

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18837 - L2 Version 1
Chandra X-Ray Center

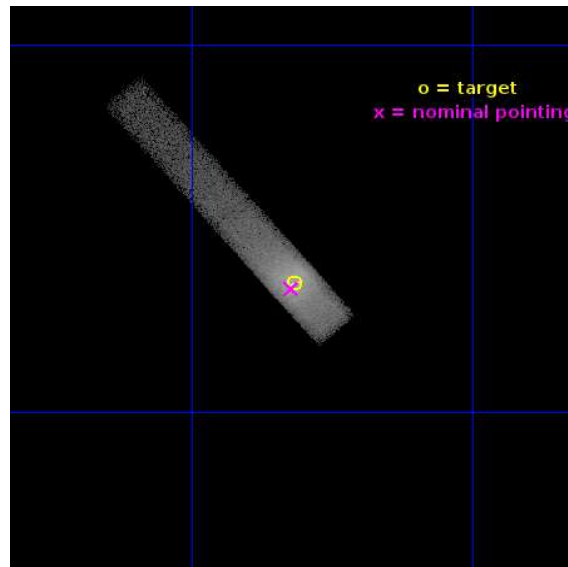
L2 Processing Date : May 1 2016

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1 Front

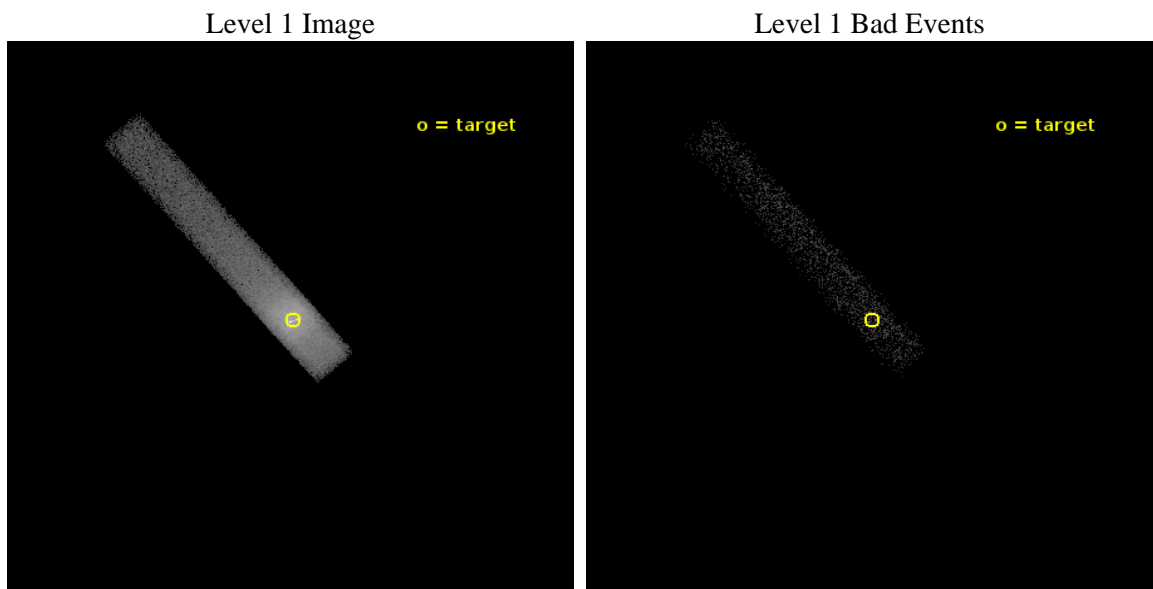
| | | |
|----------|---|---|
| seq_num | 801560 | Sequence number |
| obs_id | 18837 | Observation id |
| title | The imprints of AGN feedback within the Bondi radius of M87 | Propos |
| observer | Helen Russell | Principal investigator |
| object | M87 | Source name |
| dtcycle | 0 | |
| cycle | P | 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 | 187.70564638147 | Nominal RA [deg] |
| dec_nom | 12.389325081872 | Nominal Dec [deg] |
| roll_nom | 229.15634306469 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 15069.199101686 | Sum of GTIs [s] |
| livetime | 13666.968167682 | Livetime [s] |
| ontime7 | 15069.199101686 | Sum of GTIs [s] |
| l2events | 91832 | Number of level 2 events |



2 OBI

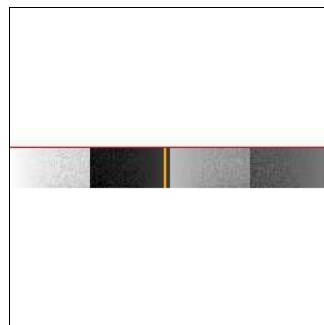
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 15000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.4.3.1 | Processing system revision | ontime | 15069.199101686 | Sum of GTIs [s] |
| caldsver | 4.7.1 | | ontime7 | 15069.199101686 | Sum of GTIs [s] |
| date | 2016-05-01T14:13:01 | Date and time of file creation | l1events | 102249 | Number of level 1 events |
| revision | 1 | Processing version of data | | | |

2.1.4 Events

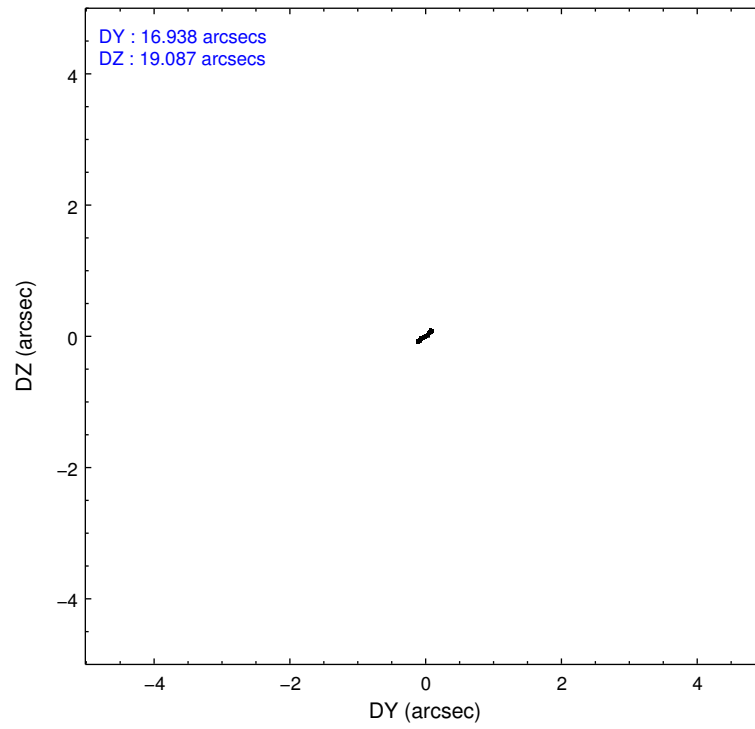
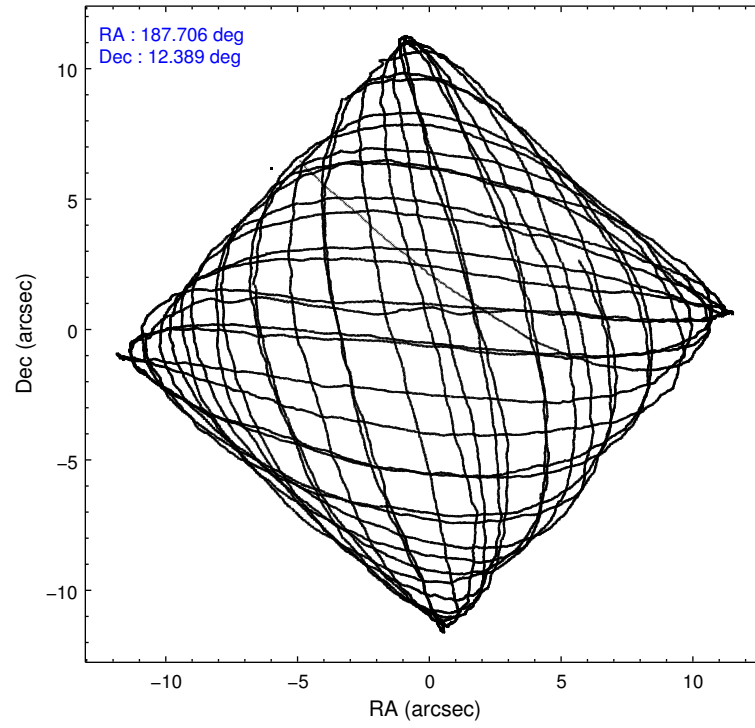
| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 102249 |
| rejected events | 9370 |
| rejected % | 9% |

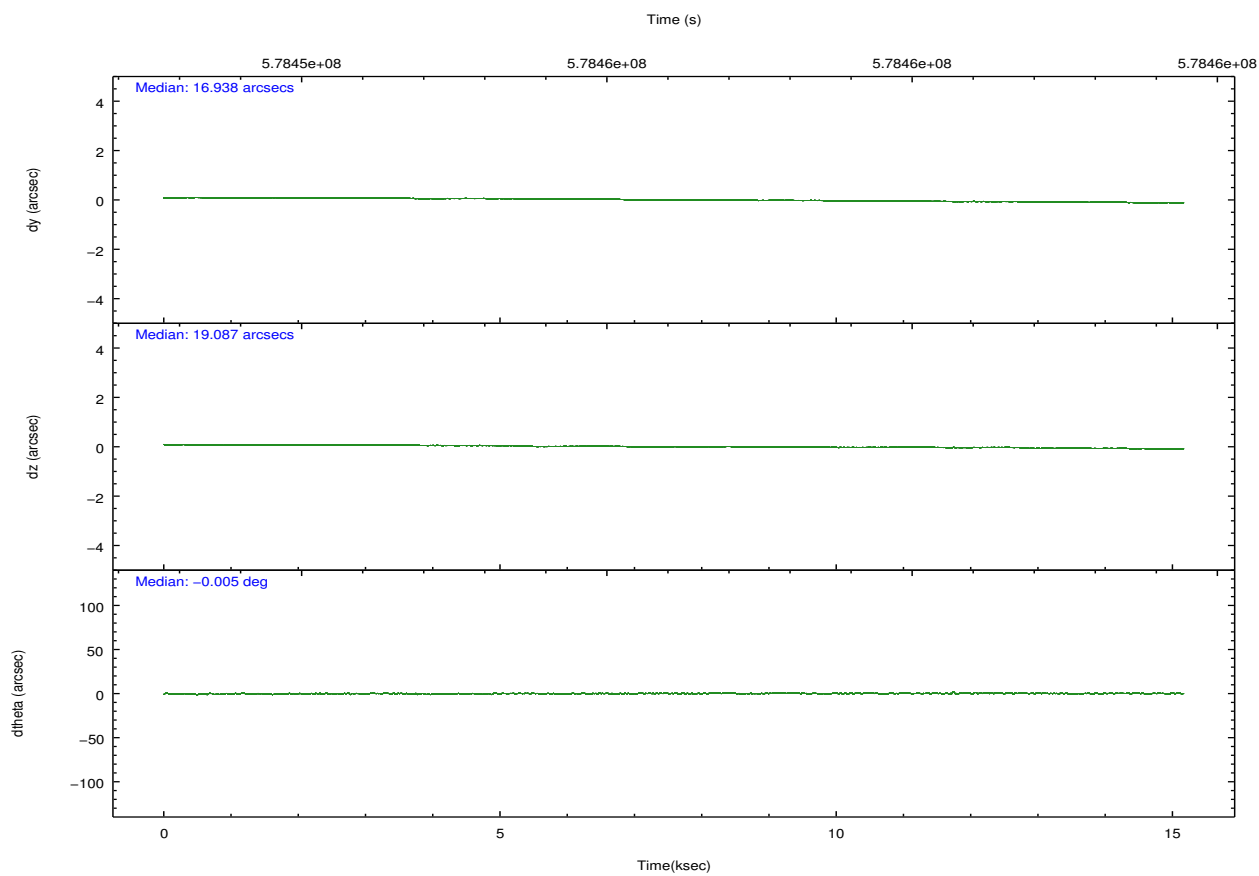
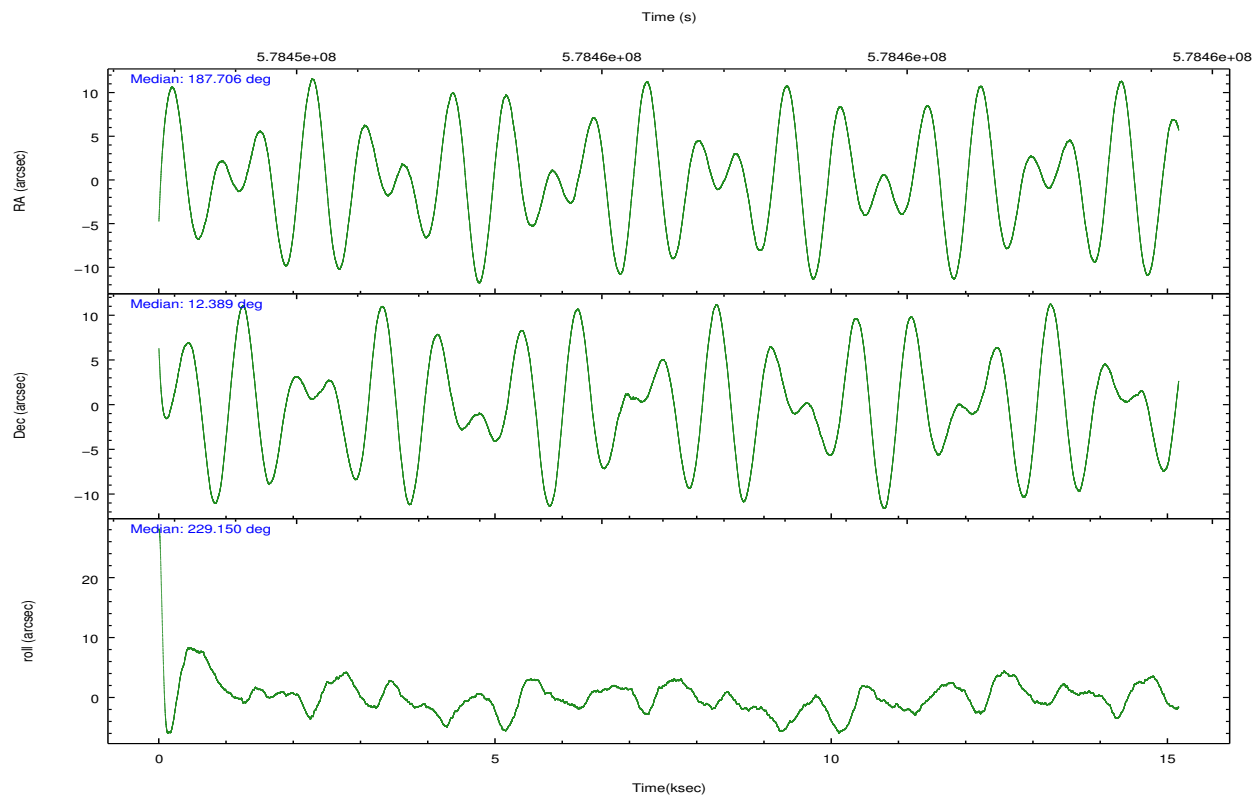
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 25447 |
| | 24% |
| grade 1 events | 31 |
| | 0% |
| grade 2 events | 24255 |
| | 23% |
| grade 3 events | 11080 |
| | 10% |
| grade 4 events | 10719 |
| | 10% |
| grade 5 events | 2239 |
| | 2% |
| grade 6 events | 21380 |
| | 20% |
| grade 7 events | 7098 |
| | 6% |

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 | 187.710535 | 187.7056463814748 | Subarray requested | CUSTOM | 1/8 |
| [deg] Pointing Dec | 12.416358 | 12.38932508187206 | Subarray start row | 449 | 449 |
| [deg] Pointing Roll | 228.998633 | 229.1563430646871 | Subarray row count | 128 | 128 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | [s] Primary exposure time | 0.000000 | 0.4 |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 578448680.184000 | 578446893.9584301 | | | |
| Observation start date | 2016-05-01T00:10:12 | 2016-04-30T23:41:33 | | | |
| [s] Observation end time (MET) | 578463680.184000 | 578464804.80946 | | | |
| Observation end date | 2016-05-01T04:20:12 | 2016-05-01T04:40:04 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



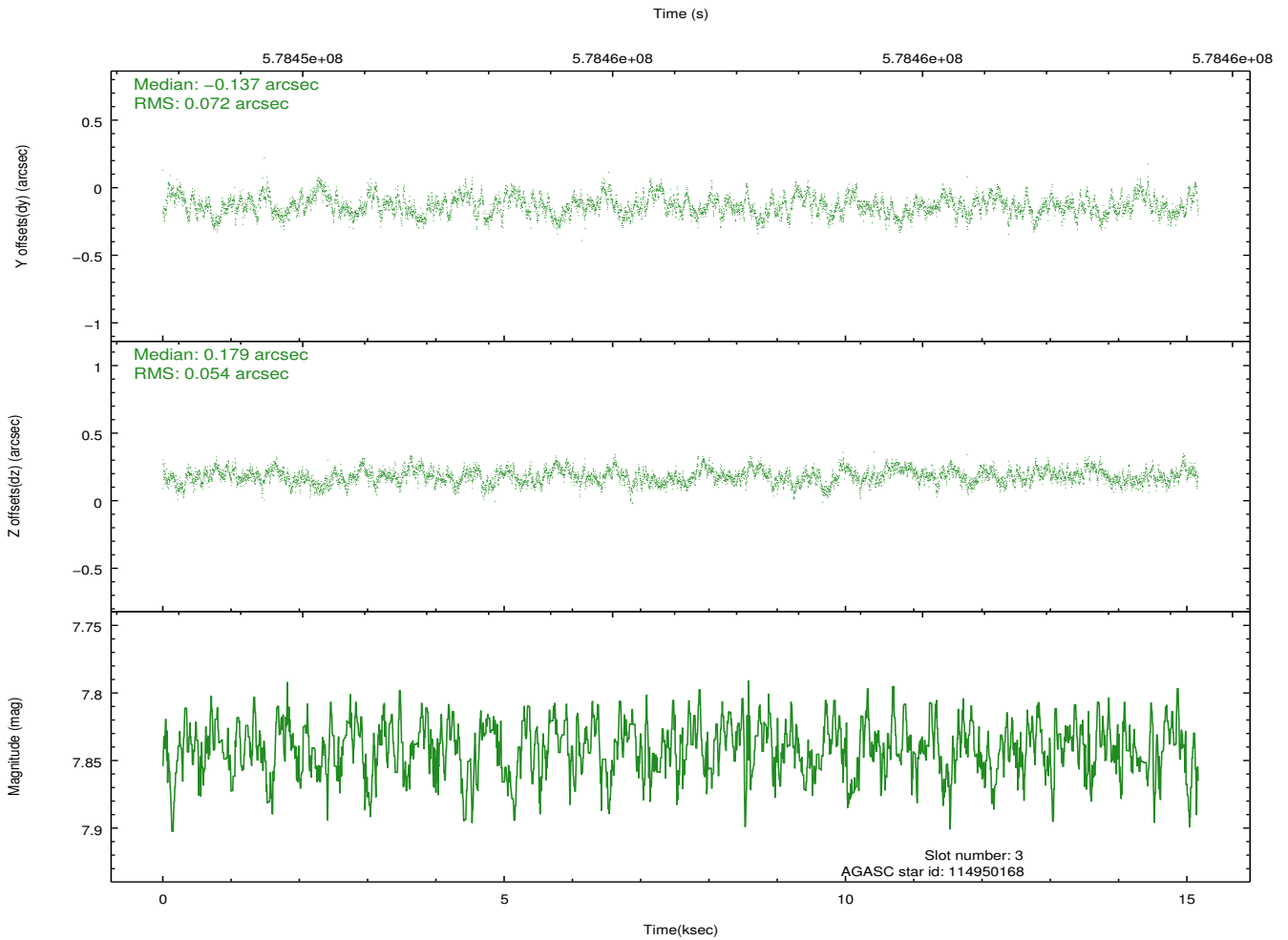
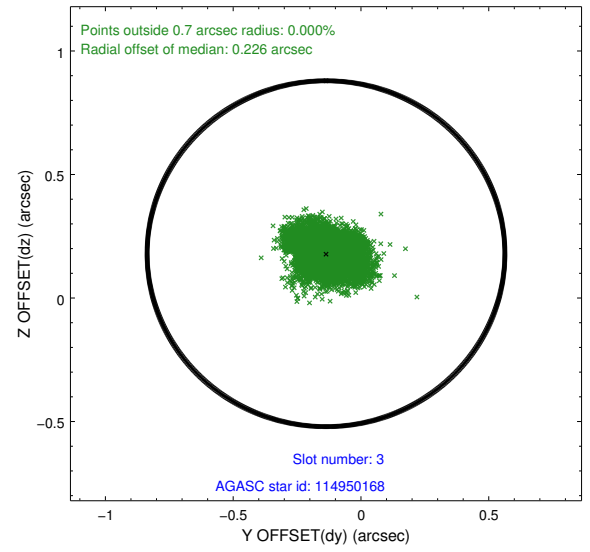
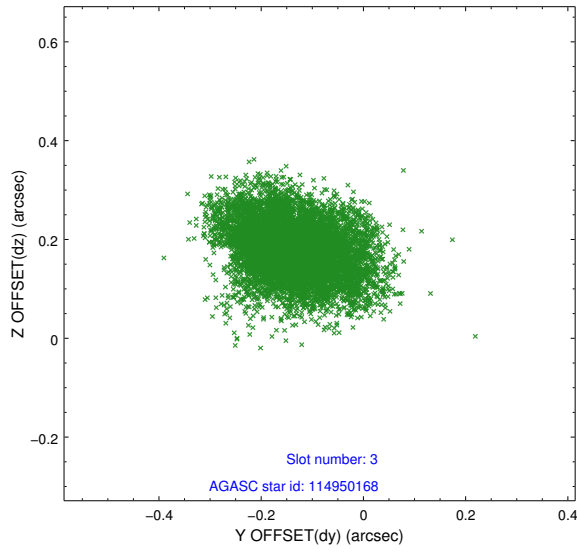


Slot Statistics

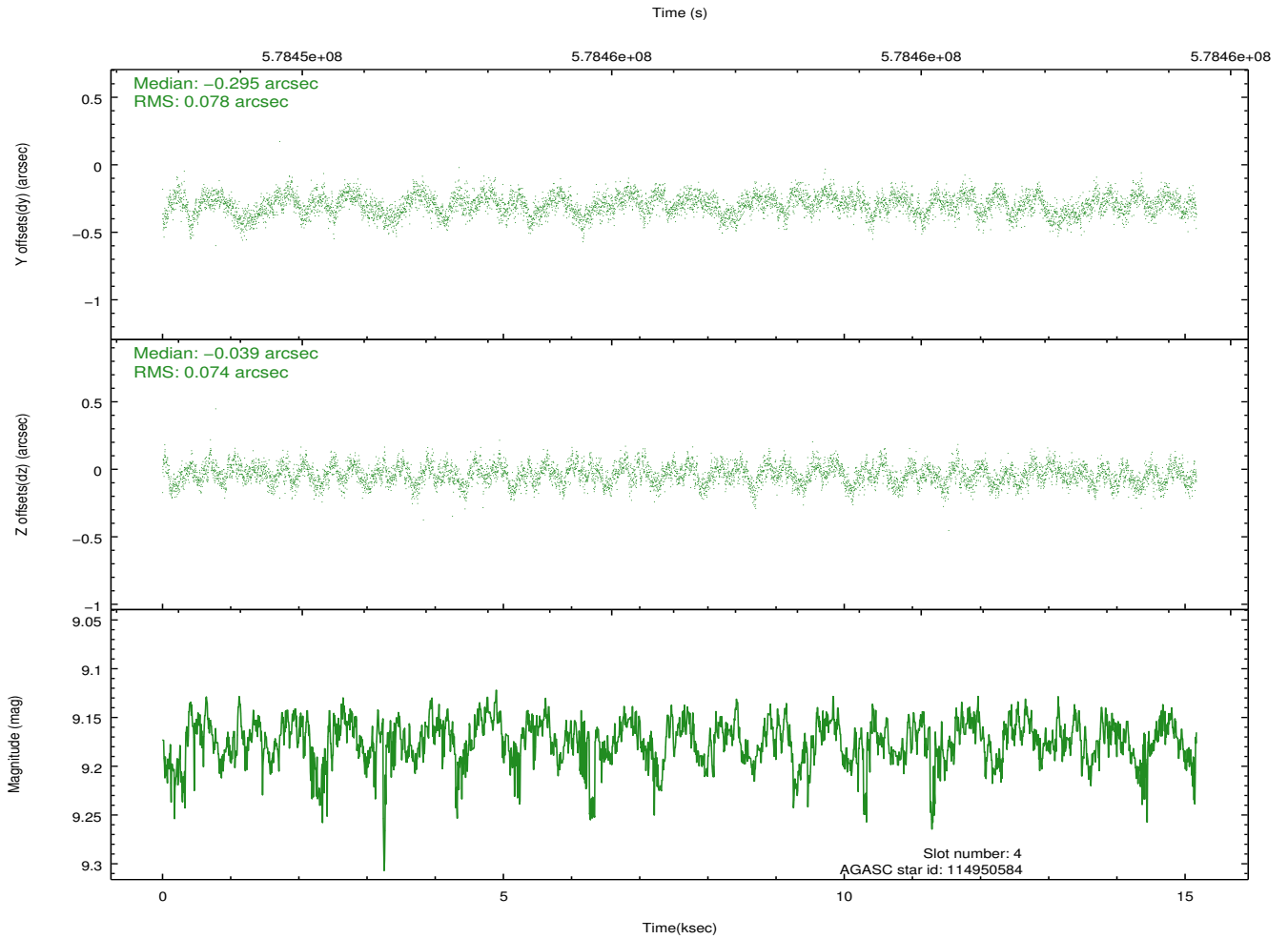
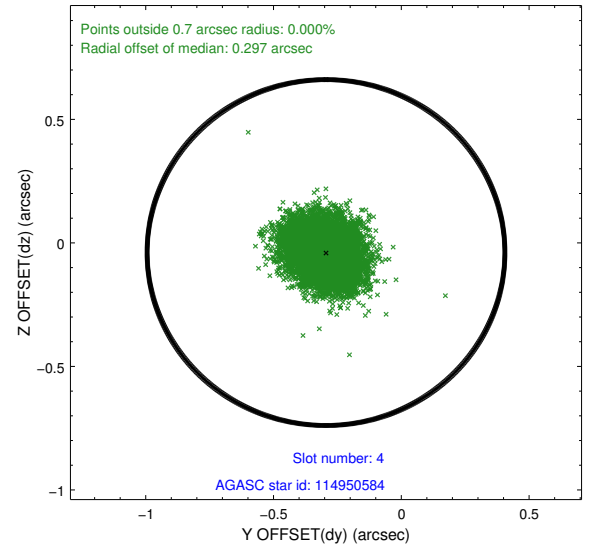
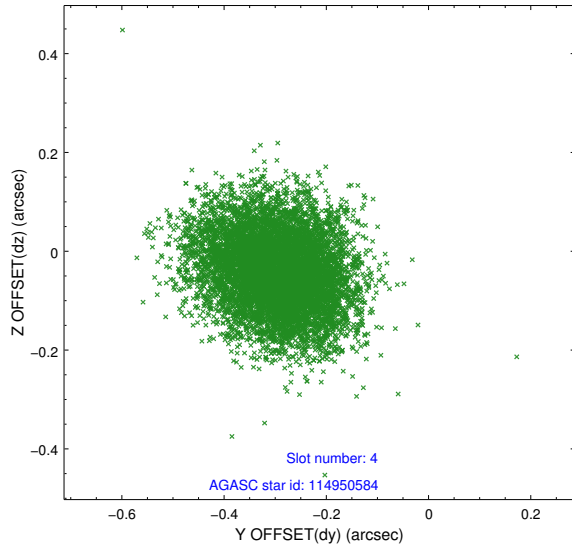
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | | ACIS-S-2 | 7.13 | 3699 | -0.187 | -0.139 | 0.008 | 0.014 | 0.000000 | 0.000000 | -770.13 | -1740.68 |
| 1 | FID | | ACIS-S-4 | 7.24 | 3699 | 0.462 | 0.127 | 0.007 | 0.012 | 0.000000 | 0.000000 | 2143.64 | 167.79 |
| 2 | FID | | ACIS-S-5 | 7.25 | 3698 | -0.307 | 0.020 | 0.009 | 0.014 | 0.000000 | 0.000000 | -1822.73 | 161.66 |
| 3 | GUIDE | used | 114950168 | 7.84 | 7397 | -0.137 | 0.179 | 0.096 | 0.159 | 187.143398 | 12.117441 | 2120.92 | -801.34 |
| 4 | GUIDE | used | 114950584 | 9.17 | 7391 | -0.295 | -0.039 | 0.115 | 0.183 | 187.487323 | 11.827248 | 2117.22 | 797.32 |
| 5 | GUIDE | used | 114952824 | 8.56 | 7394 | 0.101 | 0.413 | 0.089 | 0.146 | 187.703904 | 12.486727 | -174.44 | -183.80 |
| 6 | GUIDE | used | 114955056 | 8.30 | 7393 | 0.255 | -0.548 | 0.098 | 0.154 | 187.914001 | 12.127854 | 314.55 | 1220.89 |
| 7 | GUIDE | used | 114954440 | 9.16 | 7391 | 0.081 | -0.007 | 0.168 | 0.284 | 186.915066 | 12.219118 | 2369.18 | -1647.45 |

2.4 Star Slots

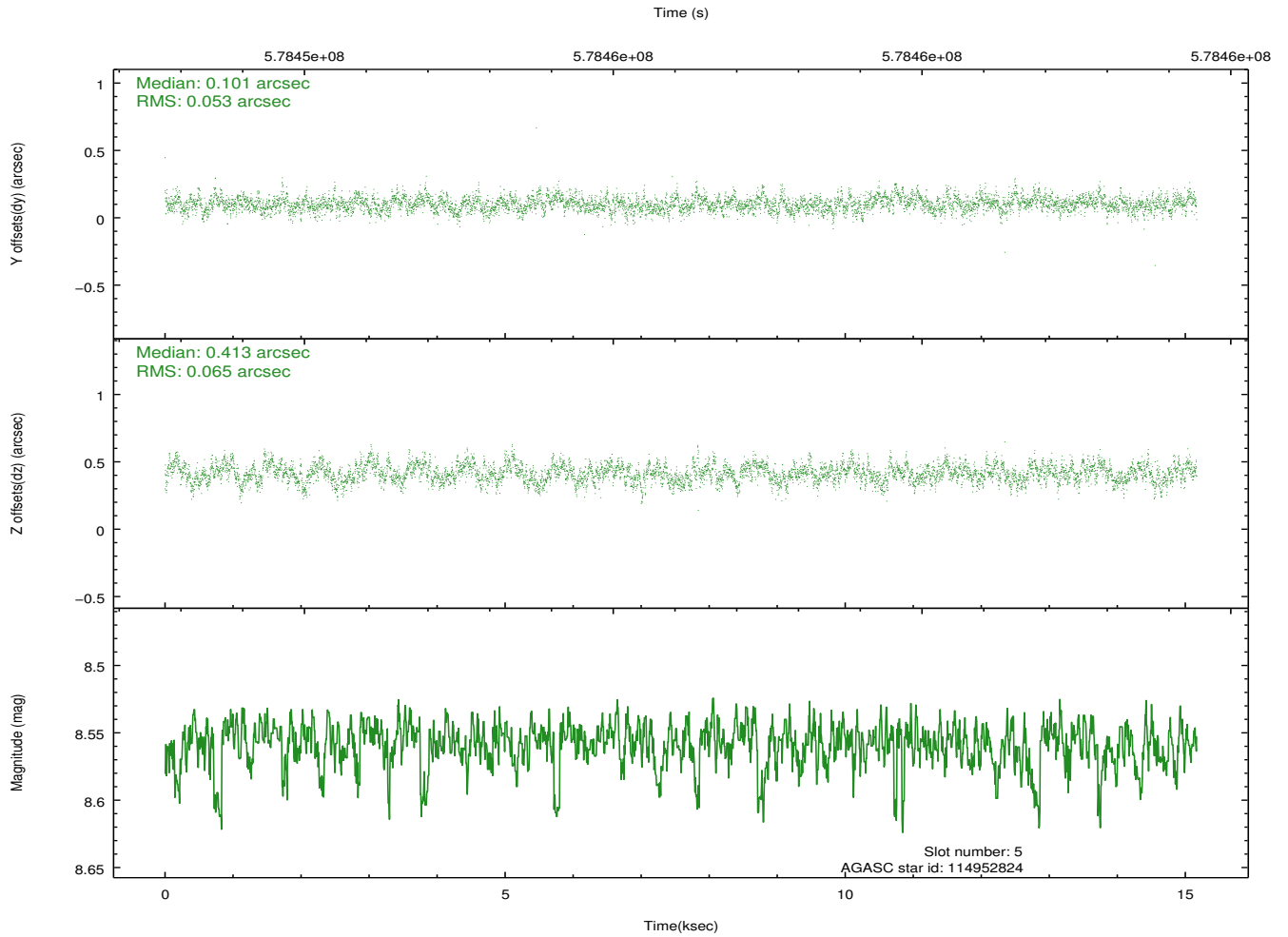
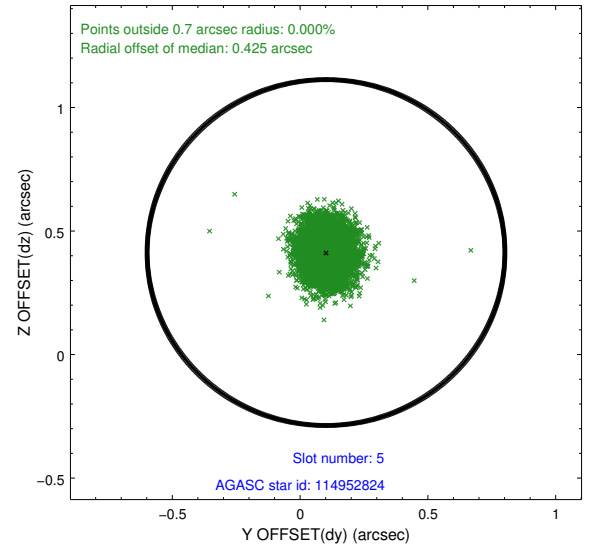
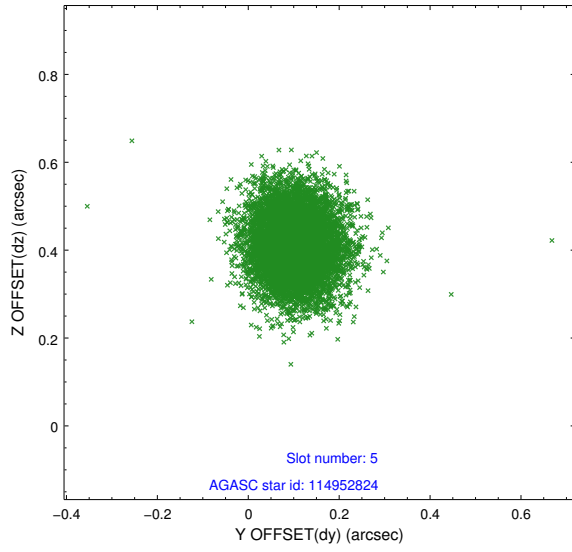
2.4.1 Slot 3



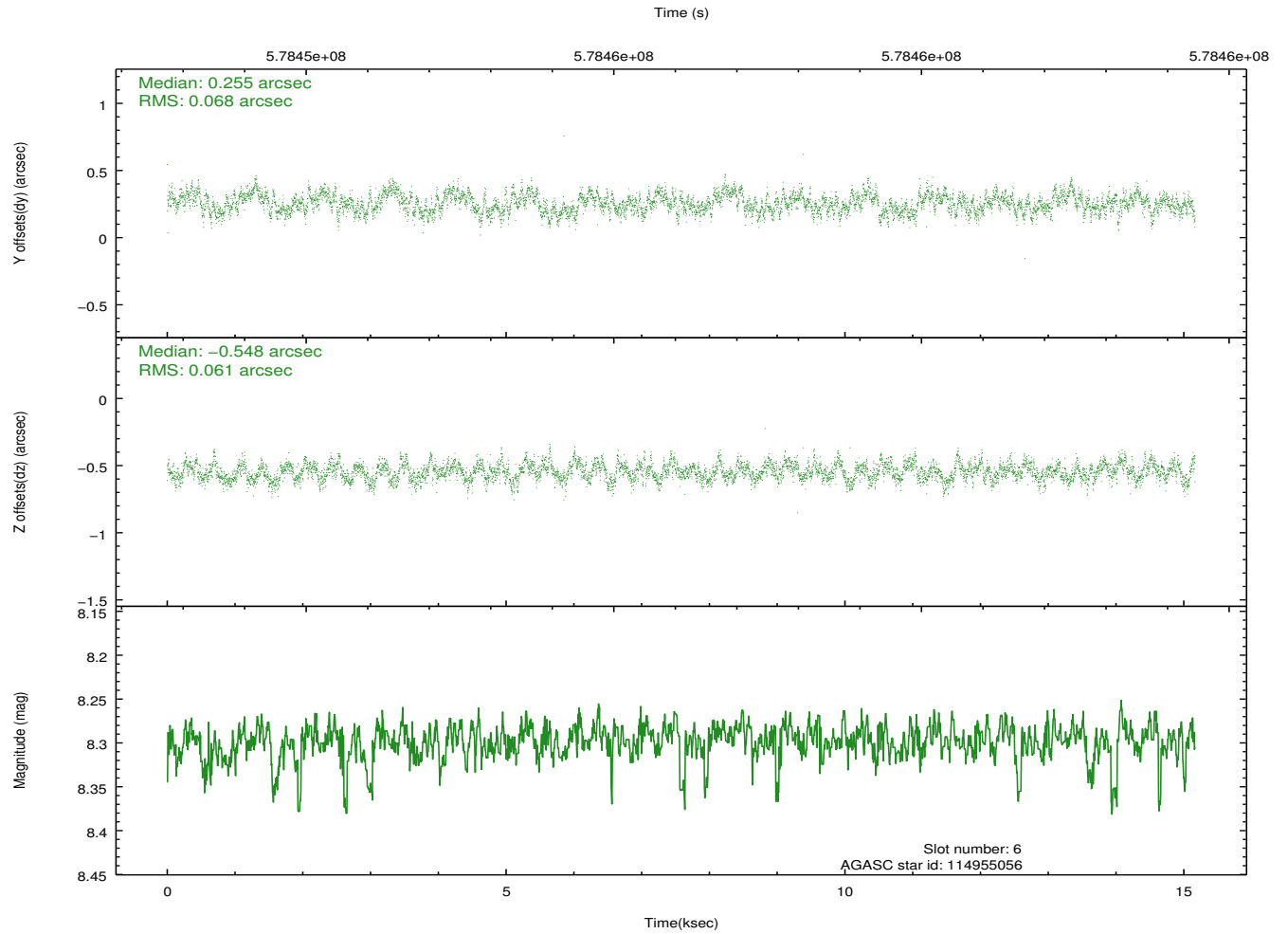
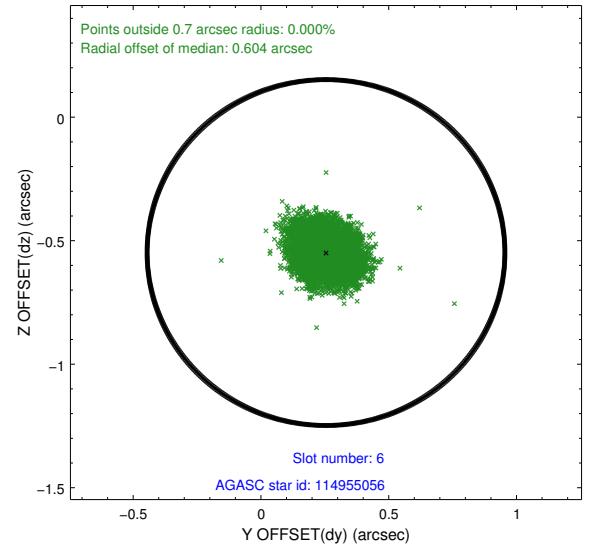
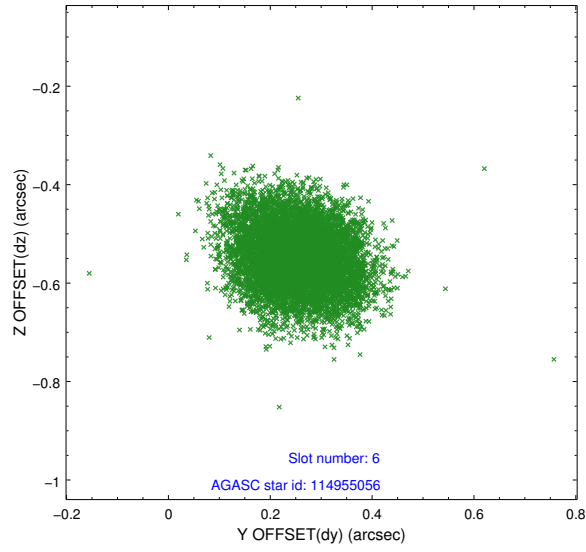
2.4.2 Slot 4



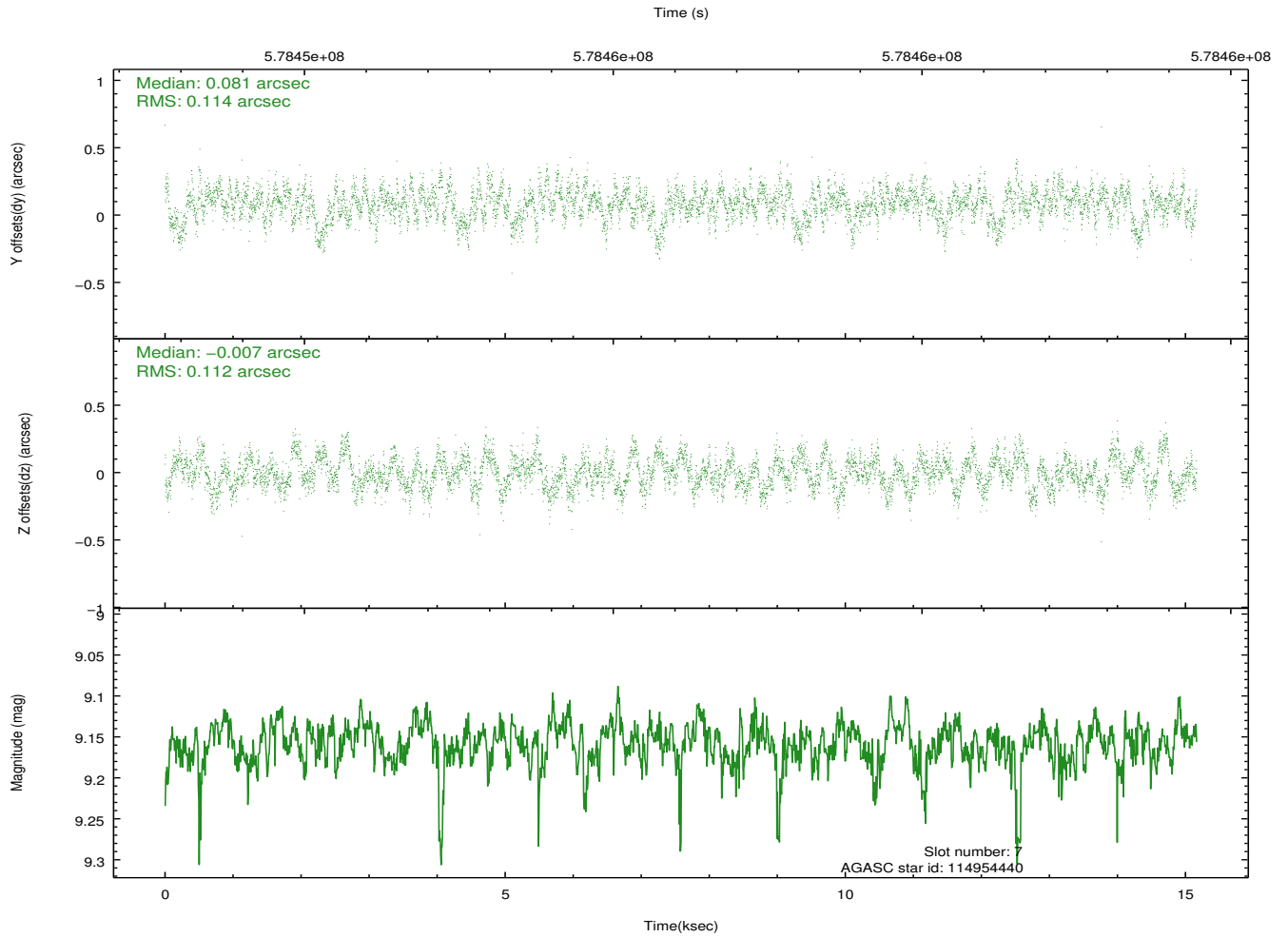
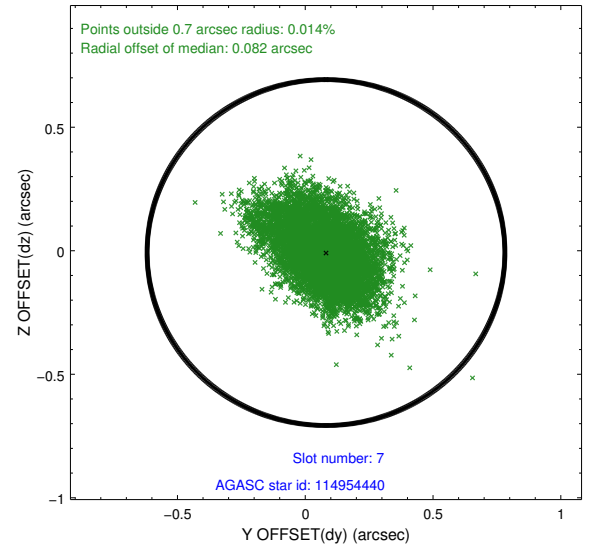
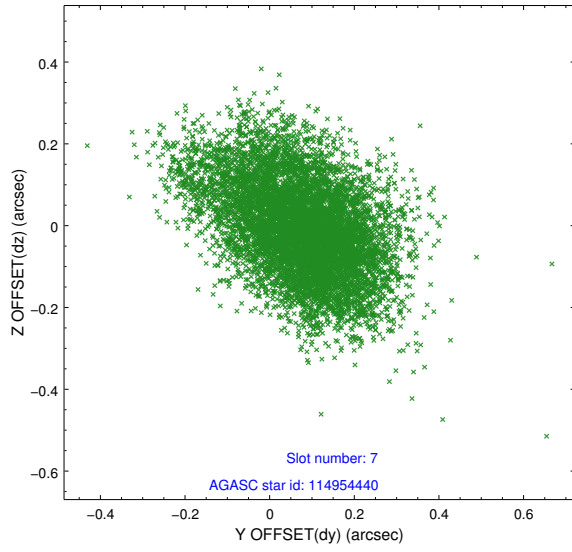
2.4.3 Slot 5



2.4.4 Slot 6

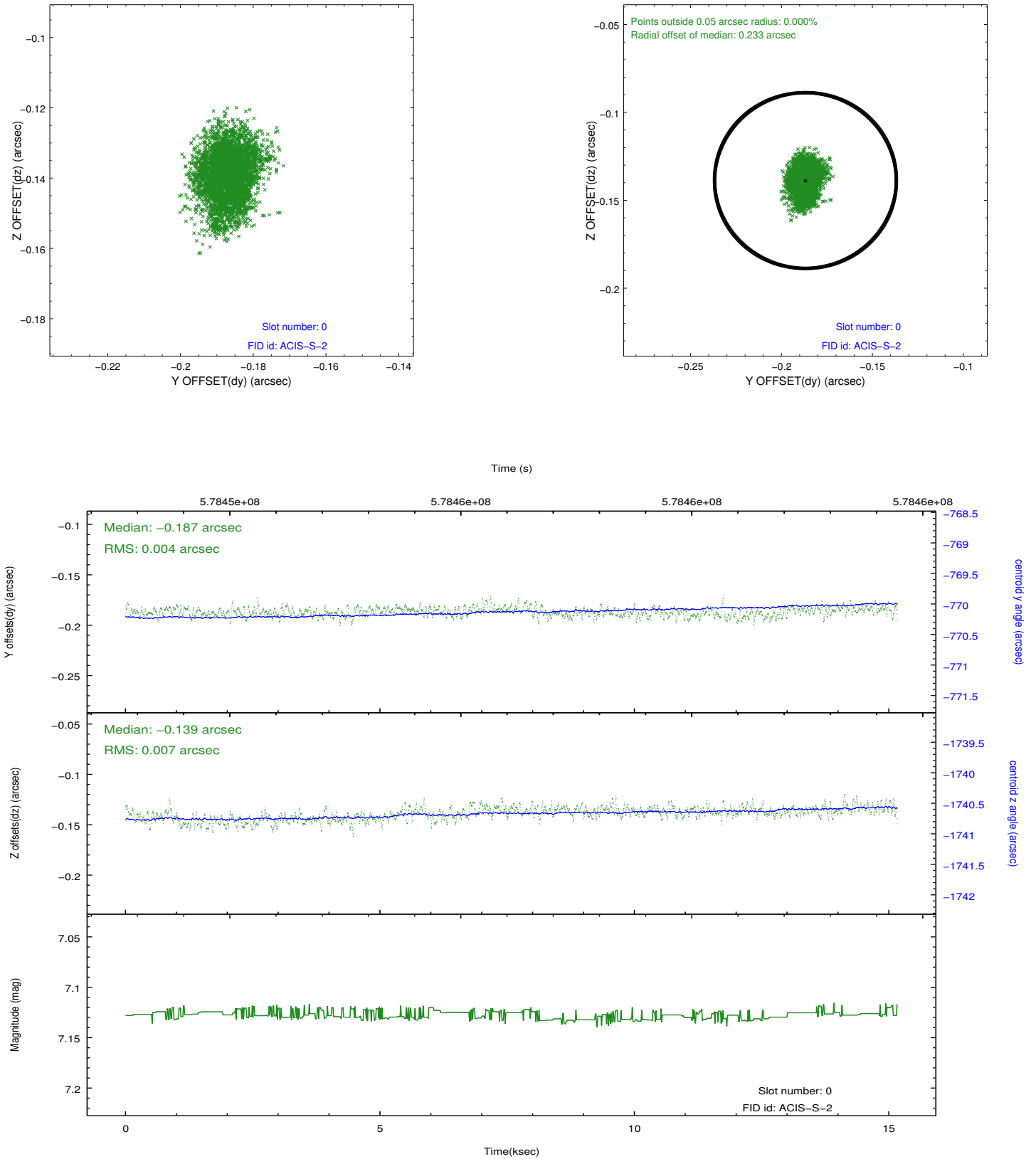


2.4.5 Slot 7

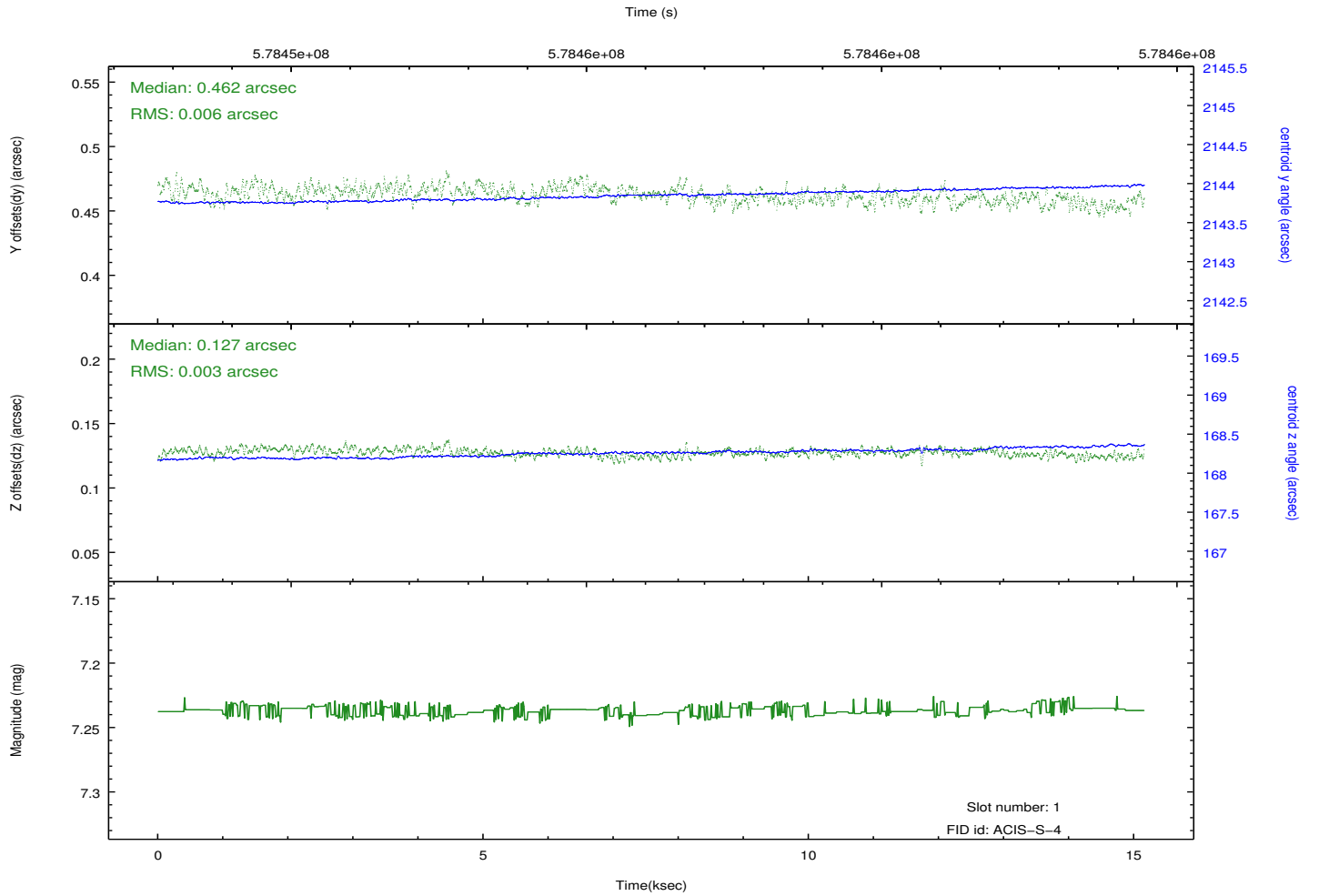
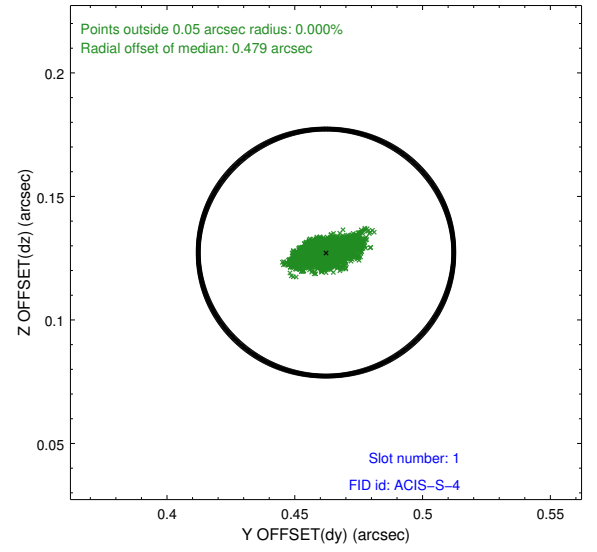
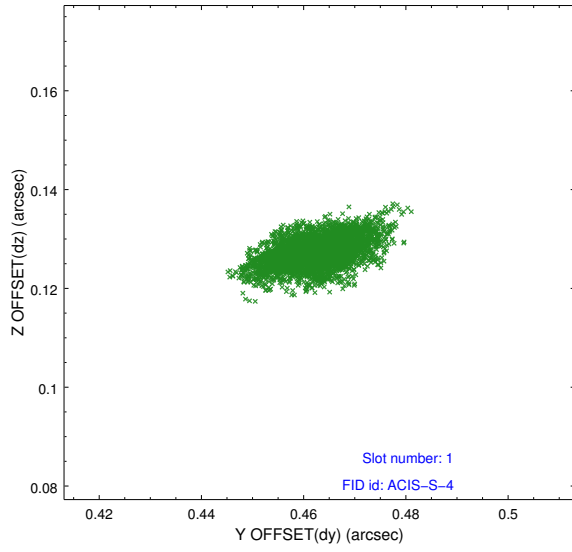


2.5 FID Slots

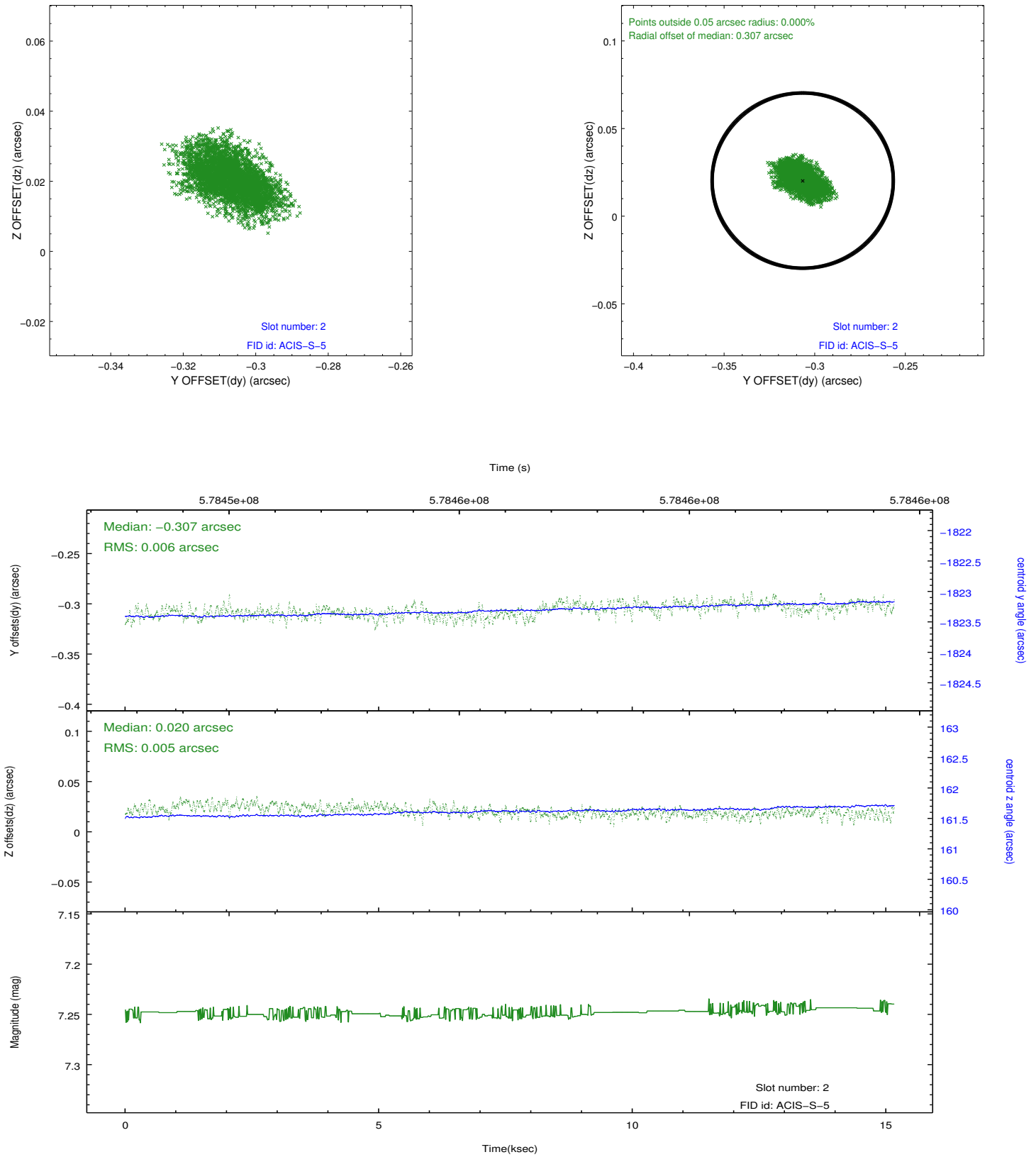
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2016.05.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 15.069199101686 |

A.2 Comments