

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 6011 - L2 Version 002  
Chandra X-Ray Center

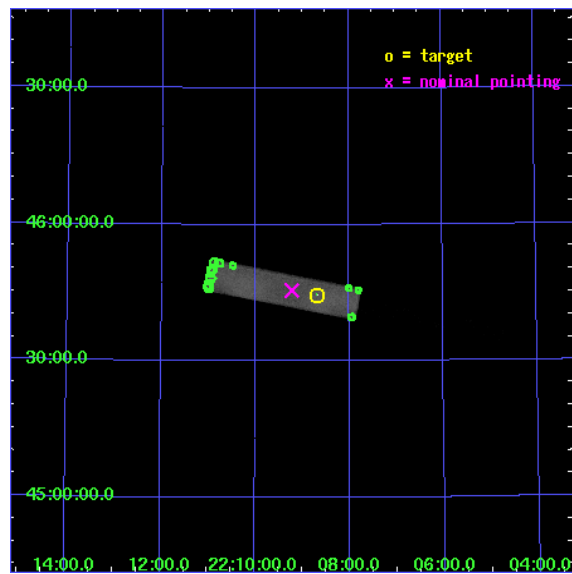
L2 Processing Date : Mar 23 2006

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# 1 Front

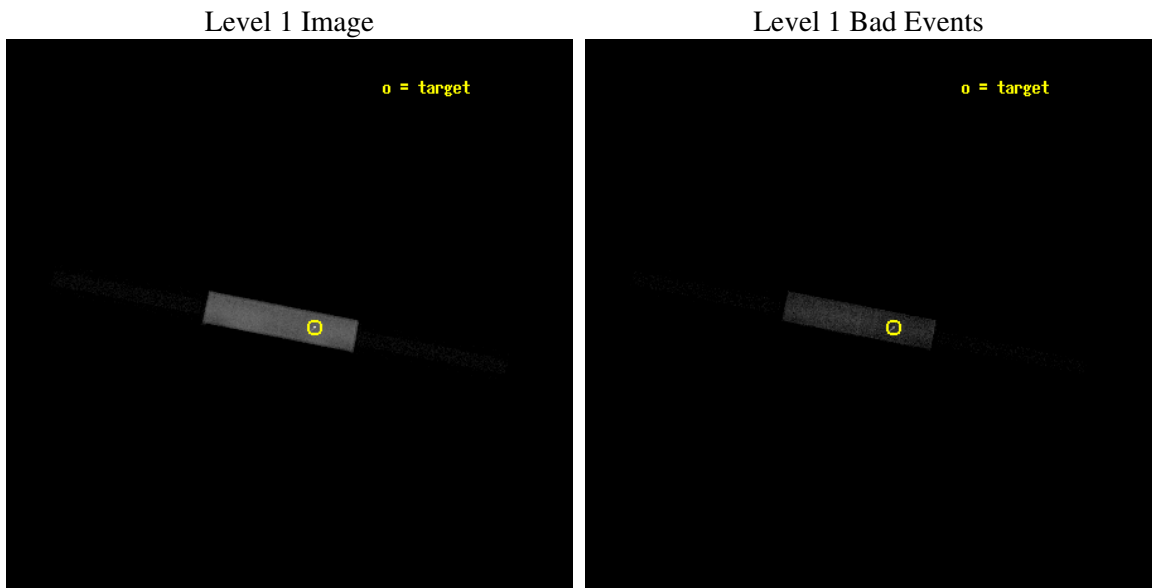
|          |   |
|----------|---|
| seq_num  | 290503  |
| obs_id   | 6011  |
| title    | AO6B Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain |
| observer | Dr. CXC Calibration   |
| object   | ArLac   |
| ra_targ  | 332.17  |
| dec_targ | 45.742306   |
| ra_nom   | 332.30466698003   |
| dec_nom  | 45.759520464918   |
| roll_nom | 190.92497109095   |
| revision | 2   |
| ontime   | 1153.3813030124   |
| livetime | 1138.2247879001   |
| l2events | 103568  |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



## 2.1.2 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.7.1             |
| caldbver | 3.2.1               |
| date     | 2006-03-23T15:01:36 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 1000.000000     |
| ontime         | 1182.0813043118 |
| l1events       | 158033          |

## 2.1.3 Events

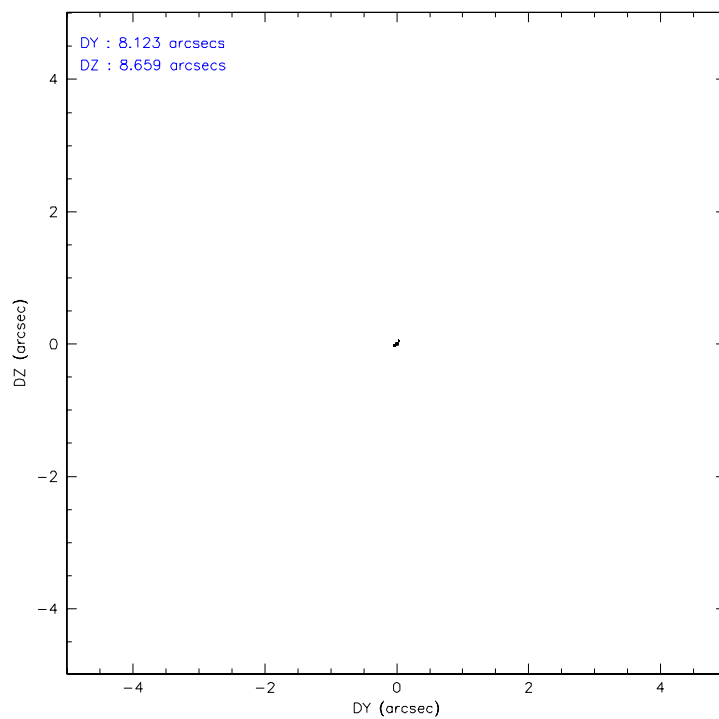
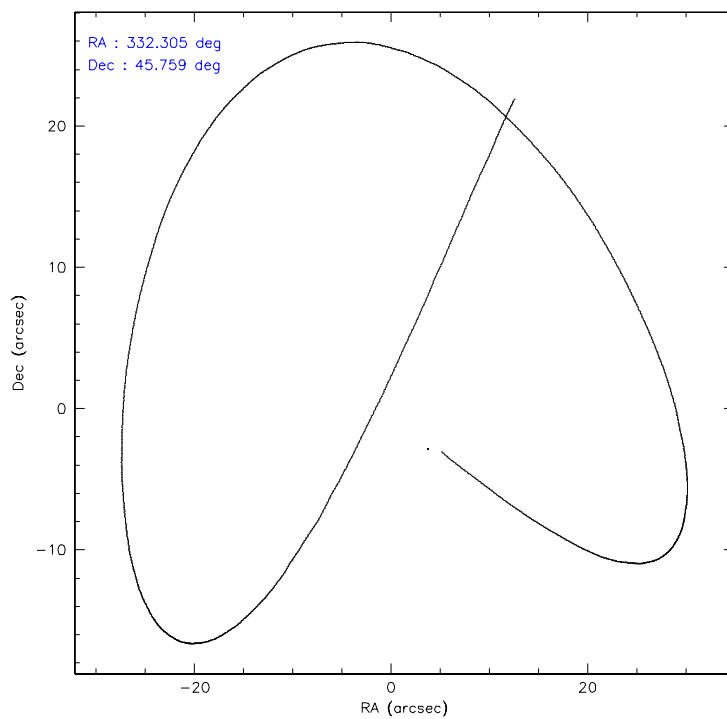
### Level 1 Events

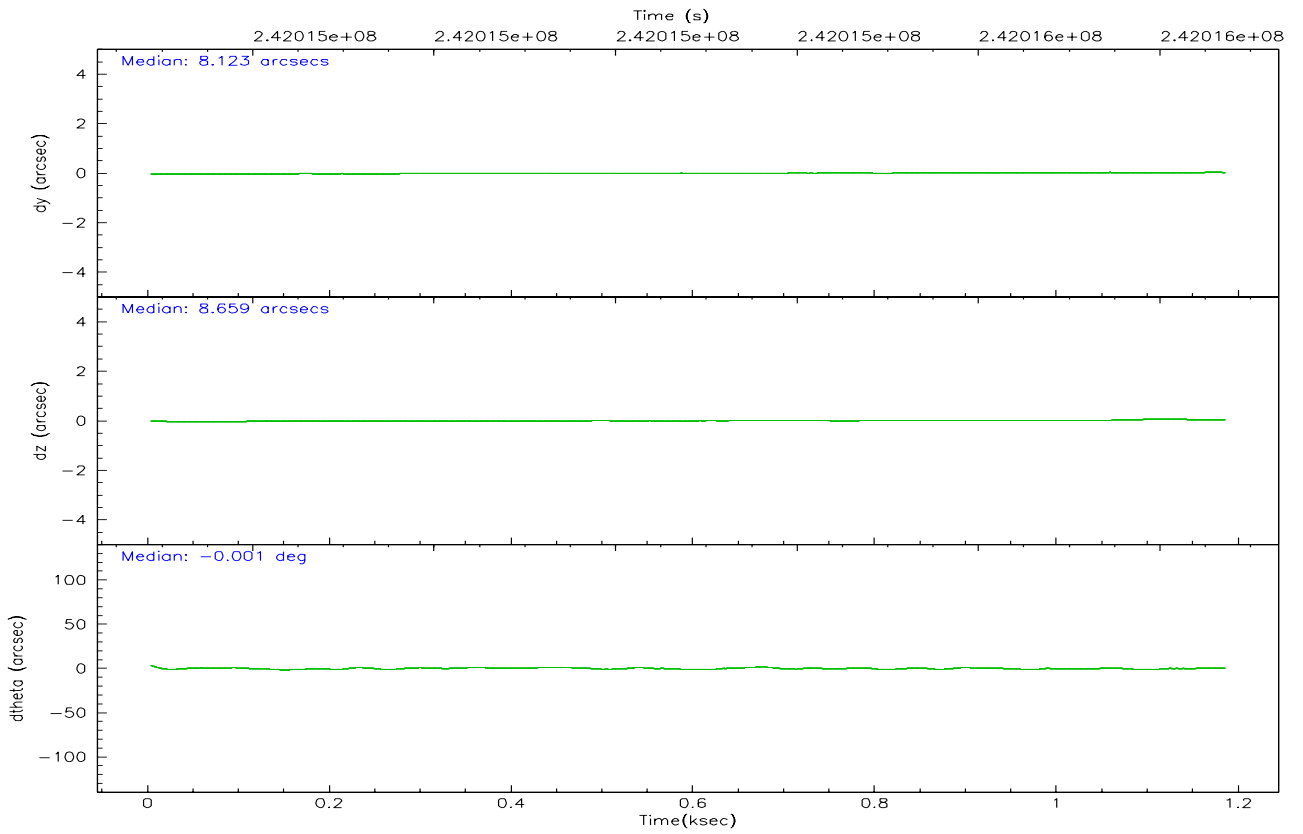
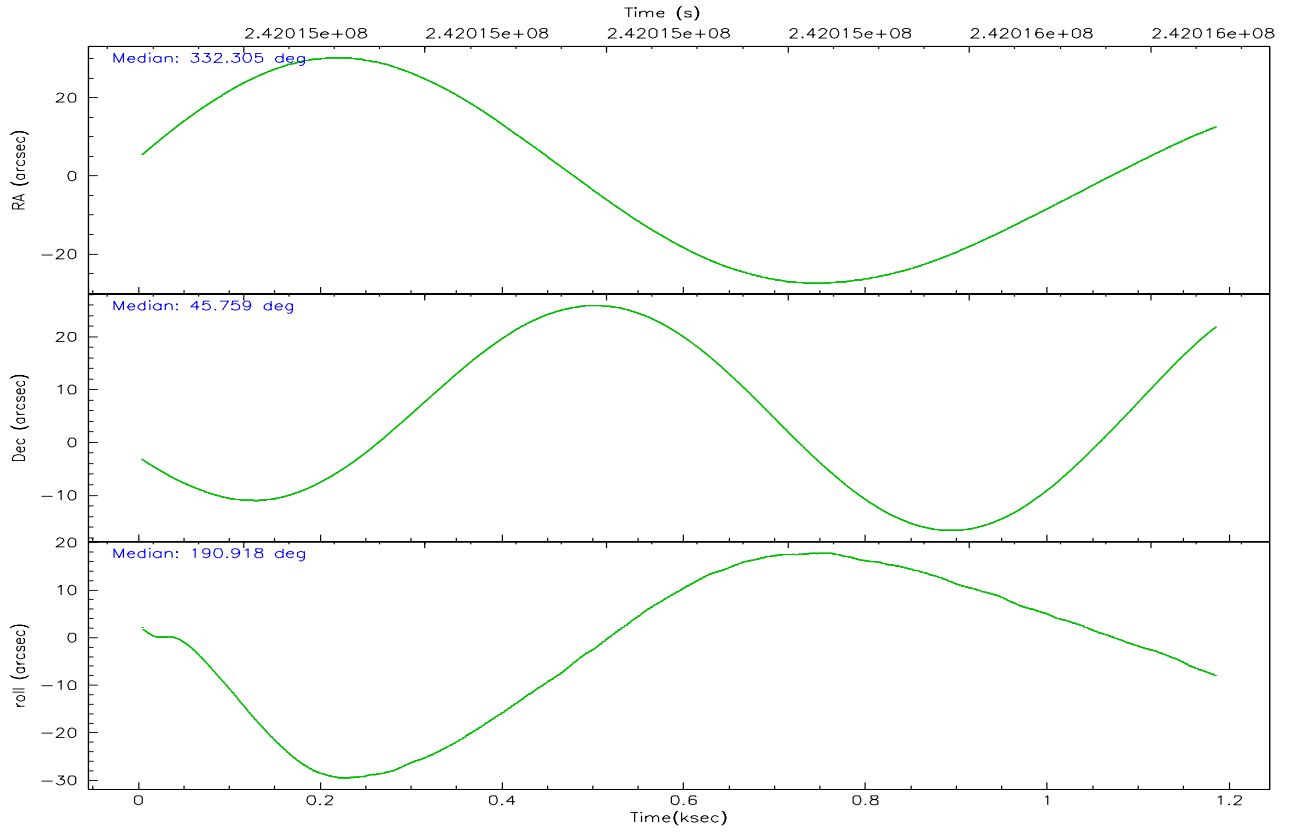
|                    | <b>segment<br/>1</b> | <b>segment<br/>2</b> | <b>segment<br/>3</b> |
|--------------------|----------------------|----------------------|----------------------|
| level 1<br>events  | 1480                 | 155244               | 1309                 |
| rejected<br>events | 1480                 | 47243                | 1277                 |
| rejected<br>%      | 100%                 | 30%                  | 97%                  |

## 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                       | 332.333720          | 332.3046669800296    |                              |           |         |
| Pointing Dec                      | 45.780238           | 45.7595204649179     |                              |           |         |
| Pointing Roll                     | 190.836808          | 190.9249710909525    |                              |           |         |
| 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            | 242014874.184000    | 242014498.9342       |                              |           |         |
| Observation start date            | 2005-09-02T02:20:10 | 2005-09-02T02:14:58  |                              |           |         |
| Observation end time              | 242015874.184000    | 242016008.75927      |                              |           |         |
| Observation end date              | 2005-09-02T02:36:50 | 2005-09-02T02:40:08  |                              |           |         |

## 2.3 Aspect



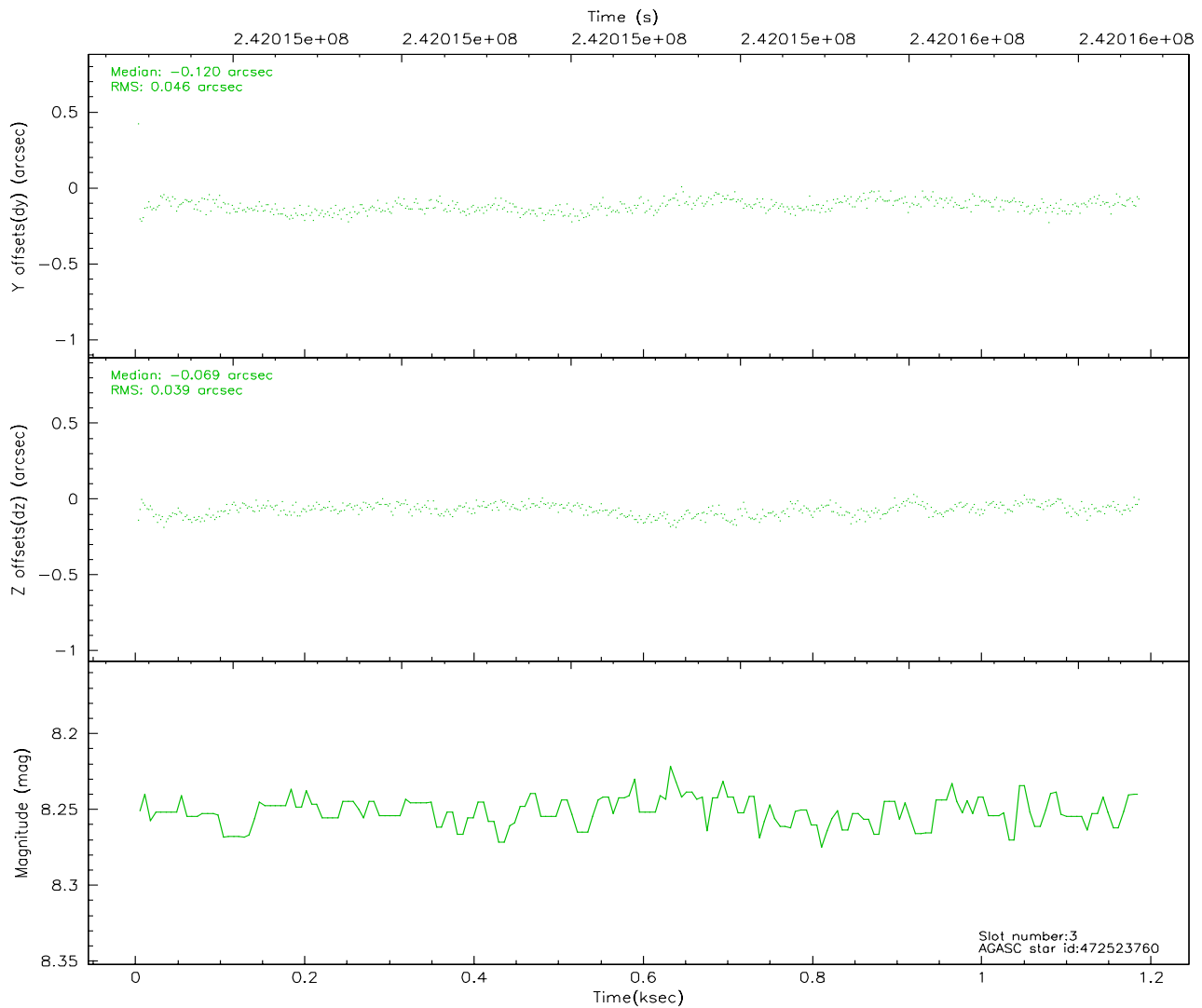
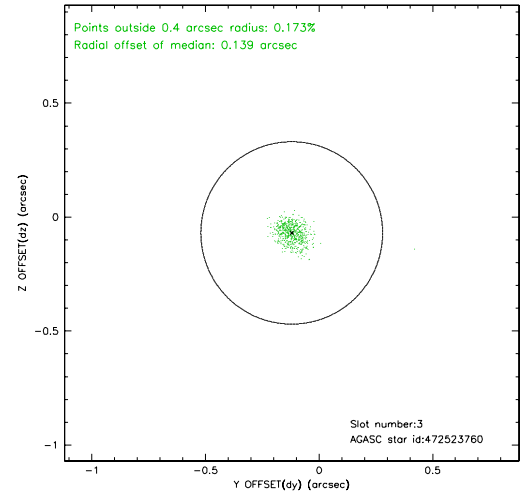
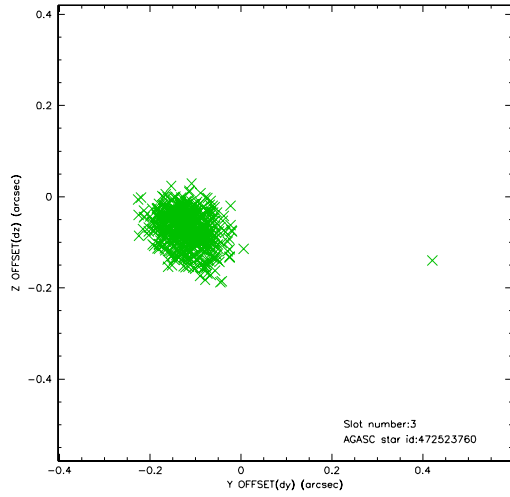


### Slot Statistics

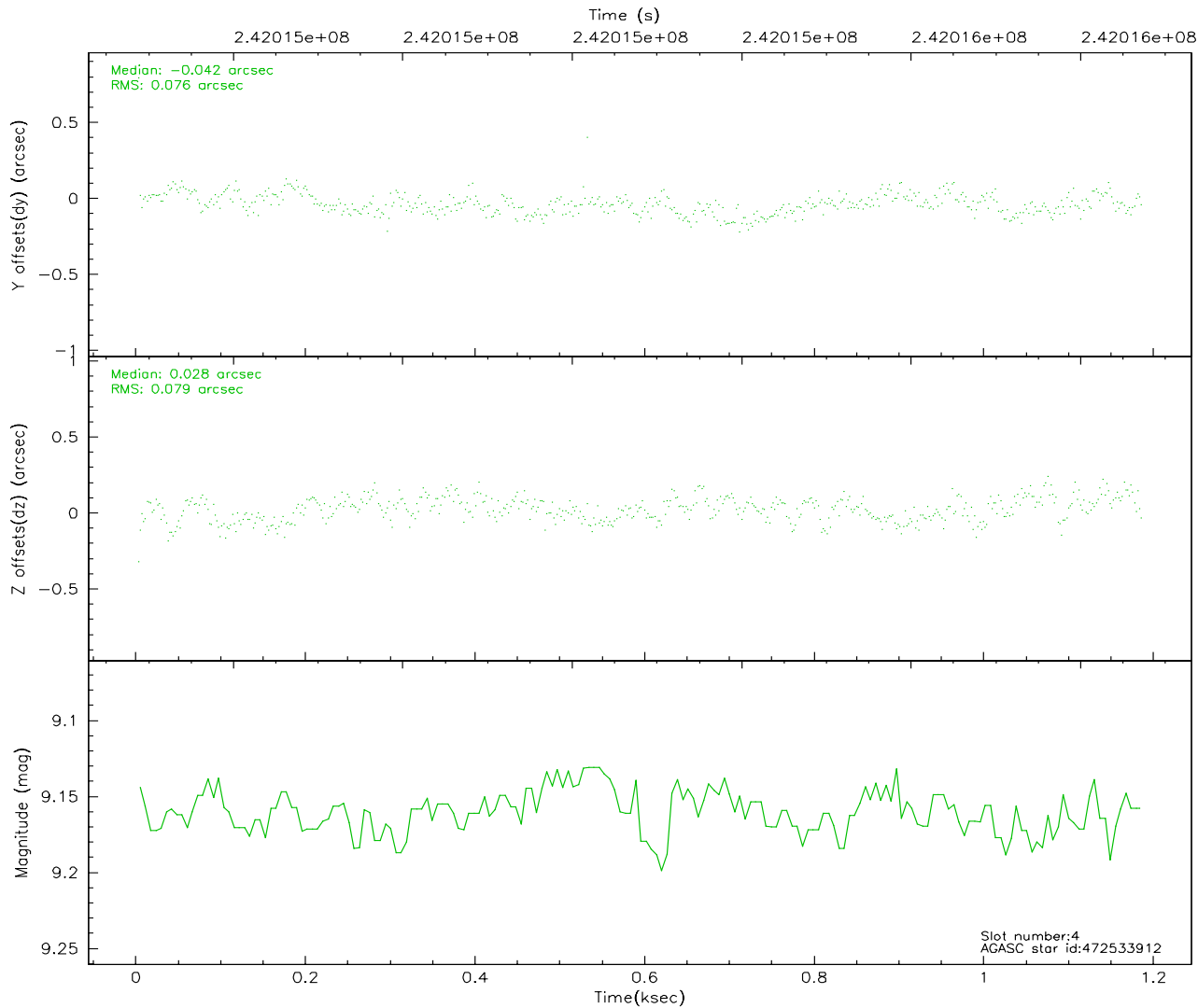
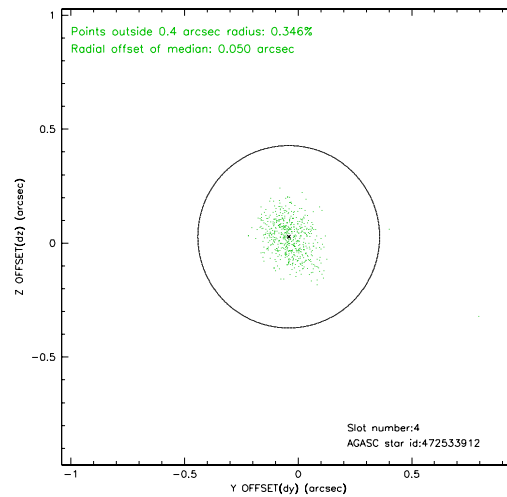
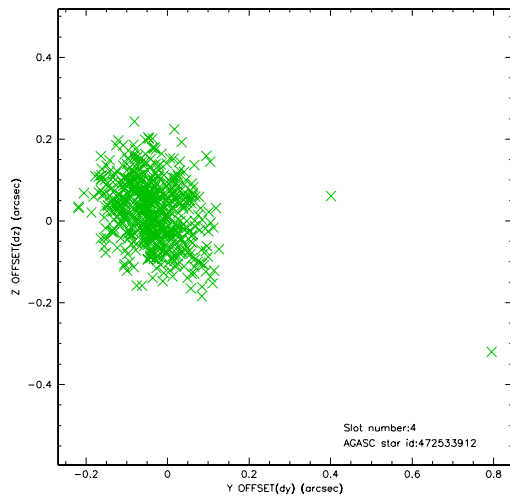
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-S-2   | 7.03 | 289   | 0.127  | -0.106 | 0.007 | 0.011 | 0.000000   | 0.000000  | 1237.36  | -449.94  |
| 1    | FID    | HRC-S-3   | 7.04 | 289   | 0.053  | -0.102 | 0.005 | 0.010 | 0.000000   | 0.000000  | -1160.80 | 570.76   |
| 2    | FID    | HRC-S-4   | 7.02 | 289   | 0.225  | -0.089 | 0.007 | 0.012 | 0.000000   | 0.000000  | 1232.05  | 576.78   |
| 3    | GUIDE  | 472523760 | 8.25 | 578   | -0.120 | -0.069 | 0.060 | 0.096 | 331.645363 | 45.403260 | 1963.47  | 995.33   |
| 4    | GUIDE  | 472533912 | 9.16 | 578   | -0.042 | 0.028  | 0.109 | 0.177 | 331.791136 | 46.368695 | 929.35   | -2340.09 |
| 5    | GUIDE  | 472535576 | 7.87 | 578   | -0.127 | 0.076  | 0.060 | 0.100 | 331.438373 | 46.291802 | 1841.74  | -2246.97 |
| 6    | GUIDE  | 472655152 | 9.44 | 578   | 0.130  | 0.005  | 0.113 | 0.188 | 332.504239 | 45.862991 | -471.61  | -219.91  |
| 7    | GUIDE  | 472665256 | 9.00 | 577   | 0.157  | -0.013 | 0.075 | 0.135 | 332.808125 | 46.195041 | -1442.04 | -1251.83 |

## 2.4 Star Slots

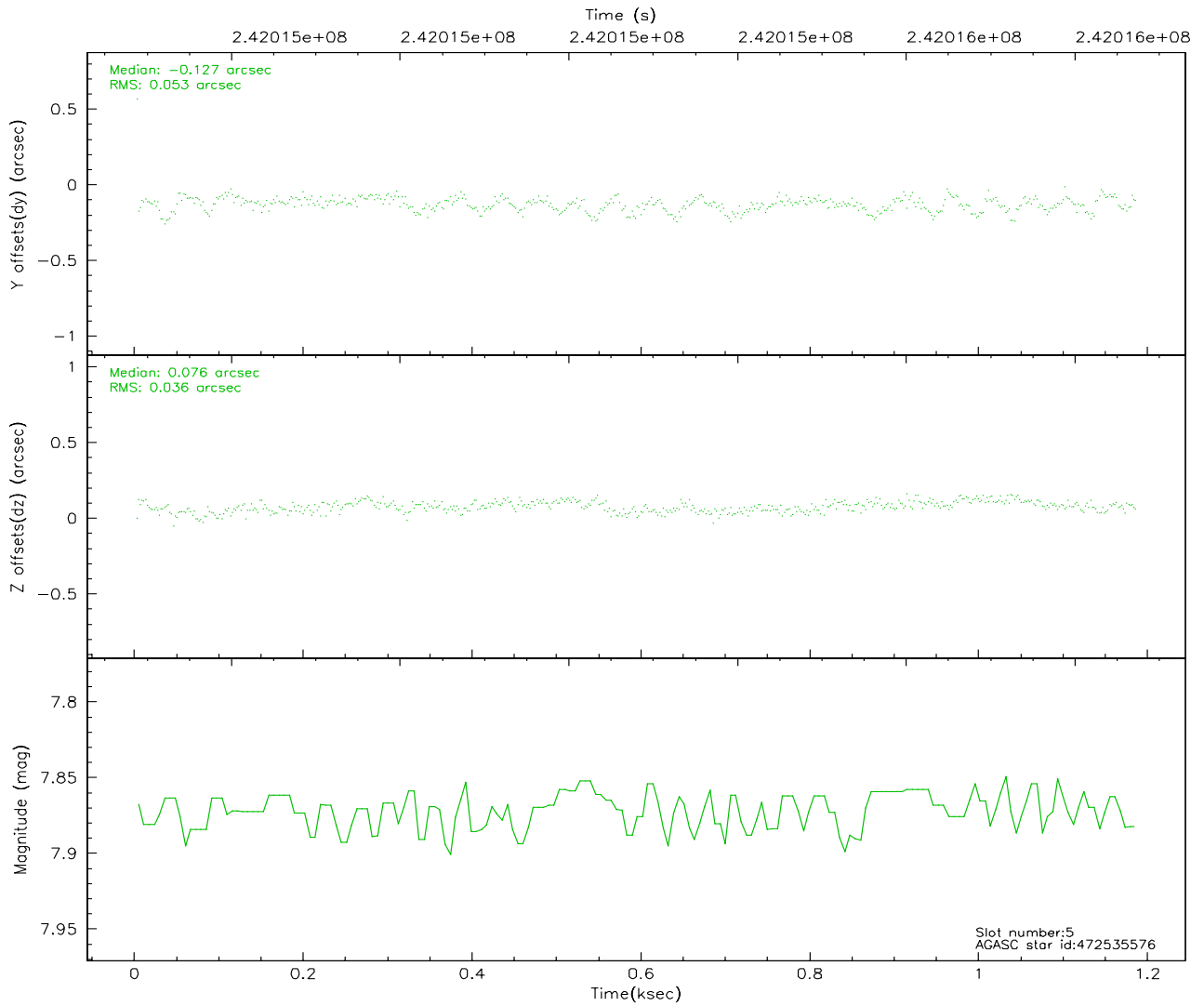
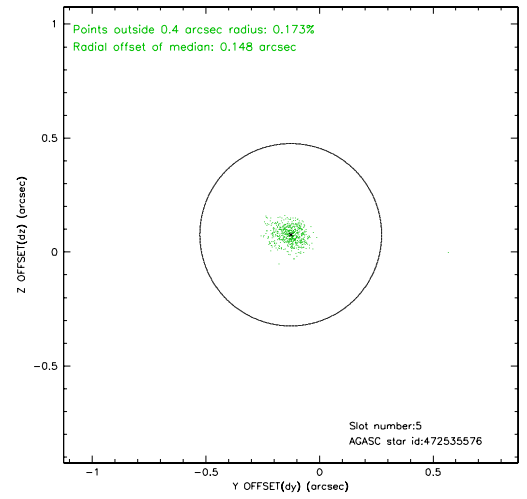
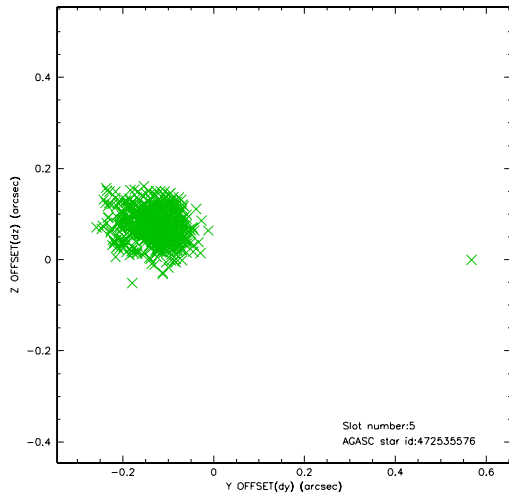
### 2.4.1 Slot 3



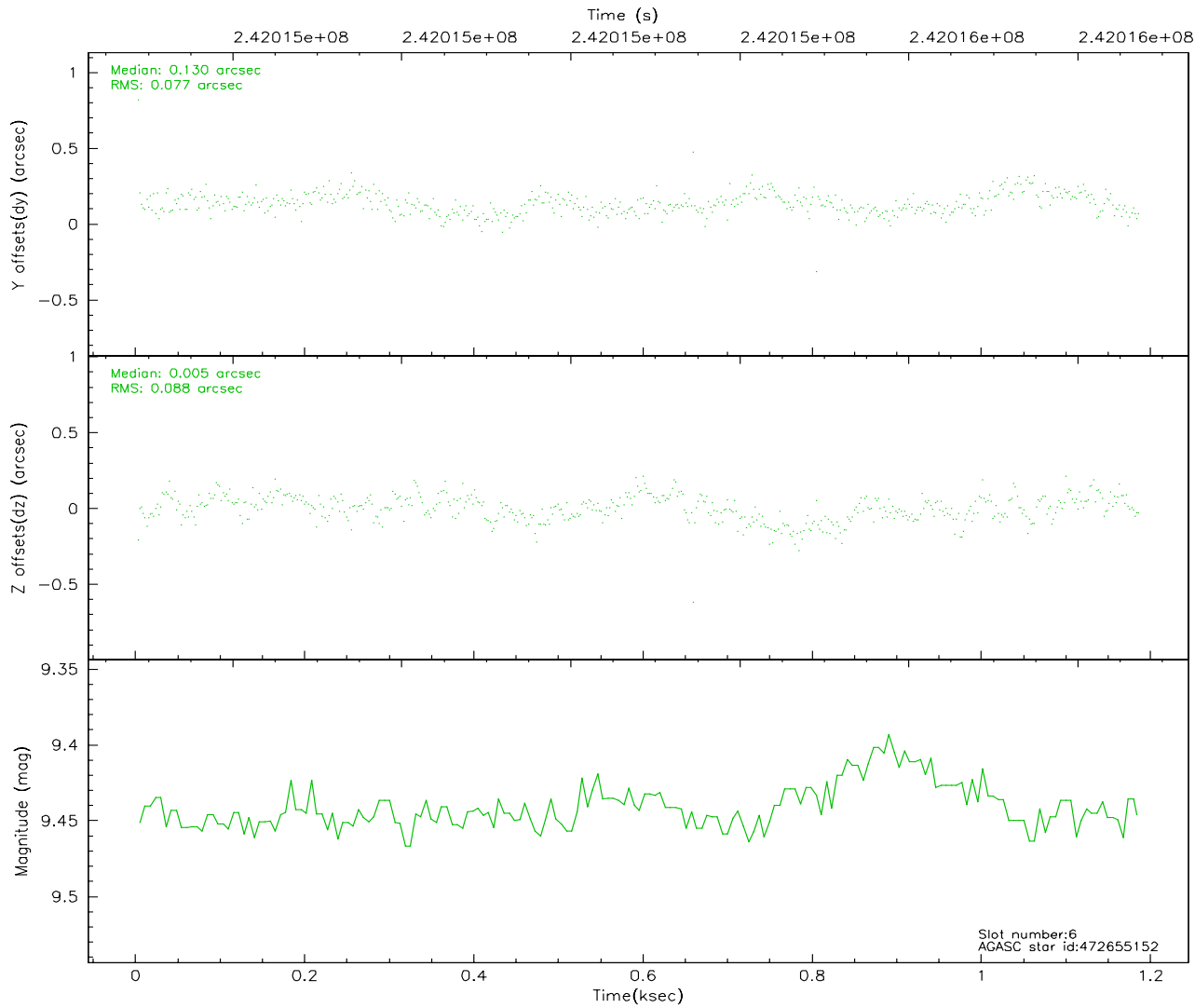
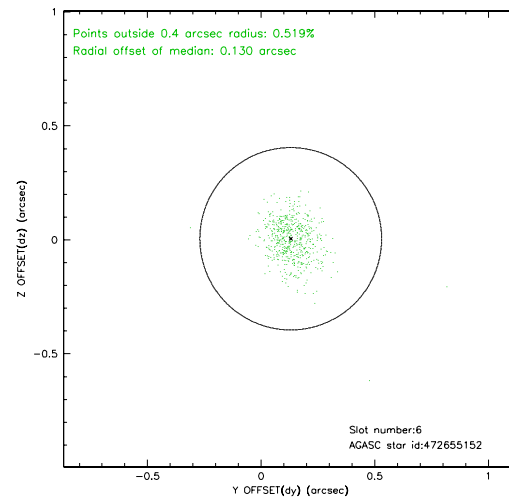
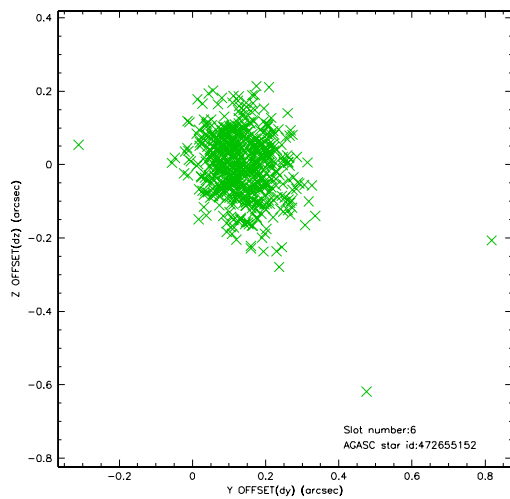
## 2.4.2 Slot 4



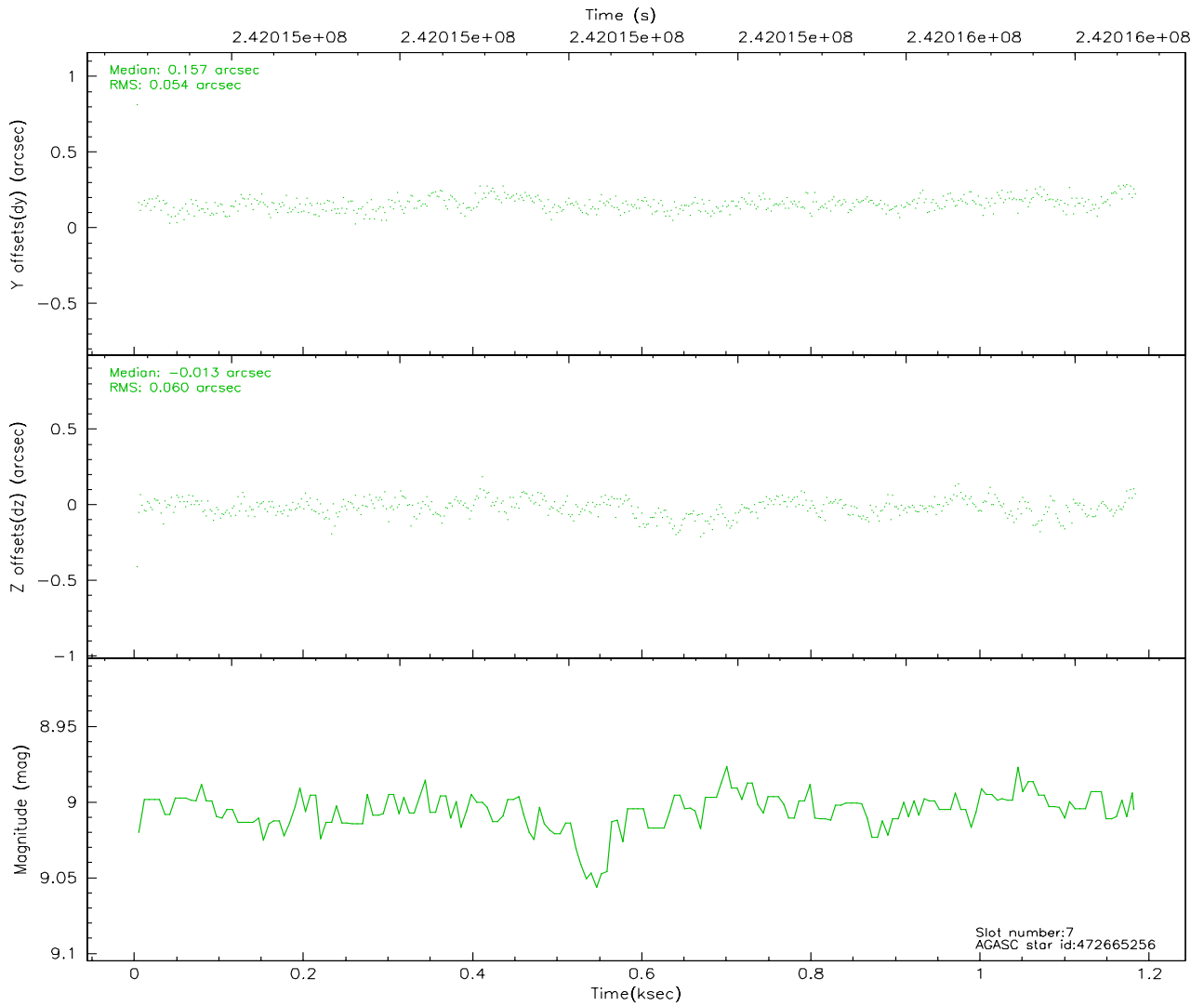
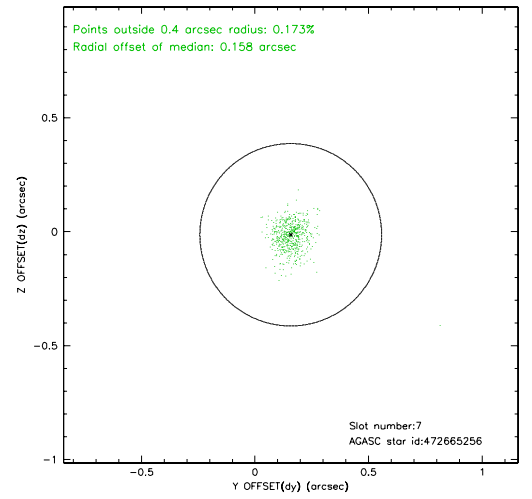
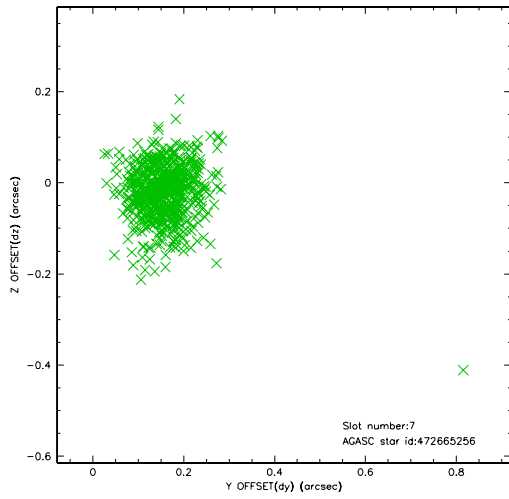
### 2.4.3 Slot 5



## 2.4.4 Slot 6

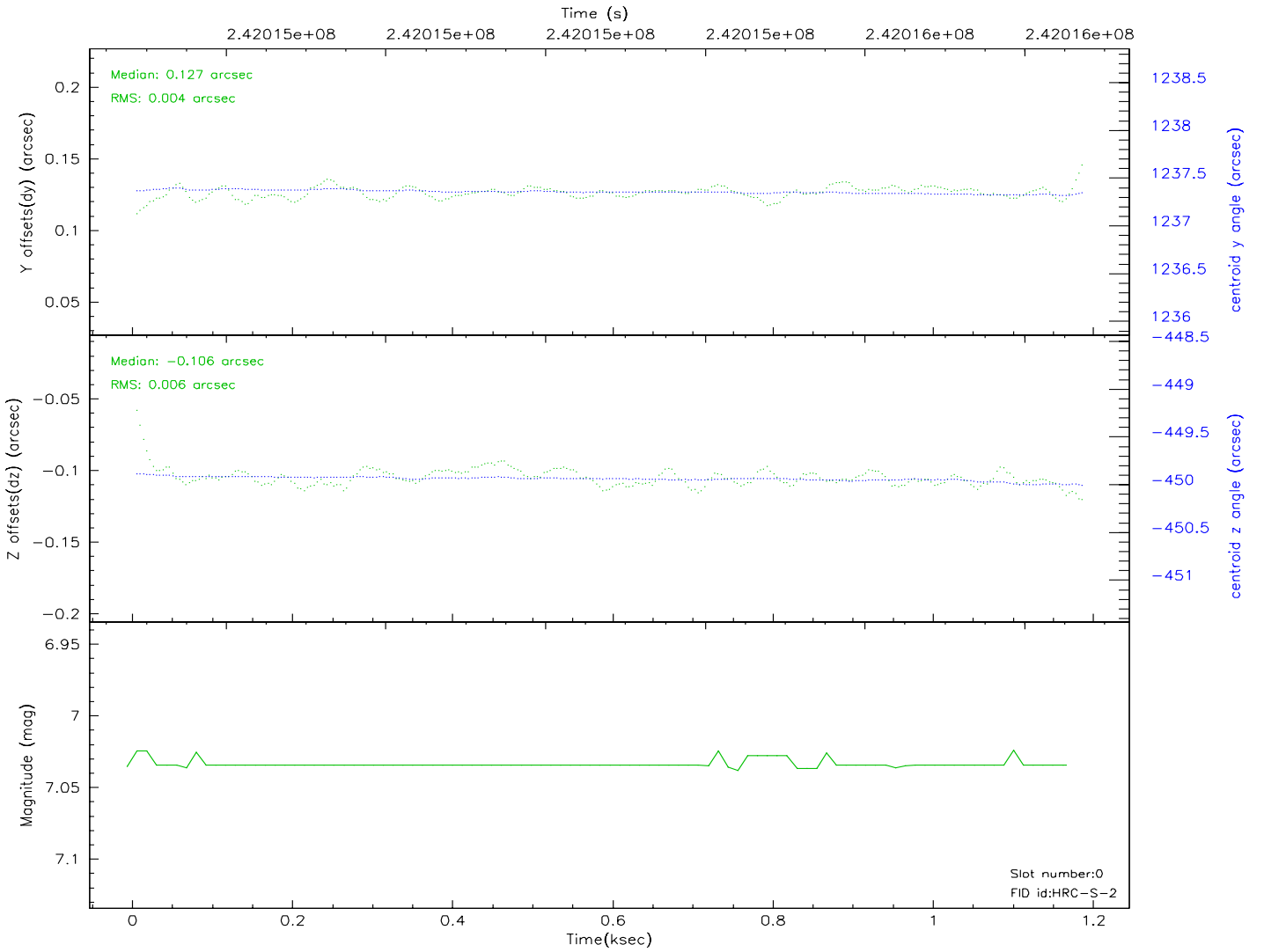
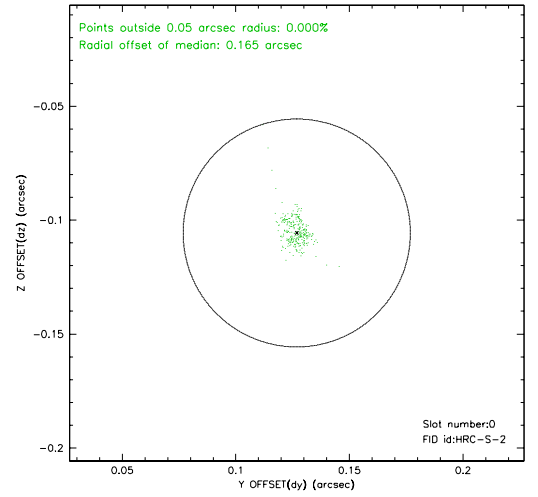
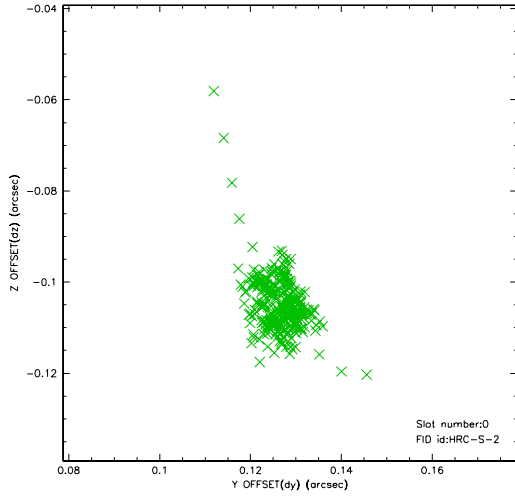


### 2.4.5 Slot 7

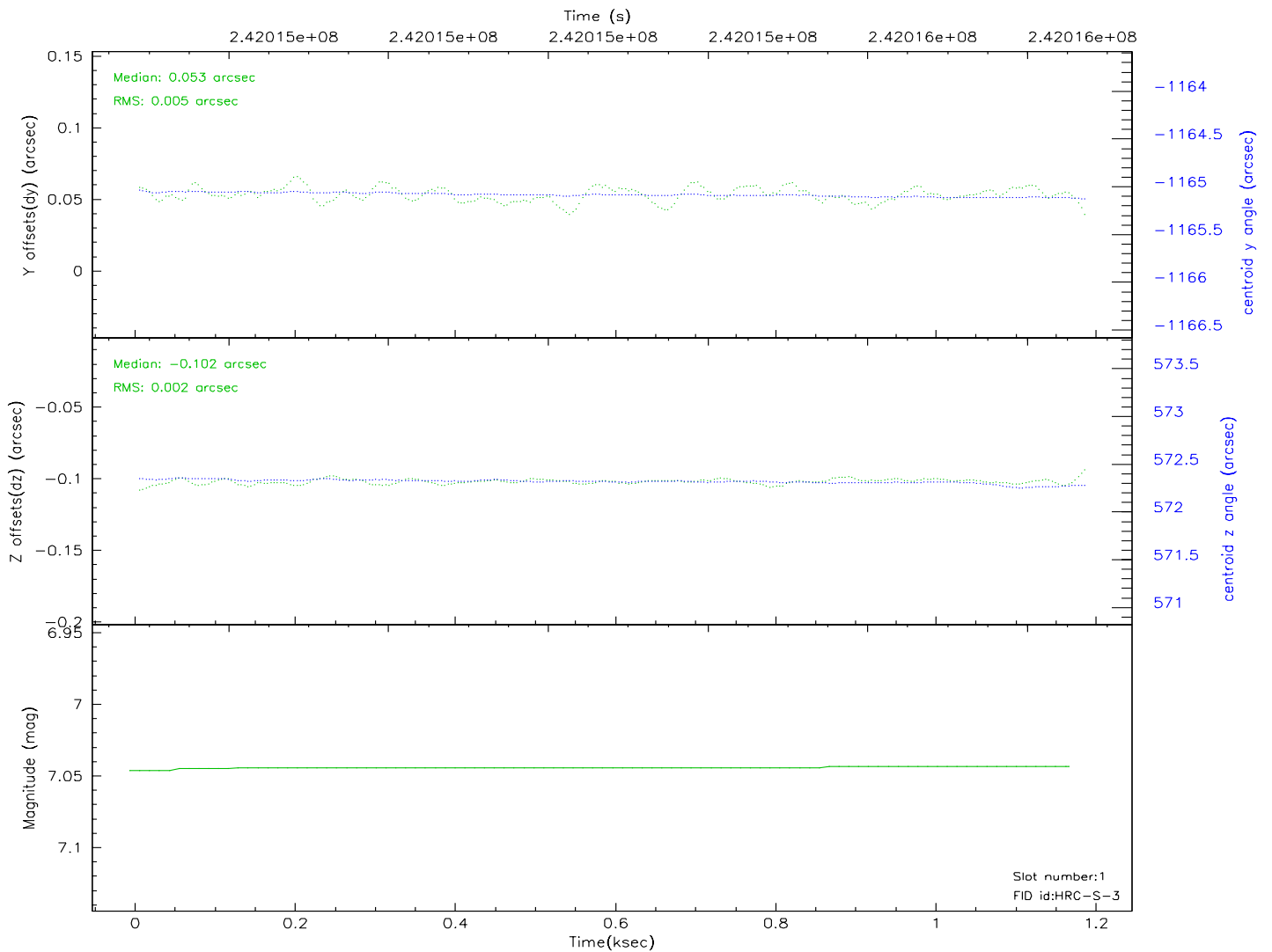
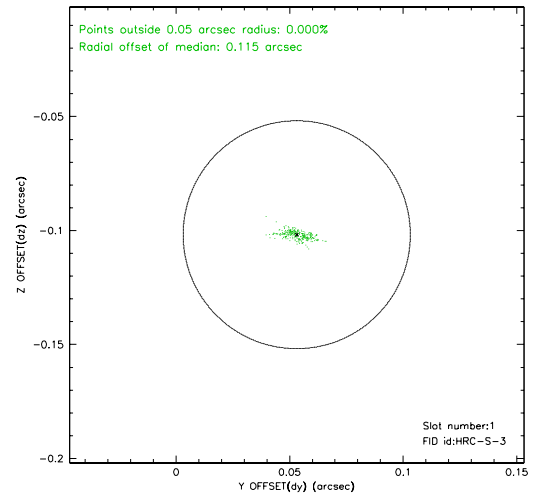
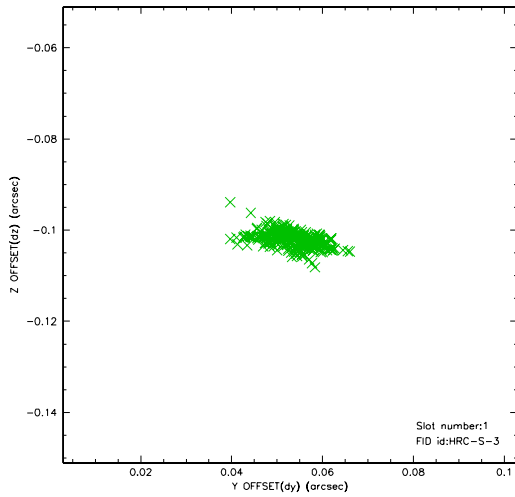


## 2.5 FID Slots

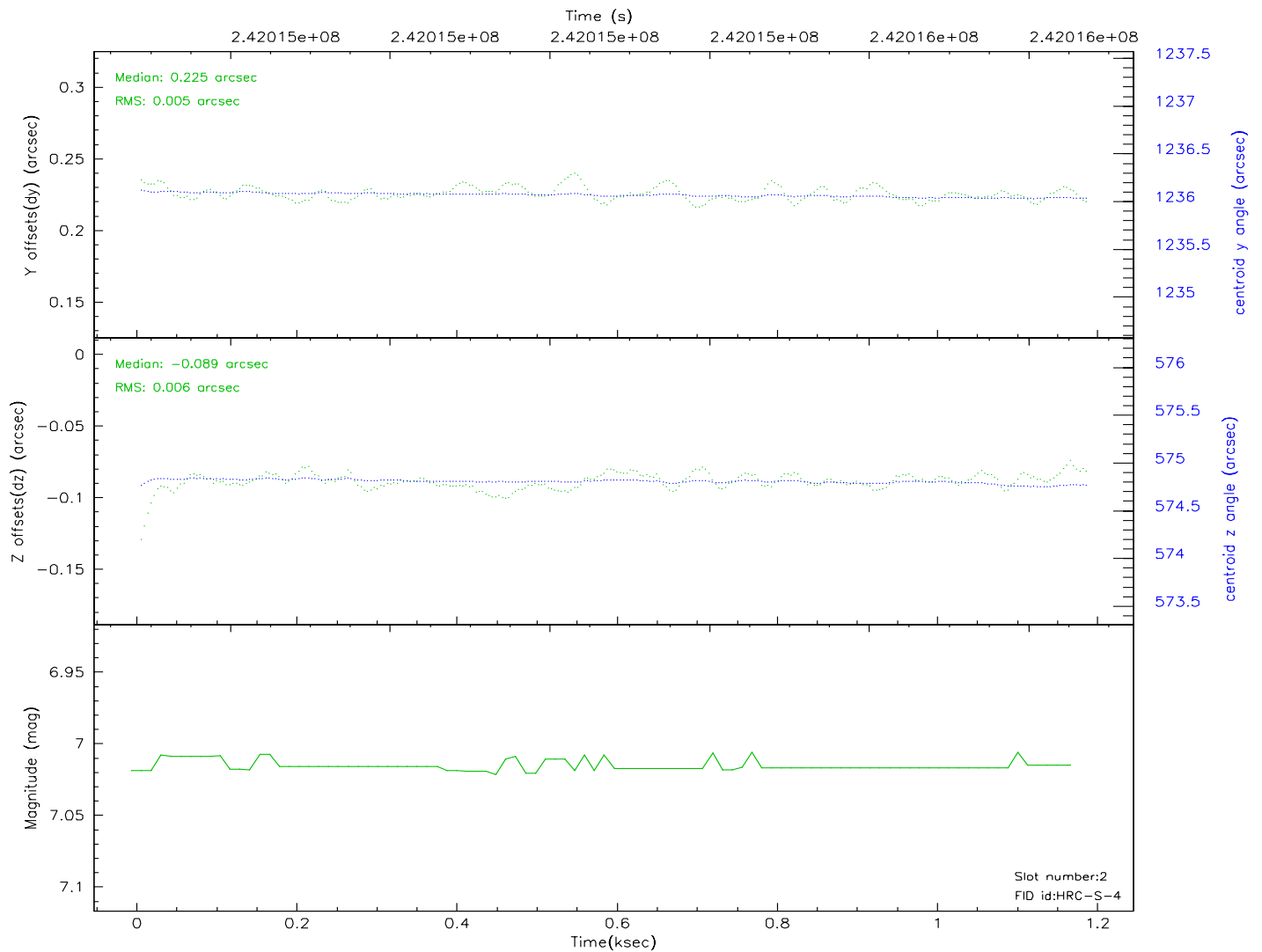
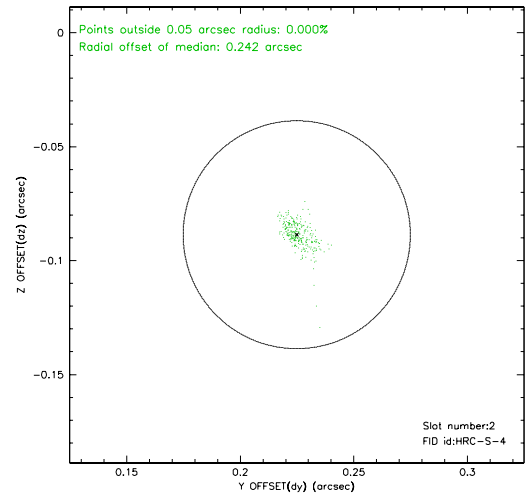
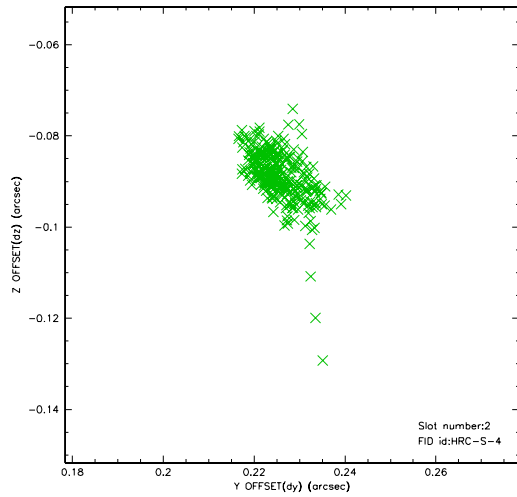
### 2.5.1 Slot 0



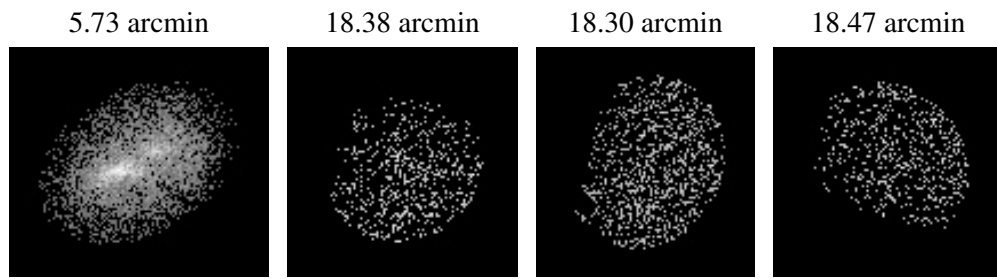
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2006.03.23    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 1.153125      |

## A.2 Comments