [s] |
| ontime7 | 24963.199907064 | Sum of GTIs [s] |
| ontime8 | 24963.199907064 | Sum of GTIs [s] |
| l2events | 203851 | Number of level 2 events |



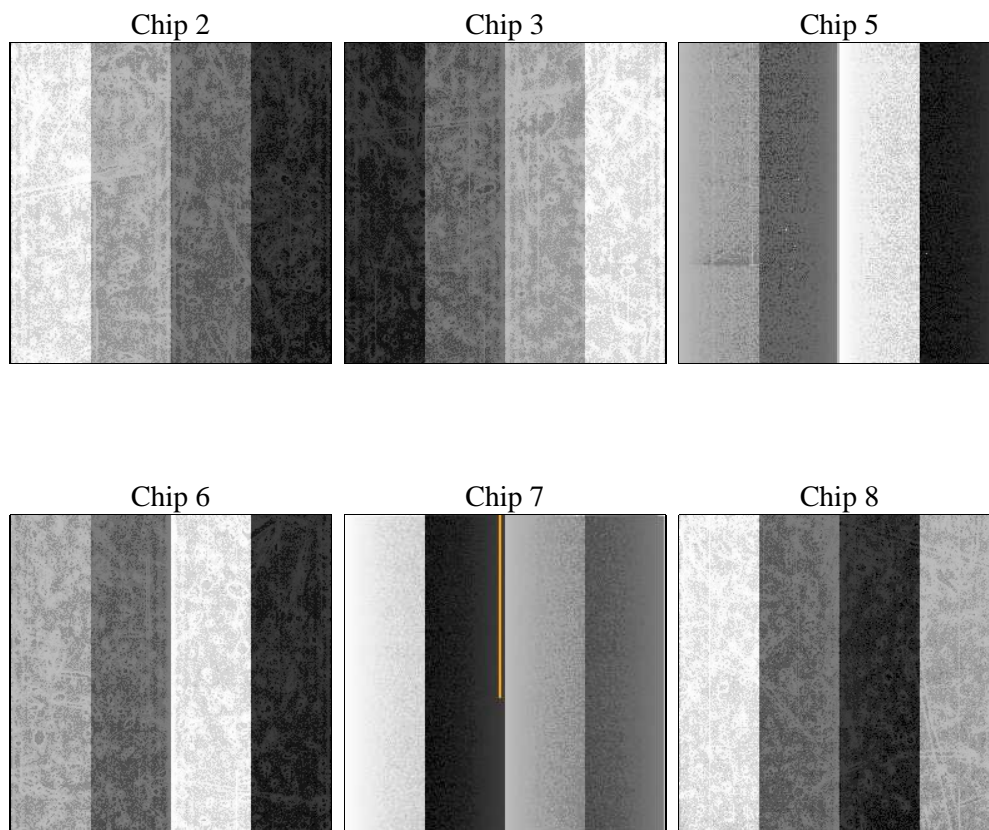
2 OBI

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 | 10.3.1 | Processing system revision | ontime | 24963.199907064 | Sum of GTIs [s] |
| caldsver | 4.6.4 | | ontime2 | 24963.199907064 | Sum of GTIs [s] |
| date | 2014-12-07T01:37:58 | Date and time of file creation | ontime3 | 24959.958936632 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime5 | 24963.199907064 | Sum of GTIs [s] |
| | | | ontime6 | 24963.199907064 | Sum of GTIs [s] |
| | | | ontime7 | 24963.199907064 | Sum of GTIs [s] |
| | | | ontime8 | 24963.199907064 | Sum of GTIs [s] |
| | | | l1events | 852892 | Number of level 1 events |

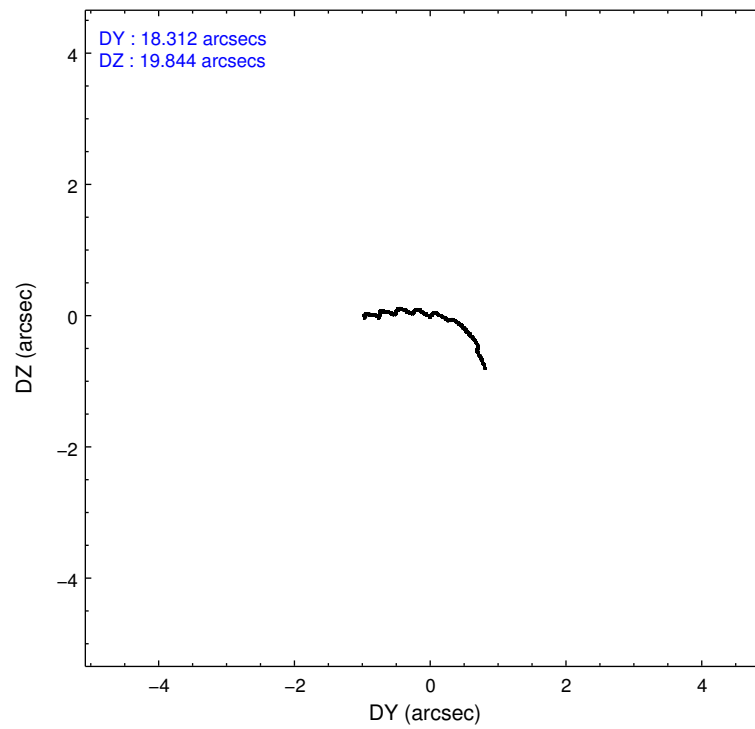
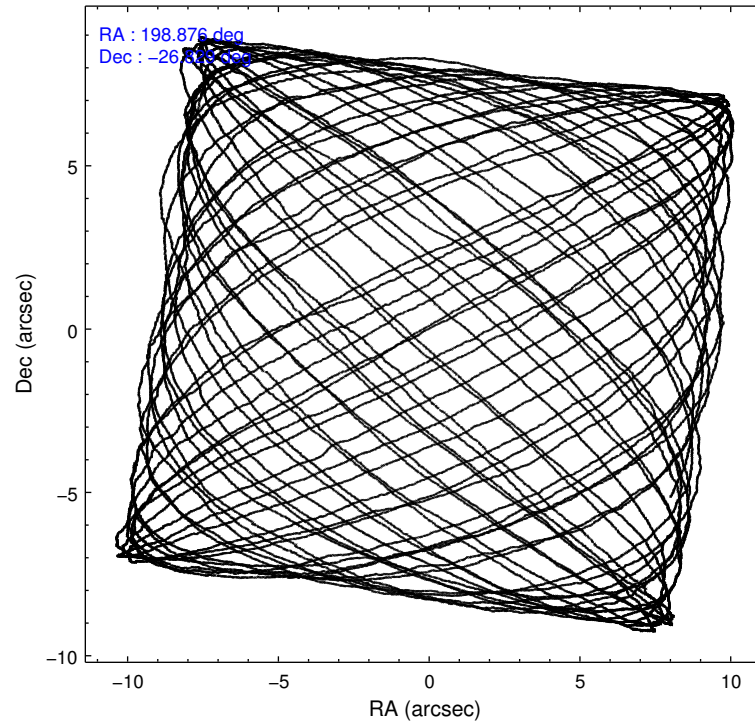
2.1.4 Events

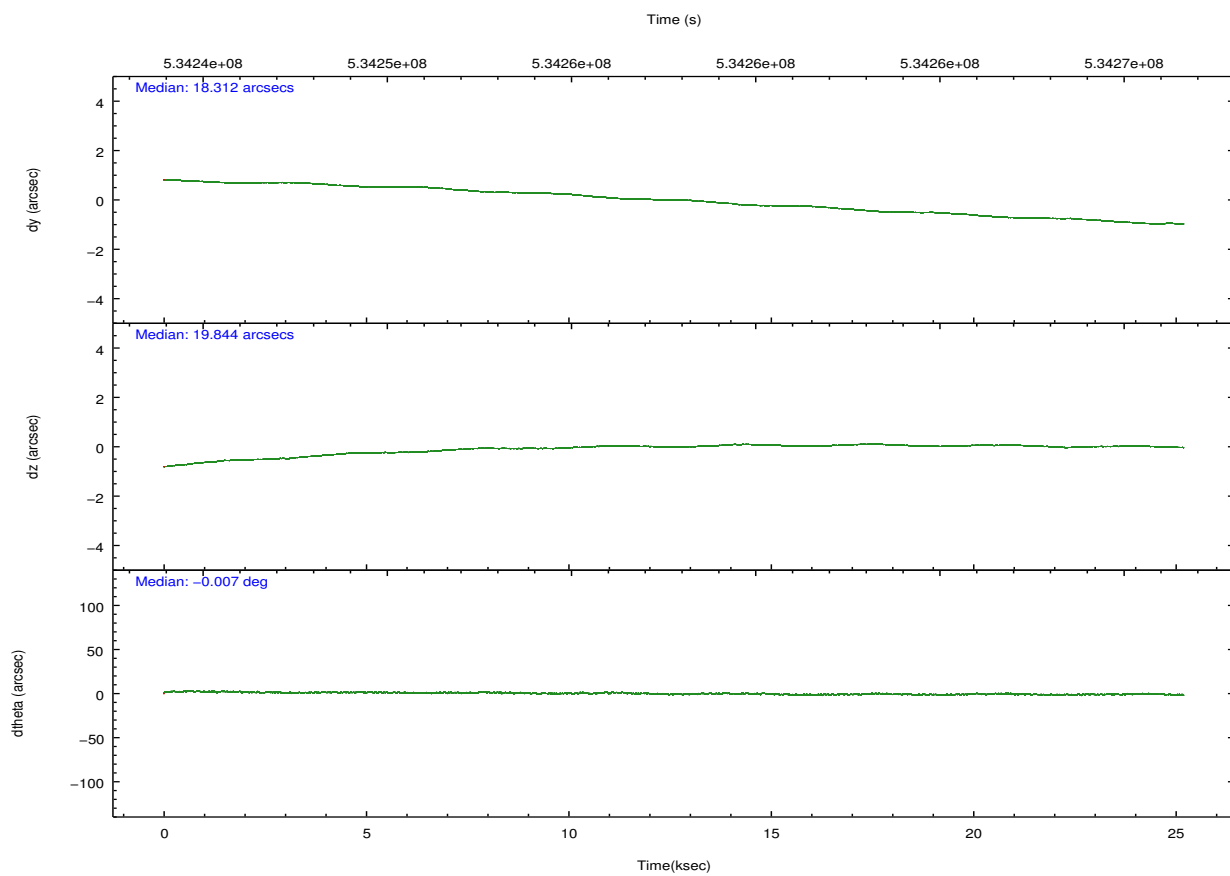
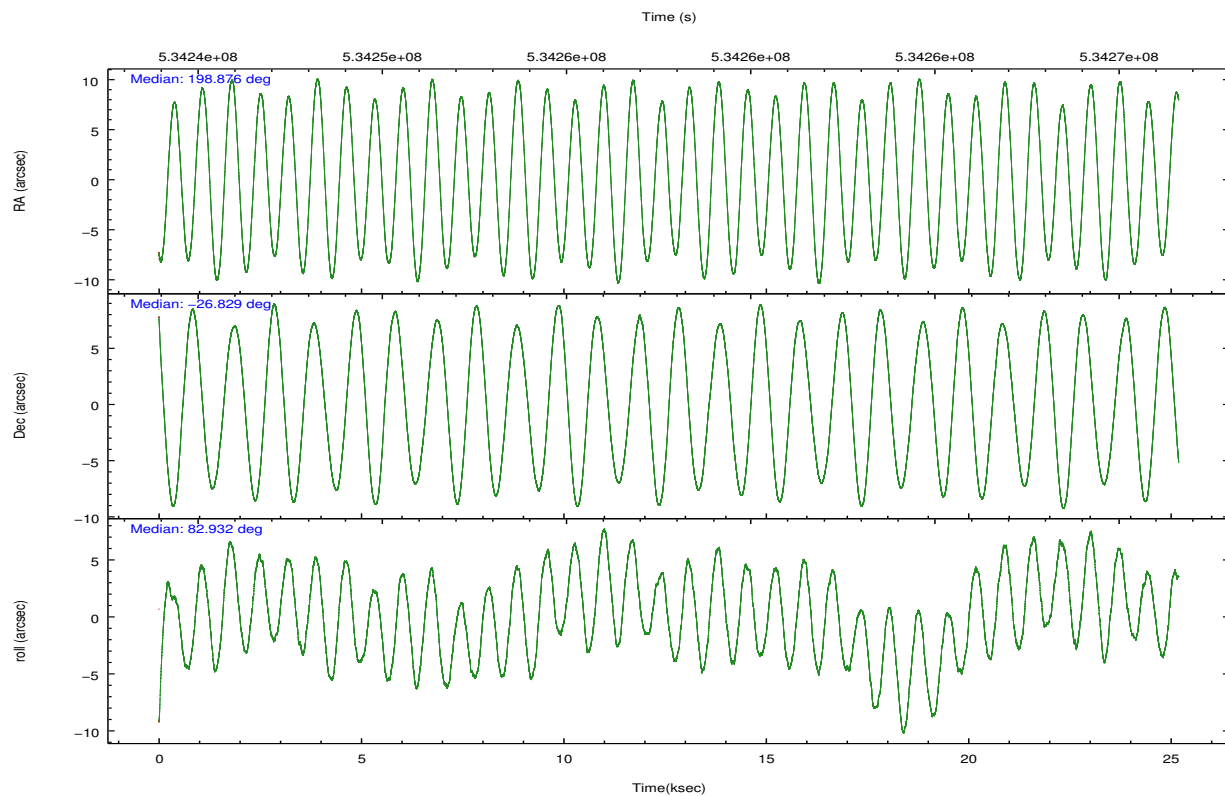
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|-------|-------|-------|-------|--------|
| level 1 events | 121919 | 108713 | 188297 | 119034 | 155988 | 158941 | grade 0 events | 4616 | 4892 | 5671 | 4731 | 5941 | 12649 |
| rejected events | 108487 | 95609 | 98731 | 104816 | 88299 | 116533 | | 3% | 4% | 3% | 3% | 3% | 7% |
| rejected % | 88% | 87% | 52% | 88% | 56% | 73% | grade 1 events | 60 | 83 | 356 | 54 | 201 | 119 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3453 | 2855 | 27690 | 3217 | 13958 | 9867 |
| | | | | | | | | 2% | 2% | 14% | 2% | 8% | 6% |
| | | | | | | | grade 3 events | 1295 | 1377 | 3103 | 1413 | 5540 | 4423 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 1369 | 1323 | 2959 | 1405 | 5568 | 4275 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 5 events | 5161 | 6007 | 14064 | 6155 | 15637 | 8896 |
| | | | | | | | | 4% | 5% | 7% | 5% | 10% | 5% |
| | | | | | | | grade 6 events | 2700 | 2658 | 50153 | 3456 | 36691 | 11230 |
| | | | | | | | | 2% | 2% | 26% | 2% | 23% | 7% |
| | | | | | | | grade 7 events | 103265 | 89518 | 84301 | 98603 | 72452 | 107482 |
| | | | | | | | | 84% | 82% | 44% | 82% | 46% | 67% |

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 | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 198.888467 | 198.8761011951377 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | -26.854024 | -26.82888942016266 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 82.783011 | 82.93405062079266 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | O3 | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.145094680475 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.01257209746719923 | CCD S4 on | O4 | Y |
| [s] Observation start time (MET) | 534245370.184000 | 534243768.81603 | CCD S5 on | N | N |
| Observation start date | 2014-12-06T09:28:23 | 2014-12-06T09:02:48 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 534270370.184000 | 534271237.28006 | On-chip summing requested | N | N |
| Observation end date | 2014-12-06T16:25:03 | 2014-12-06T16:40:37 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



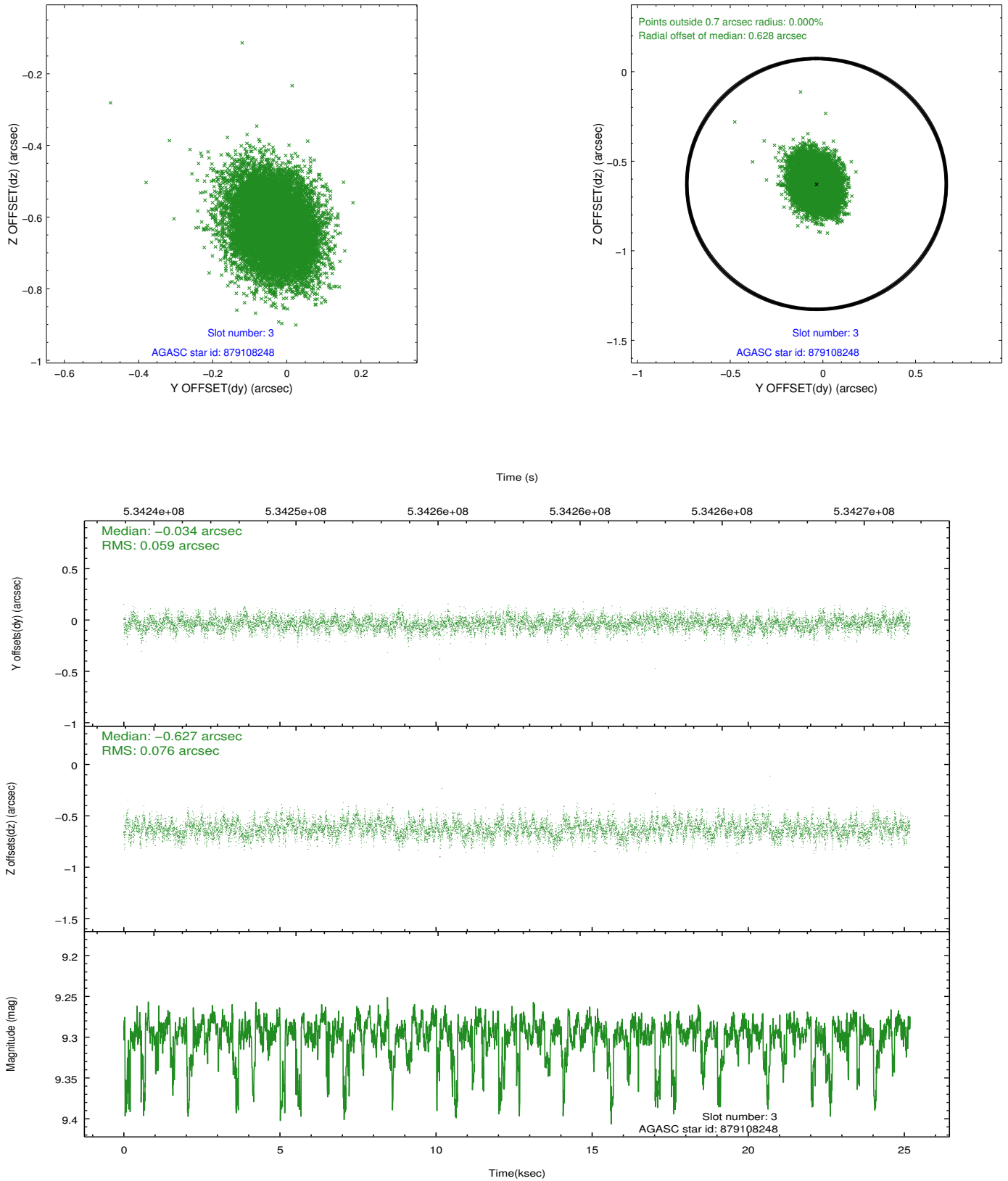


Slot Statistics

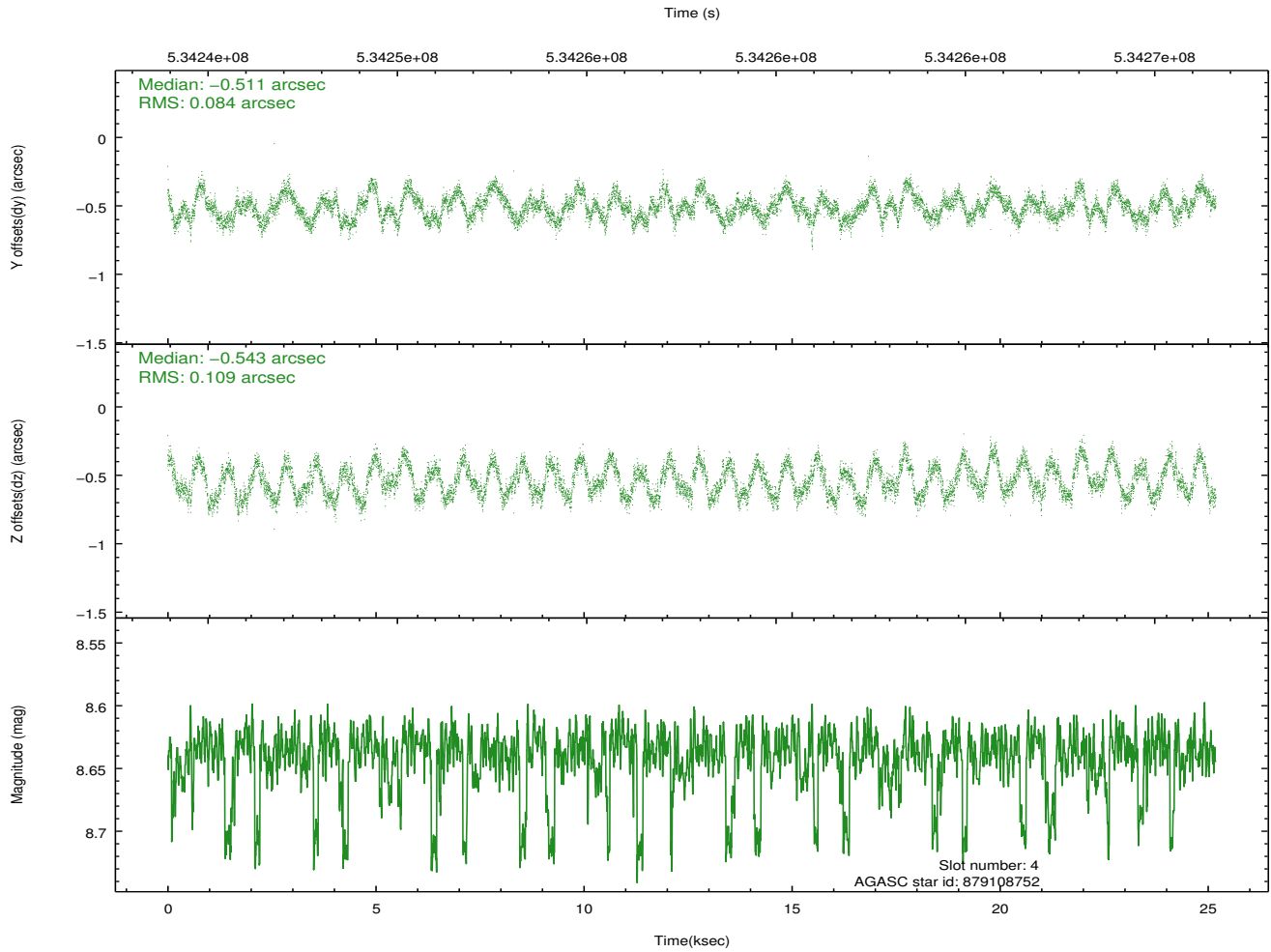
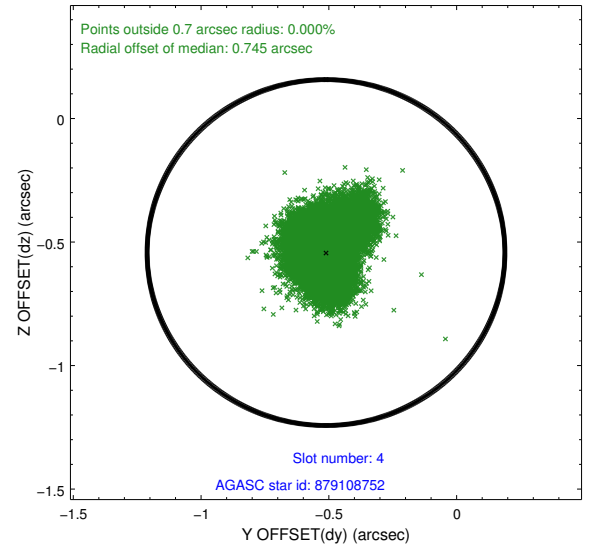
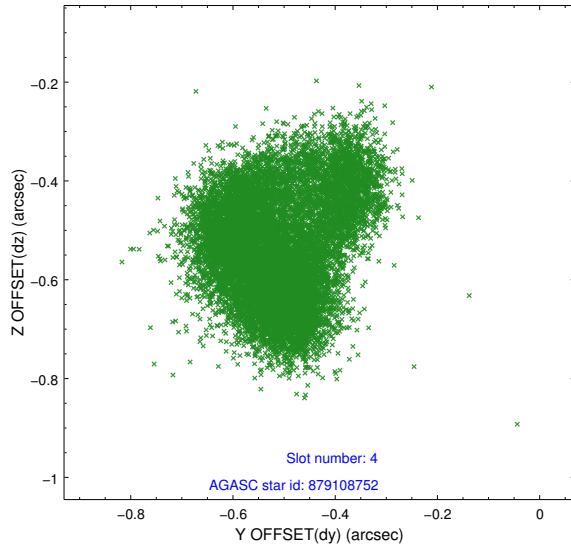
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | | ACIS-S-1 | 7.11 | 6145 | 0.081 | -0.035 | 0.013 | 0.030 | 0.000000 | 0.000000 | 924.83 | -1736.78 |
| 1 | FID | | ACIS-S-5 | 7.15 | 6145 | -0.177 | 0.047 | 0.015 | 0.027 | 0.000000 | 0.000000 | -1824.40 | 160.66 |
| 2 | FID | | ACIS-S-6 | 7.25 | 6145 | 0.074 | -0.000 | 0.020 | 0.031 | 0.000000 | 0.000000 | 390.18 | 804.76 |
| 3 | GUIDE | used | 879108248 | 9.30 | 12281 | -0.034 | -0.627 | 0.102 | 0.166 | 198.124330 | -27.306389 | -1930.06 | 2219.25 |
| 4 | GUIDE | used | 879108752 | 8.64 | 12276 | -0.511 | -0.543 | 0.148 | 0.227 | 198.438590 | -26.515997 | 1021.10 | 1589.55 |
| 5 | GUIDE | used | 879239352 | 9.43 | 12280 | 0.378 | 0.319 | 0.145 | 0.249 | 199.520527 | -27.206706 | -1010.18 | -2166.72 |
| 6 | GUIDE | used | 879239896 | 9.20 | 12278 | 0.251 | 0.917 | 0.138 | 0.224 | 198.875360 | -27.446008 | -2119.19 | -225.12 |
| 7 | GUIDE | used | 879241784 | 9.18 | 12279 | -0.085 | -0.053 | 0.195 | 0.320 | 199.167015 | -26.638928 | 879.31 | -789.59 |

2.4 Star Slots

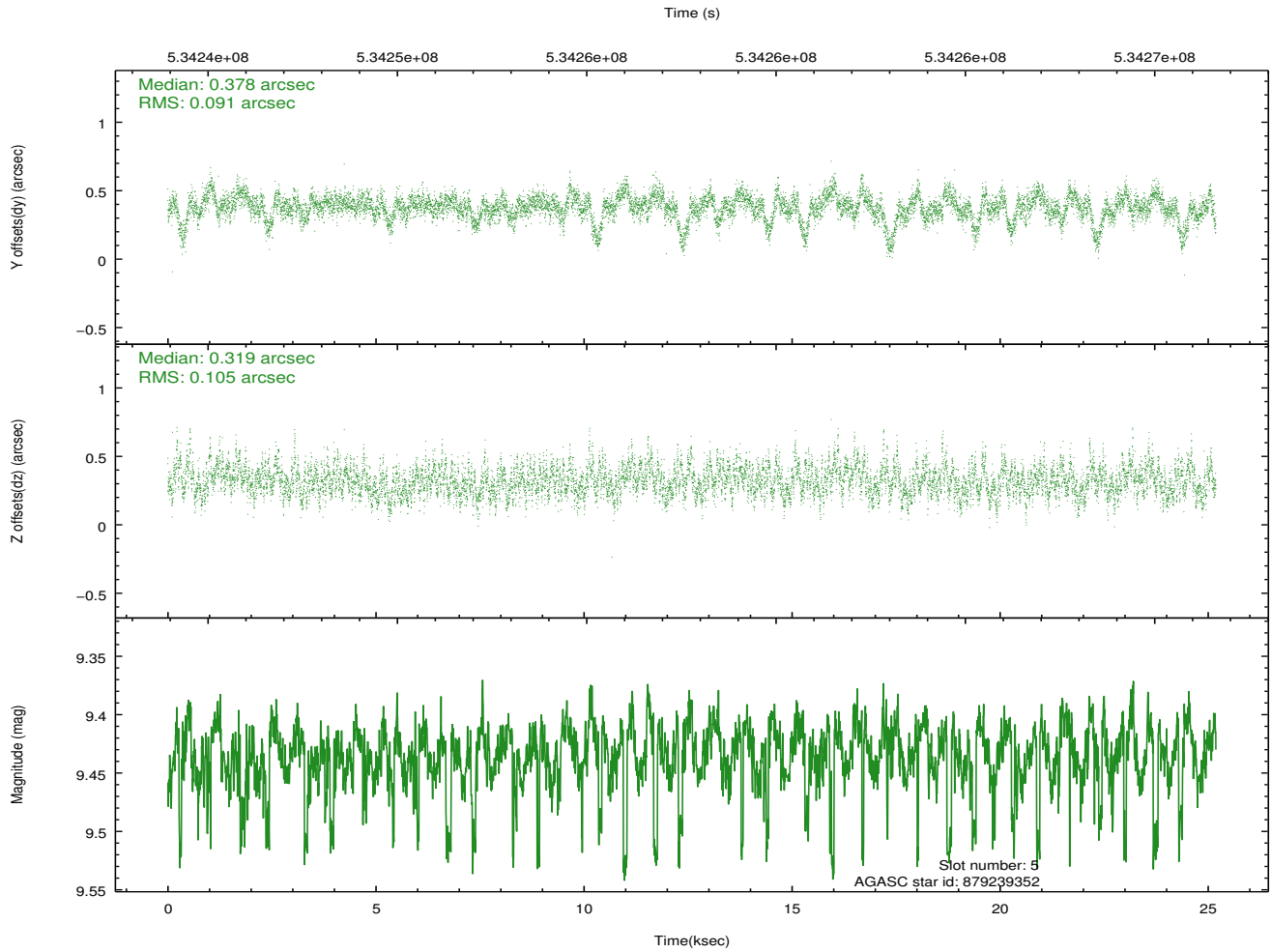
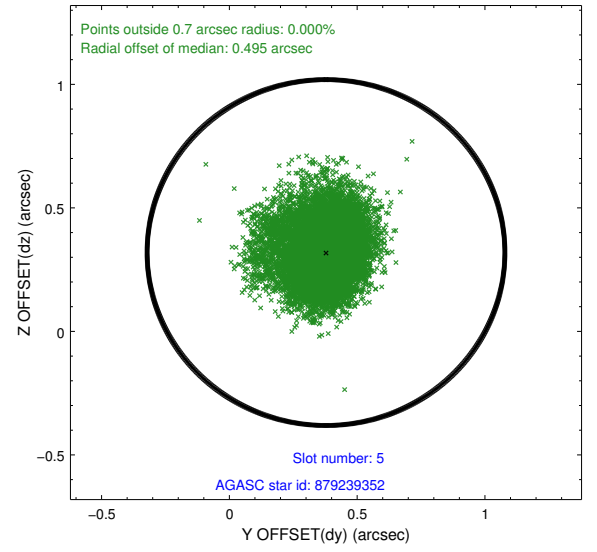
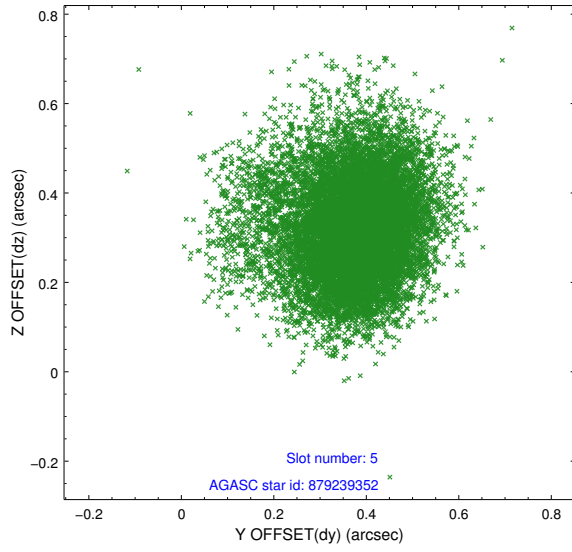
2.4.1 Slot 3



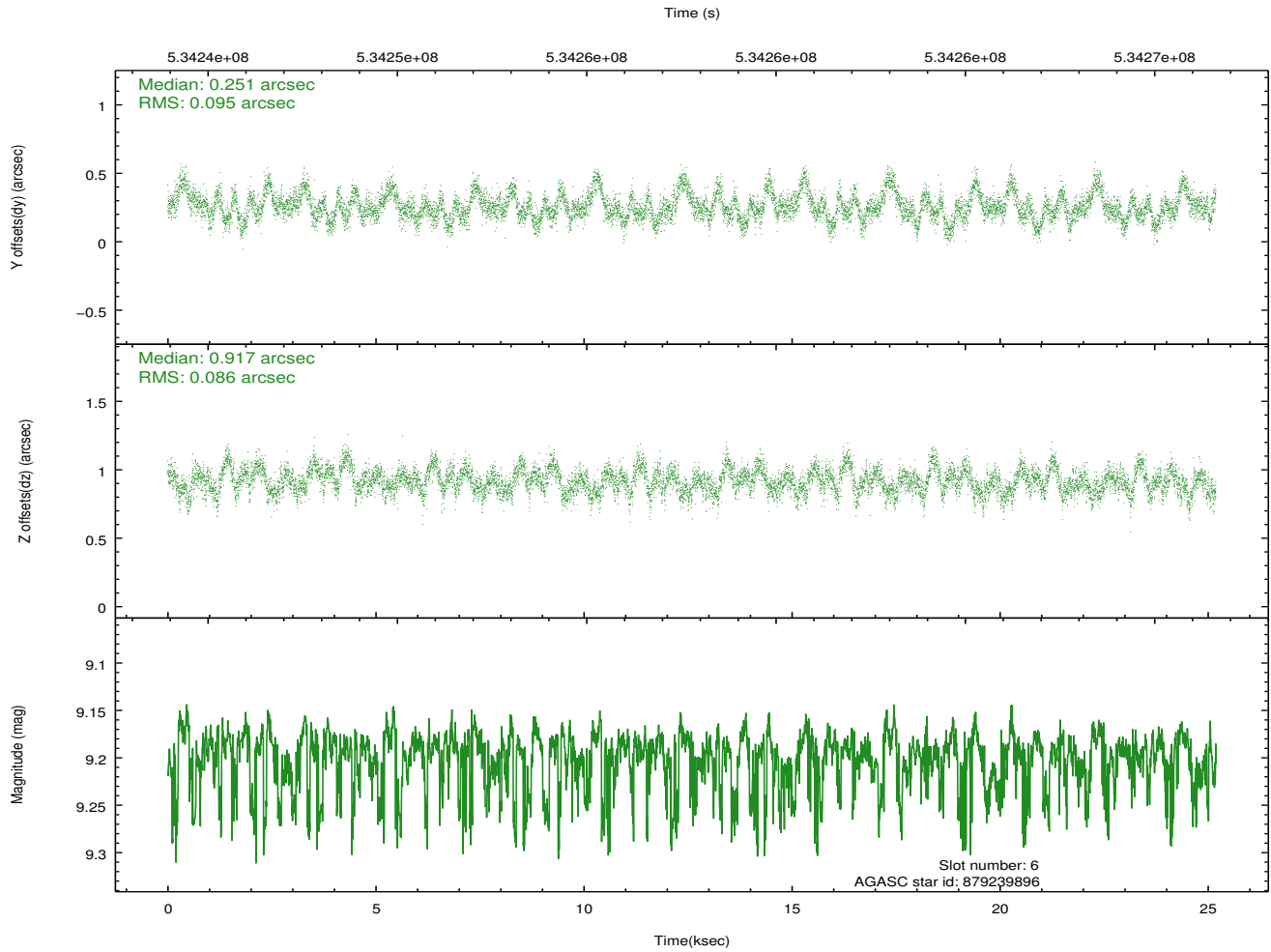
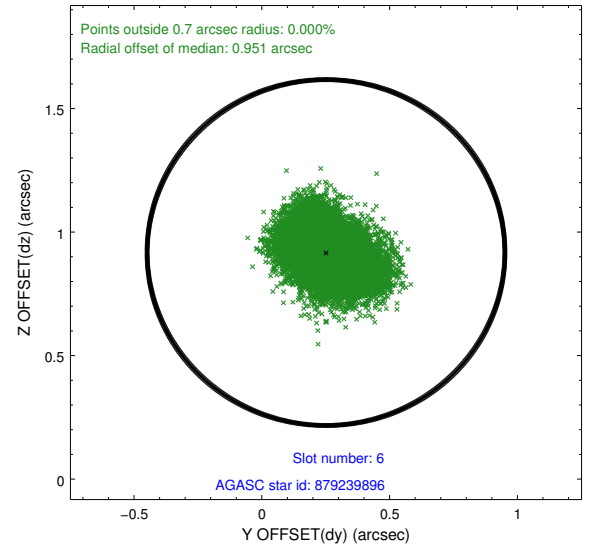
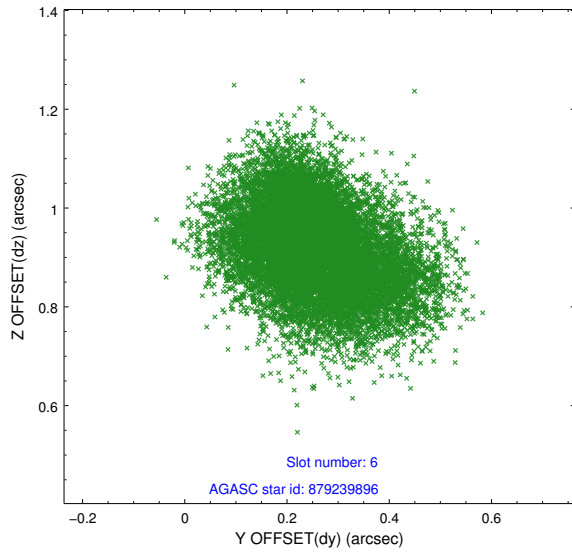
2.4.2 Slot 4



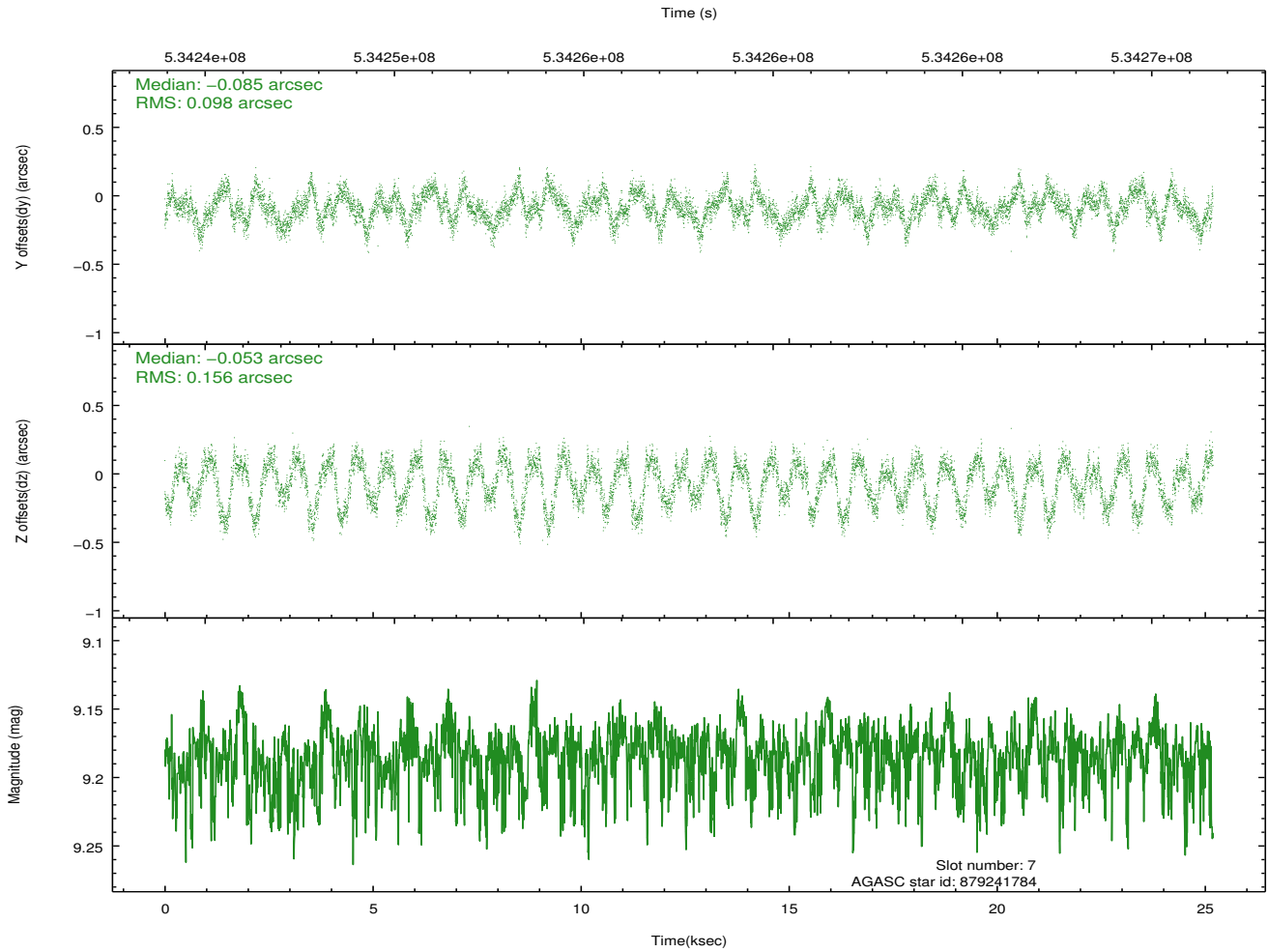
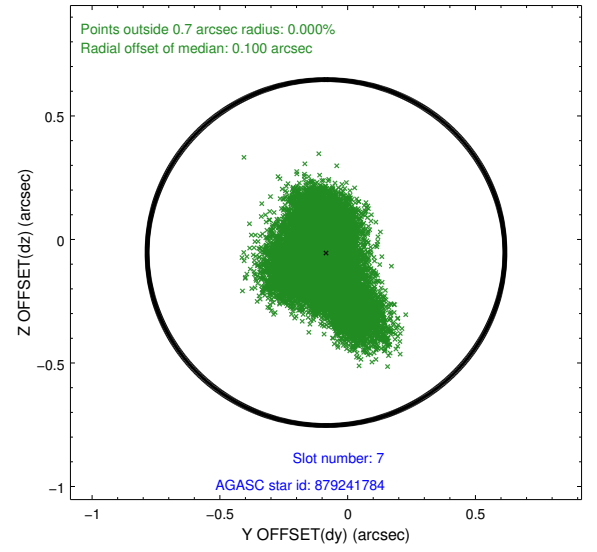
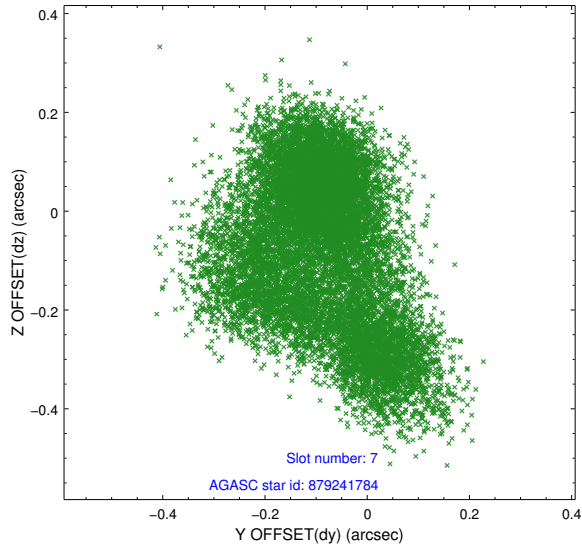
2.4.3 Slot 5



2.4.4 Slot 6

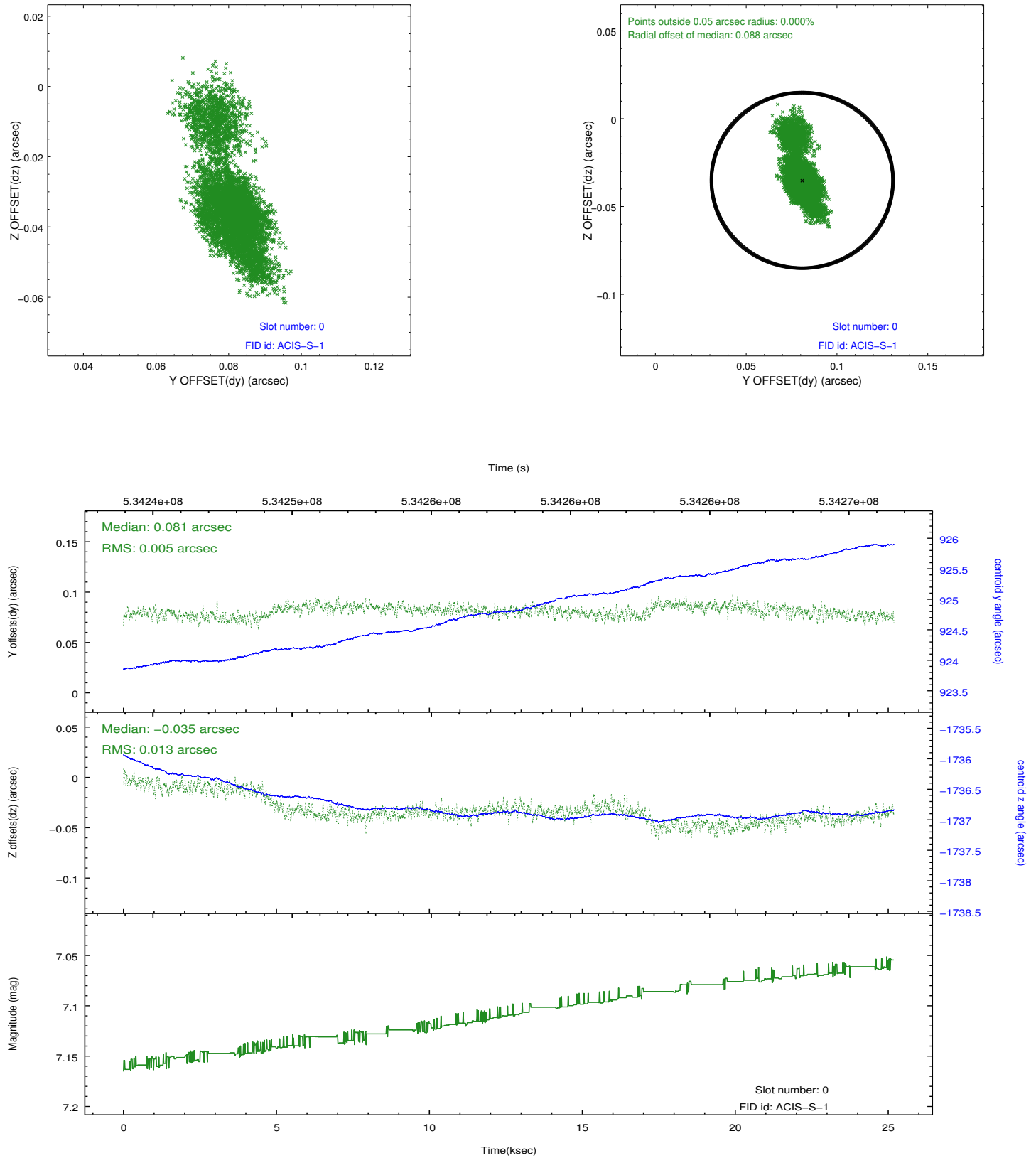


2.4.5 Slot 7

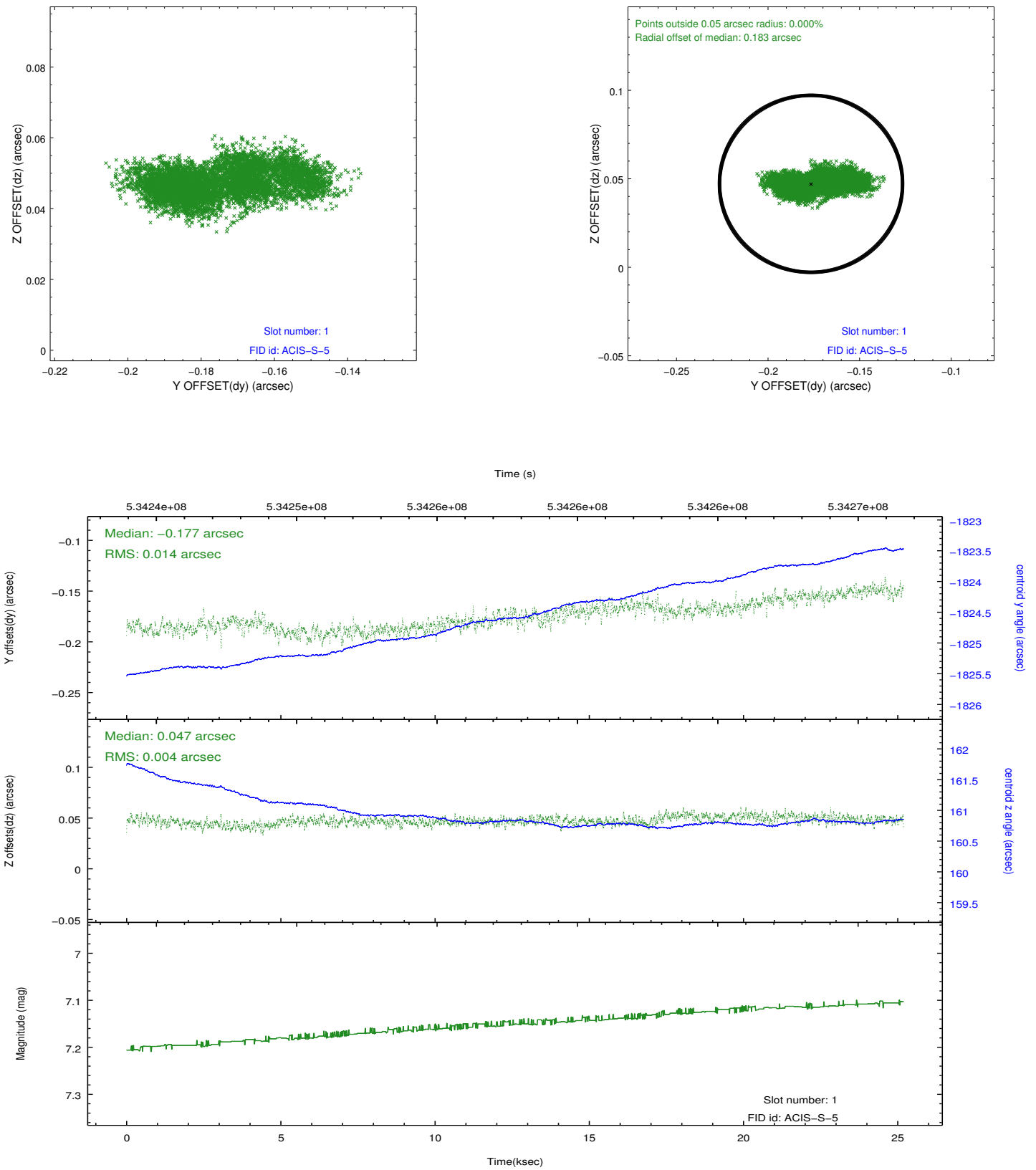


2.5 FID Slots

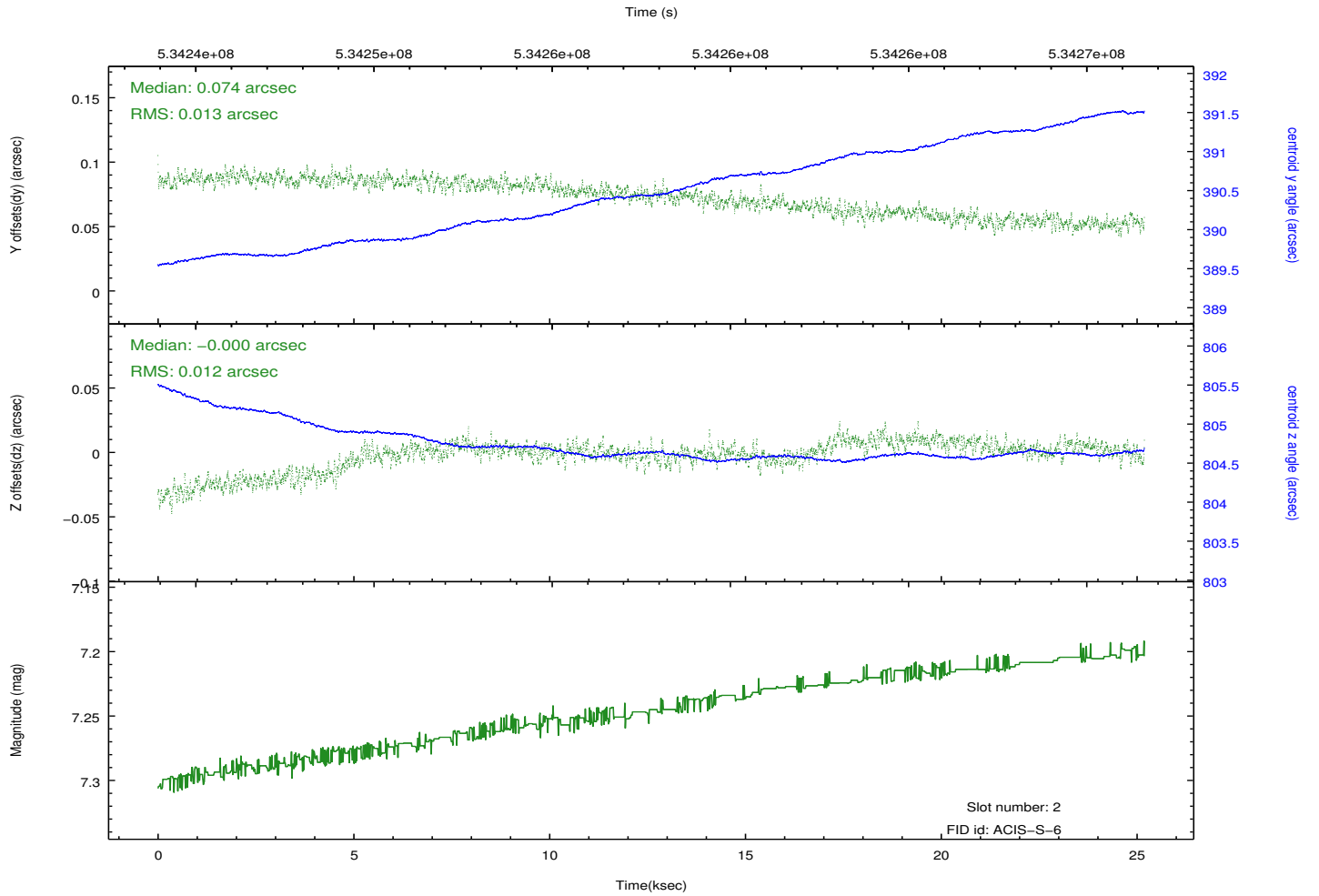
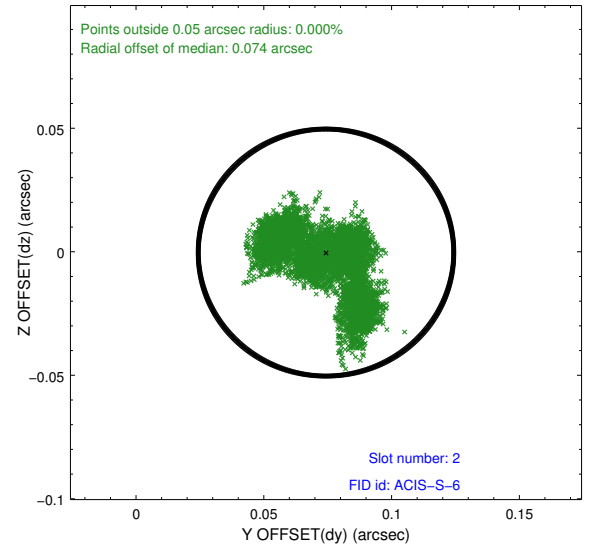
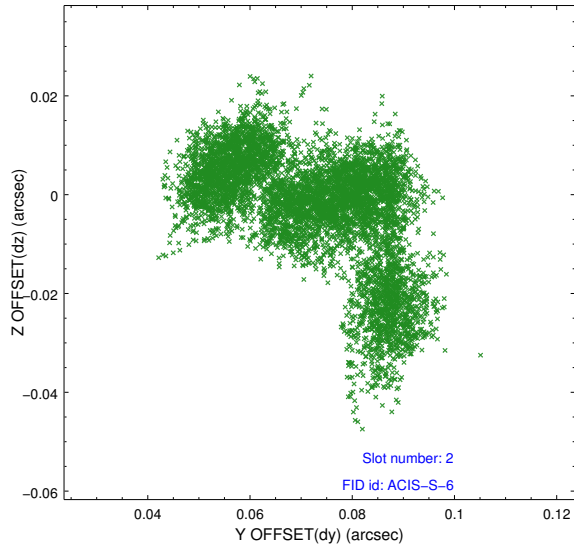
2.5.1 Slot 0



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) | 2014.12.08 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 24.963199907064 |

A.2 Comments