

V&V Reference Report

L2 ASCDS Version : 8.5.1

Observation 6075 - L2 Version 3
Chandra X-Ray Center

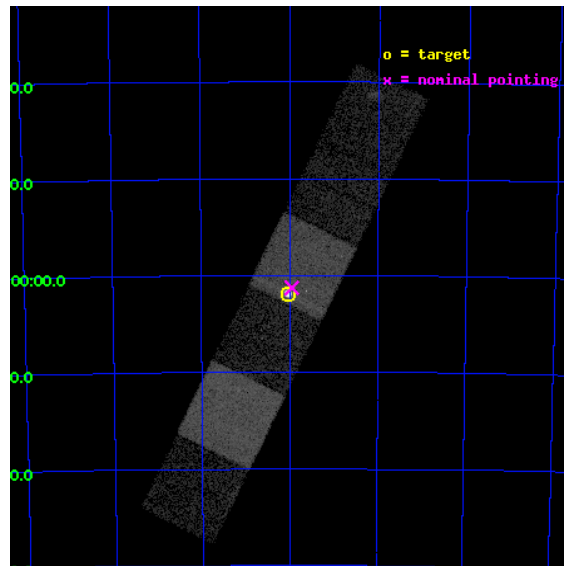
L2 Processing Date : Dec 14 2012

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1 Front

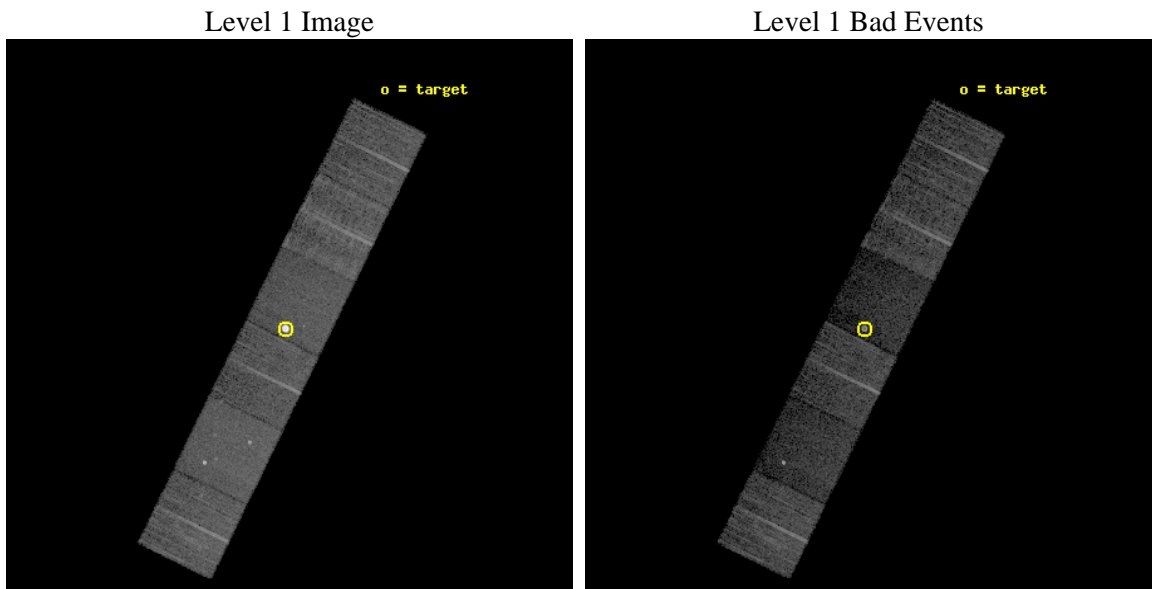
| | | |
|----------|--|---|
| seq_num | 590402 | Sequence number |
| obs_id | 6075 | Observation id |
| title | AO6A ACIS-S Calibration Observations of E0102-72 | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | E0102-72[S3,-120,-1,0,0] | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 16.01 | Observer's specified target RA [deg] |
| dec_targ | -72.032028 | Observer's specified target Dec [deg] |
| ra_nom | 15.987183541175 | Nominal RA [deg] |
| dec_nom | -72.021435381439 | Nominal Dec [deg] |
| roll_nom | 296.11215131804 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 7954.7551374137 | Sum of GTIs [s] |
| livetime | 7854.0272380853 | Livetime [s] |
| ontime4 | 7954.796177417 | Sum of GTIs [s] |
| ontime5 | 7954.7140974104 | Sum of GTIs [s] |
| ontime6 | 7954.6730574071 | Sum of GTIs [s] |
| ontime7 | 7954.7551374137 | Sum of GTIs [s] |
| ontime8 | 7954.6320174038 | Sum of GTIs [s] |
| ontime9 | 7954.5909774303 | Sum of GTIs [s] |
| l2events | 123264 | Number of level 2 events |



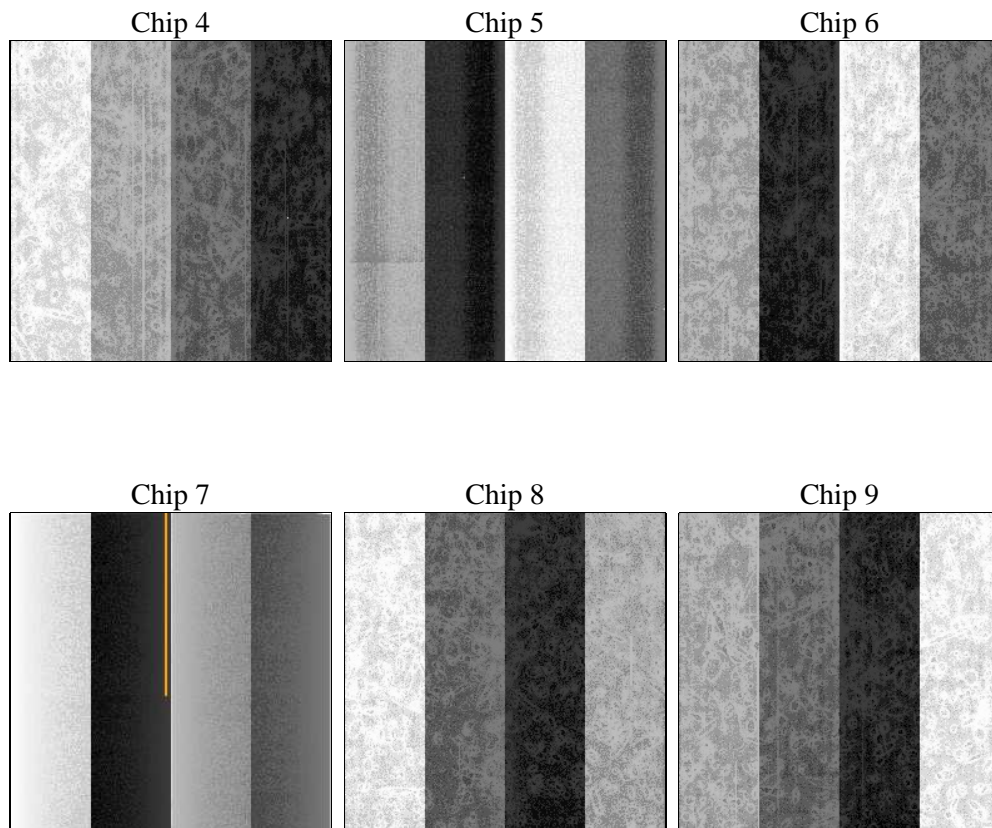
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 8000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1 | Processing system revision | ontime | 7954.7551374137 | Sum of GTIs [s] |
| caldsver | 4.5.5 | | ontime4 | 7954.796177417 | Sum of GTIs [s] |
| date | 2012-12-14T20:39:28 | Date and time of file creation | ontime5 | 7954.7140974104 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 7954.6730574071 | Sum of GTIs [s] |
| | | | ontime7 | 7954.7551374137 | Sum of GTIs [s] |
| | | | ontime8 | 7954.6320174038 | Sum of GTIs [s] |
| | | | ontime9 | 7954.5909774303 | Sum of GTIs [s] |
| | | | l1events | 378746 | Number of level 1 events |

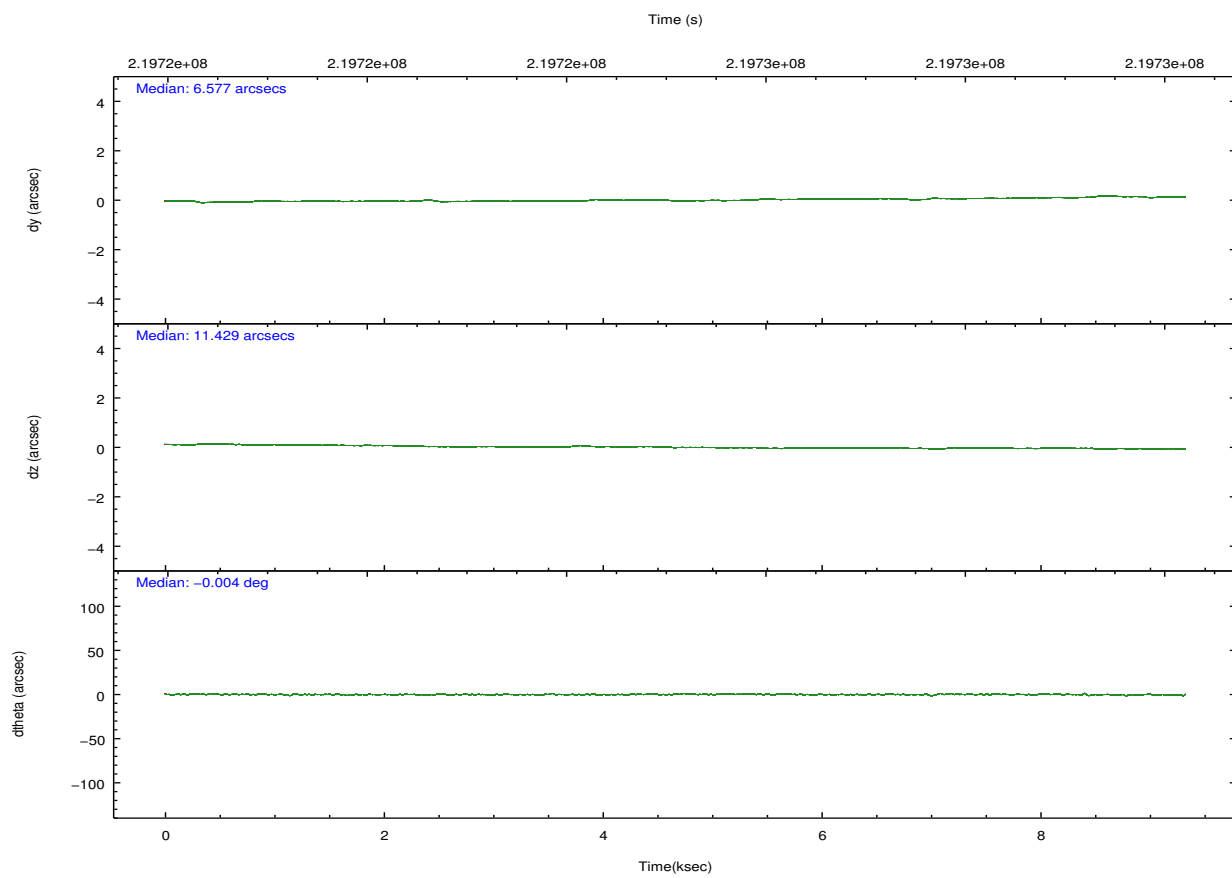
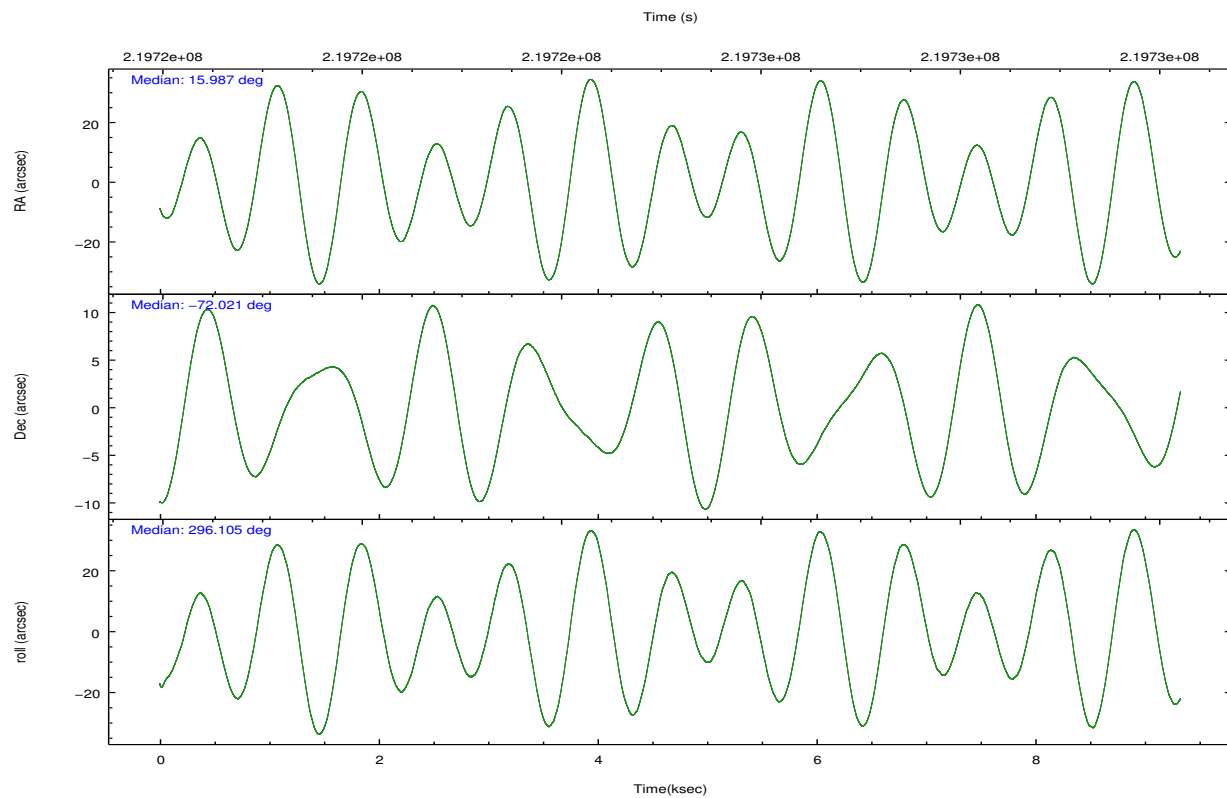
2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 | | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|-------|-------|-------|--------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 58734 | 61240 | 49858 | 101746 | 60240 | 46928 | grade 0 events | 2136 | 3661 | 2300 | 19179 | 3791 | 1860 |
| rejected events | 53432 | 28611 | 44374 | 24841 | 46852 | 41966 | | 3% | 5% | 4% | 18% | 6% | 3% |
| rejected % | 90% | 46% | 89% | 24% | 77% | 89% | grade 1 events | 54 | 91 | 28 | 378 | 50 | 29 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1192 | 10202 | 1126 | 20074 | 2978 | 1008 |
| | | | | | | | | 2% | 16% | 2% | 19% | 4% | 2% |
| | | | | | | | grade 3 events | 622 | 1501 | 544 | 8995 | 1460 | 578 |
| | | | | | | | | 1% | 2% | 1% | 8% | 2% | 1% |
| | | | | | | | grade 4 events | 530 | 1539 | 554 | 8700 | 1404 | 573 |
| | | | | | | | | 0% | 2% | 1% | 8% | 2% | 1% |
| | | | | | | | grade 5 events | 1590 | 5281 | 1575 | 5826 | 2413 | 1828 |
| | | | | | | | | 2% | 8% | 3% | 5% | 4% | 3% |
| | | | | | | | grade 6 events | 828 | 15746 | 966 | 20029 | 3758 | 950 |
| | | | | | | | | 1% | 25% | 1% | 19% | 6% | 2% |
| | | | | | | | grade 7 events | 51782 | 23219 | 42765 | 18565 | 44386 | 40102 |
| | | | | | | | | 88% | 37% | 85% | 18% | 73% | 85% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-456789 | ACIS-456789 | 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 | 15.913361 | 15.98718354117481 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -72.006516 | -72.02143538143869 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 295.885307 | 296.1121513180399 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 215654464.184000 | 215654464.184000 | | | |
| [s] Window stop time (MET) | 220838464.184000 | 220838464.184000 | | | |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 219721753.184000 | 219720222.60774 | | | |
| Observation start date | 2004-12-18T01:48:09 | 2004-12-18T01:23:42 | | | |
| [s] Observation end time (MET) | 219729753.184000 | 219730552.5582 | | | |
| Observation end date | 2004-12-18T04:01:29 | 2004-12-18T04:15:52 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect

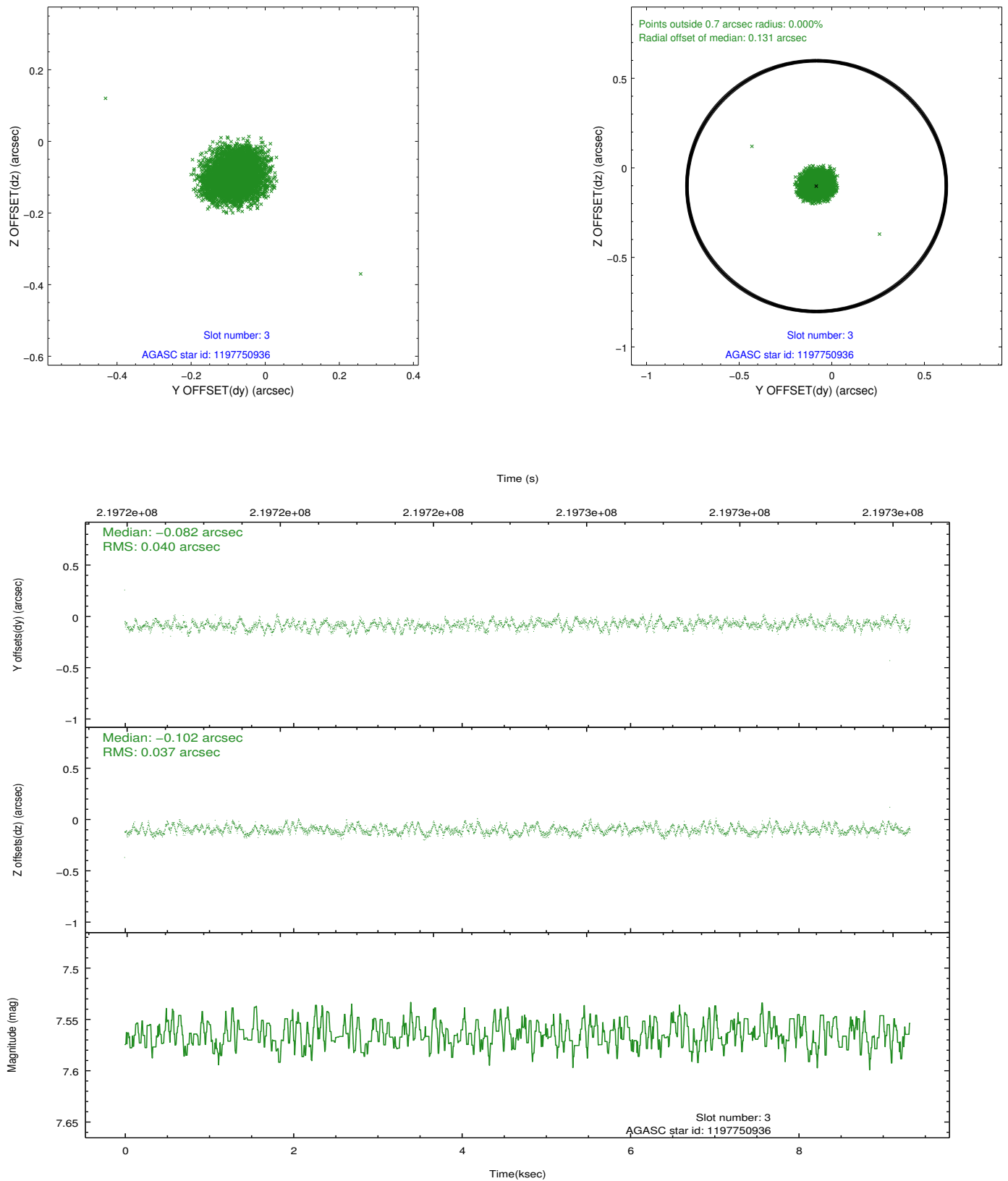


Slot Statistics

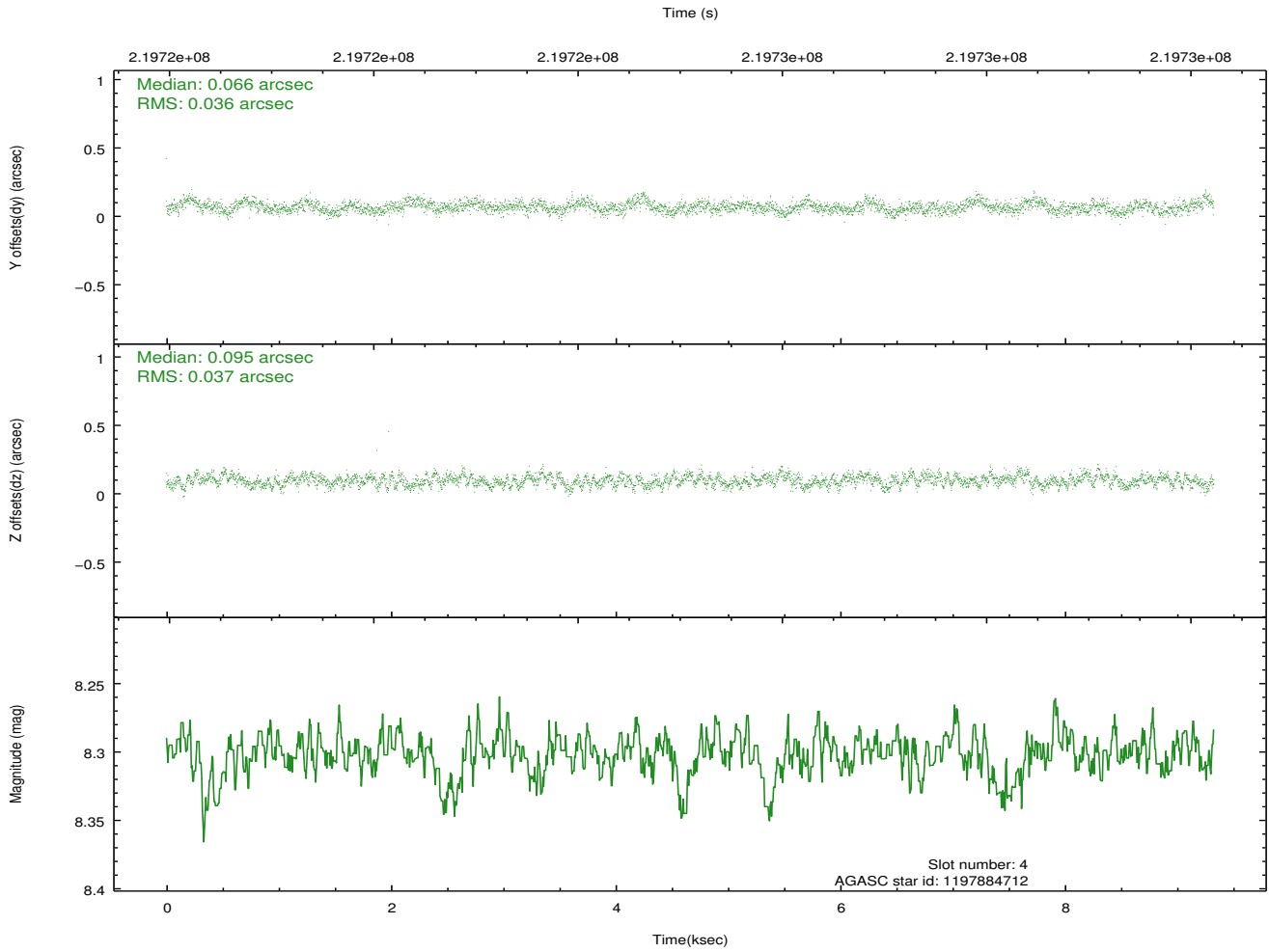
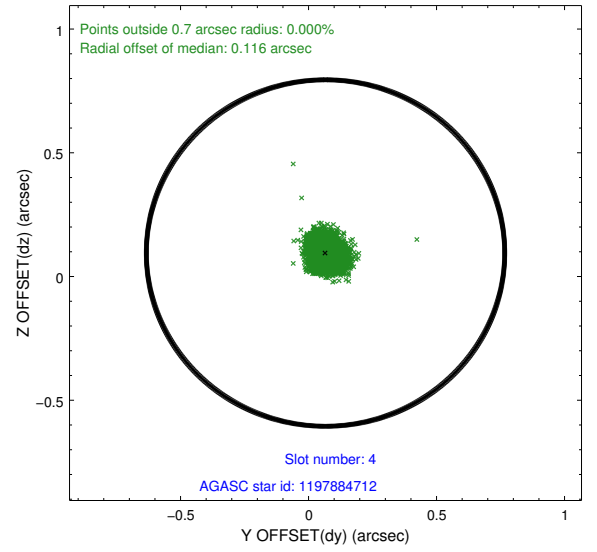
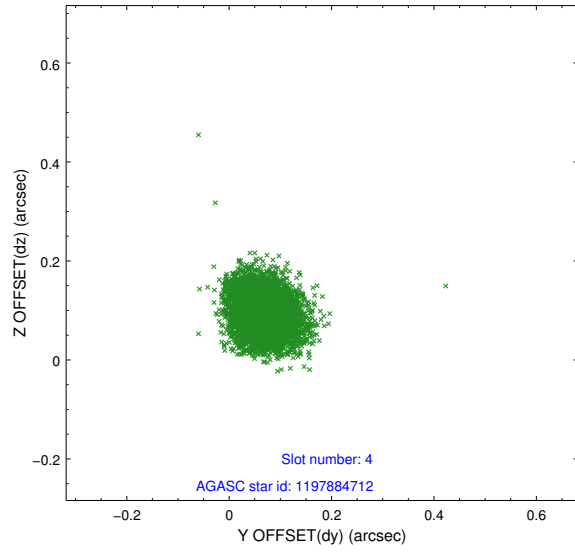
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 2276 | -0.054 | -0.040 | 0.015 | 0.021 | 0.000000 | 0.000000 | -759.38 | -1732.72 |
| 1 | FID | ACIS-S-4 | 7.20 | 2276 | 0.054 | 0.021 | 0.011 | 0.017 | 0.000000 | 0.000000 | 2153.74 | 175.23 |
| 2 | FID | ACIS-S-6 | 7.35 | 2276 | -0.027 | 0.028 | 0.009 | 0.014 | 0.000000 | 0.000000 | 403.37 | 813.29 |
| 3 | GUIDE | 1197750936 | 7.57 | 4551 | -0.082 | -0.102 | 0.058 | 0.091 | 15.387940 | -71.549550 | -1738.72 | 178.21 |
| 4 | GUIDE | 1197884712 | 8.30 | 4551 | 0.066 | 0.095 | 0.054 | 0.088 | 16.087398 | -72.252690 | 880.88 | -214.89 |
| 5 | GUIDE | 1197885104 | 9.35 | 4546 | 0.098 | 0.025 | 0.090 | 0.144 | 17.845067 | -72.189368 | 1551.91 | 1611.02 |
| 6 | GUIDE | 1197885328 | 7.23 | 4550 | 0.009 | -0.020 | 0.055 | 0.084 | 16.283090 | -71.733943 | -699.07 | 804.04 |
| 7 | GUIDE | 1198189696 | 7.39 | 4549 | -0.090 | 0.001 | 0.057 | 0.093 | 15.223750 | -72.697522 | 1919.79 | -1751.68 |

2.4 Star Slots

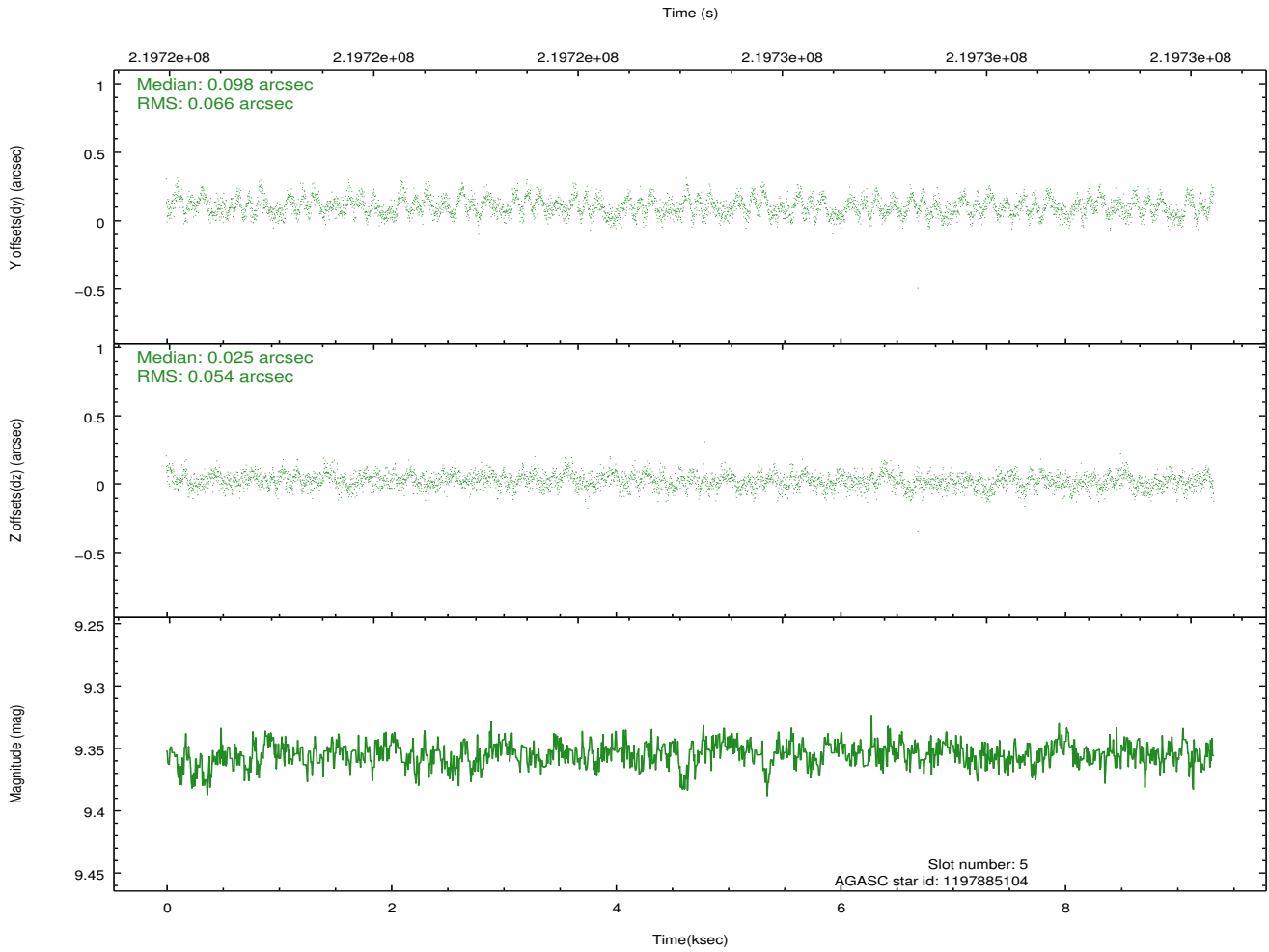
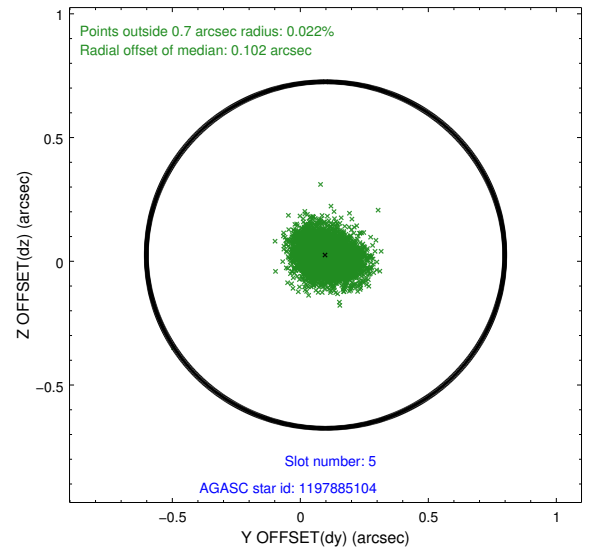
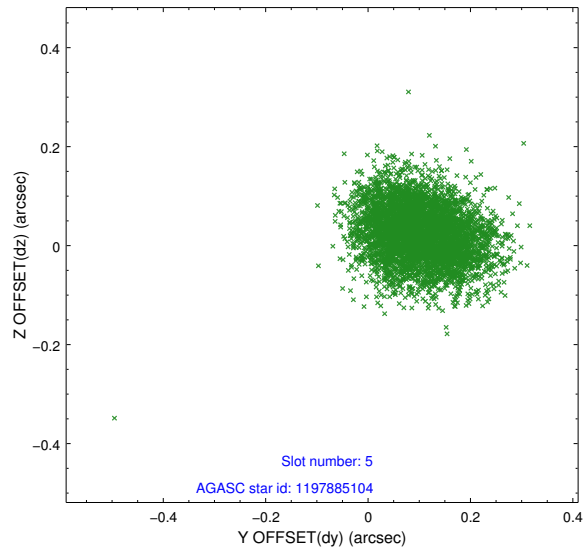
2.4.1 Slot 3



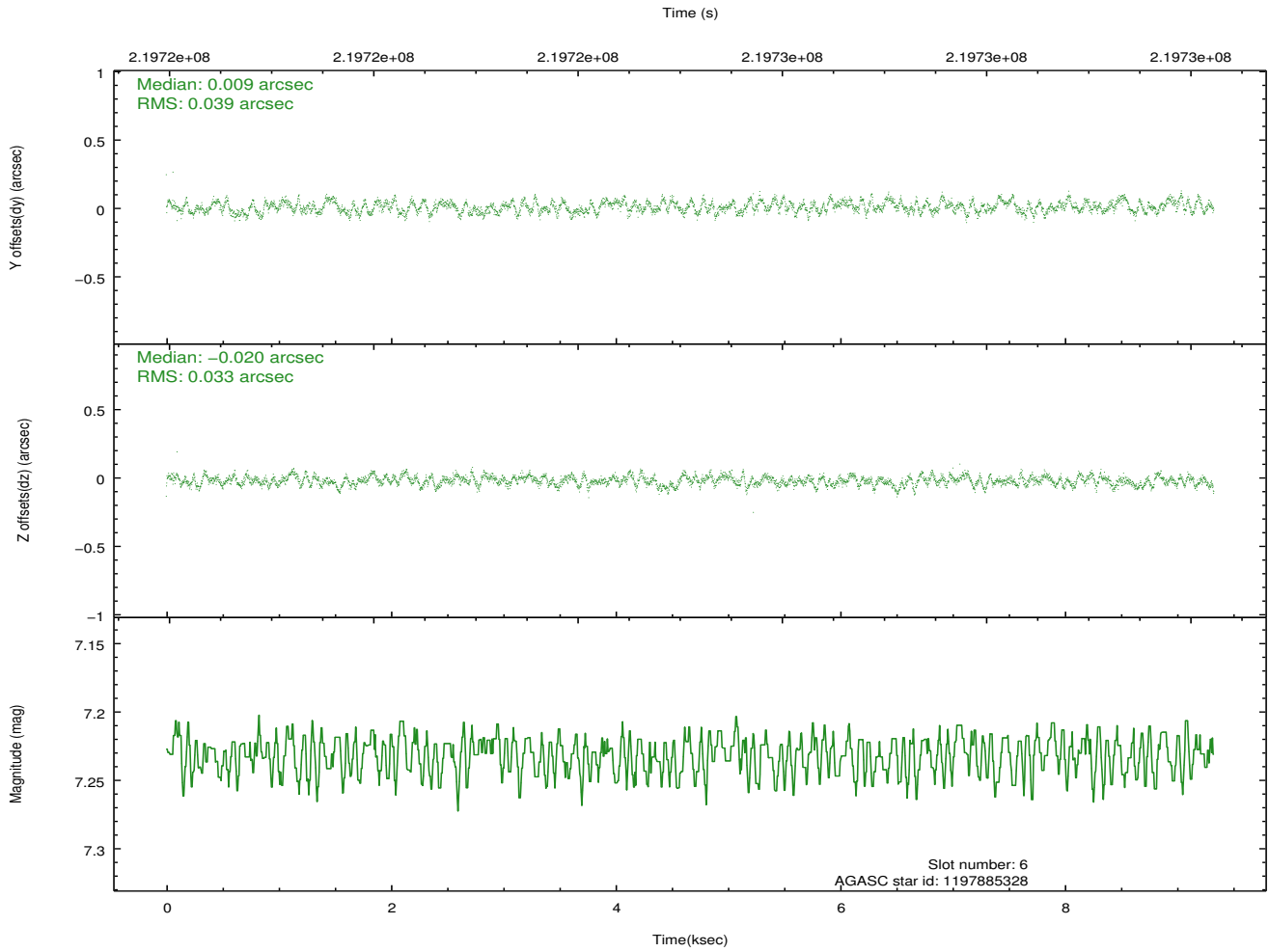
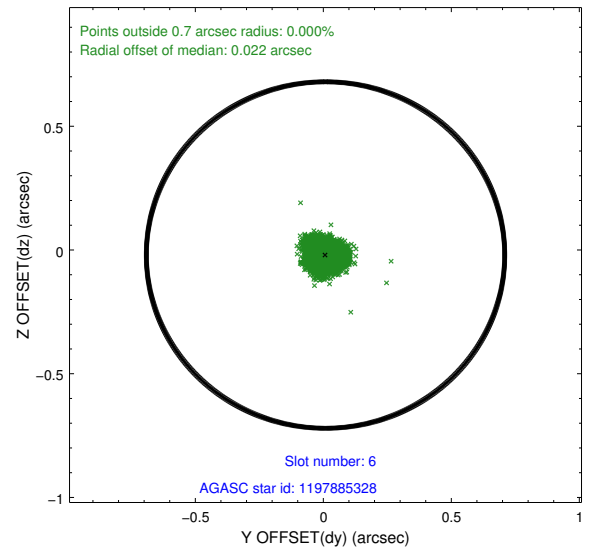
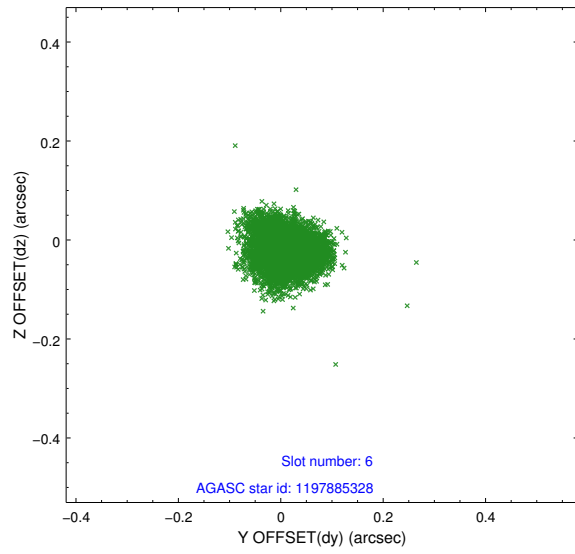
2.4.2 Slot 4



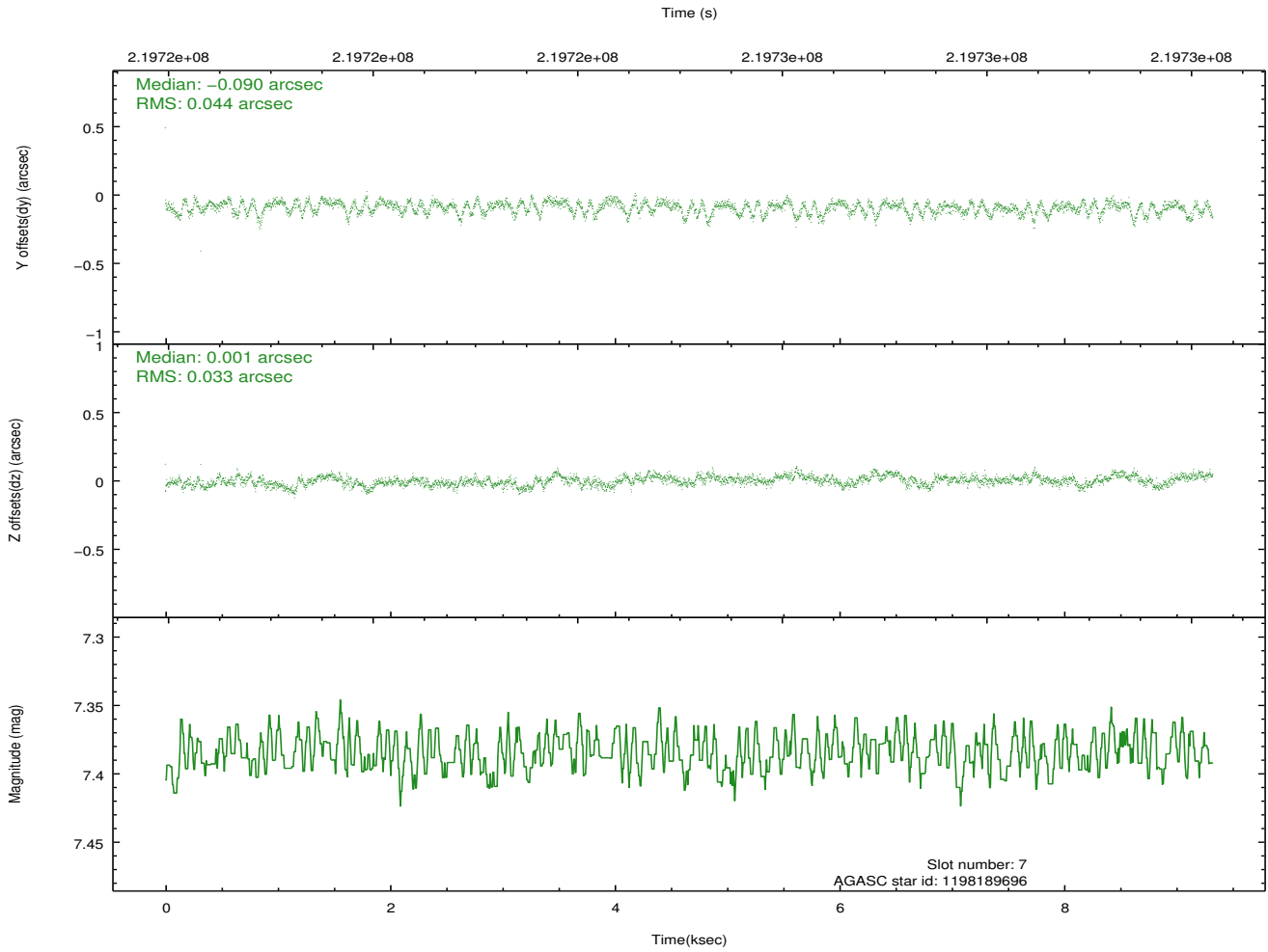
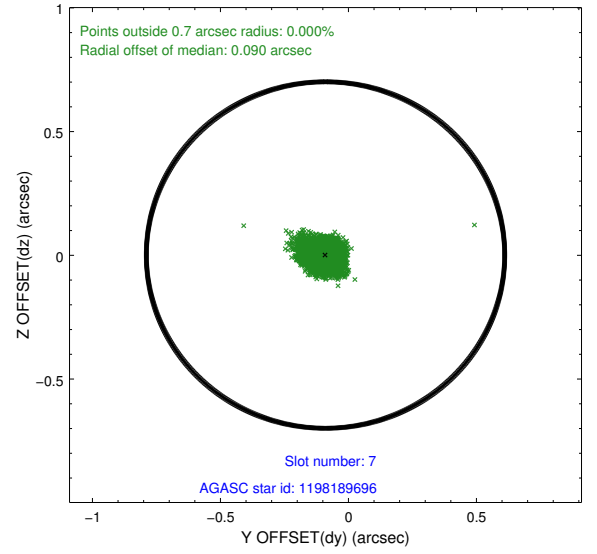
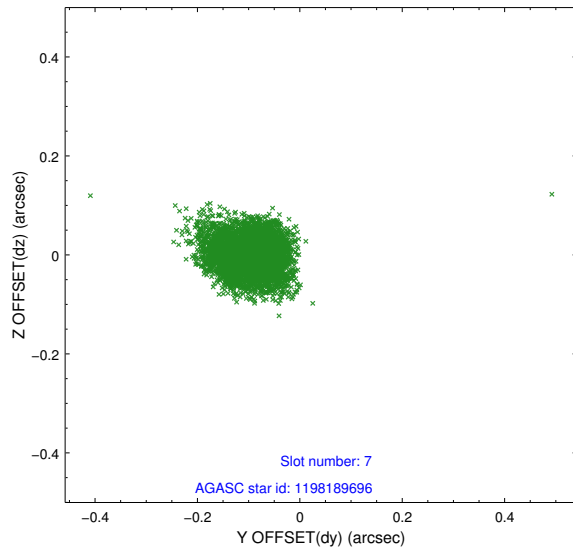
2.4.3 Slot 5



2.4.4 Slot 6

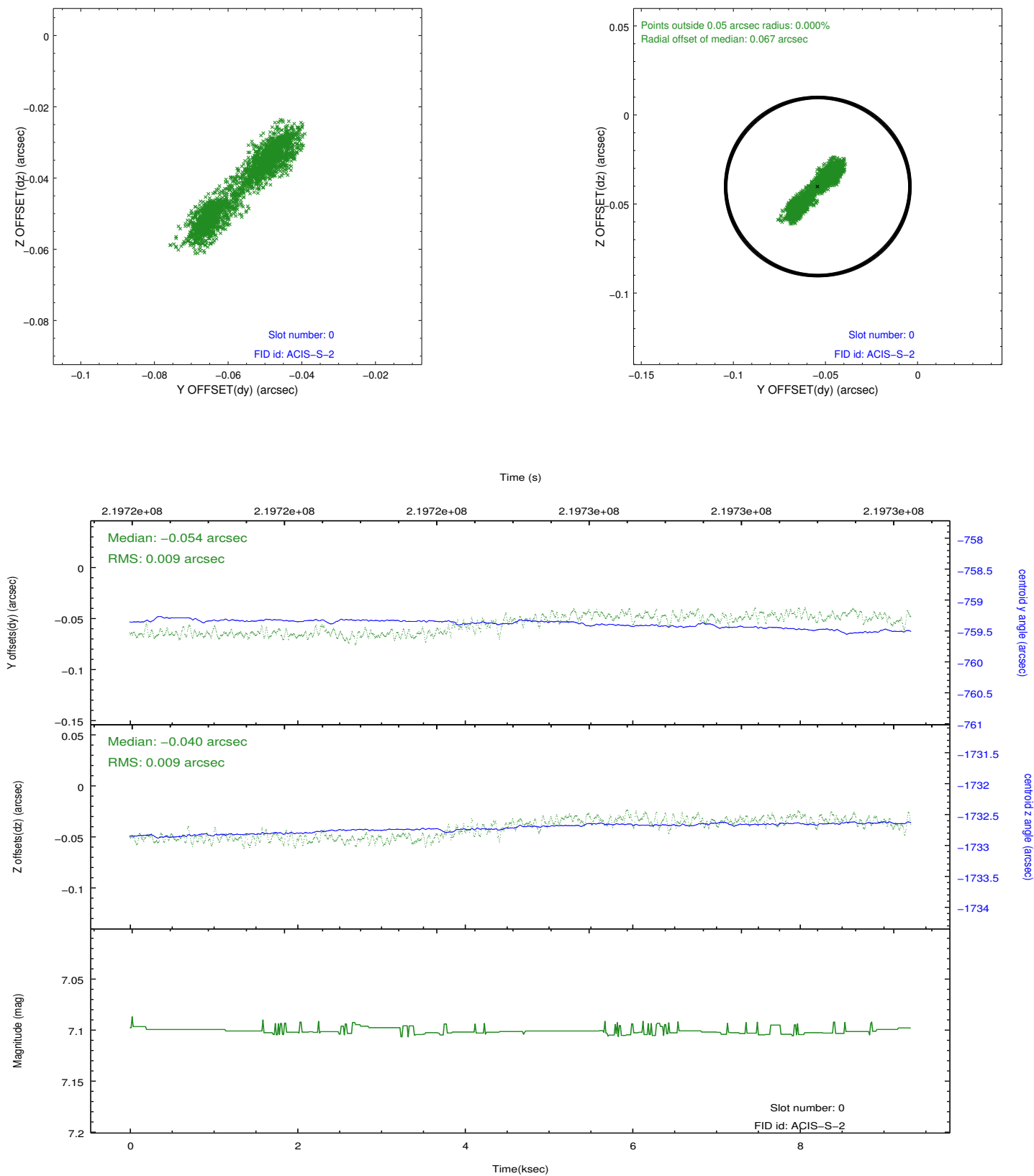


2.4.5 Slot 7

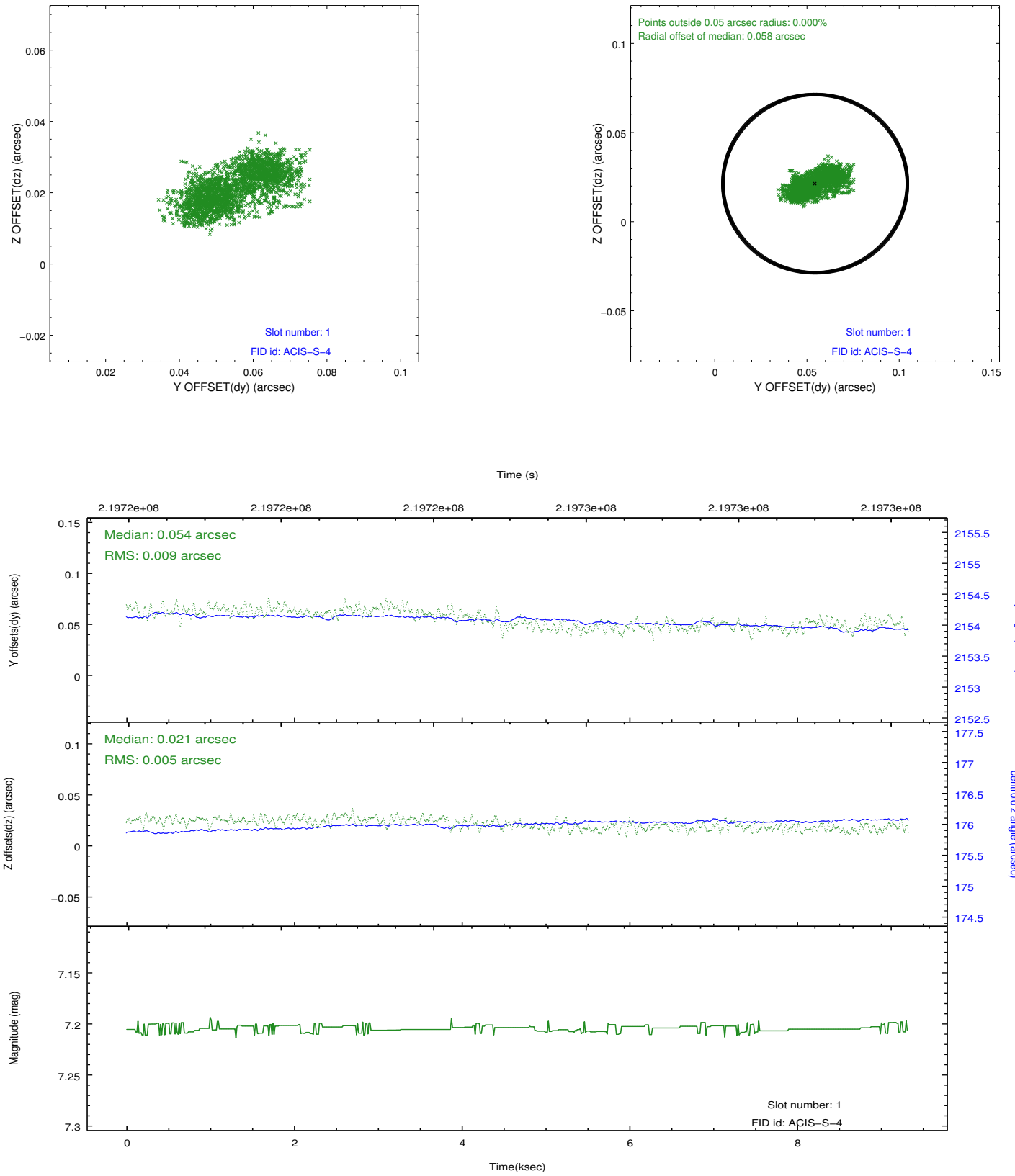


2.5 FID Slots

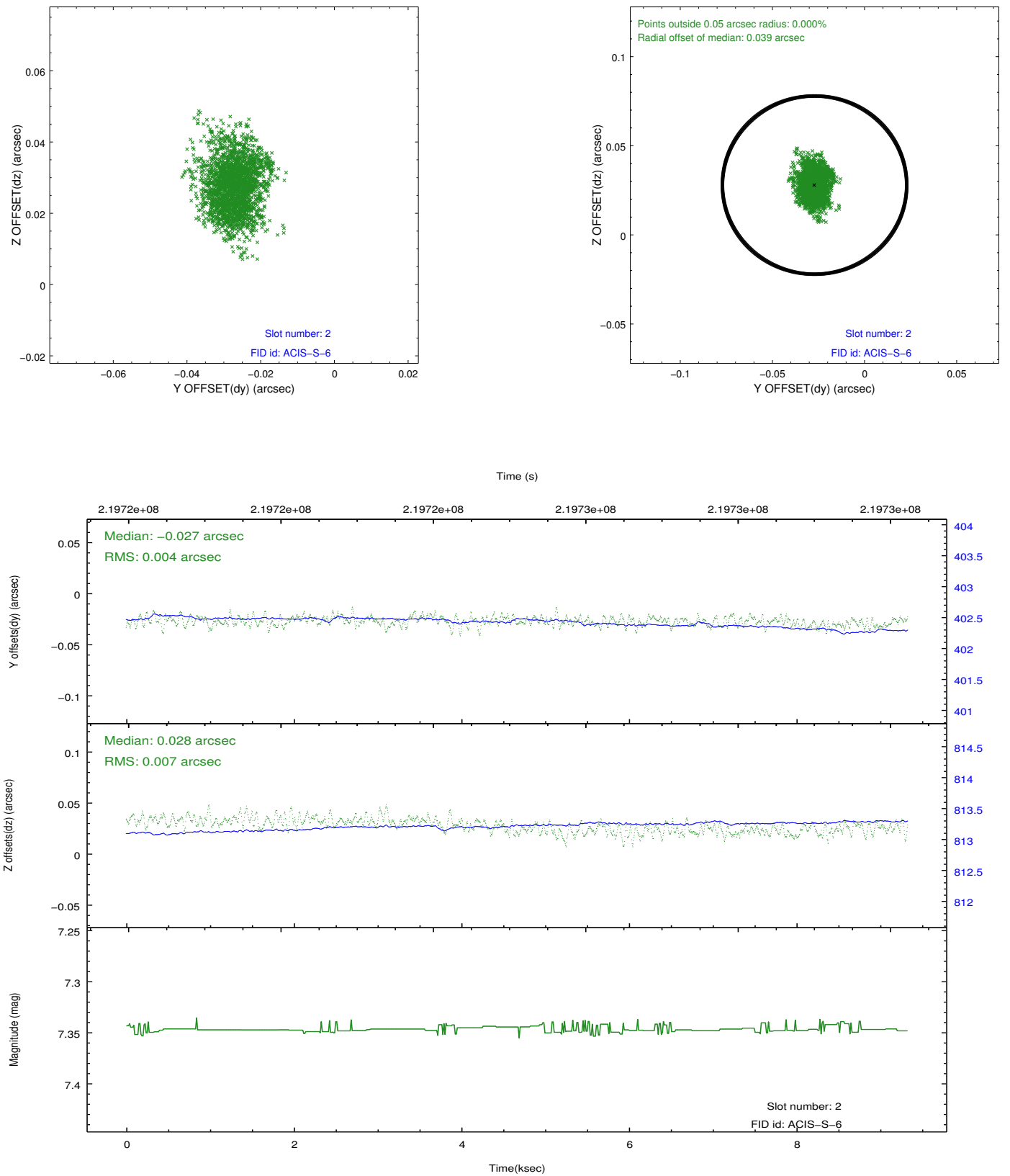
2.5.1 Slot 0



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) | 2013.01.04 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.955199 |

A.2 Comments

Window constraint met.