

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3928 - L2 Version 3
Chandra X-Ray Center

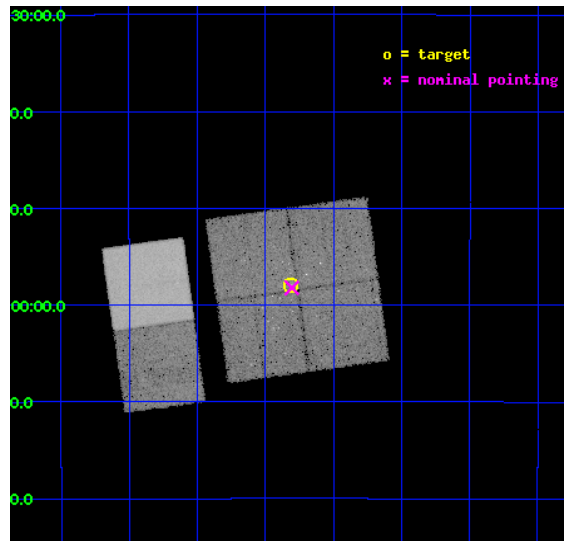
L2 Processing Date : Oct 28 2012

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1 Front

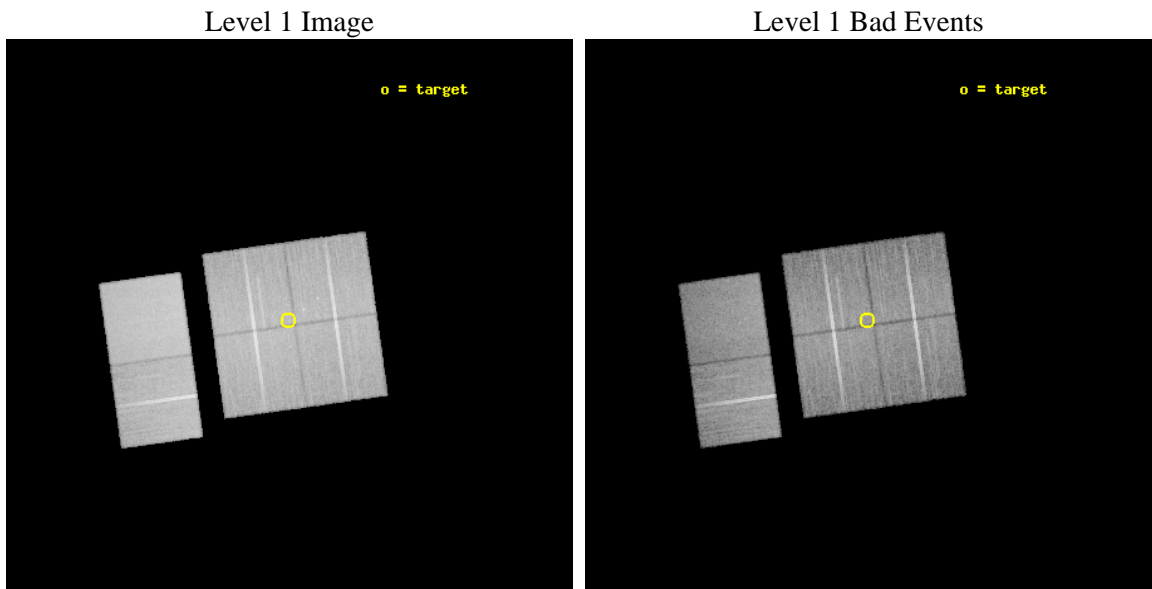
| | | |
|----------|--|---|
| seq_num | 600302 | Sequence number |
| obs_id | 3928 | Observation id |
| title | X-RAY HALOES OF MASSIVE DISC GALAXIES: TESTING GALAXY FORMATION | Pr |
| observer | Dr. Kristian Pedersen | Principal investigator |
| object | NGC 5170 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 202.45375 | Observer's specified target RA [deg] |
| dec_targ | -17.9665 | Observer's specified target Dec [deg] |
| ra_nom | 202.45126655614 | Nominal RA [deg] |
| dec_nom | -17.970450385244 | Nominal Dec [deg] |
| roll_nom | 262.11238145209 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 33455.95900473 | Sum of GTIs [s] |
| livetime | 33032.319507052 | Livetime [s] |
| ontime0 | 33459.199875355 | Sum of GTIs [s] |
| ontime1 | 33446.236034125 | Sum of GTIs [s] |
| ontime2 | 33459.199875355 | Sum of GTIs [s] |
| ontime3 | 33455.95900473 | Sum of GTIs [s] |
| ontime6 | 33459.199875355 | Sum of GTIs [s] |
| ontime7 | 33459.199875355 | Sum of GTIs [s] |
| l2events | 220567 | Number of level 2 events |



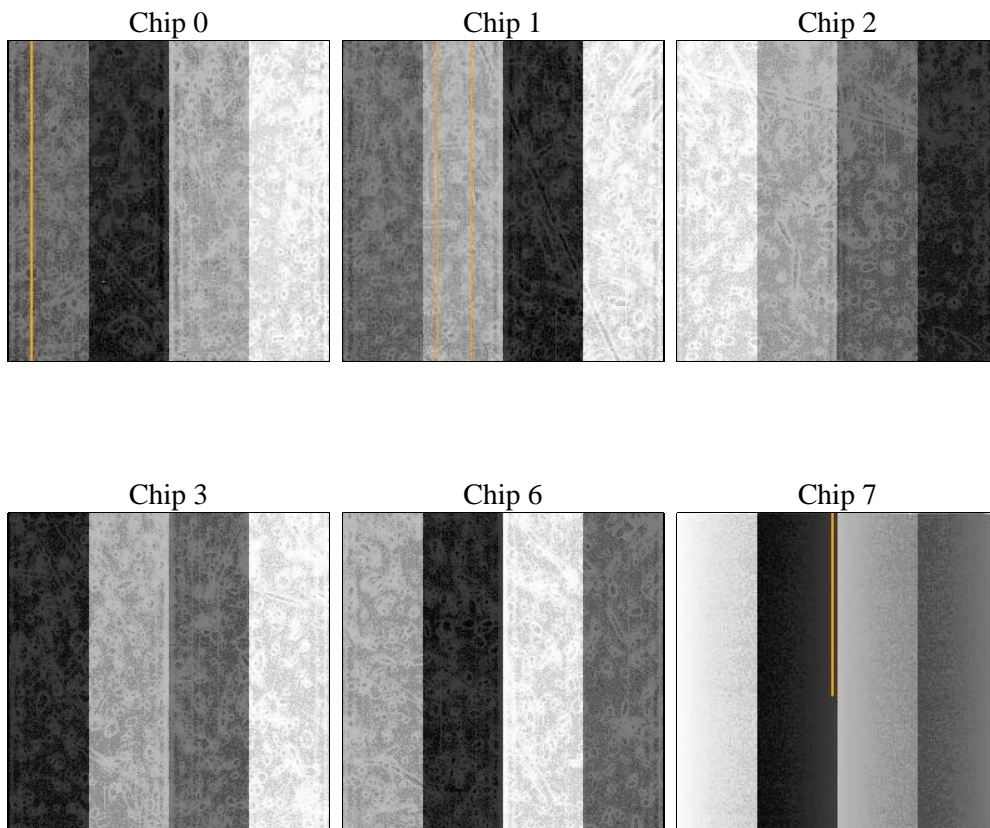
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 33300.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 33455.95900473 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime0 | 33459.199875355 | Sum of GTIs [s] |
| date | 2012-10-28T13:41:05 | Date and time of file creation | ontime1 | 33446.236034125 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 33459.199875355 | Sum of GTIs [s] |
| | | | ontime3 | 33455.95900473 | Sum of GTIs [s] |
| | | | ontime6 | 33459.199875355 | Sum of GTIs [s] |
| | | | ontime7 | 33459.199875355 | Sum of GTIs [s] |
| | | | l1events | 1295953 | Number of level 1 events |

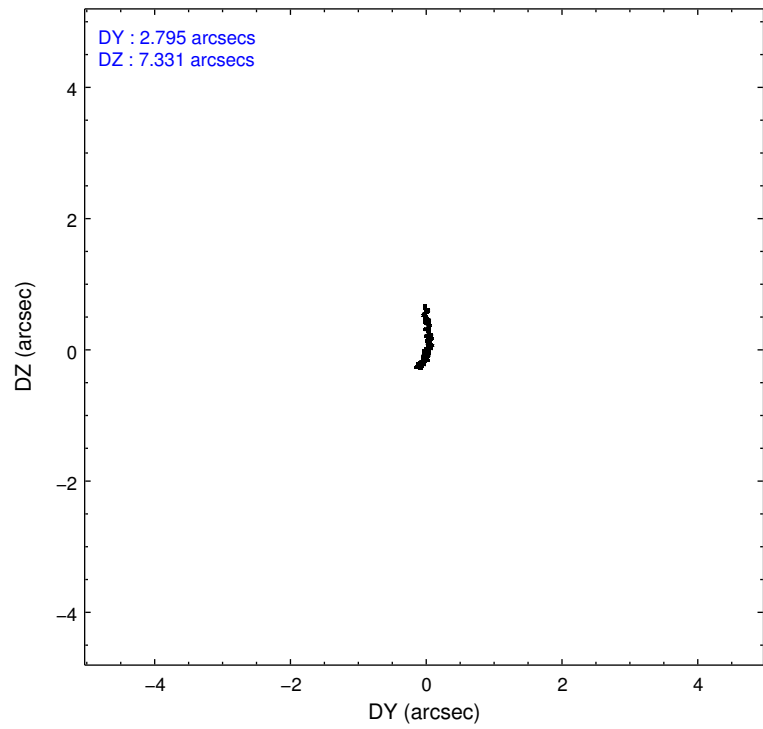
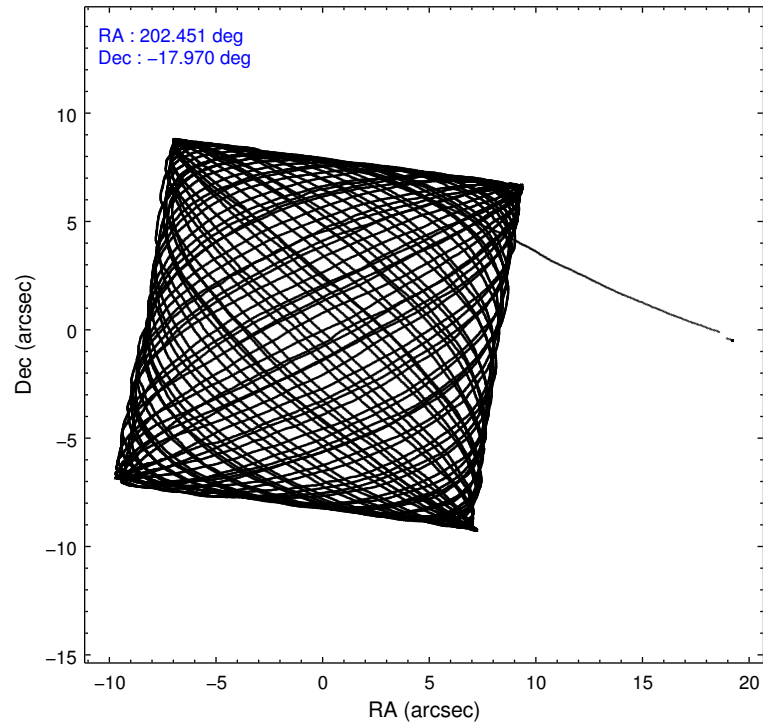
2.1.4 Events

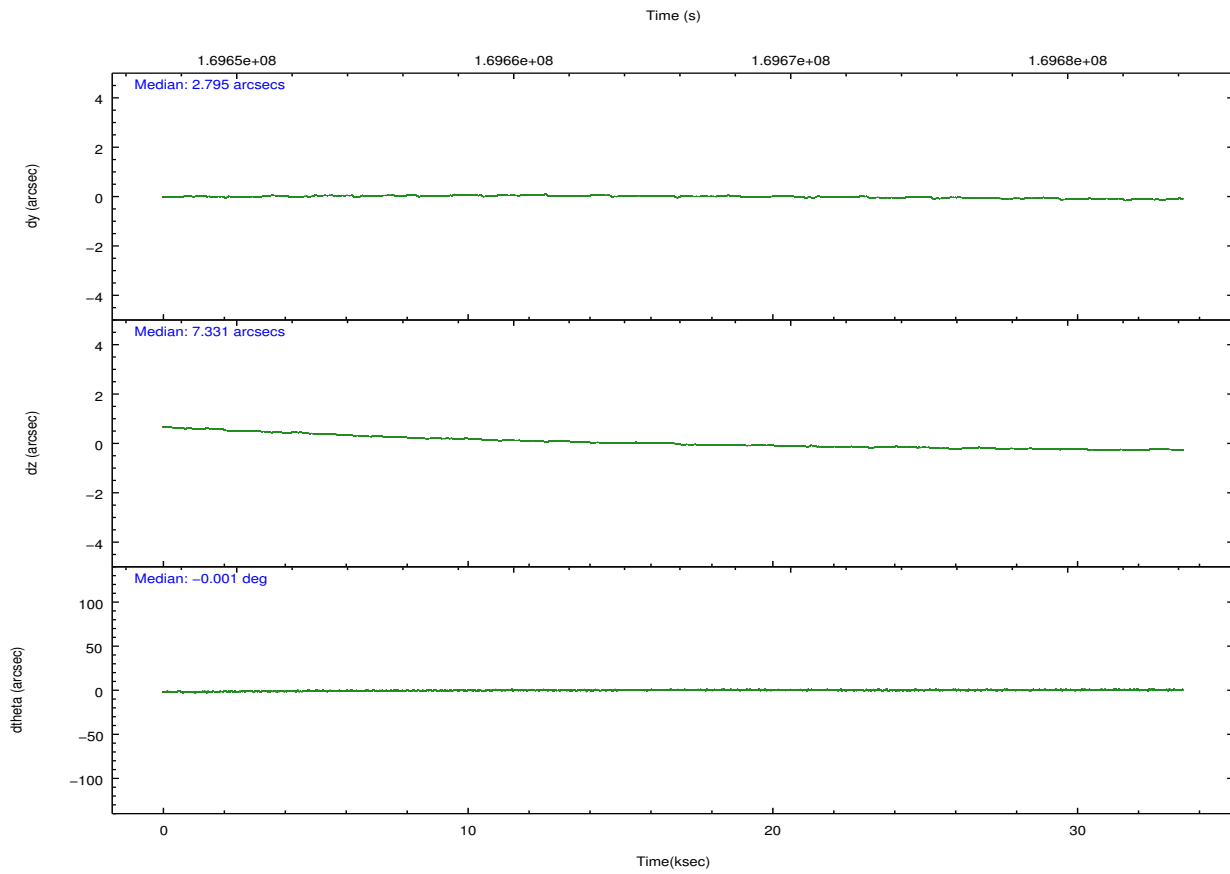
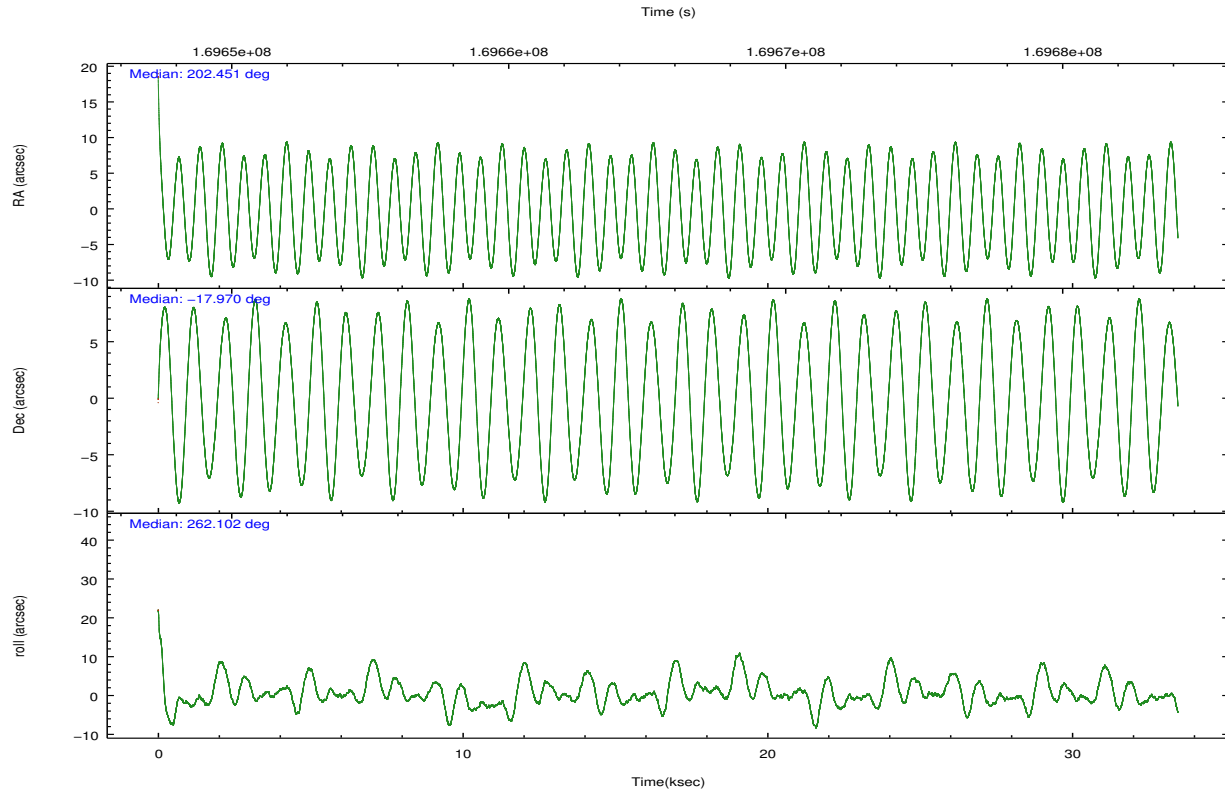
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 187974 | 195682 | 208497 | 204712 | 219455 | 279633 | grade 0 events | 11026 | 10818 | 11581 | 10915 | 10078 | 10457 |
| rejected events | 162769 | 169200 | 183229 | 180209 | 194620 | 164786 | | 5% | 5% | 5% | 5% | 4% | 3% |
| rejected % | 86% | 86% | 87% | 88% | 88% | 58% | grade 1 events | 100 | 104 | 111 | 128 | 97 | 240 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 5096 | 5373 | 5033 | 4626 | 5064 | 23031 |
| | | | | | | | | 2% | 2% | 2% | 2% | 2% | 8% |
| | | | | | | | grade 3 events | 2503 | 2648 | 2312 | 2303 | 2467 | 10380 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 2281 | 2661 | 2437 | 2465 | 2323 | 10154 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 8260 | 8703 | 8200 | 8997 | 9566 | 26955 |
| | | | | | | | | 4% | 4% | 3% | 4% | 4% | 9% |
| | | | | | | | grade 6 events | 4371 | 5031 | 3955 | 4260 | 4972 | 61111 |
| | | | | | | | | 2% | 2% | 1% | 2% | 2% | 21% |
| | | | | | | | grade 7 events | 154337 | 160344 | 174868 | 171018 | 184888 | 137305 |
| | | | | | | | | 82% | 81% | 83% | 83% | 84% | 49% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | 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 | 202.440302 | 202.4512665561424 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -17.945151 | -17.97045038524432 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 261.900307 | 262.1123814520861 | [s] Primary exposure time | 0.000000 | 3.2 |
| [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) | 169649182.184000 | 169648084.30488 | | | |
| Observation start date | 2003-05-18T12:45:18 | 2003-05-18T12:28:04 | | | |
| [s] Observation end time (MET) | 169682482.184000 | 169683103.43136 | | | |
| Observation end date | 2003-05-18T22:00:18 | 2003-05-18T22:11:43 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



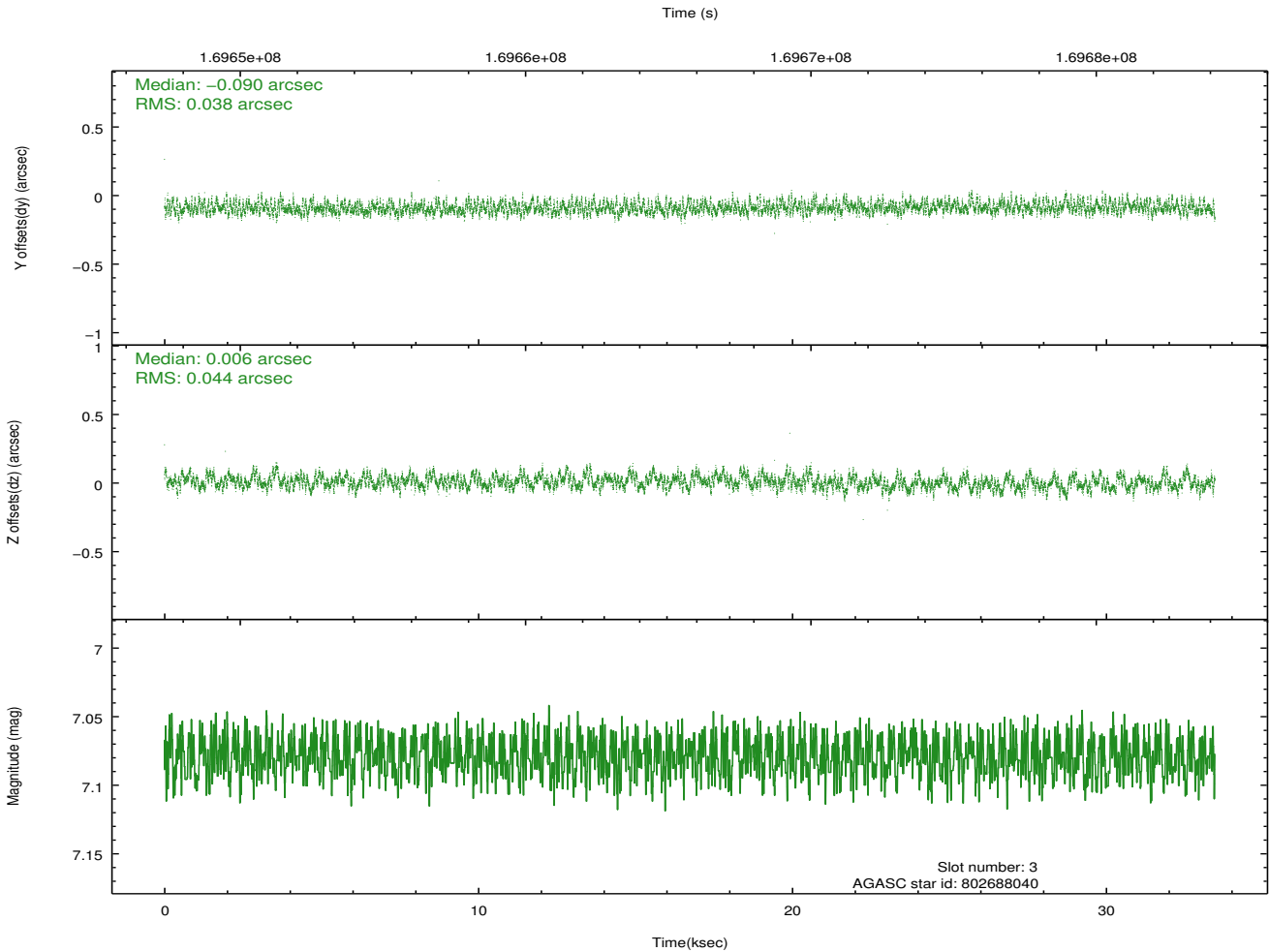
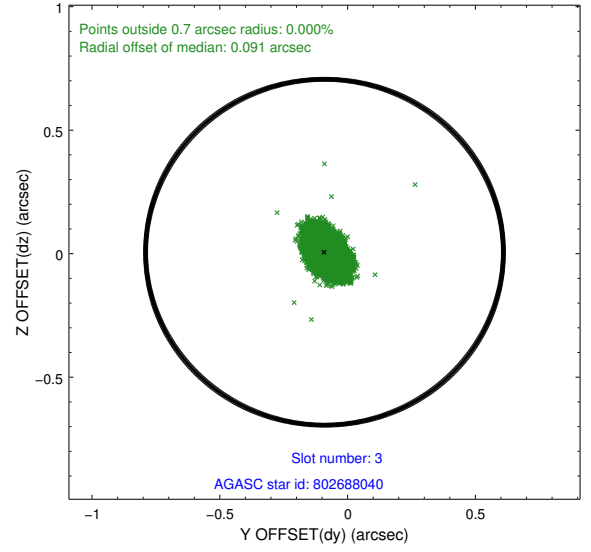
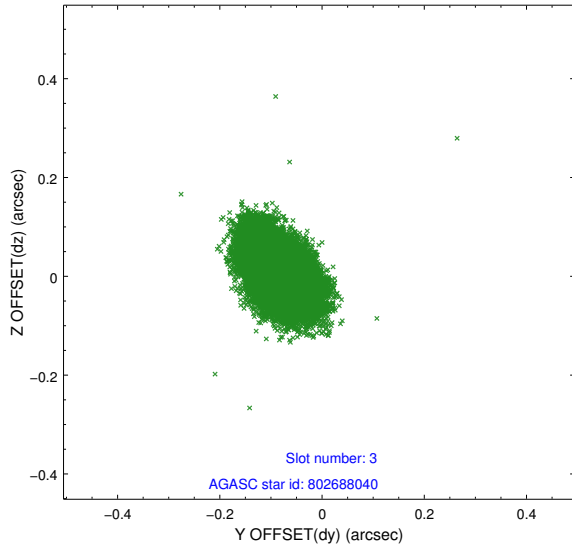


Slot Statistics

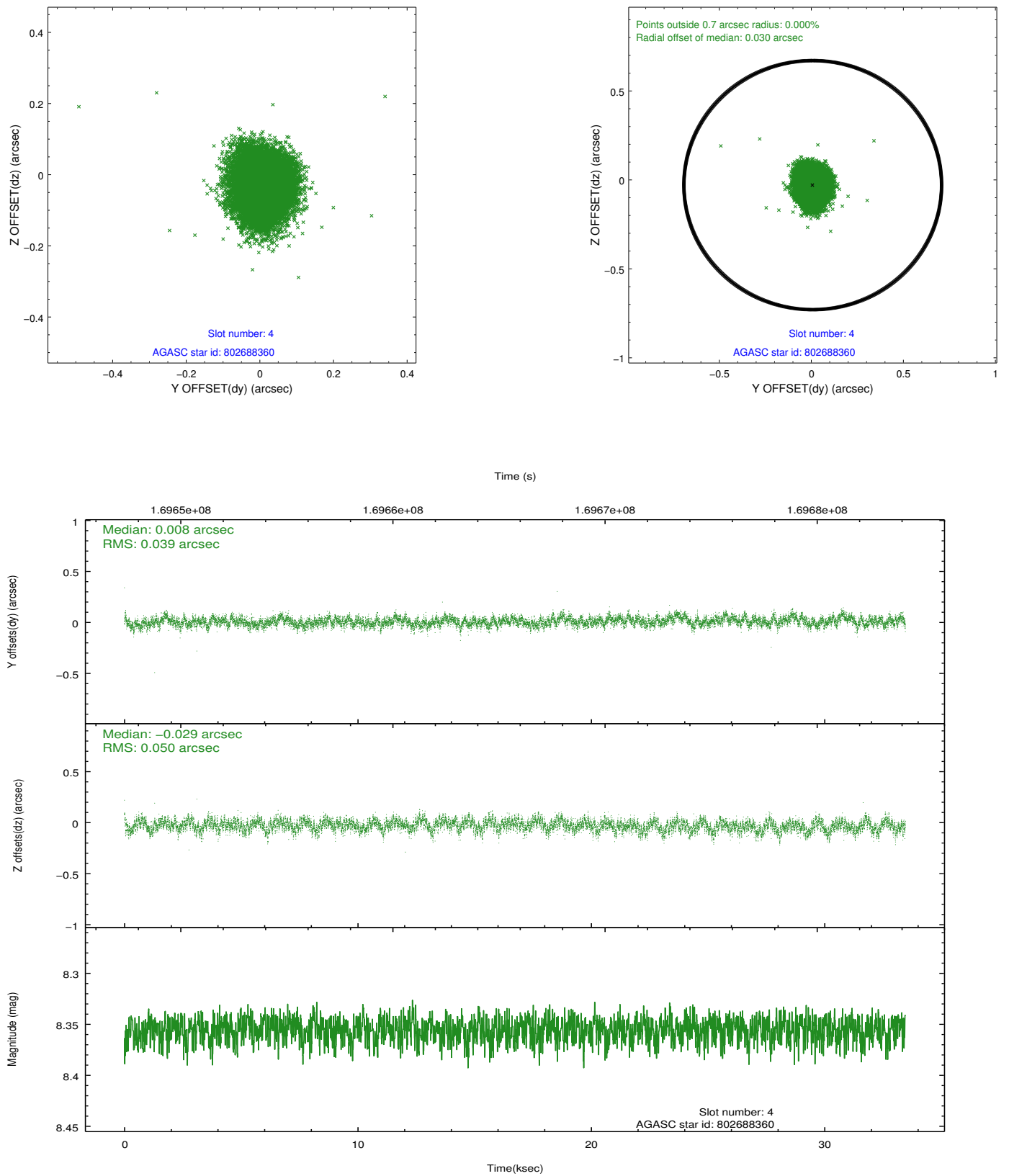
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 8163 | 0.017 | 0.014 | 0.023 | 0.033 | 0.000000 | 0.000000 | 937.02 | -830.79 |
| 1 | FID | ACIS-I-5 | 7.24 | 8163 | -0.087 | 0.059 | 0.013 | 0.021 | 0.000000 | 0.000000 | -1811.14 | 1066.77 |
| 2 | FID | ACIS-I-6 | 7.26 | 8163 | -0.019 | -0.003 | 0.018 | 0.026 | 0.000000 | 0.000000 | 402.51 | 1711.23 |
| 3 | GUIDE | 802688040 | 7.08 | 16324 | -0.090 | 0.006 | 0.062 | 0.102 | 201.795060 | -17.928948 | 258.25 | -2195.71 |
| 4 | GUIDE | 802688360 | 8.36 | 16323 | 0.008 | -0.029 | 0.067 | 0.110 | 201.899269 | -18.032155 | 574.34 | -1789.15 |
| 5 | GUIDE | 802816944 | 9.57 | 16270 | 0.096 | -0.041 | 0.103 | 0.186 | 202.201674 | -17.995786 | 296.75 | -783.15 |
| 6 | GUIDE | 802817240 | 8.85 | 16322 | -0.019 | -0.044 | 0.076 | 0.121 | 203.010877 | -17.569303 | -1612.51 | 1748.25 |
| 7 | GUIDE | 802818456 | 9.61 | 16311 | -0.000 | 0.115 | 0.100 | 0.162 | 202.842962 | -18.066806 | 241.11 | 1426.21 |

2.4 Star Slots

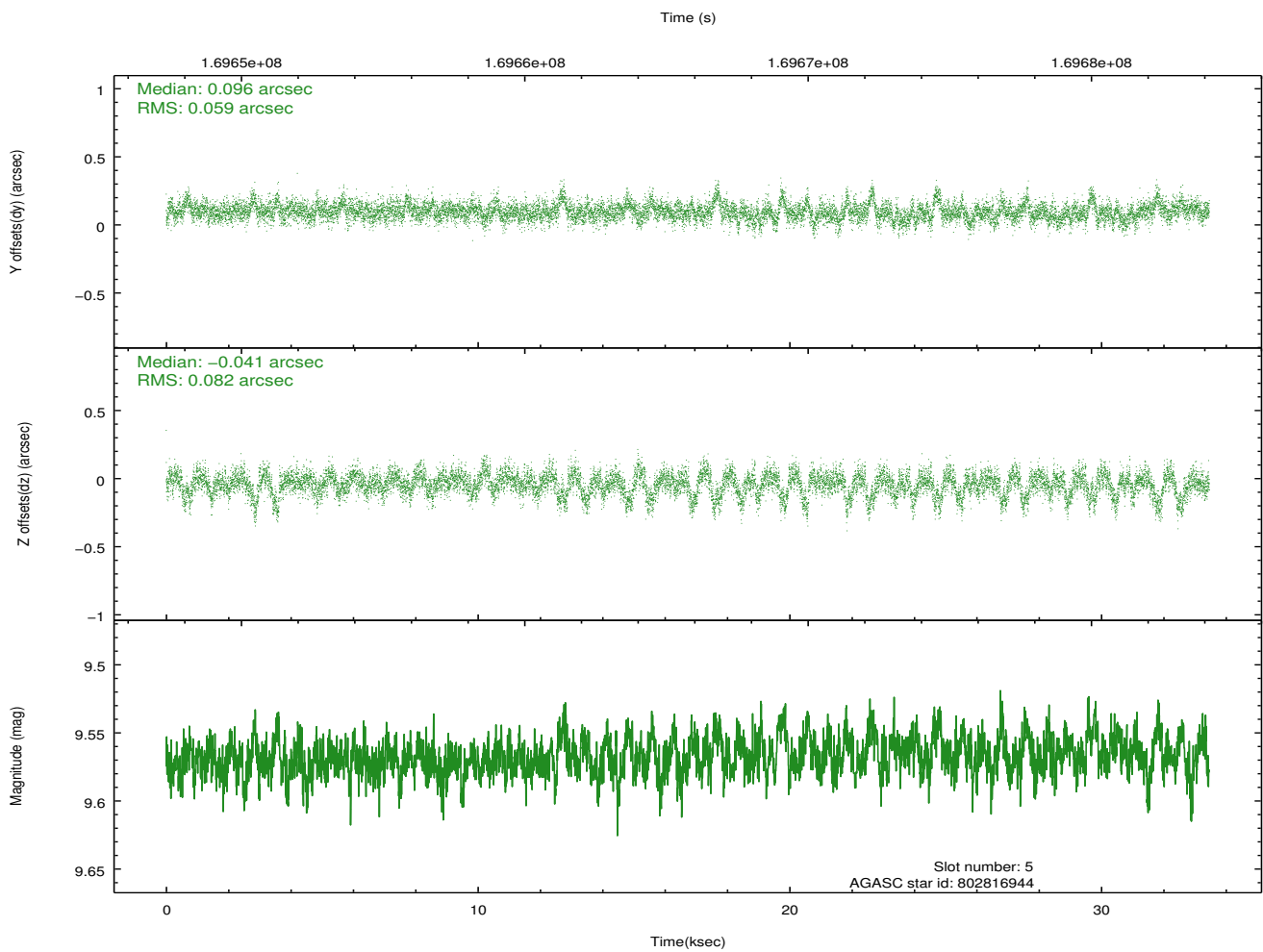
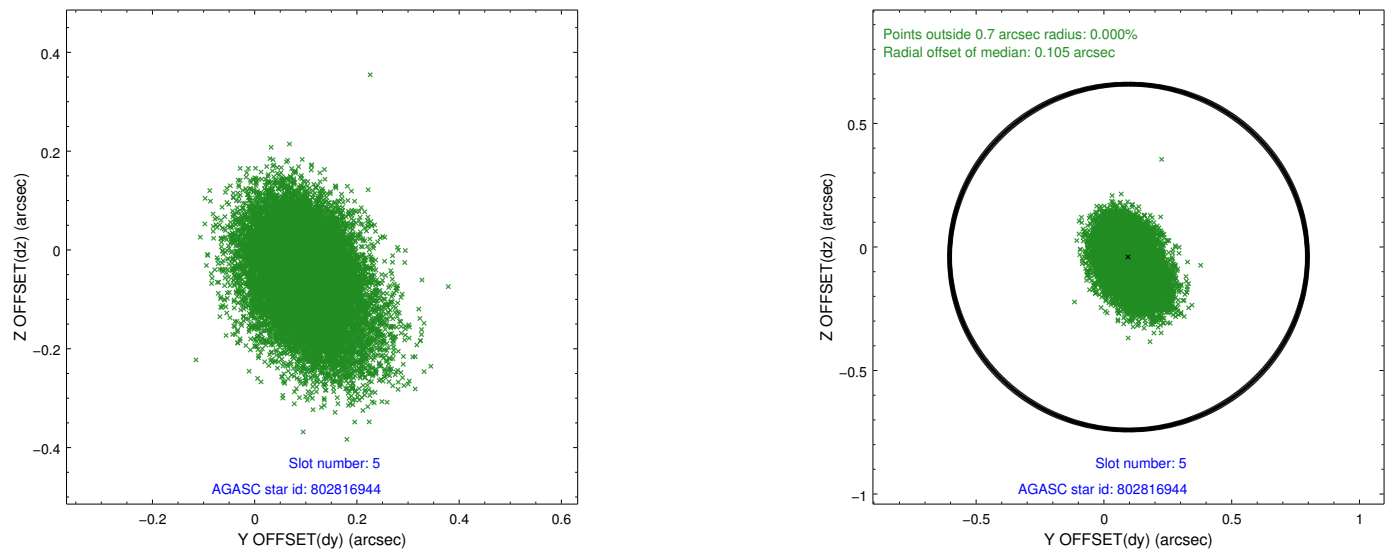
2.4.1 Slot 3



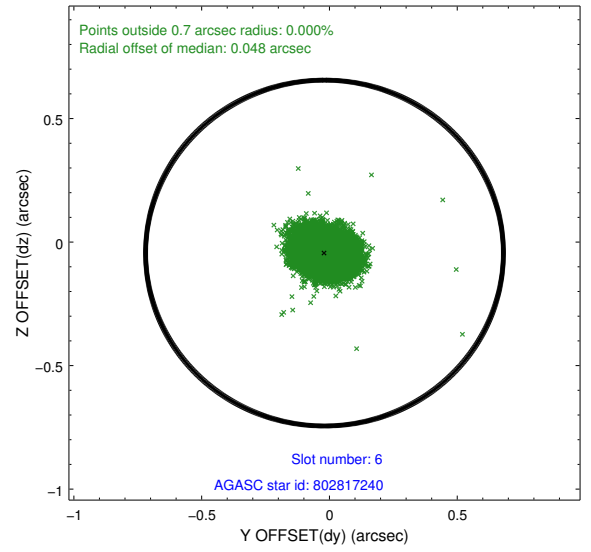
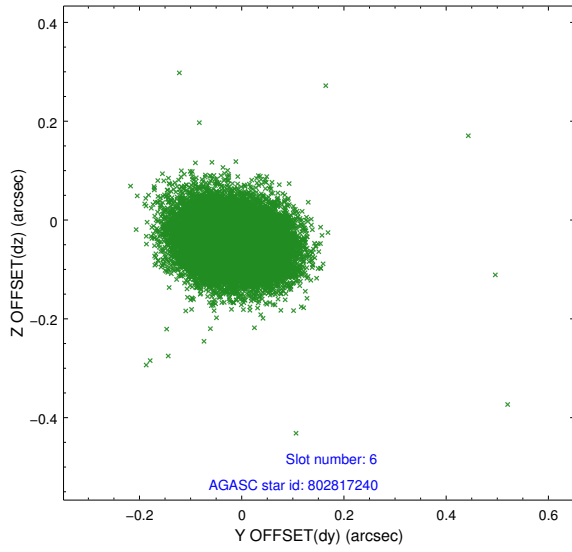
2.4.2 Slot 4



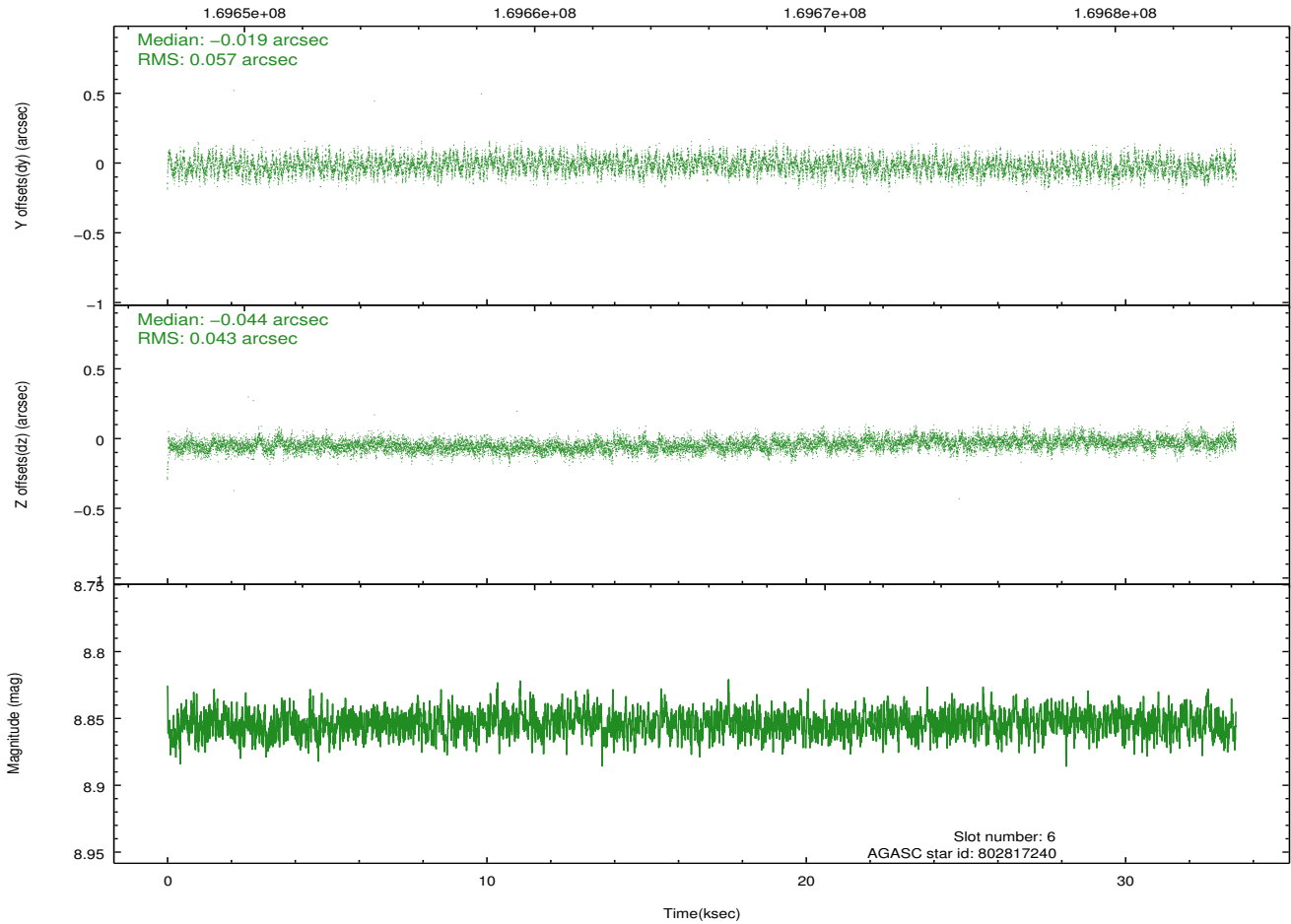
2.4.3 Slot 5



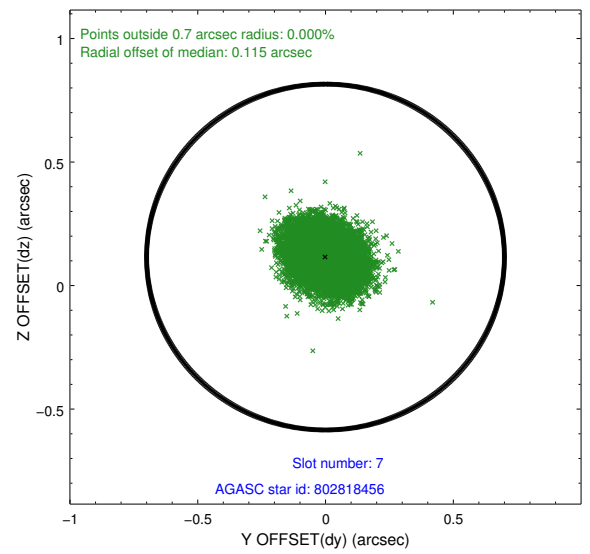
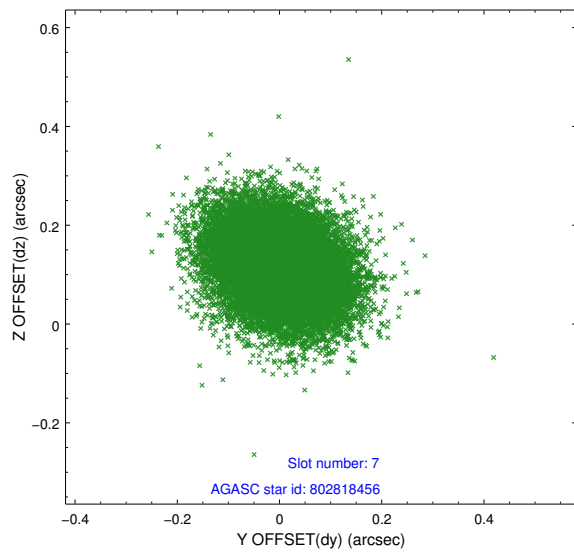
2.4.4 Slot 6



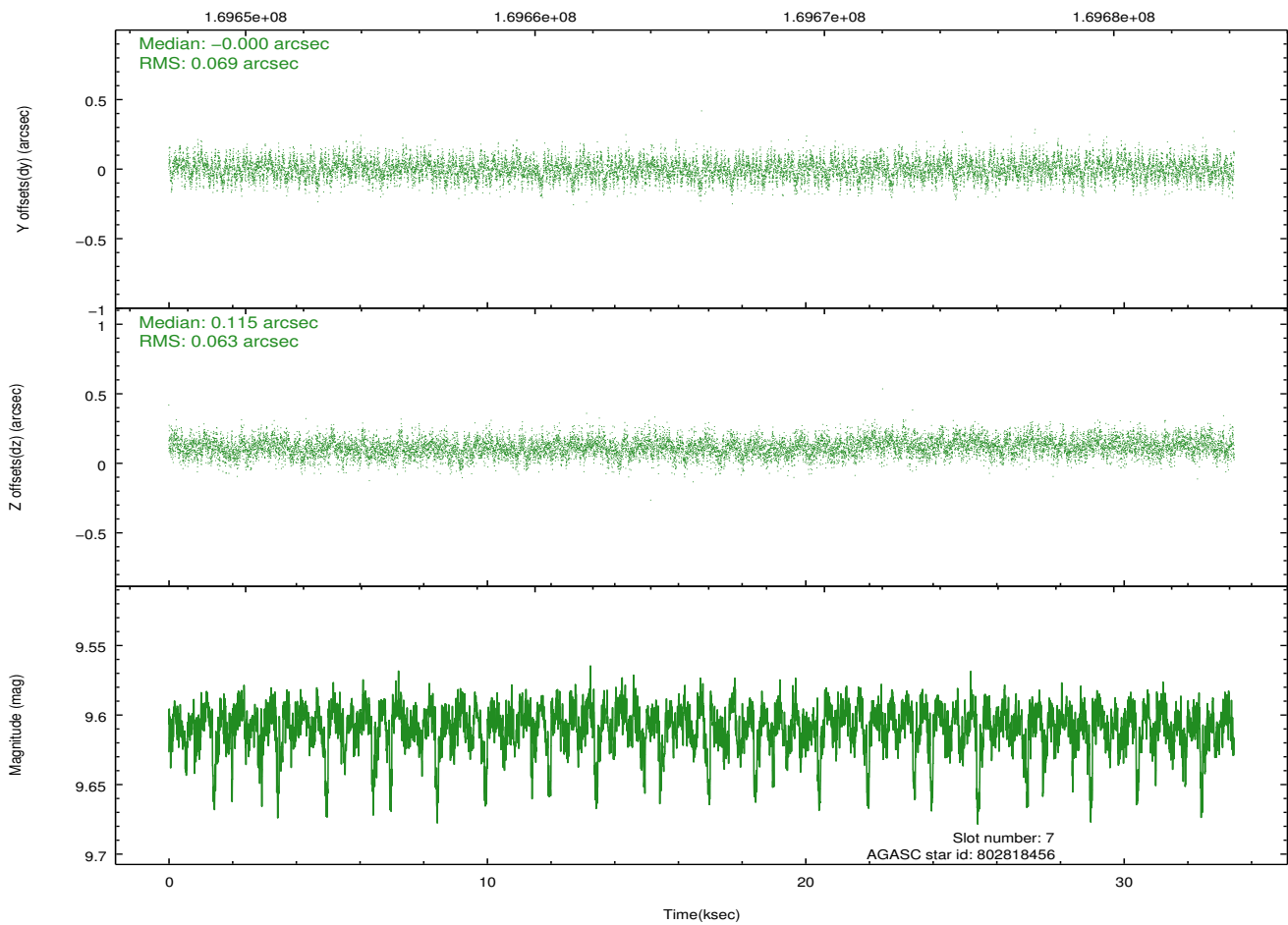
Time (s)



2.4.5 Slot 7

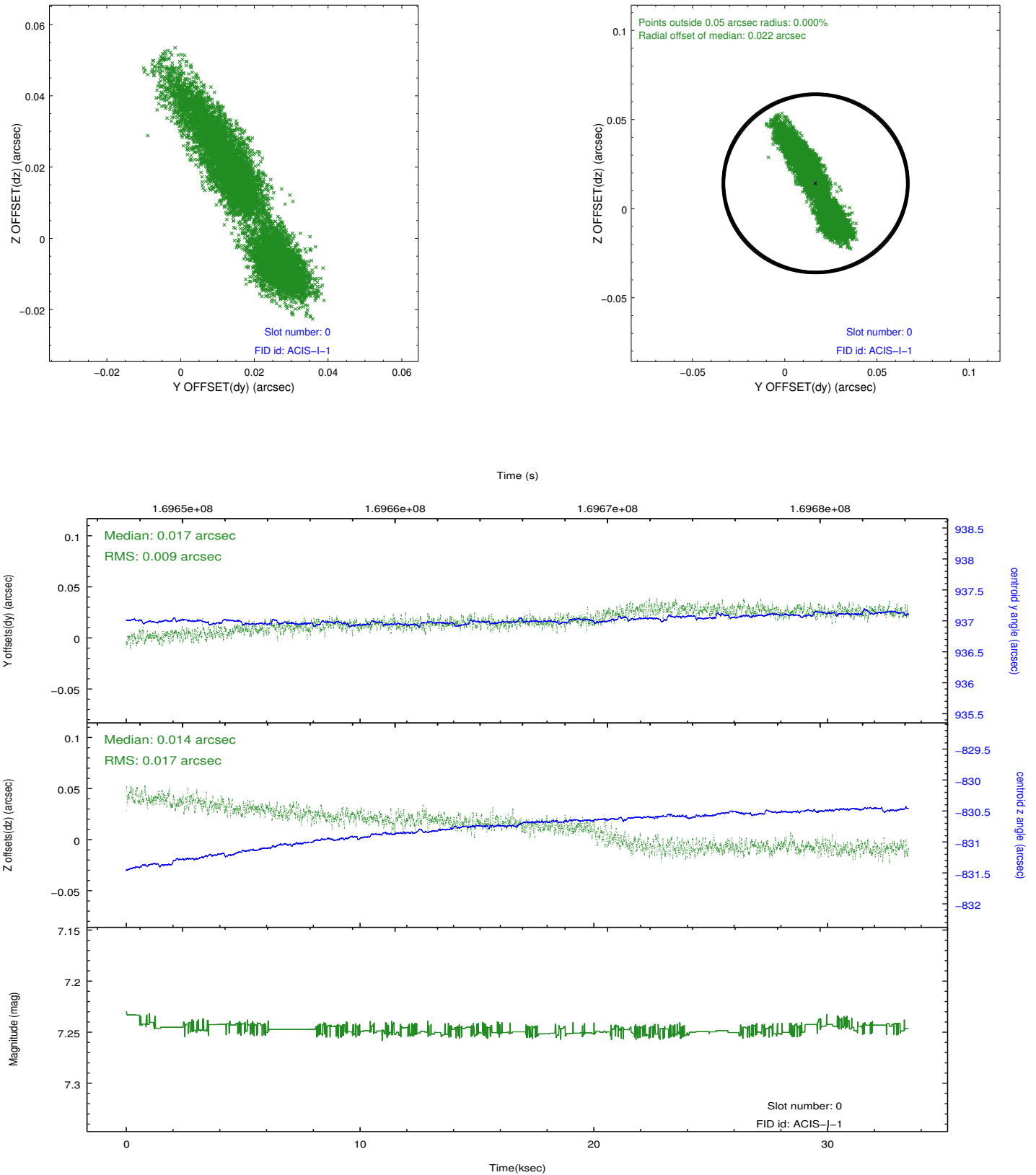


Time (s)

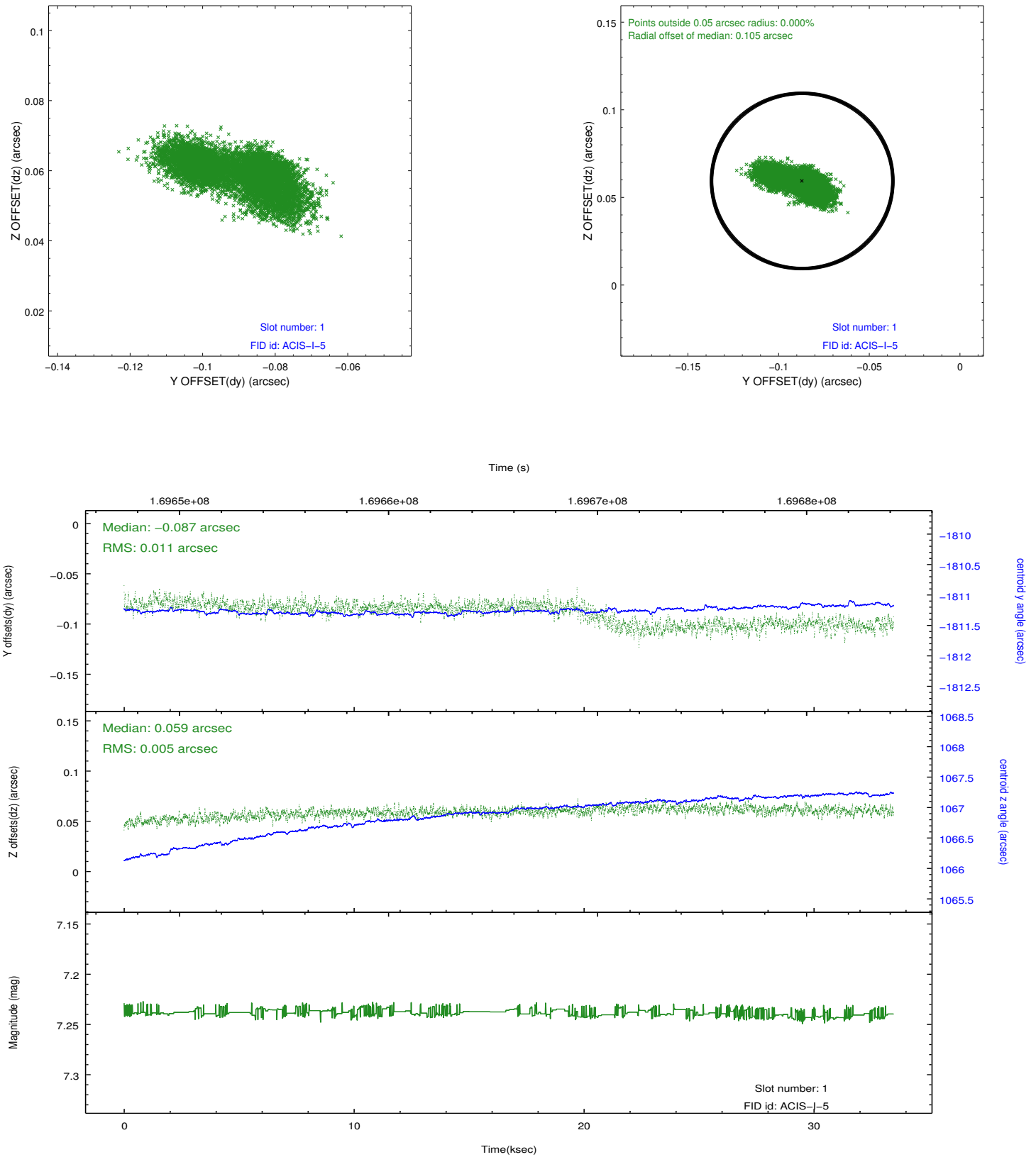


2.5 FID Slots

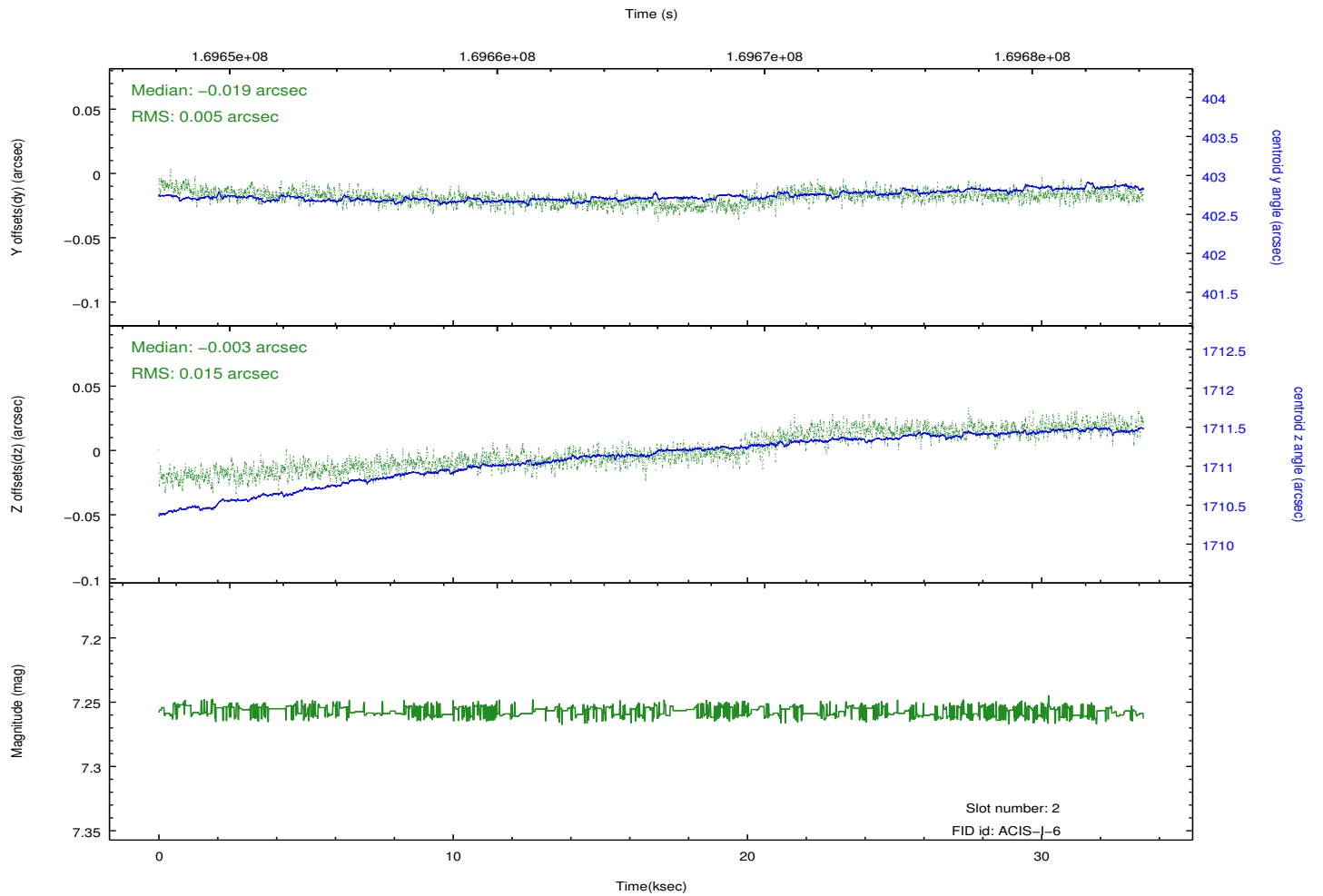
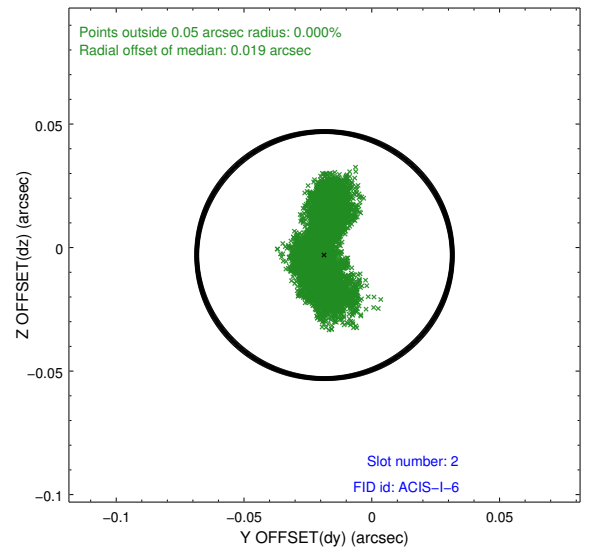
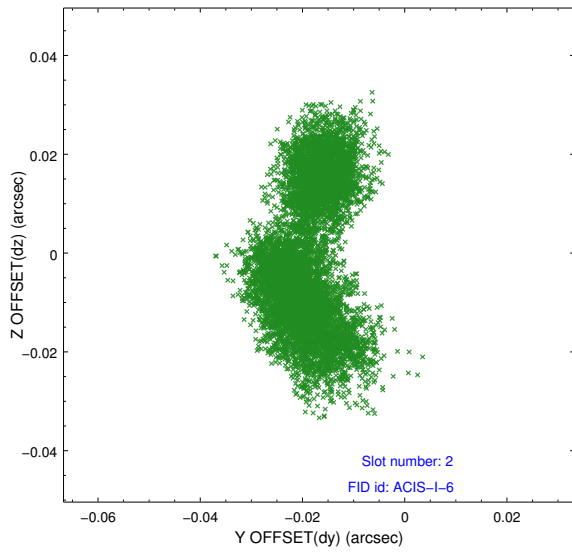
2.5.1 Slot 0



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) | 2012.11.15 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 33.455 |

A.2 Comments