

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4386 - L2 Version 3
Chandra X-Ray Center

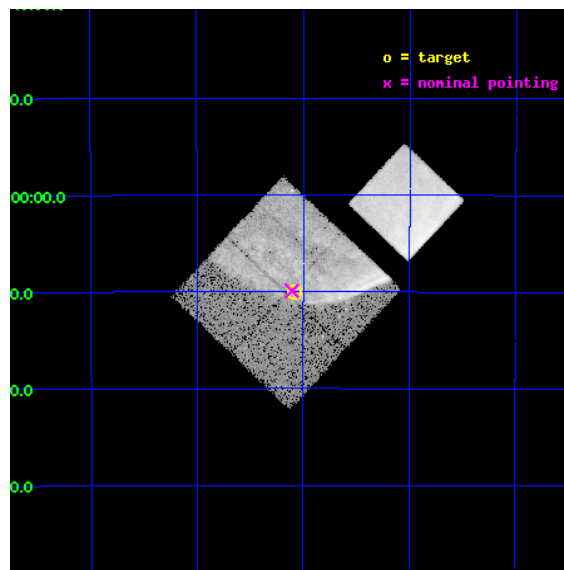
L2 Processing Date : Oct 26 2012

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1 Front

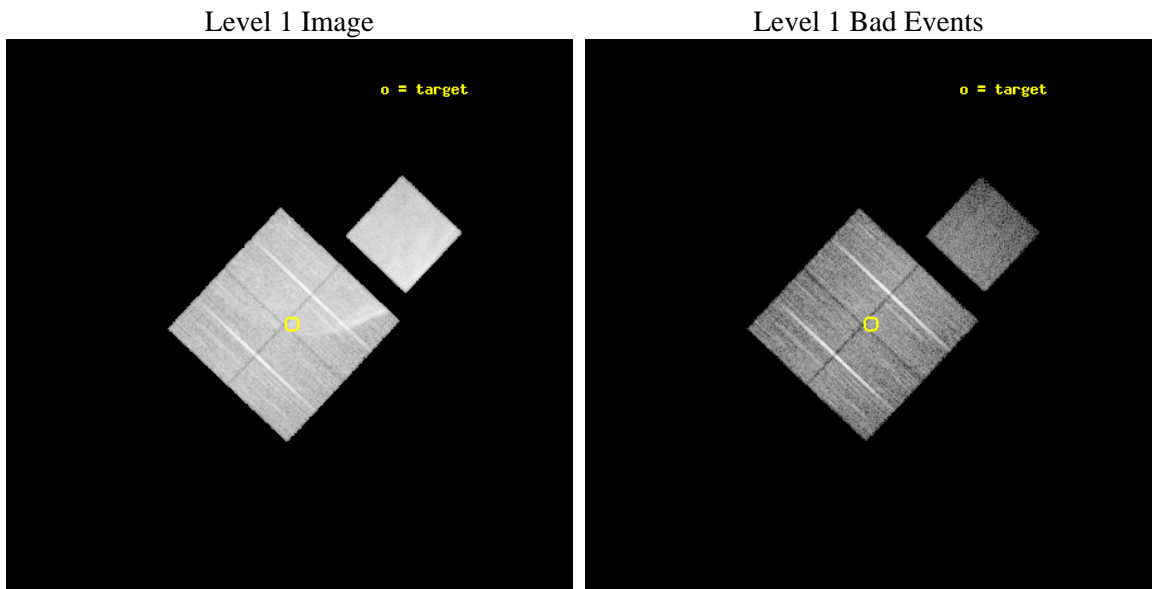
| | | |
|----------|---|---|
| seq_num | 500317 | Sequence number |
| obs_id | 4386 | Observation id |
| title | STUDYING HIGH MACH NUMBER SHOCKS IN YOUNG SUPERNOVA REMNANTS WITH CHANDRA | Proposal title |
| observer | Prof. John Hughes | Principal investigator |
| object | SN1006 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 225.770792 | Observer's specified target RA [deg] |
| dec_targ | -42.1667 | Observer's specified target Dec [deg] |
| ra_nom | 225.77663619113 | Nominal RA [deg] |
| dec_nom | -42.165096704547 | Nominal Dec [deg] |
| roll_nom | 43.212608060541 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 20056.440526068 | Sum of GTIs [s] |
| livetime | 19794.388365258 | Livetime [s] |
| ontime0 | 20056.317406058 | Sum of GTIs [s] |
| ontime1 | 20056.358446062 | Sum of GTIs [s] |
| ontime2 | 20050.117655098 | Sum of GTIs [s] |
| ontime3 | 20056.440526068 | Sum of GTIs [s] |
| ontime7 | 20056.481566072 | Sum of GTIs [s] |
| l2events | 245205 | Number of level 2 events |



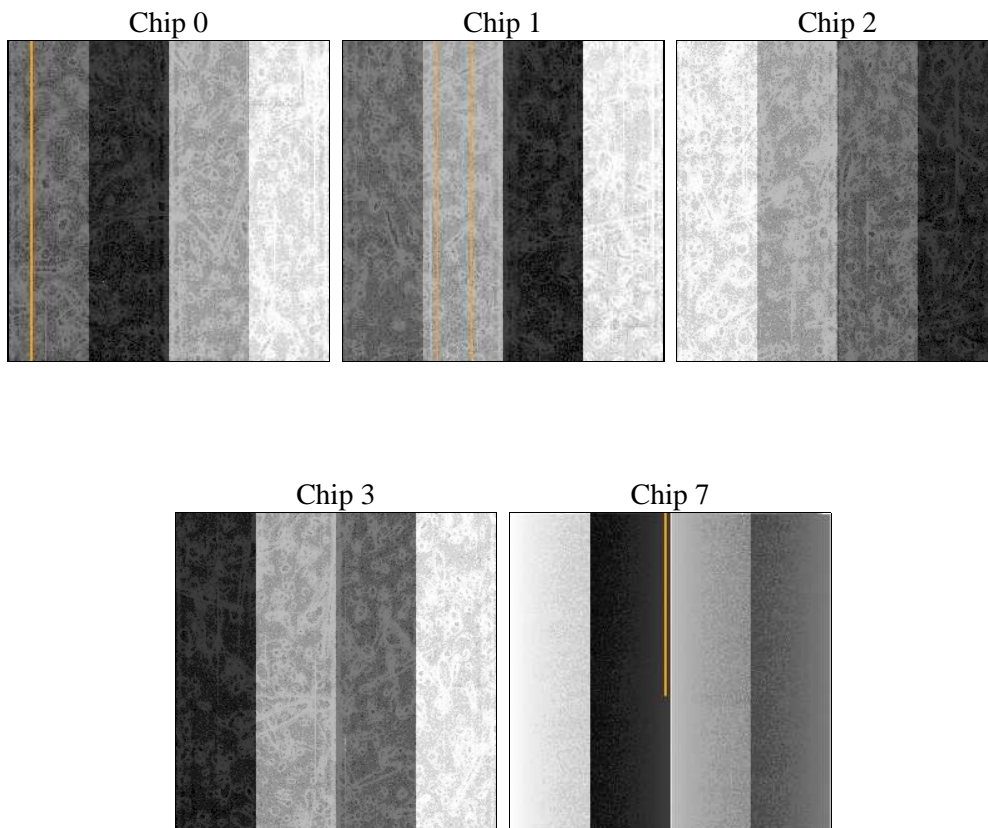
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 20280.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 20056.440526068 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime0 | 20056.317406058 | Sum of GTIs [s] |
| date | 2012-10-26T11:57:21 | Date and time of file creation | ontime1 | 20056.358446062 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 20050.117655098 | Sum of GTIs [s] |
| | | | ontime3 | 20056.440526068 | Sum of GTIs [s] |
| | | | ontime7 | 20056.481566072 | Sum of GTIs [s] |
| | | | l1events | 675510 | Number of level 1 events |

2.1.4 Events

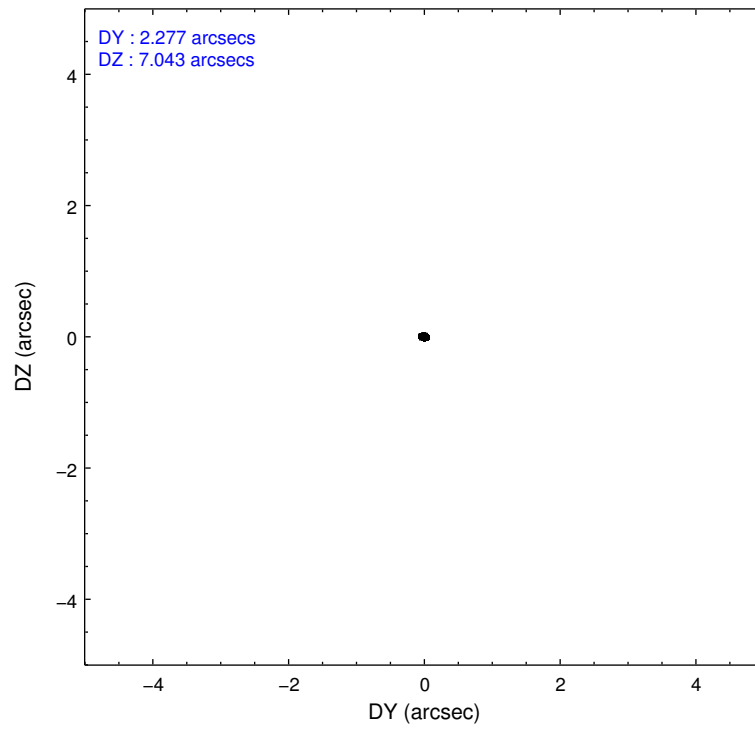
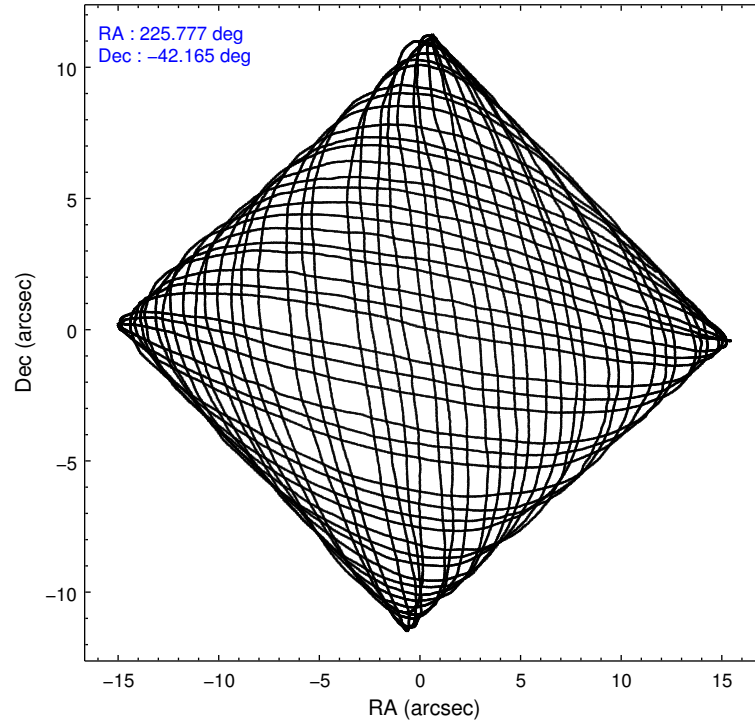
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|-----------------|--------|-------|--------|--------|--------|
| level 1 events | 104696 | 98355 | 135687 | 145351 | 191421 |
| rejected events | 85585 | 86849 | 99351 | 95310 | 51082 |
| rejected % | 81% | 88% | 73% | 65% | 26% |

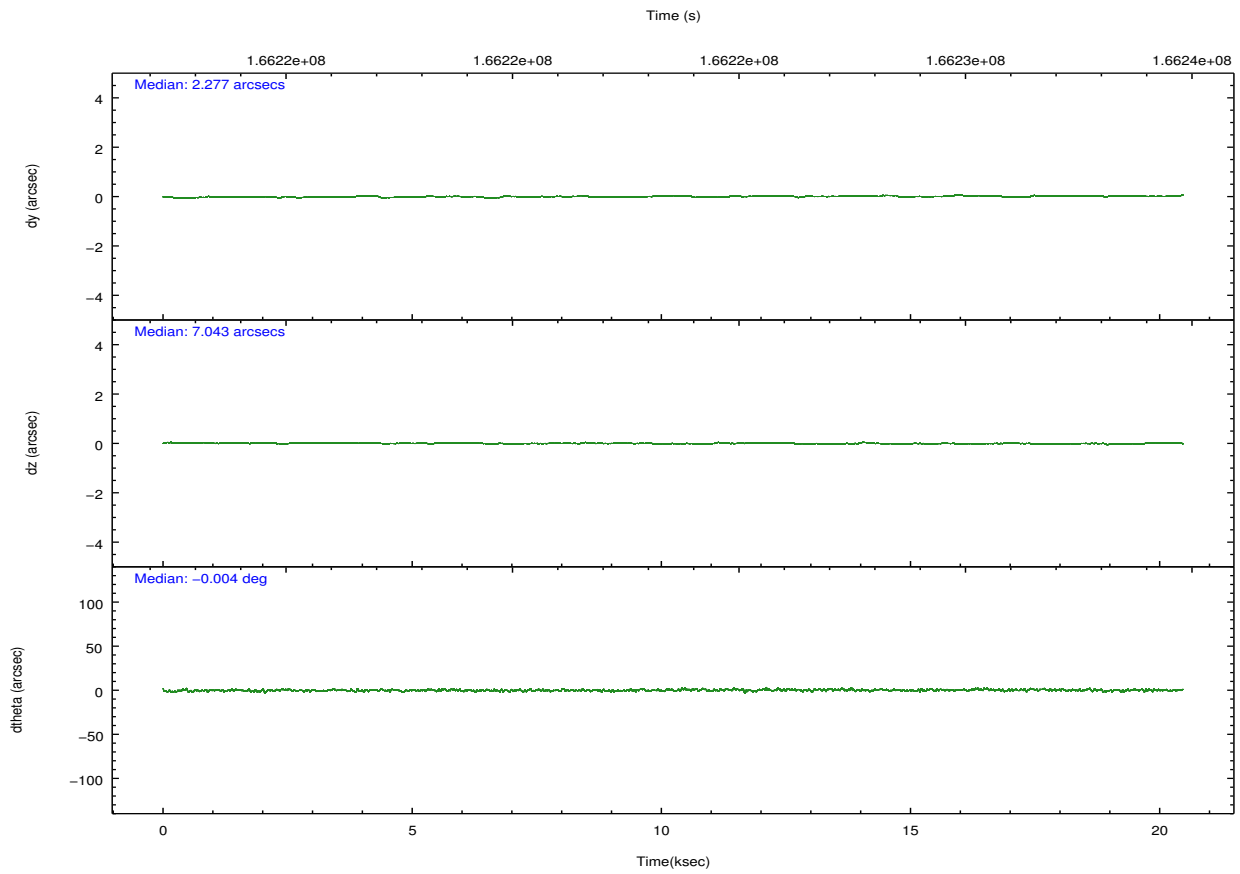
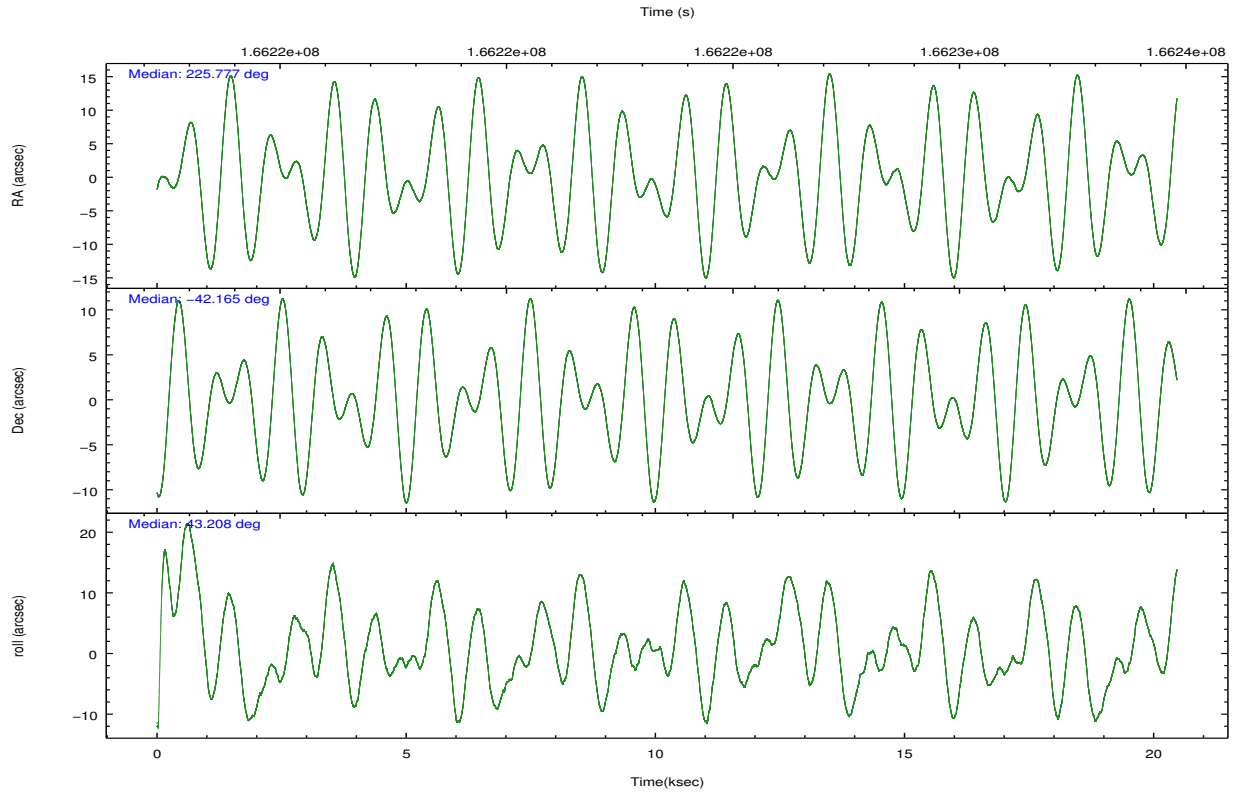
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 11678 | 4665 | 27635 | 39078 | 38567 |
| | 11% | 4% | 20% | 26% | 20% |
| grade 1 events | 71 | 49 | 181 | 169 | 100 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2952 | 2202 | 3944 | 5033 | 34210 |
| | 2% | 2% | 2% | 3% | 17% |
| grade 3 events | 1374 | 1269 | 1392 | 1898 | 15236 |
| | 1% | 1% | 1% | 1% | 7% |
| grade 4 events | 1192 | 1213 | 1428 | 1849 | 15091 |
| | 1% | 1% | 1% | 1% | 7% |
| grade 5 events | 3059 | 3348 | 2985 | 3539 | 10980 |
| | 2% | 3% | 2% | 2% | 5% |
| grade 6 events | 1920 | 2160 | 1949 | 2199 | 37283 |
| | 1% | 2% | 1% | 1% | 19% |
| grade 7 events | 82450 | 83449 | 96173 | 91586 | 39954 |
| | 78% | 84% | 70% | 63% | 20% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01237 | ACIS-01237 | 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 | 225.766138 | 225.7766361911332 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -42.191339 | -42.1650967045472 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 42.996878 | 43.21260806054129 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | | | |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | | | |
| [s] Observation start time (MET) | 166213499.184000 | 166213123.12215 | | | |
| Observation start date | 2003-04-08T18:23:55 | 2003-04-08T18:18:43 | | | |
| [s] Observation end time (MET) | 166233779.184000 | 166233913.19803 | | | |
| Observation end date | 2003-04-09T00:01:55 | 2003-04-09T00:05:13 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





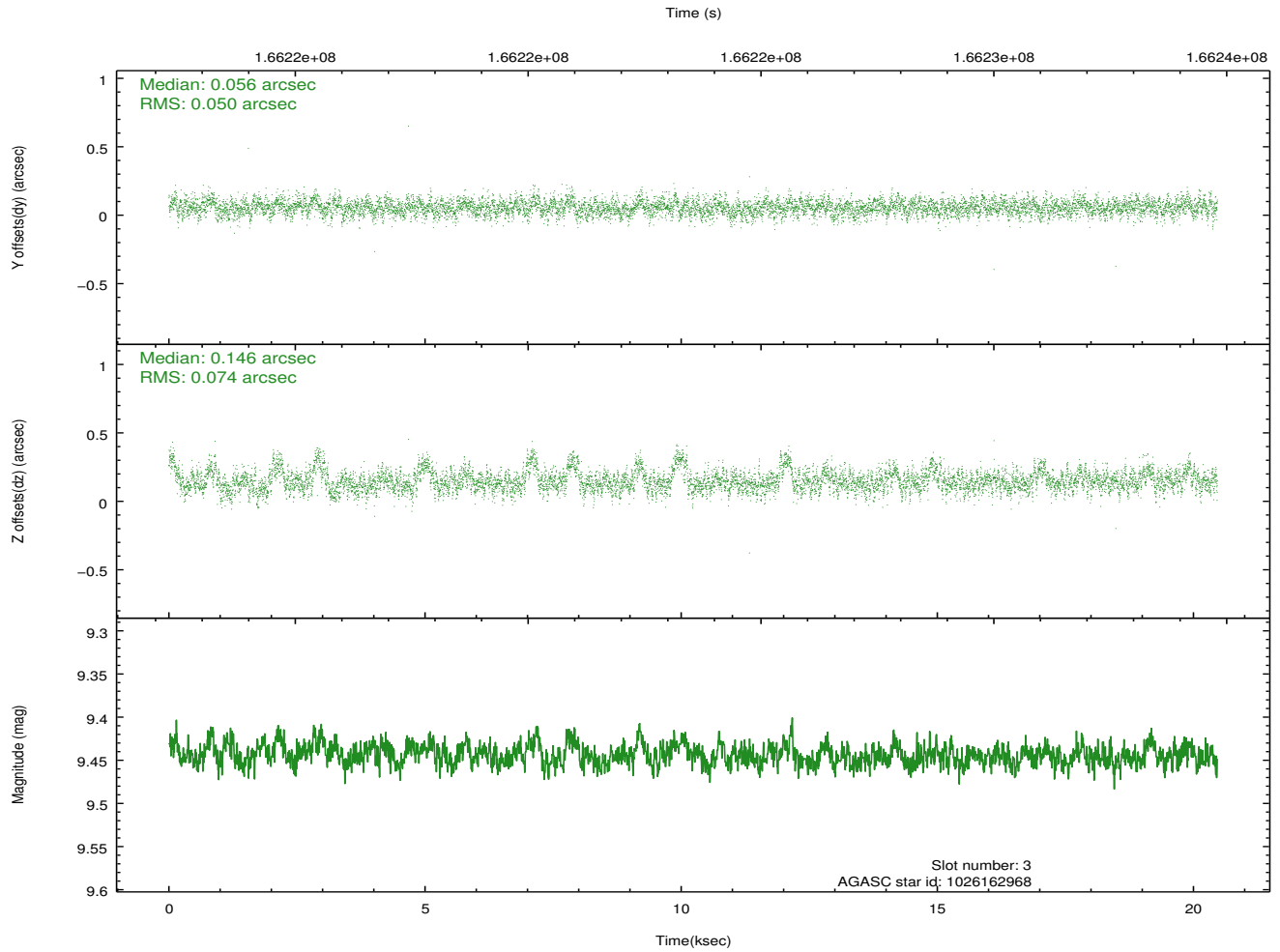
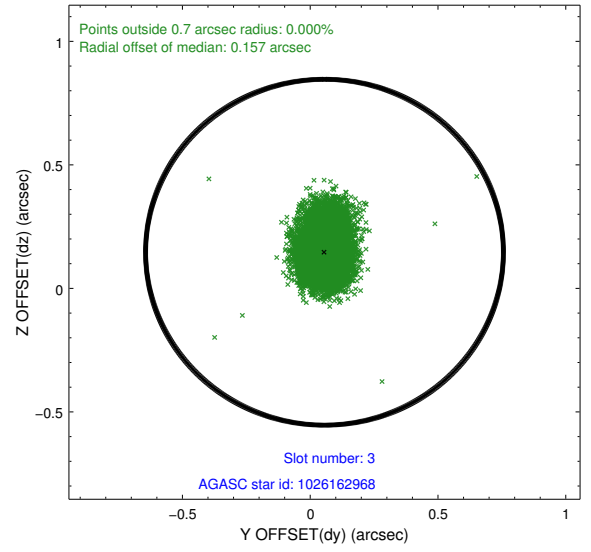
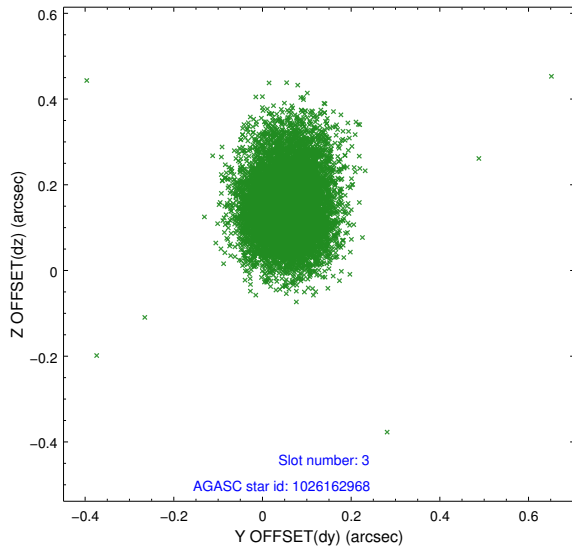
Slot Statistics

| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 4990 | -0.082 | 0.003 | 0.009 | 0.015 | 0.000000 | 0.000000 | 937.48 | -830.41 |
| 1 | FID | ACIS-I-2 | 7.16 | 4991 | -0.053 | -0.017 | 0.007 | 0.011 | 0.000000 | 0.000000 | -756.48 | -837.00 |
| 2 | FID | ACIS-I-4 | 7.17 | 4991 | 0.036 | 0.081 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2157.35 | 1069.42 |
| 3 | GUIDE | 1026162968 | 9.44 | 9978 | 0.056 | 0.146 | 0.091 | 0.160 | 225.835985 | -42.679852 | -1063.74 | -1412.30 |
| 4 | GUIDE | 1026163728 | 9.23 | 9980 | -0.040 | -0.237 | 0.104 | 0.160 | 225.377558 | -41.568164 | 762.77 | 2352.54 |
| 5 | GUIDE | 1026170368 | 9.31 | 9979 | 0.095 | 0.071 | 0.079 | 0.128 | 225.763429 | -42.291155 | -249.78 | -257.58 |
| 6 | GUIDE | 1026170800 | 9.02 | 9981 | 0.088 | -0.058 | 0.073 | 0.118 | 225.400024 | -42.381702 | -1180.49 | 161.05 |
| 7 | GUIDE | 1026183784 | 9.19 | 9969 | -0.199 | 0.070 | 0.086 | 0.153 | 226.363370 | -41.841537 | 2026.52 | -175.11 |

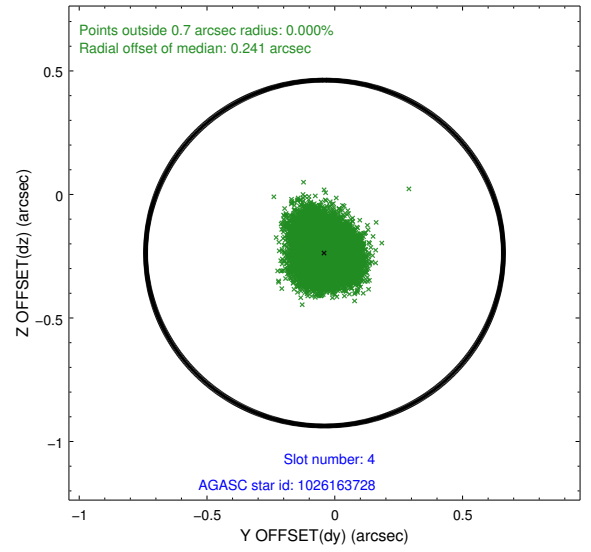
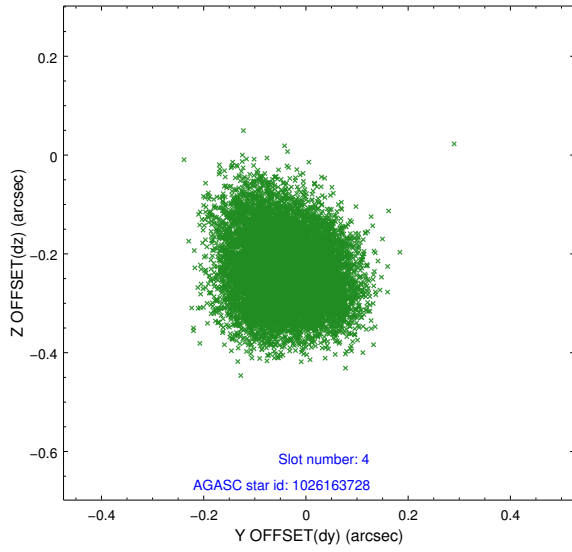
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2.4 Star Slots

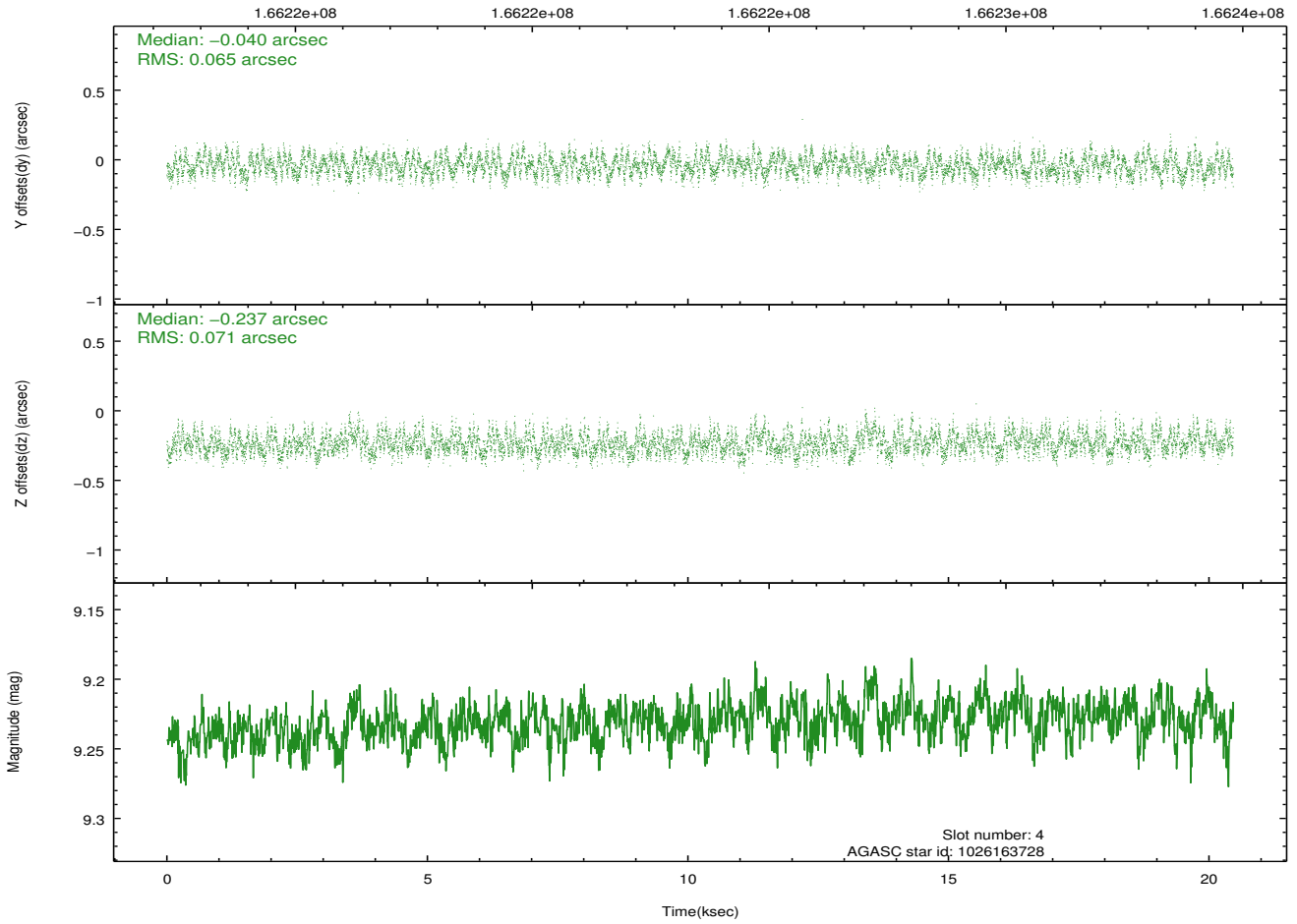
2.4.1 Slot 3



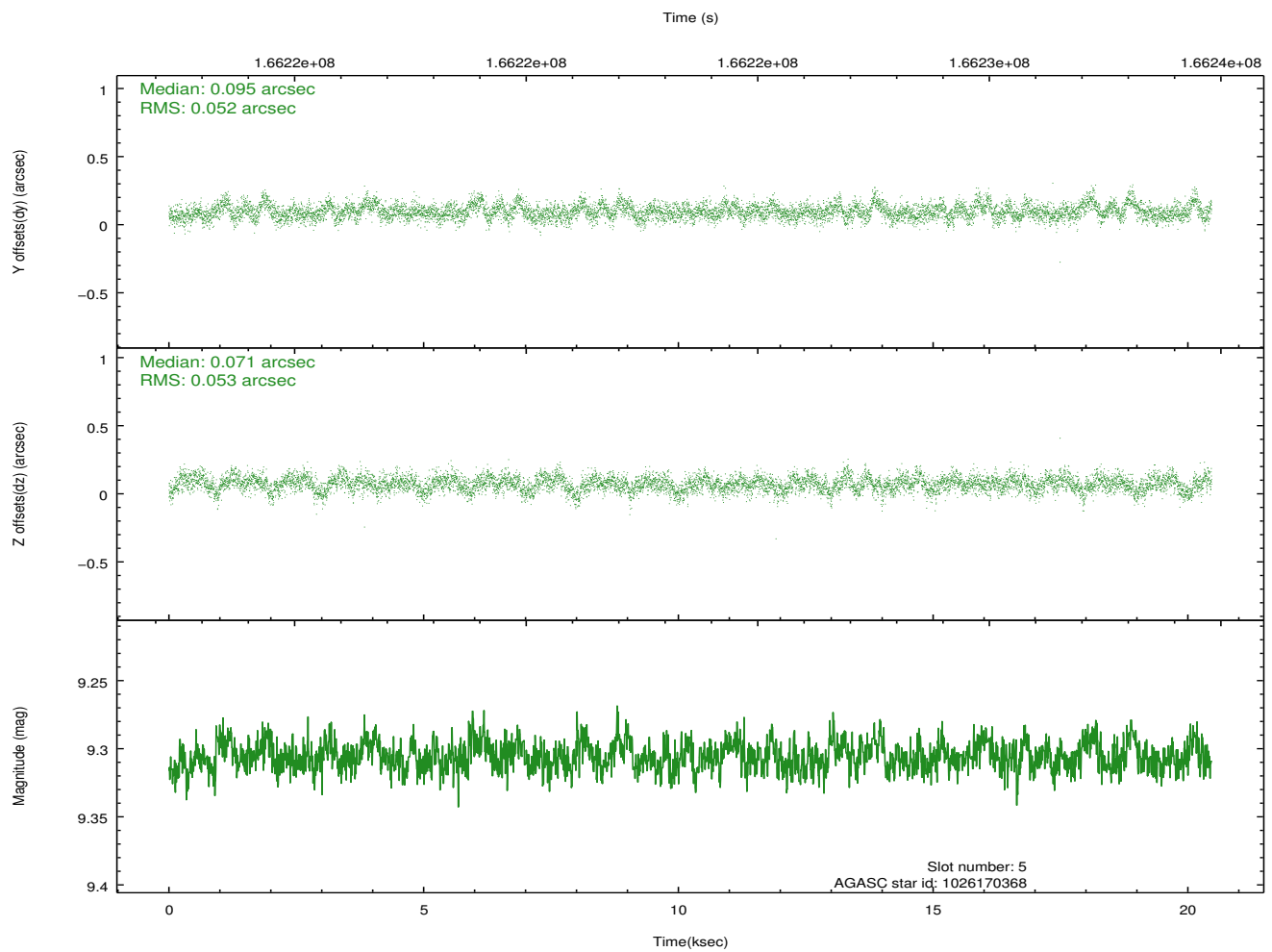
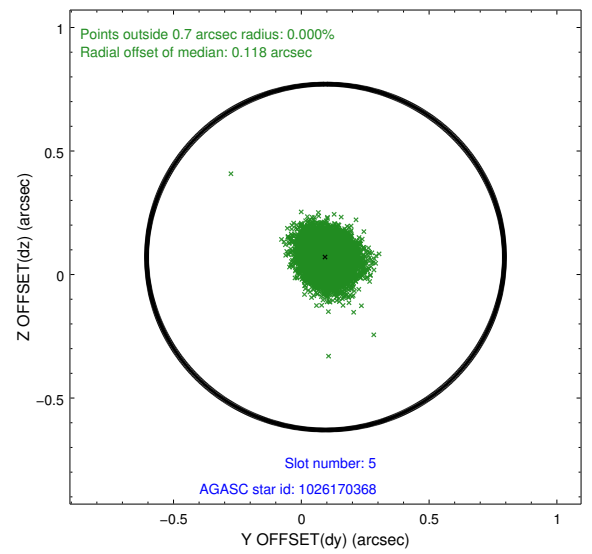
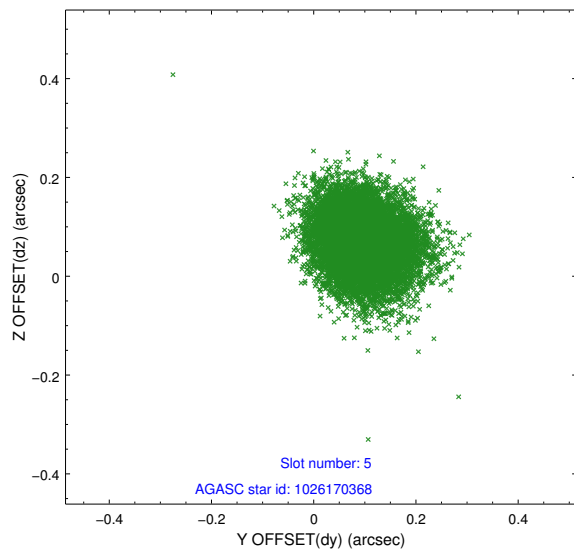
2.4.2 Slot 4



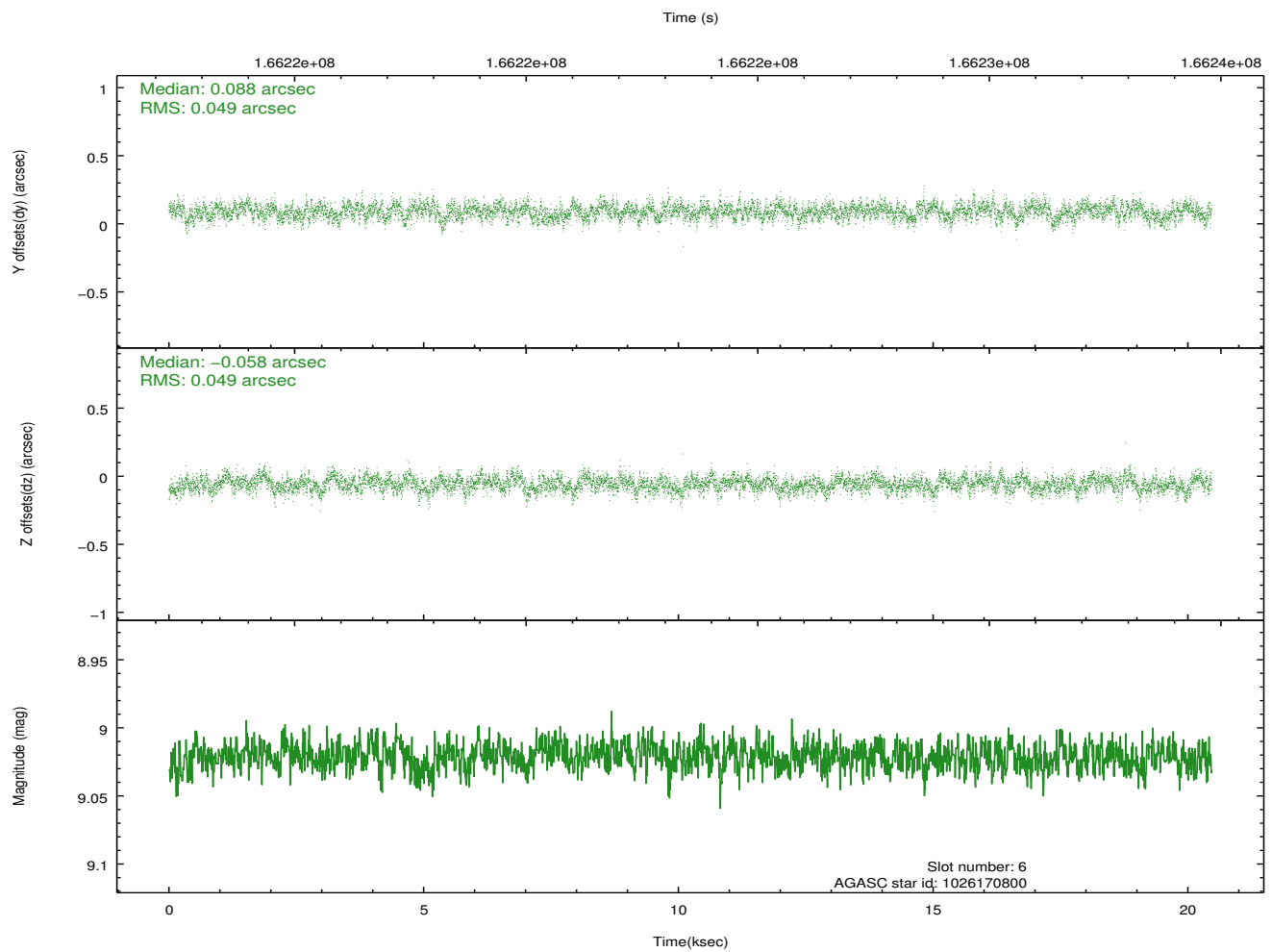
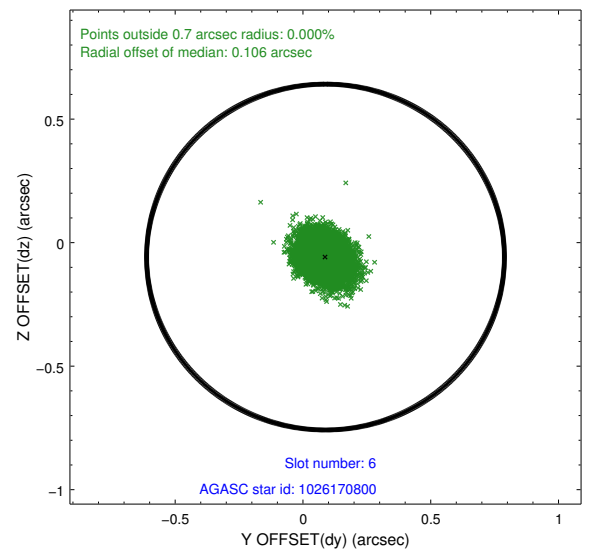
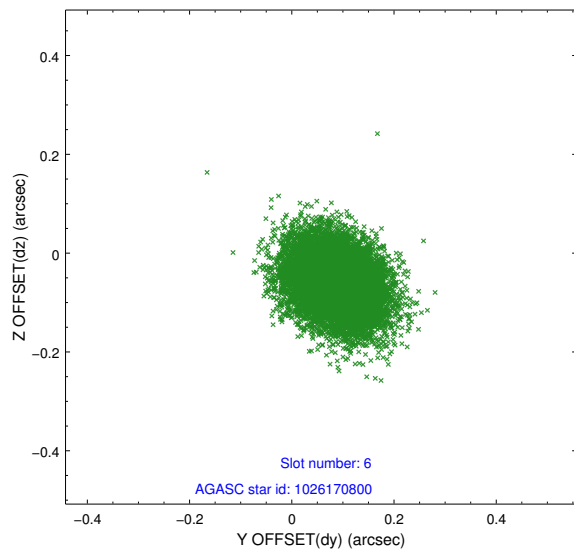
Time (s)



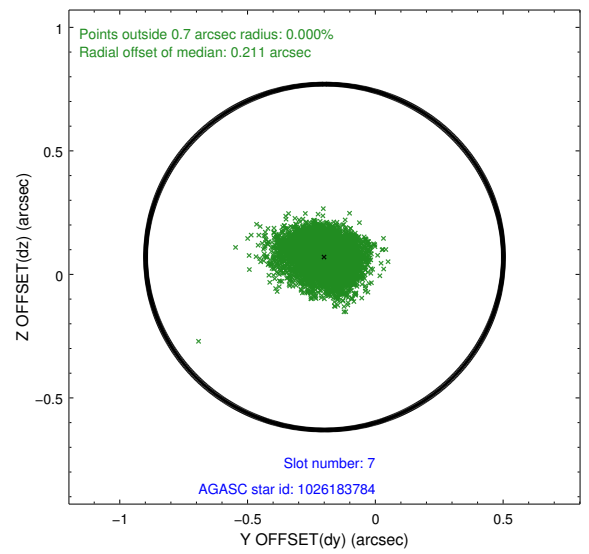
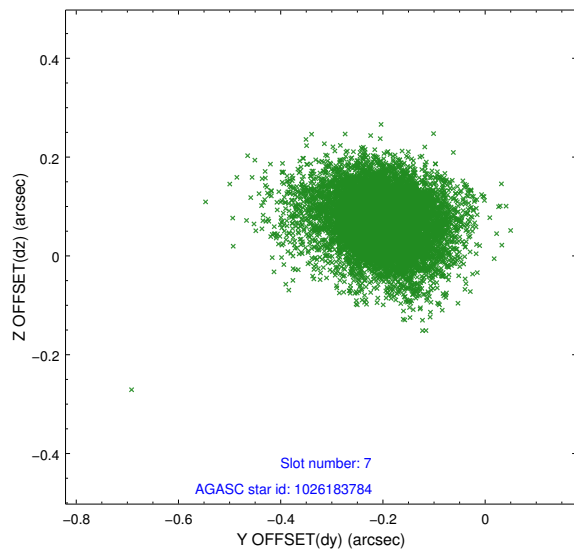
2.4.3 Slot 5



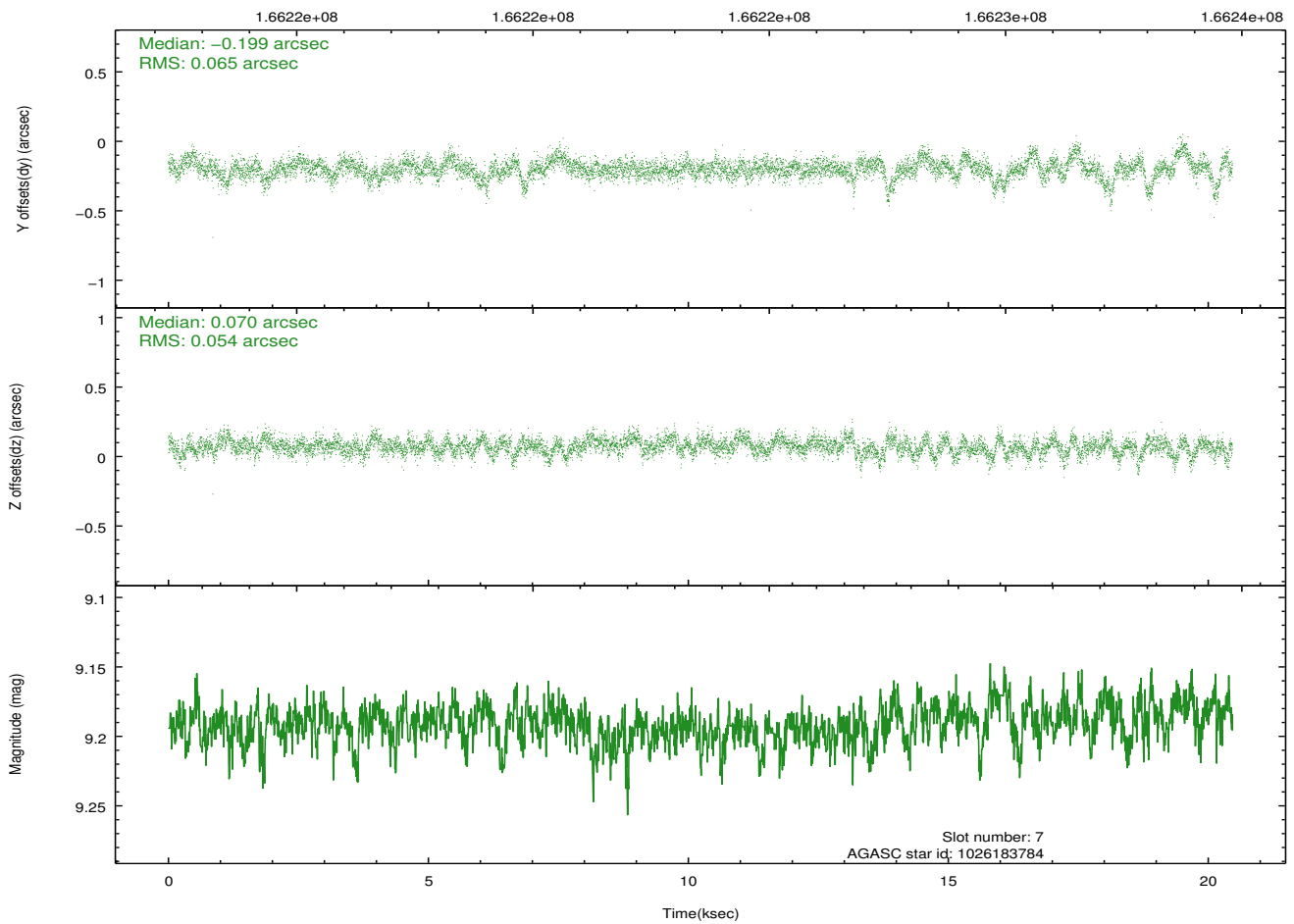
2.4.4 Slot 6



2.4.5 Slot 7

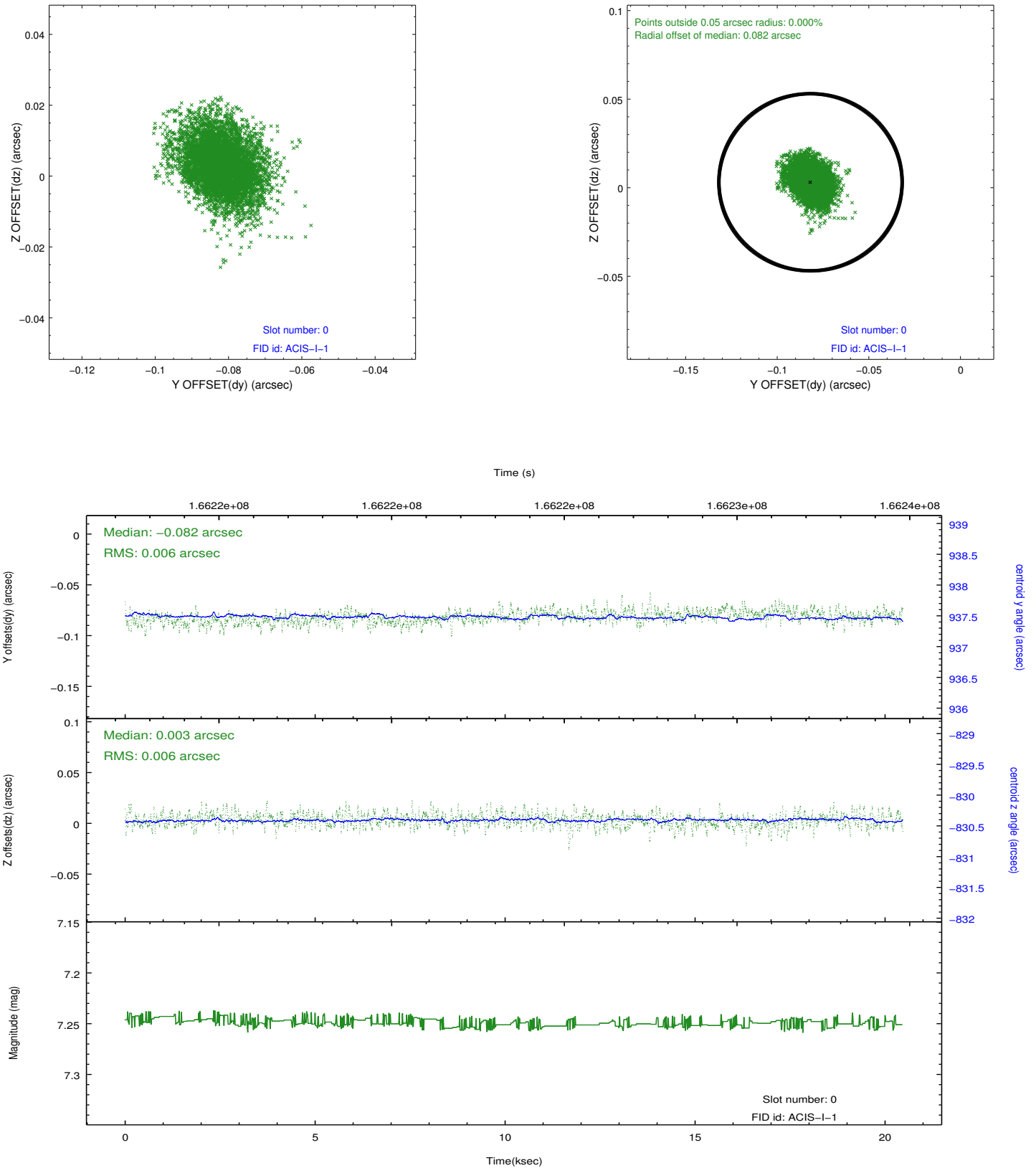


Time (s)

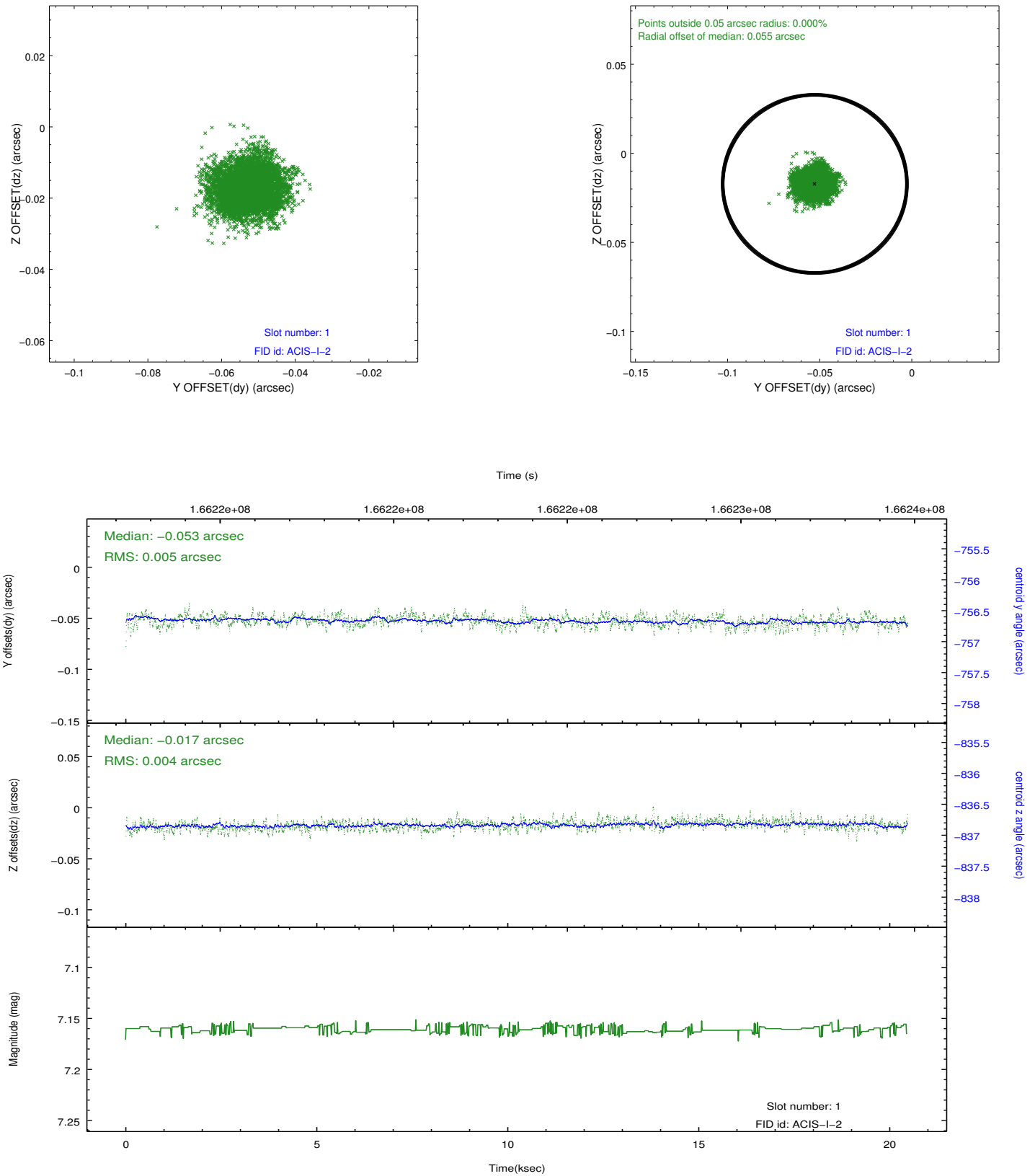


2.5 FID Slots

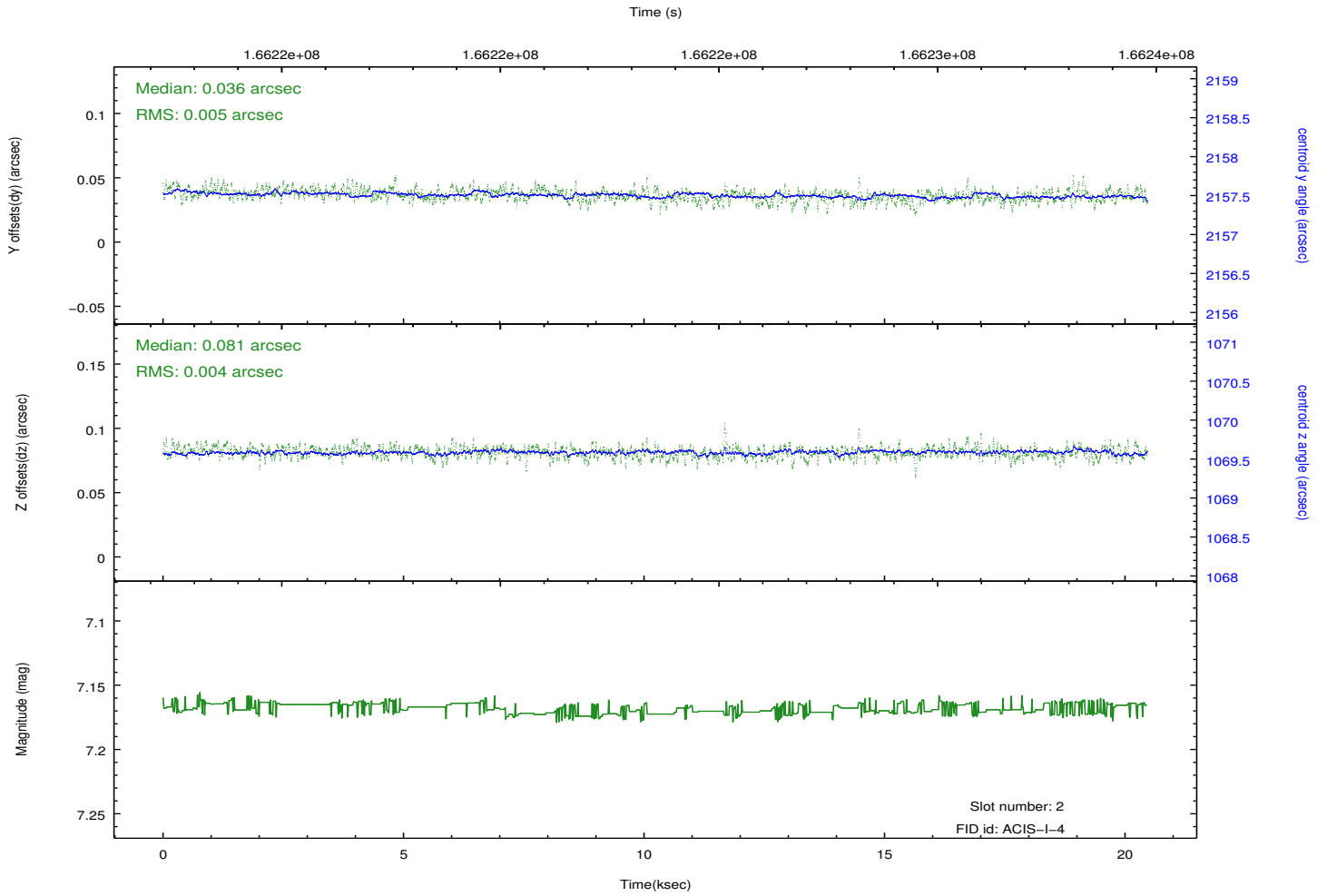
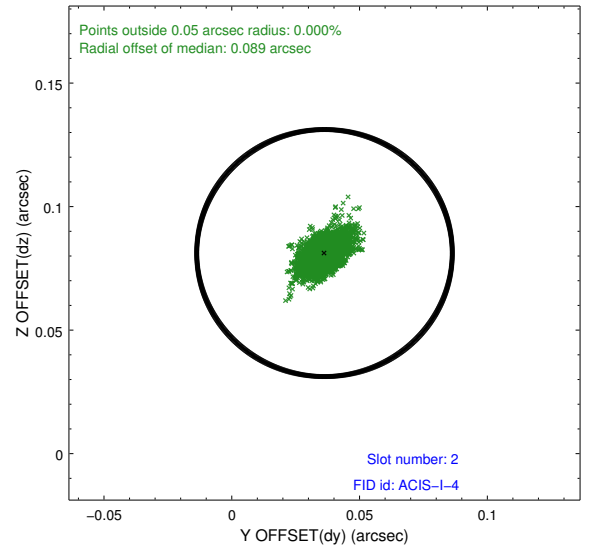
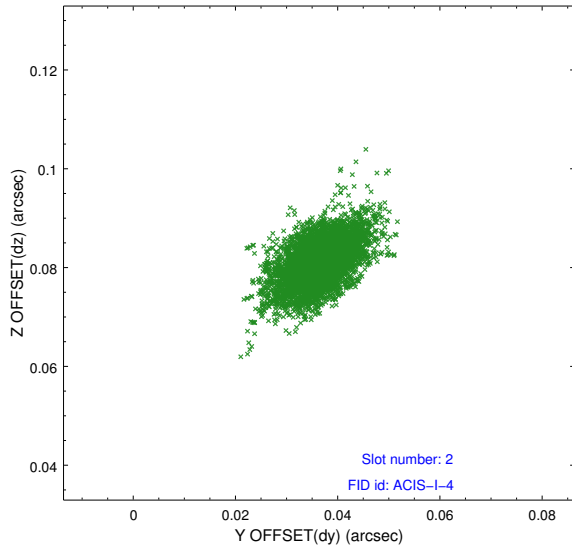
2.5.1 Slot 0



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) | 2012.11.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 20.056 |

A.2 Comments