

V&V Reference Report

L2 ASCDS Version : 7.6.11

Observation 3144 - L2 Version 2
Chandra X-Ray Center

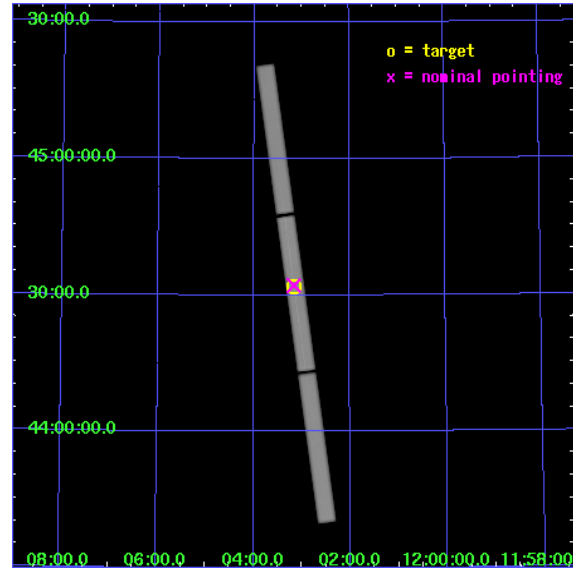
L2 Processing Date : Aug 28 2007

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1 Front

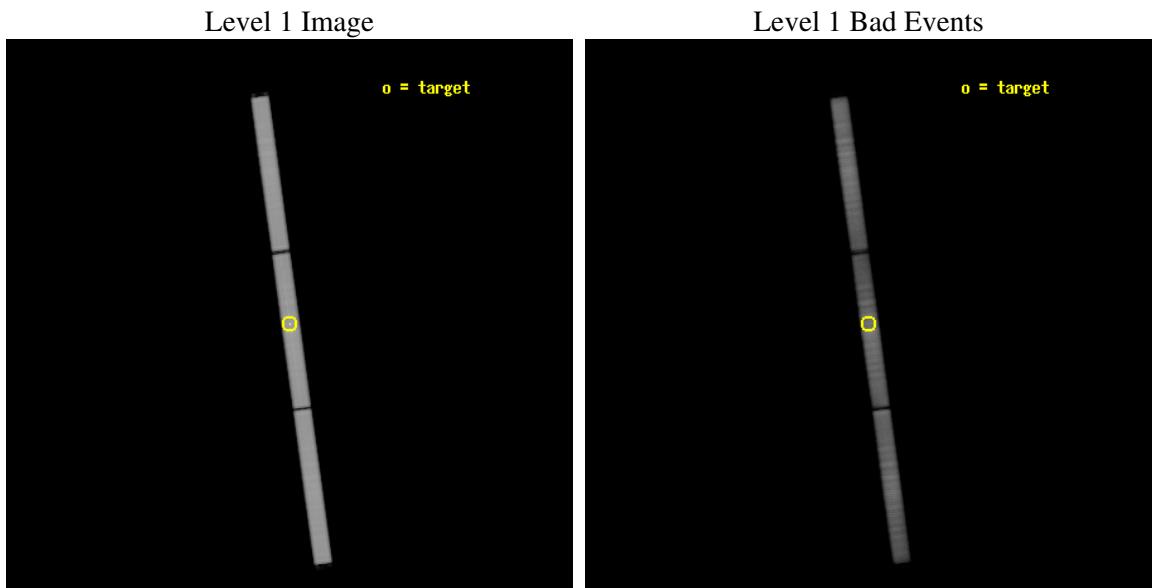
| | |
|----------|--|
| seq_num | 700583 |
| obs_id | 3144 |
| title | SOFT X-RAY EMISSION AND ABSORPTION IN NGC 4051 |
| observer | Dr. Mariano Mendez |
| object | NGC 4051 |
| ra_targ | 180.79 |
| dec_targ | 44.531444 |
| ra_nom | 180.79111032515 |
| dec_nom | 44.53609968694 |
| roll_nom | 82.089443378185 |
| revision | 2 |
| ontime | 92064.734947875 |
| livetime | 91455.432653847 |
| l2events | 4665534 |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | |
|----------|---------------------|
| obi_num | 1 |
| ascdsver | 7.6.11 |
| caldbver | 3.4.0 |
| date | 2007-08-28T19:59:26 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 92500.000000 |
| ontime | 92064.734947875 |
| l1events | 6884118 |

2.1.3 Events

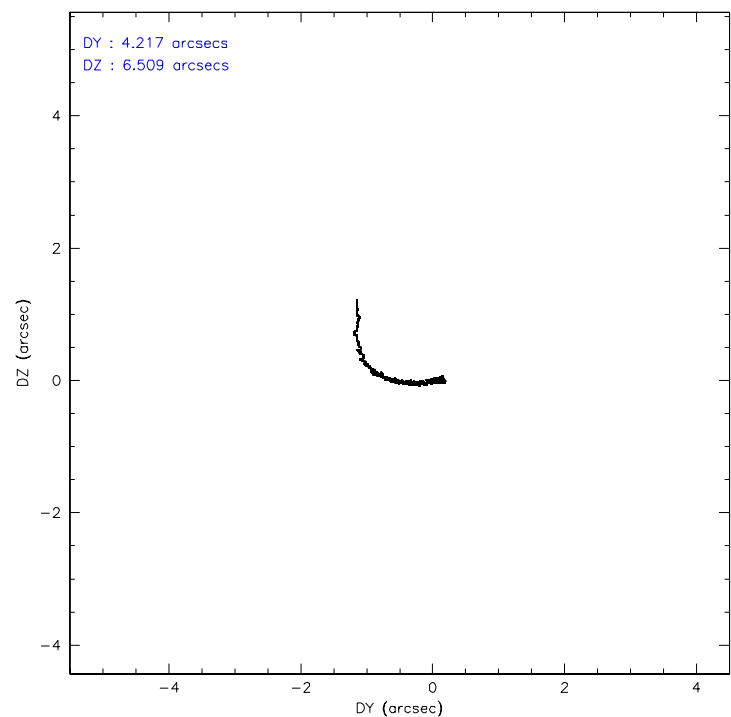
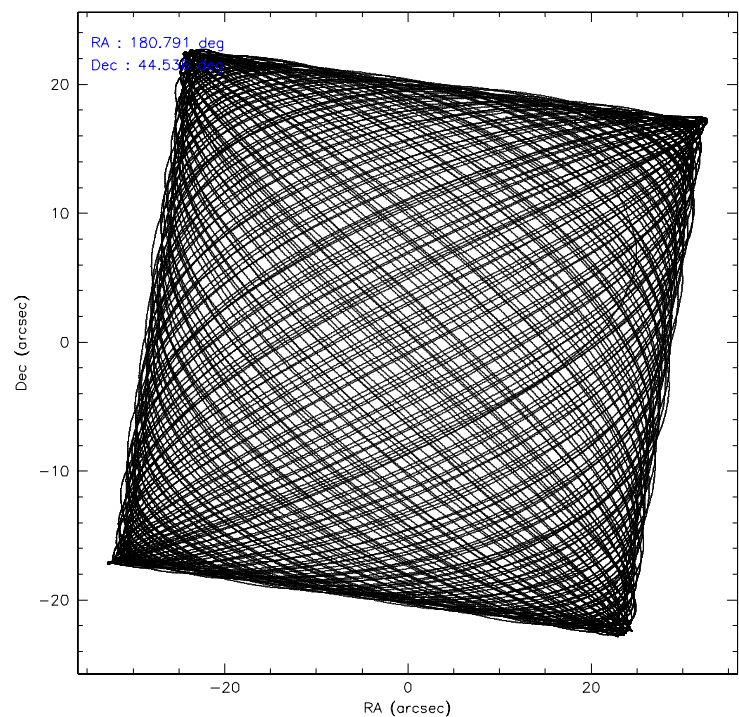
Level 1 Events

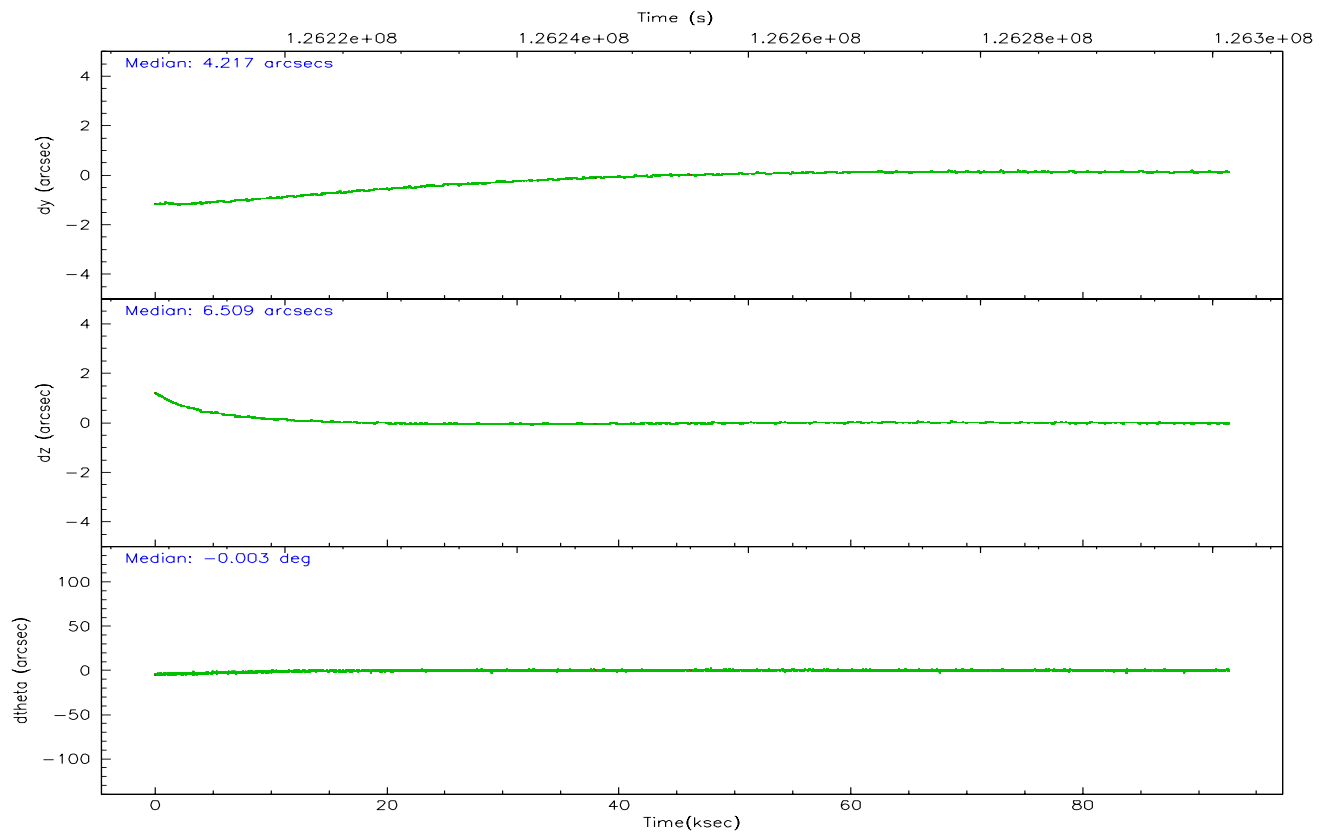
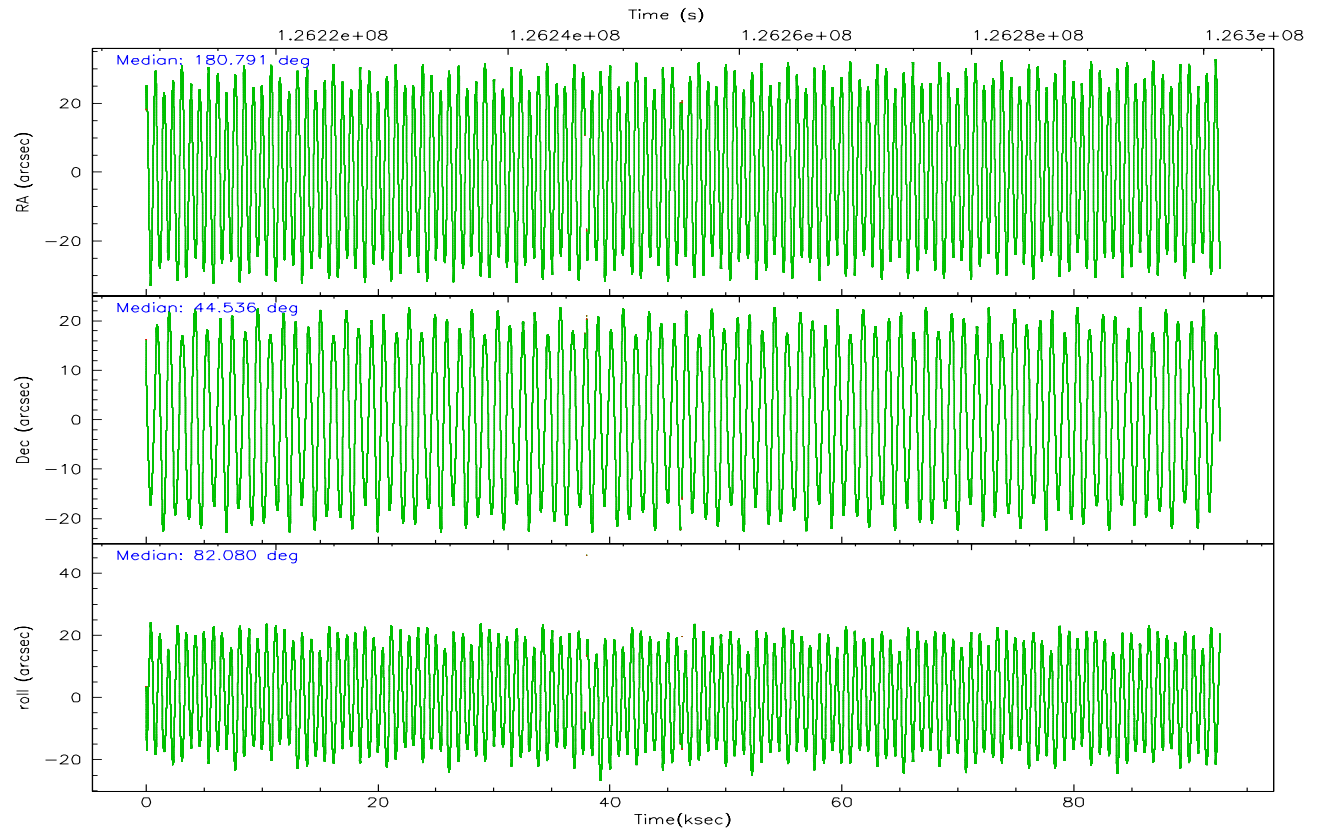
| | segment 1 | segment 2 | segment 3 |
|--------------------|----------------------|----------------------|----------------------|
| level 1 events | 2314342 | 2312457 | 2257319 |
| rejected events | 462581 | 501376 | 570537 |
| rejected % | 19% | 21% | 25% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 6 | 6 |
| 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 | | | |
| Pointing RA | 180.807998 | 180.7911103251513 | | | |
| Pointing Dec | 44.510118 | 44.53609968694013 | | | |
| Pointing Roll | 82.010269 | 82.08944337818545 | | | |
| SIM focus pos (mm) | -1.429586 | -1.428180813131781 | | | |
| SIM defocus (mm) | 0.1037507710433287 | 0.1051558262725154 | | | |
| SIM translation stage pos (mm) | 250.455976 | 250.4635187648994 | | | |
| SIM translation stage offset (mm) | 0 | -0.007540371344731511 | | | |
| Observation start time | 126208948.184000 | 126207641.56092 | | | |
| Observation start date | 2001-12-31T18:01:24 | 2001-12-31T17:40:41 | | | |
| Observation end time | 126301448.184000 | 126301906.20221 | | | |
| Observation end date | 2002-01-01T19:43:04 | 2002-01-01T19:51:46 | | | |

2.3 Aspect



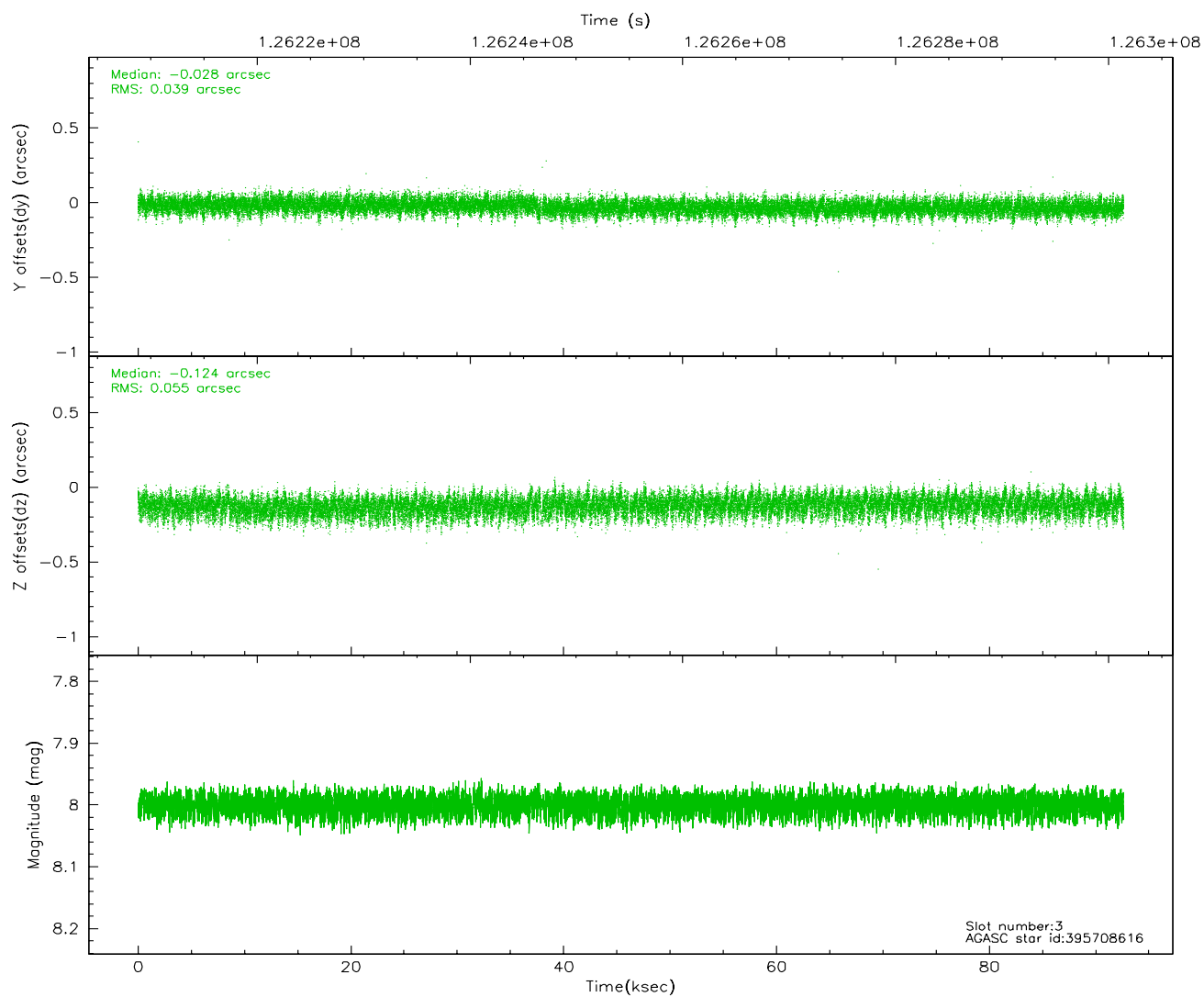
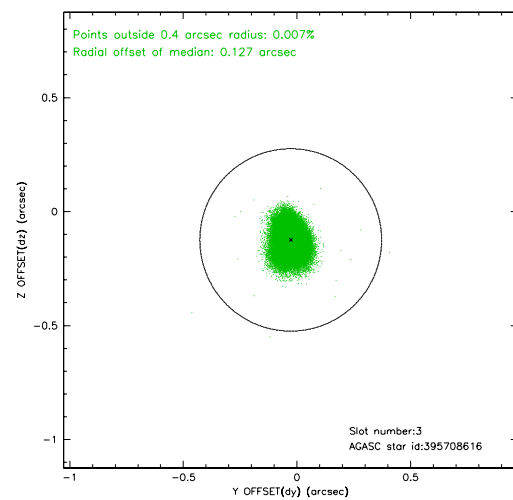
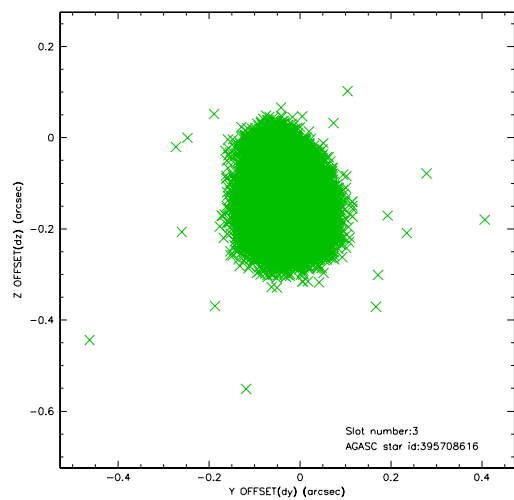


Slot Statistics

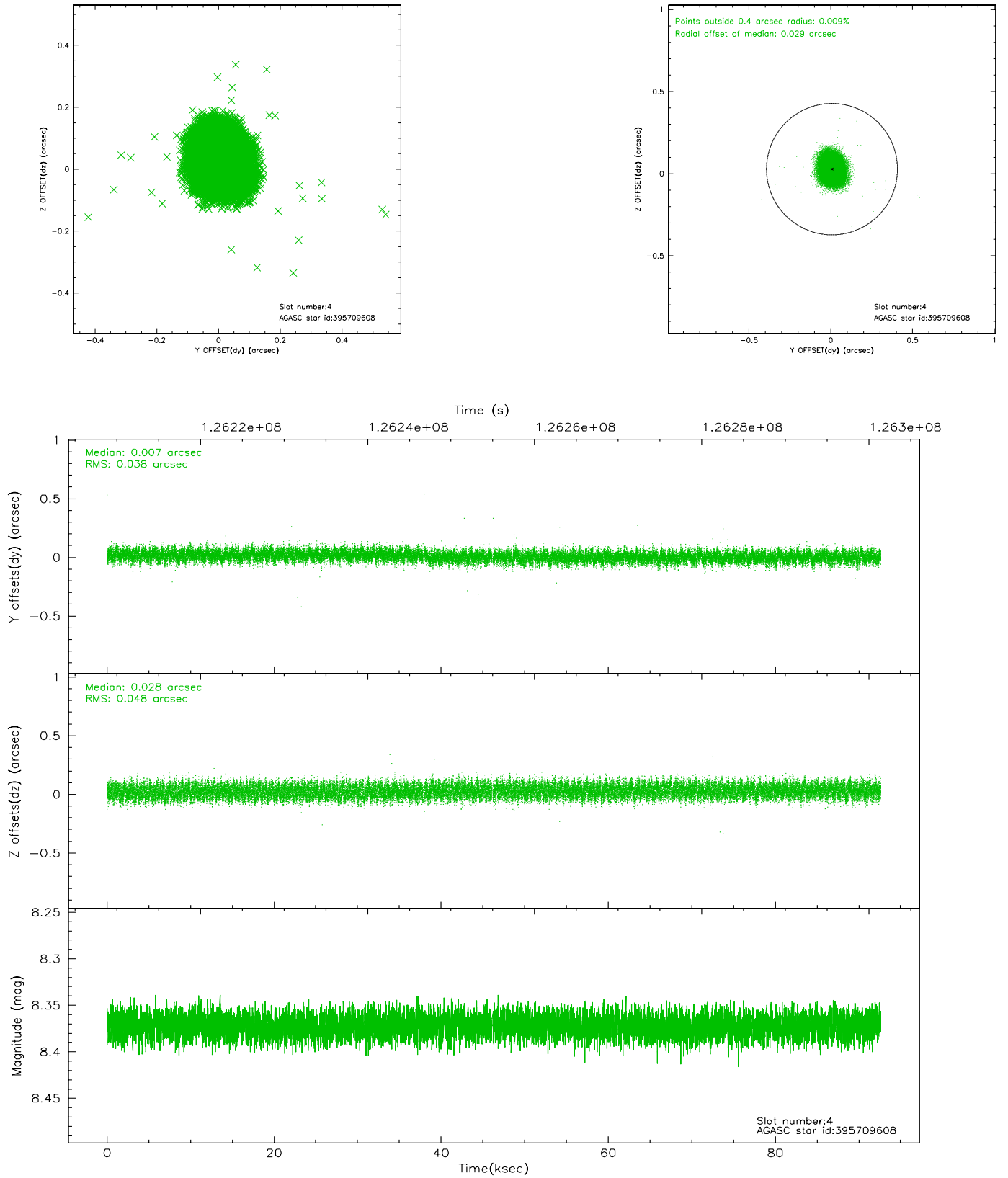
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-S-1 | 7.01 | 22531 | 0.154 | -0.128 | 0.010 | 0.028 | 0.000000 | 0.000000 | -1158.07 | -455.04 |
| 1 | FID | HRC-S-2 | 7.00 | 22531 | 0.083 | -0.091 | 0.006 | 0.025 | 0.000000 | 0.000000 | 1241.49 | -447.68 |
| 2 | FID | HRC-S-3 | 7.03 | 22531 | 0.152 | -0.083 | 0.009 | 0.024 | 0.000000 | 0.000000 | -1160.73 | 574.51 |
| 3 | GUIDE | 395708616 | 8.00 | 45059 | -0.028 | -0.124 | 0.072 | 0.118 | 180.101872 | 44.630343 | 185.01 | 1852.59 |
| 4 | GUIDE | 395709608 | 8.37 | 45059 | 0.007 | 0.028 | 0.066 | 0.103 | 181.055130 | 44.450389 | -123.18 | -658.67 |
| 5 | GUIDE | 395710032 | 8.82 | 45050 | -0.027 | 0.096 | 0.086 | 0.136 | 181.512910 | 44.376001 | -217.60 | -1862.22 |
| 6 | GUIDE | 395708696 | 8.87 | 45051 | 0.001 | -0.020 | 0.083 | 0.136 | 180.383726 | 44.624291 | 258.96 | 1134.00 |
| 7 | GUIDE | 395707376 | 9.36 | 44944 | -0.012 | 0.047 | 0.081 | 0.132 | 180.967983 | 44.858789 | 1300.55 | -229.49 |

2.4 Star Slots

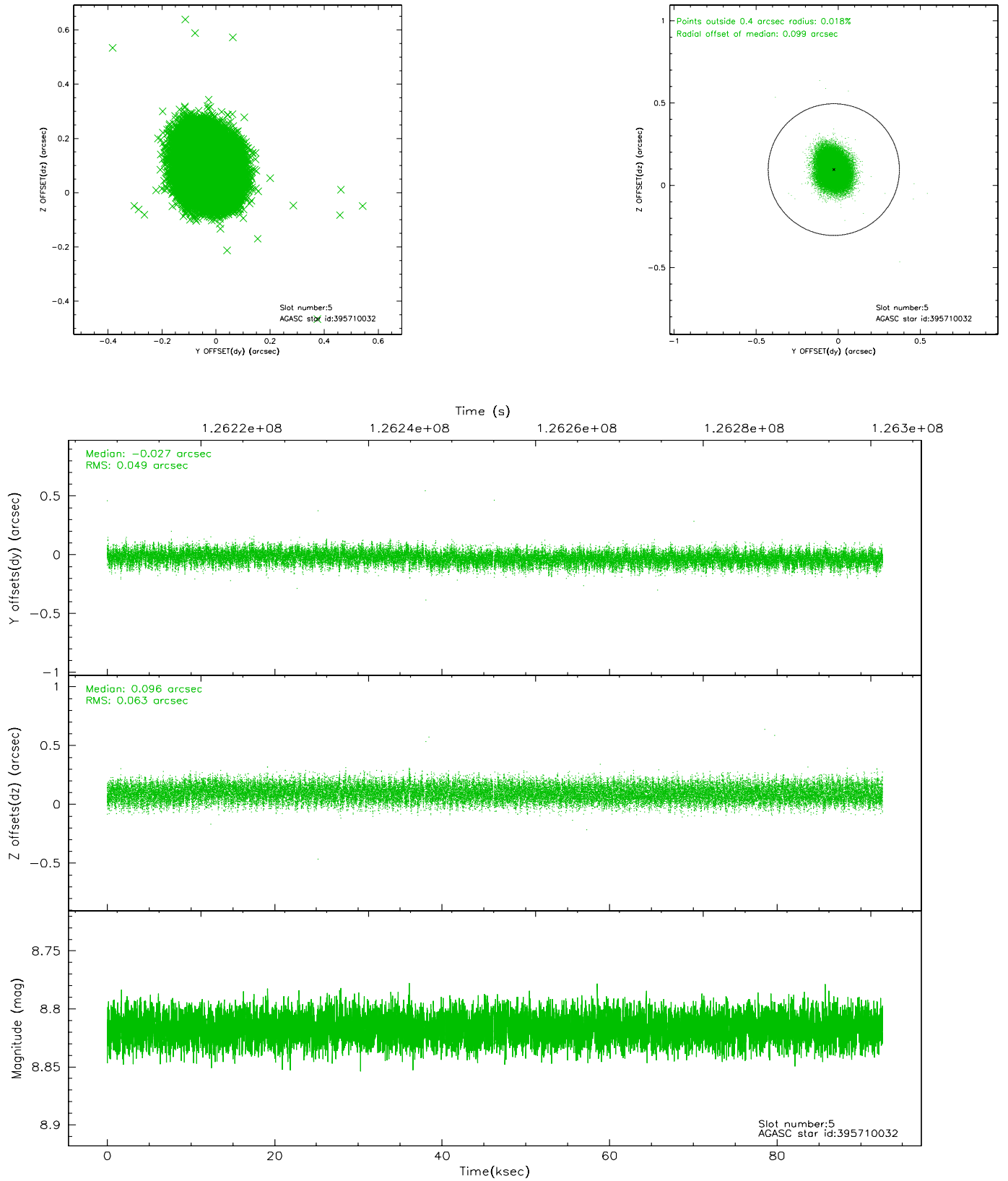
2.4.1 Slot 3



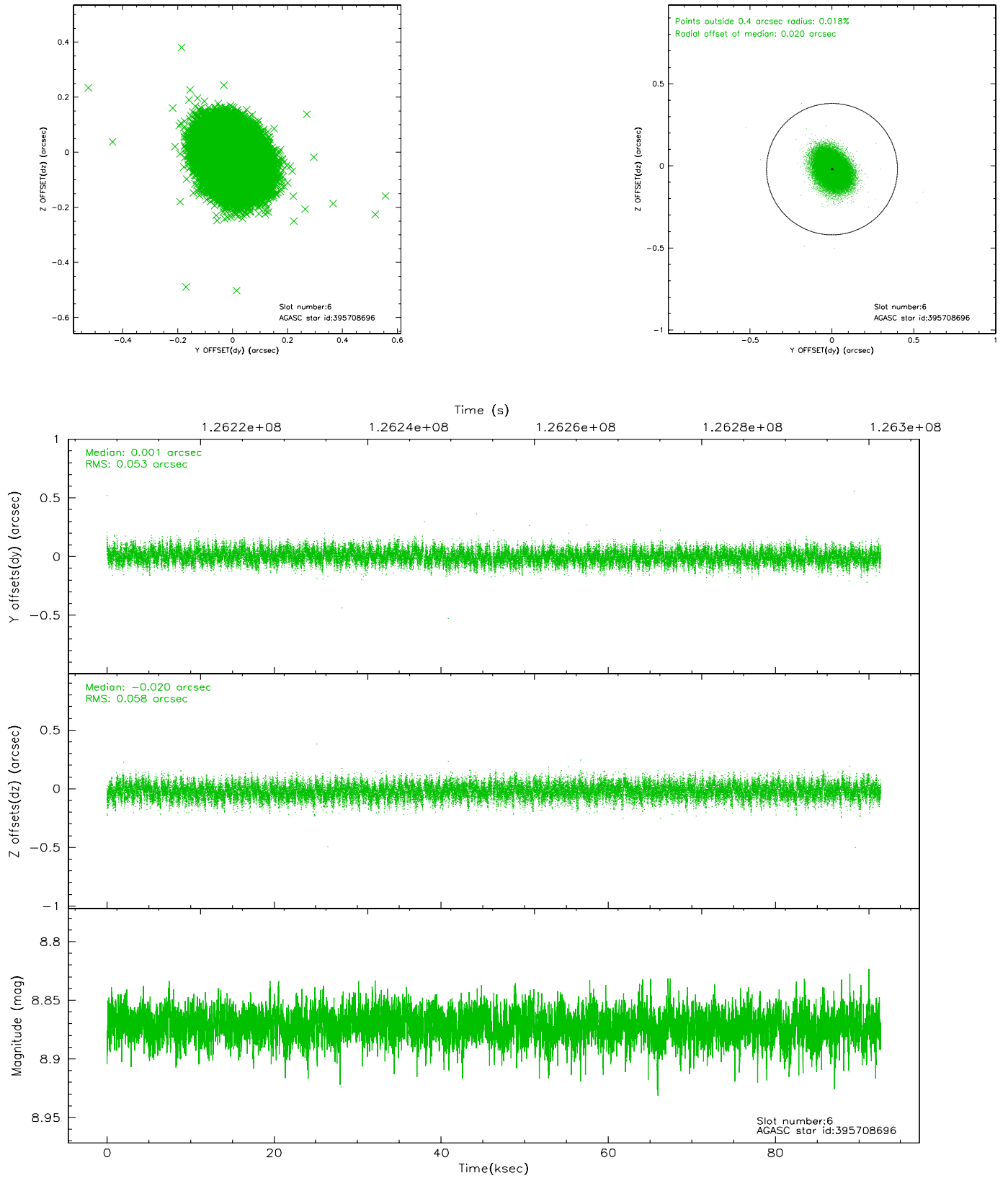
2.4.2 Slot 4



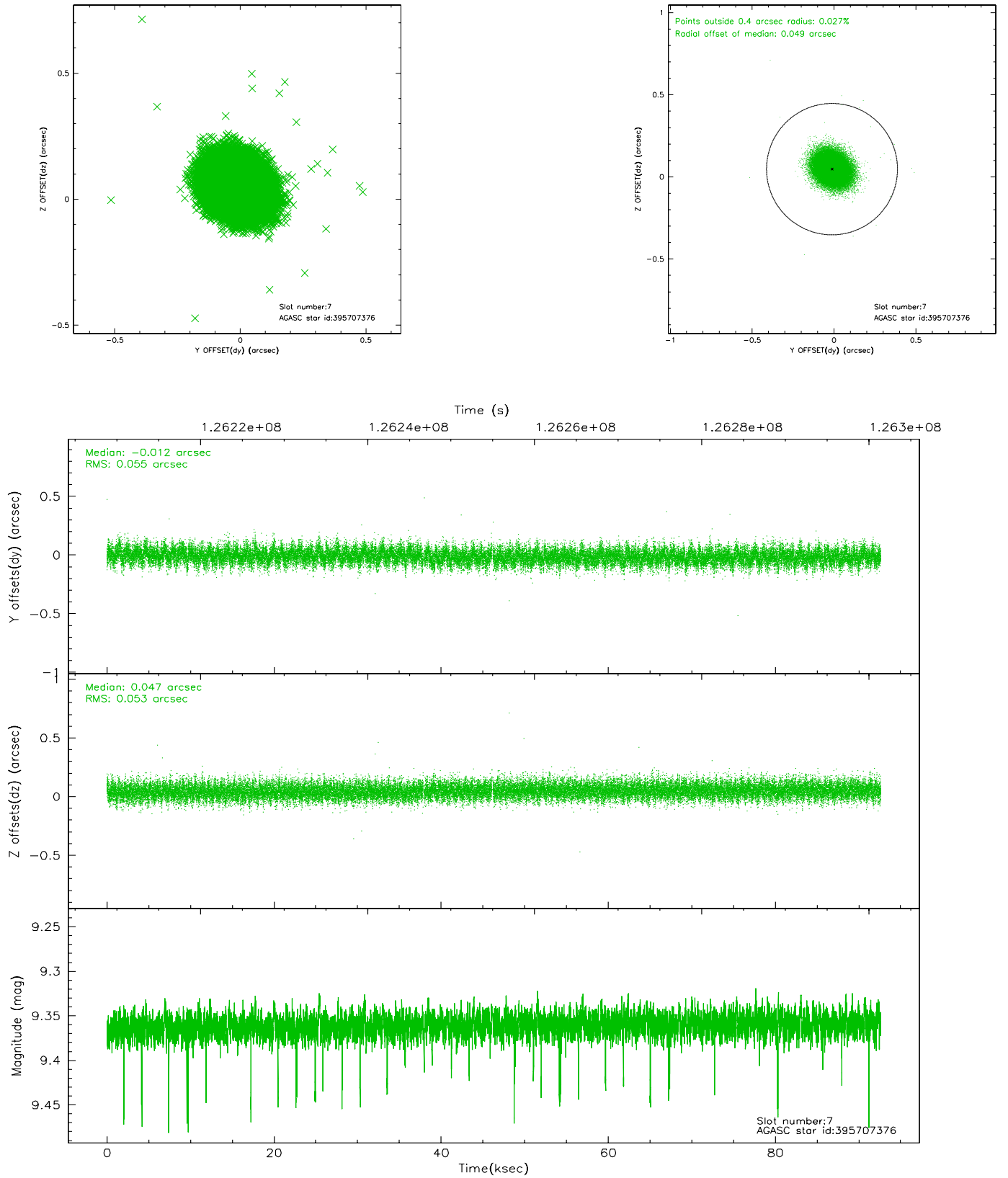
2.4.3 Slot 5



2.4.4 Slot 6

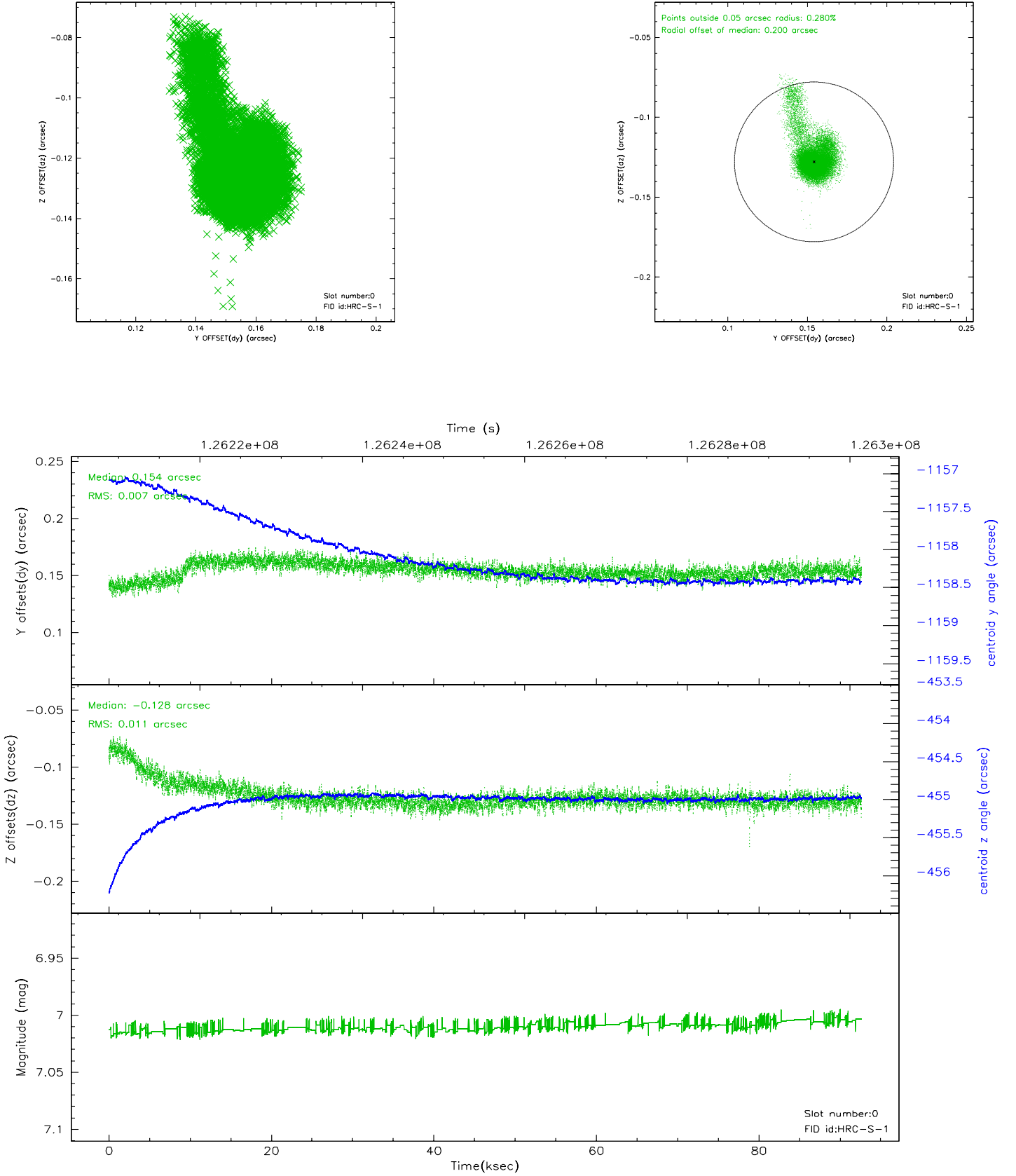


2.4.5 Slot 7

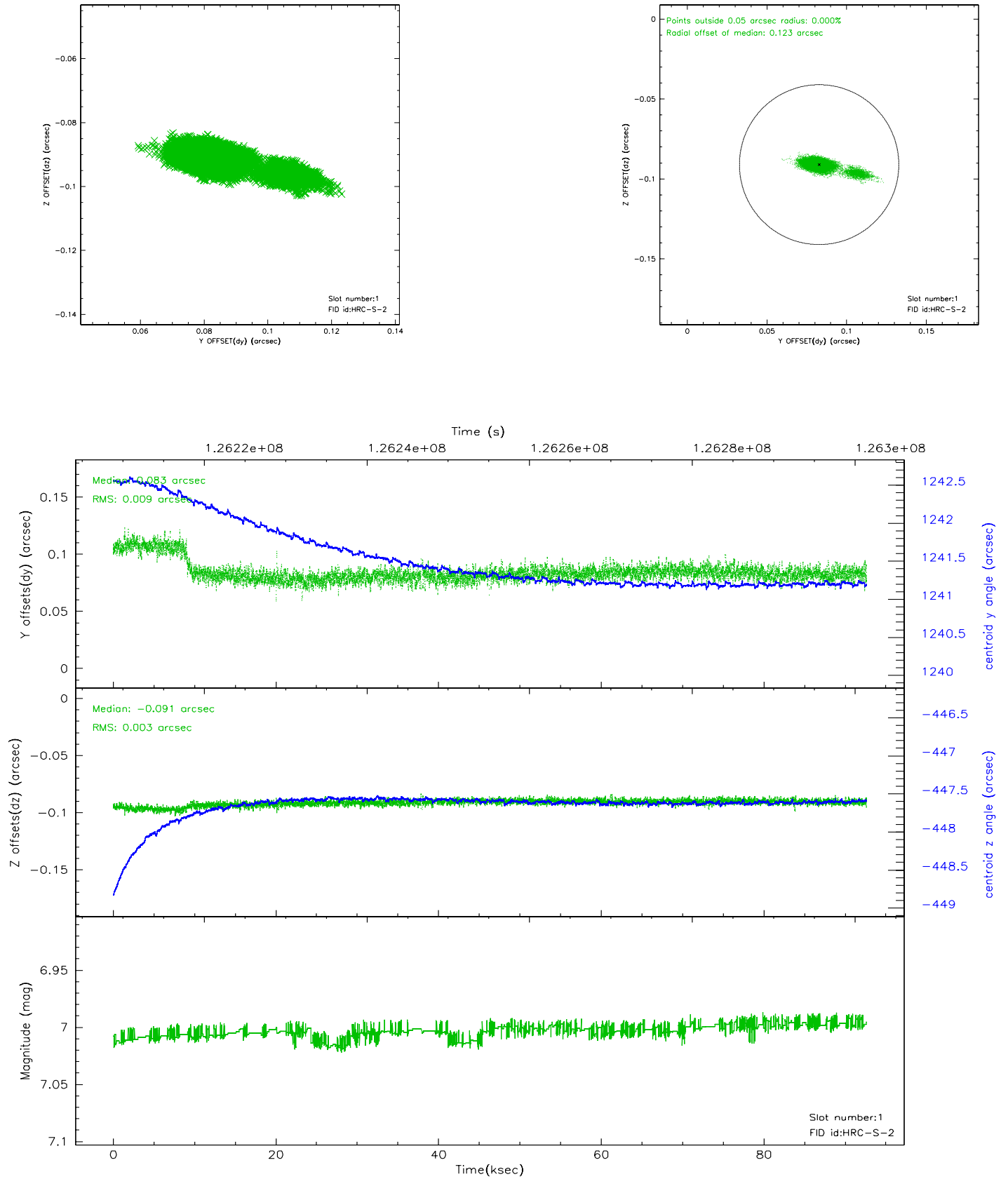


2.5 FID Slots

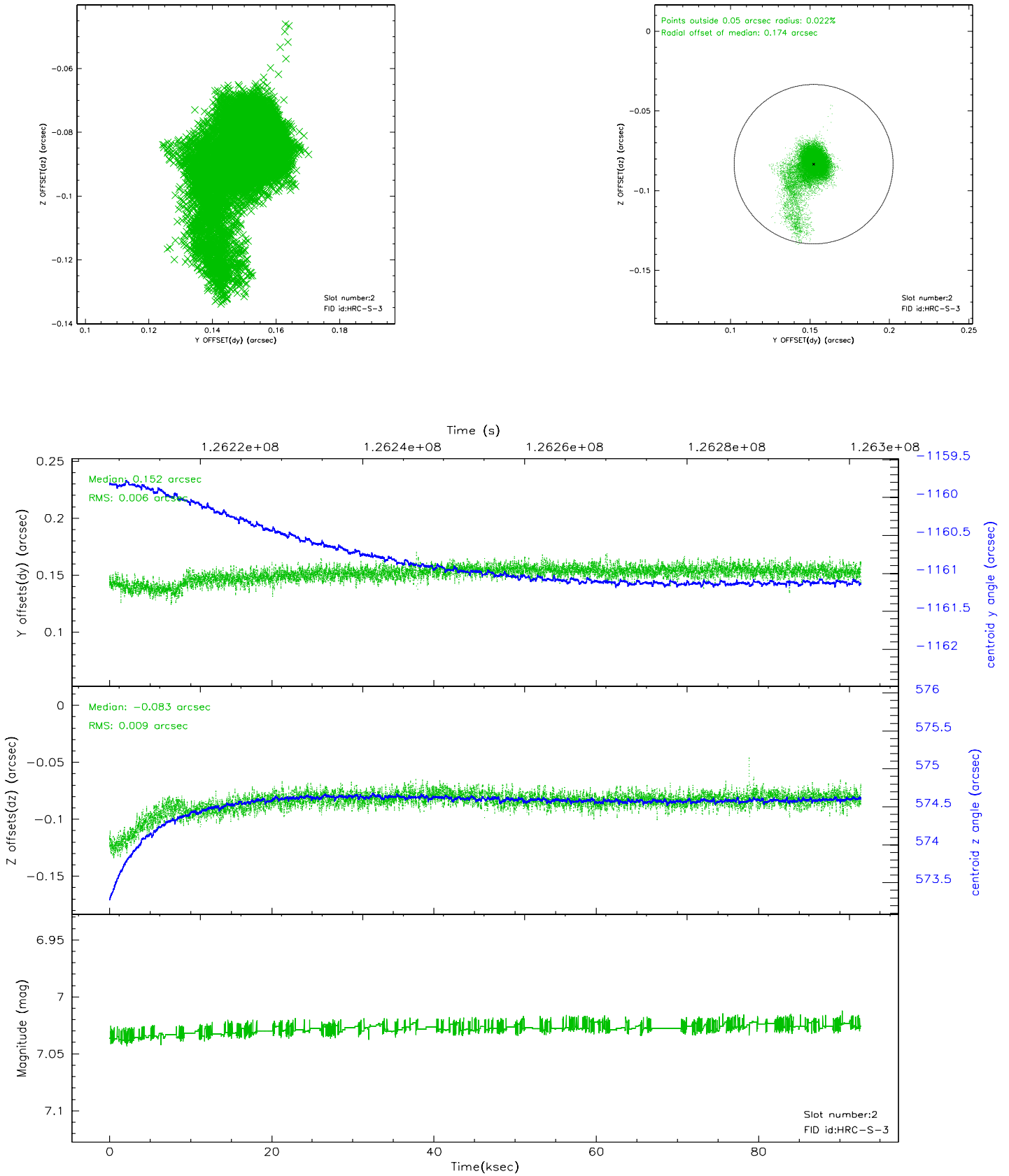
2.5.1 Slot 0



2.5.2 Slot 1

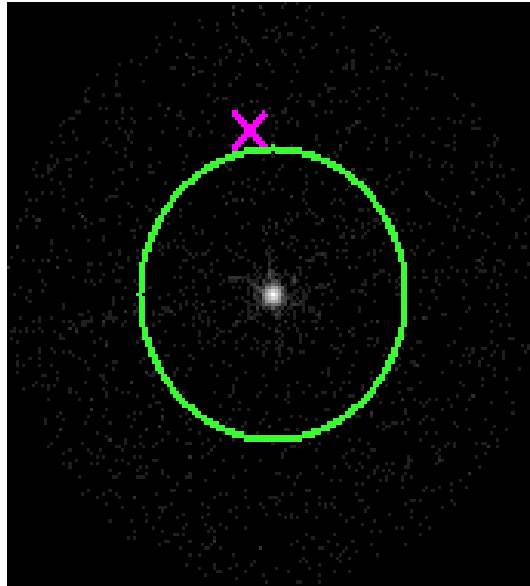


2.5.3 Slot 2



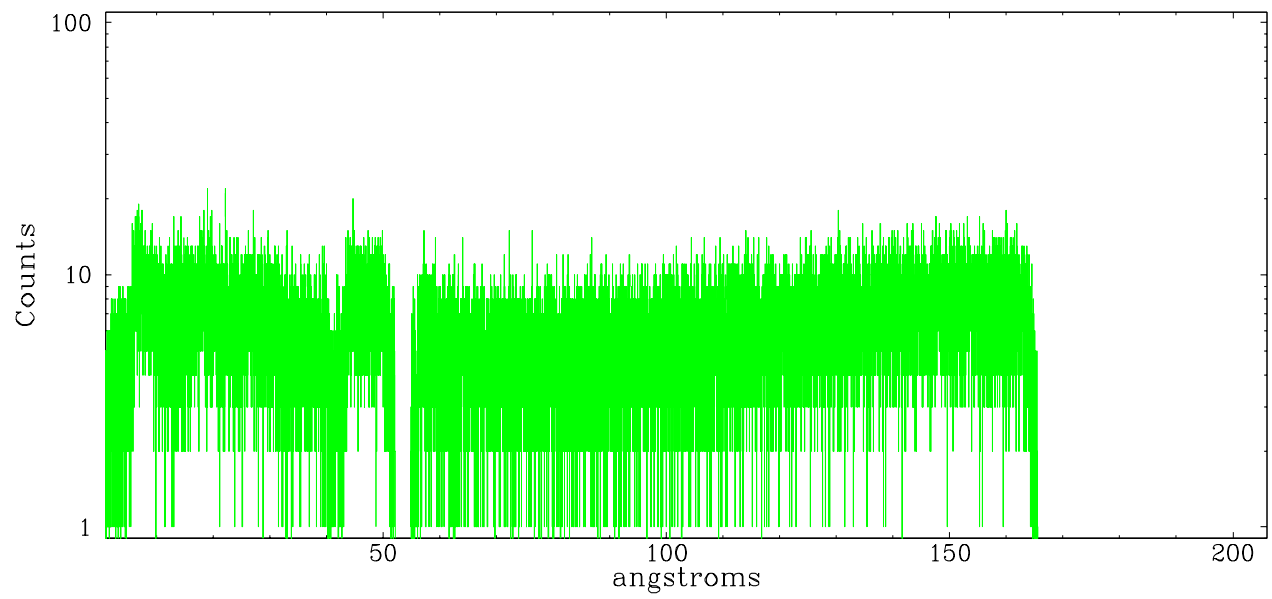
3 Gratings

3.1 LETG Arm

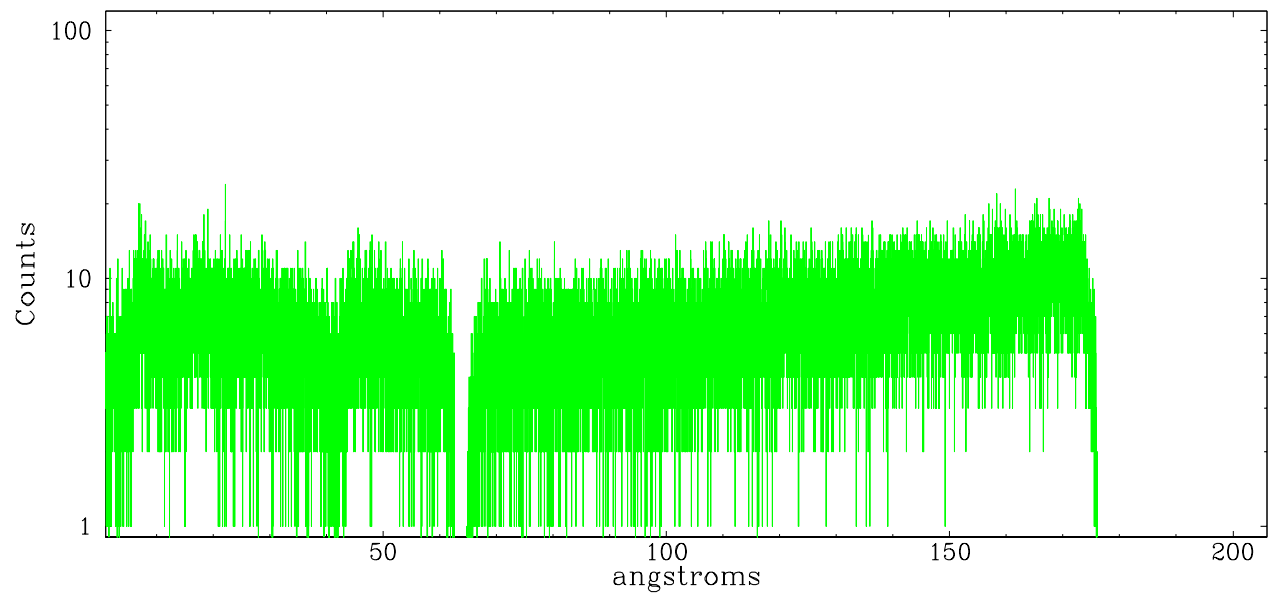


LETG Zero Order

leg order -1



leg order +1



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2007.08.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 92.034 |

A.2 Comments

Spikes in count rate during most of the observation. These spikes are presumably due to a high radiation environment.