

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11506 - L2 Version 2
Chandra X-Ray Center

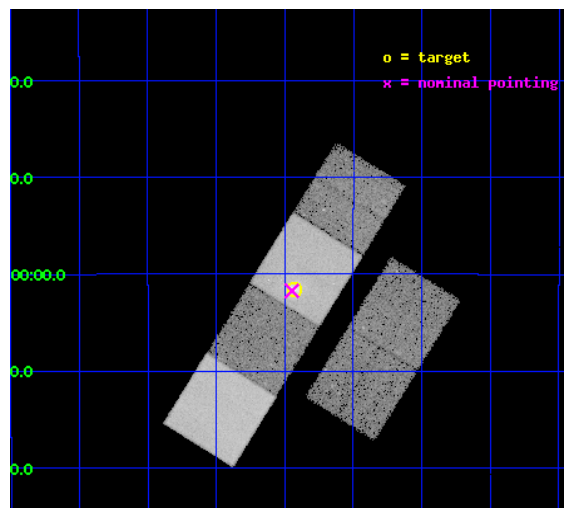
L2 Processing Date : Jun 13 2012

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1 Front

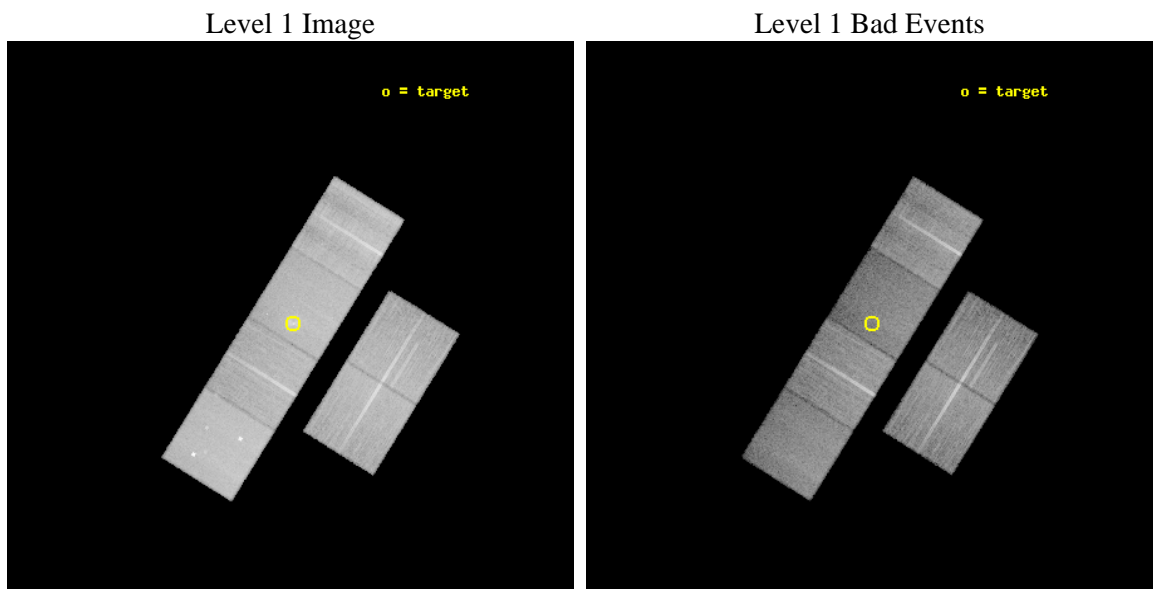
| | | |
|----------|---|---|
| seq_num | 702092 | Sequence number |
| obs_id | 11506 | Observation id |
| title | The nature of active nuclei in radio galaxies: observations of the 2Jy sample | Proposal title |
| observer | Dr Martin Hardcastle | Principal investigator |
| object | PKS 2211-17 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 333.6075 | Observer's specified target RA [deg] |
| dec_targ | -17.026722 | Observer's specified target Dec [deg] |
| ra_nom | 333.61202481086 | Nominal RA [deg] |
| dec_nom | -17.028850315956 | Nominal Dec [deg] |
| roll_nom | 301.86092292774 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 20035.199925423 | Sum of GTIs [s] |
| livetime | 19781.502160218 | Livetime [s] |
| ontime2 | 20035.199925423 | Sum of GTIs [s] |
| ontime3 | 20031.958885133 | Sum of GTIs [s] |
| ontime5 | 20035.199925423 | Sum of GTIs [s] |
| ontime6 | 20035.199925423 | Sum of GTIs [s] |
| ontime7 | 20035.199925423 | Sum of GTIs [s] |
| ontime8 | 20035.199925423 | Sum of GTIs [s] |
| l2events | 276228 | Number of level 2 events |



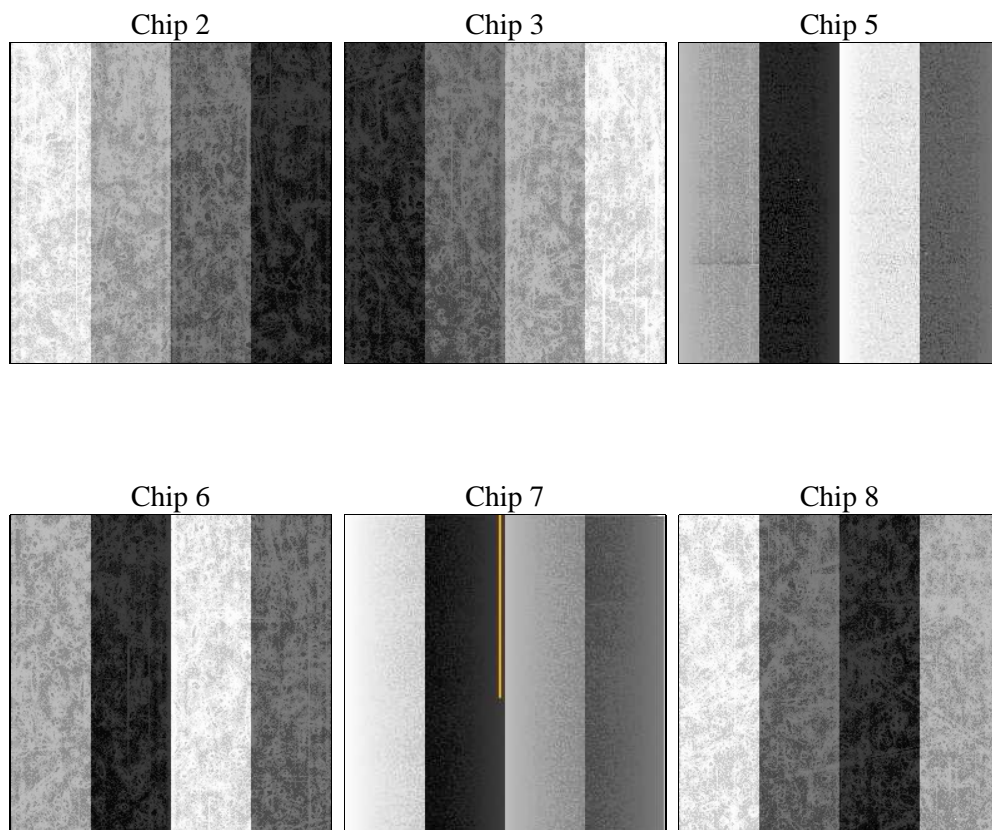
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 20000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 20035.199925423 | Sum of GTIs [s] |
| caldbver | 4.4.10 | | ontime2 | 20035.199925423 | Sum of GTIs [s] |
| date | 2012-06-13T19:30:37 | Date and time of file creation | ontime3 | 20031.958885133 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 20035.199925423 | Sum of GTIs [s] |
| | | | ontime6 | 20035.199925423 | Sum of GTIs [s] |
| | | | ontime7 | 20035.199925423 | Sum of GTIs [s] |
| | | | ontime8 | 20035.199925423 | Sum of GTIs [s] |
| | | | l1events | 1211911 | Number of level 1 events |

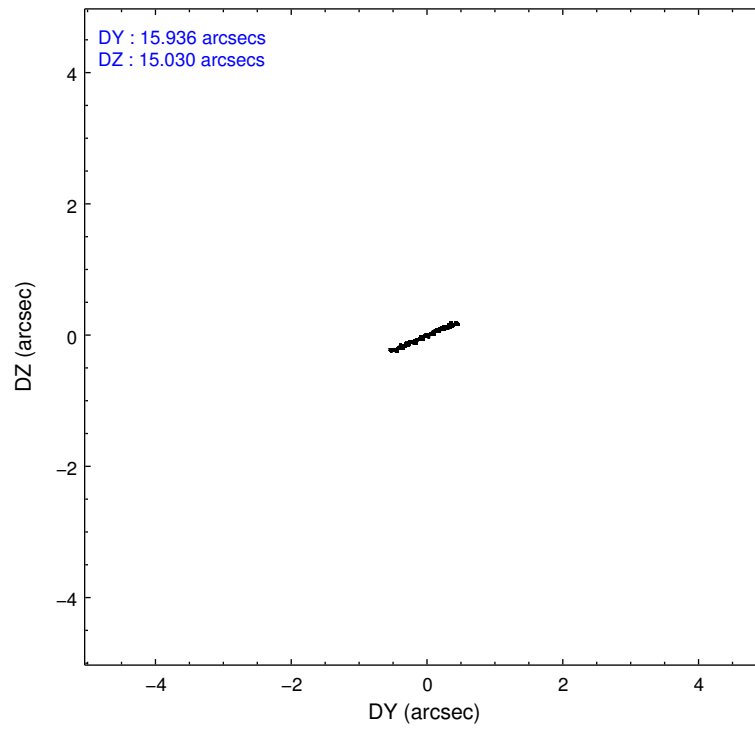
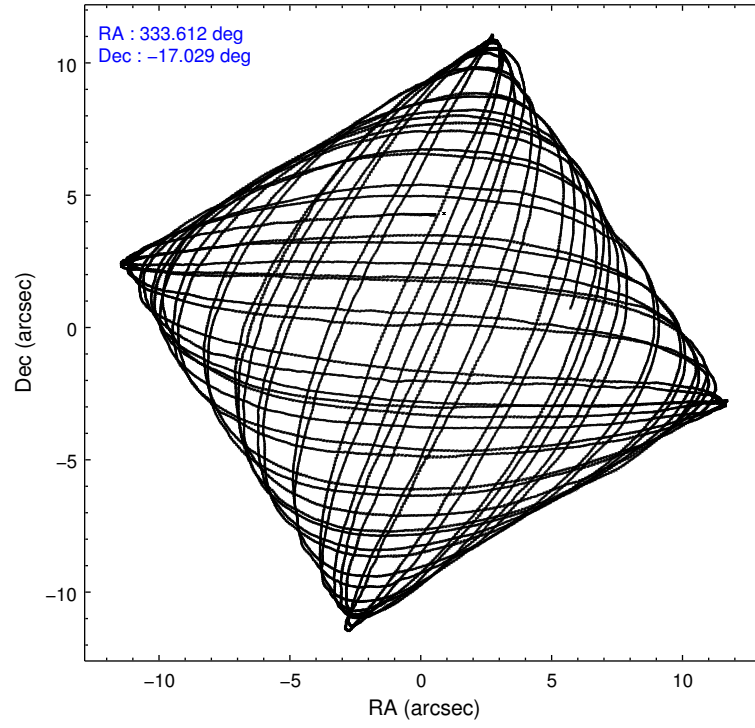
2.1.4 Events

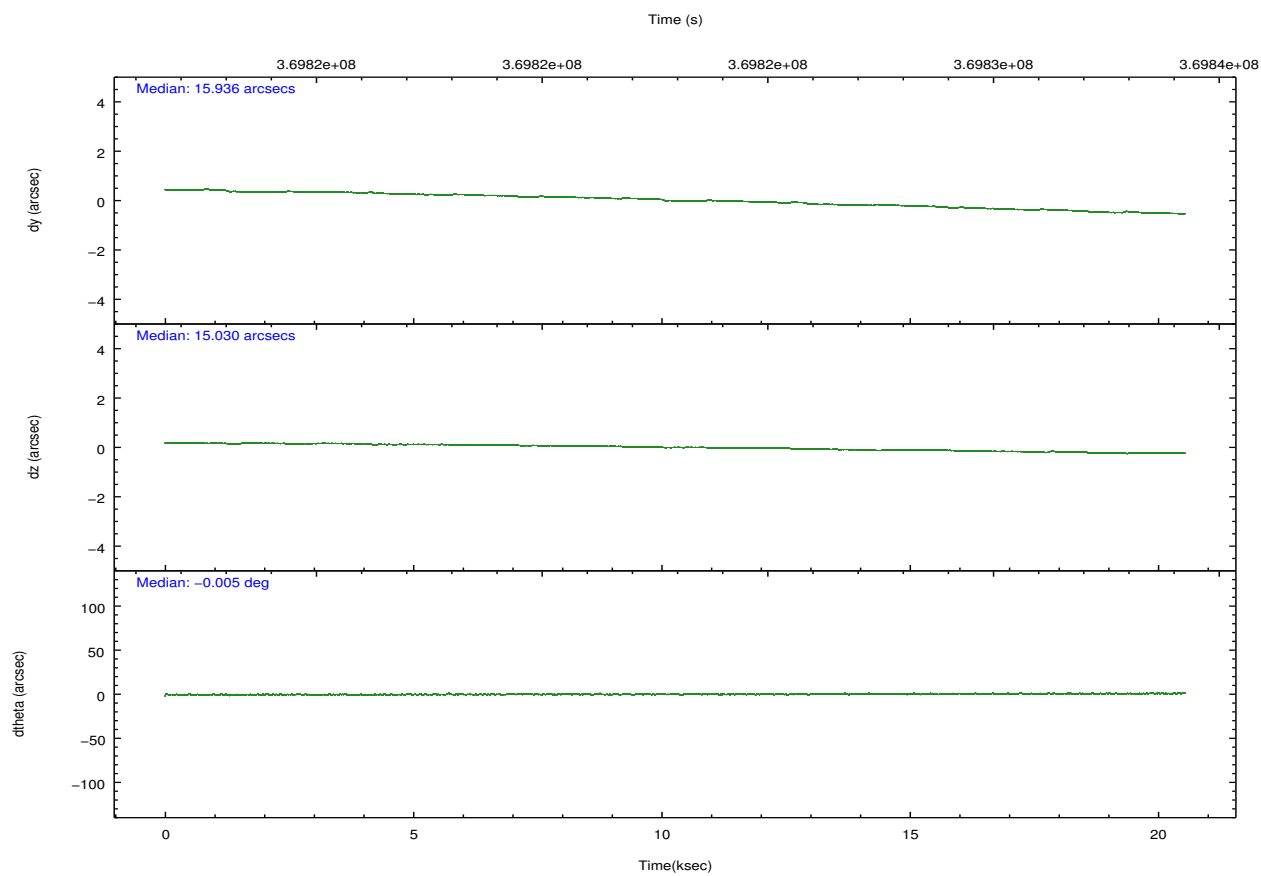
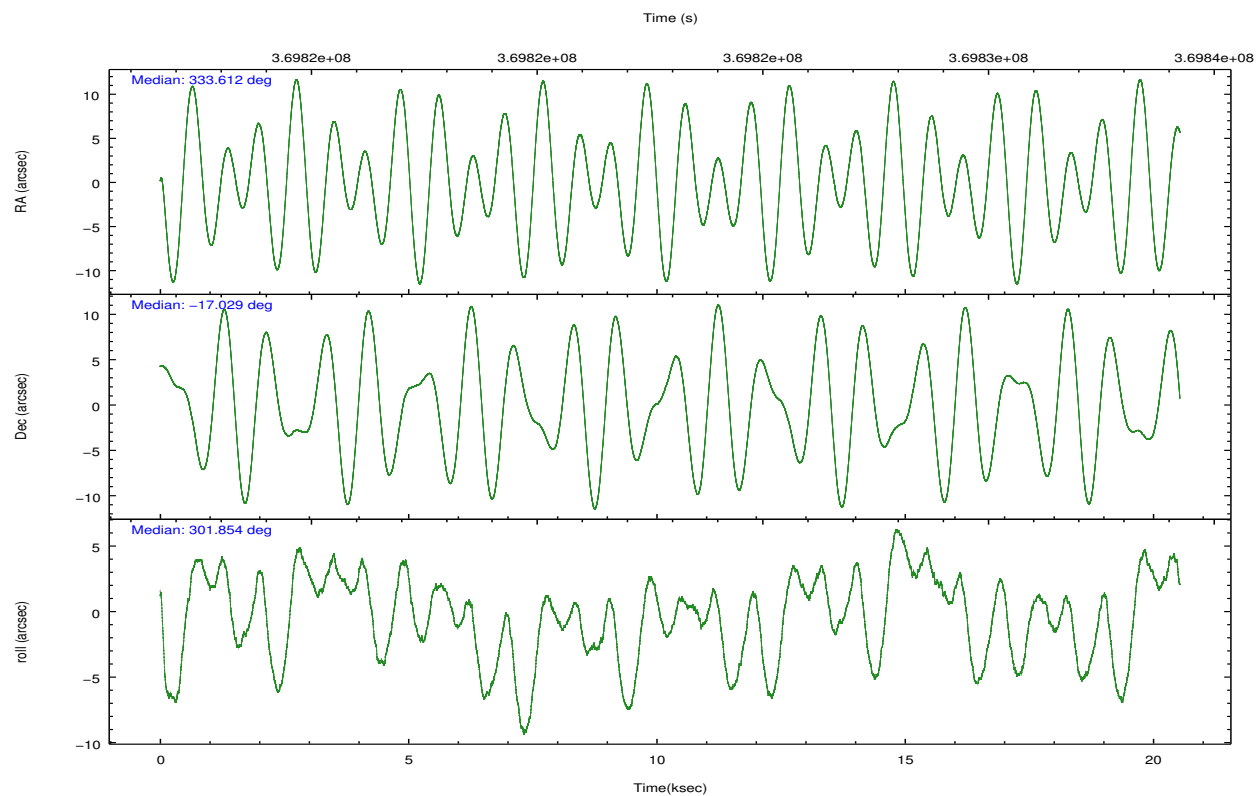
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|-------|--------|
| level 1 events | 185820 | 169823 | 248649 | 178940 | 207578 | 221101 | grade 0 events | 6319 | 5823 | 14006 | 6620 | 11700 | 15284 |
| rejected events | 168405 | 153467 | 123142 | 160402 | 107353 | 167201 | | 3% | 3% | 5% | 3% | 5% | 6% |
| rejected % | 90% | 90% | 49% | 89% | 51% | 75% | grade 1 events | 115 | 97 | 531 | 93 | 276 | 181 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 4248 | 3609 | 37228 | 4101 | 21214 | 12577 |
| | | | | | | | | 2% | 2% | 14% | 2% | 10% | 5% |
| | | | | | | | grade 3 events | 1723 | 1832 | 4973 | 1965 | 9377 | 6154 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 1849 | 1800 | 4810 | 1919 | 9212 | 5563 |
| | | | | | | | | 0% | 1% | 1% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 5927 | 7076 | 19490 | 7152 | 21084 | 10565 |
| | | | | | | | | 3% | 4% | 7% | 3% | 10% | 4% |
| | | | | | | | grade 6 events | 3284 | 3300 | 64527 | 3936 | 48761 | 14355 |
| | | | | | | | | 1% | 1% | 25% | 2% | 23% | 6% |
| | | | | | | | grade 7 events | 162355 | 146286 | 103084 | 153154 | 85954 | 156422 |
| | | | | | | | | 87% | 86% | 41% | 85% | 41% | 70% |

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 | 333.586647 | 333.6120248108589 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | -17.016314 | -17.02885031595601 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 301.696864 | 301.860922927739 | 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 | Y | Y |
| [s] Observation start time (MET) | 369813204.184000 | 369812020.9392 | CCD S5 on | N | N |
| Observation start date | 2009-09-20T05:52:18 | 2009-09-20T05:33:40 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 369833204.184000 | 369834428.97782 | On-chip summing requested | N | N |
| Observation end date | 2009-09-20T11:25:38 | 2009-09-20T11:47:08 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



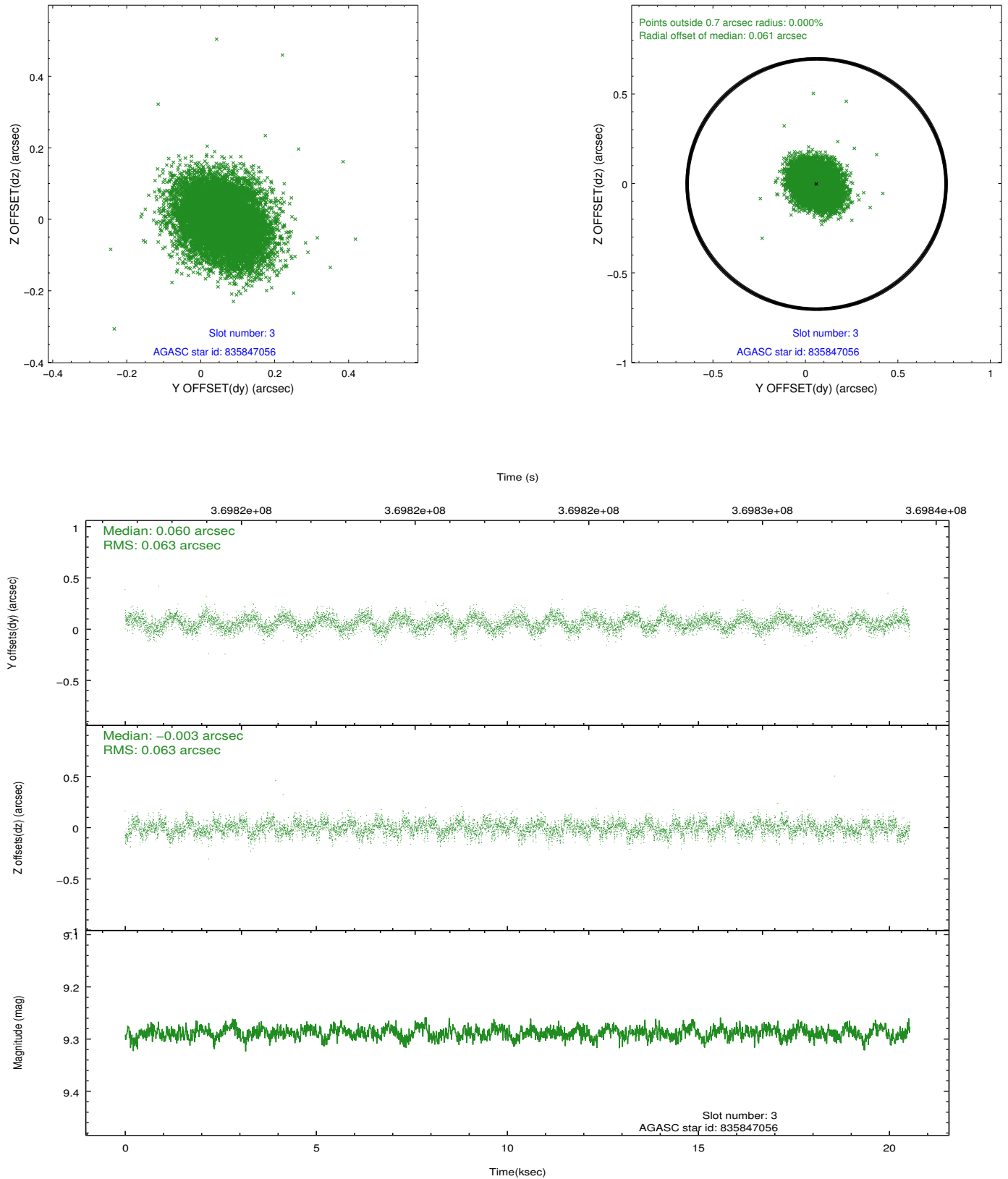


Slot Statistics

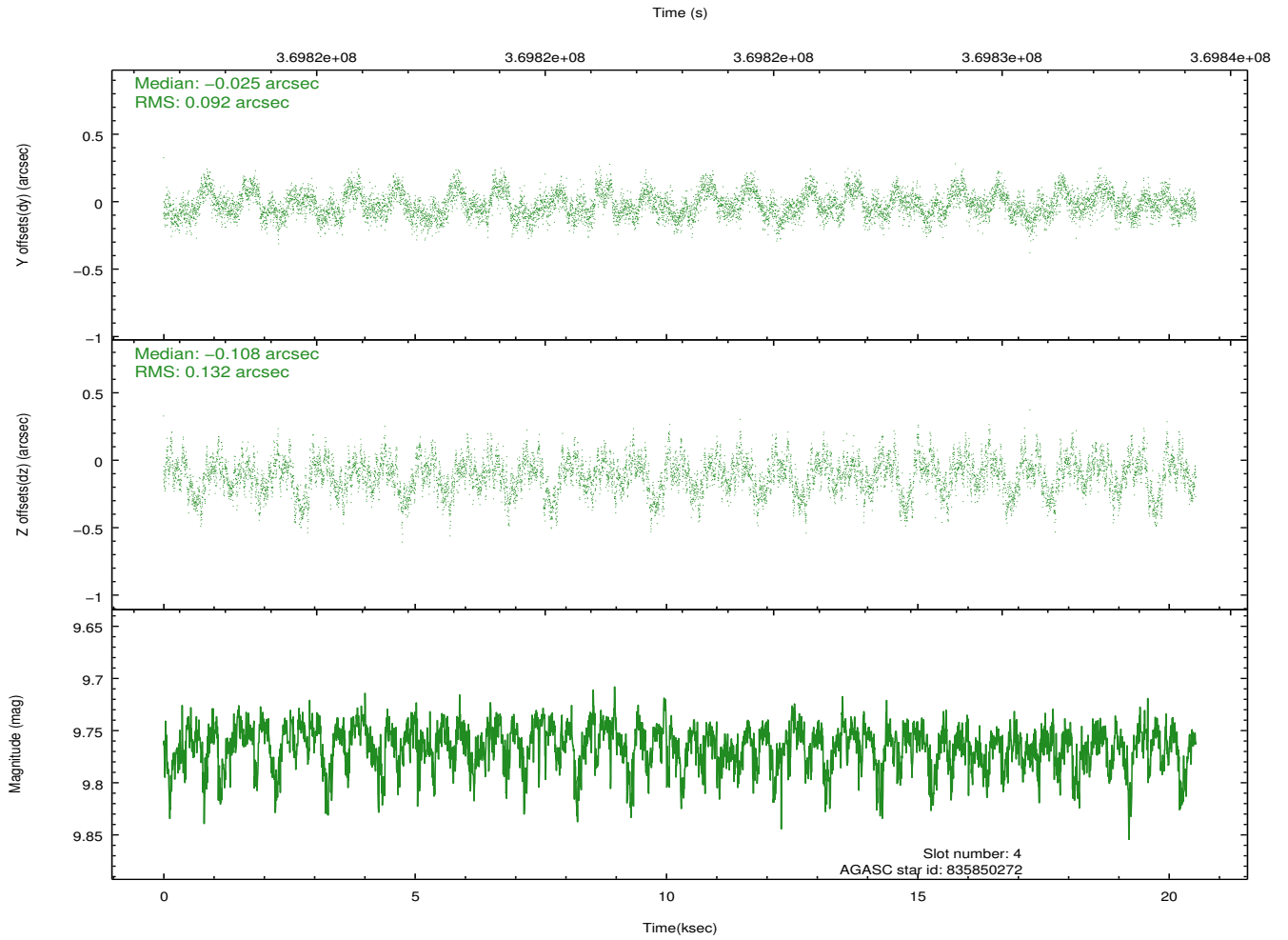
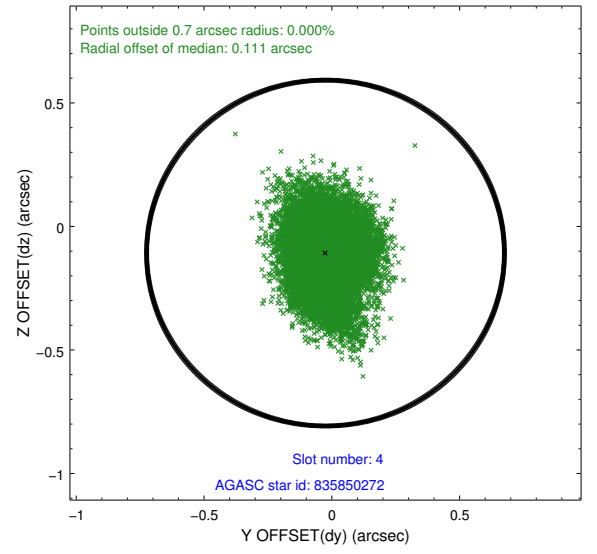
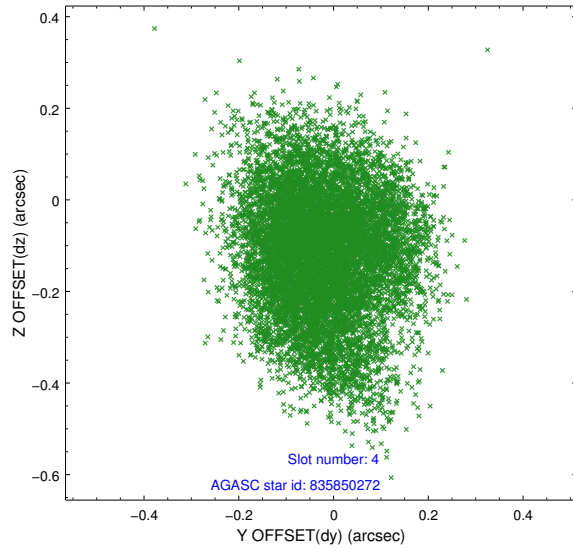
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 6.96 | 5009 | -0.107 | -0.037 | 0.007 | 0.012 | 0.000000 | 0.000000 | -769.02 | -1736.34 |
| 1 | FID | ACIS-S-4 | 7.04 | 5009 | 0.215 | 0.062 | 0.006 | 0.012 | 0.000000 | 0.000000 | 2144.48 | 172.08 |
| 2 | FID | ACIS-S-5 | 7.07 | 5008 | -0.139 | -0.016 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1821.68 | 165.84 |
| 3 | GUIDE | 835847056 | 9.29 | 10014 | 0.060 | -0.003 | 0.095 | 0.152 | 333.278171 | -16.621840 | -1766.03 | -159.70 |
| 4 | GUIDE | 835850272 | 9.76 | 10002 | -0.025 | -0.108 | 0.172 | 0.277 | 333.242614 | -17.411688 | 591.66 | -1753.99 |
| 5 | GUIDE | 835977888 | 9.42 | 10004 | -0.088 | -0.016 | 0.228 | 0.314 | 333.352822 | -17.230918 | 236.17 | -1090.12 |
| 6 | GUIDE | 835978224 | 9.11 | 10008 | 0.122 | 0.092 | 0.103 | 0.166 | 334.068991 | -17.205246 | 1452.61 | 1053.22 |
| 7 | GUIDE | 835978912 | 9.41 | 10001 | -0.065 | 0.075 | 0.143 | 0.214 | 334.237511 | -16.984216 | 1082.76 | 1965.64 |

2.4 Star Slots

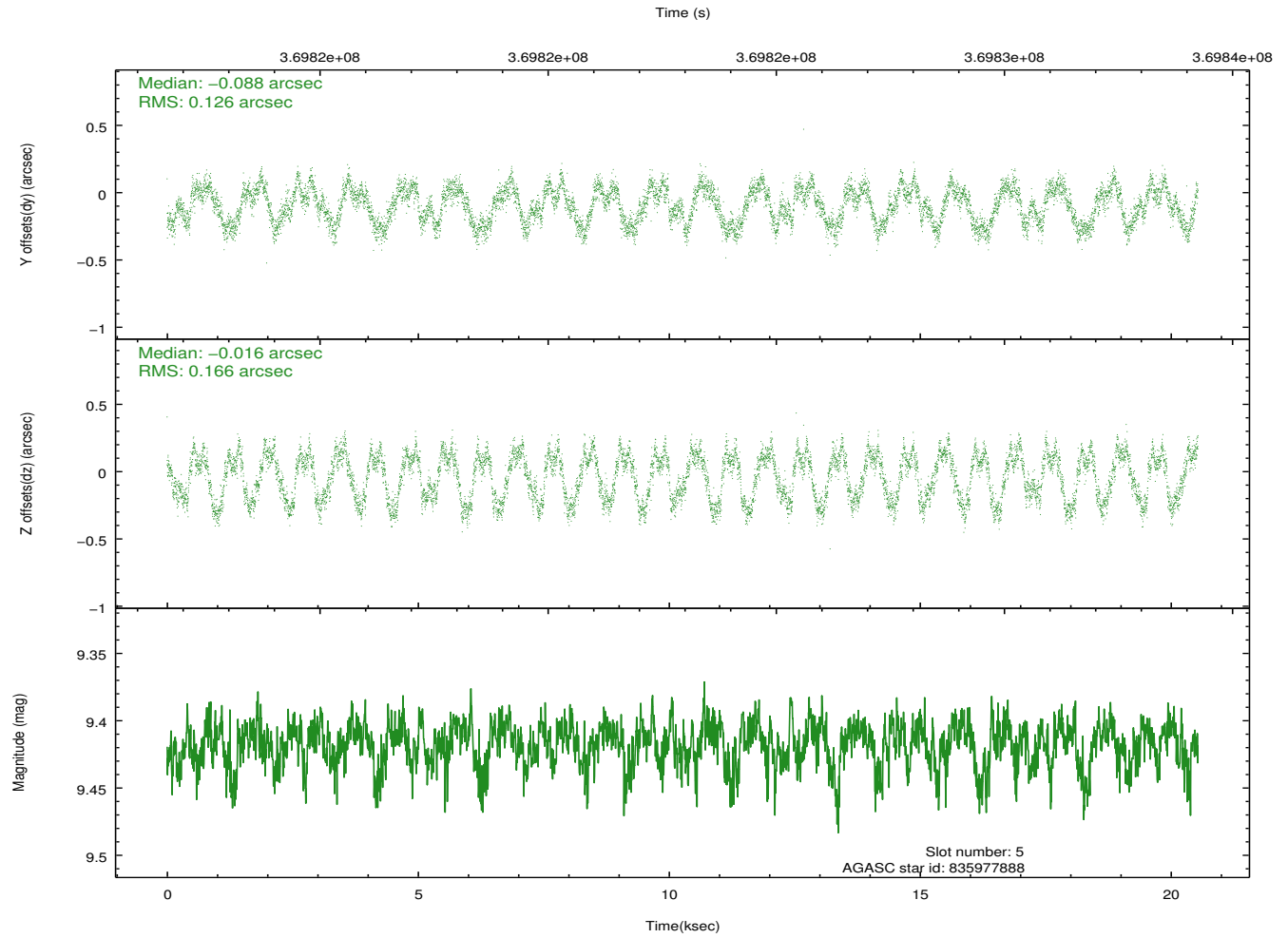
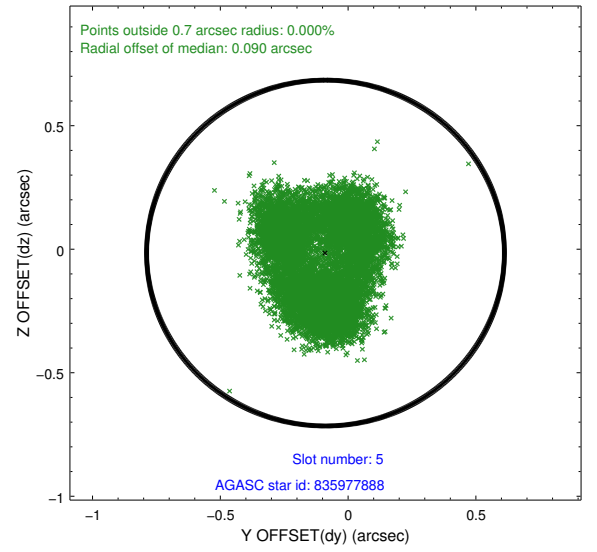
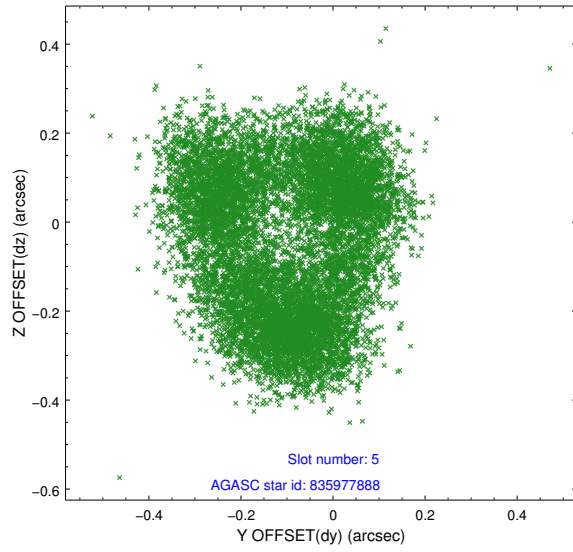
2.4.1 Slot 3



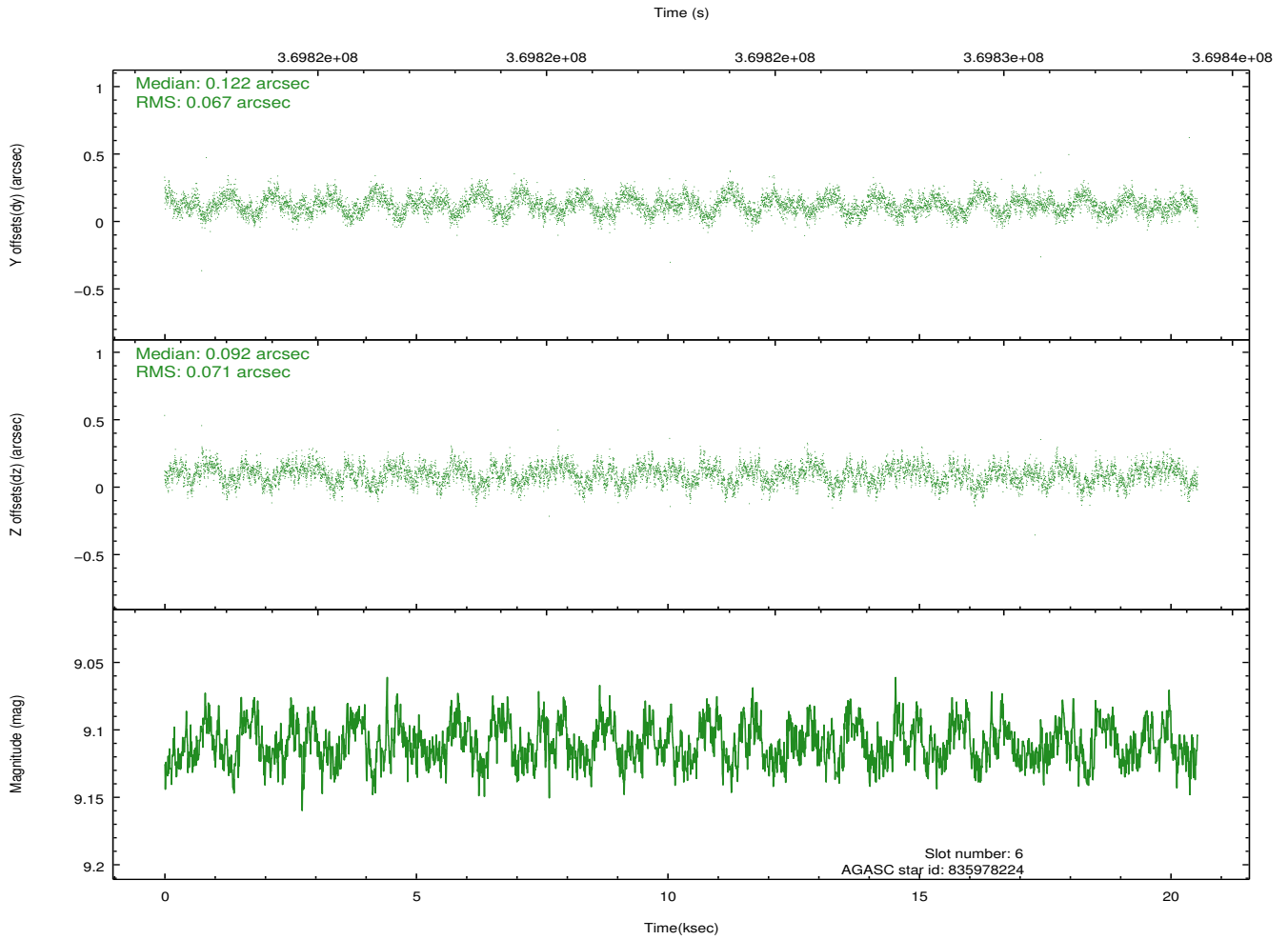
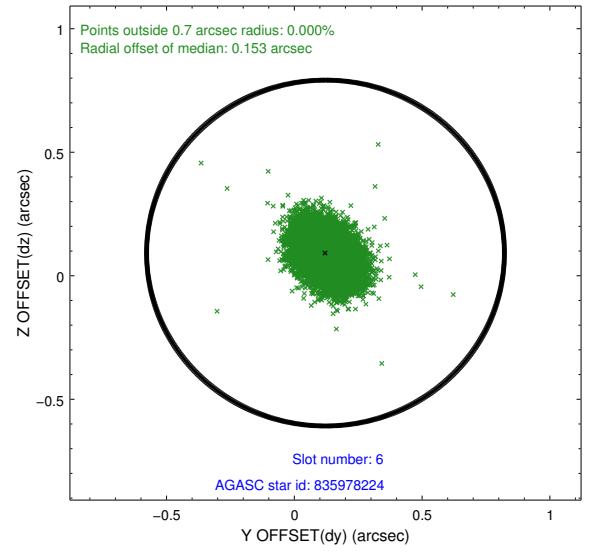
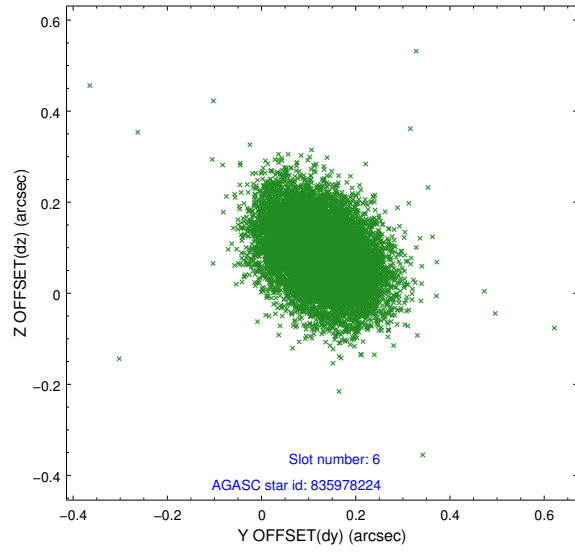
2.4.2 Slot 4



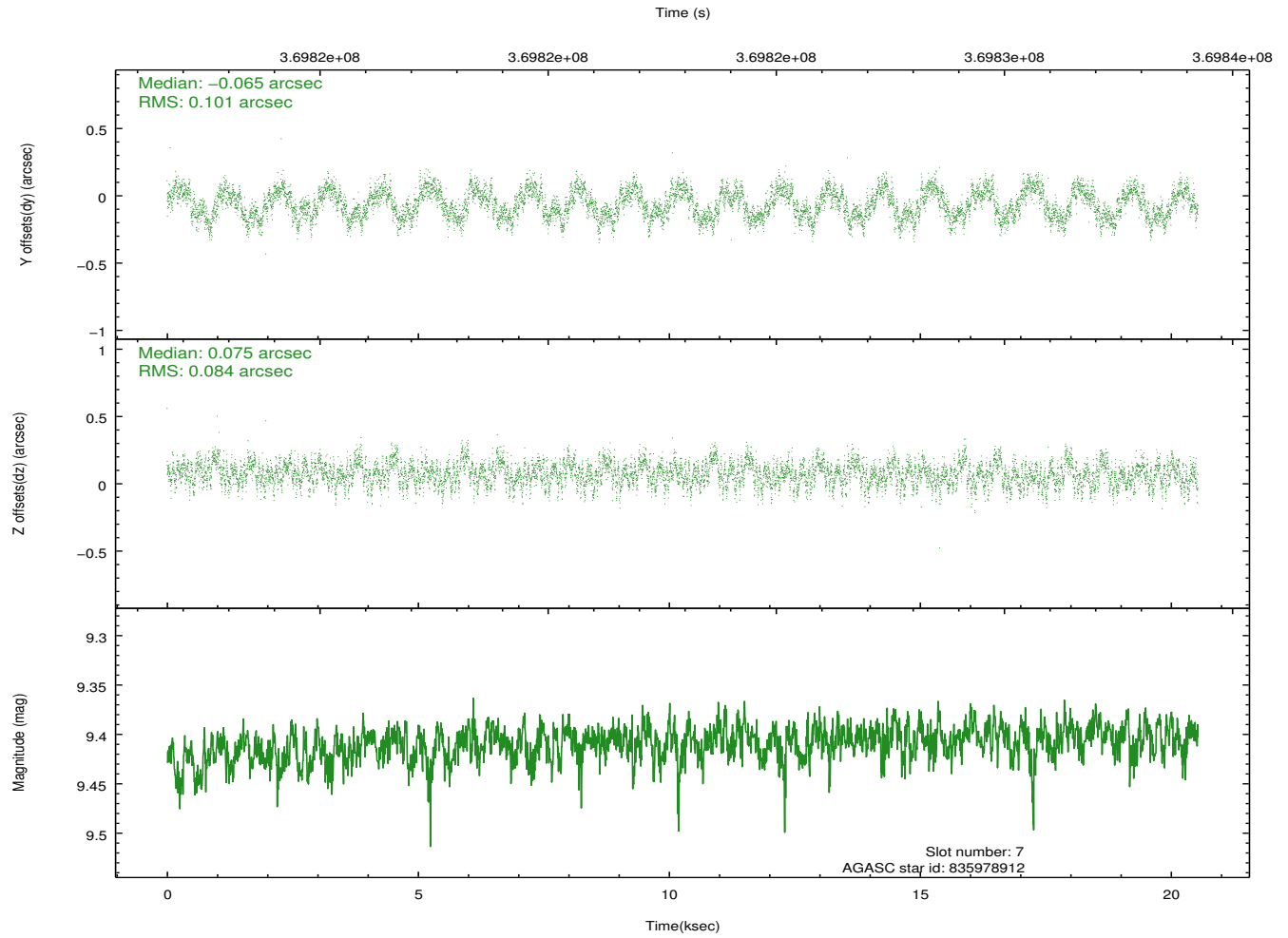
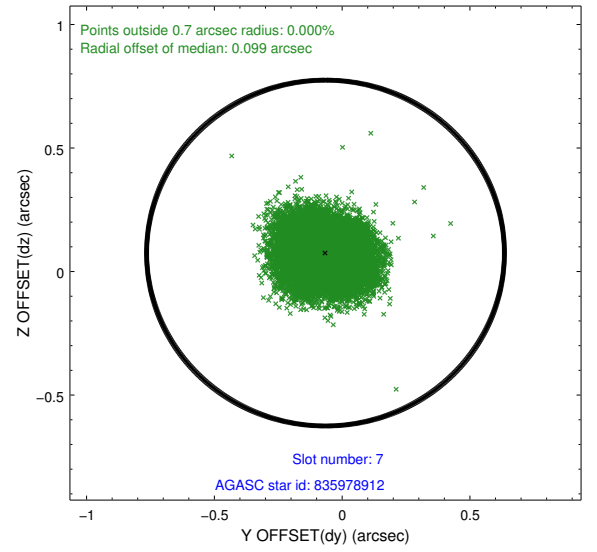
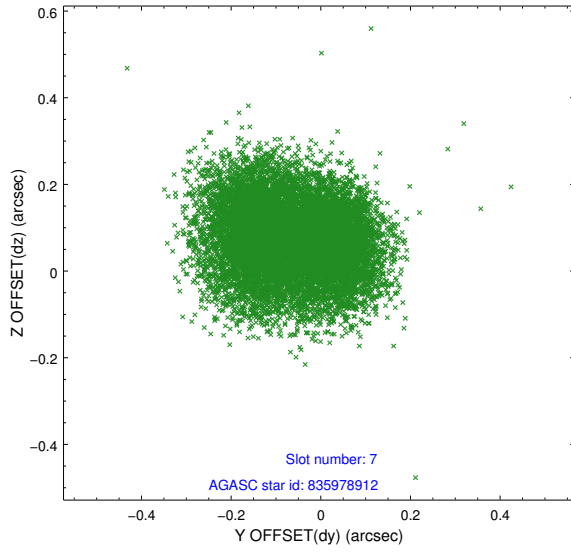
2.4.3 Slot 5



2.4.4 Slot 6

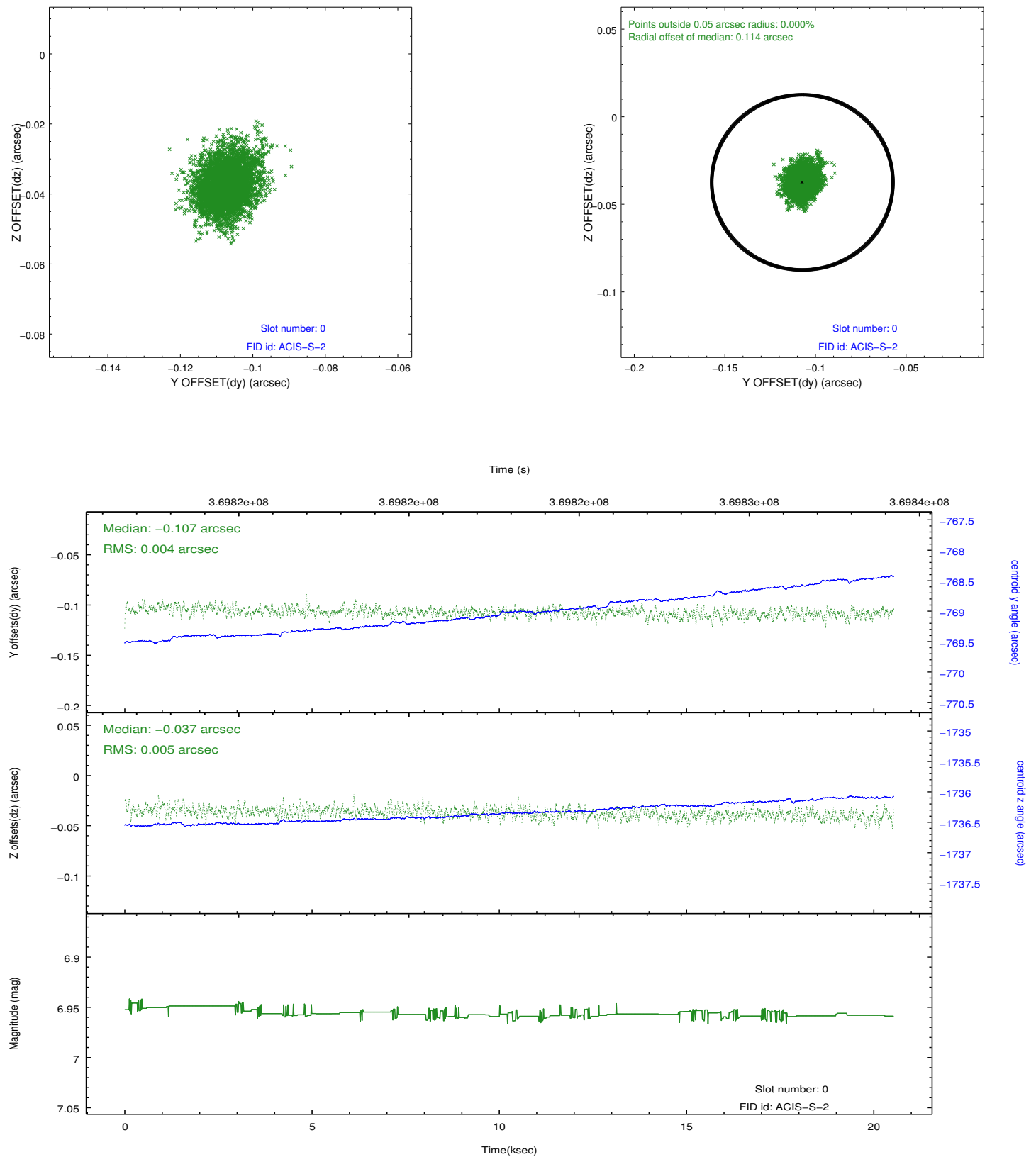


2.4.5 Slot 7

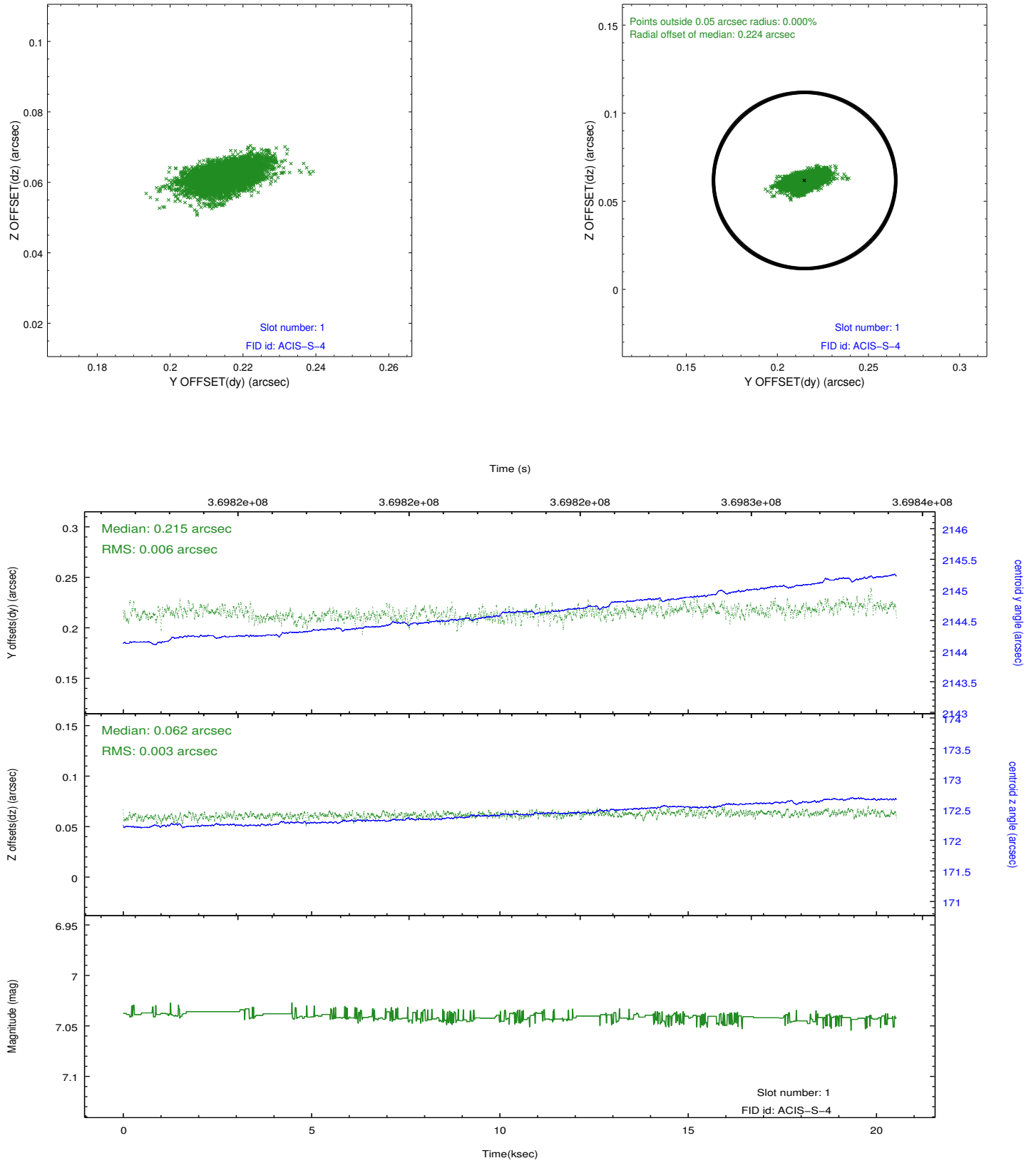


2.5 FID Slots

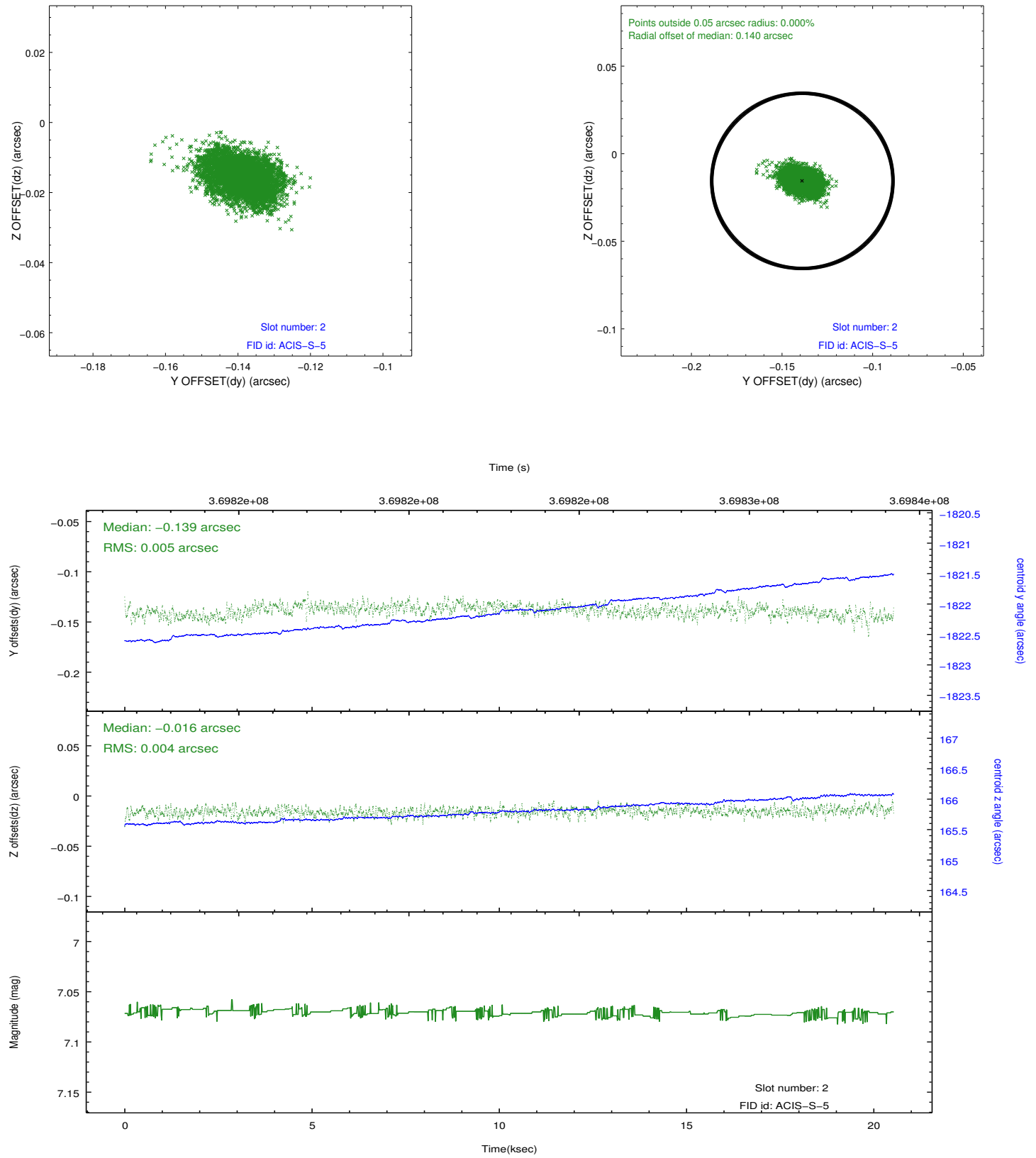
2.5.1 Slot 0



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) | 2012.06.18 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 20.035199925423 |

A.2 Comments