

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 12132 - L2 Version 3
Chandra X-Ray Center

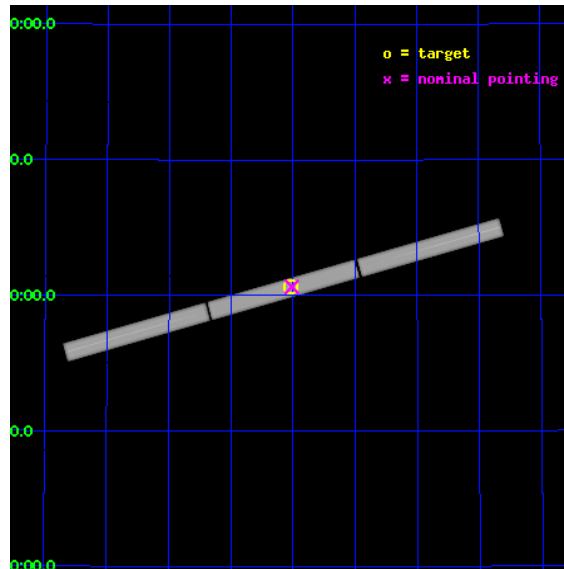
L2 Processing Date : Jun 28 2012

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1 Front

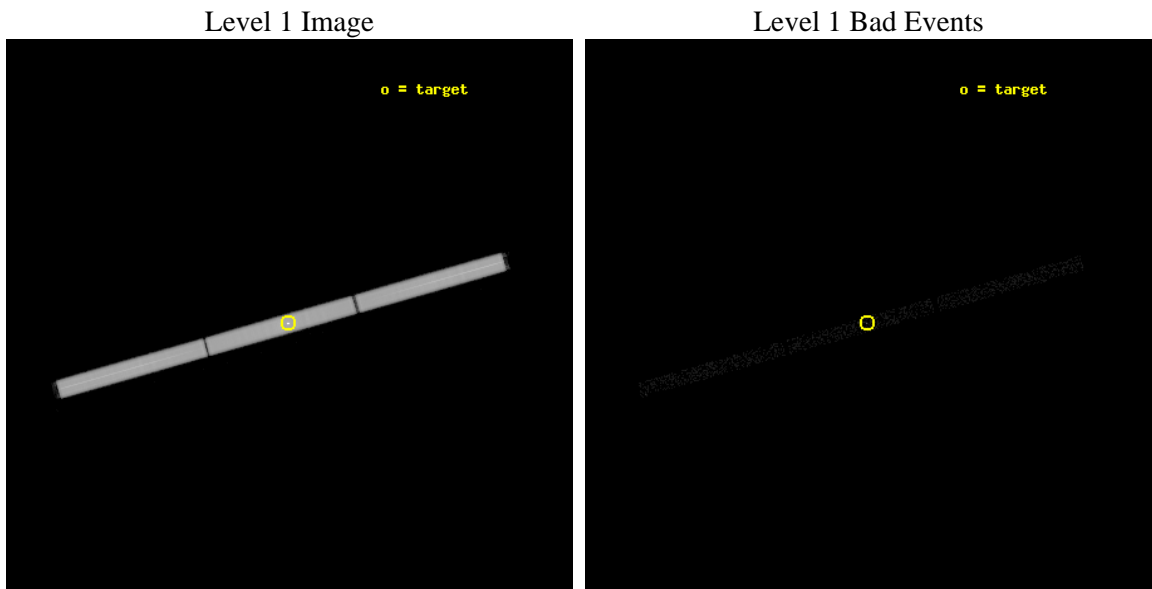
| | | |
|----------|--|---------------------------------------|
| seq_num | 200653 | Sequence number |
| obs_id | 12132 | Observation id |
| title | The Chandra LETGS Soft X-ray Spectrum of the White Dwarf GD153 | Pro |
| observer | Dr. Peter Predehl | Principal investigator |
| object | GD153 | Source name |
| ra_targ | 194.259583 | Observer's specified target RA [deg] |
| dec_targ | 22.03125 | Observer's specified target Dec [deg] |
| ra_nom | 194.25470363218 | Nominal RA [deg] |
| dec_nom | 22.032626308039 | Nominal Dec [deg] |
| roll_nom | 164.06917477834 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 45181.233545125 | [s] |
| livetime | 44699.775926194 | Ontime multiplied by DTCOR |
| l2events | 4201712 | 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 | 45000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 45181.233545125 | [s] |
| caldbver | 4.5.0 | | l1events | 5347554 | Number of level 1 events |
| date | 2012-06-27T18:30:44 | Date and time of file creation | | | |
| revision | 3 | Processing version of data | | | |

2.1.3 Events

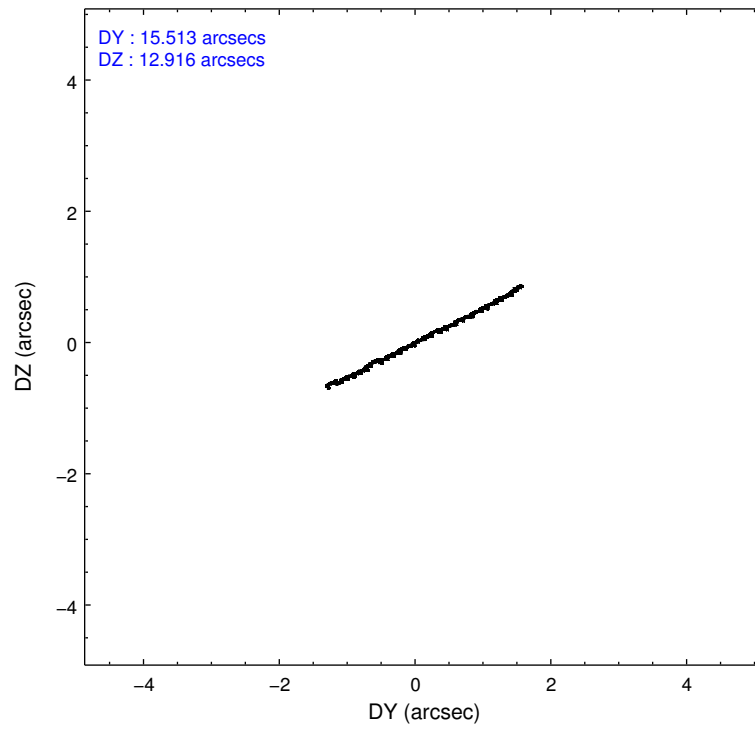
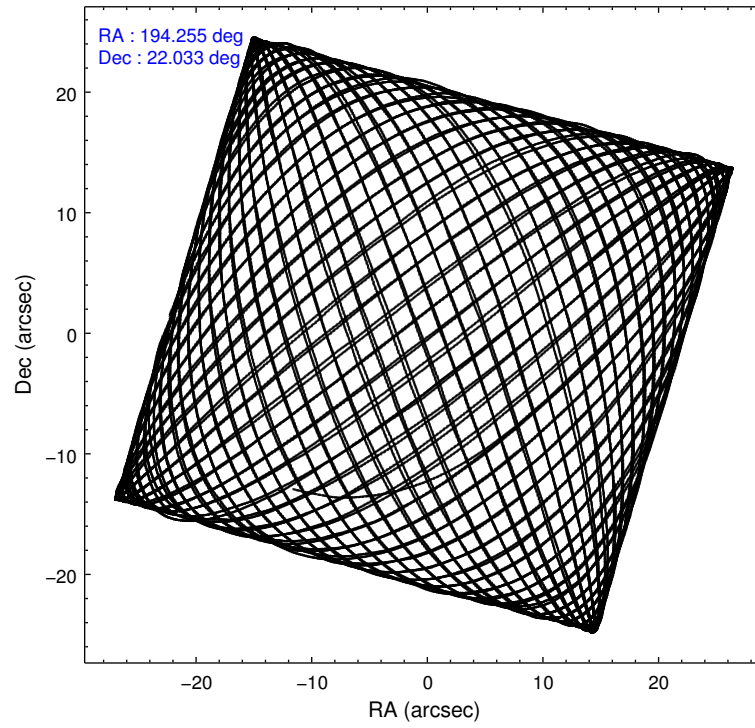
Level 1 Events

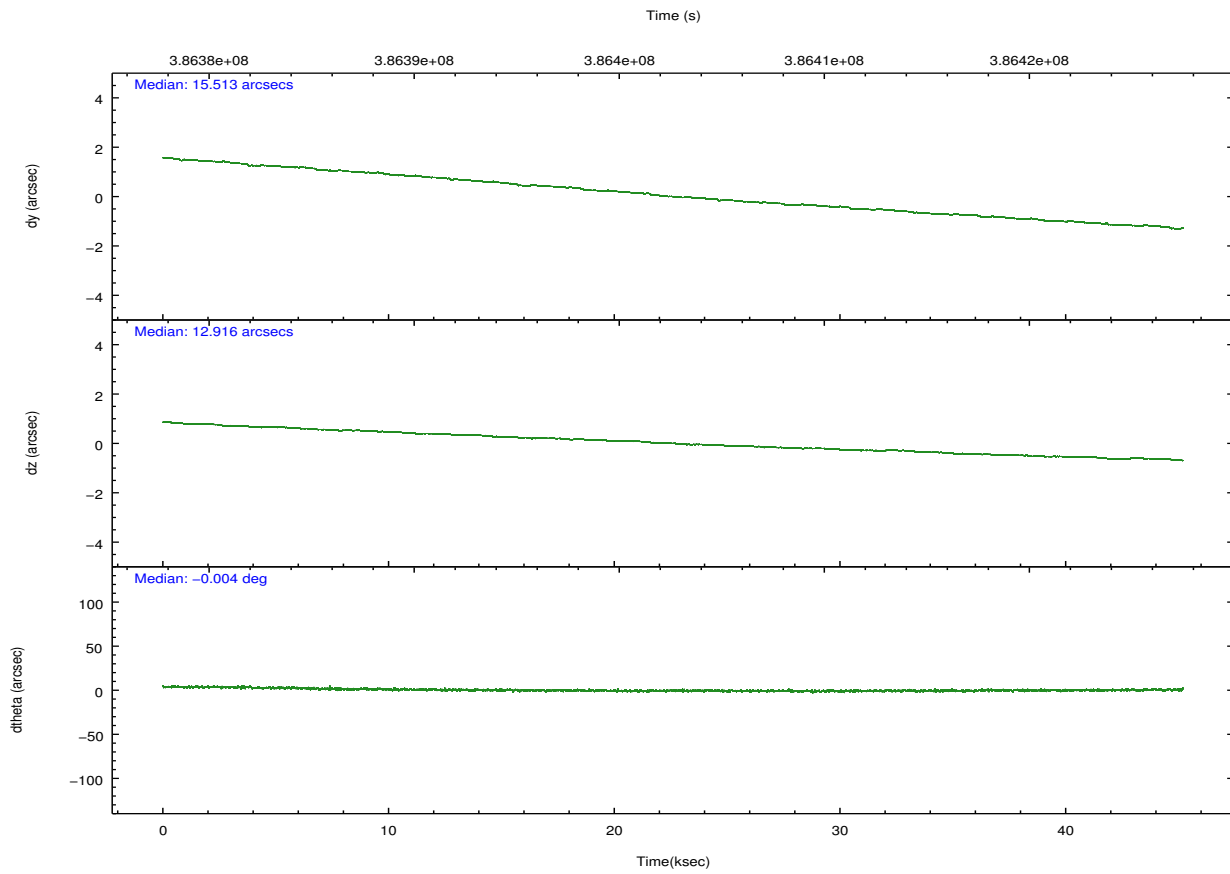
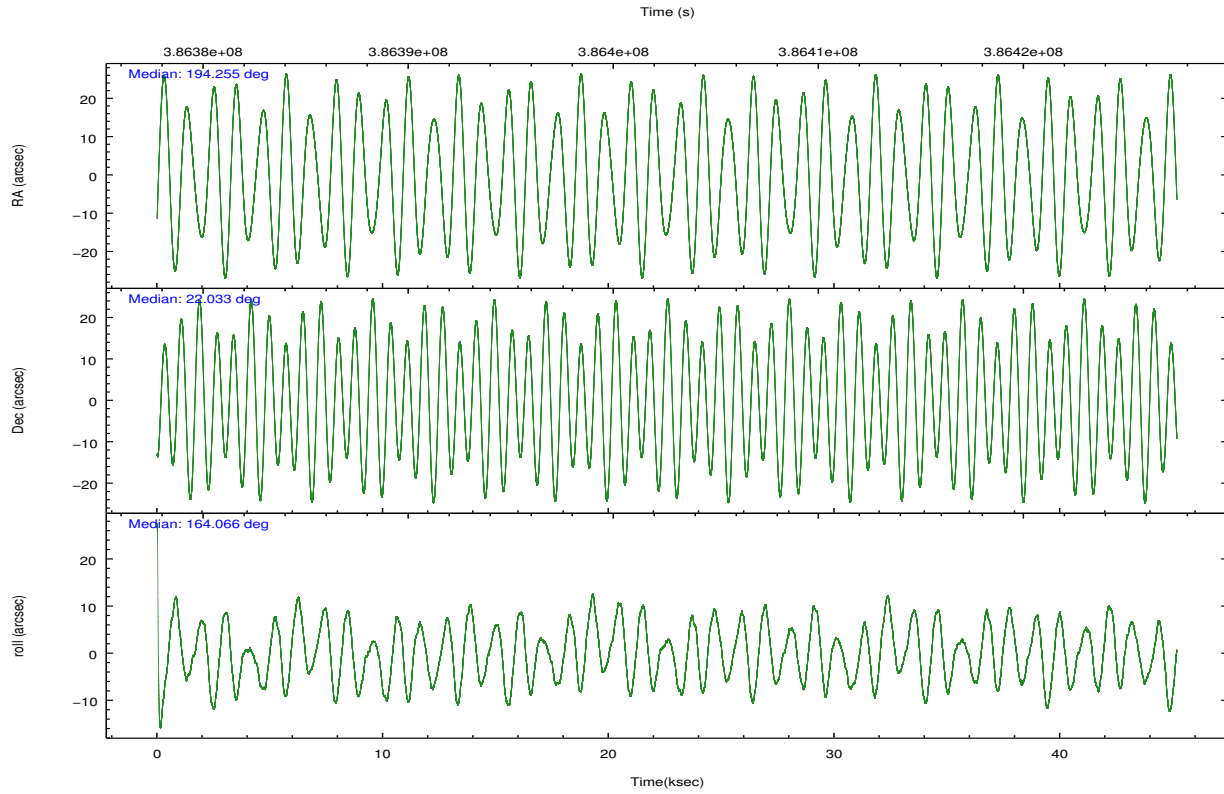
| | segment 1 | segment 2 | segment 3 |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events | 1793612 | 1753788 | 1800154 |
| rejected events | 3064 | 3243 | 3295 |
| rejected % | 0% | 0% | 0% |

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 | LETG | LETG | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 194.284287 | 194.2547036321785 | | | |
| [deg] Pointing Dec | 22.040984 | 22.03262630803917 | | | |
| [deg] Pointing Roll | 163.990734 | 164.0691747783401 | | | |
| [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) | 386380228.184000 | 386378525.3388 | | | |
| Observation start date | 2010-03-30T23:49:22 | 2010-03-30T23:22:05 | | | |
| [s] Observation end time (MET) | 386425228.184000 | 386426173.49122 | | | |
| Observation end date | 2010-03-31T12:19:22 | 2010-03-31T12:36:13 | | | |

2.3 Aspect



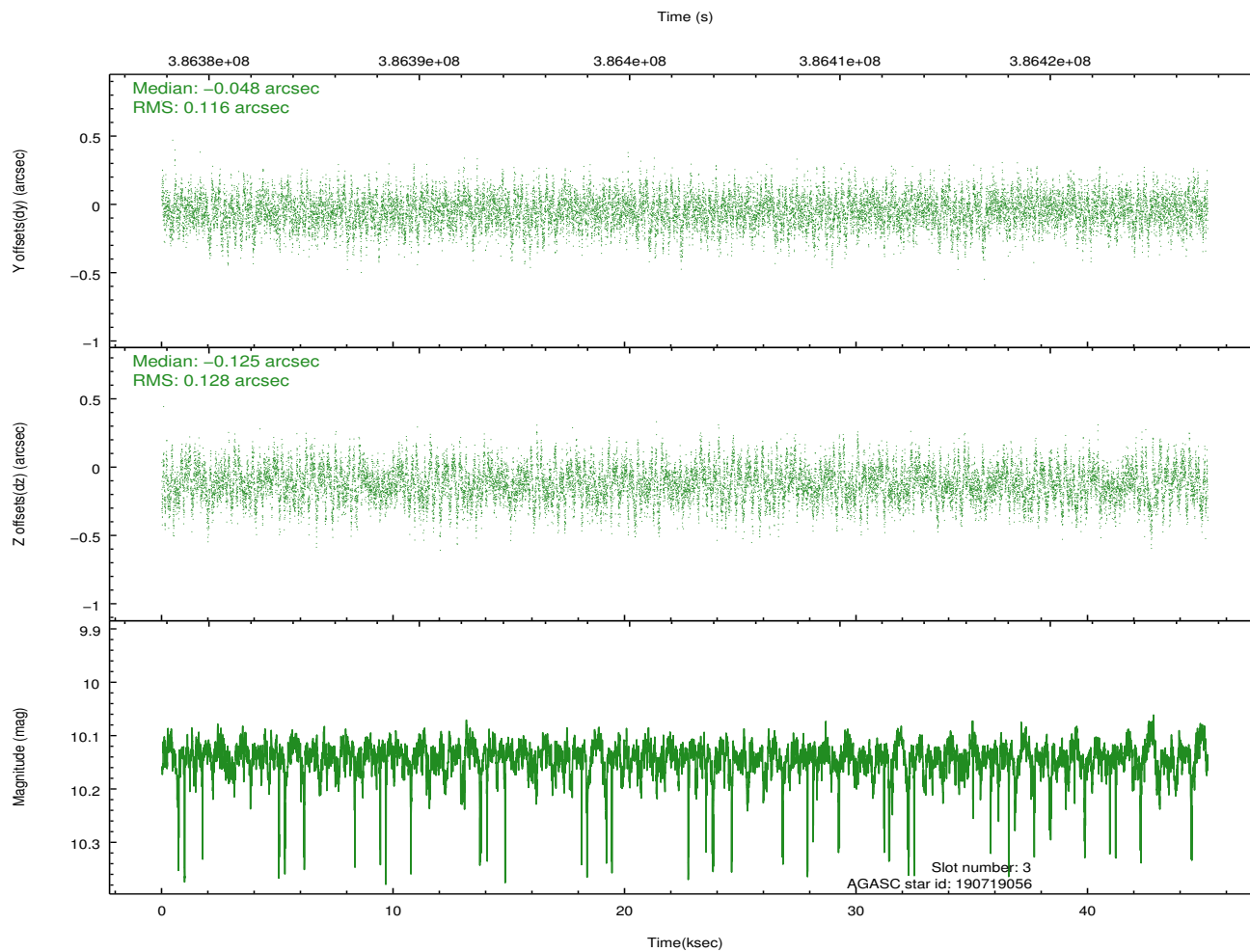
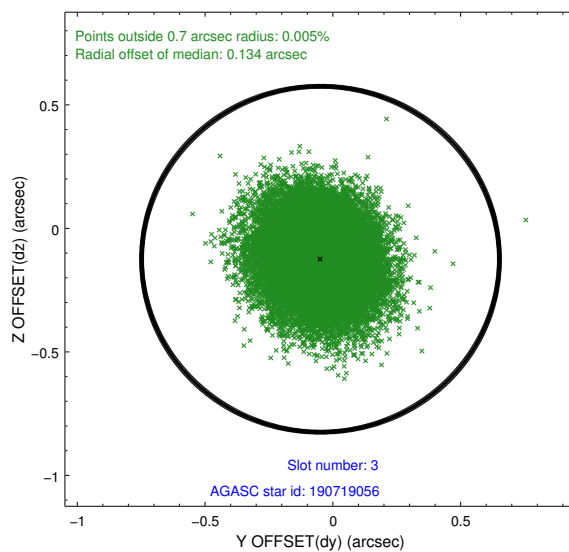
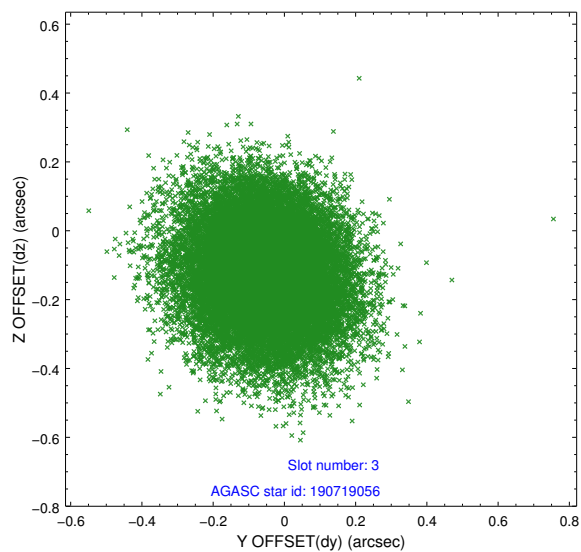


Slot Statistics

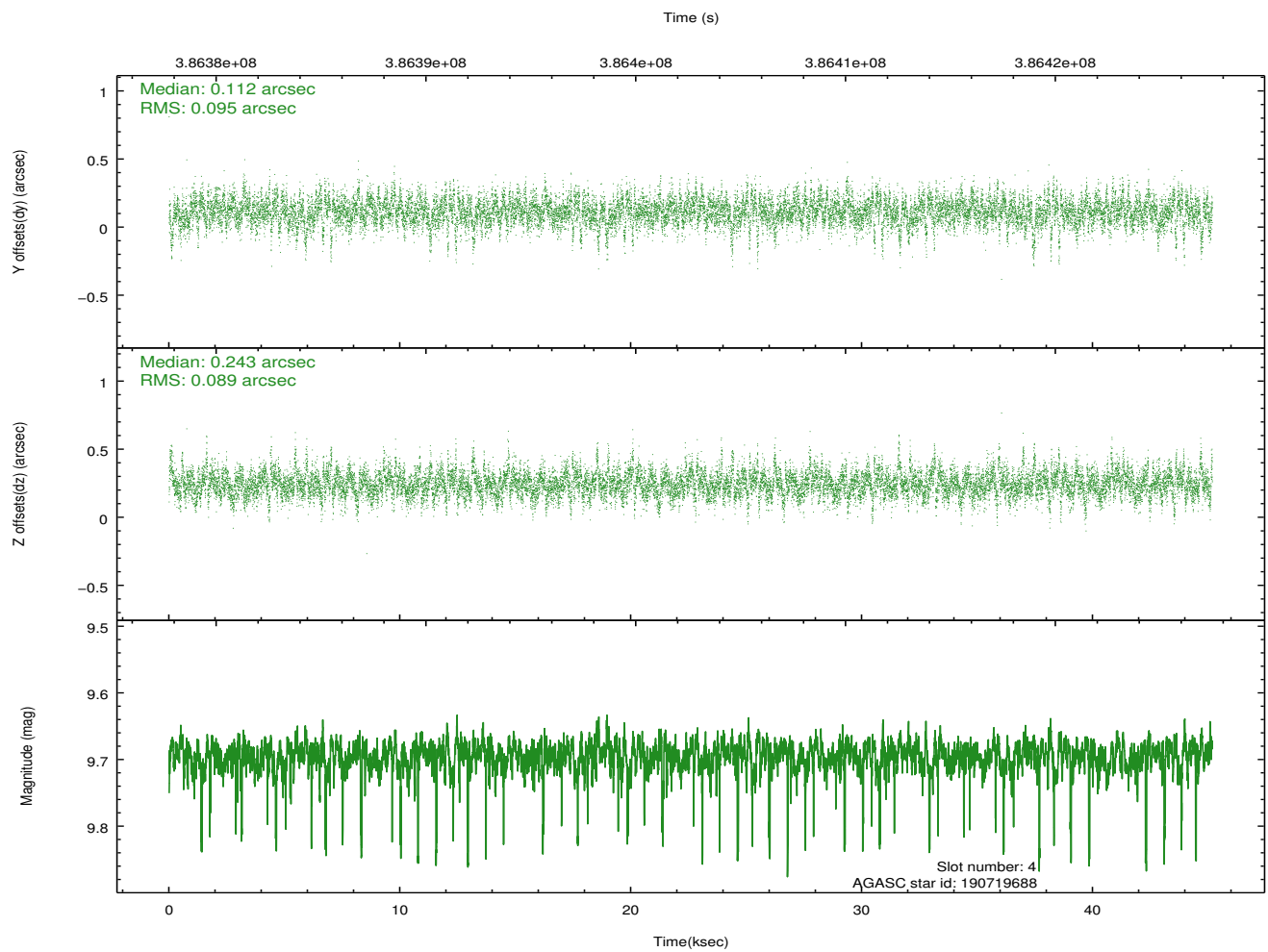
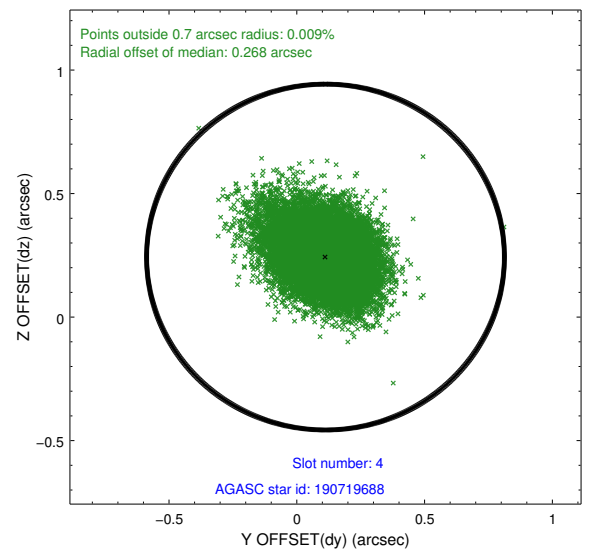
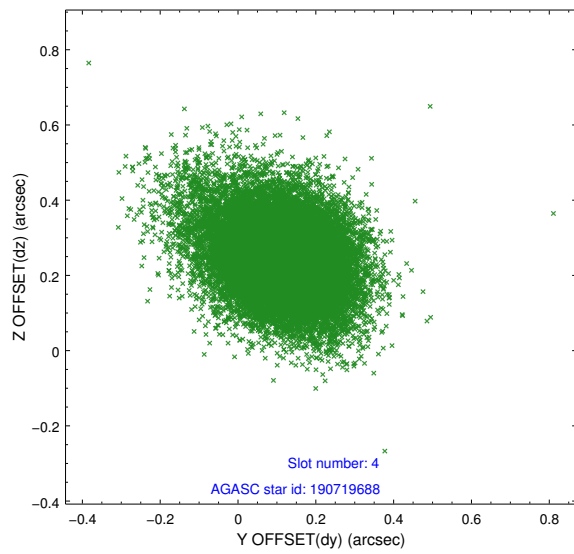
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|---------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|---------|
| 0 | FID | HRC-S-2 | 7.00 | 11019 | 0.224 | -0.138 | 0.030 | 0.039 | 0.000000 | 0.000000 | 1229.82 | -454.35 |
| 1 | FID | HRC-S-3 | 7.03 | 11019 | 0.042 | -0.060 | 0.030 | 0.039 | 0.000000 | 0.000000 | -1172.67 | 567.82 |
| 2 | OMITTED | | 0.00 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000 | 0.000000 | 0.00 | 0.00 |
| 3 | GUIDE | 190719056 | 10.14 | 21927 | -0.048 | -0.125 | 0.185 | 0.298 | 194.588717 | 21.325530 | -1691.25 | 2193.42 |
| 4 | GUIDE | 190719688 | 9.70 | 21947 | 0.112 | 0.243 | 0.133 | 0.237 | 193.909737 | 22.180853 | 1339.89 | -140.29 |
| 5 | GUIDE | 190720152 | 7.12 | 22040 | -0.122 | -0.297 | 0.086 | 0.139 | 193.666732 | 22.107929 | 2047.16 | 332.81 |
| 6 | GUIDE | 190843704 | 7.36 | 22038 | -0.089 | 0.105 | 0.085 | 0.138 | 194.670543 | 22.042885 | -1237.56 | -360.96 |
| 7 | GUIDE | 190845144 | 8.87 | 22030 | 0.149 | 0.069 | 0.100 | 0.167 | 194.692633 | 22.213679 | -1135.41 | -973.84 |

2.4 Star Slots

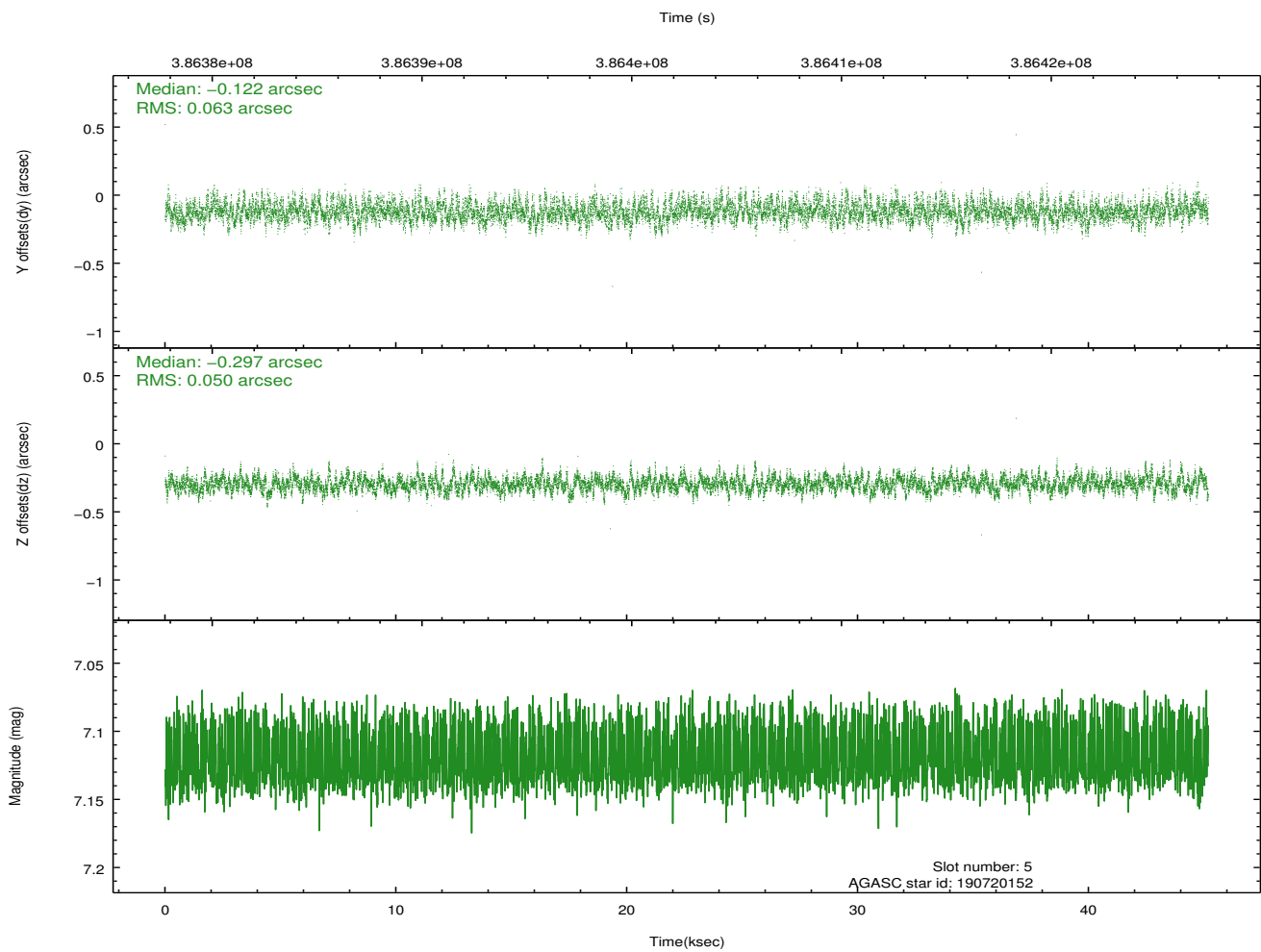
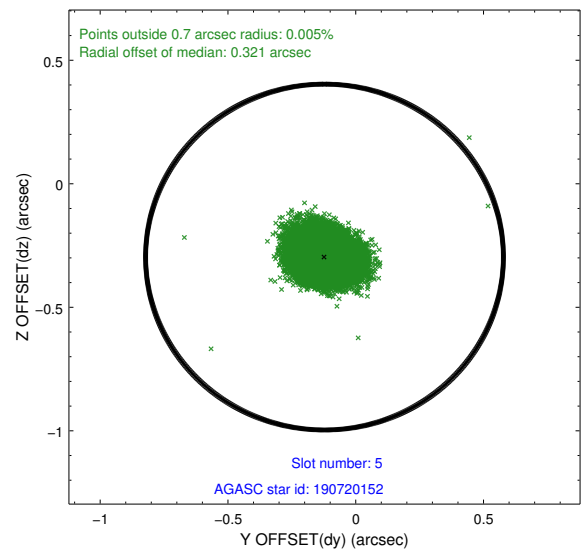
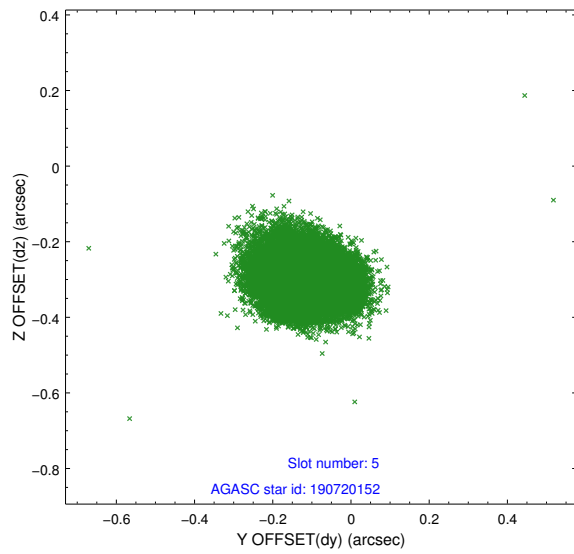
2.4.1 Slot 3



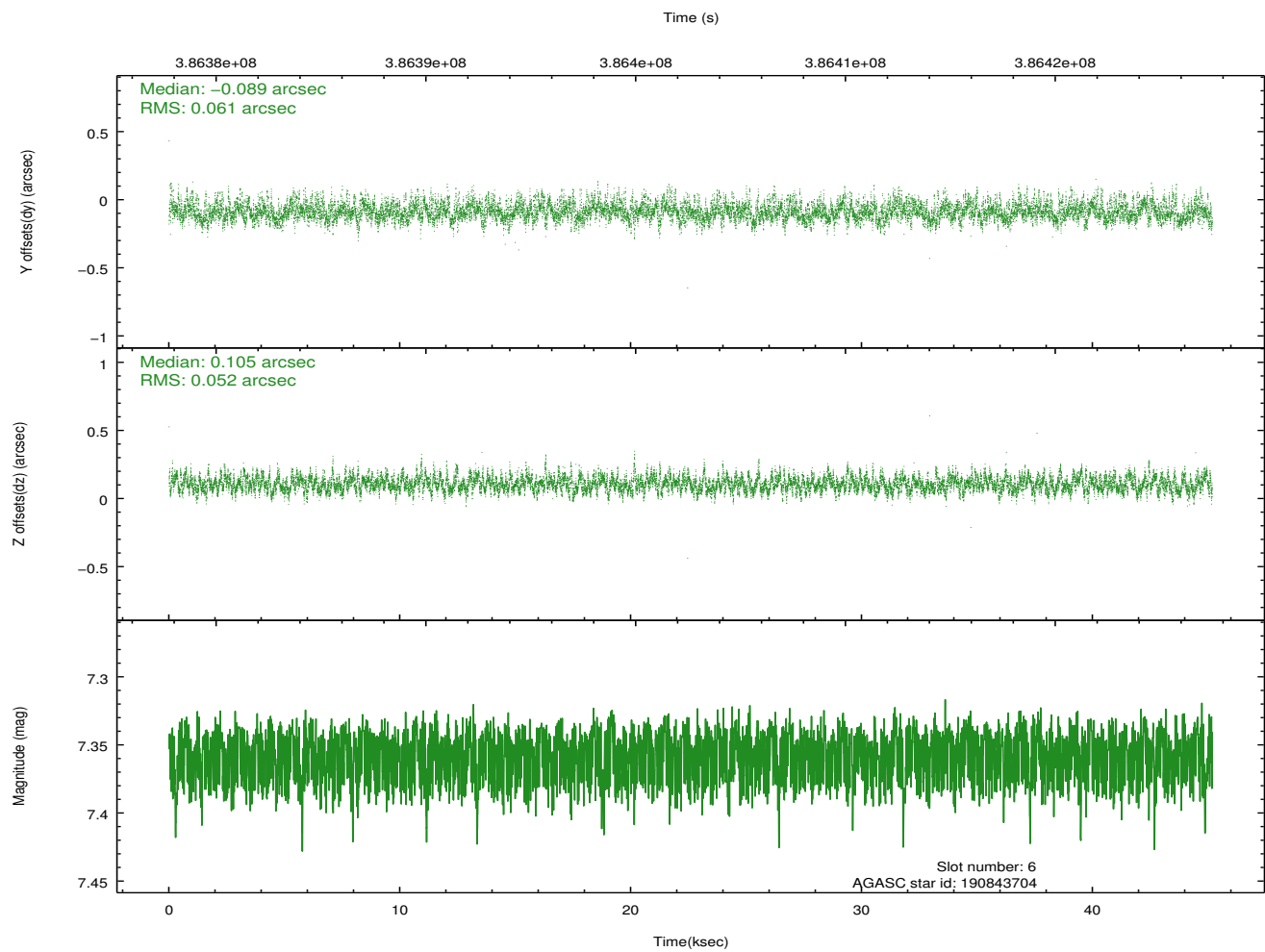
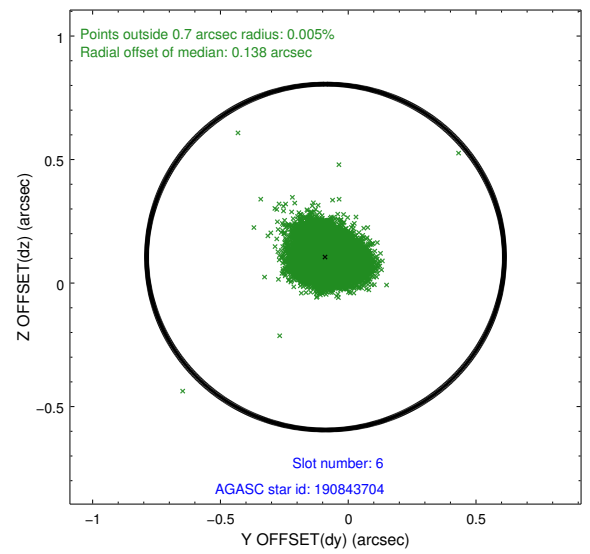
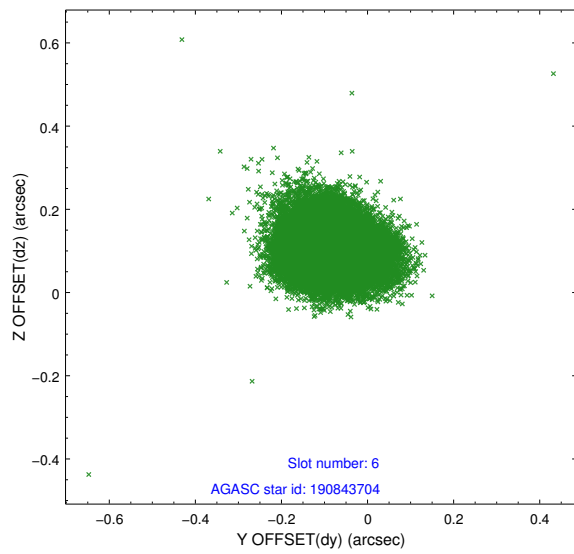
2.4.2 Slot 4



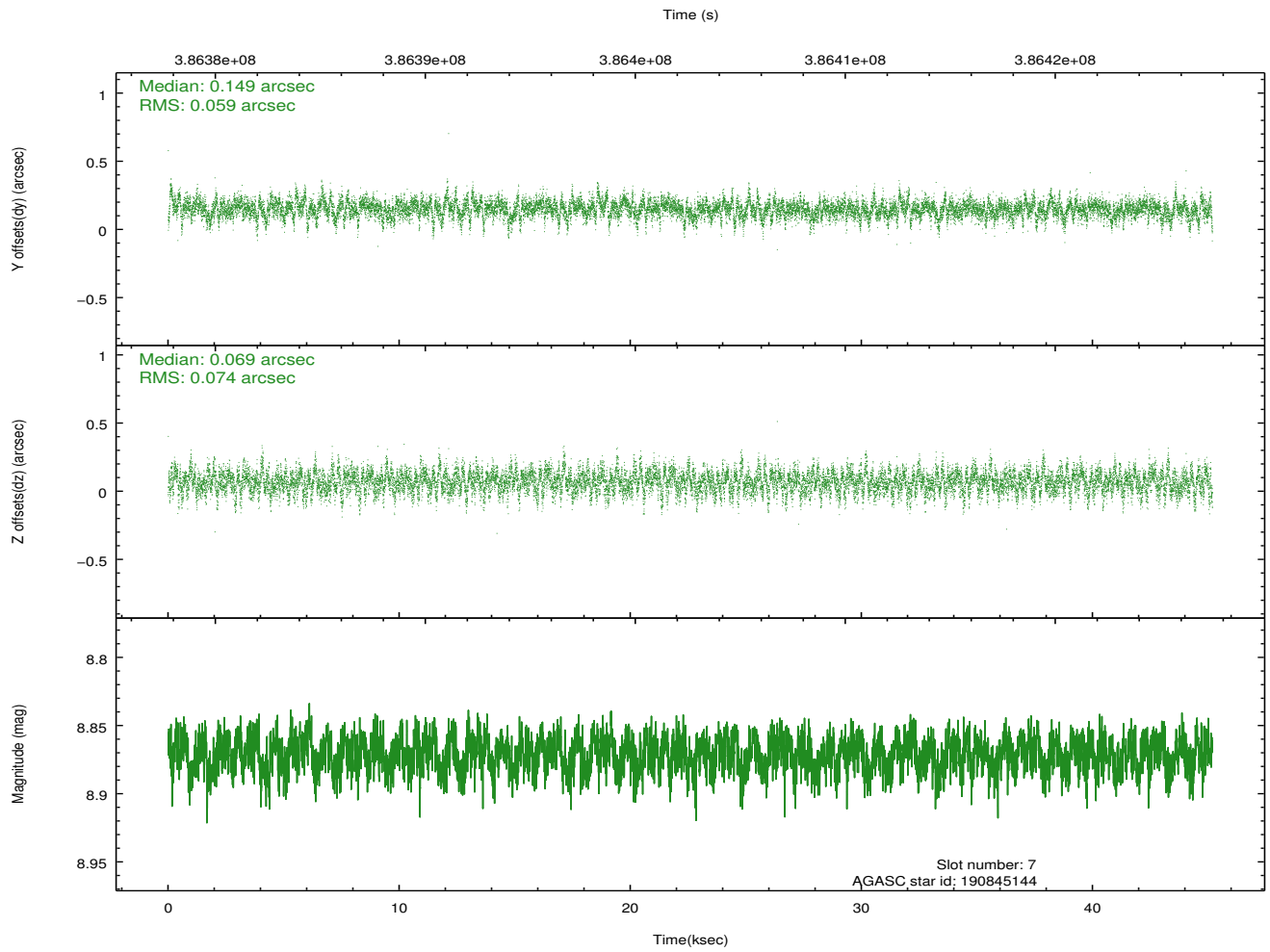
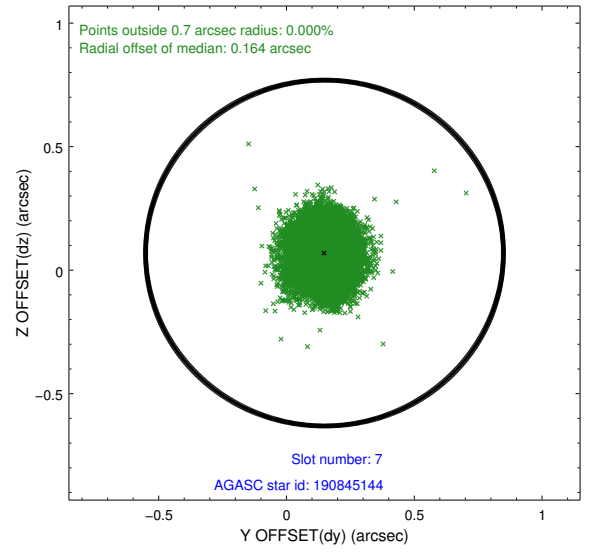
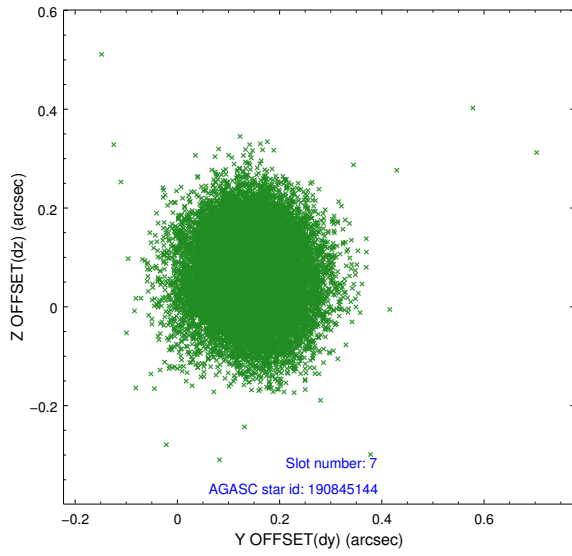
2.4.3 Slot 5



2.4.4 Slot 6

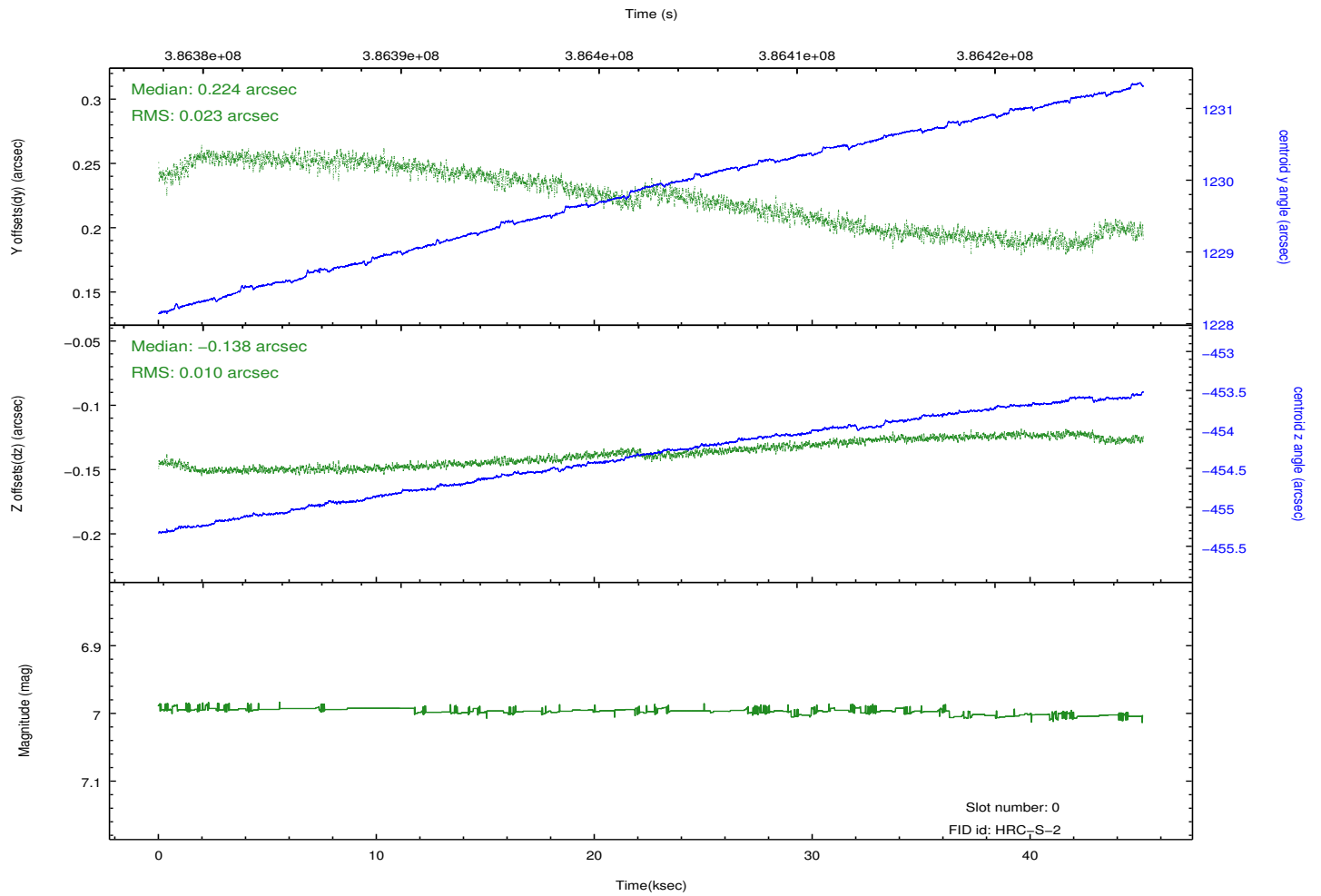
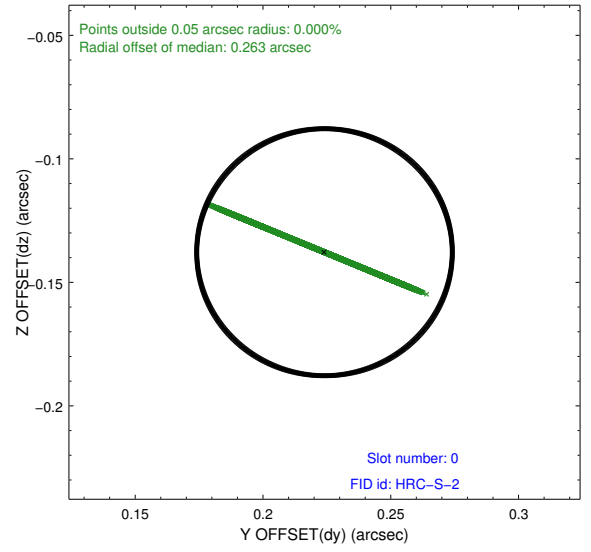
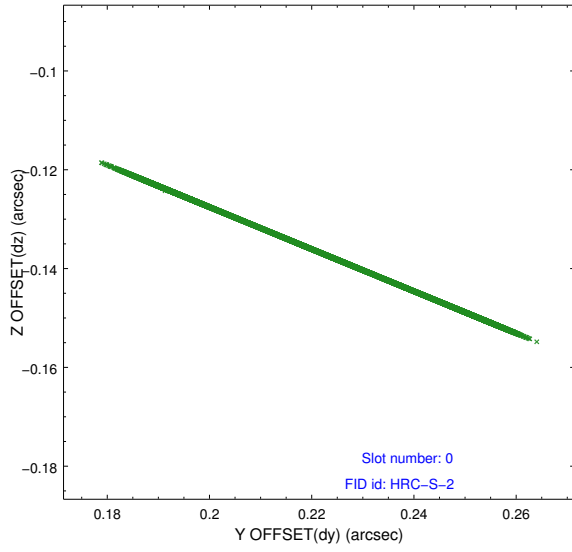


2.4.5 Slot 7

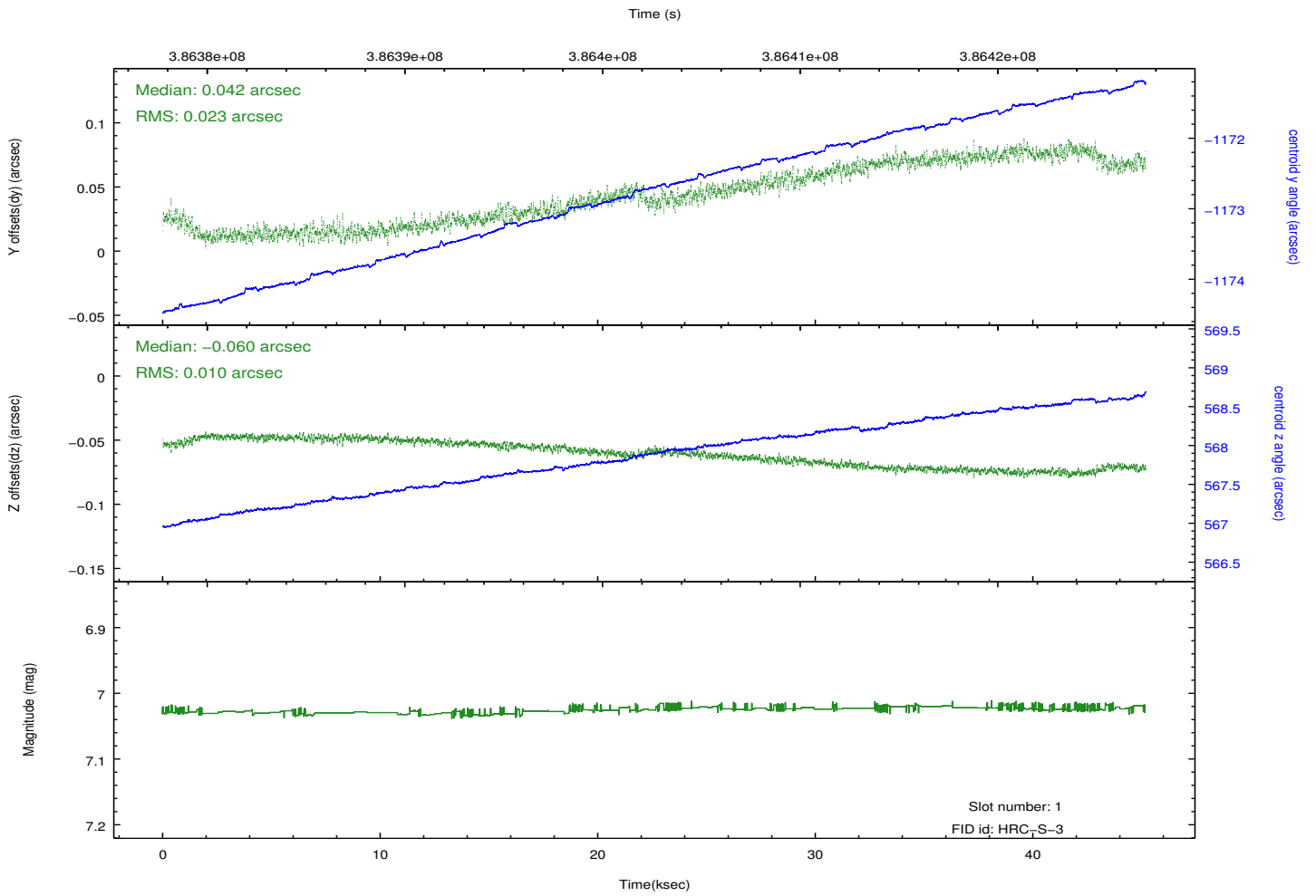
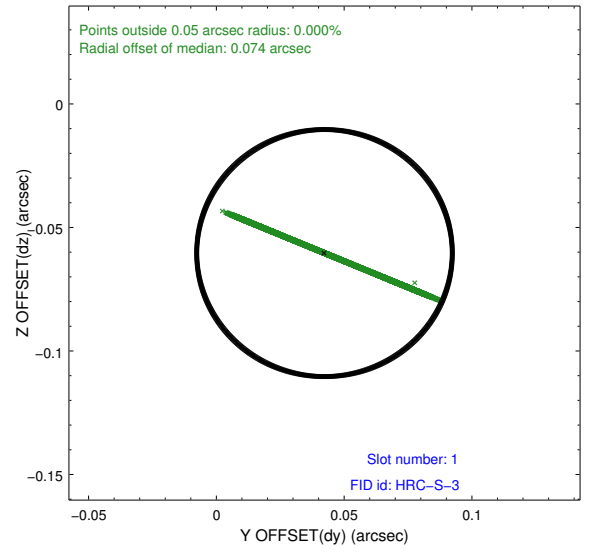
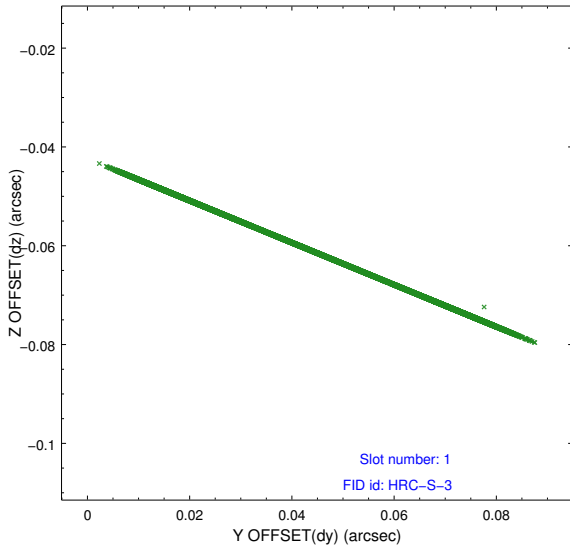


2.5 FID Slots

2.5.1 Slot 0

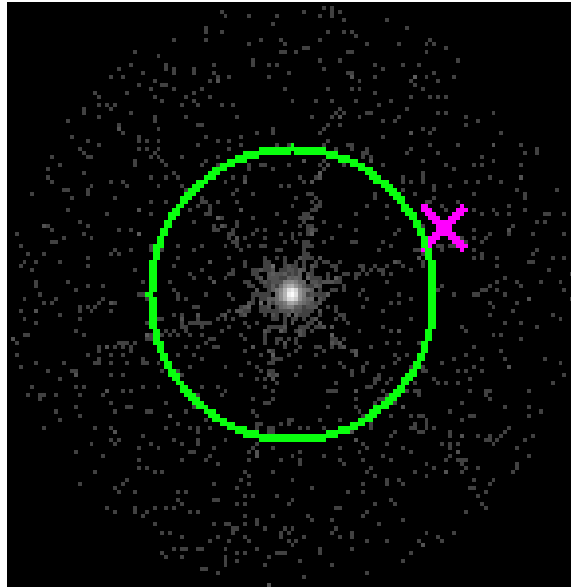


2.5.2 Slot 1

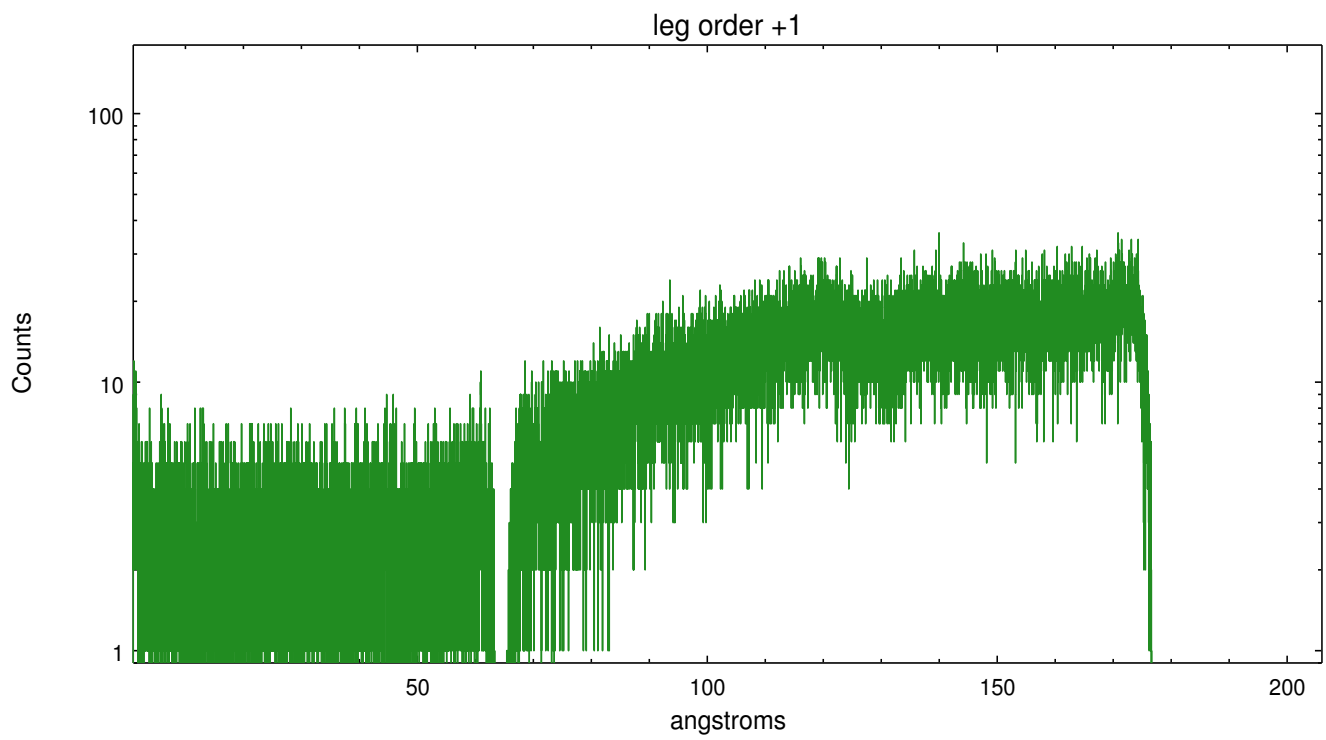
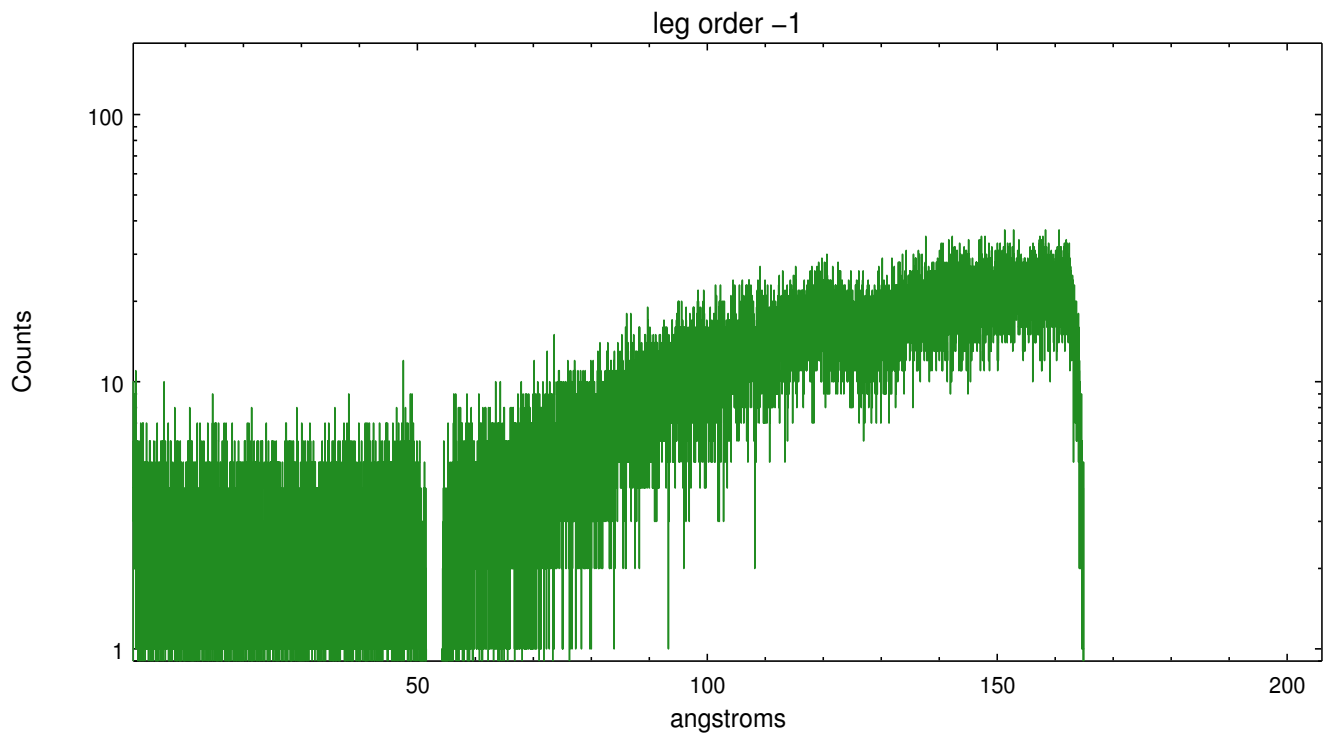


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.07.03 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 45.1812335 |

A.2 Comments

The fid light in slot 2 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this fid light from the solution.