

# V&V Reference Report

## L2 ASCDS Version : 7.6.11.10

Observation 5174 - L2 Version 6  
Chandra X-Ray Center

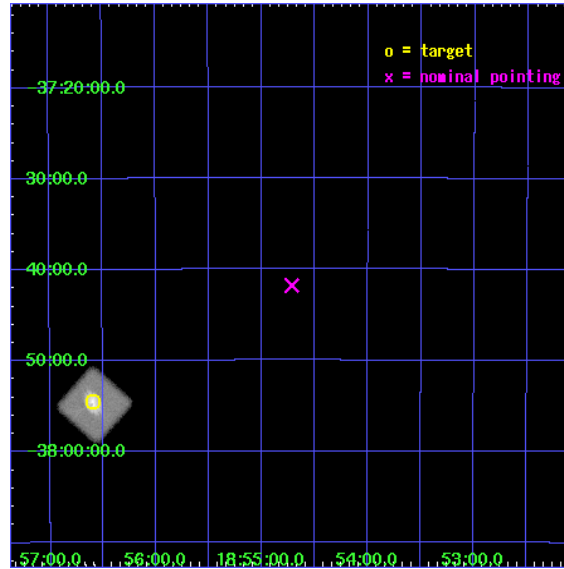
L2 Processing Date : Feb 9 2009

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# 1 Front

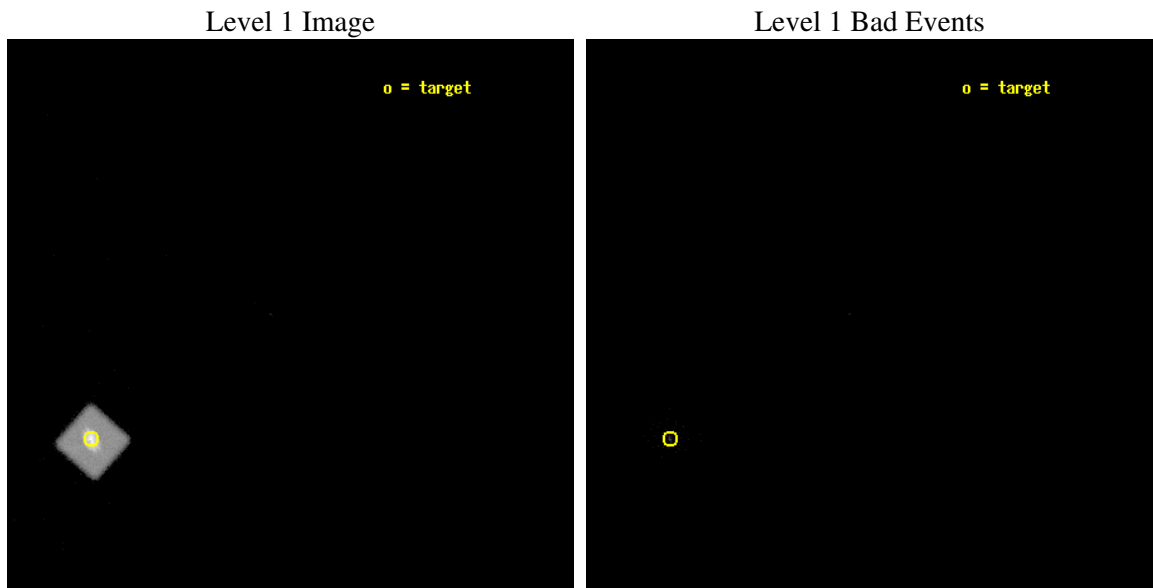
|          |  |
|----------|--|
| seq_num  | 990002   |
| obs_id   | 5174   |
| title    | AO5 Calibration Observations of the ACIS charged particle background |
| observer | Dr. CXC Calibration  |
| object   | RXJ1856.5-3754   |
| ra_targ  | 284.147083   |
| dec_targ | -37.909611   |
| ra_nom   | 283.67918189652  |
| dec_nom  | -37.696391548025   |
| roll_nom | 266.72891994987  |
| revision | 6  |
| ontime   | 48839.202192396  |
| livetime | 48666.31443436   |
| l2events | 106127   |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.11.10           |
| caldbver | 3.5.1               |
| date     | 2009-02-09T17:26:47 |
| revision | 6                   |

|                |                |
|----------------|----------------|
| sched_exp_time | 49000.000000   |
| ontime         | 48904.80219239 |
| l1events       | 128379         |

### 2.1.3 Events

#### Level 1 Events

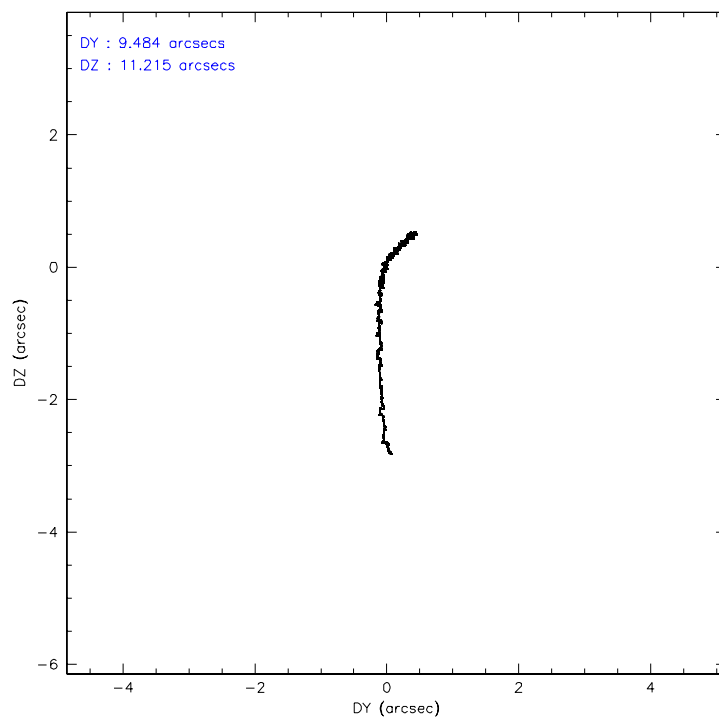
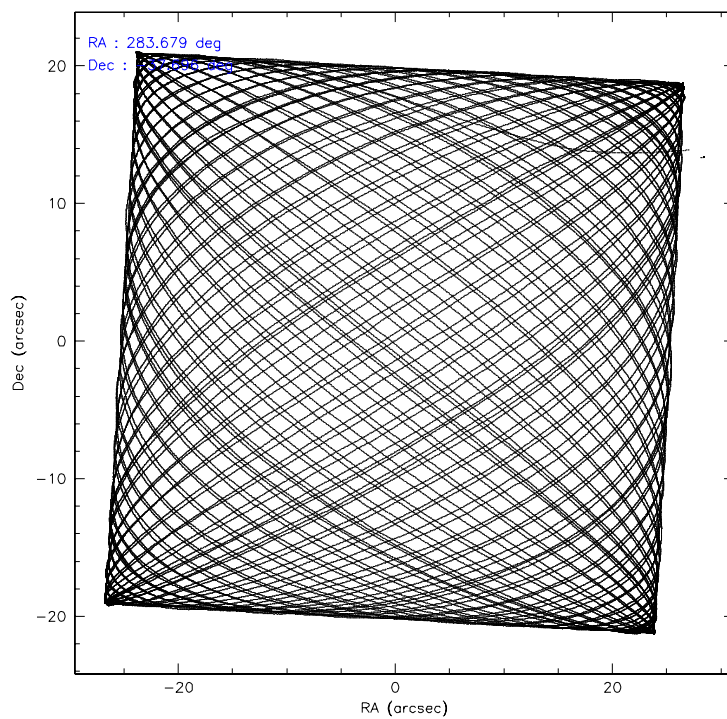
|                    | <b>segment<br/>0</b> |
|--------------------|----------------------|
| level 1<br>events  | 128379               |
| rejected<br>events | 528                  |
| rejected %         | 0%                   |

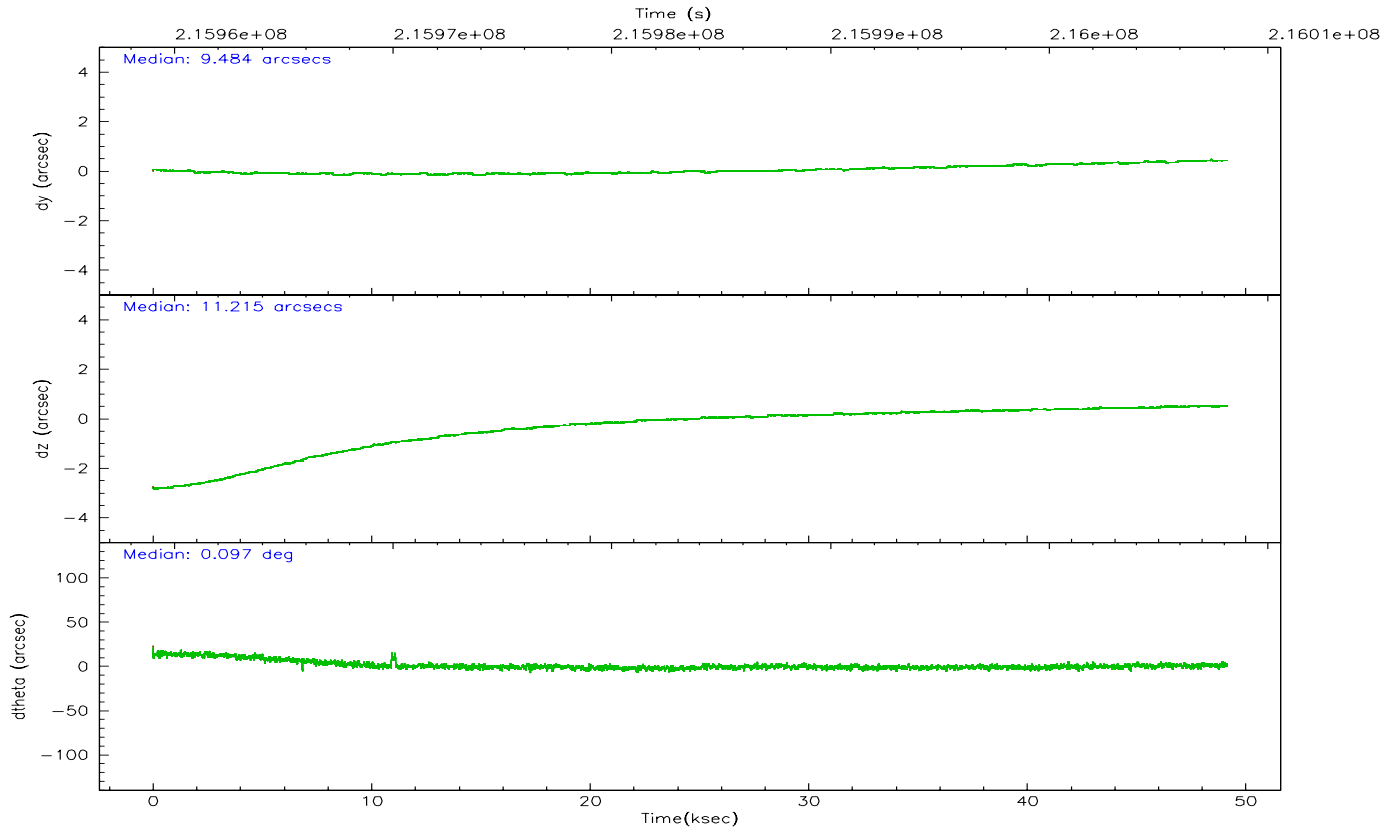
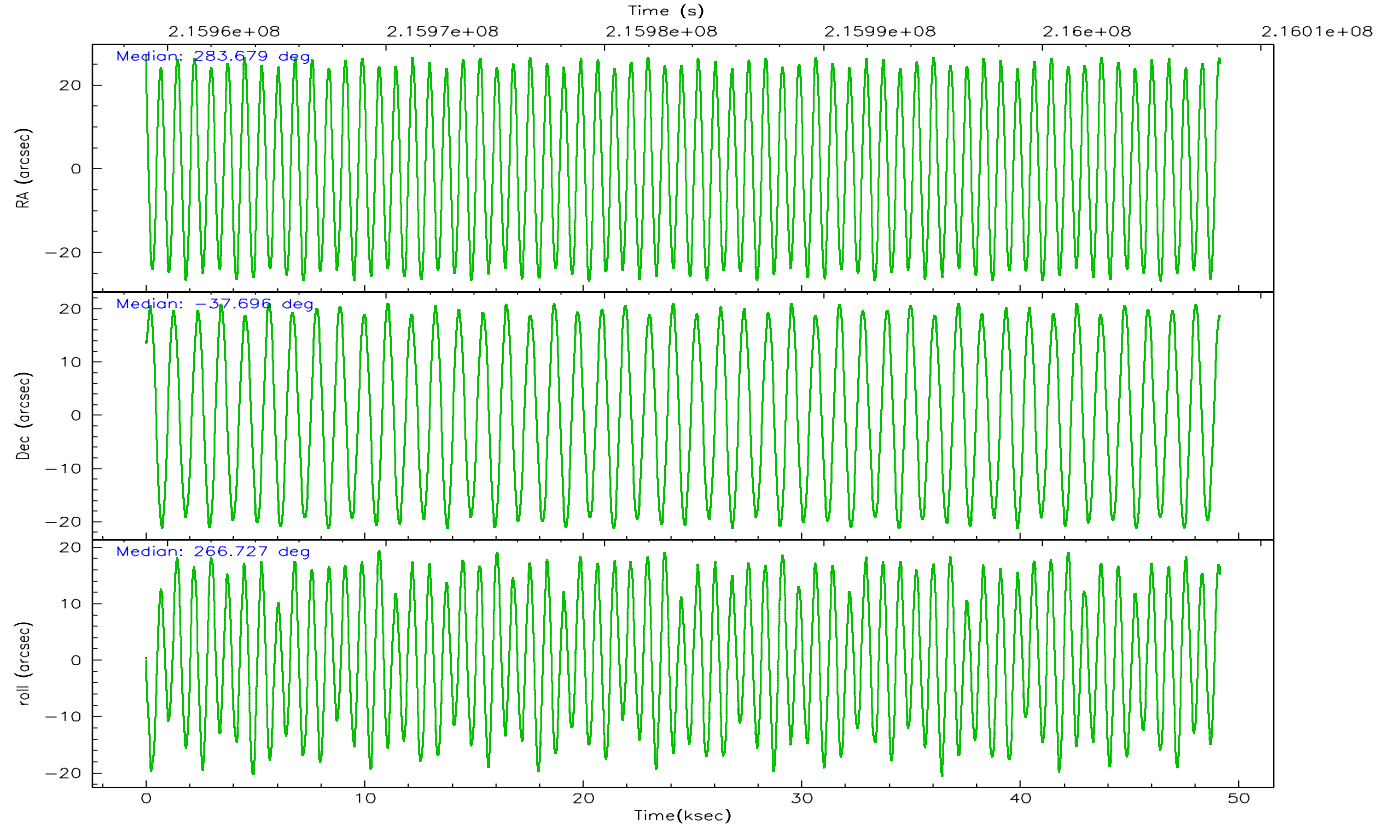


## 2.2 Compared Parameters

| 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         | OVERRIDE  | OVERRIDE |
| Data mode                         | NEXT_IN_LINE        | NEXT_IN_LINE        |                              |           |          |
| Observation mode                  | POINTING            | POINTING            |                              |           |          |
| Pointing RA                       | 283.679181896524    | 283.679181896524    |                              |           |          |
| Pointing Dec                      | -37.696391548025    | -37.696391548025    |                              |           |          |
| Pointing Roll                     | 266.7289199498699   | 266.7289199498699   |                              |           |          |
| Window start time                 | 210384064.184000    | 210384064.184000    |                              |           |          |
| Window stop time                  | 218160064.184000    | 218160064.184000    |                              |           |          |
| SIM focus pos (mm)                | -1.038866356238299  | -1.038866356238299  |                              |           |          |
| SIM defocus (mm)                  | 0.00142623211714632 | 0.00142623211714632 |                              |           |          |
| SIM translation stage pos (mm)    | 51.9960404362608    | 51.9960404362608    |                              |           |          |
| SIM translation stage offset (mm) | 74.989453869027     | 74.989453869027     |                              |           |          |
| Observation start time            | 215959001.184       | 215959001.184       |                              |           |          |
| Observation start date            | 2004-11-04T12:38:06 | 2004-11-04T12:36:41 |                              |           |          |
| Observation end time              | 216008150.184       | 216008150.184       |                              |           |          |
| Observation end date              | 2004-11-05T02:14:46 | 2004-11-05T02:15:50 |                              |           |          |

## 2.3 Aspect



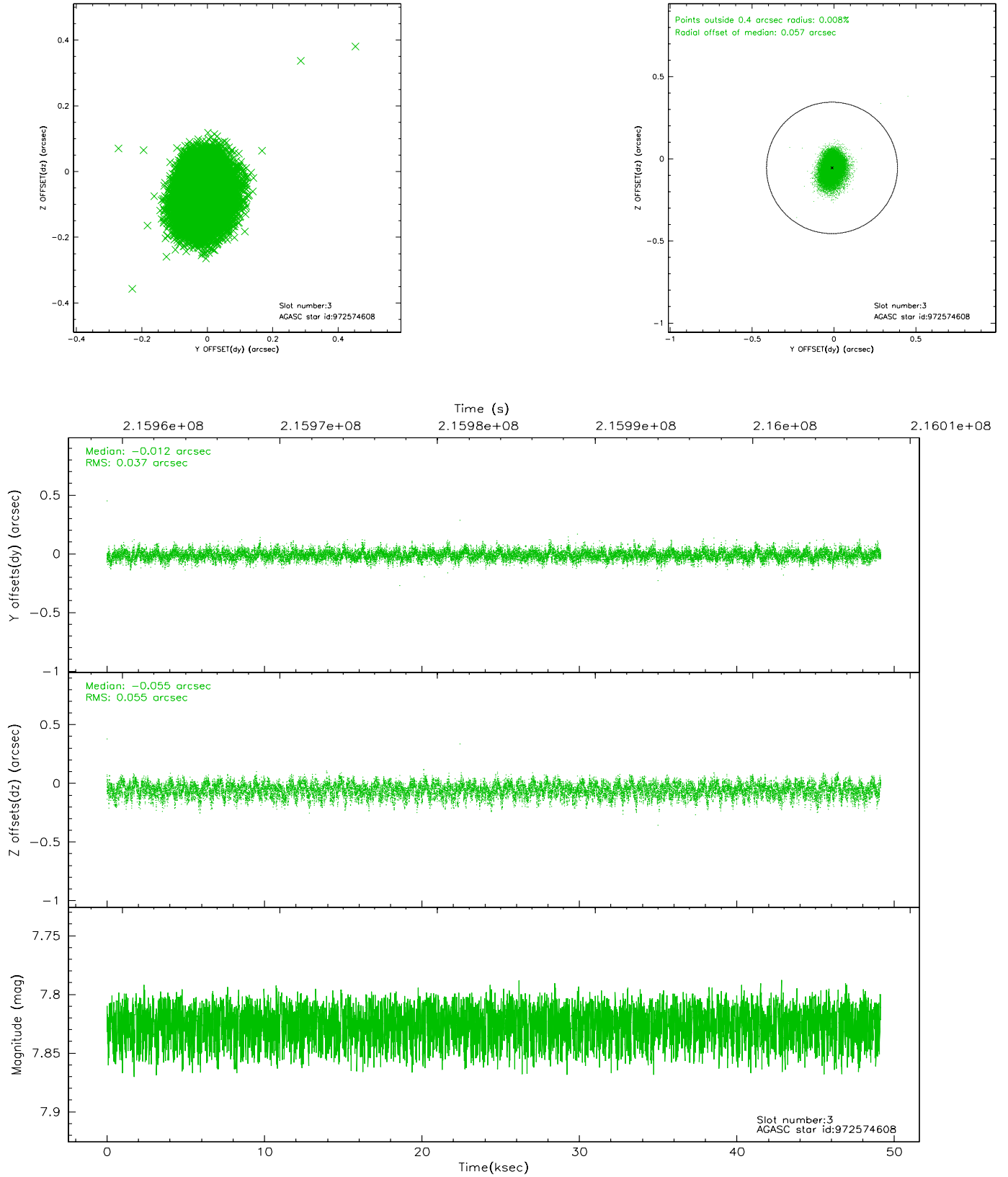


Slot Statistics

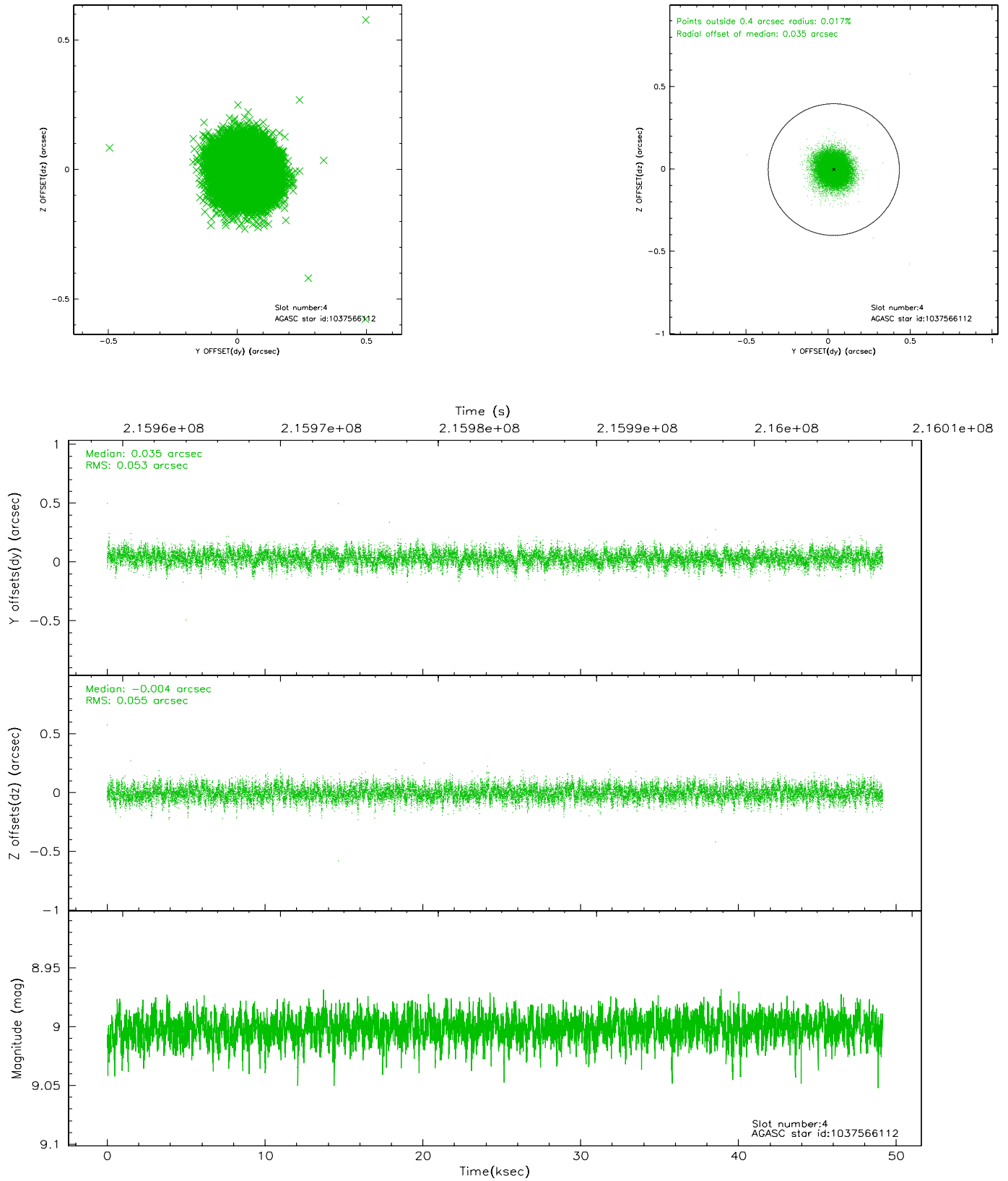
| slot | status | id         | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec        | mean_y   | mean_z   |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0    | FID    | HRC-I-1    | 6.89 | 11988 | -0.612 | -0.028 | 0.005 | 0.011 | 0.000000   | 0.000000   | -763.86  | 239.06   |
| 1    | FID    | HRC-I-2    | 7.01 | 11983 | 0.691  | -0.026 | 0.005 | 0.011 | 0.000000   | 0.000000   | 846.93   | 240.14   |
| 2    | UNUSED |            | 0.00 | 0     | 0.000  | 0.000  | 0.000 | 0.000 | 0.000000   | 0.000000   | 0.00     | 0.00     |
| 3    | GUIDE  | 972574608  | 7.83 | 23974 | -0.012 | -0.055 | 0.070 | 0.116 | 283.352847 | -37.274388 | -1379.58 | -966.91  |
| 4    | GUIDE  | 1037566112 | 9.00 | 23965 | 0.035  | -0.004 | 0.080 | 0.132 | 283.021431 | -38.146262 | 1810.71  | -1718.61 |
| 5    | GUIDE  | 1037567312 | 8.47 | 23969 | 0.031  | 0.038  | 0.060 | 0.098 | 283.456056 | -37.976515 | 1126.73  | -525.61  |
| 6    | GUIDE  | 1037569296 | 9.46 | 23955 | 0.096  | 0.067  | 0.106 | 0.175 | 284.013208 | -38.111113 | 1524.11  | 1078.13  |
| 7    | GUIDE  | 972564920  | 9.66 | 23938 | -0.149 | -0.043 | 0.125 | 0.209 | 283.044679 | -36.997275 | -2321.97 | -1910.09 |

## 2.4 Star Slots

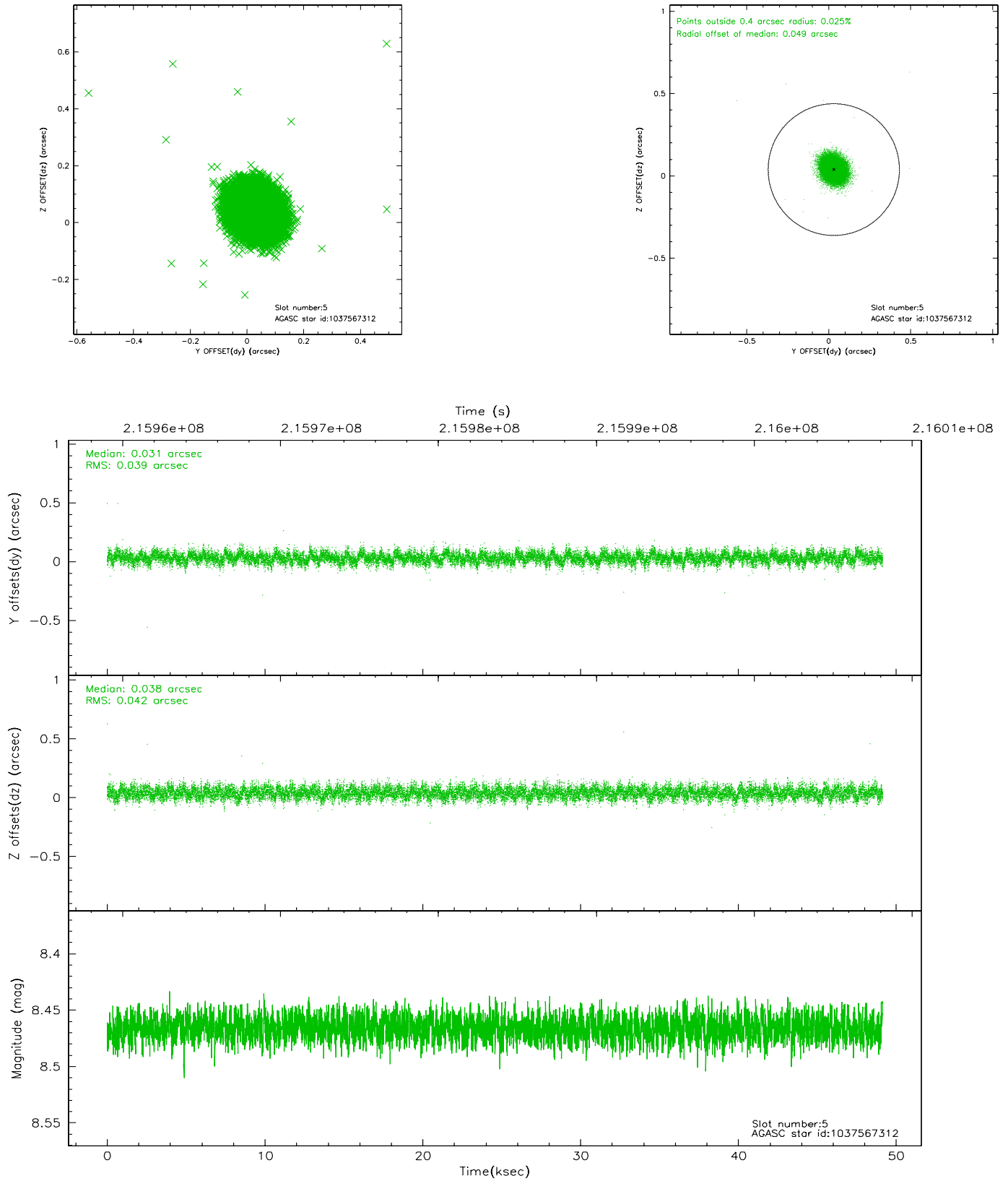
### 2.4.1 Slot 3



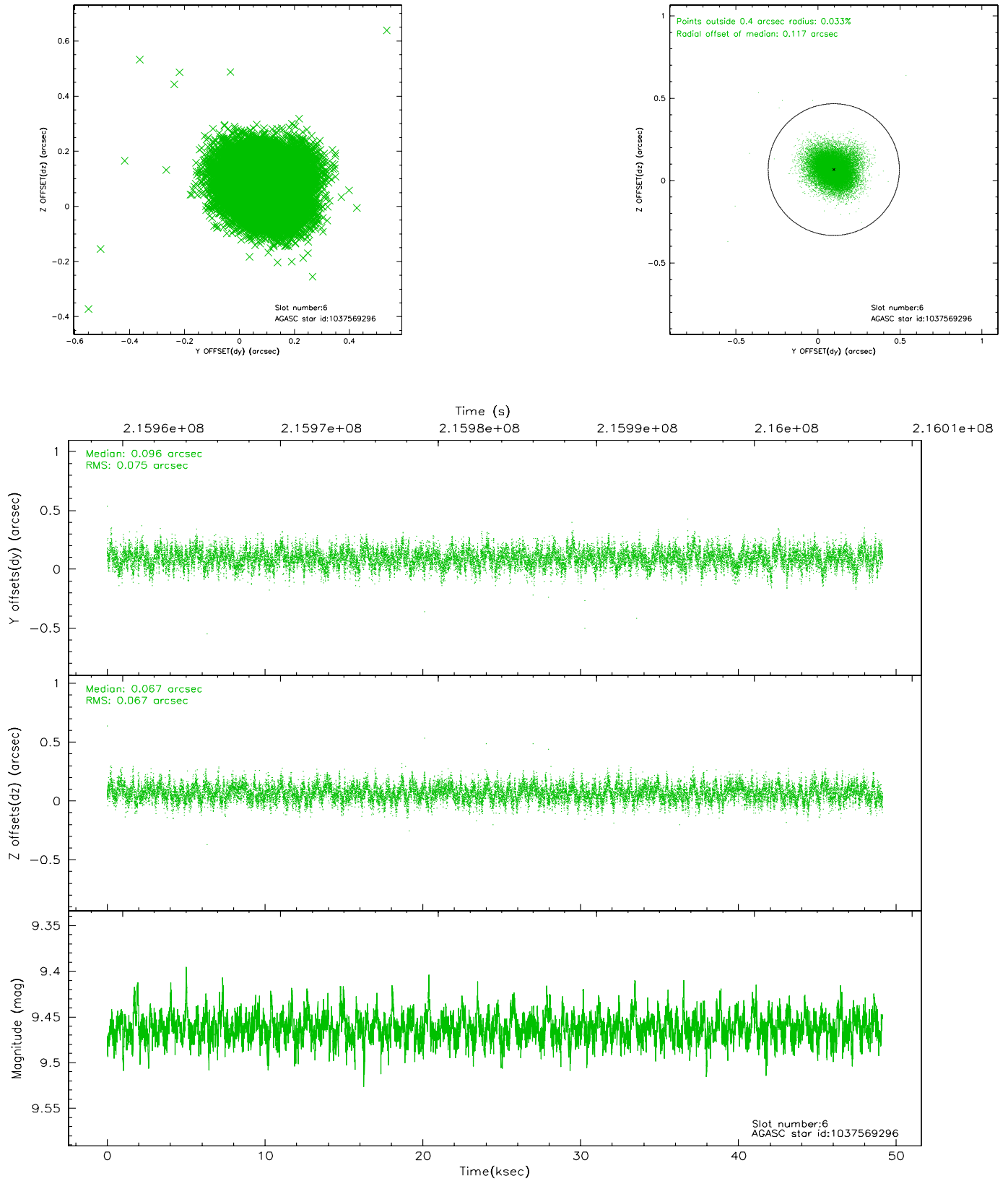
## 2.4.2 Slot 4



### 2.4.3 Slot 5

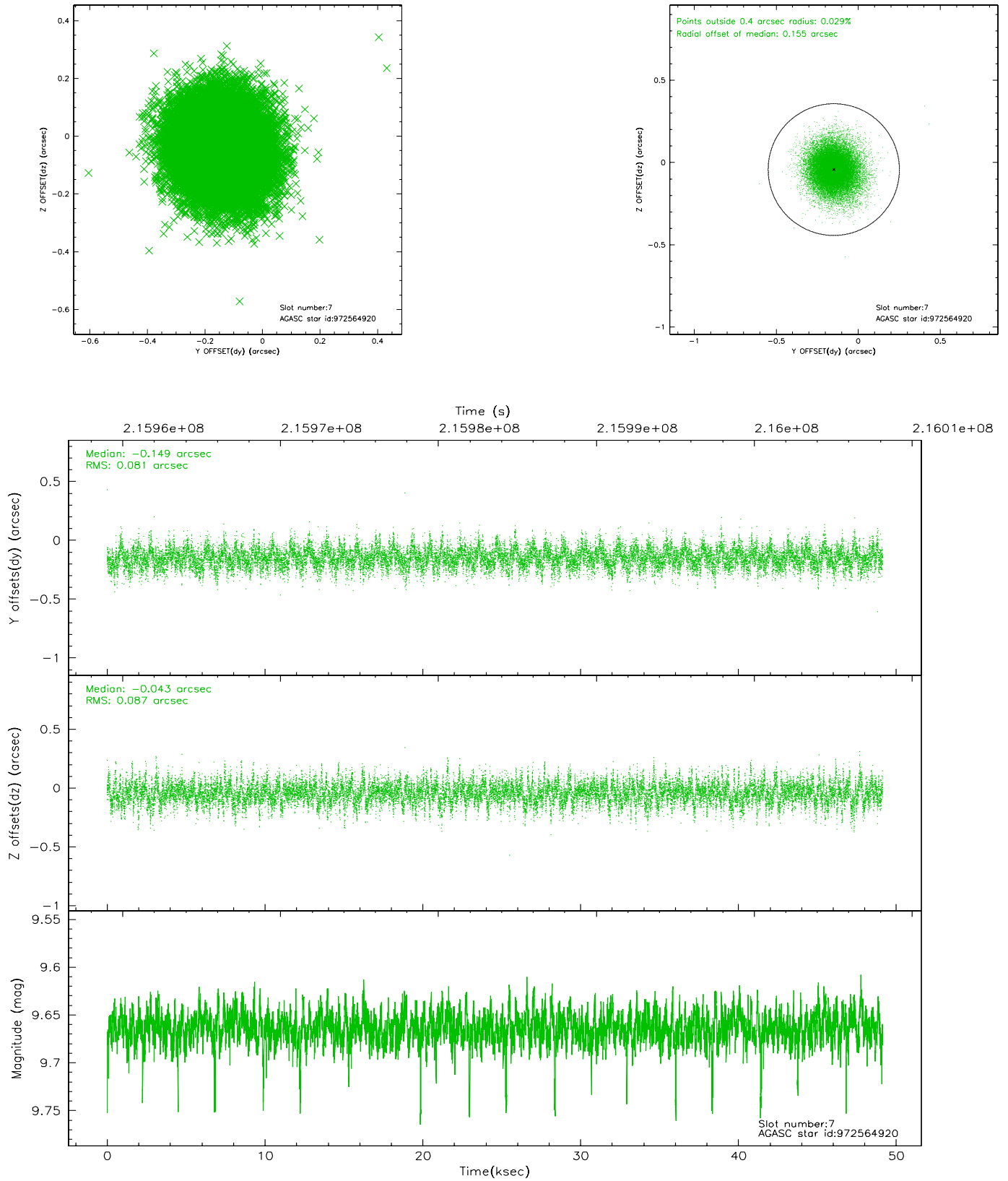


## 2.4.4 Slot 6



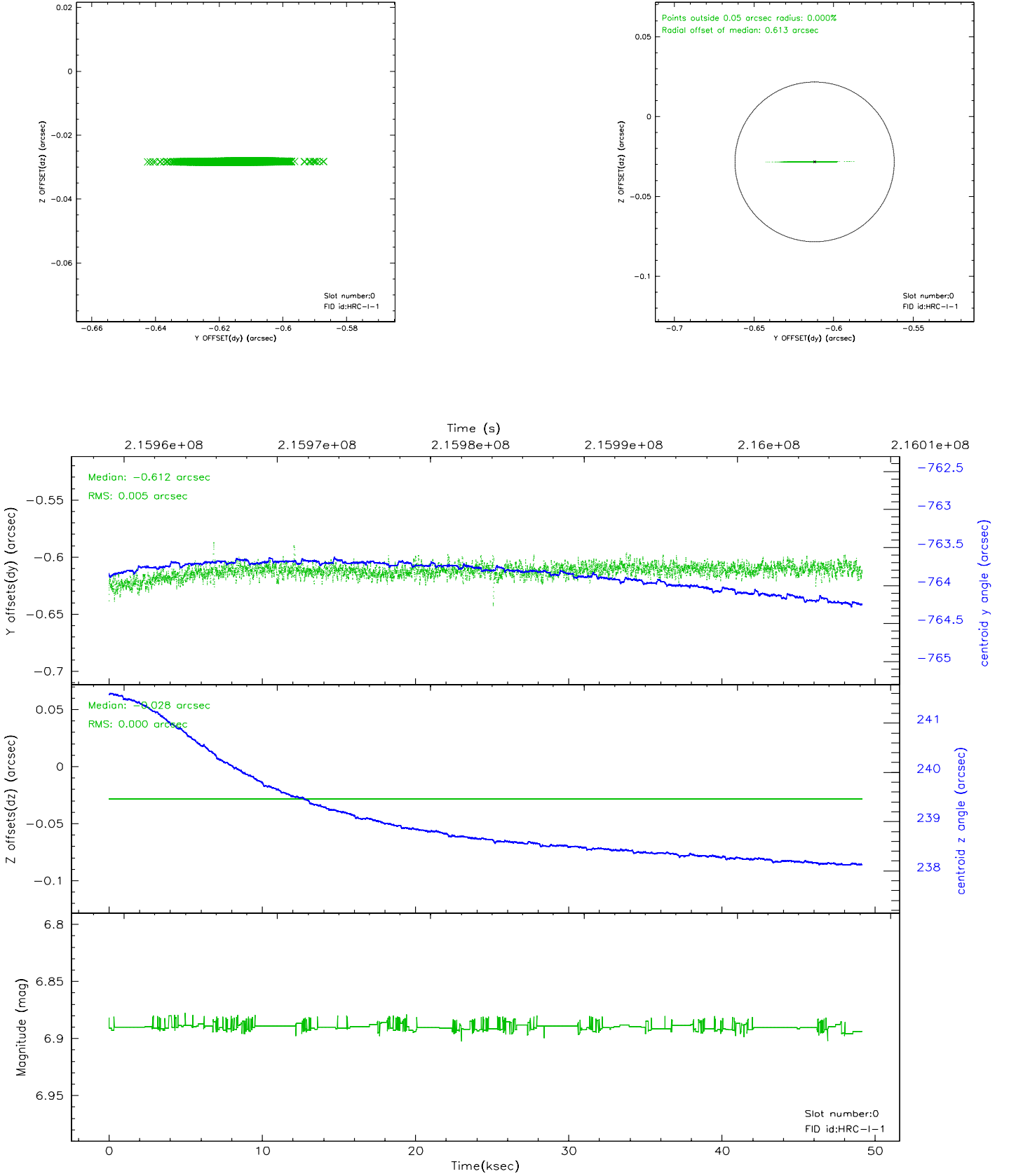


## 2.4.5 Slot 7

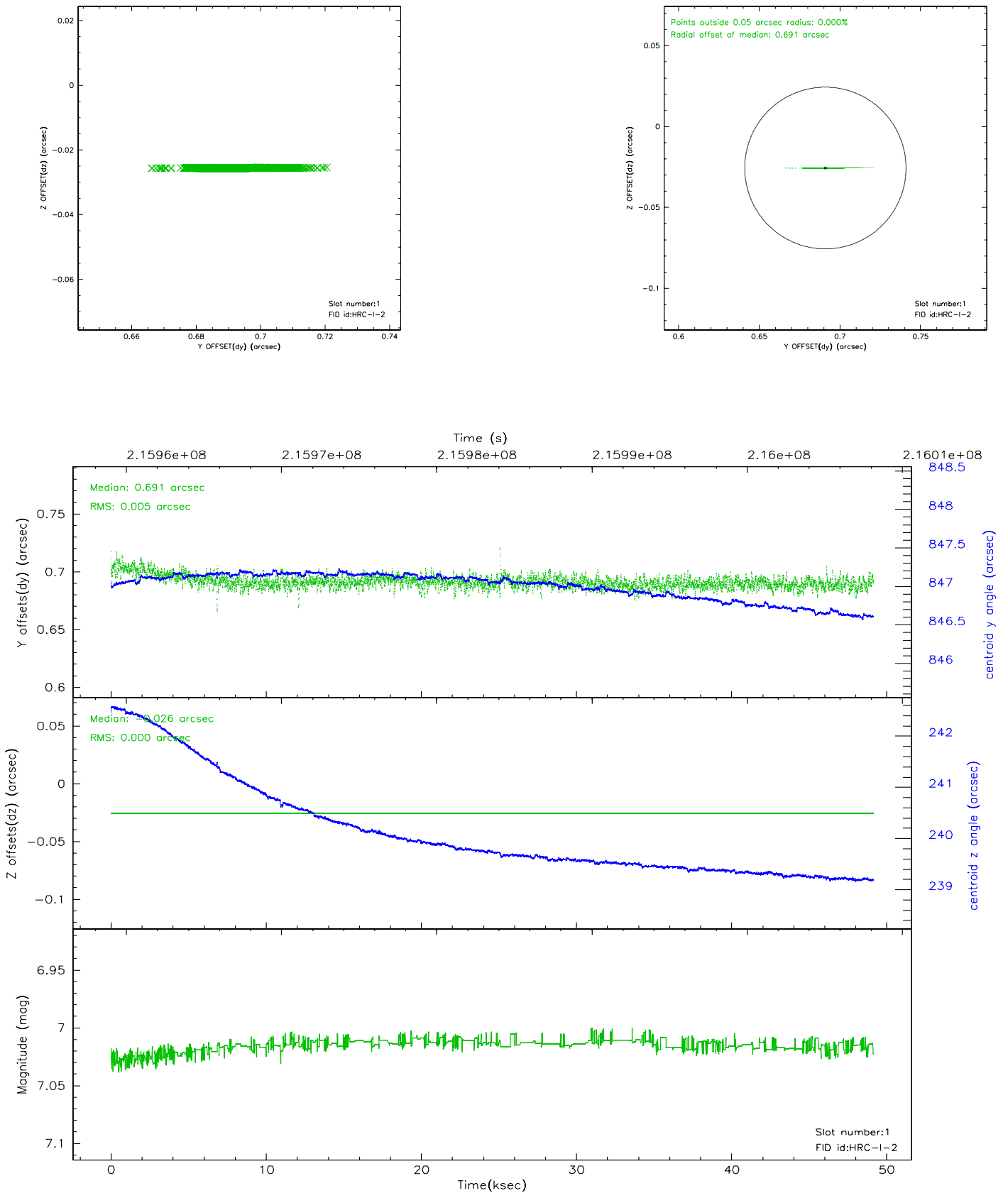


## 2.5 FID Slots

### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 3 Point Sources

# A Summary

## A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2009.02.09    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 48.839        |

## A.2 Comments

This obsid was reprocessed to correct minor errors in parameters used in processing. Some of these parameters cannot be determined automatically for this observation and were derived from spacecraft telemetry.

Slot 2 was not utilized in this observation.

Large offsets in slots 0 and 1 are due to the offset of the detector from the aim point.