

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8228 - L2 Version 5  
Chandra X-Ray Center

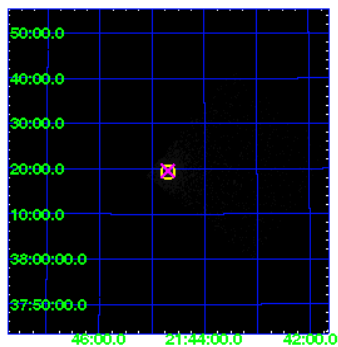
L2 Processing Date : Aug 11 2012

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# 1 Front

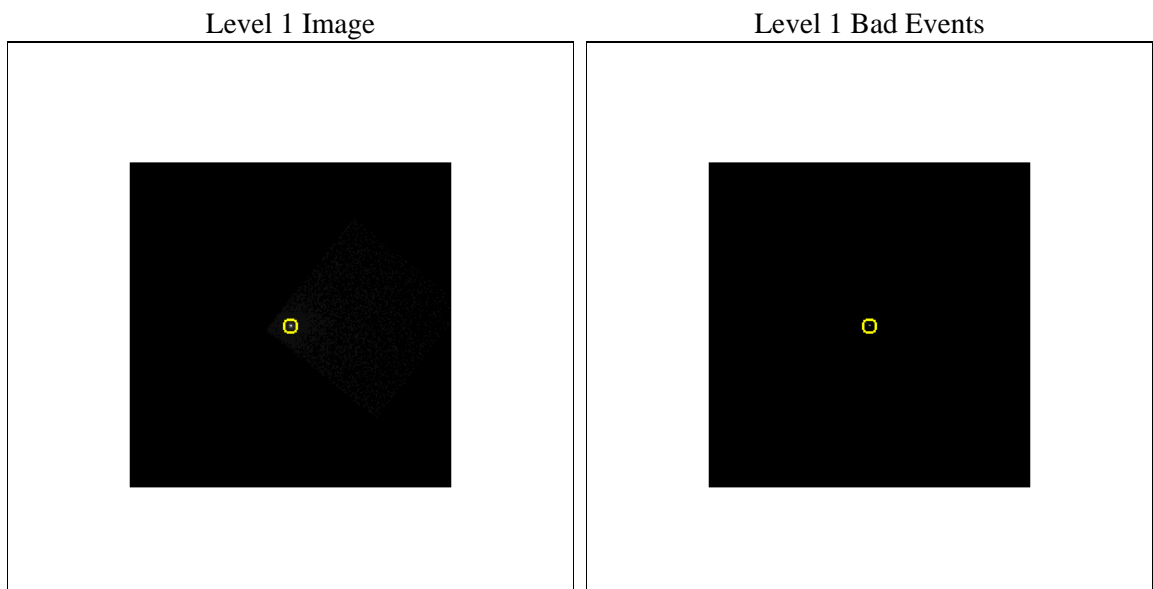
seq_num	900718	Sequence number
obs_id	8228	Observation id
title	Accurate Determination of the Dust-Scattering Halo Around Cyg X-2	&#160
observer	Frederick Seward	Principal investigator
object	Cyg X-2	Source name
ra_targ	326.171667	Observer's specified target RA [deg]
dec_targ	38.321667	Observer's specified target Dec [deg]
ra_nom	326.17377404588	Nominal RA [deg]
dec_nom	38.326180231722	Nominal Dec [deg]
roll_nom	83.368723251794	Nominal Roll [deg]
revision	5	Processing version of data
ontime	2641.68137604	[s]
livedtime	1262.0428679445	Ontime multiplied by DTCOR
l2events	446782	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	2500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2641.68137604	[s]
caldbver	4.5.1.1	&#160	l1events	590342	Number of level 1 events
date	2012-08-11T21:27:03	Date and time of file creation			
revision	5	Processing version of data			

### 2.1.3 Events

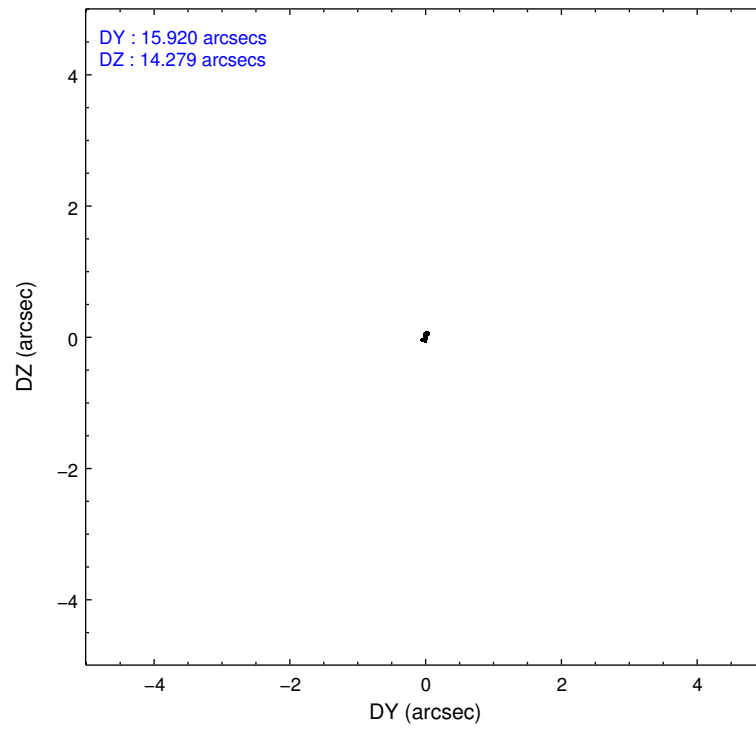
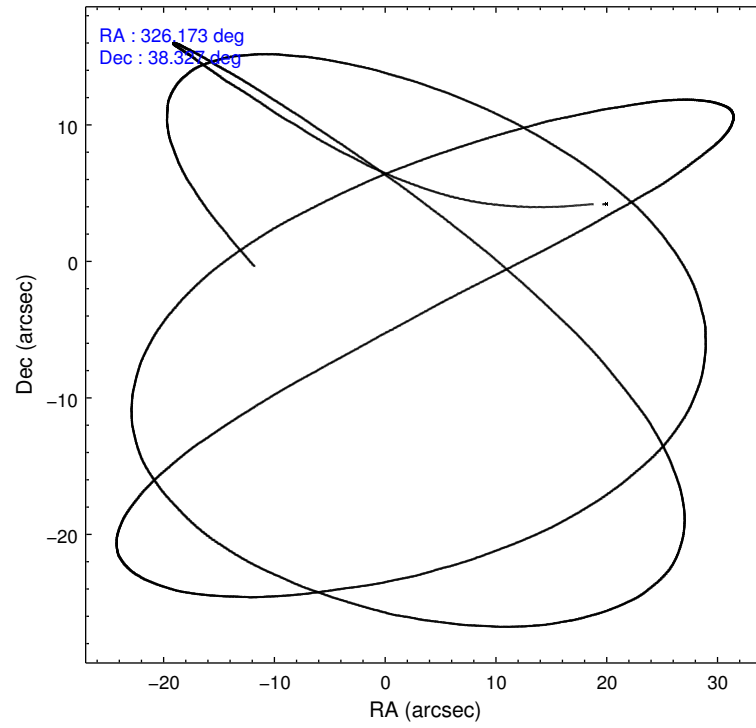
#### Level 1 Events

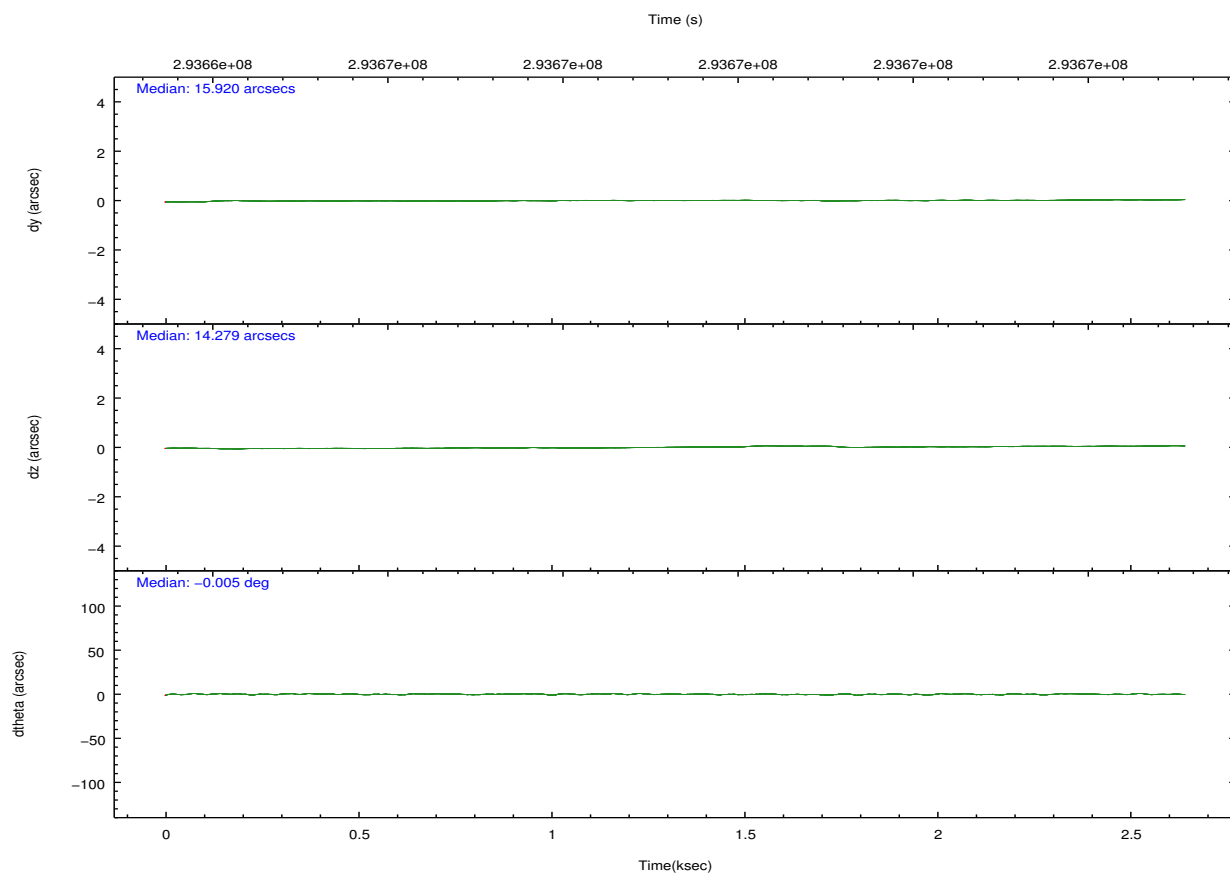
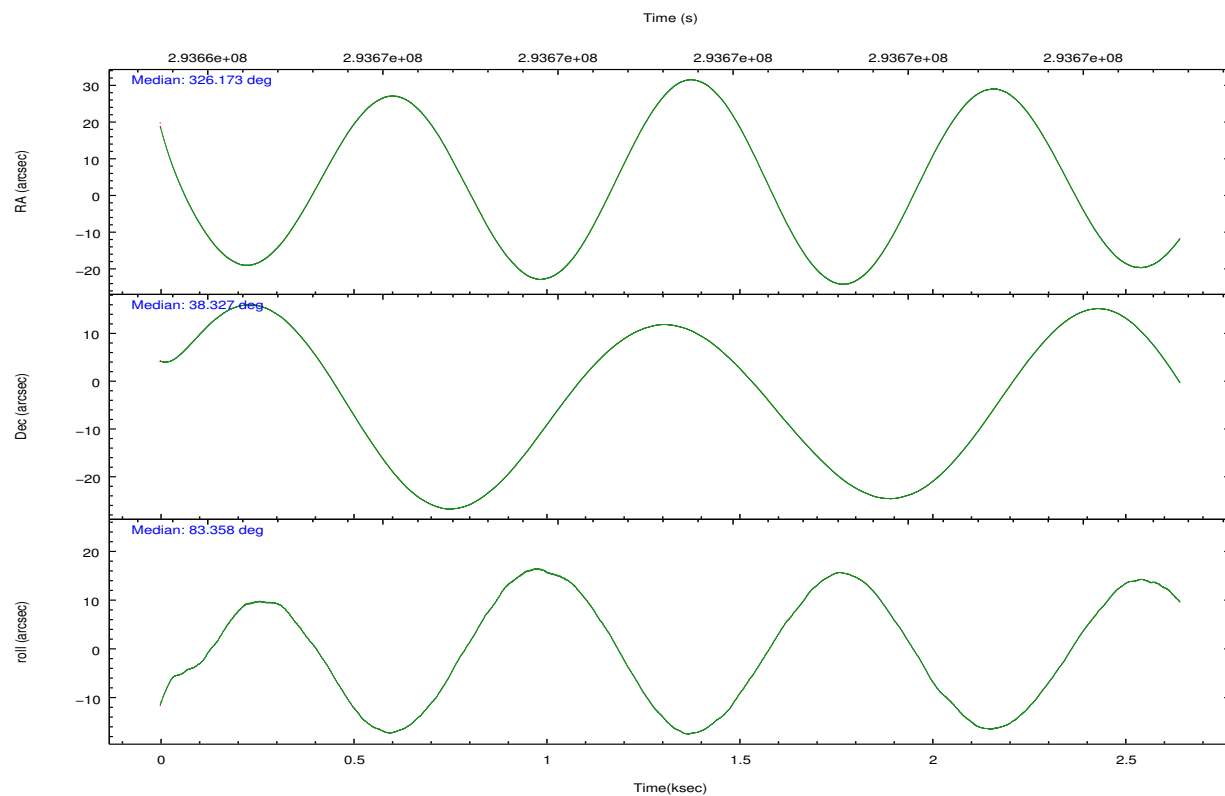
	<b>segment 0</b>
level 1 events	590342
rejected events	103242
rejected %	17%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
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			
[deg] Pointing RA	326.188695	326.1737740458784			
[deg] Pointing Dec	38.300677	38.32618023172201			
[deg] Pointing Roll	83.454945	83.36872325179435			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	77.985494	77.98651770848652			
[mm] SIM translation stage offset	49	48.99897118311505			
[s] Observation start time (MET)	293665132.184000	293664055.06451			
Observation start date	2007-04-22T21:37:47	2007-04-22T21:20:55			
[s] Observation end time (MET)	293667632.184000	293668366.72722			
Observation end date	2007-04-22T22:19:27	2007-04-22T22:32:46			

## 2.3 Aspect





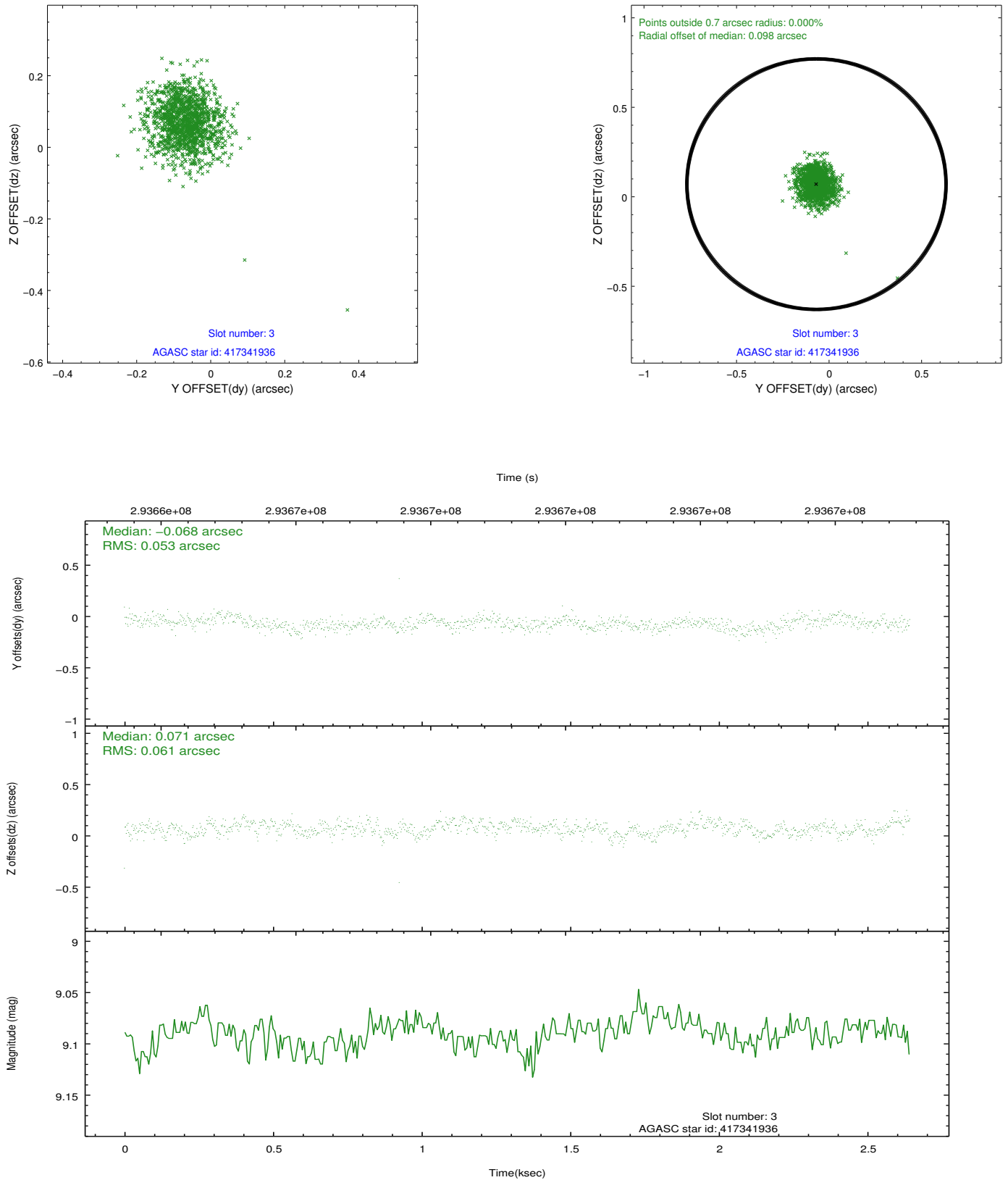
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-2	7.11	645	-0.342	-0.158	0.008	0.014	0.000000	0.000000	839.70	-296.51
1	FID	HRC-I-3	7.04	645	0.210	-0.364	0.006	0.010	0.000000	0.000000	-1200.09	2008.46
2	FID	HRC-I-4	6.91	645	0.248	0.427	0.006	0.010	0.000000	0.000000	1268.07	2010.99
3	GUIDE	417341936	9.09	1290	-0.068	0.071	0.083	0.135	326.275716	38.441212	528.24	-187.17
4	GUIDE	417343224	9.24	1289	0.140	-0.220	0.099	0.158	325.357905	37.770468	-2157.61	2130.50
5	GUIDE	417347584	9.43	1289	-0.052	0.030	0.126	0.205	326.789051	38.342651	344.97	-1665.71
6	GUIDE	417348376	8.22	1289	0.035	-0.097	0.068	0.112	325.737694	38.184491	-560.74	1218.28
7	GUIDE	417351928	7.79	1288	-0.053	0.215	0.063	0.104	326.969486	38.210974	-62.43	-2229.98

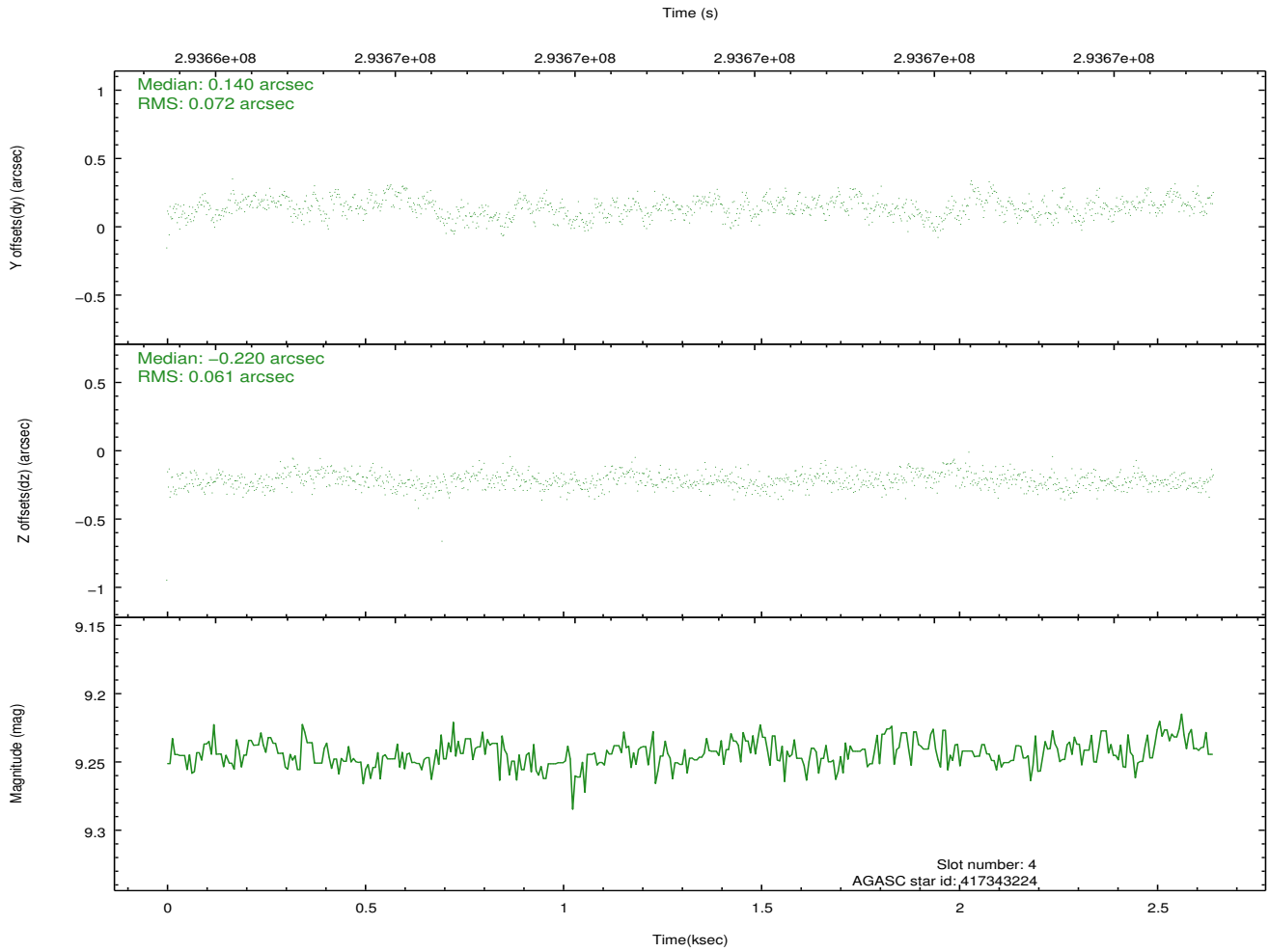
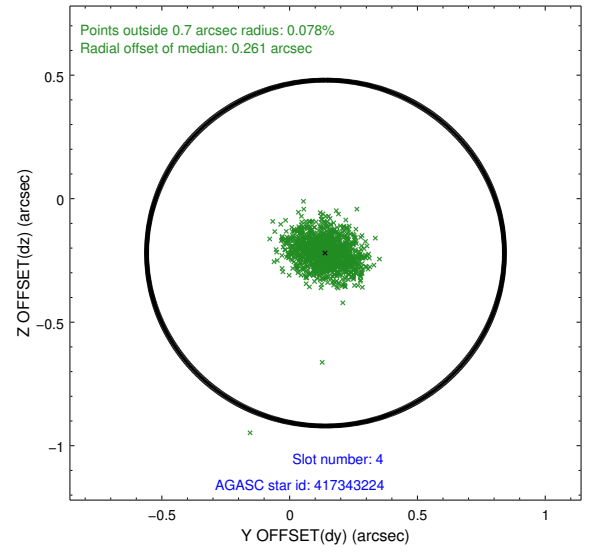
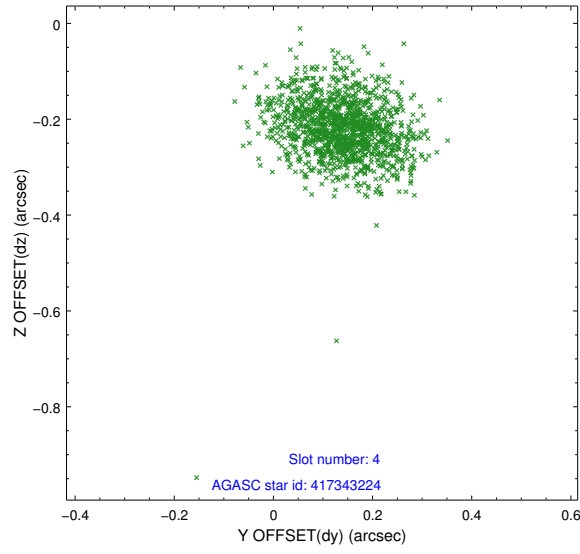


## 2.4 Star Slots

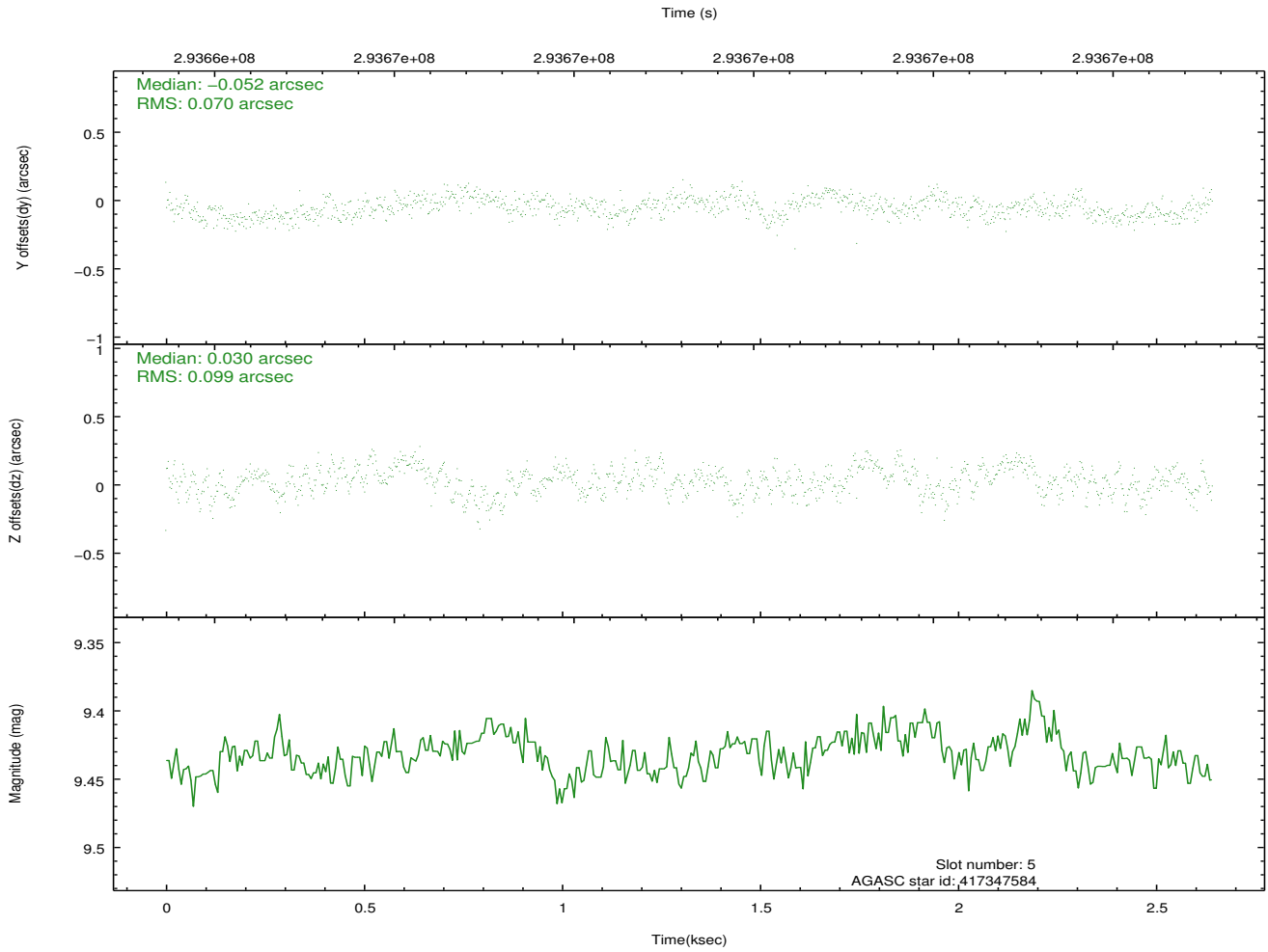
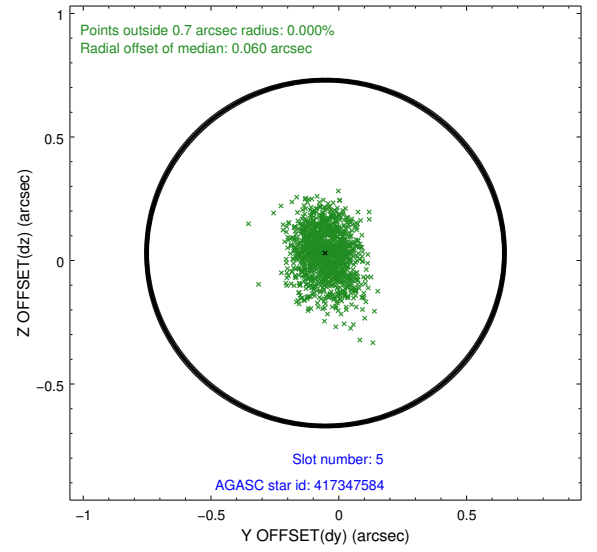
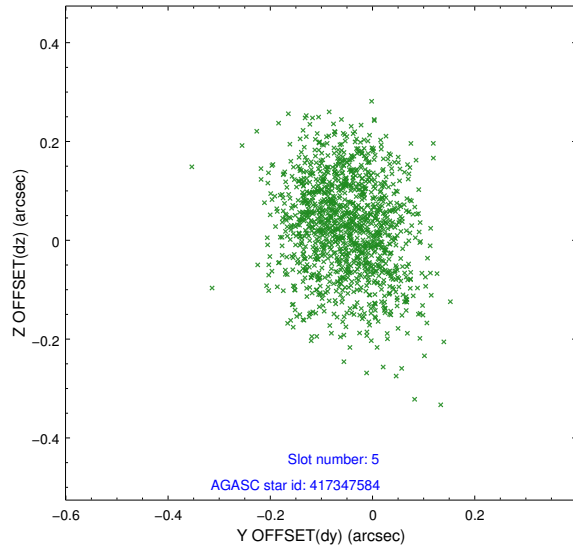
### 2.4.1 Slot 3



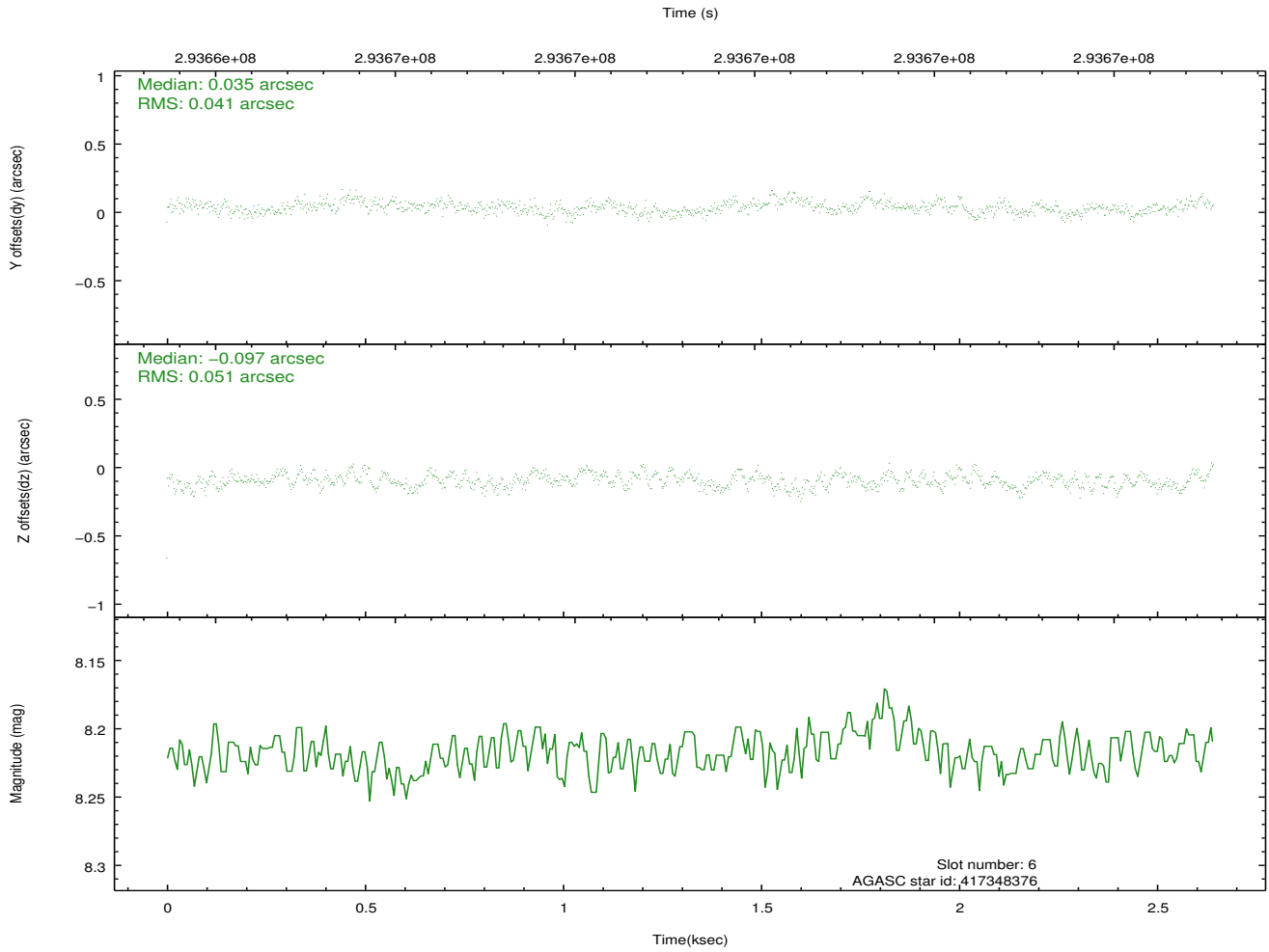
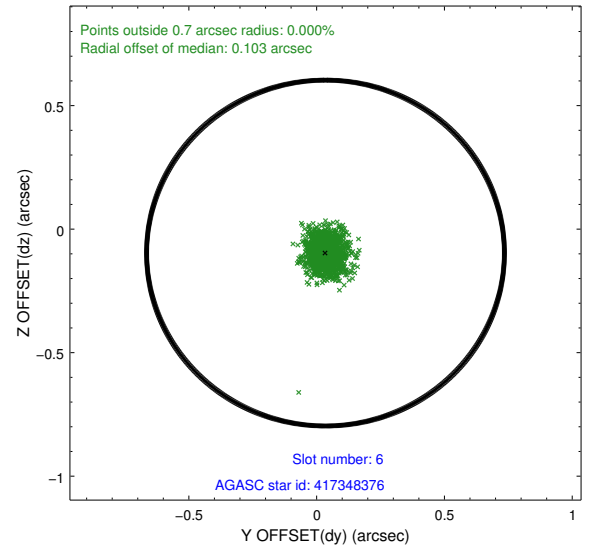
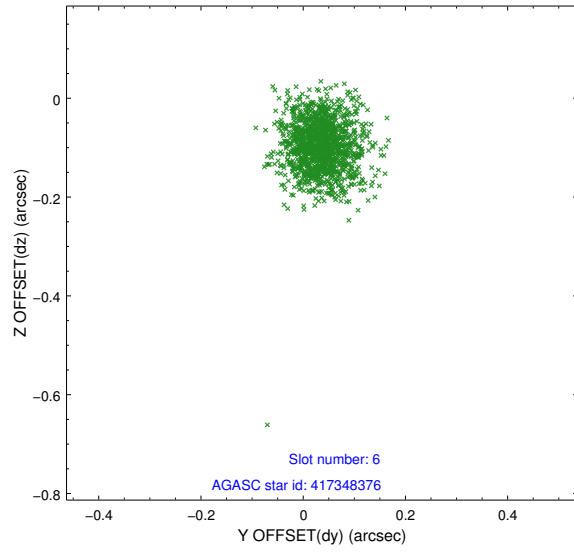
## 2.4.2 Slot 4



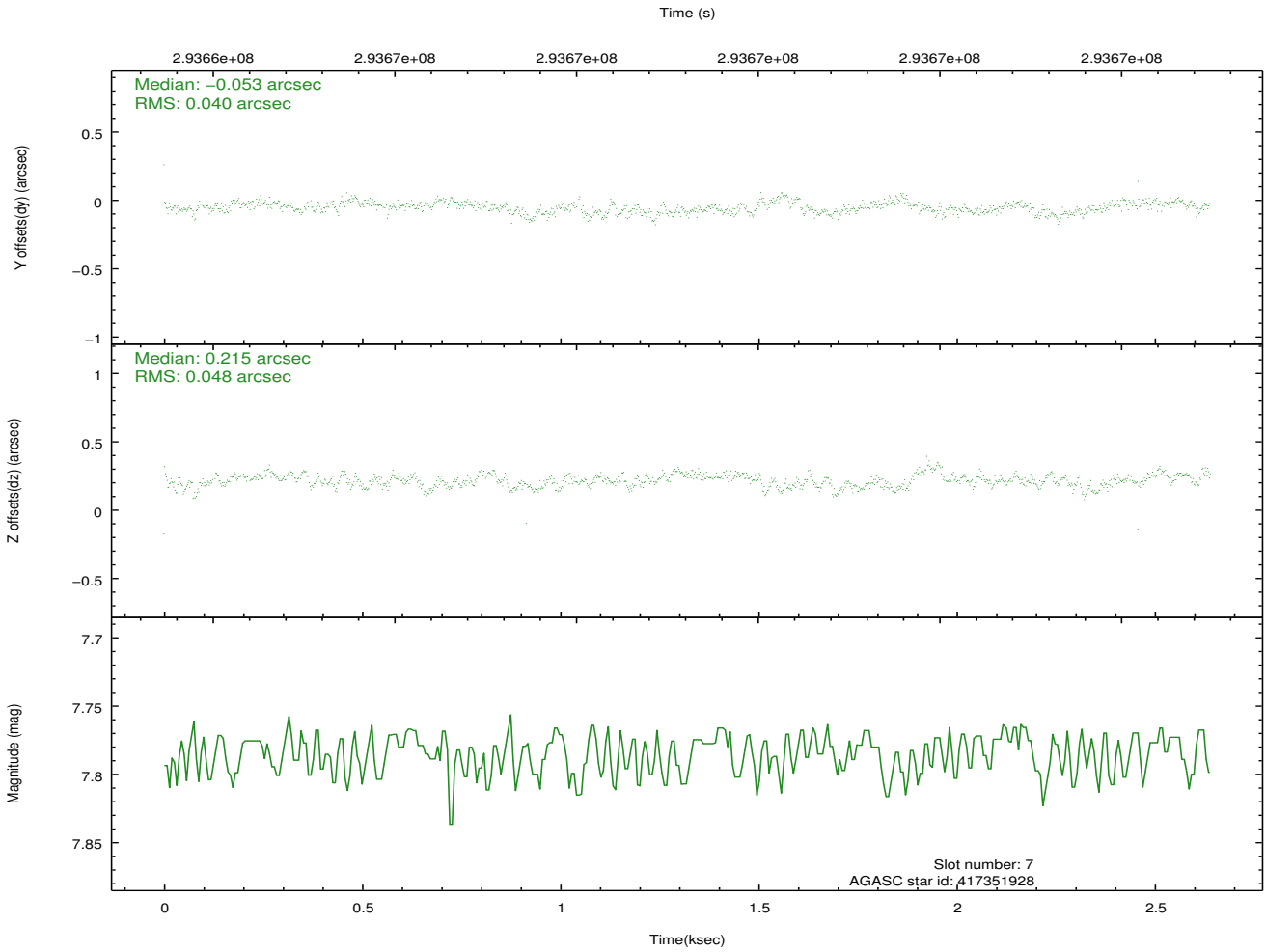
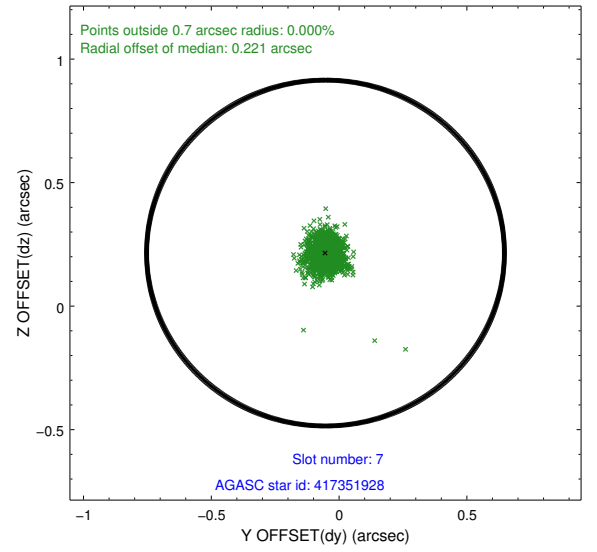
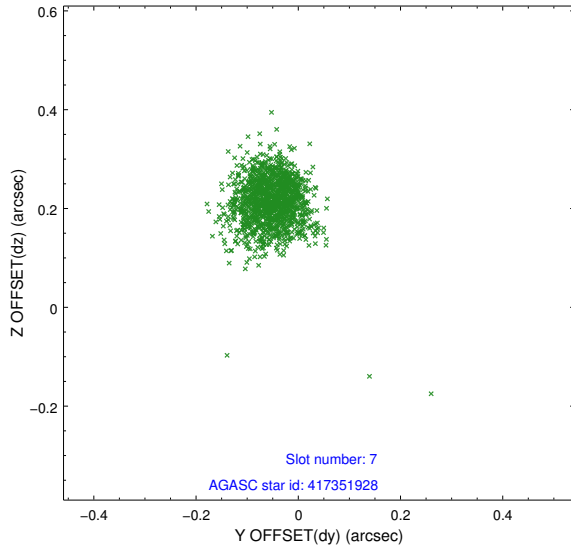
### 2.4.3 Slot 5



## 2.4.4 Slot 6

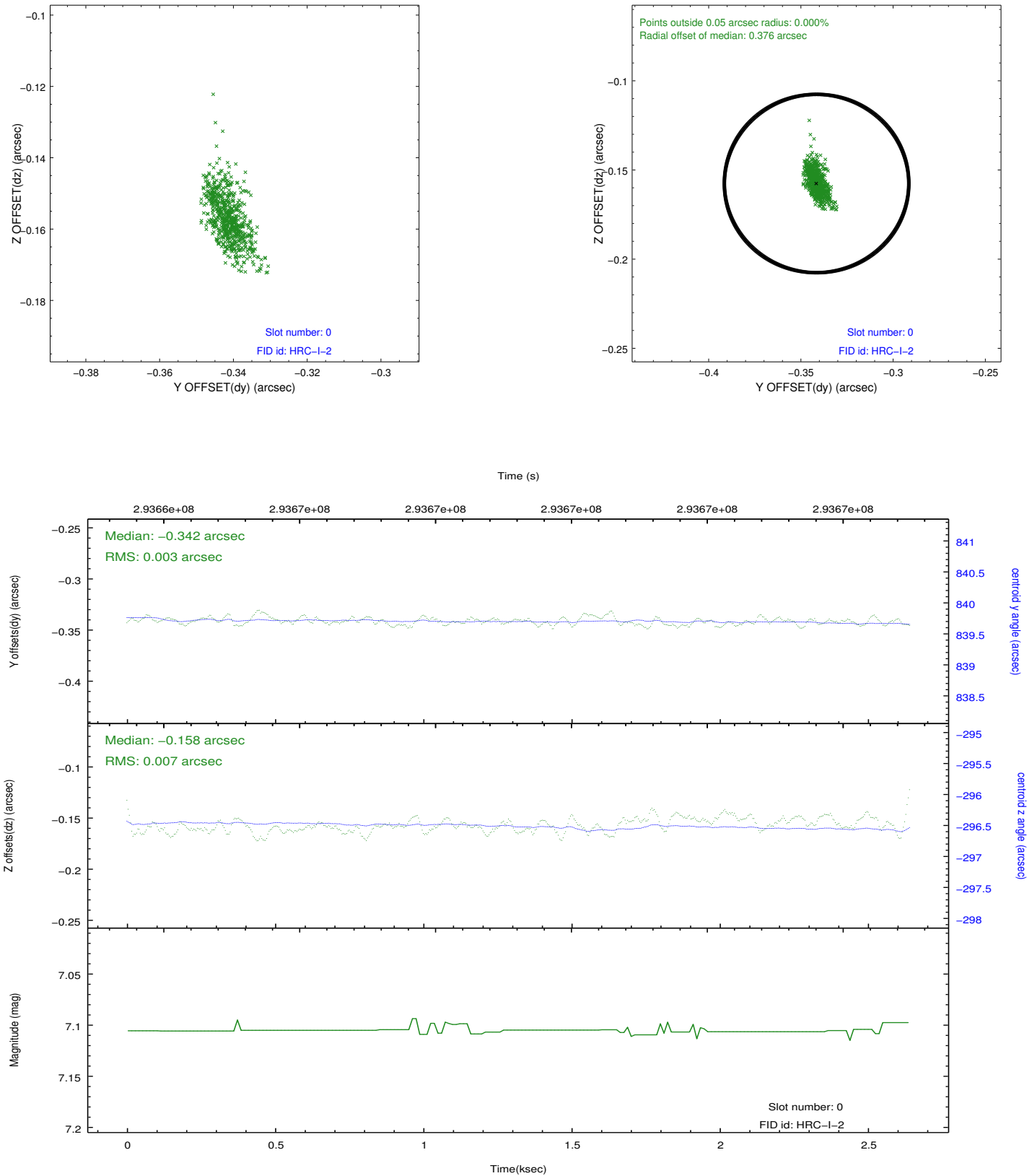


## 2.4.5 Slot 7

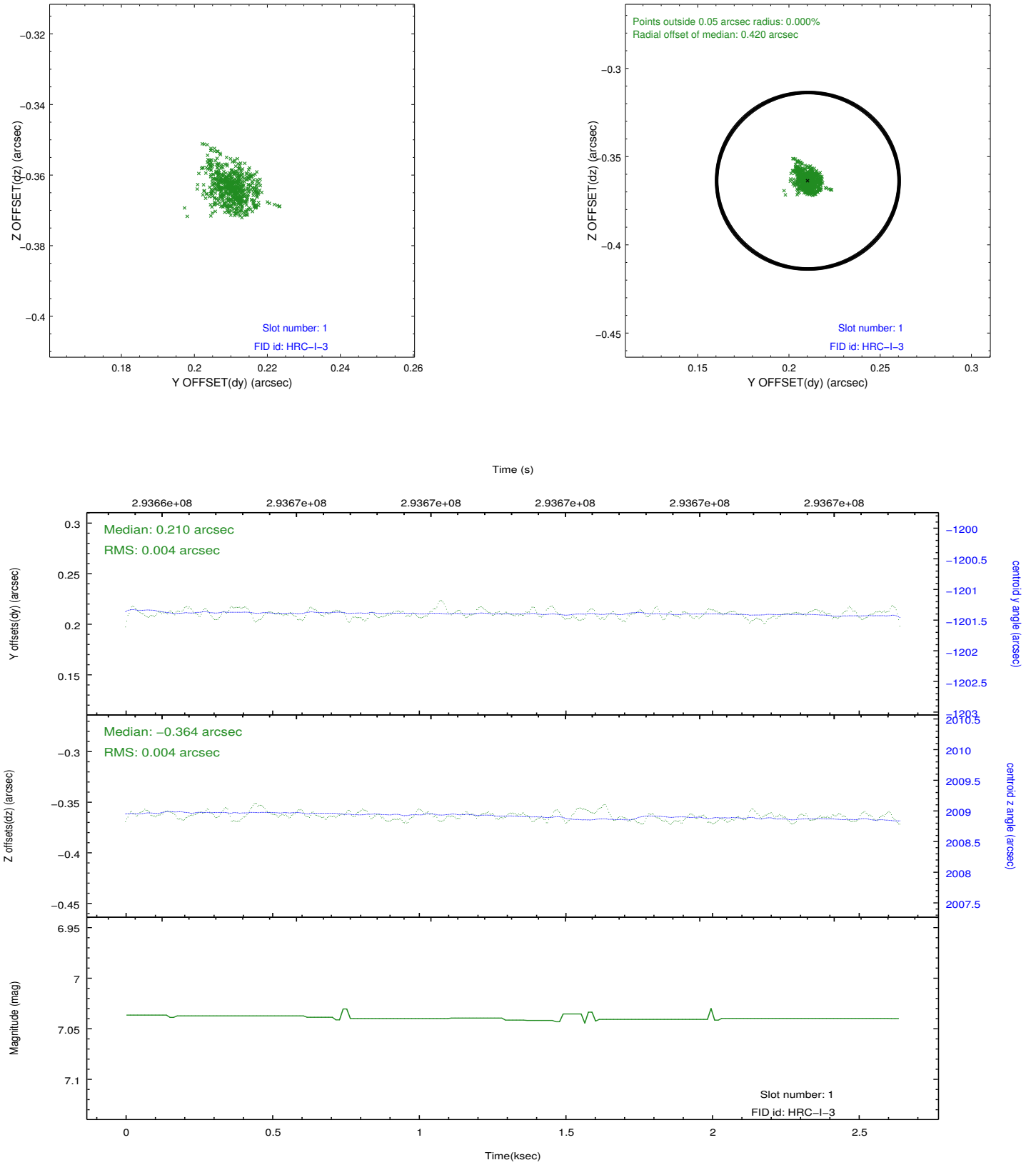


## 2.5 FID Slots

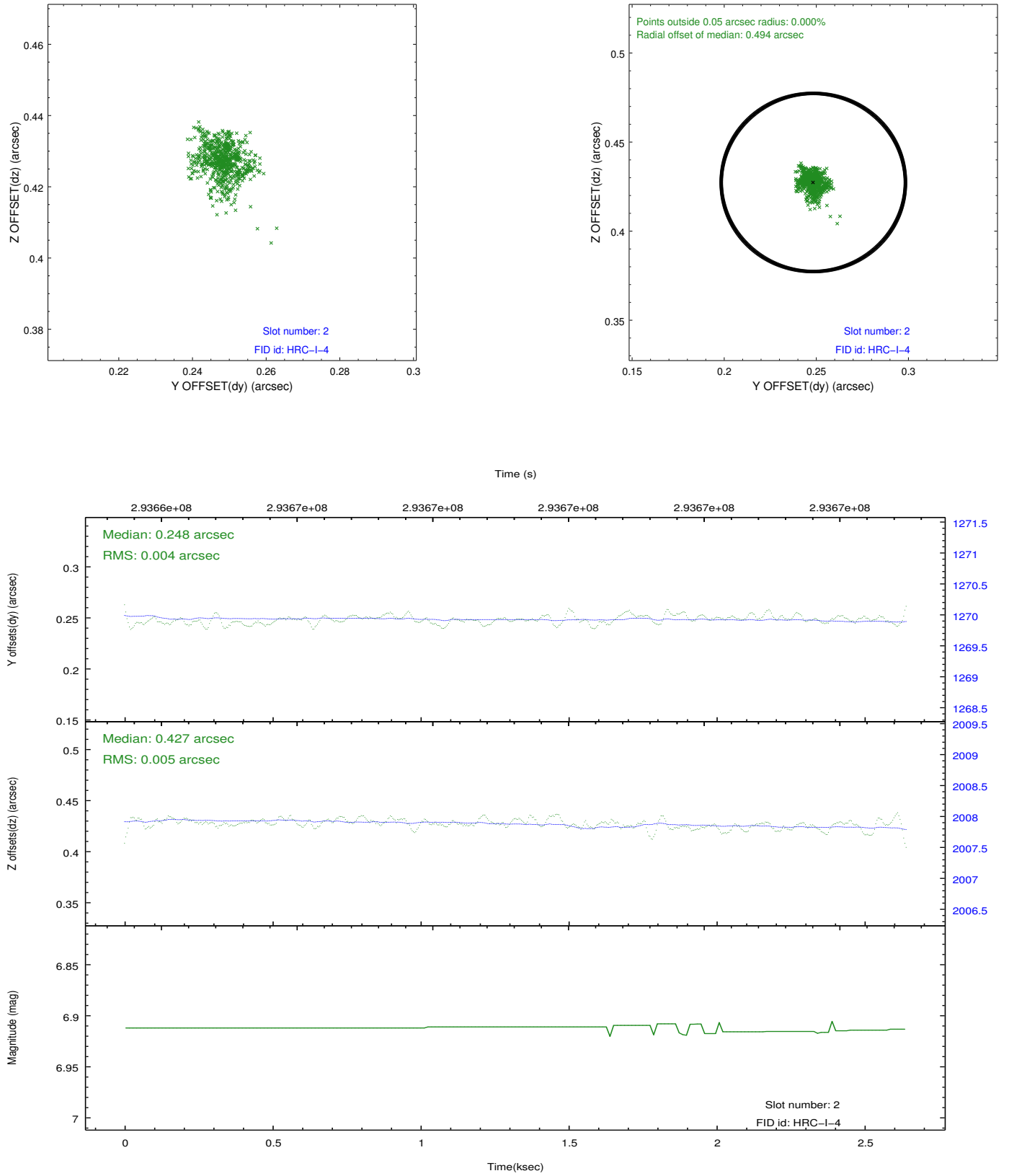
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.64168137

## A.2 Comments

This HRC-I observation has a `sim_z_offset` of 48.99 [mm], and the fid radial offsets of 0.420 arcsec (slot 1) and 0.494 arcsec (slot 2) are acceptable.

===Target deliberately placed near edge of detector to avoid damage to the instrument.

===

Low livetime due to quality of degap correction in this portion of the detector.