

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 16410 - L2 Version 1
Chandra X-Ray Center

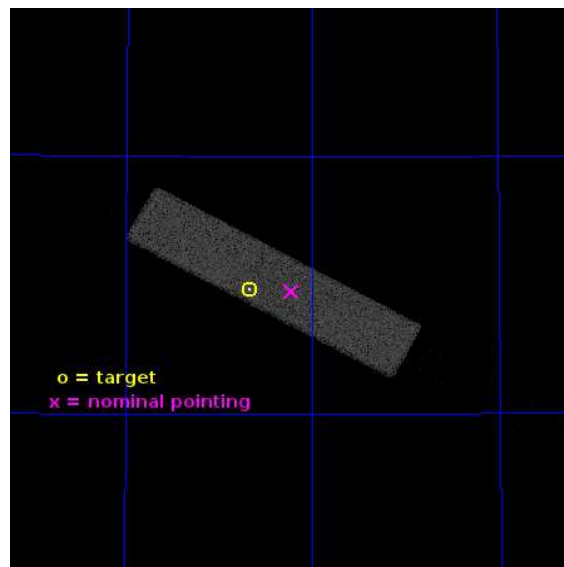
L2 Processing Date : Sep 17 2014

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1 Front

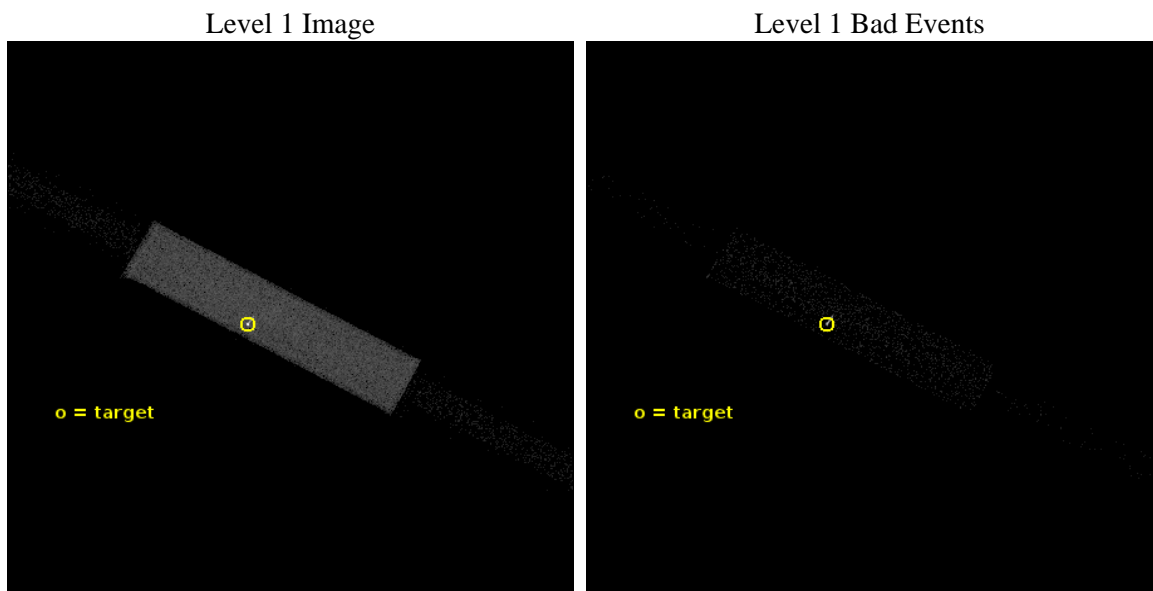
| | | |
|----------|--|---------------------------------------|
| seq_num | 291182 | Sequence number |
| obs_id | 16410 | Observation id |
| title | AO-15 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | ArLac | Source name |
| ra_targ | 332.17 | Observer's specified target RA [deg] |
| dec_targ | 45.742306 | Observer's specified target Dec [deg] |
| ra_nom | 332.05592641813 | Nominal RA [deg] |
| dec_nom | 45.738131236529 | Nominal Dec [deg] |
| roll_nom | 208.45914584366 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 1153.3813140988 | [s] |
| livetime | 1145.9540597713 | Ontime multiplied by DTCOR |
| l2events | 57350 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.2.4 | Processing system revision | ontime | 1153.3813140988 | [s] |
| caldsver | 4.6.3 | | l1events | 90223 | Number of level 1 events |
| date | 2014-09-17T03:50:51 | Date and time of file creation | | | |
| revision | 1 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

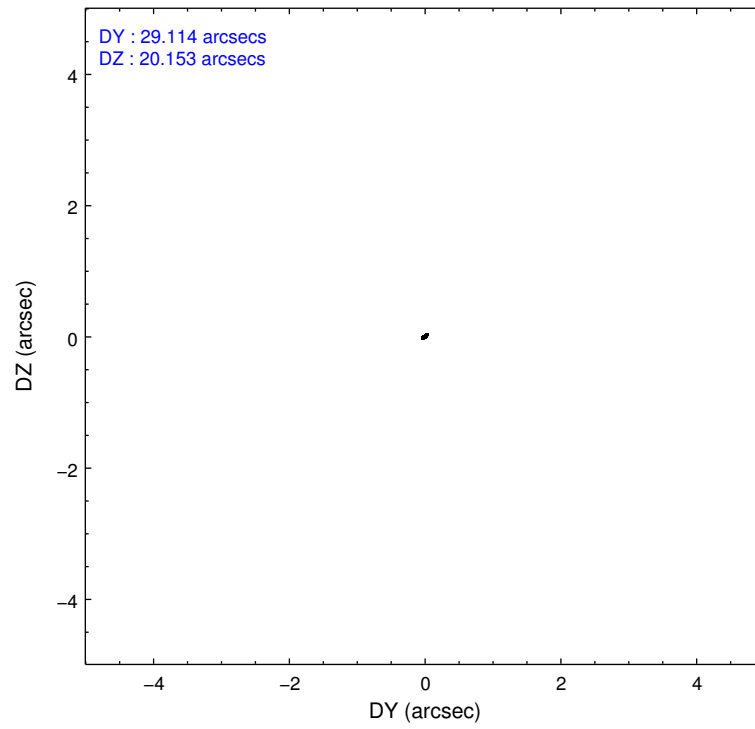
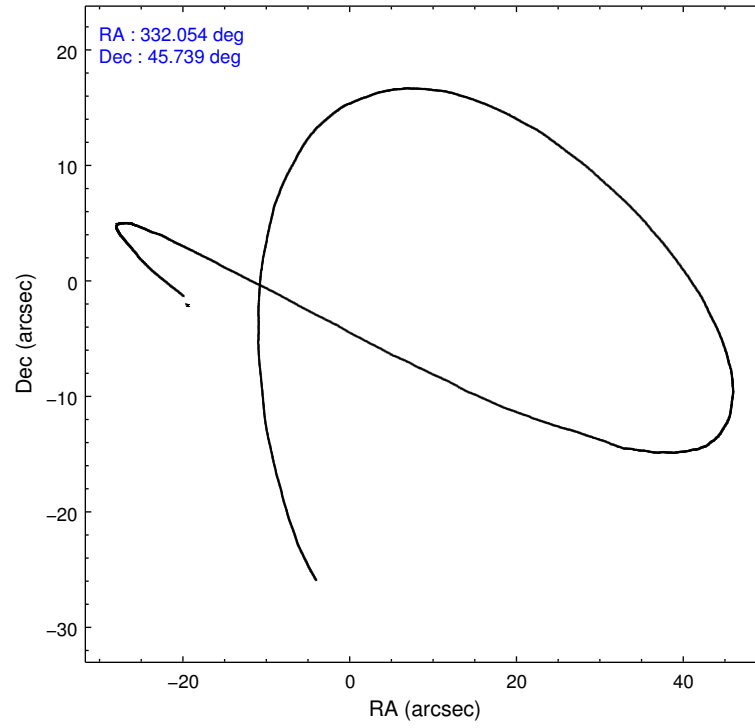
| | segment 1 | segment 2 | segment 3 |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events | 1178 | 87996 | 1049 |
| rejected events | 1176 | 21255 | 990 |
| rejected % | 99% | 24% | 94% |

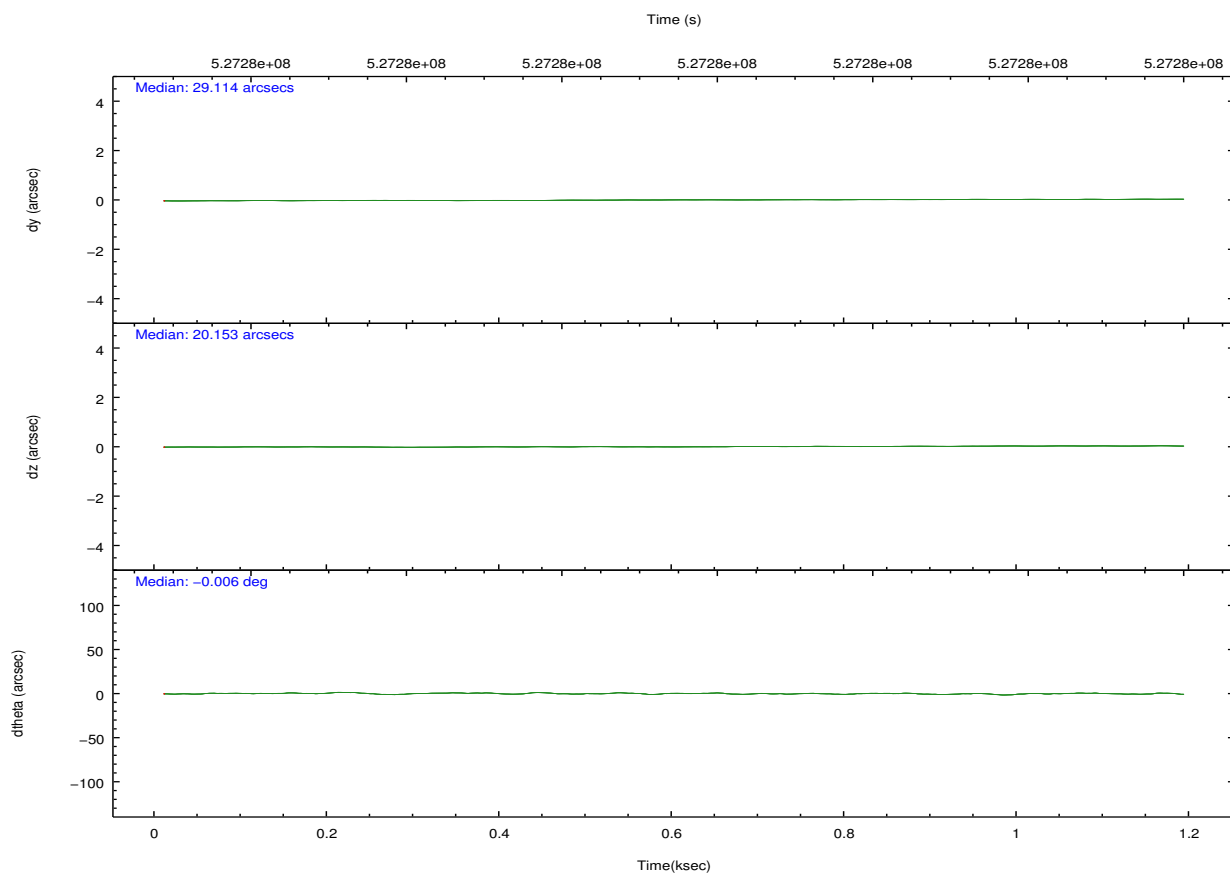
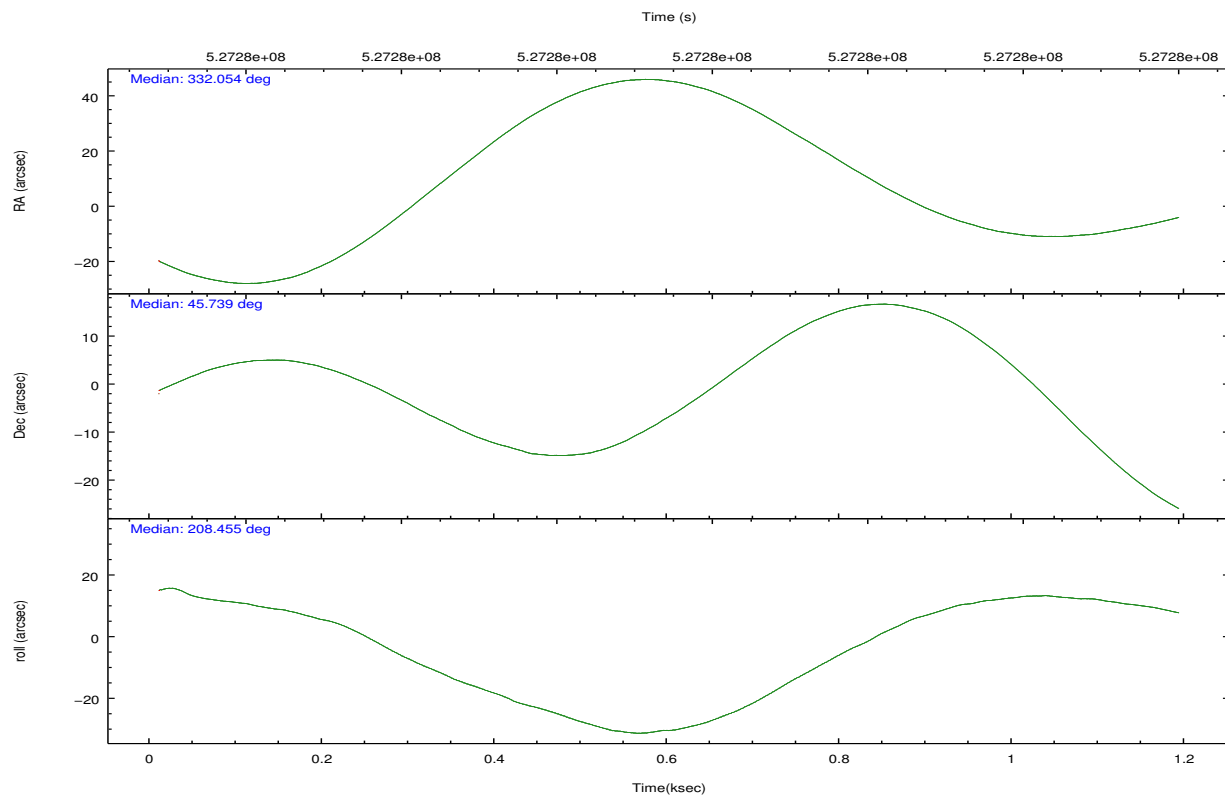
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|-----------------------|----------------------|
| Instrument | HRC | HRC |
| Detector | HRC-S | HRC-S |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 332.076948 | 332.0559264181266 |
| [deg] Pointing Dec | 45.762956 | 45.73813123652933 |
| [deg] Pointing Roll | 208.376692 | 208.4591458436577 |
| [mm] SIM focus pos | -1.533336 | -1.526339935833849 |
| [mm] SIM defocus | 7.710433287538843e-07 | 0.006996703570447904 |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 |
| [s] Observation start time (MET) | 527276548.184000 | 527276171.54111 |
| Observation start date | 2014-09-16T17:41:21 | 2014-09-16T17:36:11 |
| [s] Observation end time (MET) | 527277548.184000 | 527277681.36619 |
| Observation end date | 2014-09-16T17:58:01 | 2014-09-16T18:01:21 |

| Parameter | Planned | Actual |
|------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |

2.3 Aspect



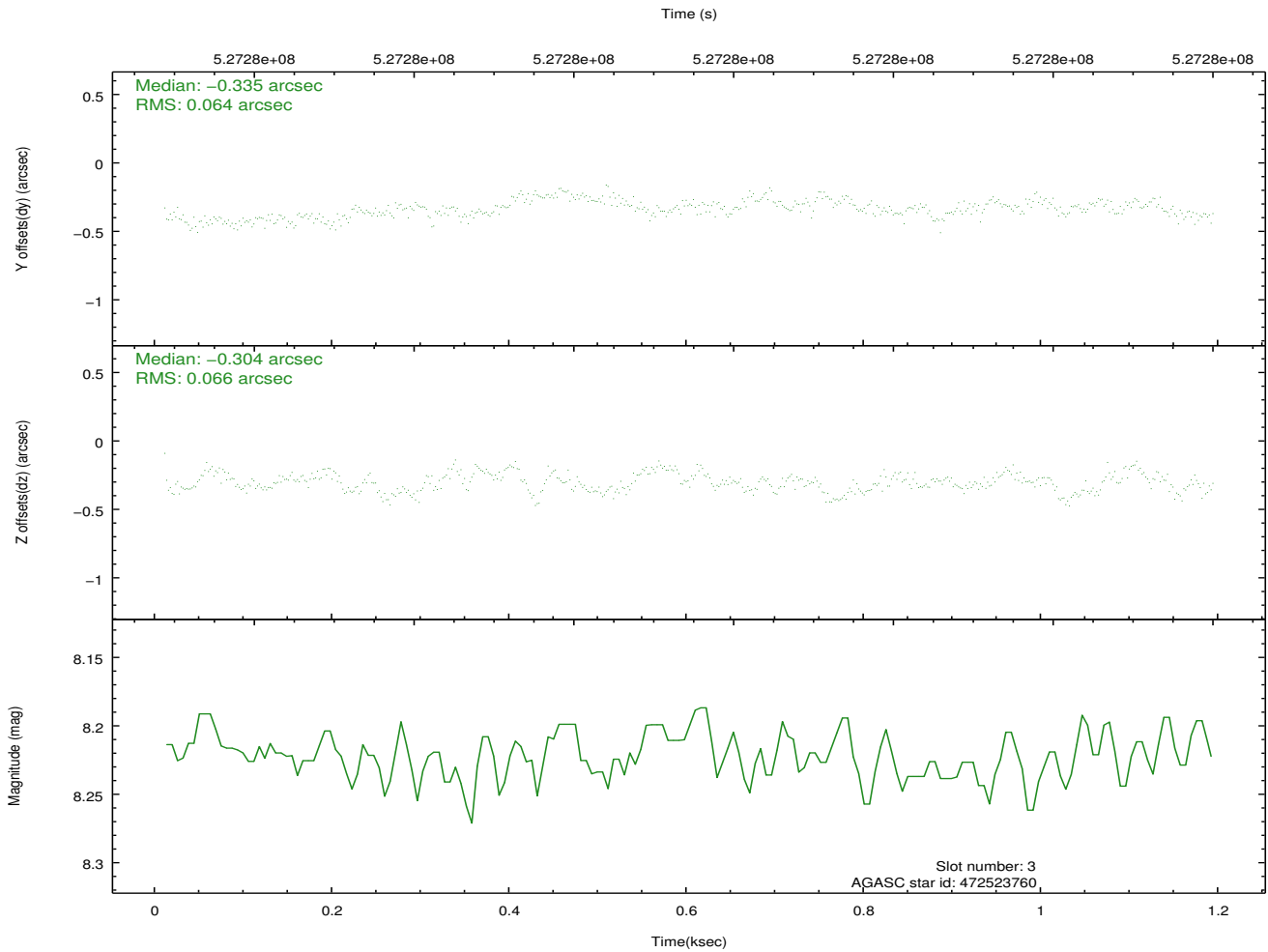
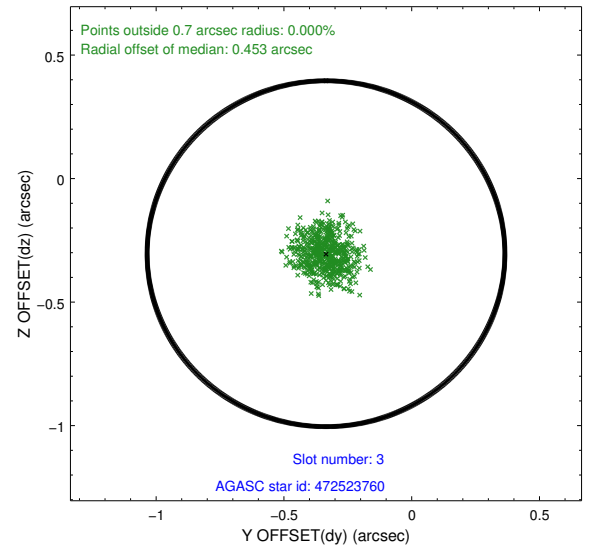
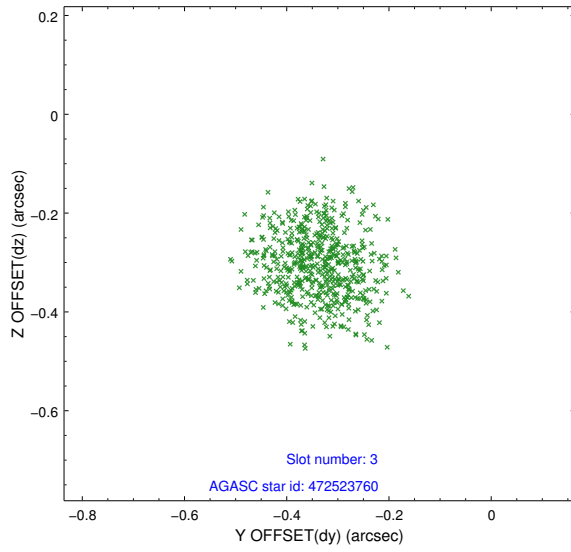


Slot Statistics

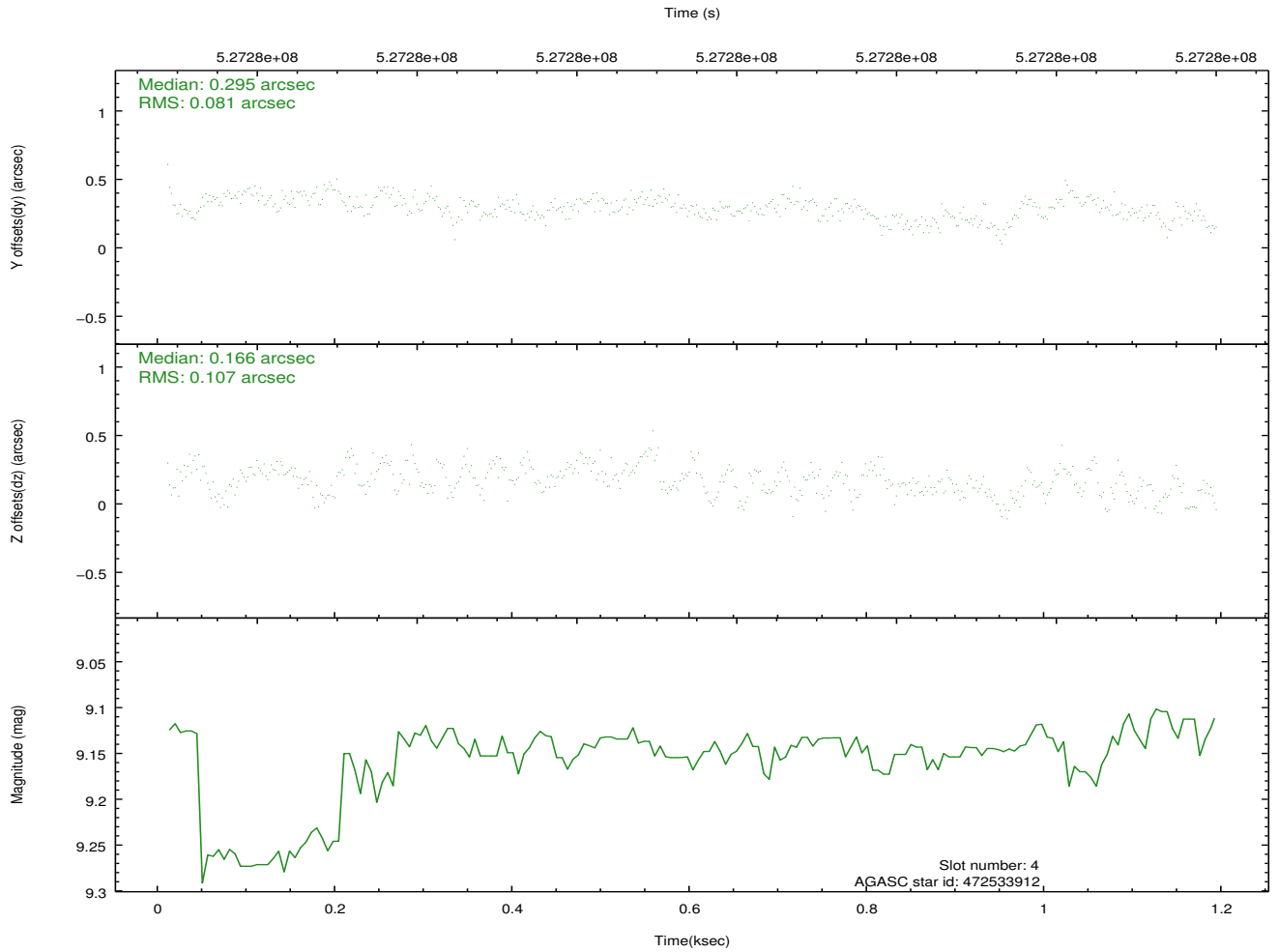
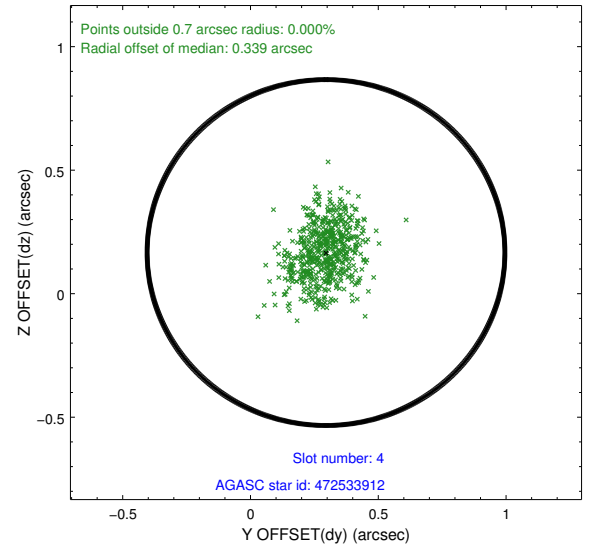
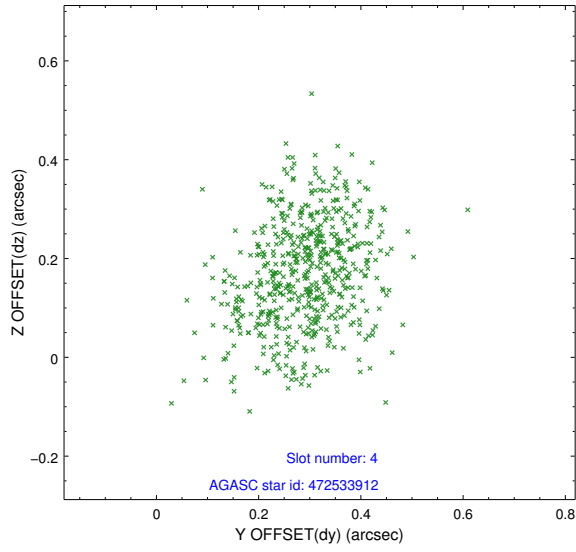
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-S-1 | 7.07 | 289 | -0.018 | -0.205 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1183.95 | -469.31 |
| 1 | FID | HRC-S-2 | 7.04 | 289 | 0.362 | -0.136 | 0.004 | 0.011 | 0.000000 | 0.000000 | 1211.99 | -463.39 |
| 2 | FID | HRC-S-3 | 7.07 | 289 | 0.046 | 0.038 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1182.47 | 558.85 |
| 3 | GUIDE | 472523760 | 8.22 | 578 | -0.335 | -0.304 | 0.102 | 0.155 | 331.645363 | 45.403260 | 1572.48 | 621.32 |
| 4 | GUIDE | 472533912 | 9.15 | 578 | 0.295 | 0.166 | 0.146 | 0.223 | 331.791136 | 46.368695 | -410.25 | -2252.80 |
| 5 | GUIDE | 472535576 | 7.86 | 577 | -0.174 | 0.239 | 0.098 | 0.156 | 331.438373 | 46.291802 | 487.97 | -2436.06 |
| 6 | GUIDE | 472655152 | 9.40 | 577 | -0.042 | -0.306 | 0.189 | 0.307 | 332.504239 | 45.862991 | -1115.39 | 188.48 |
| 7 | GUIDE | 472665256 | 8.99 | 577 | 0.259 | 0.201 | 0.108 | 0.170 | 332.808125 | 46.195041 | -2349.09 | -506.49 |

2.4 Star Slots

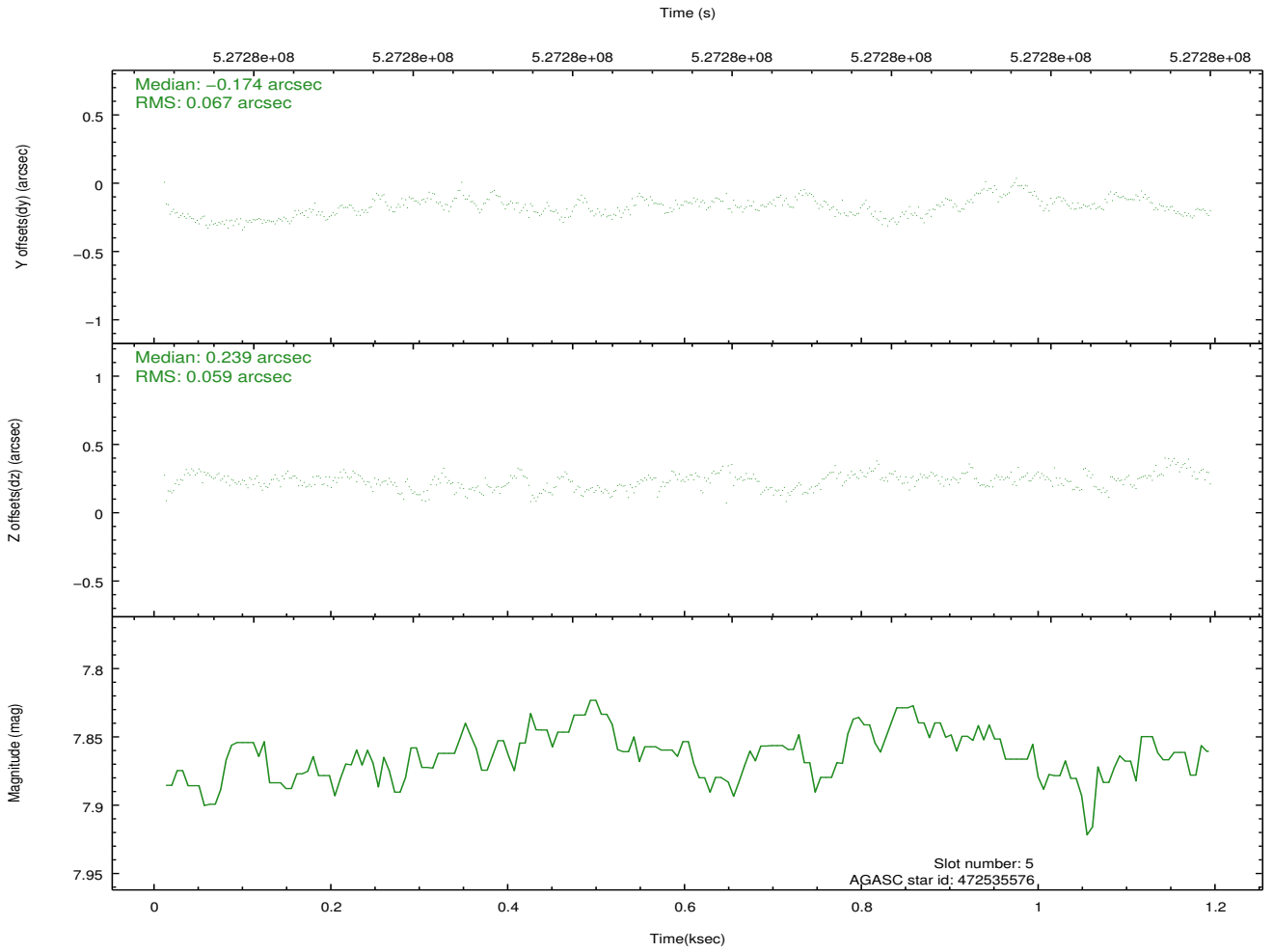
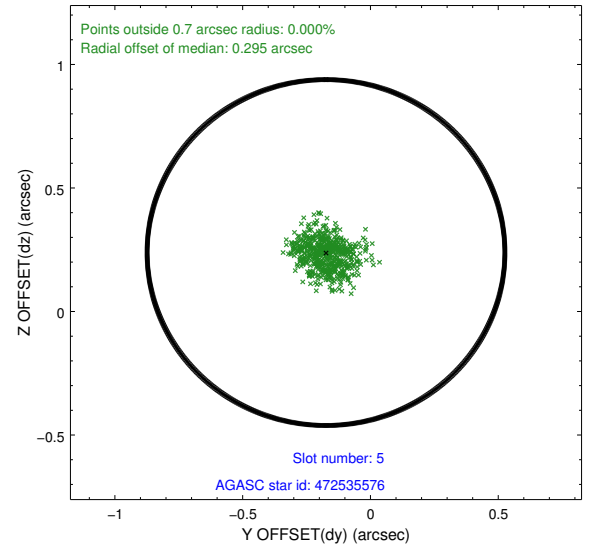
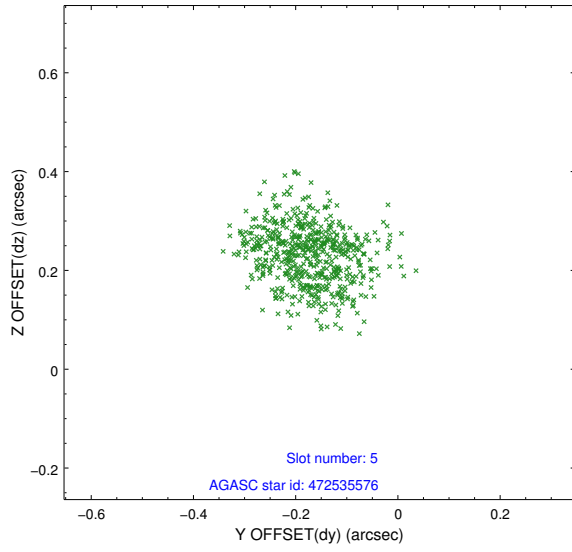
2.4.1 Slot 3



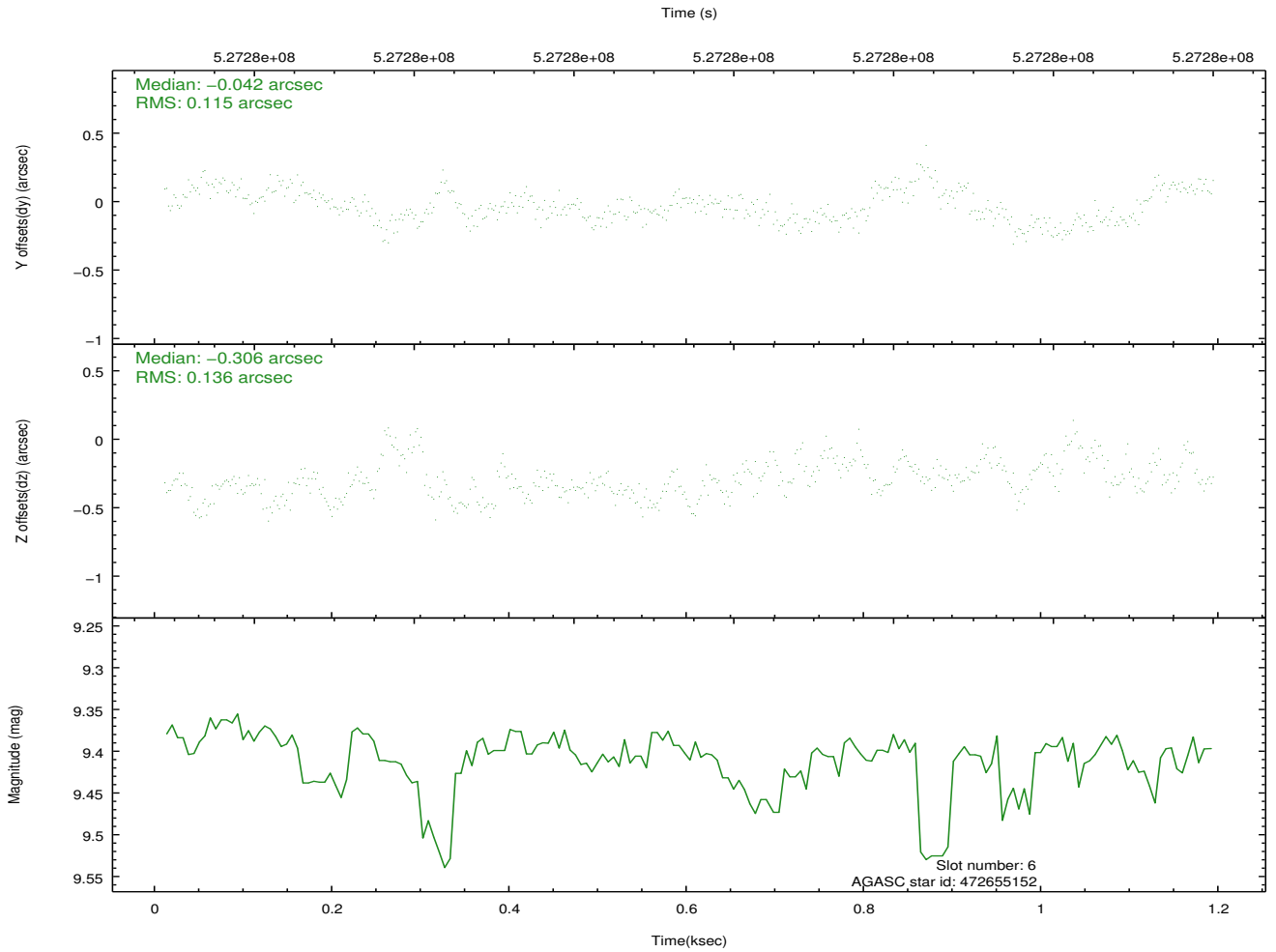
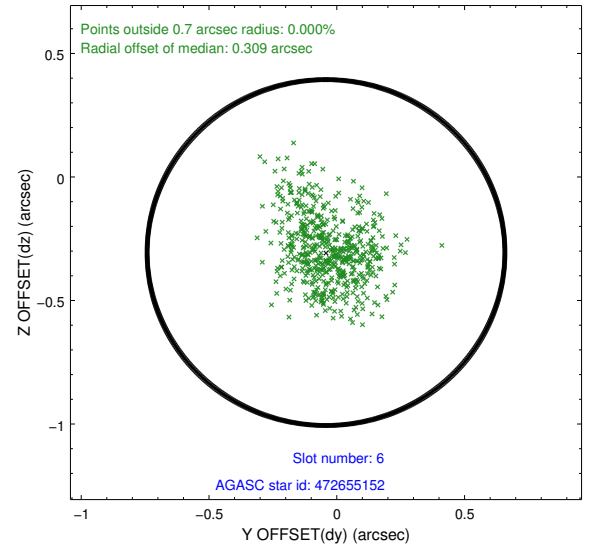
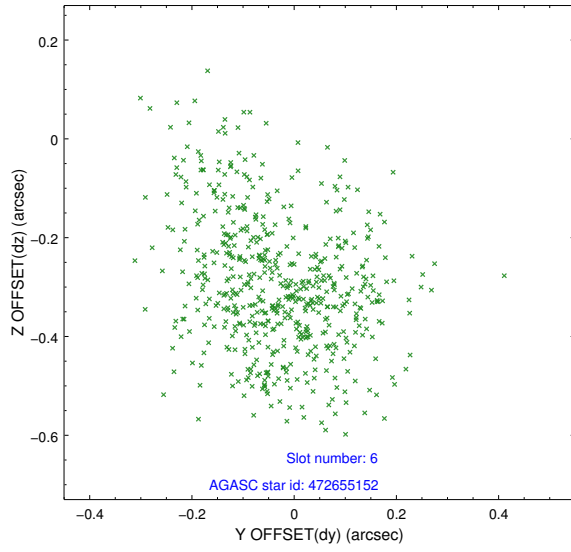
2.4.2 Slot 4



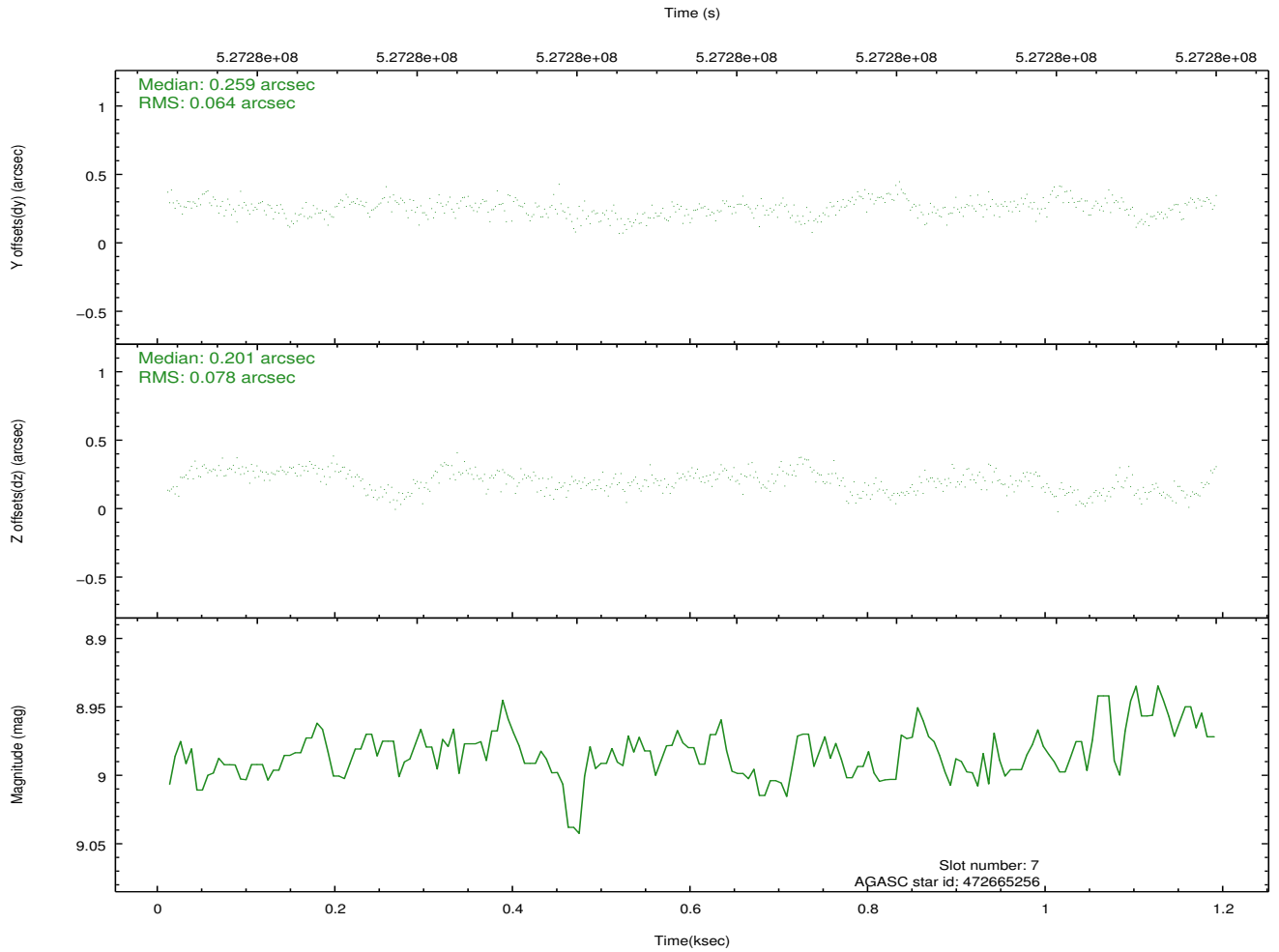
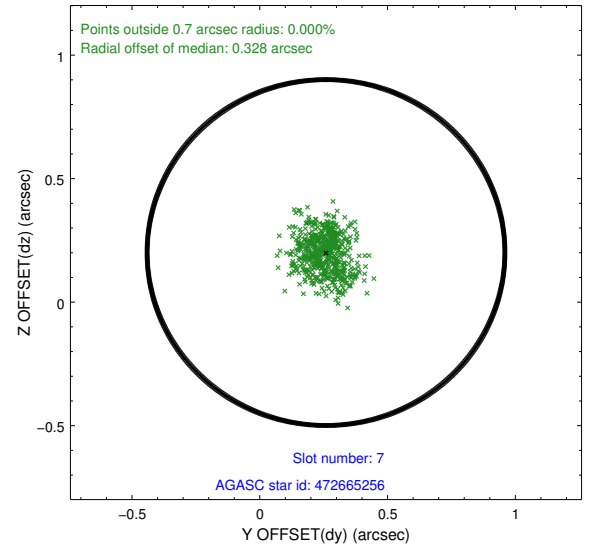
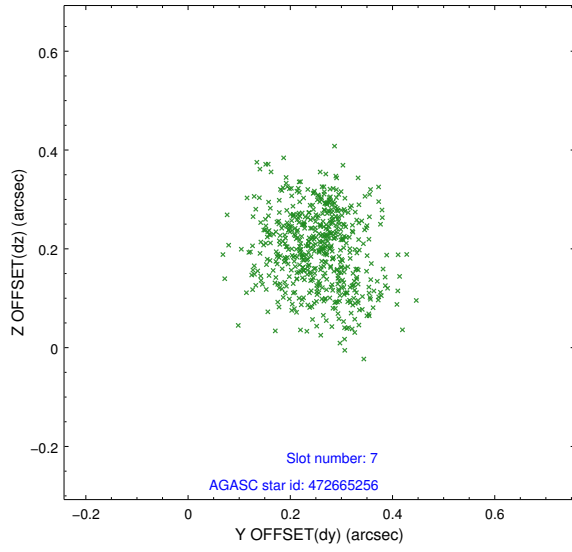
2.4.3 Slot 5



2.4.4 Slot 6

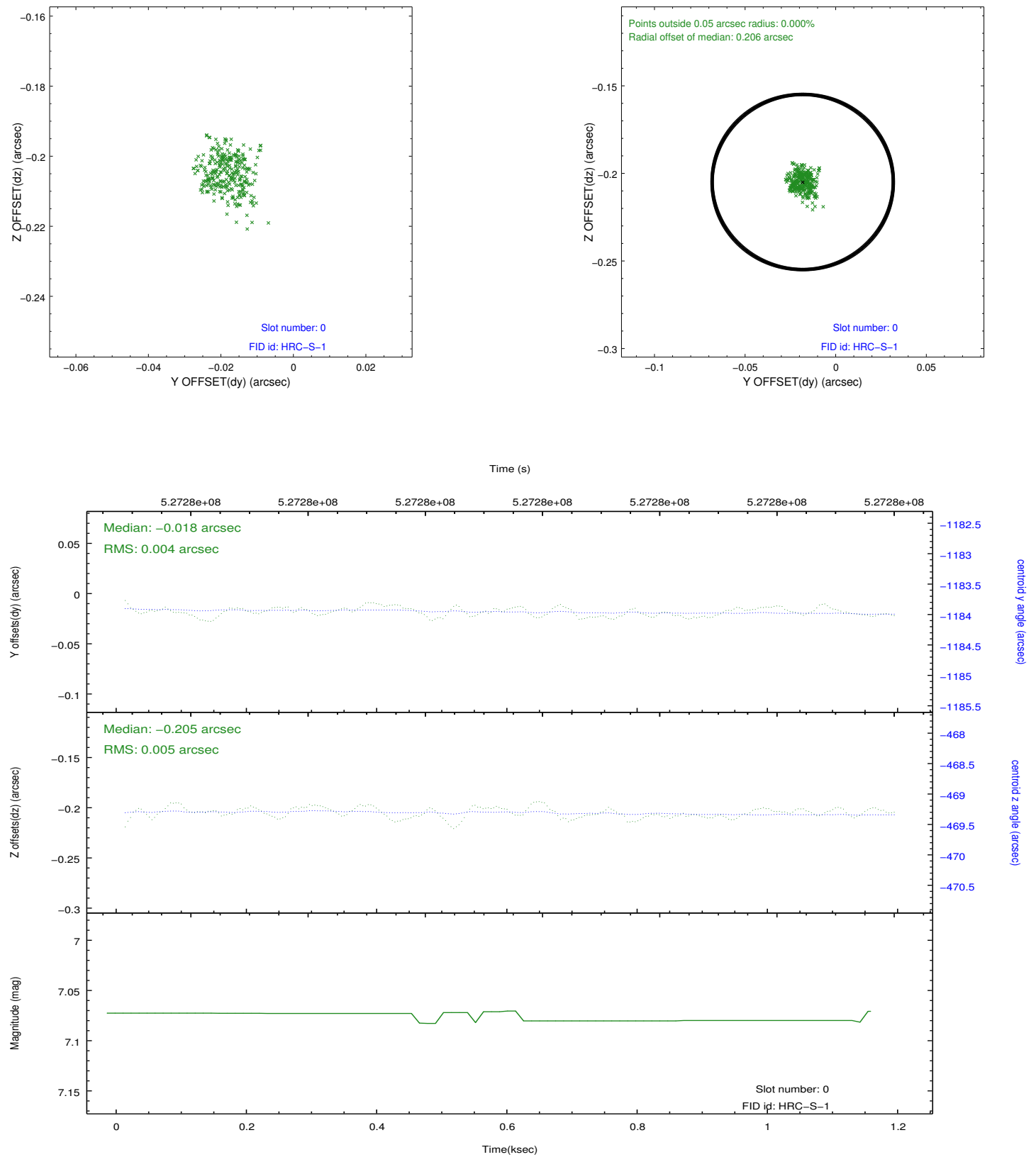


2.4.5 Slot 7

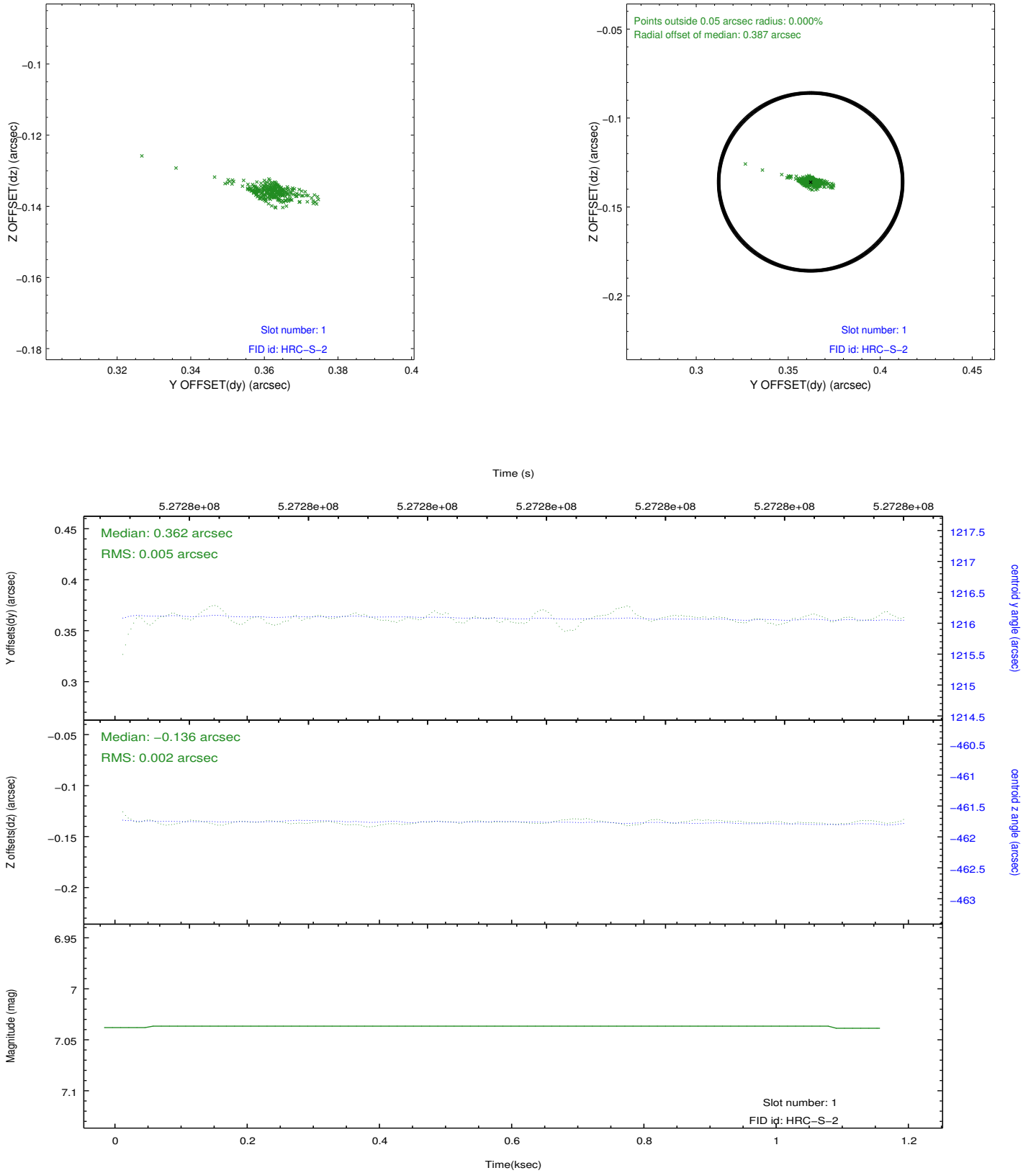


2.5 FID Slots

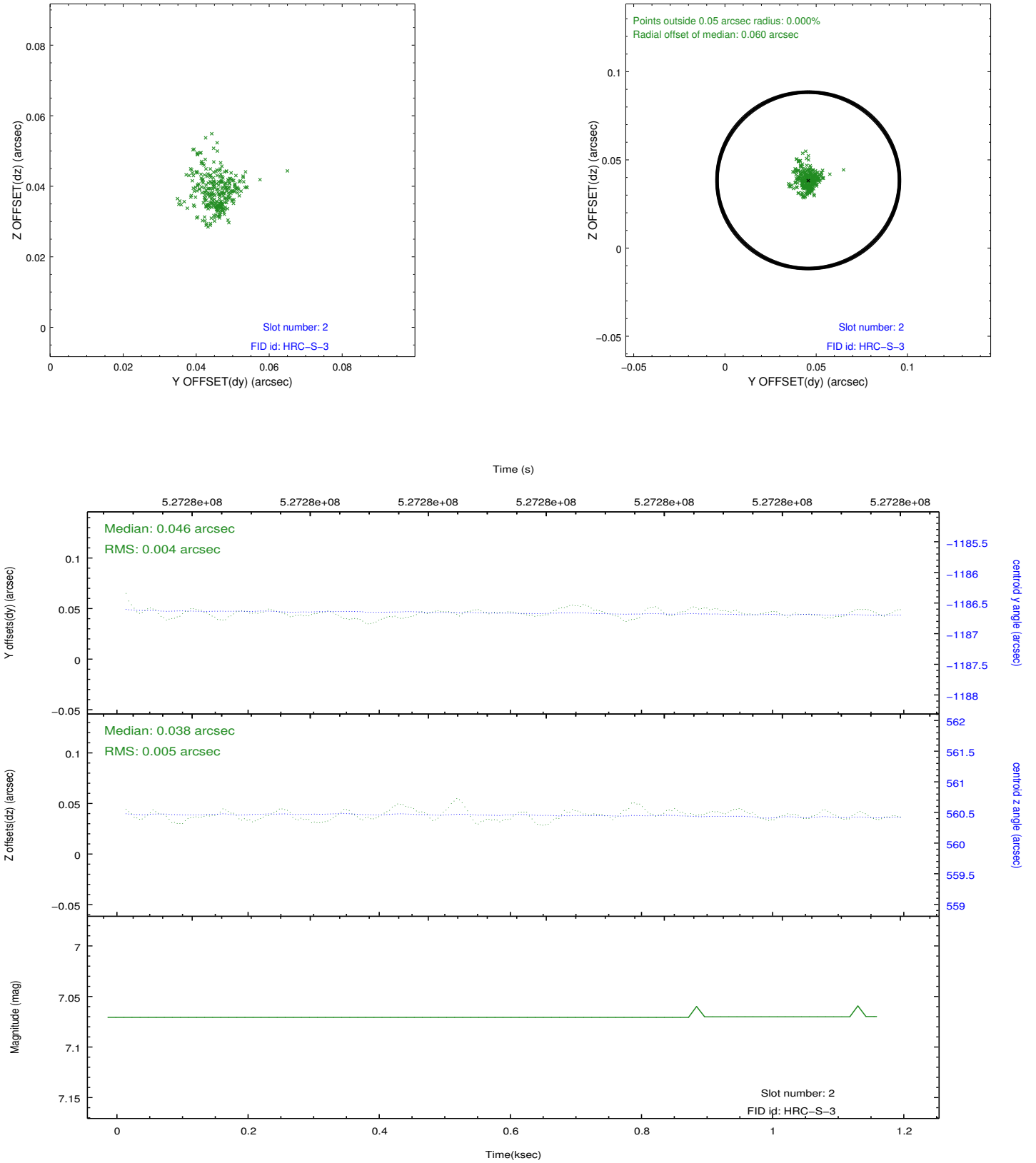
2.5.1 Slot 0



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) | 2014.09.17 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.1533813140988 |

A.2 Comments