

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6119 - L2 Version 3
Chandra X-Ray Center

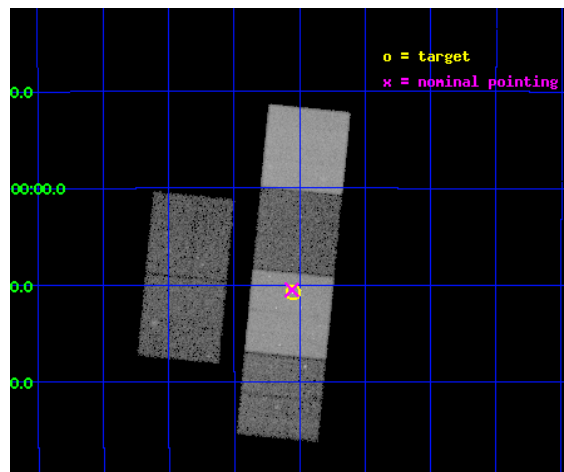
L2 Processing Date : Dec 23 2012

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1 Front

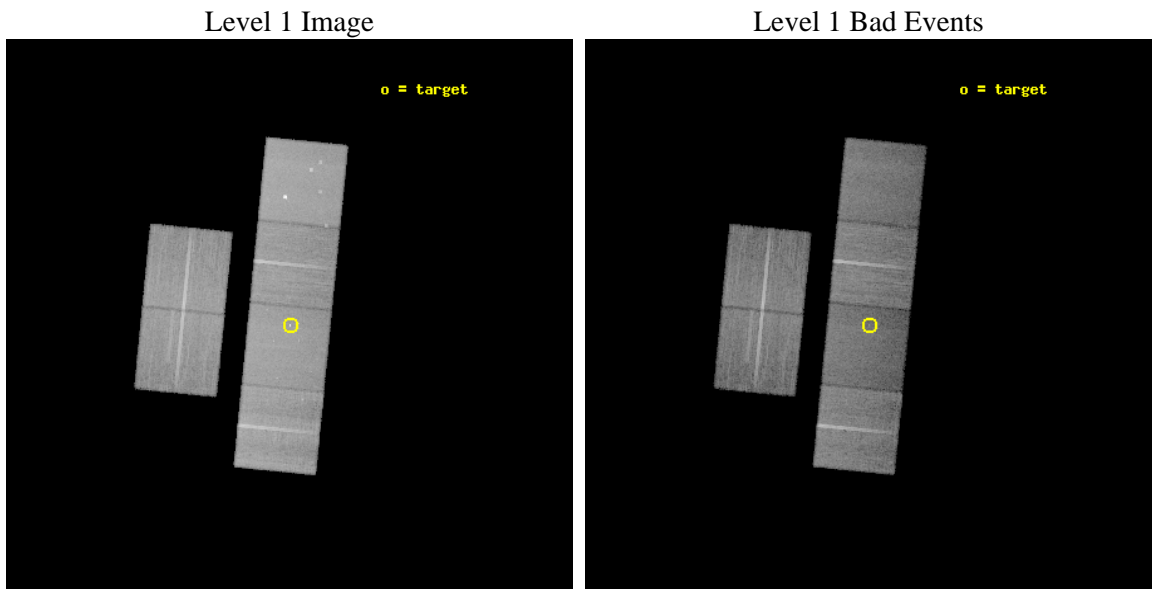
| | | |
|----------|--|---|
| seq_num | 200366 | Sequence number |
| obs_id | 6119 | Observation id |
| title | Planet-Induced Activity Enhancements in the HD 179949 System | Propo |
| observer | Dr. Steven Saar | Principal investigator |
| object | HD 179949 | Source name |
| dtycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 288.888333 | Observer's specified target RA [deg] |
| dec_targ | -24.179361 | Observer's specified target Dec [deg] |
| ra_nom | 288.88974005744 | Nominal RA [deg] |
| dec_nom | -24.175181829339 | Nominal Dec [deg] |
| roll_nom | 95.65720317843 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 30025.599888146 | Sum of GTIs [s] |
| livetime | 29645.397663117 | Livetime [s] |
| ontime2 | 30025.599888146 | Sum of GTIs [s] |
| ontime3 | 30022.358887911 | Sum of GTIs [s] |
| ontime5 | 30025.599888146 | Sum of GTIs [s] |
| ontime6 | 30025.599888146 | Sum of GTIs [s] |
| ontime7 | 30025.599888146 | Sum of GTIs [s] |
| ontime8 | 30012.635897189 | Sum of GTIs [s] |
| l2events | 271215 | Number of level 2 events |



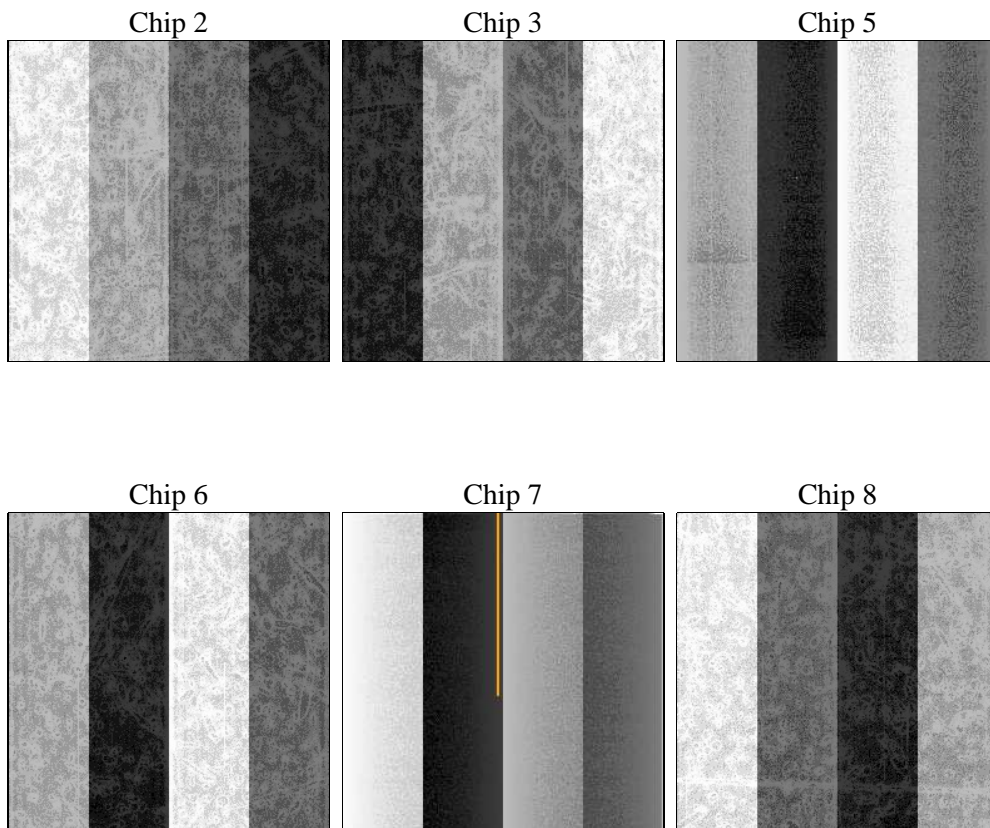
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 2 | Obi number | sched_exp_time | 30000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 30025.599888146 | Sum of GTIs [s] |
| caldbver | 4.5.5 | | ontime2 | 30025.599888146 | Sum of GTIs [s] |
| date | 2012-12-23T19:14:31 | Date and time of file creation | ontime3 | 30022.358887911 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 30025.599888146 | Sum of GTIs [s] |
| | | | ontime6 | 30025.599888146 | Sum of GTIs [s] |
| | | | ontime7 | 30025.599888146 | Sum of GTIs [s] |
| | | | ontime8 | 30012.635897189 | Sum of GTIs [s] |
| | | | l1events | 1266205 | Number of level 1 events |

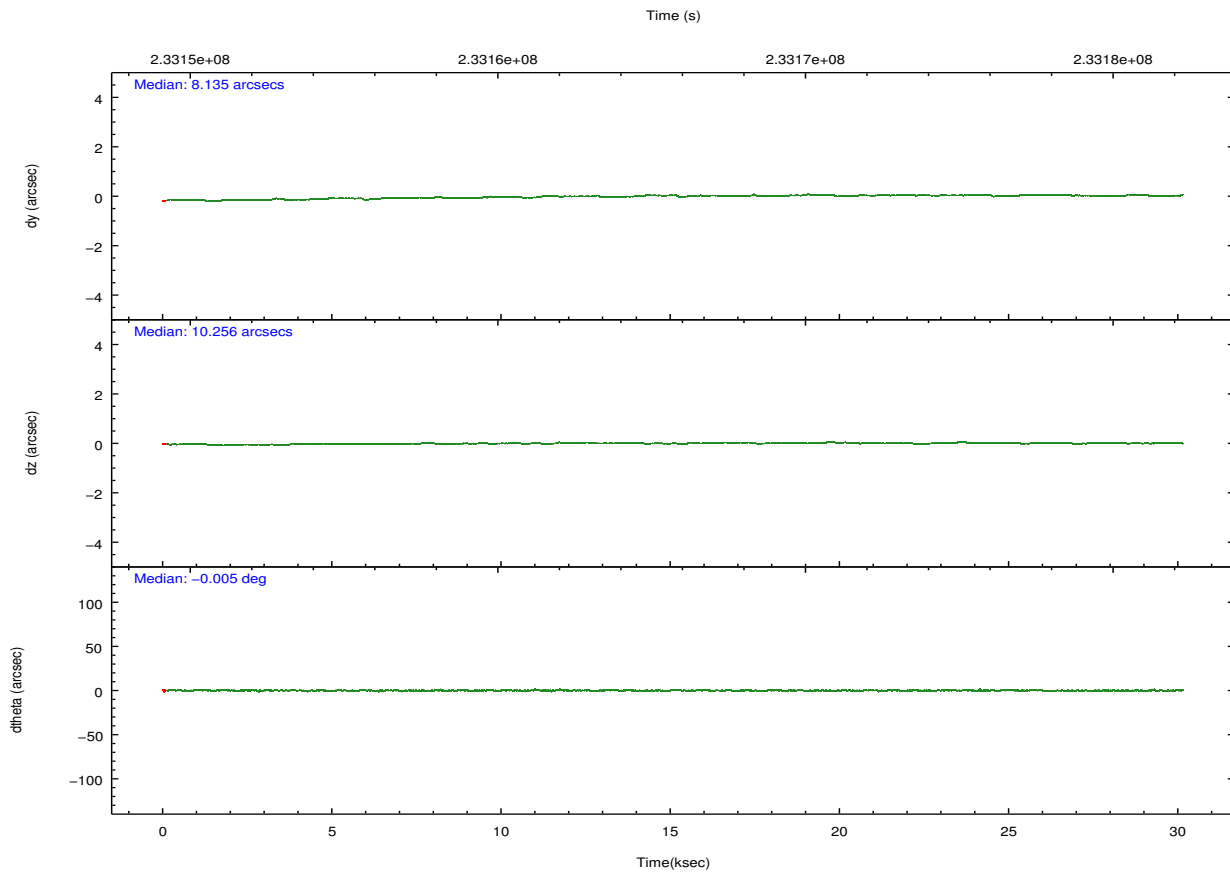
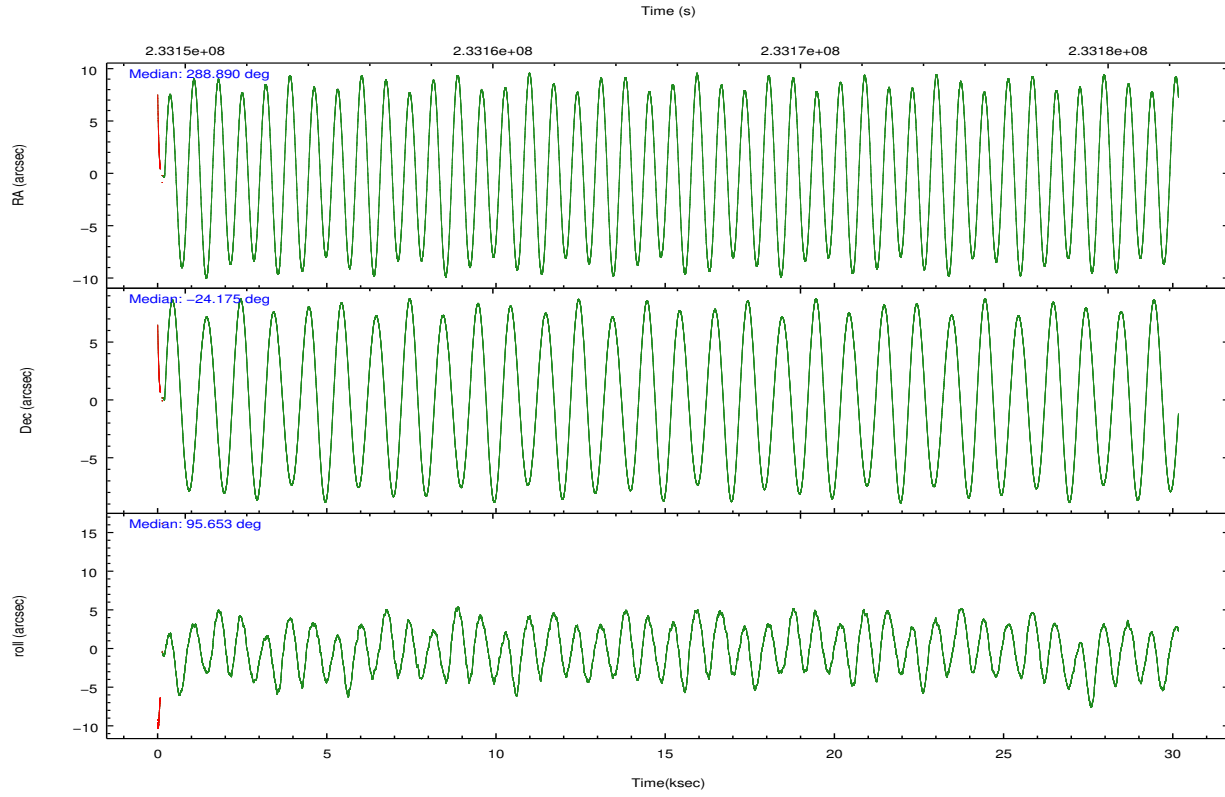
2.1.4 Events

| | 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 | 192944 | 180163 | 258756 | 190715 | 212249 | 231378 | grade 0 events | 6772 | 6954 | 17805 | 8202 | 10123 | 17308 |
| rejected events | 175148 | 162791 | 134359 | 171435 | 118139 | 179858 | | 3% | 3% | 6% | 4% | 4% | 7% |
| rejected % | 90% | 90% | 51% | 89% | 55% | 77% | grade 1 events | 100 | 115 | 419 | 163 | 240 | 185 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 4223 | 3767 | 37006 | 4114 | 20089 | 12191 |
| | | | | | | | | 2% | 2% | 14% | 2% | 9% | 5% |
| | | | | | | | grade 3 events | 2075 | 1980 | 5541 | 2269 | 9445 | 5798 |
| | | | | | | | | 1% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 2117 | 1977 | 5277 | 2120 | 9357 | 5400 |
| | | | | | | | | 1% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 6315 | 7294 | 20166 | 7798 | 22151 | 10558 |
| | | | | | | | | 3% | 4% | 7% | 4% | 10% | 4% |
| | | | | | | | grade 6 events | 3366 | 3458 | 65370 | 4172 | 49549 | 14244 |
| | | | | | | | | 1% | 1% | 25% | 2% | 23% | 6% |
| | | | | | | | grade 7 events | 167976 | 154618 | 107172 | 161877 | 91295 | 165694 |
| | | | | | | | | 87% | 85% | 41% | 84% | 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 | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 288.907458 | 288.8897400574448 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -24.197101 | -24.17518182933864 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 95.507835 | 95.65720317843035 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| Phase constraints | Y | Y | | | |
| [d] Phase period | 3.092455 | 3.092455 | | | |
| [d] Phase epoch (MJD) | 52891.020000 | 52891.020000 | | | |
| Phase start | 0.940000 | 0.940000 | | | |
| Phase end | 0.060000 | 0.060000 | | | |
| Phase start error | 0.030000 | 0.030000 | | | |
| Phase end error | 0.030000 | 0.030000 | | | |
| [s] Observation start time (MET) | 233150777.184000 | 233149118.75365 | | | |
| Observation start date | 2005-05-22T12:05:13 | 2005-05-22T11:38:38 | | | |
| [s] Observation end time (MET) | 233180777.184000 | 233181519.51762 | | | |
| Observation end date | 2005-05-22T20:25:13 | 2005-05-22T20:38:39 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect

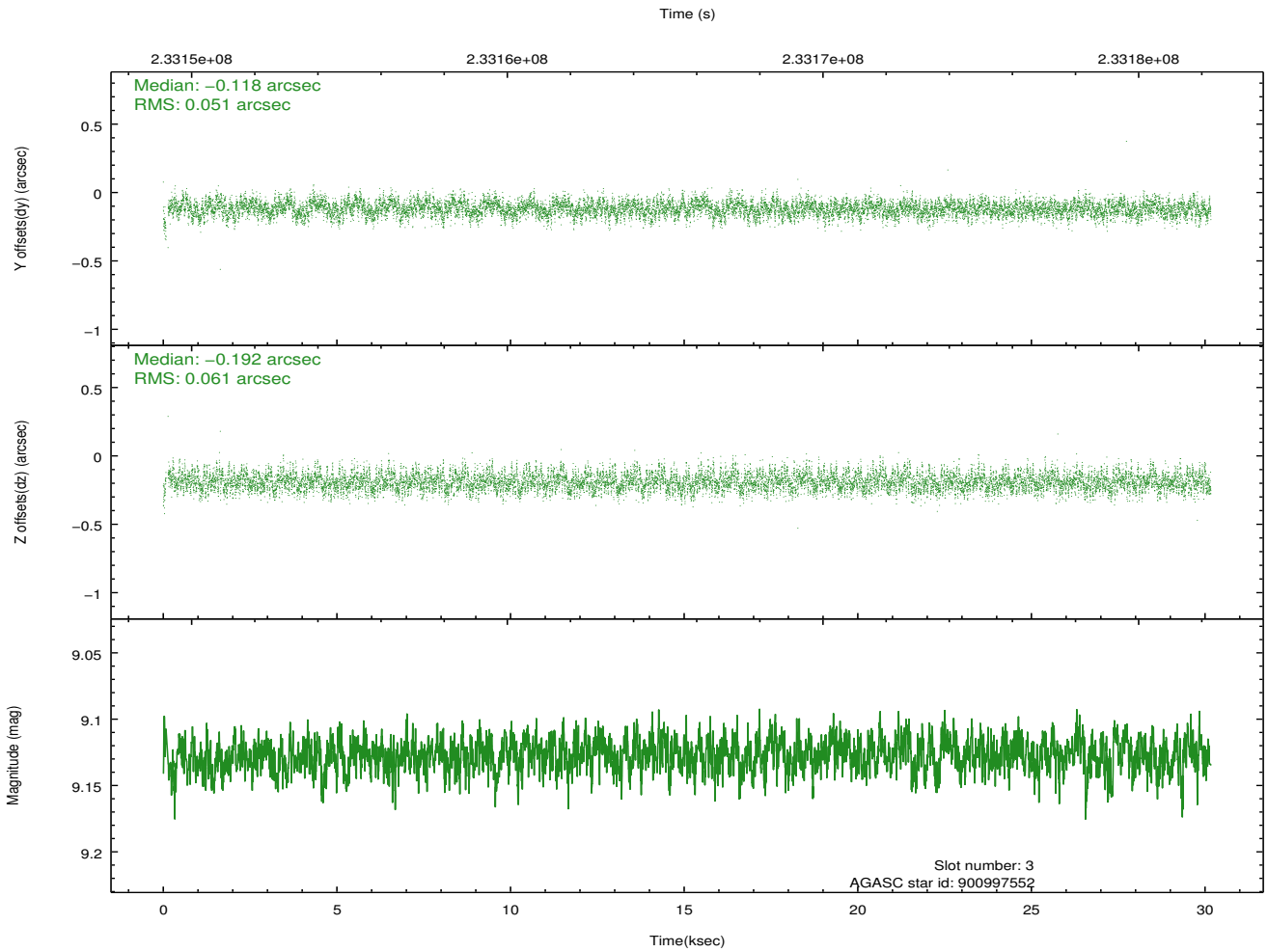
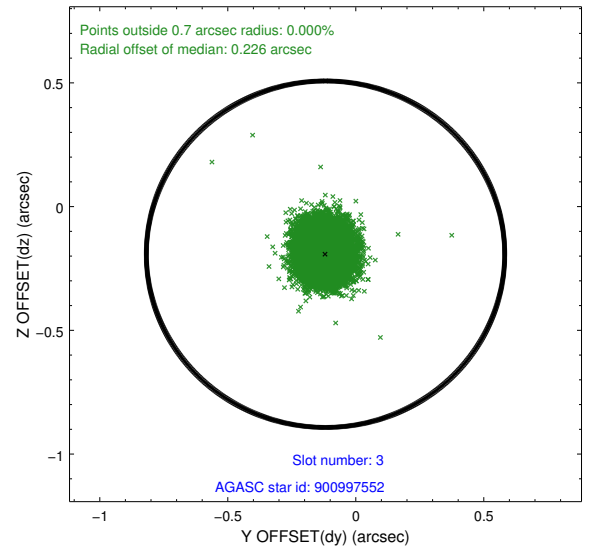
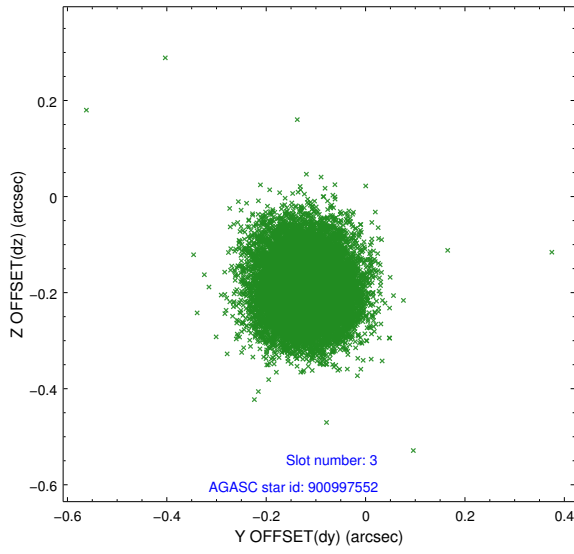


Slot Statistics

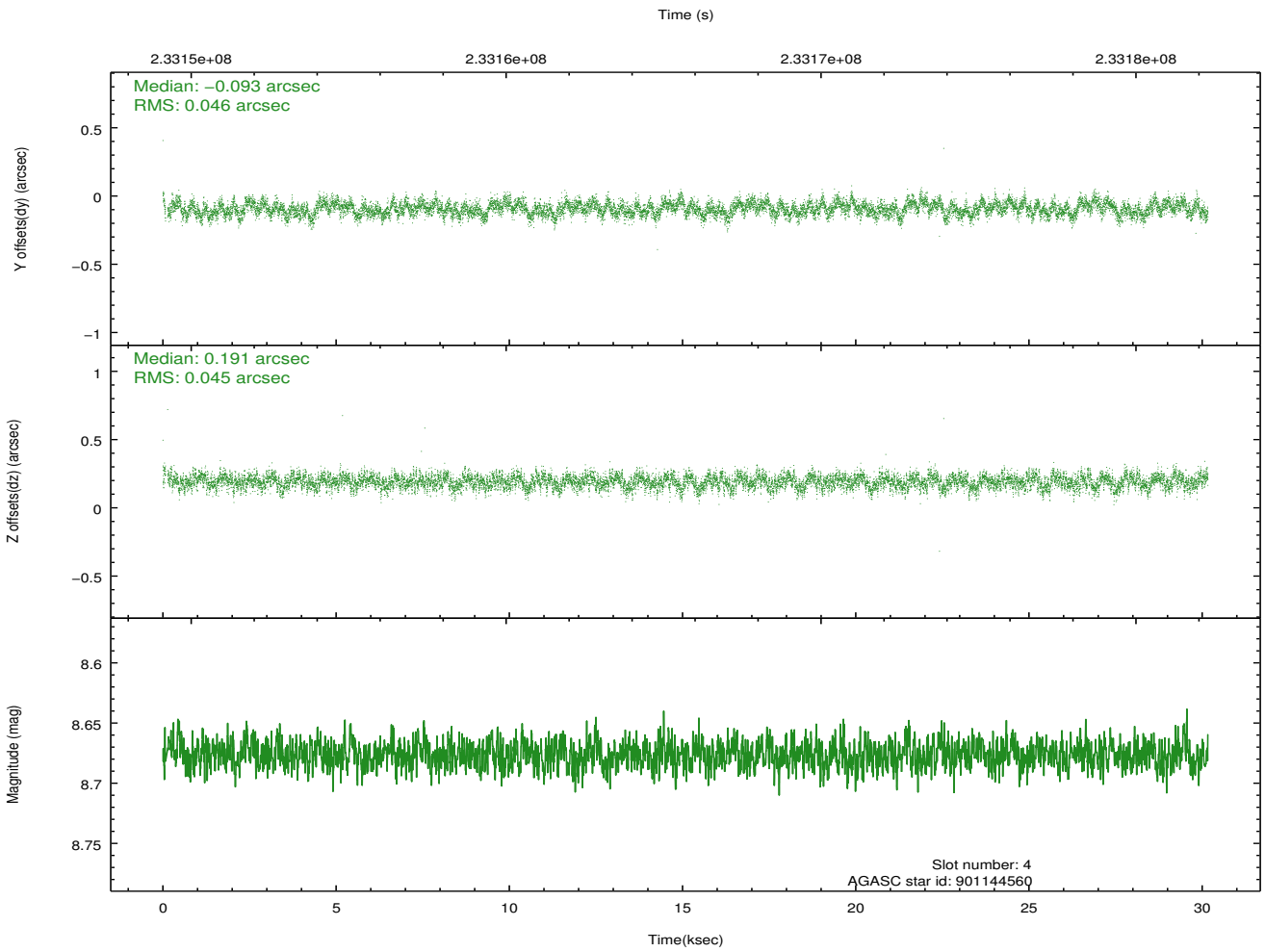
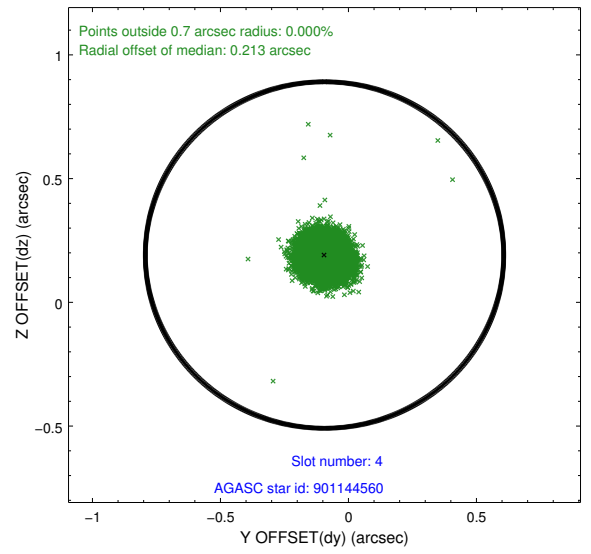
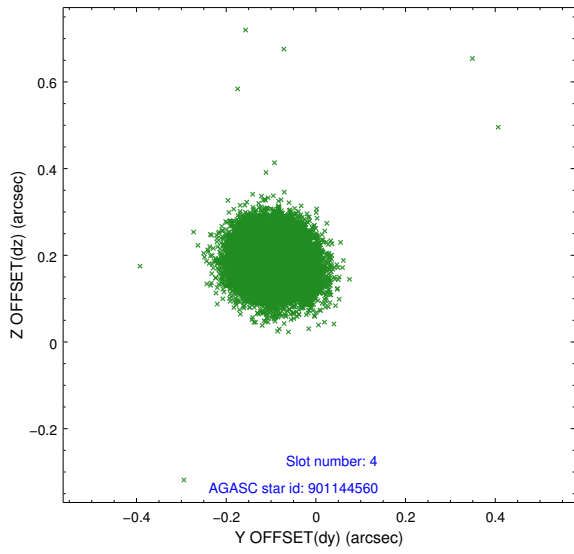
| | status | id | mag | n_pts | med_dy | med_dz | dr1 |
|-------|--------|-----------|----------|----------|--------|--------|-------|
| | FID | ACIS-S-2 | 7.10 | 7343 | -0.041 | -0.019 | 0.007 |
| | FID | ACIS-S-4 | 7.20 | 7344 | 0.122 | 0.025 | 0.007 |
| | FID | ACIS-S-5 | 7.23 | 7343 | -0.113 | 0.003 | 0.007 |
| | GUIDE | 900997552 | 9.13 | 14679 | -0.118 | -0.192 | 0.084 |
| | GUIDE | 901144560 | 8.68 | 14684 | -0.093 | 0.191 | 0.069 |
| | GUIDE | 901514880 | 8.92 | 14620 | 0.111 | -0.194 | 0.064 |
| | GUIDE | 901647096 | 9.15 | 14680 | 0.102 | 0.198 | 0.087 |
| 0.000 | 0.000 | 0.000 | 0.000000 | 0.000000 | 0.00 | 0.00 | |

2.4 Star Slots

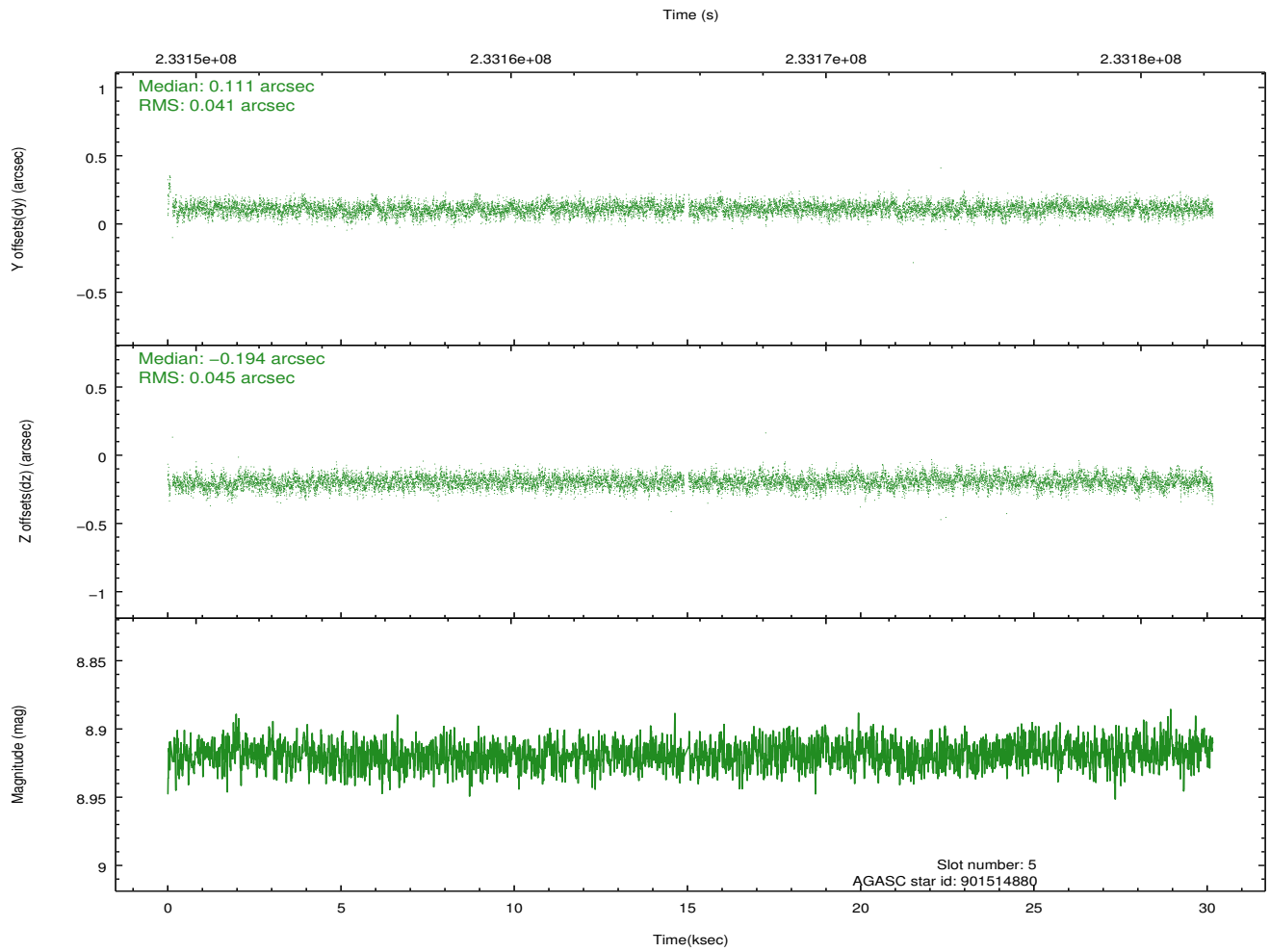
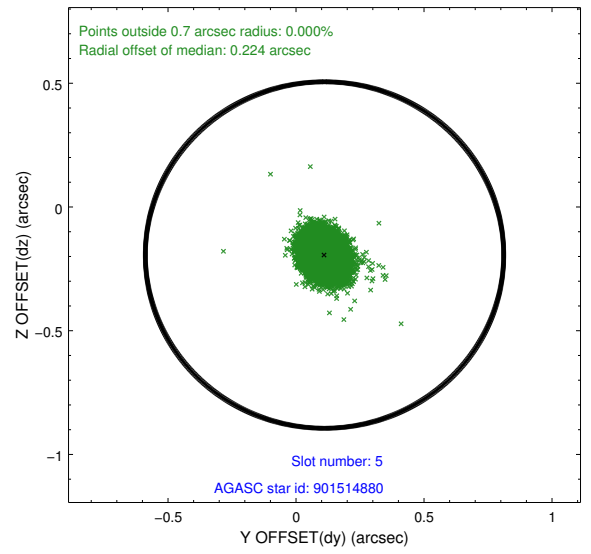
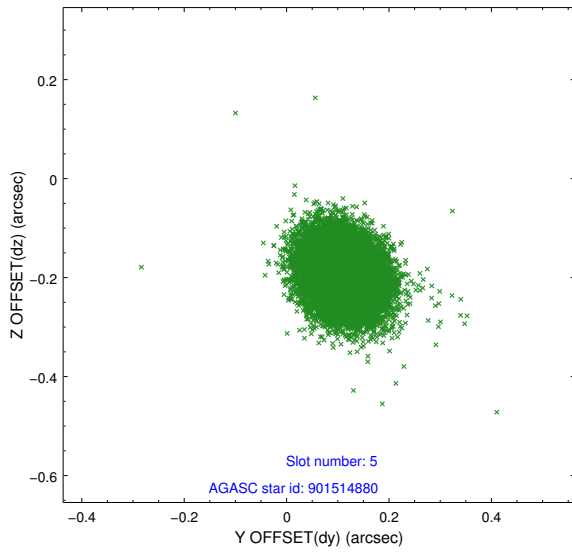
2.4.1 Slot 3



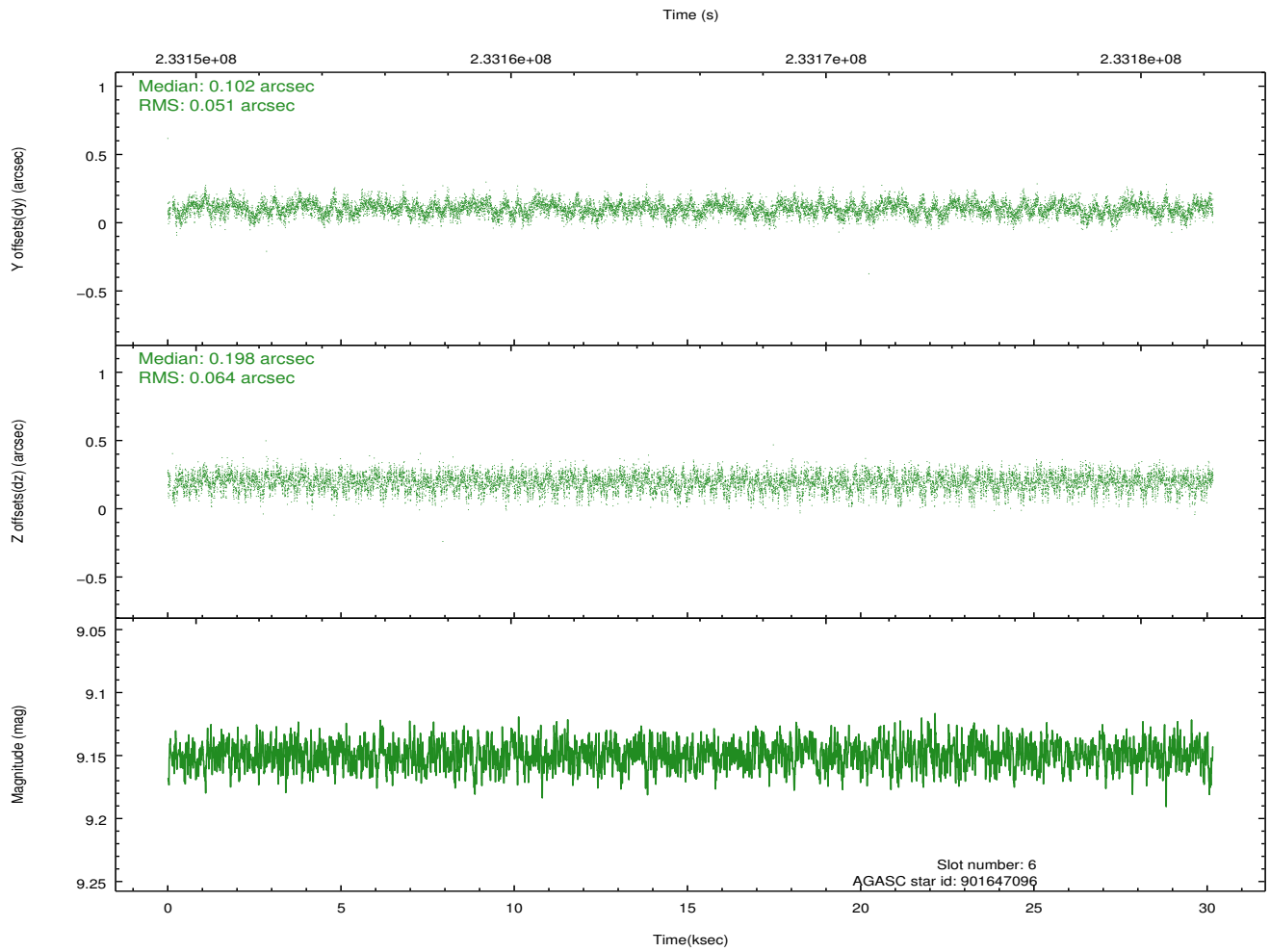
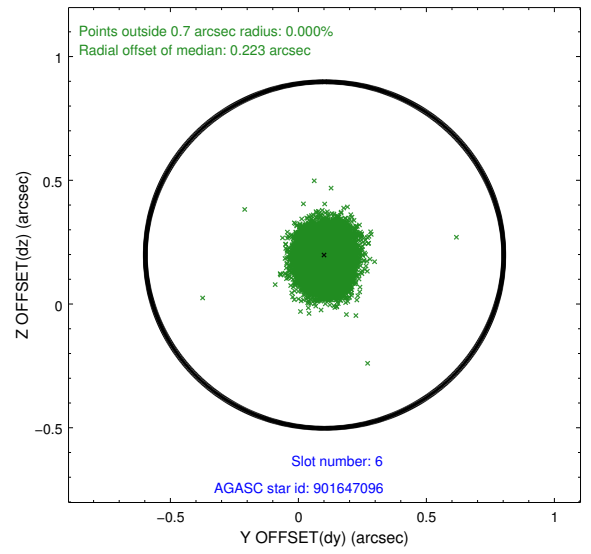
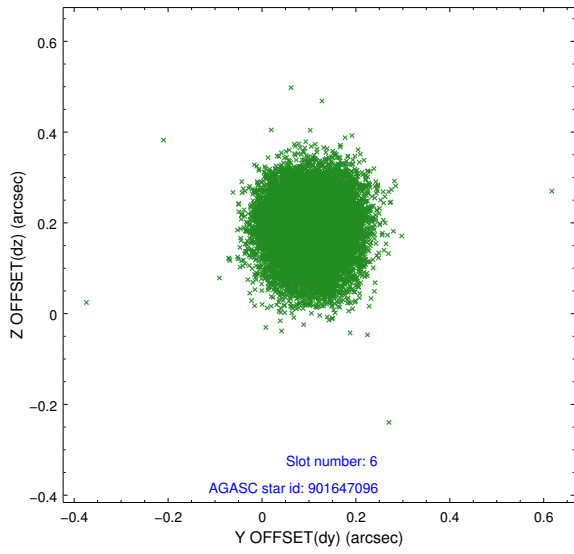
2.4.2 Slot 4



2.4.3 Slot 5

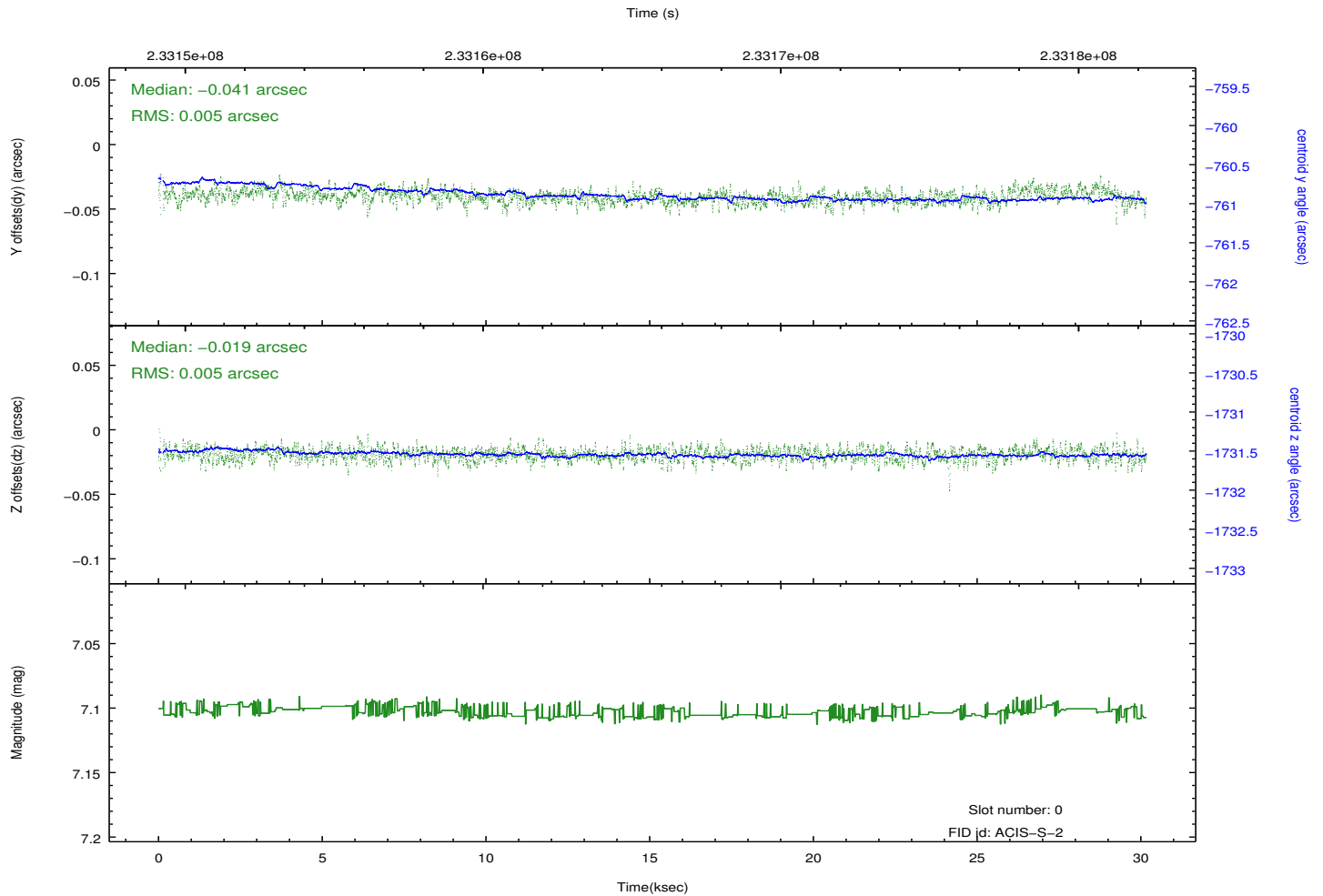
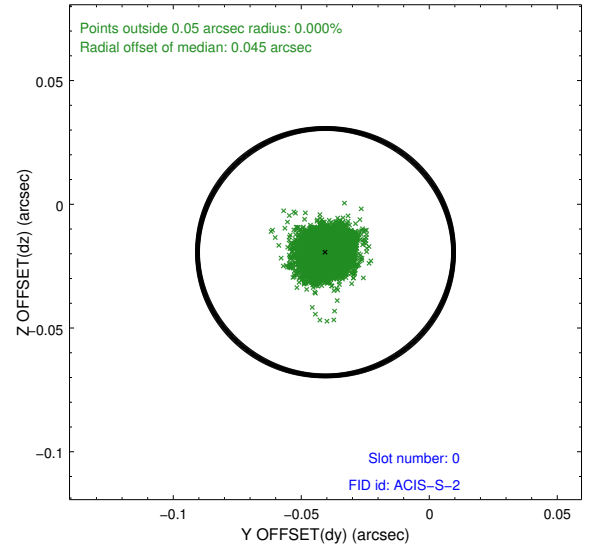
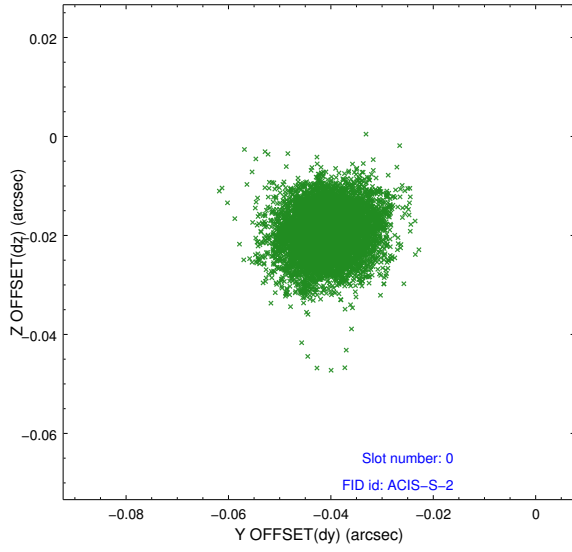


2.4.4 Slot 6

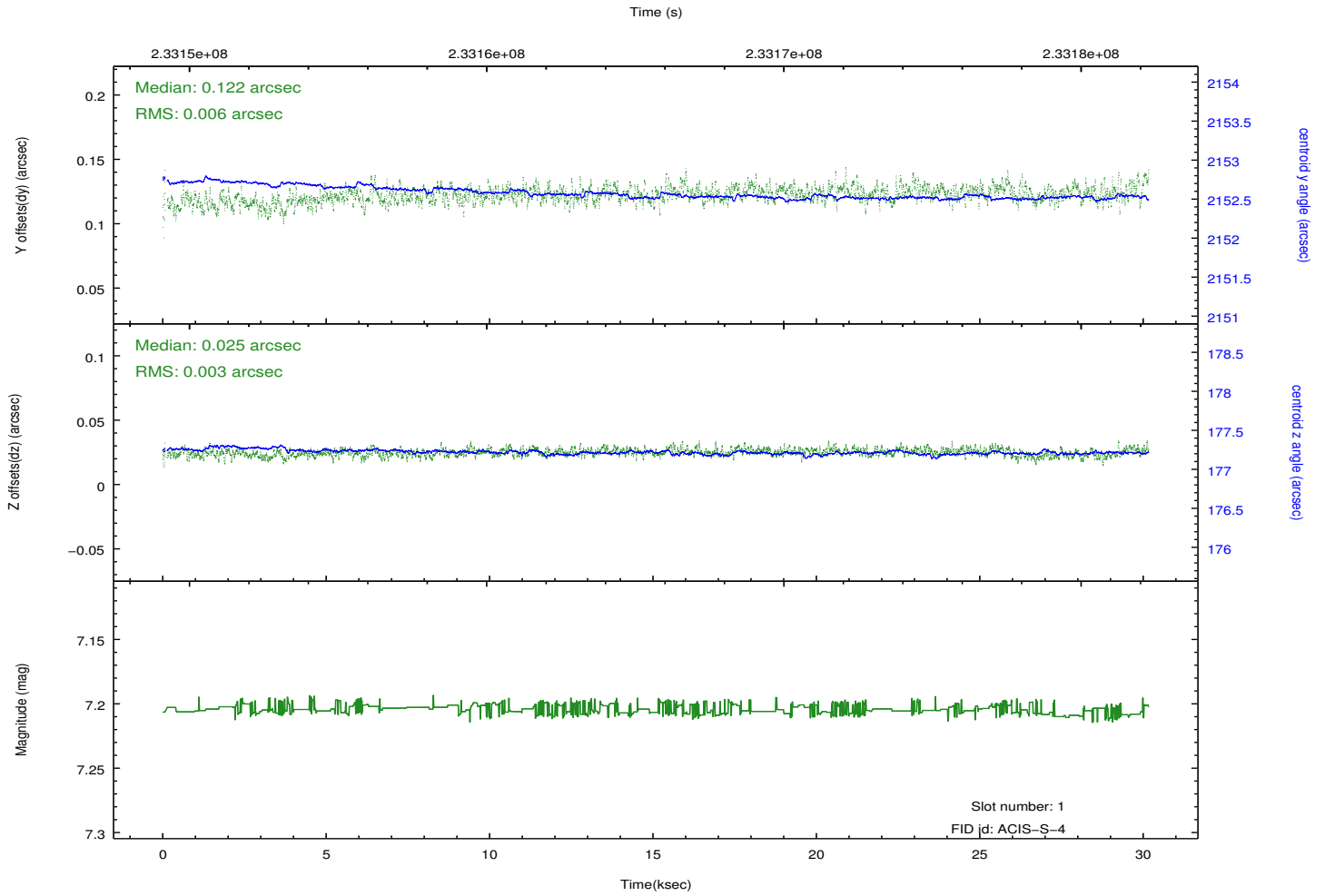
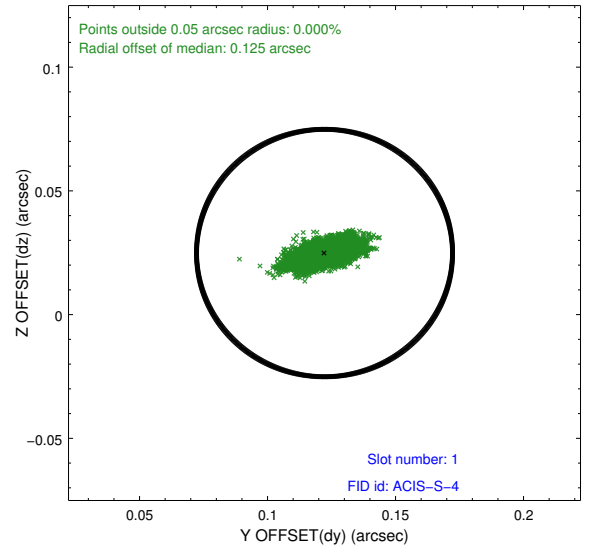
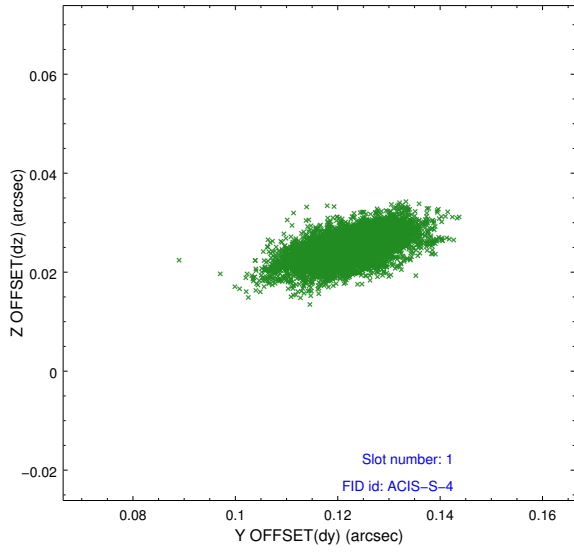


2.5 FID Slots

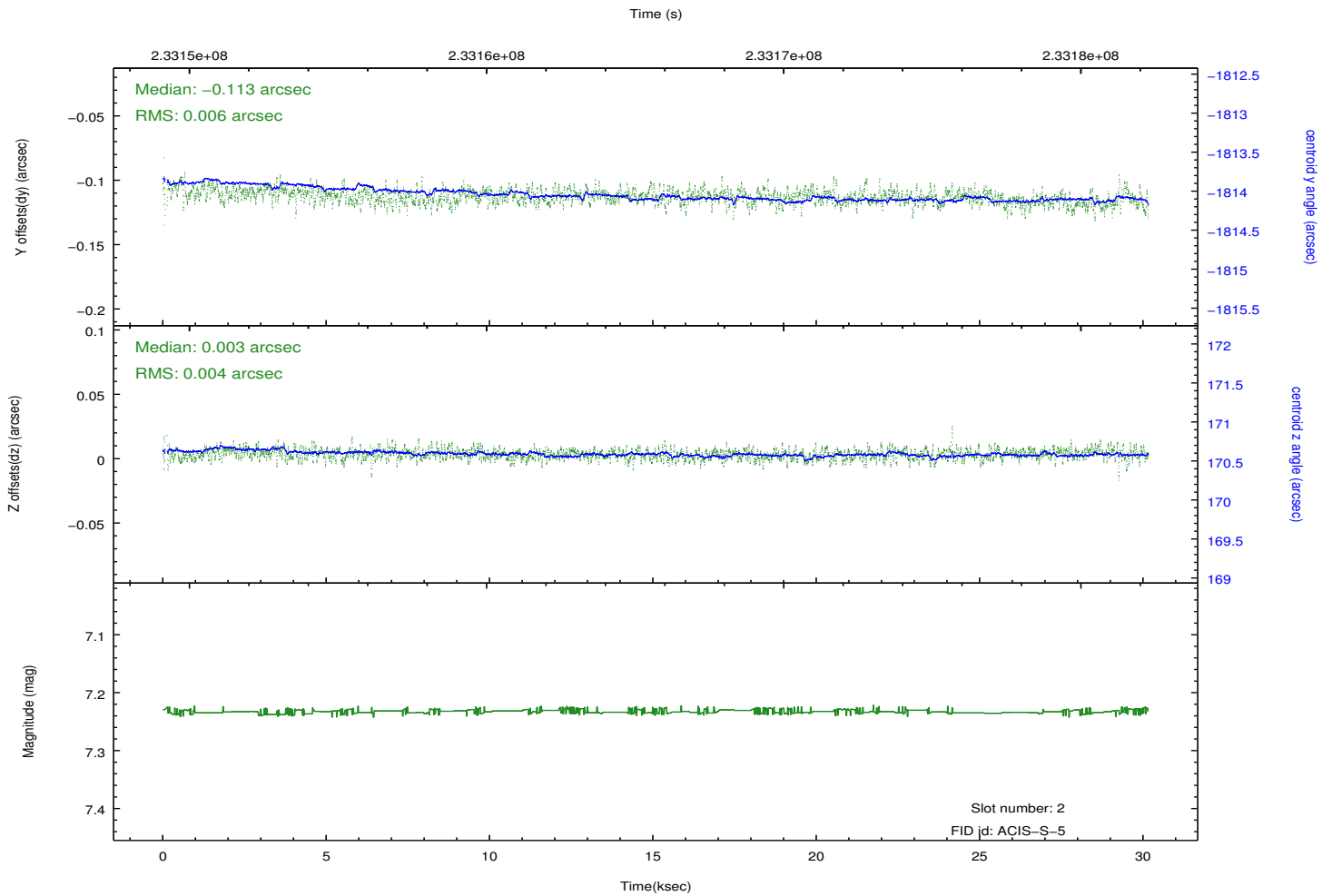
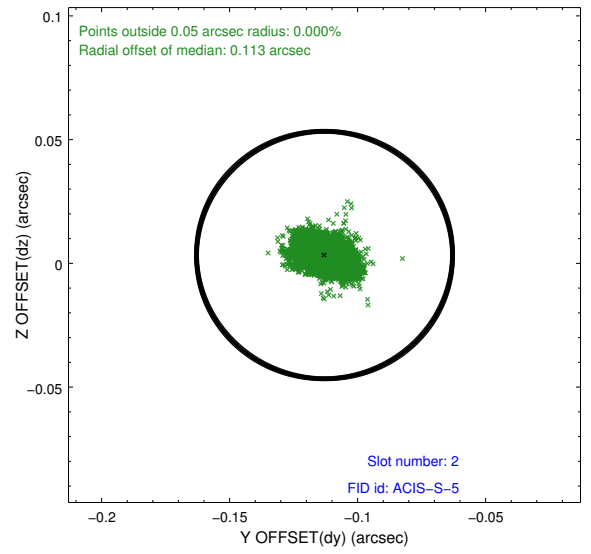
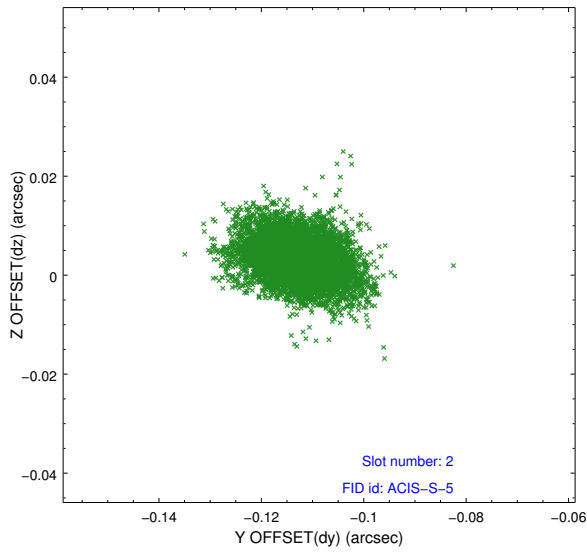
2.5.1 Slot 0



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) | 2013.01.16 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 30.02559 |

A.2 Comments

Joint Proposal: HST. Monitor constraint met.