

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 5347 - L2 Version 3
Chandra X-Ray Center

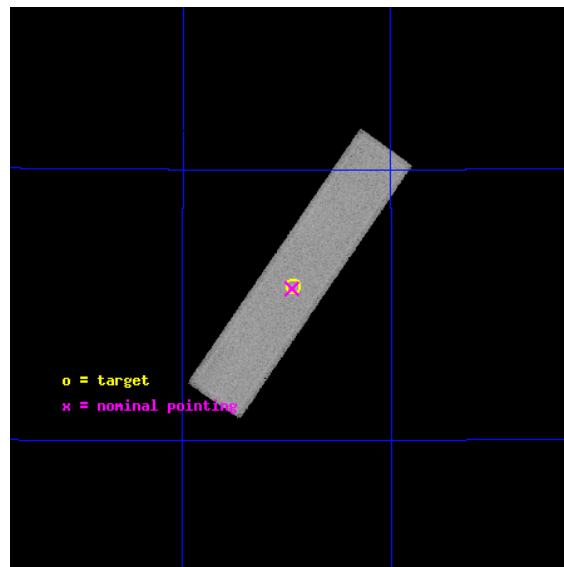
L2 Processing Date : Dec 10 2012

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

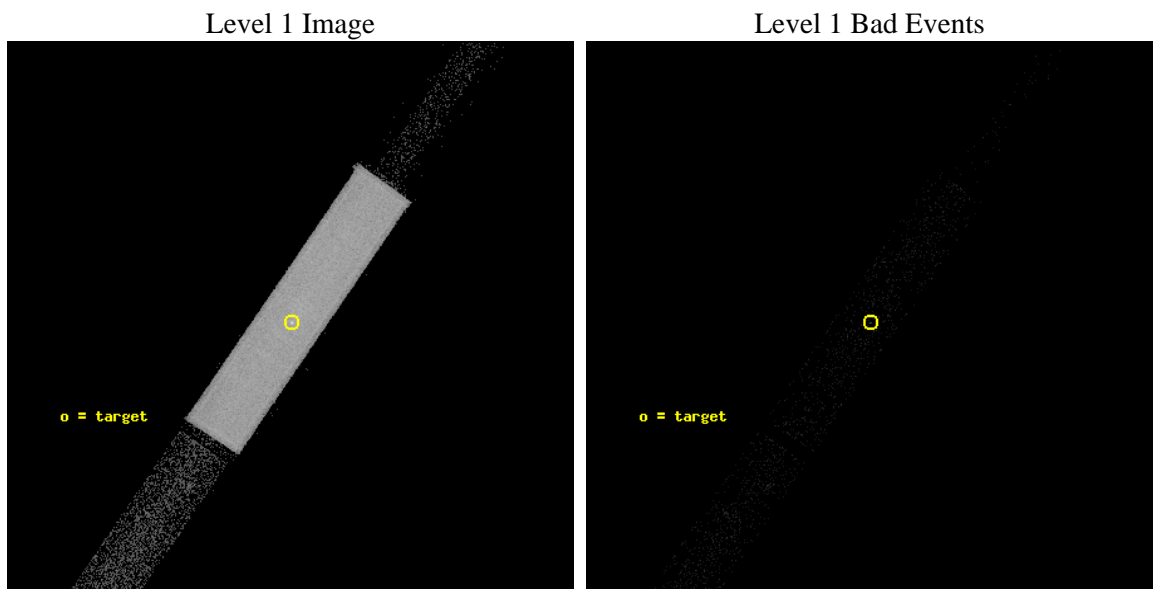
| | | |
|----------|--|--|
| seq_num | 290444 | Sequence number |
| obs_id | 5347 | Observation id |
| title | Monitoring the health of the HRC UV Ion shield | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | Vega | Source name |
| ra_targ | 279.235 | Observer's specified target RA [deg] |
| dec_targ | 38.783778 | Observer's specified target Dec [deg] |
| ra_nom | 279.23838425813 | Nominal RA [deg] |
| dec_nom | 38.780034324785 | Nominal Dec [deg] |
| roll_nom | 304.51520179772 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 3152.1313913167 | [s] |
| livetime | 3129.445866001 | Ontime multiplied by DTCOR |
| l2events | 156284 | 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 | 8.5 | Processing system revision | ontime | 3152.1313913167 | [s] |
| caldsver | 4.5.4 | | l1events | 201373 | Number of level 1 events |
| date | 2012-12-11T00:26:09 | Date and time of file creation | | | |
| revision | 3 | Processing version of data | | | |

2.1.3 Events

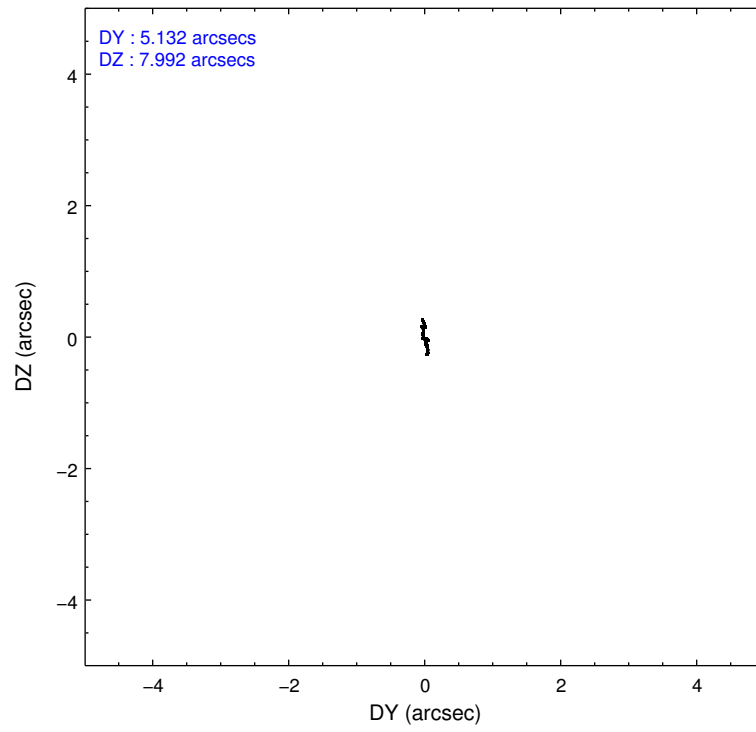
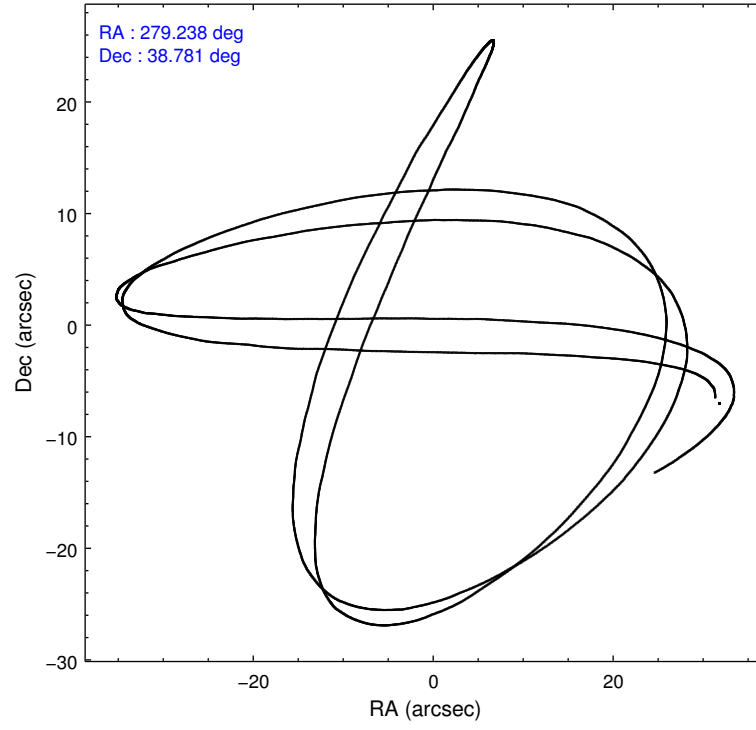
Level 1 Events

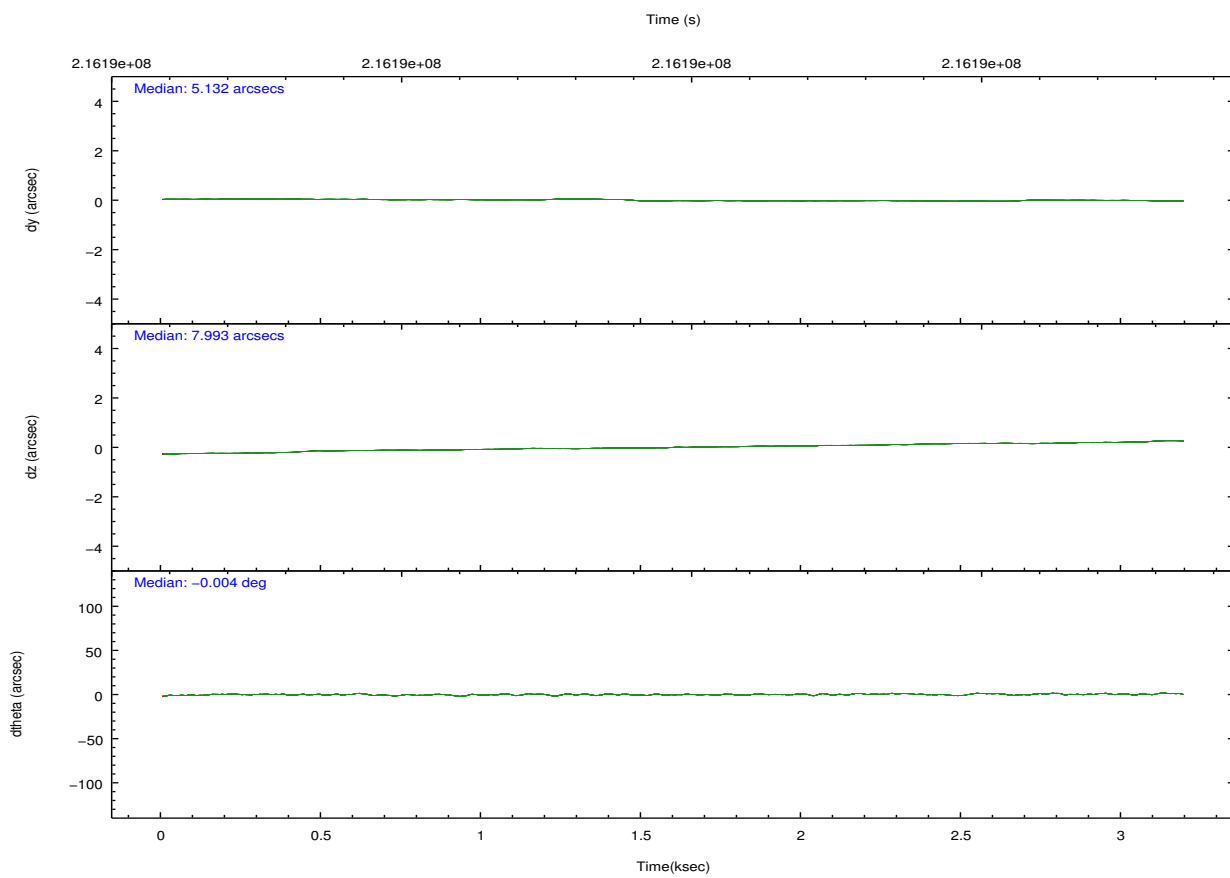
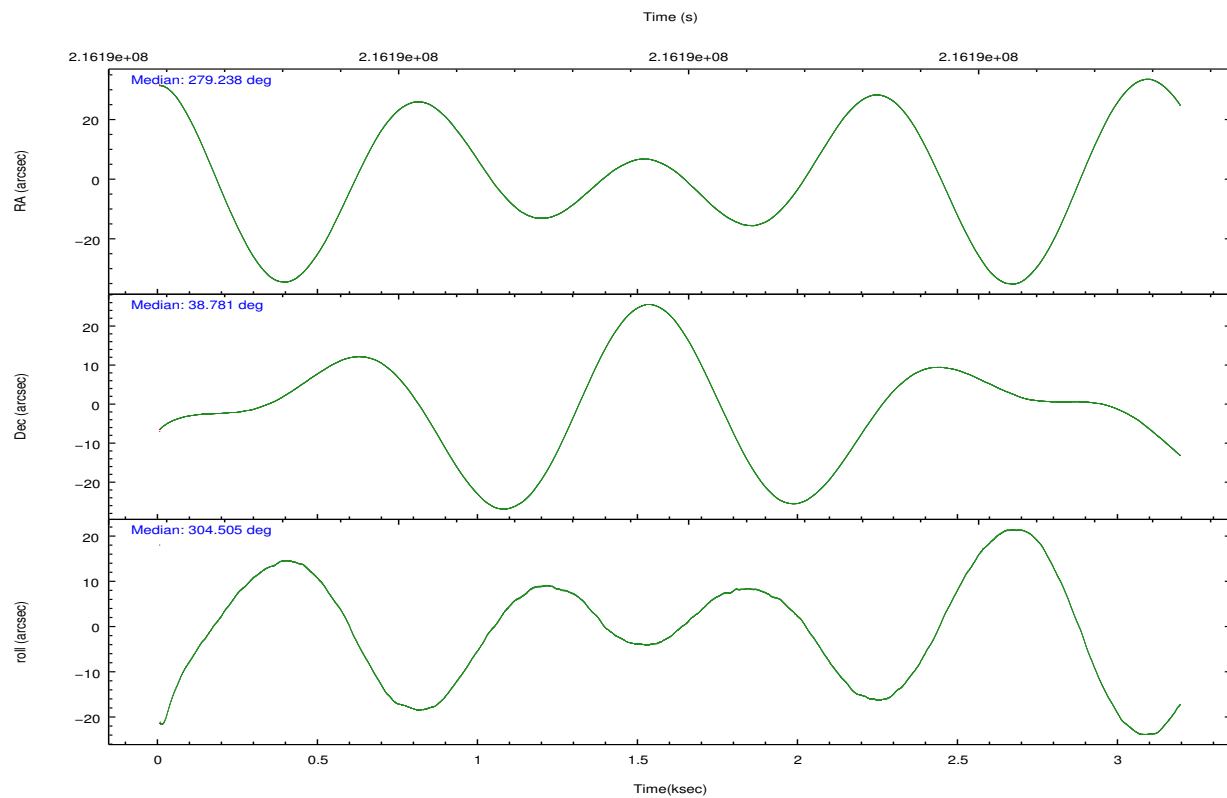
| | segment 1 | segment 2 | segment 3 |
|-----------------|--------------|--------------|--------------|
| level 1 events | 1021 | 194714 | 5638 |
| rejected events | 1021 | 5155 | 5568 |
| rejected % | 100% | 2% | 98% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 7 | 7 |
| Detector | HRC-S | HRC-S | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 279.204398 | 279.2383842581339 | | | |
| [deg] Pointing Dec | 38.790853 | 38.78003432478457 | | | |
| [deg] Pointing Roll | 304.469180 | 304.5152017977188 | | | |
| [s] Window start time (MET) | 215654464.184000 | 215654464.184000 | | | |
| [s] Window stop time (MET) | 218246404.184000 | 218246404.184000 | | | |
| [mm] SIM focus pos | -1.429586 | -1.428180813131781 | | | |
| [mm] SIM defocus | 0.1037507710433287 | 0.1051558262725154 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 216186534.184000 | 216186158.26145 | | | |
| Observation start date | 2004-11-07T03:47:50 | 2004-11-07T03:42:38 | | | |
| [s] Observation end time (MET) | 216189534.184000 | 216189668.37411 | | | |
| Observation end date | 2004-11-07T04:37:50 | 2004-11-07T04:41:08 | | | |

2.3 Aspect



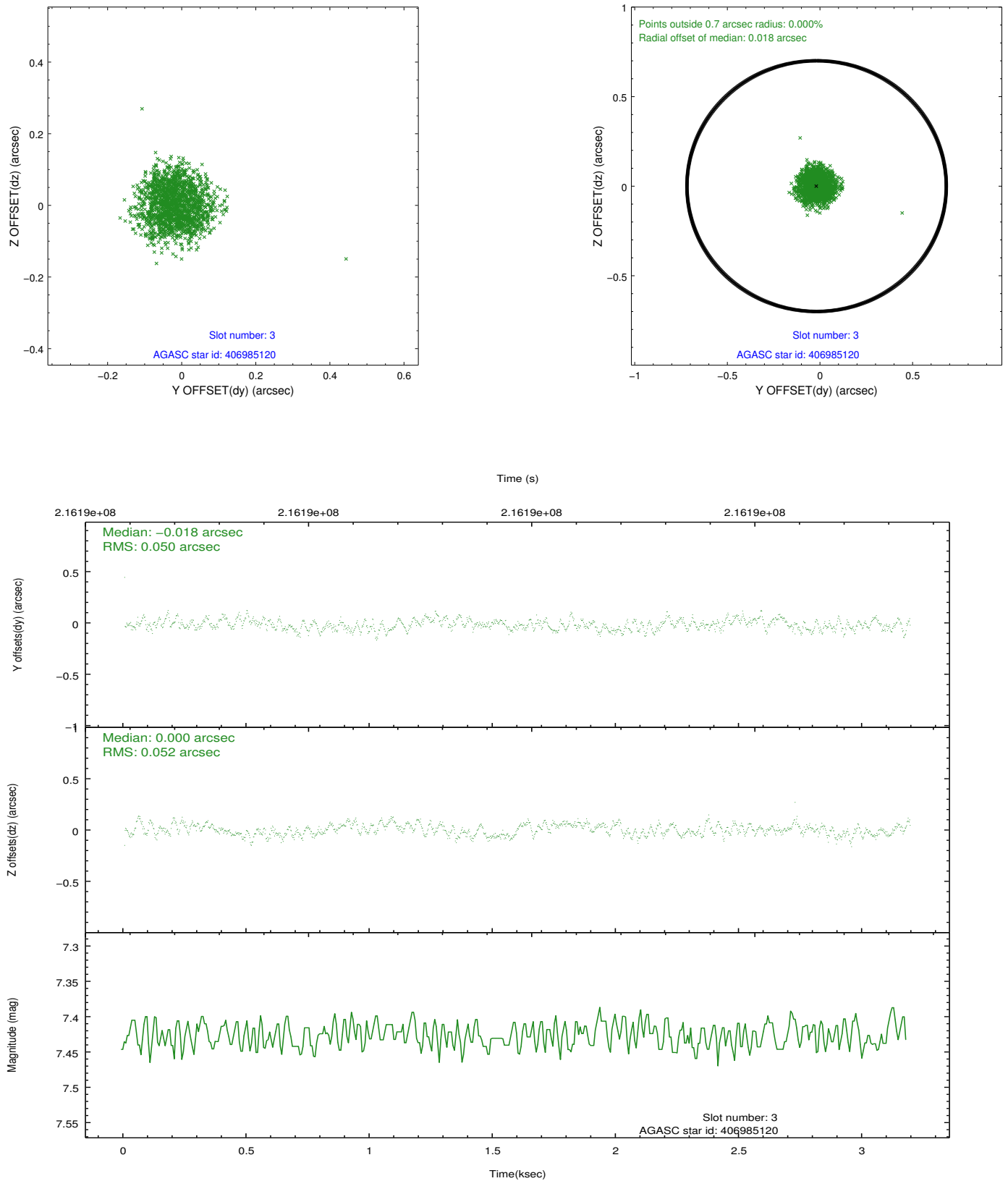


Slot Statistics

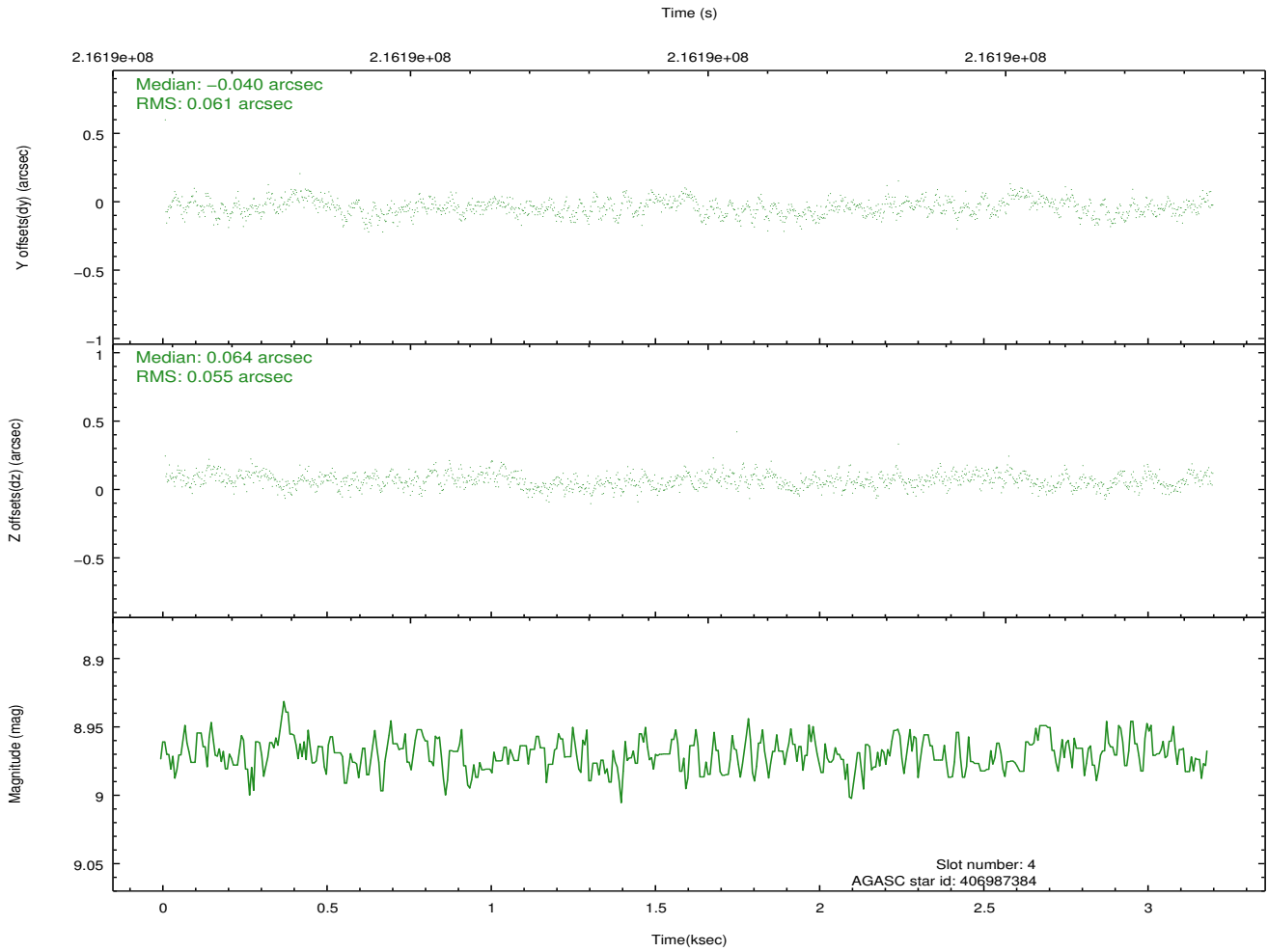
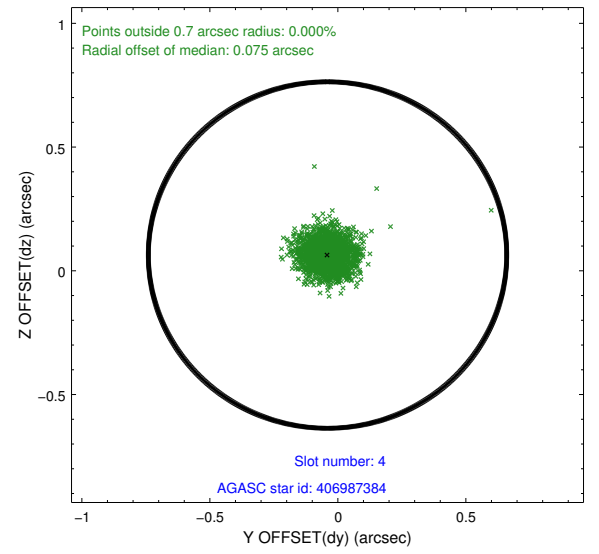
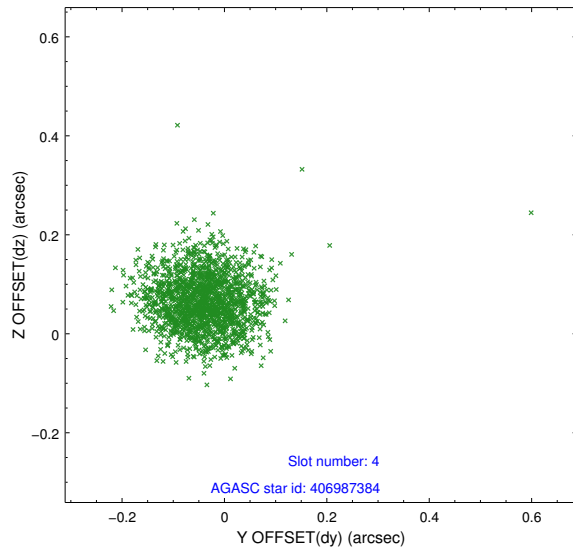
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-S-1 | 6.99 | 779 | 0.111 | -0.128 | 0.009 | 0.014 | 0.000000 | 0.000000 | -1159.25 | -456.60 |
| 1 | FID | HRC-S-2 | 6.99 | 779 | 0.133 | -0.094 | 0.005 | 0.009 | 0.000000 | 0.000000 | 1238.97 | -449.76 |
| 2 | FID | HRC-S-3 | 7.01 | 779 | 0.146 | -0.081 | 0.009 | 0.015 | 0.000000 | 0.000000 | -1160.36 | 572.40 |
| 3 | GUIDE | 406985120 | 7.43 | 1557 | -0.018 | 0.000 | 0.078 | 0.117 | 278.839732 | 38.894839 | -887.70 | -629.94 |
| 4 | GUIDE | 406987384 | 8.97 | 1556 | -0.040 | 0.064 | 0.086 | 0.134 | 278.815518 | 38.115336 | 1380.22 | -2283.68 |
| 5 | GUIDE | 406990192 | 9.00 | 1557 | 0.030 | -0.067 | 0.092 | 0.156 | 278.510952 | 38.533654 | -345.86 | -2131.82 |
| 6 | GUIDE | 407521232 | 8.65 | 1557 | 0.079 | 0.002 | 0.096 | 0.149 | 279.628883 | 39.431715 | -1236.14 | 2278.39 |
| 7 | GUIDE | 406983600 | 8.91 | 1554 | -0.044 | 0.003 | 0.113 | 0.168 | 279.940957 | 39.020708 | 477.02 | 2172.68 |

2.4 Star Slots

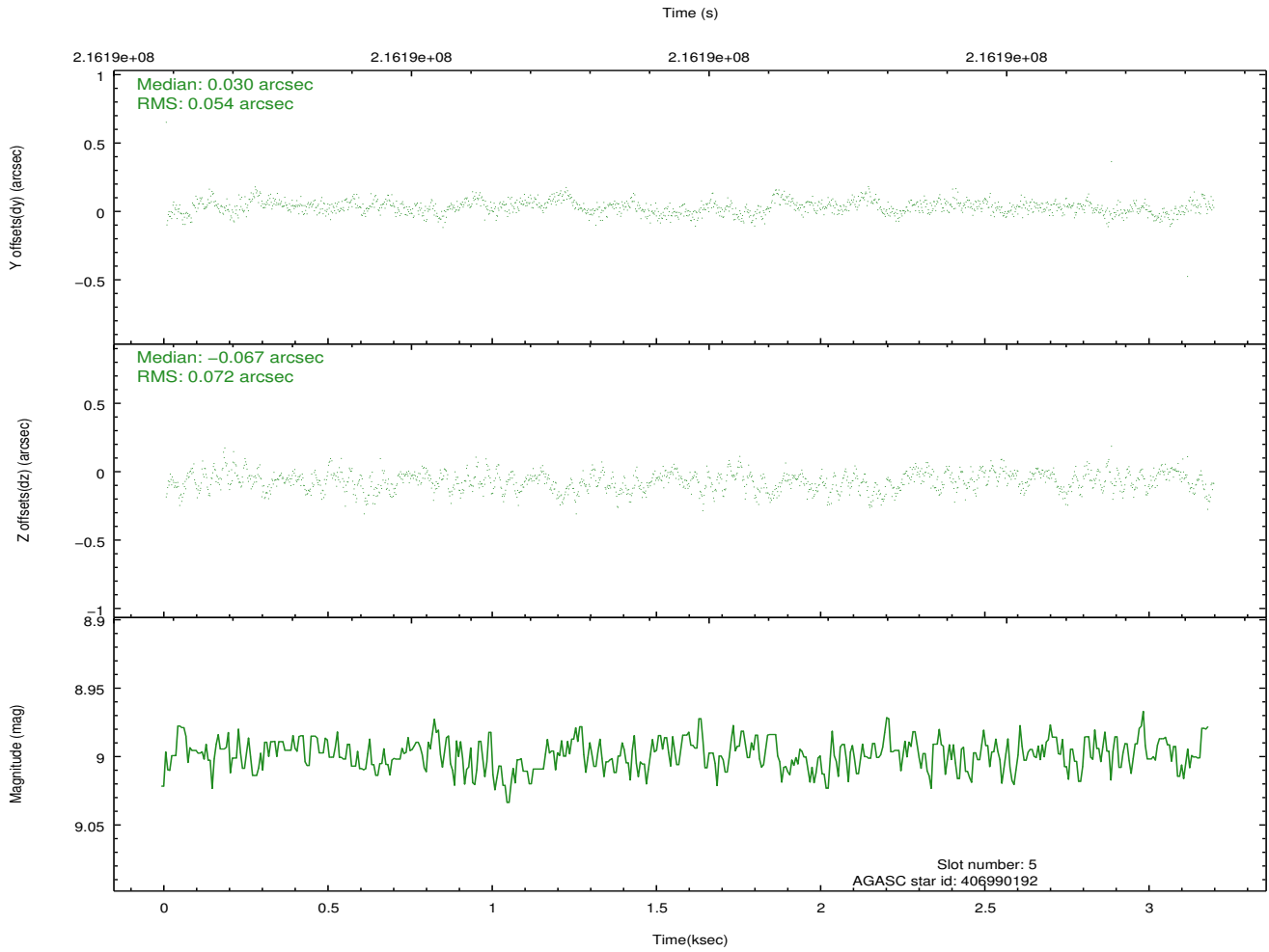
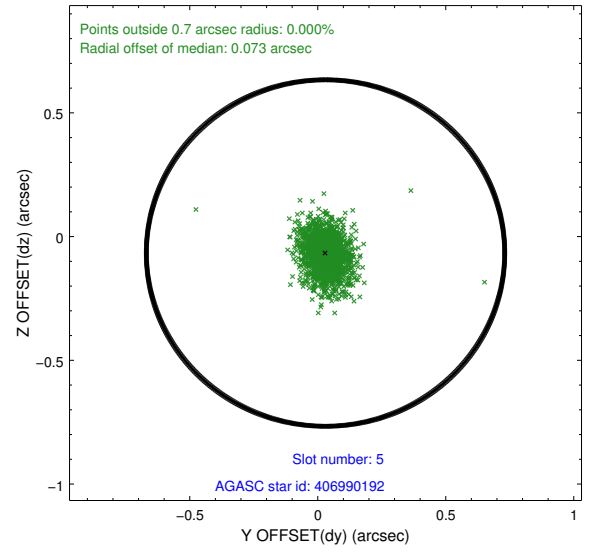
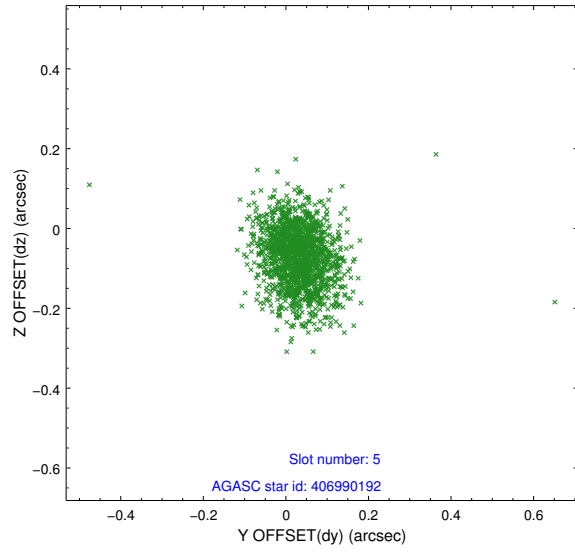
2.4.1 Slot 3



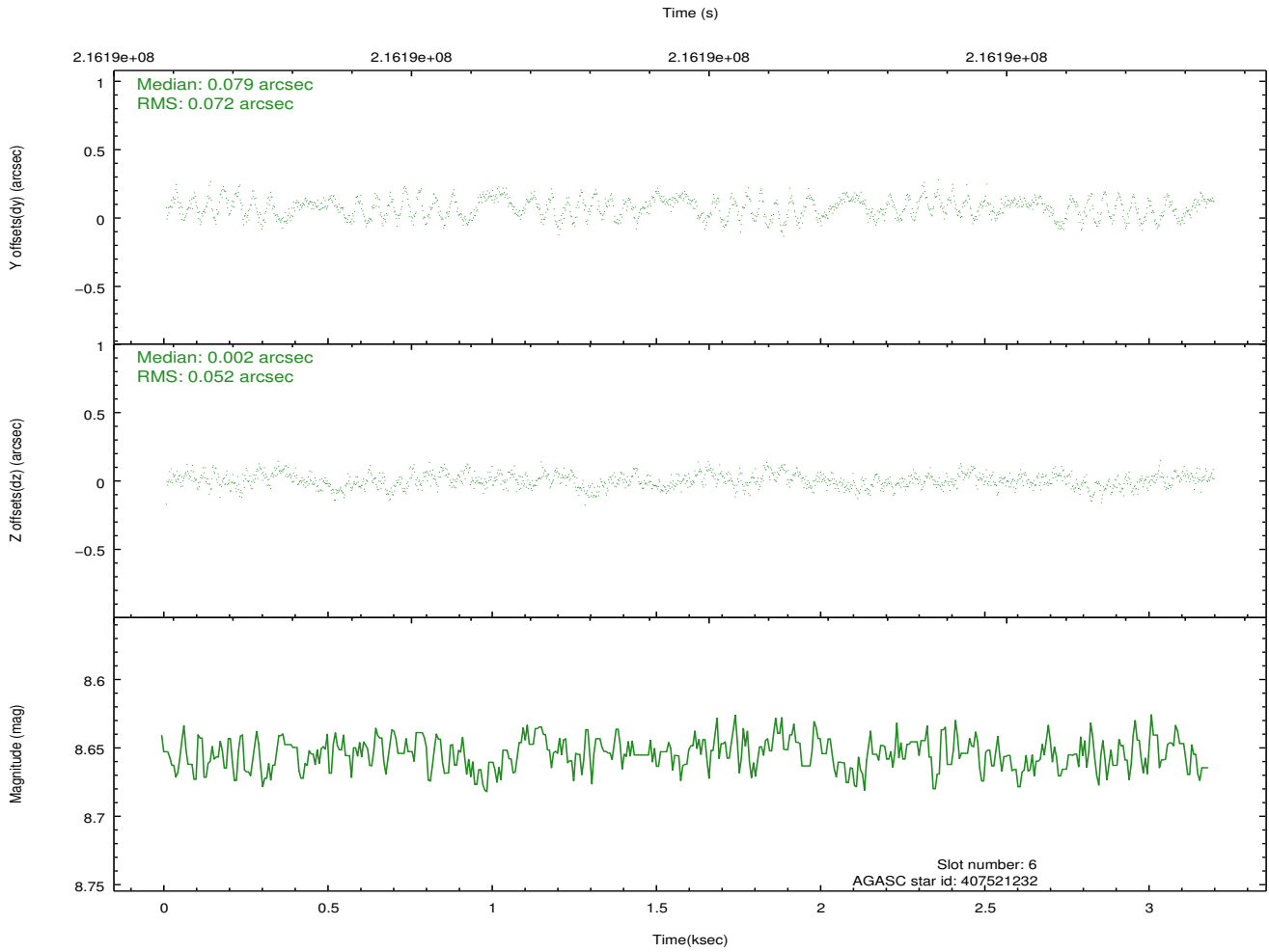
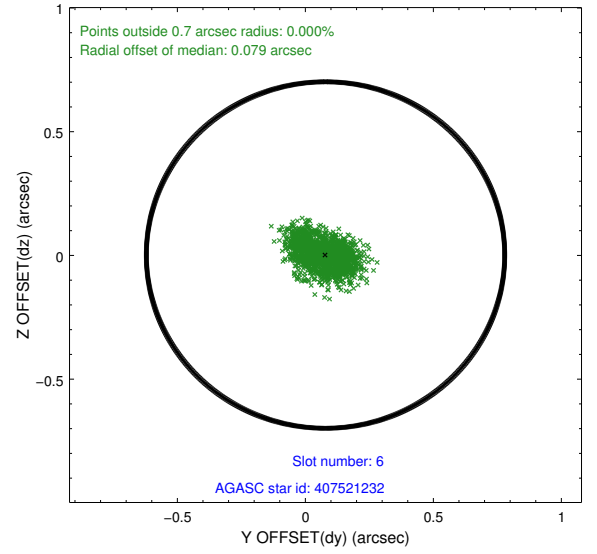
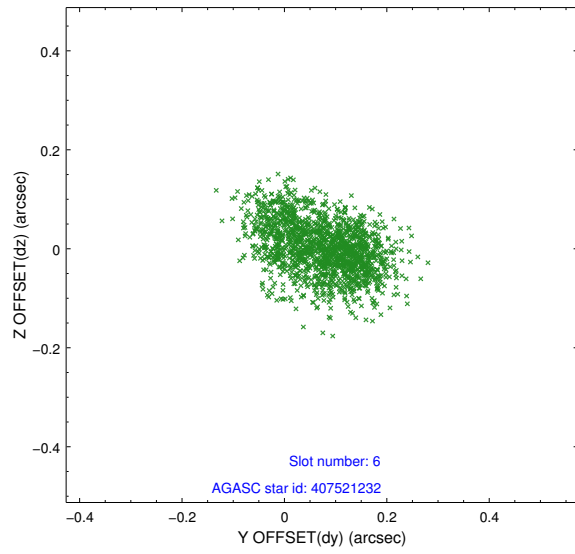
2.4.2 Slot 4



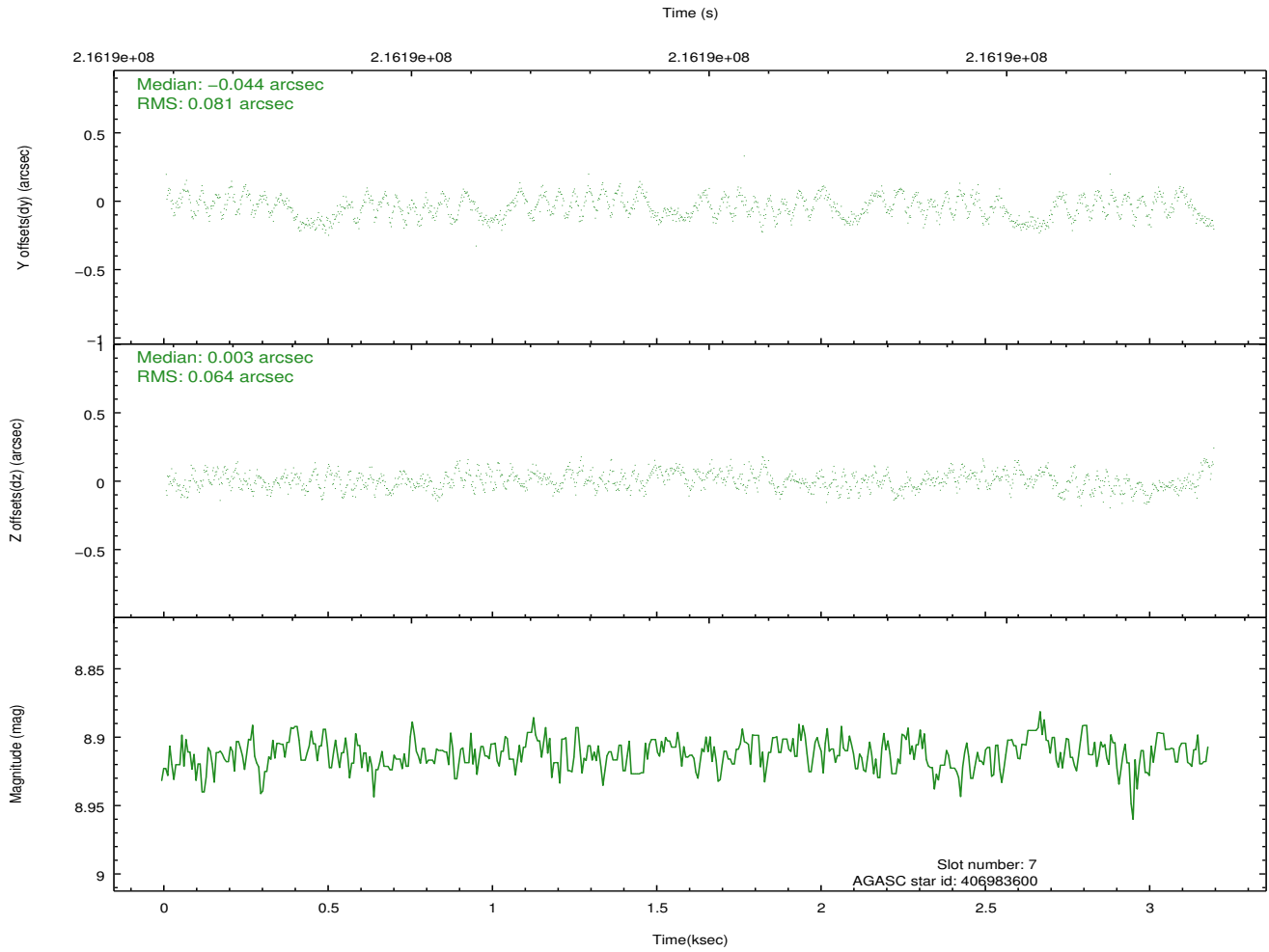
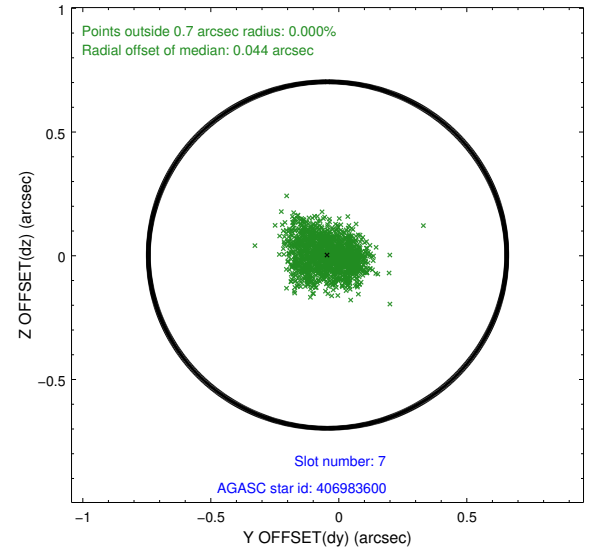
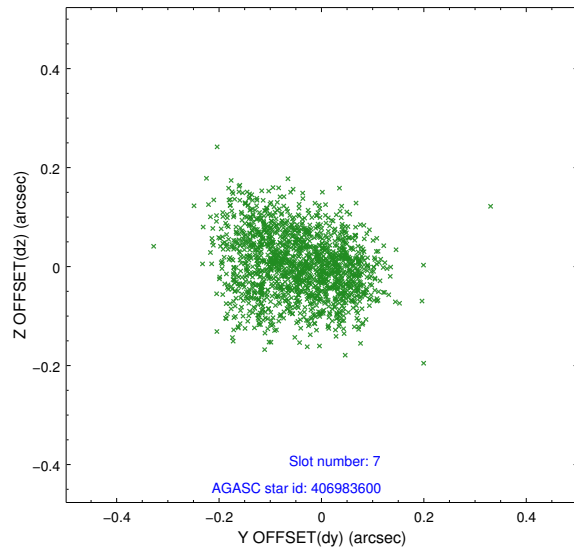
2.4.3 Slot 5



2.4.4 Slot 6

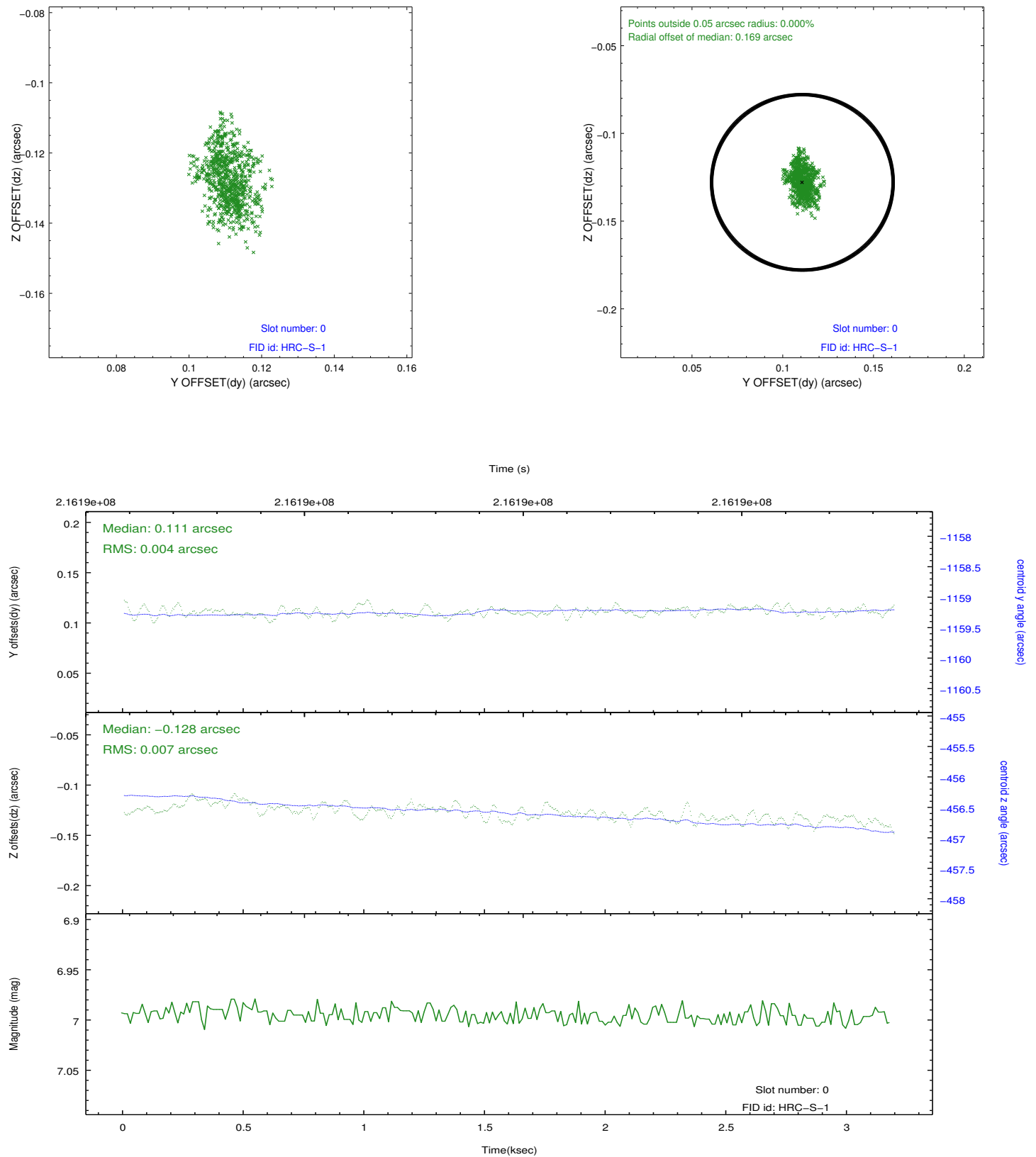


2.4.5 Slot 7

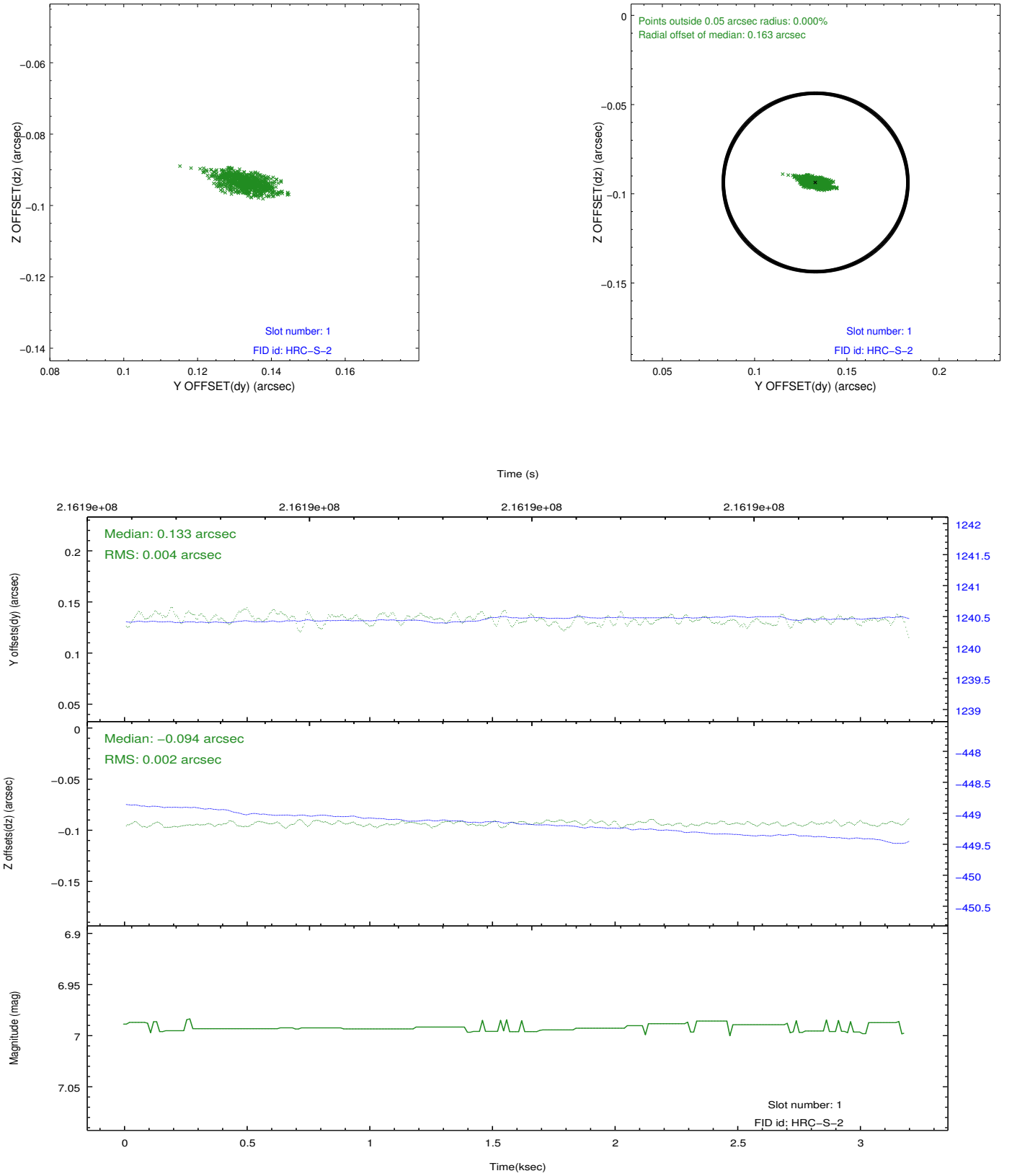


2.5 FID Slots

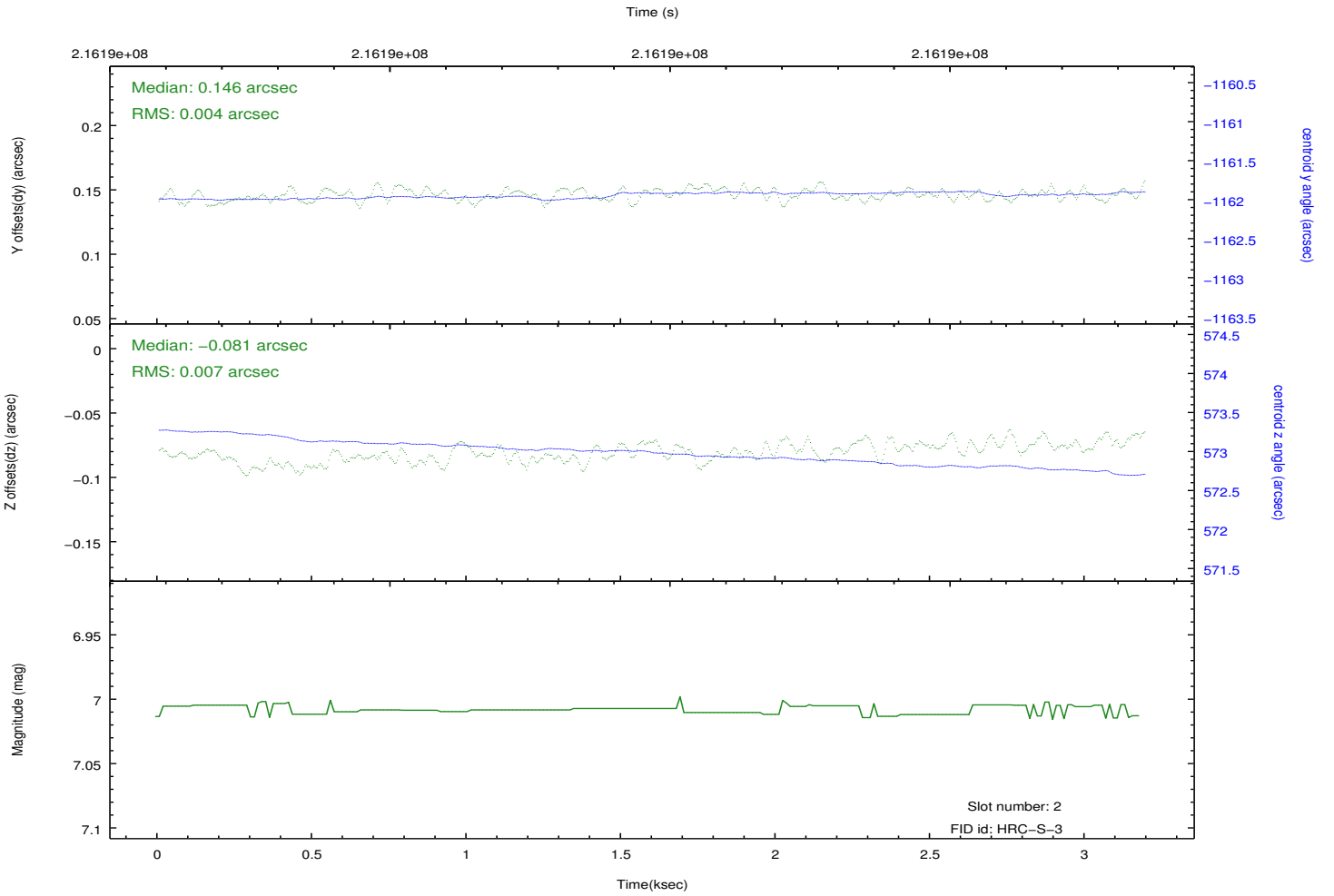
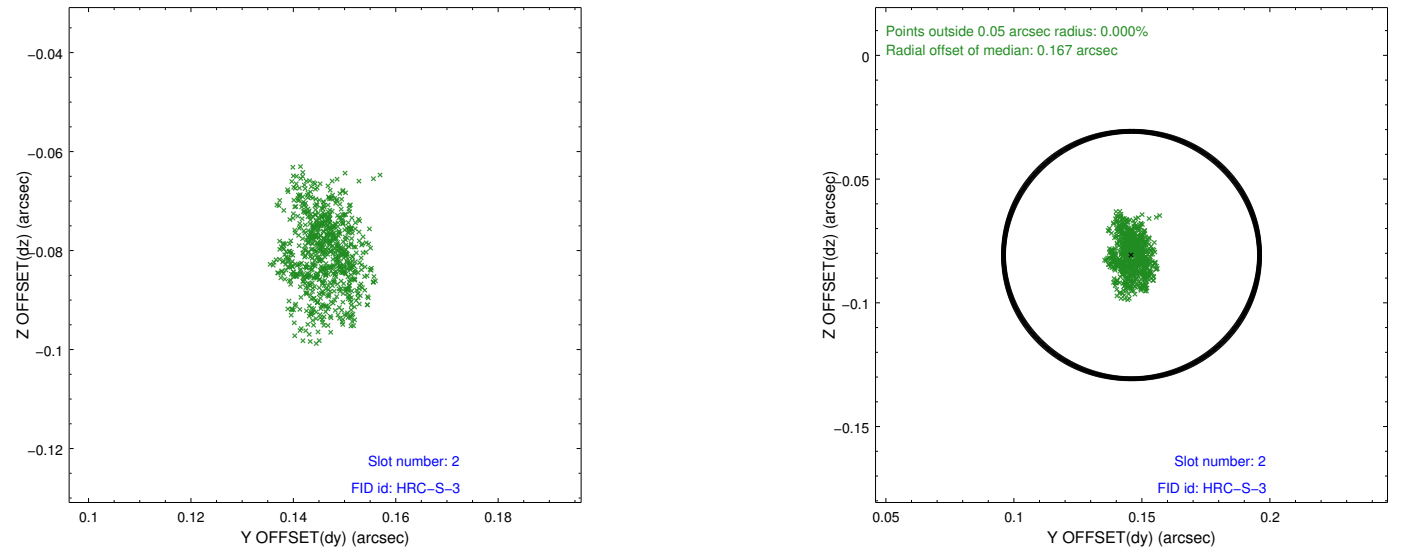
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.12.23 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 3.152 |

A.2 Comments

Window preference met.