

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7809 - L2 Version 2
Chandra X-Ray Center

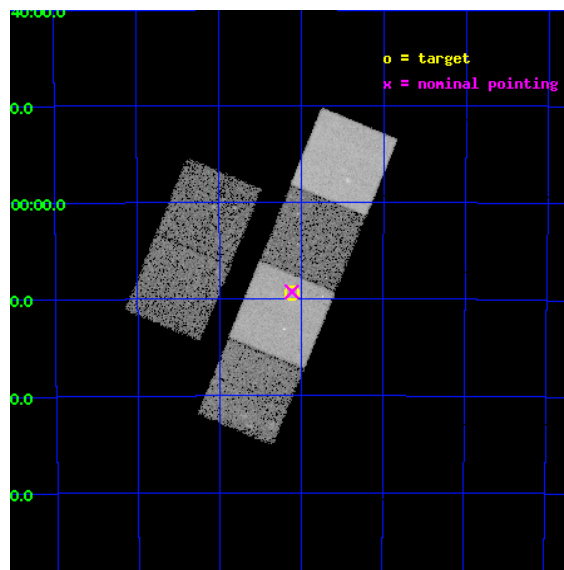
L2 Processing Date : Apr 14 2012

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1 Front

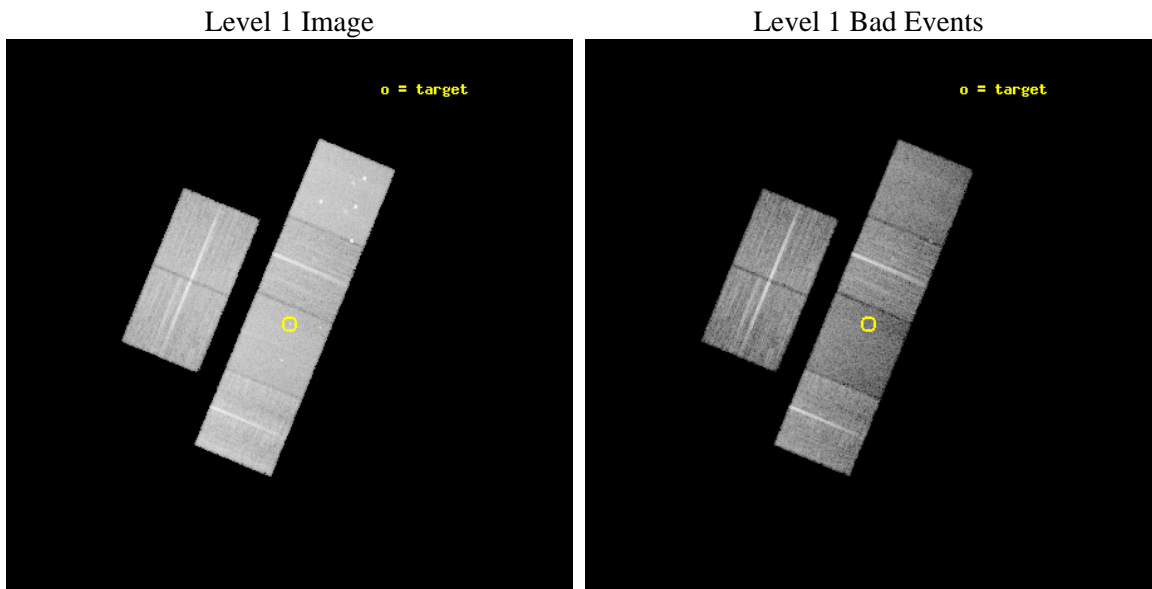
| | | |
|----------|--|---|
| seq_num | 701473 | Sequence number |
| obs_id | 7809 | Observation id |
| title | The Chandra-RBGS Survey of a Complete Sample of Luminous Infrared Galaxies | Proposal title |
| observer | Professor David Sanders | Principal investigator |
| object | IRAS 13120-5453 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 198.776667 | Observer's specified target RA [deg] |
| dec_targ | -55.156306 | Observer's specified target Dec [deg] |
| ra_nom | 198.77850323371 | Nominal RA [deg] |
| dec_nom | -55.154510474644 | Nominal Dec [deg] |
| roll_nom | 112.37759963059 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 14856.599340975 | Sum of GTIs [s] |
| livetime | 14668.47613455 | Livetime [s] |
| ontime2 | 14853.399410725 | Sum of GTIs [s] |
| ontime3 | 14856.476220965 | Sum of GTIs [s] |
| ontime5 | 14856.558300972 | Sum of GTIs [s] |
| ontime6 | 14850.035300314 | Sum of GTIs [s] |
| ontime7 | 14856.599340975 | Sum of GTIs [s] |
| ontime8 | 14853.194180667 | Sum of GTIs [s] |
| l2events | 170584 | Number of level 2 events |



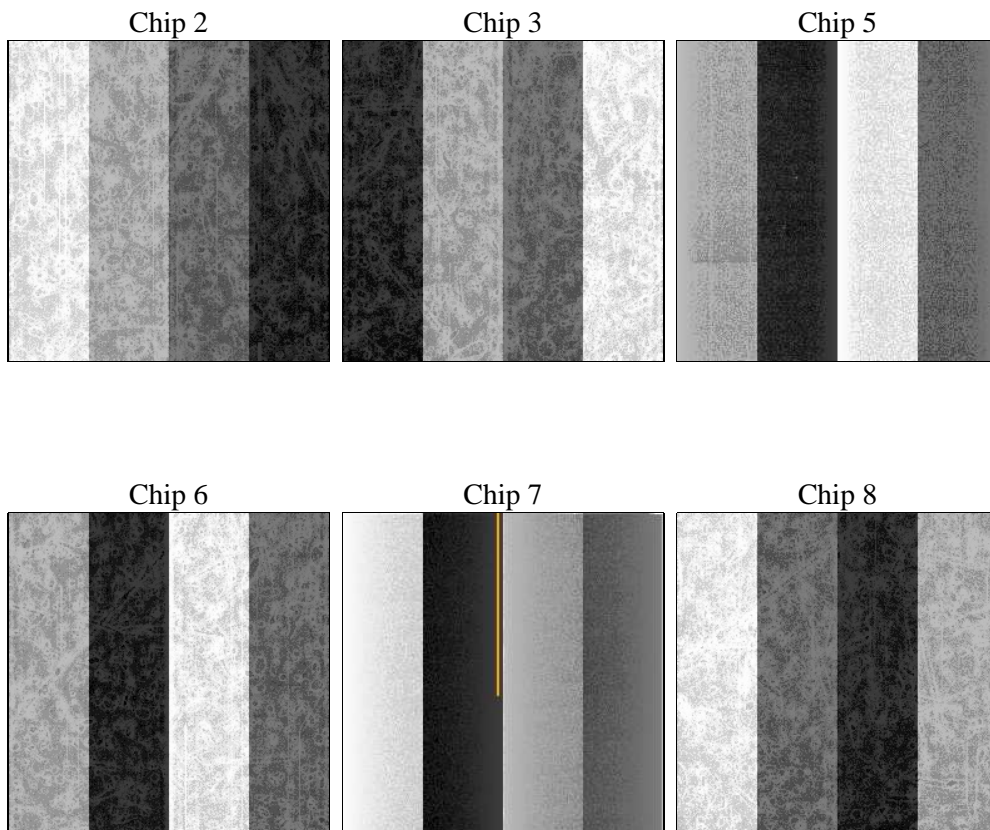
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 15102.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 14856.599340975 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime2 | 14853.399410725 | Sum of GTIs [s] |
| date | 2012-04-14T17:05:17 | Date and time of file creation | ontime3 | 14856.476220965 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 14856.558300972 | Sum of GTIs [s] |
| | | | ontime6 | 14850.035300314 | Sum of GTIs [s] |
| | | | ontime7 | 14856.599340975 | Sum of GTIs [s] |
| | | | ontime8 | 14853.194180667 | Sum of GTIs [s] |
| | | | l1events | 775396 | Number of level 1 events |

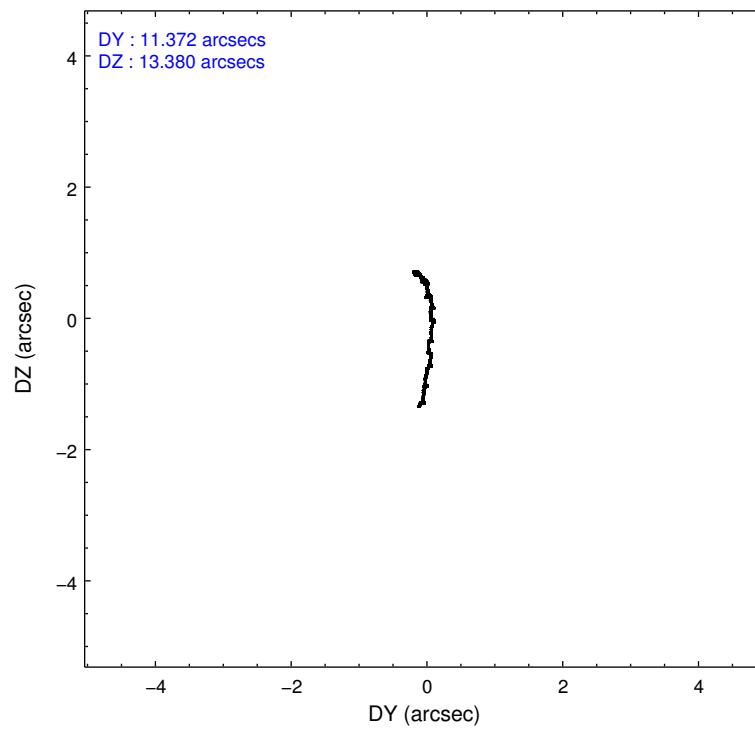
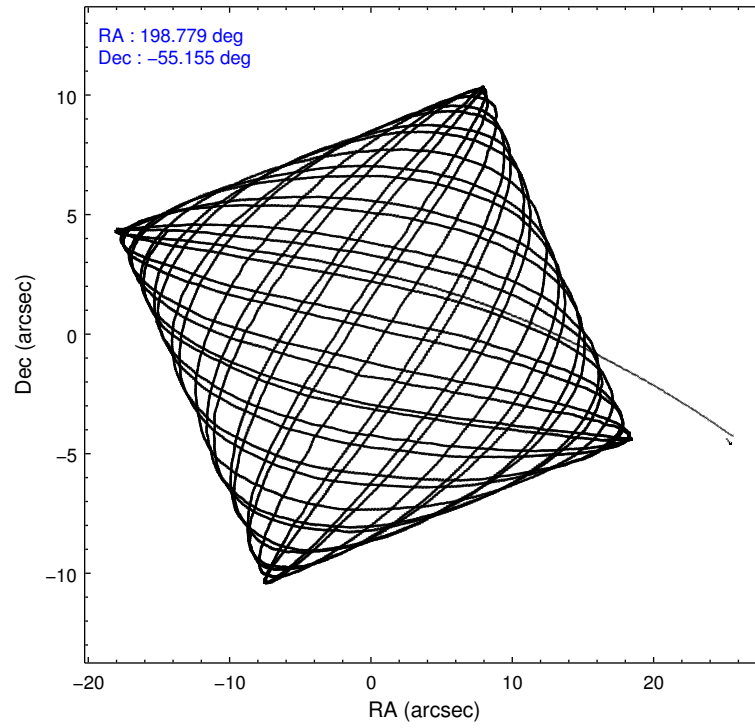
2.1.4 Events

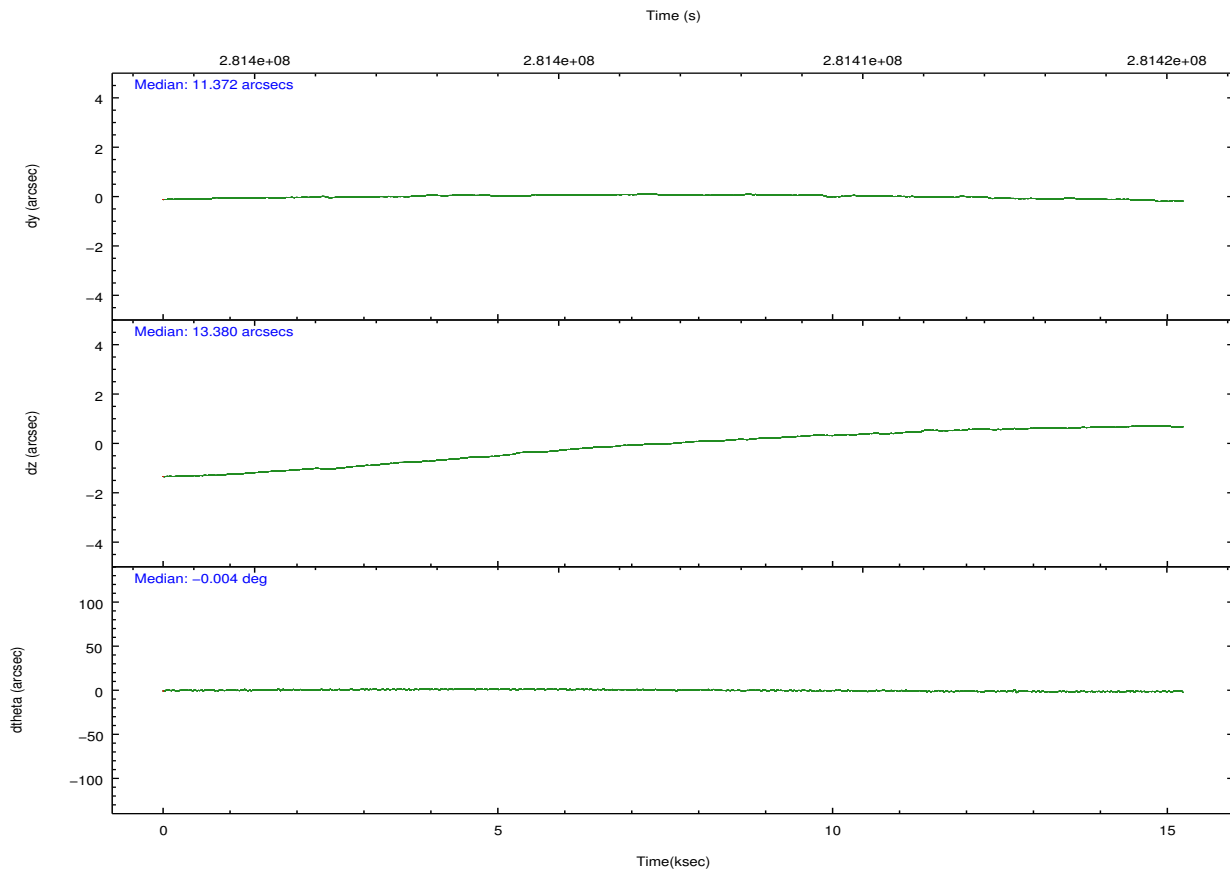
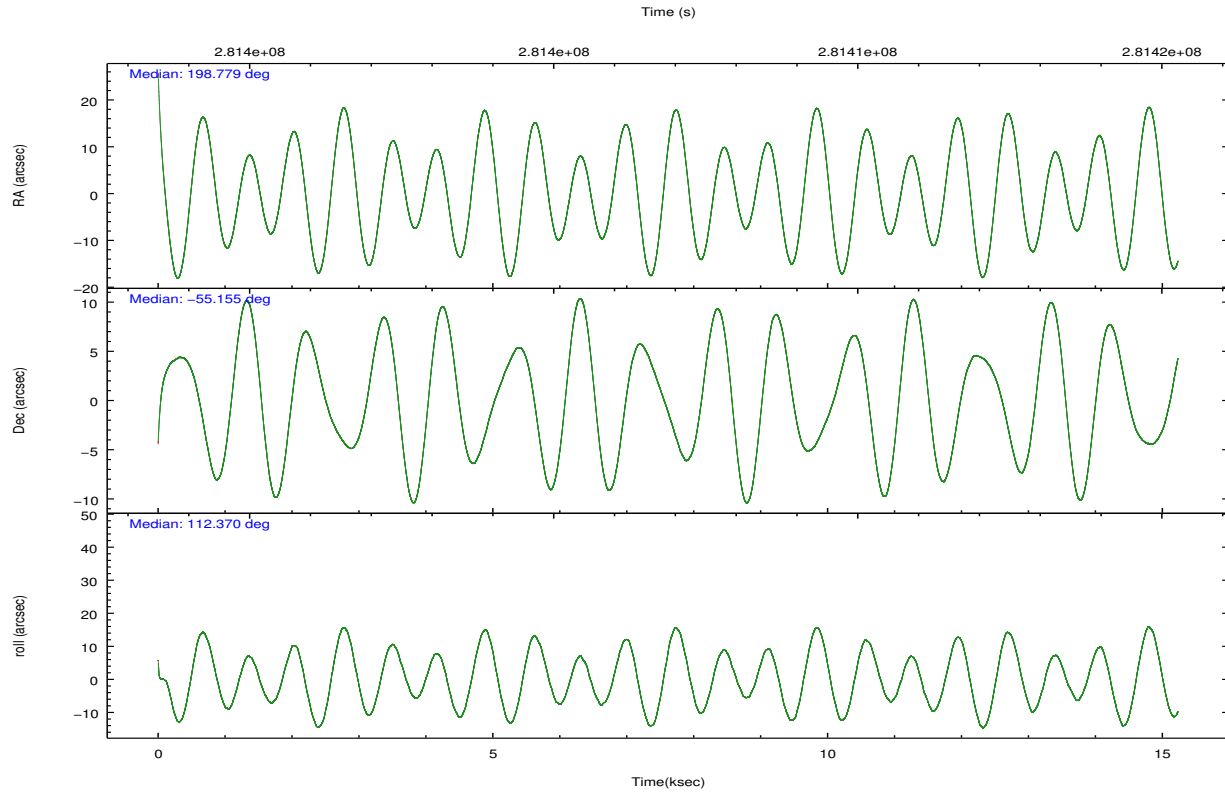
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|-------|-------|--------|-------|--------|
| level 1 events | 118026 | 111202 | 156067 | 118482 | 127227 | 144392 | grade 0 events | 4226 | 3747 | 8997 | 4281 | 5687 | 10547 |
| rejected events | 106834 | 100761 | 77736 | 106560 | 68728 | 110219 | | 3% | 3% | 5% | 3% | 4% | 7% |
| rejected % | 90% | 90% | 49% | 89% | 54% | 76% | grade 1 events | 73 | 65 | 368 | 58 | 157 | 102 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2531 | 2258 | 22483 | 2610 | 11972 | 7751 |
| | | | | | | | | 2% | 2% | 14% | 2% | 9% | 5% |
| | | | | | | | grade 3 events | 1197 | 1239 | 3367 | 1286 | 5370 | 3599 |
| | | | | | | | | 1% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 1240 | 1134 | 3283 | 1270 | 5287 | 3364 |
| | | | | | | | | 1% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 3688 | 4360 | 12432 | 4409 | 13388 | 6554 |
| | | | | | | | | 3% | 3% | 7% | 3% | 10% | 4% |
| | | | | | | | grade 6 events | 2000 | 2063 | 40216 | 2480 | 30195 | 8917 |
| | | | | | | | | 1% | 1% | 25% | 2% | 23% | 6% |
| | | | | | | | grade 7 events | 103071 | 96336 | 64921 | 102088 | 55171 | 103558 |
| | | | | | | | | 87% | 86% | 41% | 86% | 43% | 71% |

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 | 198.816707 | 198.7785032337125 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | -55.170844 | -55.15451047464445 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 112.252335 | 112.3775996305872 | 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 | O5 | 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 | O4 | Y |
| [s] Observation start time (MET) | 281399396.184000 | 281398237.71963 | CCD S5 on | N | N |
| Observation start date | 2006-12-01T22:28:51 | 2006-12-01T22:10:37 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 281414498.184000 | 281414956.49542 | On-chip summing requested | N | N |
| Observation end date | 2006-12-02T02:40:33 | 2006-12-02T02:49:16 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



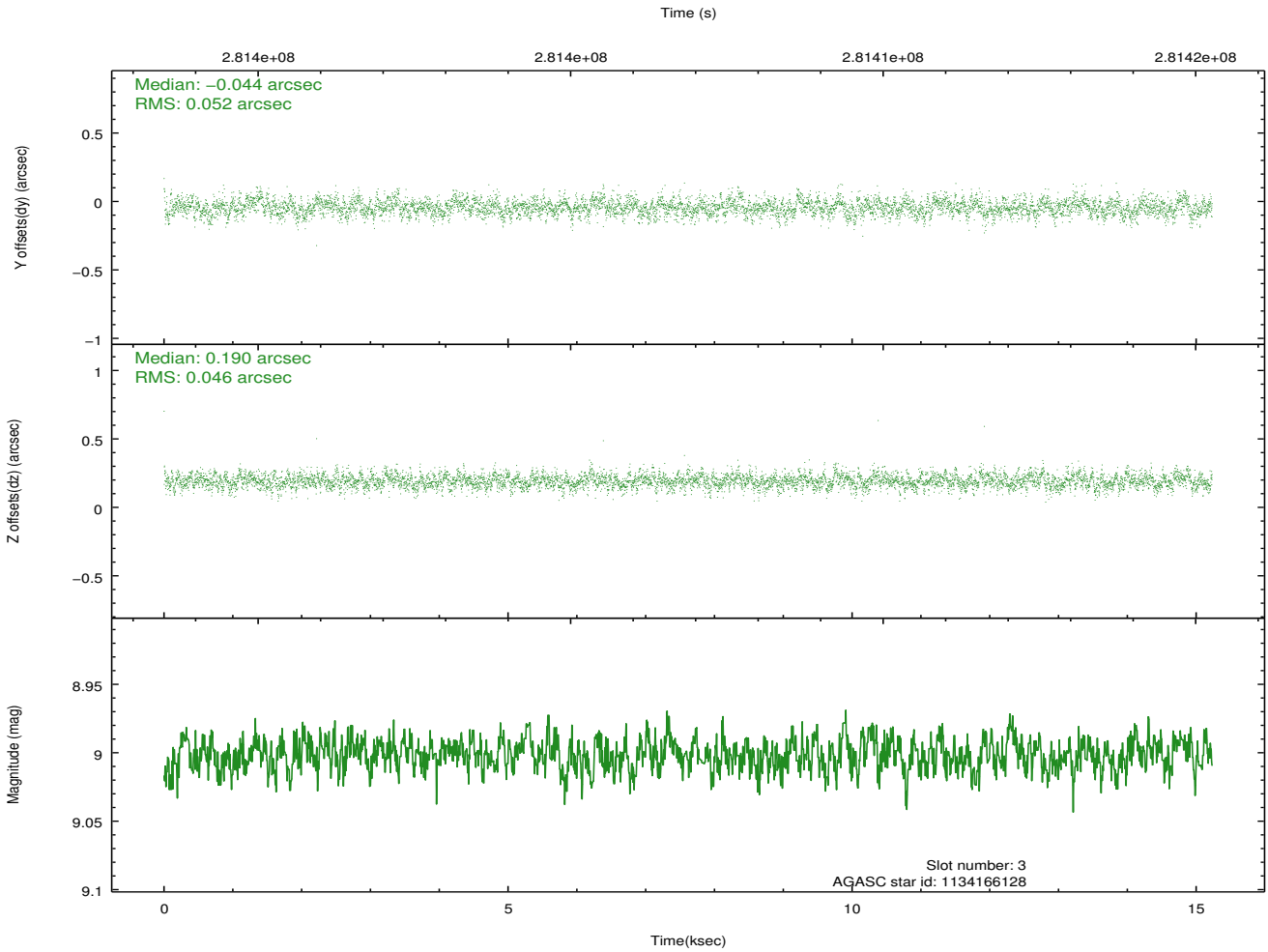
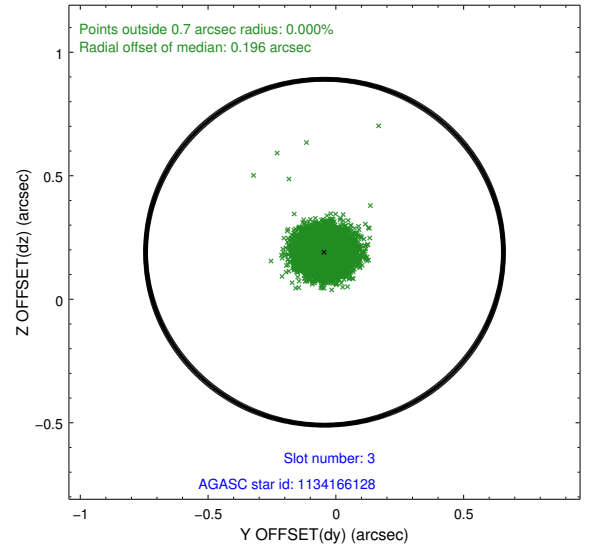
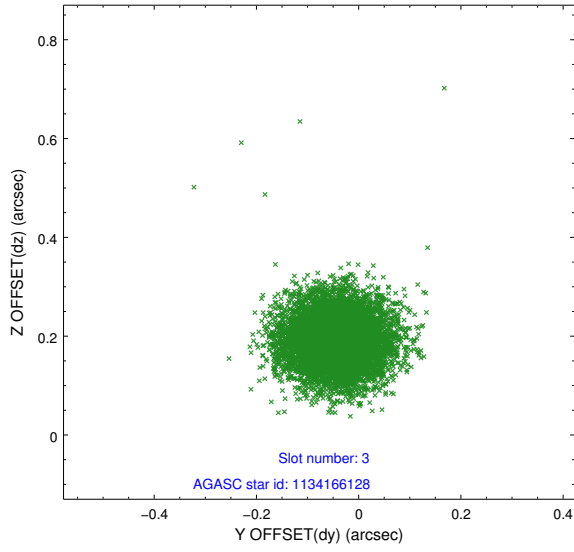


Slot Statistics

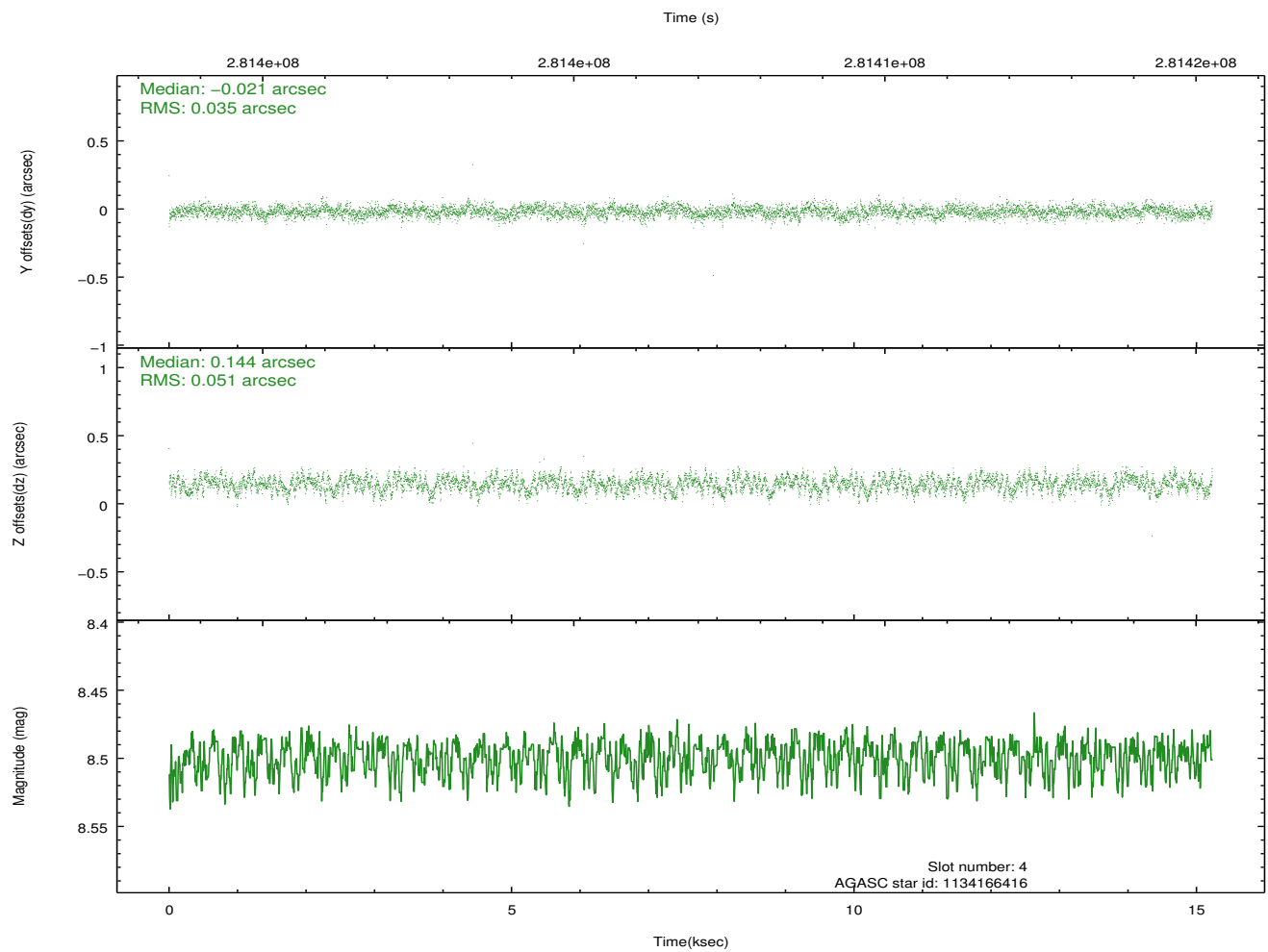
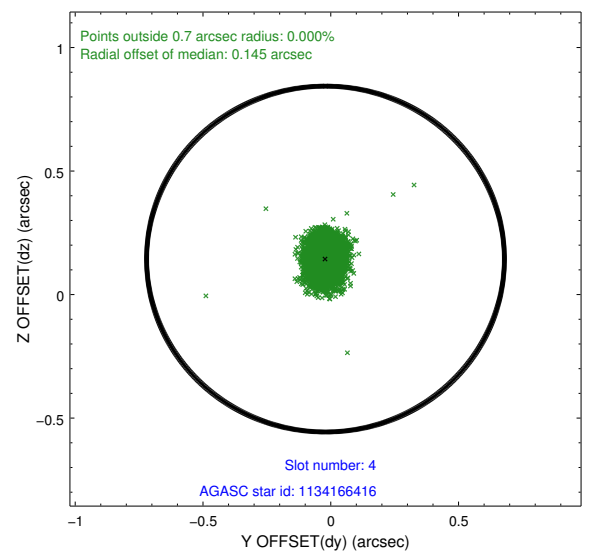
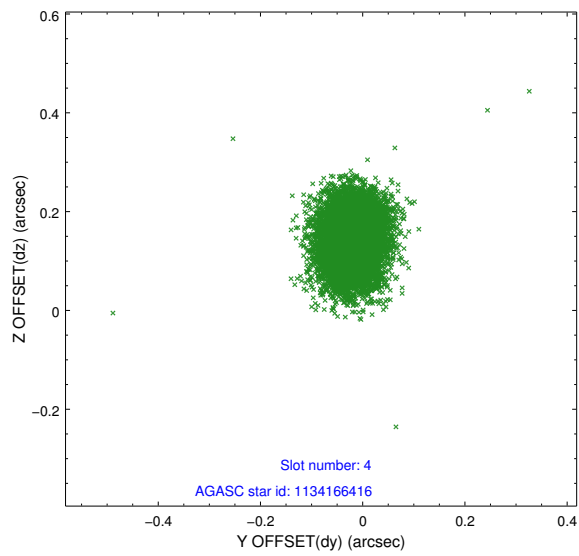
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 3716 | -0.031 | -0.050 | 0.012 | 0.018 | 0.000000 | 0.000000 | -764.27 | -1734.62 |
| 1 | FID | ACIS-S-4 | 7.21 | 3714 | 0.123 | 0.028 | 0.010 | 0.016 | 0.000000 | 0.000000 | 2149.03 | 173.62 |
| 2 | FID | ACIS-S-5 | 7.23 | 3715 | -0.123 | 0.030 | 0.009 | 0.016 | 0.000000 | 0.000000 | -1816.82 | 167.64 |
| 3 | GUIDE | 1134166128 | 9.00 | 7428 | -0.044 | 0.190 | 0.073 | 0.120 | 198.666314 | -54.542217 | 2213.45 | -565.68 |
| 4 | GUIDE | 1134166416 | 8.50 | 7427 | -0.021 | 0.144 | 0.065 | 0.105 | 199.797261 | -54.941456 | -15.88 | -2183.69 |
| 5 | GUIDE | 1134175104 | 7.81 | 7422 | -0.006 | -0.197 | 0.062 | 0.097 | 198.199136 | -55.108655 | 683.70 | 1094.21 |
| 6 | GUIDE | 1134175744 | 7.82 | 7429 | -0.018 | 0.019 | 0.065 | 0.101 | 199.535045 | -55.252245 | -835.74 | -1250.00 |
| 7 | GUIDE | 1134179136 | 8.43 | 7427 | 0.088 | -0.154 | 0.073 | 0.118 | 197.872999 | -55.356834 | 99.53 | 2045.62 |

2.4 Star Slots

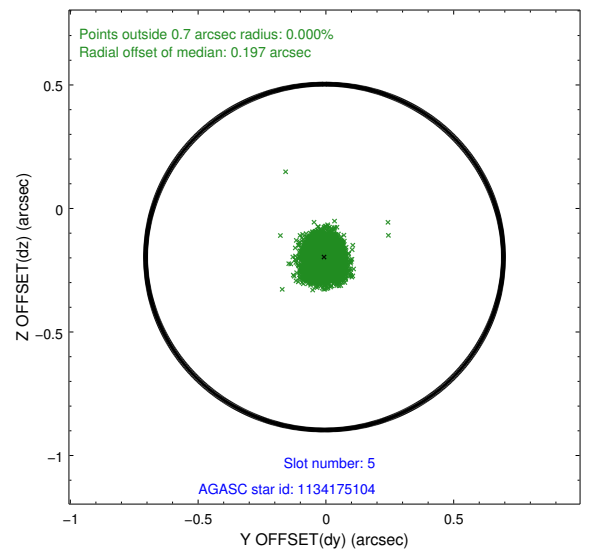
2.4.1 Slot 3



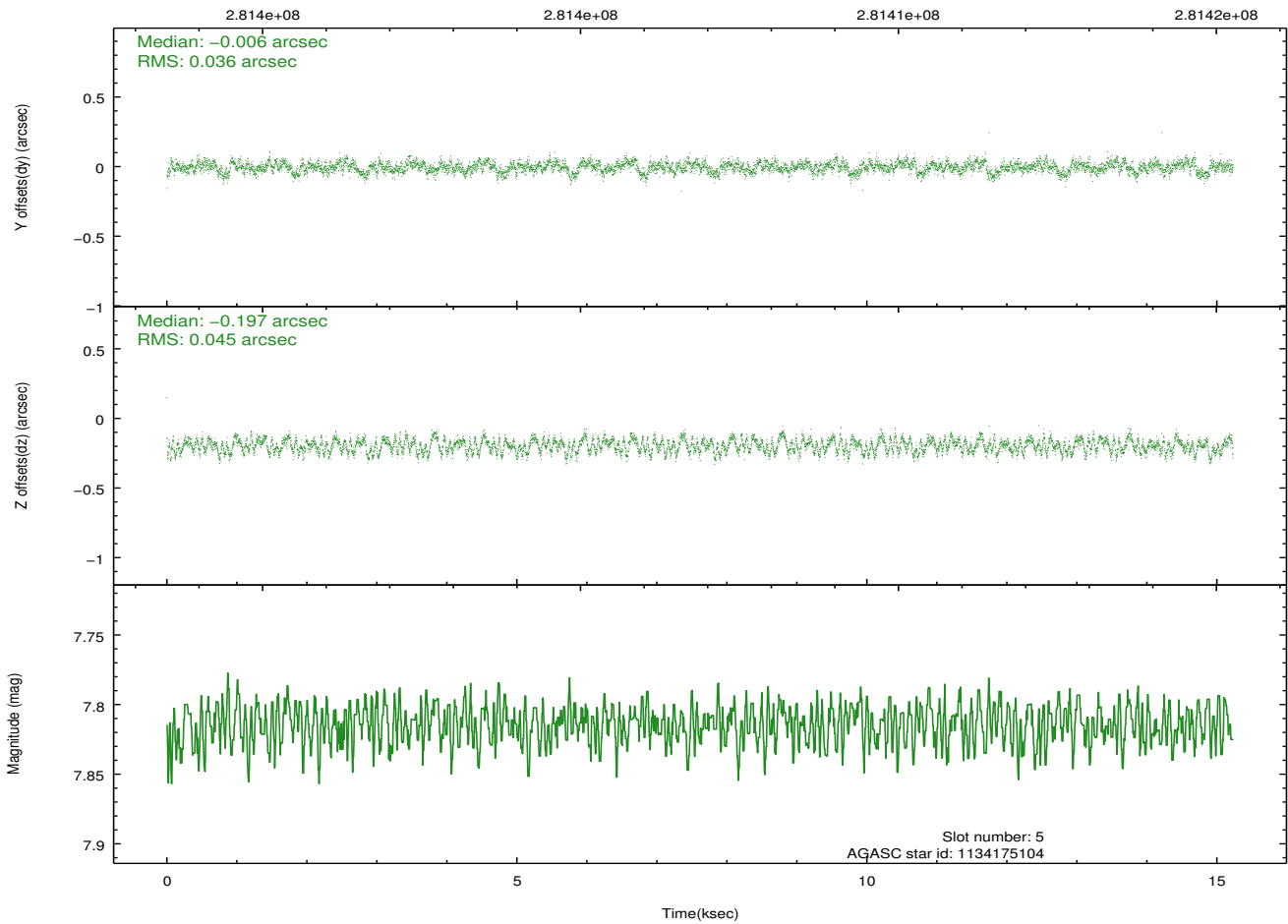
2.4.2 Slot 4



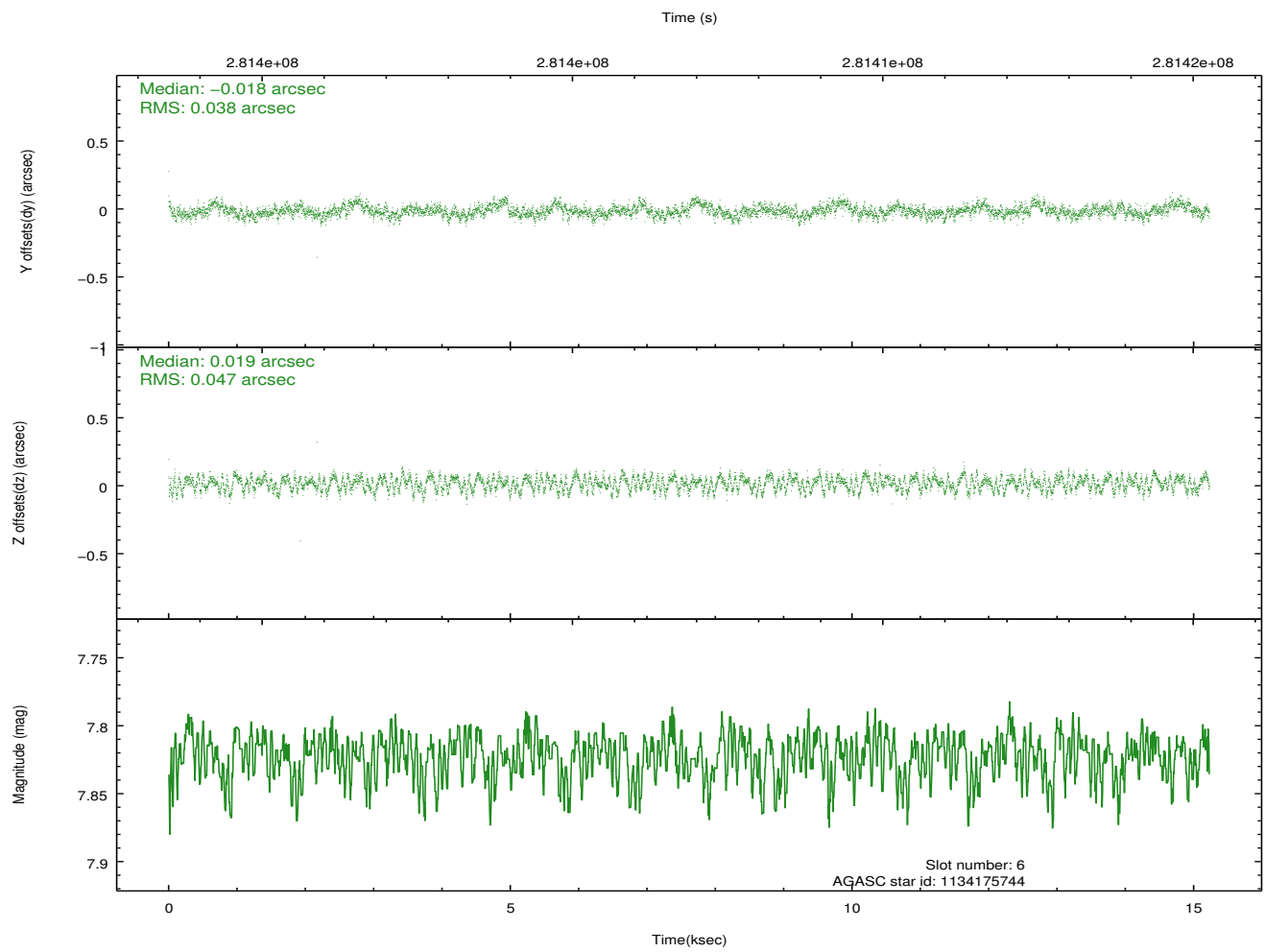
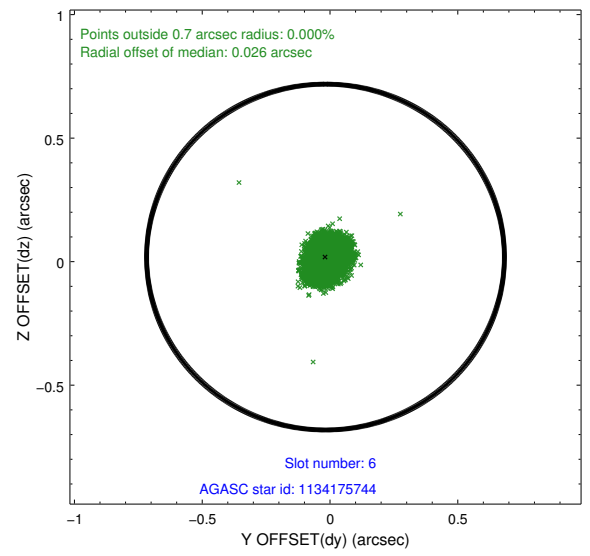
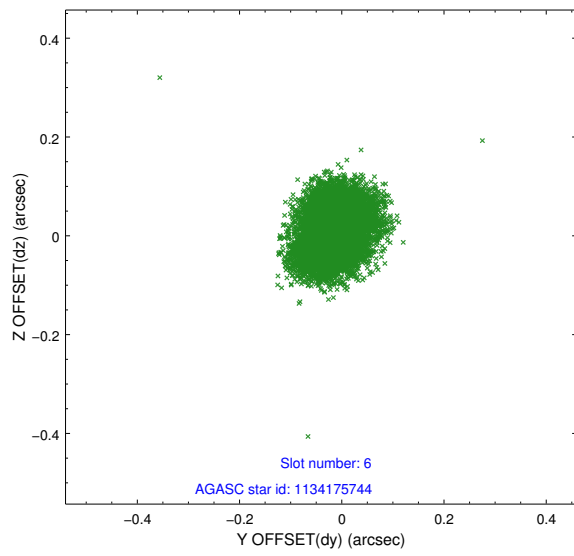
2.4.3 Slot 5



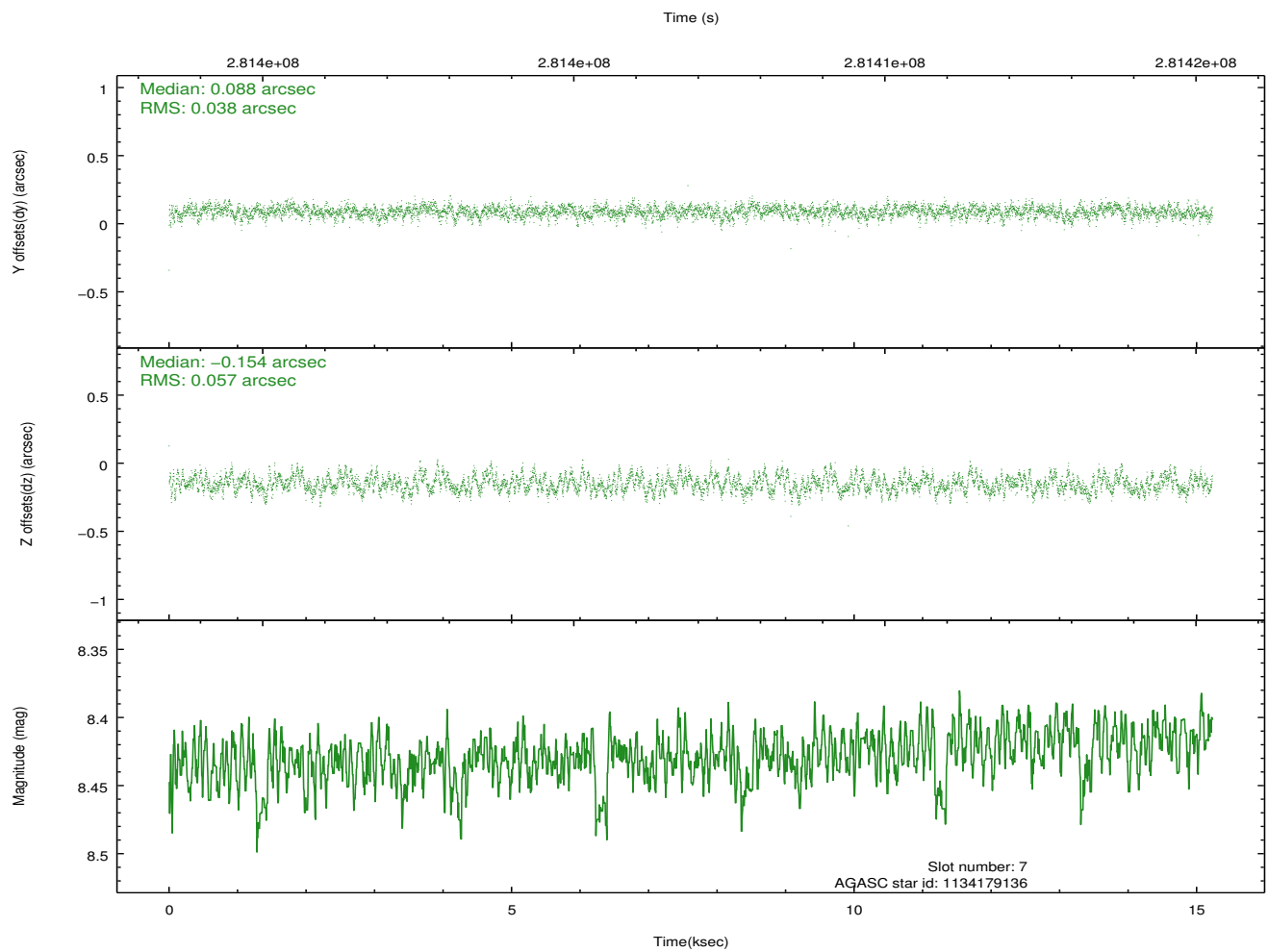
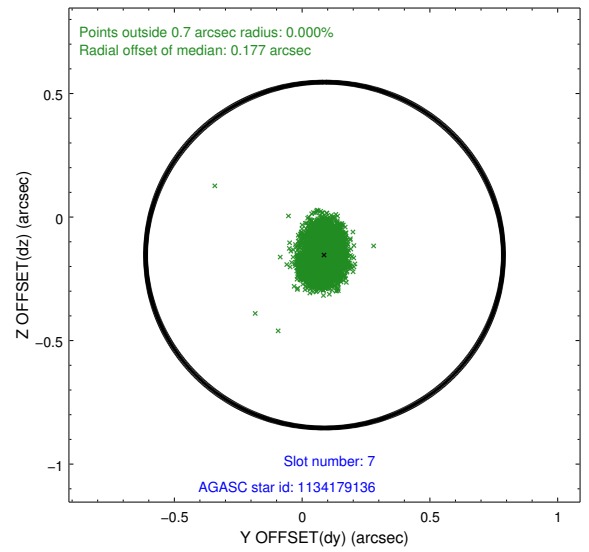
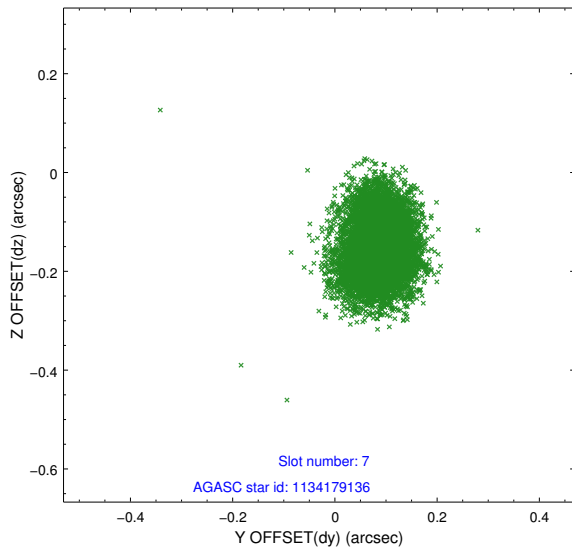
Time (s)



2.4.4 Slot 6

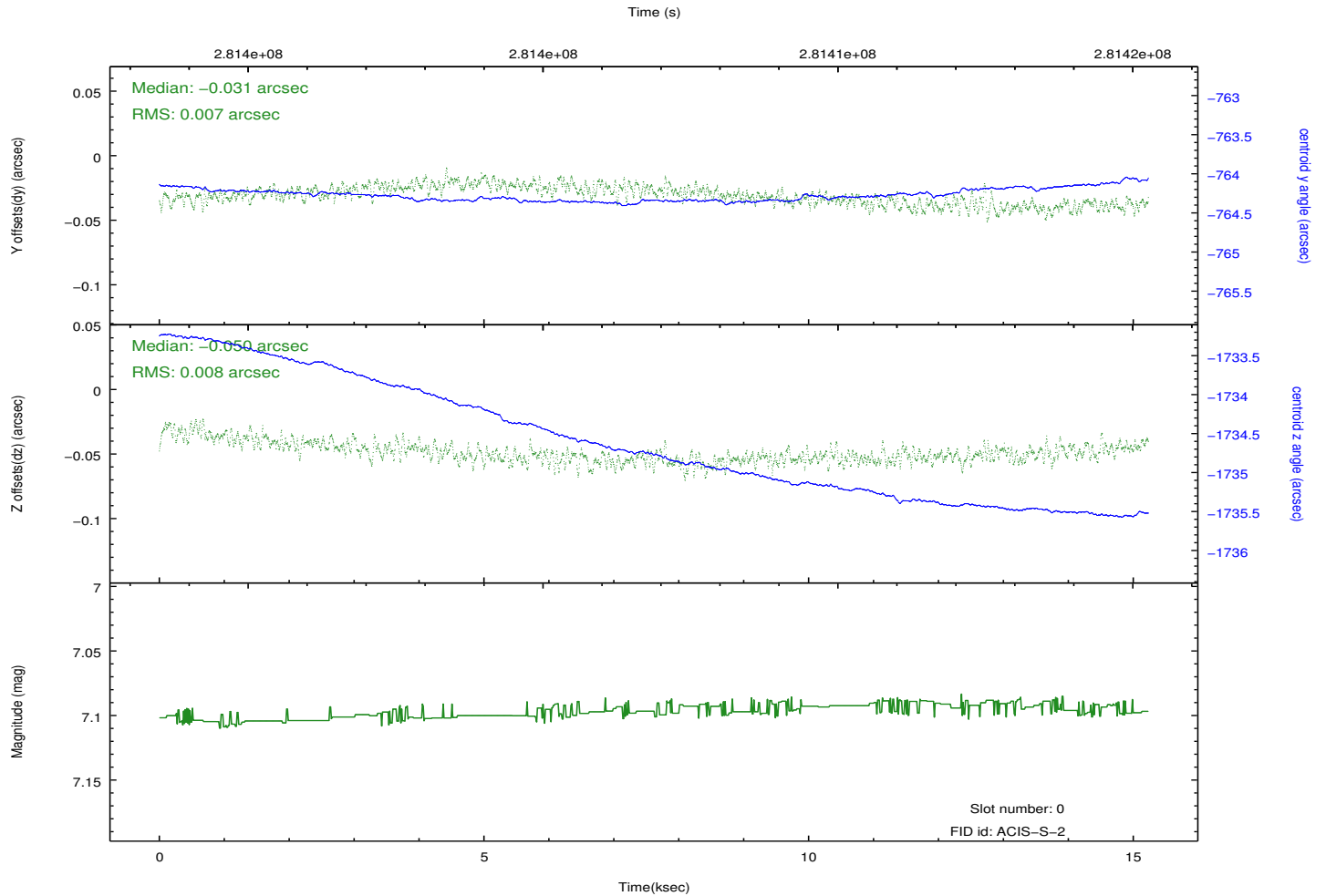
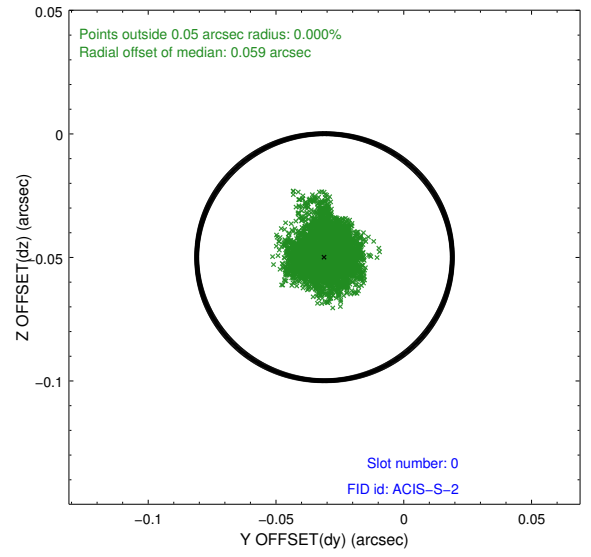
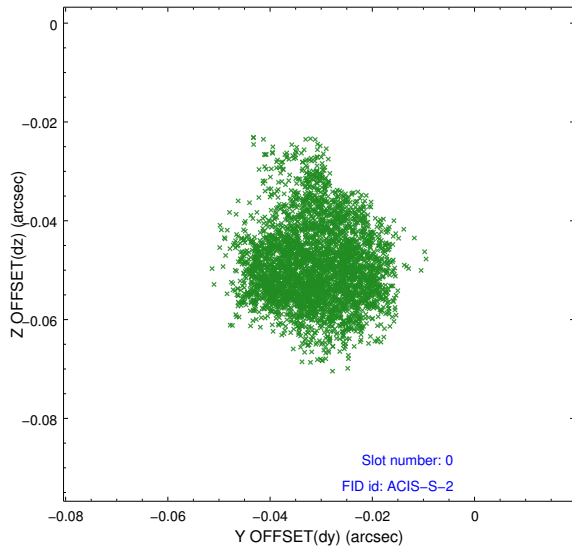


2.4.5 Slot 7

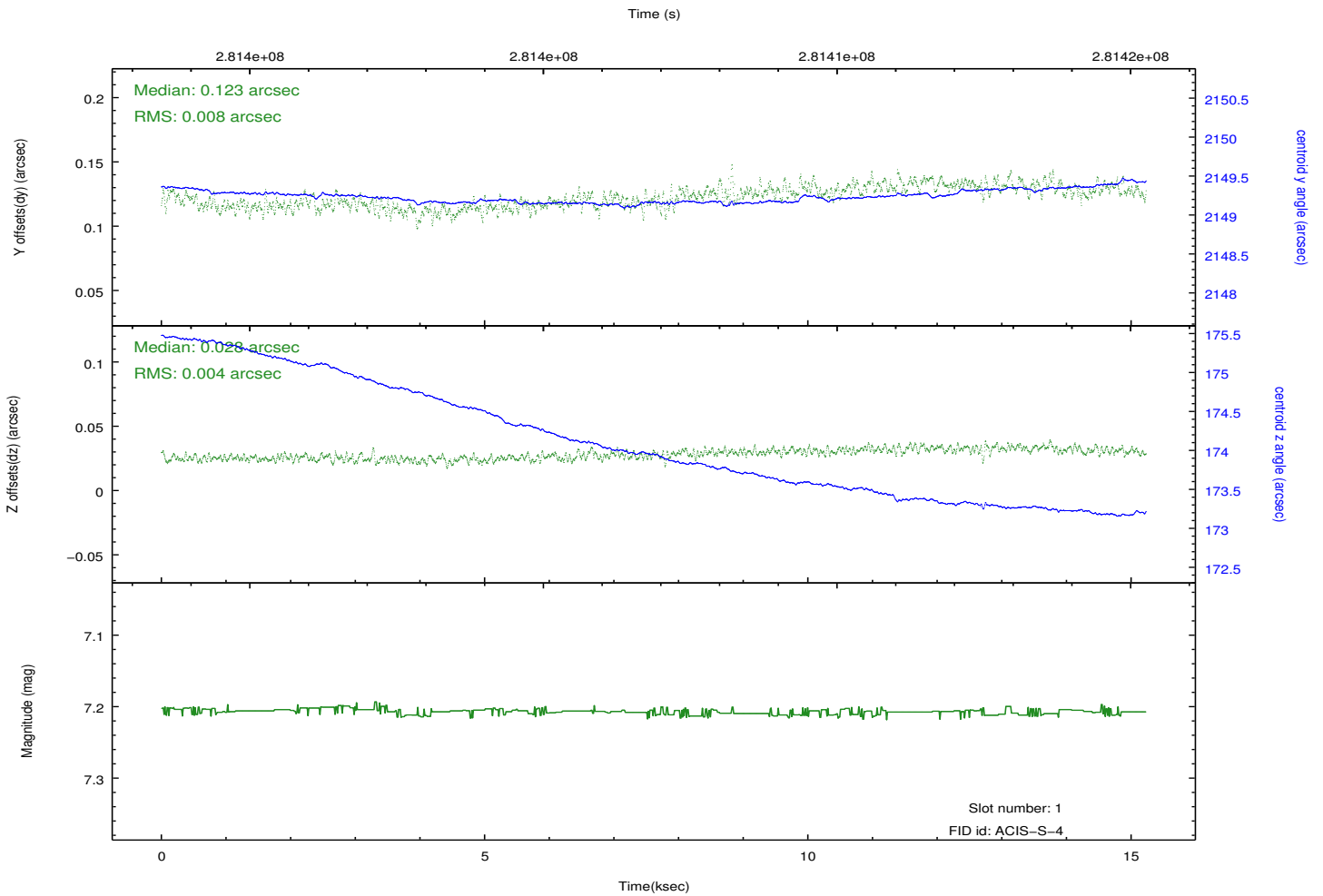
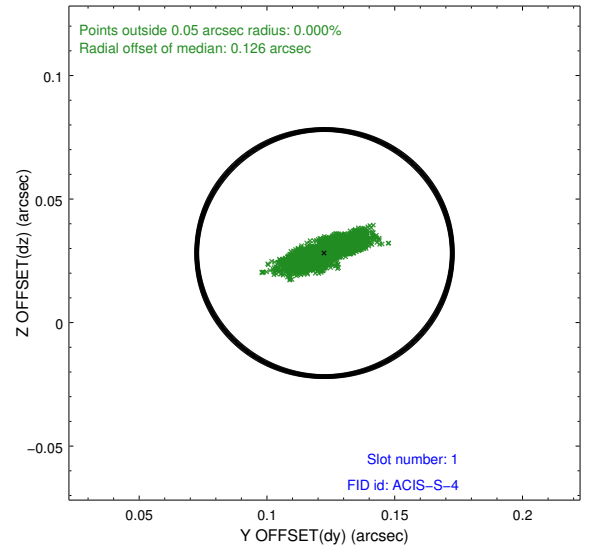
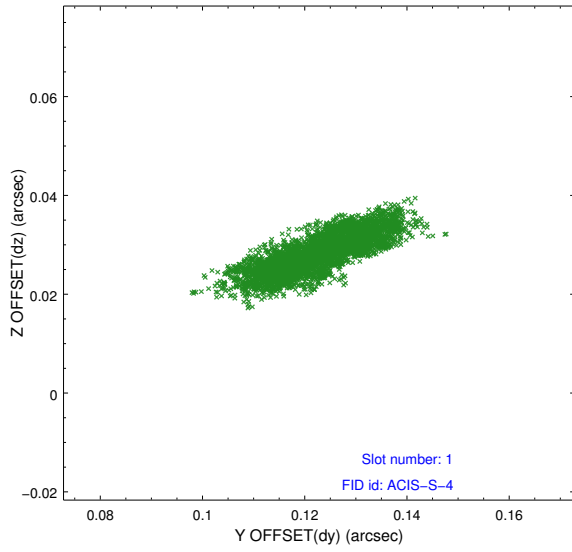


2.5 FID Slots

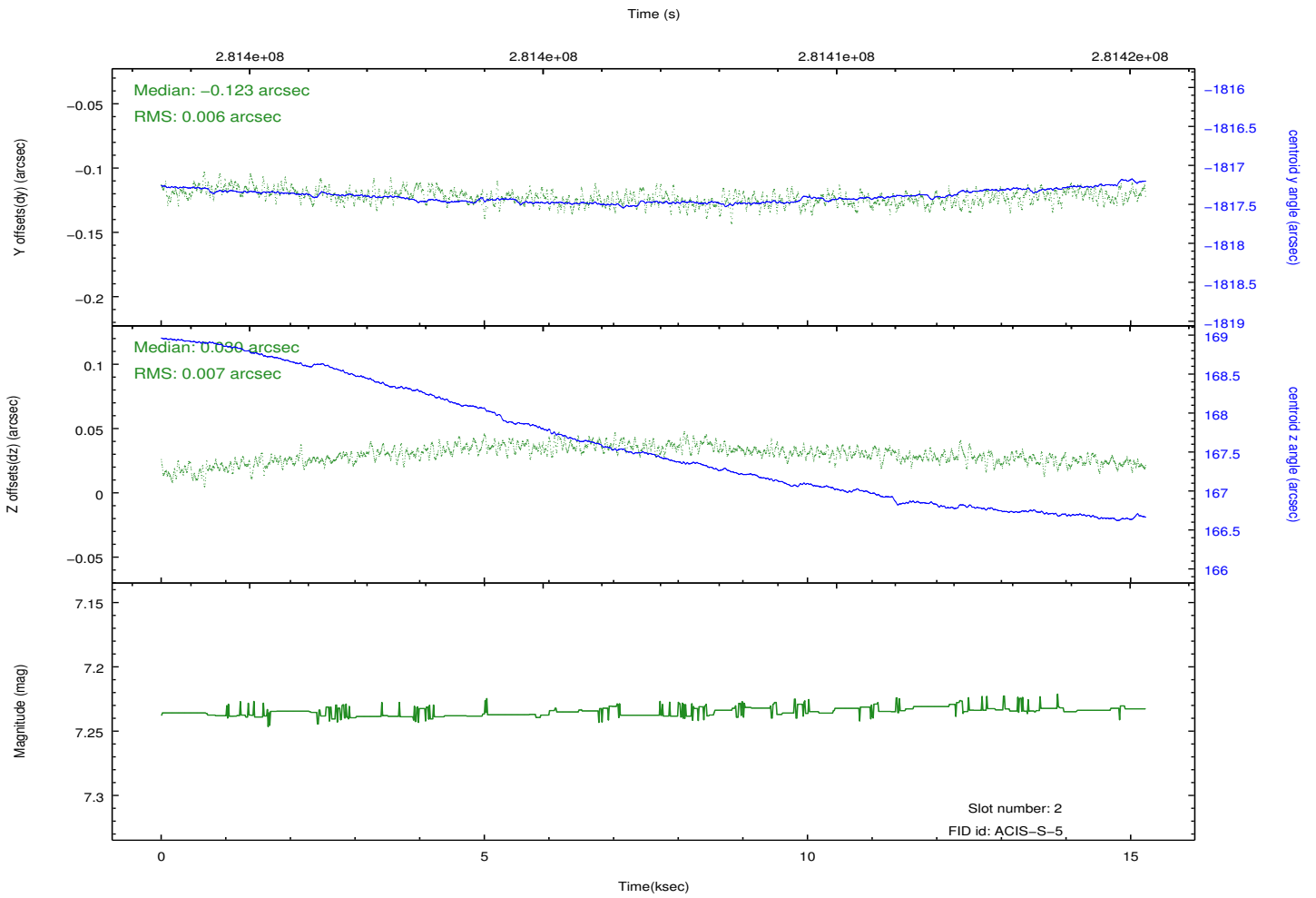
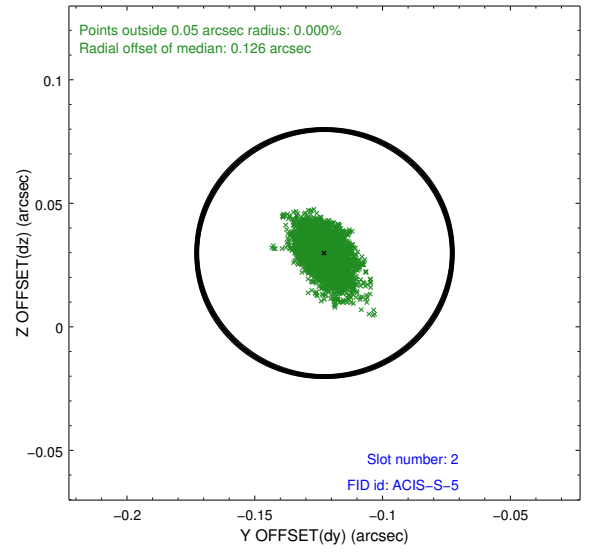
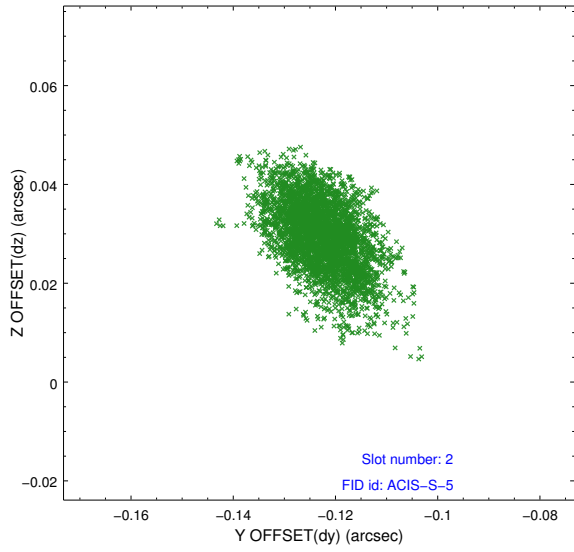
2.5.1 Slot 0



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) | 2012.04.18 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 14.8575999 |

A.2 Comments