

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13068 - L2 Version 4
Chandra X-Ray Center

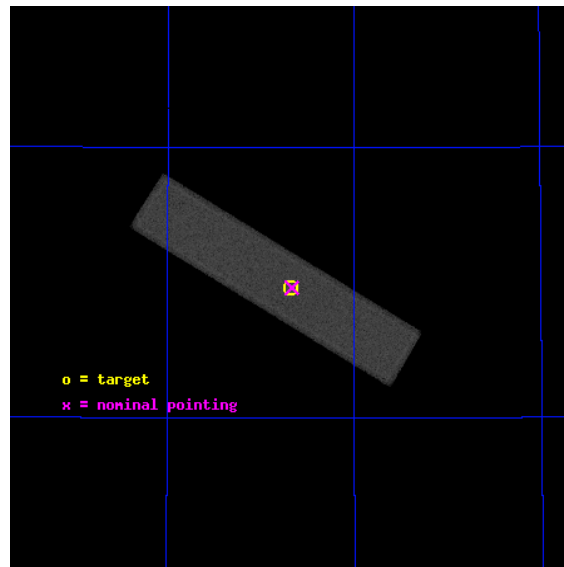
L2 Processing Date : Aug 9 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Parameters | 4 |
| 2.1.3 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

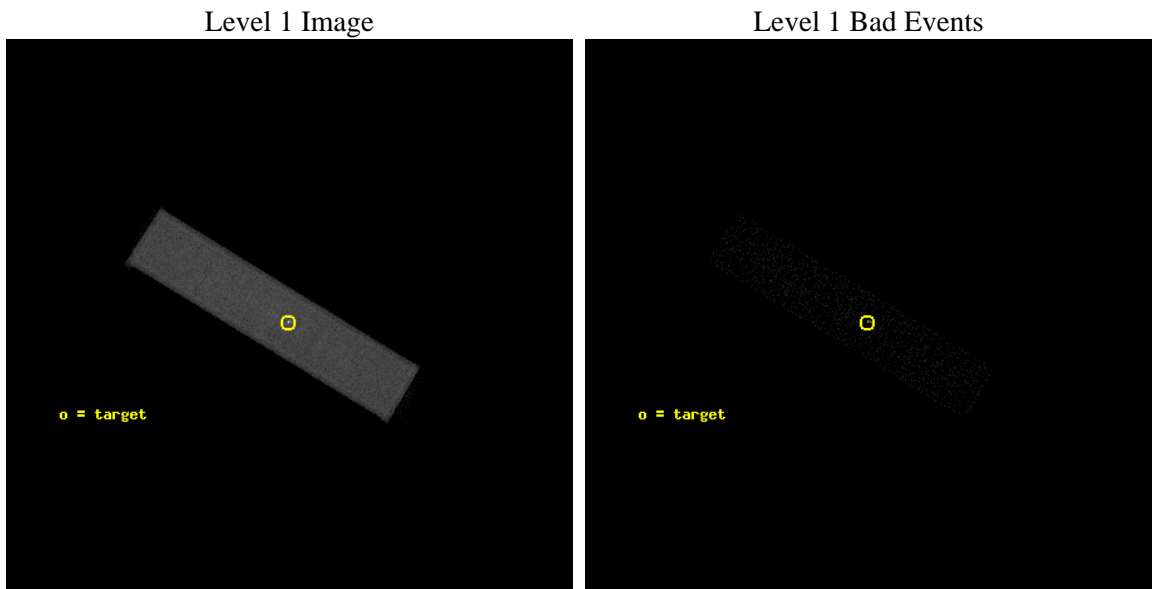
| | | |
|----------|--|---------------------------------------|
| seq_num | 290987 | Sequence number |
| obs_id | 13068 | Observation id |
| title | AO-12 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| 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 | 332.16716431426 | Nominal RA [deg] |
| dec_nom | 45.741160687688 | Nominal Dec [deg] |
| roll_nom | 211.1552822531 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 3159.3064156771 | [s] |
| livetime | 3135.8302910224 | Ontime multiplied by DTCOR |
| l2events | 176666 | 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 | 3000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 3159.3064156771 | [s] |
| caldsver | 4.5.1.1 | | l1events | 217292 | Number of level 1 events |
| date | 2012-08-10T00:59:38 | Date and time of file creation | | | |
| revision | 4 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

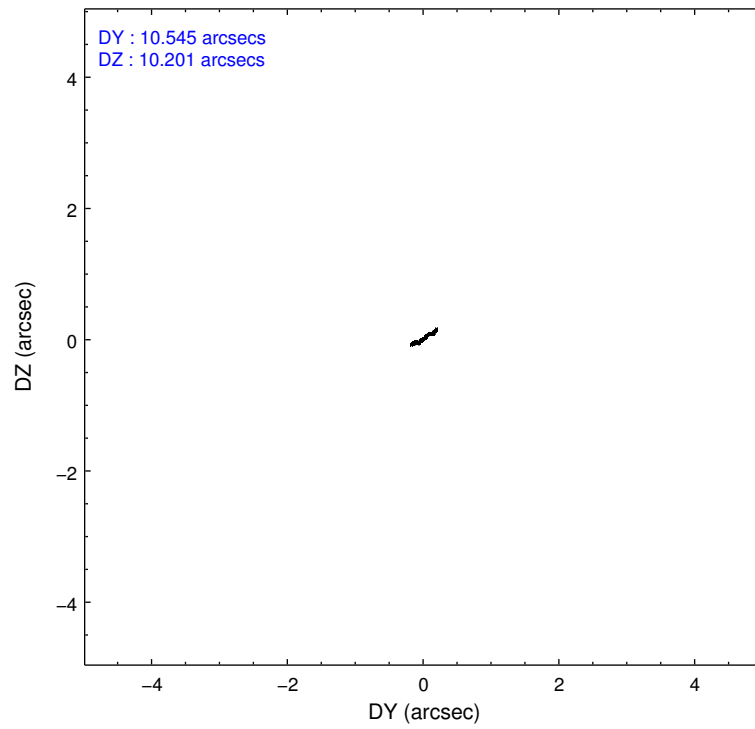
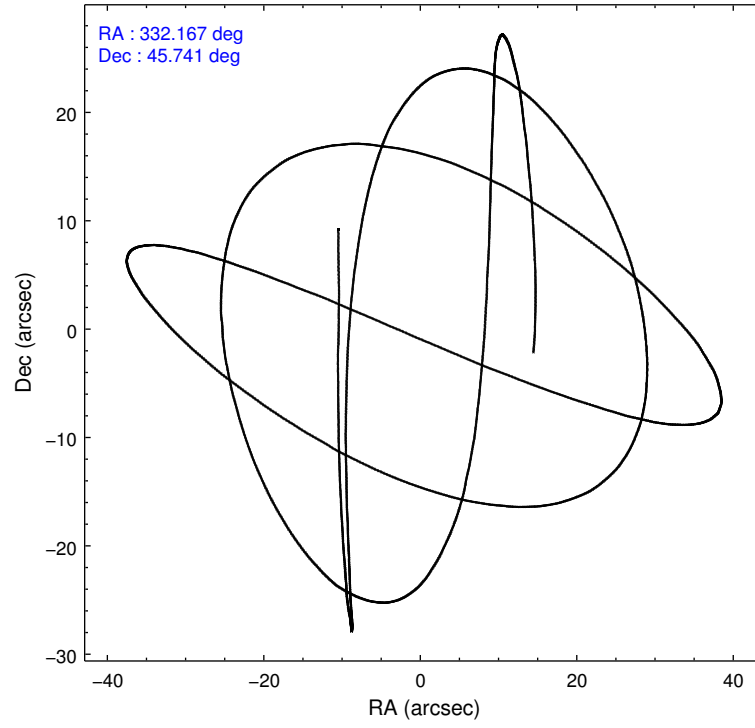
| | segment 1 | segment 2 | segment 3 |
|-----------------|--------------|--------------|--------------|
| level 1 events | 0 | 217292 | 0 |
| rejected events | 0 | 11268 | 0 |
| rejected % | 0% | 5% | 0% |

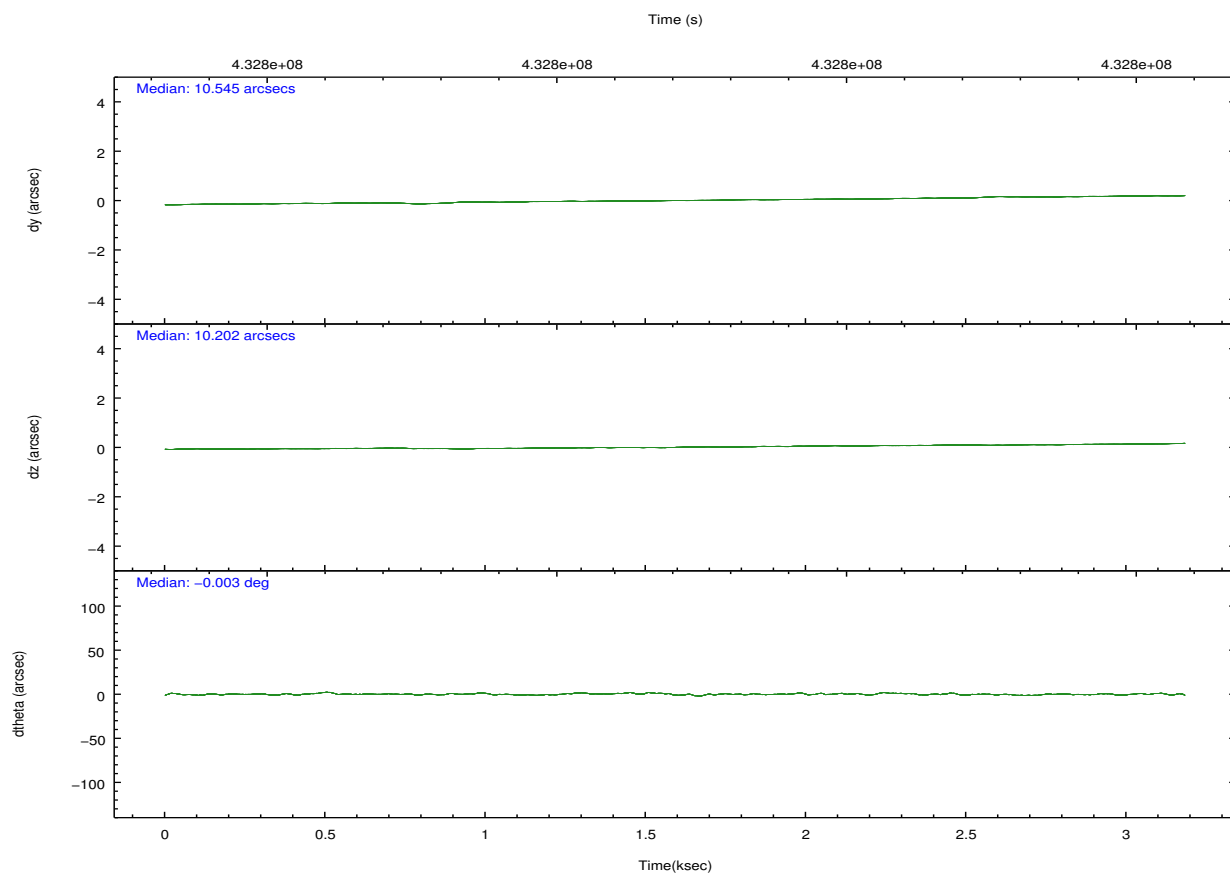
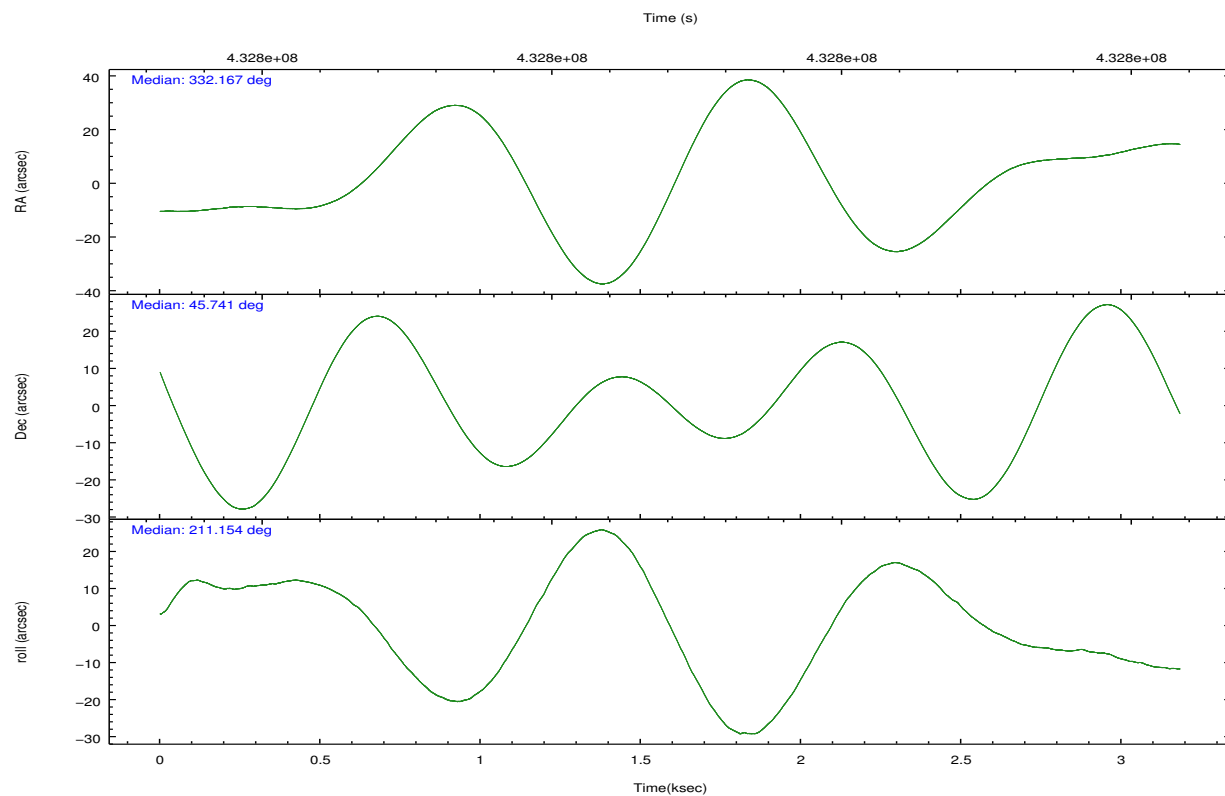
2.2 Compared Parameters

| 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 | 332.185204 | 332.1671643142589 |
| [deg] Pointing Dec | 45.767000 | 45.74116068768779 |
| [deg] Pointing Roll | 211.075012 | 211.1552822531023 |
| [s] Window start time (MET) | 428544066.184000 | 428544066.184000 |
| [s] Window stop time (MET) | 436406466.184000 | 436406466.184000 |
| [mm] SIM focus pos | -1.533336 | -1.526339935833849 |
| [mm] SIM defocus | 7.710433287538843e-07 | 0.006996703570447904 |
| [mm] SIM translation stage pos | 250.455976 | 250.4635187648994 |
| [mm] SIM translation stage offset | 0 | -0.007540371344731511 |
| [s] Observation start time (MET) | 432799992.184000 | 432799612.44924 |
| Observation start date | 2011-09-19T06:12:06 | 2011-09-19T06:06:52 |
| [s] Observation end time (MET) | 432802992.184000 | 432803126.14943 |
| Observation end date | 2011-09-19T07:02:06 | 2011-09-19T07:05:26 |

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

2.3 Aspect



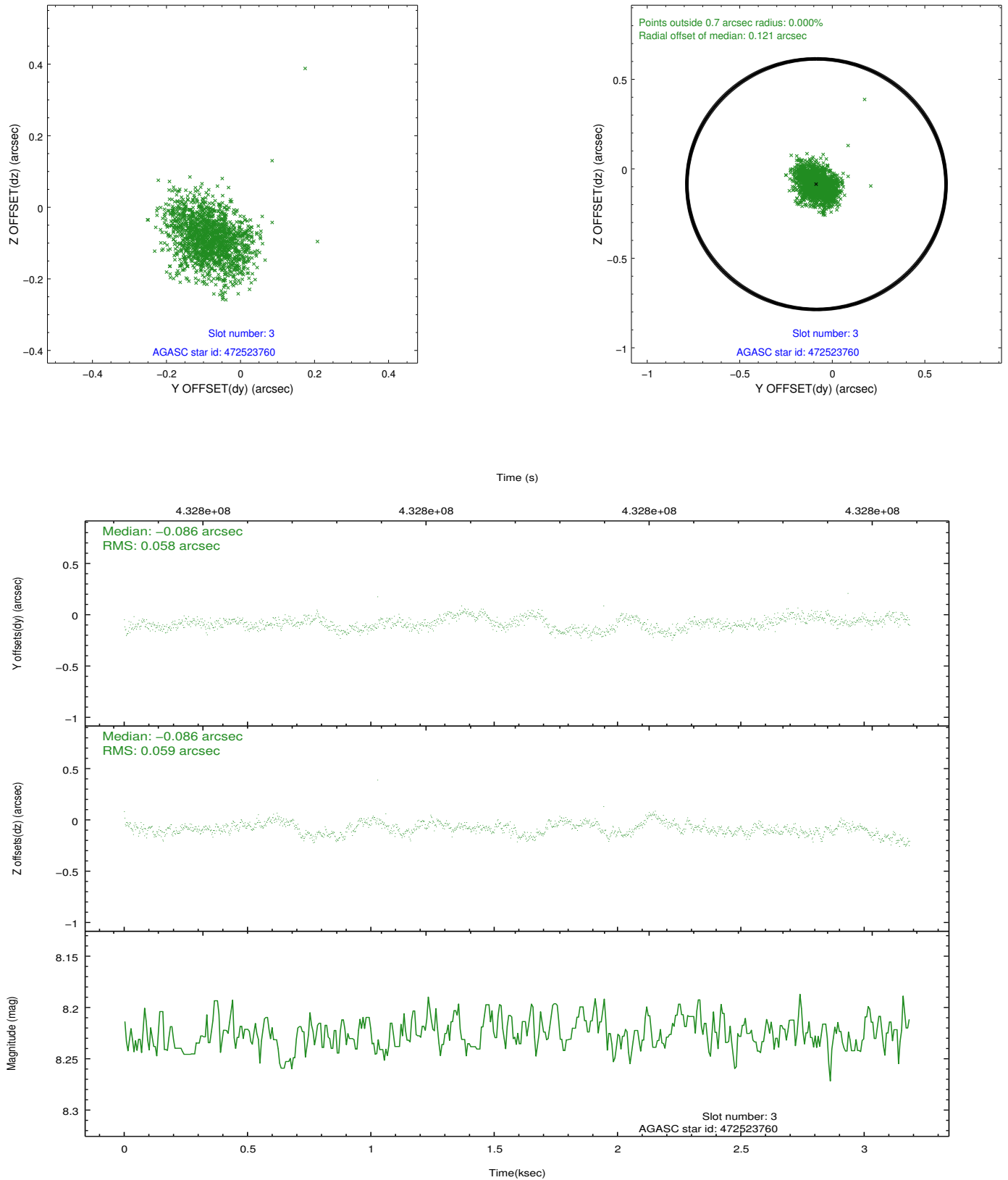


Slot Statistics

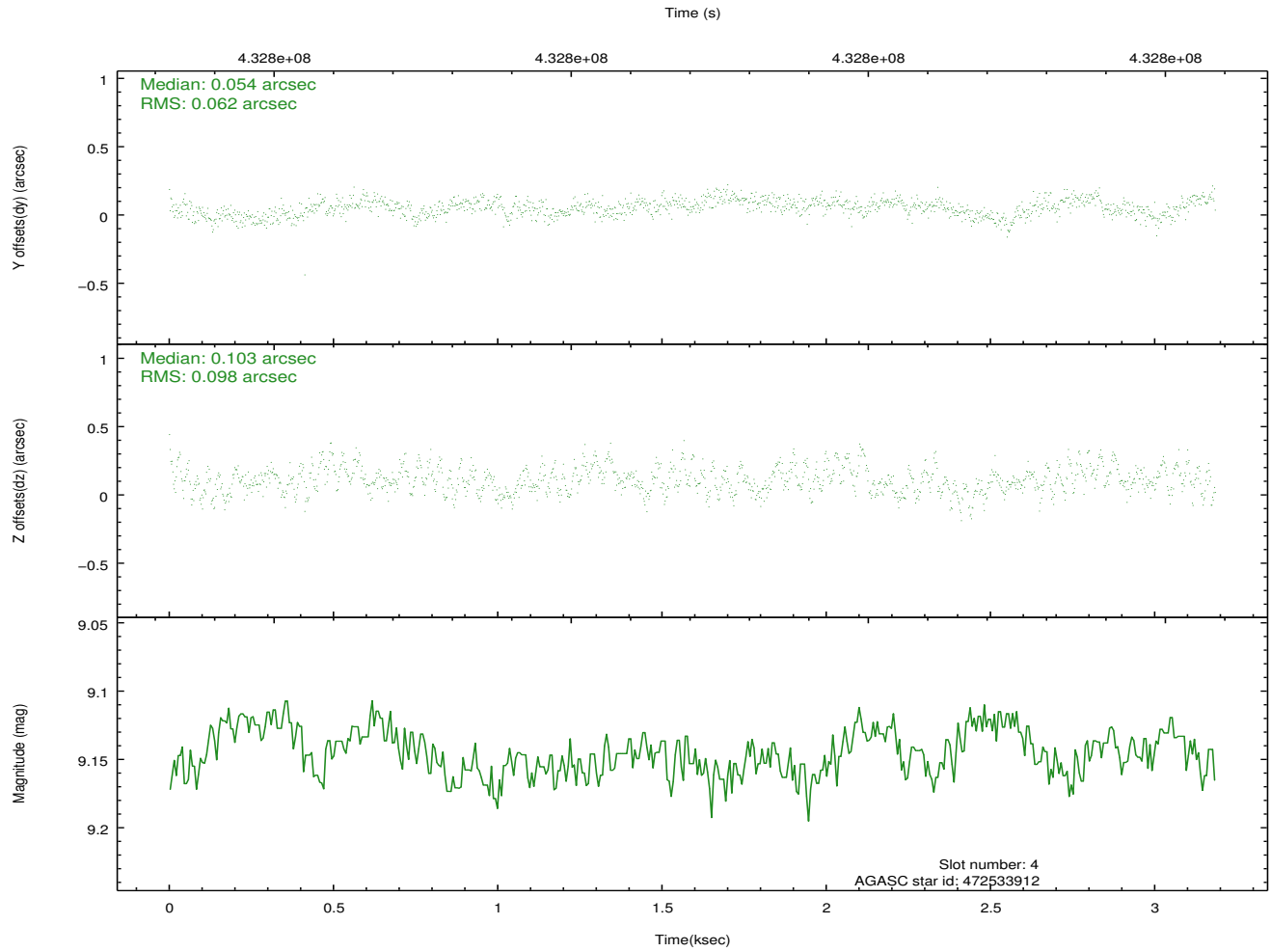
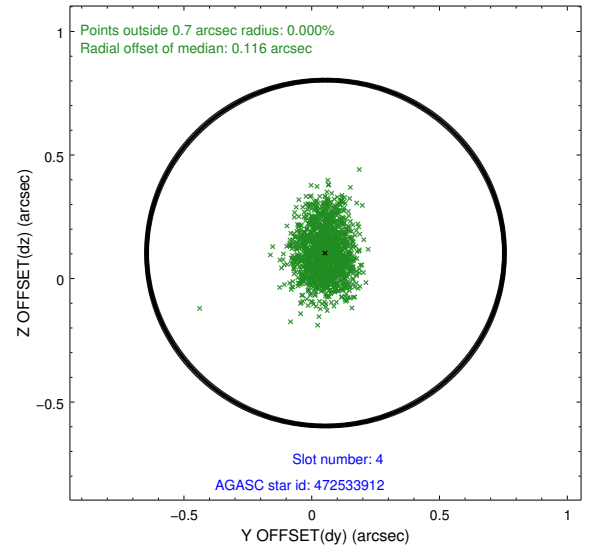
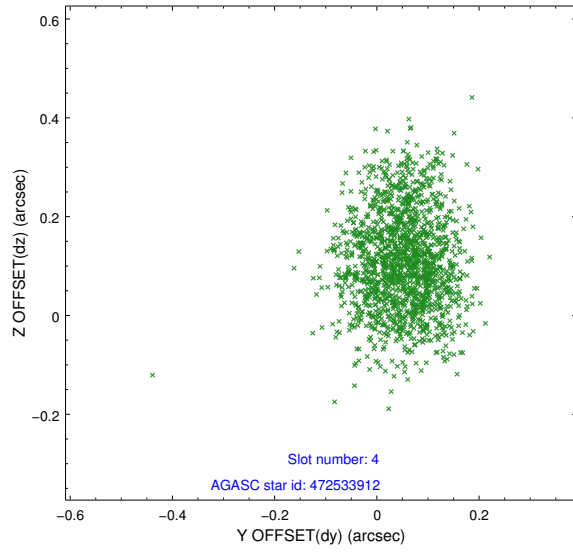
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-S-1 | 6.98 | 777 | 0.058 | -0.177 | 0.011 | 0.019 | 0.000000 | 0.000000 | -1164.86 | -458.88 |
| 1 | FID | HRC-S-2 | 6.96 | 777 | 0.254 | -0.122 | 0.009 | 0.016 | 0.000000 | 0.000000 | 1233.49 | -452.07 |
| 2 | FID | HRC-S-3 | 6.99 | 777 | 0.078 | -0.002 | 0.010 | 0.017 | 0.000000 | 0.000000 | -1165.97 | 570.23 |
| 3 | GUIDE | 472523760 | 8.23 | 1554 | -0.086 | -0.086 | 0.089 | 0.139 | 331.645363 | 45.403260 | 1842.57 | 413.41 |
| 4 | GUIDE | 472533912 | 9.15 | 1554 | 0.054 | 0.103 | 0.123 | 0.205 | 331.791136 | 46.368695 | -279.31 | -2362.07 |
| 5 | GUIDE | 472655152 | 9.42 | 1554 | 0.030 | -0.186 | 0.131 | 0.210 | 332.504239 | 45.862991 | -864.07 | 114.07 |
| 6 | GUIDE | 472665256 | 9.01 | 1554 | 0.090 | 0.167 | 0.084 | 0.137 | 332.808125 | 46.195041 | -2128.17 | -523.43 |
| 7 | GUIDE | 420754040 | 9.05 | 1552 | -0.083 | -0.003 | 0.087 | 0.149 | 331.917939 | 44.882543 | 2224.37 | 2374.51 |

2.4 Star Slots

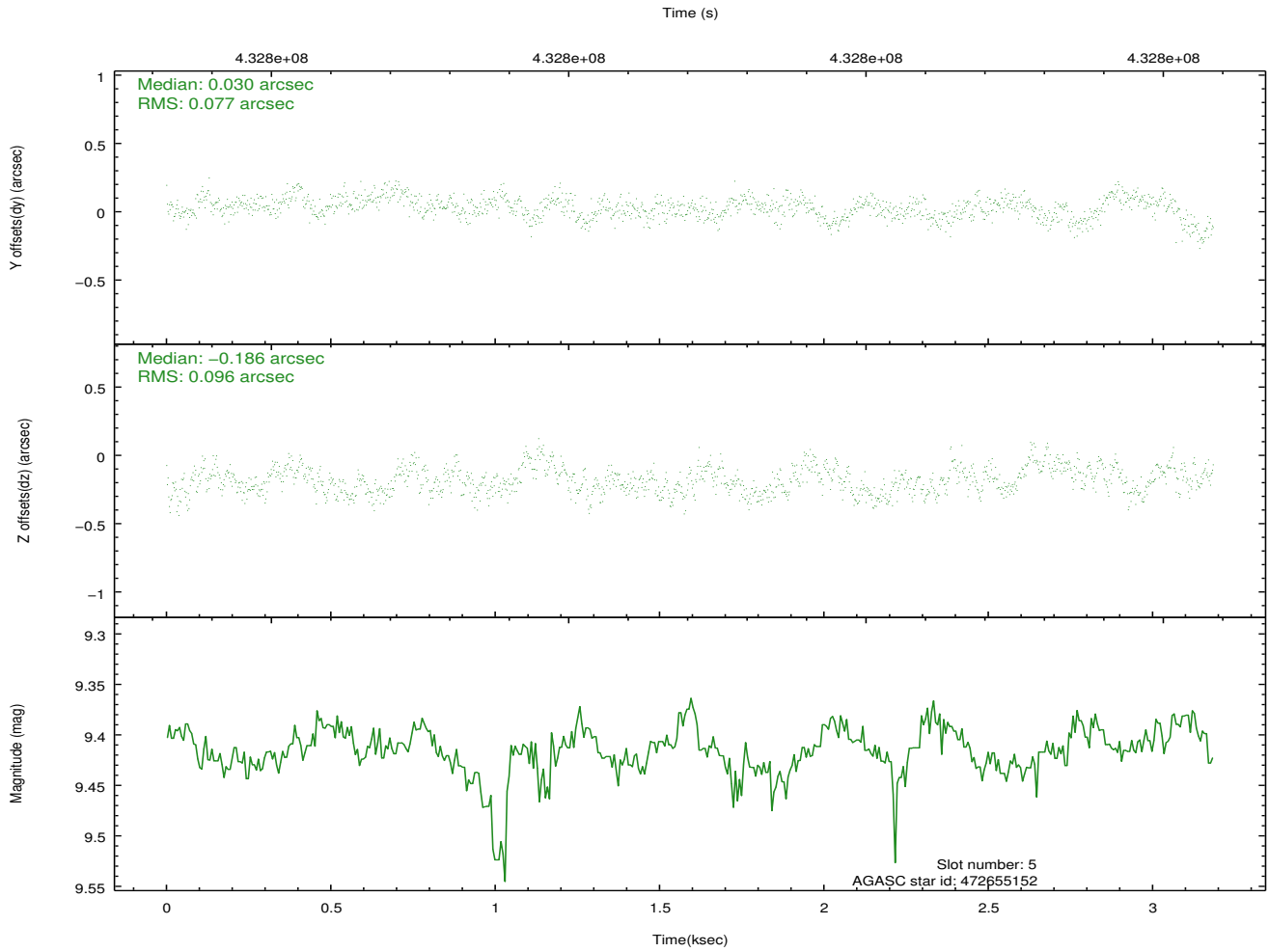
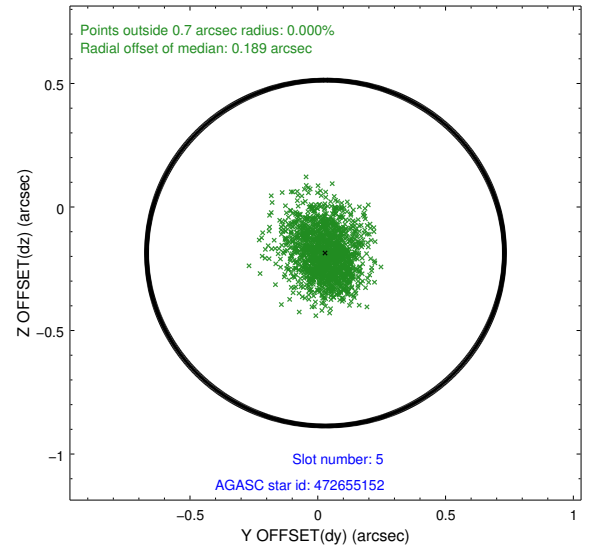
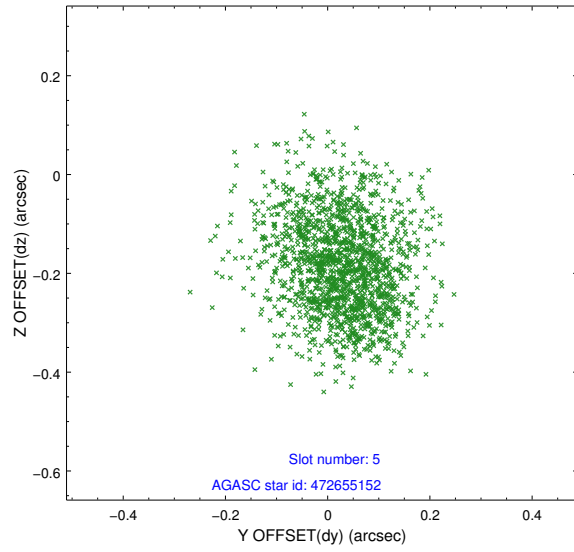
2.4.1 Slot 3



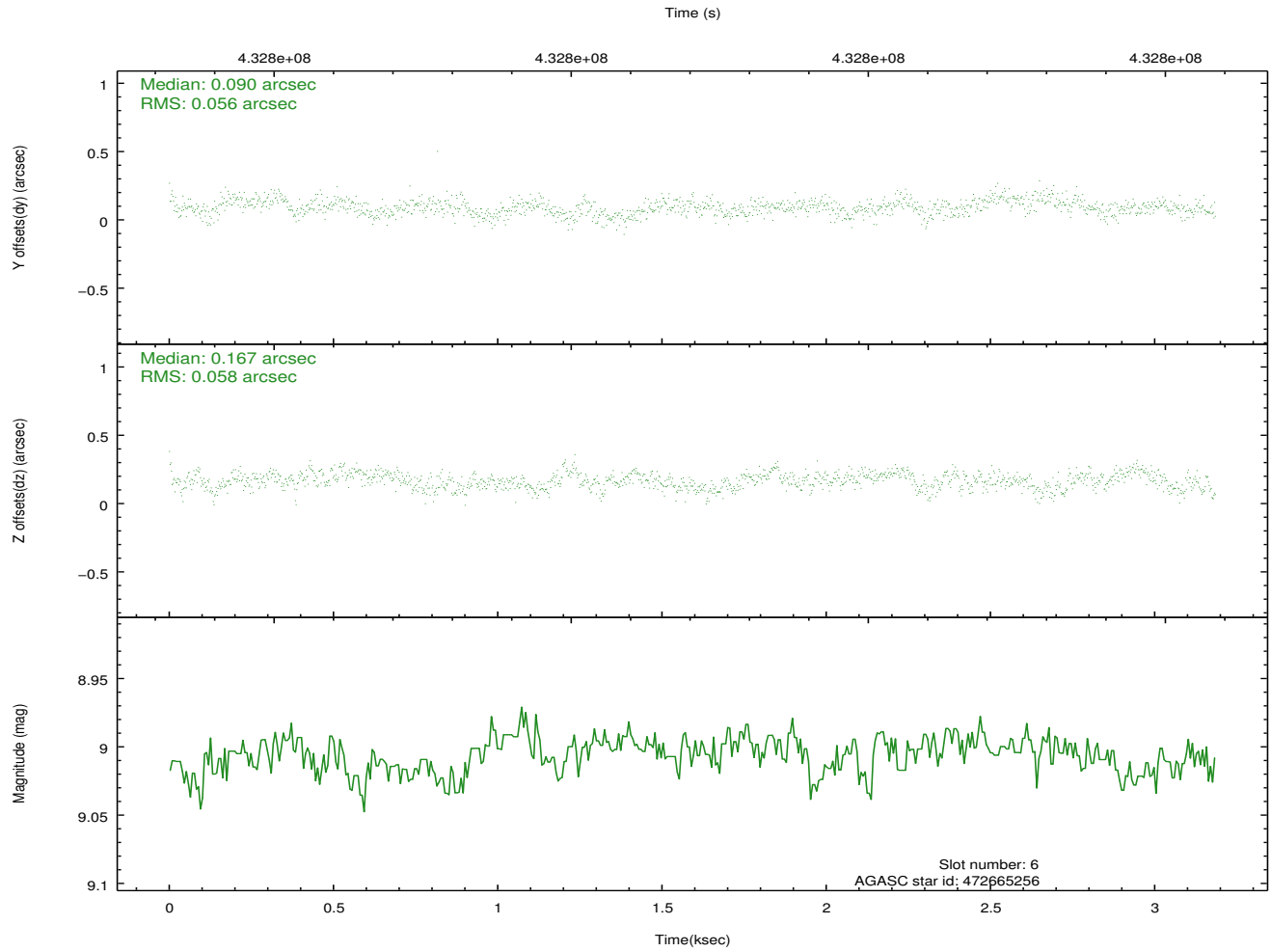
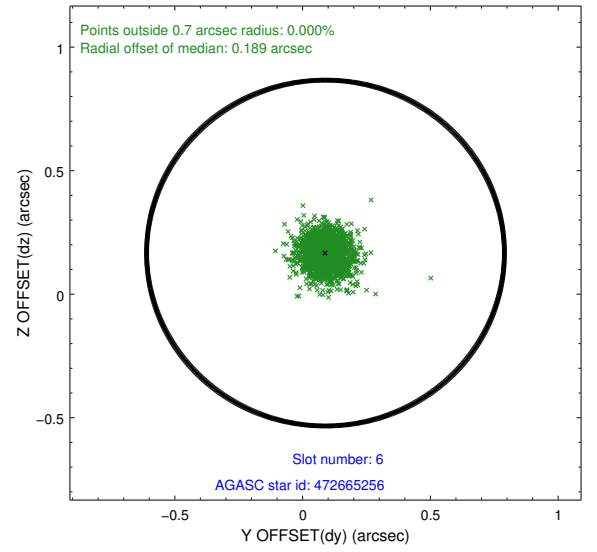
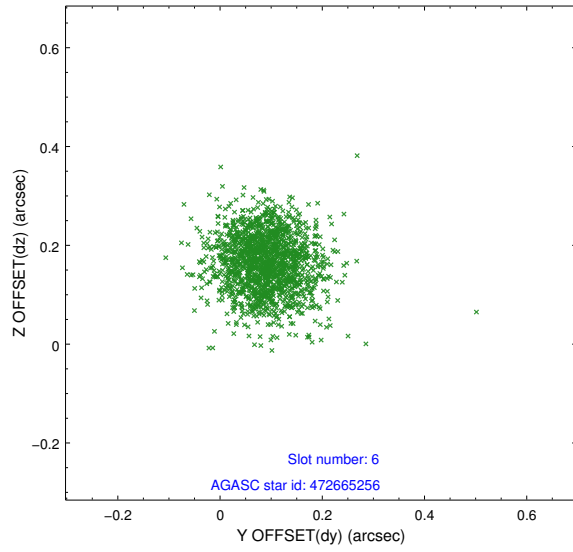
2.4.2 Slot 4



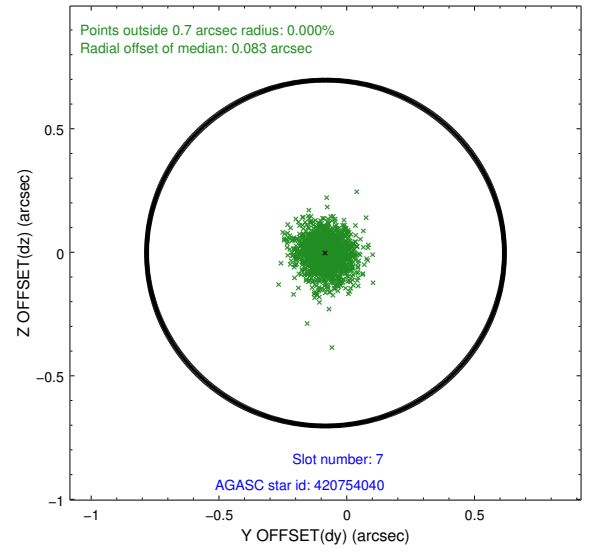
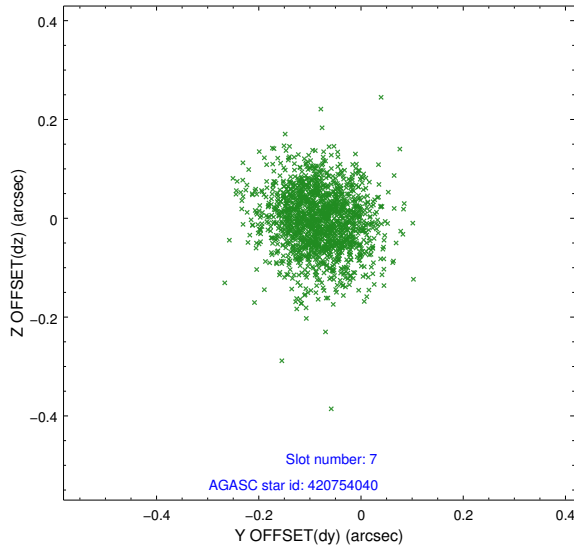
2.4.3 Slot 5



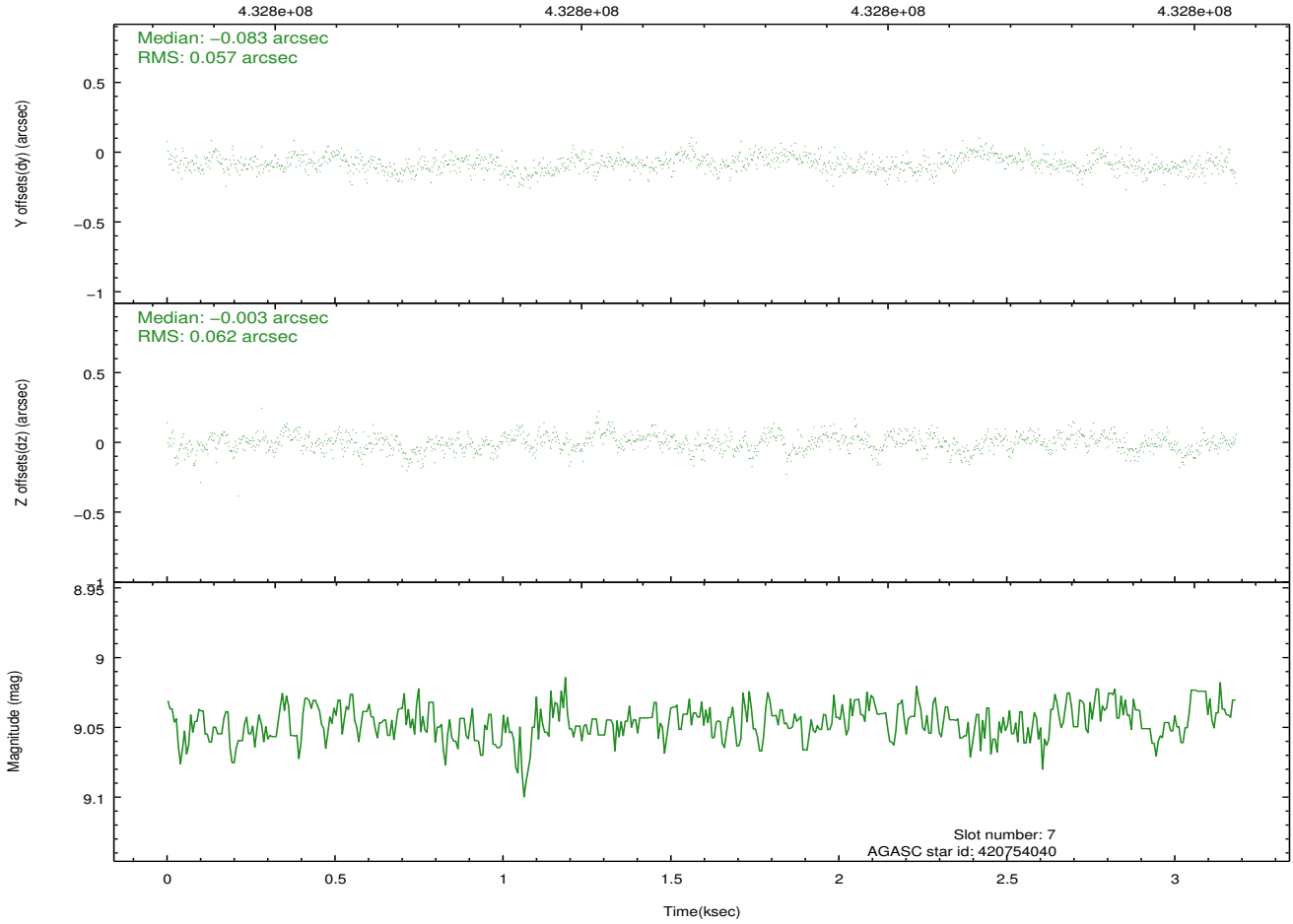
2.4.4 Slot 6



2.4.5 Slot 7

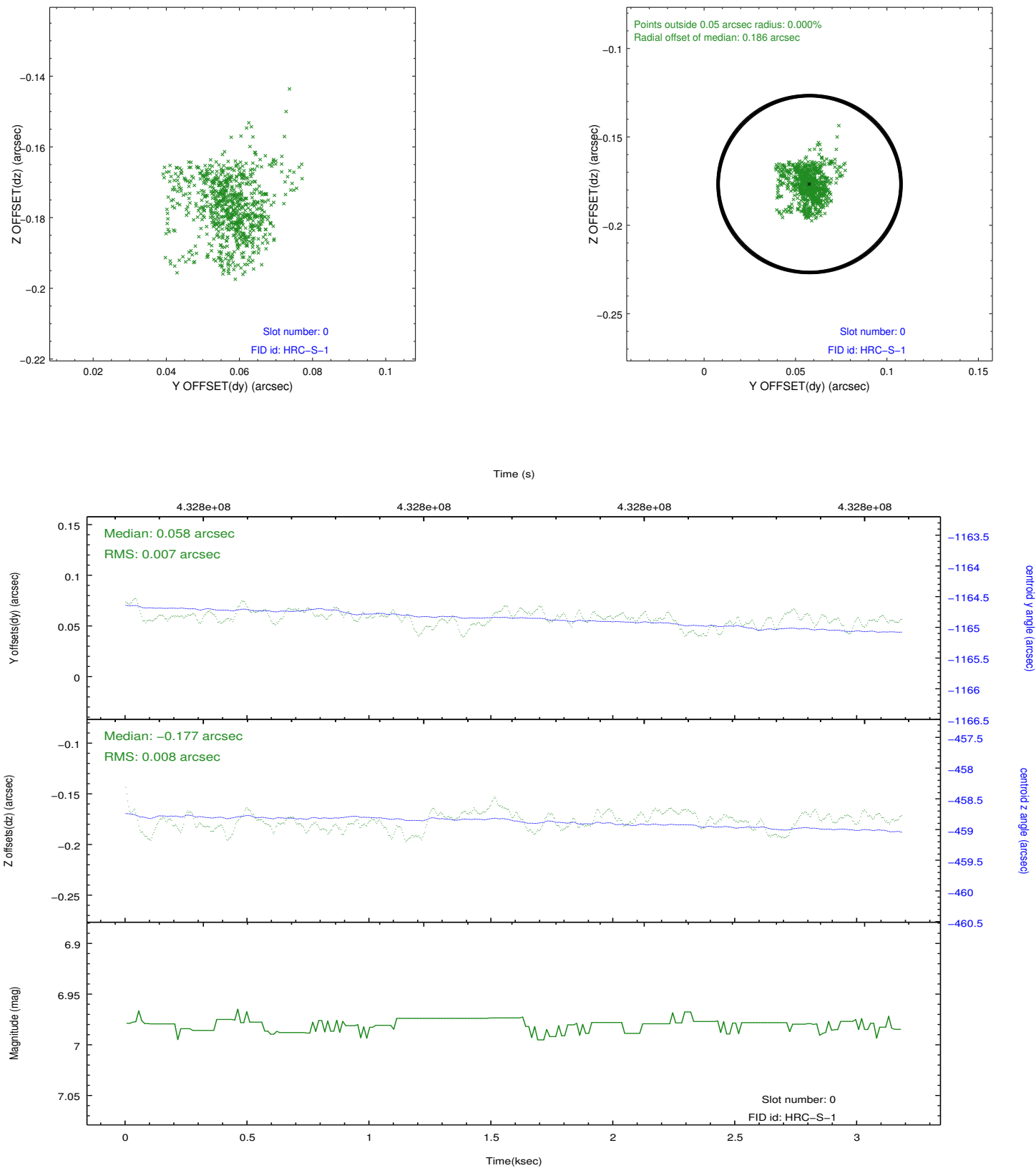


Time (s)

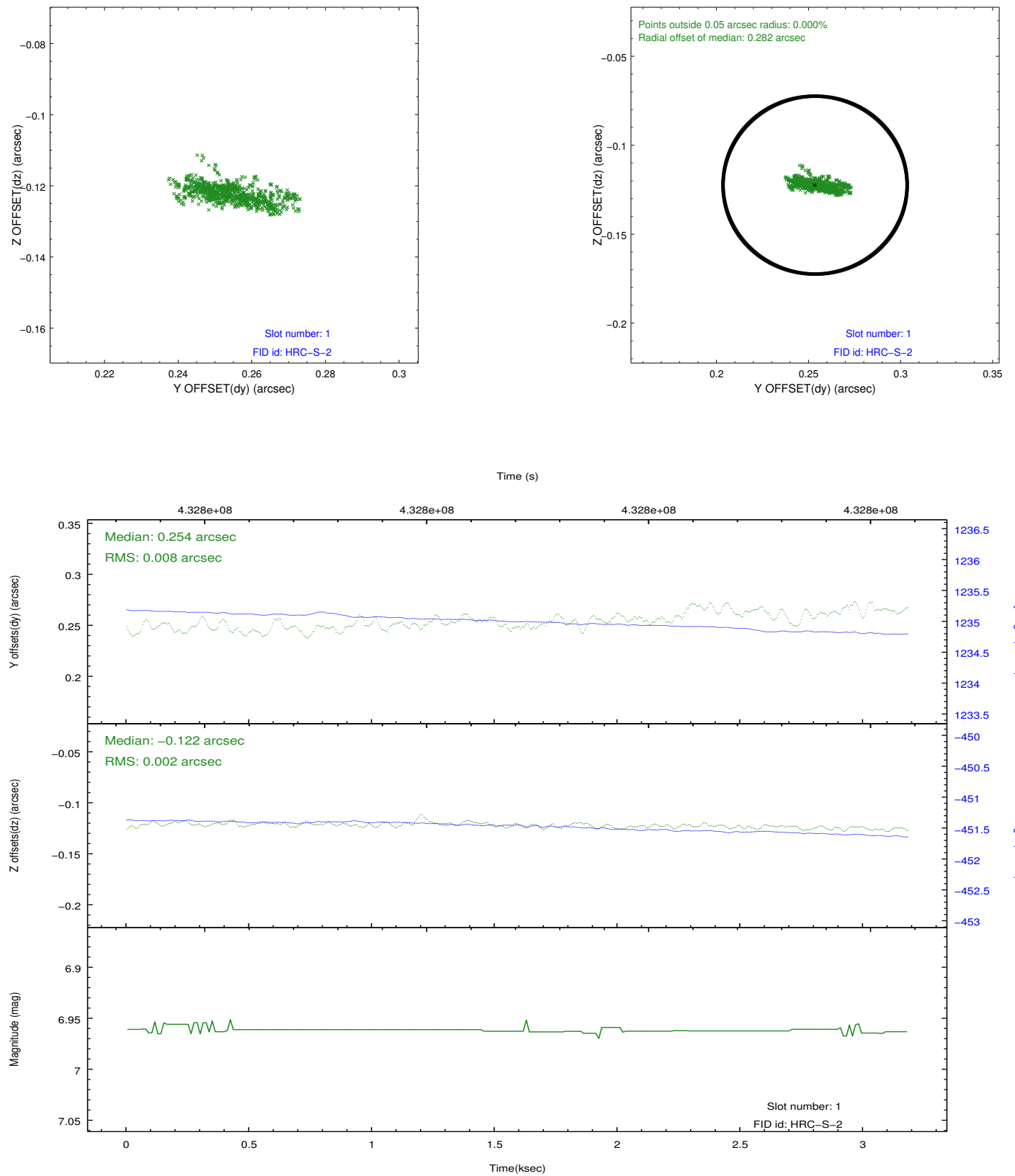


2.5 FID Slots

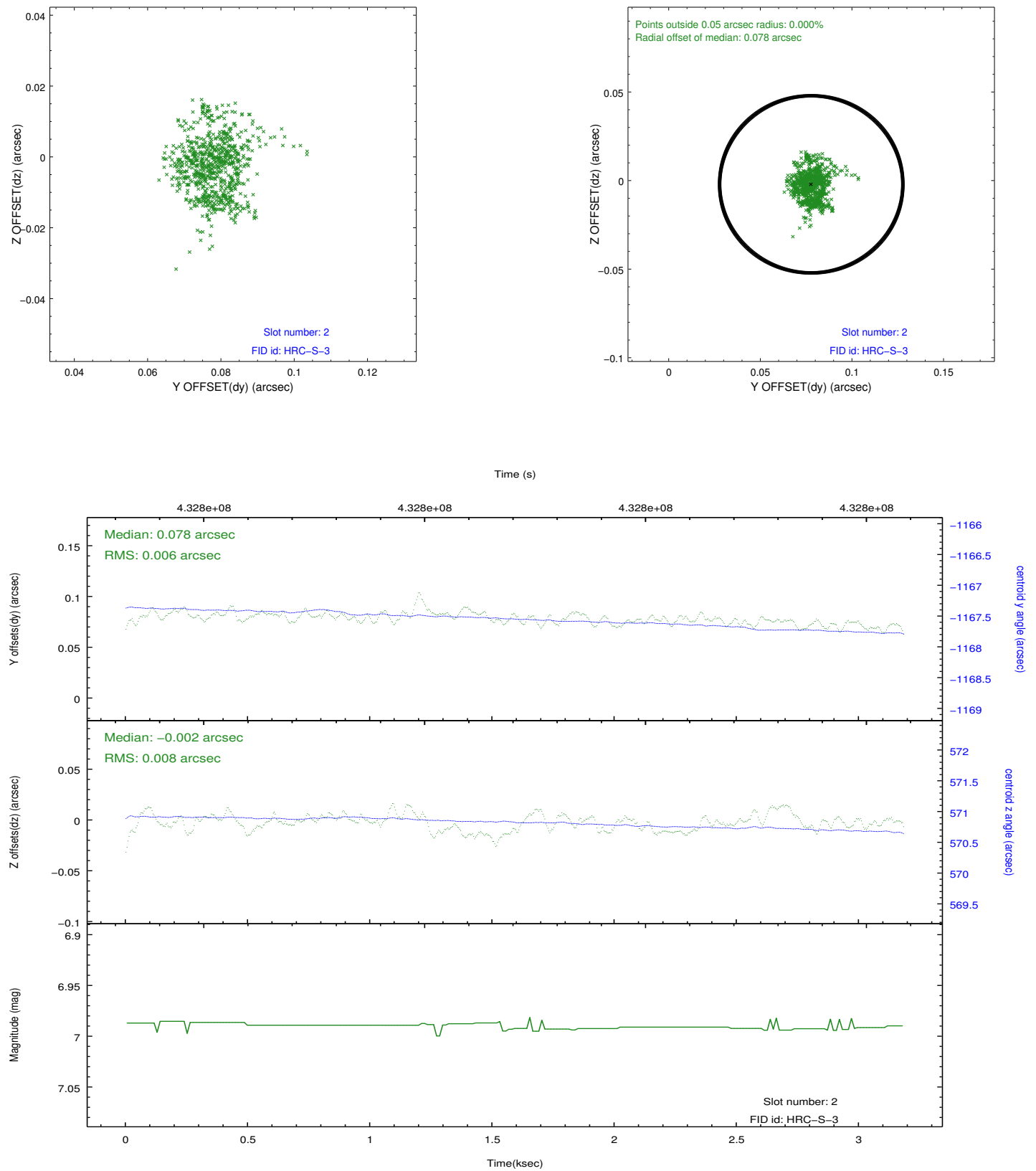
2.5.1 Slot 0



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) | 2012.08.10 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 3.1593064156175 |

A.2 Comments

Window preference met.