

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 3690 - L2 Version 001  
Chandra X-Ray Center

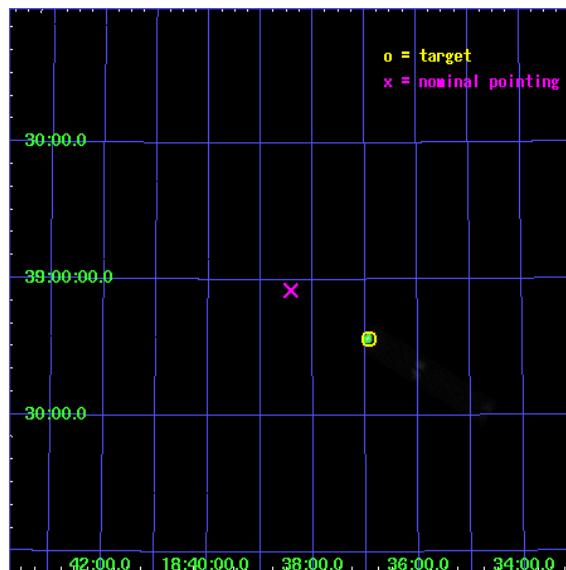
L2 Processing Date : Jul 19 2006

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# 1 Front

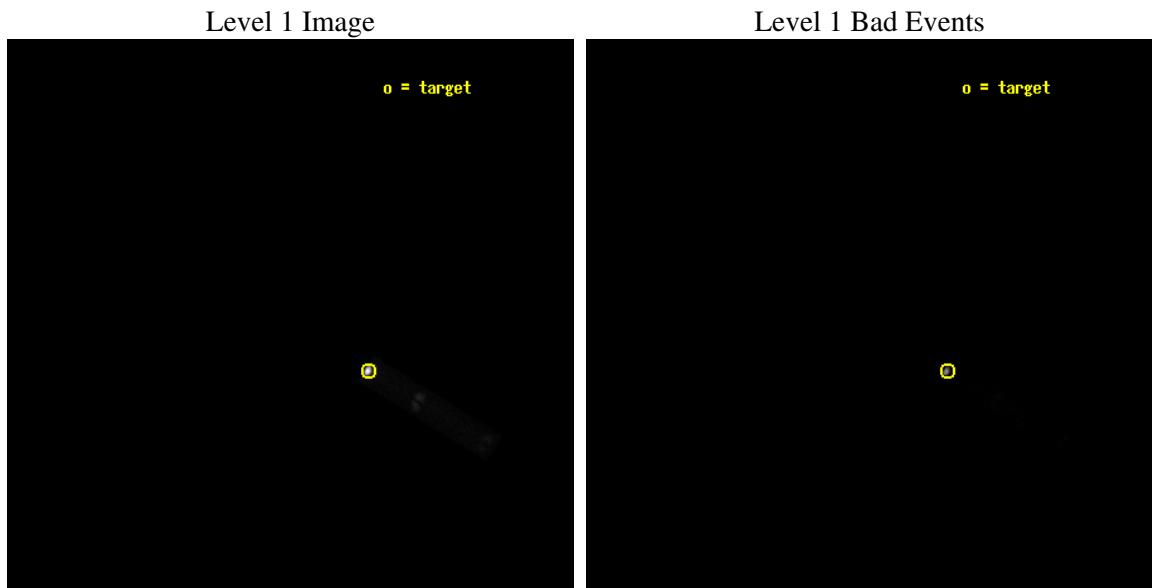
|          |   |
|----------|---|
| seq_num  | 290244  |
| obs_id   | 3690  |
| title    | AO4 MEASUREMENTS OF THE OPTICAL/UV TRANSMISSION OF THE HRC AND ACIS FILTERS |
| observer | Dr. CXC Calibration   |
| object   | VEGA  |
| ra_targ  | 279.235   |
| dec_targ | 38.783778   |
| ra_nom   | 279.60492928173   |
| dec_nom  | 38.960697682205   |
| roll_nom | 31.578161422076   |
| revision | 2   |
| ontime   | 2142.506339848  |
| livetime | 809.24878787106   |
| l2events | 336505  |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.8               |
| caldbver | 3.2.2               |
| date     | 2006-07-19T13:28:25 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 2000.000000     |
| ontime         | 2178.1250913441 |
| l1events       | 439335          |

### 2.1.3 Events

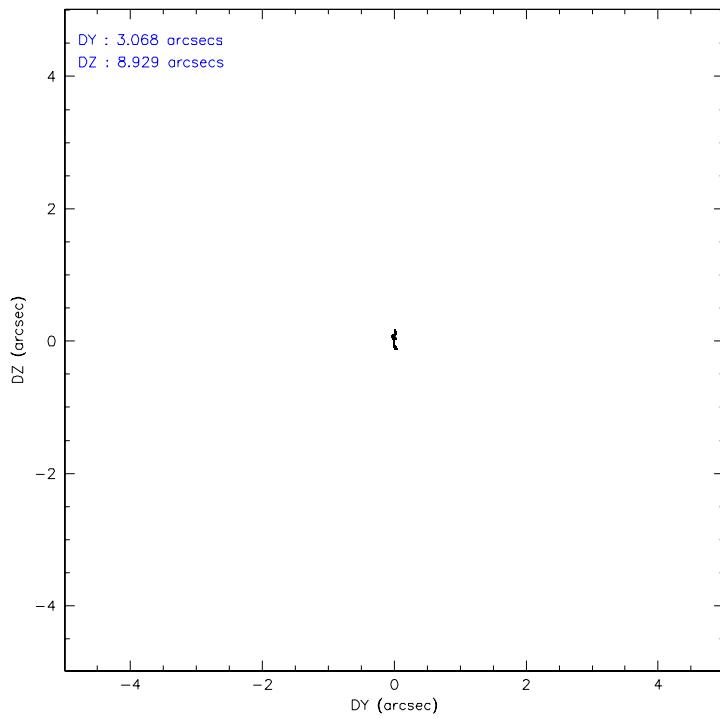
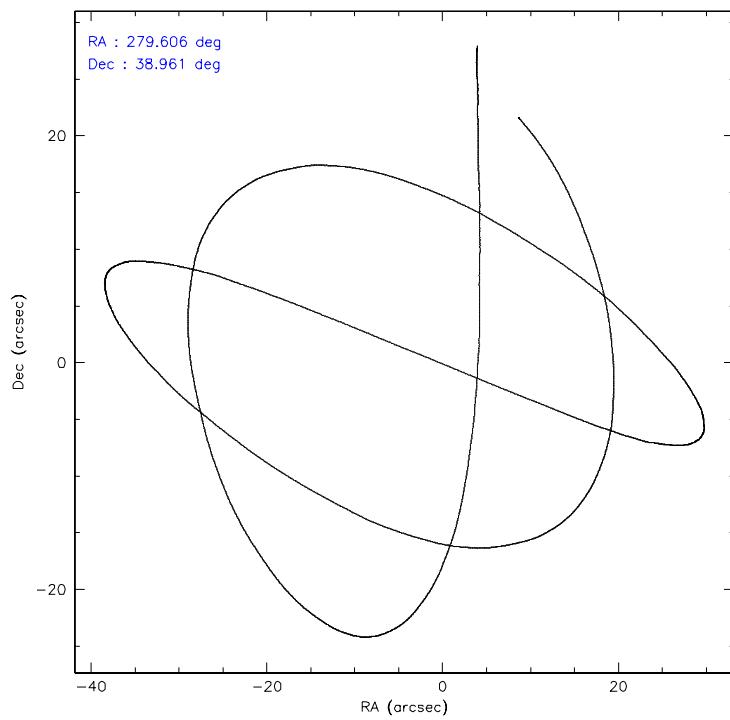
Level 1 Events

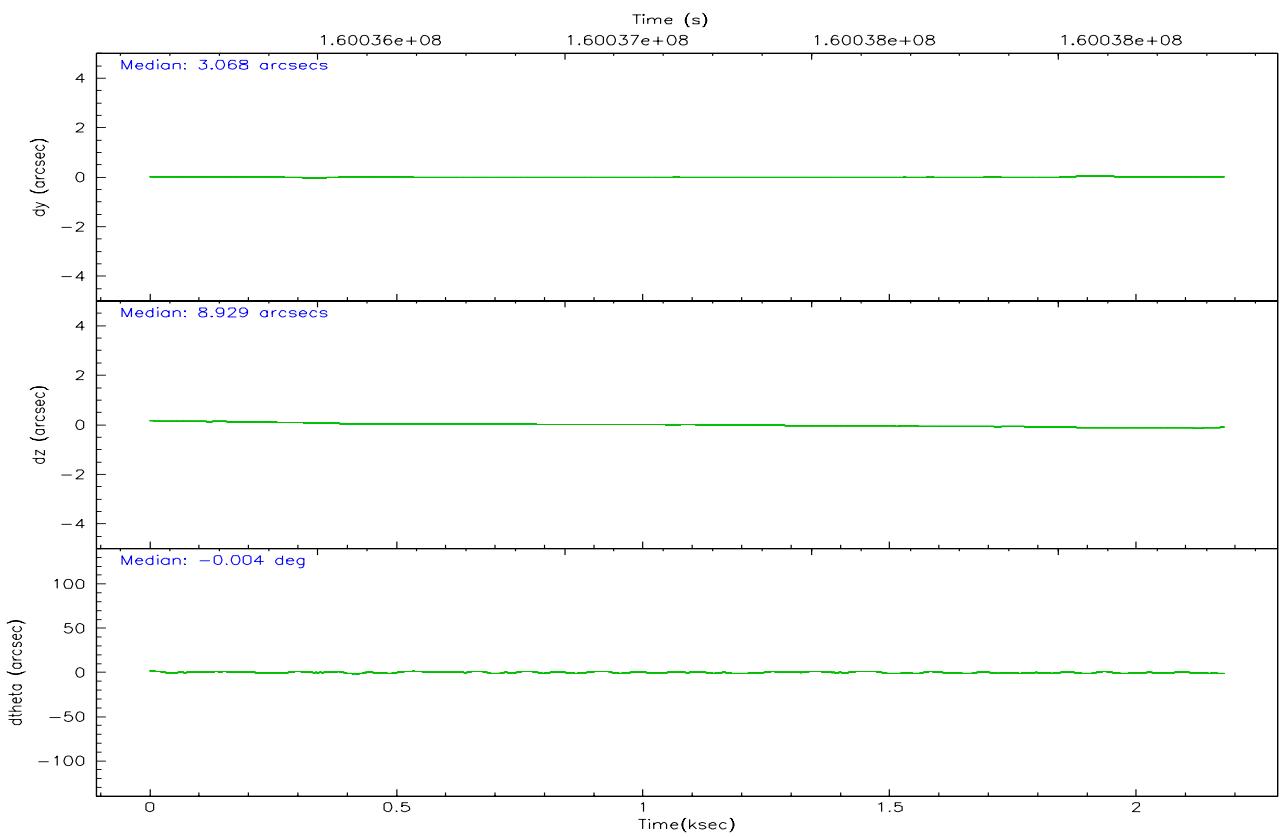
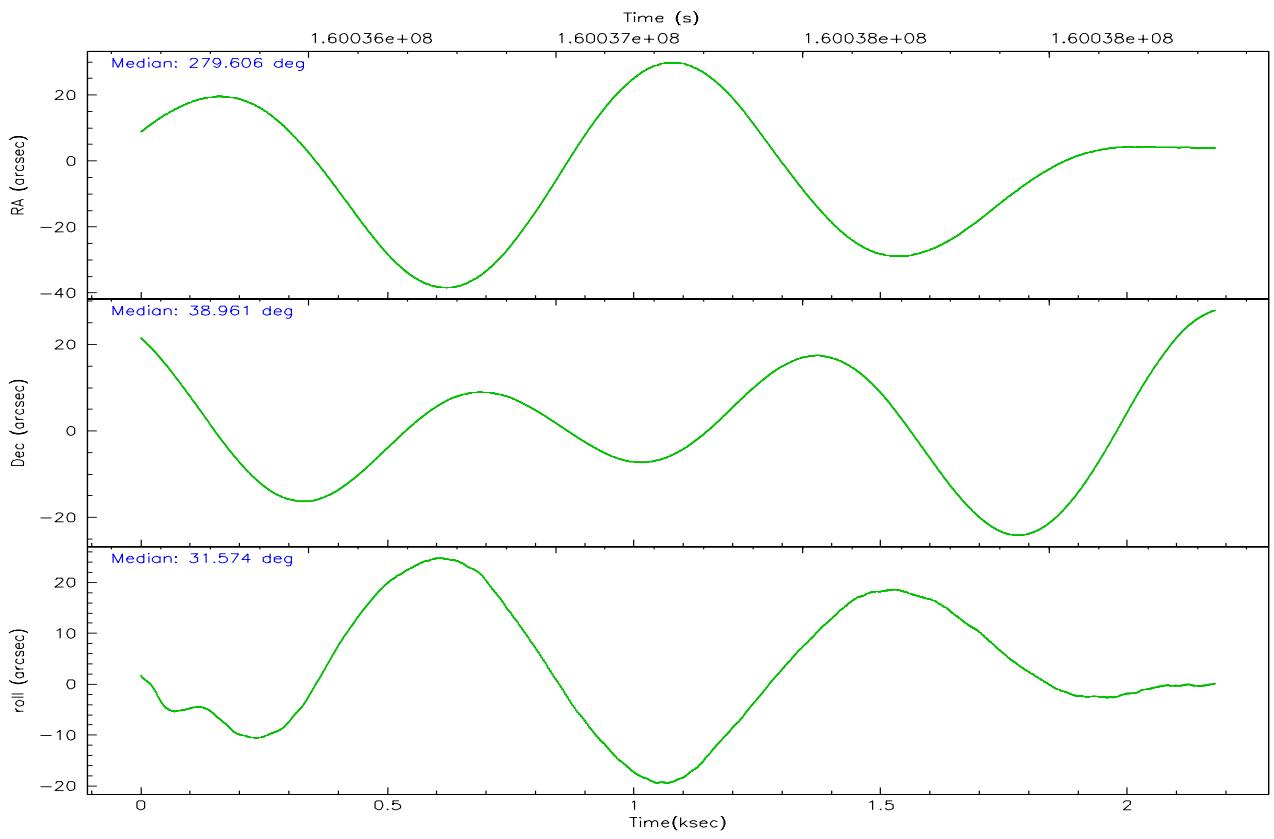
|                 | segment<br>1 | segment<br>2 | segment<br>3 |
|-----------------|--------------|--------------|--------------|
| level 1 events  | 425966       | 12958        | 411          |
| rejected events | 36853        | 12943        | 411          |
| rejected %      | 8%           | 99%          | 100%         |

## 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                           | NONE                | NONE                 | Obspar update status         | NONE      | UPDATED |
| Data mode                         | OBSERVING           | OBSERVING            |                              |           |         |
| Observation mode                  | POINTING            | POINTING             |                              |           |         |
| Pointing RA                       | 279.588887          | 279.6049292817256    |                              |           |         |
| Pointing Dec                      | 38.935120           | 38.96069768220549    |                              |           |         |
| Pointing Roll                     | 31.520930           | 31.57816142207554    |                              |           |         |
| Window start time                 | 159019264.184000    | 159019264.184000     |                              |           |         |
| Window stop time                  | 161697664.184000    | 161697664.184000     |                              |           |         |
| SIM focus pos (mm)                | -1.429586           | -1.428180813131781   |                              |           |         |
| SIM defocus (mm)                  | 0.1037507710433287  | 0.1051558262725154   |                              |           |         |
| SIM translation stage pos (mm)    | 250.455976          | 250.466033080201     |                              |           |         |
| SIM translation stage offset (mm) | 0                   | -0.01005468664627074 |                              |           |         |
| Observation start time            | 160036339.184000    | 160035963.43725      |                              |           |         |
| Observation start date            | 2003-01-27T06:31:15 | 2003-01-27T06:26:03  |                              |           |         |
| Observation end time              | 160038339.184000    | 160038473.14985      |                              |           |         |
| Observation end date              | 2003-01-27T07:04:35 | 2003-01-27T07:07:53  |                              |           |         |

## 2.3 Aspect





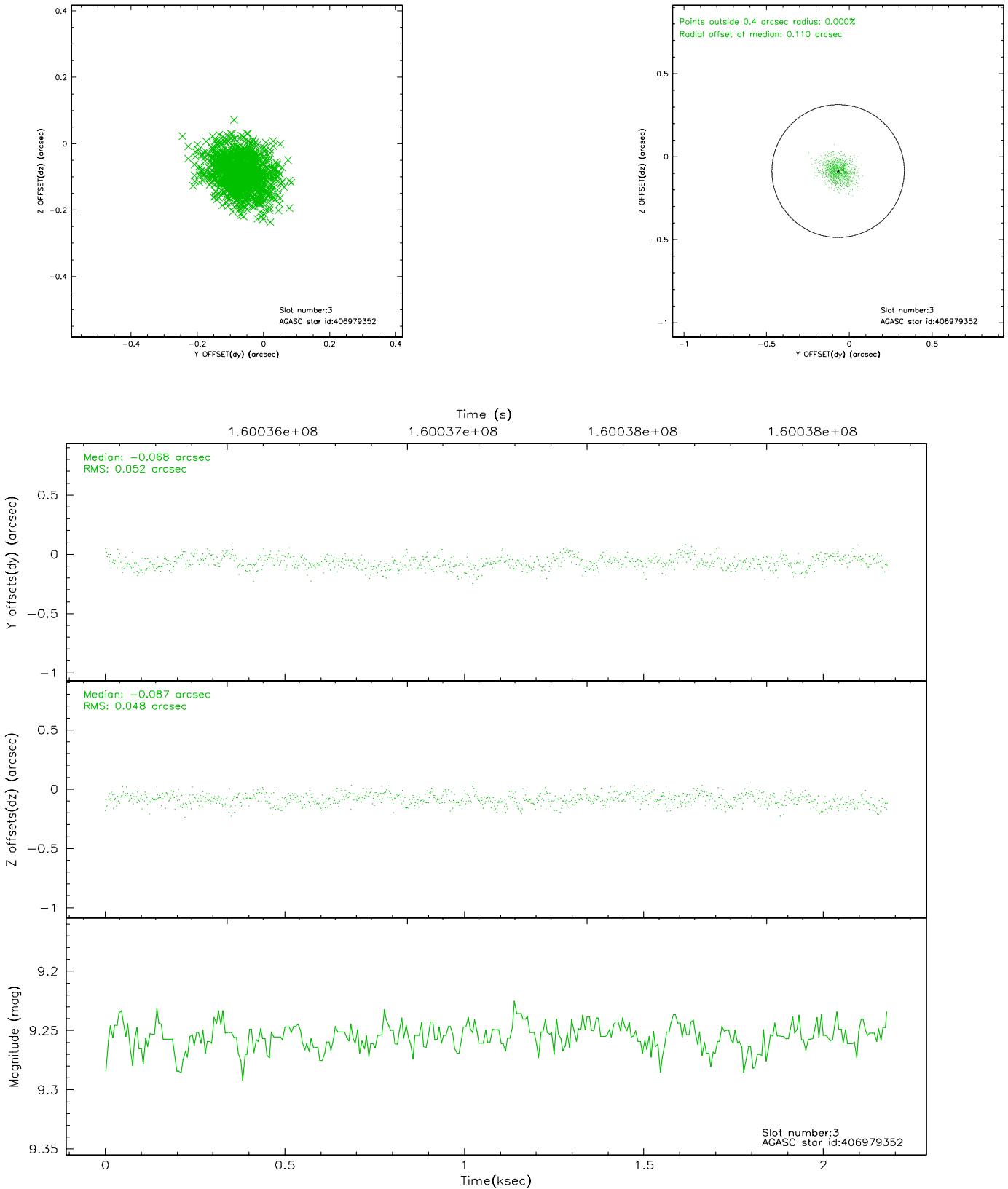
### Slot Statistics

| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-S-1   | 7.04 | 532   | 0.160  | -0.147 | 0.008 | 0.013 | 0.000000   | 0.000000  | -1157.08 | -457.56  |
| 1    | FID    | HRC-S-2   | 7.03 | 532   | 0.087  | -0.095 | 0.004 | 0.008 | 0.000000   | 0.000000  | 1240.35  | -451.00  |
| 2    | FID    | HRC-S-3   | 7.05 | 532   | 0.143  | -0.060 | 0.009 | 0.014 | 0.000000   | 0.000000  | -1157.49 | 571.21   |
| 3    | GUIDE  | 406979352 | 9.26 | 1064  | -0.068 | -0.087 | 0.075 | 0.123 | 279.968297 | 39.230258 | 1458.43  | 355.11   |
| 4    | GUIDE  | 406980288 | 9.31 | 1063  | 0.052  | -0.064 | 0.098 | 0.159 | 278.903147 | 39.061646 | -1389.83 | 1398.21  |
| 5    | GUIDE  | 406989616 | 8.23 | 1064  | 0.047  | 0.037  | 0.062 | 0.100 | 279.202881 | 38.520843 | -1706.39 | -698.67  |
| 6    | GUIDE  | 407521232 | 8.64 | 1064  | -0.087 | 0.027  | 0.081 | 0.118 | 279.628883 | 39.431715 | 1027.84  | 1466.38  |
| 7    | GUIDE  | 406987320 | 9.69 | 1063  | 0.057  | 0.084  | 0.116 | 0.180 | 279.420366 | 38.109597 | -1959.17 | -2281.06 |

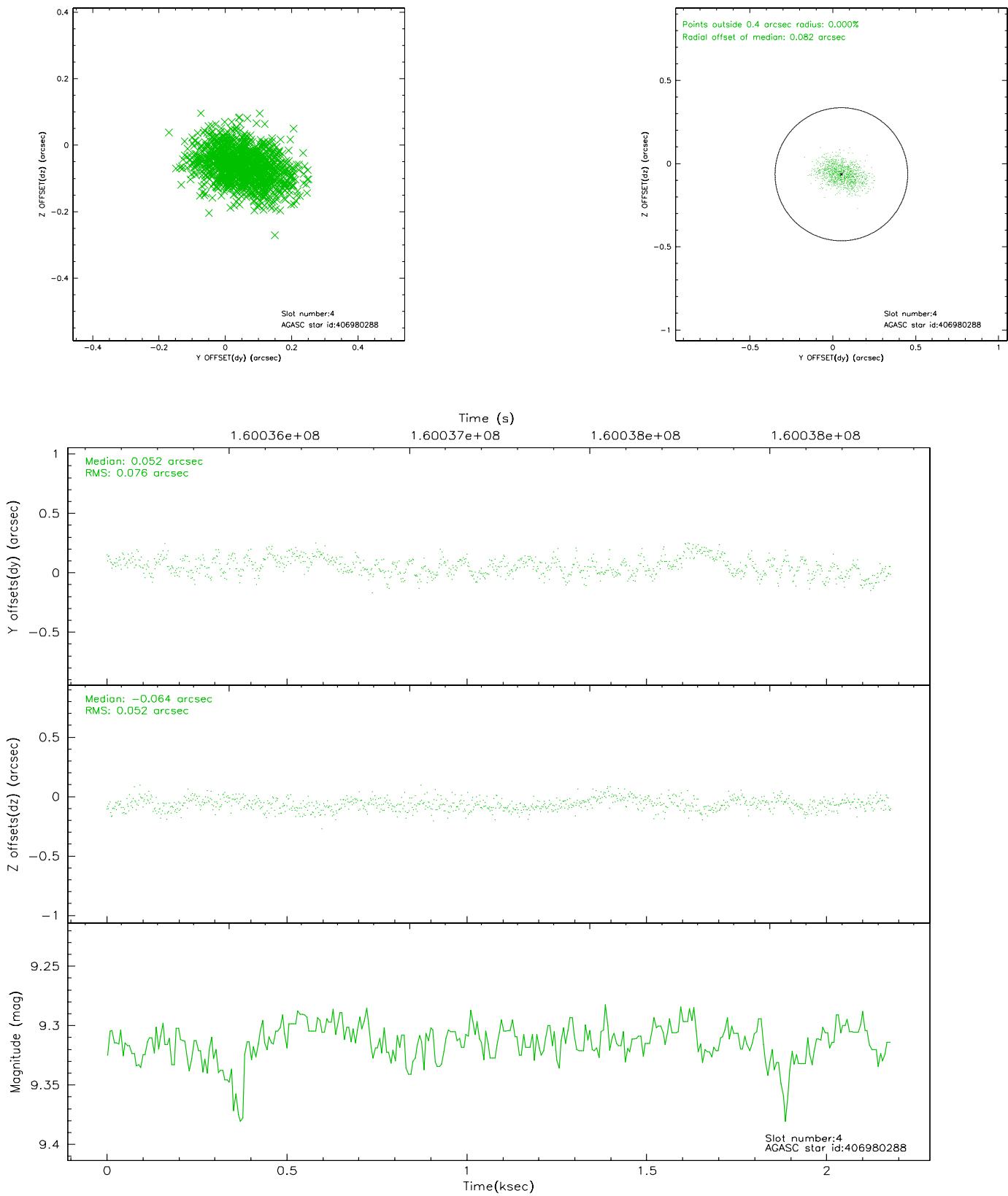
∞

## 2.4 Star Slots

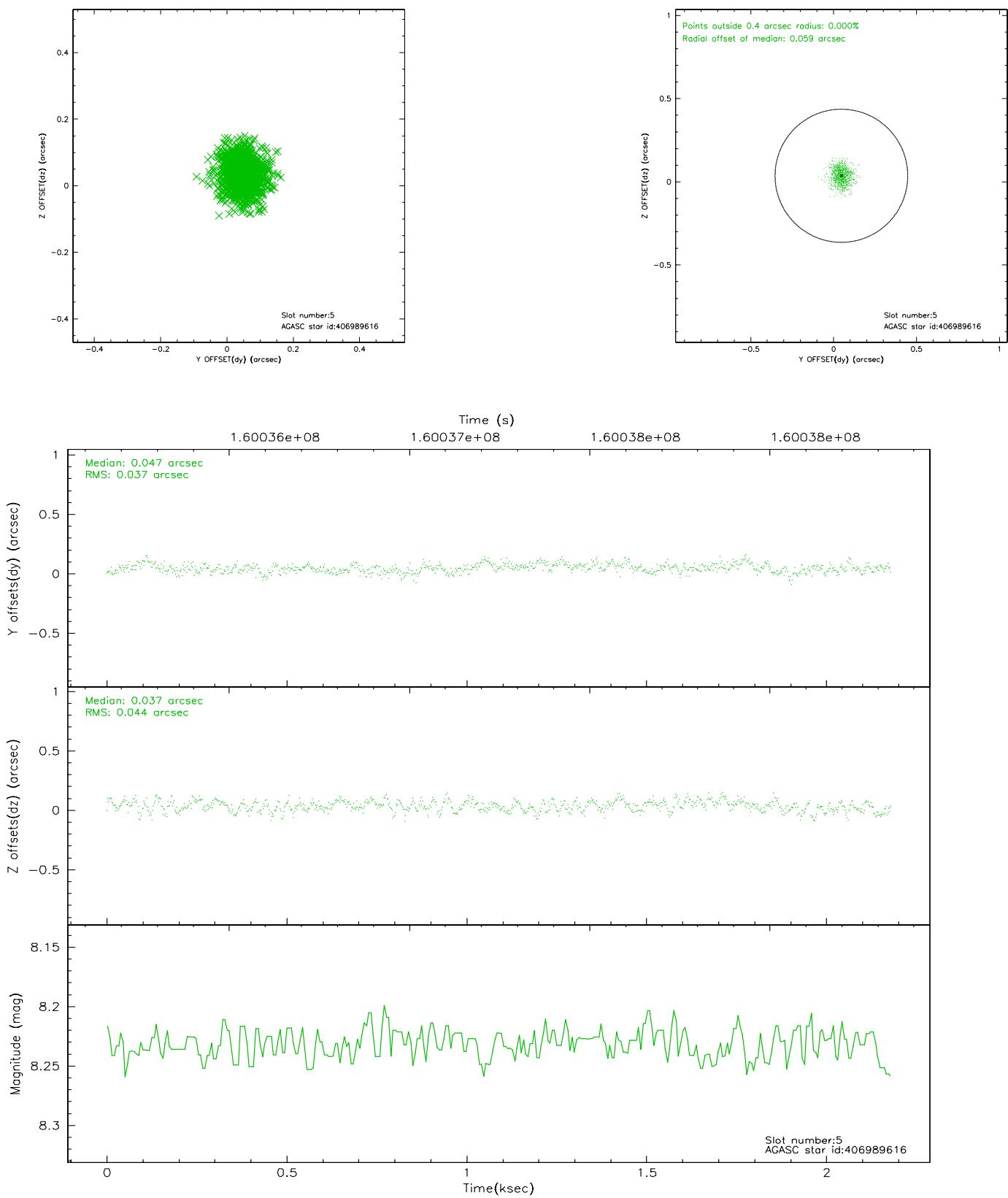
### 2.4.1 Slot 3



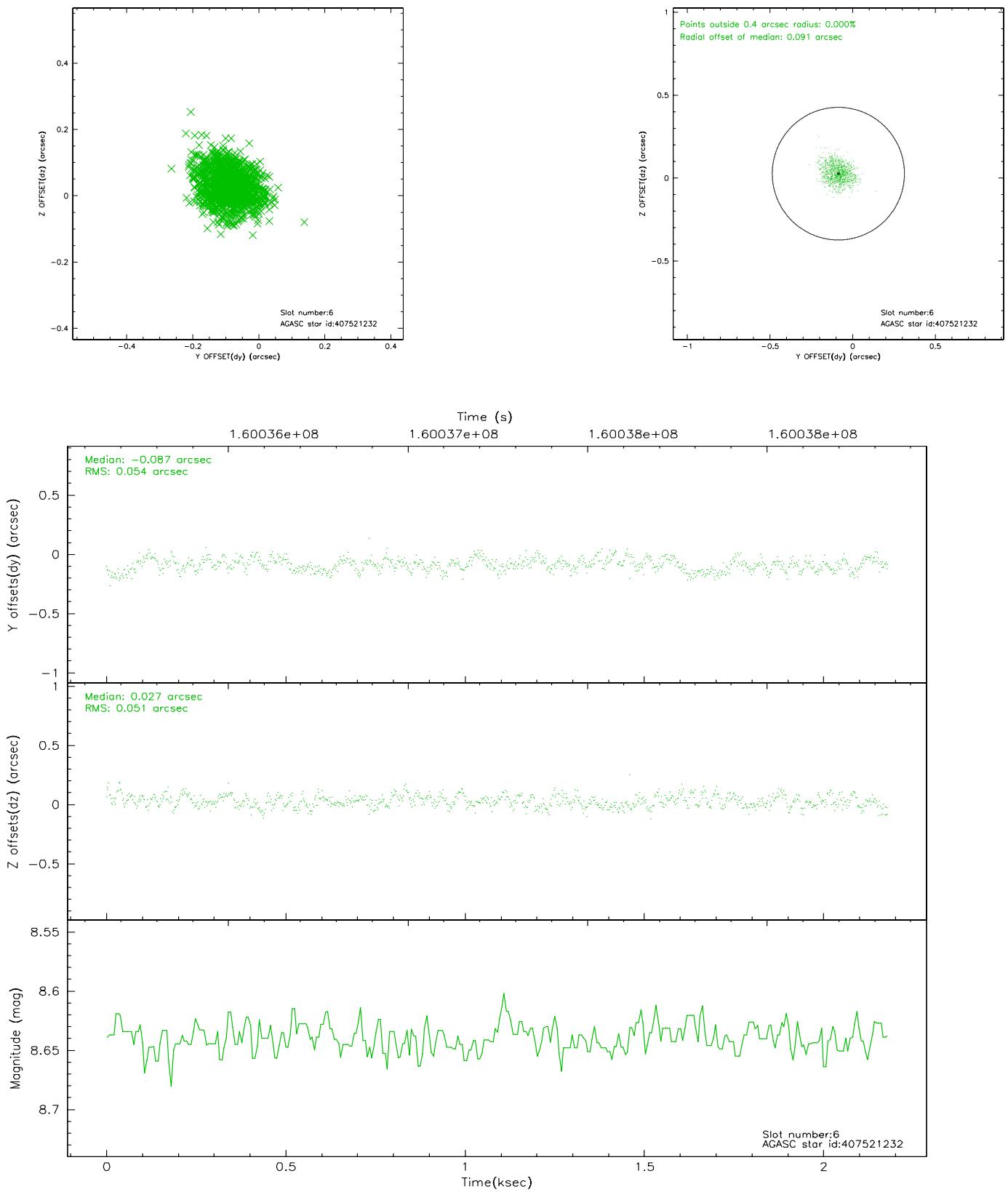
## 2.4.2 Slot 4



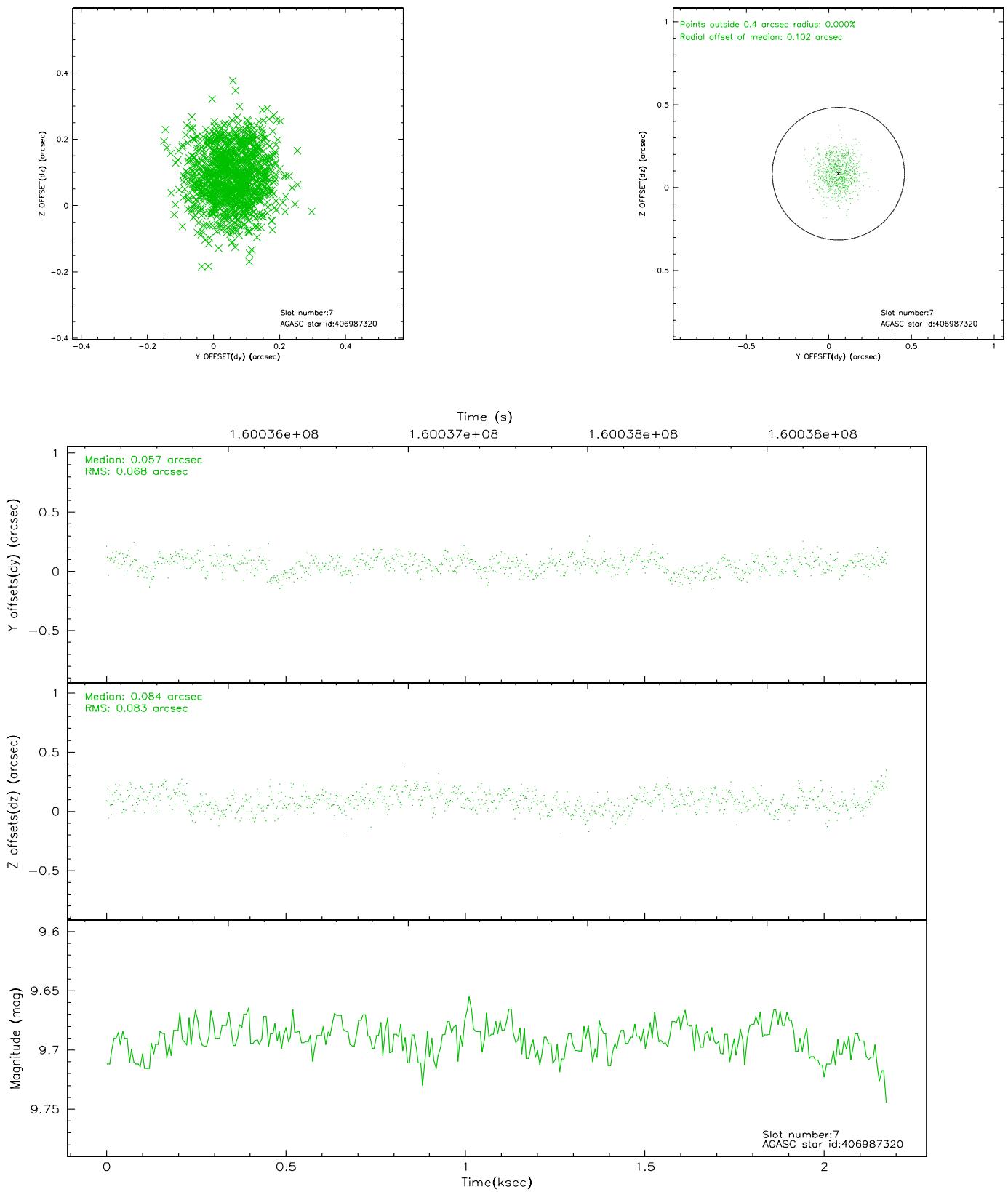
### 2.4.3 Slot 5



## 2.4.4 Slot 6

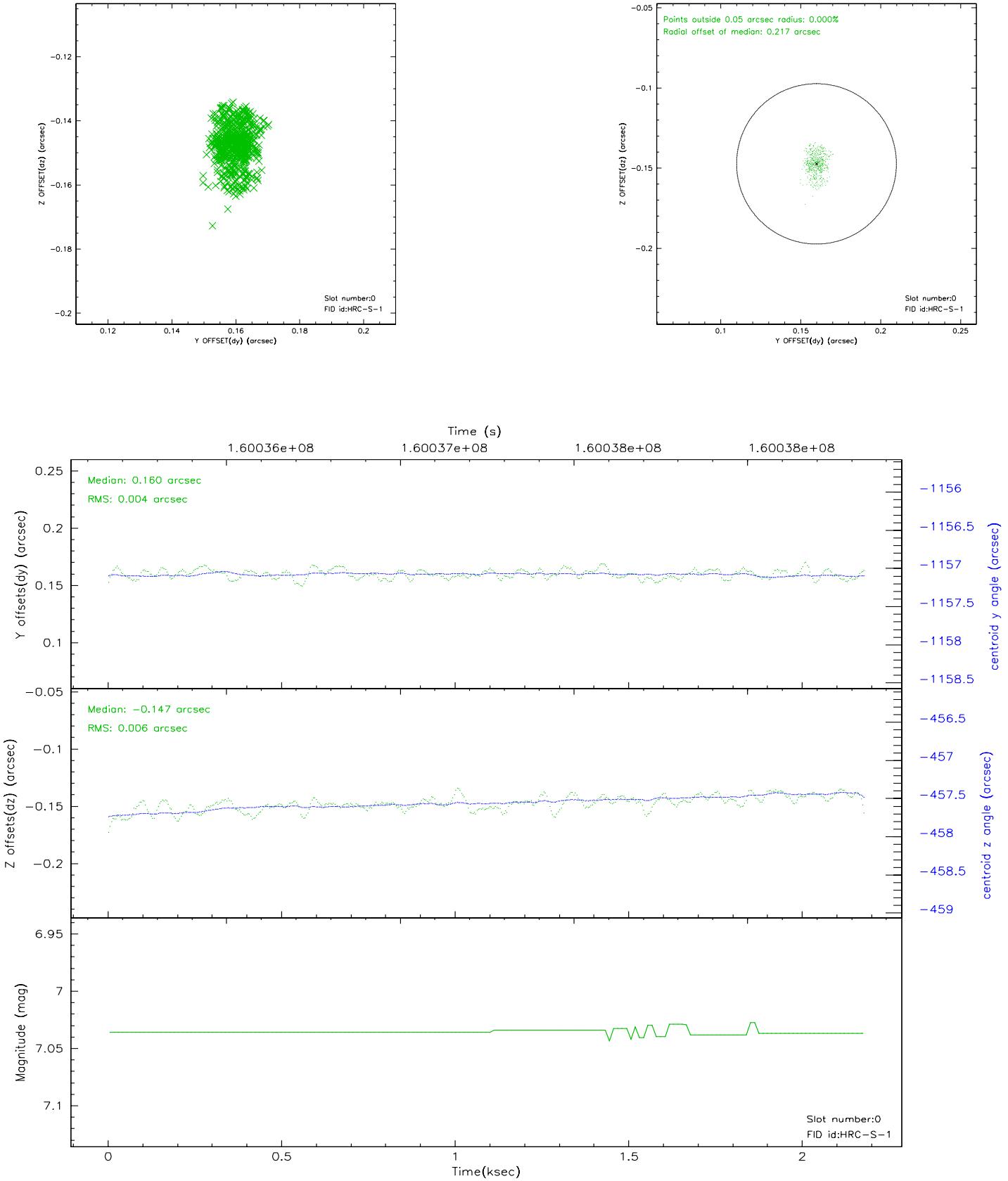


## 2.4.5 Slot 7

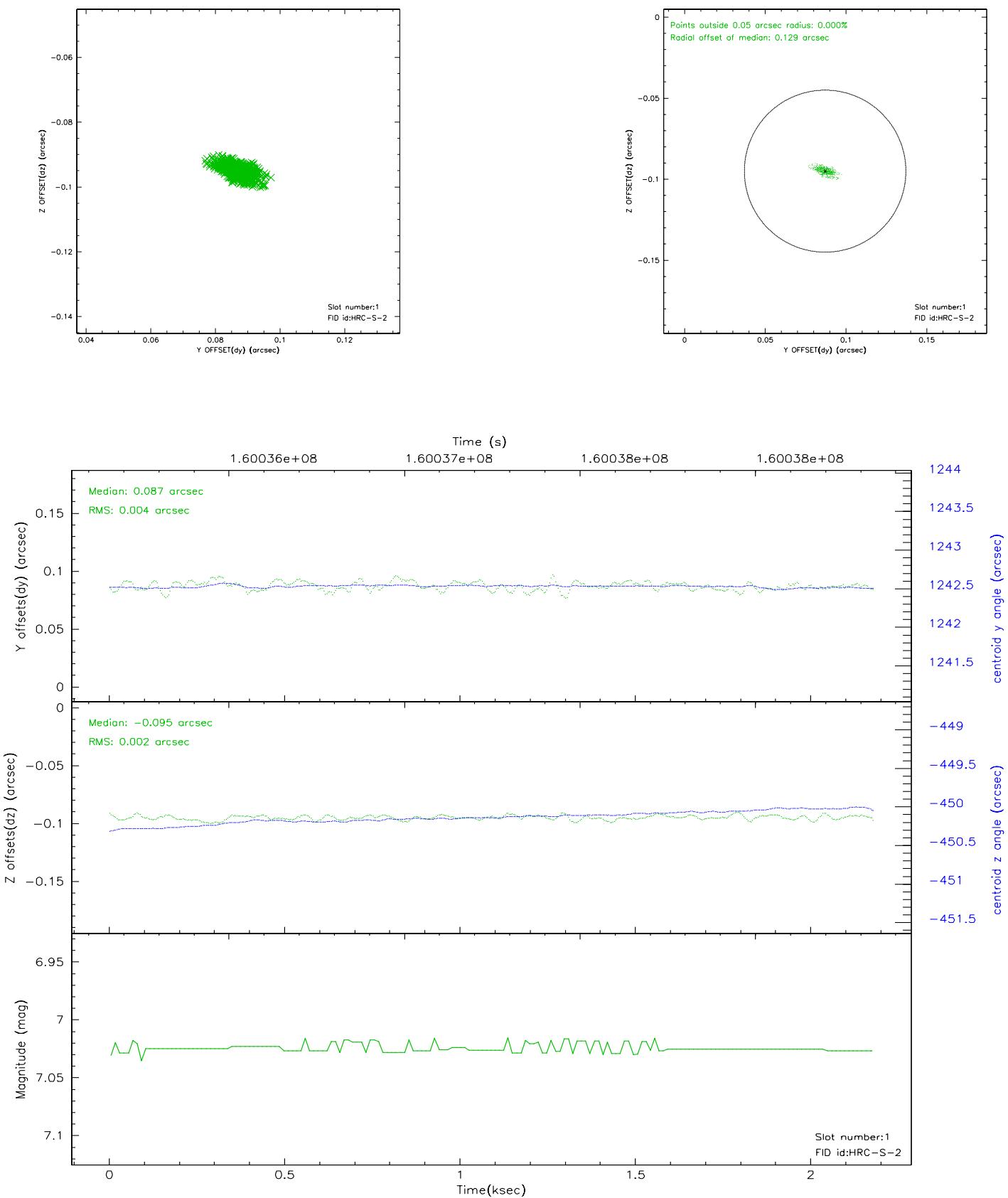


## 2.5 FID Slots

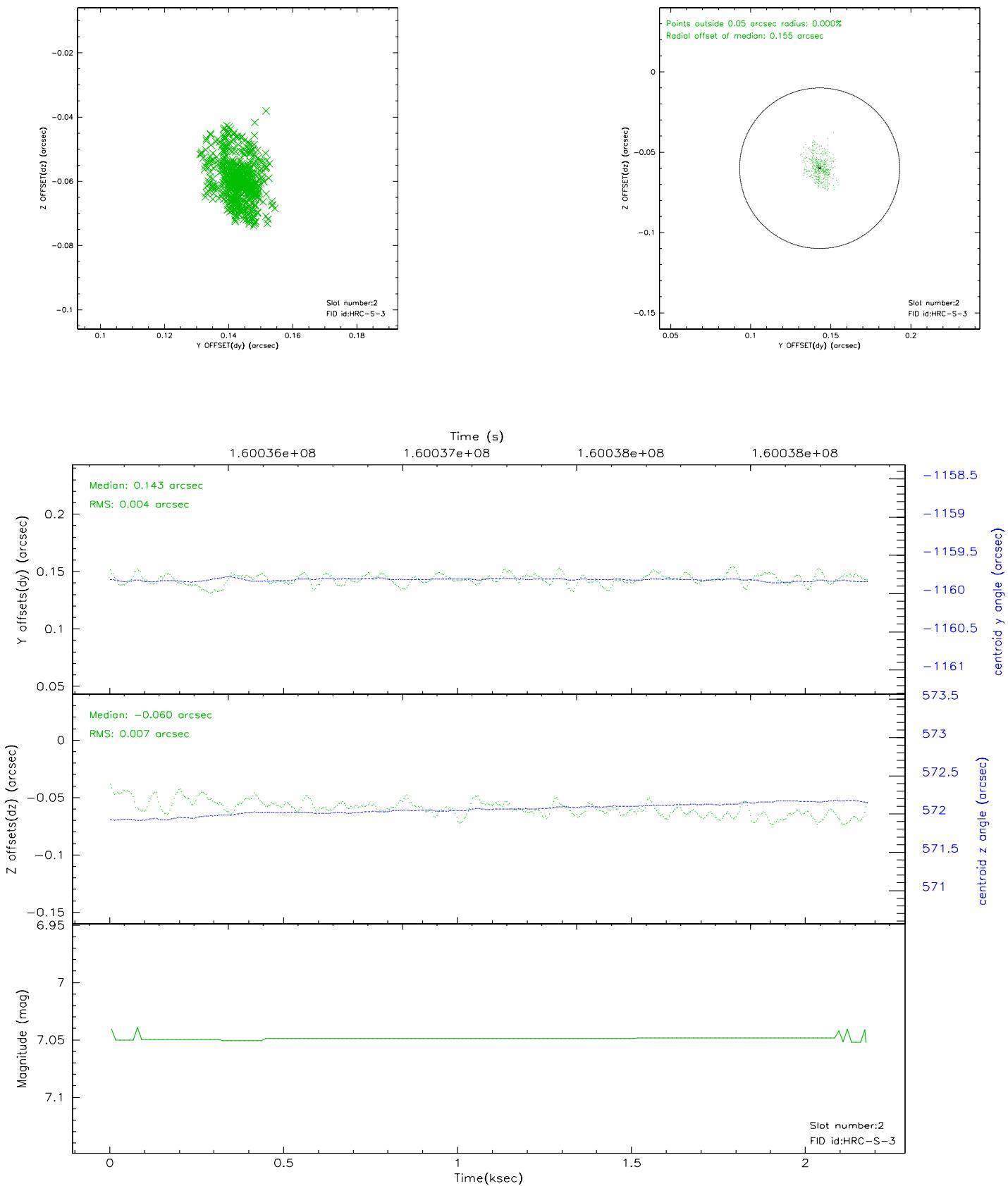
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources

# A Summary

## A.1 Status

|                            |            |
|----------------------------|------------|
| V&V Scientist              | Jen Lauer  |
| V&V Date (YYYY-MM-DD)      | 2006.07.19 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 2.142      |

## A.2 Comments

Window constraint met.

The chip and source are far off-axis, causing the source to be extended and asymmetric. Additionally, internal reflections from the telescope fall onto the chip.