

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14559 - L2 Version 2
Chandra X-Ray Center

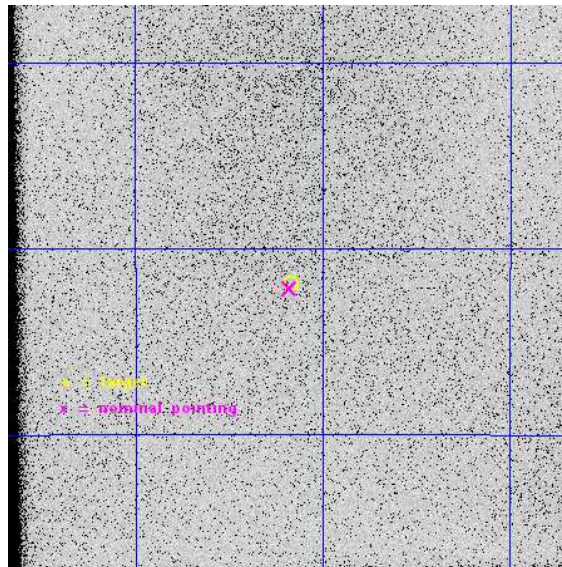
L2 Processing Date : Dec 2 2014

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1 Front

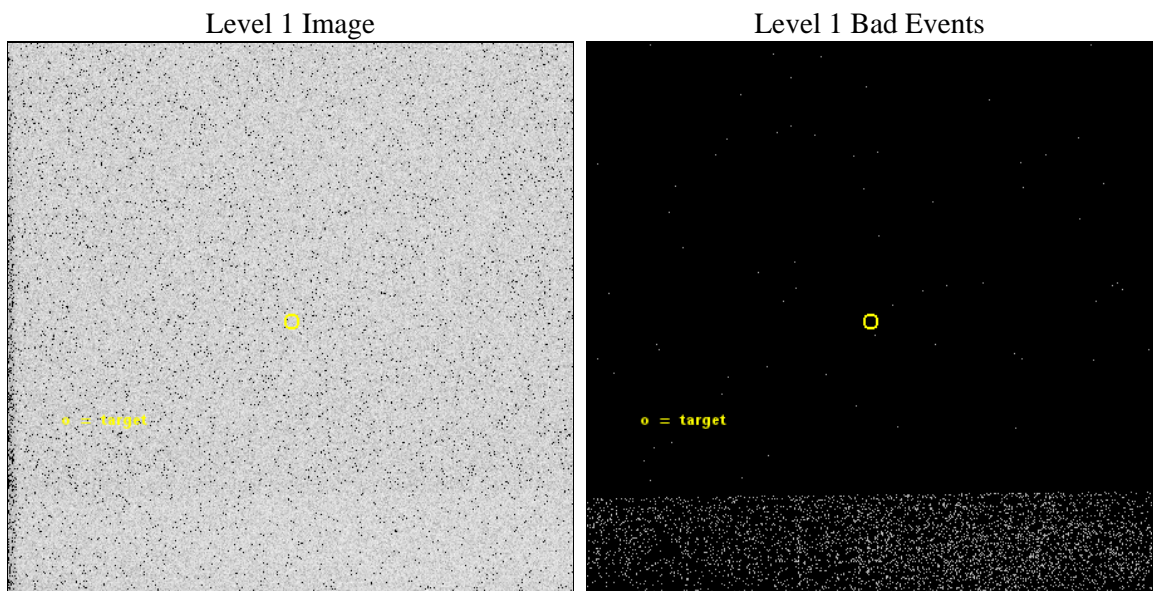
| | | |
|----------|--|---------------------------------------|
| seq_num | 200860 | Sequence number |
| obs_id | 14559 | Observation id |
| title | Search for X-ray emission from a sample of luminous O-type subdwarfs | |
| observer | Mr. Nicola La Palombara | Principal investigator |
| object | LSS 1275 | Source name |
| ra_targ | 140.042083 | Observer's specified target RA [deg] |
| dec_targ | -45.531917 | Observer's specified target Dec [deg] |
| ra_nom | 140.04442019798 | Nominal RA [deg] |
| dec_nom | -45.535960320267 | Nominal Dec [deg] |
| roll_nom | 314.35076347773 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 4187.3814763427 | [s] |
| livetime | 1107.1434522348 | Ontime multiplied by DTCOR |
| l2events | 553430 | 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 | 4000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.3 | Processing system revision | ontime | 4187.3814763427 | [s] |
| caldbver | 4.6.4 | | l1events | 912526 | Number of level 1 events |
| date | 2014-12-02T07:22:56 | Date and time of file creation | | | |
| revision | 2 | Processing version of data | | | |

2.1.3 Events

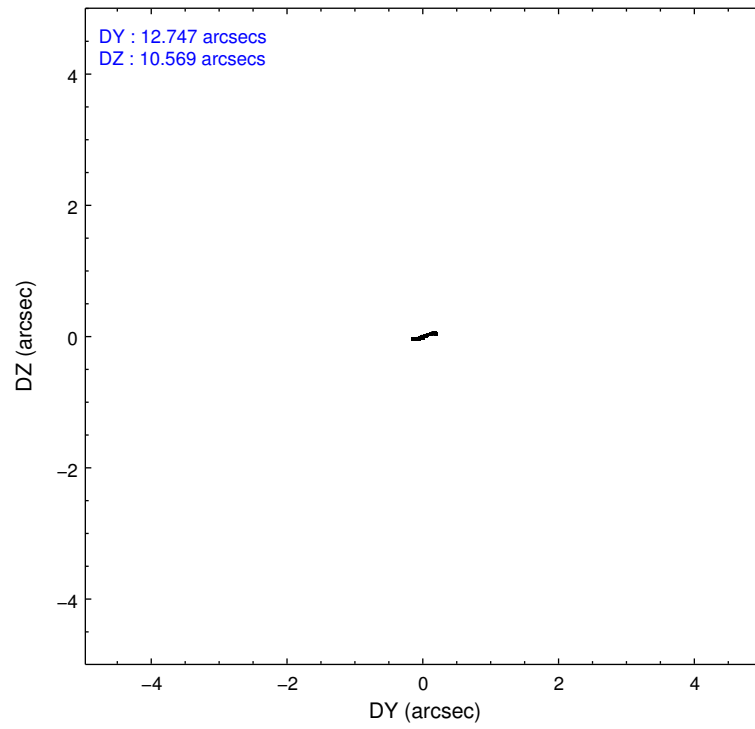
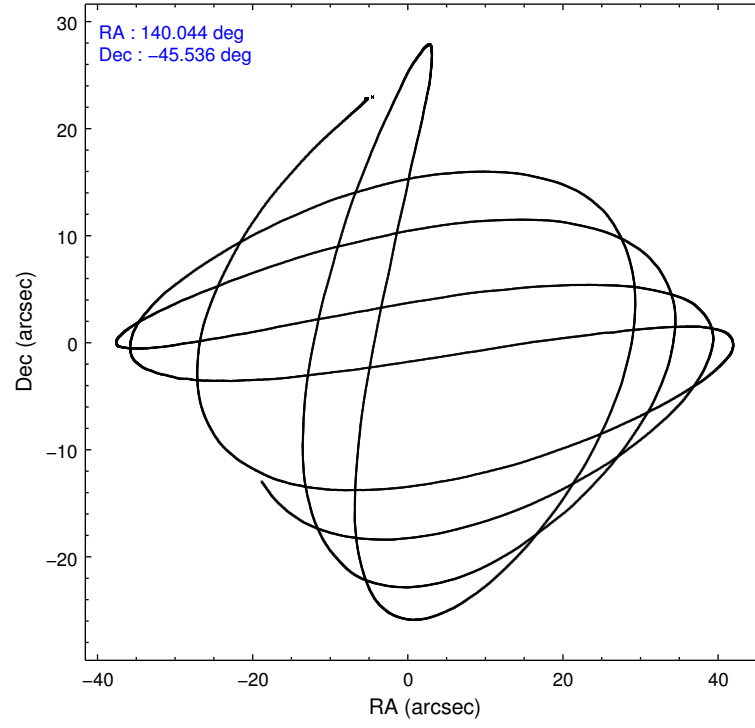
Level 1 Events

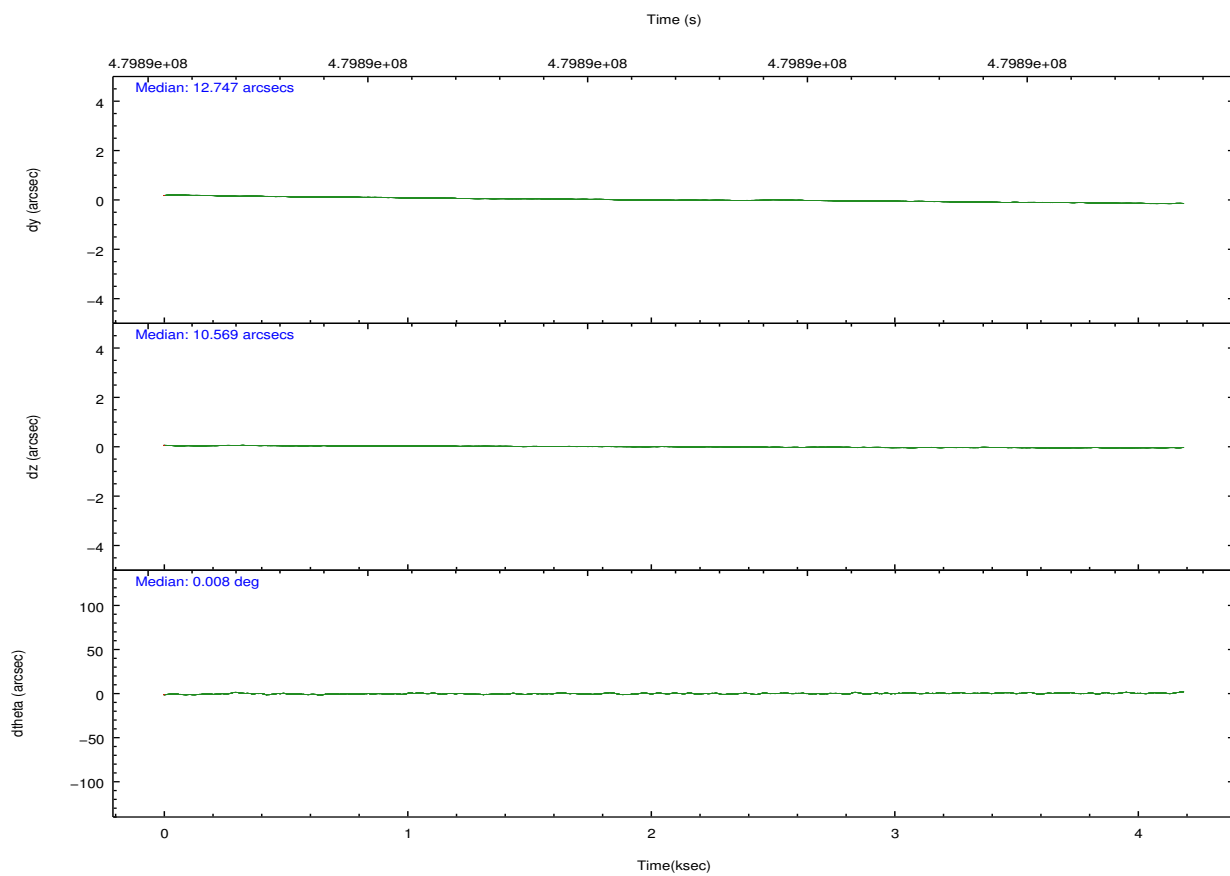
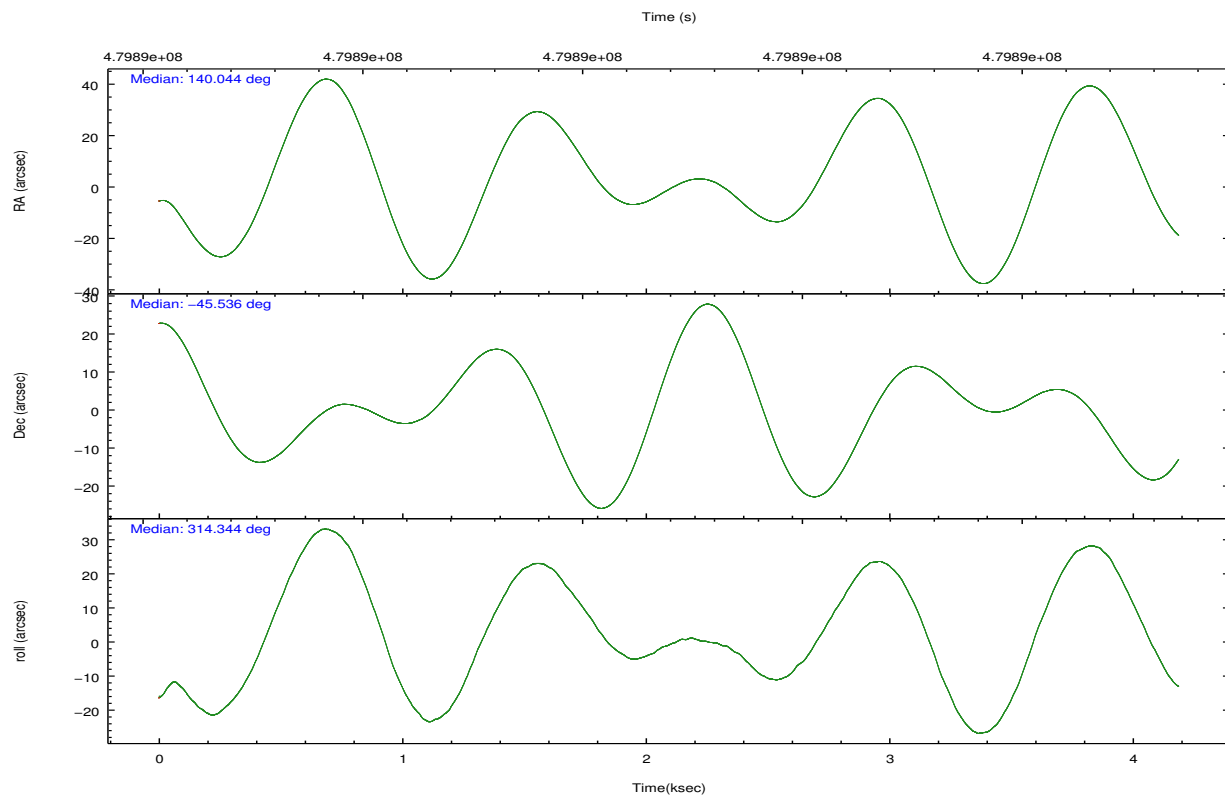
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 912526 |
| rejected events | 140357 |
| rejected % | 15% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 7 | 7 |
| Detector | HRC-I | HRC-I | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 140.006794 | 140.0444201979818 | | | |
| [deg] Pointing Dec | -45.529082 | -45.53596032026743 | | | |
| [deg] Pointing Roll | 314.419413 | 314.3507634777275 | | | |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 | | | |
| [mm] SIM defocus | 0 | 0.001426264420575141 | | | |
| [mm] SIM translation stage pos | 126.985494 | 126.9829799899862 | | | |
| [mm] SIM translation stage offset | 0 | 0.002508901615314585 | | | |
| [s] Observation start time (MET) | 479887483.184000 | 479886689.99233 | | | |
| Observation start date | 2013-03-17T06:03:36 | 2013-03-17T05:51:29 | | | |
| [s] Observation end time (MET) | 479891483.184000 | 479892415.13014 | | | |
| Observation end date | 2013-03-17T07:10:16 | 2013-03-17T07:26:55 | | | |

2.3 Aspect



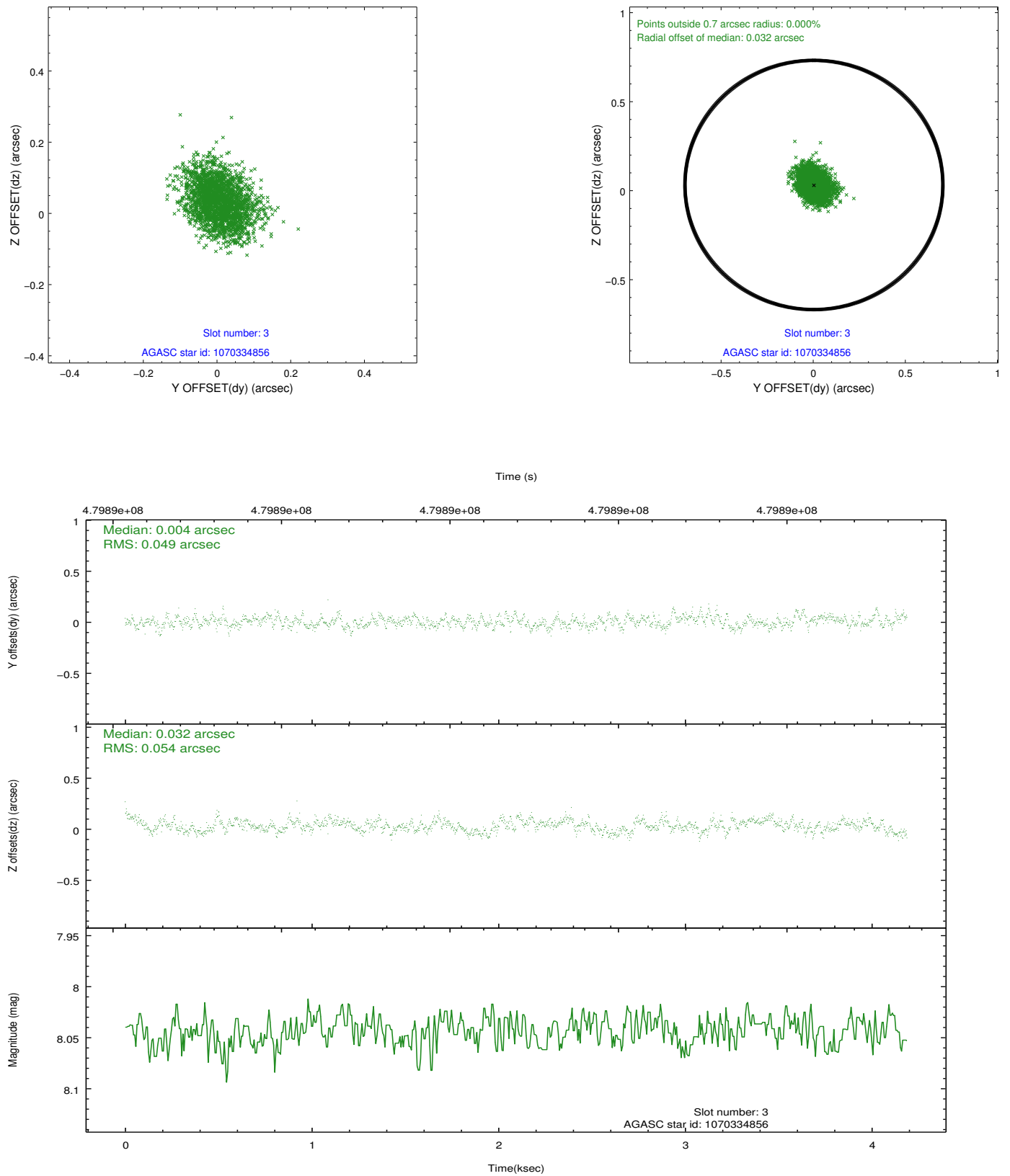


Slot Statistics

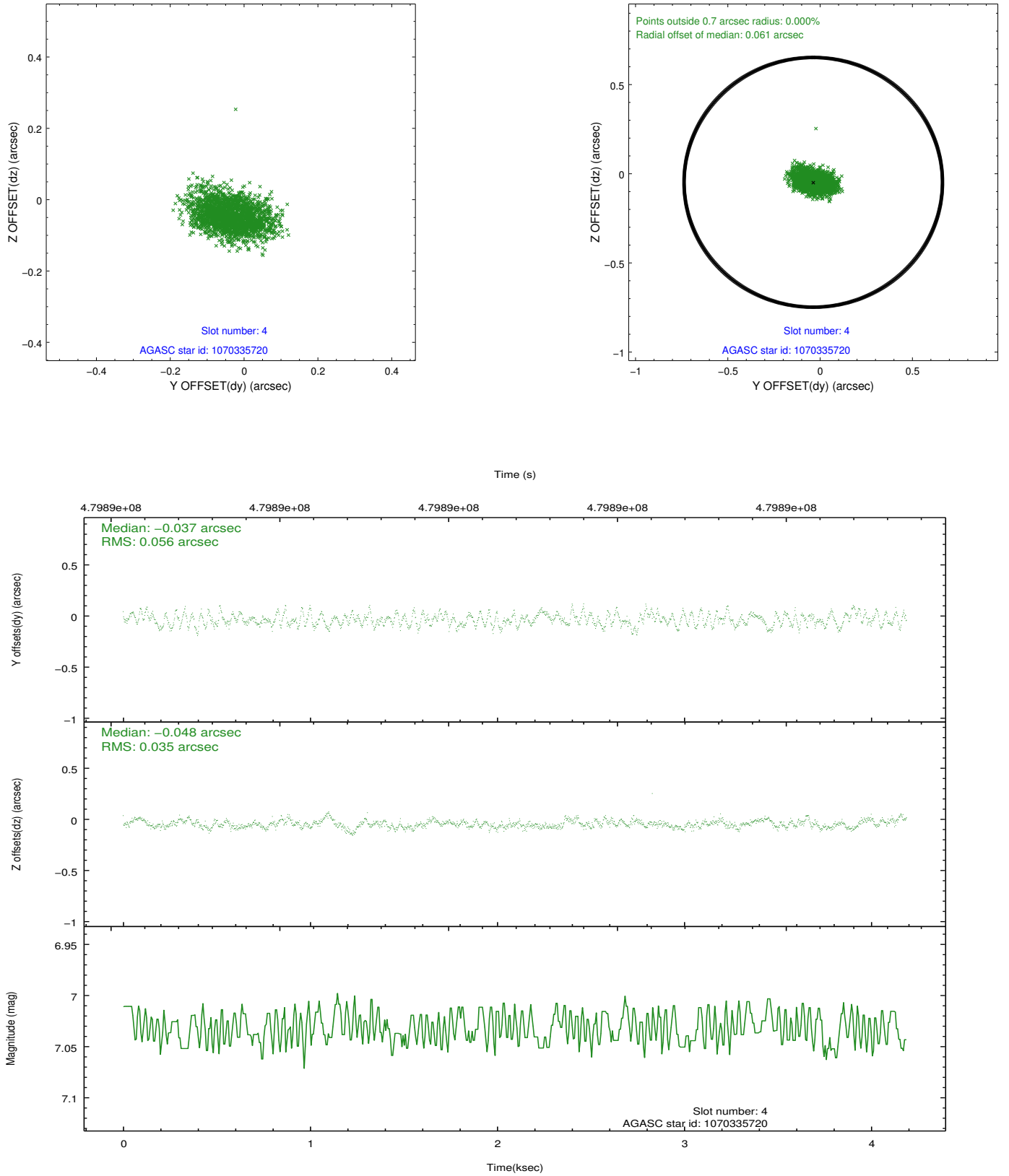
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | | HRC-I-2 | 6.98 | 1022 | 0.075 | -0.063 | 0.008 | 0.013 | 0.000000 | 0.000000 | 844.21 | -1300.15 |
| 1 | FID | | HRC-I-3 | 7.03 | 1022 | -0.150 | 0.010 | 0.007 | 0.013 | 0.000000 | 0.000000 | -1196.31 | 1004.77 |
| 2 | FID | | HRC-I-4 | 6.96 | 1022 | 0.194 | -0.032 | 0.007 | 0.014 | 0.000000 | 0.000000 | 1273.31 | 1004.60 |
| 3 | GUIDE | used | 1070334856 | 8.04 | 2044 | 0.004 | 0.032 | 0.077 | 0.126 | 140.265289 | -45.041864 | -792.56 | 1696.92 |
| 4 | GUIDE | used | 1070335720 | 7.03 | 2044 | -0.037 | -0.048 | 0.070 | 0.117 | 139.715245 | -45.007960 | -1858.93 | 783.30 |
| 5 | GUIDE | used | 1070346496 | 8.60 | 2040 | -0.045 | 0.134 | 0.086 | 0.131 | 139.613992 | -45.948915 | 391.98 | -1760.66 |
| 6 | GUIDE | used | 1070353976 | 7.73 | 2043 | 0.036 | -0.056 | 0.090 | 0.148 | 139.498881 | -45.636275 | -616.02 | -1186.44 |
| 7 | GUIDE | used | 1070467056 | 9.14 | 2038 | 0.029 | -0.059 | 0.102 | 0.170 | 140.786051 | -45.671675 | 1745.12 | 1034.68 |

2.4 Star Slots

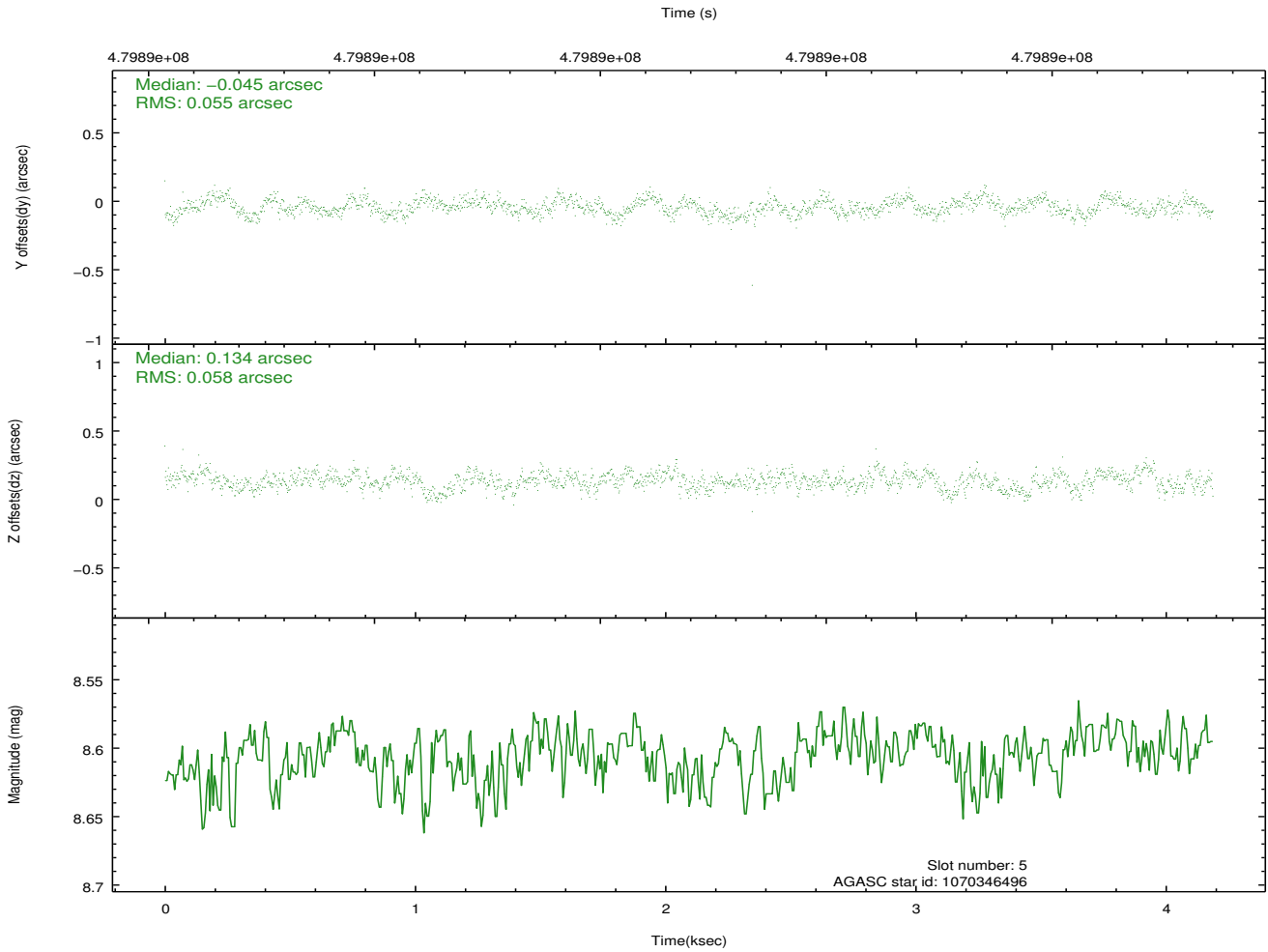
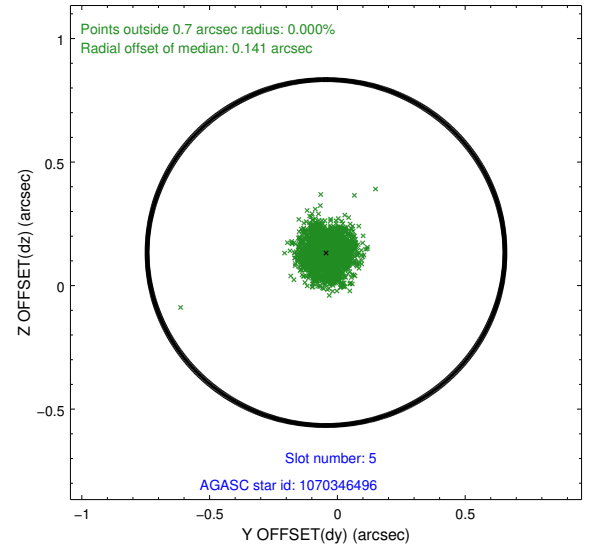
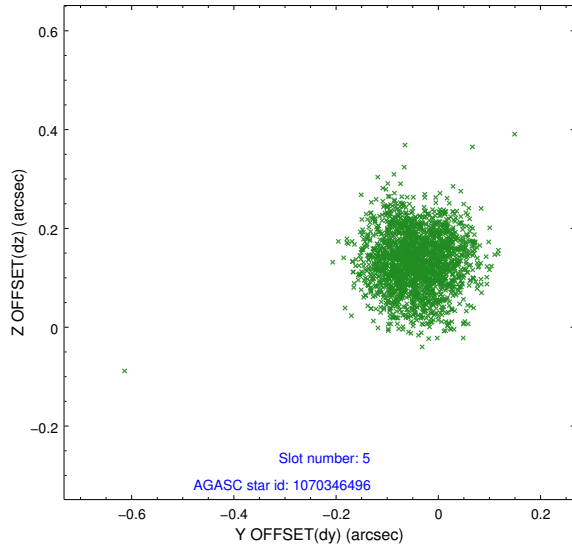
2.4.1 Slot 3



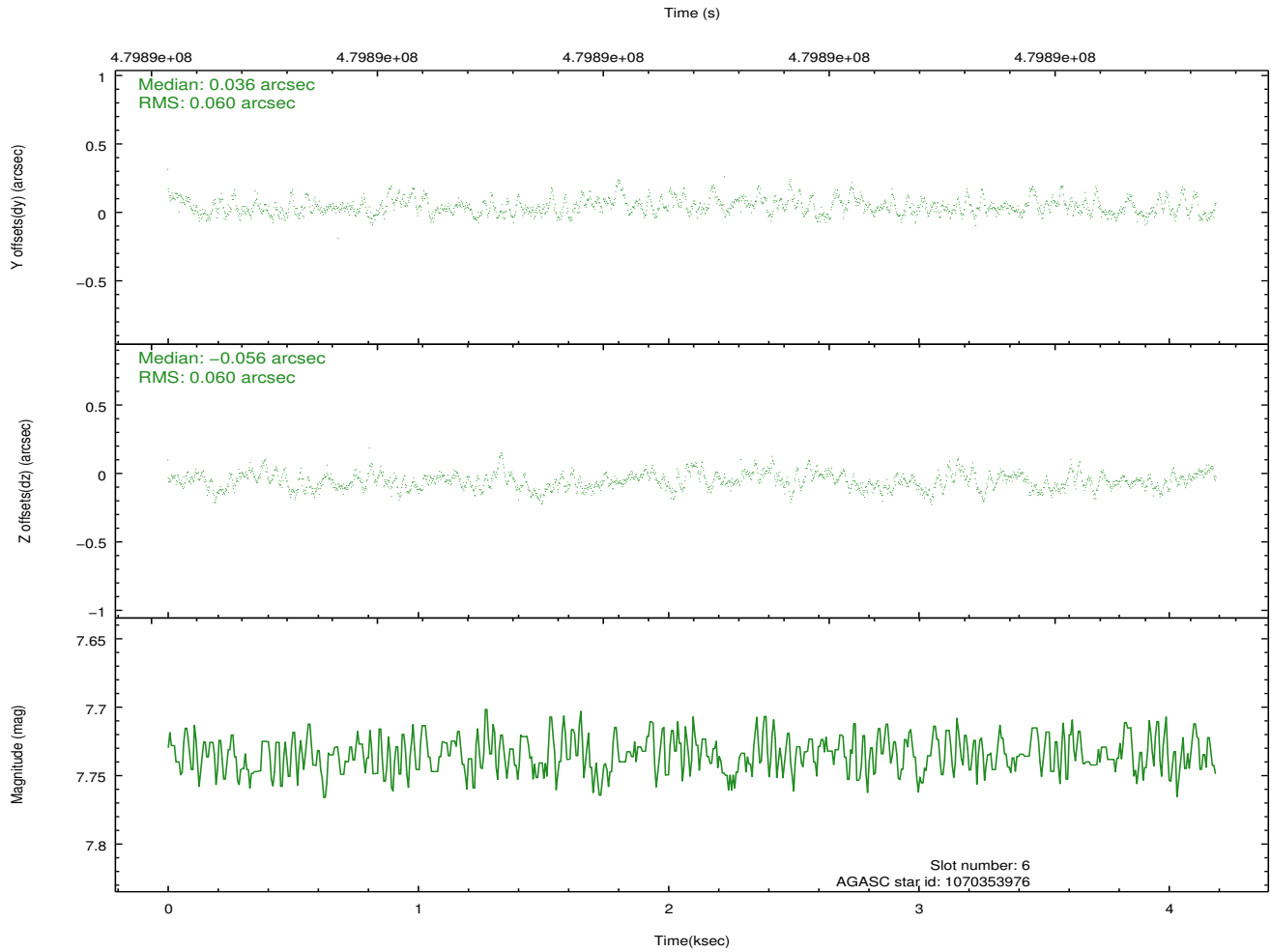
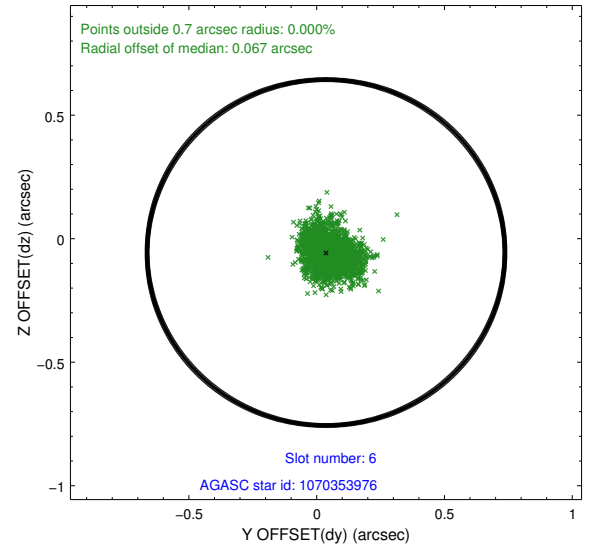
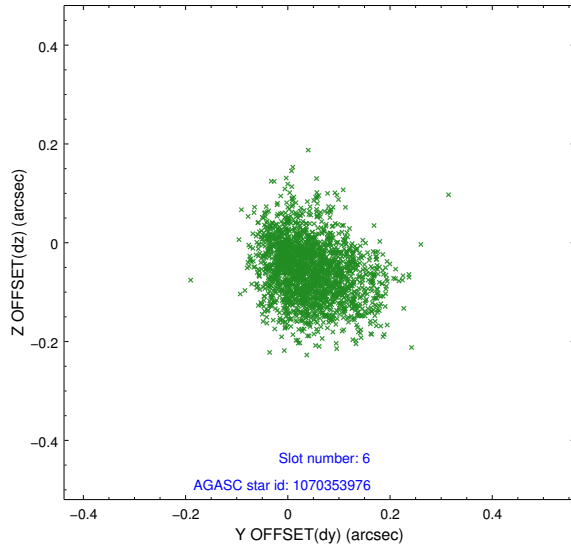
2.4.2 Slot 4



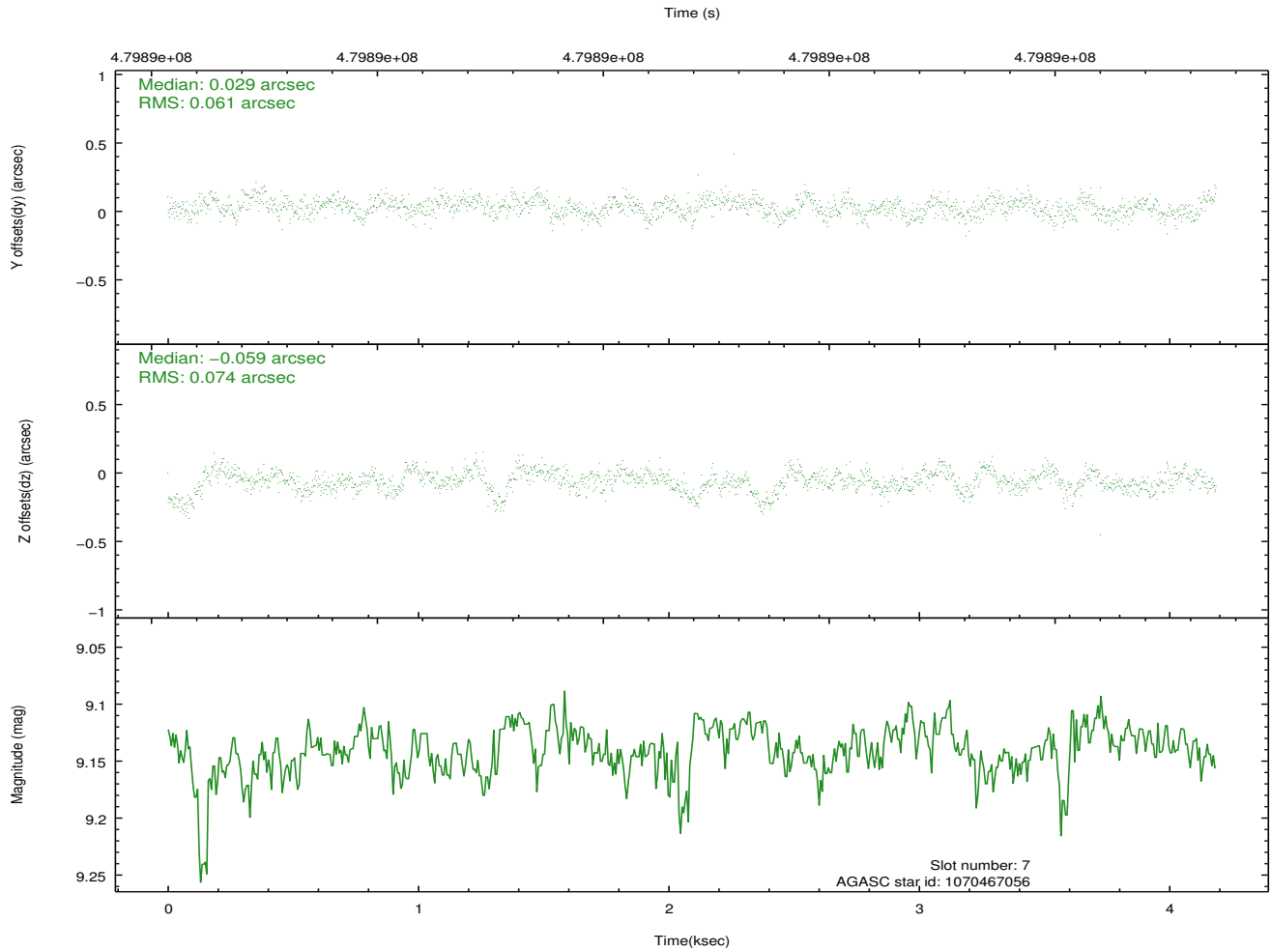
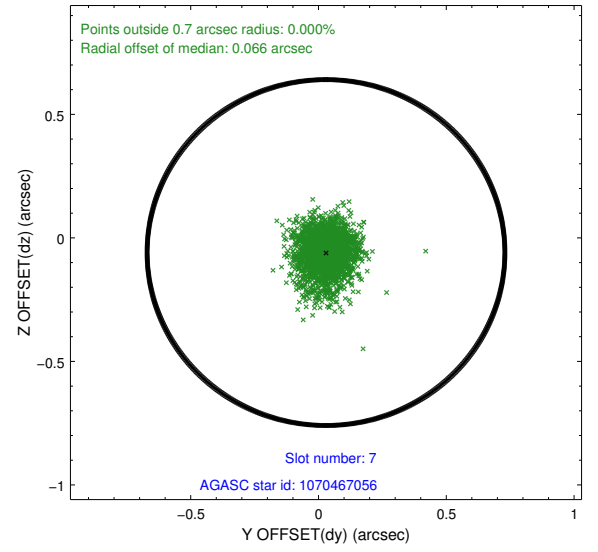
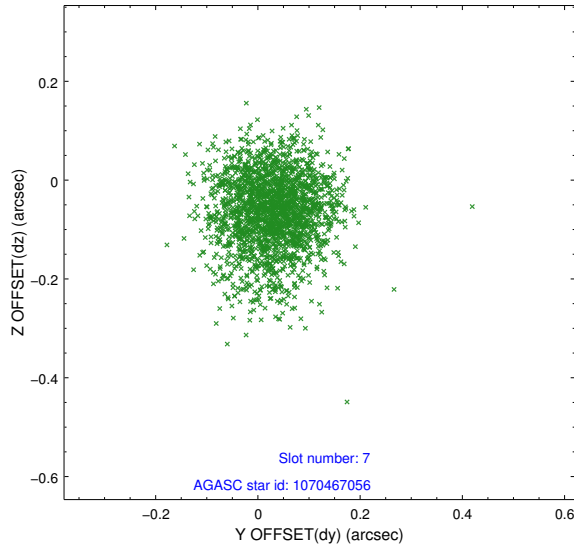
2.4.3 Slot 5



2.4.4 Slot 6

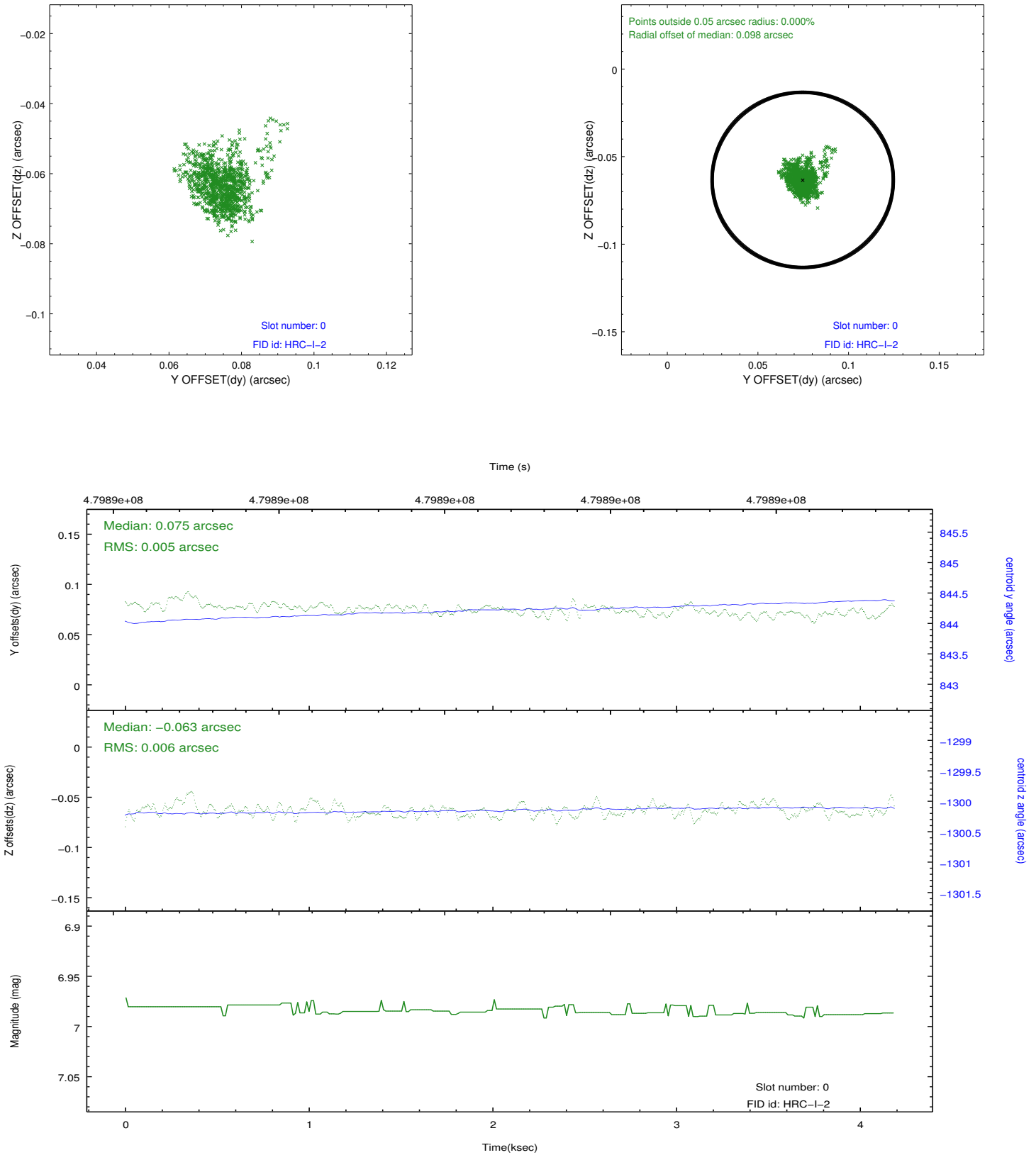


2.4.5 Slot 7

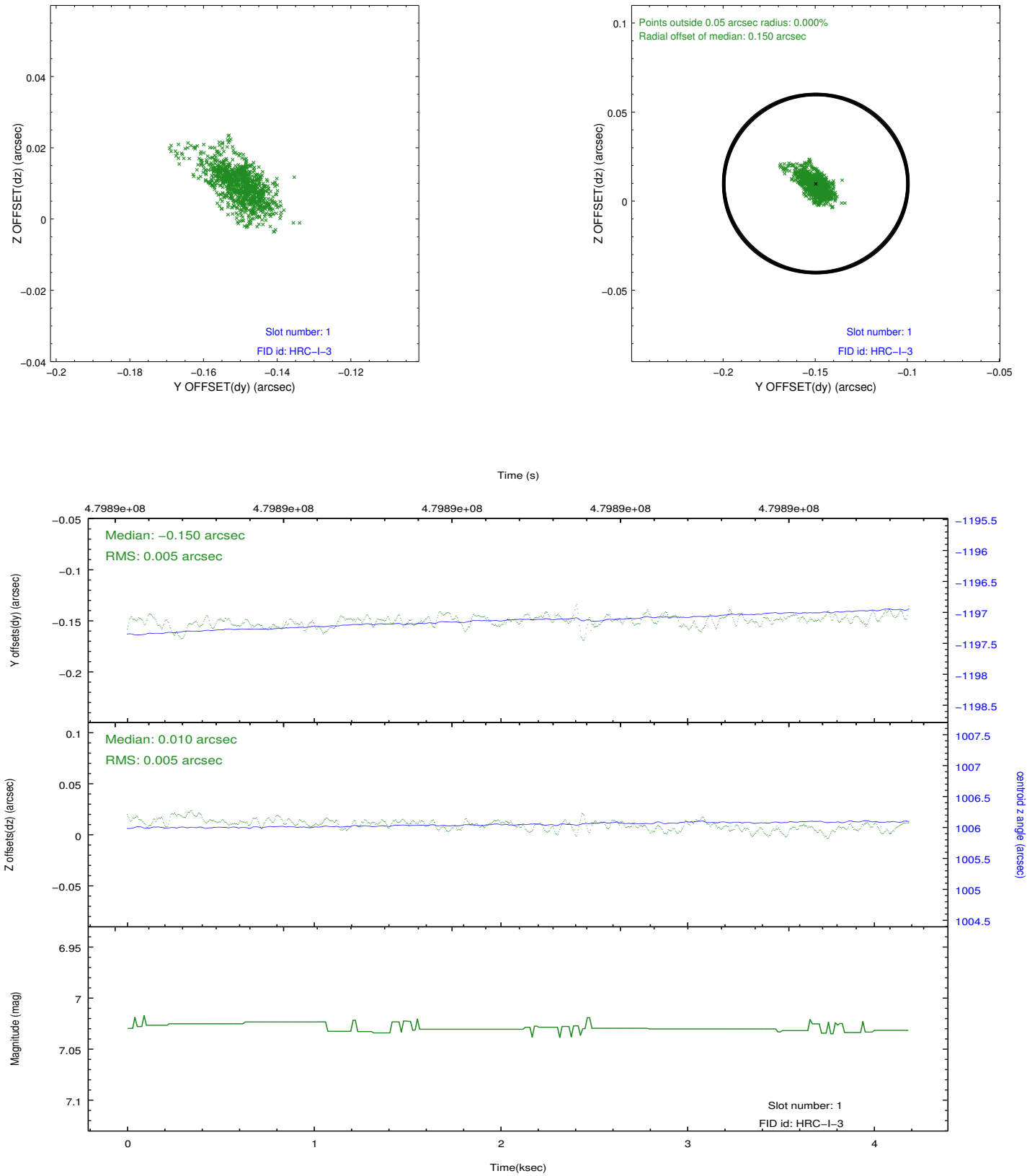


2.5 FID Slots

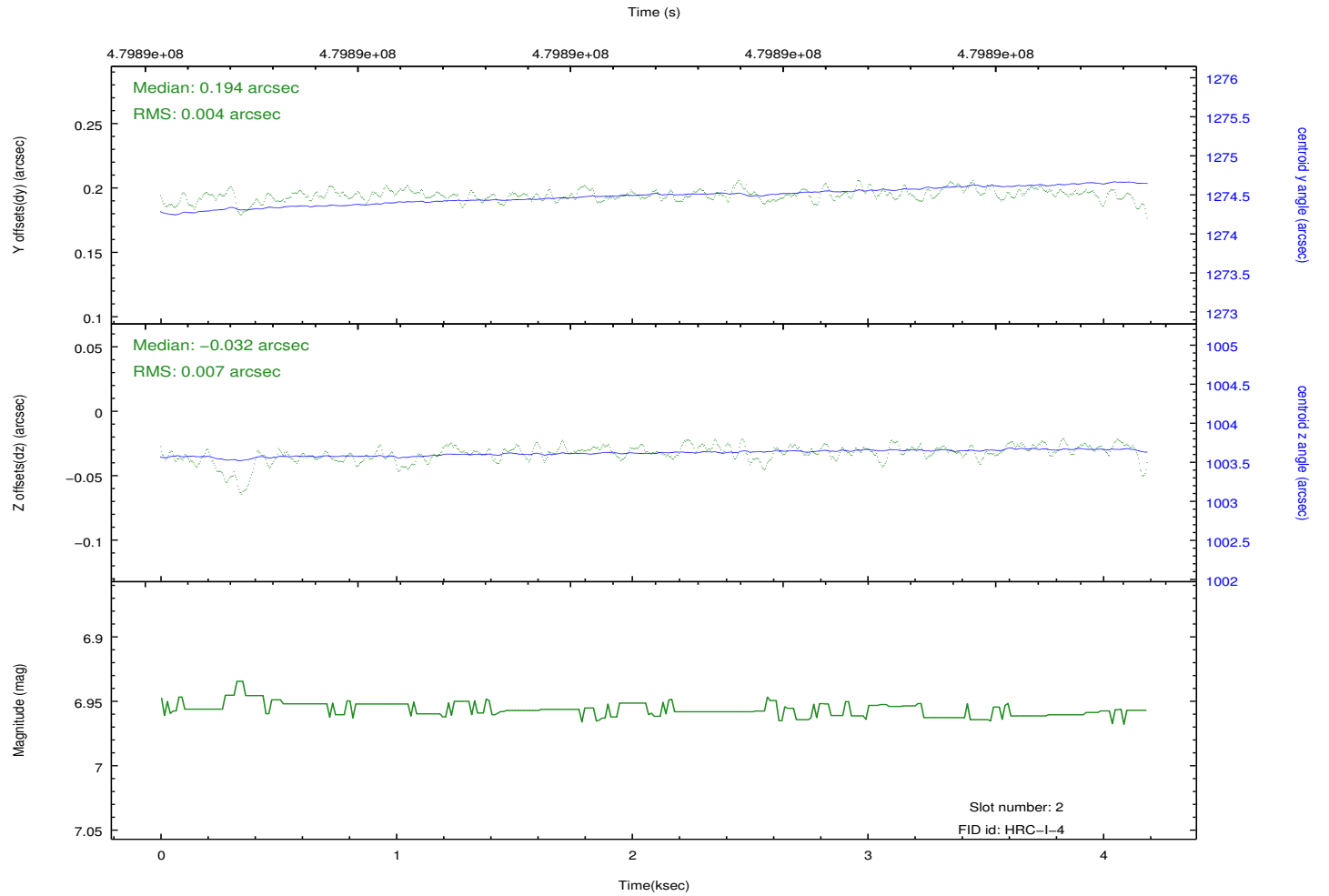
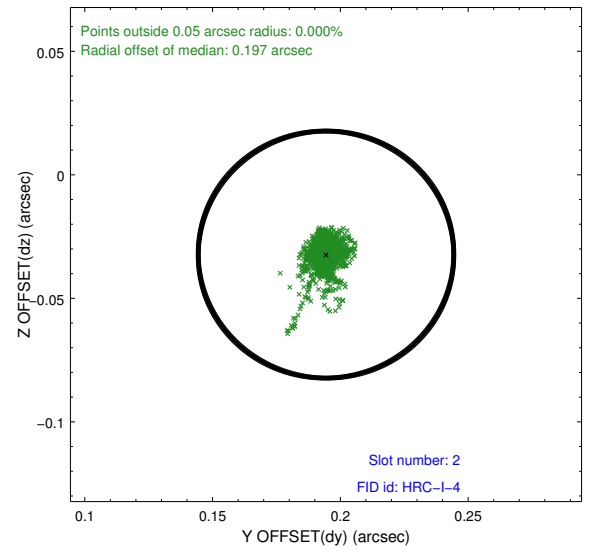
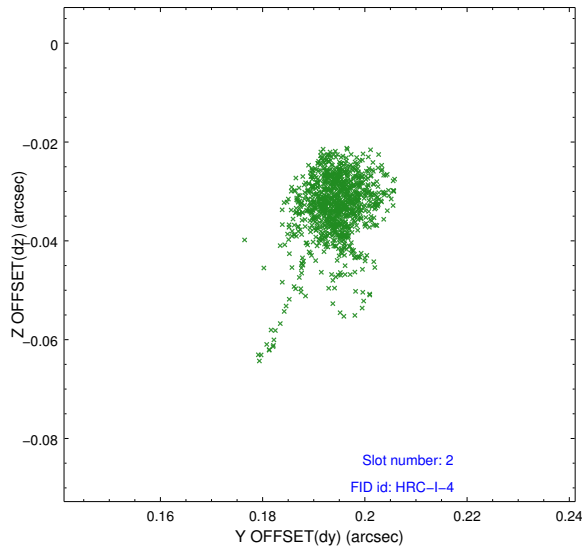
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2014.12.10 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.1873814763427 |

A.2 Comments

Live time is only 1.1 ks, although the ONTIME is 4.187 ks. The count rate was above the telemetry saturation limit due to the high radiation environment.

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These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.