

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4394 - L2 Version 3
Chandra X-Ray Center

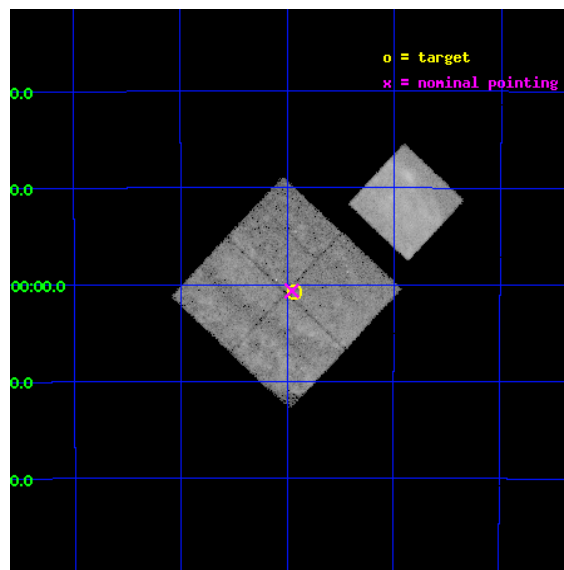
L2 Processing Date : Oct 26 2012

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1 Front

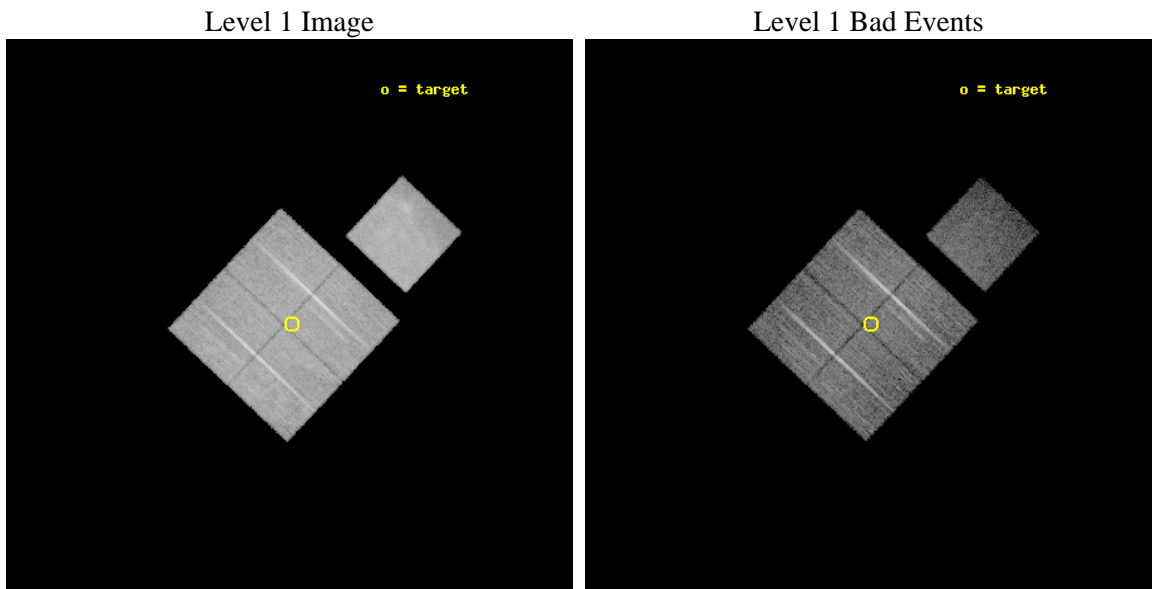
| | | |
|----------|---|---|
| seq_num | 500317 | Sequence number |
| obs_id | 4394 | Observation id |
| title | STUDYING HIGH MACH NUMBER SHOCKS IN YOUNG SUPERNOVA REMNANTS WITH CHANDRA | Proposal title |
| observer | Prof. John Hughes | Principal investigator |
| object | SN1006 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 225.733292 | Observer's specified target RA [deg] |
| dec_targ | -42.0125 | Observer's specified target Dec [deg] |
| ra_nom | 225.73913612473 | Nominal RA [deg] |
| dec_nom | -42.010923267065 | Nominal Dec [deg] |
| roll_nom | 43.212599479036 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 19849.056662261 | Sum of GTIs [s] |
| livetime | 19589.714124306 | Livetime [s] |
| ontime0 | 19839.510581642 | Sum of GTIs [s] |
| ontime1 | 19848.974582255 | Sum of GTIs [s] |
| ontime2 | 19842.733721495 | Sum of GTIs [s] |
| ontime3 | 19849.056662261 | Sum of GTIs [s] |
| ontime7 | 19849.097682327 | Sum of GTIs [s] |
| l2events | 202372 | Number of level 2 events |



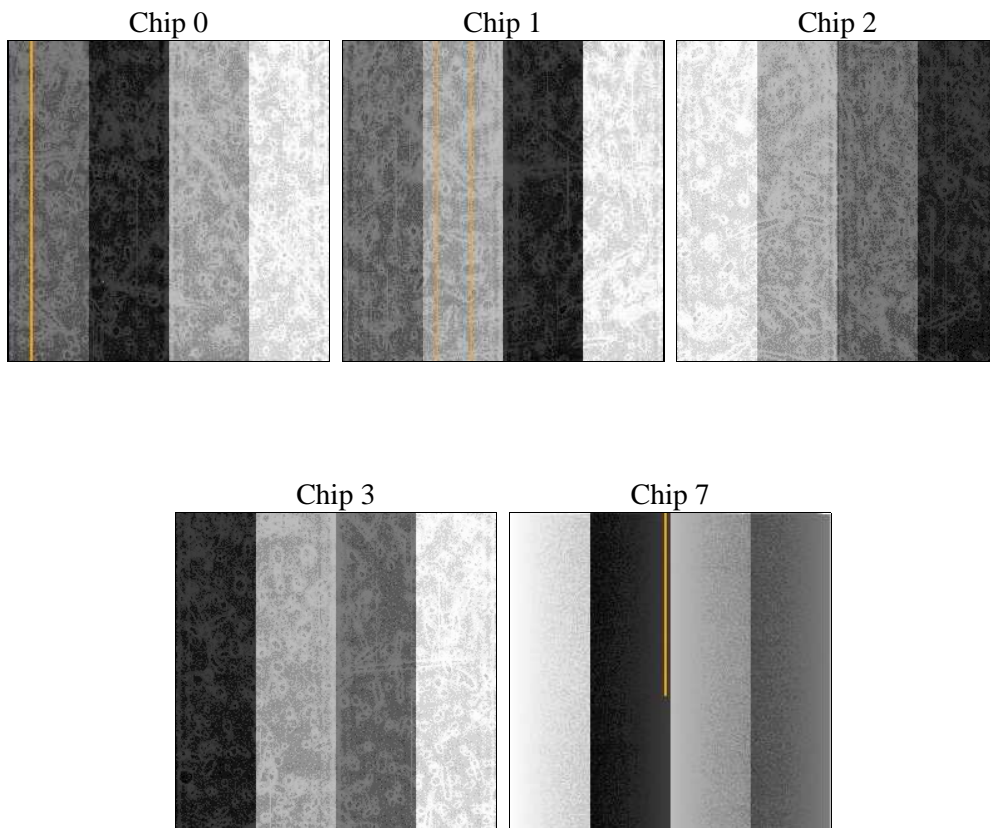
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 20074.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 19849.056662261 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime0 | 19839.510581642 | Sum of GTIs [s] |
| date | 2012-10-26T12:37:07 | Date and time of file creation | ontime1 | 19848.974582255 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 19842.733721495 | Sum of GTIs [s] |
| | | | ontime3 | 19849.056662261 | Sum of GTIs [s] |
| | | | ontime7 | 19849.097682327 | Sum of GTIs [s] |
| | | | l1events | 597754 | Number of level 1 events |

2.1.4 Events

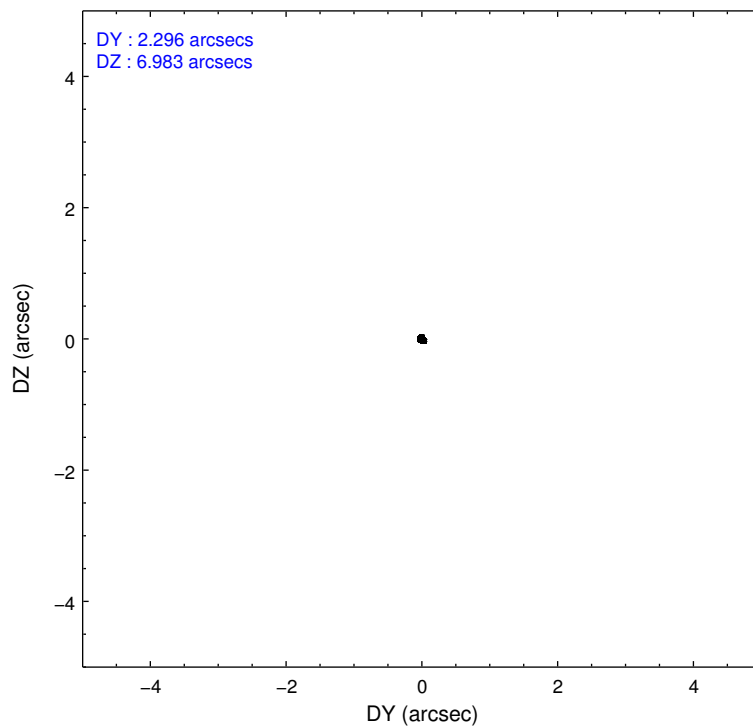
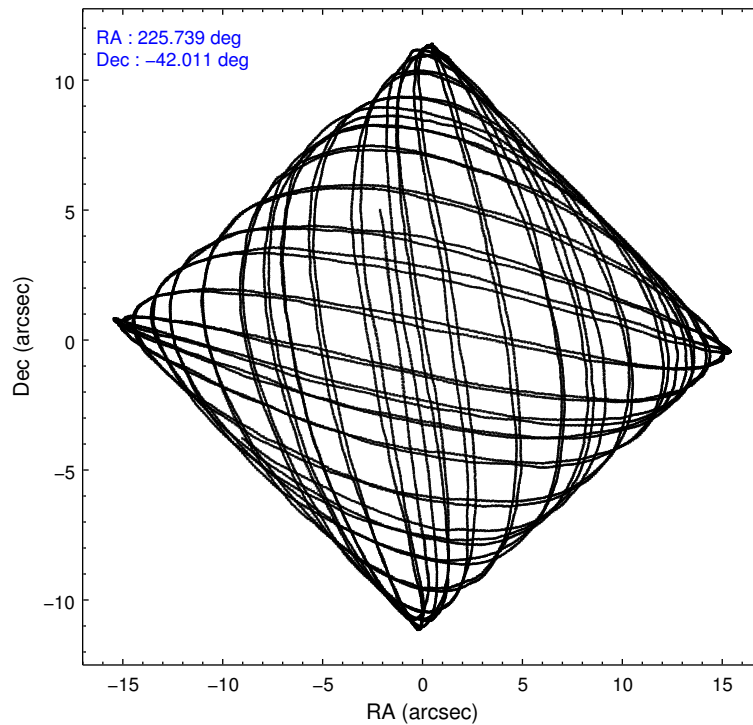
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 113707 | 118611 | 115306 | 118962 | 131168 |
| rejected events | 79247 | 79529 | 88331 | 87755 | 47868 |
| rejected % | 69% | 67% | 76% | 73% | 36% |

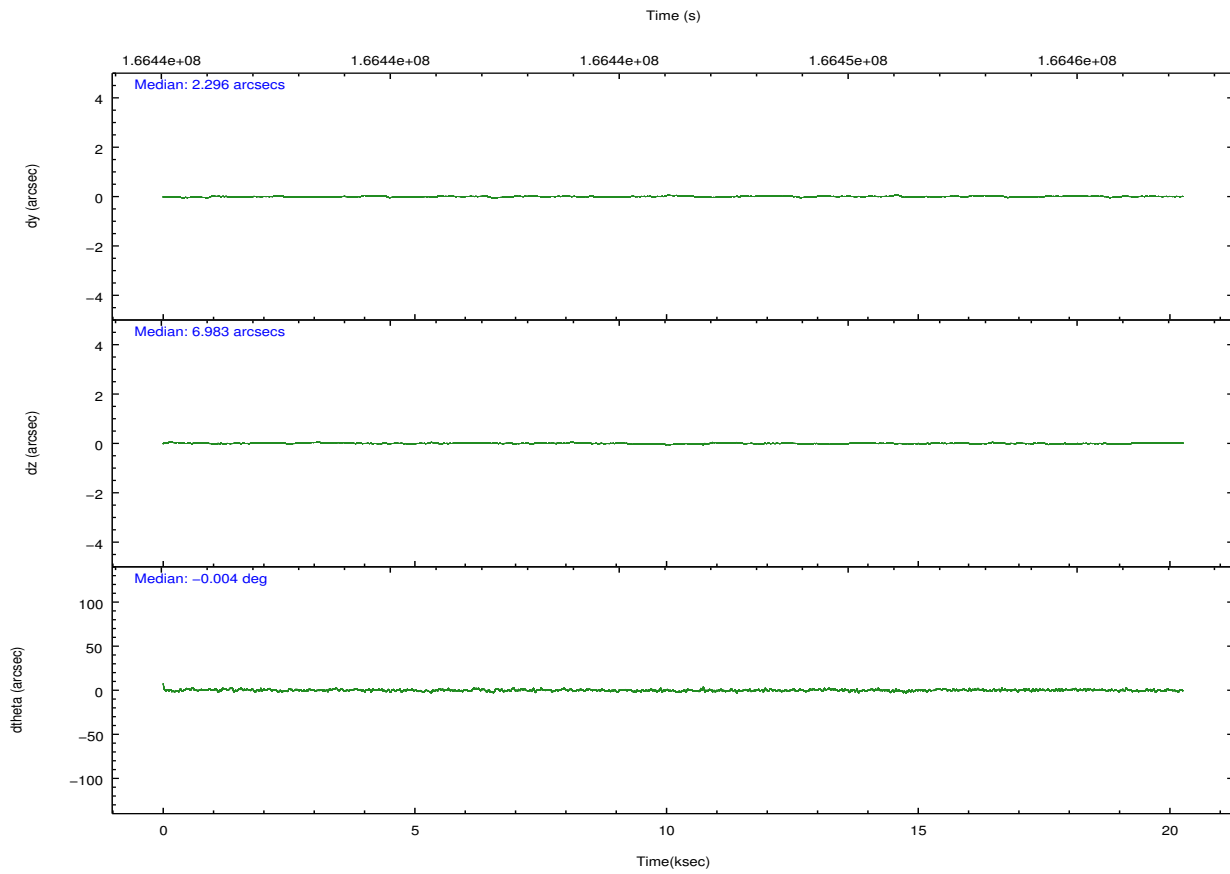
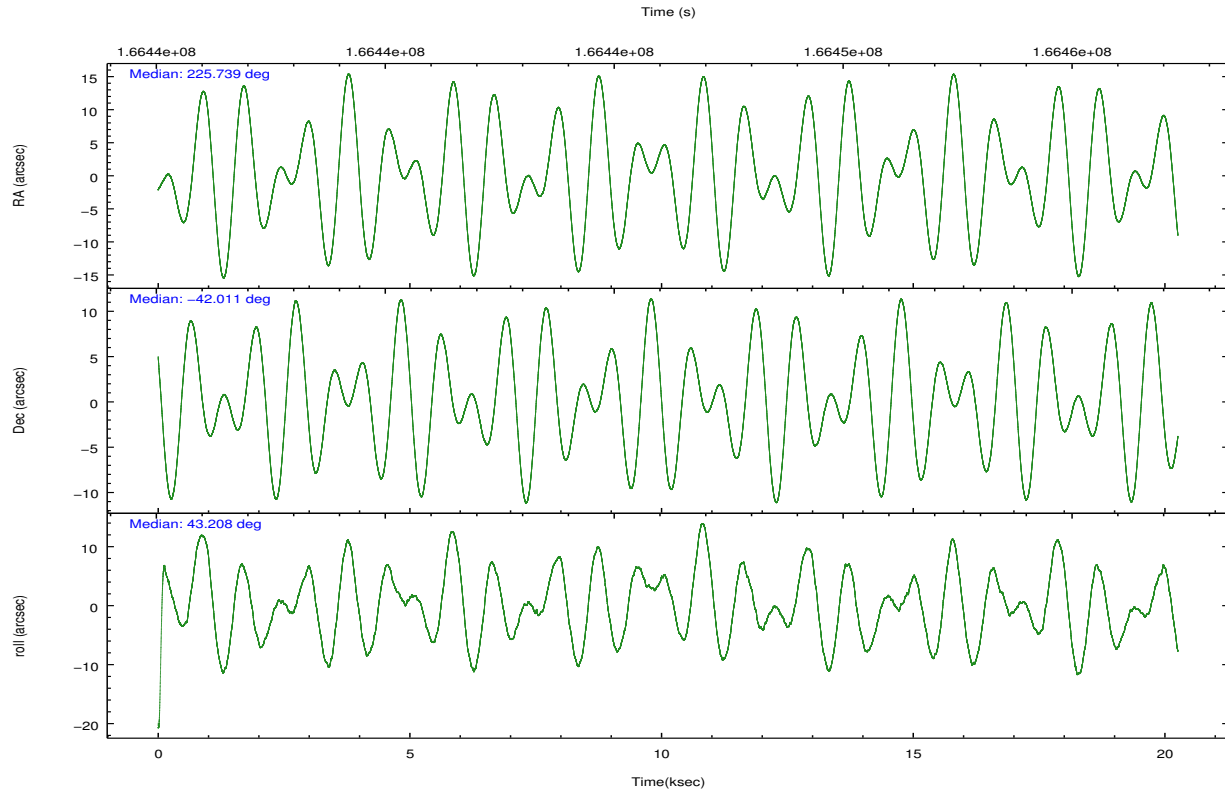
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 26023 | 29663 | 19652 | 23516 | 20272 |
| | 22% | 25% | 17% | 19% | 15% |
| grade 1 events | 123 | 124 | 98 | 106 | 73 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 3666 | 3977 | 3104 | 3205 | 19364 |
| | 3% | 3% | 2% | 2% | 14% |
| grade 3 events | 1555 | 1613 | 1239 | 1325 | 8840 |
| | 1% | 1% | 1% | 1% | 6% |
| grade 4 events | 1369 | 1618 | 1259 | 1319 | 8591 |
| | 1% | 1% | 1% | 1% | 6% |
| grade 5 events | 2961 | 3265 | 2753 | 3325 | 10067 |
| | 2% | 2% | 2% | 2% | 7% |
| grade 6 events | 1862 | 2217 | 1731 | 1849 | 26262 |
| | 1% | 1% | 1% | 1% | 20% |
| grade 7 events | 76148 | 76134 | 85470 | 84317 | 37699 |
| | 66% | 64% | 74% | 70% | 28% |

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 | 225.728644 | 225.7391361247281 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -42.037143 | -42.01092326706478 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 42.996894 | 43.21259947903567 | [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) | 166436233.184000 | 166435857.16905 | | | |
| Observation start date | 2003-04-11T08:16:09 | 2003-04-11T08:10:57 | | | |
| [s] Observation end time (MET) | 166456307.184000 | 166457216.11996 | | | |
| Observation end date | 2003-04-11T13:50:43 | 2003-04-11T14:06:56 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



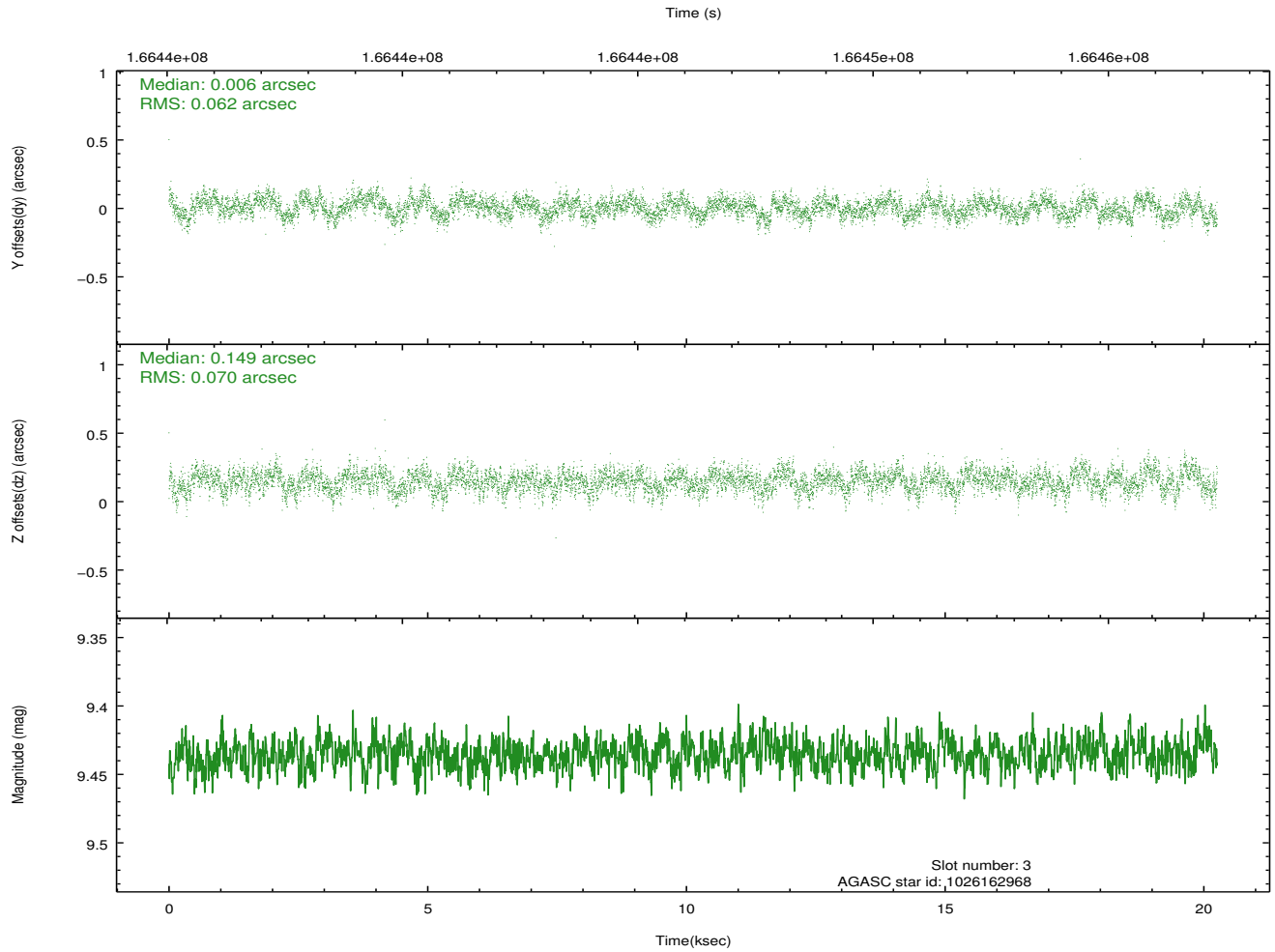
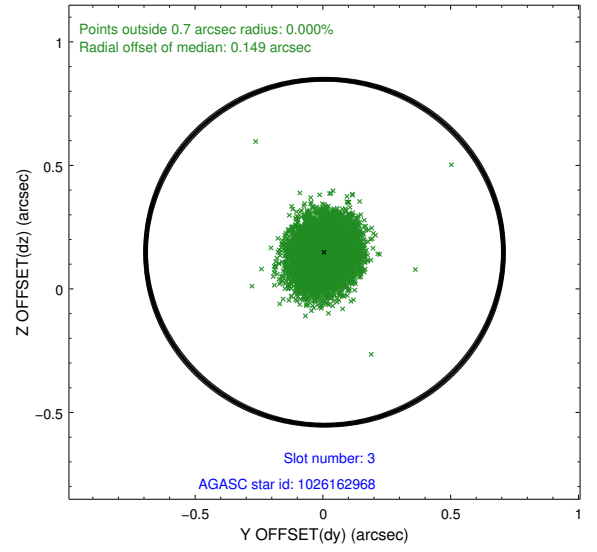
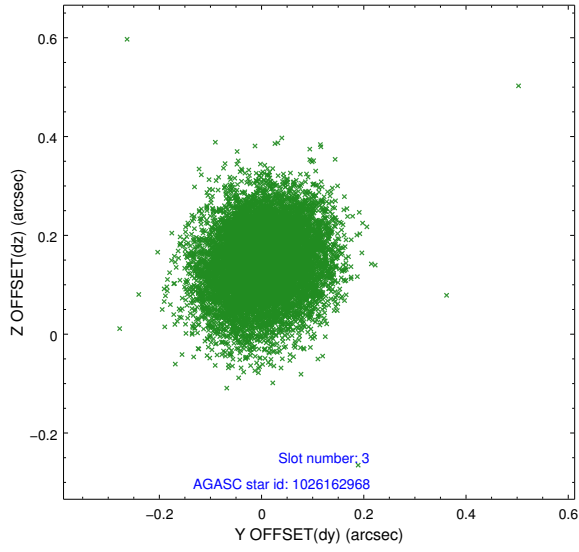


Slot Statistics

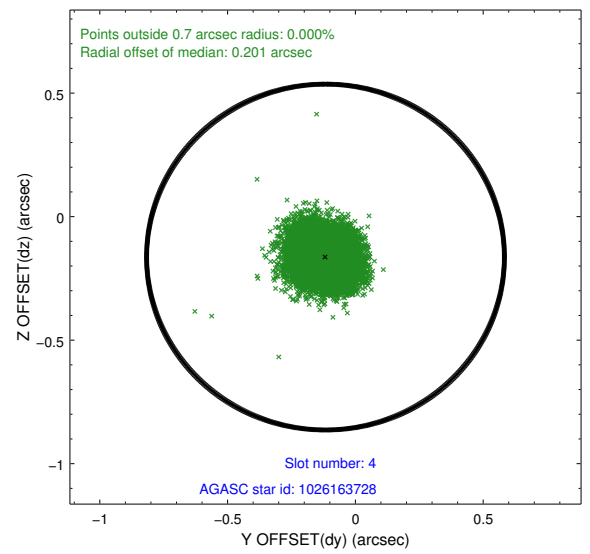
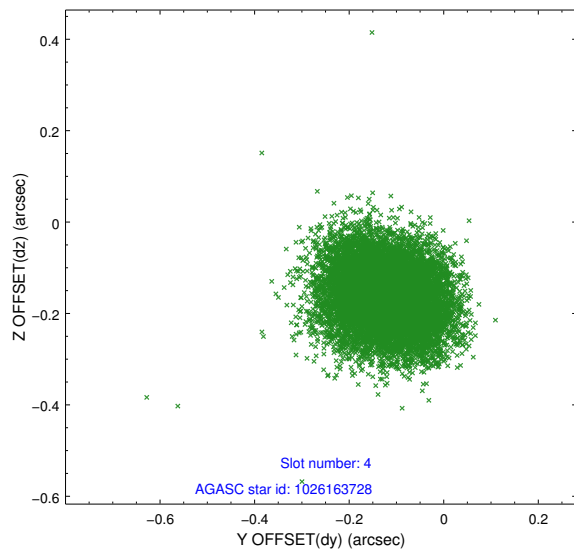
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 4942 | -0.082 | 0.003 | 0.009 | 0.015 | 0.000000 | 0.000000 | 937.46 | -830.34 |
| 1 | FID | ACIS-I-2 | 7.16 | 4941 | -0.052 | -0.017 | 0.007 | 0.011 | 0.000000 | 0.000000 | -756.49 | -836.95 |
| 2 | FID | ACIS-I-4 | 7.17 | 4942 | 0.036 | 0.081 | 0.008 | 0.014 | 0.000000 | 0.000000 | 2157.33 | 1069.48 |
| 3 | GUIDE | 1026162968 | 9.44 | 9873 | 0.006 | 0.149 | 0.101 | 0.159 | 225.835985 | -42.679852 | -1369.81 | -1885.96 |
| 4 | GUIDE | 1026163728 | 9.22 | 9877 | -0.117 | -0.164 | 0.102 | 0.159 | 225.377558 | -41.568164 | 458.29 | 1878.10 |
| 5 | GUIDE | 1026170368 | 9.30 | 9876 | 0.057 | -0.026 | 0.079 | 0.129 | 225.763429 | -42.291155 | -555.35 | -731.72 |
| 6 | GUIDE | 1026170800 | 9.02 | 9879 | 0.103 | 0.022 | 0.085 | 0.131 | 225.400024 | -42.381702 | -1485.82 | -312.52 |
| 7 | GUIDE | 1026185256 | 9.32 | 9878 | -0.044 | 0.019 | 0.086 | 0.137 | 226.095983 | -42.018643 | 762.76 | -622.62 |

2.4 Star Slots

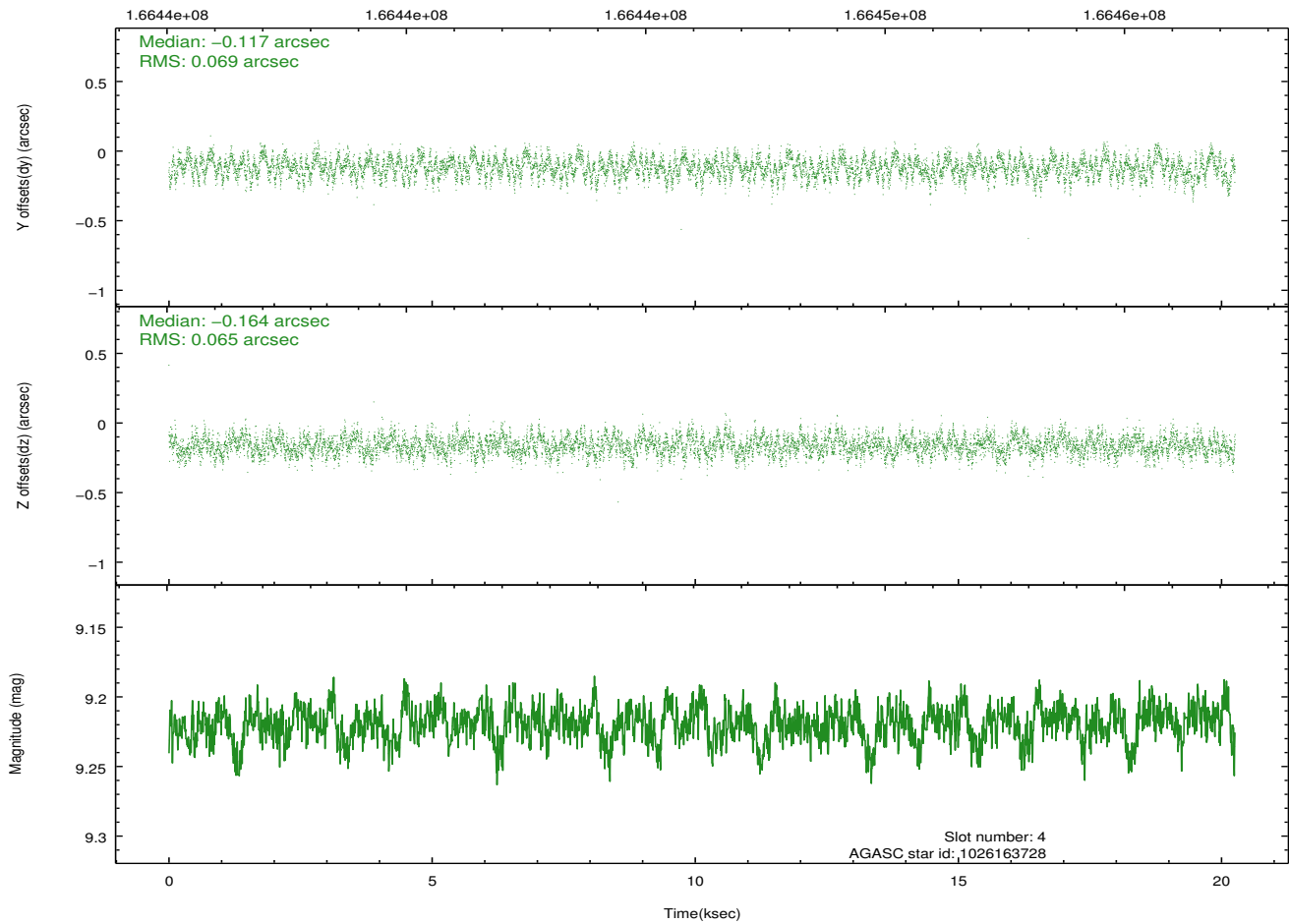
2.4.1 Slot 3



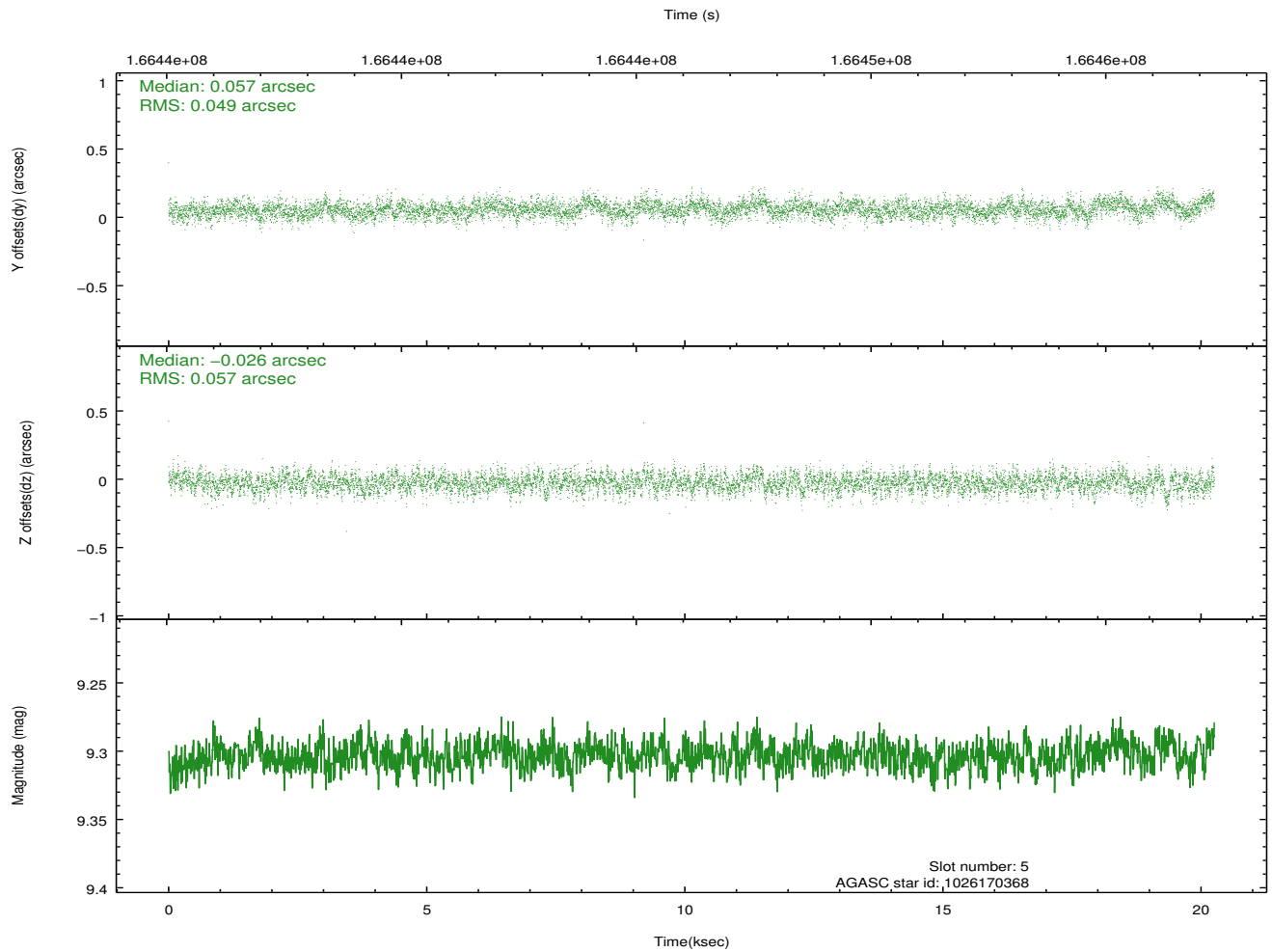
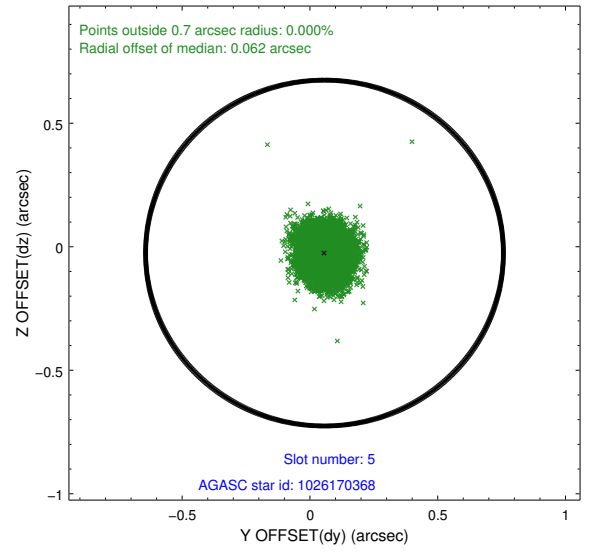
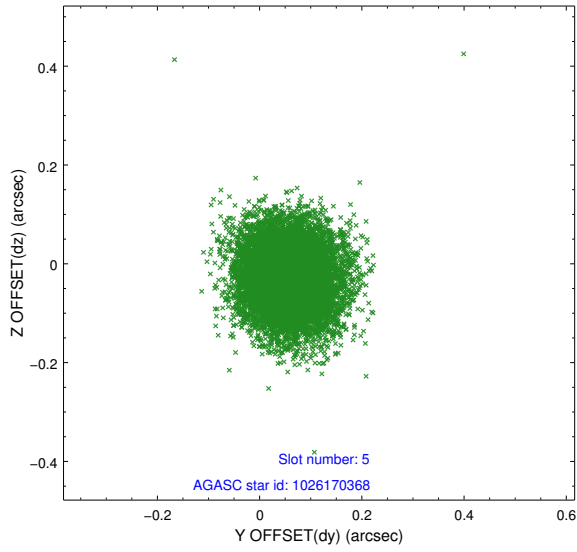
2.4.2 Slot 4



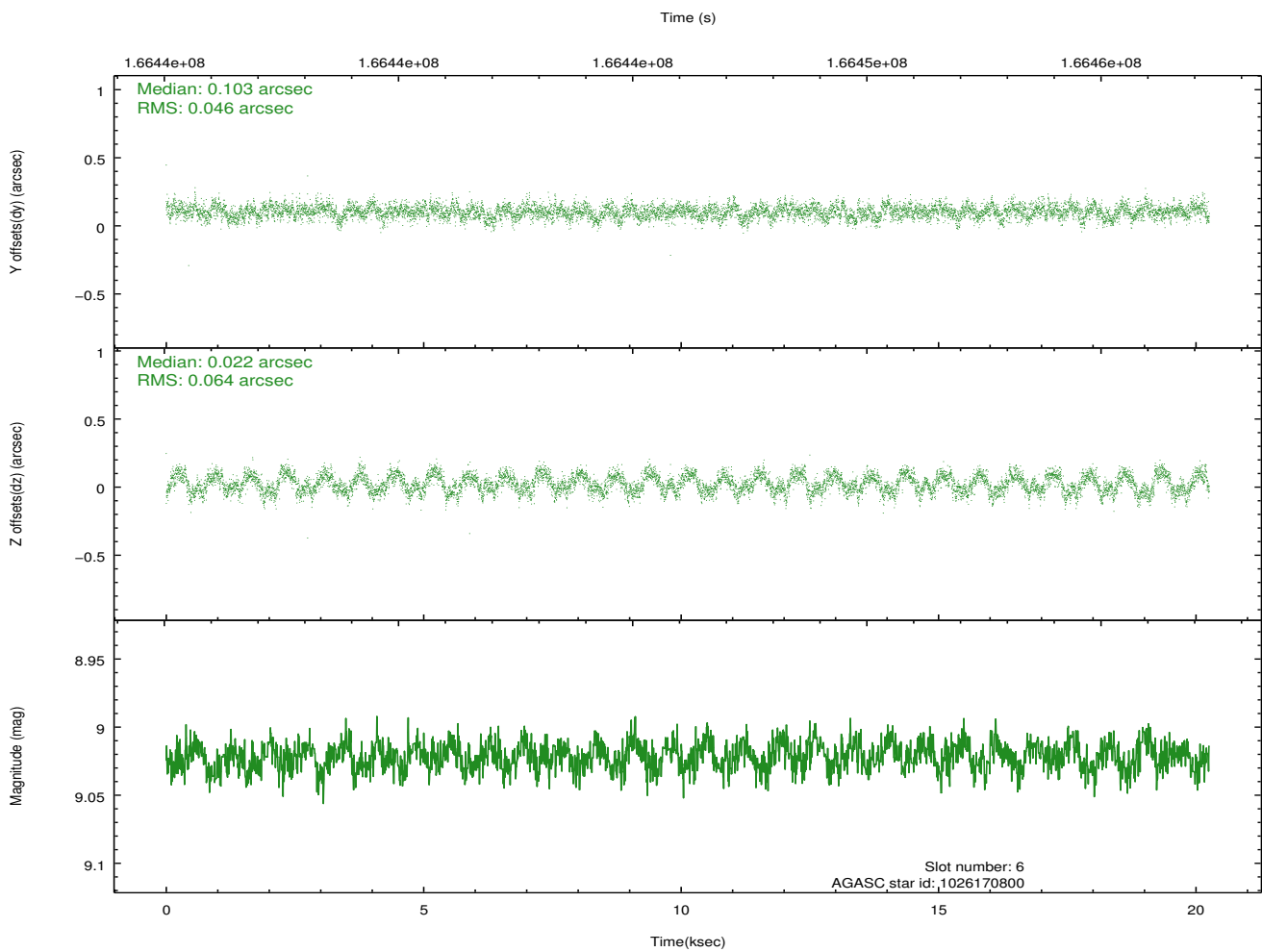
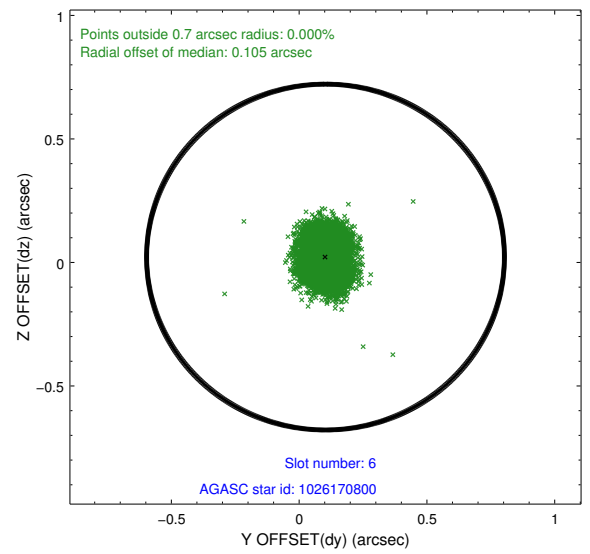
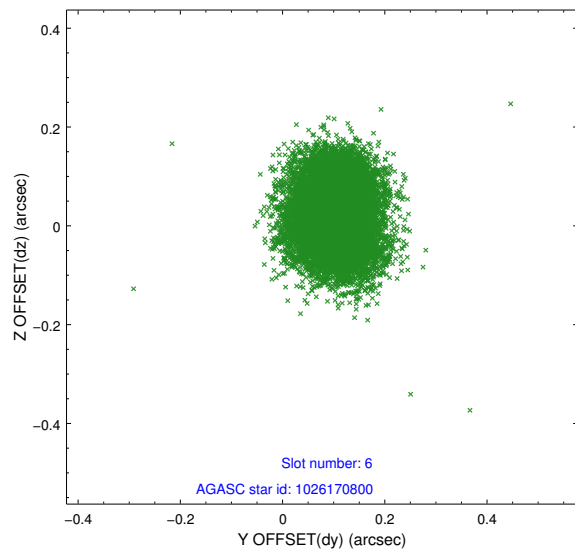
Time (s)



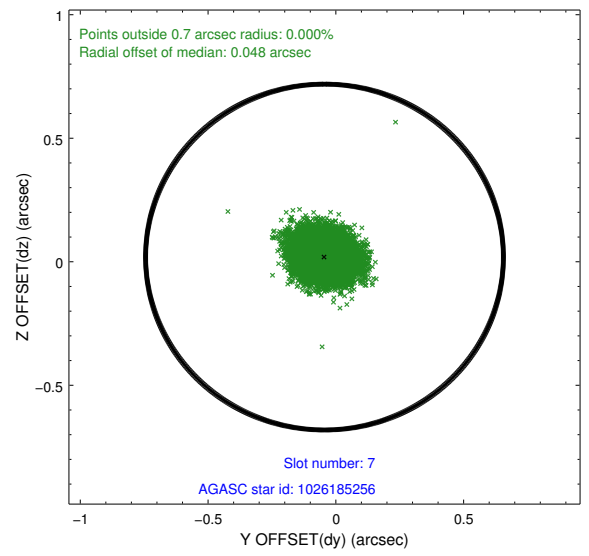
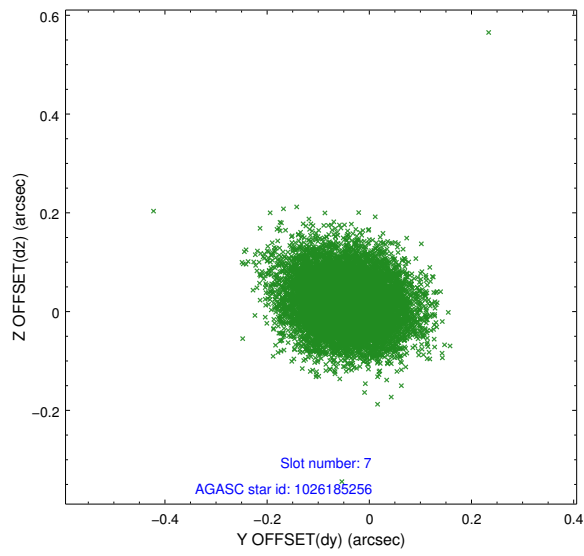
2.4.3 Slot 5



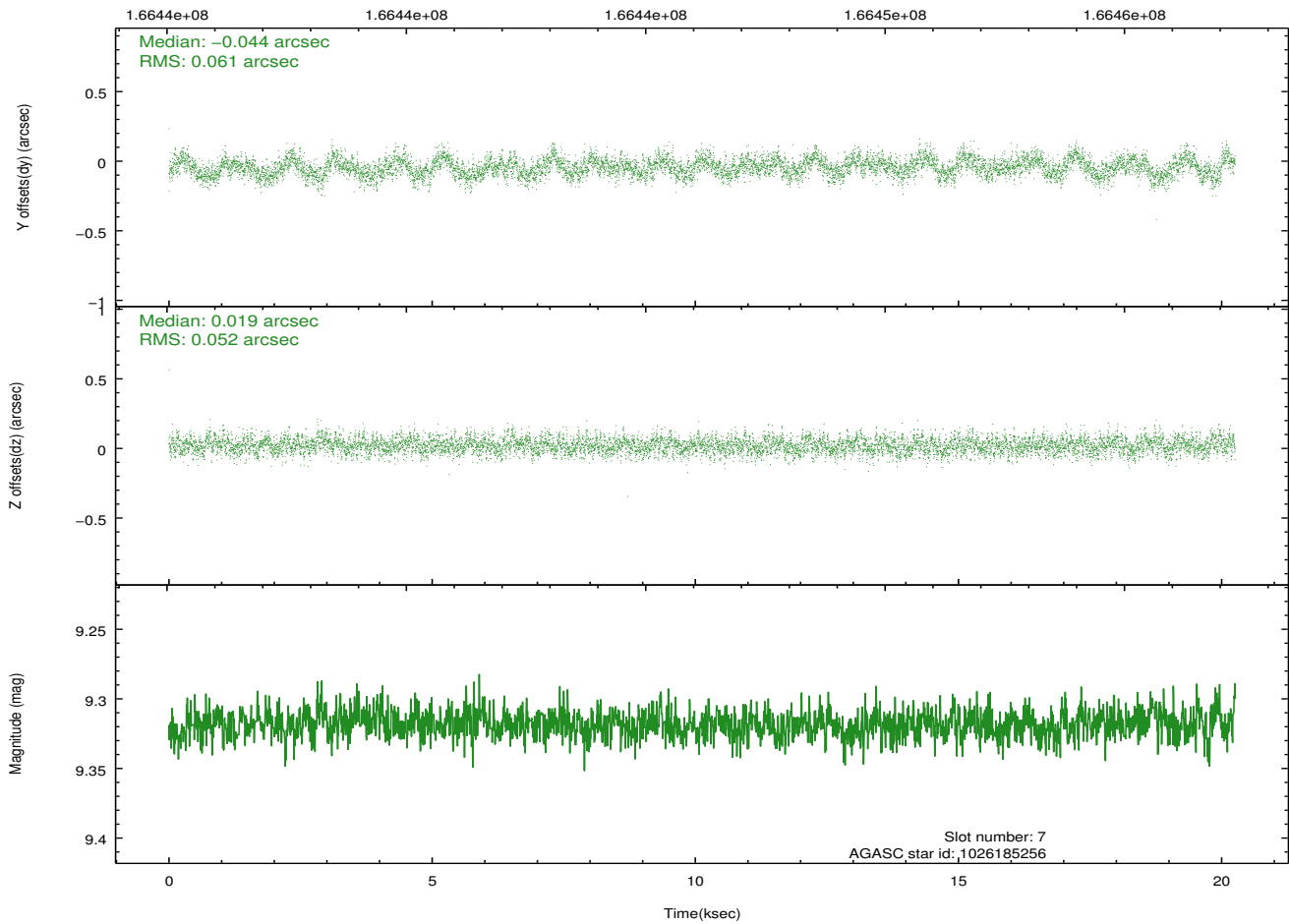
2.4.4 Slot 6



2.4.5 Slot 7

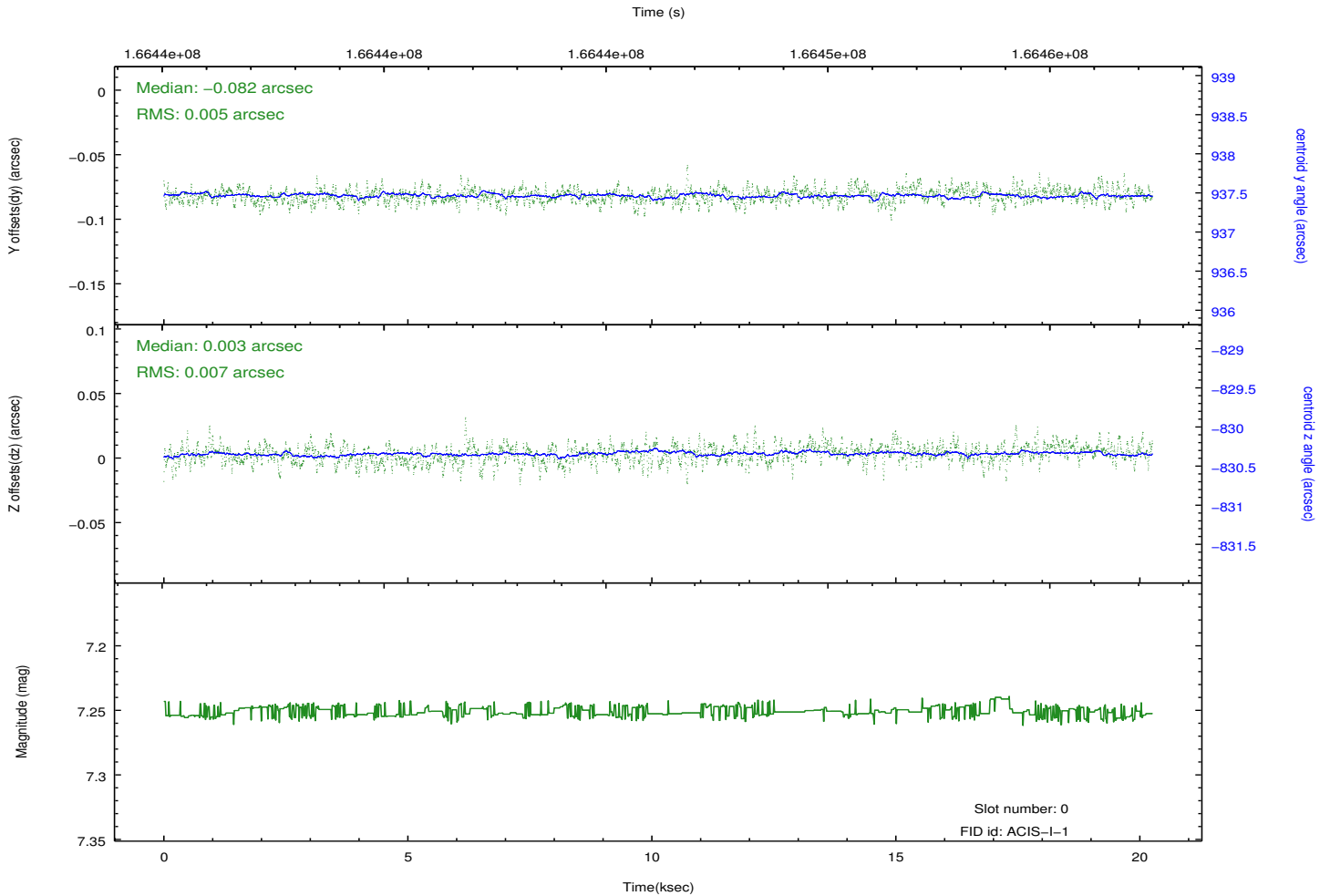
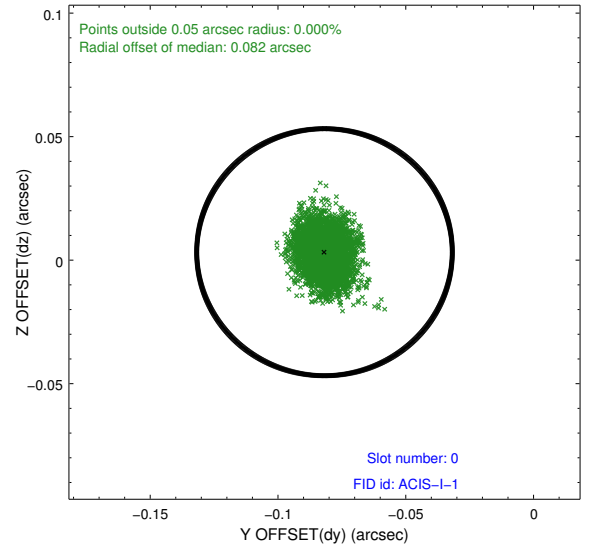
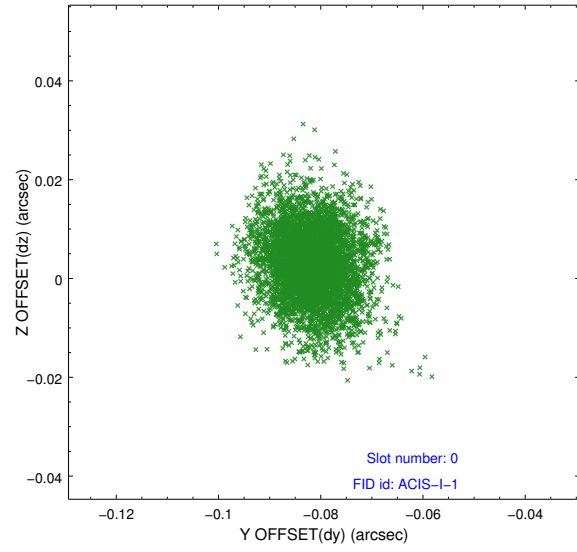


Time (s)

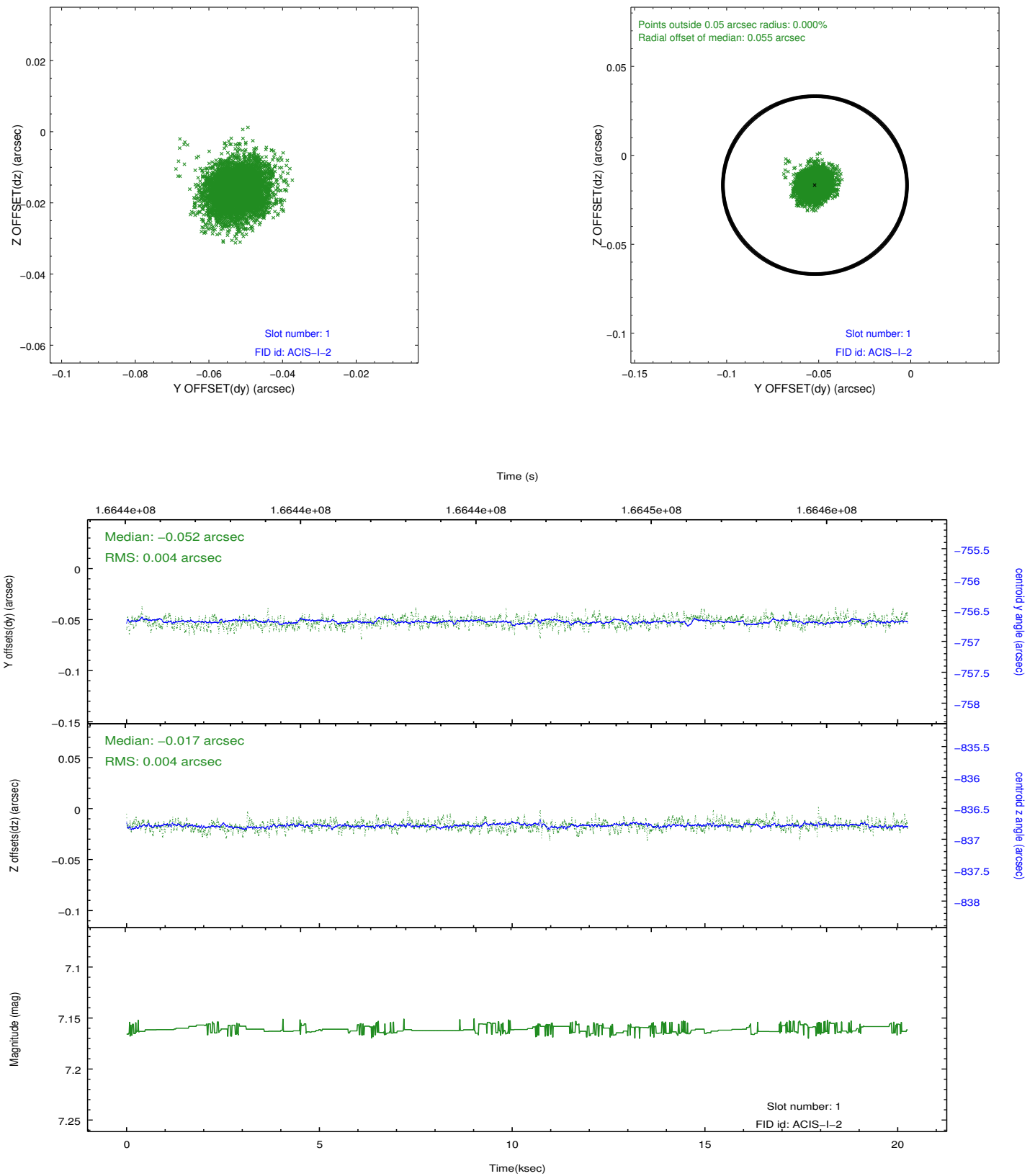


2.5 FID Slots

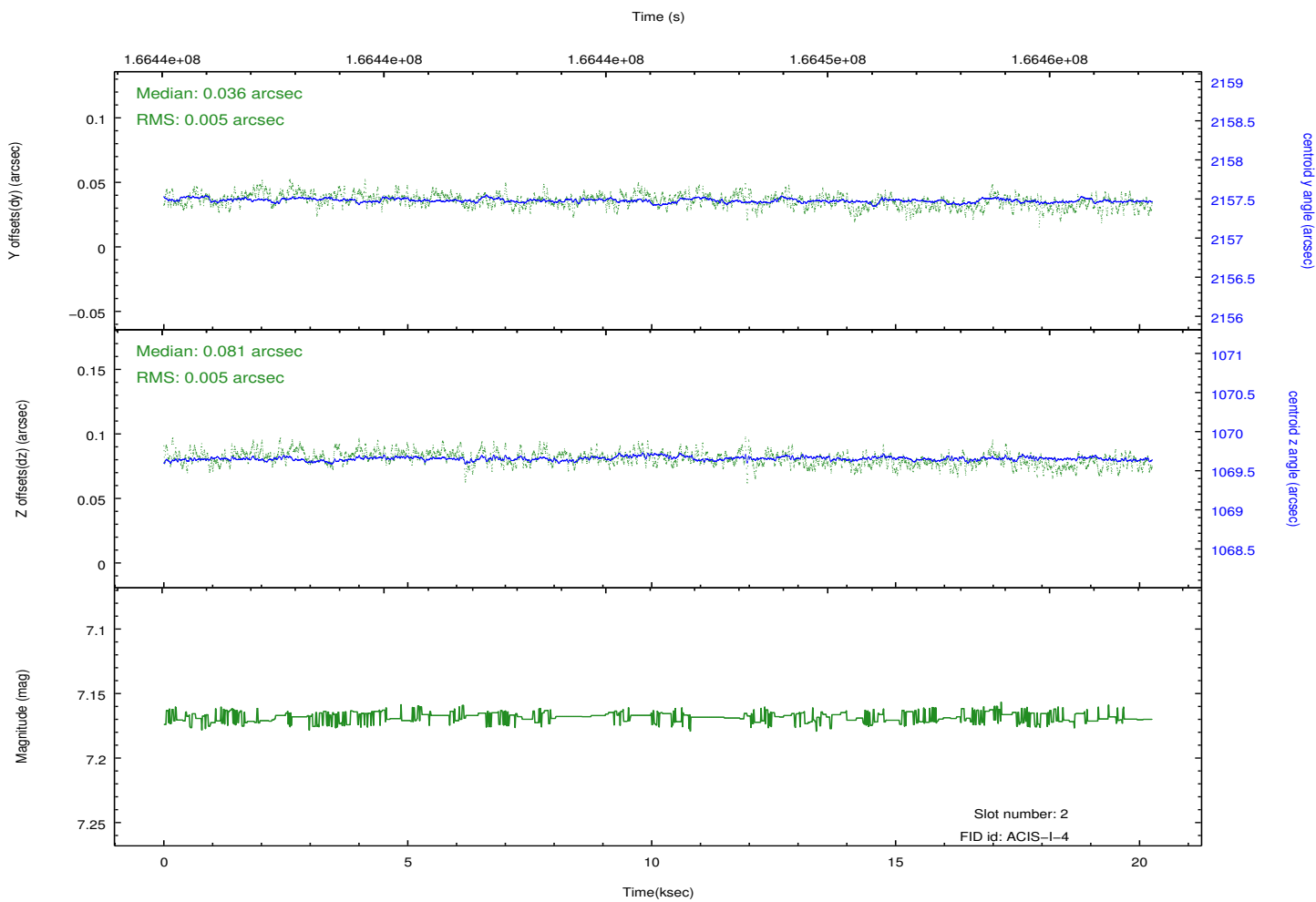
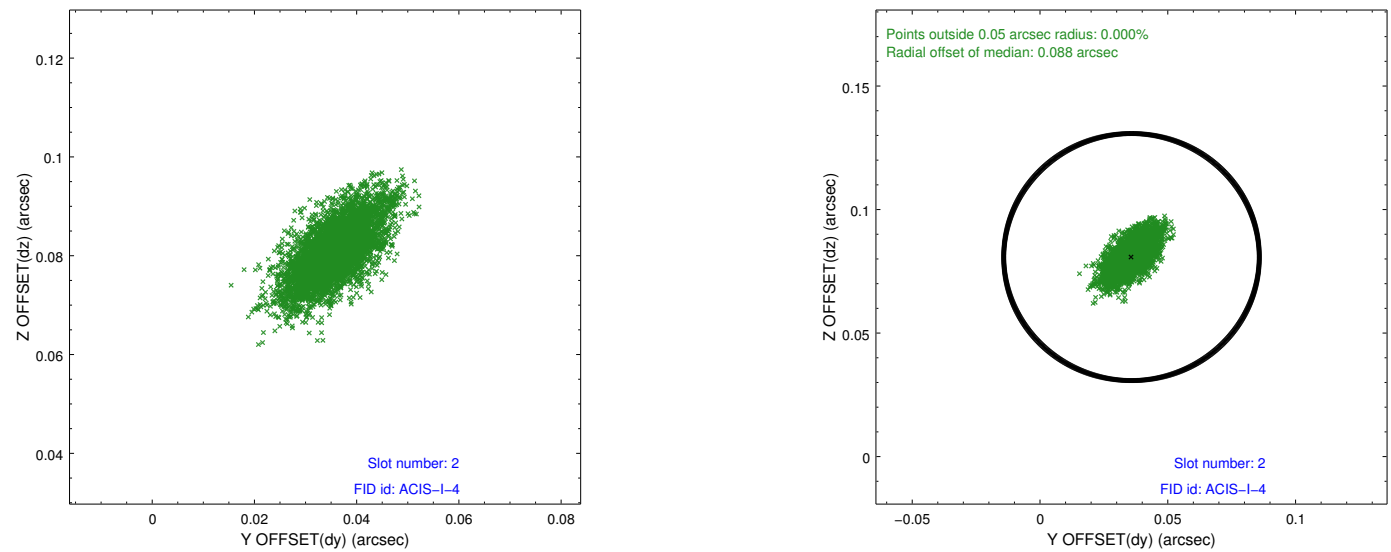
2.5.1 Slot 0



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 | 19.849 |

A.2 Comments