

V&V Reference Report

L2 ASCDS Version : 8.3.2.1

Observation 1331 - L2 Version 4
Chandra X-Ray Center

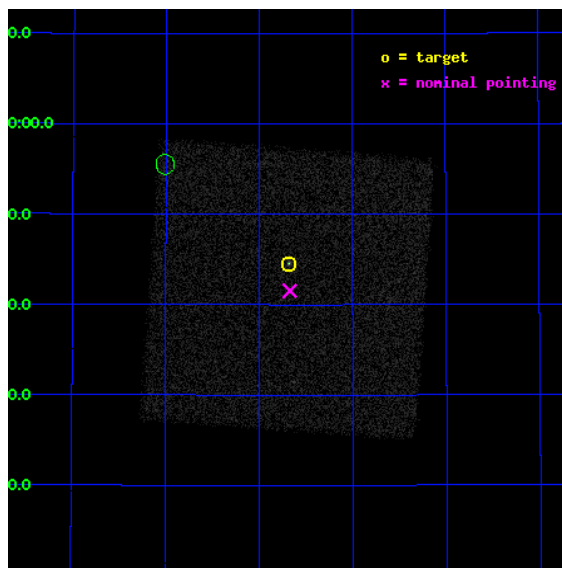
L2 Processing Date : Sep 28 2010

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 |
| 3 | Point Sources | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

| | | |
|----------|---------------------|---------------------------------|
| seq_num | 280281 | Sequence number |
| obs_id | 1331 | Observation id |
| title | | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | ArLac | Source name |
| ra_targ | 332.1701 | Observer's specified target RA |
| dec_targ | 45.7423 | Observer's specified target Dec |
| ra_nom | 332.16773794093 | Nominal RA |
| dec_nom | 45.692491884233 | Nominal Dec |
| roll_nom | 229.05899864278 | Nominal Roll |
| revision | 4 | Processing version of data |
| ontime | 1276.3812960014 | [s] |
| livetime | 1267.3116989893 | Ontime multiplied by DTCOR |
| l2events | 40009 | Number of level 2 events |

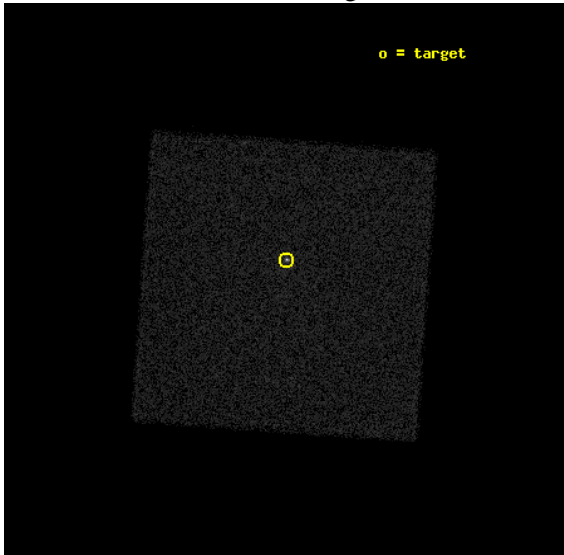


2 OBI

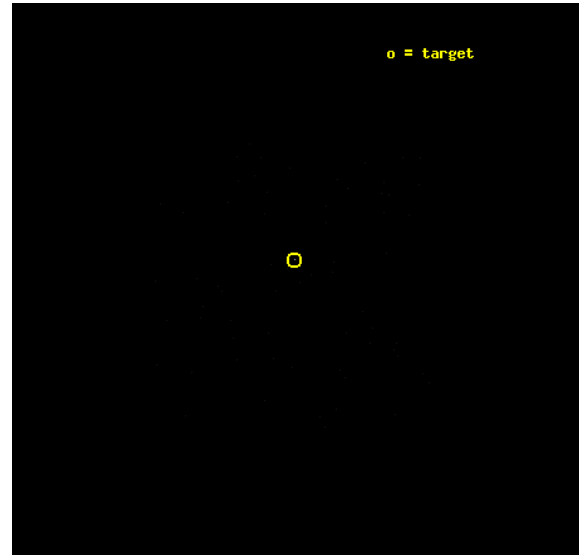
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|-------------------------------------|
| obi_num | 0 | Obi number | sched_exp_time | 1000.000000 | Scheduled observation exposure time |
| ascdsver | 8.3.2.1 | Processing system revision | ontime | 1276.3812960014 | [s] |
| caldbver | 4.3.1 | | l1events | 69614 | Number of level 1 events |
| date | 2010-09-28T17:04:00 | Date and time of file creation | | | |
| revision | 4 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

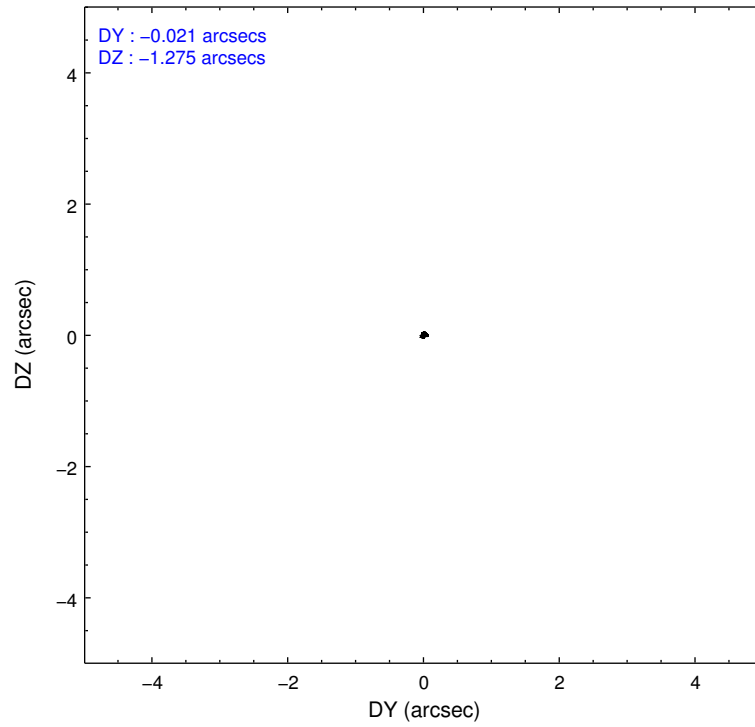
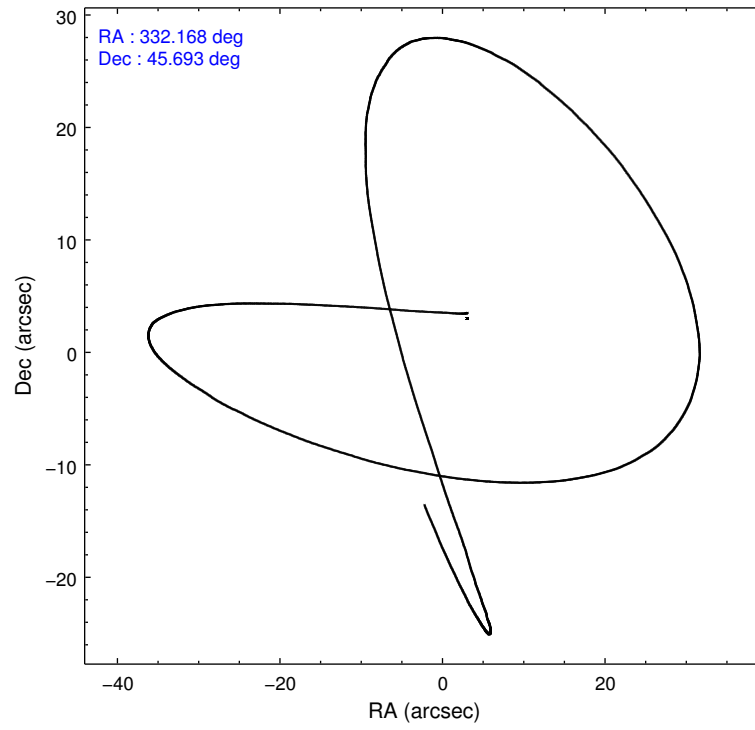
| | segment 0 |
|-----------------|----------------------|
| level 1 events | 69614 |
| rejected events | 2705 |
| rejected % | 3% |

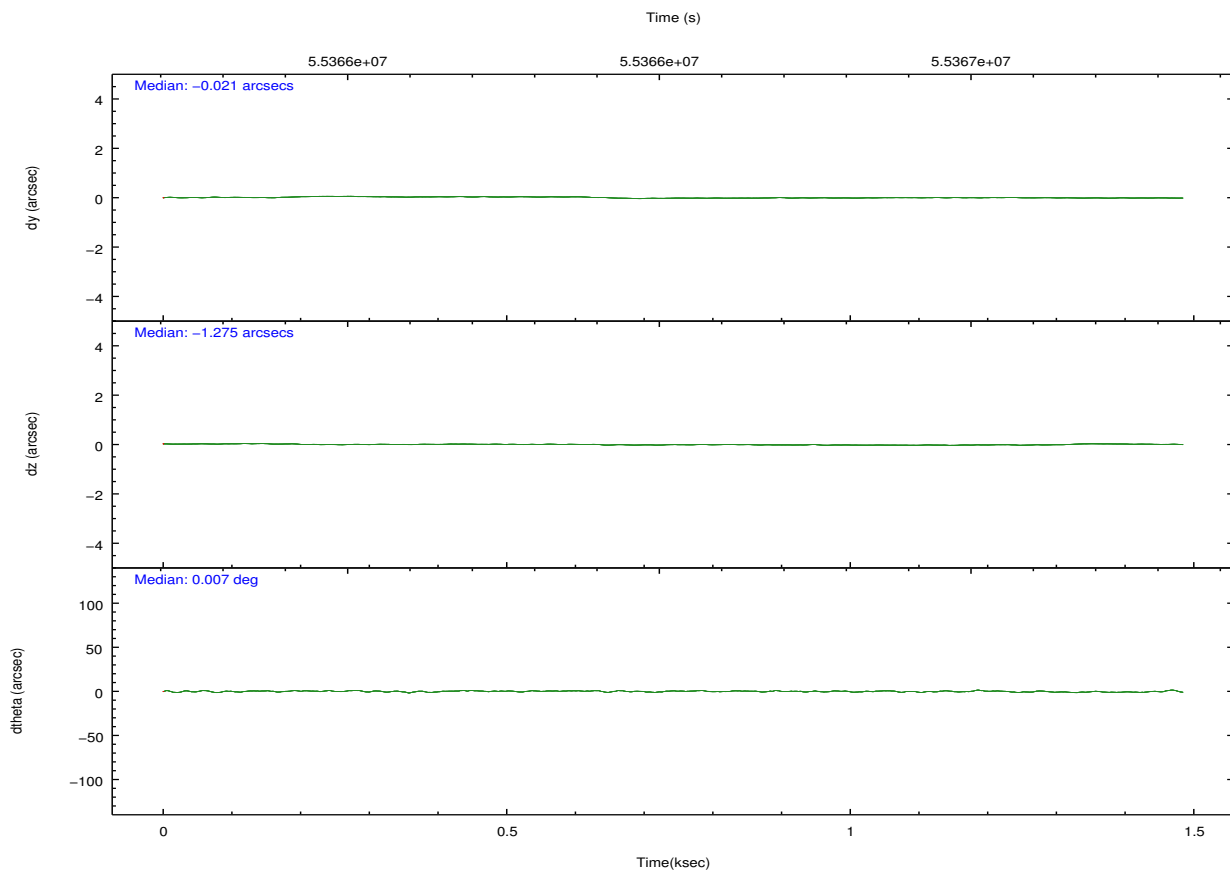
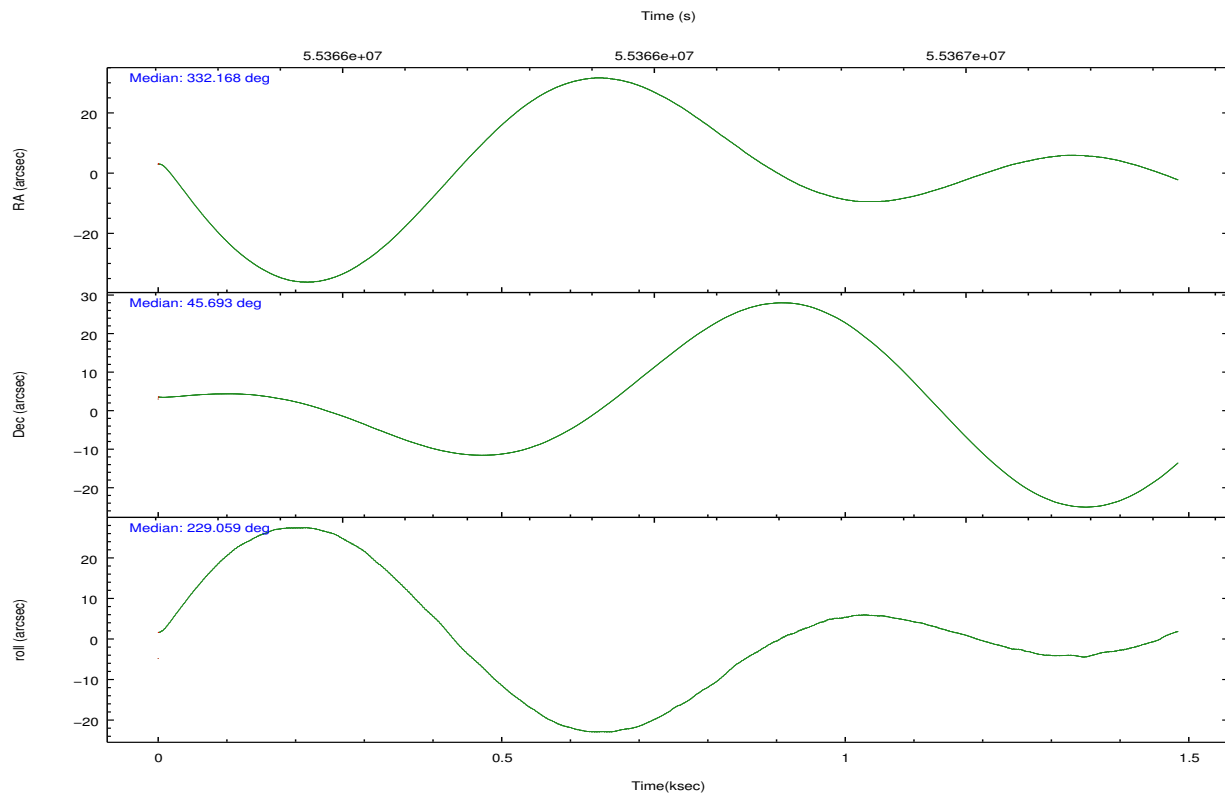
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|------------------------|
| Instrument | HRC | HRC |
| Detector | HRC-I | HRC-I |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| Pointing RA | 332.176121 | 332.1677379409296 |
| Pointing Dec | 45.720153 | 45.69249188423291 |
| Pointing Roll | 229.148460 | 229.0589986427819 |
| SIM focus pos (mm) | -0.040293 | -0.2342646132009995 |
| SIM defocus (mm) | 1 | 0.806028007457875 |
| SIM translation stage pos (mm) | 126.985494 | 126.9854943052878 |
| SIM translation stage offset (mm) | 0 | -5.413686238853188e-06 |
| Observation start time | 55366264.184000 | 55365597.656992 |
| Observation start date | 1999-10-03T19:30:00 | 1999-10-03T19:19:57 |
| Observation end time | 55367264.184000 | 55367398.069557 |
| Observation end date | 1999-10-03T19:46:40 | 1999-10-03T19:49:58 |

| Parameter | Planned | Actual |
|------------------------------|-----------|---------|
| Obspar format version number | 6 | 6 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |

2.3 Aspect



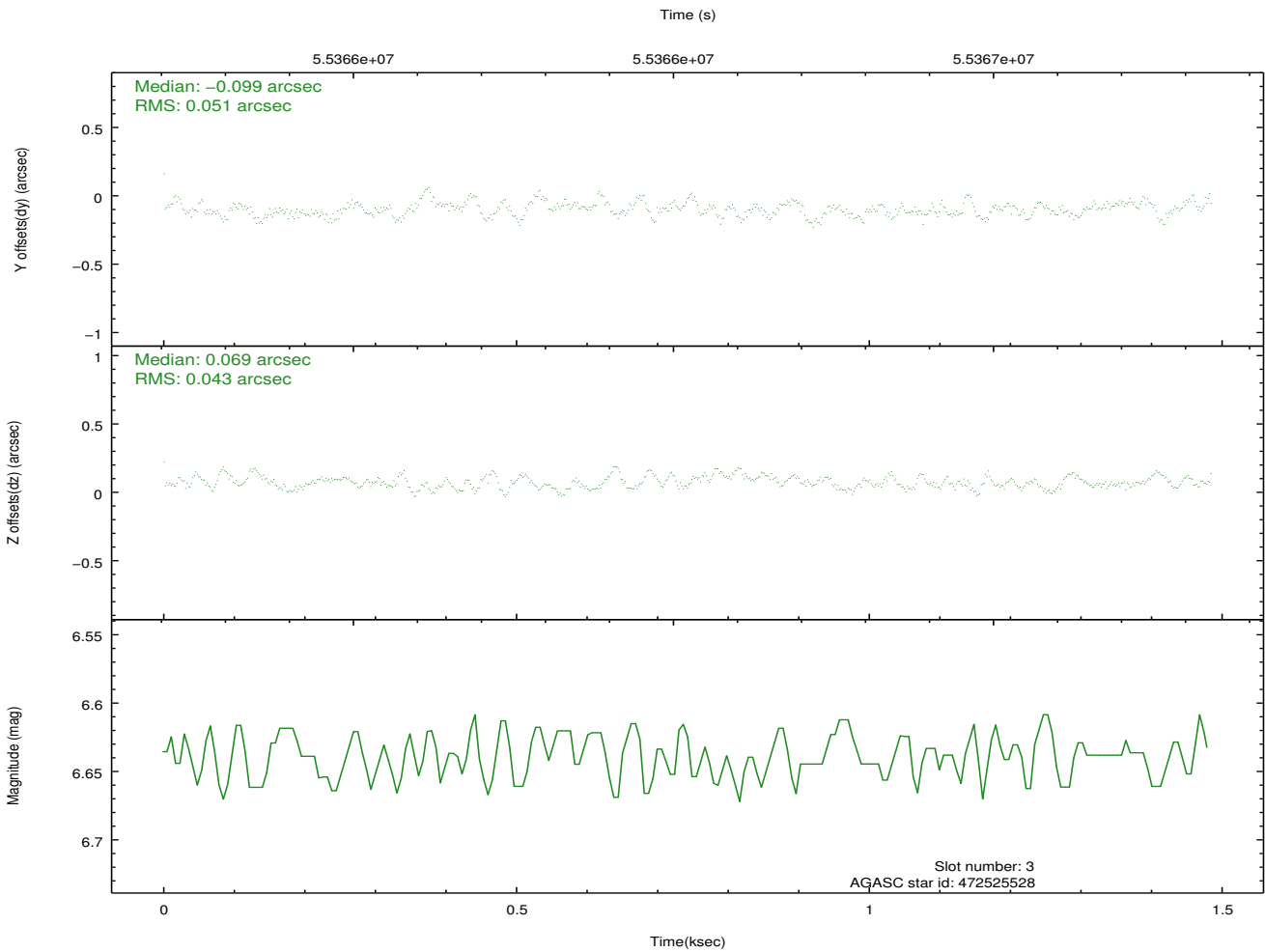
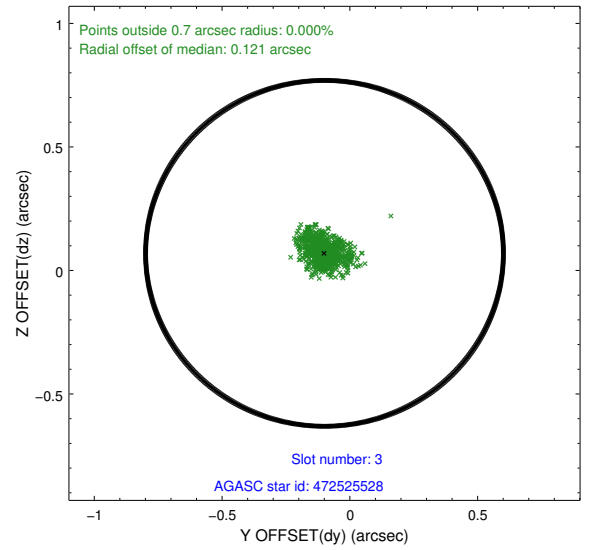
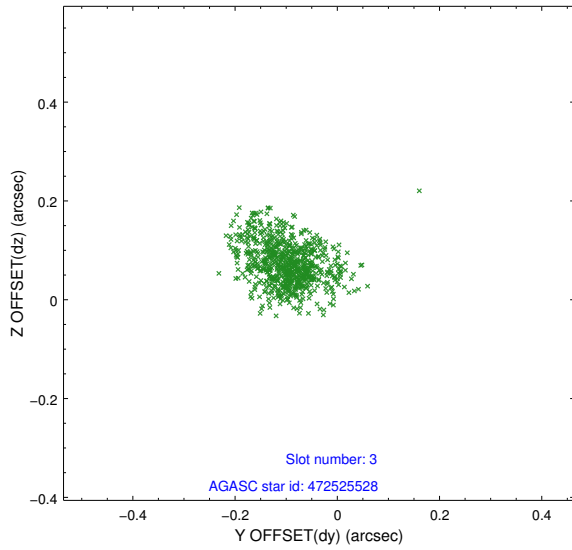


Slot Statistics

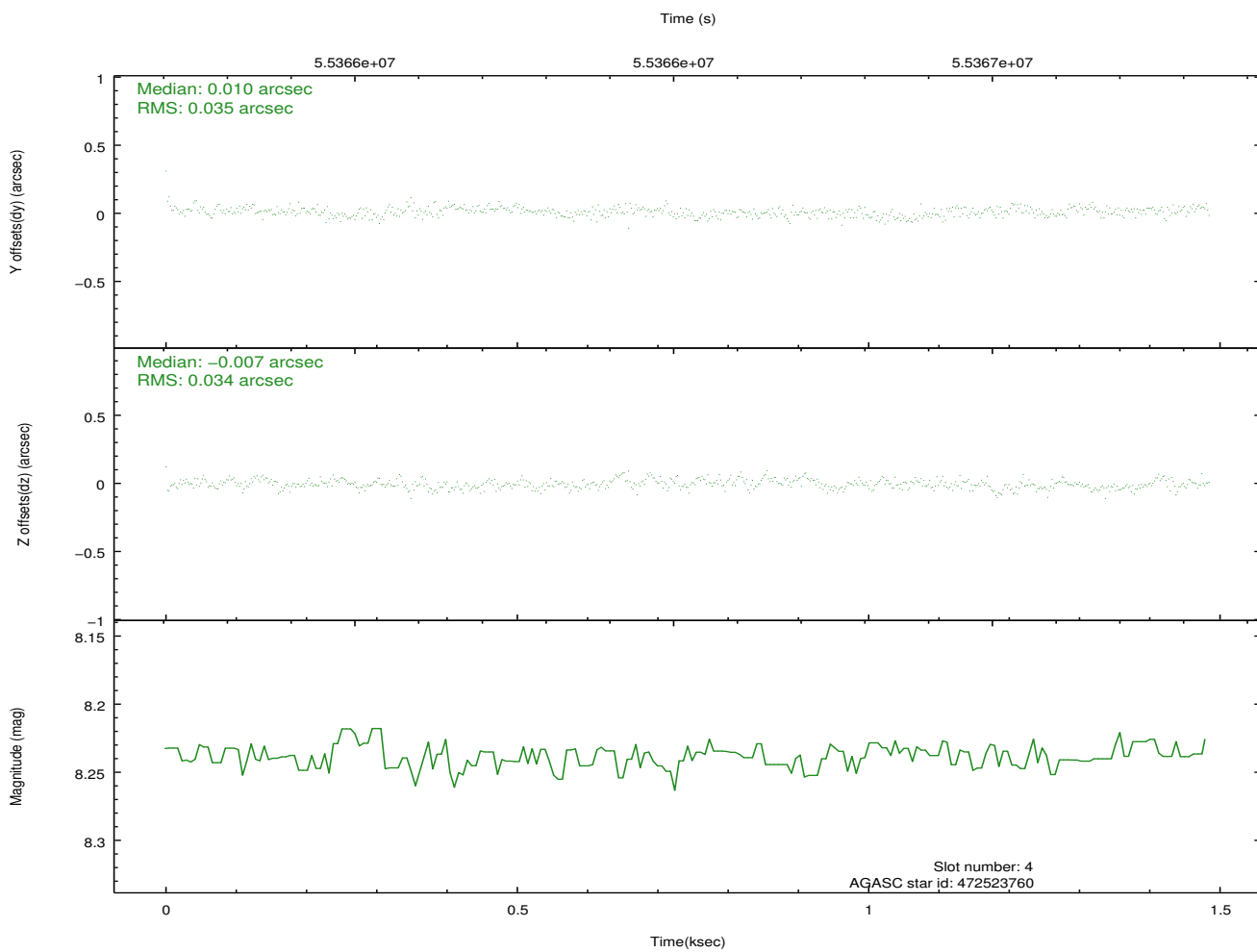
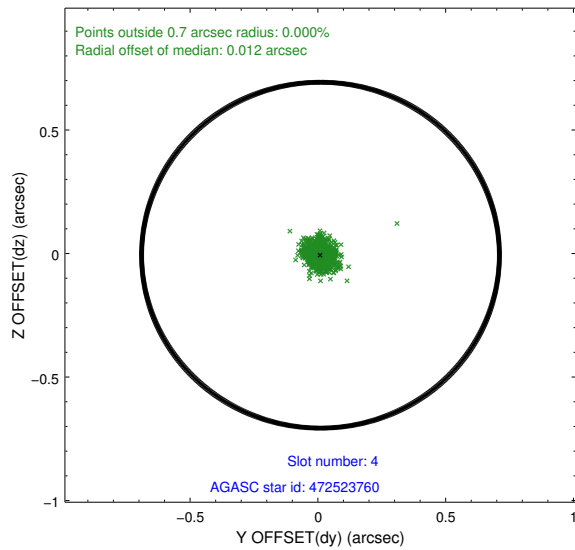
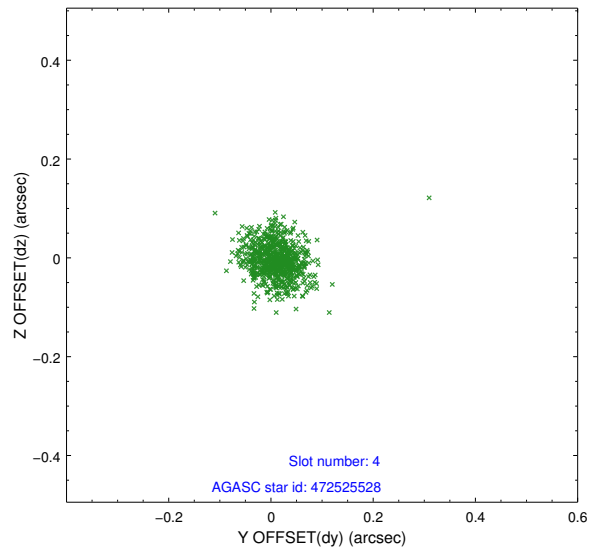
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-I-1 | 6.95 | 725 | 0.034 | -0.016 | 0.006 | 0.010 | 0.000000 | 0.000000 | -755.37 | -1286.53 |
| 1 | FID | HRC-I-3 | 7.03 | 725 | 0.043 | -0.043 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1185.00 | 1016.40 |
| 2 | UNUSED | | 0.00 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000 | 0.000000 | 0.00 | 0.00 |
| 3 | GUIDE | 472525528 | 6.64 | 725 | -0.099 | 0.069 | 0.070 | 0.115 | 331.551102 | 45.248694 | 2312.28 | -92.30 |
| 4 | GUIDE | 472523760 | 8.24 | 725 | 0.010 | -0.007 | 0.051 | 0.081 | 331.645363 | 45.403260 | 1737.32 | -271.85 |
| 5 | GUIDE | 472665256 | 9.00 | 725 | 0.001 | -0.049 | 0.061 | 0.102 | 332.808125 | 46.195041 | -2328.57 | 68.33 |
| 6 | GUIDE | 472659832 | 9.46 | 725 | -0.015 | 0.044 | 0.079 | 0.127 | 332.780399 | 46.098139 | -2026.46 | 247.16 |
| 7 | GUIDE | 472655704 | 9.47 | 703 | 0.103 | -0.067 | 0.087 | 0.136 | 332.167195 | 45.285228 | 1193.36 | 1007.03 |

2.4 Star Slots

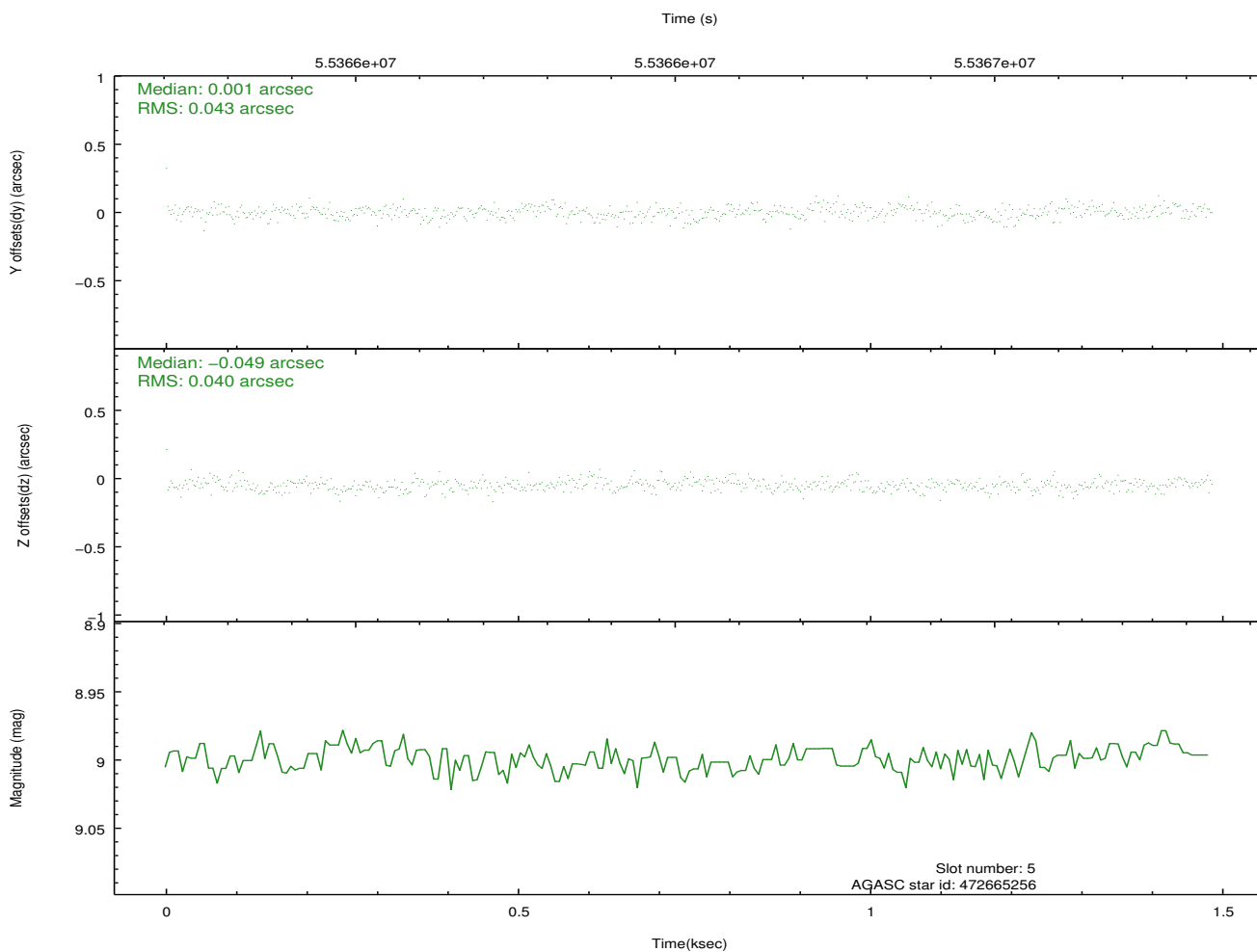
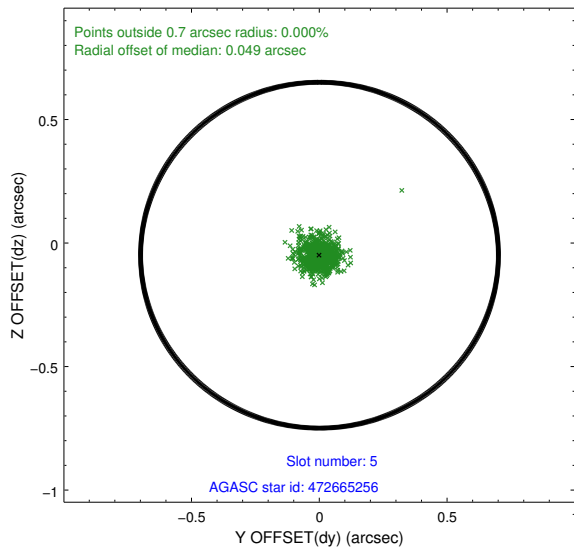
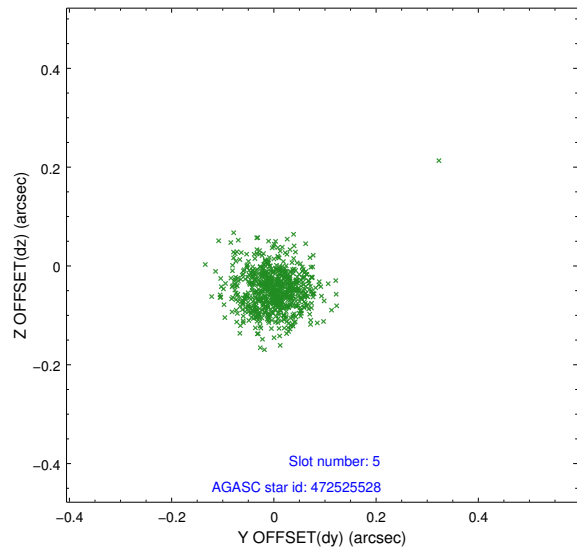
2.4.1 Slot 3



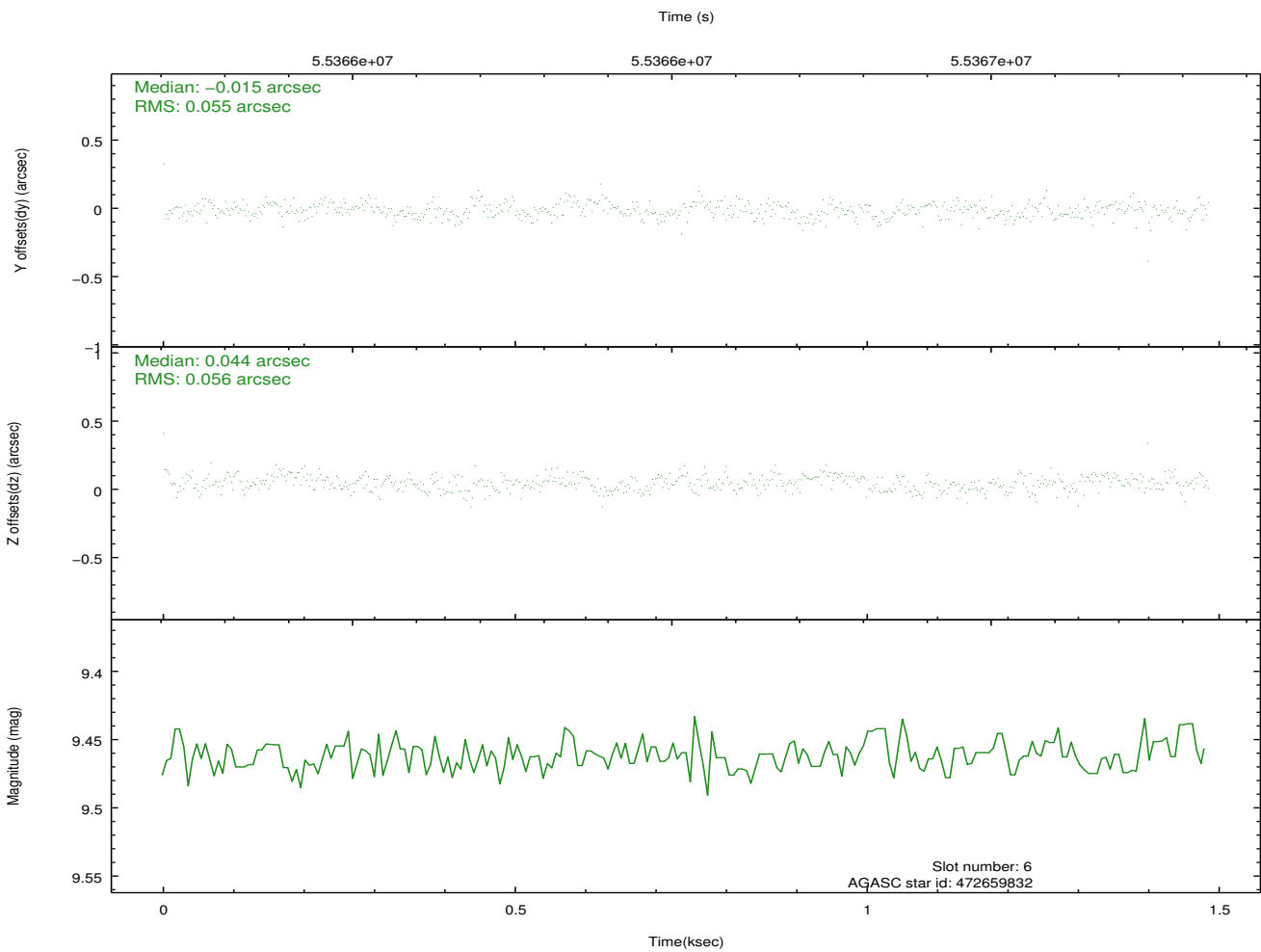
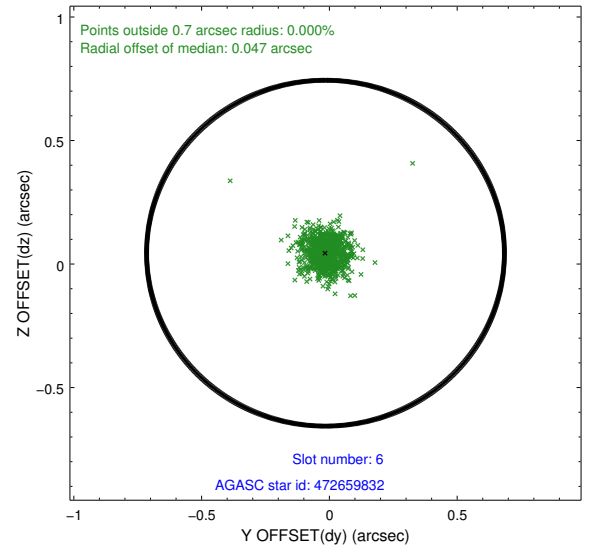
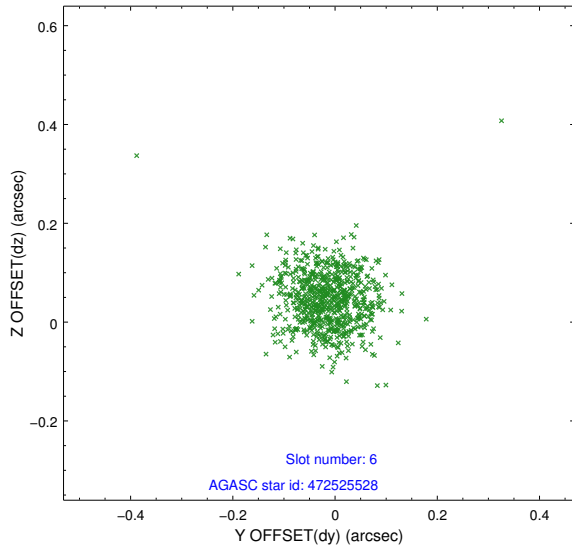
2.4.2 Slot 4



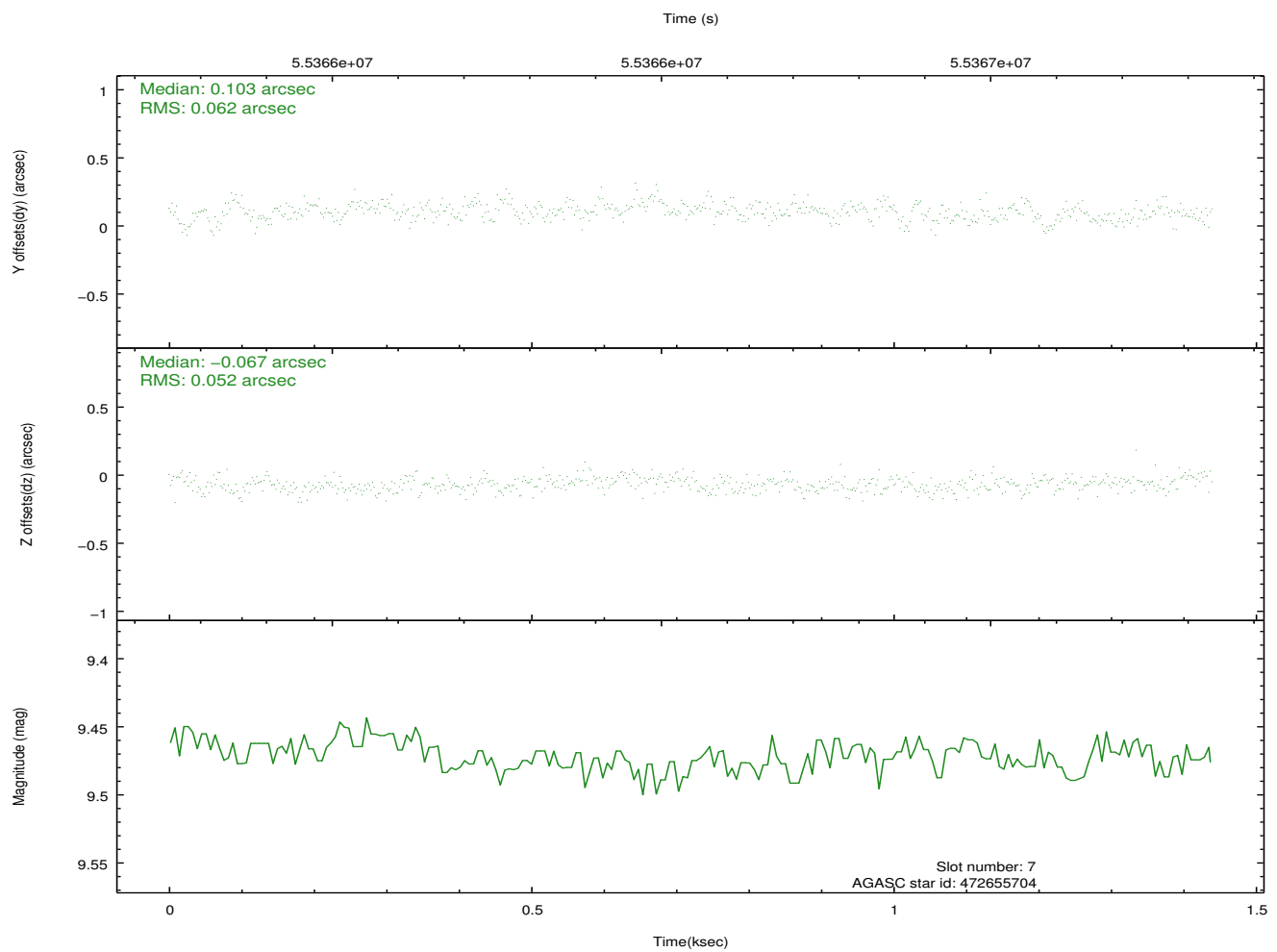
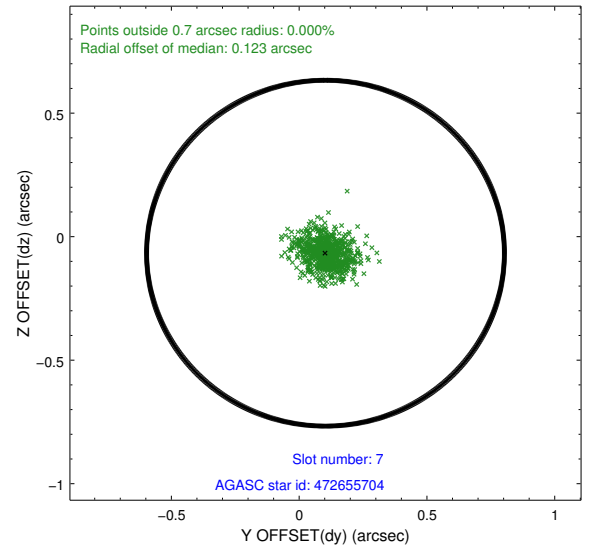
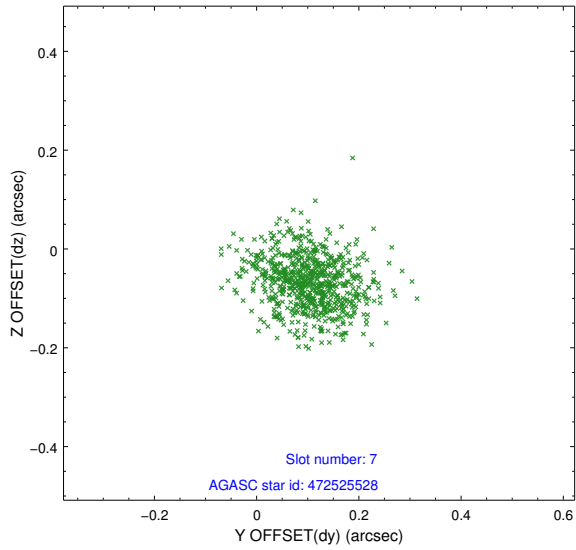
2.4.3 Slot 5



2.4.4 Slot 6

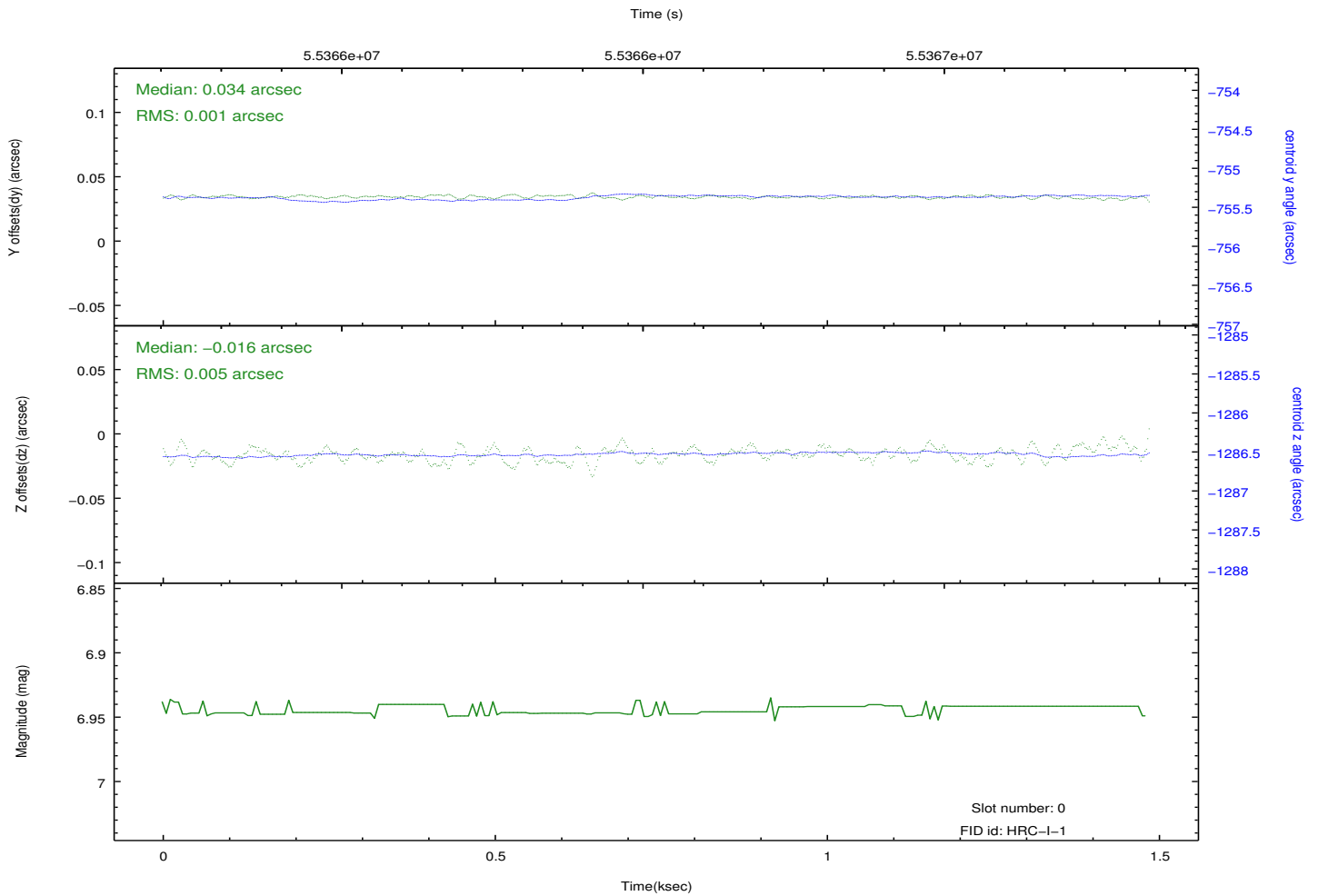
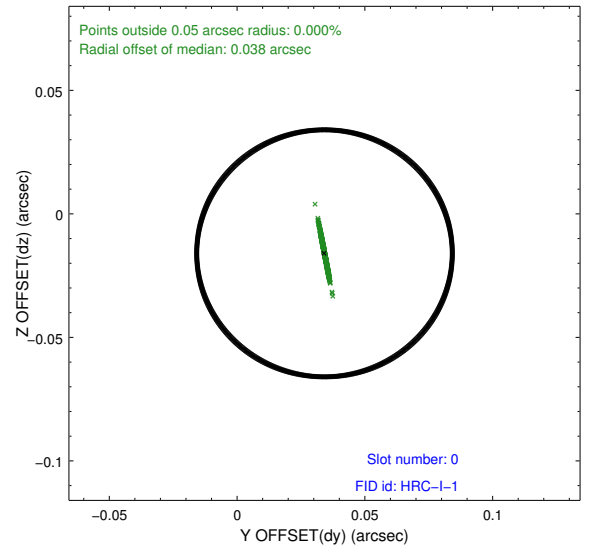
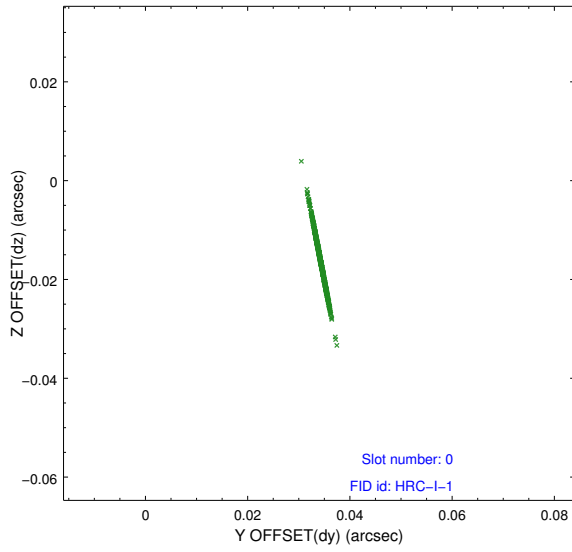


2.4.5 Slot 7

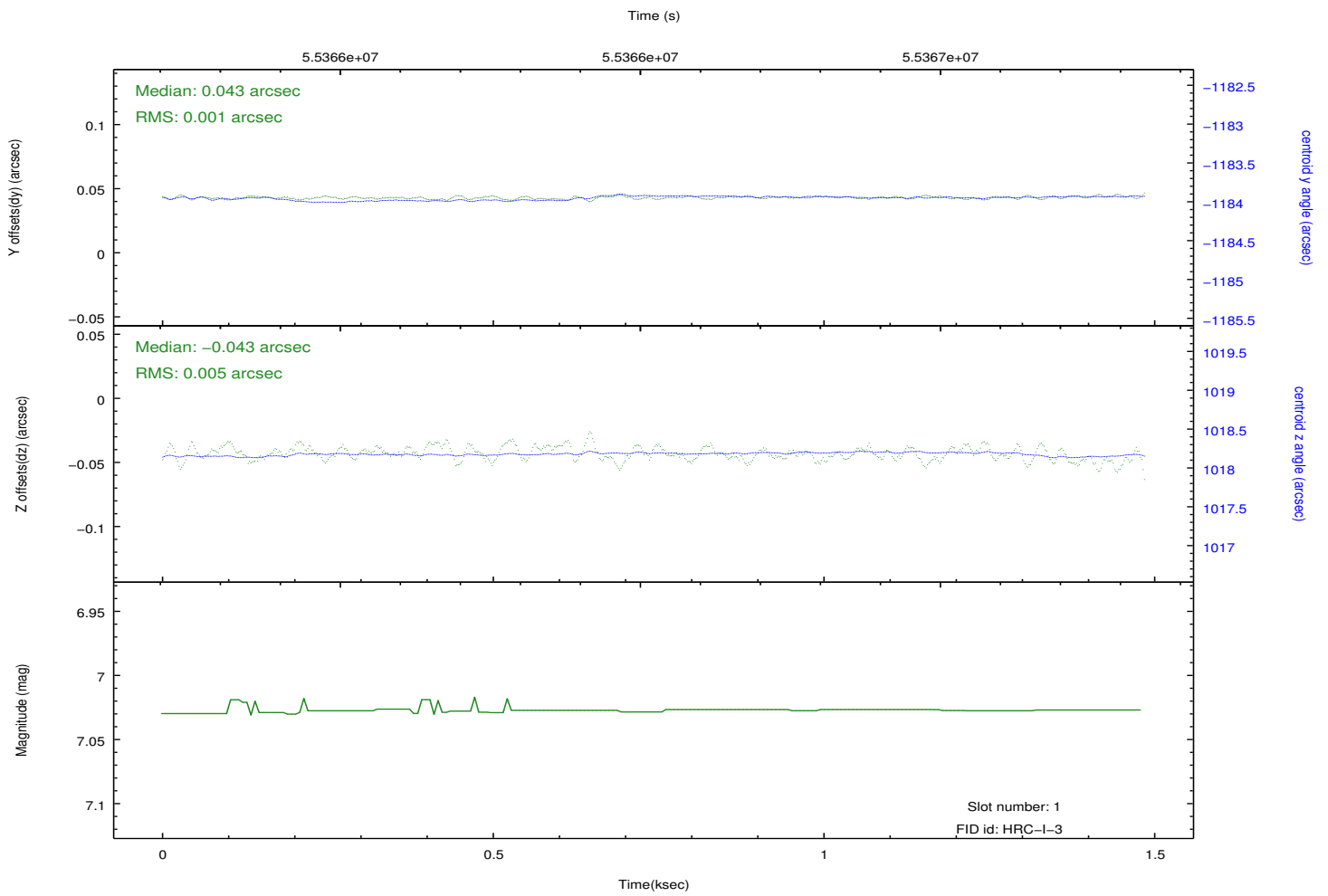
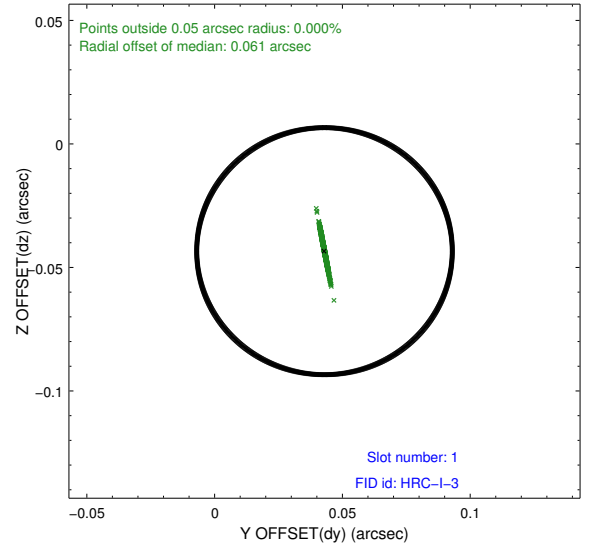
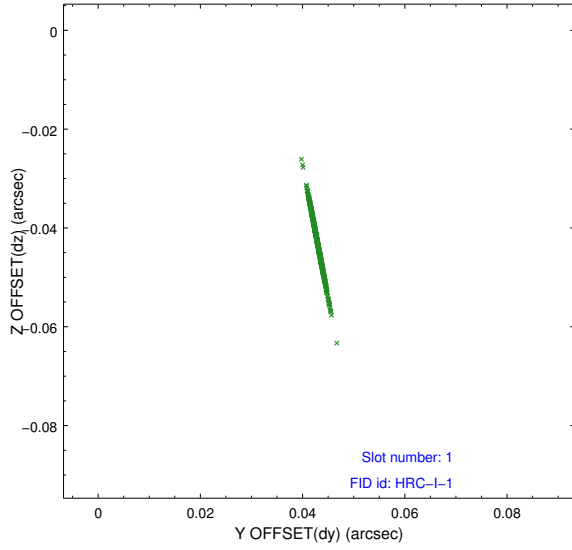


2.5 FID Slots

2.5.1 Slot 0

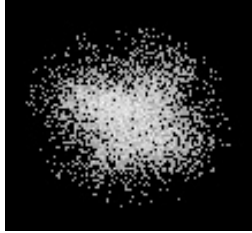


2.5.2 Slot 1



3 Point Sources

2.99 arcmin



19.69 arcmin



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2010.09.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.276 |

A.2 Comments

AR LAC observation to study HRC-I spatial gain dependence on HV. Source is off-axis.

Slot 2 was not utilized in this observation.