

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9252 - L2 Version 2
Chandra X-Ray Center

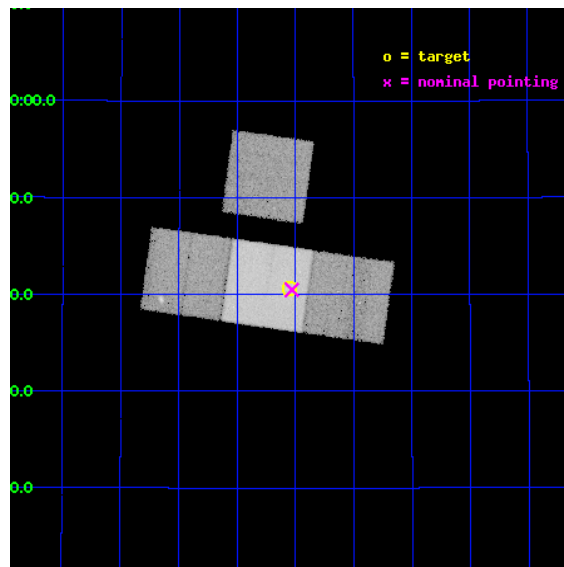
L2 Processing Date : May 11 2012

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1 Front

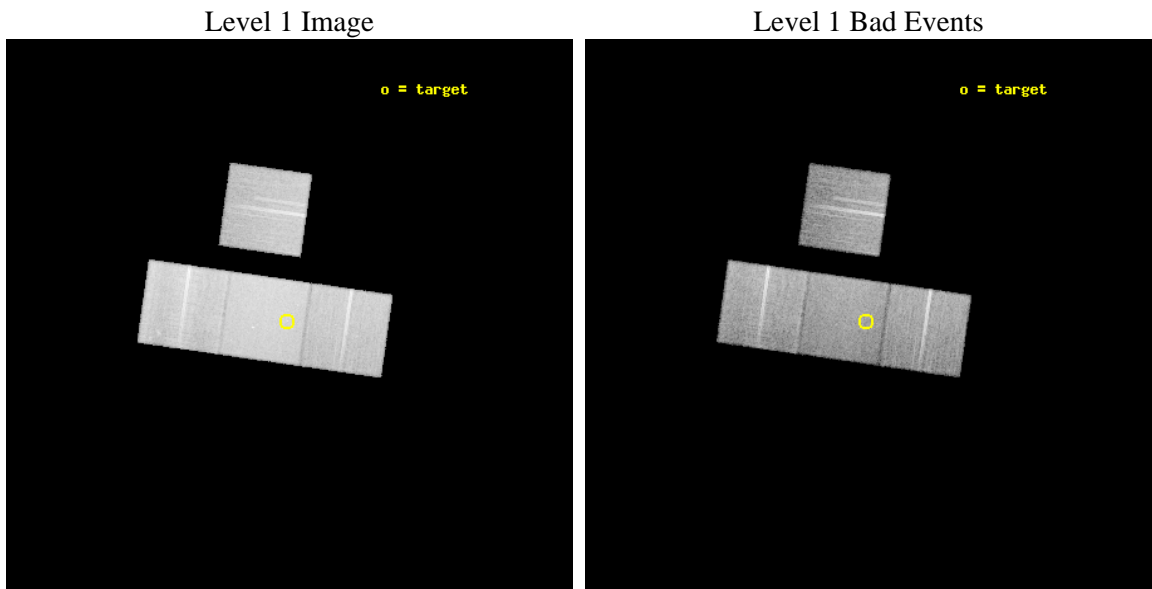
| | | |
|----------|---|---|
| seq_num | 701693 | Sequence number |
| obs_id | 9252 | Observation id |
| title | Orientation effects in the X-ray and multi-wavelength properties of high-z, 3CRR quasars. | Proposal title |
| observer | Dr. Belinda Wilkes | Principal investigator |
| object | 3CRR 252 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 167.887083 | Observer's specified target RA [deg] |
| dec_targ | 35.677917 | Observer's specified target Dec [deg] |
| ra_nom | 167.88249757813 | Nominal RA [deg] |
| dec_nom | 35.674803540672 | Nominal Dec [deg] |
| roll_nom | 188.14366835737 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 19706.700151563 | Sum of GTIs [s] |
| livetime | 19449.217606221 | Livetime [s] |
| ontime3 | 19706.700151563 | Sum of GTIs [s] |
| ontime6 | 19706.700151563 | Sum of GTIs [s] |
| ontime7 | 19706.700151563 | Sum of GTIs [s] |
| ontime8 | 19706.700151563 | Sum of GTIs [s] |
| l2events | 199024 | Number of level 2 events |



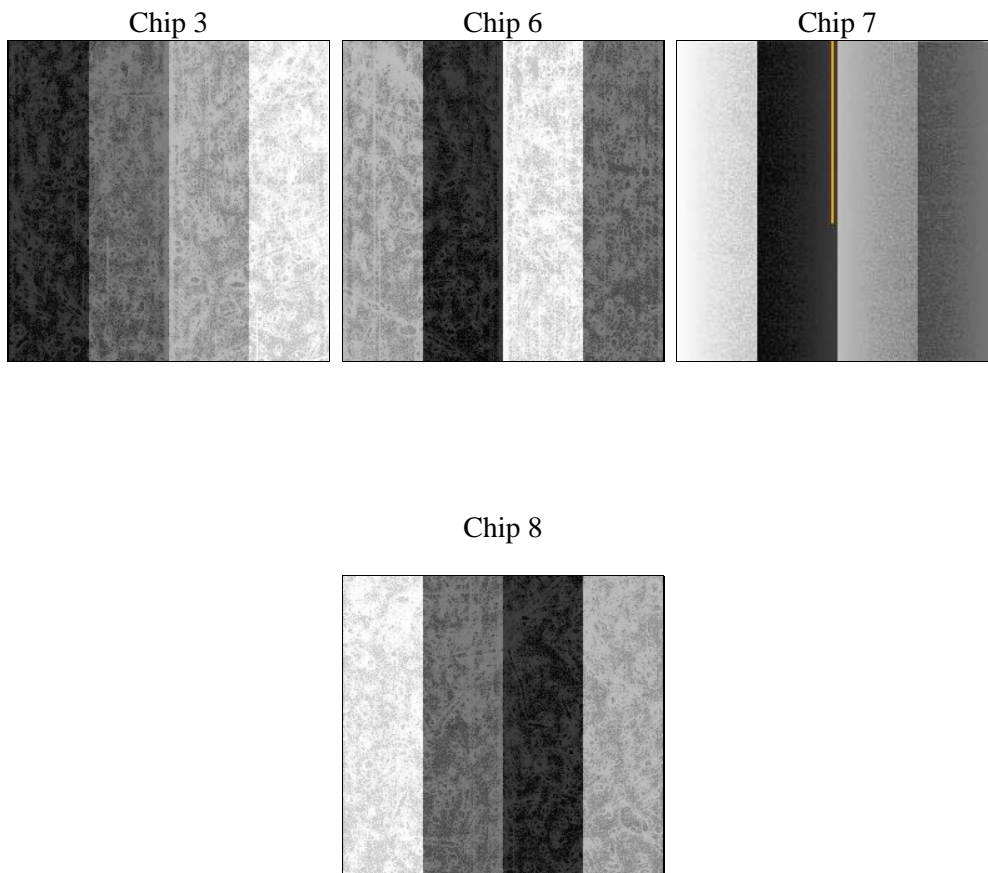
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 19561.461000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 19706.700151563 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime3 | 19706.700151563 | Sum of GTIs [s] |
| date | 2012-05-11T12:52:24 | Date and time of file creation | ontime6 | 19706.700151563 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime7 | 19706.700151563 | Sum of GTIs [s] |
| | | | ontime8 | 19706.700151563 | Sum of GTIs [s] |
| | | | l1events | 962296 | Number of level 1 events |

2.1.4 Events

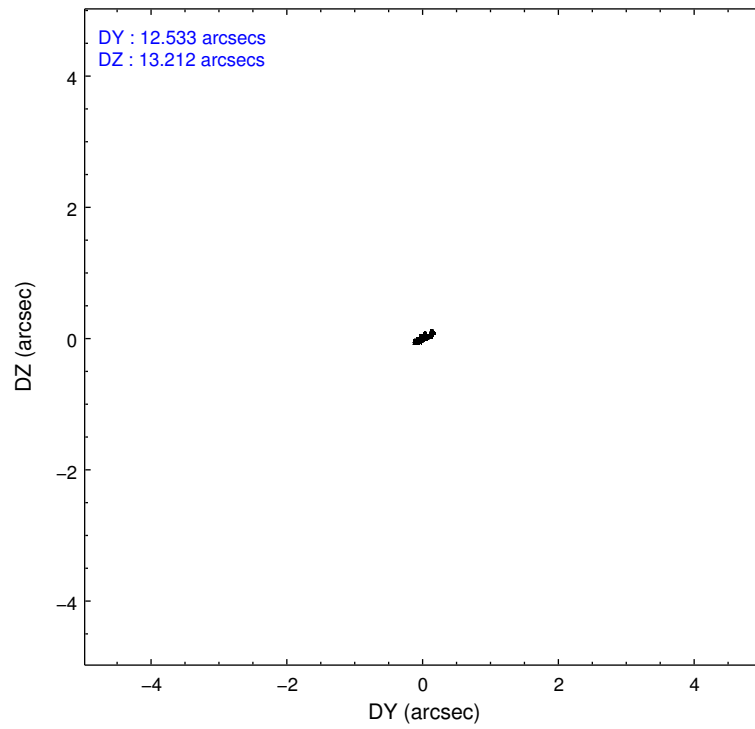
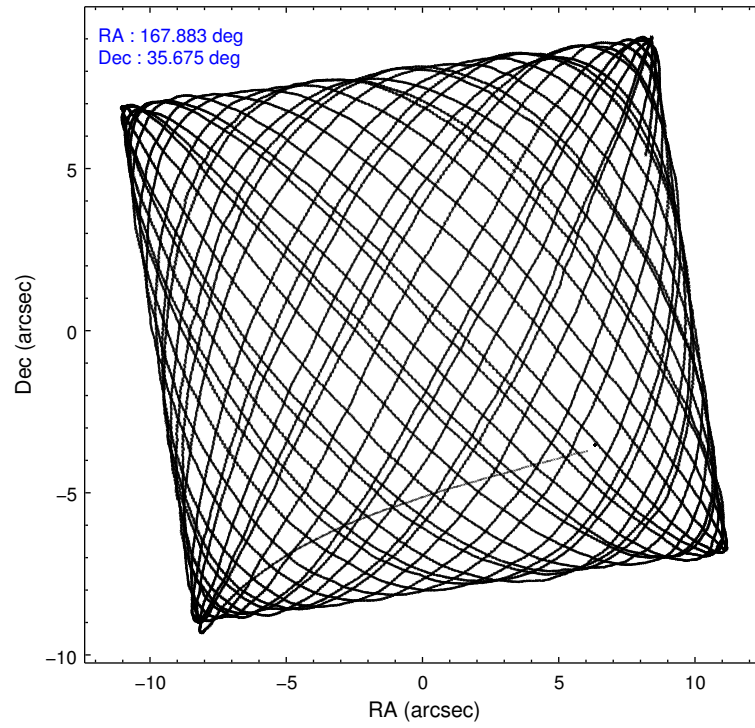
| | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|
| level 1 events | 198807 | 210213 | 287958 | 265318 |
| rejected events | 169822 | 179935 | 170811 | 203857 |
| rejected % | 85% | 85% | 59% | 76% |

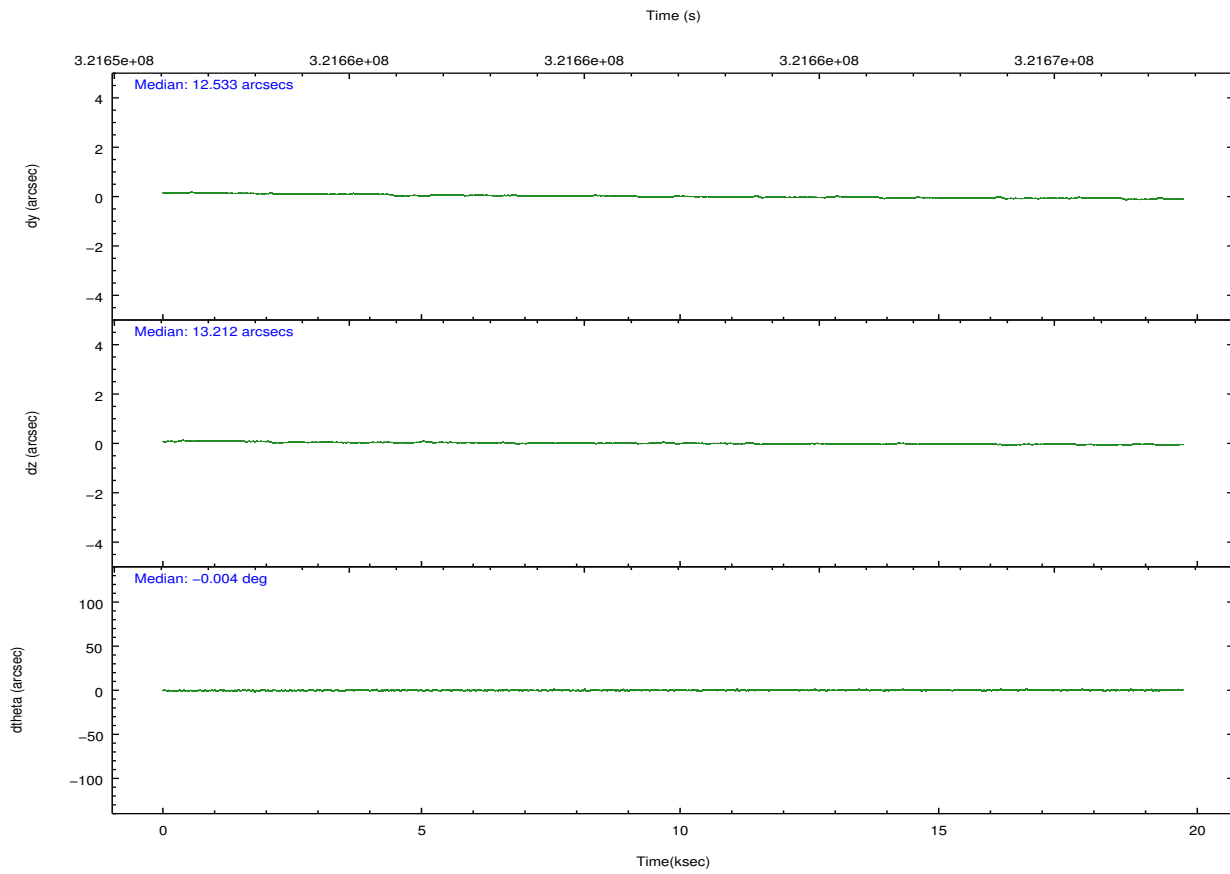
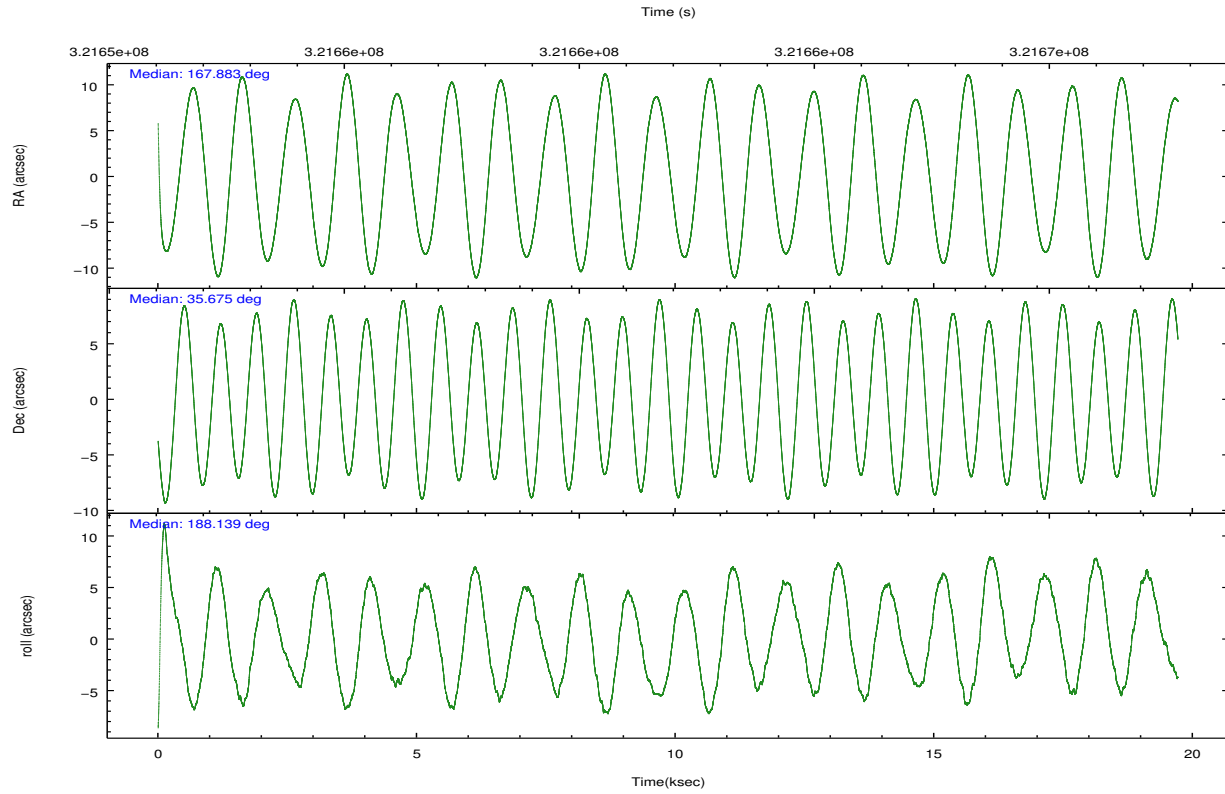
| | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|--------|
| grade 0 events | 15747 | 14939 | 10703 | 24713 |
| | 7% | 7% | 3% | 9% |
| grade 1 events | 156 | 122 | 266 | 205 |
| | 0% | 0% | 0% | 0% |
| grade 2 events | 5364 | 6663 | 24866 | 13769 |
| | 2% | 3% | 8% | 5% |
| grade 3 events | 2569 | 2403 | 10124 | 6215 |
| | 1% | 1% | 3% | 2% |
| grade 4 events | 2466 | 2448 | 10044 | 5954 |
| | 1% | 1% | 3% | 2% |
| grade 5 events | 9437 | 9567 | 25547 | 12703 |
| | 4% | 4% | 8% | 4% |
| grade 6 events | 4541 | 5614 | 69796 | 14745 |
| | 2% | 2% | 24% | 5% |
| grade 7 events | 158527 | 168457 | 136612 | 187014 |
| | 79% | 80% | 47% | 70% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-3678 | ACIS-3678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 167.908690 | 167.8824975781312 | CCD I2 on | N | N |
| [deg] Pointing Dec | 35.691983 | 35.67480354067182 | CCD I3 on | O1 | Y |
| [deg] Pointing Roll | 187.971770 | 188.1436683573678 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | O3 | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | CCD S4 on | O2 | Y |
| [s] Observation start time (MET) | 321652192.184000 | 321650487.28718 | CCD S5 on | N | N |
| Observation start date | 2008-03-11T19:48:47 | 2008-03-11T19:21:27 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 321671754.184000 | 321671981.02572 | On-chip summing requested | N | N |
| Observation end date | 2008-03-12T01:14:49 | 2008-03-12T01:19:41 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



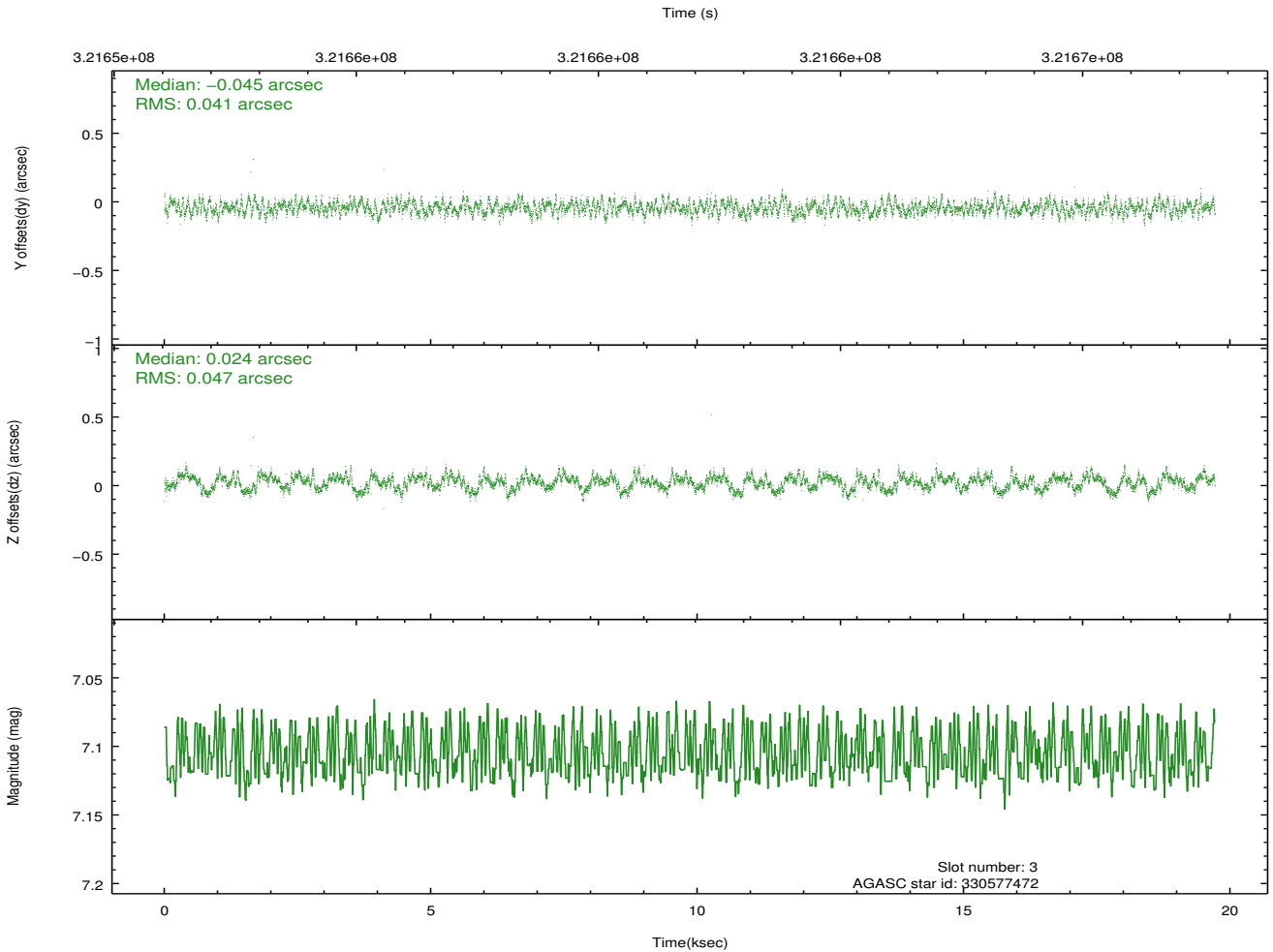
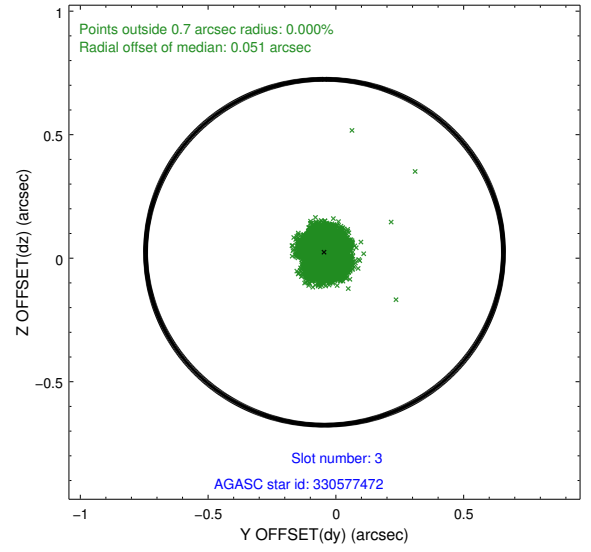
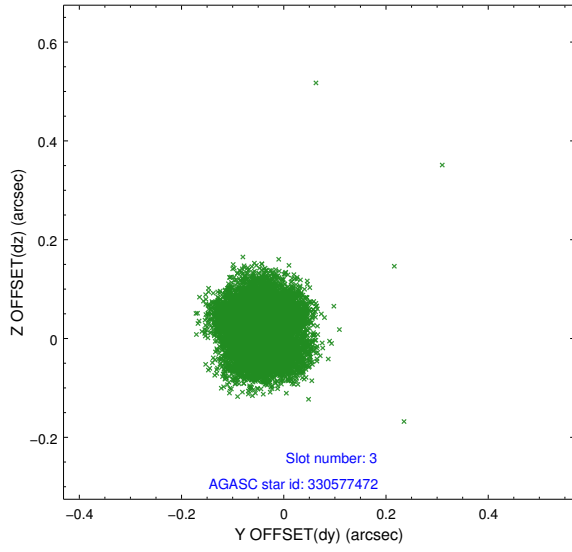


Slot Statistics

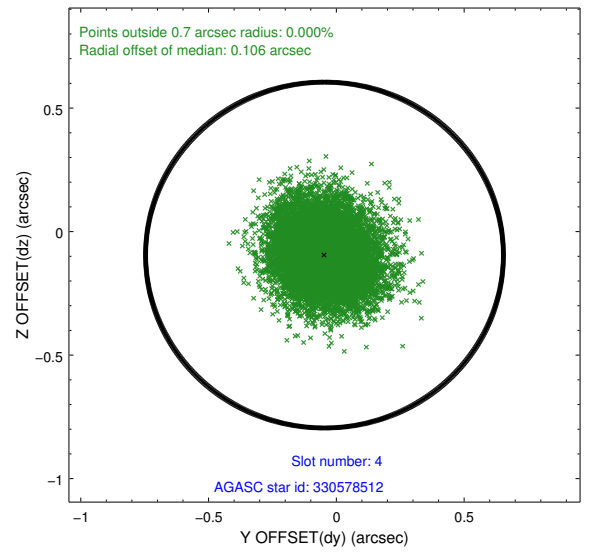
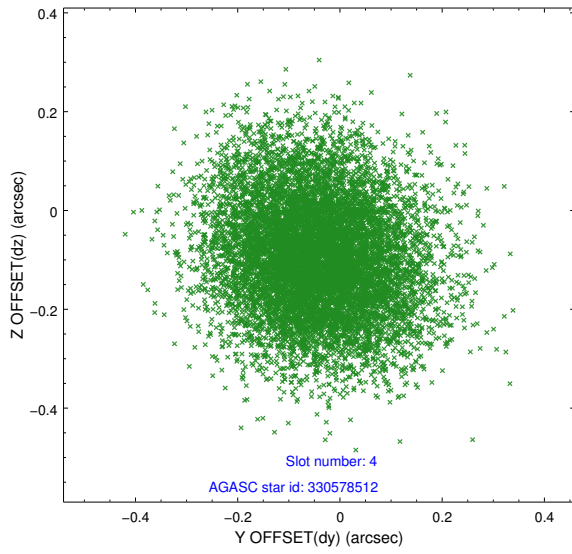
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 4809 | -0.026 | -0.056 | 0.007 | 0.011 | 0.000000 | 0.000000 | -765.47 | -1734.60 |
| 1 | FID | ACIS-S-4 | 7.19 | 4808 | 0.134 | 0.028 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2147.88 | 173.76 |
| 2 | FID | ACIS-S-5 | 7.24 | 4809 | -0.139 | 0.037 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1818.18 | 167.66 |
| 3 | GUIDE | 330577472 | 7.11 | 9619 | -0.045 | 0.024 | 0.068 | 0.104 | 168.184493 | 35.830134 | -865.72 | -381.87 |
| 4 | GUIDE | 330578512 | 10.57 | 9588 | -0.046 | -0.095 | 0.162 | 0.263 | 167.496811 | 35.191522 | 1449.47 | 1613.89 |
| 5 | GUIDE | 330578568 | 7.27 | 9618 | 0.065 | 0.079 | 0.065 | 0.110 | 167.148983 | 36.010831 | 2031.15 | -1451.58 |
| 6 | GUIDE | 330580456 | 8.28 | 9614 | 0.073 | -0.032 | 0.068 | 0.107 | 167.553575 | 35.335117 | 1211.08 | 1125.93 |
| 7 | GUIDE | 330581544 | 6.51 | 9618 | -0.063 | 0.024 | 0.080 | 0.146 | 168.134795 | 35.814080 | -712.33 | -343.27 |

2.4 Star Slots

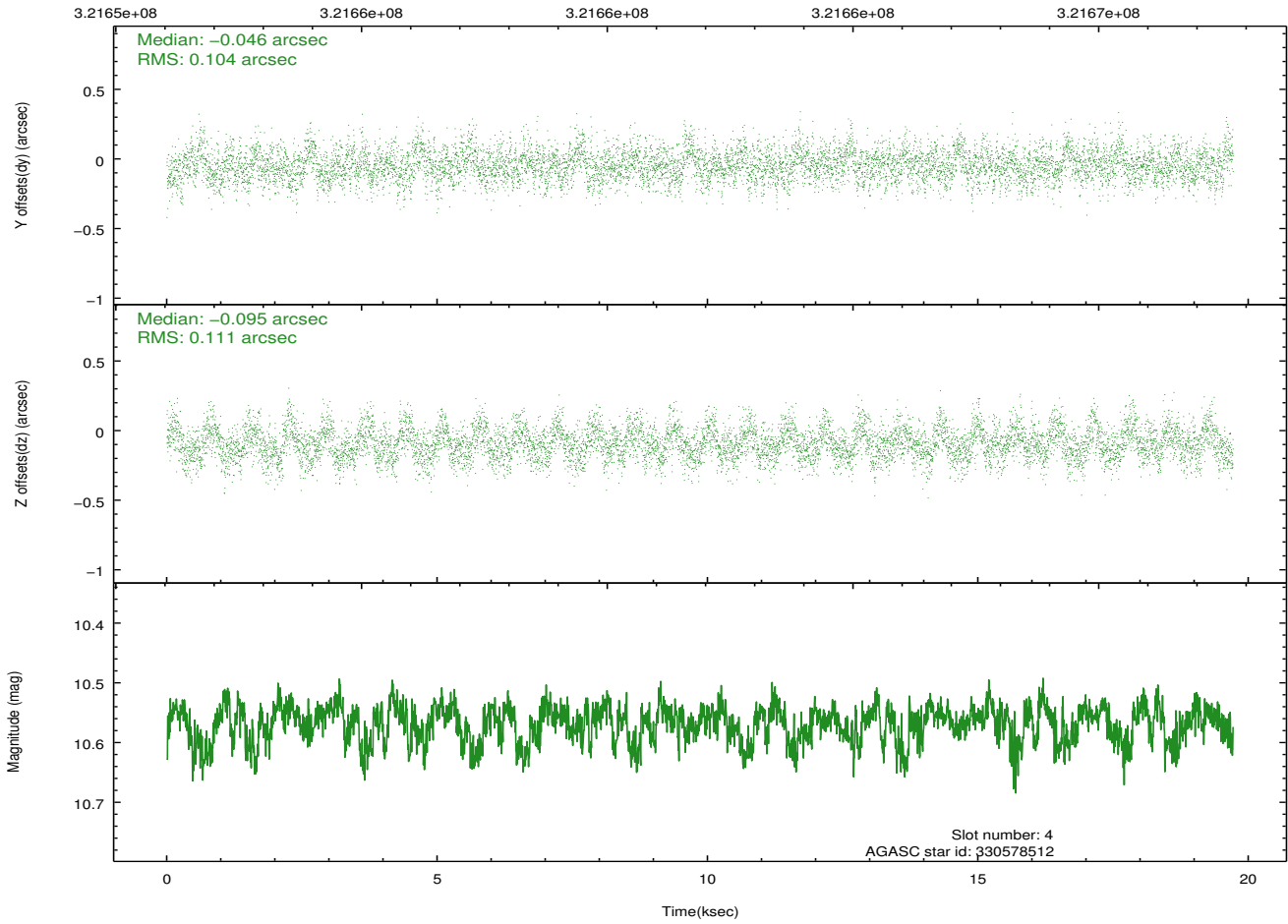
2.4.1 Slot 3



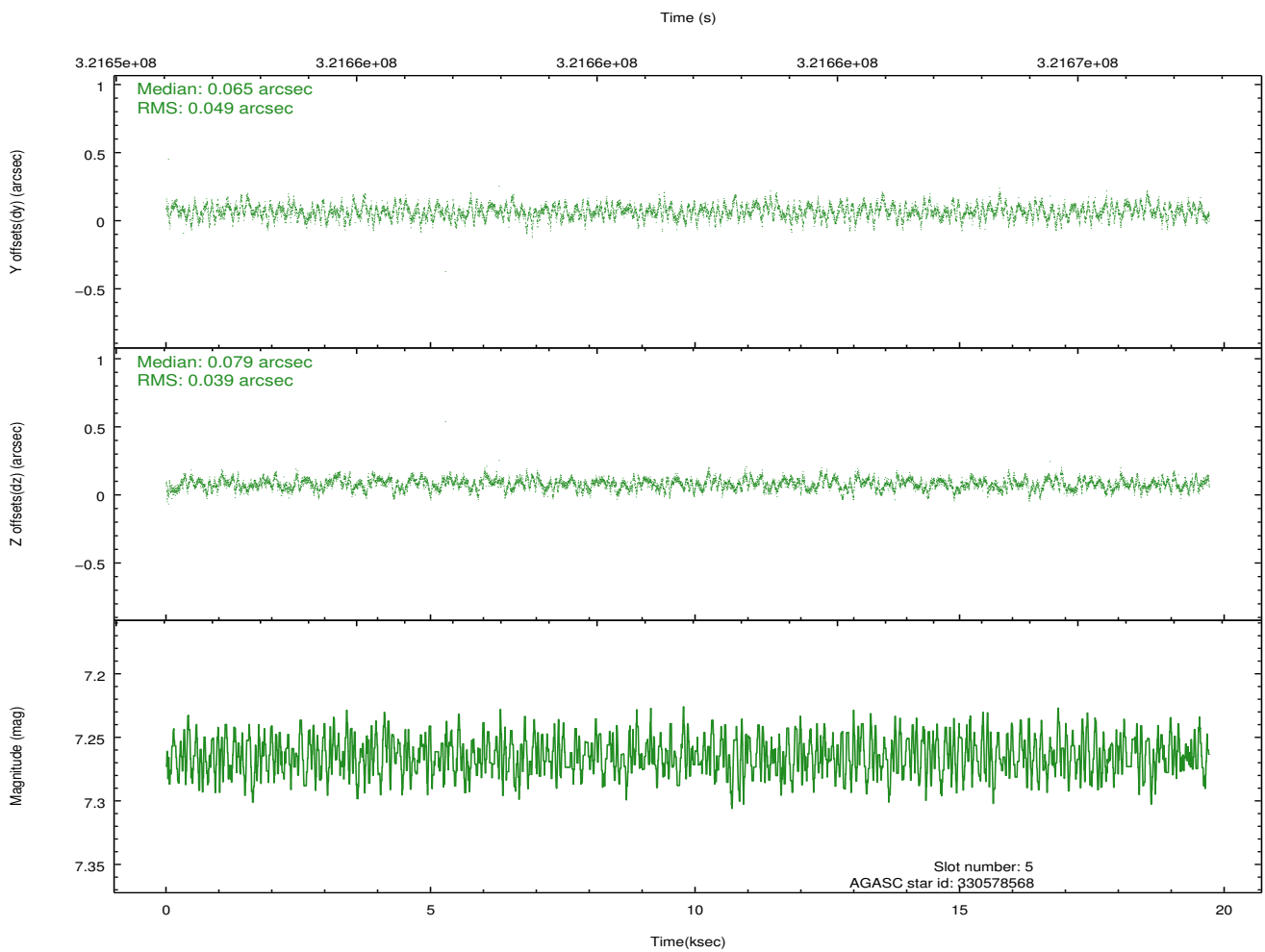
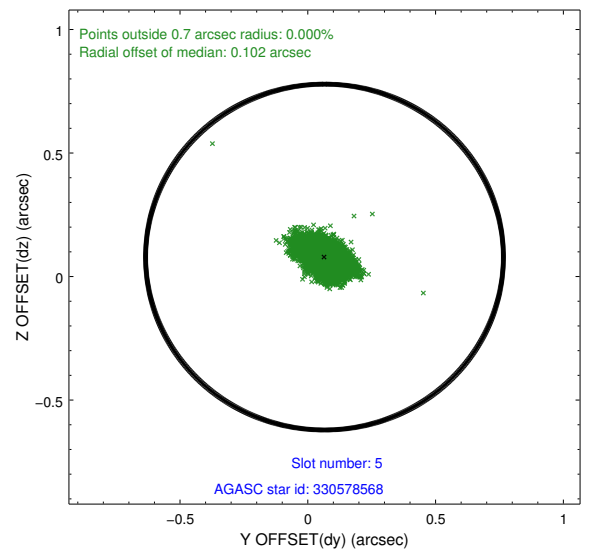
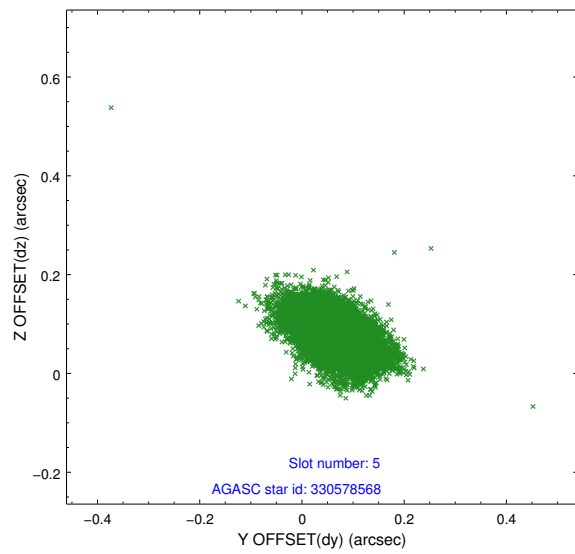
2.4.2 Slot 4



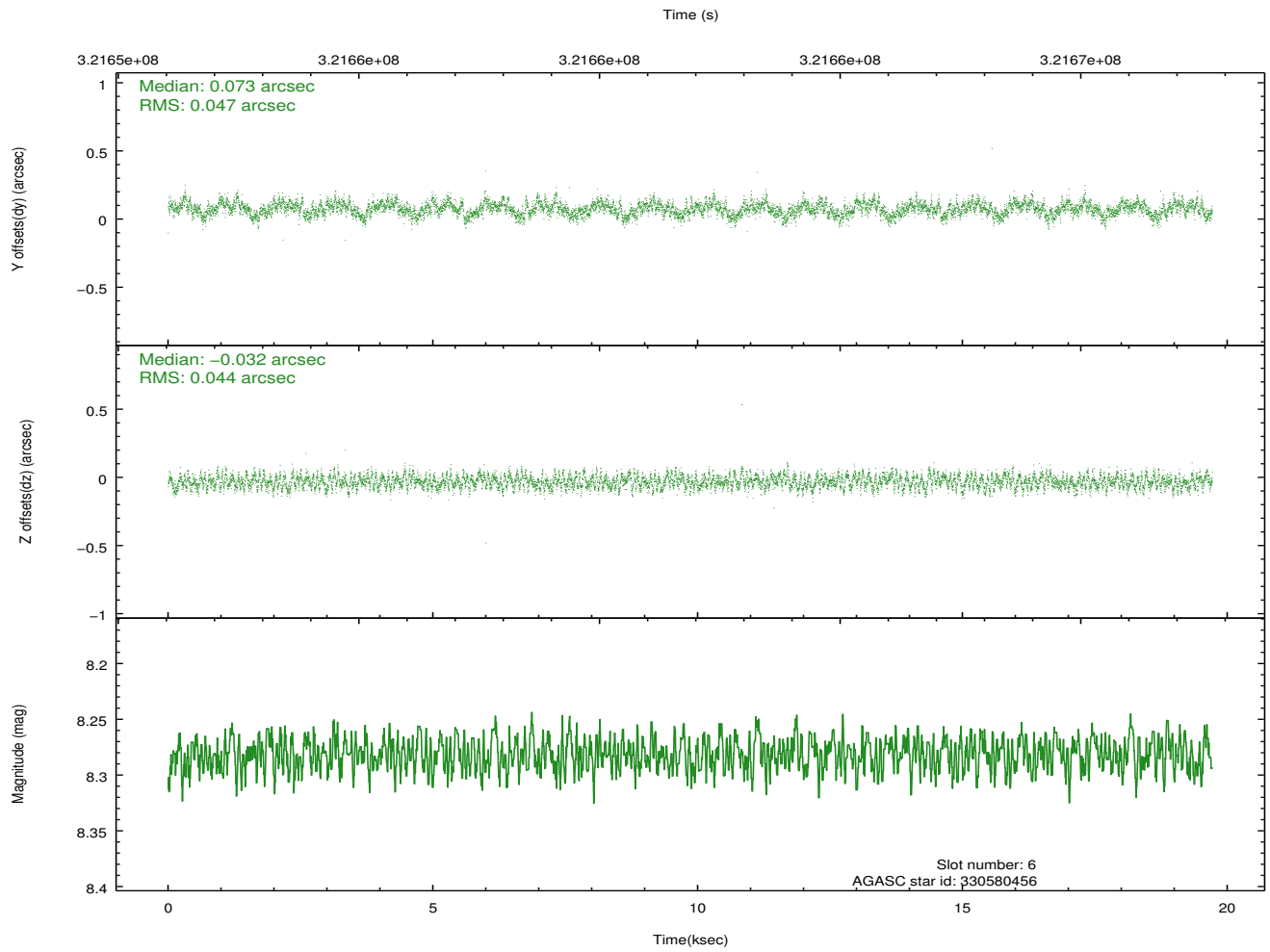
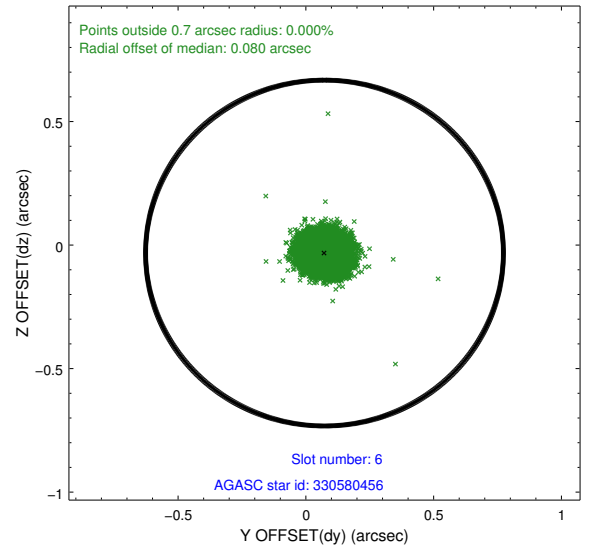
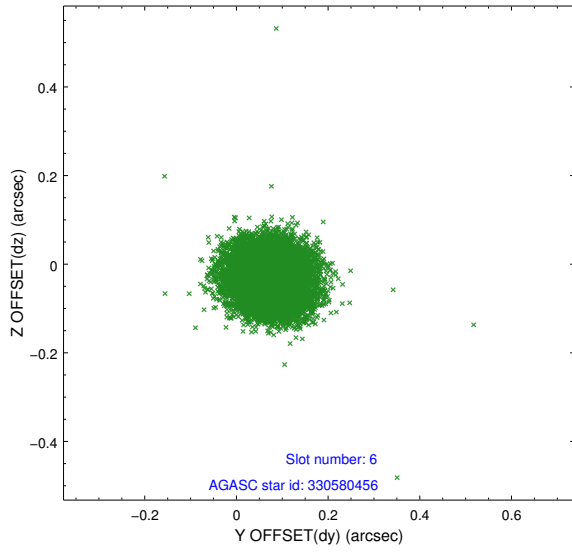
Time (s)



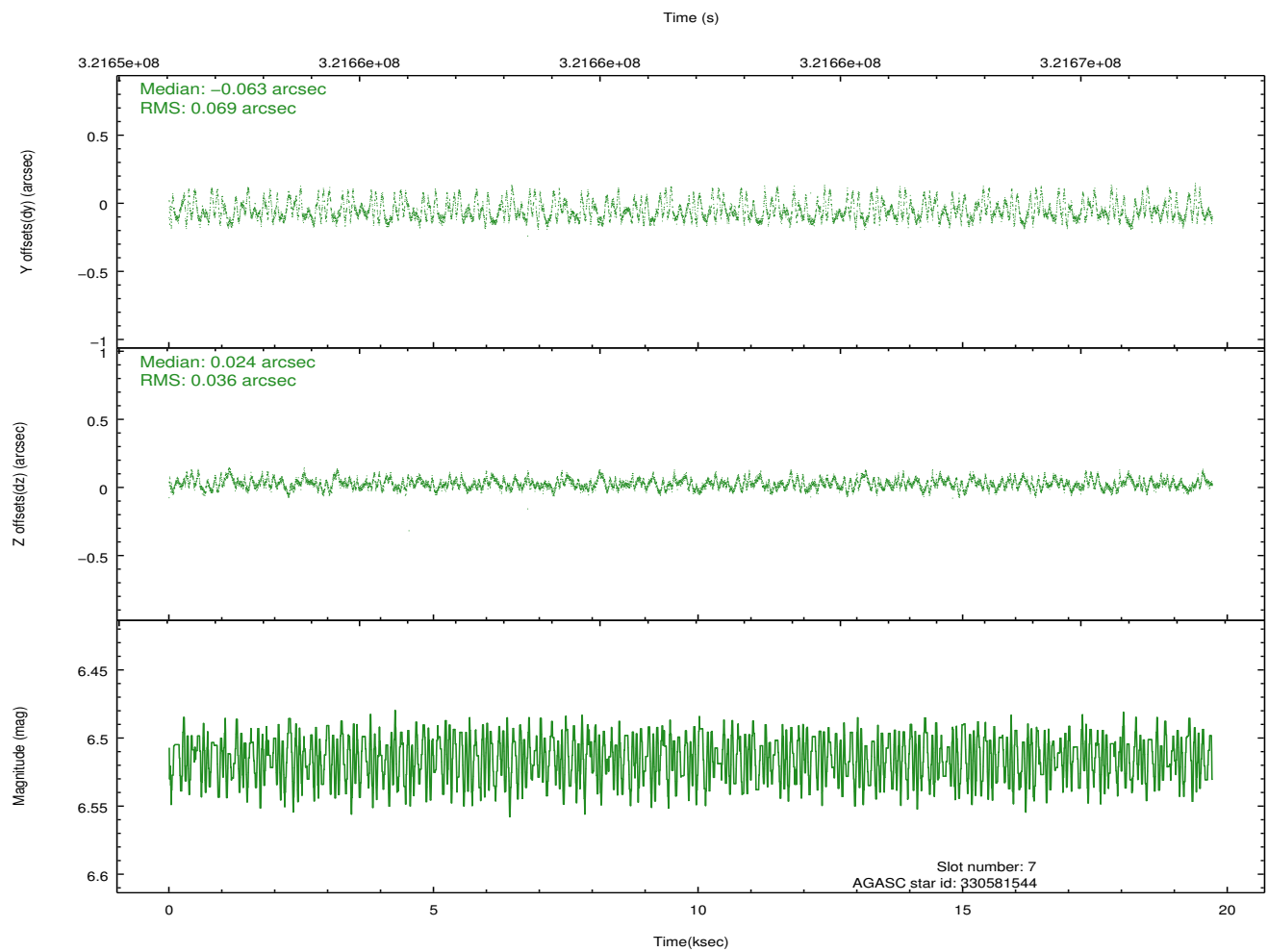
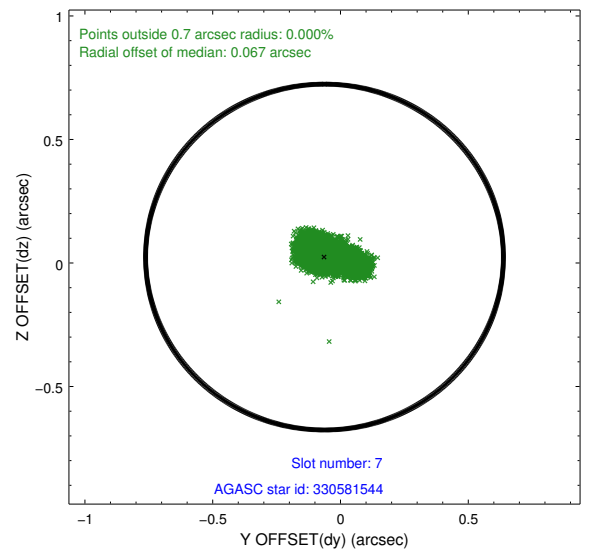
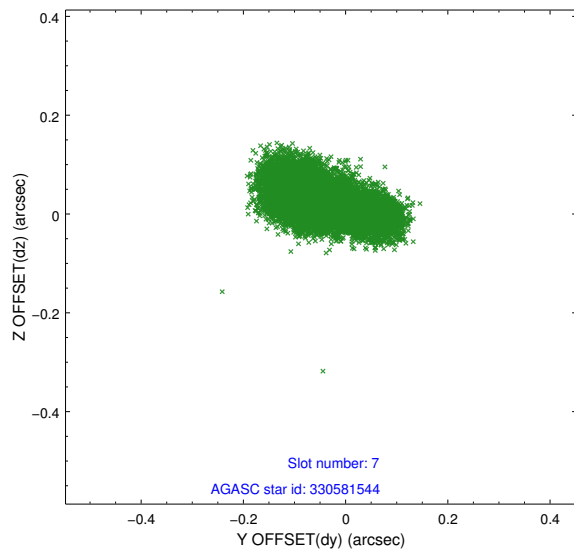
2.4.3 Slot 5



2.4.4 Slot 6

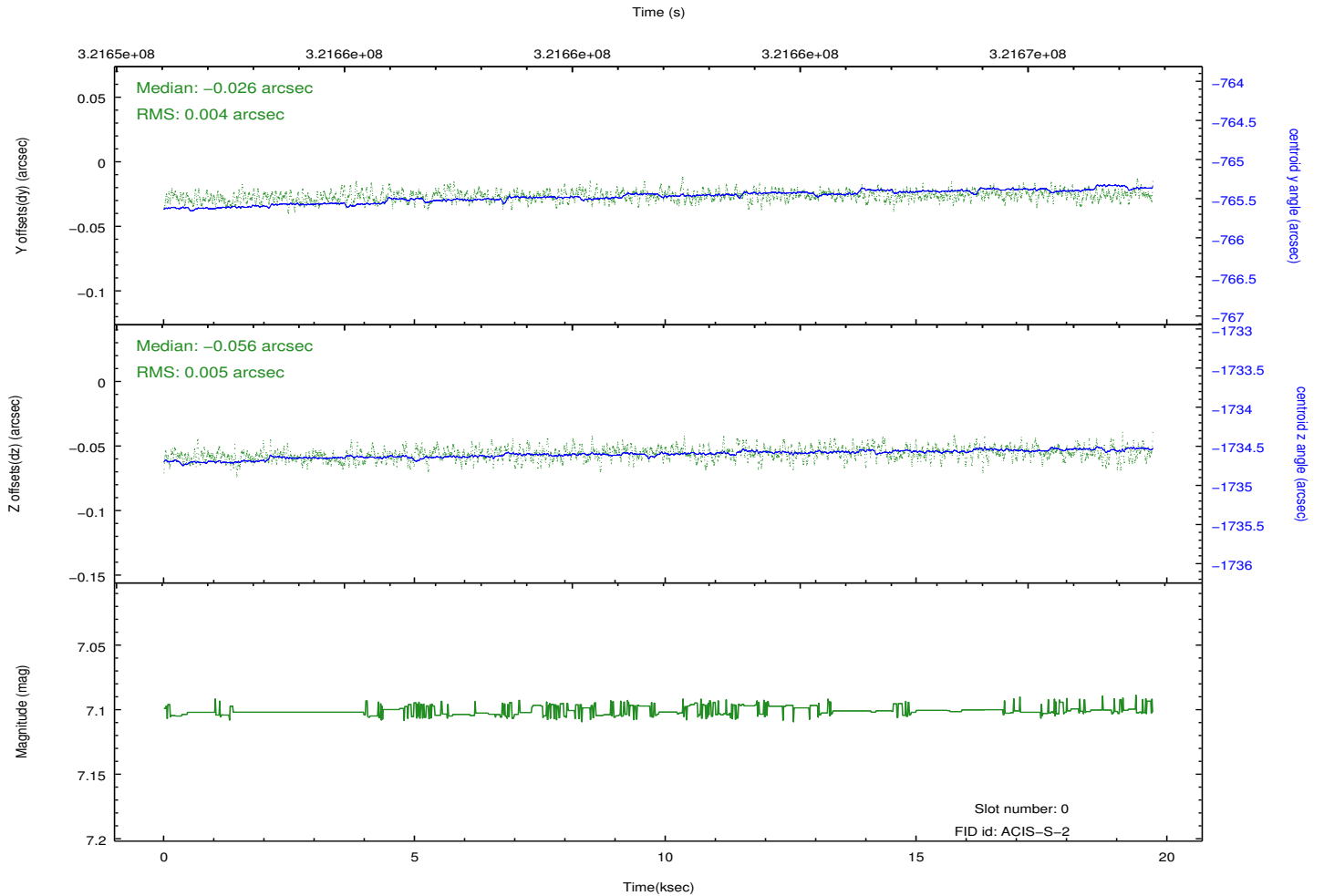
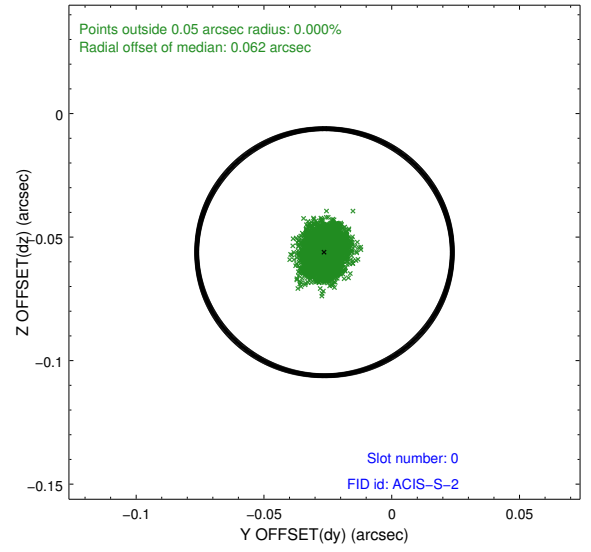
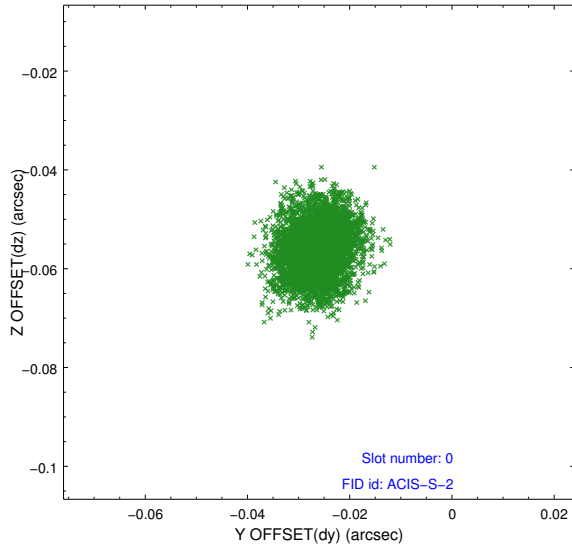


2.4.5 Slot 7

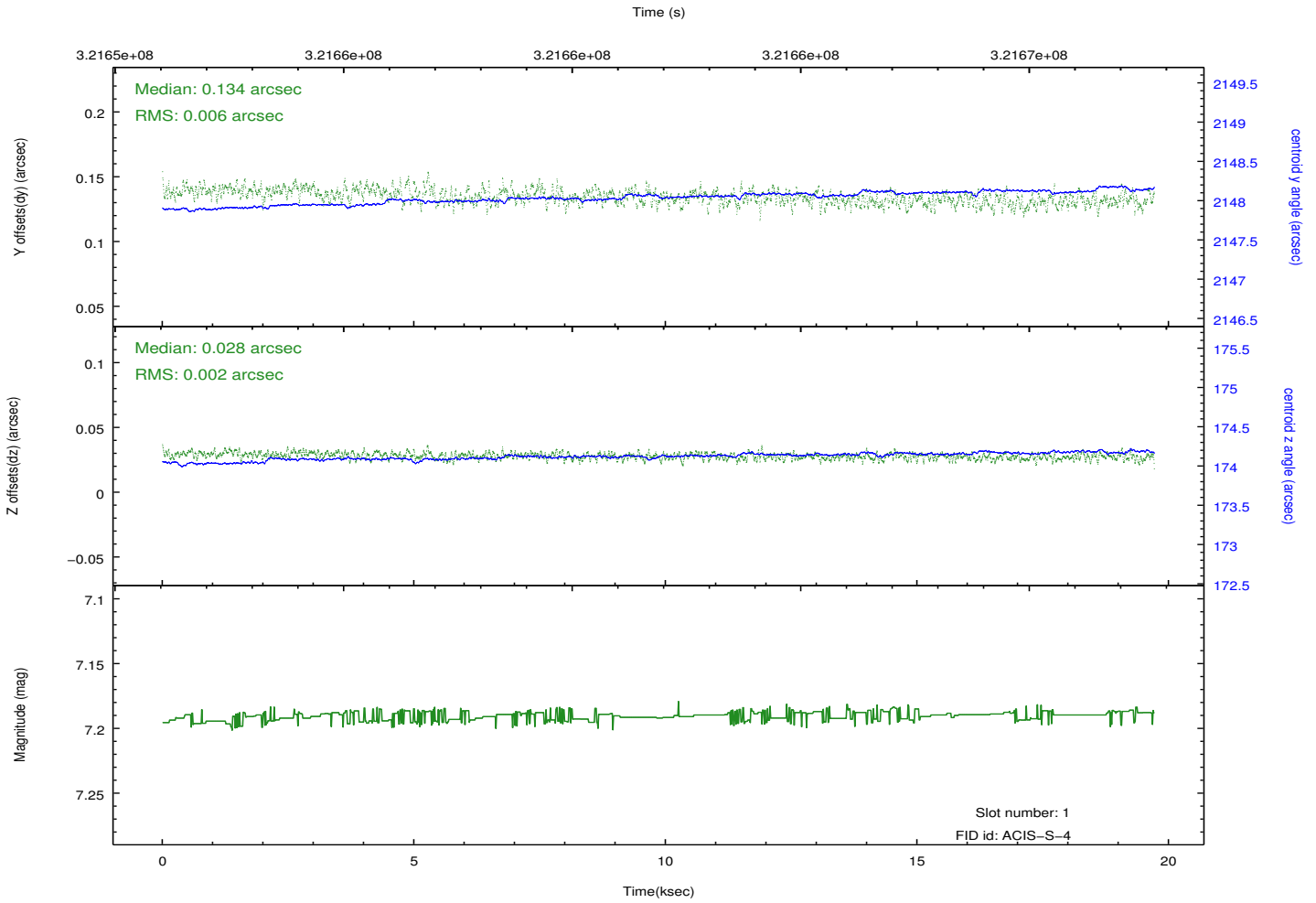
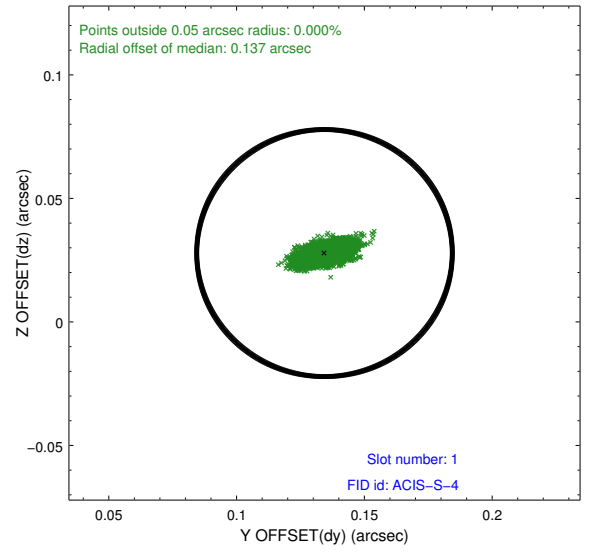
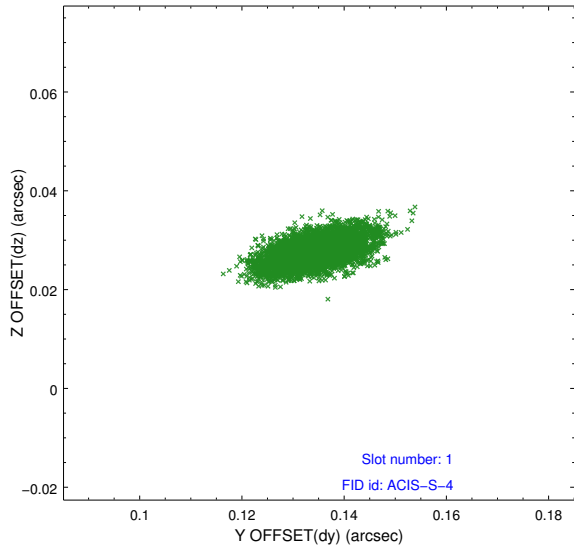


2.5 FID Slots

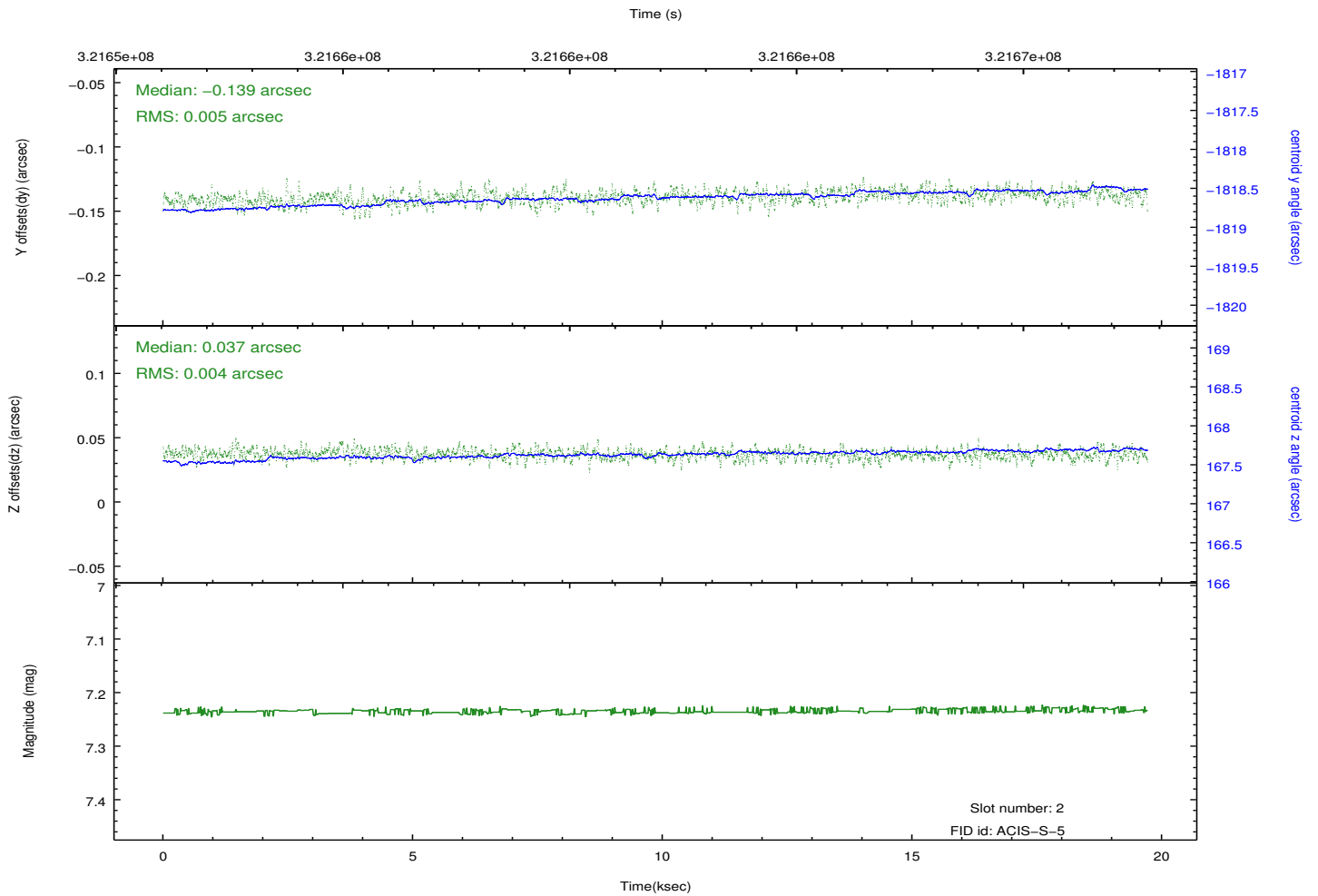
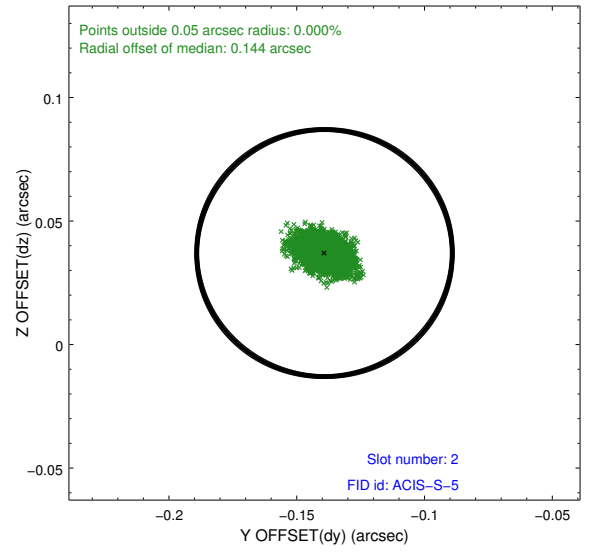
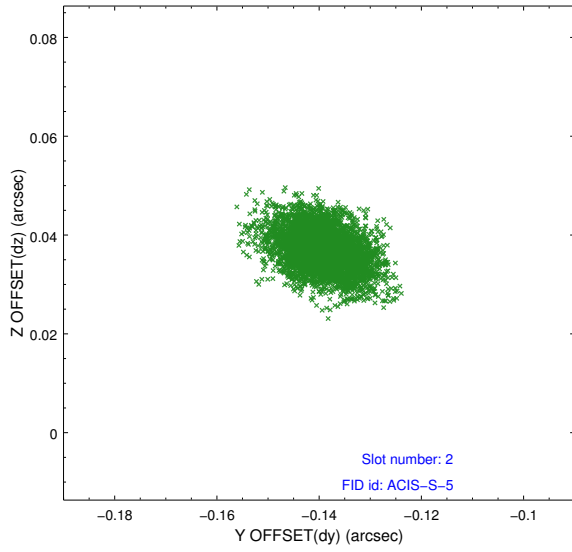
2.5.1 Slot 0



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) | 2012.05.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 19.7067001 |

A.2 Comments