

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5745 - L2 Version 3
Chandra X-Ray Center

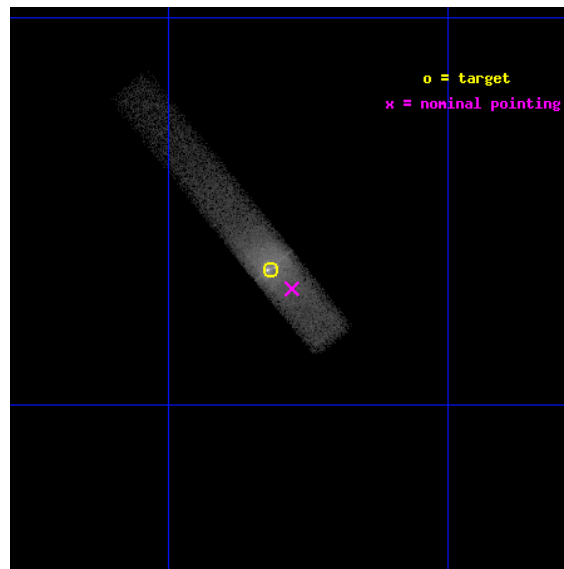
L2 Processing Date : Dec 22 2012

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1 Front

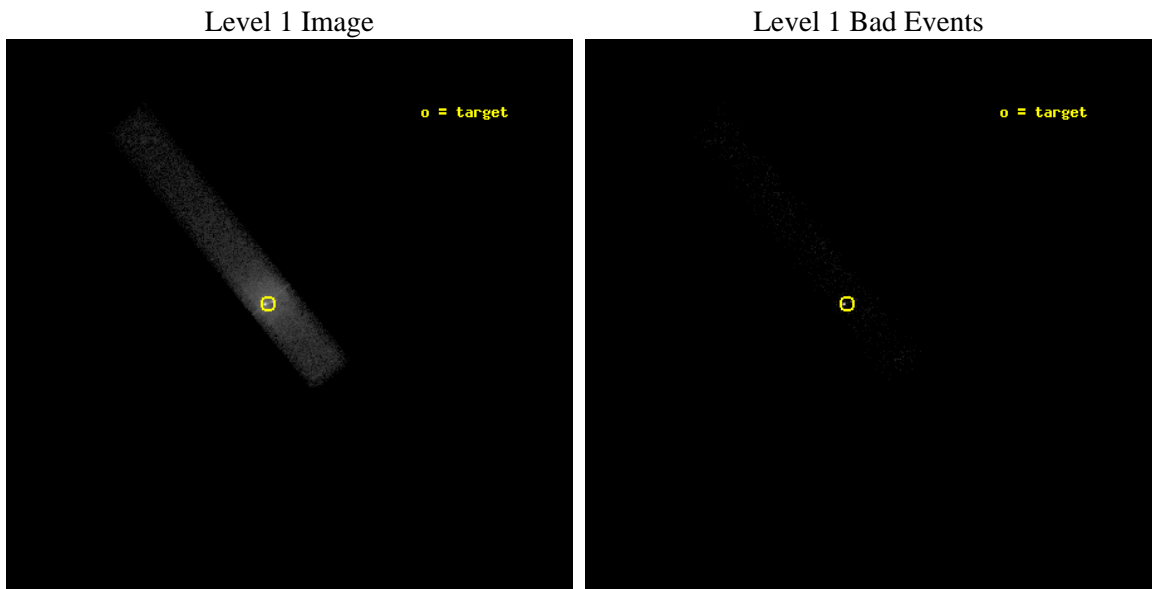
| | | |
|----------|--|---|
| seq_num | 701167 | Sequence number |
| obs_id | 5745 | Observation id |
| title | The X-ray Flares of Knot 'HST-1' in the M87 Jet (monitoring) | Pro |
| observer | Dr. John Biretta | Principal investigator |
| object | M87 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 187.704167 | Observer's specified target RA [deg] |
| dec_targ | 12.391667 | Observer's specified target Dec [deg] |
| ra_nom | 187.69492163926 | Nominal RA [deg] |
| dec_nom | 12.383145514172 | Nominal Dec [deg] |
| roll_nom | 230.93341120157 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 5187.6000772715 | Sum of GTIs [s] |
| livetime | 4704.8794461015 | Livetime [s] |
| ontime7 | 5187.6000772715 | Sum of GTIs [s] |
| l2events | 59570 | Number of level 2 events |



2 OBI

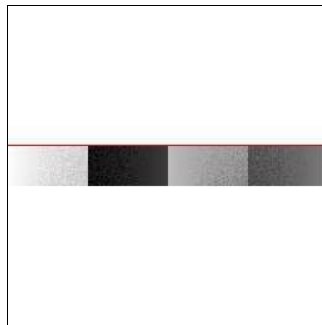
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 5000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 5187.6000772715 | Sum of GTIs [s] |
| caldsver | 4.5.5 | | ontime7 | 5187.6000772715 | Sum of GTIs [s] |
| date | 2012-12-23T02:38:28 | Date and time of file creation | l1events | 78153 | Number of level 1 events |
| revision | 3 | Processing version of data | | | |

2.1.4 Events

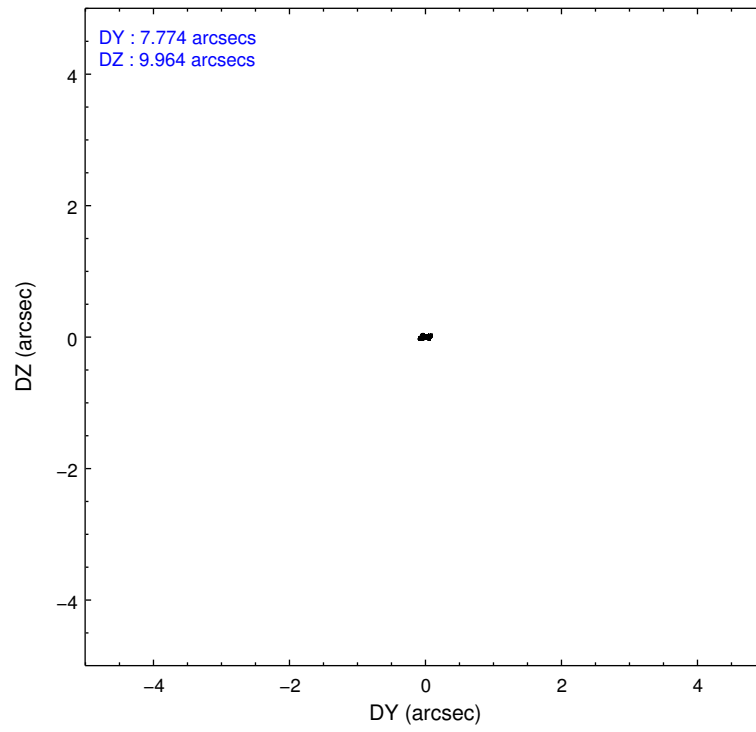
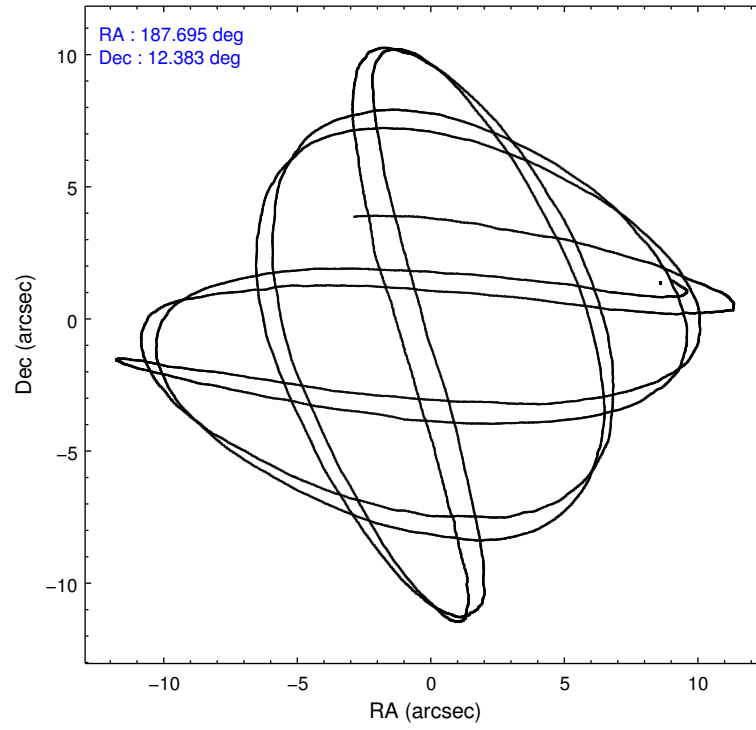
| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 78153 |
| rejected events | 17978 |
| rejected % | 23% |

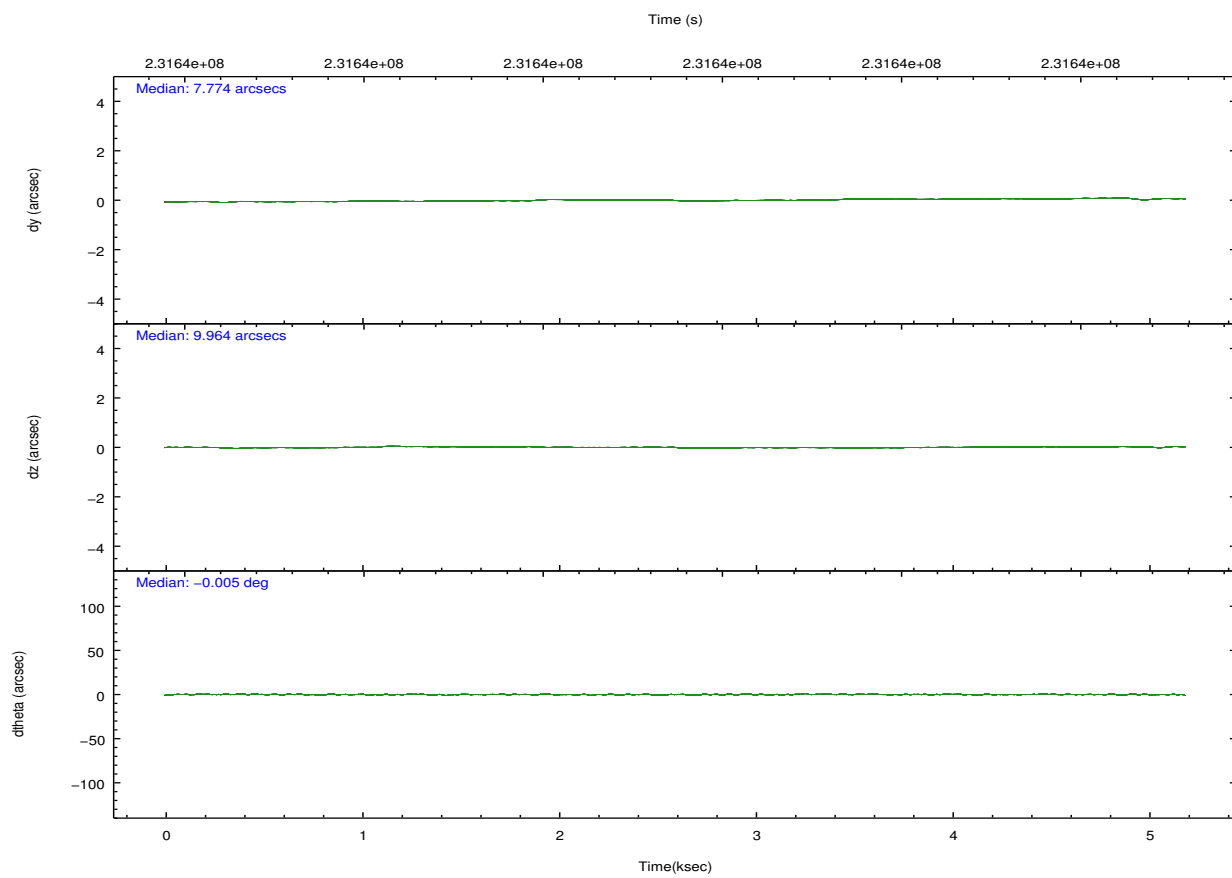
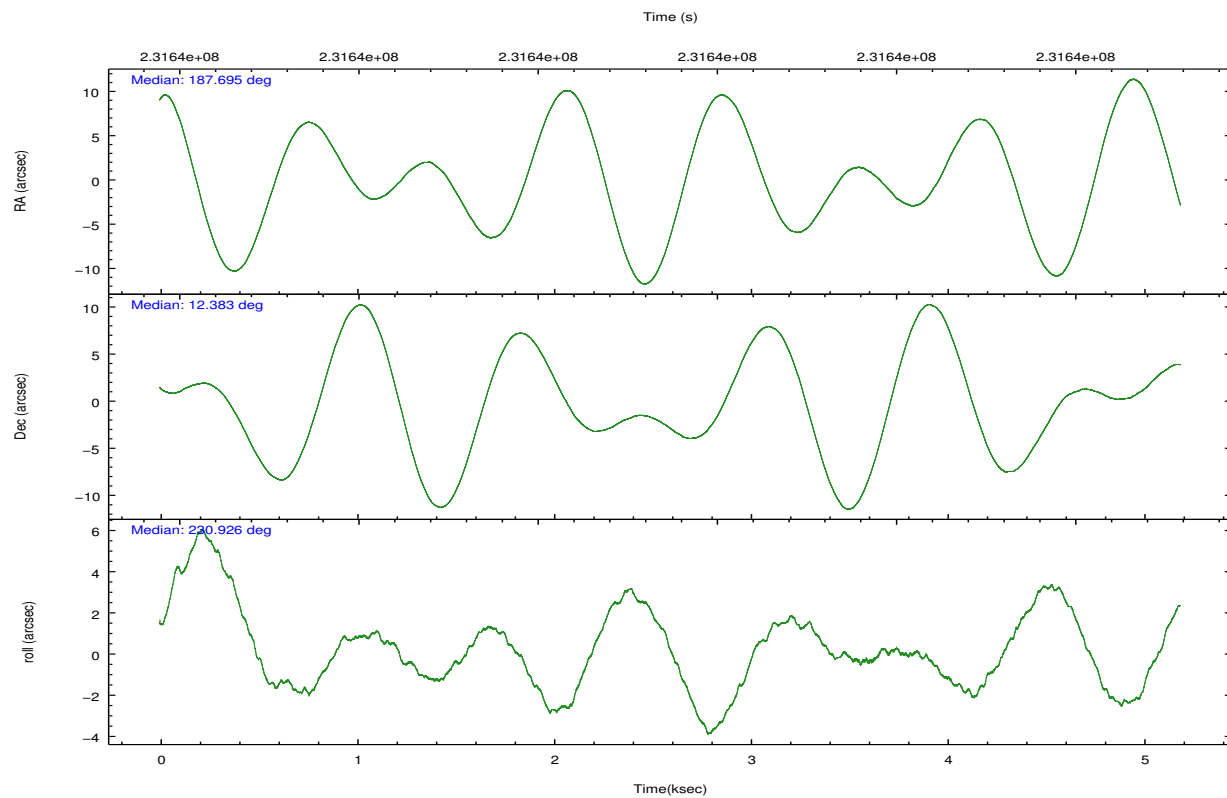
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 18597 |
| | 23% |
| grade 1 events | 482 |
| | 0% |
| grade 2 events | 15665 |
| | 20% |
| grade 3 events | 7136 |
| | 9% |
| grade 4 events | 7182 |
| | 9% |
| grade 5 events | 3037 |
| | 3% |
| grade 6 events | 14477 |
| | 18% |
| grade 7 events | 11577 |
| | 14% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-7 | ACIS-7 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 187.698862 | 187.6949216392575 | Subarray requested | CUSTOM | 1/8 |
| [deg] Pointing Dec | 12.410095 | 12.38314551417152 | Subarray start row | 449 | 449 |
| [deg] Pointing Roll | 230.775937 | 230.9334112015651 | Subarray row count | 128 | 128 |
| [s] Window start time (MET) | 231379264.184000 | 231379264.184000 | Alternating exposures requested | N | N |
| [s] Window stop time (MET) | 231984064.184000 | 231984064.184000 | [s] Primary exposure time | 0.000000 | 0.4 |
| [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 | | | |
| [s] Observation start time (MET) | 231636325.184000 | 231634684.25967 | | | |
| Observation start date | 2005-05-04T23:24:21 | 2005-05-04T22:58:04 | | | |
| [s] Observation end time (MET) | 231641325.184000 | 231641458.99748 | | | |
| Observation end date | 2005-05-05T00:47:41 | 2005-05-05T00:50:58 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



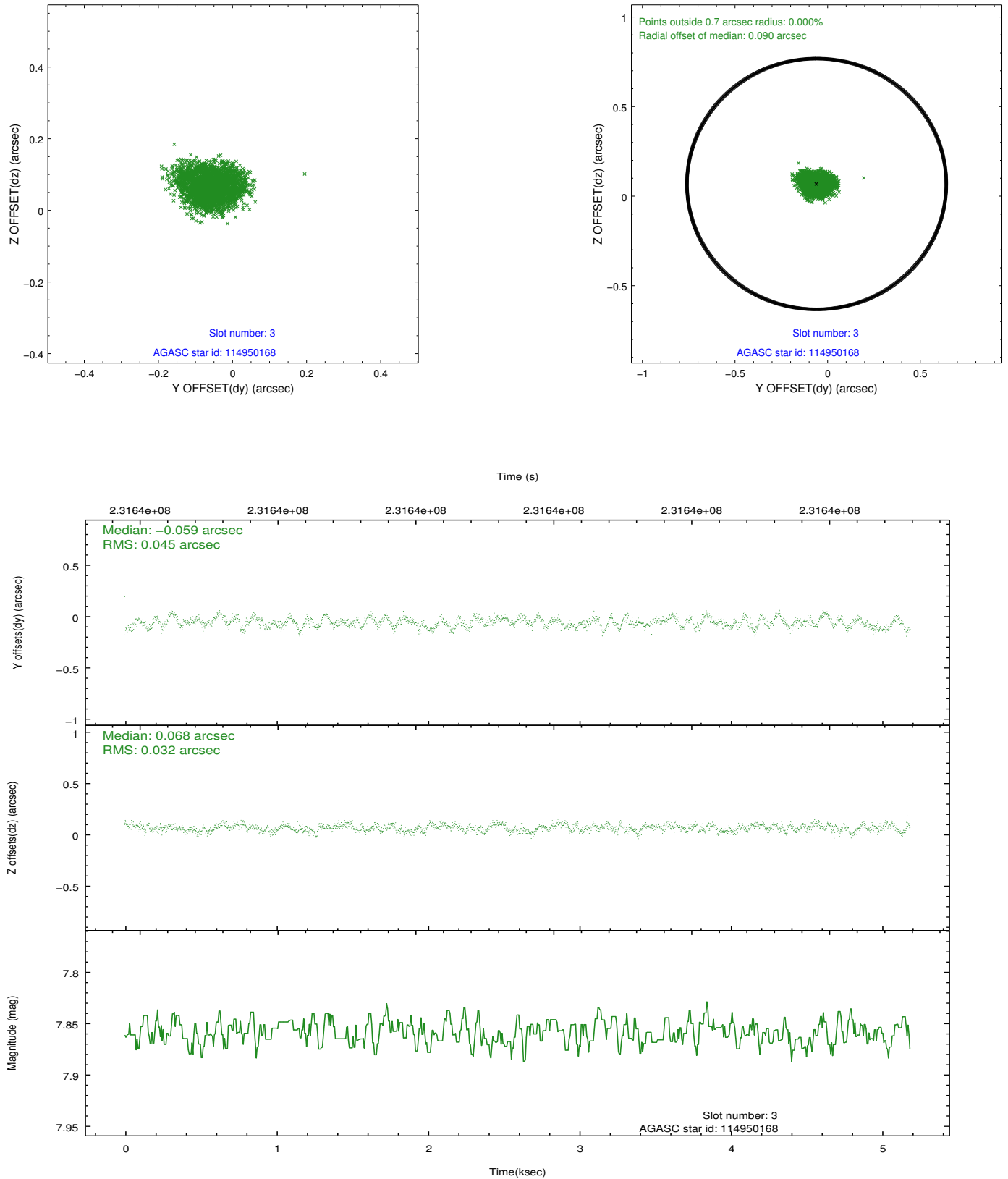


Slot Statistics

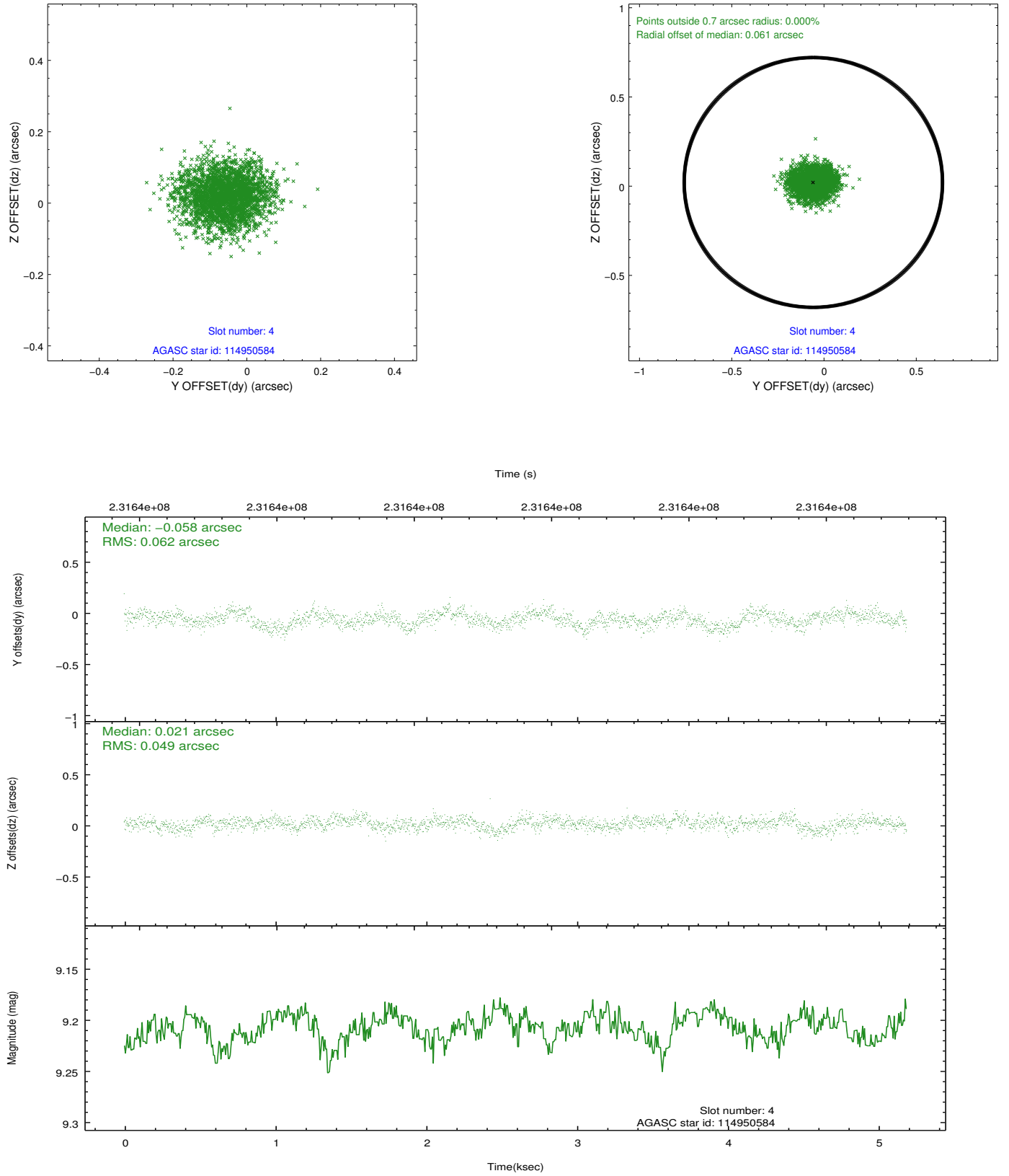
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 1266 | -0.043 | -0.024 | 0.007 | 0.010 | 0.000000 | 0.000000 | -760.55 | -1731.25 |
| 1 | FID | ACIS-S-4 | 7.21 | 1266 | 0.105 | 0.027 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2152.30 | 176.15 |
| 2 | FID | ACIS-S-5 | 7.24 | 1266 | -0.093 | 0.005 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1811.99 | 171.03 |
| 3 | GUIDE | 114950168 | 7.86 | 2532 | -0.059 | 0.068 | 0.060 | 0.093 | 187.143398 | 12.117441 | 2051.61 | -849.48 |
| 4 | GUIDE | 114950584 | 9.21 | 2532 | -0.058 | 0.021 | 0.084 | 0.136 | 187.487323 | 11.827248 | 2097.95 | 748.87 |
| 5 | GUIDE | 114952824 | 8.57 | 2529 | -0.011 | 0.124 | 0.063 | 0.103 | 187.703904 | 12.486727 | -223.38 | -160.68 |
| 6 | GUIDE | 114954440 | 9.21 | 2531 | 0.093 | -0.099 | 0.103 | 0.162 | 186.915066 | 12.219118 | 2273.96 | -1703.85 |
| 7 | GUIDE | 114955056 | 8.31 | 2529 | 0.036 | -0.114 | 0.070 | 0.110 | 187.914001 | 12.127854 | 309.42 | 1227.90 |

2.4 Star Slots

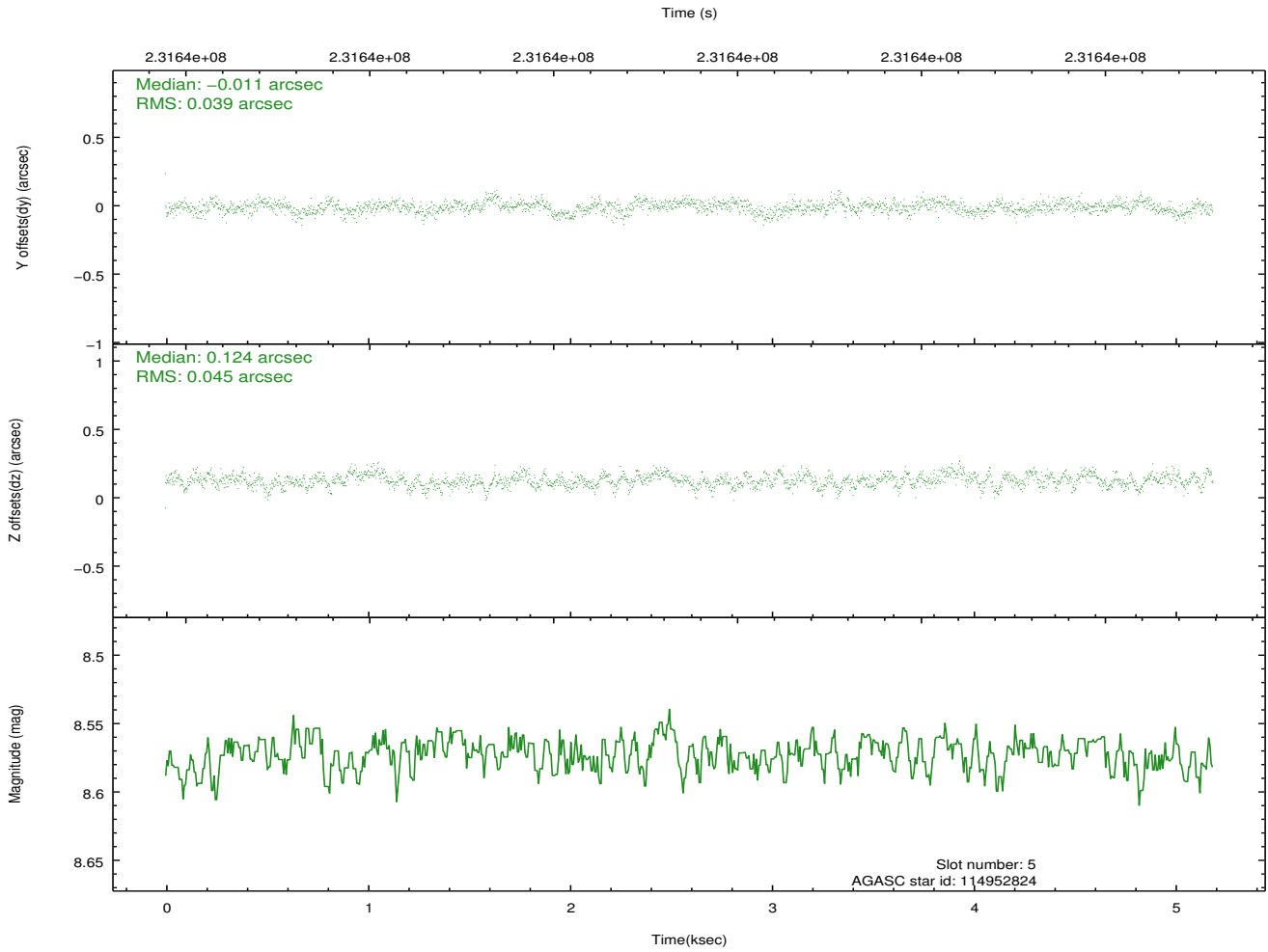
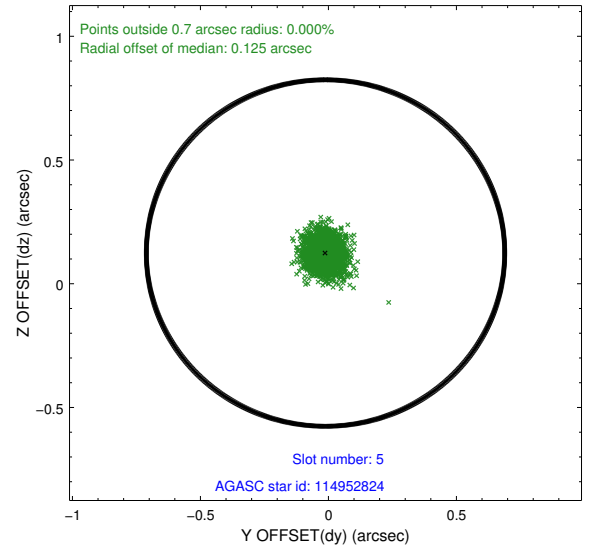
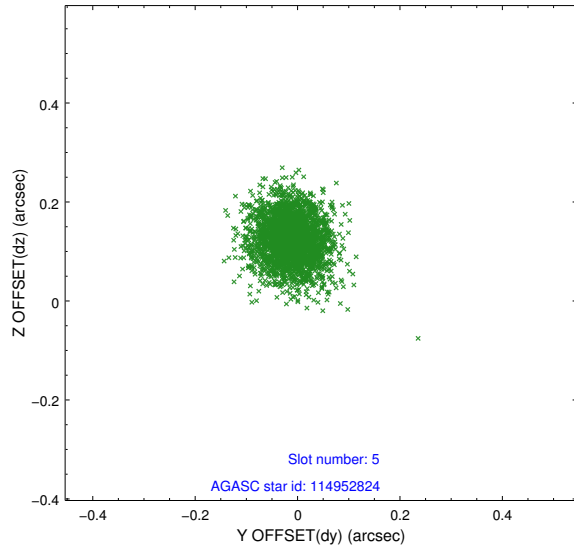
2.4.1 Slot 3



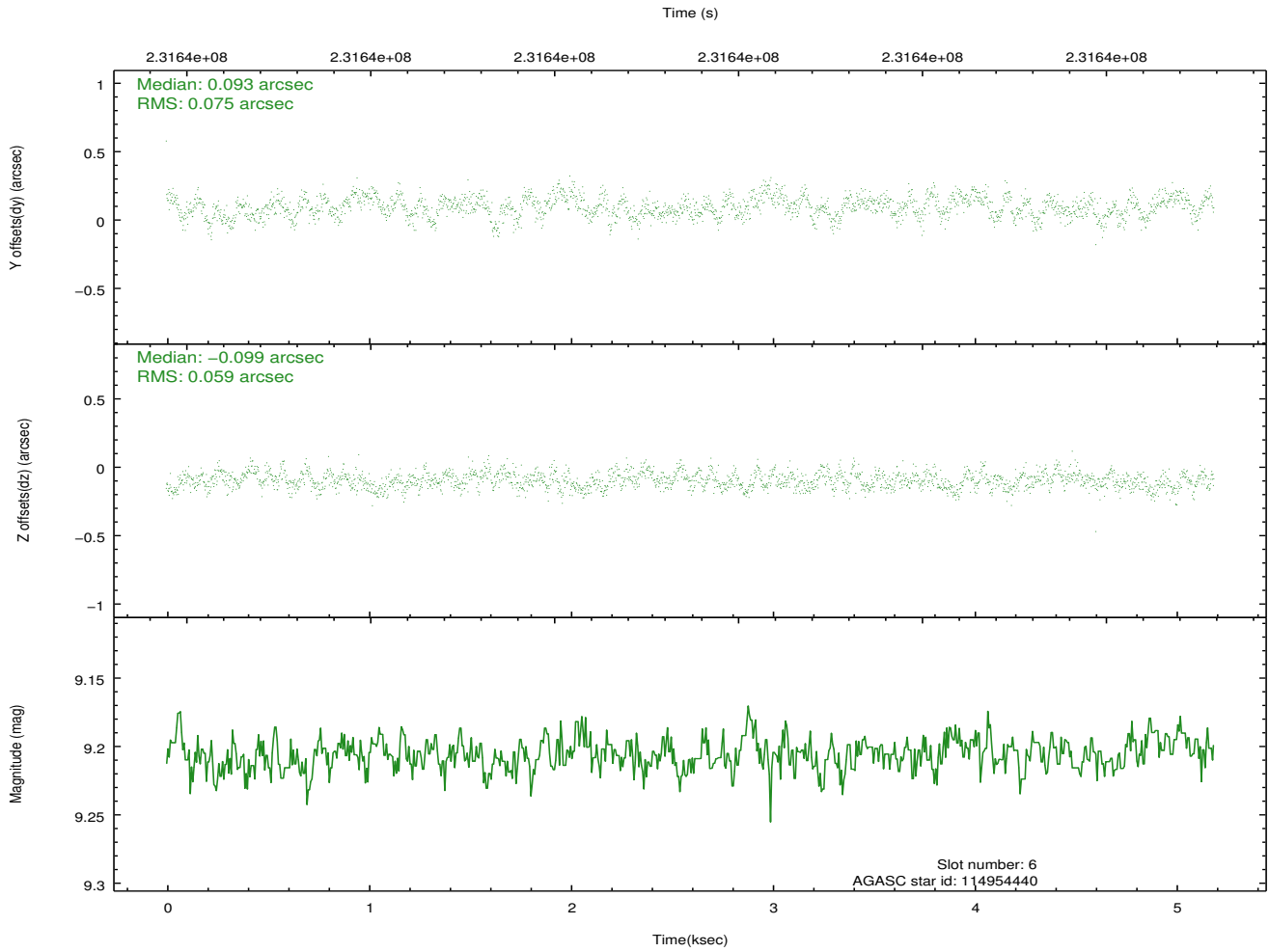
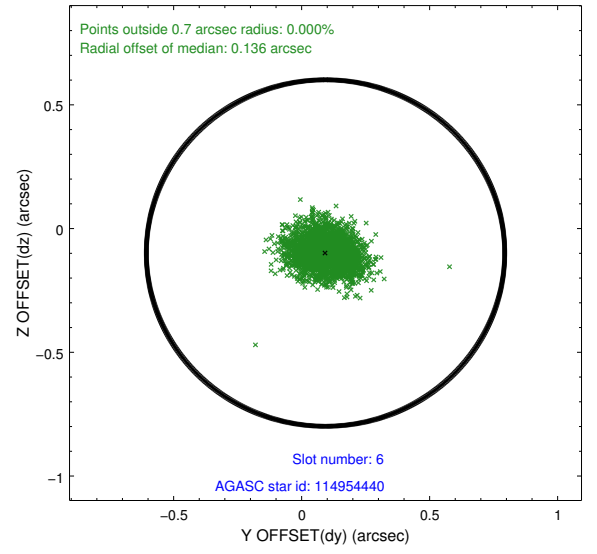
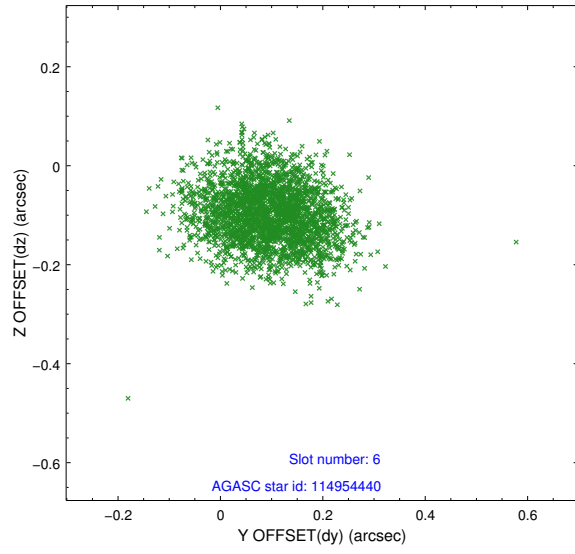
2.4.2 Slot 4



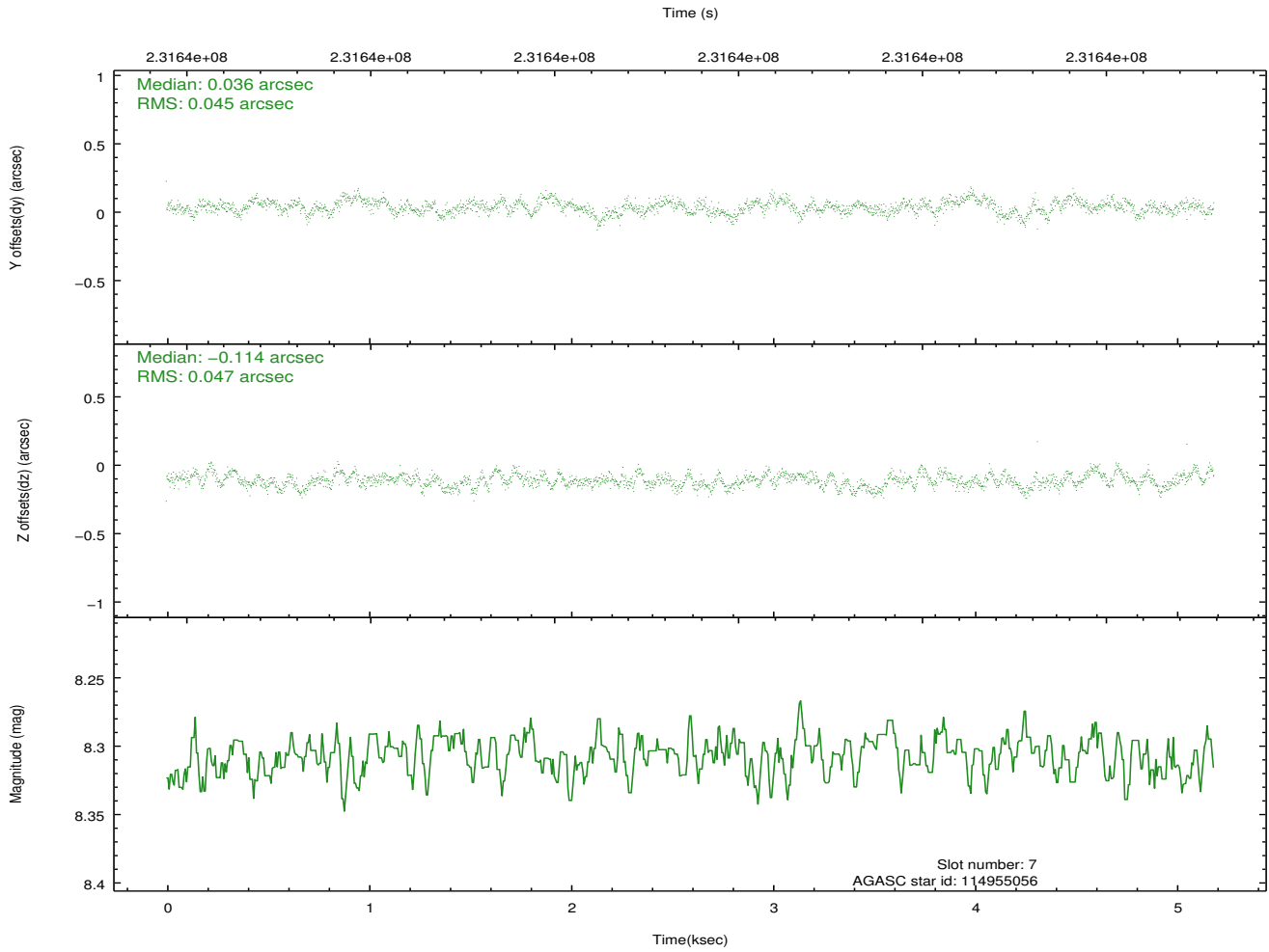
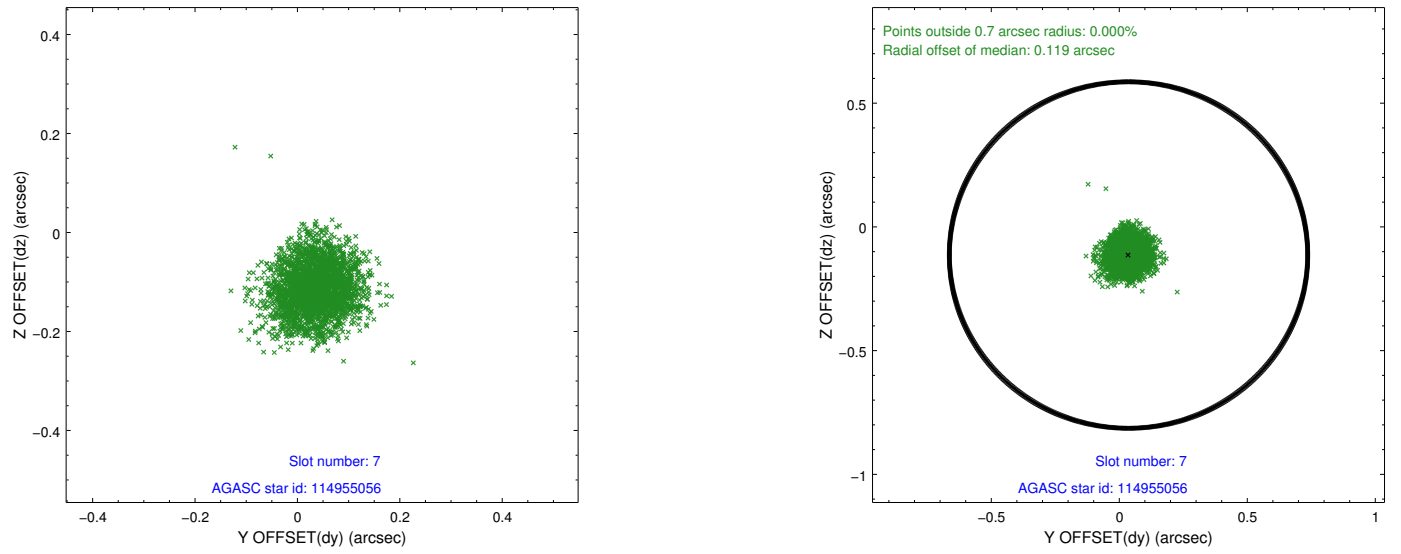
2.4.3 Slot 5



2.4.4 Slot 6

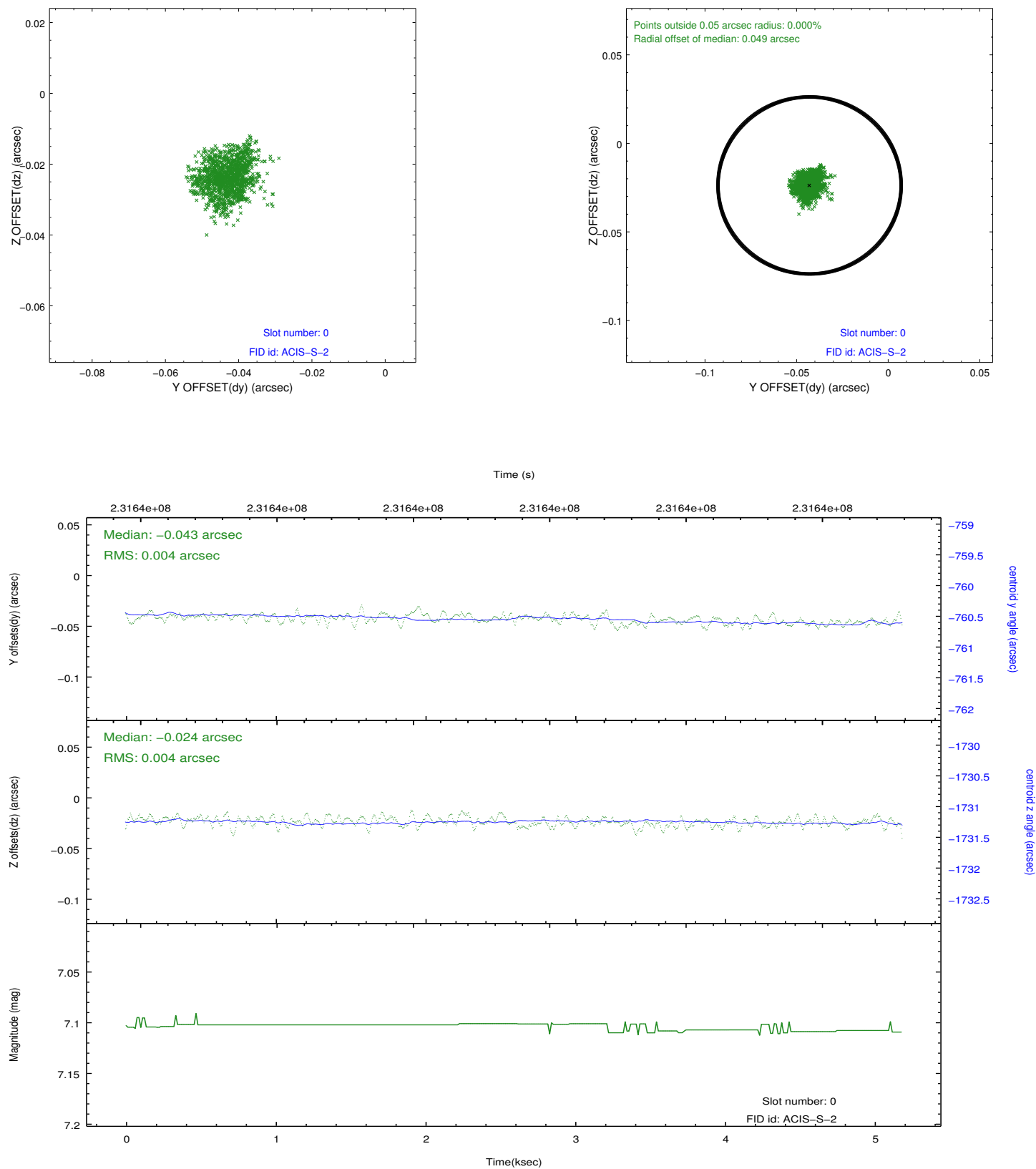


2.4.5 Slot 7

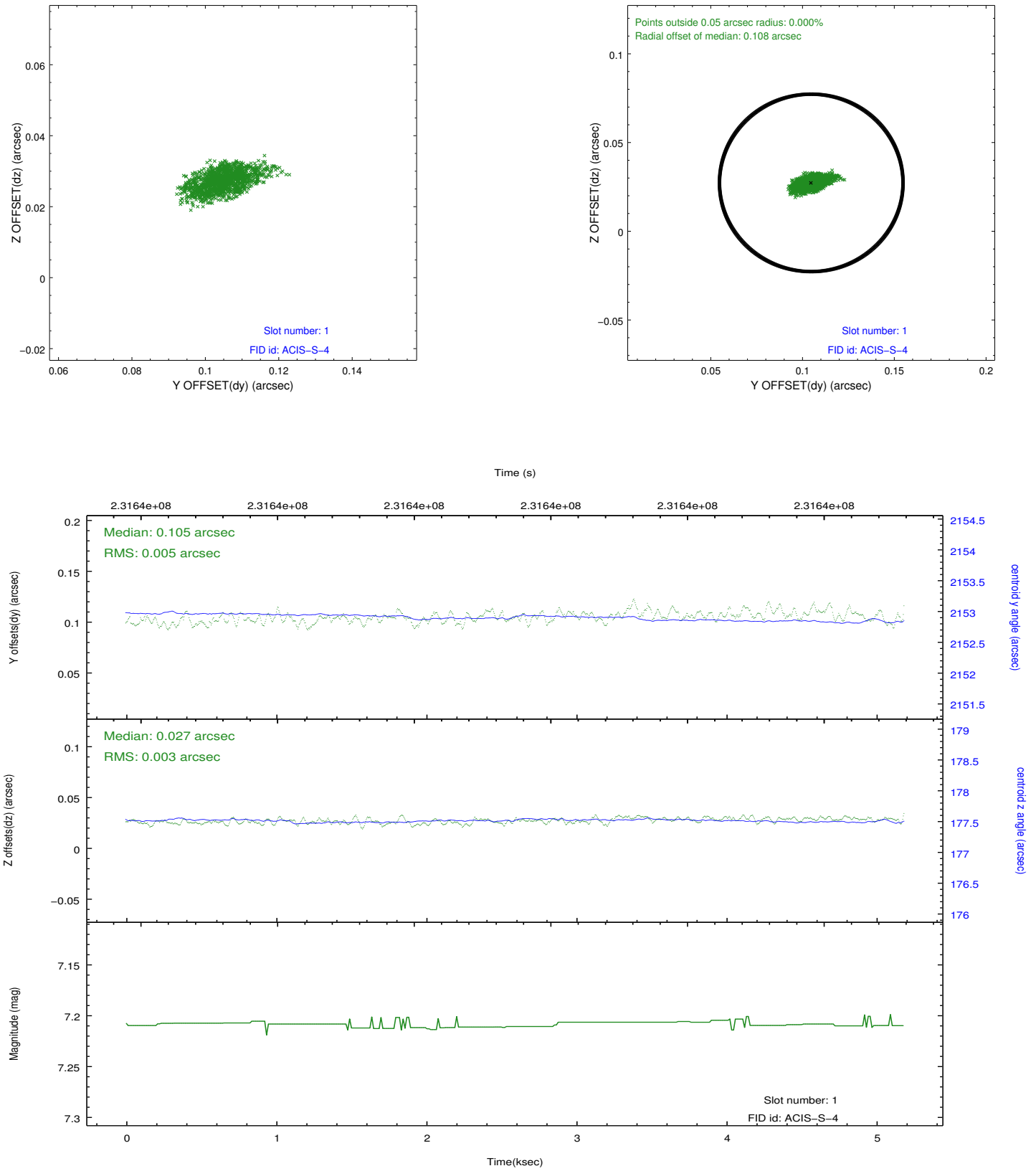


2.5 FID Slots

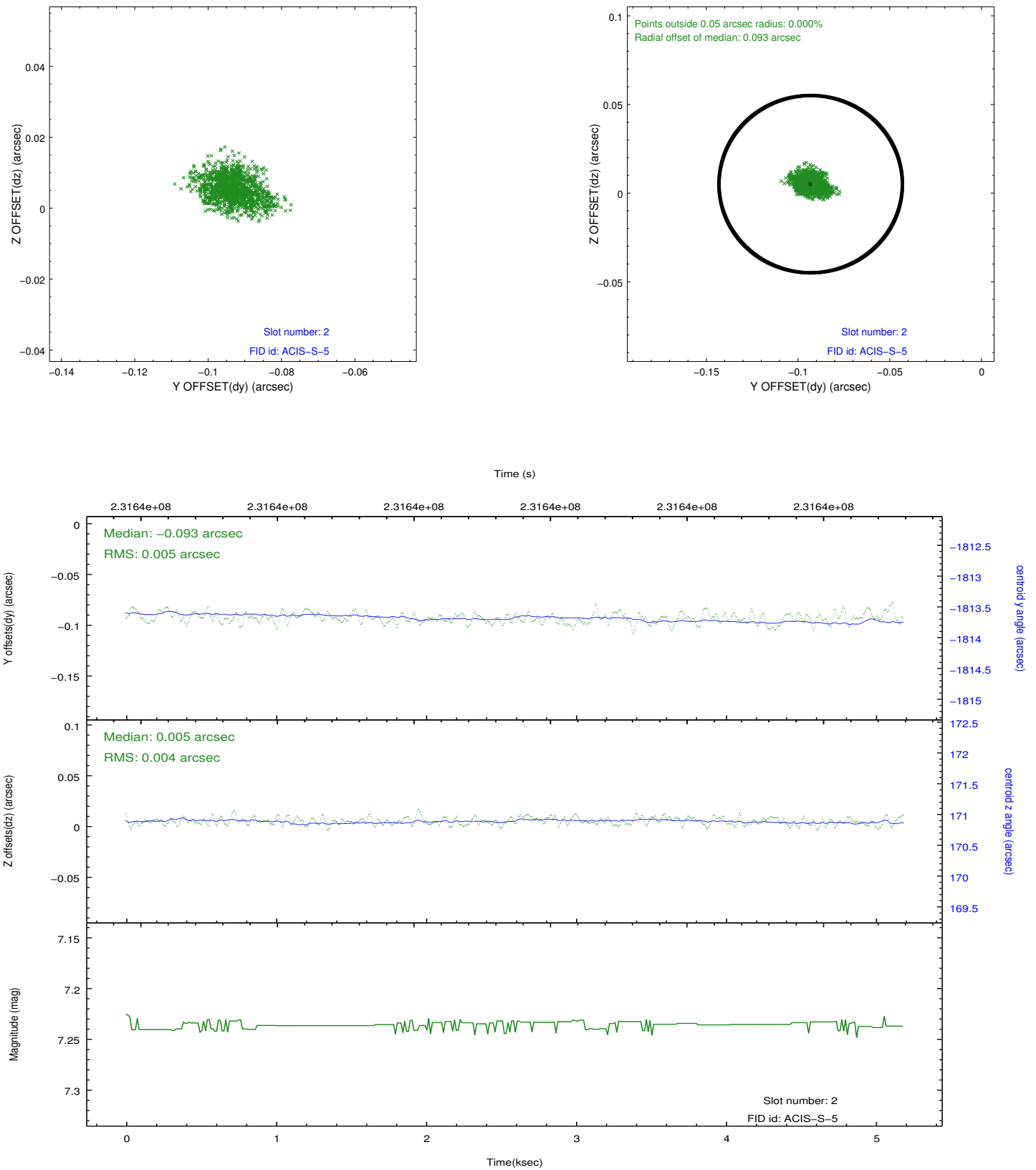
2.5.1 Slot 0



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) | 2013.01.15 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.1876 |

A.2 Comments

Window constraint satisfied. Joint Proposal: CX0-HST