

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11104 - L2 Version 2
Chandra X-Ray Center

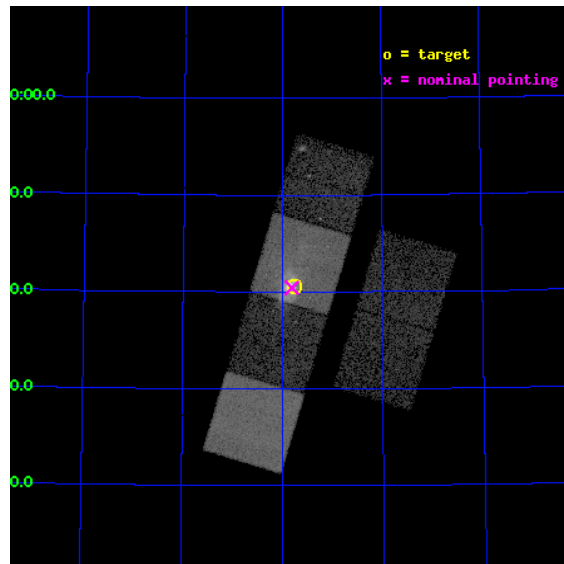
L2 Processing Date : Jun 28 2012

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1 Front

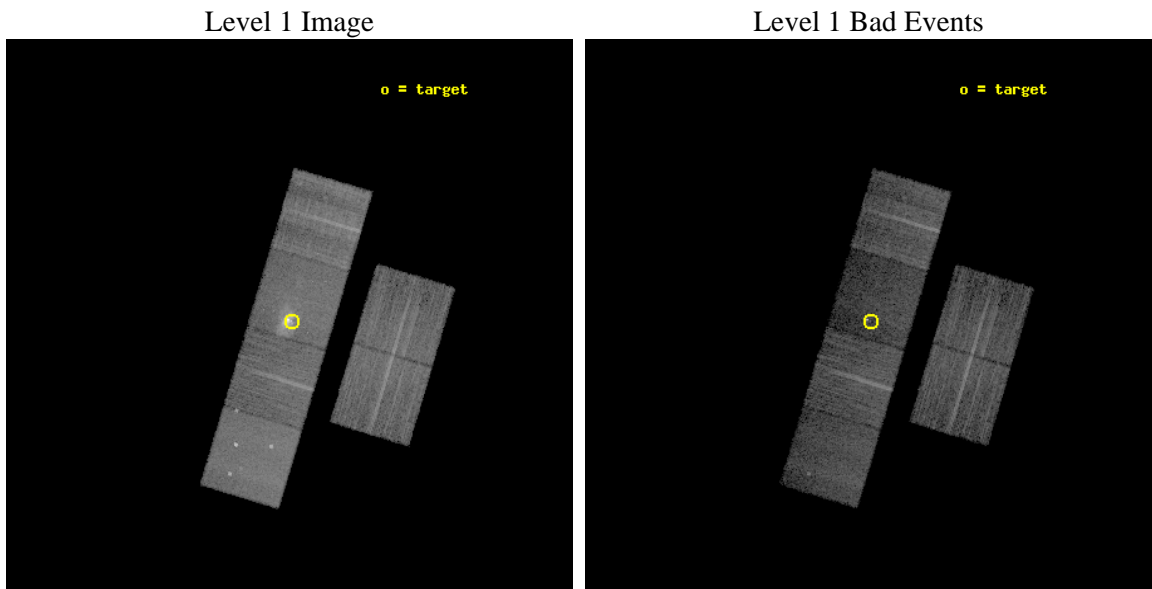
| | | |
|----------|---|---|
| seq_num | 501189 | Sequence number |
| obs_id | 11104 | Observation id |
| title | THE X-RAY EVOLUTION OF SUPERNOVA 2004AM | Proposal title |
| observer | Mr Yi-Kuan Chiang | Principal investigator |
| object | SN 2004am | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 148.944167 | Observer's specified target RA [deg] |
| dec_targ | 69.67725 | Observer's specified target Dec [deg] |
| ra_nom | 148.95451454757 | Nominal RA [deg] |
| dec_nom | 69.673989277273 | Nominal Dec [deg] |
| roll_nom | 286.70879187025 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 10047.191627383 | Sum of GTIs [s] |
| livetime | 9919.9680373048 | Livetime [s] |
| ontime2 | 10047.232667387 | Sum of GTIs [s] |
| ontime3 | 10047.068507373 | Sum of GTIs [s] |
| ontime5 | 10047.15058738 | Sum of GTIs [s] |
| ontime6 | 10047.109547377 | Sum of GTIs [s] |
| ontime7 | 10047.191627383 | Sum of GTIs [s] |
| ontime8 | 10047.02746737 | Sum of GTIs [s] |
| l2events | 144216 | Number of level 2 events |



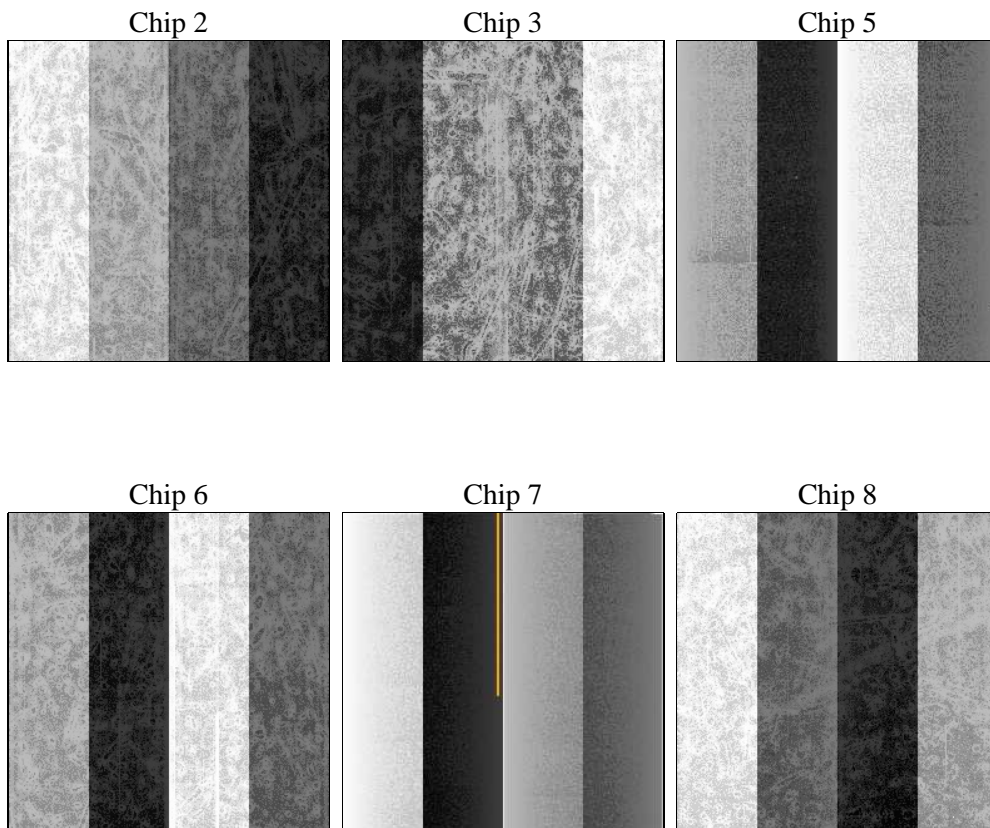
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 10000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 10047.191627383 | Sum of GTIs [s] |
| caldbver | 4.5.0 | | ontime2 | 10047.232667387 | Sum of GTIs [s] |
| date | 2012-06-28T20:08:00 | Date and time of file creation | ontime3 | 10047.068507373 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 10047.15058738 | Sum of GTIs [s] |
| | | | ontime6 | 10047.109547377 | Sum of GTIs [s] |
| | | | ontime7 | 10047.191627383 | Sum of GTIs [s] |
| | | | ontime8 | 10047.02746737 | Sum of GTIs [s] |
| | | | l1events | 509553 | Number of level 1 events |

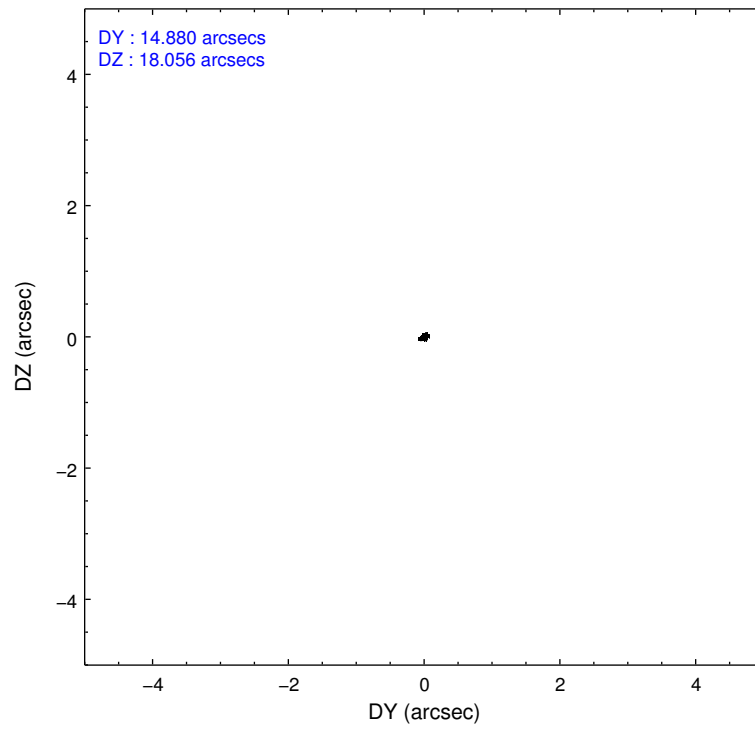
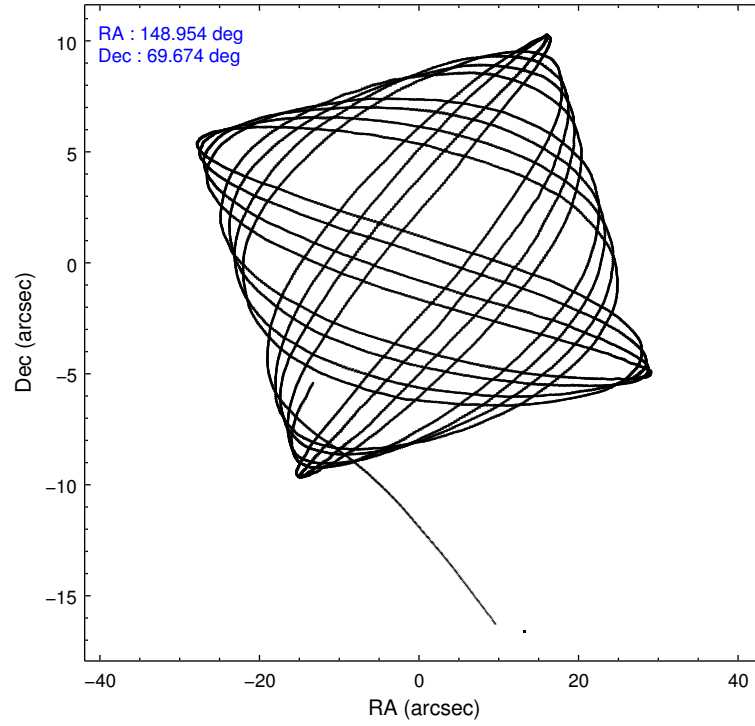
2.1.4 Events

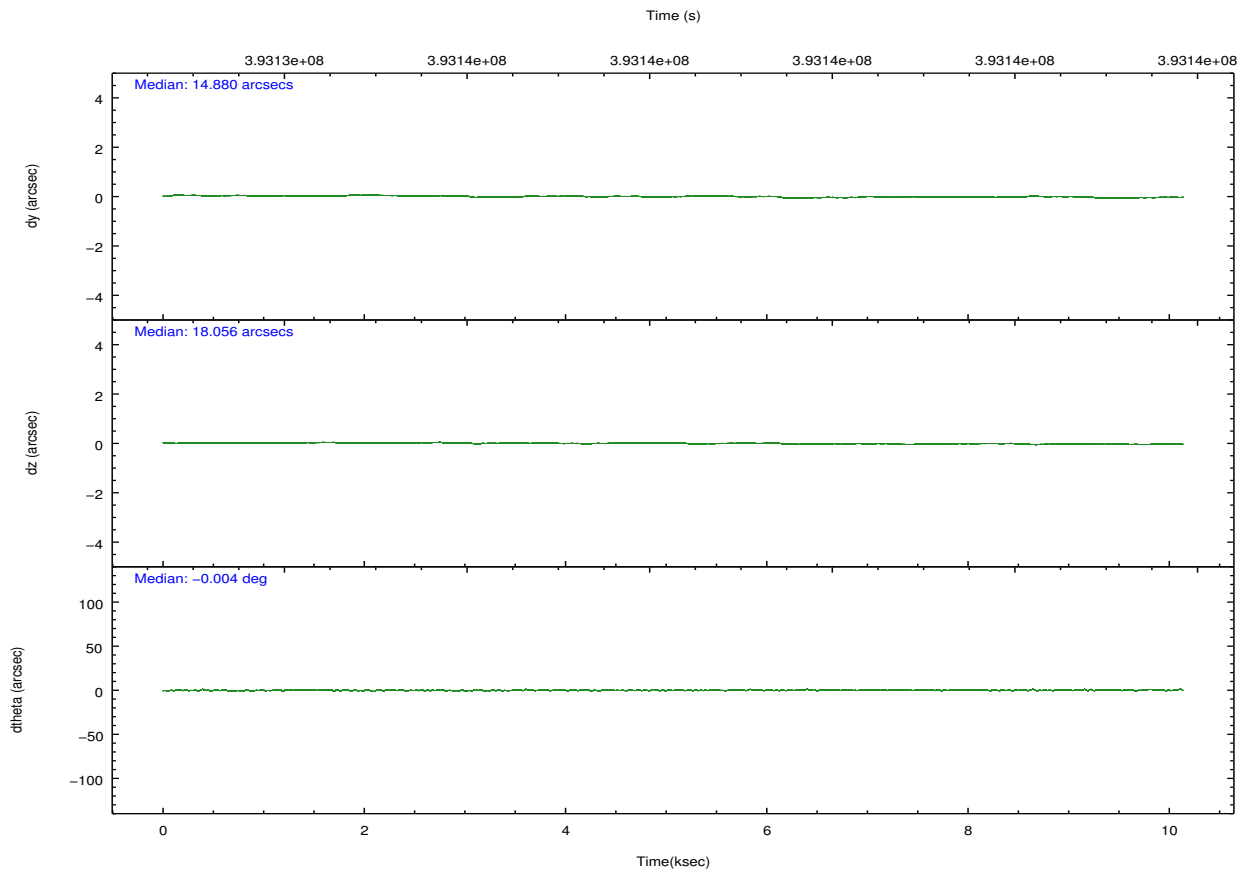
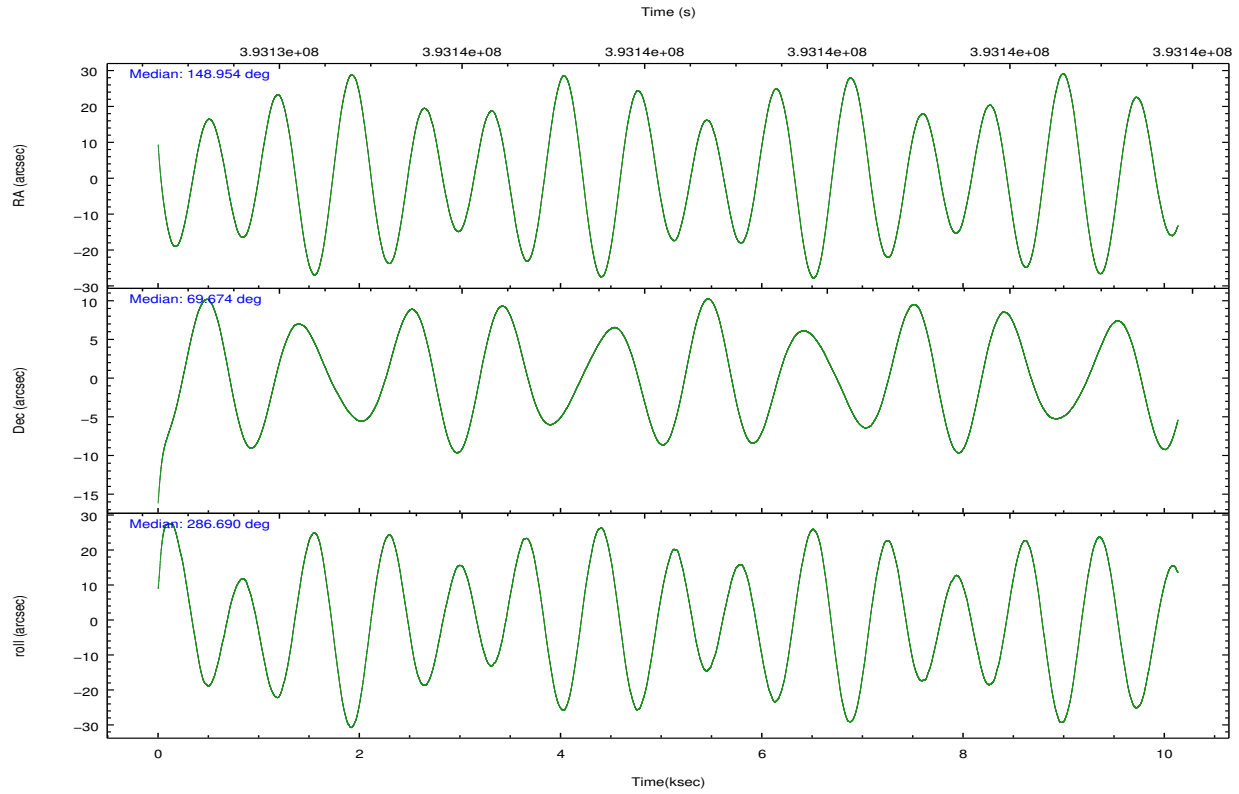
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|--------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 72197 | 66682 | 98285 | 71013 | 110028 | 91348 | grade 0 events | 2641 | 2532 | 7409 | 3479 | 13853 | 7232 |
| rejected events | 65074 | 59916 | 45594 | 62535 | 38246 | 66679 | | 3% | 3% | 7% | 4% | 12% | 7% |
| rejected % | 90% | 89% | 46% | 88% | 34% | 72% | grade 1 events | 55 | 34 | 191 | 39 | 208 | 70 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1743 | 1505 | 15661 | 1862 | 17341 | 5784 |
| | | | | | | | | 2% | 2% | 15% | 2% | 15% | 6% |
| | | | | | | | grade 3 events | 710 | 726 | 2158 | 784 | 7659 | 2584 |
| | | | | | | | | 0% | 1% | 2% | 1% | 6% | 2% |
| | | | | | | | grade 4 events | 747 | 715 | 2050 | 790 | 7448 | 2466 |
| | | | | | | | | 1% | 1% | 2% | 1% | 6% | 2% |
| | | | | | | | grade 5 events | 2261 | 2705 | 7500 | 2671 | 8323 | 4017 |
| | | | | | | | | 3% | 4% | 7% | 3% | 7% | 4% |
| | | | | | | | grade 6 events | 1290 | 1293 | 25450 | 1573 | 25535 | 6612 |
| | | | | | | | | 1% | 1% | 25% | 2% | 23% | 7% |
| | | | | | | | grade 7 events | 62750 | 57172 | 37866 | 59815 | 29661 | 62583 |
| | | | | | | | | 86% | 85% | 38% | 84% | 26% | 68% |

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 | 148.896531 | 148.9545145475666 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | 69.692500 | 69.67398927727274 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 286.606546 | 286.708791870248 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | Y | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | CCD S4 on | Y | Y |
| [s] Observation start time (MET) | 393133320.184000 | 393131749.45744 | CCD S5 on | N | N |
| Observation start date | 2010-06-17T03:40:54 | 2010-06-17T03:15:49 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 393143320.184000 | 393143839.84556 | On-chip summing requested | N | N |
| Observation end date | 2010-06-17T06:27:34 | 2010-06-17T06:37:19 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



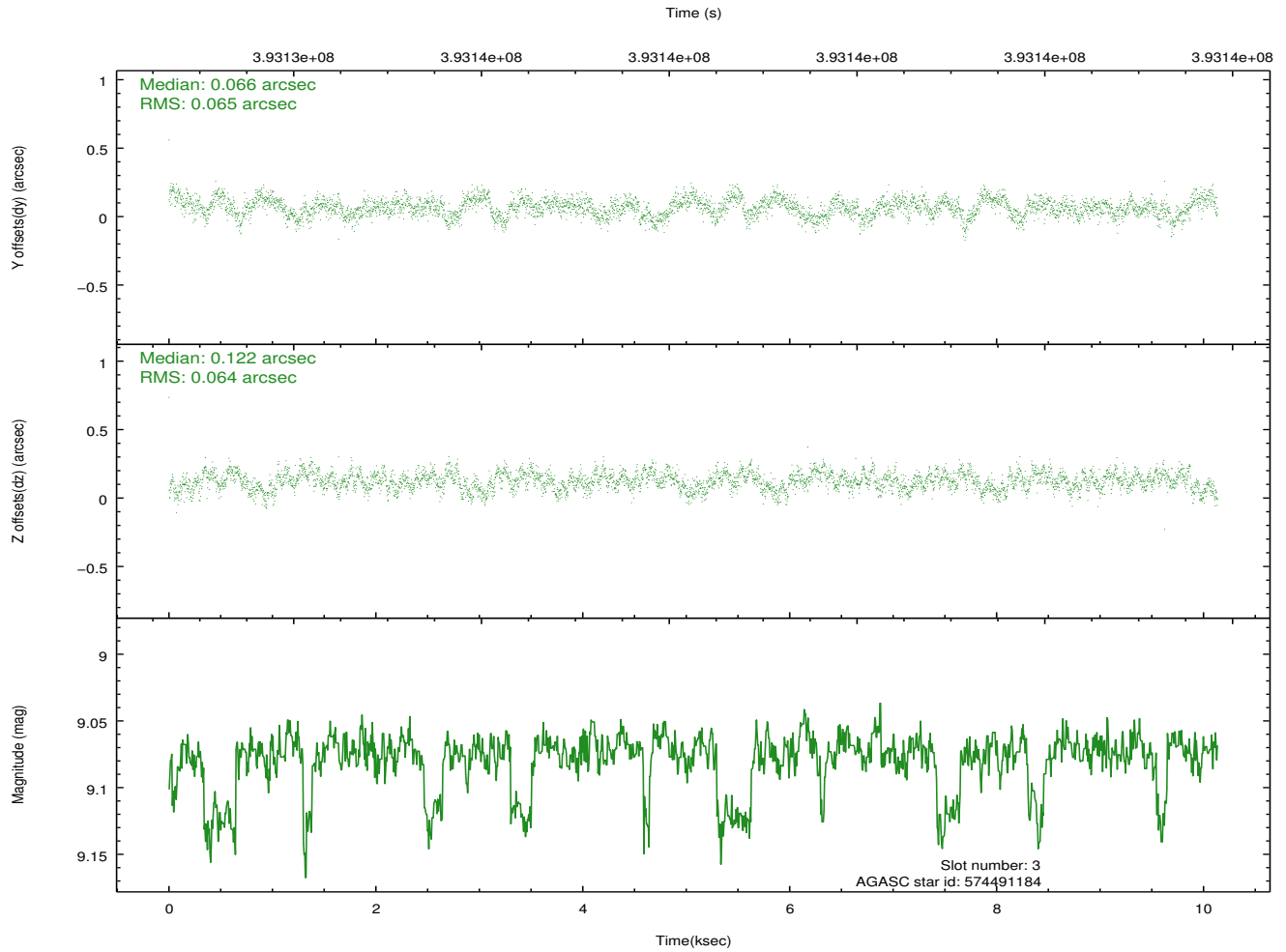
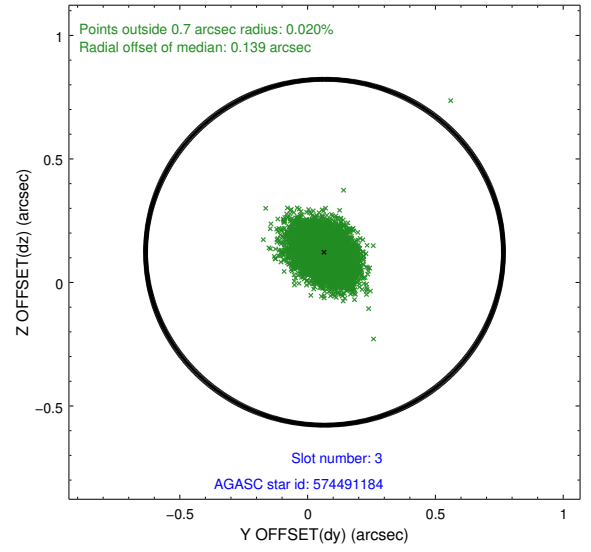
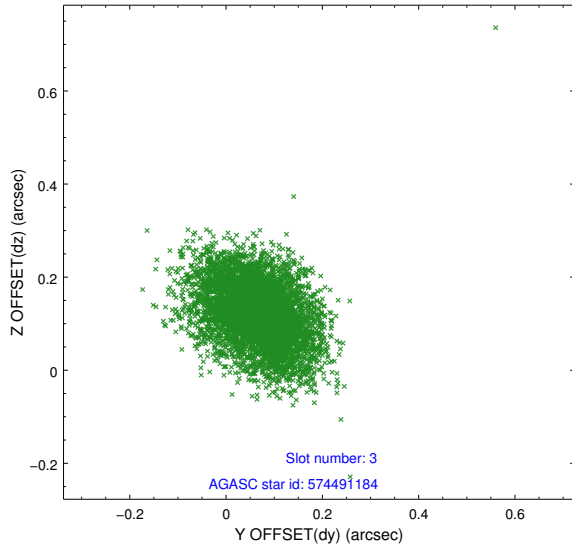


Slot Statistics

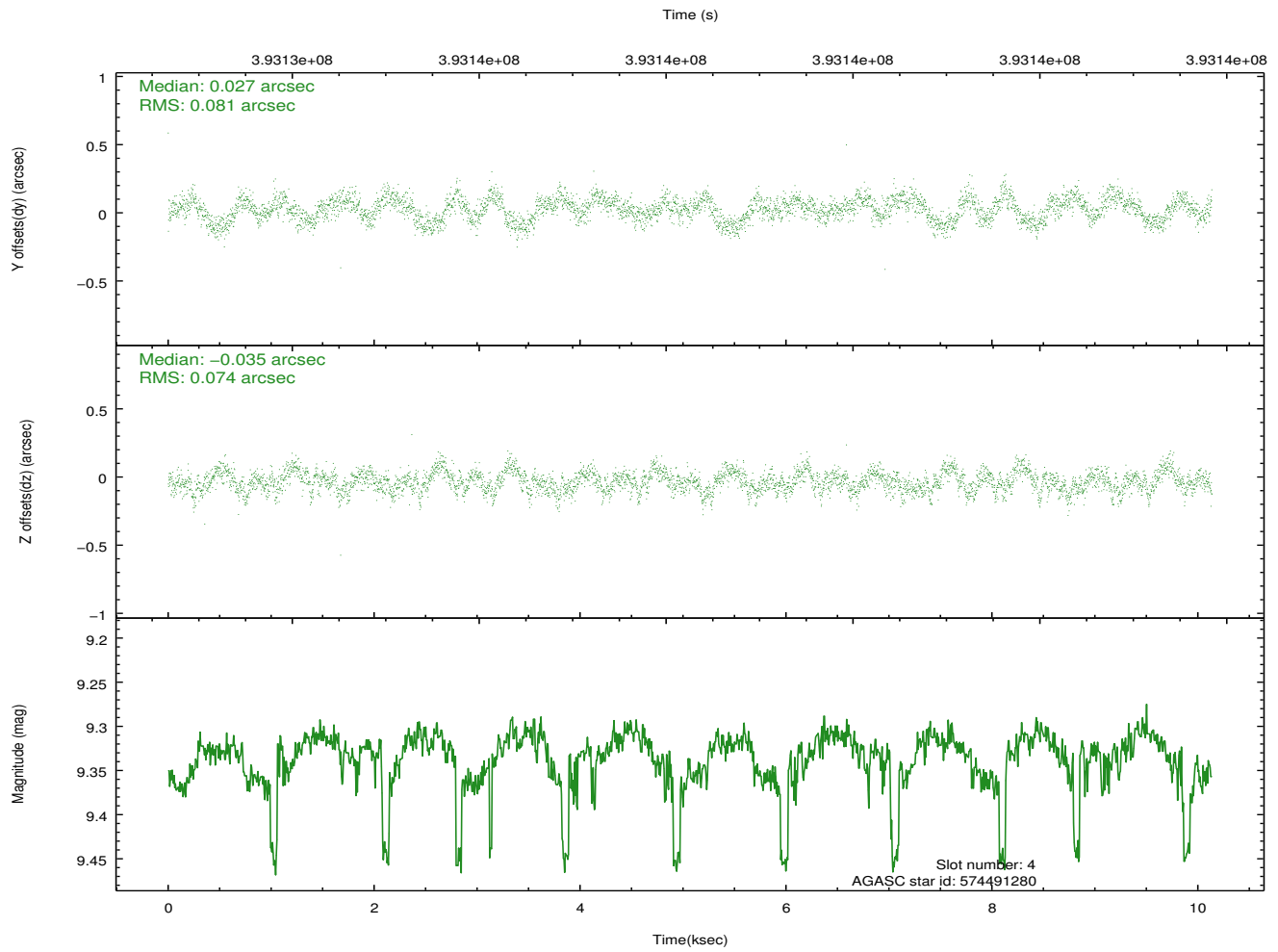
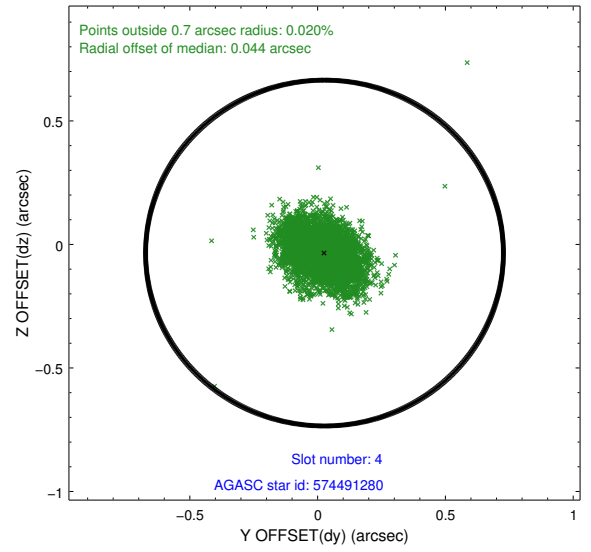
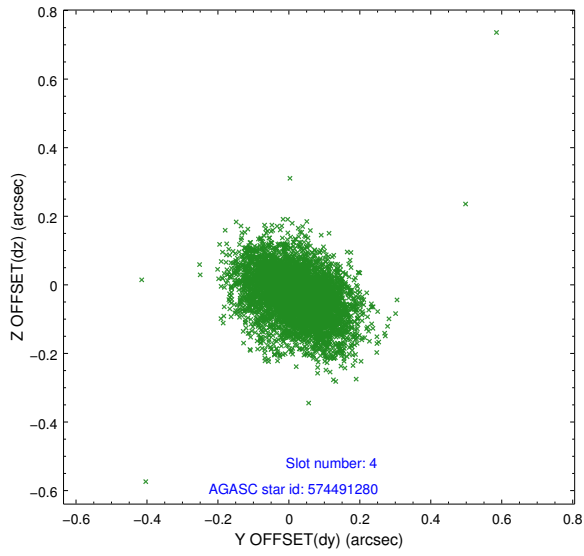
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 6.96 | 2472 | 0.072 | -0.026 | 0.007 | 0.011 | 0.000000 | 0.000000 | 928.20 | -1735.15 |
| 1 | FID | ACIS-S-4 | 6.97 | 2471 | 0.123 | -0.012 | 0.006 | 0.010 | 0.000000 | 0.000000 | 2146.00 | 168.45 |
| 2 | FID | ACIS-S-5 | 7.00 | 2473 | -0.222 | 0.050 | 0.006 | 0.012 | 0.000000 | 0.000000 | -1820.24 | 162.81 |
| 3 | GUIDE | 574491184 | 9.08 | 4938 | 0.066 | 0.122 | 0.097 | 0.155 | 148.582453 | 69.768699 | -375.17 | -295.19 |
| 4 | GUIDE | 574491280 | 9.33 | 4906 | 0.027 | -0.035 | 0.116 | 0.189 | 148.611567 | 69.450135 | 733.46 | -594.78 |
| 5 | GUIDE | 574491872 | 9.27 | 4942 | -0.007 | 0.054 | 0.098 | 0.167 | 147.207613 | 69.765453 | -876.29 | -1932.44 |
| 6 | GUIDE | 574886496 | 8.50 | 4942 | -0.146 | -0.162 | 0.080 | 0.125 | 148.945563 | 70.041136 | -1185.97 | 416.31 |
| 7 | GUIDE | 574886464 | 9.81 | 4936 | 0.068 | 0.029 | 0.119 | 0.192 | 149.898674 | 70.203982 | -1425.47 | 1700.43 |

2.4 Star Slots

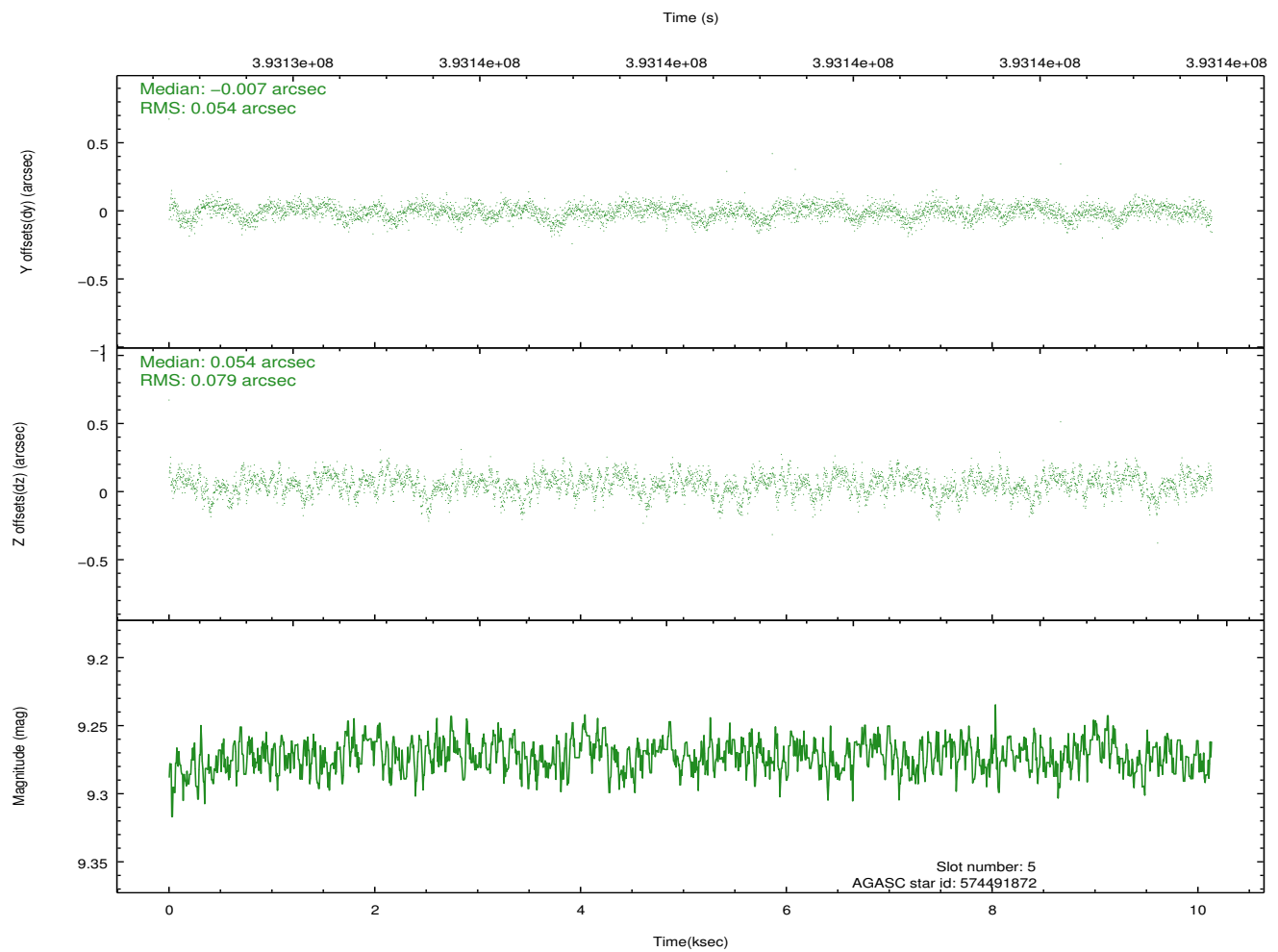
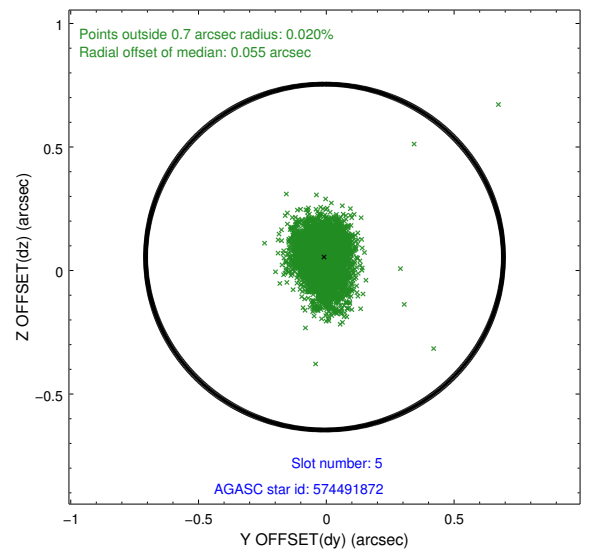
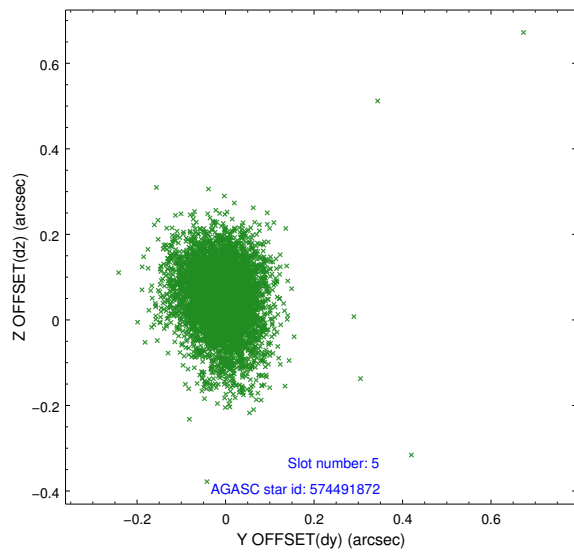
2.4.1 Slot 3



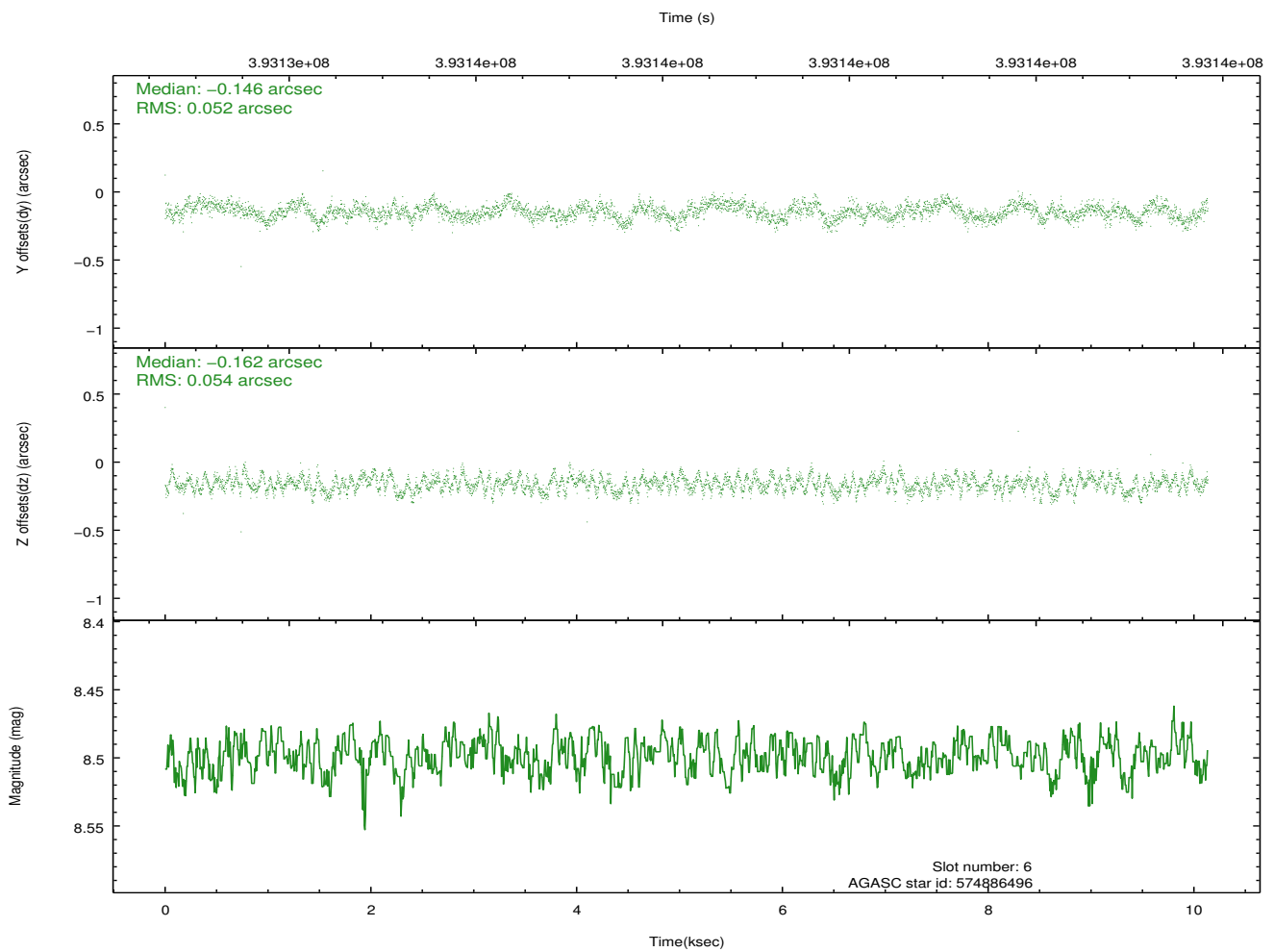
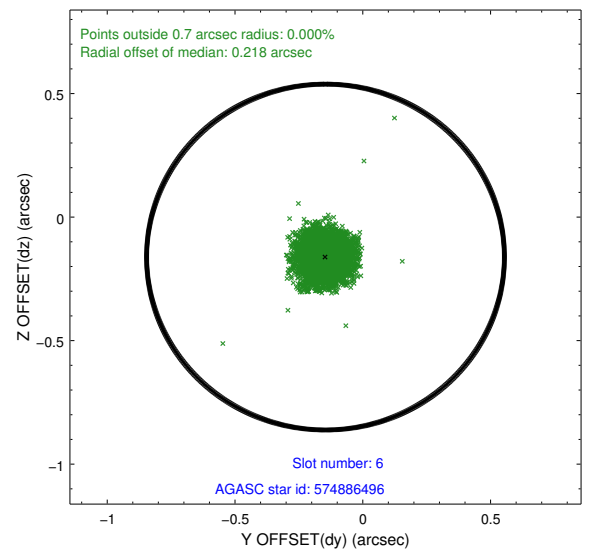
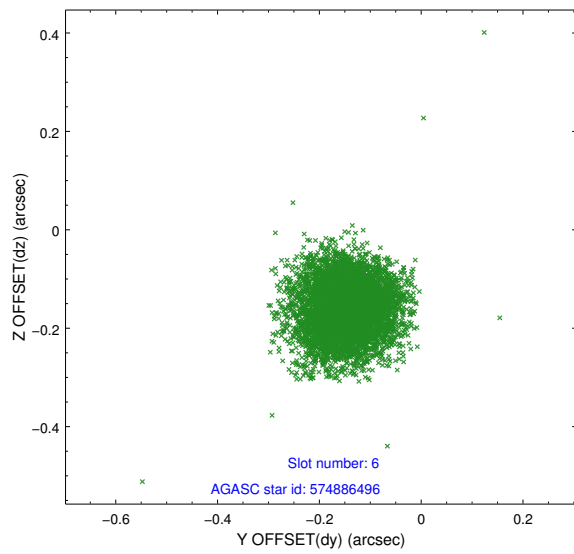
2.4.2 Slot 4



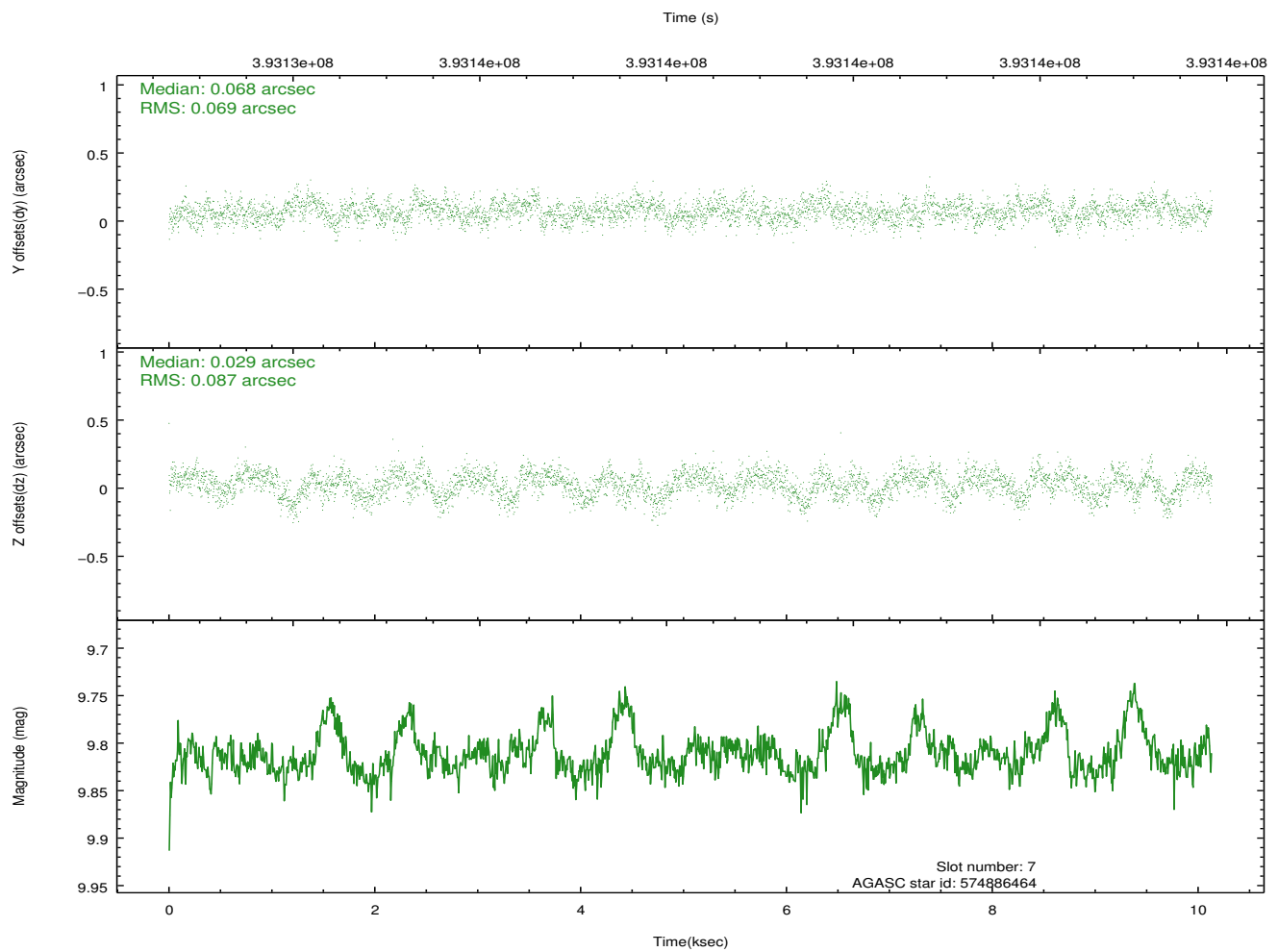
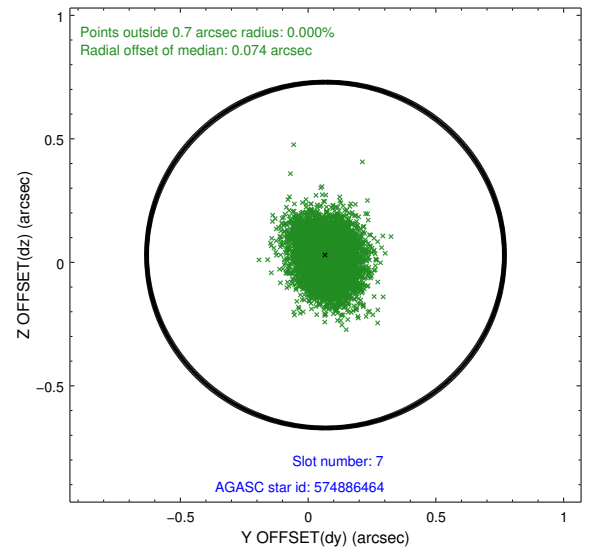
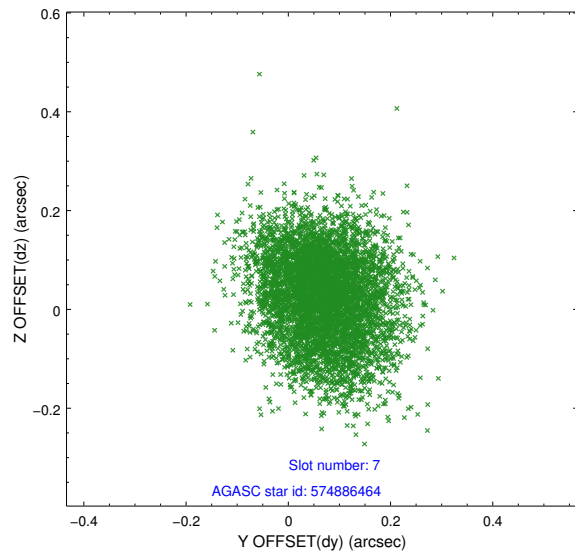
2.4.3 Slot 5



2.4.4 Slot 6

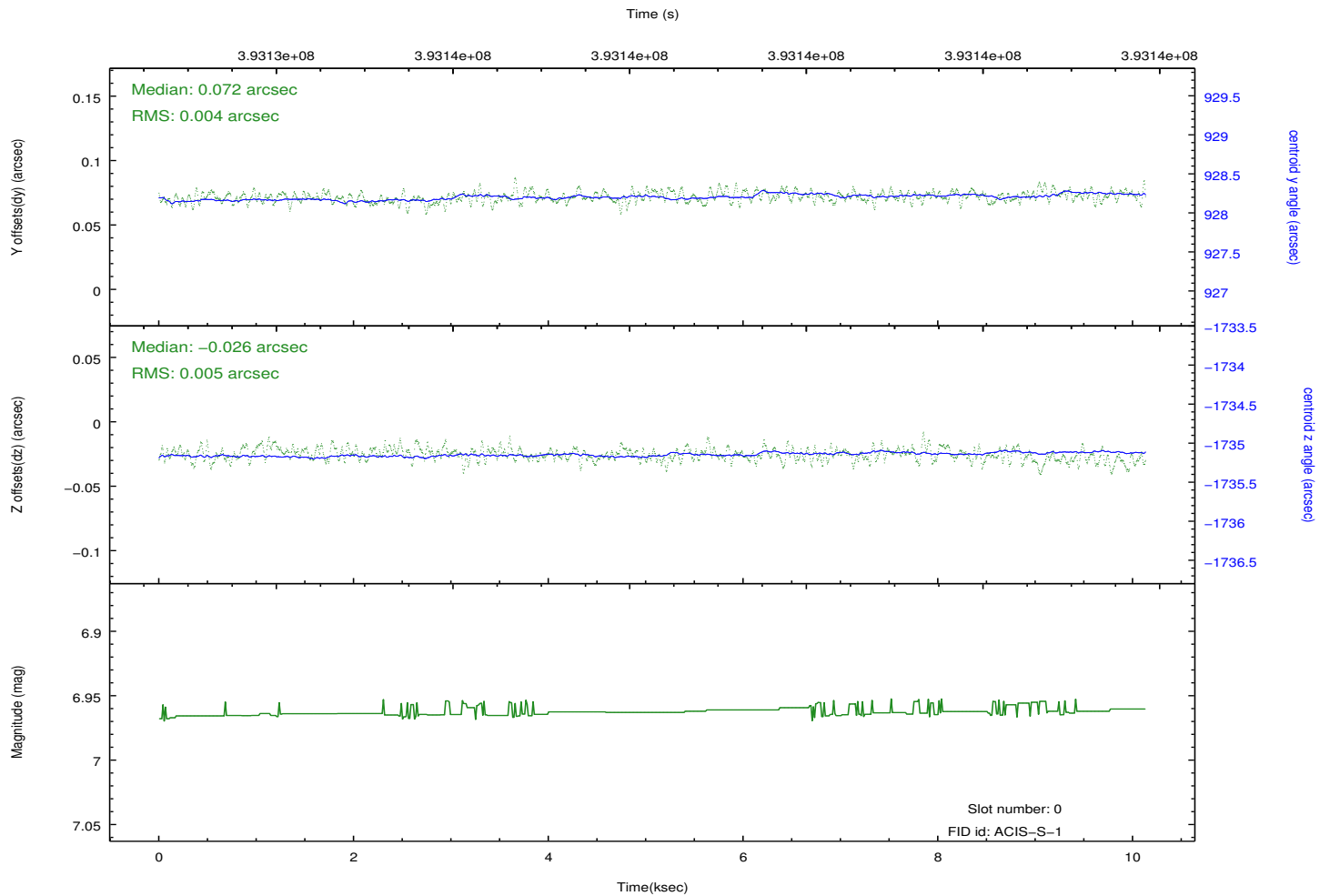
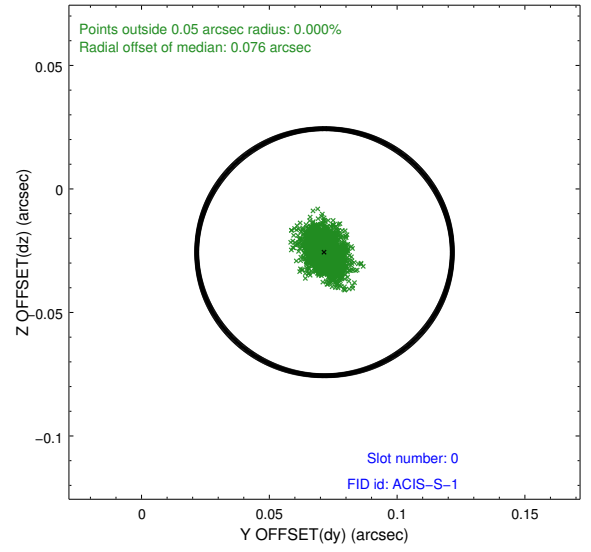
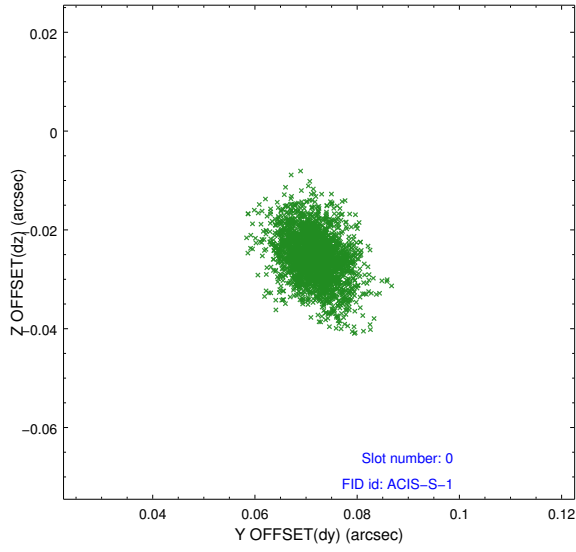


2.4.5 Slot 7

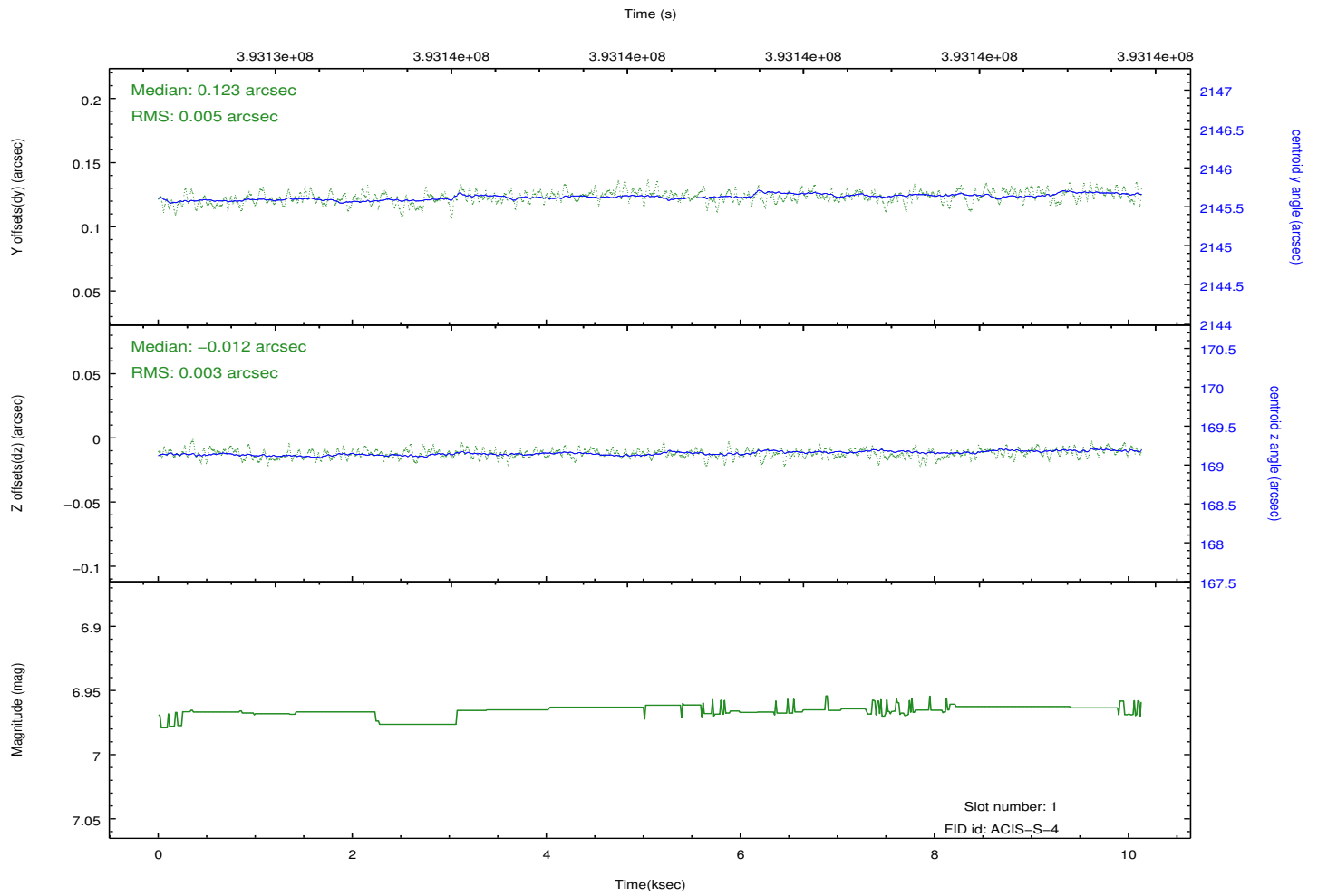
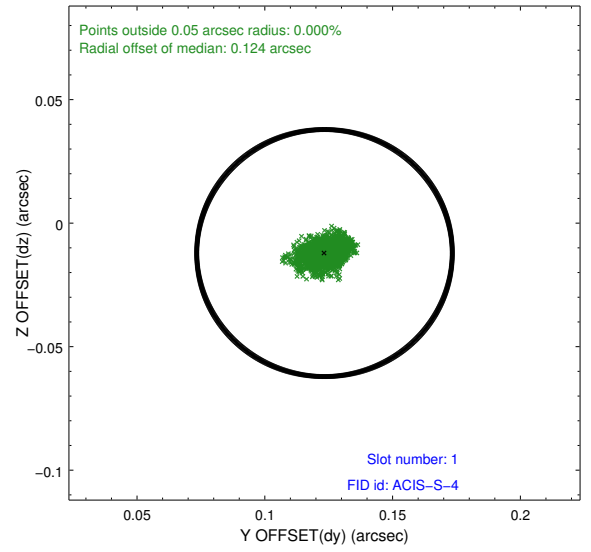
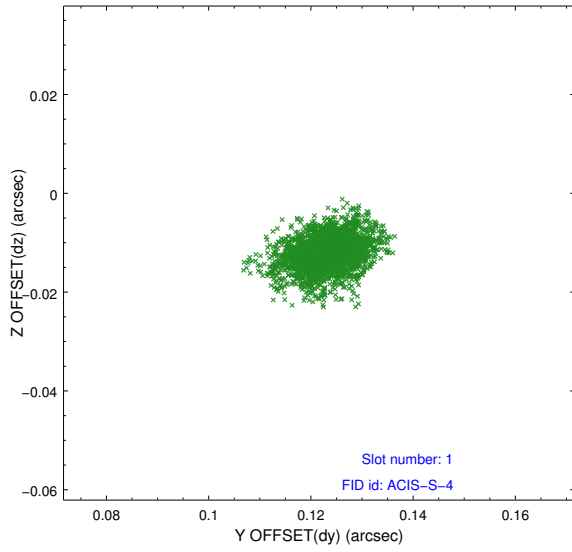


2.5 FID Slots

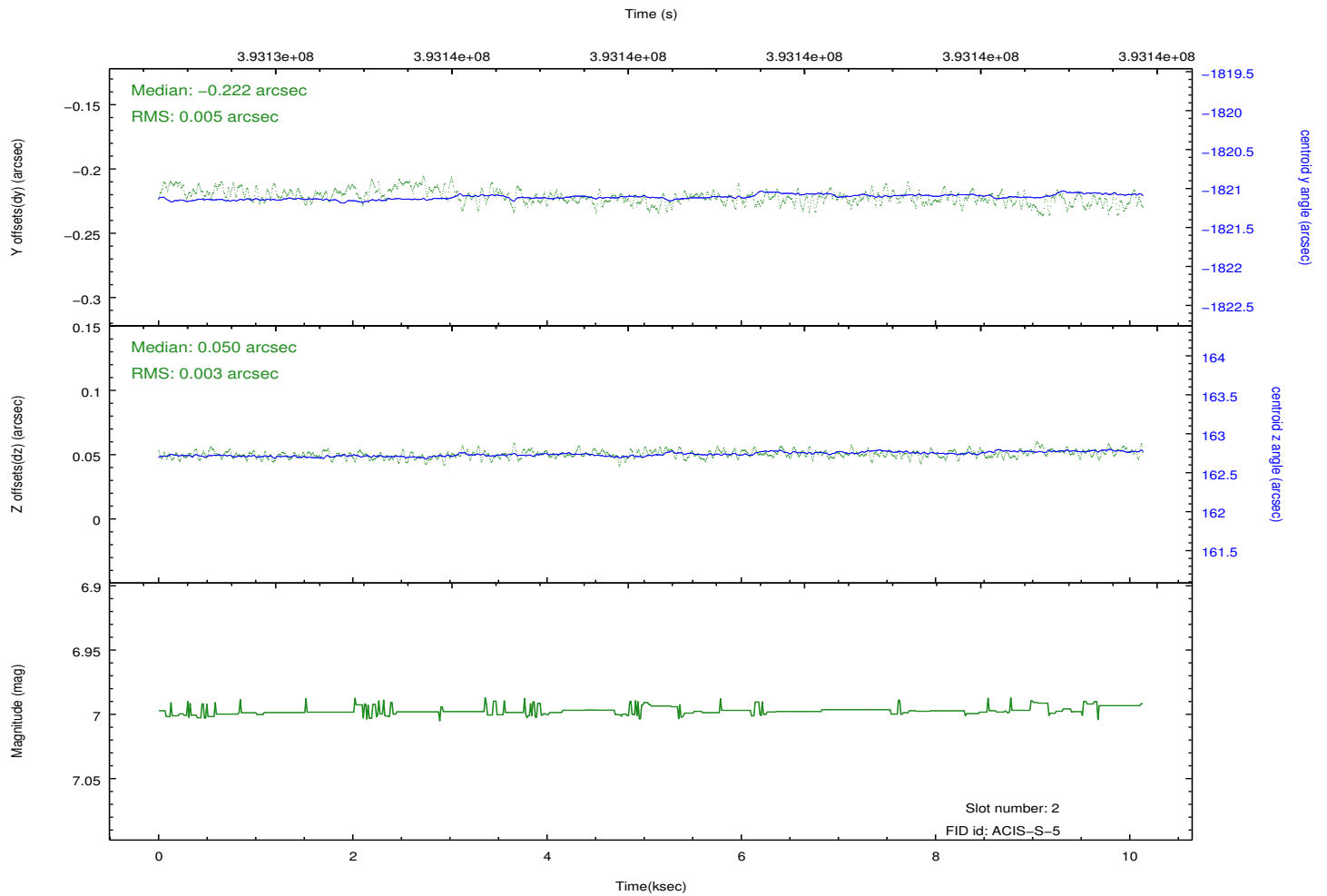
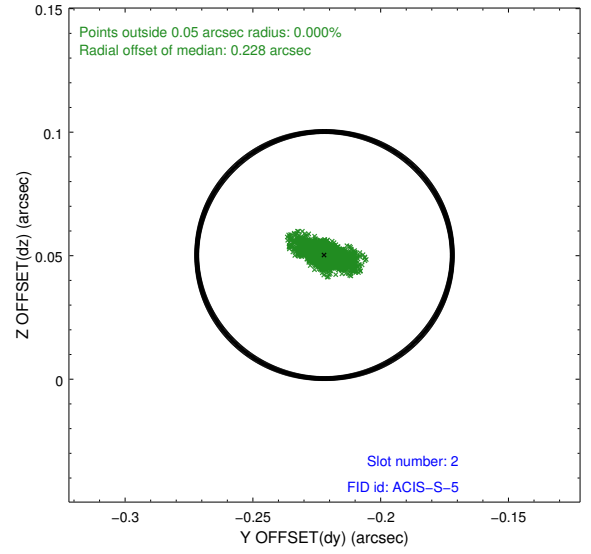
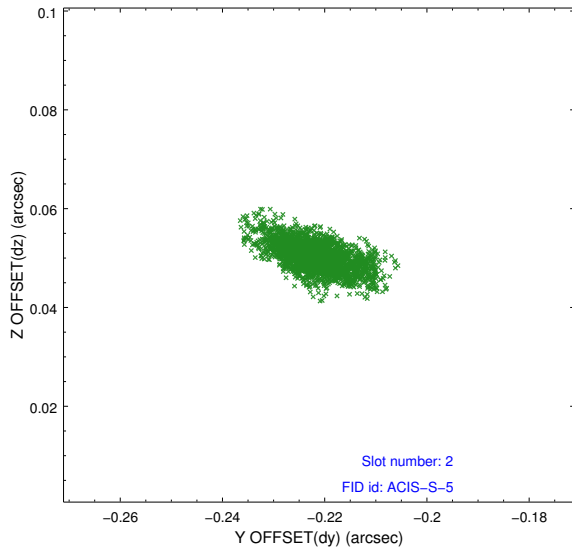
2.5.1 Slot 0



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) | 2012.07.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 10.047191632628 |

A.2 Comments