

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7577 - L2 Version 3
Chandra X-Ray Center

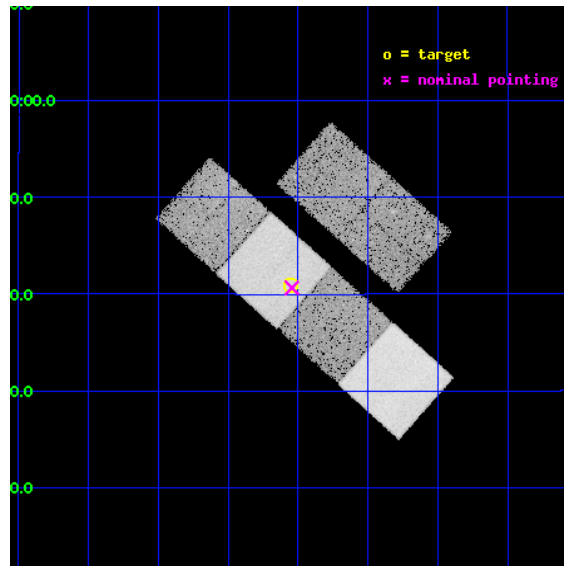
L2 Processing Date : Apr 24 2012

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1 Front

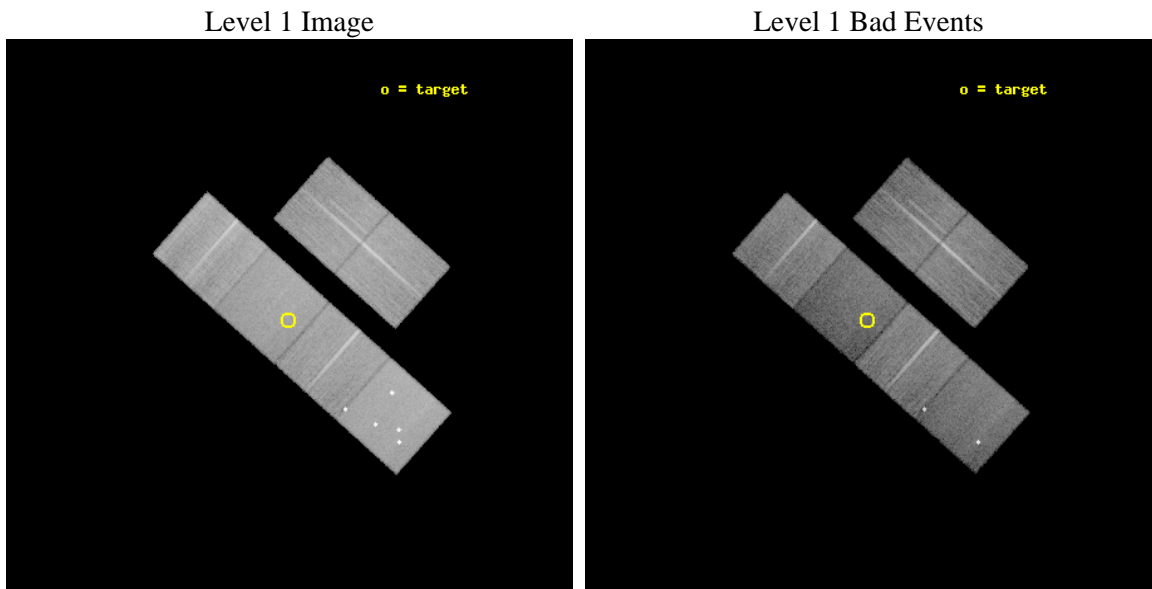
| | | |
|----------|---------------------------------------|---|
| seq_num | 500709 | Sequence number |
| obs_id | 7577 | Observation id |
| title | X-ray Emission from the Planet Pulsar | Proposal title |
| observer | Professor Gordon Garmire | Principal investigator |
| object | PSR B1257+12 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 195.0125 | Observer's specified target RA [deg] |
| dec_targ | 12.682222 | Observer's specified target Dec [deg] |
| ra_nom | 195.01108110924 | Nominal RA [deg] |
| dec_nom | 12.677546687039 | Nominal Dec [deg] |
| roll_nom | 221.7662779223 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 18540.79993099 | Sum of GTIs [s] |
| livetime | 18306.025158334 | Livetime [s] |
| ontime2 | 18527.835929871 | Sum of GTIs [s] |
| ontime3 | 18537.558930695 | Sum of GTIs [s] |
| ontime5 | 18540.79993099 | Sum of GTIs [s] |
| ontime6 | 18540.79993099 | Sum of GTIs [s] |
| ontime7 | 18540.79993099 | Sum of GTIs [s] |
| ontime8 | 18540.79993099 | Sum of GTIs [s] |
| l2events | 209851 | Number of level 2 events |



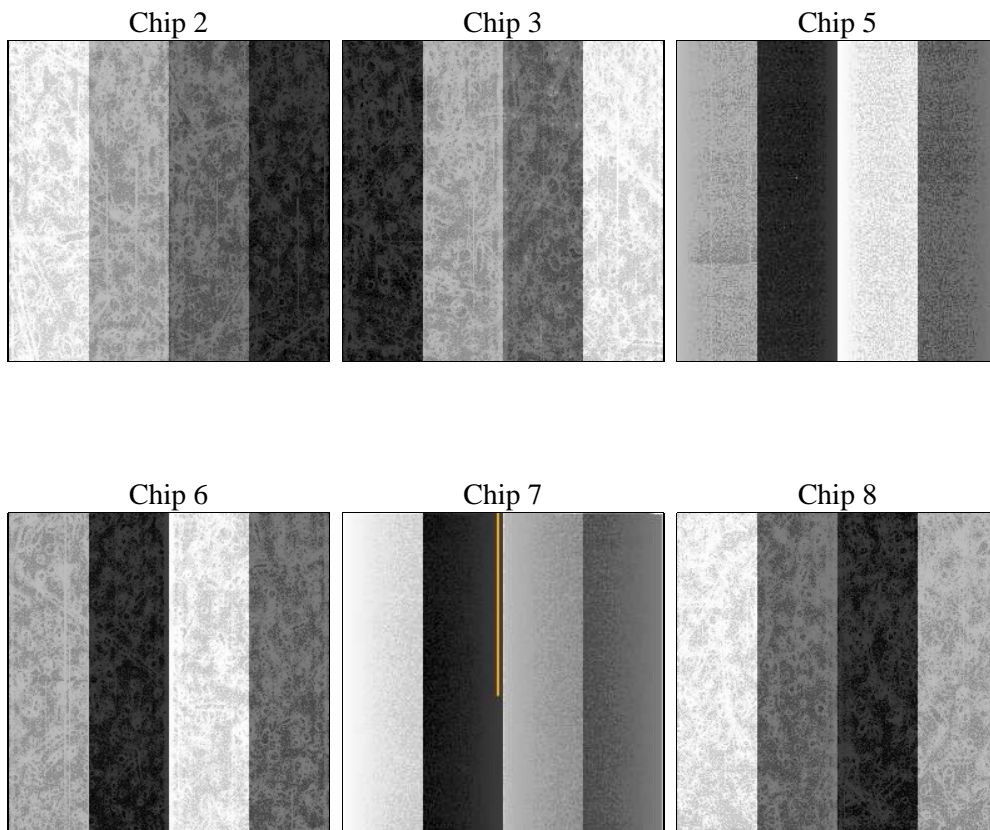
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 18500.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 18540.79993099 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime2 | 18527.835929871 | Sum of GTIs [s] |
| date | 2012-04-24T09:17:03 | Date and time of file creation | ontime3 | 18537.558930695 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 18540.79993099 | Sum of GTIs [s] |
| | | | ontime6 | 18540.79993099 | Sum of GTIs [s] |
| | | | ontime7 | 18540.79993099 | Sum of GTIs [s] |
| | | | ontime8 | 18540.79993099 | Sum of GTIs [s] |
| | | | l1events | 1001218 | Number of level 1 events |

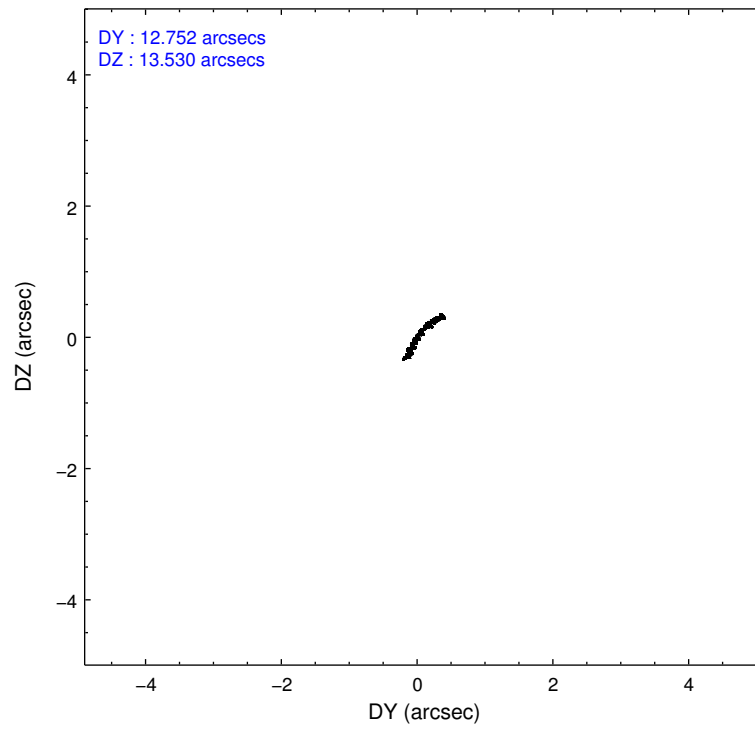
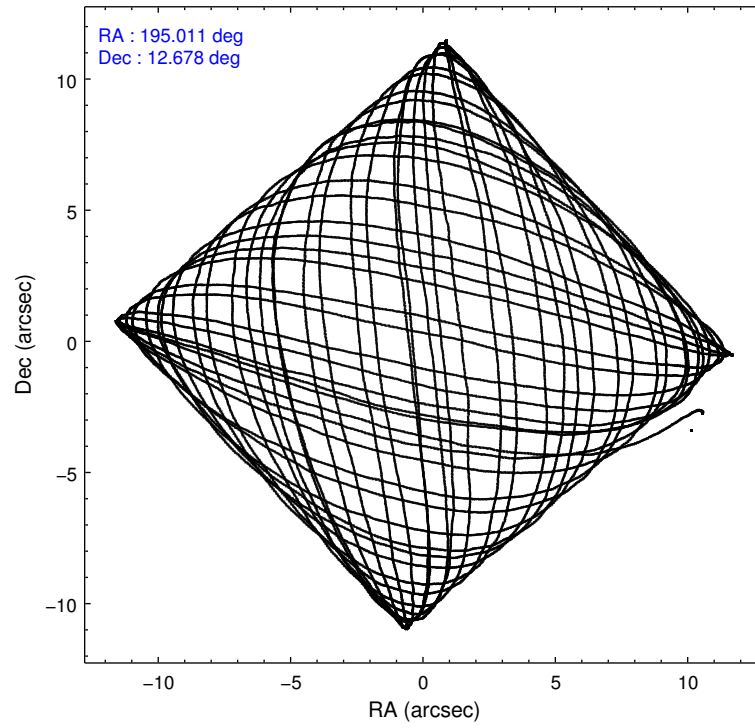
2.1.4 Events

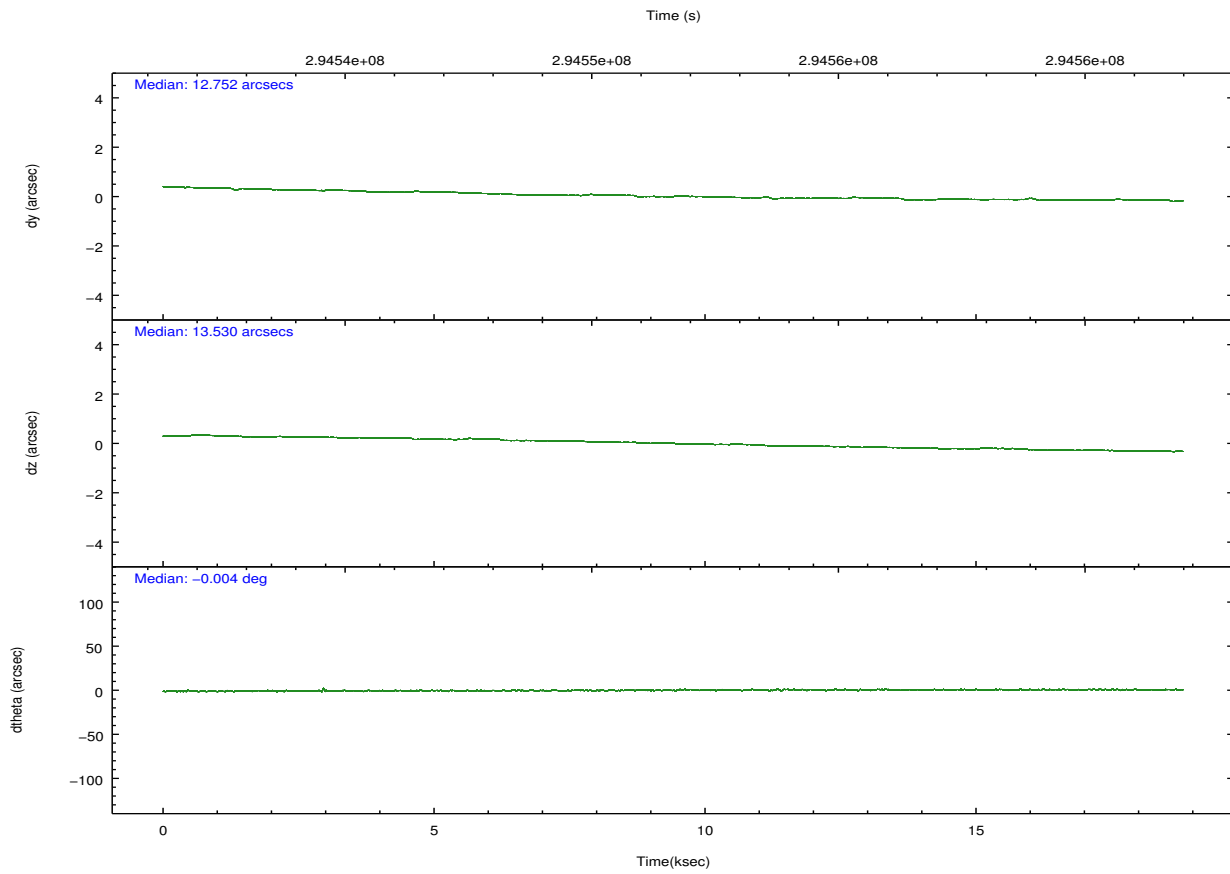
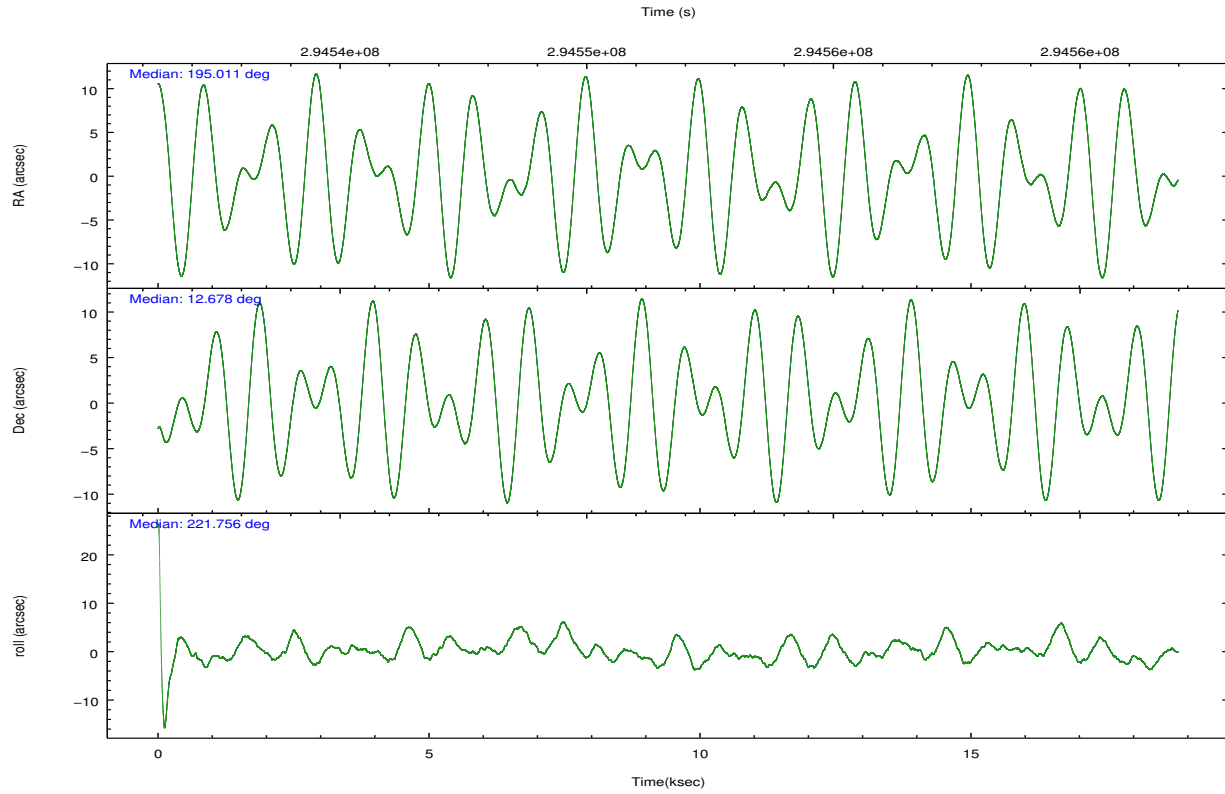
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|-------|--------|-------|--------|
| level 1 events | 159374 | 142071 | 213751 | 149478 | 154654 | 181890 | grade 0 events | 5152 | 4642 | 20889 | 5041 | 6458 | 11739 |
| rejected events | 145209 | 129014 | 101707 | 134924 | 83058 | 139659 | | 3% | 3% | 9% | 3% | 4% | 6% |
| rejected % | 91% | 90% | 47% | 90% | 53% | 76% | grade 1 events | 92 | 74 | 1345 | 78 | 123 | 127 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3266 | 2792 | 30861 | 3277 | 14490 | 9670 |
| | | | | | | | | 2% | 1% | 14% | 2% | 9% | 5% |
| | | | | | | | grade 3 events | 1510 | 1498 | 4520 | 1617 | 6718 | 4838 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 1584 | 1420 | 3923 | 1558 | 6505 | 4421 |
| | | | | | | | | 0% | 0% | 1% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 4576 | 5407 | 16286 | 5542 | 16417 | 8233 |
| | | | | | | | | 2% | 3% | 7% | 3% | 10% | 4% |
| | | | | | | | grade 6 events | 2668 | 2709 | 51894 | 3065 | 37442 | 11595 |
| | | | | | | | | 1% | 1% | 24% | 2% | 24% | 6% |
| | | | | | | | grade 7 events | 140526 | 123529 | 84033 | 129300 | 66501 | 131267 |
| | | | | | | | | 88% | 86% | 39% | 86% | 42% | 72% |

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 | 195.019492 | 195.0110811092403 | CCD I2 on | Y | Y |
| [deg] Pointing Dec | 12.703655 | 12.67754668703897 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 221.607768 | 221.7662779222954 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | O2 | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | 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 | O1 | Y |
| [s] Observation start time (MET) | 294542558.184000 | 294541486.36888 | CCD S5 on | N | N |
| Observation start date | 2007-05-03T01:21:33 | 2007-05-03T01:04:46 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 294561058.184000 | 294561988.93236 | On-chip summing requested | N | N |
| Observation end date | 2007-05-03T06:29:53 | 2007-05-03T06:46:28 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



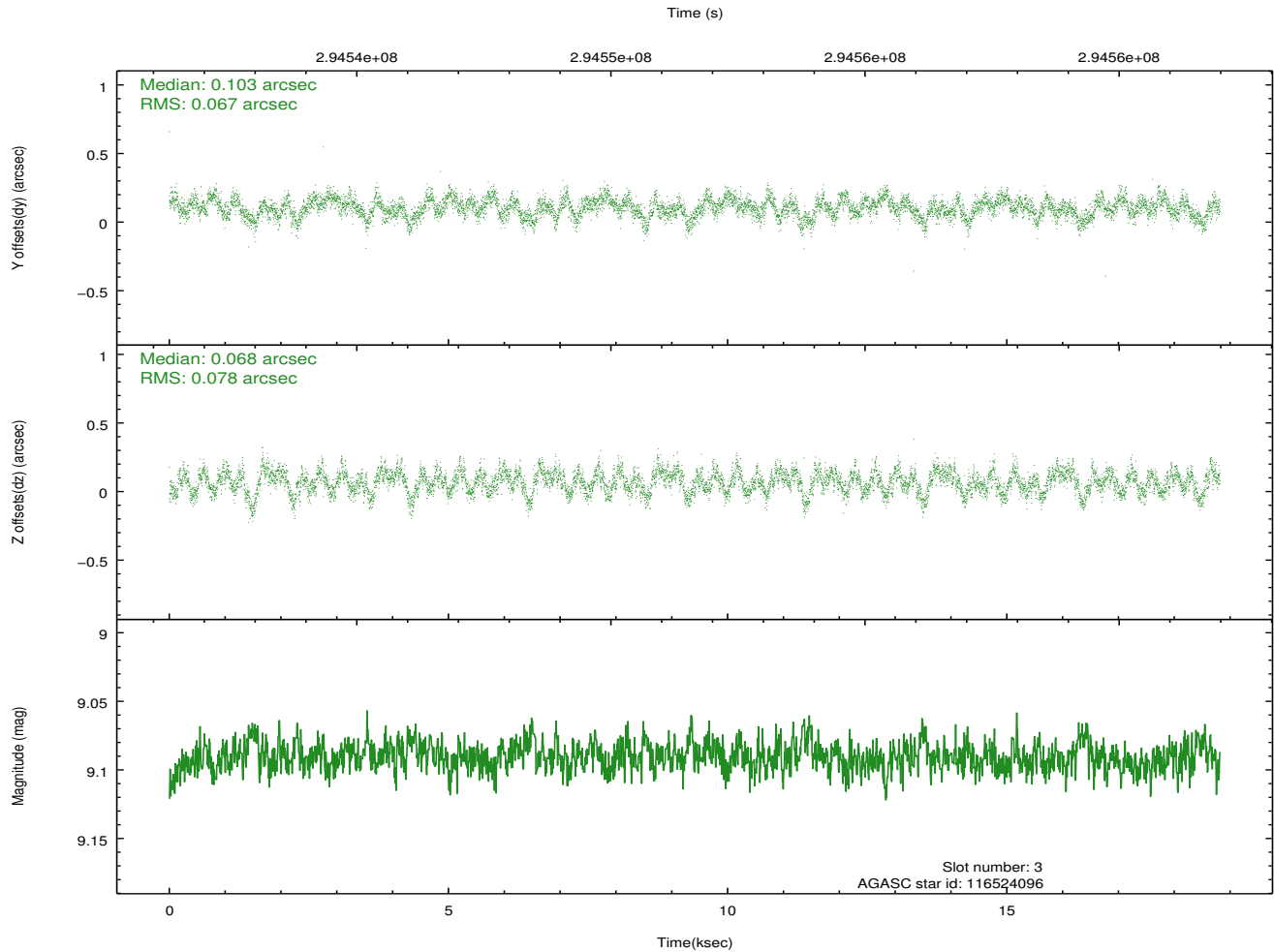
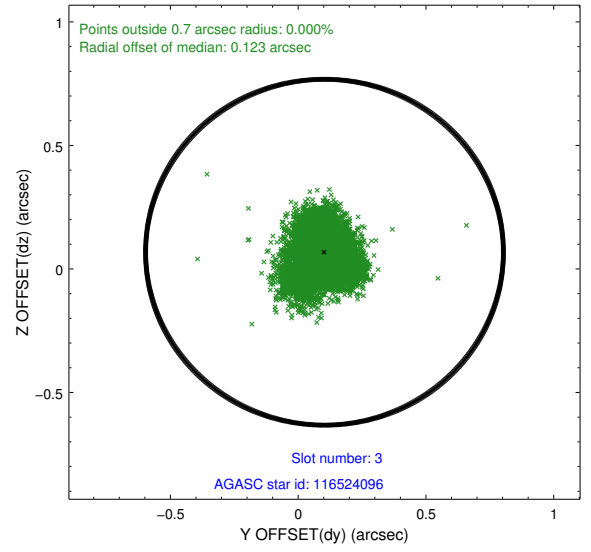
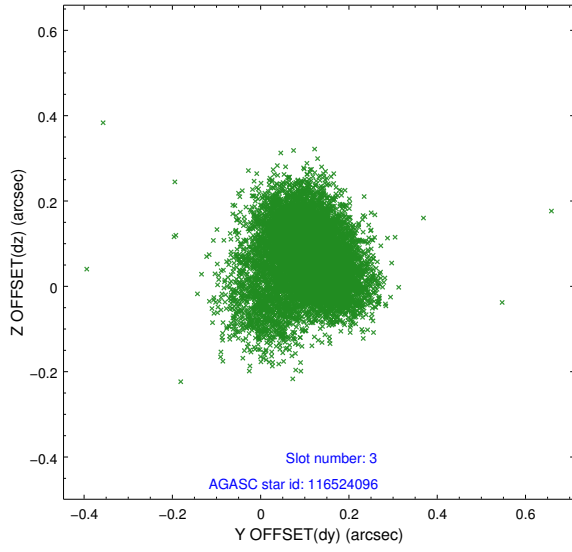


Slot Statistics

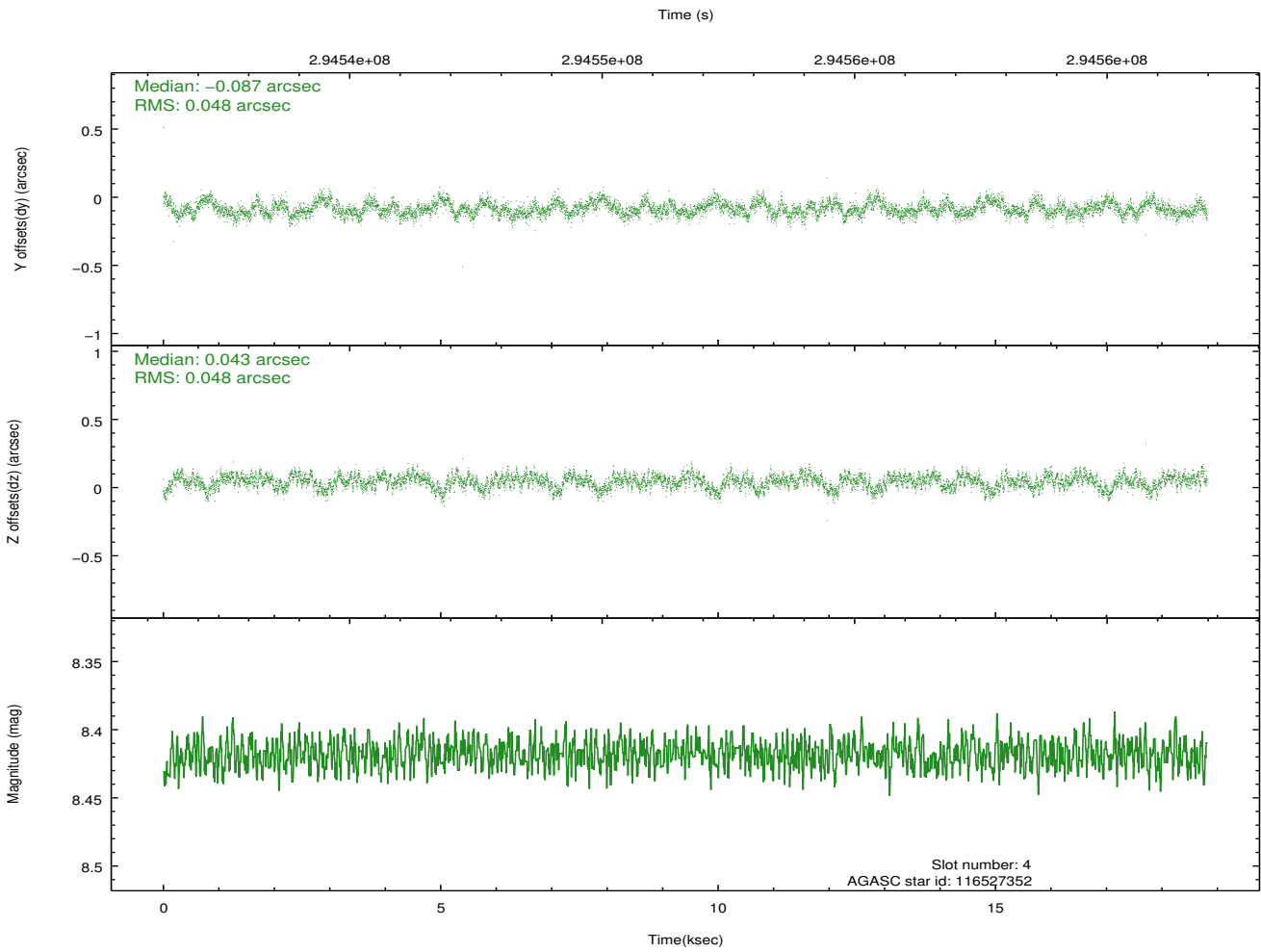
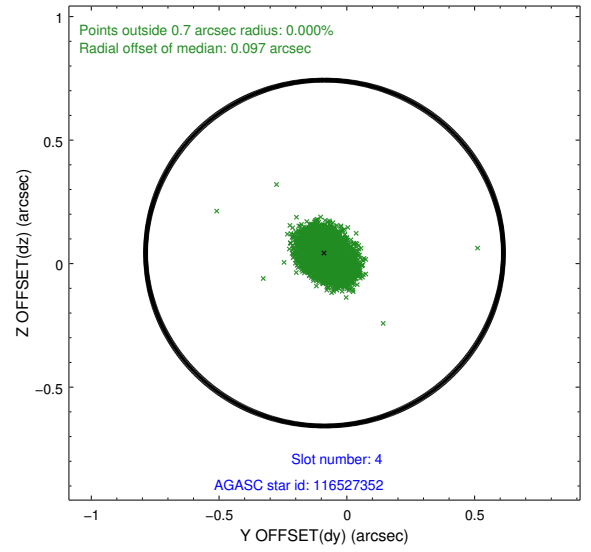
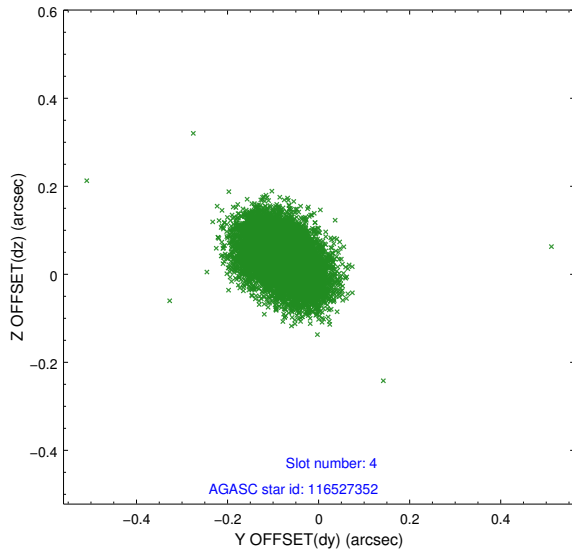
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.09 | 4589 | -0.027 | -0.059 | 0.010 | 0.015 | 0.000000 | 0.000000 | -765.73 | -1734.93 |
| 1 | FID | ACIS-S-4 | 7.19 | 4590 | 0.150 | 0.029 | 0.015 | 0.026 | 0.000000 | 0.000000 | 2147.63 | 173.42 |
| 2 | FID | ACIS-S-5 | 7.23 | 4590 | -0.155 | 0.039 | 0.009 | 0.016 | 0.000000 | 0.000000 | -1818.43 | 167.34 |
| 3 | GUIDE | 116524096 | 9.09 | 9171 | 0.103 | 0.068 | 0.108 | 0.180 | 194.956948 | 12.943353 | -408.56 | -790.52 |
| 4 | GUIDE | 116527352 | 8.42 | 9177 | -0.087 | 0.043 | 0.071 | 0.119 | 195.349925 | 13.169883 | -1980.82 | -486.93 |
| 5 | GUIDE | 116527432 | 9.76 | 9170 | -0.047 | 0.044 | 0.174 | 0.261 | 195.424040 | 13.173544 | -2184.12 | -324.09 |
| 6 | GUIDE | 116529304 | 9.82 | 9170 | 0.090 | -0.125 | 0.124 | 0.202 | 195.459196 | 12.690906 | -1125.25 | 1058.85 |
| 7 | GUIDE | 116529456 | 10.34 | 9164 | -0.061 | -0.028 | 0.154 | 0.247 | 195.731712 | 12.662703 | -1775.05 | 1769.08 |

2.4 Star Slots

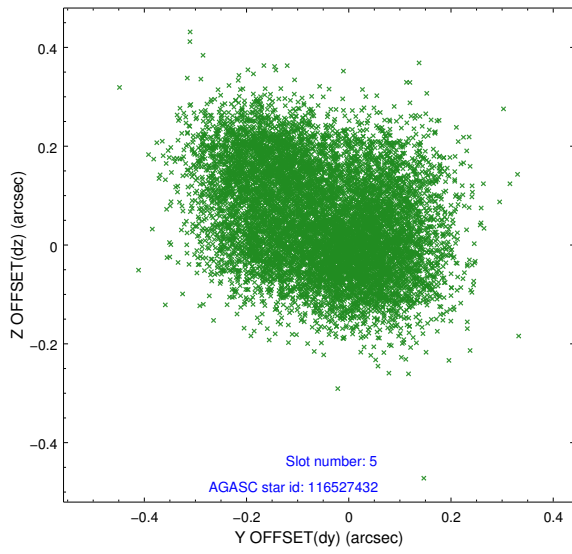
2.4.1 Slot 3



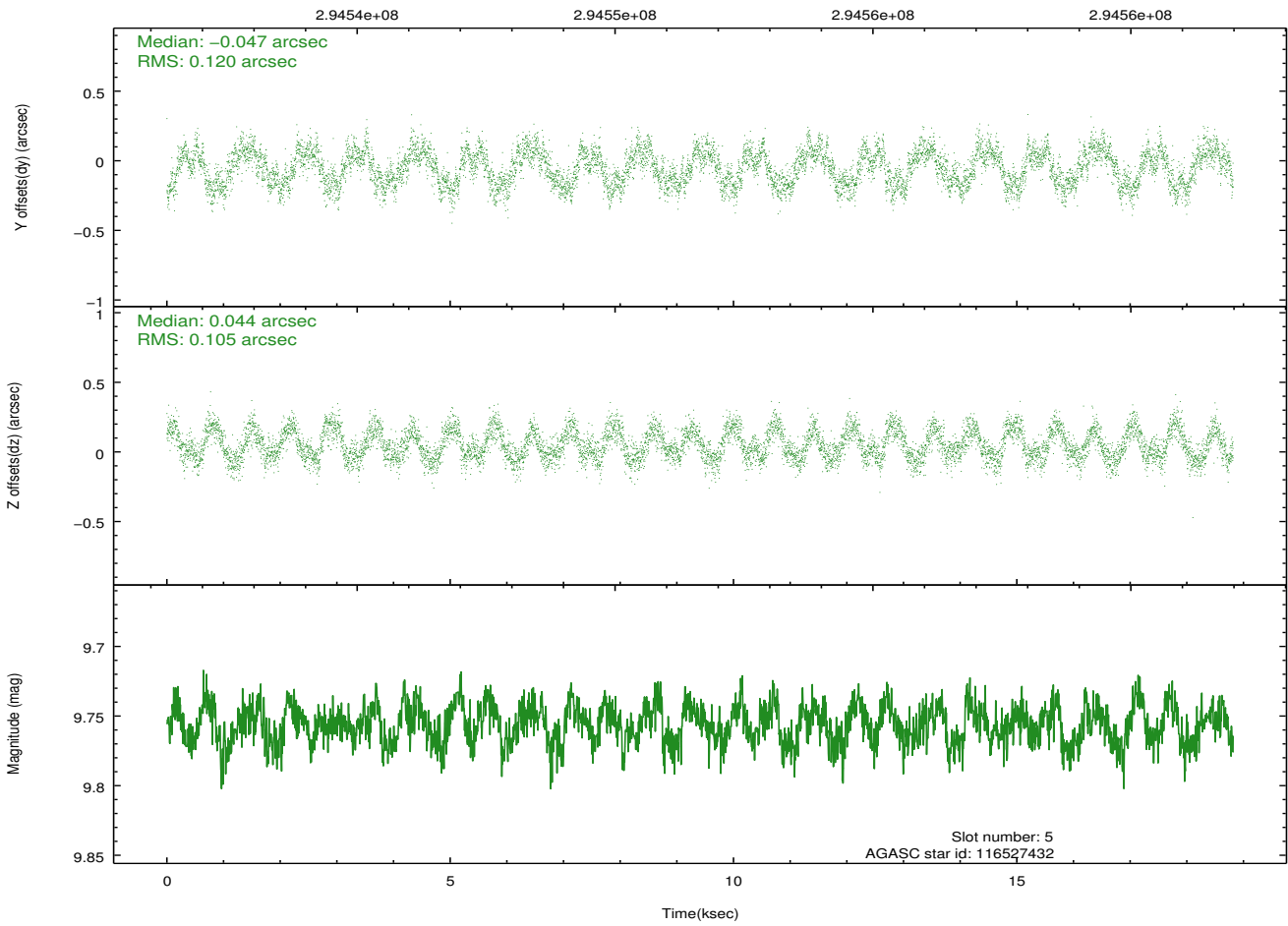
2.4.2 Slot 4



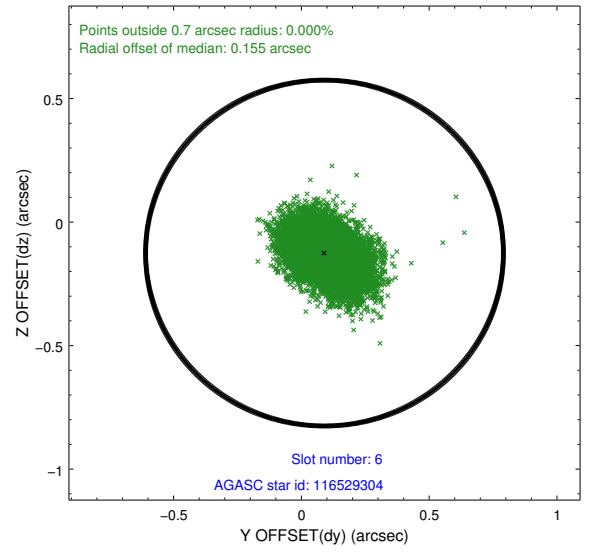
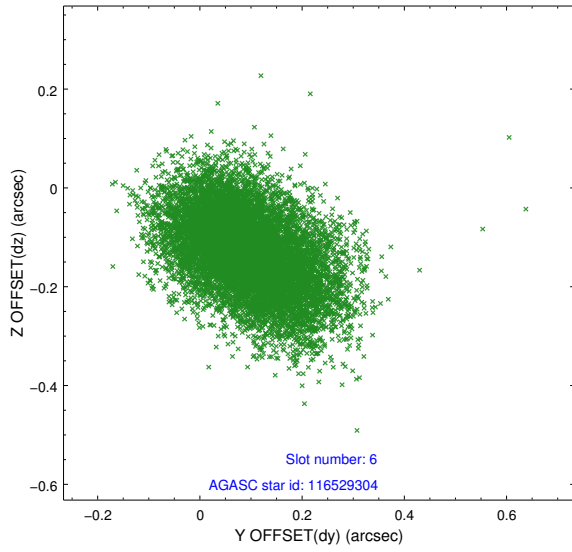
2.4.3 Slot 5



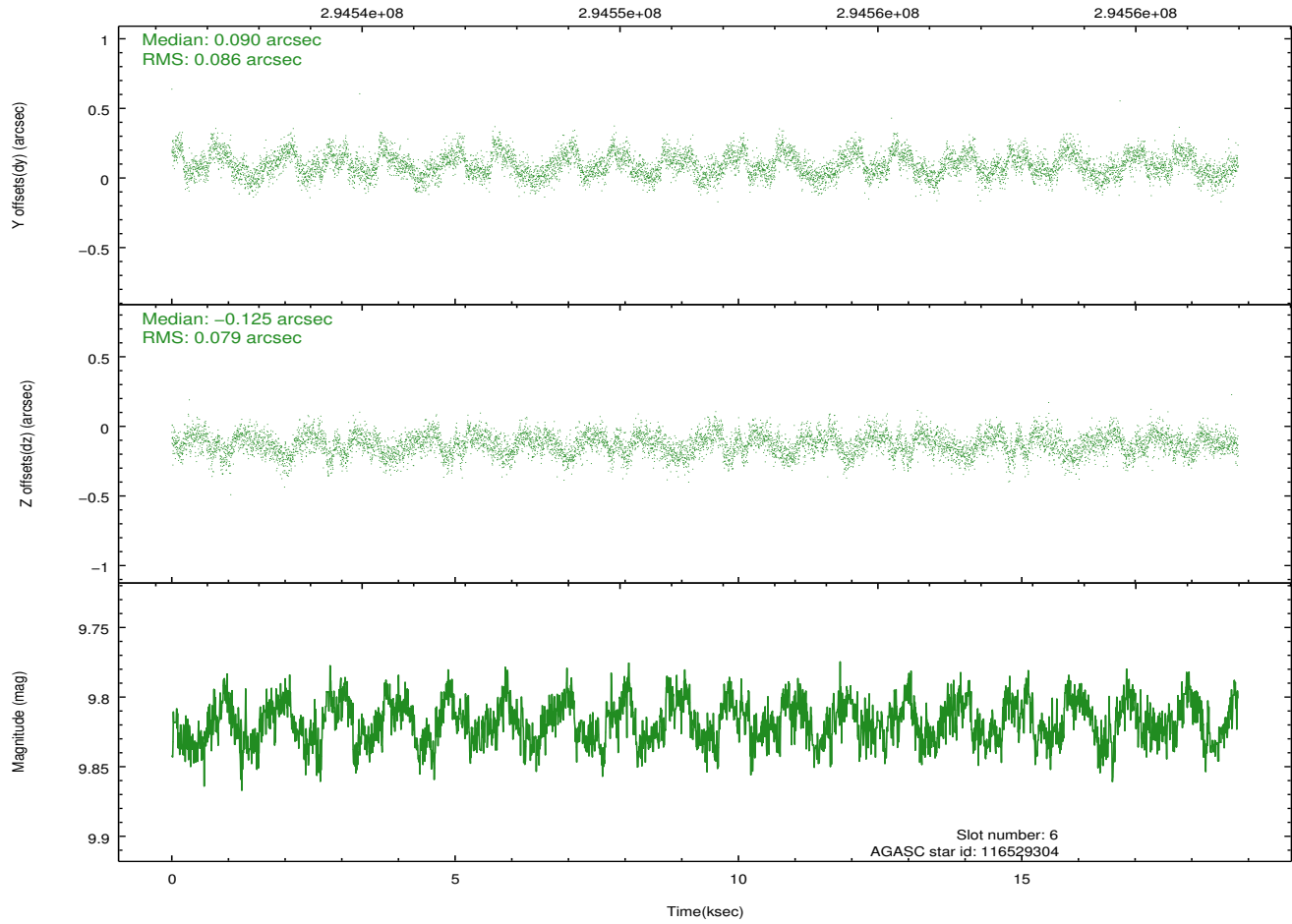
Time (s)



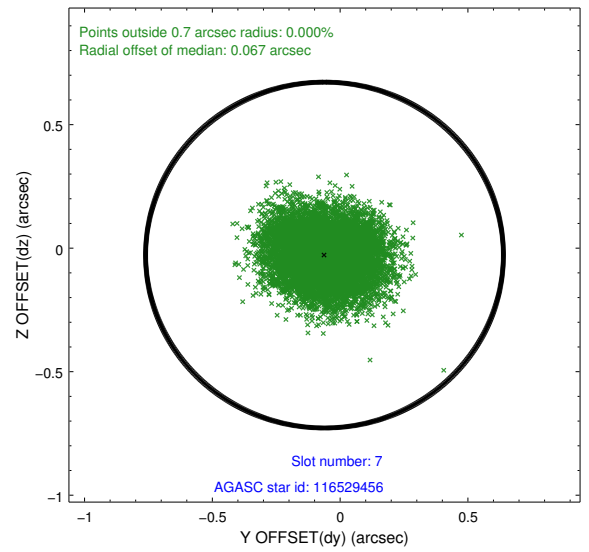
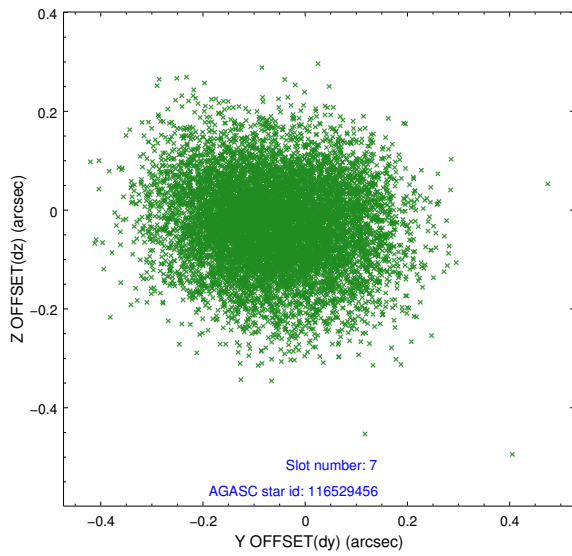
2.4.4 Slot 6



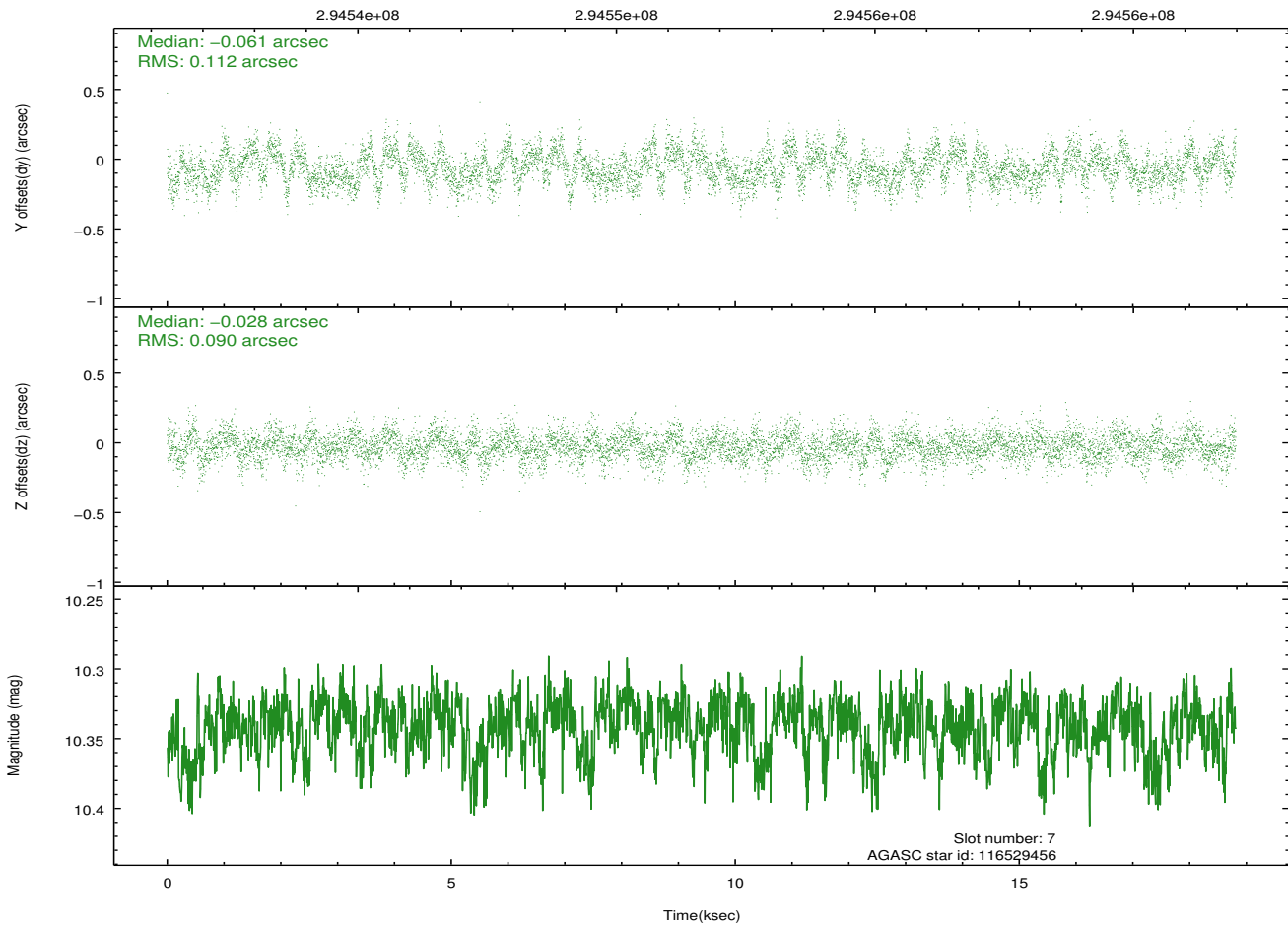
Time (s)



2.4.5 Slot 7

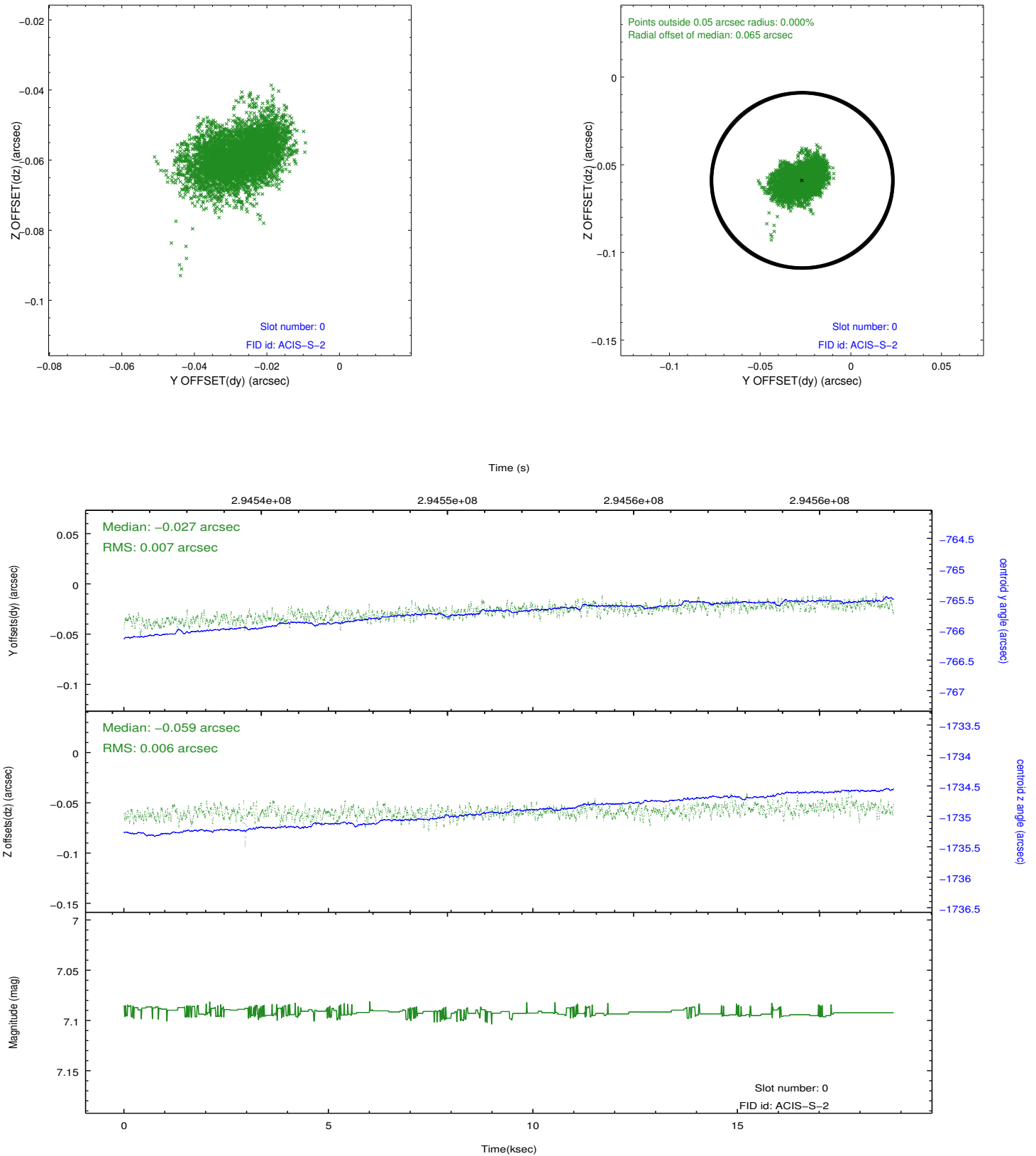


Time (s)

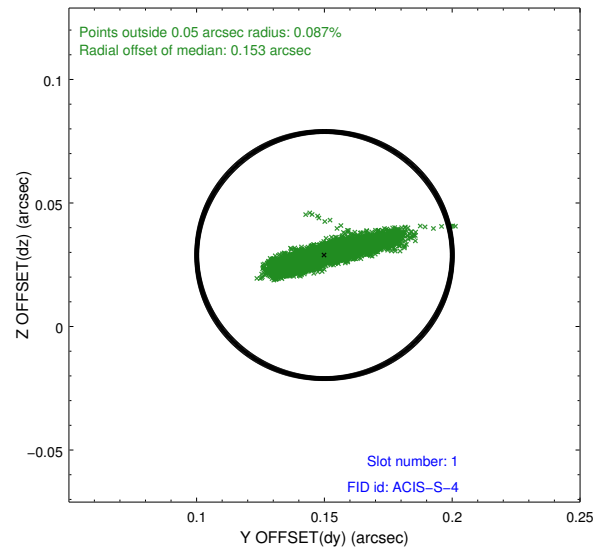
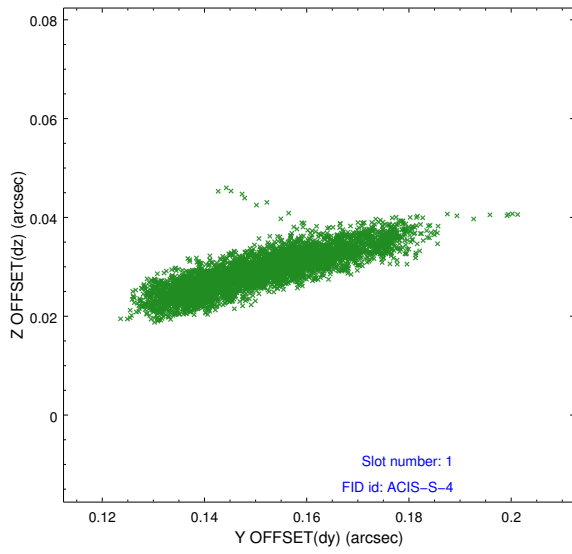


2.5 FID Slots

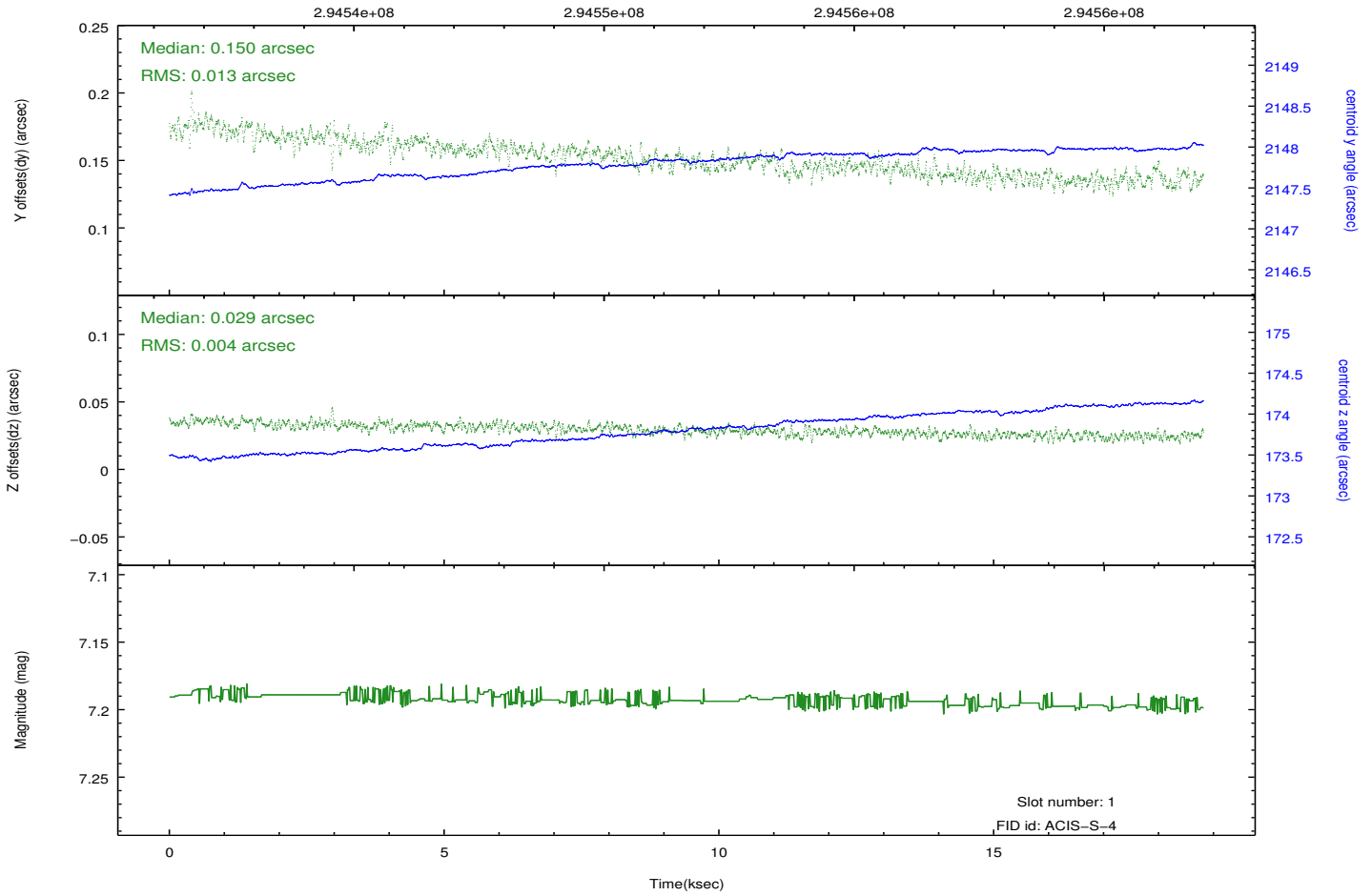
2.5.1 Slot 0



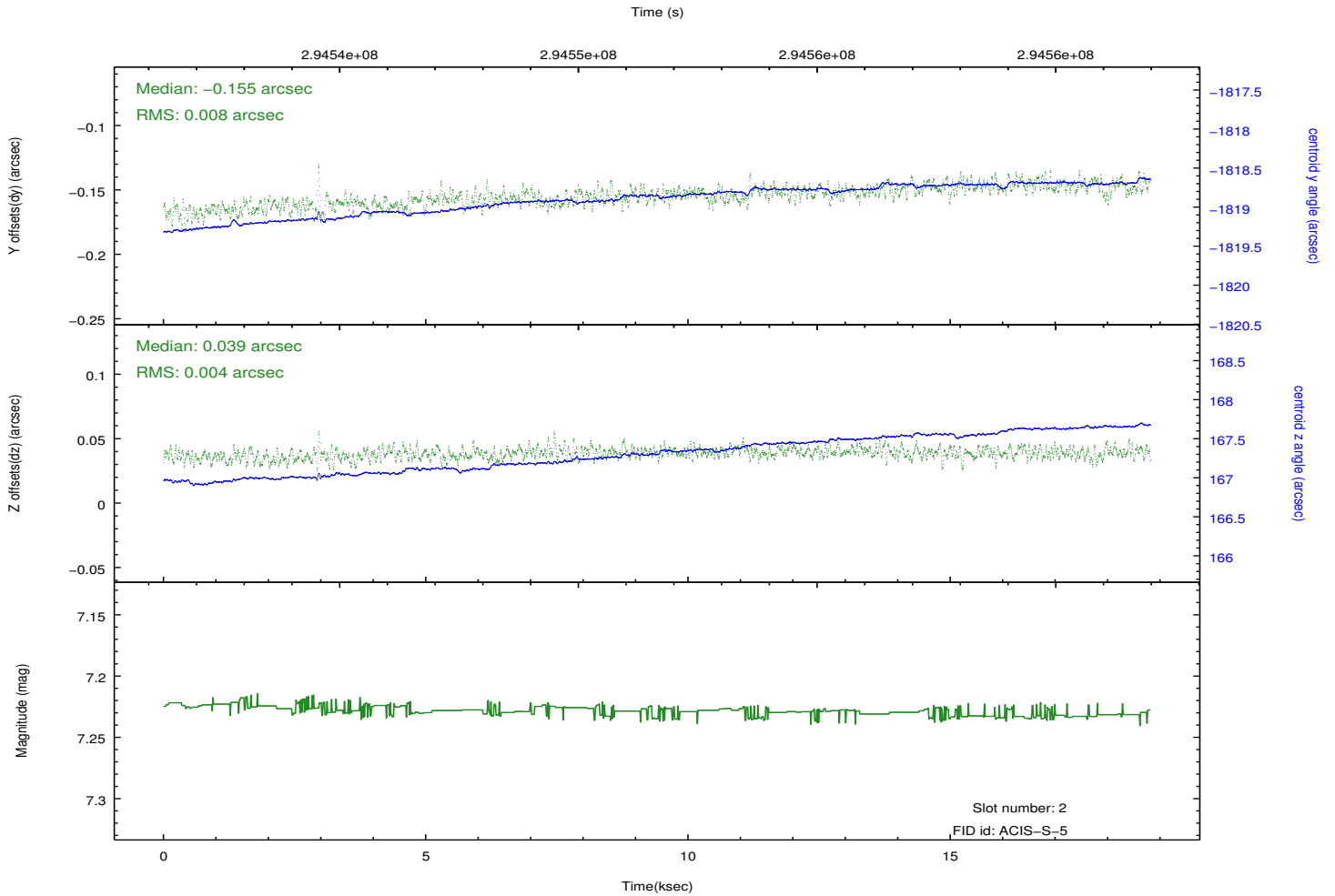
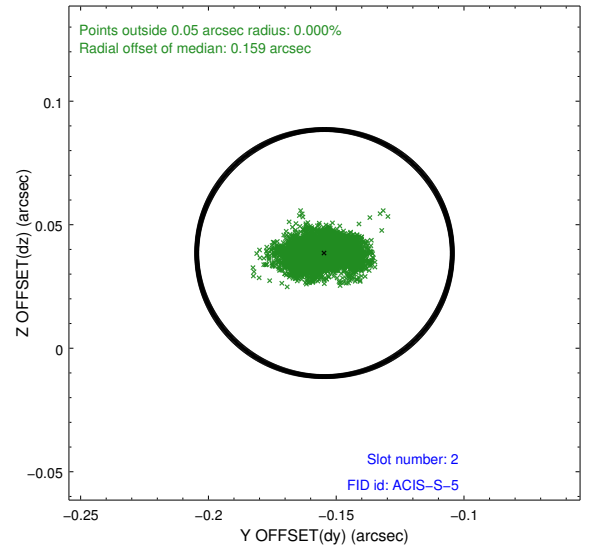
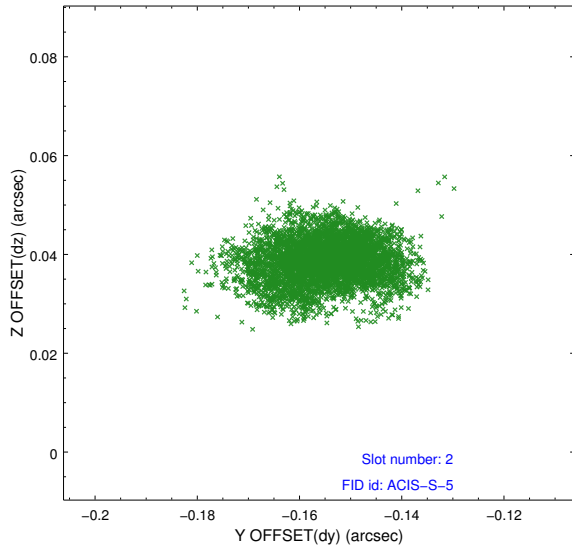
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.04.25 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 18.5407999 |

A.2 Comments