

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 20654 - L2 Version 1
Chandra X-Ray Center

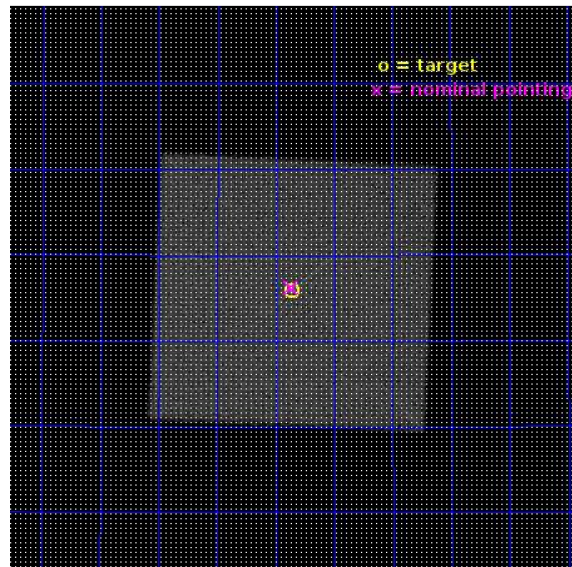
L2 Processing Date : Dec 1 2018

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1 Front

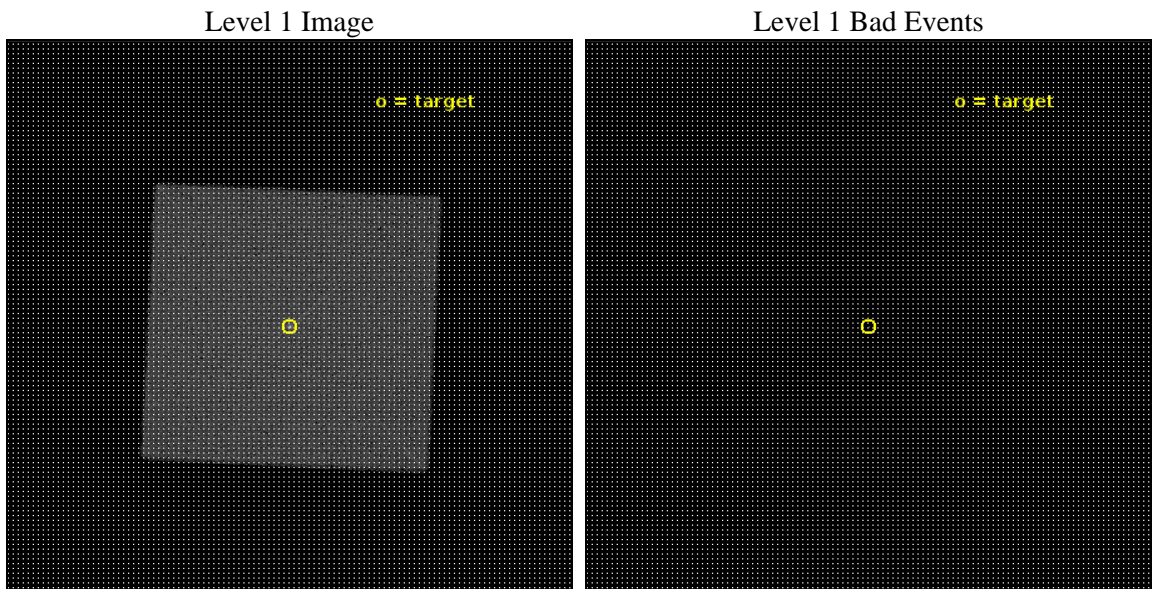
| | | |
|----------|--|---------------------------------------|
| seq_num | 291367 | Sequence number |
| obs_id | 20654 | Observation id |
| title | AO-19 Calibration Observations of HZ43 | Proposal title |
| observer | CXC Calibration | Principal investigator |
| object | HZ43 | Source name |
| ra_targ | 199.090417 | Observer's specified target RA [deg] |
| dec_targ | 29.098306 | Observer's specified target Dec [deg] |
| ra_nom | 199.09149507742 | Nominal RA [deg] |
| dec_nom | 29.103677162019 | Nominal Dec [deg] |
| roll_nom | 47.719991883312 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 2123.0313766003 | [s] |
| livetime | 2086.3606506541 | Ontime multiplied by DTCOR |
| l2events | 264927 | 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 | 2000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.7 | Processing system revision | ontime | 2123.0313766003 | [s] |
| caldbver | 4.8.0.1 | | l1events | 547695 | Number of level 1 events |
| date | 2018-12-01T18:08:55 | Date and time of file creation | tgmethod | TGDETECT | Method used to create src1a file |
| revision | 1 | Processing version of data | zo_pos | (16419.81, 16240.65) | src1a sky pixel position |

2.1.3 Events

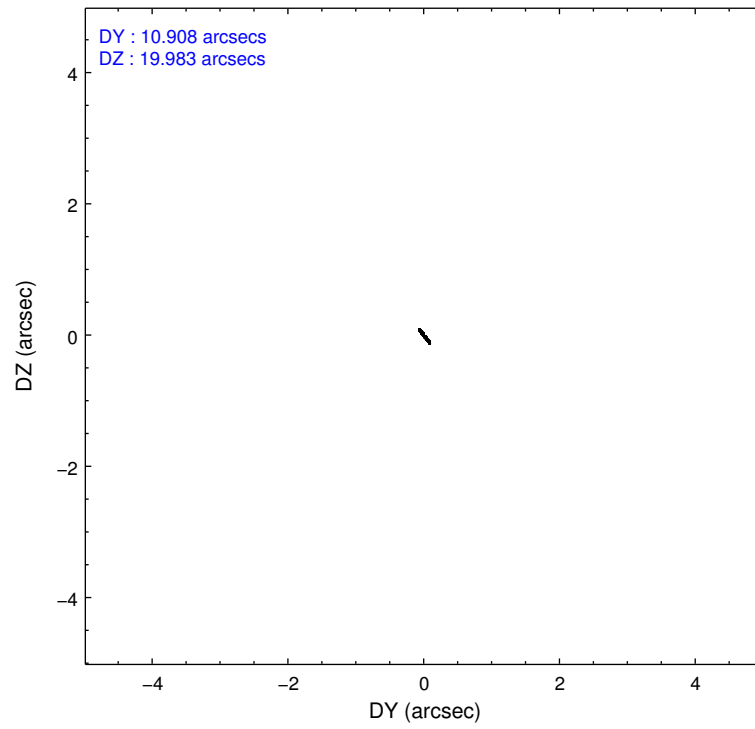
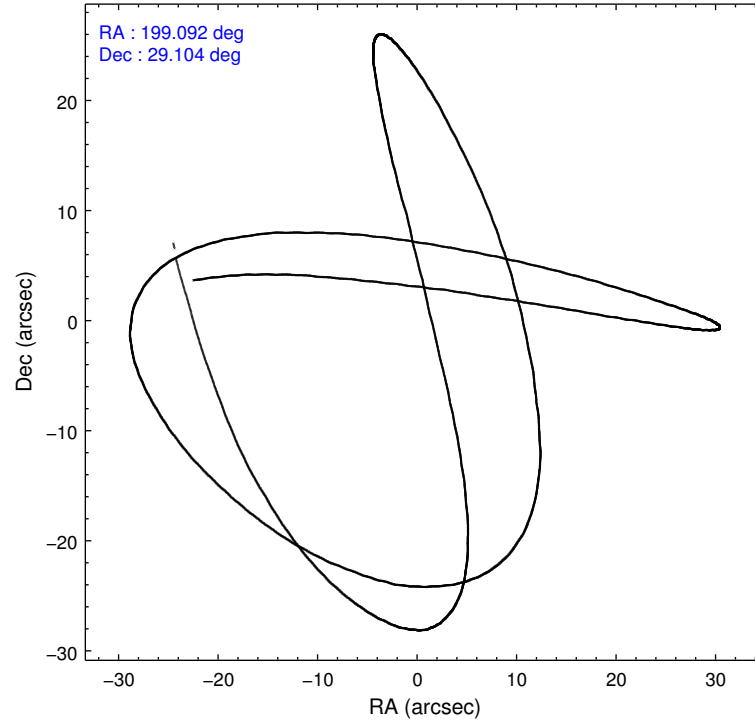
Level 1 Events

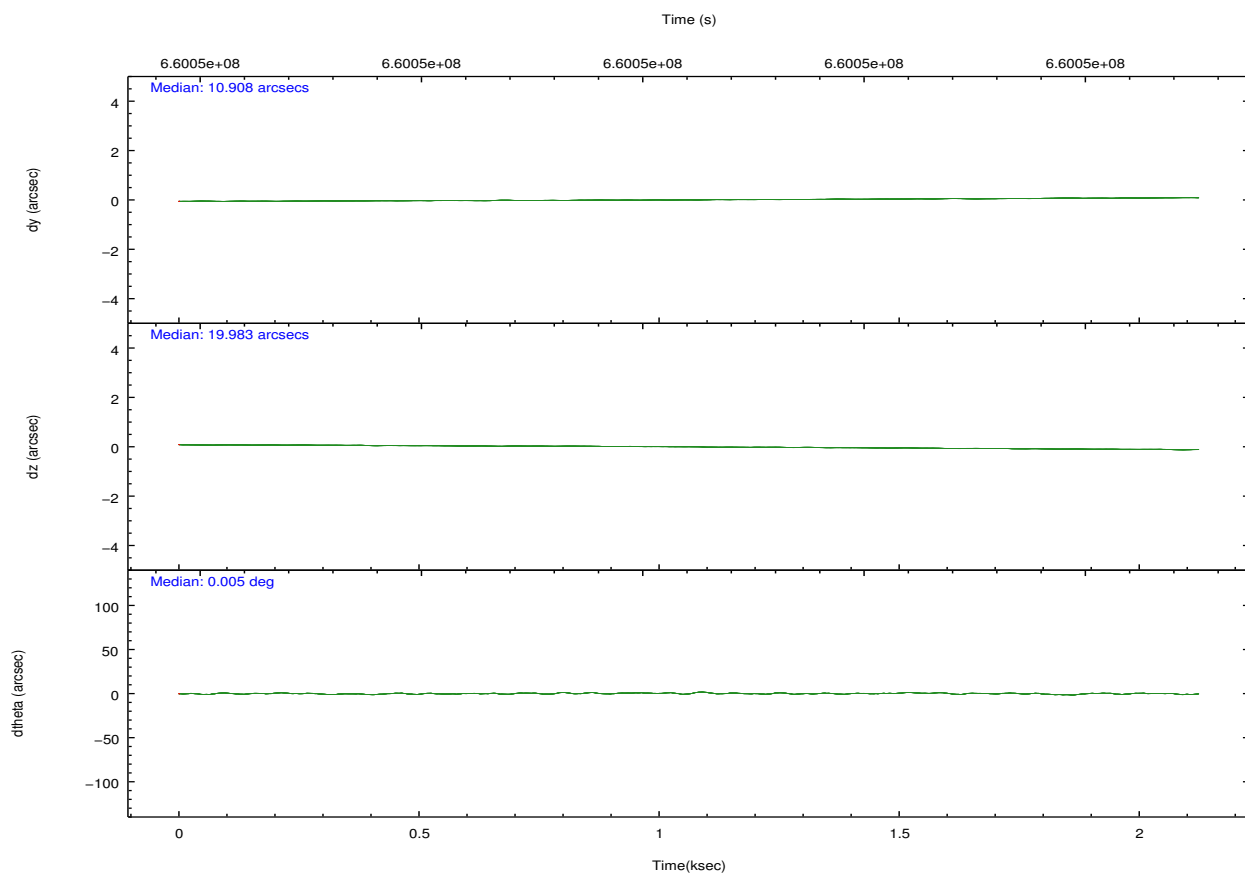
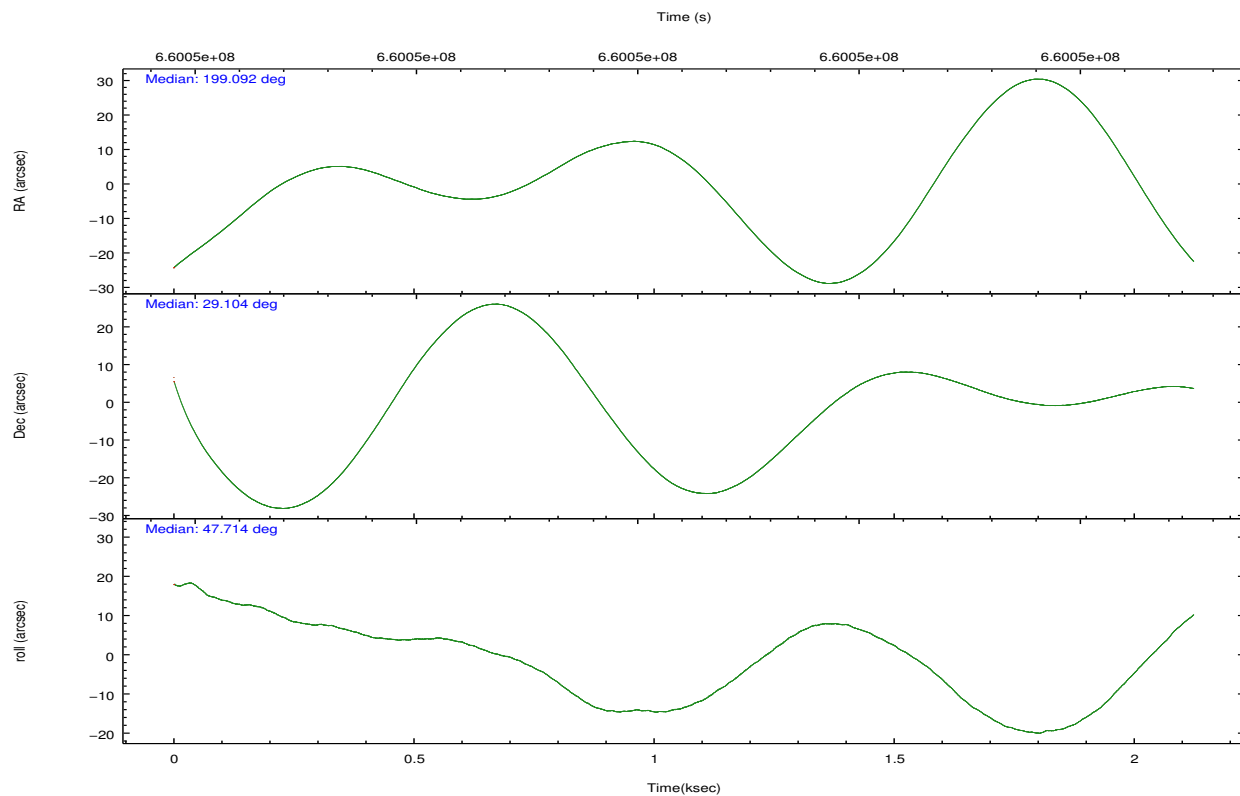
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 547695 |
| rejected events | 200318 |
| rejected % | 36% |

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 | LETG | LETG | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 199.085143 | 199.0914950774156 | | | |
| [deg] Pointing Dec | 29.077056 | 29.10367716201852 | | | |
| [deg] Pointing Roll | 47.818620 | 47.71999188331188 | | | |
| [s] Window start time (MET) | 658627269.184000 | 658627269.184000 | | | |
| [s] Window stop time (MET) | 661219269.184000 | 661219269.184000 | | | |
| [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) | 660046180.184000 | 660044839.47955 | | | |
| Observation start date | 2018-12-01T10:08:31 | 2018-12-01T09:47:19 | | | |
| [s] Observation end time (MET) | 660048180.184000 | 660048828.26728 | | | |
| Observation end date | 2018-12-01T10:41:51 | 2018-12-01T10:53:48 | | | |

2.3 Aspect



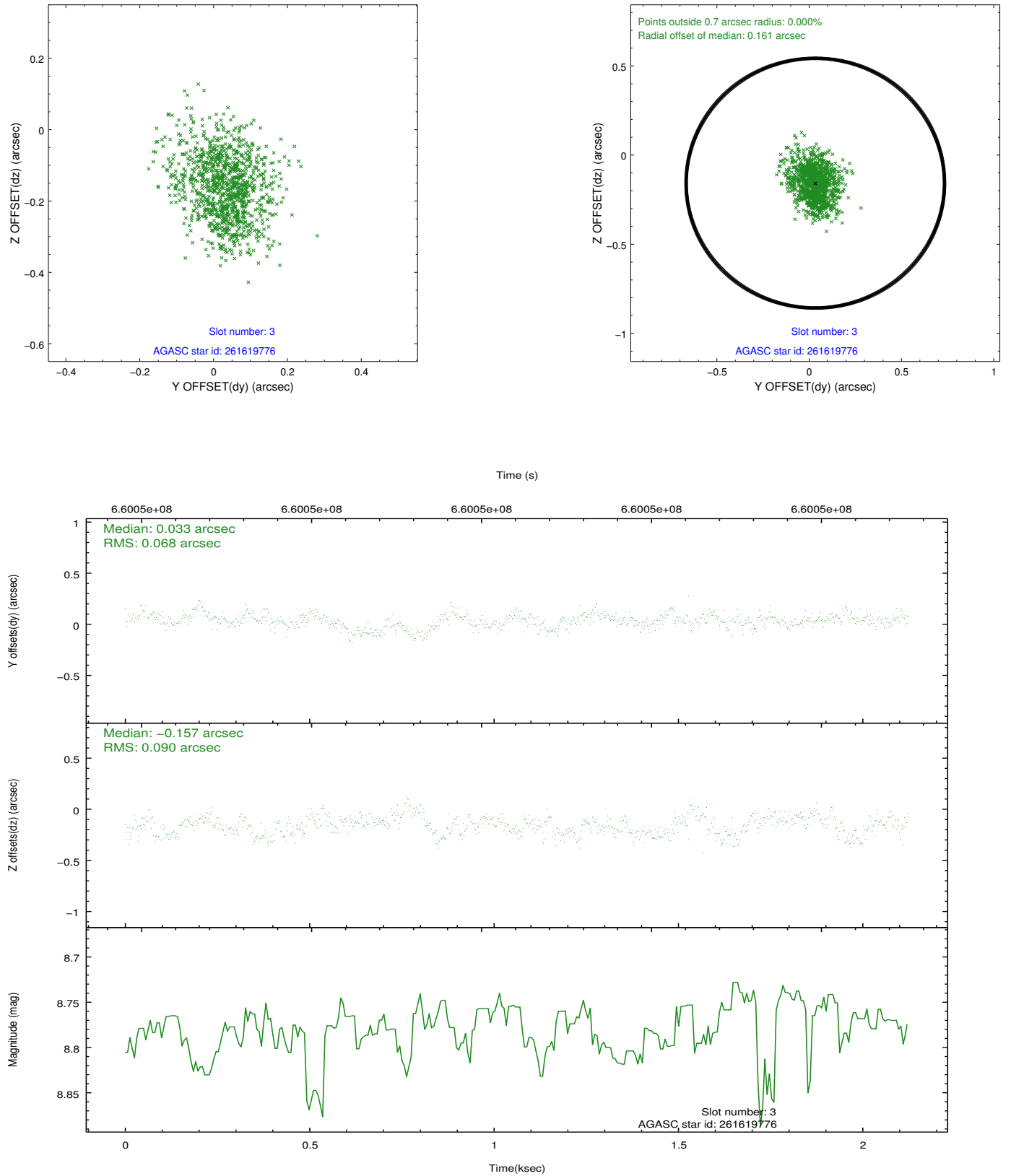


Slot Statistics

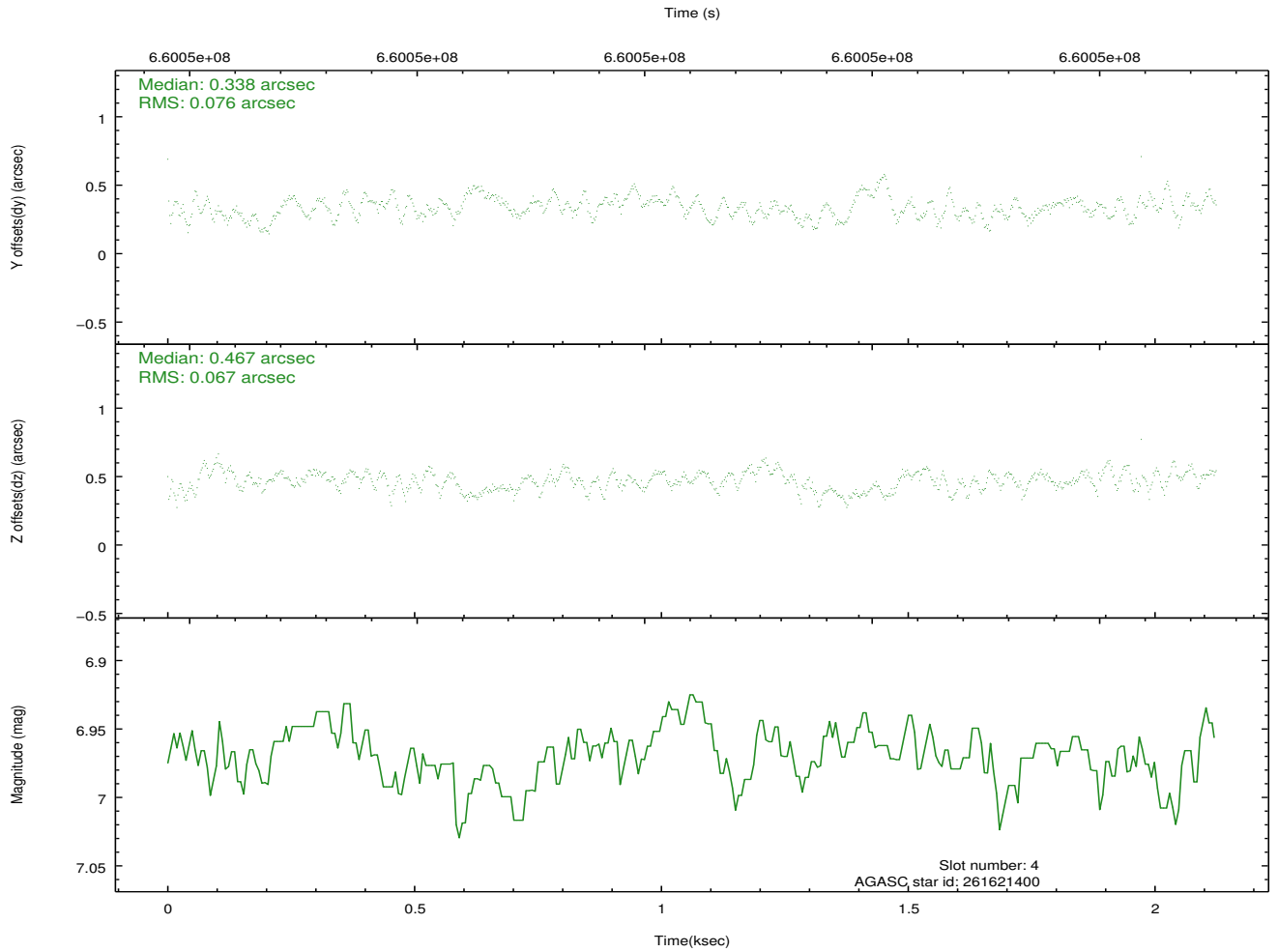
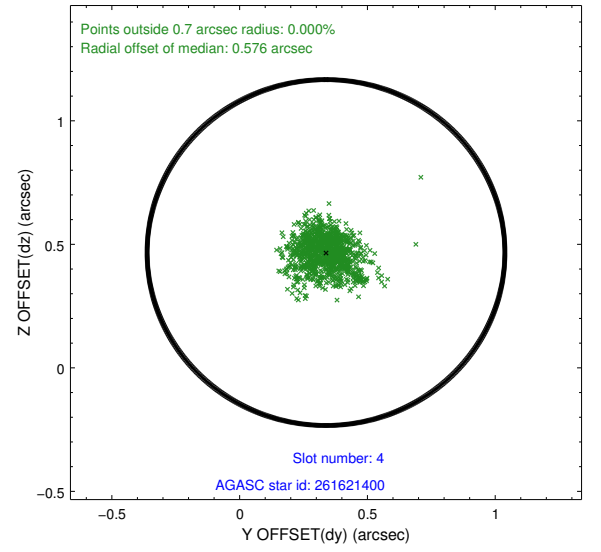
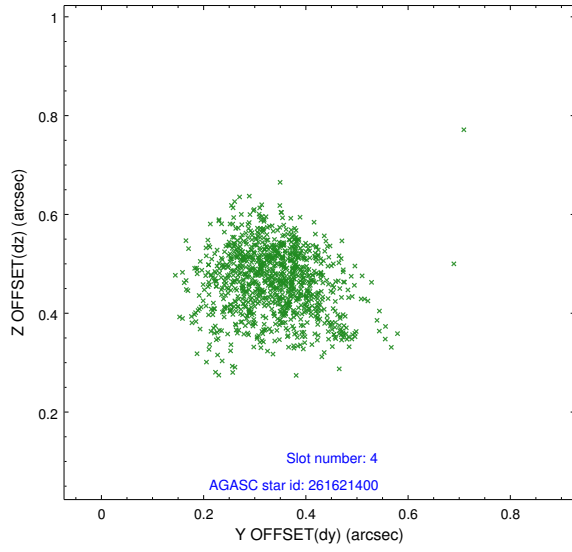
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|-------|
| 0 | FID | | HRC-I-1 | 7.06 | 519 | 1.000 | -0.247 | -0.098 | 0.008 | 0.016 | 0.000000 | 0.000000 | -766.76 | -1308 |
| 1 | FID | | HRC-I-2 | 7.09 | 519 | 1.000 | 0.400 | -0.100 | 0.007 | 0.014 | 0.000000 | 0.000000 | 845.04 | -1312 |
| 2 | FID | | HRC-I-3 | 7.14 | 519 | 1.000 | -0.034 | 0.109 | 0.008 | 0.022 | 0.000000 | 0.000000 | -1193.55 | 993 |
| 3 | GUIDE | used | 261619776 | 8.78 | 1037 | 1.000 | 0.033 | -0.157 | 0.121 | 0.198 | 198.654383 | 29.401174 | -40.81 | 1786 |
| 4 | GUIDE | used | 261621400 | 6.97 | 1037 | 1.000 | 0.338 | 0.467 | 0.105 | 0.176 | 198.901600 | 28.741982 | -1282.60 | -376 |
| 5 | GUIDE | used | 261623040 | 9.07 | 1036 | 1.000 | -0.351 | -0.426 | 0.181 | 0.294 | 198.792686 | 29.757643 | 1200.58 | 2323 |
| 6 | GUIDE | used | 261626376 | 9.67 | 1031 | 1.000 | -0.137 | -0.168 | 0.233 | 0.410 | 198.947288 | 29.347445 | 431.56 | 978 |
| 7 | GUIDE | used | 261629720 | 8.08 | 1036 | 1.000 | 0.132 | 0.277 | 0.095 | 0.152 | 199.236176 | 29.044452 | 232.76 | -427 |

2.4 Star Slots

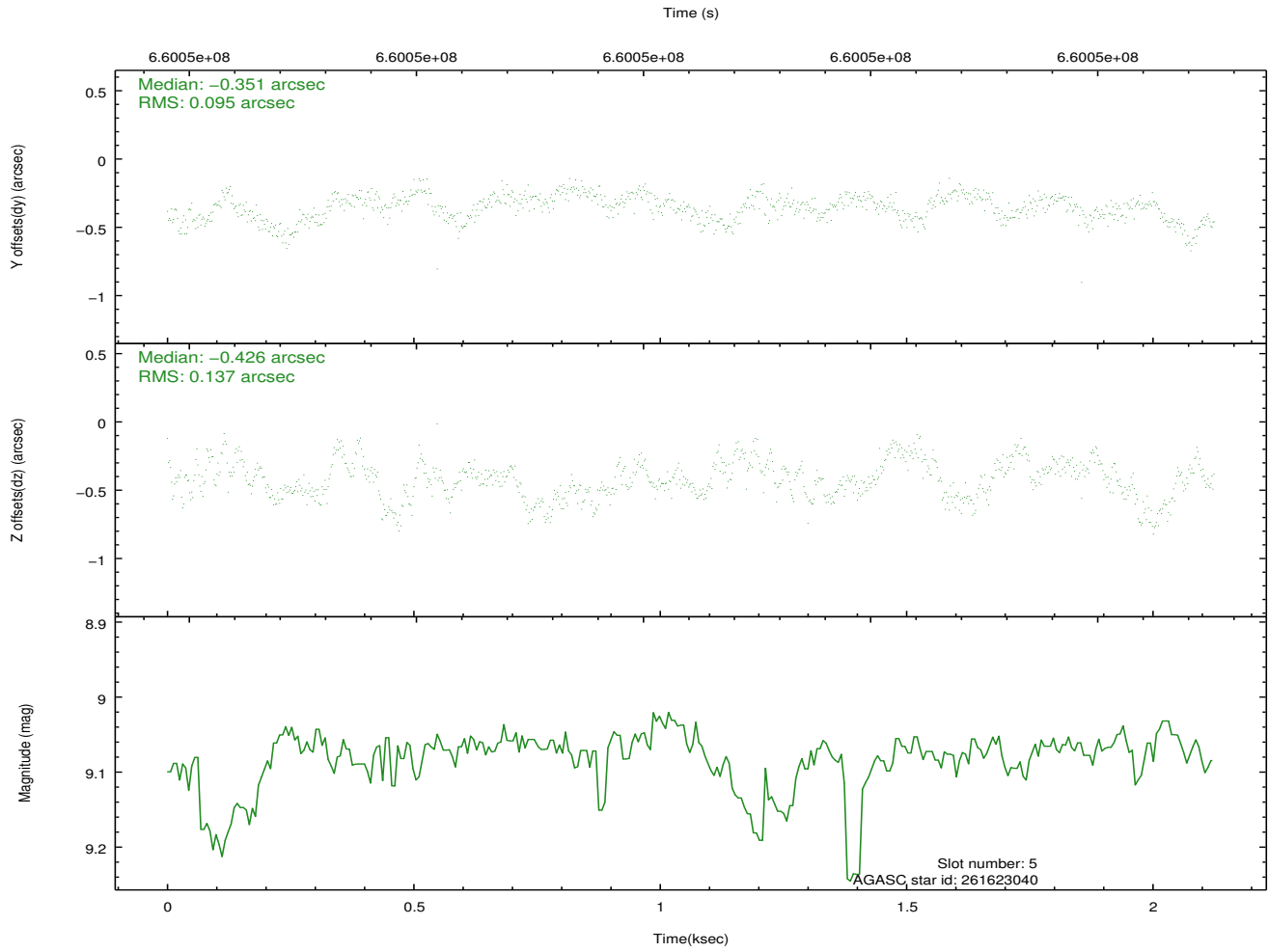
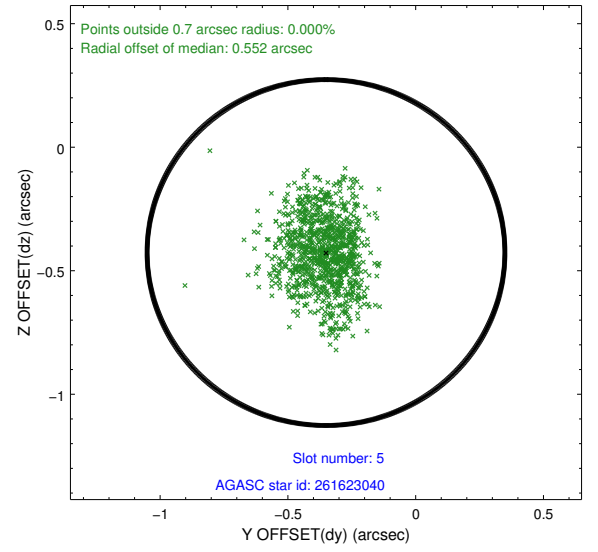
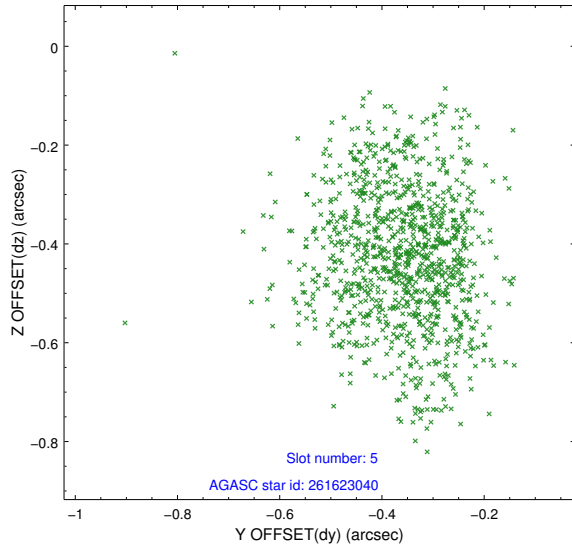
2.4.1 Slot 3



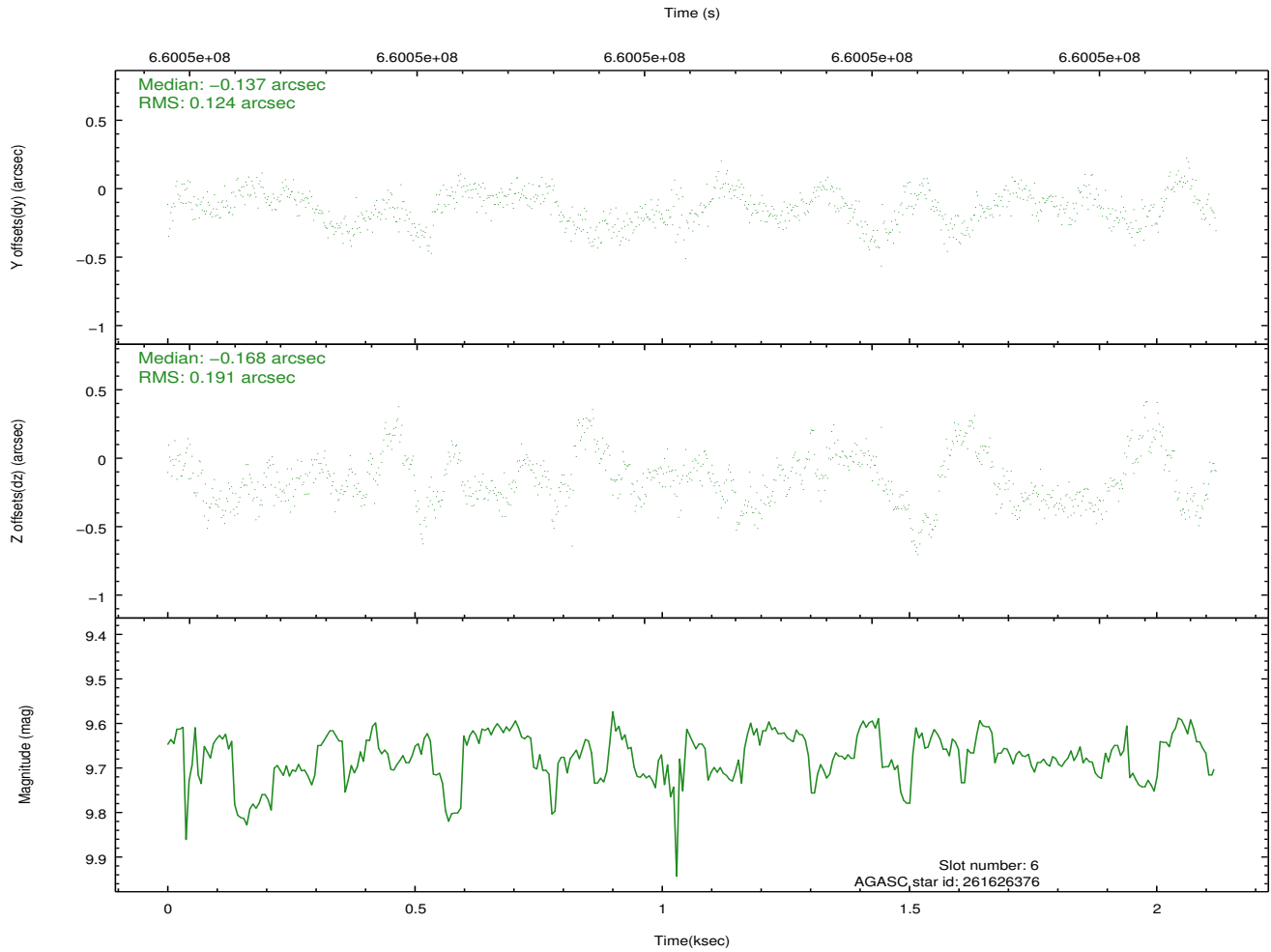
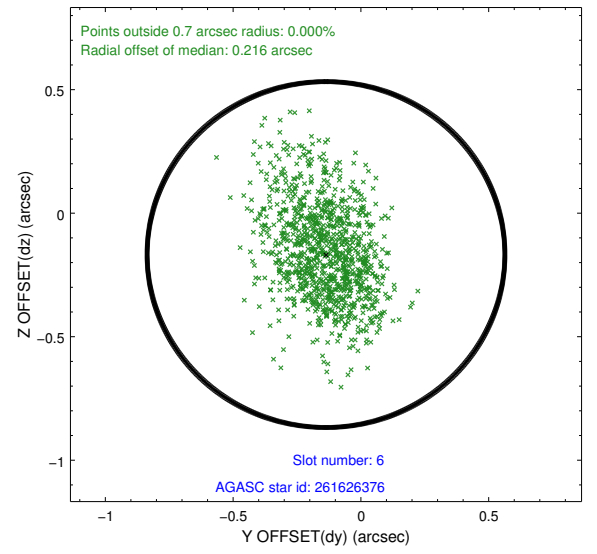
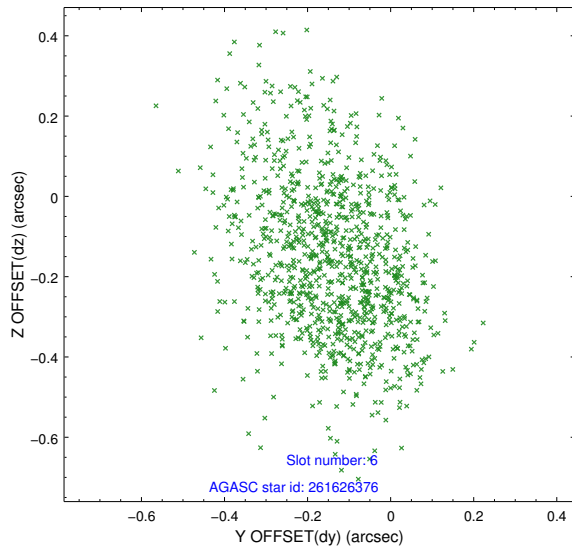
2.4.2 Slot 4



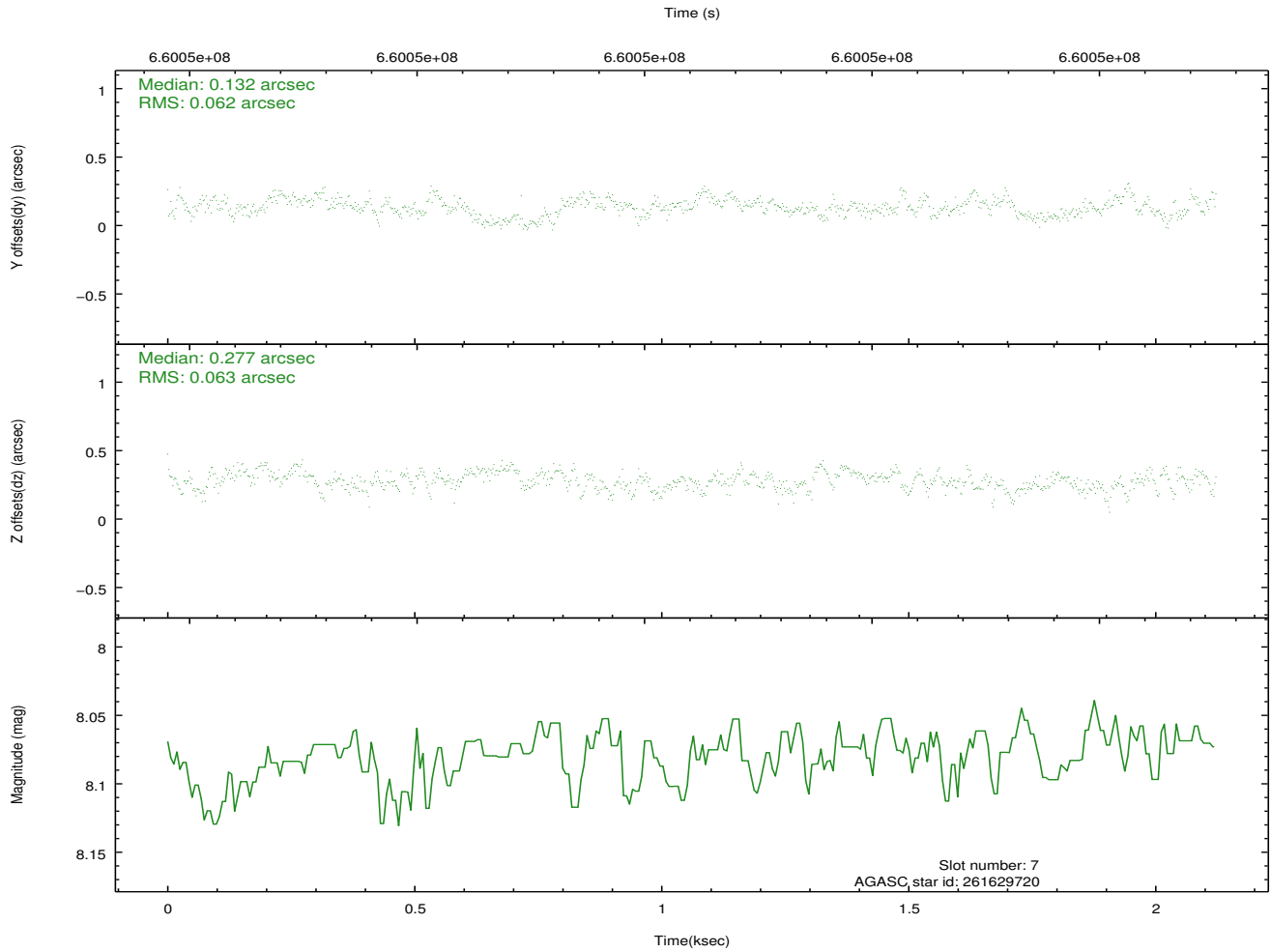
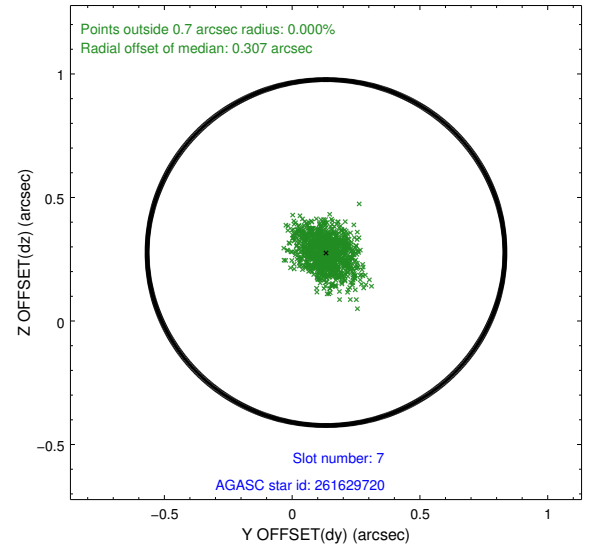
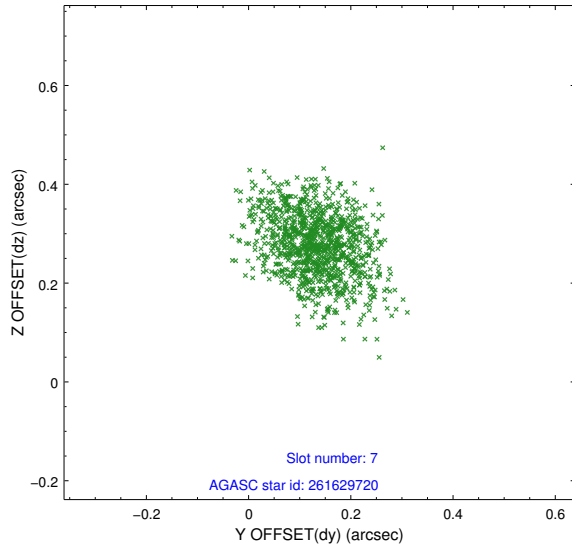
2.4.3 Slot 5



2.4.4 Slot 6

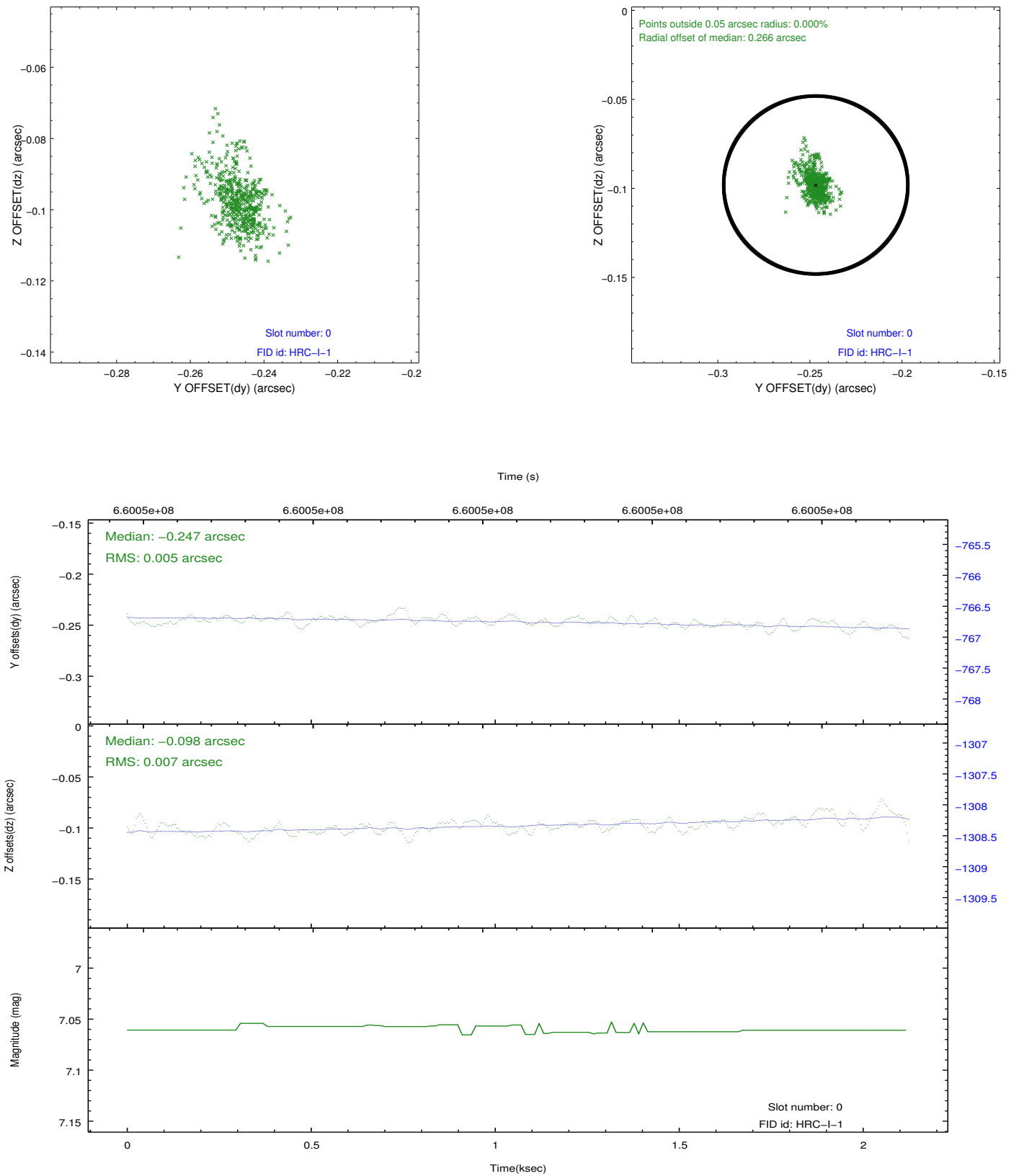


2.4.5 Slot 7

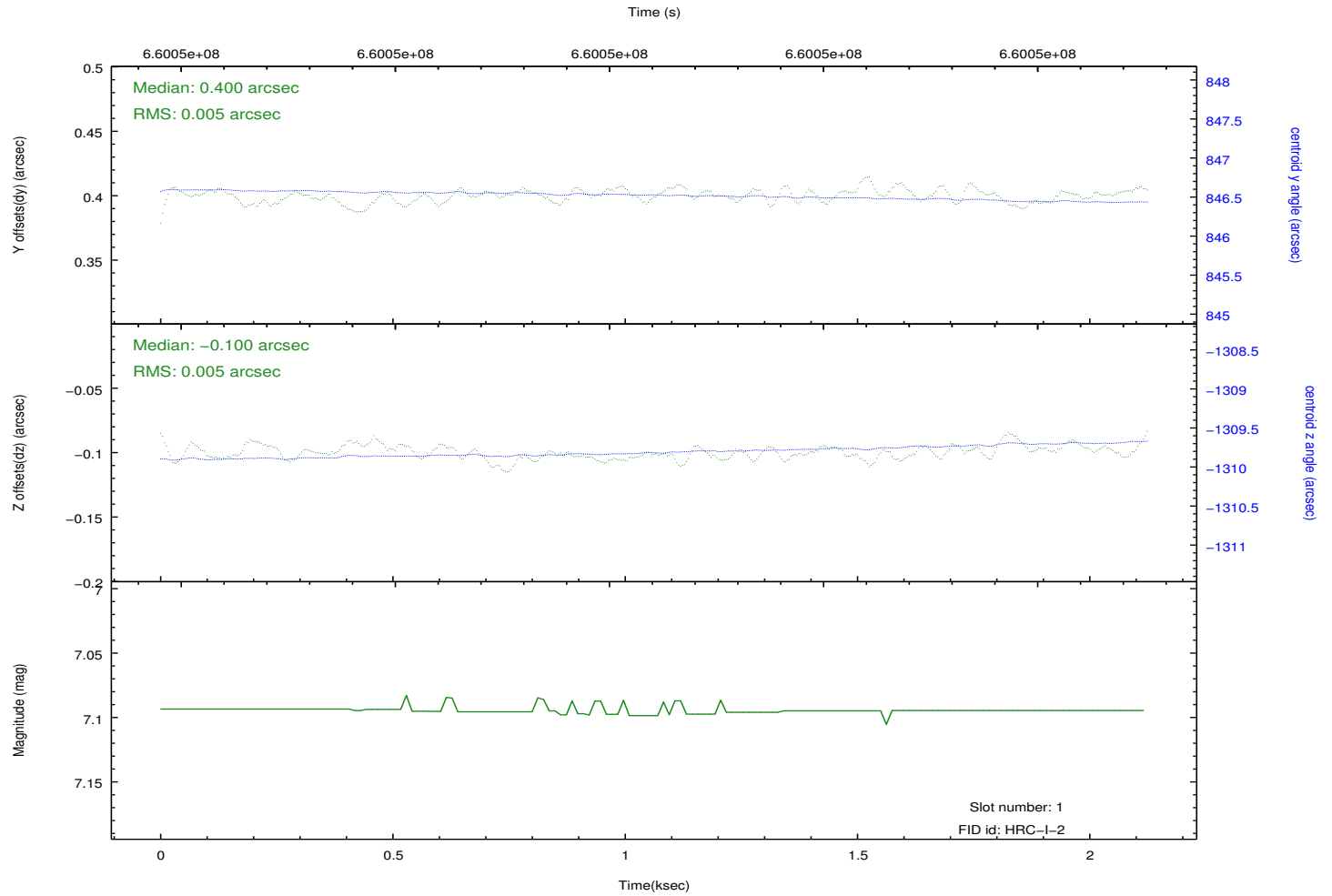
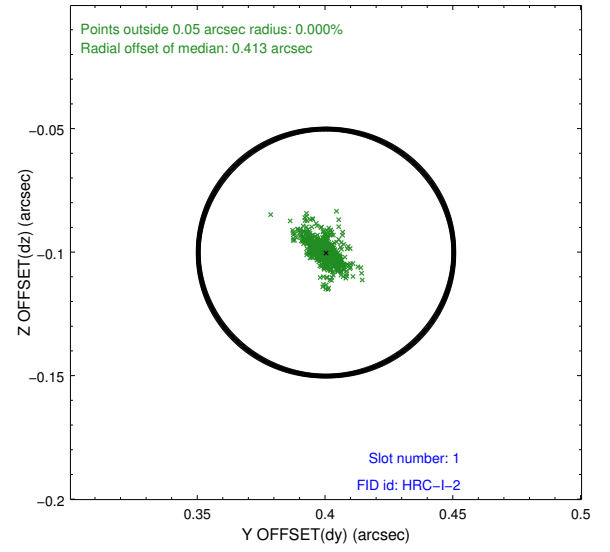
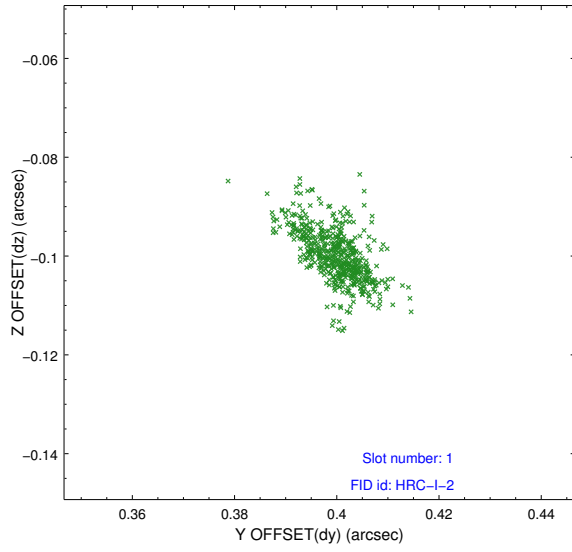


2.5 FID Slots

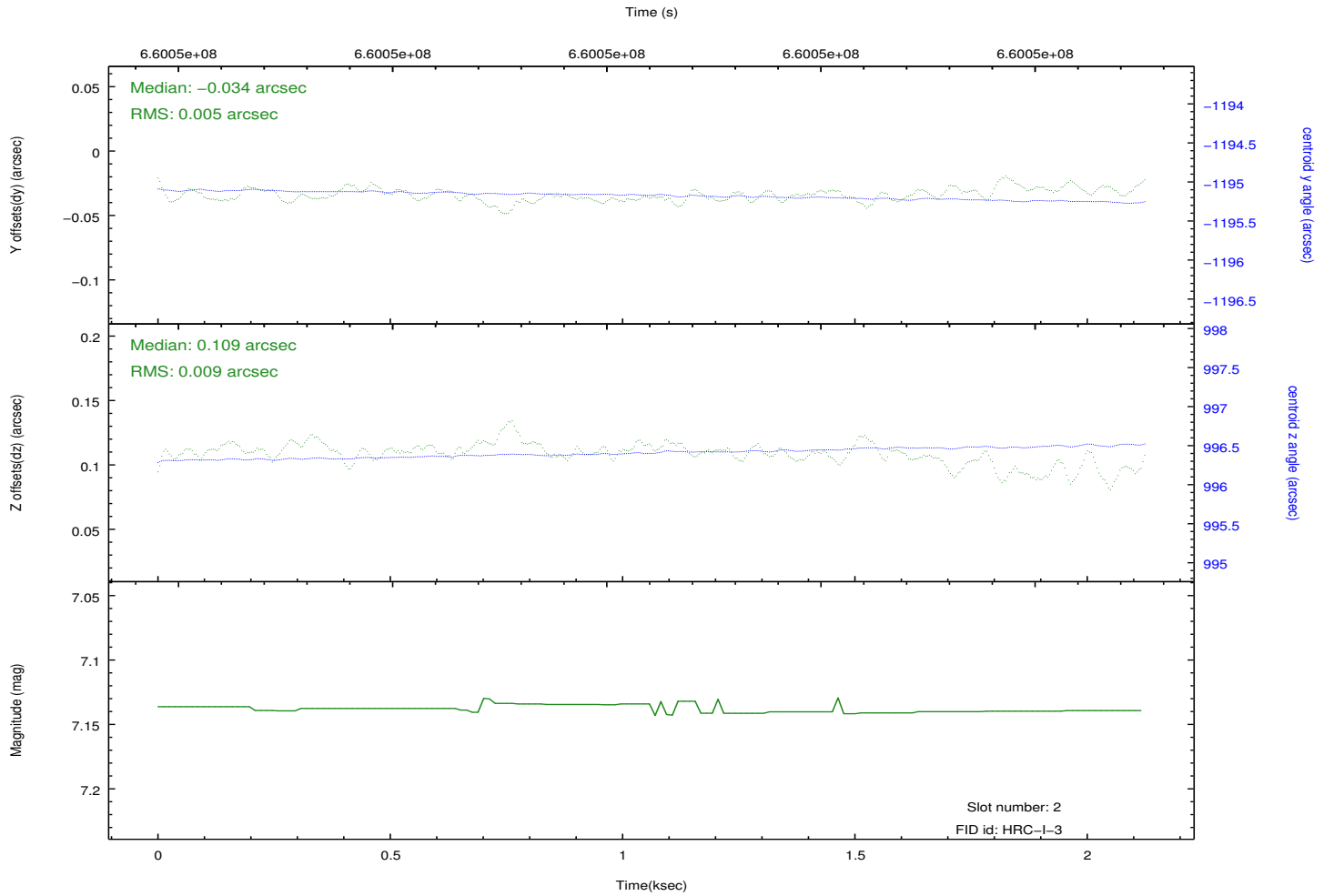
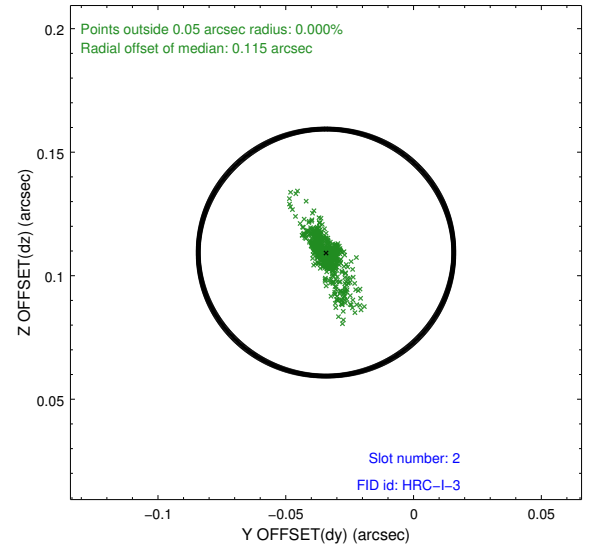
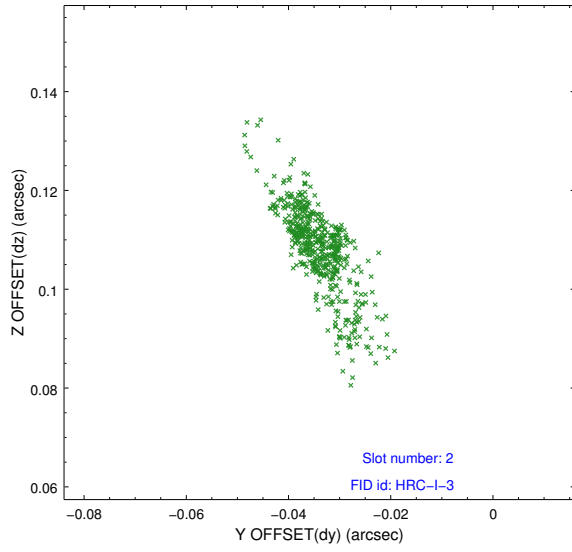
2.5.1 Slot 0



2.5.2 Slot 1

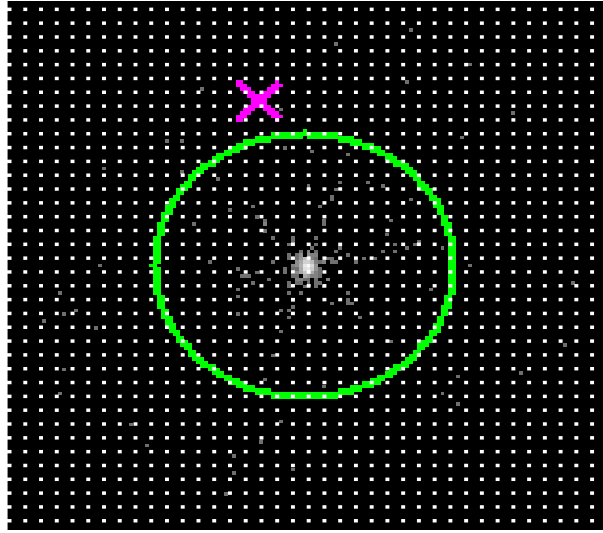


2.5.3 Slot 2

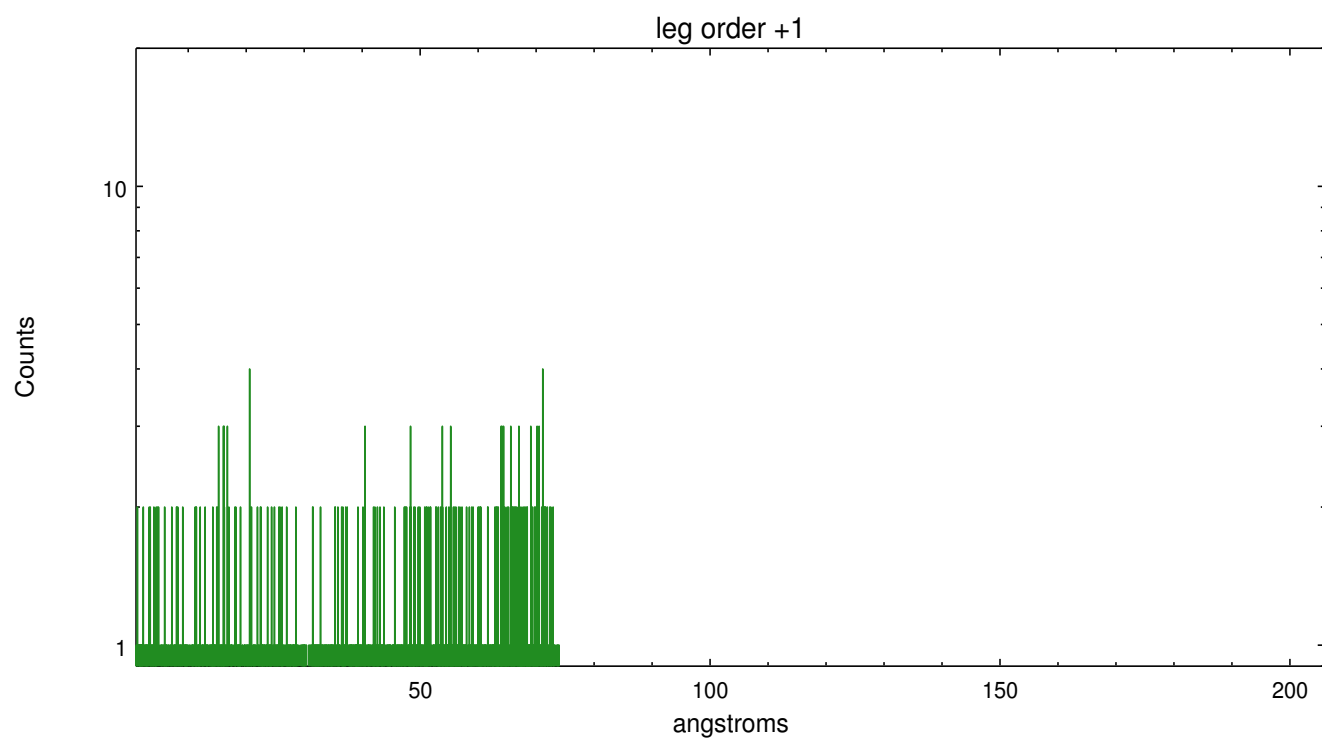
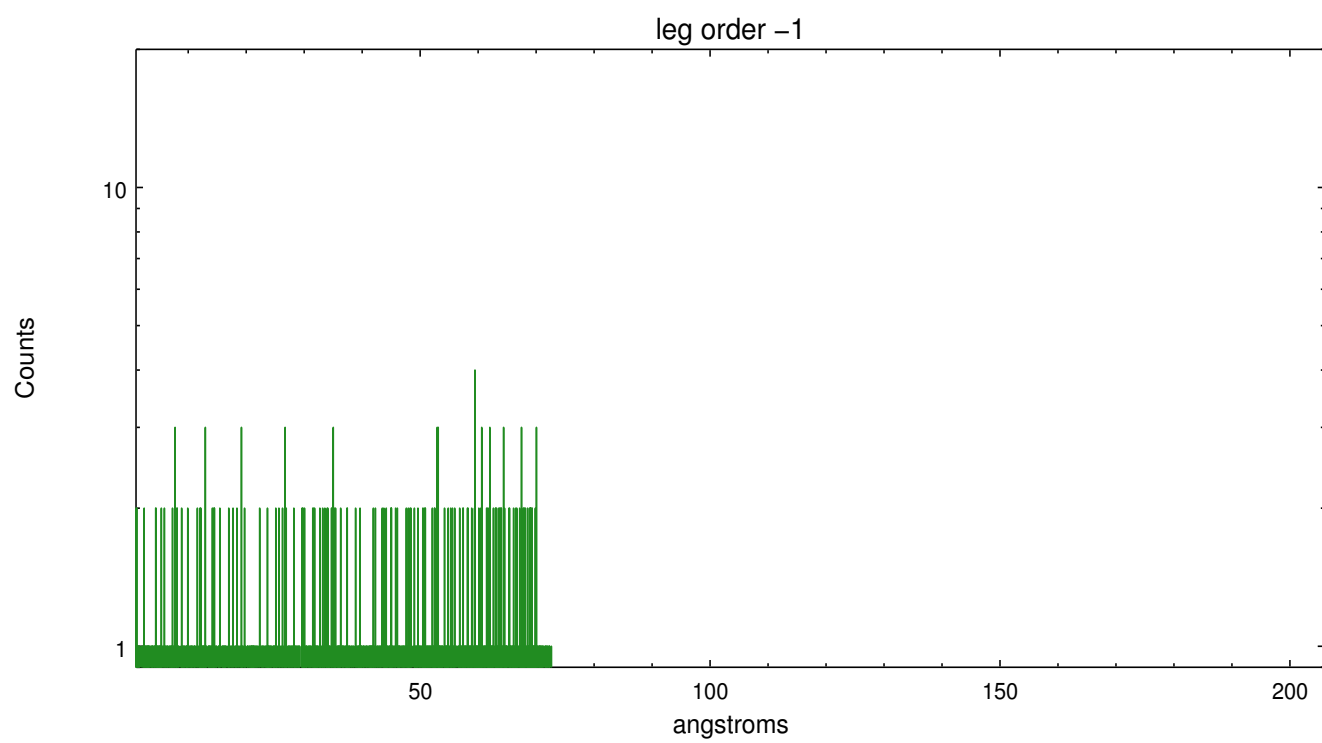


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2018.12.01 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 2.1230313766003 |

A.2 Comments