

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7580 - L2 Version 2
Chandra X-Ray Center

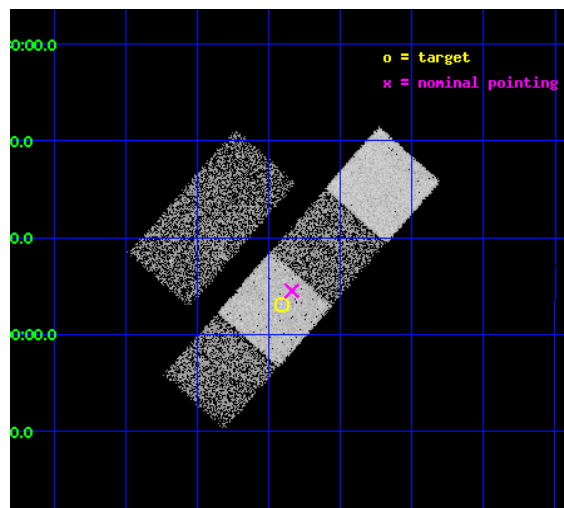
L2 Processing Date : Apr 25 2012

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1 Front

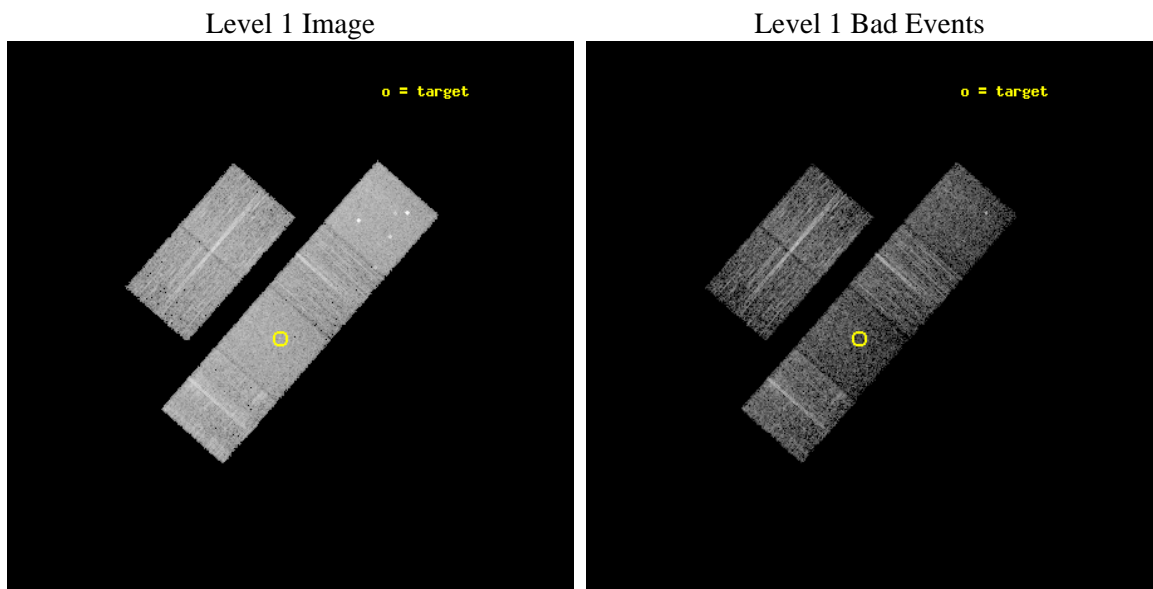
| | | |
|----------|--|---|
| seq_num | 500712 | Sequence number |
| obs_id | 7580 | Observation id |
| title | Chandra monitoring of the candidate Anomalous X-ray Pulsar AX J1845-0258 | Proposal title |
| observer | Professor Gordon Garmire | Principal investigator |
| object | AX J1845-0258 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 281.227833 | Observer's specified target RA [deg] |
| dec_targ | -2.948083 | Observer's specified target Dec [deg] |
| ra_nom | 281.20984720178 | Nominal RA [deg] |
| dec_nom | -2.9250555962368 | Nominal Dec [deg] |
| roll_nom | 131.2885766062 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 4827.3515890837 | Sum of GTIs [s] |
| livetime | 4766.2247565805 | Livetime [s] |
| ontime2 | 4827.392629087 | Sum of GTIs [s] |
| ontime3 | 4827.2284690738 | Sum of GTIs [s] |
| ontime5 | 4827.3105490804 | Sum of GTIs [s] |
| ontime6 | 4827.2695090771 | Sum of GTIs [s] |
| ontime7 | 4827.3515890837 | Sum of GTIs [s] |
| ontime8 | 4827.1874290705 | Sum of GTIs [s] |
| l2events | 57269 | Number of level 2 events |



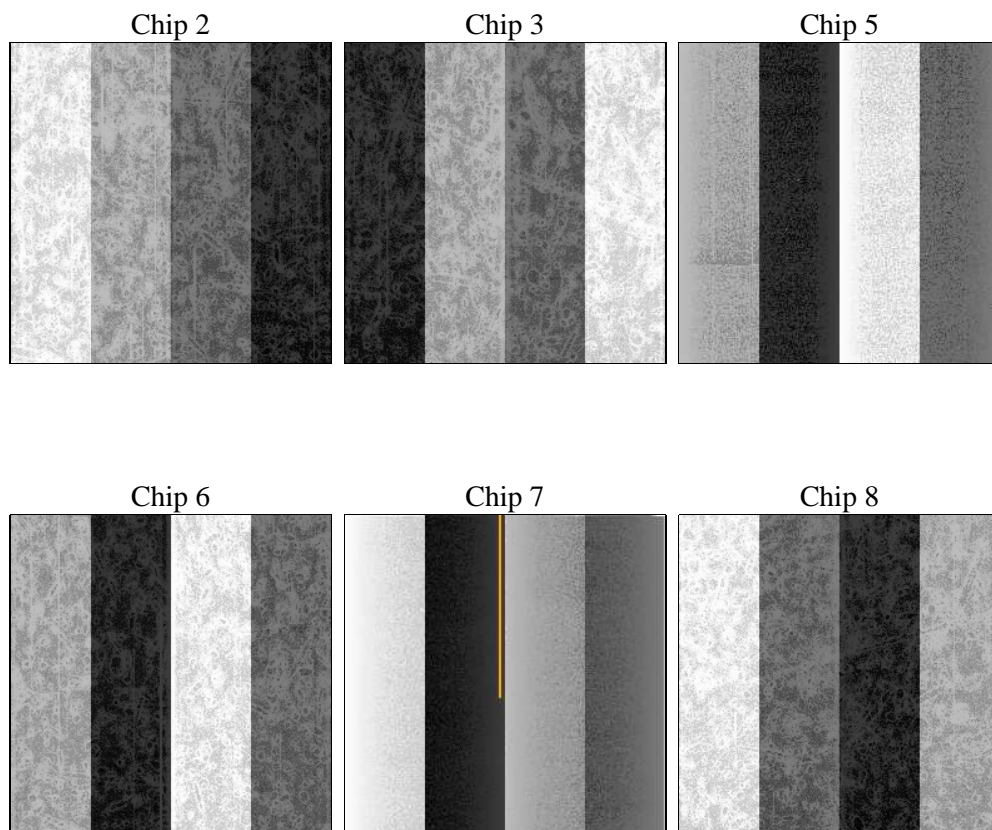
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 4785.390000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 4827.3515890837 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime2 | 4827.392629087 | Sum of GTIs [s] |
| date | 2012-04-25T20:49:24 | Date and time of file creation | ontime3 | 4827.2284690738 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 4827.3105490804 | Sum of GTIs [s] |
| | | | ontime6 | 4827.2695090771 | Sum of GTIs [s] |
| | | | ontime7 | 4827.3515890837 | Sum of GTIs [s] |
| | | | ontime8 | 4827.1874290705 | Sum of GTIs [s] |
| | | | l1events | 261979 | Number of level 1 events |

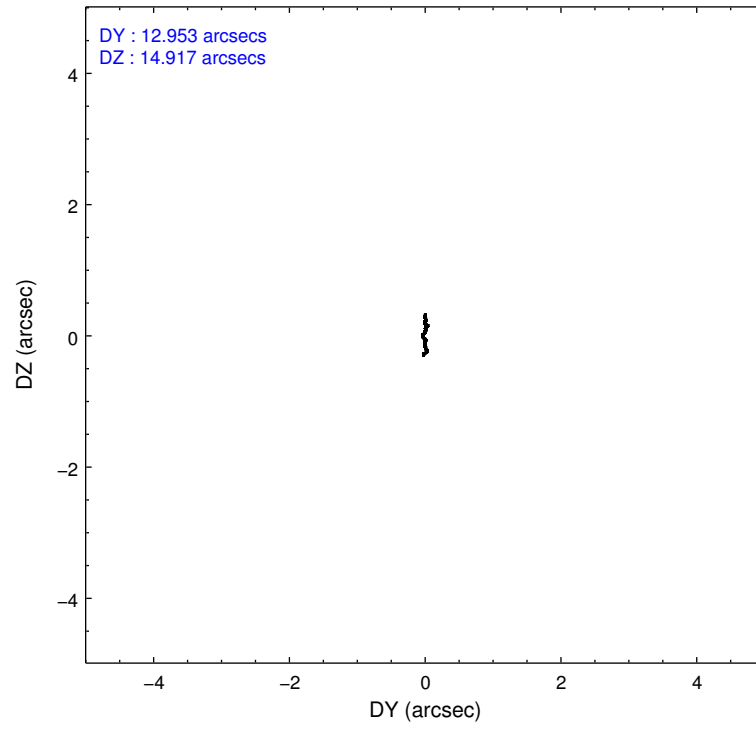
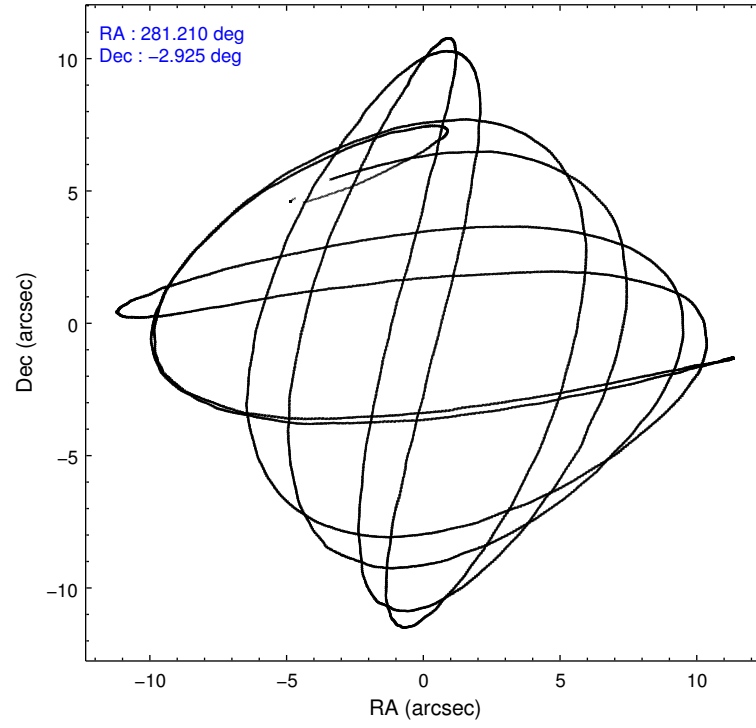
2.1.4 Events

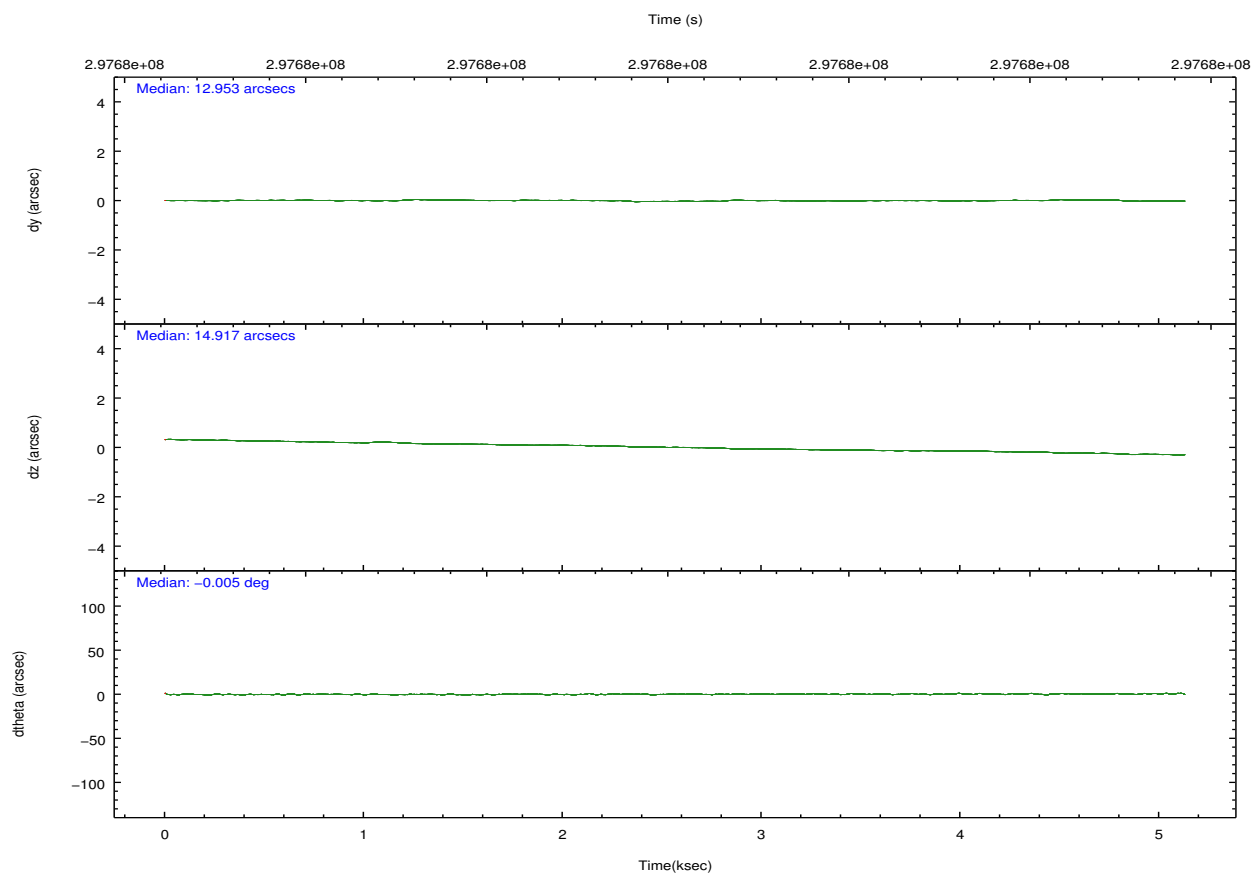
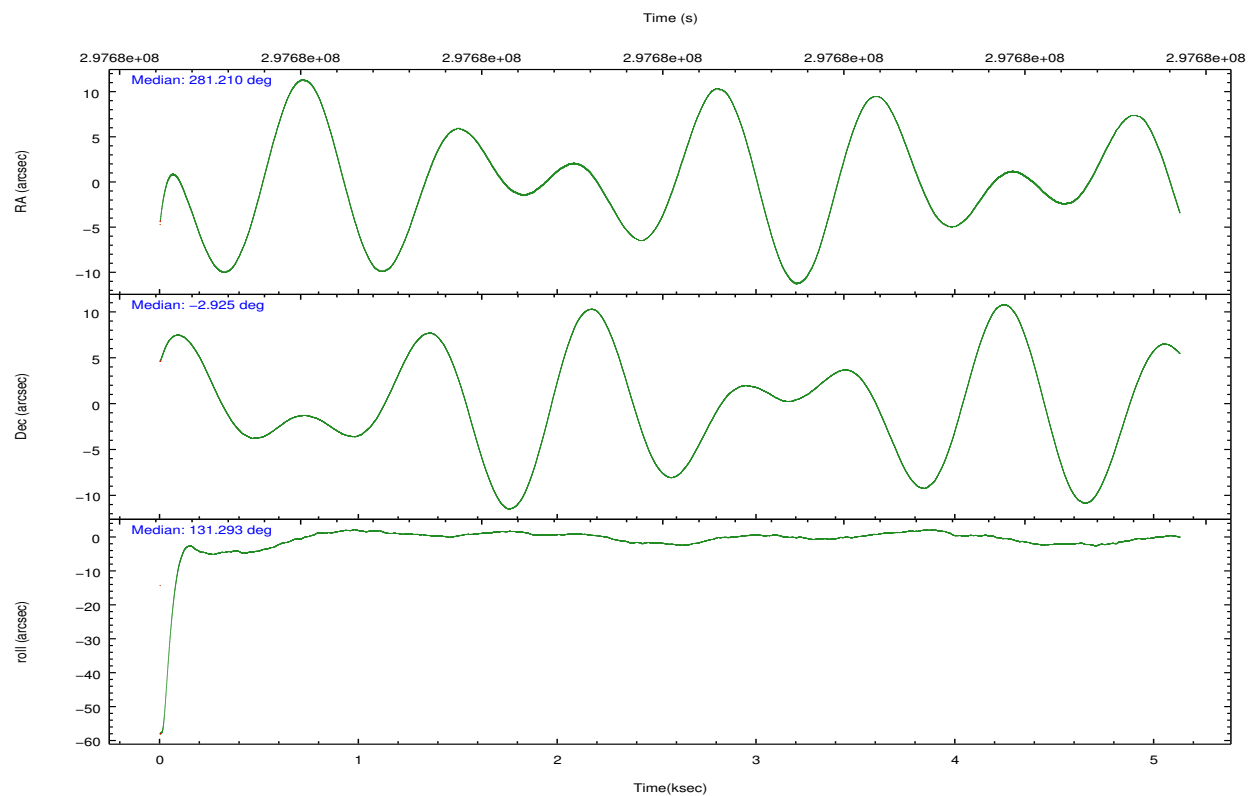
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 43199 | 35492 | 53208 | 39510 | 41835 | 48735 | grade 0 events | 1438 | 1447 | 3866 | 1594 | 1869 | 3299 |
| rejected events | 39257 | 31722 | 25619 | 35378 | 22340 | 37019 | | 3% | 4% | 7% | 4% | 4% | 6% |
| rejected % | 90% | 89% | 48% | 89% | 53% | 75% | grade 1 events | 28 | 19 | 117 | 25 | 58 | 26 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 976 | 755 | 8137 | 883 | 4153 | 2708 |
| | | | | | | | | 2% | 2% | 15% | 2% | 9% | 5% |
| | | | | | | | grade 3 events | 419 | 442 | 1158 | 448 | 1746 | 1243 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 397 | 417 | 1090 | 409 | 1748 | 1175 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 1275 | 1478 | 4095 | 1453 | 4383 | 2114 |
| | | | | | | | | 2% | 4% | 7% | 3% | 10% | 4% |
| | | | | | | | grade 6 events | 714 | 712 | 13369 | 804 | 10001 | 3296 |
| | | | | | | | | 1% | 2% | 25% | 2% | 23% | 6% |
| | | | | | | | grade 7 events | 37952 | 30222 | 21376 | 33894 | 17877 | 34874 |
| | | | | | | | | 87% | 85% | 40% | 85% | 42% | 71% |

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 | FAINT | FAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 281.235915 | 281.2098472017799 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | -2.933509 | -2.925055596236804 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 131.133430 | 131.2885766062006 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | O2 | 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 | Y | Y |
| [s] Observation start time (MET) | 297676826.184000 | 297675732.03108 | CCD S5 on | N | N |
| Observation start date | 2007-06-08T07:59:21 | 2007-06-08T07:42:12 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 297681612.184000 | 297681837.44387 | On-chip summing requested | N | N |
| Observation end date | 2007-06-08T09:19:07 | 2007-06-08T09:23:57 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



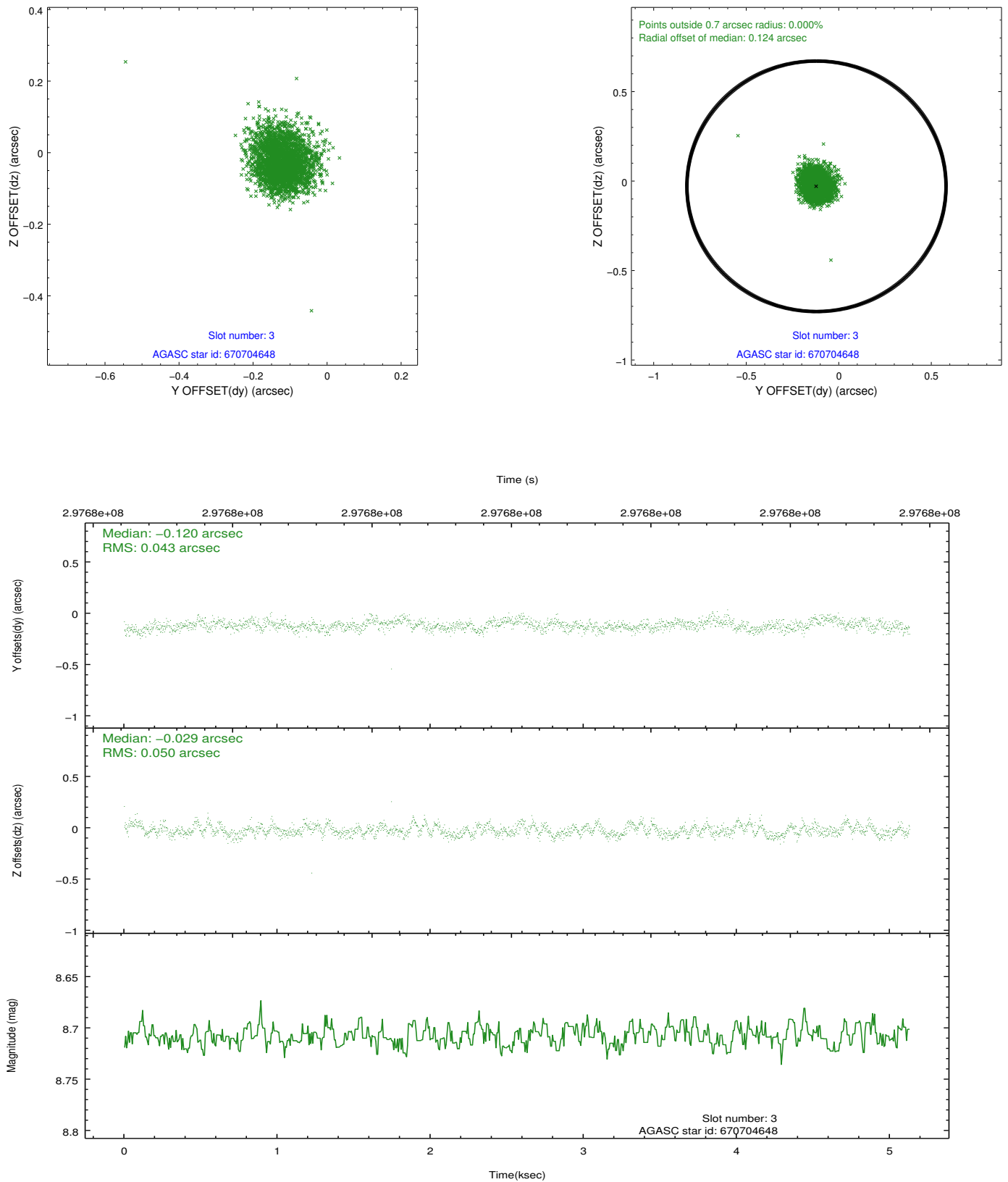


Slot Statistics

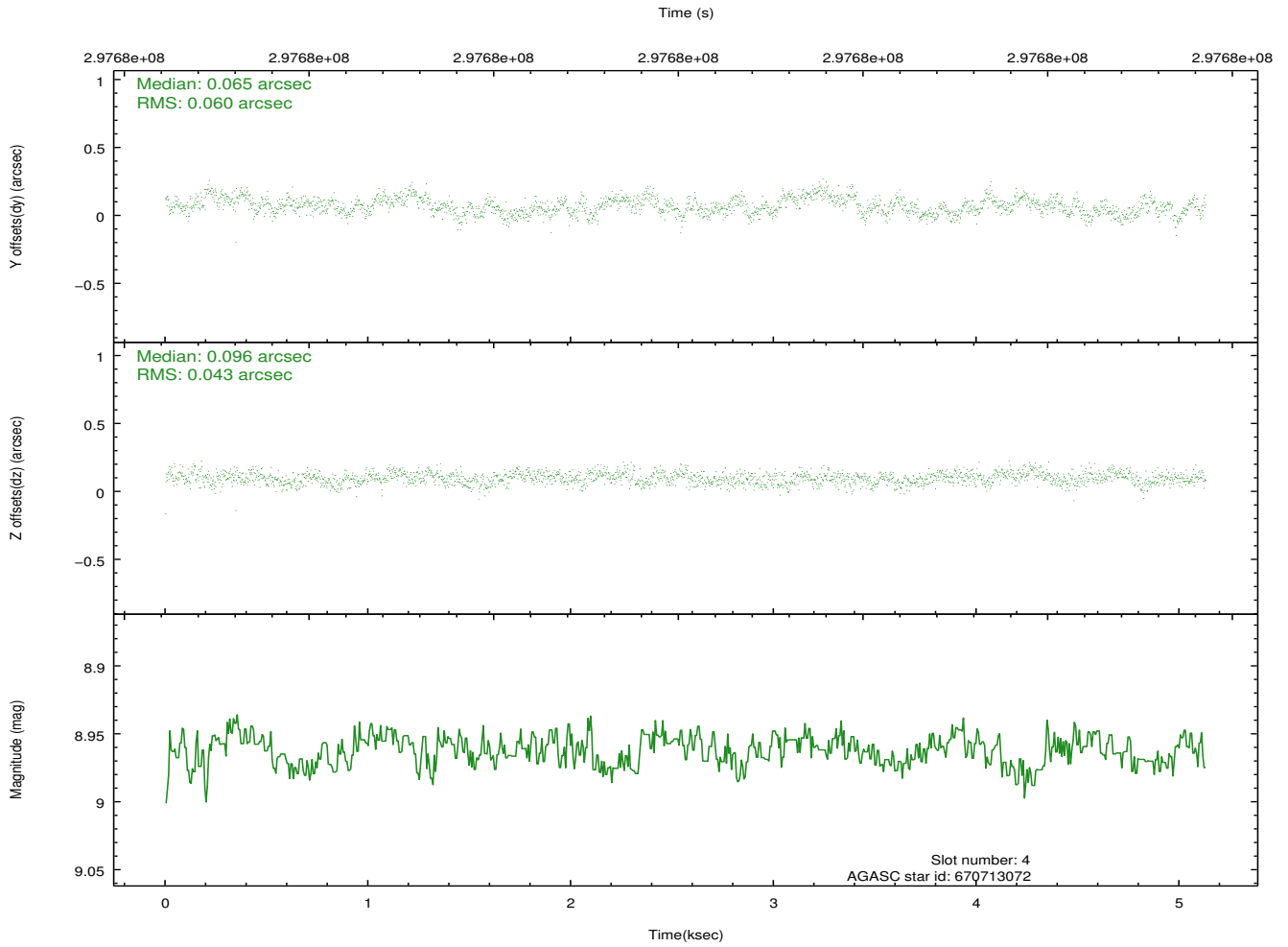
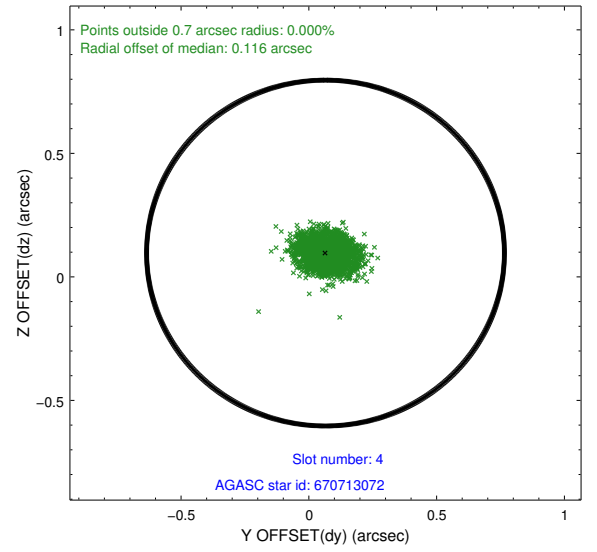
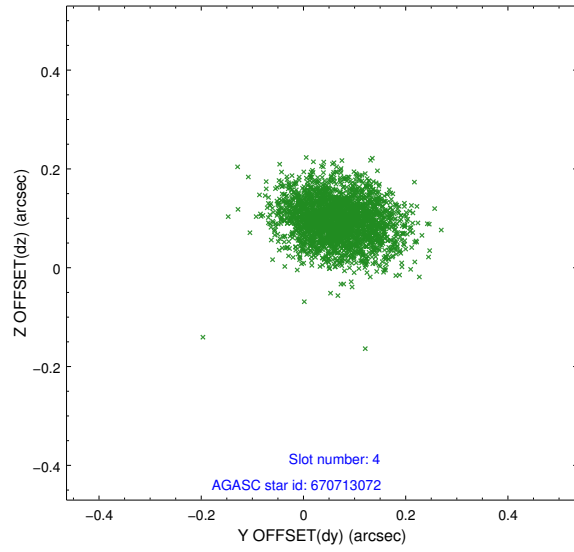
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.09 | 1252 | -0.049 | -0.035 | 0.008 | 0.014 | 0.000000 | 0.000000 | -765.89 | -1736.25 |
| 1 | FID | ACIS-S-4 | 7.19 | 1252 | 0.167 | 0.033 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2147.04 | 171.12 |
| 2 | FID | ACIS-S-5 | 7.22 | 1252 | -0.149 | 0.011 | 0.008 | 0.013 | 0.000000 | 0.000000 | -1817.34 | 166.06 |
| 3 | GUIDE | 670704648 | 8.71 | 2499 | -0.120 | -0.029 | 0.069 | 0.110 | 280.736676 | -2.935747 | 1174.04 | 1357.55 |
| 4 | GUIDE | 670713072 | 8.96 | 2502 | 0.065 | 0.096 | 0.078 | 0.127 | 281.205407 | -3.604132 | -1745.94 | 1671.65 |
| 5 | GUIDE | 670713328 | 7.56 | 2502 | -0.152 | -0.087 | 0.089 | 0.131 | 280.824681 | -3.187771 | 281.90 | 1716.28 |
| 6 | GUIDE | 670714008 | 9.01 | 2502 | 0.084 | 0.049 | 0.082 | 0.133 | 281.129237 | -3.153193 | -343.47 | 810.00 |
| 7 | GUIDE | 670830264 | 8.75 | 2501 | 0.119 | -0.036 | 0.073 | 0.121 | 281.361536 | -3.231556 | -1105.45 | 366.30 |

2.4 Star Slots

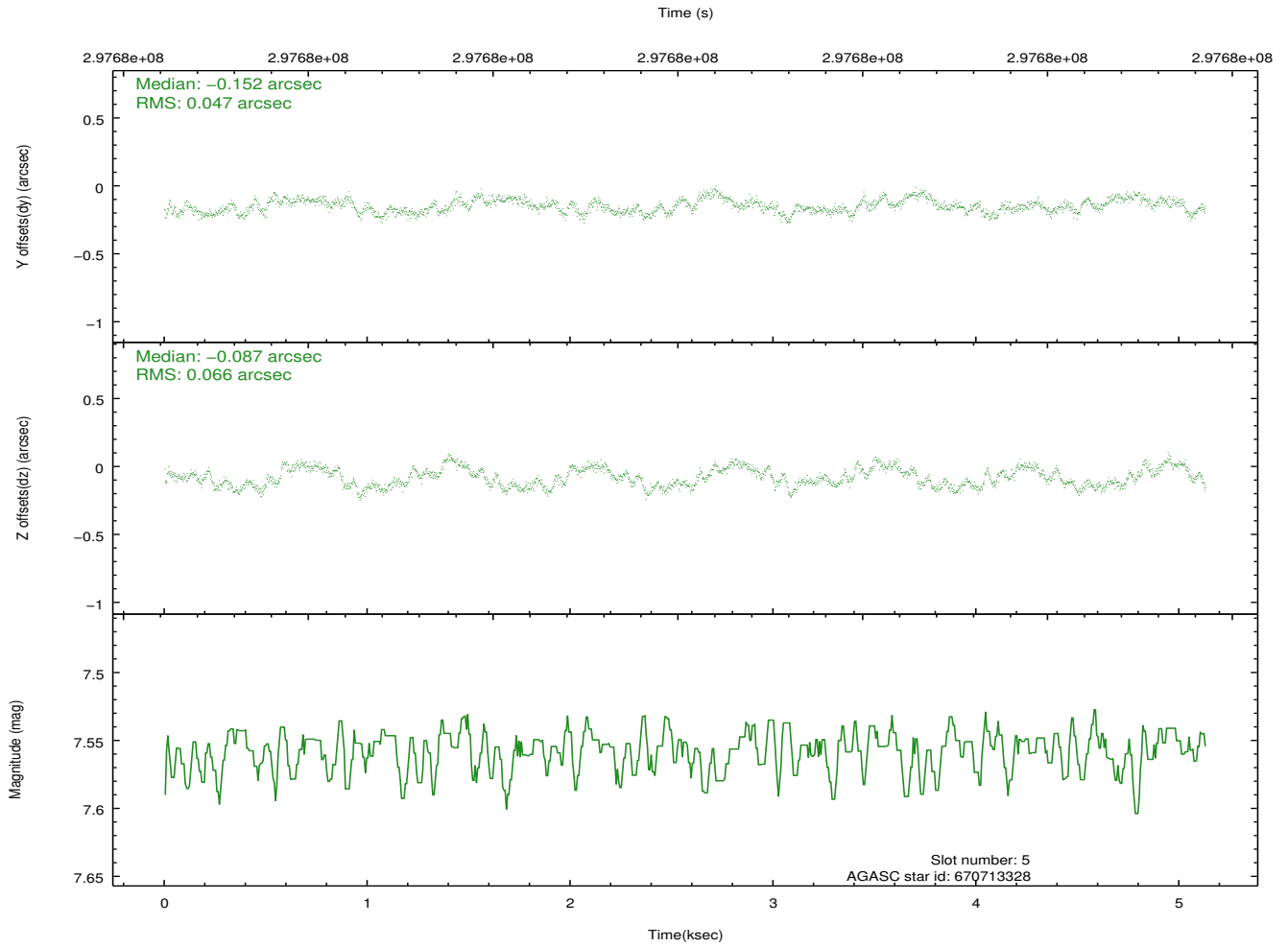
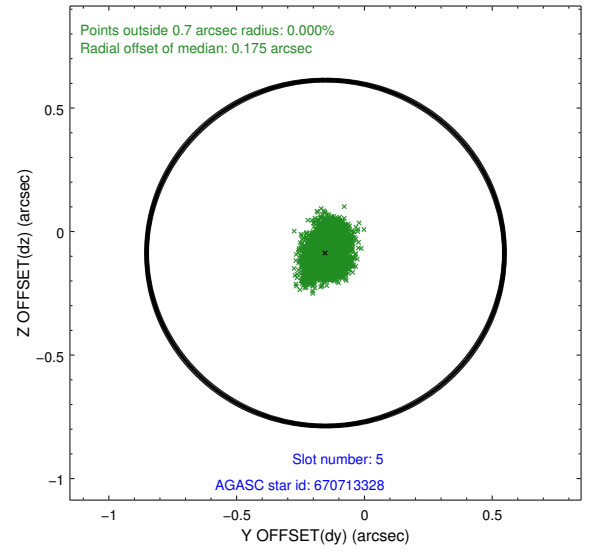
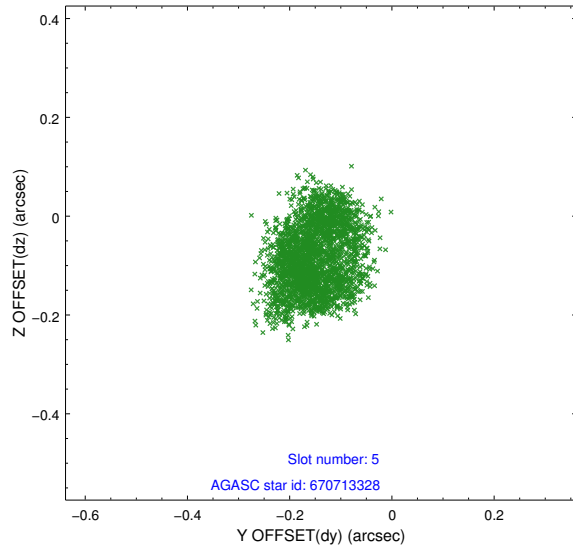
2.4.1 Slot 3



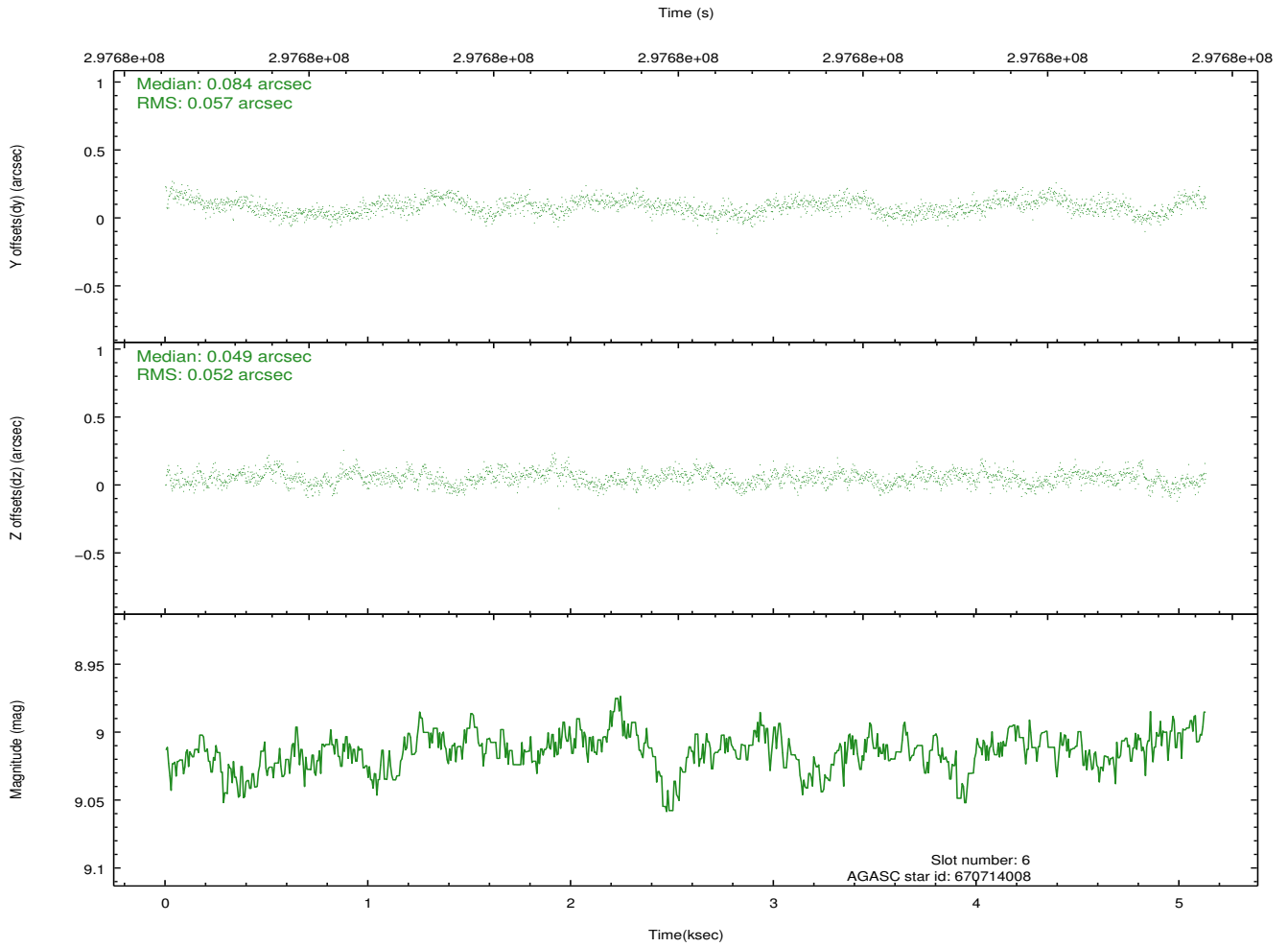
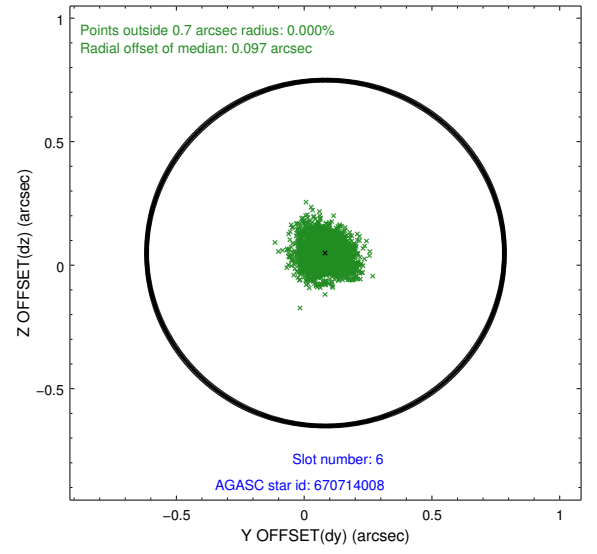
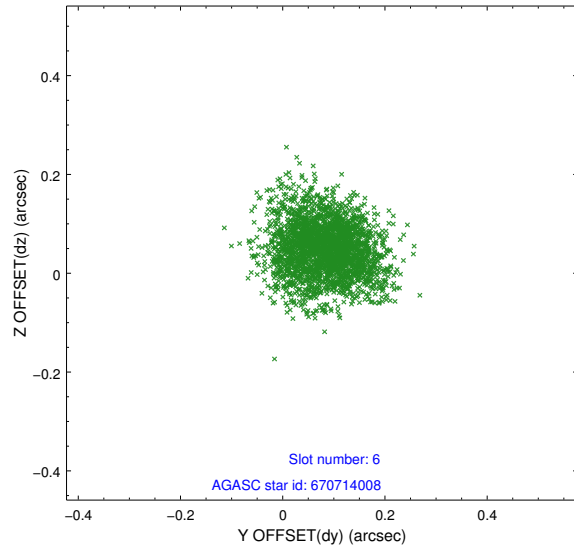
2.4.2 Slot 4



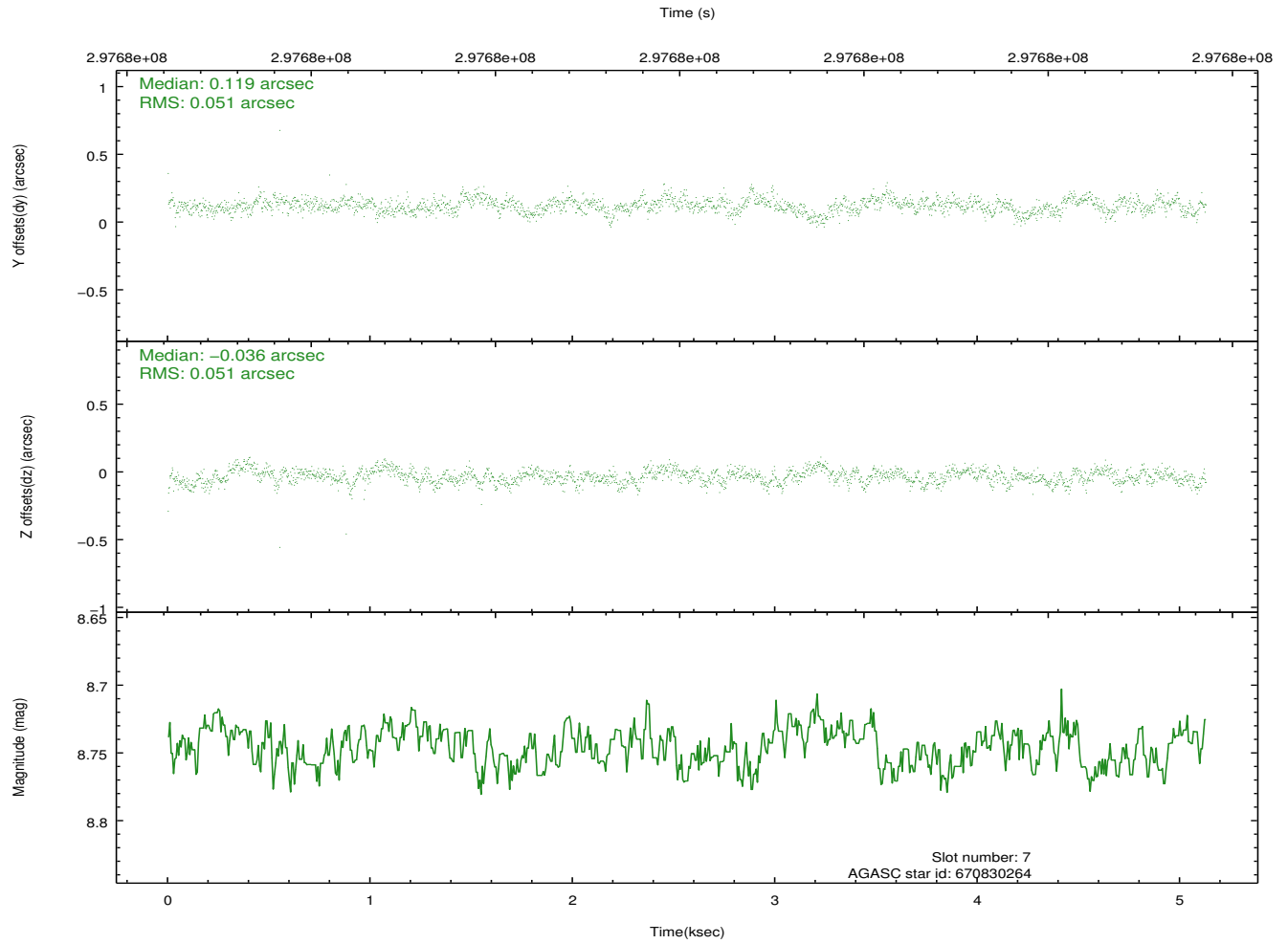
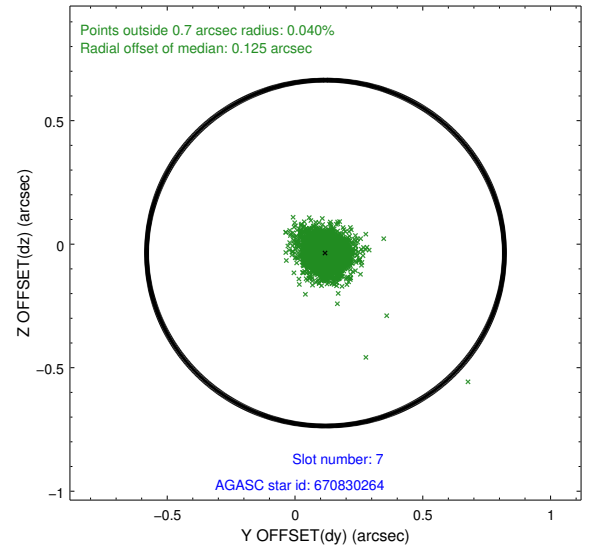
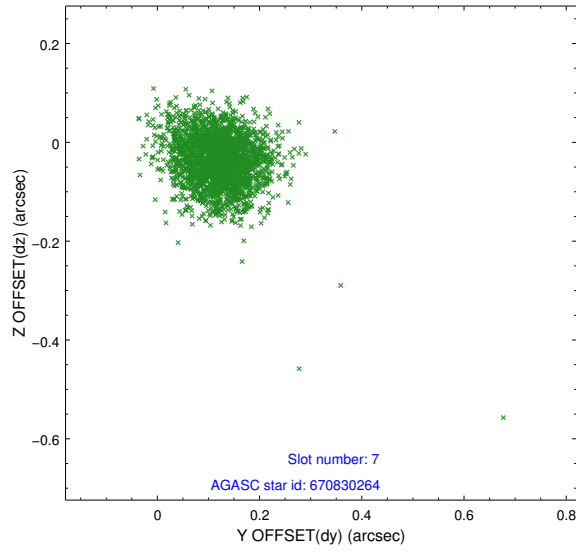
2.4.3 Slot 5



2.4.4 Slot 6

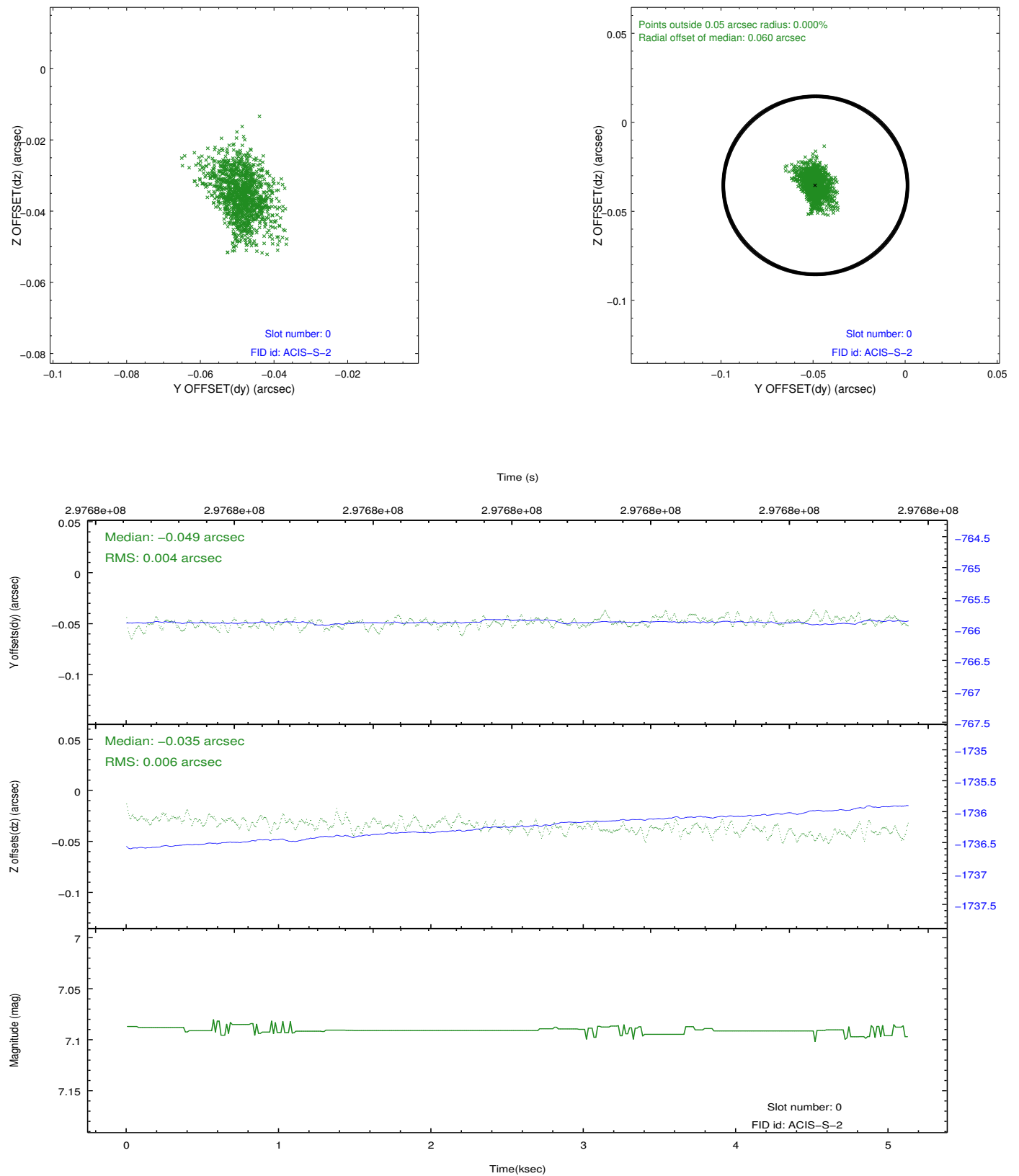


2.4.5 Slot 7

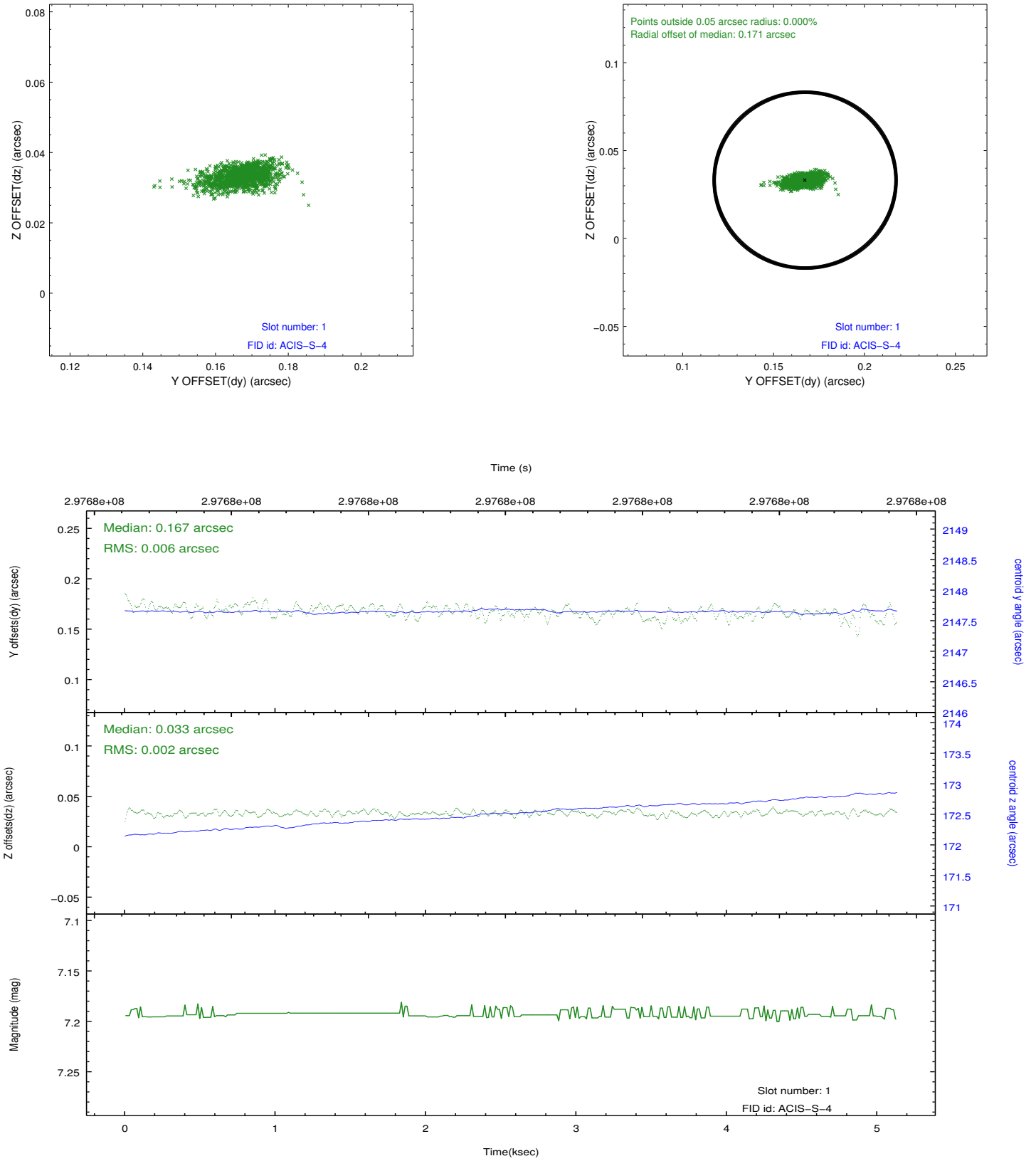


2.5 FID Slots

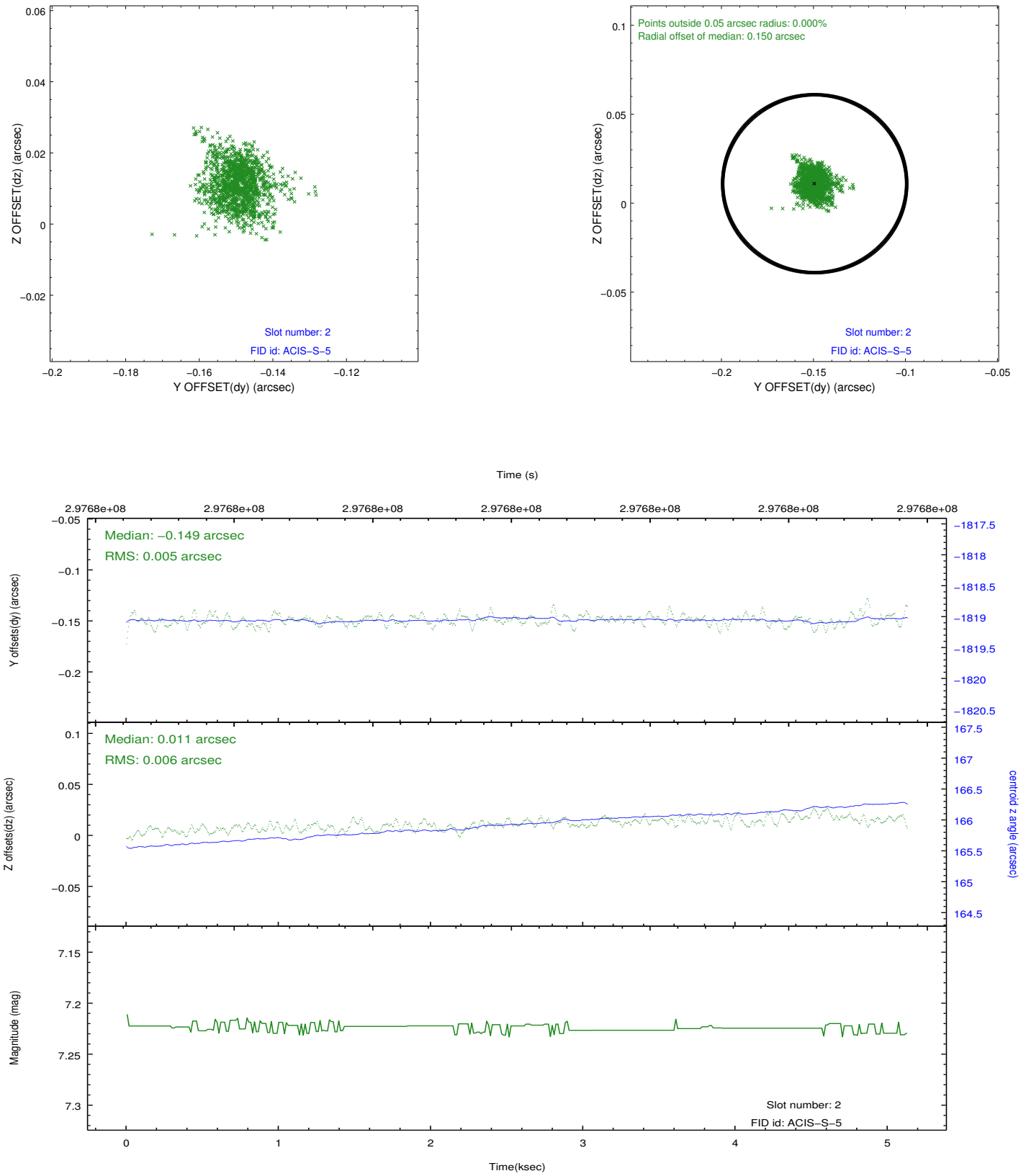
2.5.1 Slot 0



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) | 2012.04.26 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.82879998 |

A.2 Comments