

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9493 - L2 Version 2
Chandra X-Ray Center

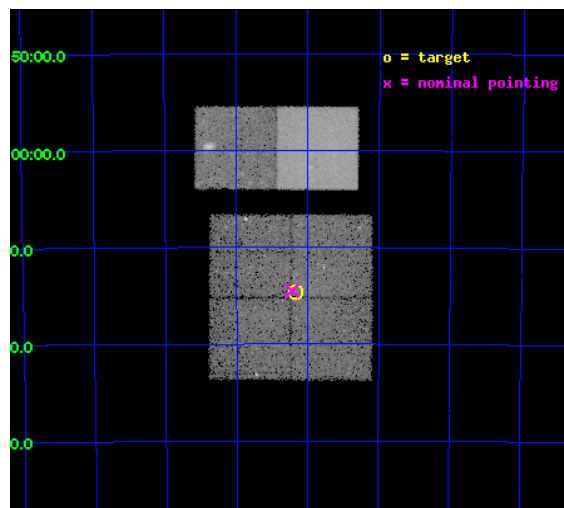
L2 Processing Date : May 10 2012

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1 Front

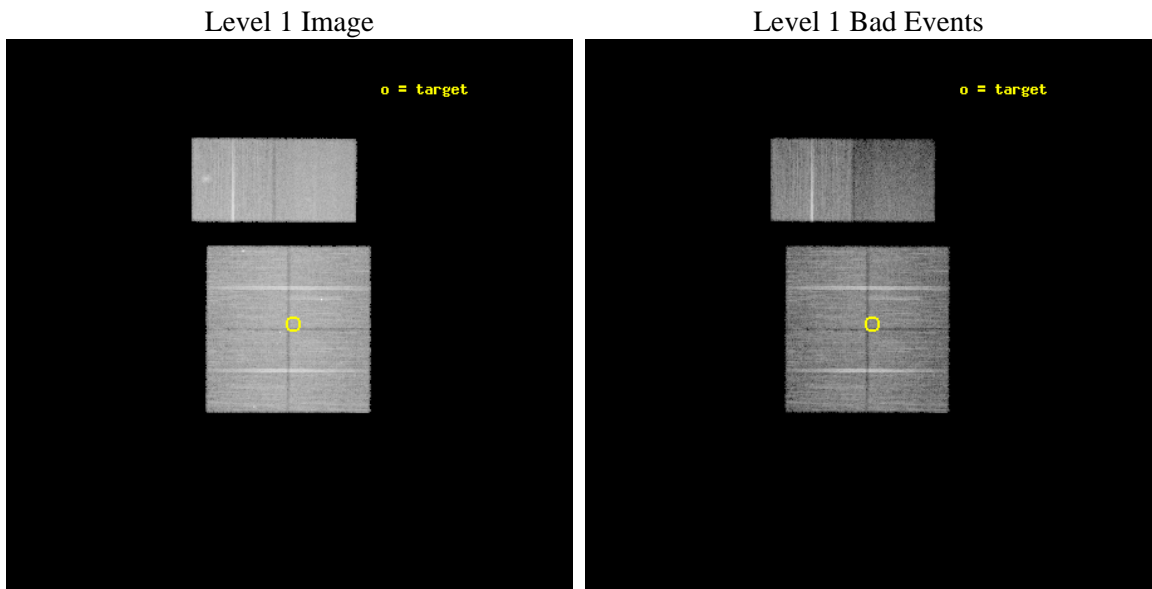
| | | |
|----------|--|---|
| seq_num | 900830 | Sequence number |
| obs_id | 9493 | Observation id |
| title | The Great Nebula in Carina: Protoplanetary Disks to Starburst Galaxies | Proposal title |
| observer | Dr. Leisa Townsley | Principal investigator |
| object | Carina South Pillars Ptg 2 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 160.790417 | Observer's specified target RA [deg] |
| dec_targ | -60.244139 | Observer's specified target Dec [deg] |
| ra_nom | 160.80594369096 | Nominal RA [deg] |
| dec_nom | -60.241702335167 | Nominal Dec [deg] |
| roll_nom | 0.22215765431813 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 20043.266273499 | Sum of GTIs [s] |
| livetime | 19789.466367337 | Livetime [s] |
| ontime0 | 20043.143153489 | Sum of GTIs [s] |
| ontime1 | 20036.702212811 | Sum of GTIs [s] |
| ontime2 | 20043.225233495 | Sum of GTIs [s] |
| ontime3 | 20043.266273499 | Sum of GTIs [s] |
| ontime6 | 20043.348353505 | Sum of GTIs [s] |
| ontime7 | 20043.307313502 | Sum of GTIs [s] |
| l2events | 161824 | Number of level 2 events |



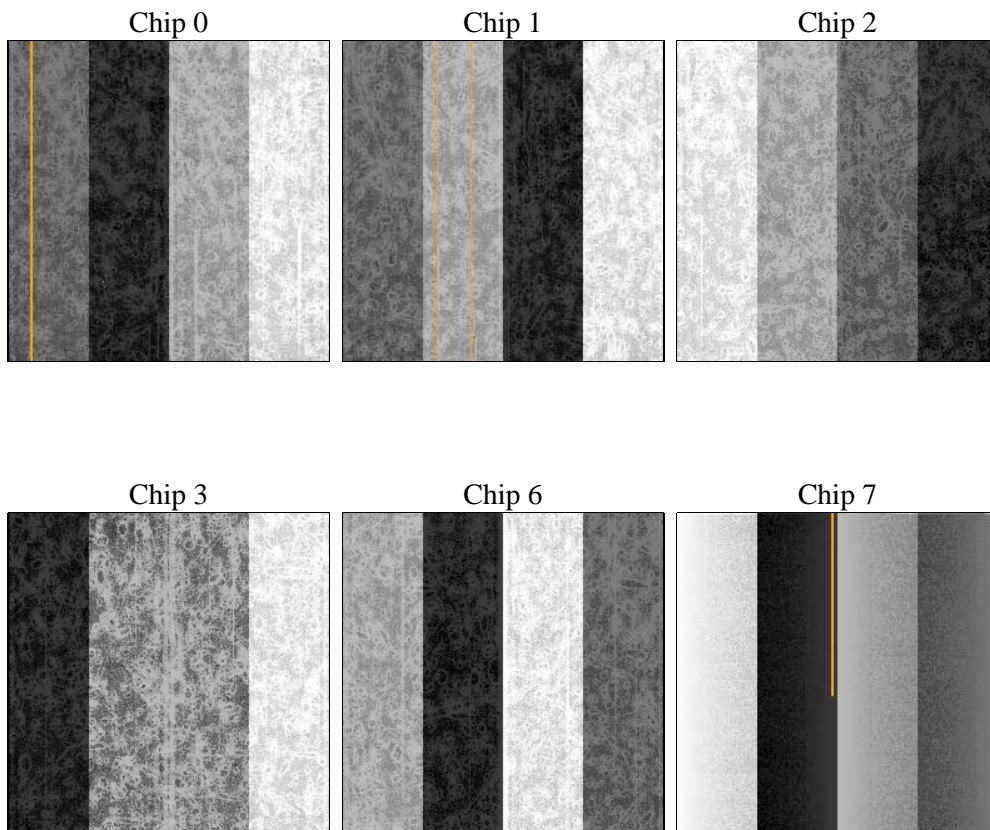
2 OBI

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 | 8.4.4 | Processing system revision | ontime | 20043.266273499 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime0 | 20043.143153489 | Sum of GTIs [s] |
| date | 2012-05-10T09:13:04 | Date and time of file creation | ontime1 | 20036.702212811 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 20043.225233495 | Sum of GTIs [s] |
| | | | ontime3 | 20043.266273499 | Sum of GTIs [s] |
| | | | ontime6 | 20043.348353505 | Sum of GTIs [s] |
| | | | ontime7 | 20043.307313502 | Sum of GTIs [s] |
| | | | l1events | 91551 | Number of level 1 events |

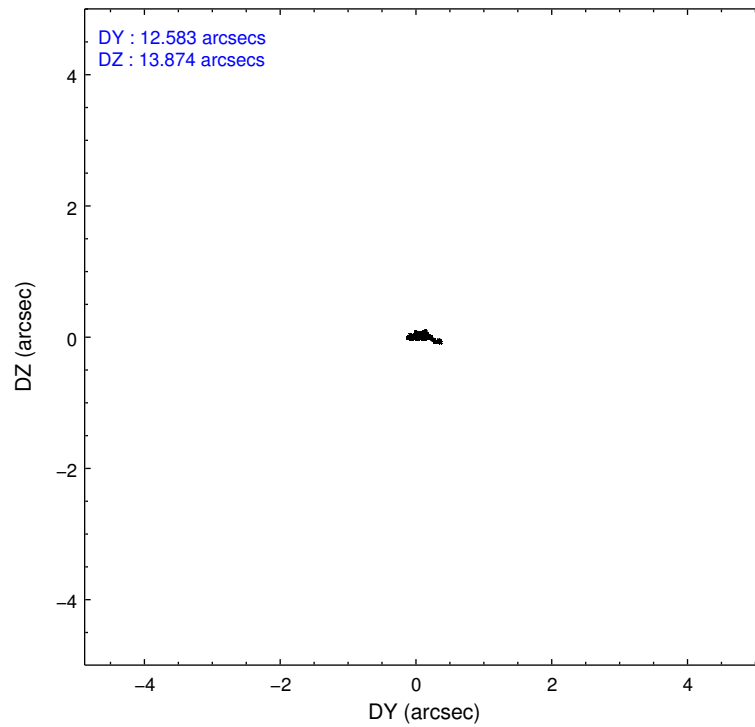
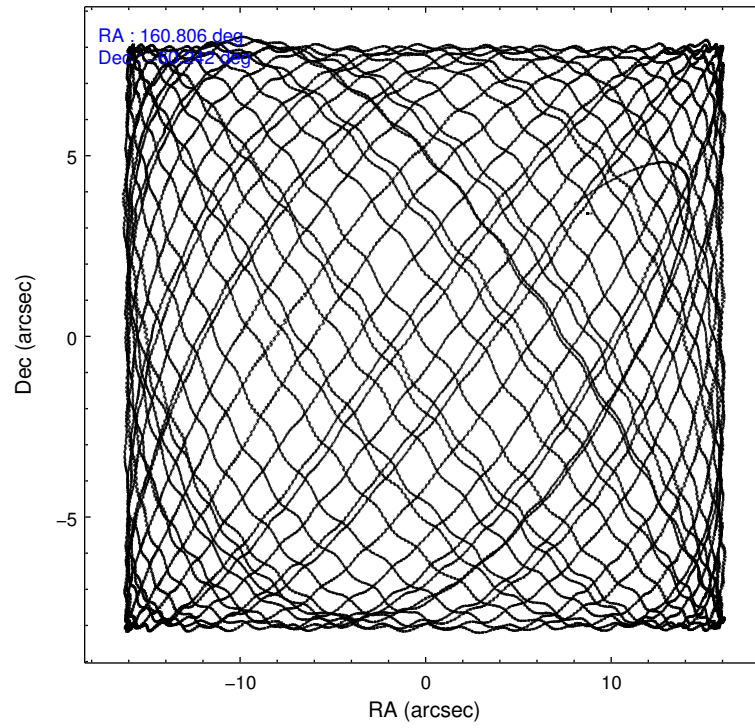
2.1.4 Events

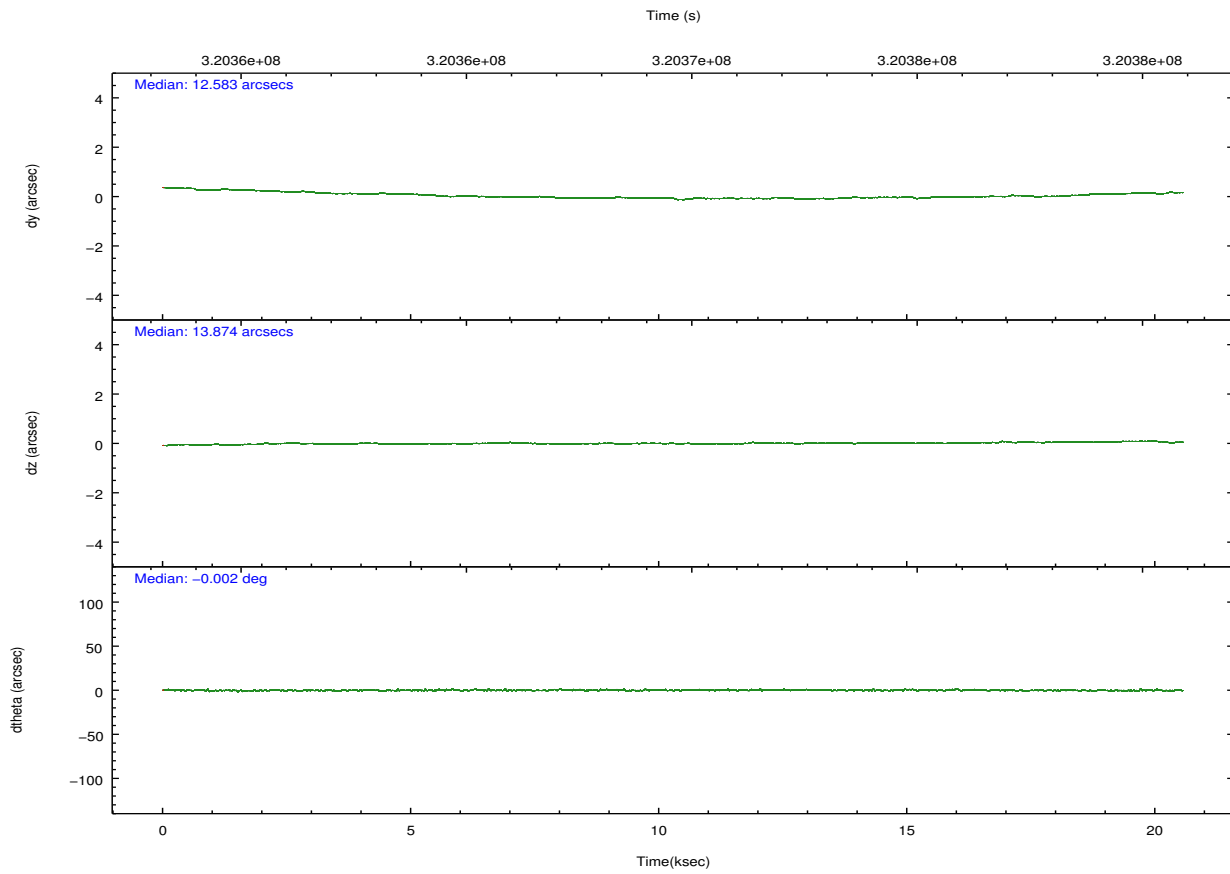
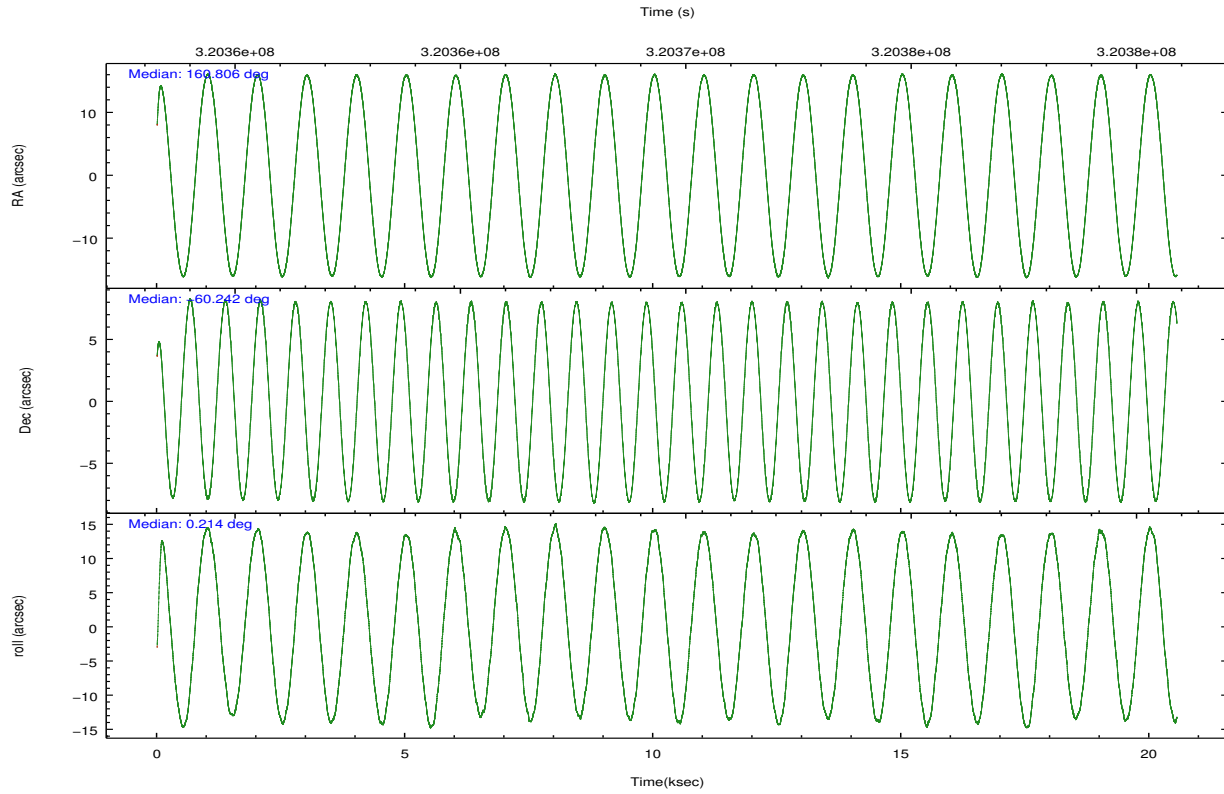
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|-------|
| level 1 events | 144832 | 140611 | 160498 | 150372 | 164825 | 154413 | grade 0 events | 7852 | 7553 | 8769 | 9465 | 13800 | 10797 |
| rejected events | 126907 | 122569 | 141976 | 131601 | 139880 | 73748 | | 5% | 5% | 5% | 6% | 8% | 6% |
| rejected % | 87% | 87% | 88% | 87% | 84% | 47% | grade 1 events | 101 | 76 | 129 | 125 | 118 | 224 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3917 | 3713 | 3851 | 3296 | 4098 | 17793 |
| | | | | | | | | 2% | 2% | 2% | 2% | 2% | 11% |
| | | | | | | | grade 3 events | 1785 | 1837 | 1639 | 1683 | 1866 | 7901 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 4 events | 1609 | 1764 | 1666 | 1638 | 1813 | 7785 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 5 events | 4387 | 4832 | 4327 | 5147 | 5299 | 15562 |
| | | | | | | | | 3% | 3% | 2% | 3% | 3% | 10% |
| | | | | | | | grade 6 events | 2768 | 3183 | 2608 | 2696 | 3371 | 36405 |
| | | | | | | | | 1% | 2% | 1% | 1% | 2% | 23% |
| | | | | | | | grade 7 events | 122413 | 117653 | 137509 | 126322 | 134460 | 57946 |
| | | | | | | | | 84% | 83% | 85% | 84% | 81% | 37% |

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 | CCD I0 on | Y | Y |
| Observation mode | POINTING | POINTING | CCD I1 on | Y | Y |
| [deg] Pointing RA | 160.758160 | 160.8059436909556 | CCD I2 on | Y | Y |
| [deg] Pointing Dec | -60.255637 | -60.24170233516691 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 359.971989 | 0.2221576543181261 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001439871863259334 | CCD S2 on | O1 | Y |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | CCD S3 on | O2 | Y |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | CCD S4 on | N | N |
| [s] Observation start time (MET) | 320359864.184000 | 320358618.73691 | CCD S5 on | N | N |
| Observation start date | 2008-02-25T20:49:59 | 2008-02-25T20:30:18 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 320379864.184000 | 320380532.21297 | On-chip summing requested | N | N |
| Observation end date | 2008-02-26T02:23:19 | 2008-02-26T02:35:32 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



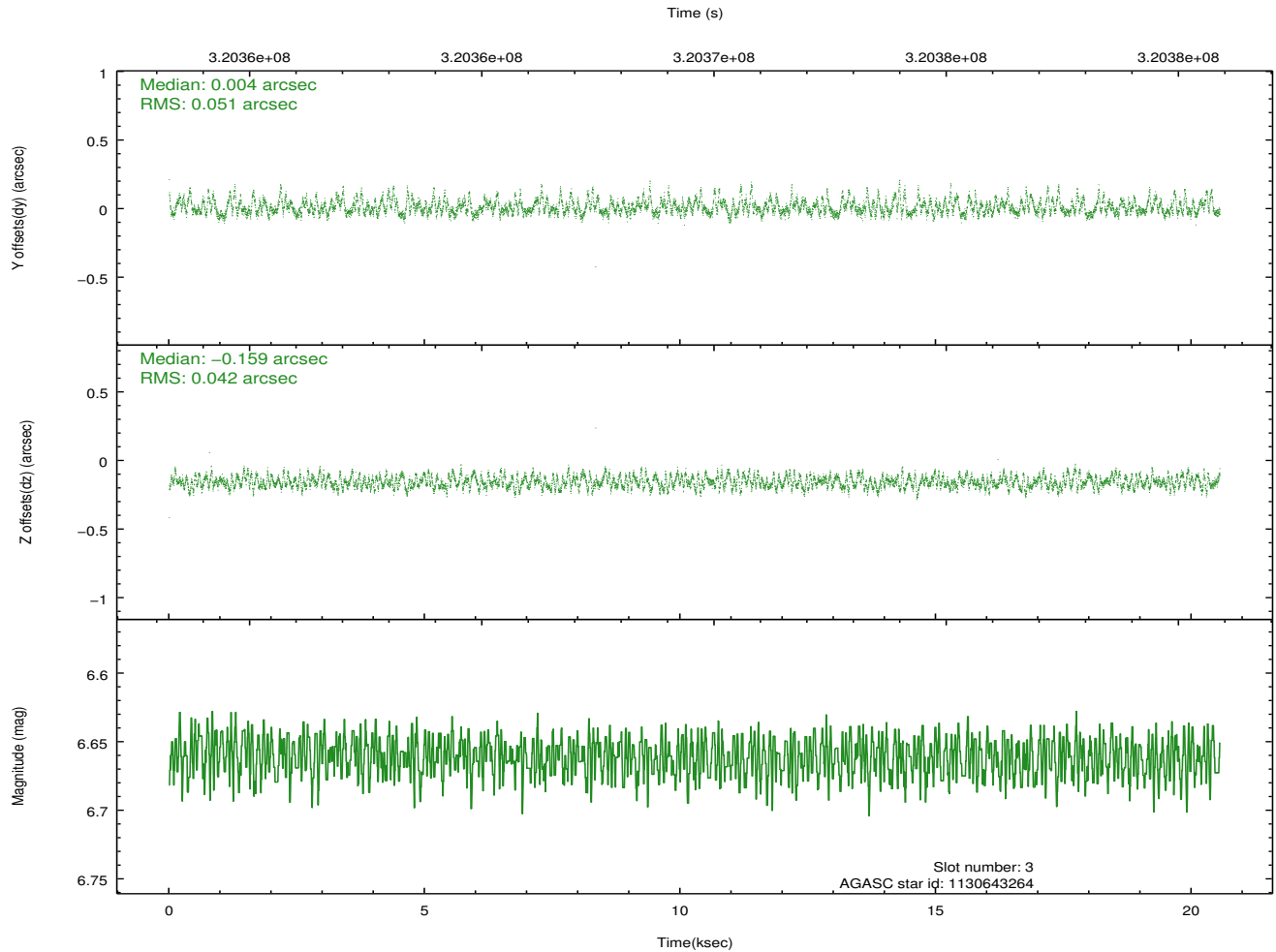
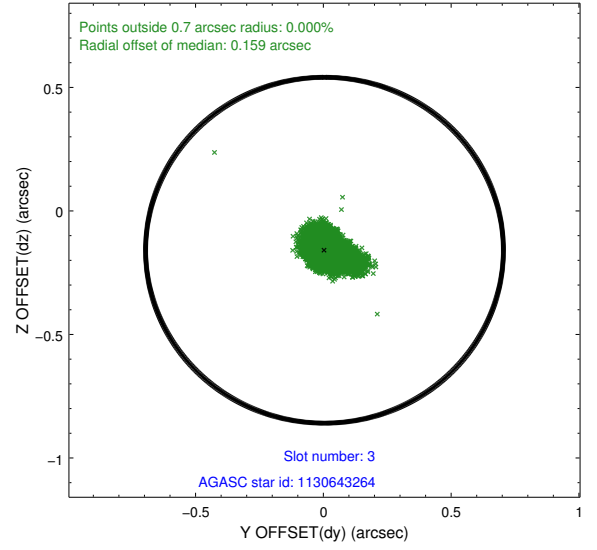
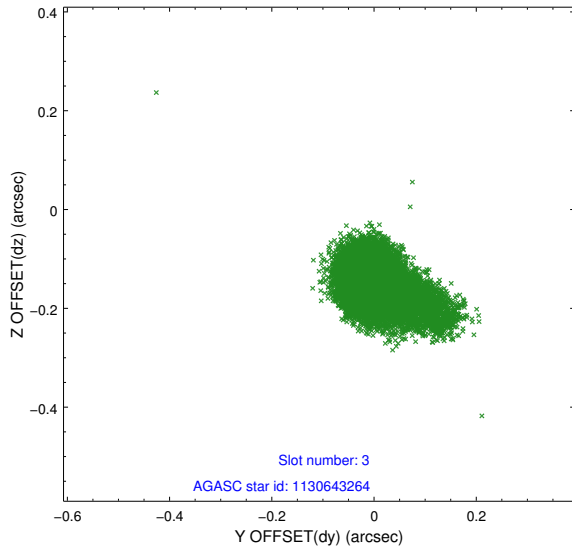


Slot Statistics

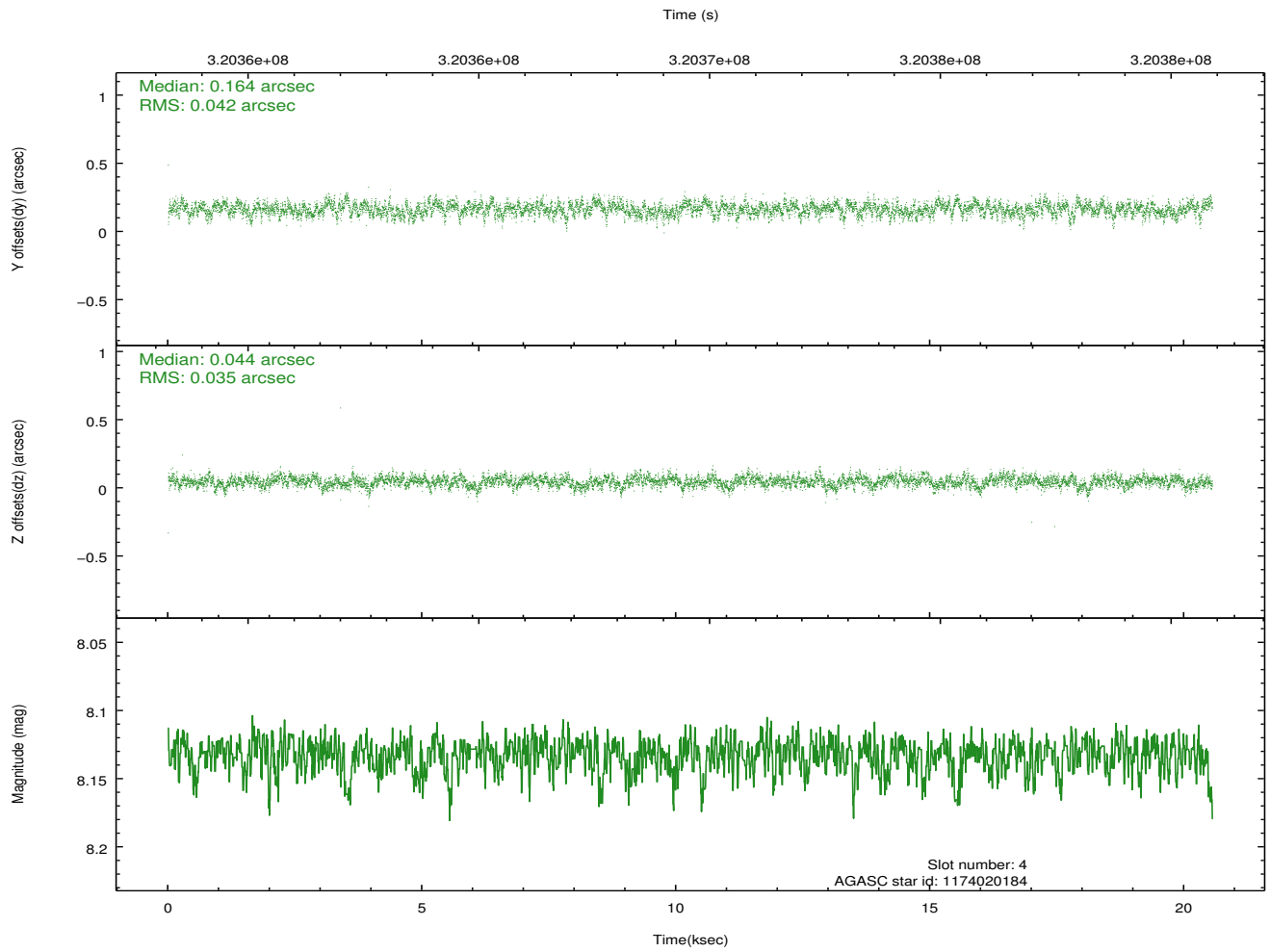
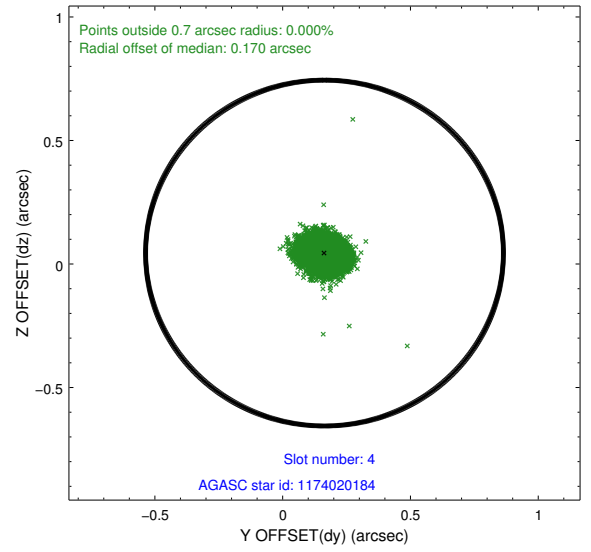
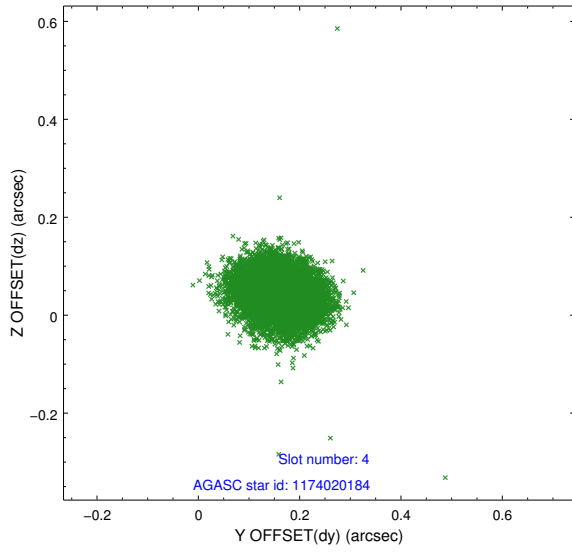
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.23 | 5014 | 0.030 | 0.008 | 0.006 | 0.011 | 0.000000 | 0.000000 | 926.93 | -837.44 |
| 1 | FID | ACIS-I-5 | 7.22 | 5013 | -0.178 | 0.048 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1821.28 | 1060.00 |
| 2 | FID | ACIS-I-6 | 7.23 | 5014 | 0.056 | 0.015 | 0.008 | 0.013 | 0.000000 | 0.000000 | 392.31 | 1704.67 |
| 3 | GUIDE | 1130643264 | 6.66 | 10028 | 0.004 | -0.159 | 0.067 | 0.118 | 160.322990 | -59.676912 | -792.02 | 2080.38 |
| 4 | GUIDE | 1174020184 | 8.13 | 10023 | 0.164 | 0.044 | 0.057 | 0.094 | 159.502388 | -60.147833 | -2250.15 | 365.70 |
| 5 | GUIDE | 1174025248 | 8.78 | 10017 | 0.042 | 0.131 | 0.105 | 0.163 | 161.784801 | -60.573378 | 1816.57 | -1156.52 |
| 6 | GUIDE | 1174042520 | 8.70 | 10015 | -0.186 | 0.105 | 0.078 | 0.130 | 161.882835 | -60.770414 | 1978.48 | -1868.70 |
| 7 | GUIDE | 1174033144 | 8.69 | 10015 | -0.021 | -0.123 | 0.075 | 0.122 | 161.168741 | -60.059230 | 737.71 | 705.14 |

2.4 Star Slots

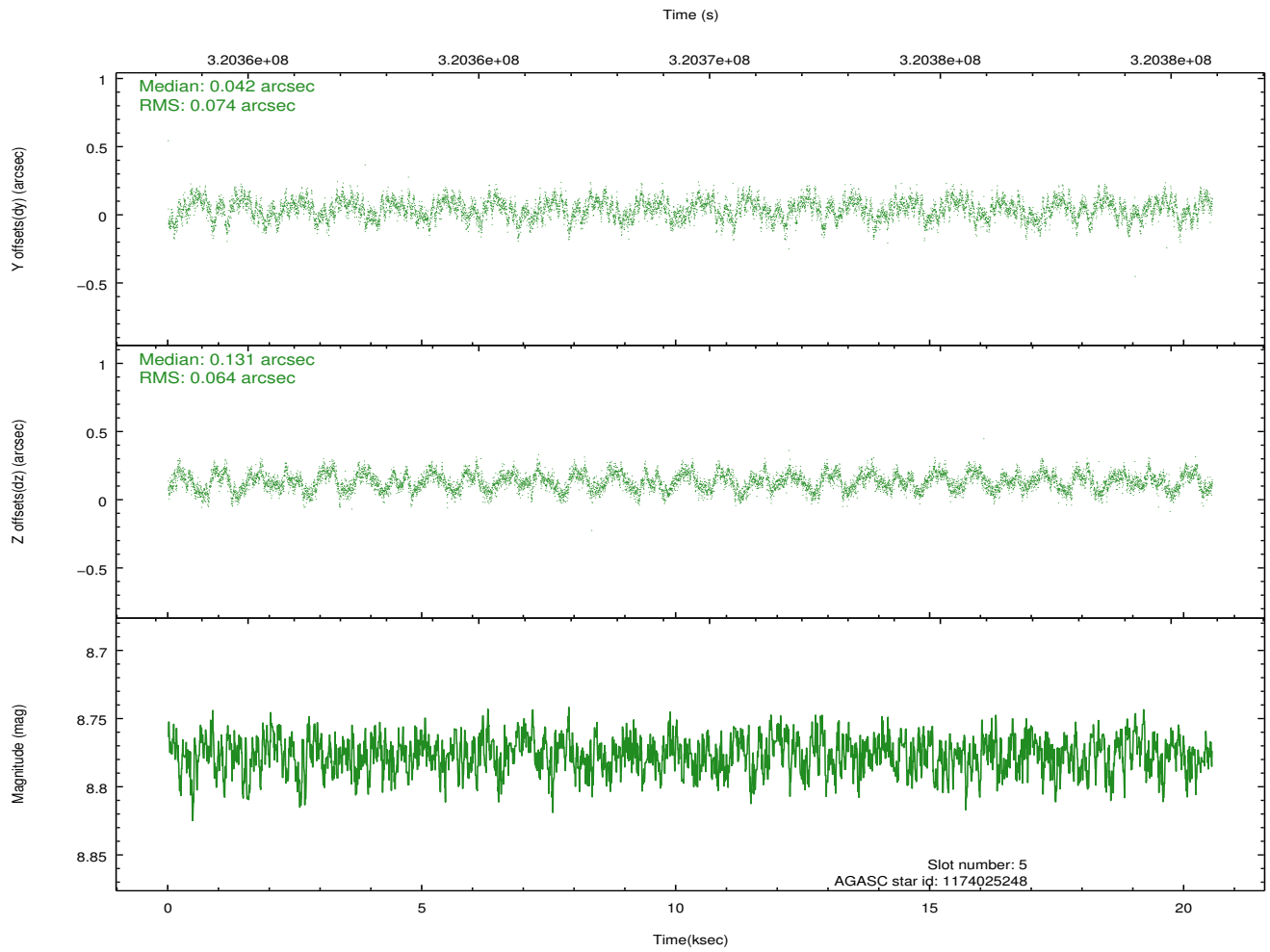
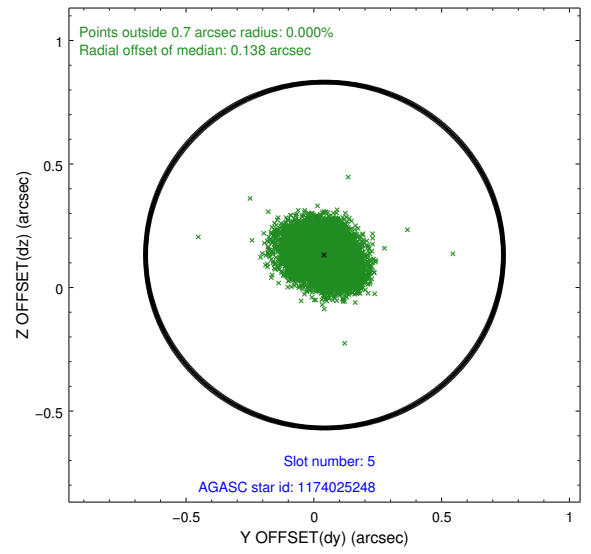
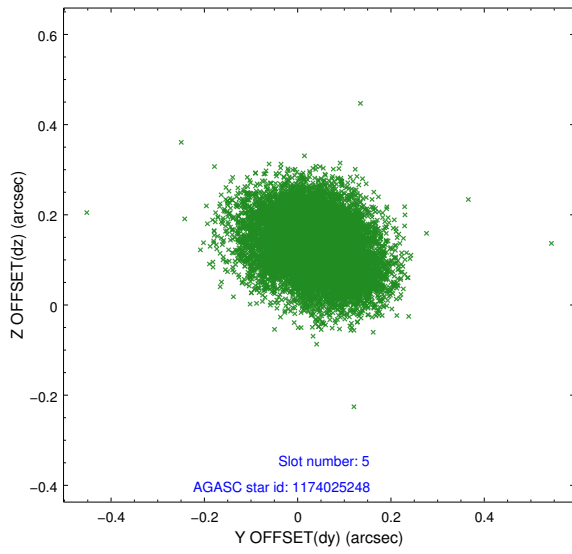
2.4.1 Slot 3



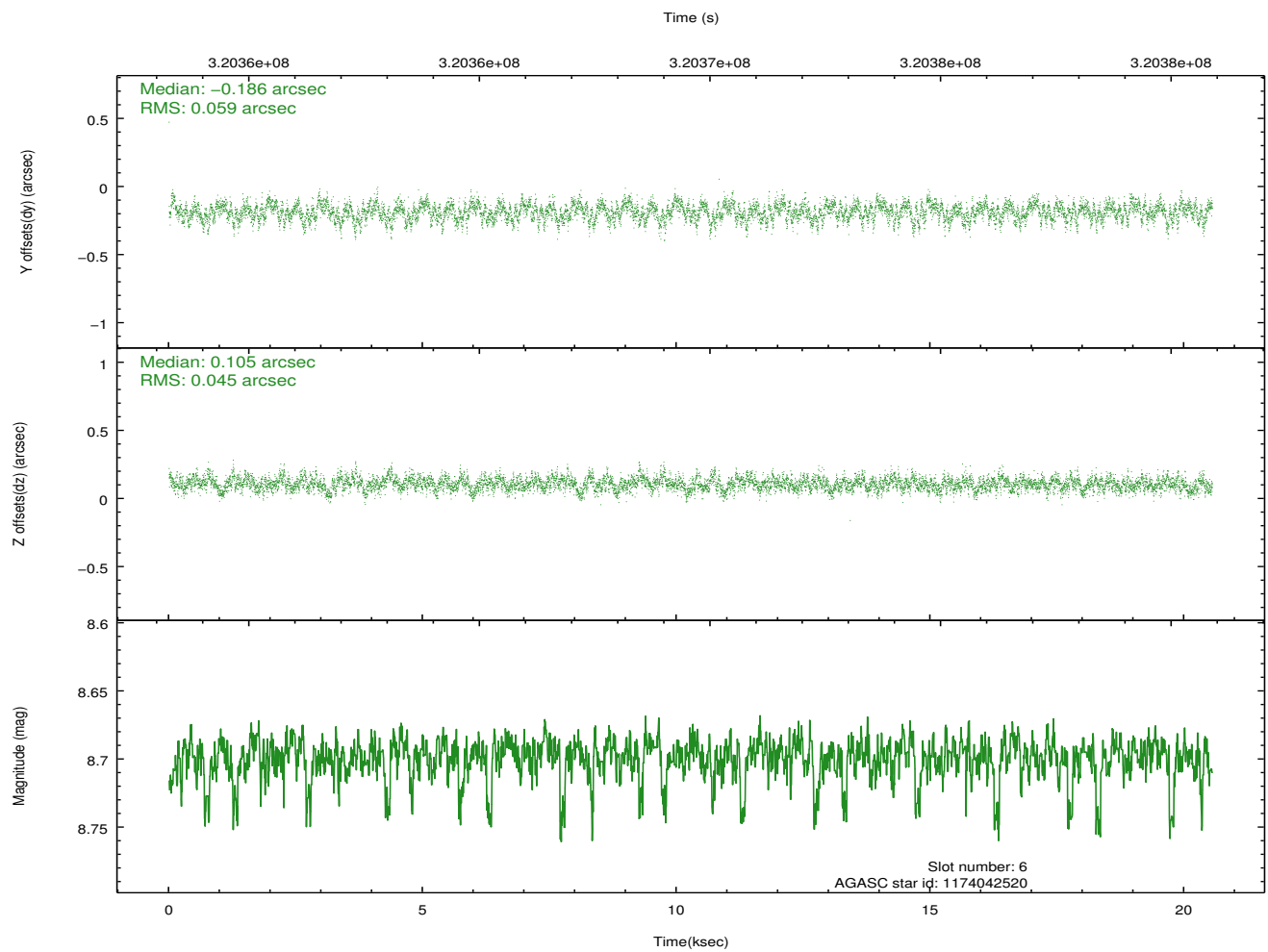
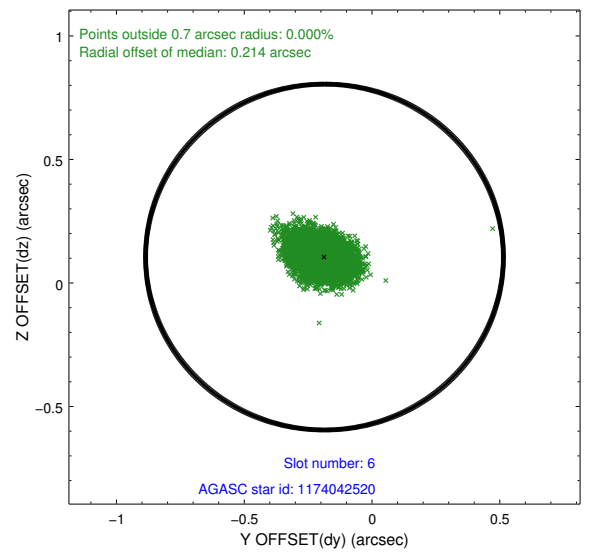
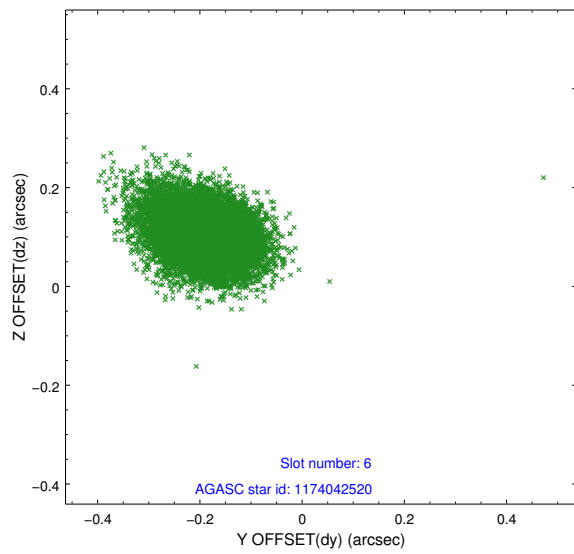
2.4.2 Slot 4



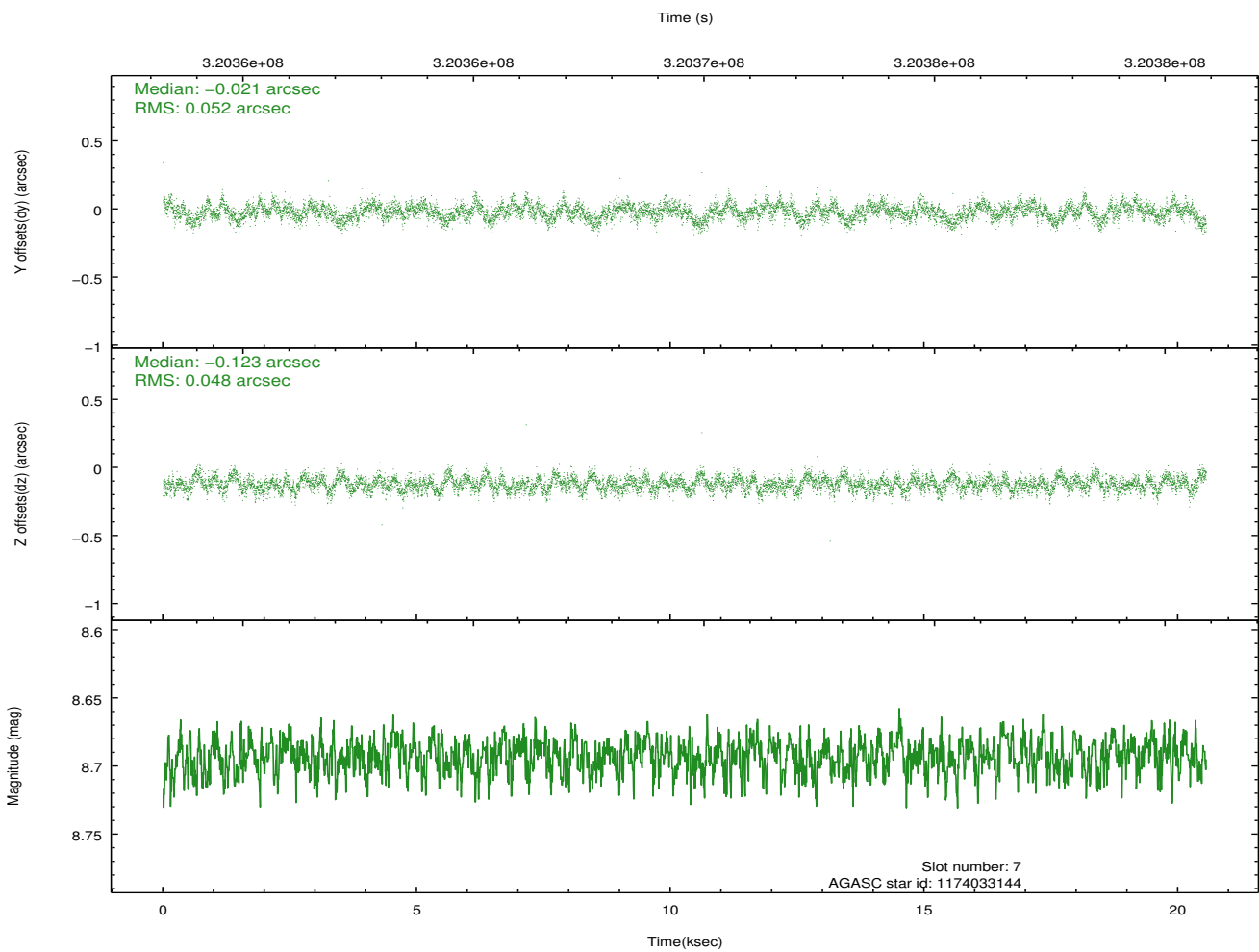
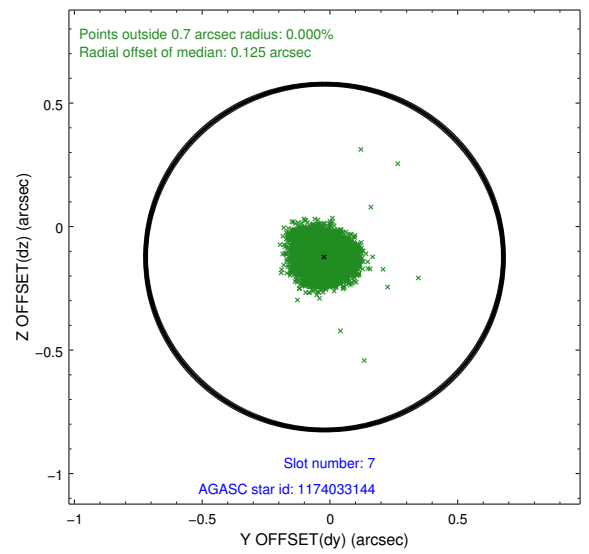
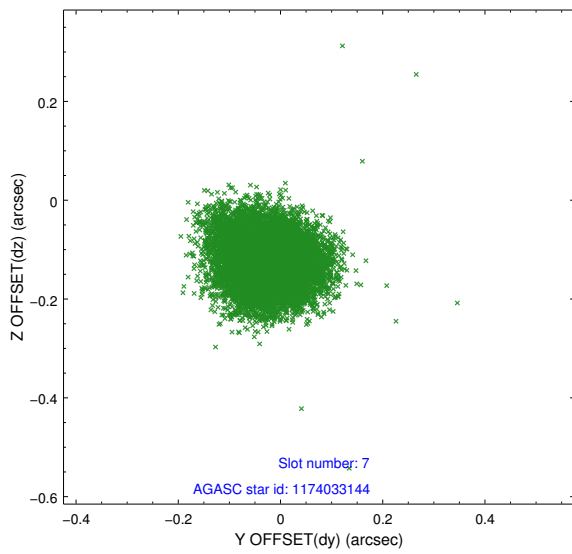
2.4.3 Slot 5



2.4.4 Slot 6

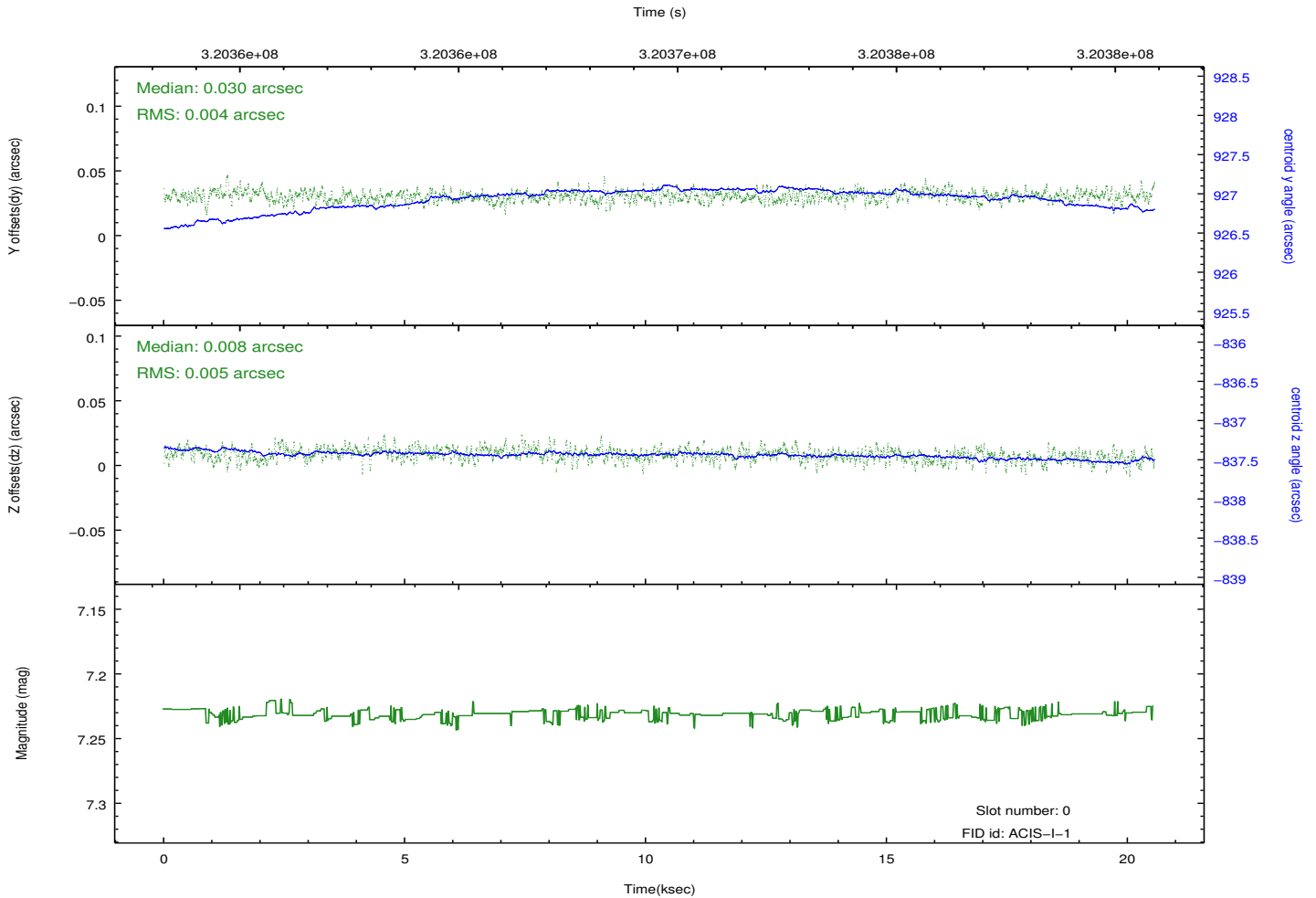
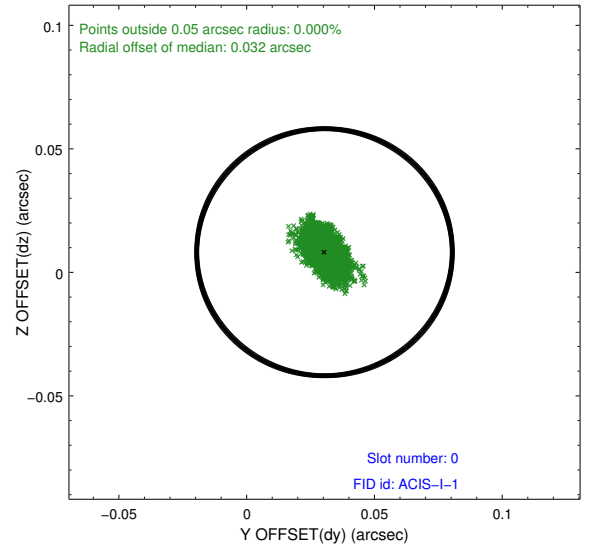
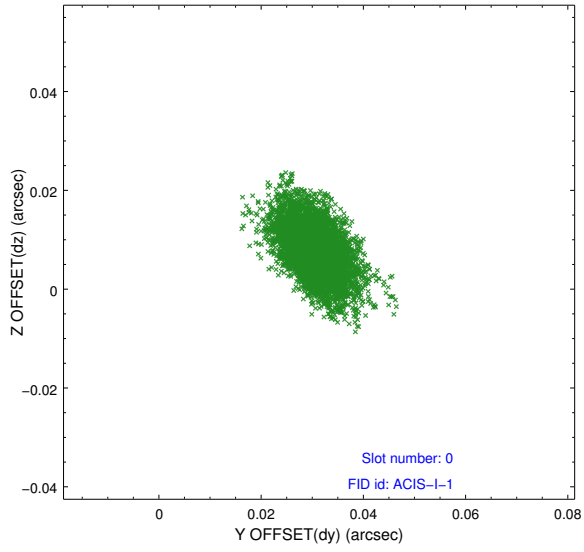


2.4.5 Slot 7

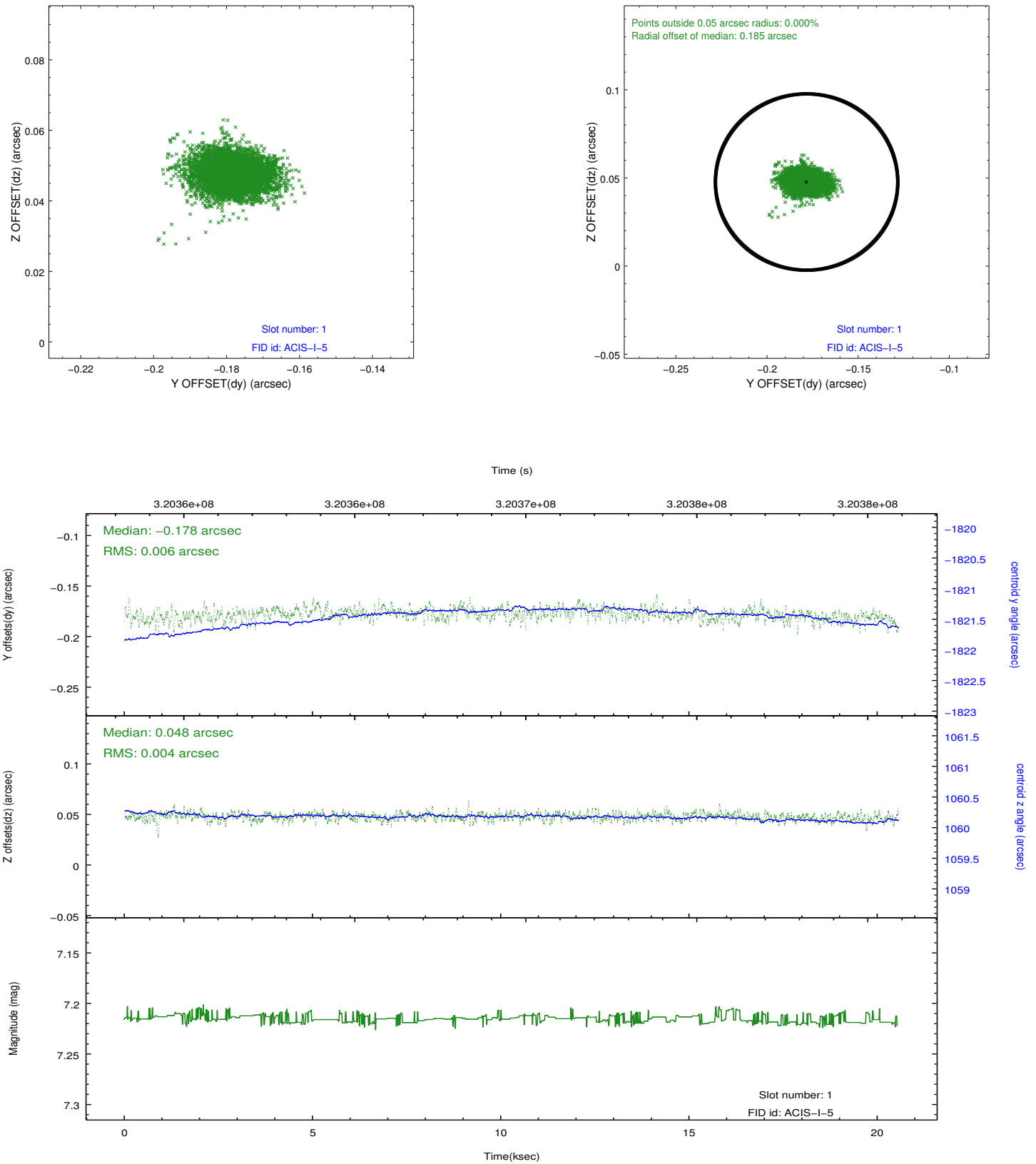


2.5 FID Slots

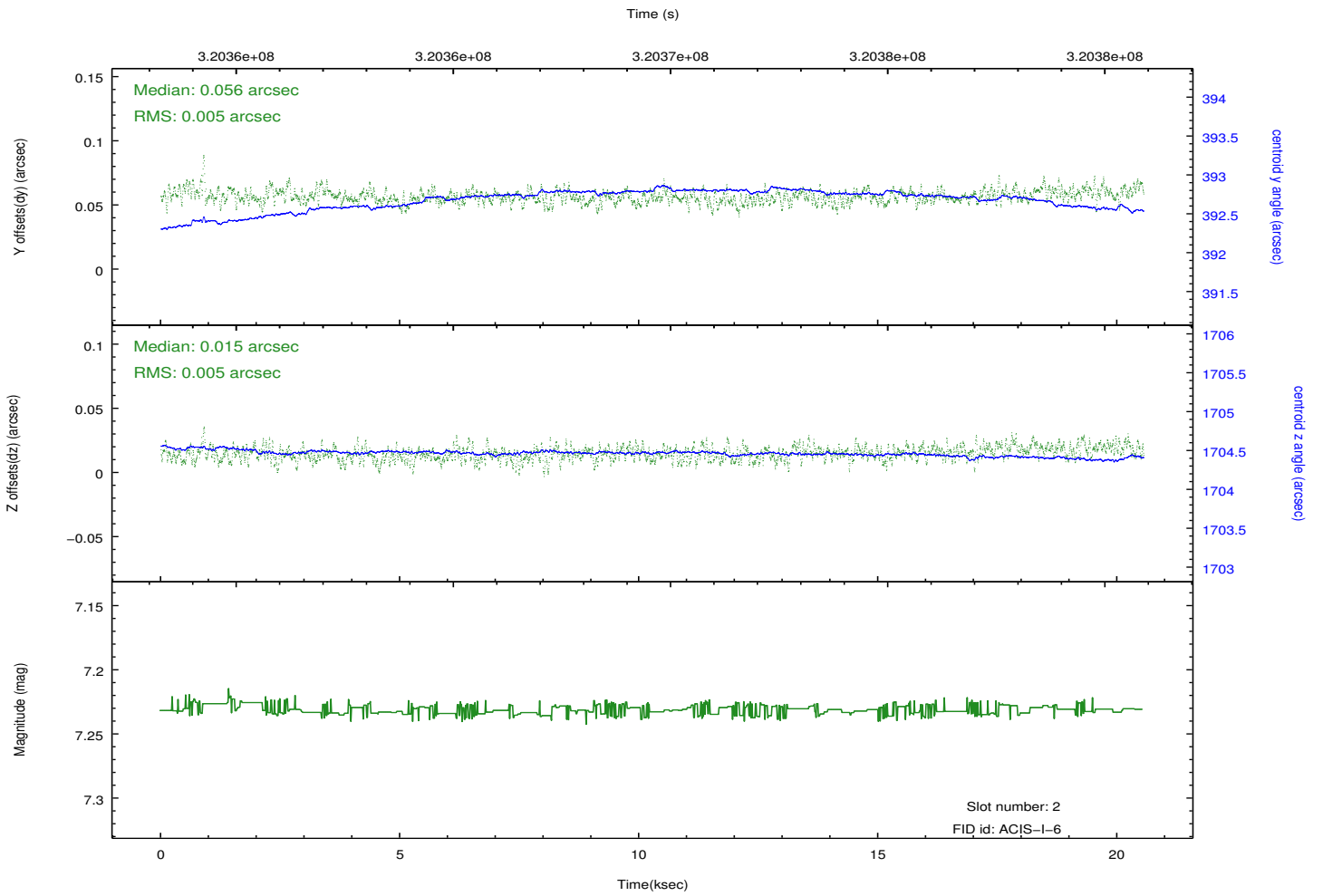
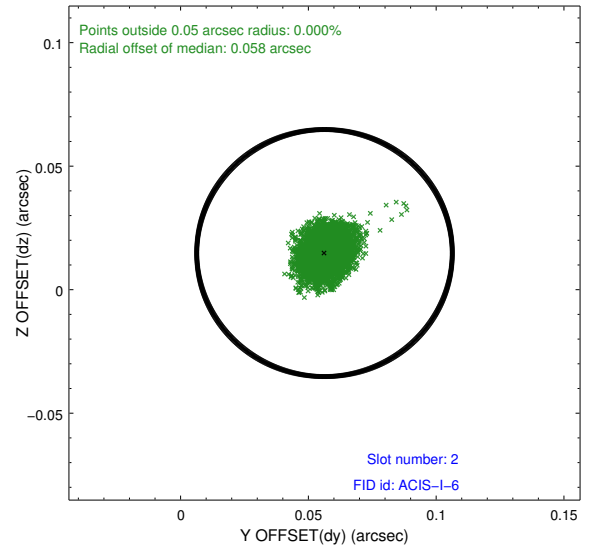
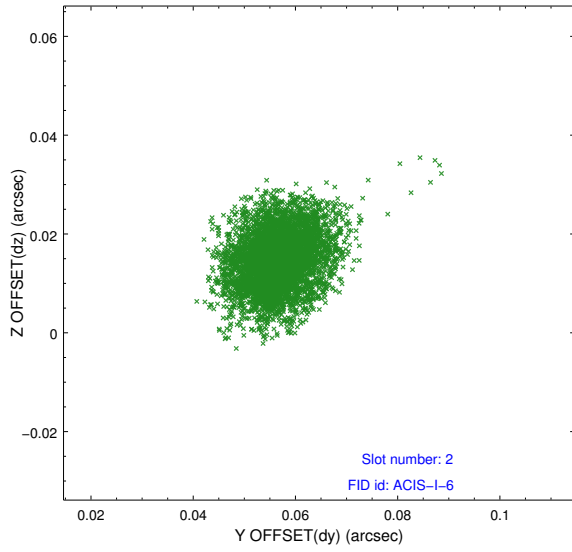
2.5.1 Slot 0



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) | 2012.05.13 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 20.0447999 |

A.2 Comments