

V&V Reference Report

L2 ASCDS Version : 7.6.7

Observation 5455 - L2 Version 3
Chandra X-Ray Center

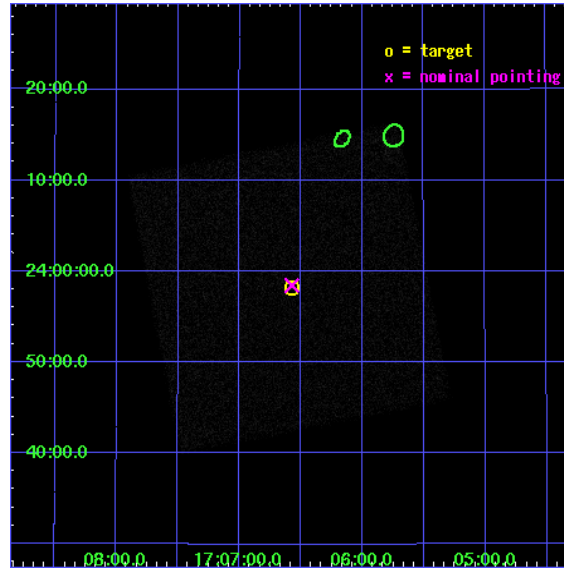
L2 Processing Date : Nov 24 2007

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 |
| 3 | Point Sources | 17 |
| A | Summary | 18 |
| A.1 | Status | 18 |
| A.2 | Comments | 18 |

1 Front

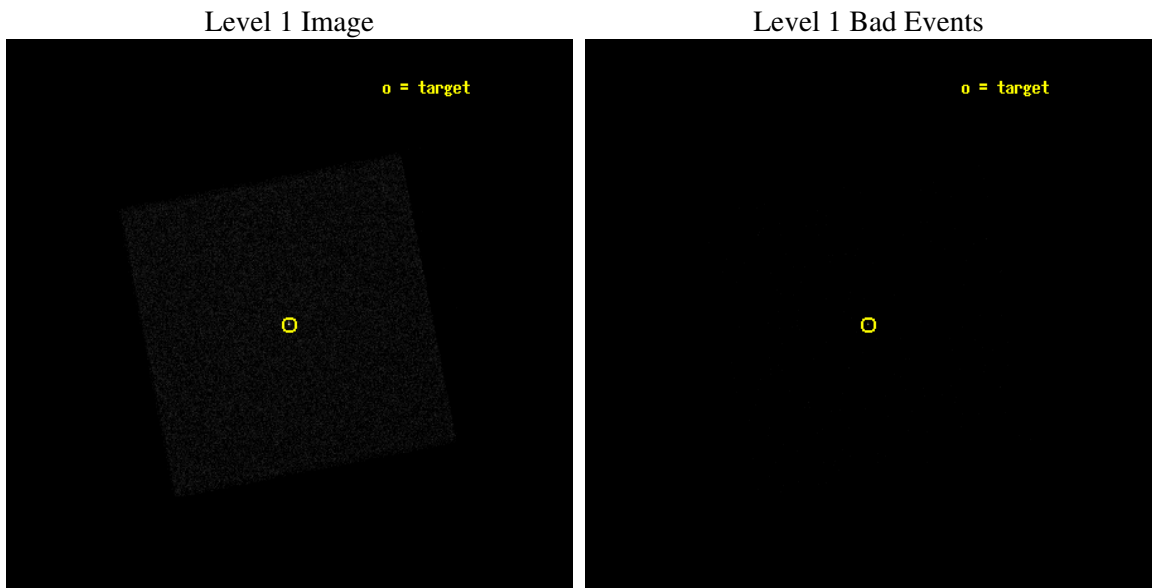
| | |
|----------|--|
| seq_num | 400385 |
| obs_id | 5455 |
| title | Precise astrometry of the X-ray sources 4U1700+24 and 4U1954+319 |
| observer | Dr. Nicola Masetti |
| object | 4U 1700+24 |
| ra_targ | 256.644167 |
| dec_targ | 23.970556 |
| ra_nom | 256.64326674318 |
| dec_nom | 23.974614930684 |
| roll_nom | 123.924440074 |
| revision | 3 |
| ontime | 1157.4813026786 |
| livetime | 1149.3013004914 |
| l2events | 45106 |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | |
|----------|---------------------|
| obi_num | 1 |
| ascdsver | 7.6.11.2 |
| caldbver | 3.4.1 |
| date | 2007-11-24T13:55:49 |
| revision | 3 |

| | |
|----------------|-----------------|
| sched_exp_time | 1000.000000 |
| ontime | 1157.4813026786 |
| l1events | 114341 |

2.1.3 Events

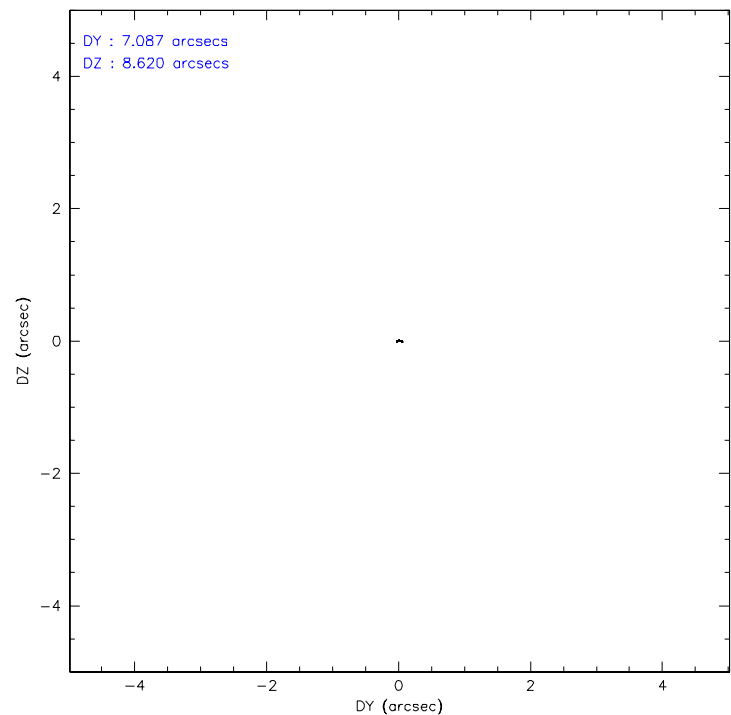
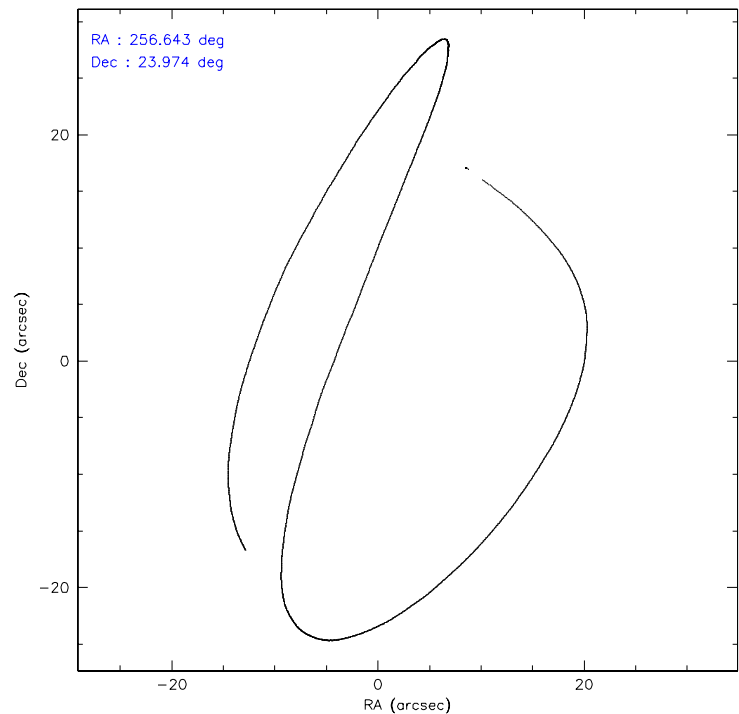
Level 1 Events

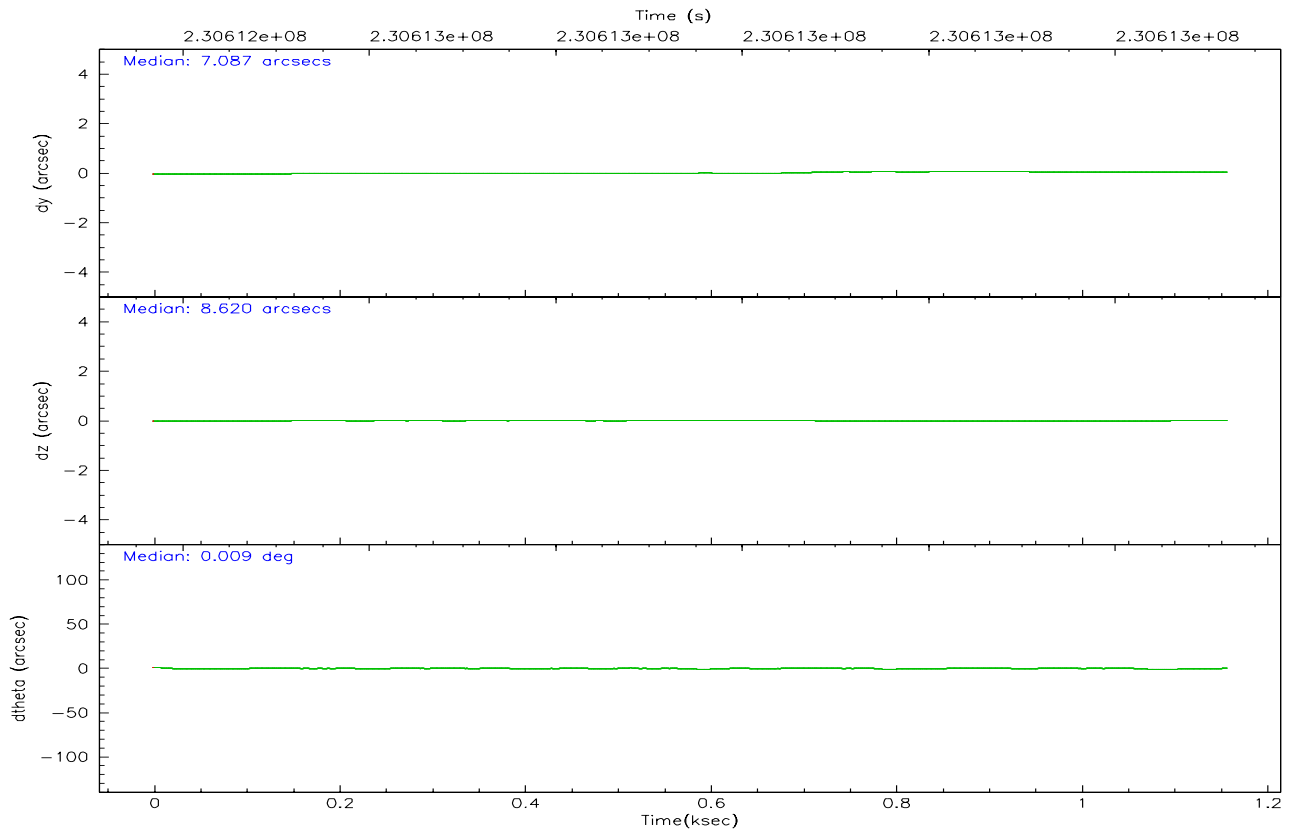
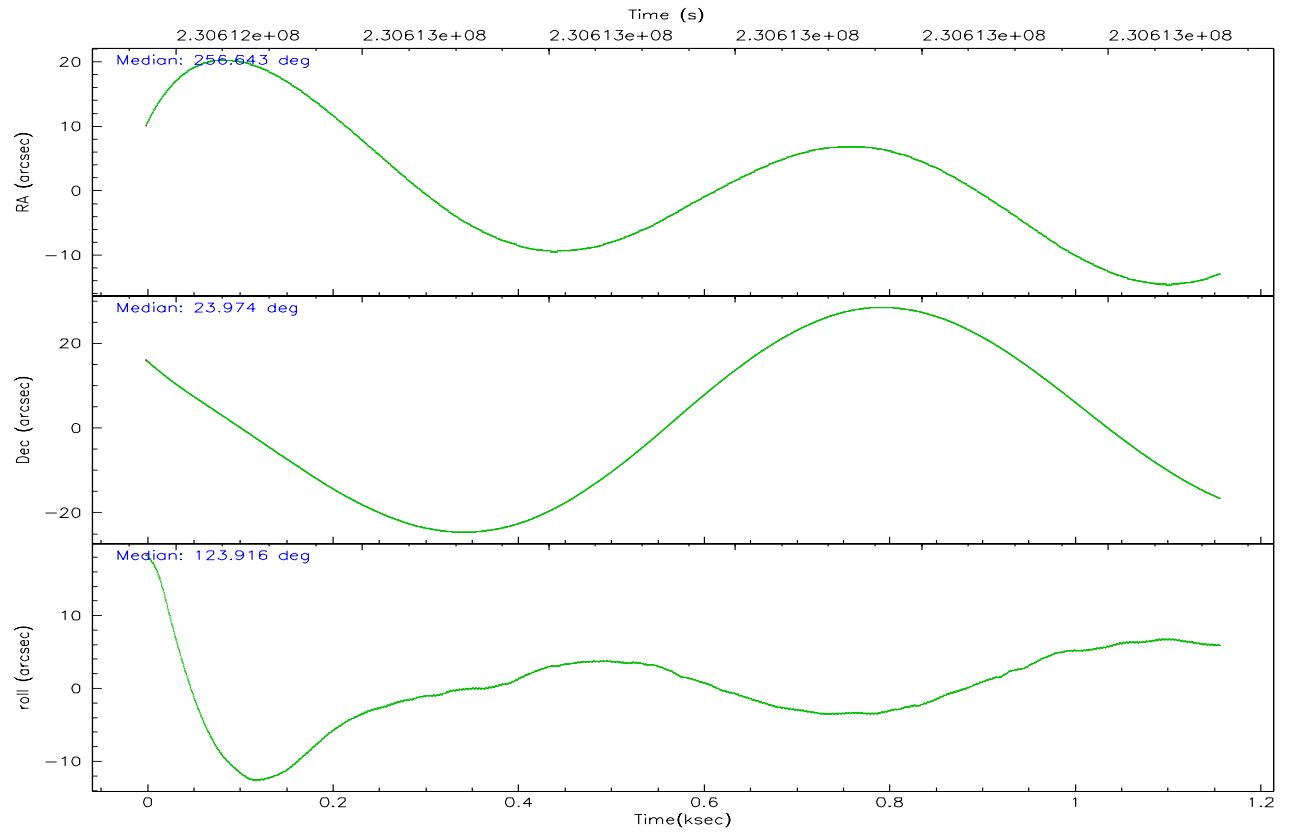
| | segment 0 |
|--------------------|----------------------|
| level 1 events | 114341 |
| rejected events | 48122 |
| rejected % | 42% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|------------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 6 | 6 |
| 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 | | | |
| Pointing RA | 256.670212 | 256.6432667431845 | | | |
| Pointing Dec | 23.963303 | 23.9746149306838 | | | |
| Pointing Roll | 124.008690 | 123.9244400740044 | | | |
| SIM focus pos (mm) | -1.040293 | -1.038866356238299 | | | |
| SIM defocus (mm) | 0 | 0.001426264420575141 | | | |
| SIM translation stage pos (mm) | 126.985494 | 126.9854943052878 | | | |
| SIM translation stage offset (mm) | 0 | -5.413686238853188e-06 | | | |
| Observation start time | 230612524.184000 | 230611567.13811 | | | |
| Observation start date | 2005-04-23T03:01:00 | 2005-04-23T02:46:07 | | | |
| Observation end time | 230613524.184000 | 230614458.66324 | | | |
| Observation end date | 2005-04-23T03:17:40 | 2005-04-23T03:34:18 | | | |

2.3 Aspect



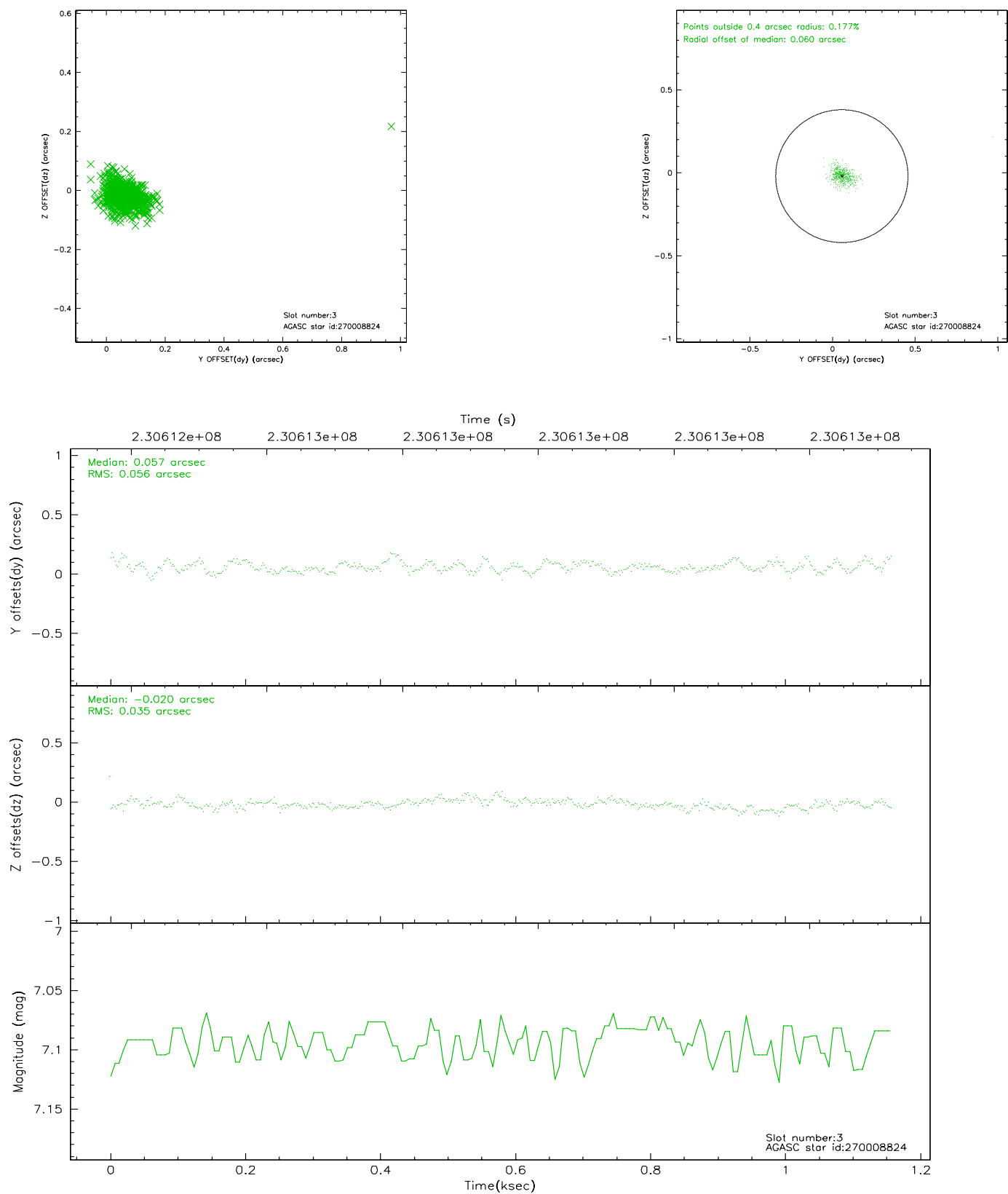


Slot Statistics

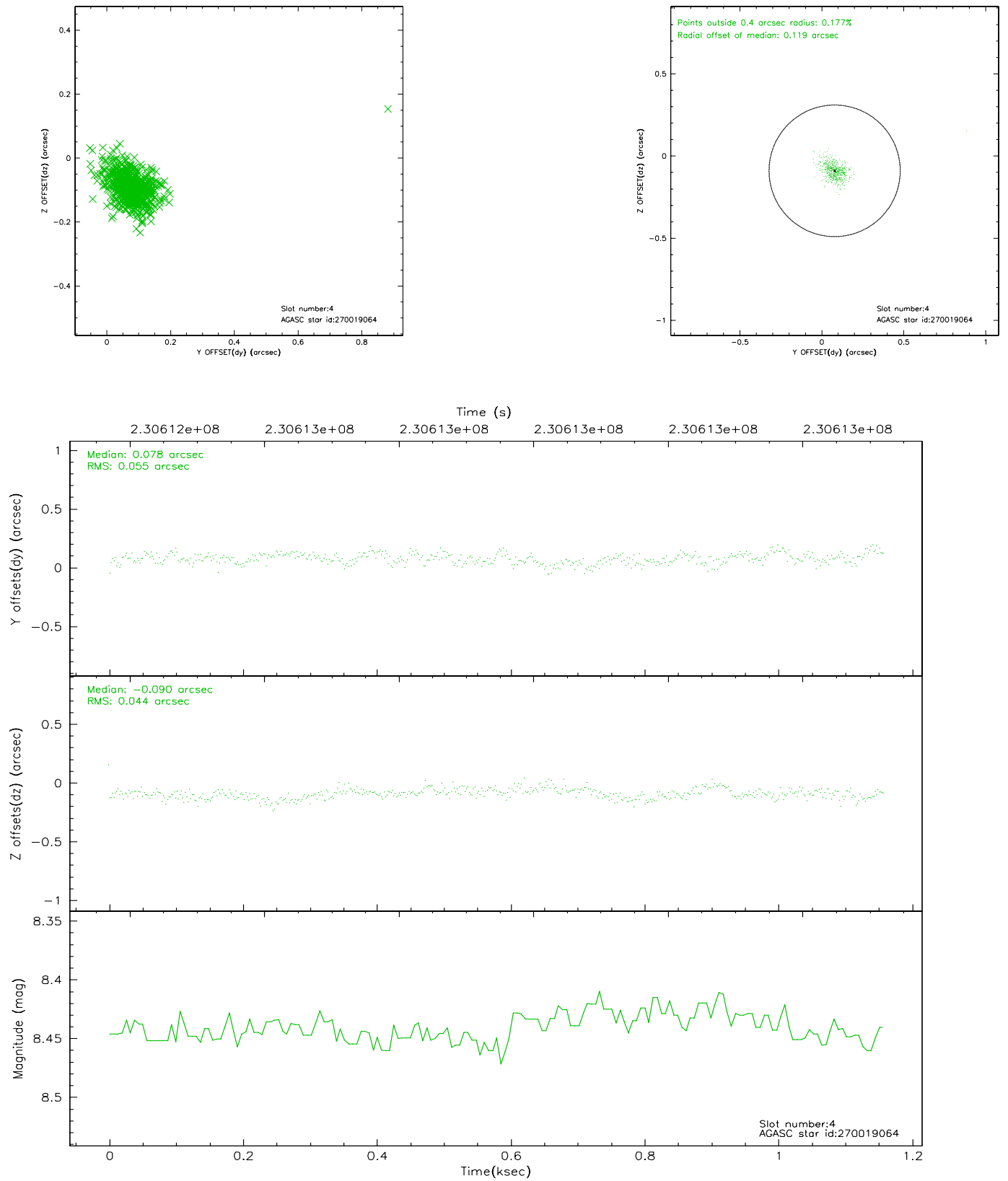
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-I-1 | 6.98 | 283 | 0.010 | 0.068 | 0.007 | 0.011 | 0.000000 | 0.000000 | -762.70 | -1296.49 |
| 1 | FID | HRC-I-2 | 7.01 | 283 | 0.110 | -0.098 | 0.006 | 0.010 | 0.000000 | 0.000000 | 847.34 | -1302.82 |
| 2 | FID | HRC-I-3 | 7.06 | 283 | -0.001 | -0.059 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1188.17 | 1003.35 |
| 3 | GUIDE | 270008824 | 7.09 | 566 | 0.057 | -0.020 | 0.055 | 0.096 | 256.514301 | 23.322063 | -1624.97 | 1718.23 |
| 4 | GUIDE | 270019064 | 8.44 | 566 | 0.078 | -0.090 | 0.063 | 0.110 | 256.784607 | 23.399474 | -1896.67 | 825.08 |
| 5 | GUIDE | 270533184 | 8.67 | 566 | 0.172 | -0.010 | 0.071 | 0.116 | 256.939866 | 24.583486 | 1355.18 | -1979.26 |
| 6 | GUIDE | 270537568 | 7.26 | 566 | -0.184 | 0.205 | 0.079 | 0.131 | 257.139787 | 24.486485 | 705.59 | -2333.15 |
| 7 | GUIDE | 270011000 | 9.36 | 565 | -0.119 | -0.089 | 0.100 | 0.171 | 256.249177 | 24.250349 | 1632.66 | 562.66 |

2.4 Star Slots

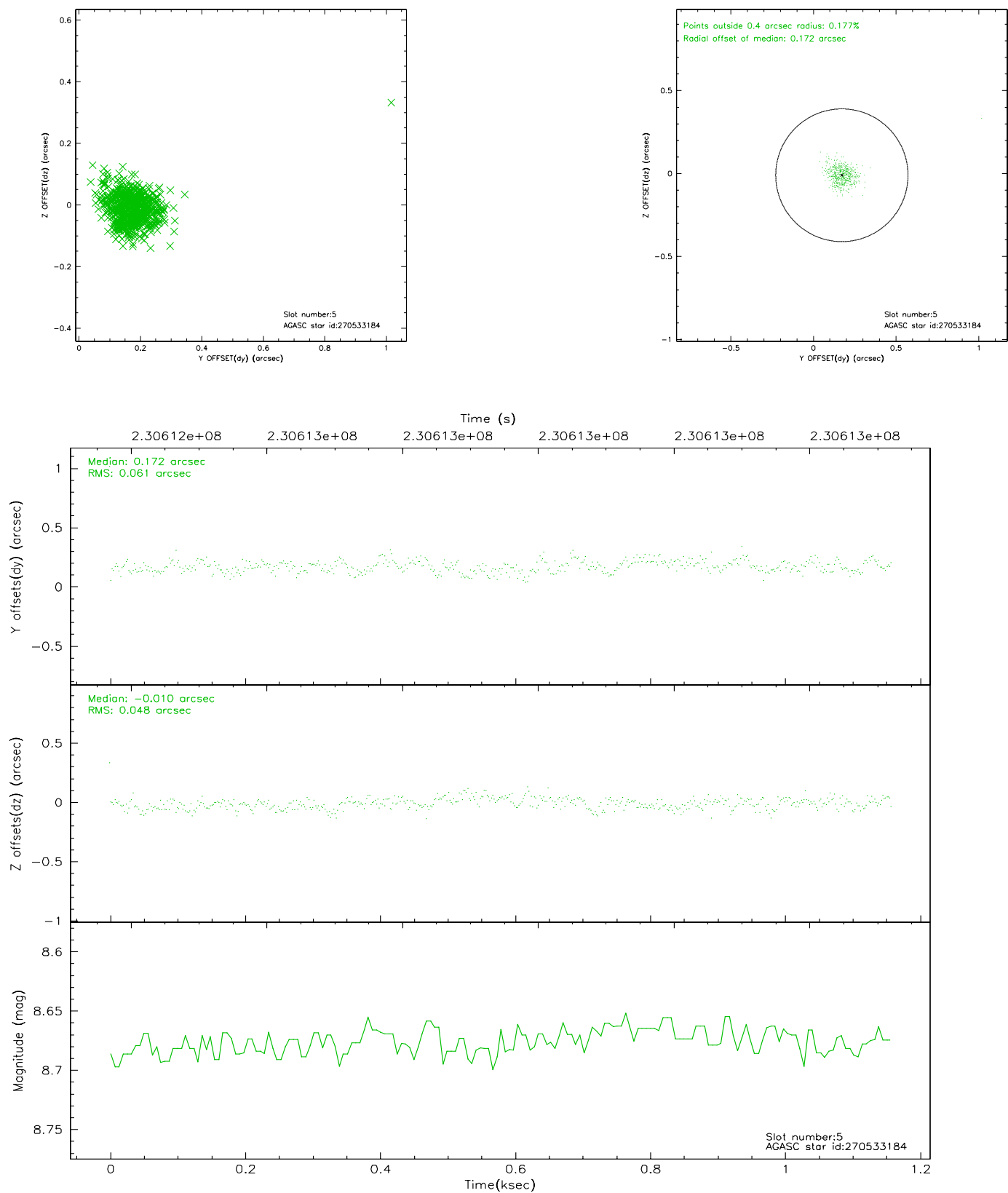
2.4.1 Slot 3



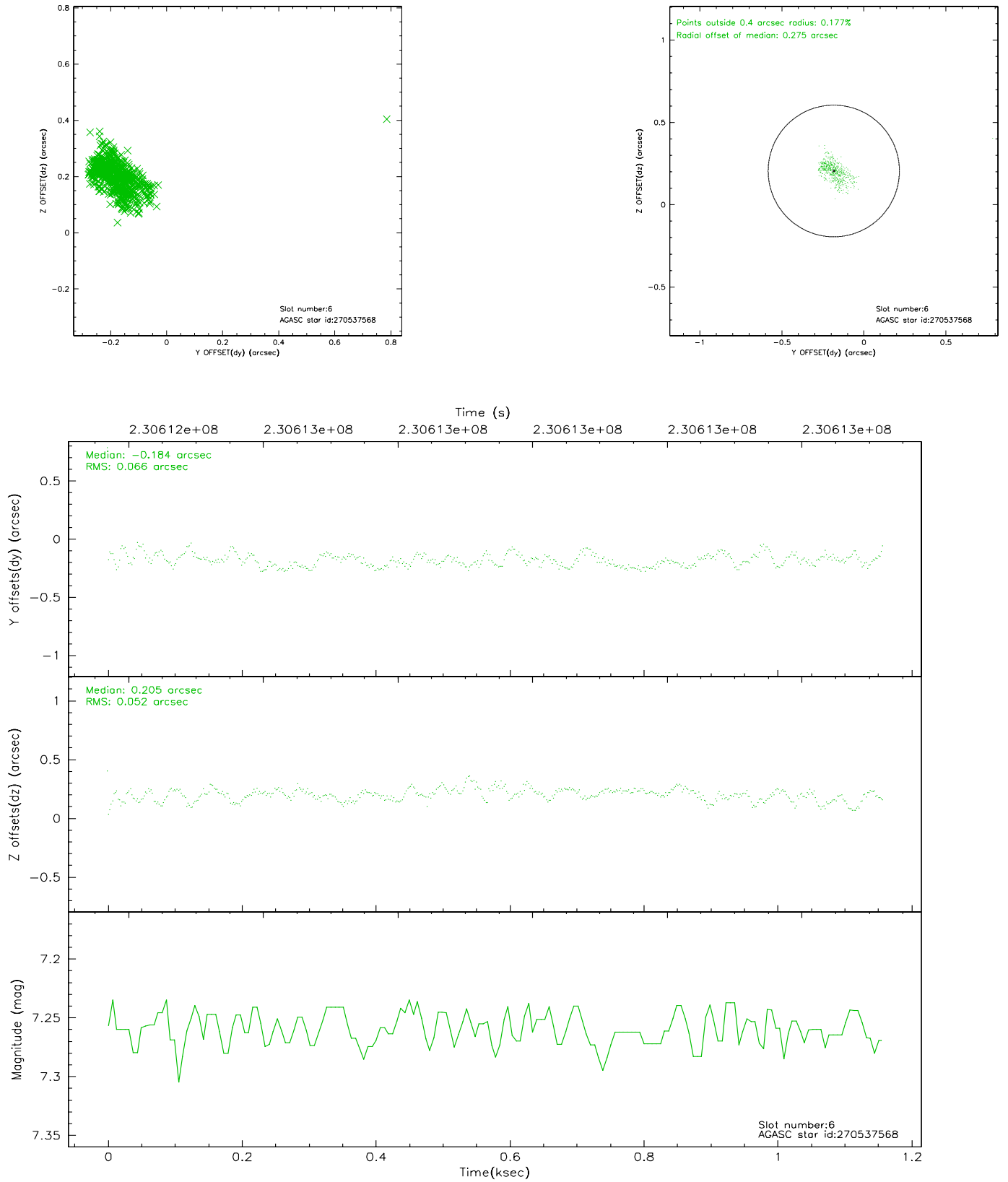
2.4.2 Slot 4



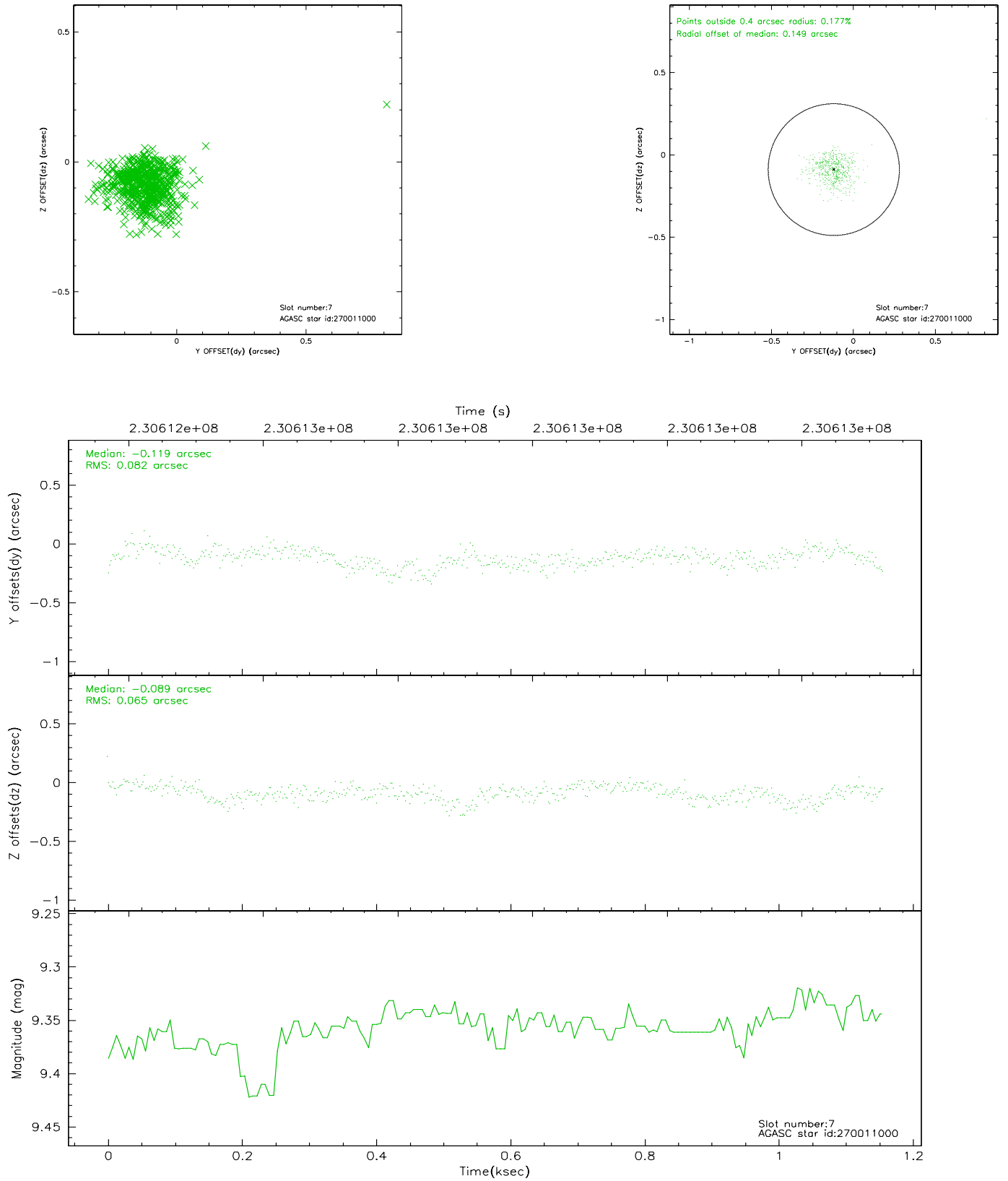
2.4.3 Slot 5



2.4.4 Slot 6

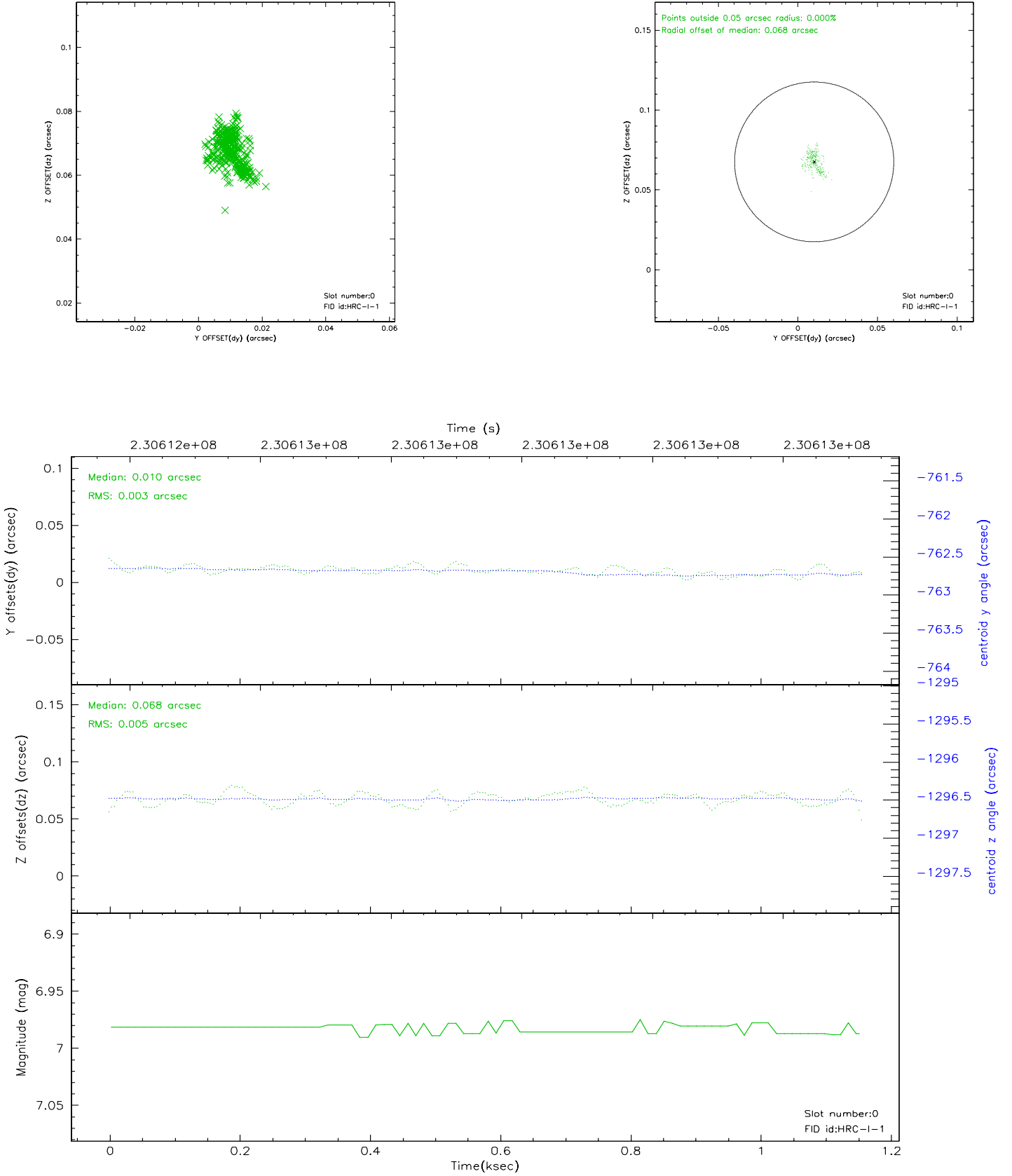


2.4.5 Slot 7

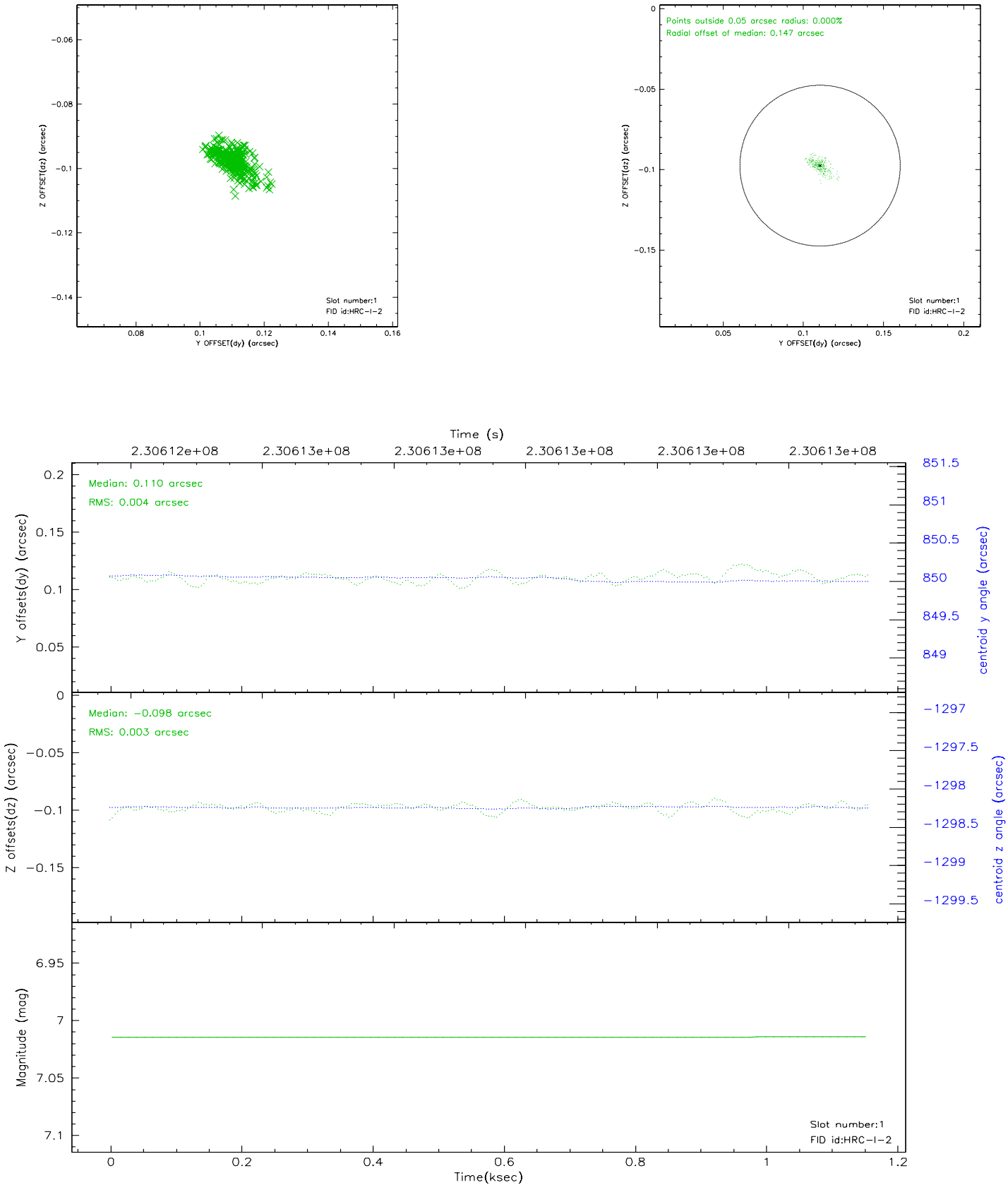


2.5 FID Slots

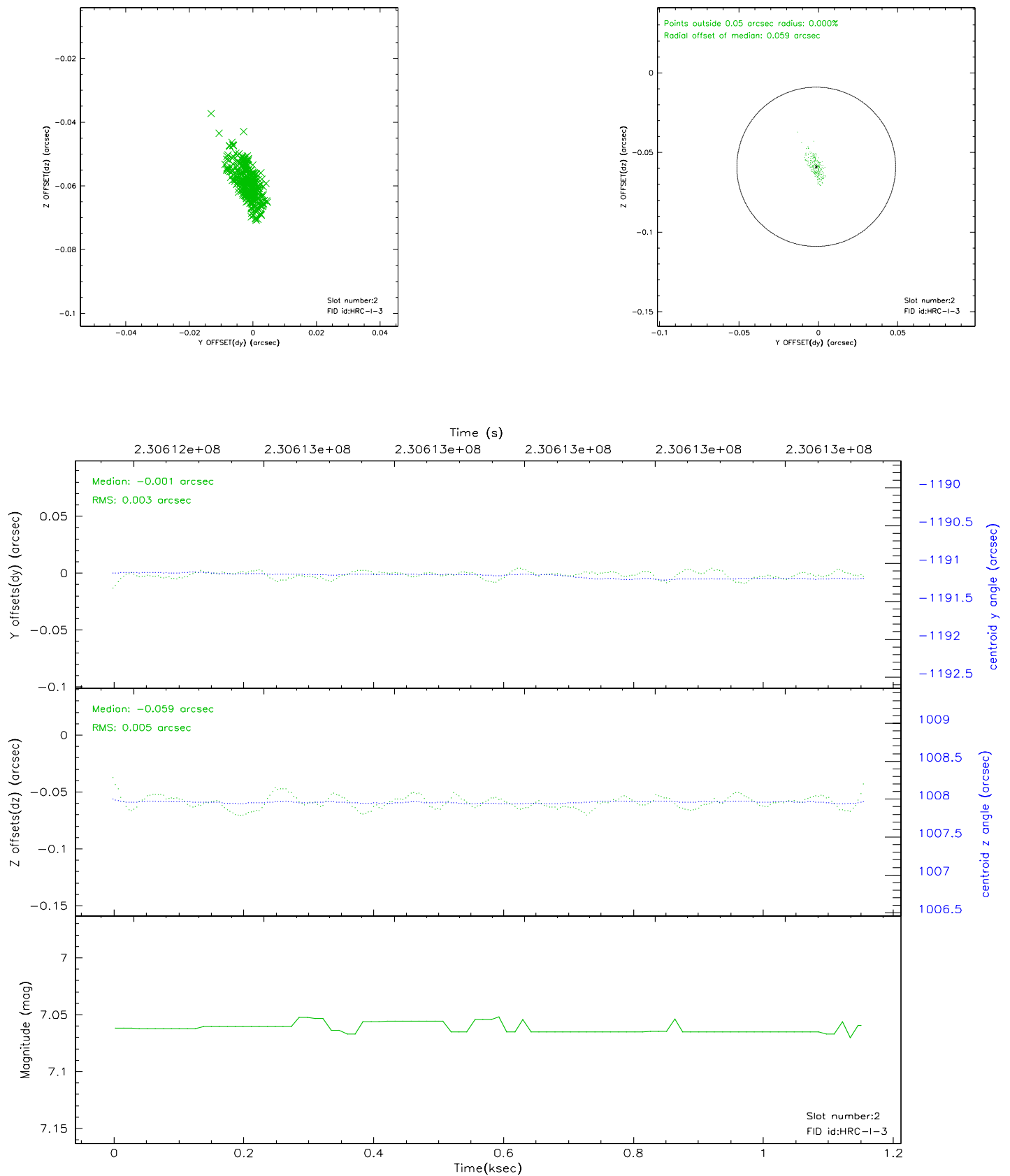
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources

17.03 arcmin



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2007.12.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.157481 |

A.2 Comments

The current observation has been reprocessed as part of Repro III ('C' supplement) the purpose of which is to update all HRC-I ObsIDs since Jan 2000 to the latest calibrations available for that configuration. Specifically, we are updating the DEGAP solution and the Gain Maps applied. For more information see the Repro IIIC web page at:

<http://asc.harvard.edu/cda/repro3.html#IIIC>

and the associated links.