

V&V Reference Report

L2 ASCDS Version : 10.4

Observation 16575 - L2 Version 1
Chandra X-Ray Center

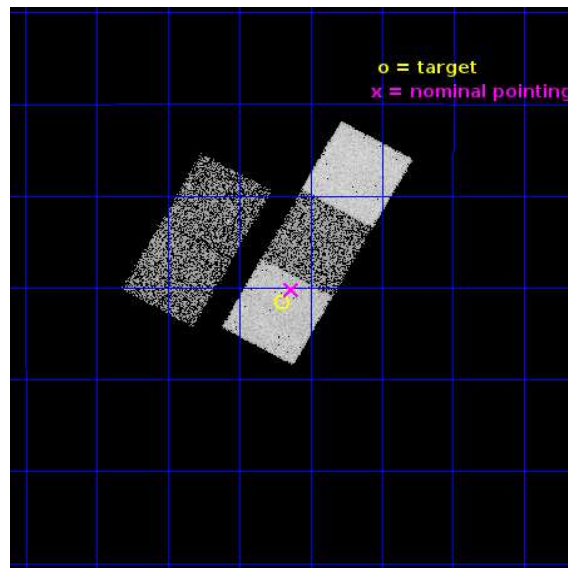
L2 Processing Date : Jun 24 2015

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1 Front

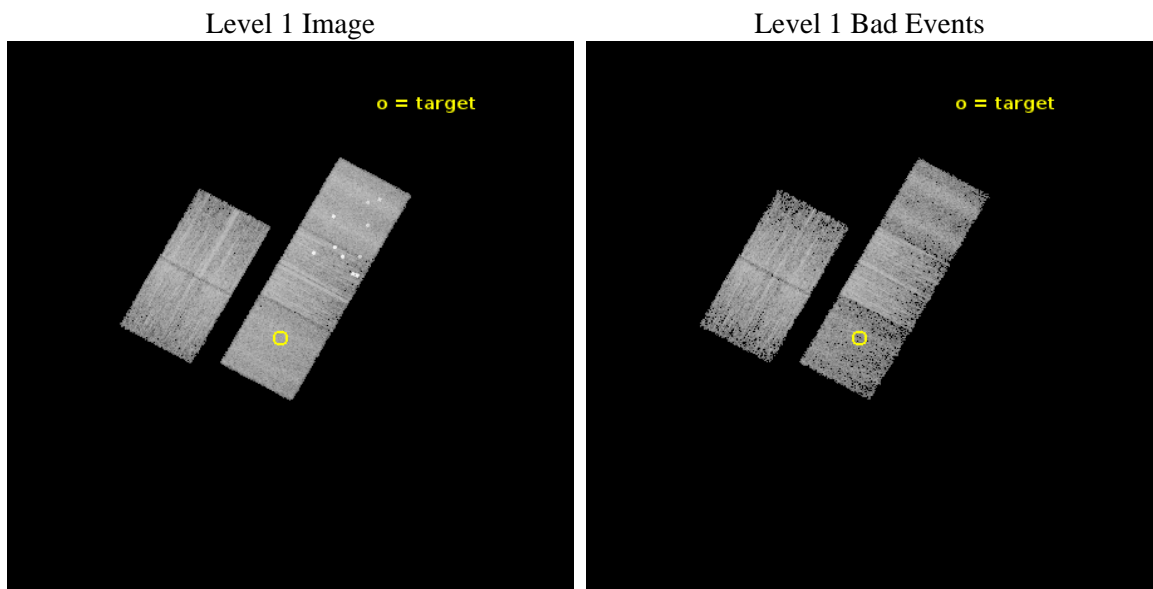
| | | |
|----------|--|---|
| seq_num | 801438 | Sequence number |
| obs_id | 16575 | Observation id |
| title | Scaling Relations of Distant, SZ-confirmed XXL Galaxy Clusters | Pro |
| observer | Dr Adam Mantz | Principal investigator |
| object | XLSSJ020611.70-061134 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 31.549167 | Observer's specified target RA [deg] |
| dec_targ | -6.193 | Observer's specified target Dec [deg] |
| ra_nom | 31.533569795485 | Nominal RA [deg] |
| dec_nom | -6.170162082189 | Nominal Dec [deg] |
| roll_nom | 119.08318181682 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 5053.0000389814 | Sum of GTIs [s] |
| livetime | 4986.9788735076 | Livetime [s] |
| ontime2 | 5053.0000389814 | Sum of GTIs [s] |
| ontime3 | 5053.0000389814 | Sum of GTIs [s] |
| ontime5 | 5053.0000389814 | Sum of GTIs [s] |
| ontime6 | 5053.0000389814 | Sum of GTIs [s] |
| ontime7 | 5053.0000389814 | Sum of GTIs [s] |
| l2events | 62301 | Number of level 2 events |



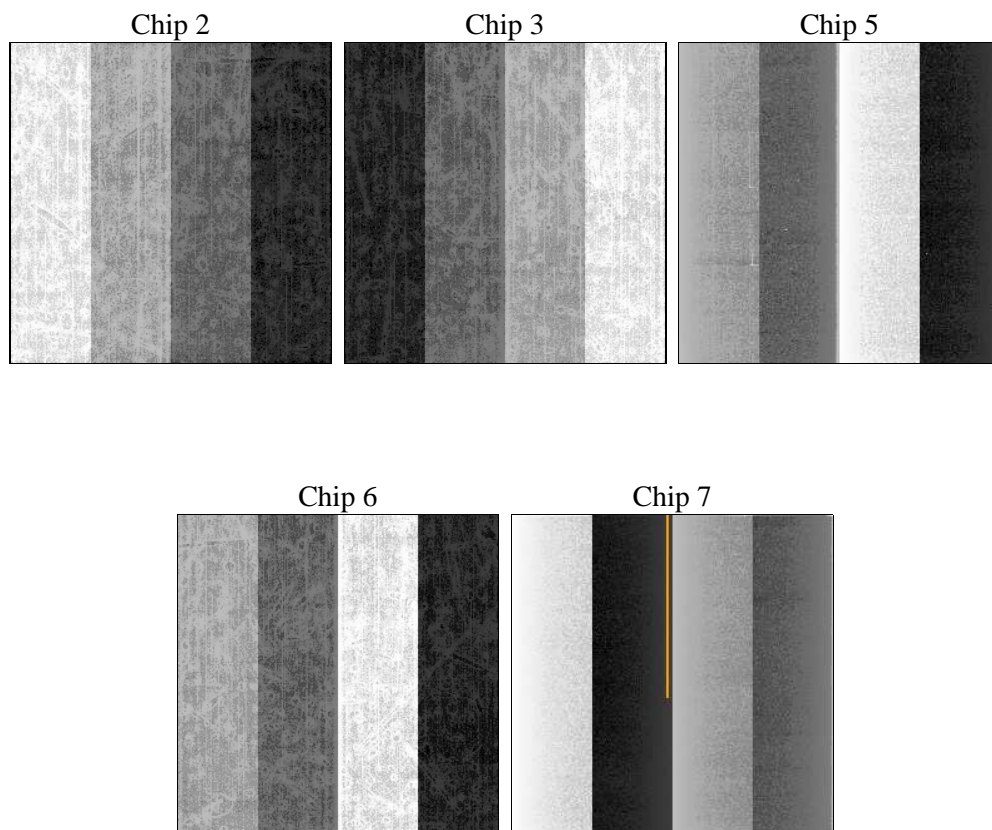
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 5000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.4 | Processing system revision | ontime | 5053.0000389814 | Sum of GTIs [s] |
| caldsver | 4.6.7 | | ontime2 | 5053.0000389814 | Sum of GTIs [s] |
| date | 2015-06-24T18:53:47 | Date and time of file creation | ontime3 | 5053.0000389814 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime5 | 5053.0000389814 | Sum of GTIs [s] |
| | | | ontime6 | 5053.0000389814 | Sum of GTIs [s] |
| | | | ontime7 | 5053.0000389814 | Sum of GTIs [s] |
| | | | l1events | 282160 | Number of level 1 events |

2.1.4 Events

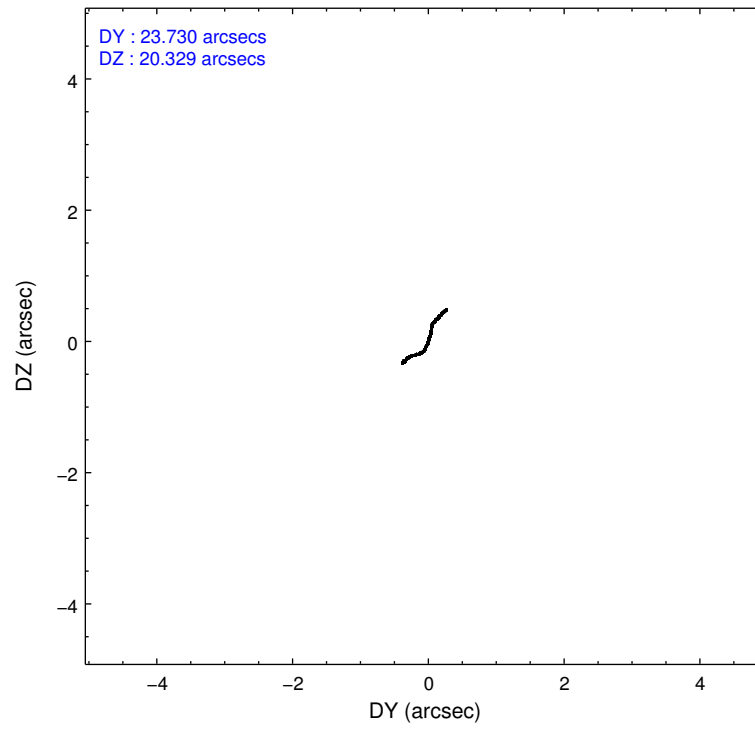
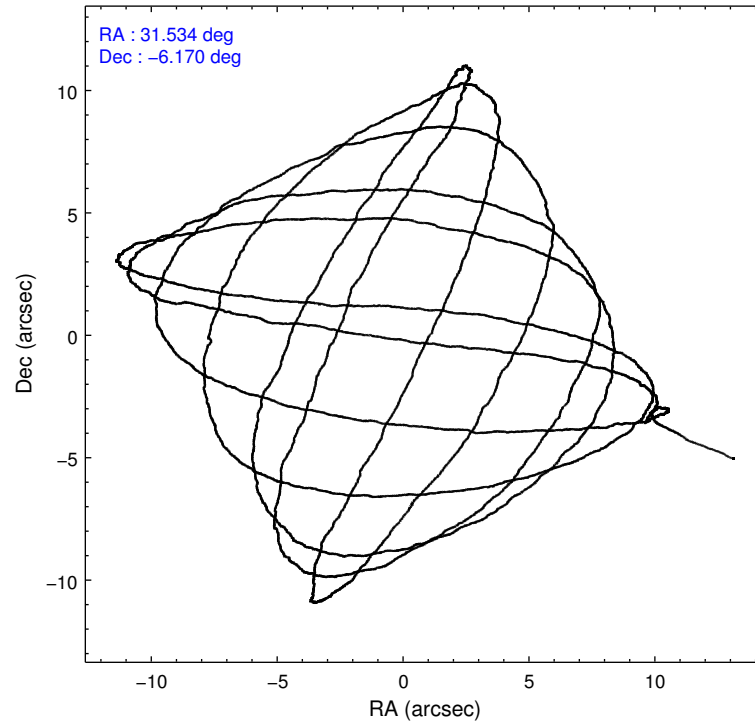
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 53239 | 47704 | 67502 | 66054 | 47661 |
| rejected events | 43779 | 43589 | 34573 | 50253 | 24865 |
| rejected % | 82% | 91% | 51% | 76% | 52% |

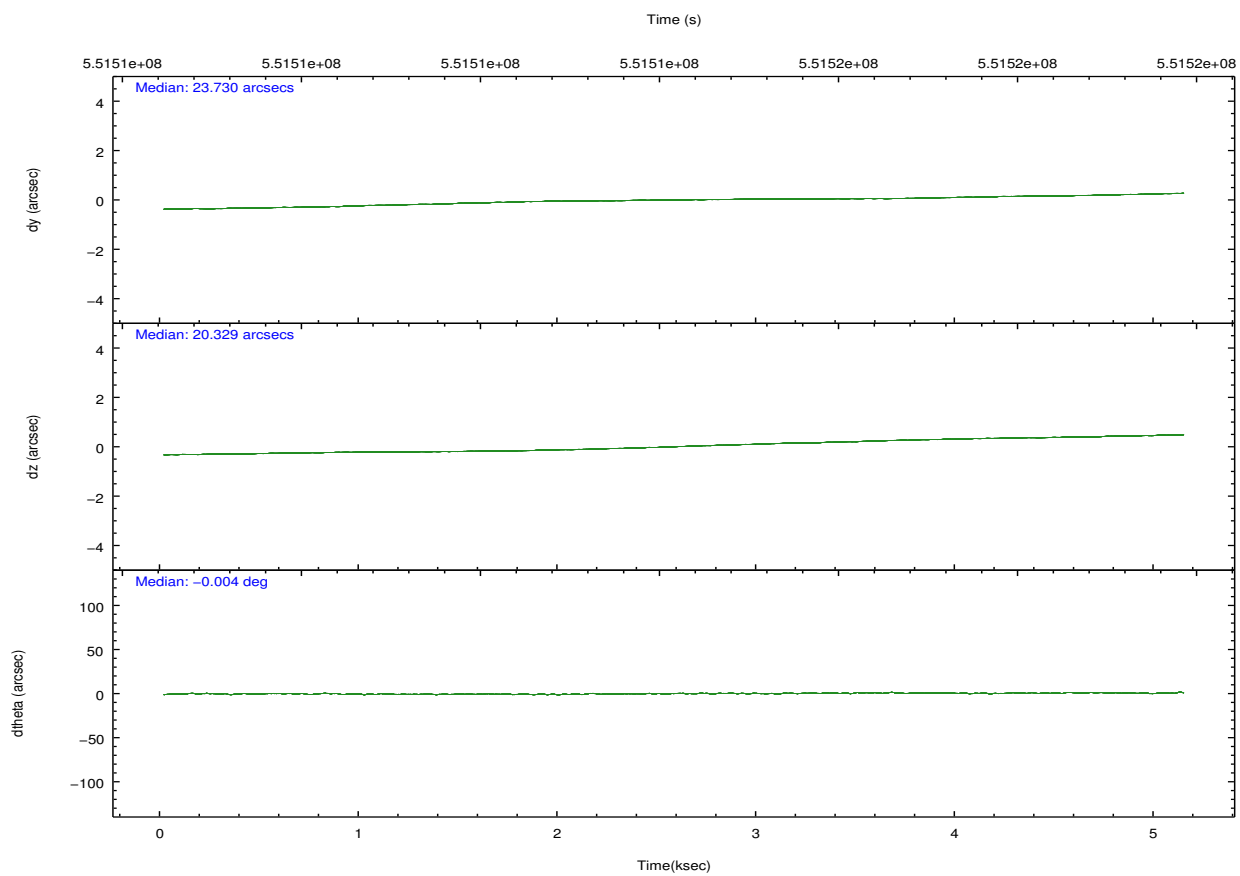
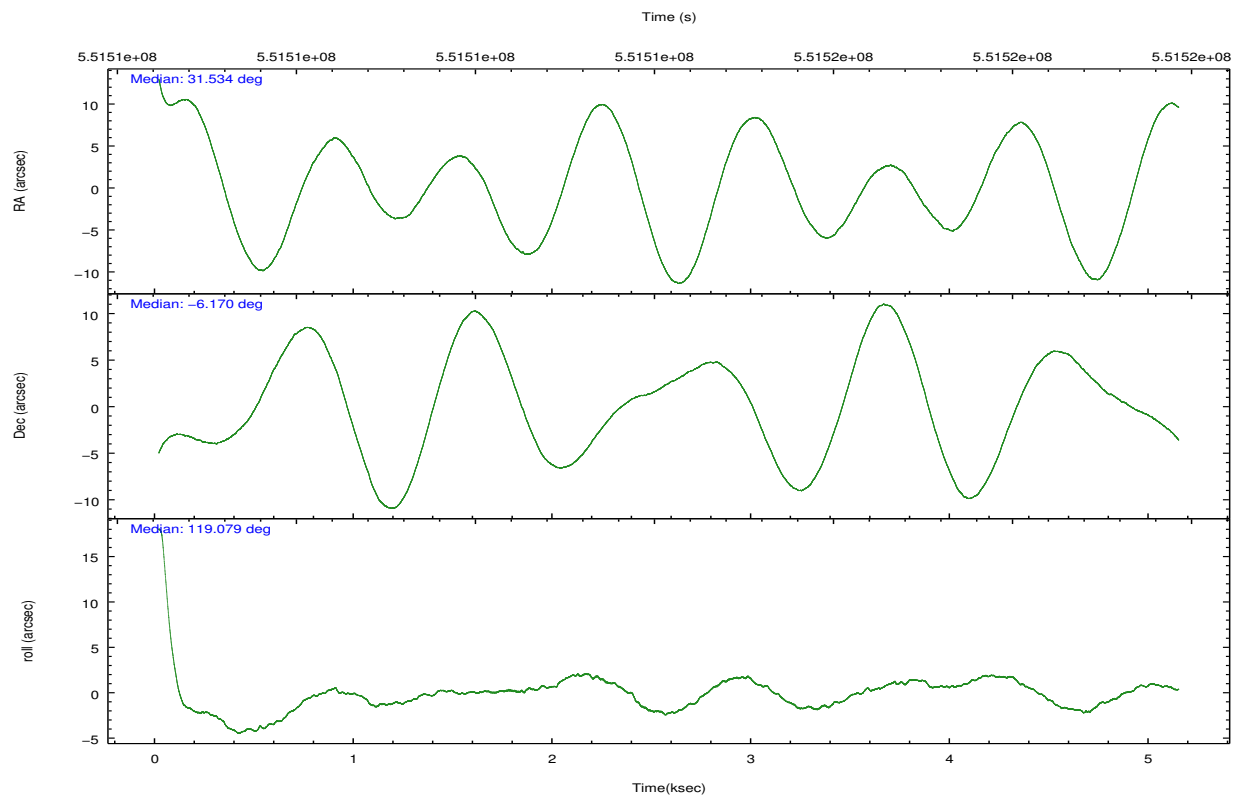
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 4790 | 1913 | 6322 | 9008 | 2658 |
| | 8% | 4% | 9% | 13% | 5% |
| grade 1 events | 47 | 33 | 396 | 65 | 197 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2572 | 1020 | 10383 | 5319 | 6436 |
| | 4% | 2% | 15% | 8% | 13% |
| grade 3 events | 326 | 310 | 2218 | 365 | 1983 |
| | 0% | 0% | 3% | 0% | 4% |
| grade 4 events | 976 | 318 | 2234 | 370 | 2043 |
| | 1% | 0% | 3% | 0% | 4% |
| grade 5 events | 1076 | 1214 | 4062 | 1316 | 4060 |
| | 2% | 2% | 6% | 1% | 8% |
| grade 6 events | 811 | 561 | 11815 | 755 | 9707 |
| | 1% | 1% | 17% | 1% | 20% |
| grade 7 events | 42641 | 42335 | 30072 | 48856 | 20577 |
| | 80% | 88% | 44% | 73% | 43% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-23567 | ACIS-23567 | 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 | 31.557345 | 31.53356979548492 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | -6.183935 | -6.170162082189002 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 118.929078 | 119.0831818168156 | 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 | -190.1400660498719 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | CCD S4 on | N | N |
| [s] Observation start time (MET) | 551511644.184000 | 551510459.55722 | CCD S5 on | N | N |
| Observation start date | 2015-06-24T05:39:37 | 2015-06-24T05:20:59 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 551516644.184000 | 551517504.89511 | On-chip summing requested | N | N |
| Observation end date | 2015-06-24T07:02:57 | 2015-06-24T07:18:24 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



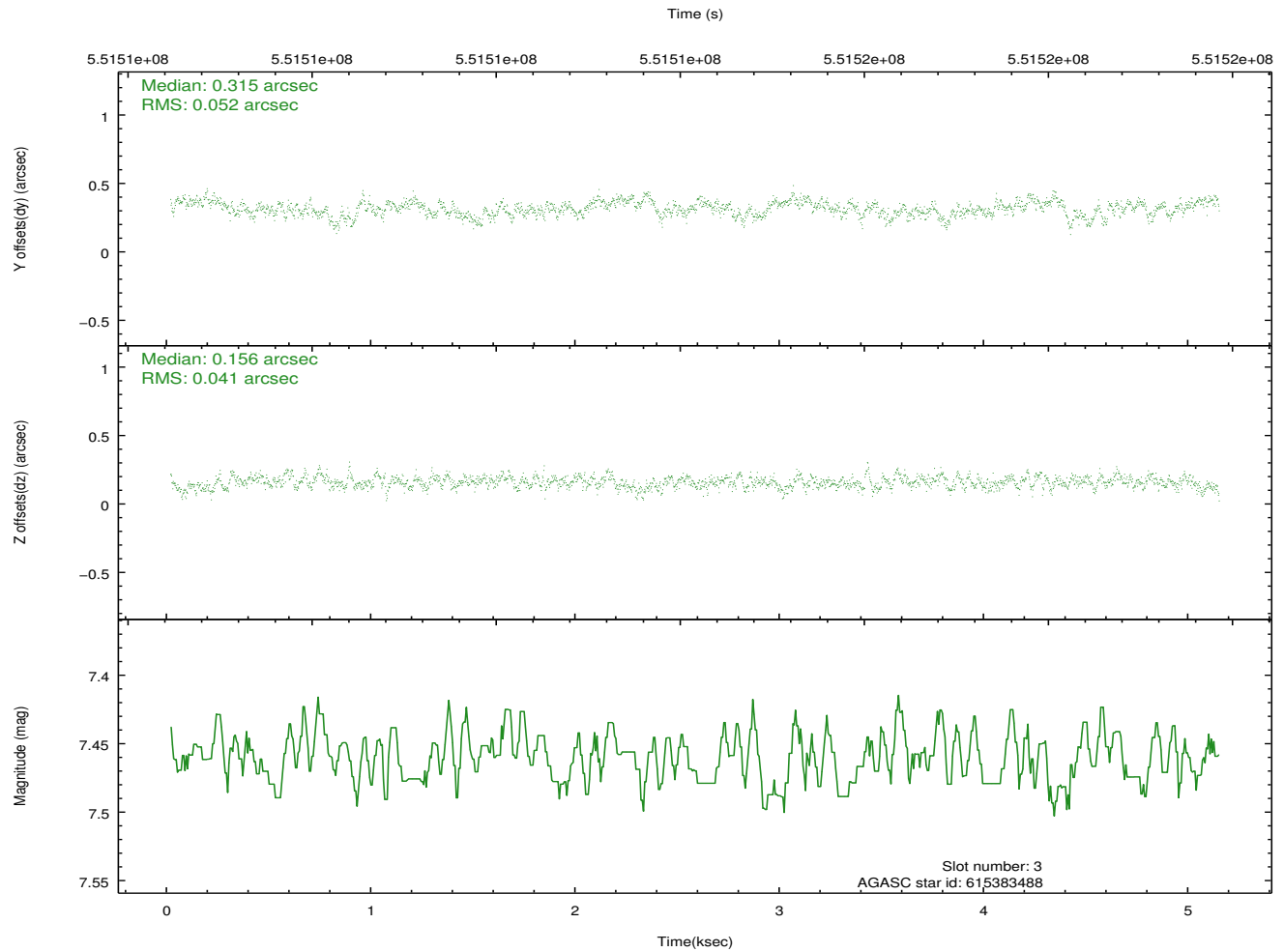
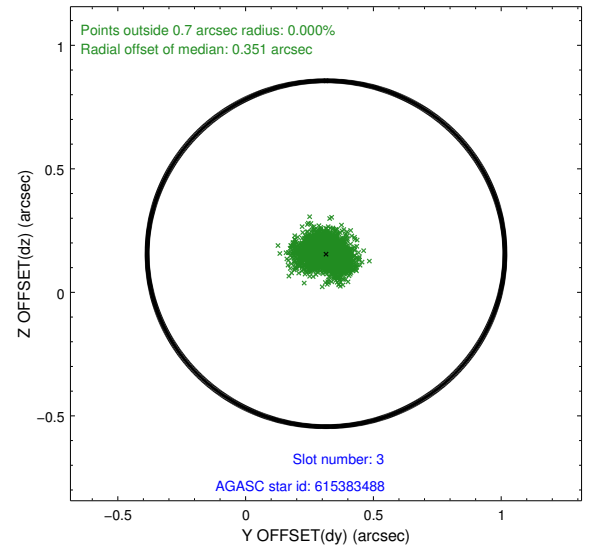
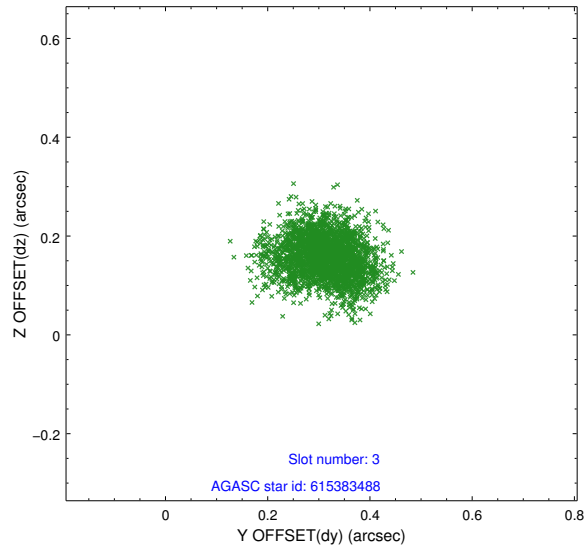


Slot Statistics

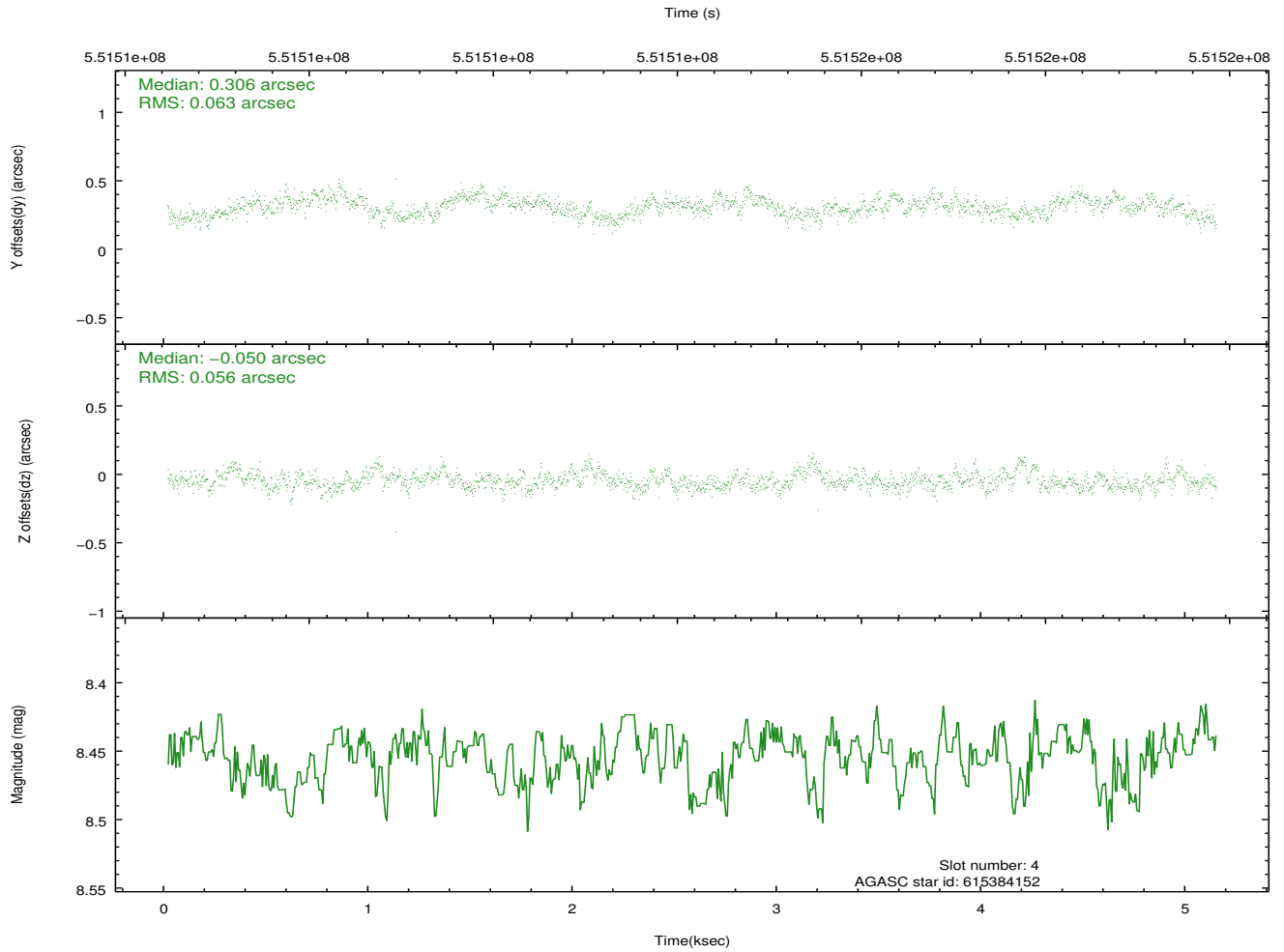
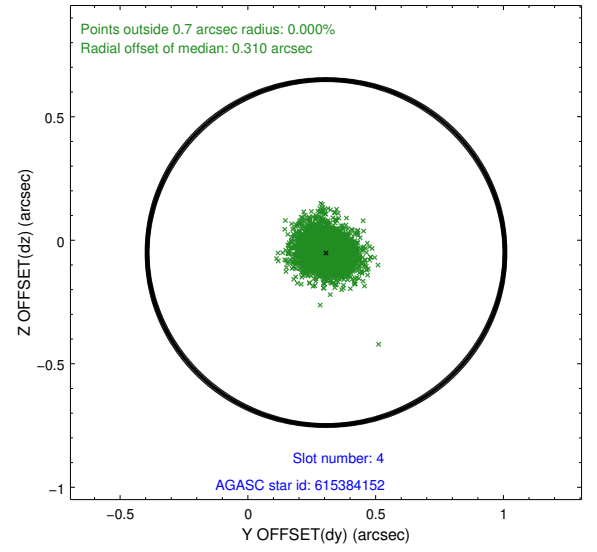
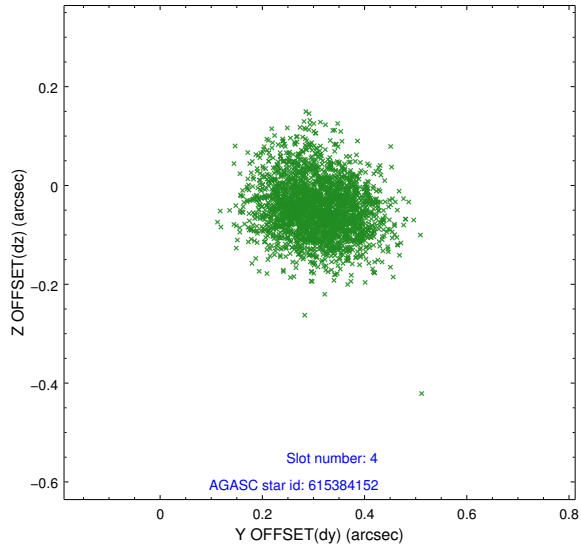
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | | ACIS-S-2 | 6.97 | 1252 | -0.187 | -0.075 | 0.008 | 0.013 | 0.000000 | 0.000000 | -777.07 | -1741.97 |
| 1 | FID | | ACIS-S-4 | 7.07 | 1252 | 0.443 | 0.110 | 0.006 | 0.012 | 0.000000 | 0.000000 | 2136.27 | 165.49 |
| 2 | FID | | ACIS-S-5 | 7.08 | 1253 | -0.287 | -0.027 | 0.007 | 0.013 | 0.000000 | 0.000000 | -1828.52 | 160.34 |
| 3 | GUIDE | used | 615383488 | 7.46 | 2505 | 0.315 | 0.156 | 0.070 | 0.117 | 32.110315 | -6.469610 | -1857.05 | -1232.21 |
| 4 | GUIDE | used | 615384152 | 8.45 | 2505 | 0.306 | -0.050 | 0.090 | 0.146 | 31.875647 | -6.364033 | -1118.51 | -683.34 |
| 5 | GUIDE | used | 615387648 | 7.58 | 2505 | -0.118 | 0.008 | 0.066 | 0.108 | 31.673414 | -5.777737 | 1078.50 | -1071.10 |
| 6 | GUIDE | used | 615390216 | 7.65 | 2505 | -0.588 | -0.440 | 0.071 | 0.112 | 31.061043 | -5.710942 | 2350.07 | 732.20 |
| 7 | GUIDE | used | 615389936 | 8.99 | 2503 | 0.084 | 0.322 | 0.104 | 0.171 | 32.078605 | -5.743445 | 485.52 | -2399.67 |

2.4 Star Slots

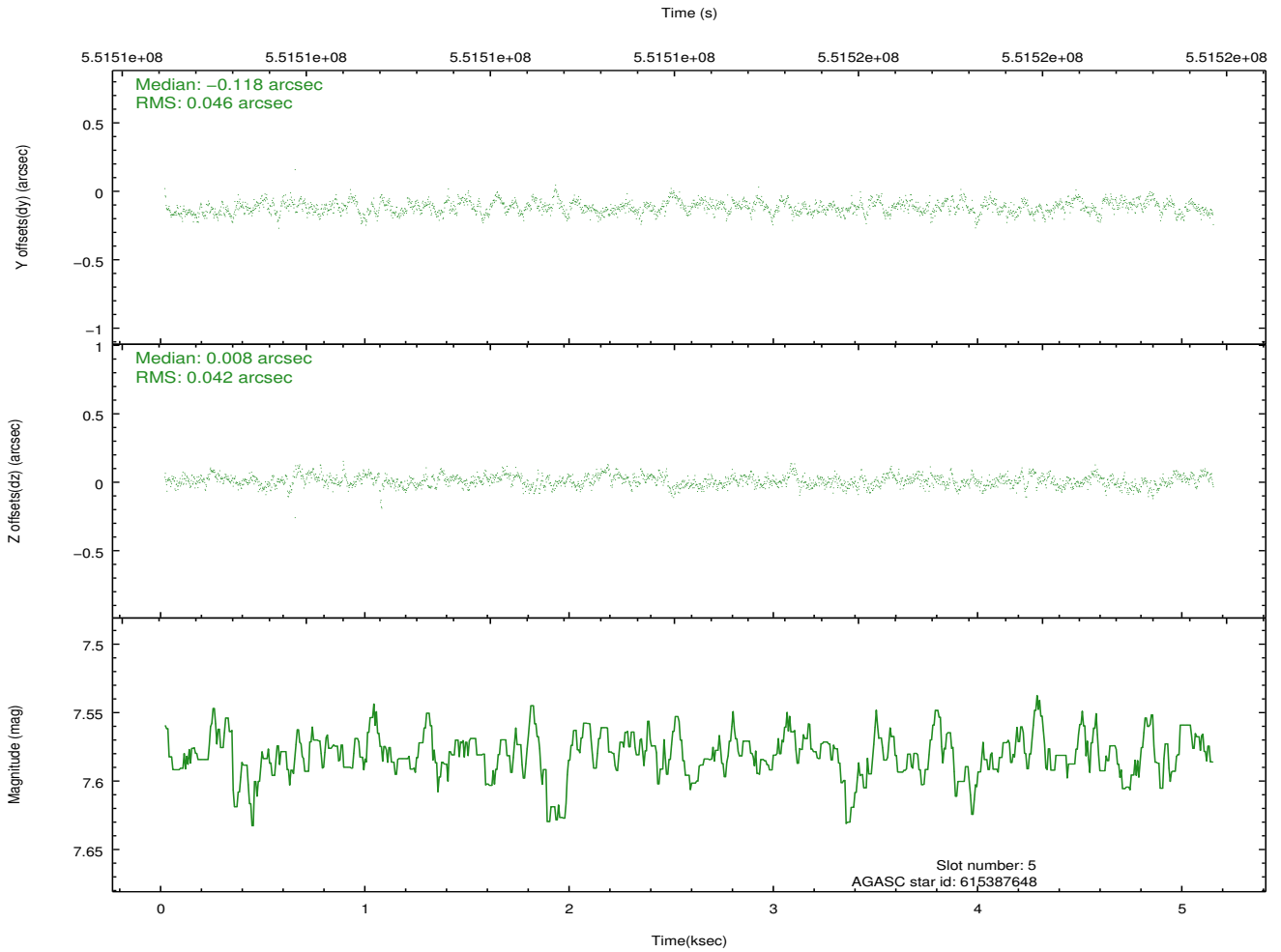
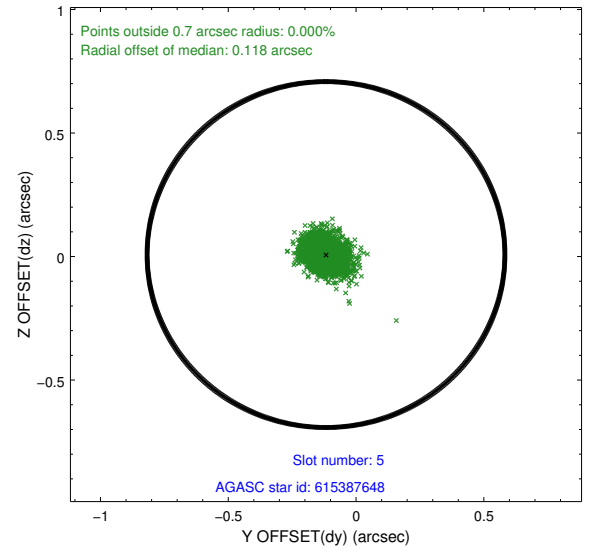
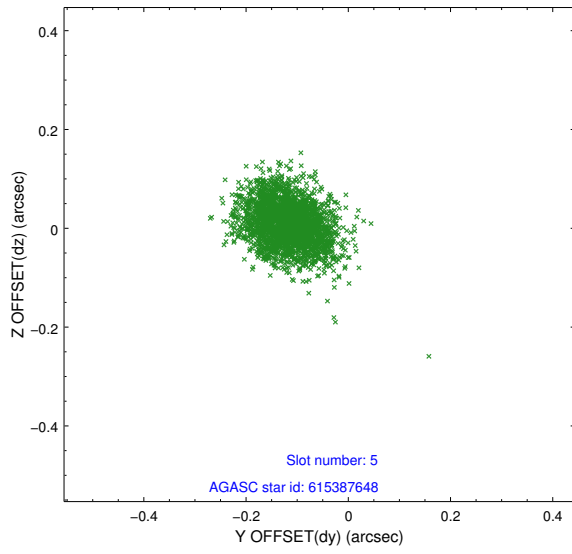
2.4.1 Slot 3



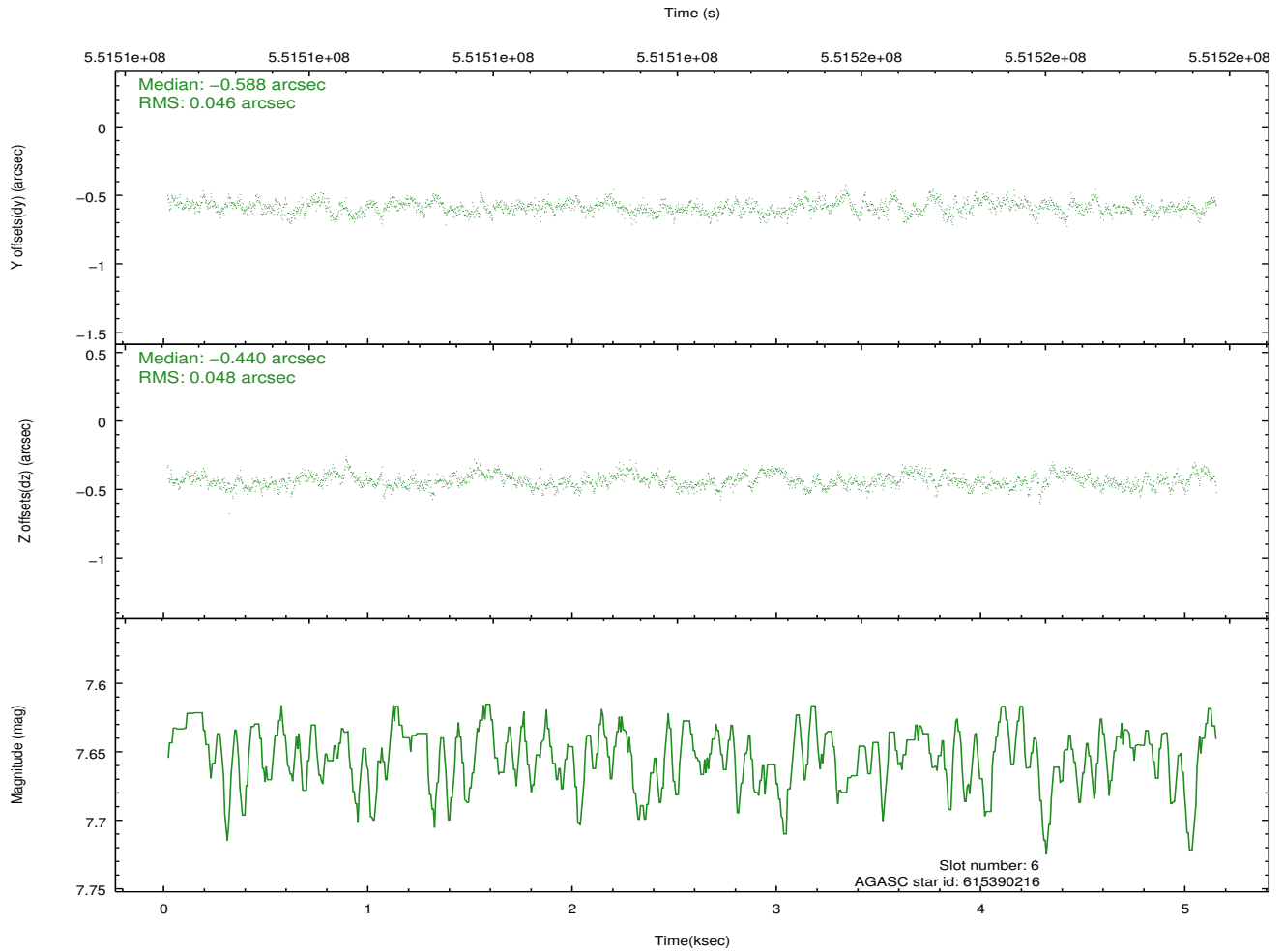
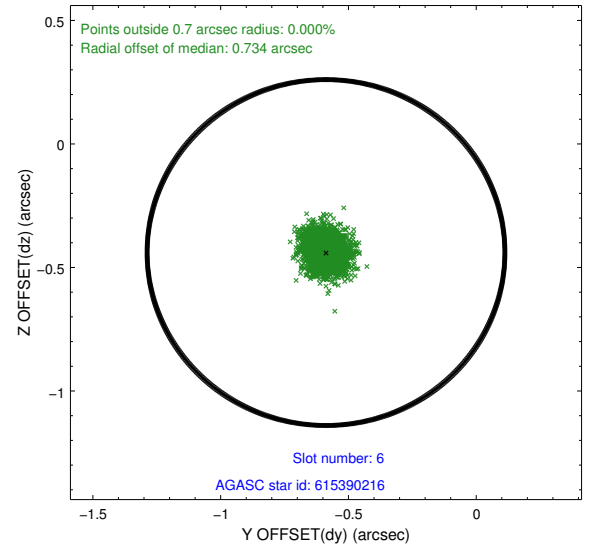
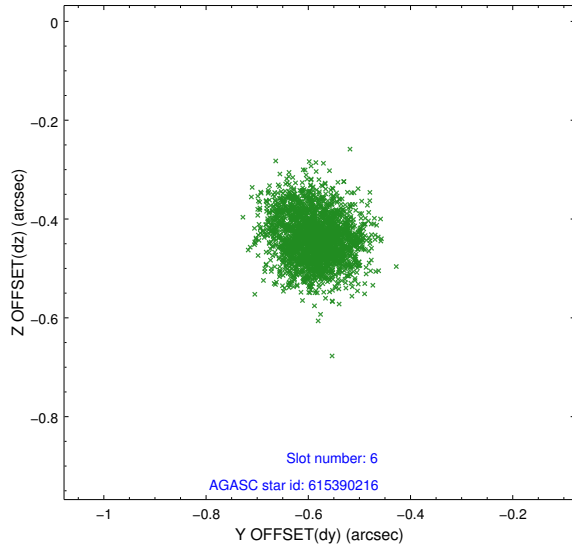
2.4.2 Slot 4



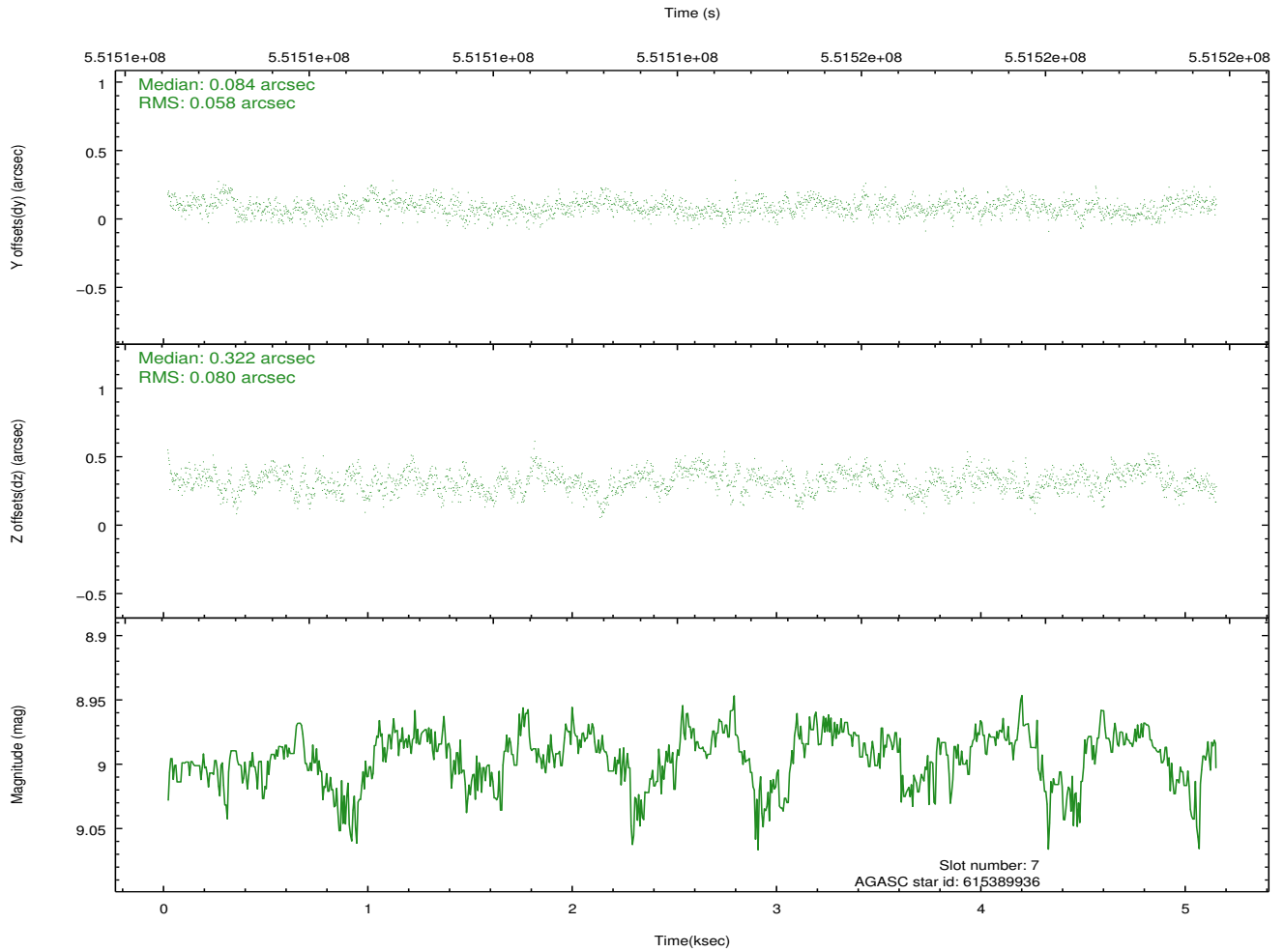
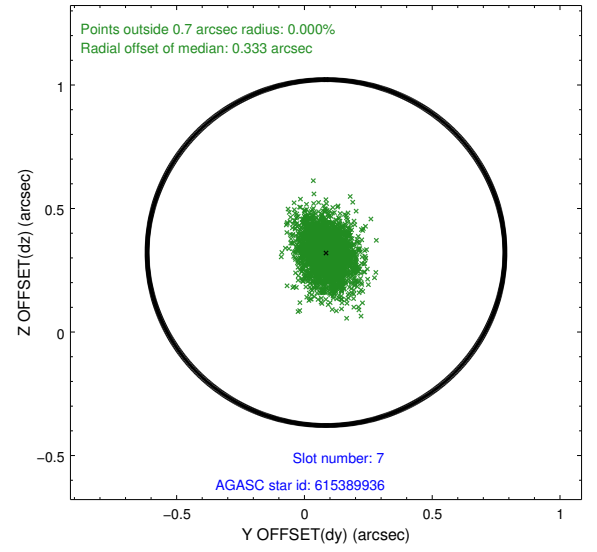
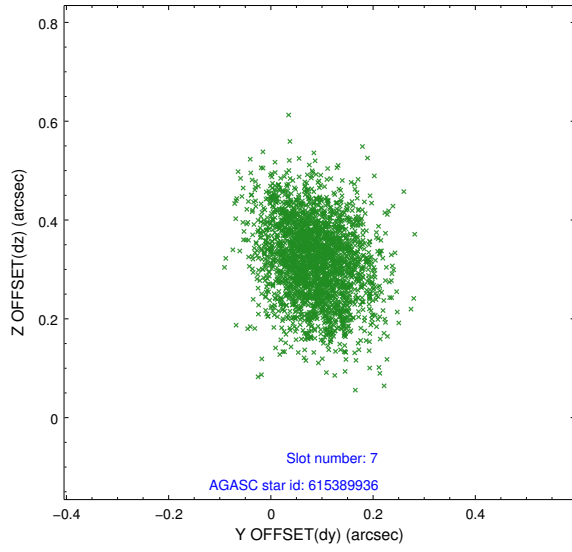
2.4.3 Slot 5



2.4.4 Slot 6

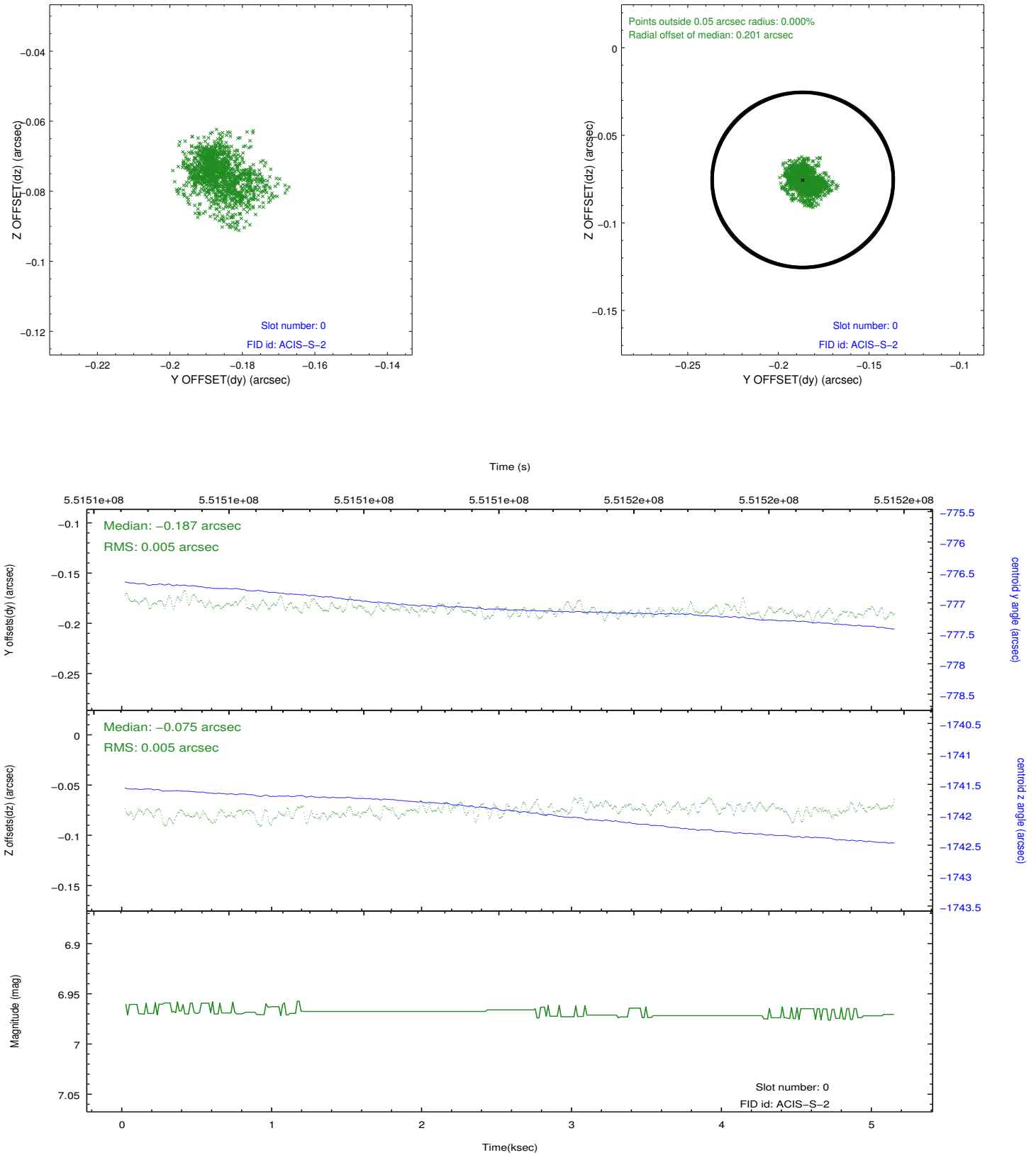


2.4.5 Slot 7

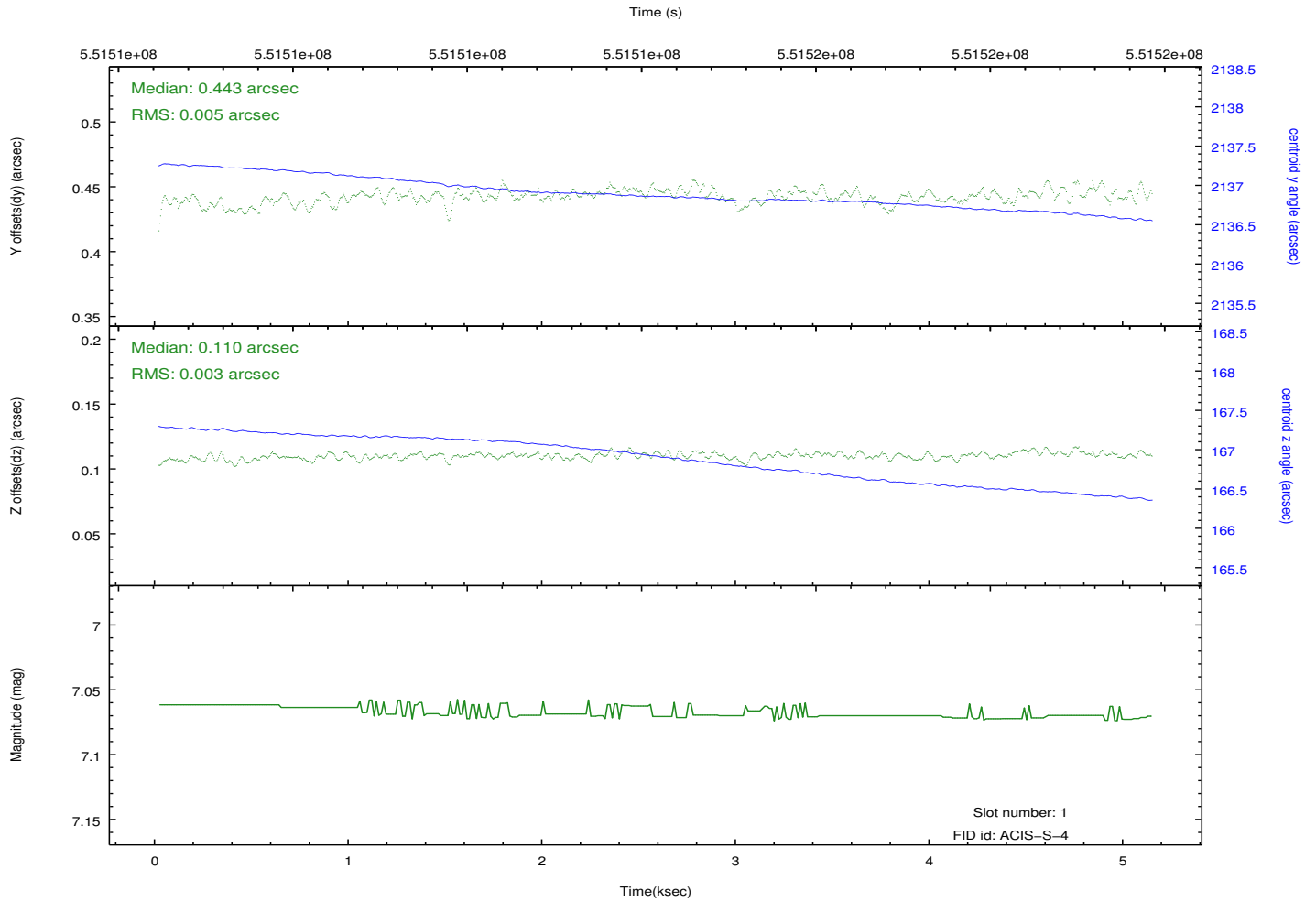
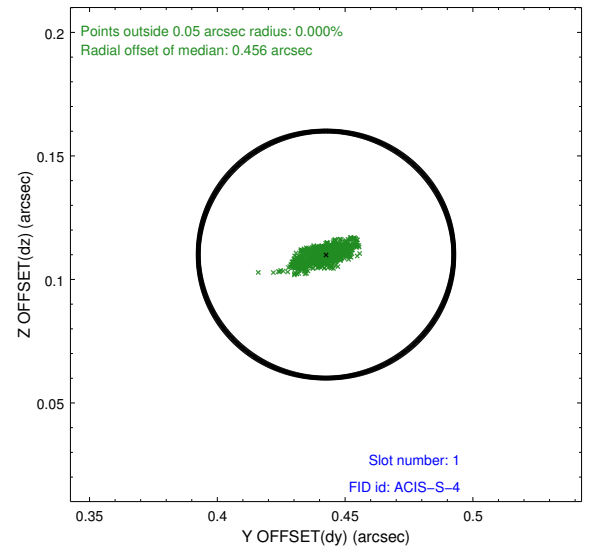
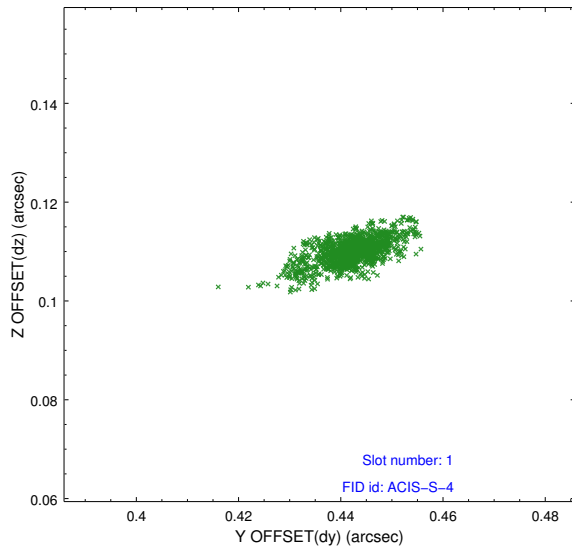


2.5 FID Slots

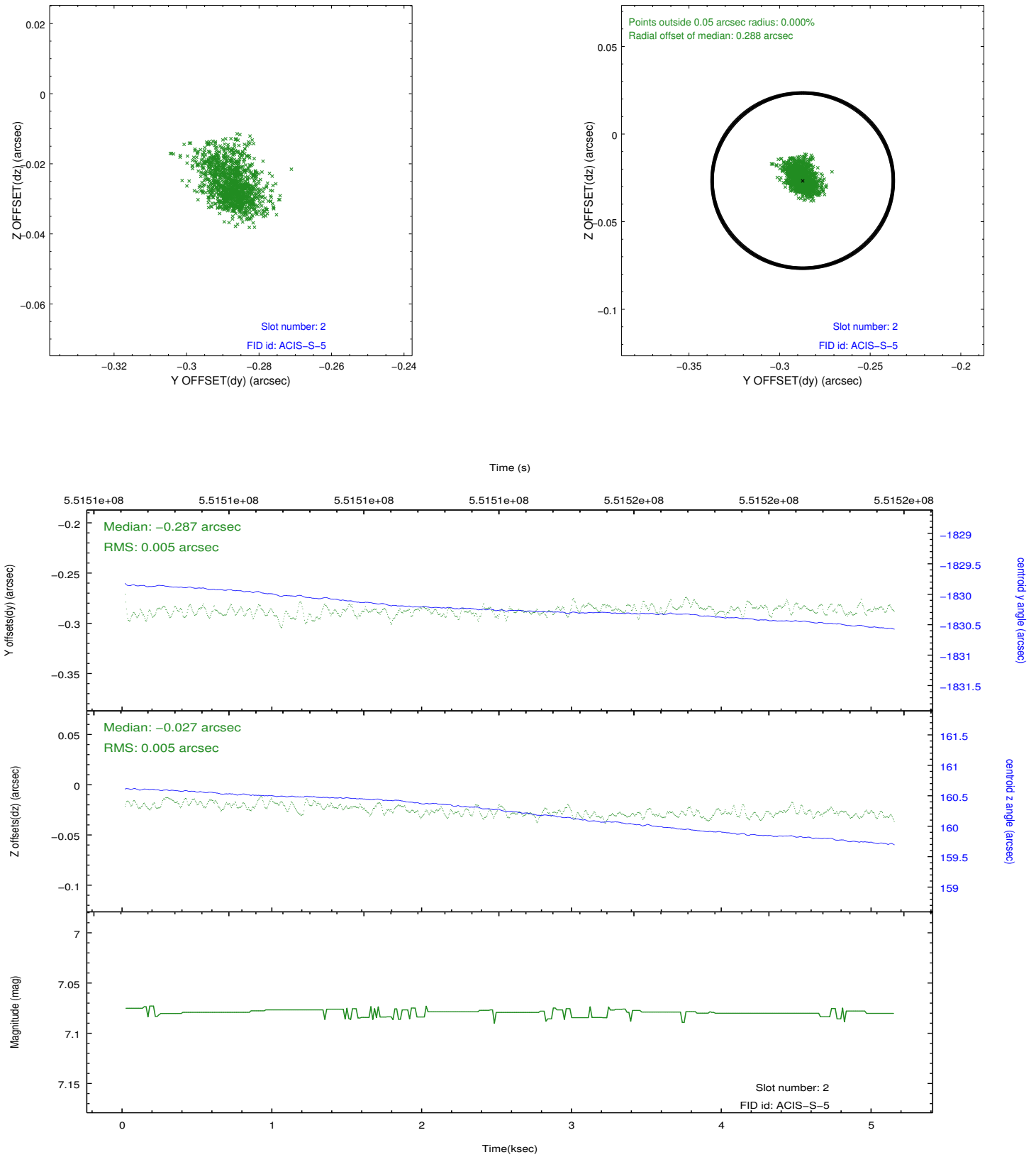
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2015.06.25 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.0530000389814 |

A.2 Comments

Joint proposal with XMM.