

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8376 - L2 Version 7  
Chandra X-Ray Center

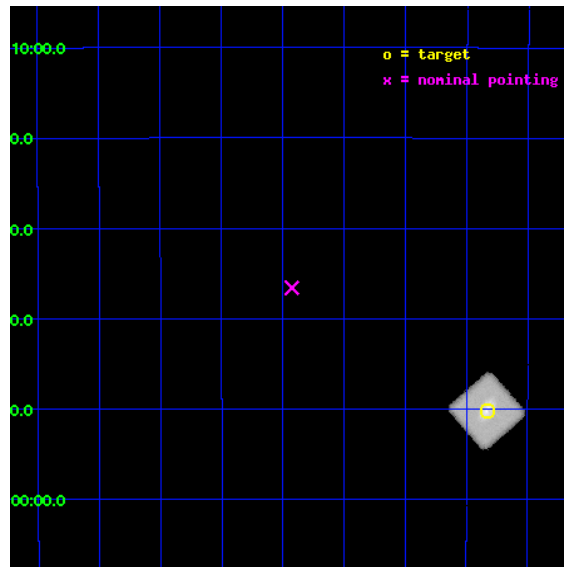
L2 Processing Date : Aug 12 2012

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# 1 Front

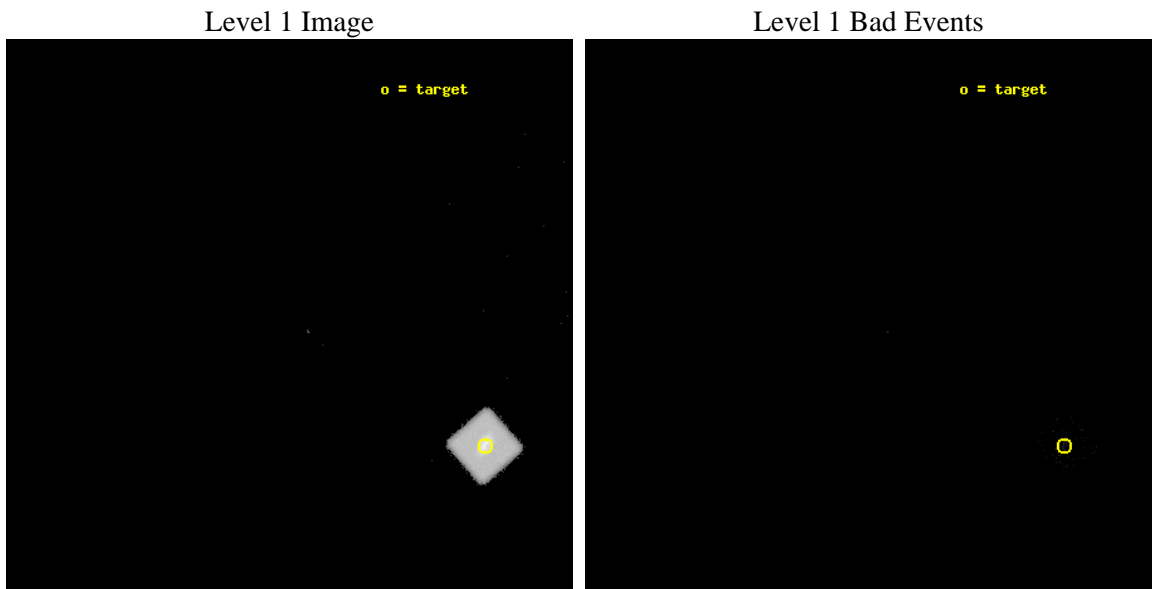
seq_num	990009	Sequence number
obs_id	8376	Observation id
title	AO8 Calibration Observations of the ACIS charged particle background	&#160
observer	Dr. CXC Calibration	Principal investigator
object	Ross 154	Source name
ra_targ	282.457083	Observer's specified target RA [deg]
dec_targ	-23.836628	Observer's specified target Dec [deg]
ra_nom	282.8566391906	Nominal RA [deg]
dec_nom	-23.610044454907	Nominal Dec [deg]
roll_nom	93.898505271866	Nominal Roll [deg]
revision	7	Processing version of data
ontime	48511.202321172	[s]
livetime	39425.255456493	Ontime multiplied by DTCOR
l2events	113671	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	48809.789000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	48576.802321136	[s]
caldbver	4.5.1.1	&#160	l1events	148275	Number of level 1 events
date	2012-08-11T22:35:09	Date and time of file creation			
revision	7	Processing version of data			

### 2.1.3 Events

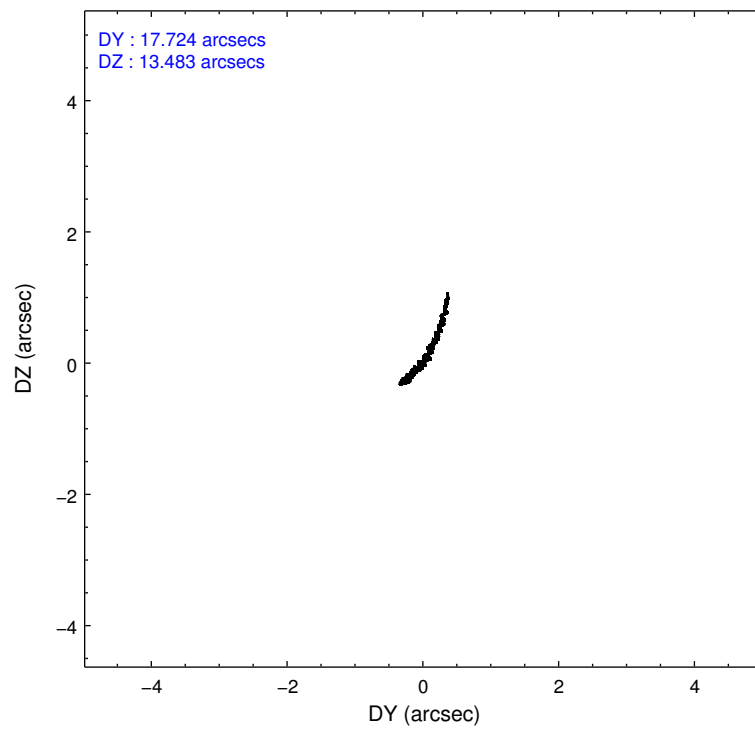
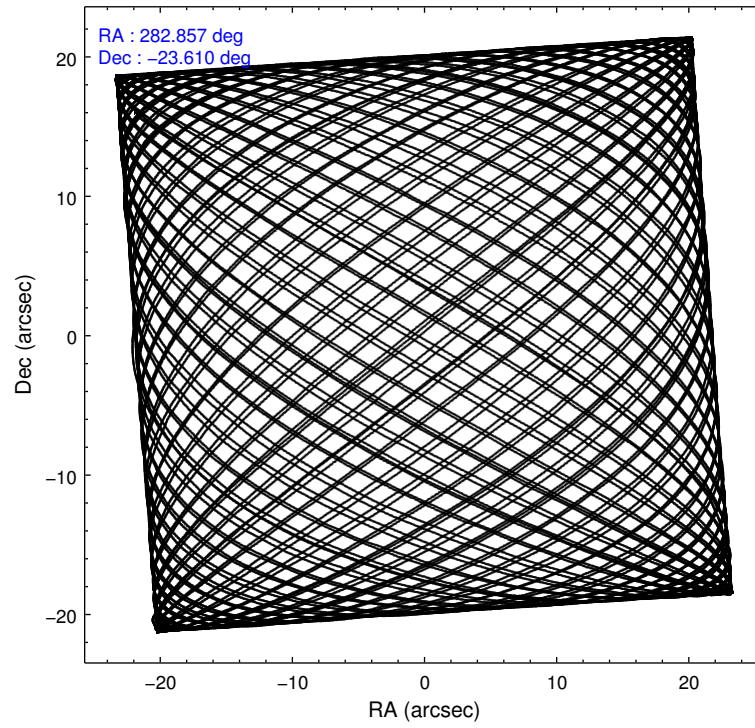
#### Level 1 Events

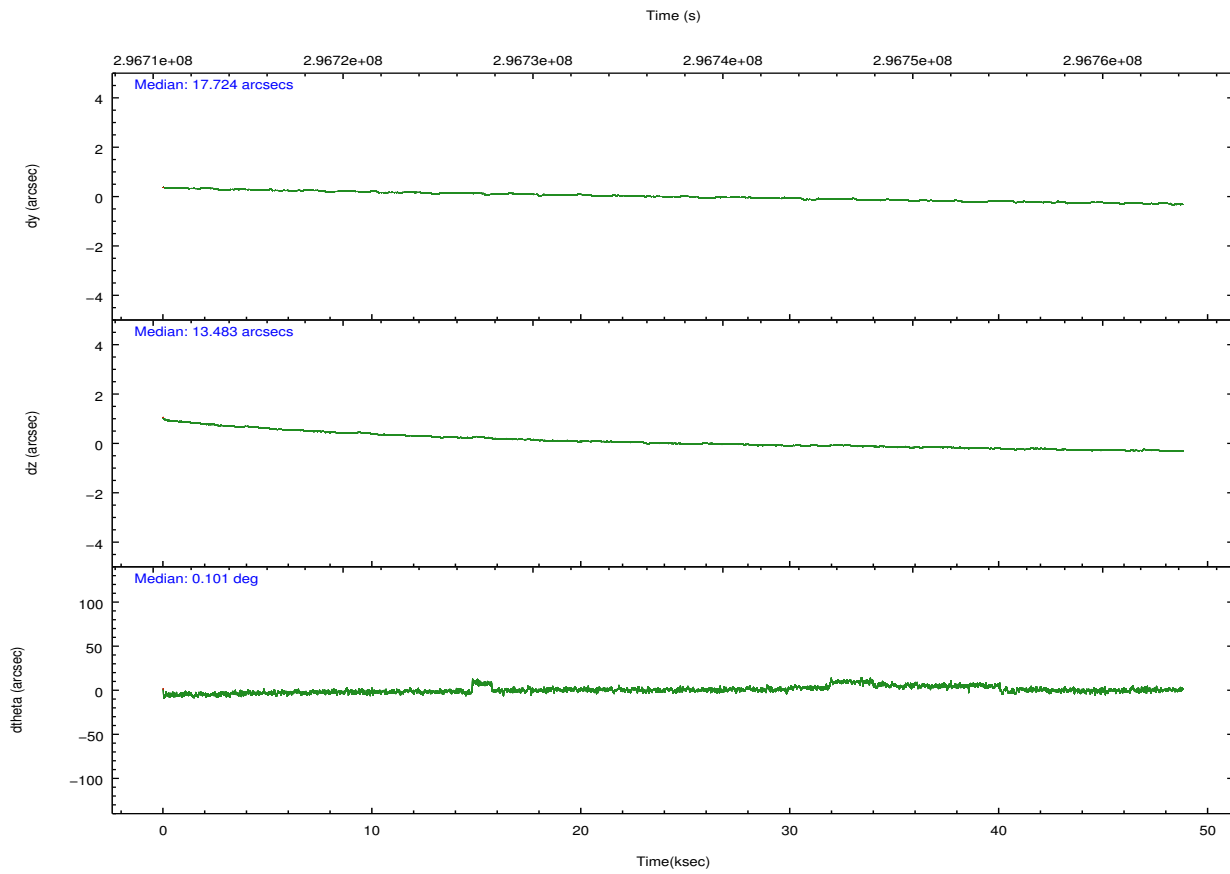
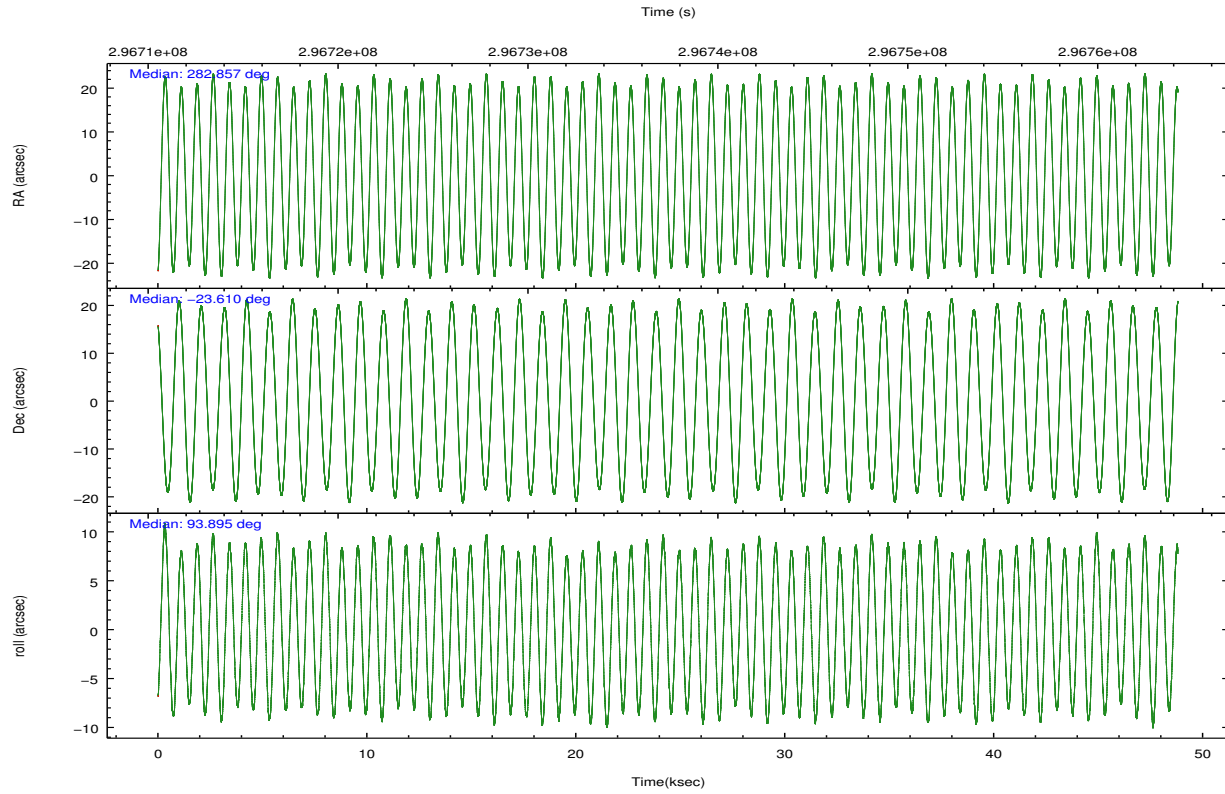
	<b>segment 0</b>
level 1 events	148275
rejected events	603
rejected %	0%

## 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	OVERRIDE	OVERRIDE
Data mode	NEXT_IN_LINE	NEXT_IN_LINE			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	282.8566393177176	282.8566391906027			
[deg] Pointing Dec	-23.61004437429172	-23.61004445490714			
[deg] Pointing Roll	93.89850532577229	93.89850527186556			
[mm] SIM focus pos	-1.0388663562	-1.0388663562			
[mm] SIM defocus	0.00142623215544524	0.00142623215544524			
[mm] SIM translation stage pos	51.9985547516	51.9985547516			
[mm] SIM translation stage offset	74.9869395536878	74.9869395536878			
[s] Observation start time (MET)	296712972.184	296712972.184			
Observation start date	2007-05-28T04:15:07	2007-05-28T04:16:12			
[s] Observation end time (MET)	296761781.184	296761781.184			
Observation end date	2007-05-28T17:48:36	2007-05-28T17:49:41			

## 2.3 Aspect



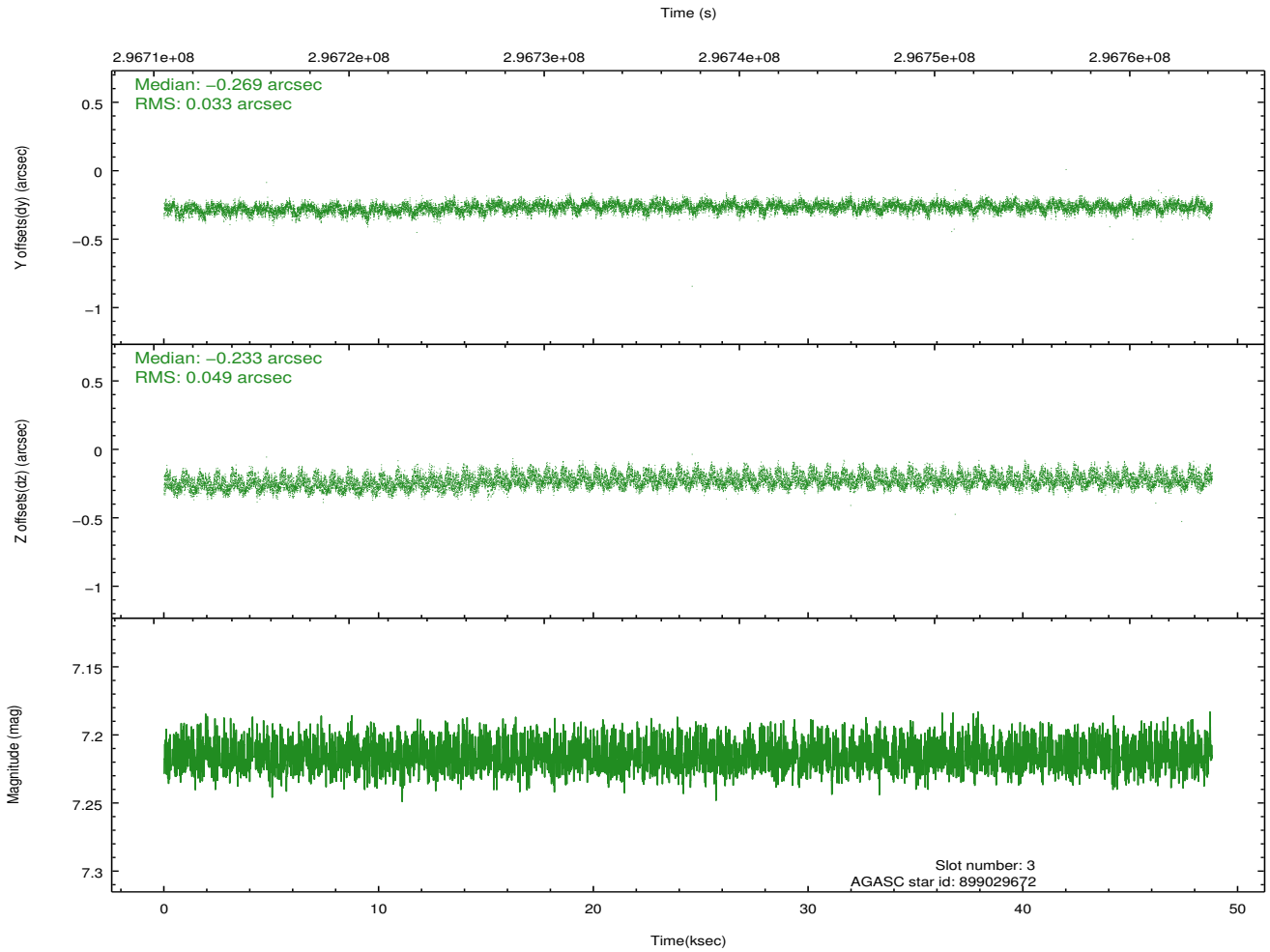
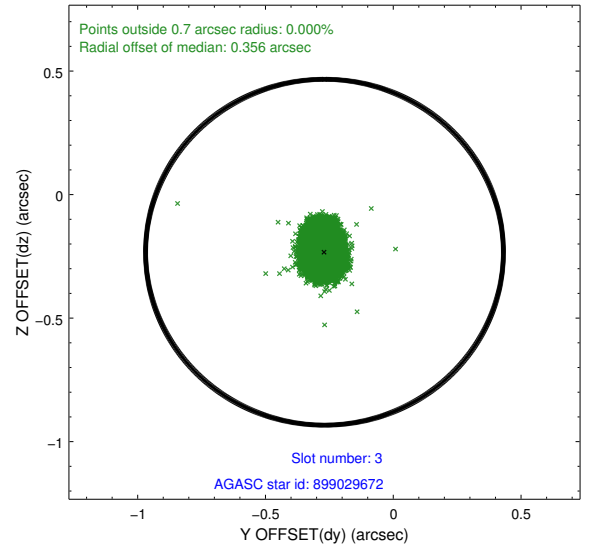
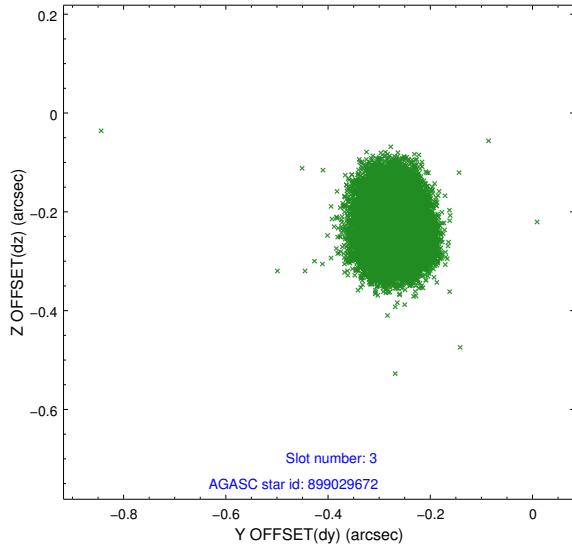


### Slot Statistics

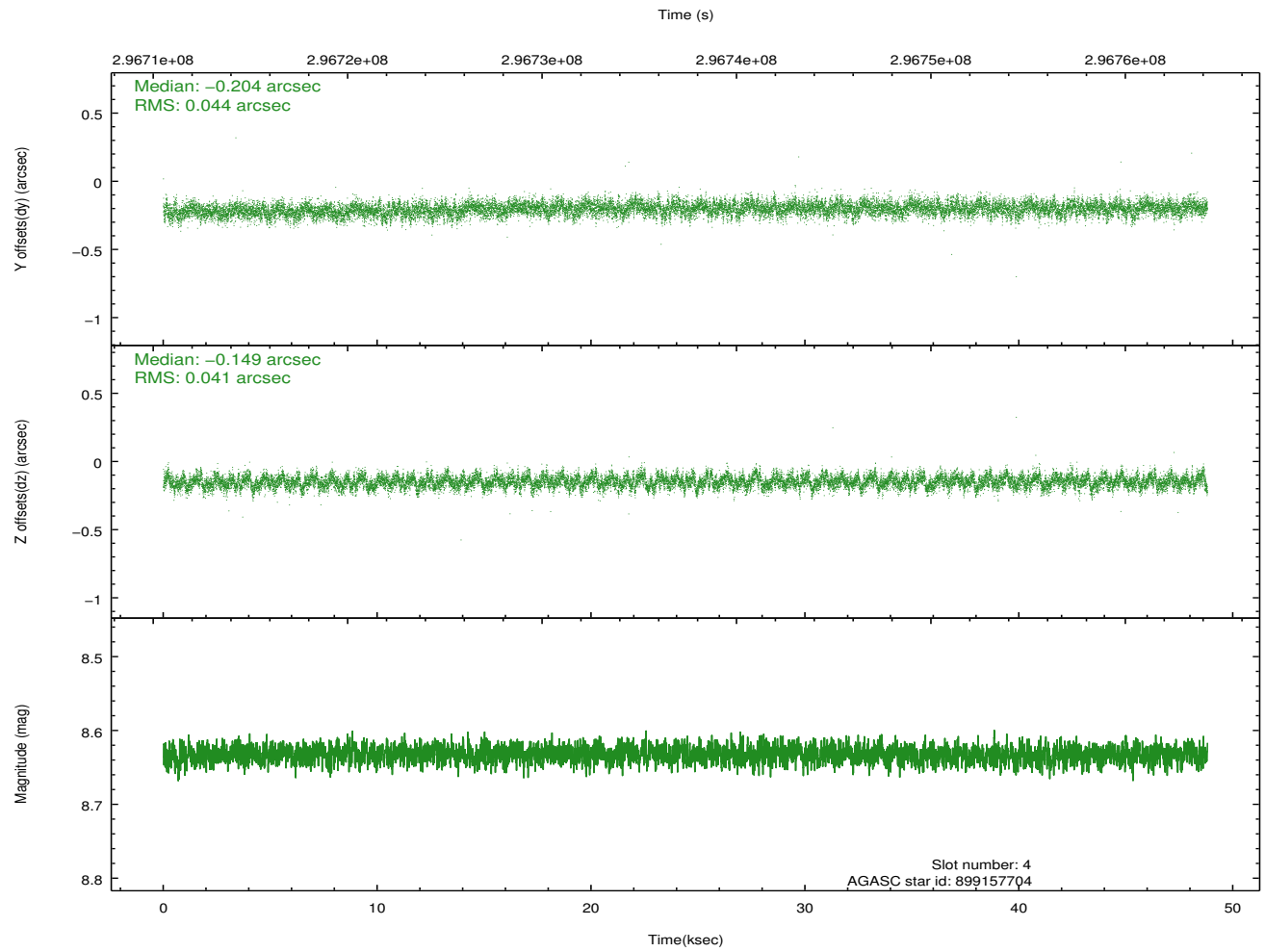
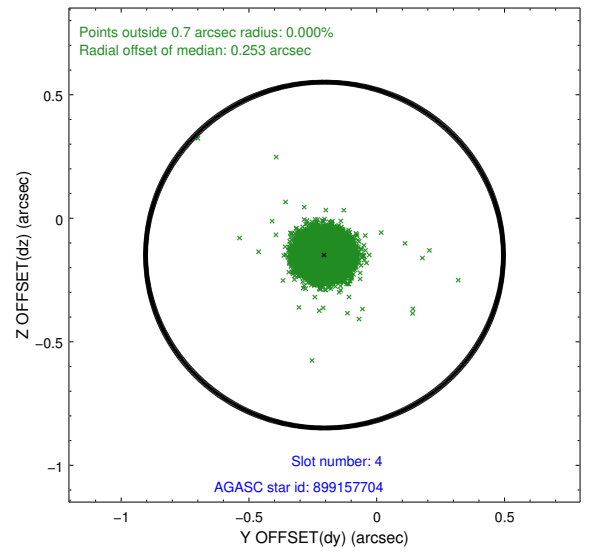
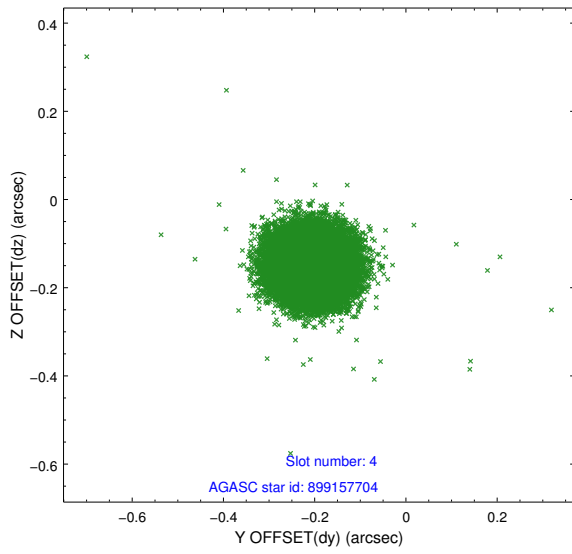
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.90	11904	-0.699	-0.029	0.007	0.015	0.000000	0.000000	-772.35	236.20
1	FID	HRC-I-2	7.04	11901	0.778	-0.025	0.007	0.015	0.000000	0.000000	838.61	237.20
2	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	899029672	7.21	23803	-0.269	-0.233	0.062	0.101	282.156214	-23.215031	1657.98	2263.90
4	GUIDE	899157704	8.63	23795	-0.204	-0.149	0.063	0.102	282.775409	-23.051512	2108.33	179.35
5	GUIDE	899163112	7.64	23808	0.255	0.155	0.062	0.097	282.966165	-24.223749	-2145.24	-153.82
6	GUIDE	899163552	8.90	23789	0.256	0.080	0.089	0.144	283.360155	-23.991487	-1403.90	-1505.37
7	GUIDE	899167384	8.28	23801	-0.036	0.145	0.066	0.108	283.292900	-23.367021	854.15	-1448.02

## 2.4 Star Slots

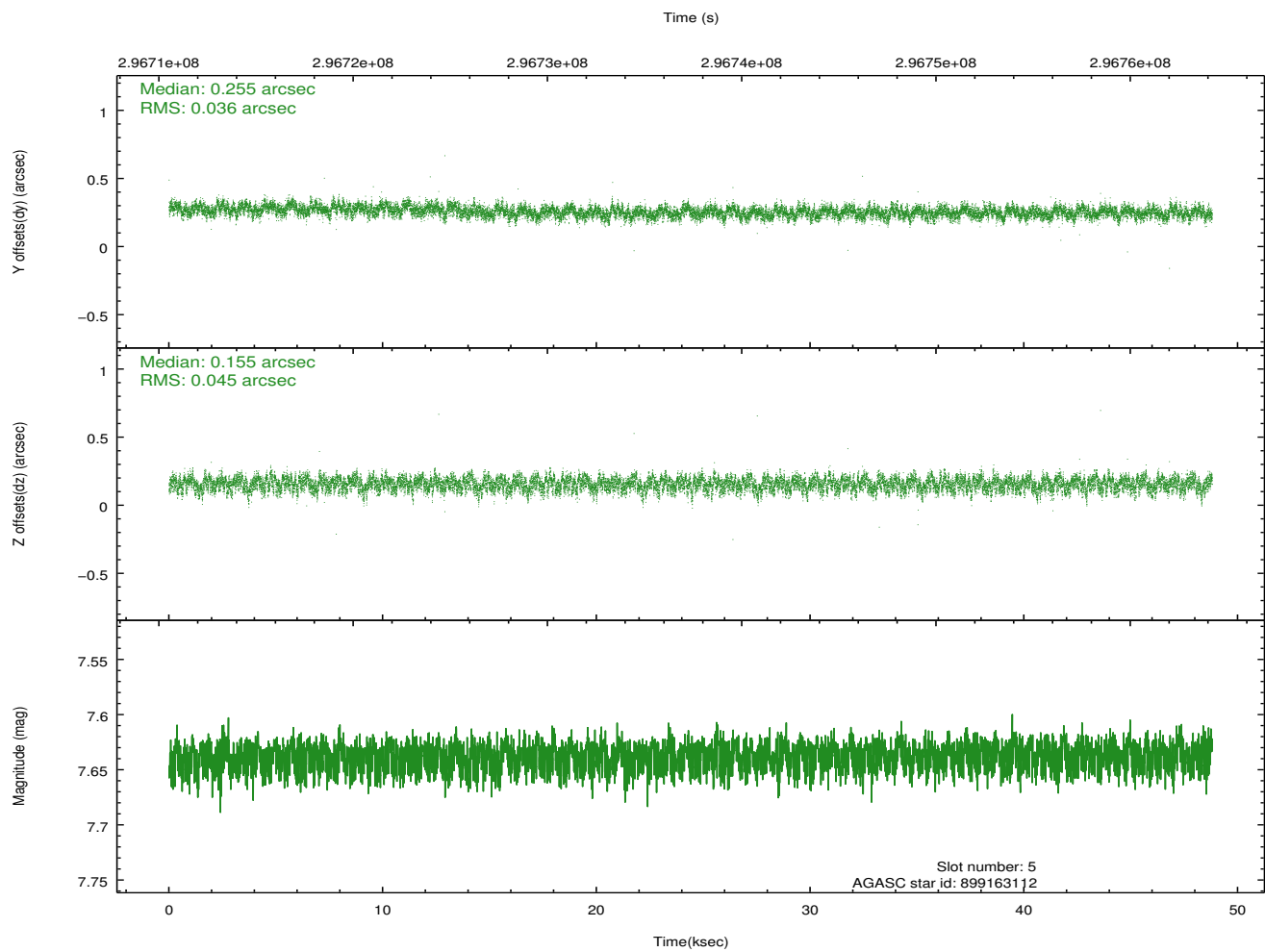
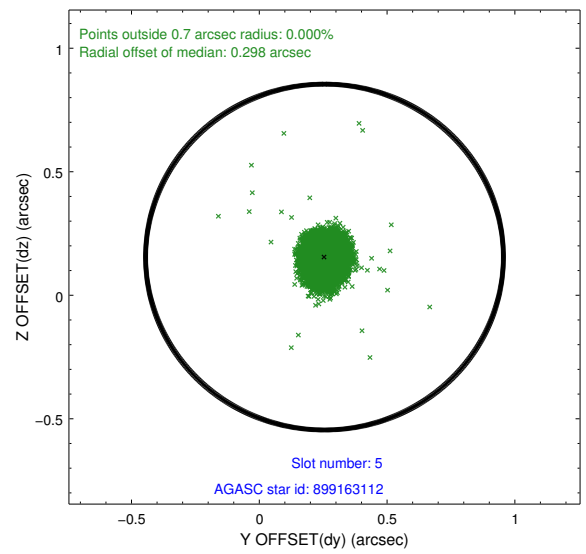
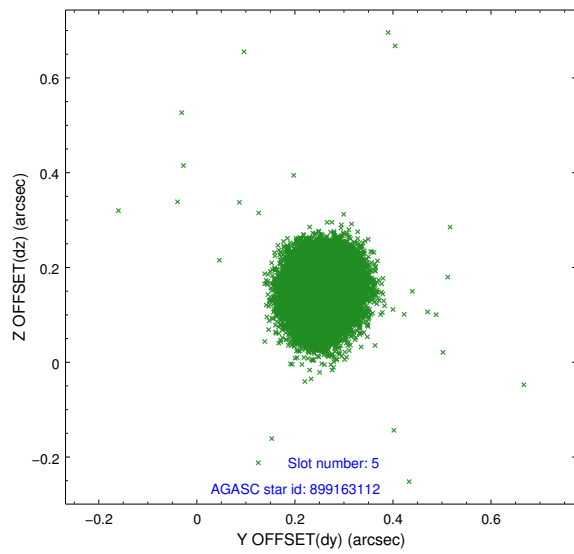
### 2.4.1 Slot 3



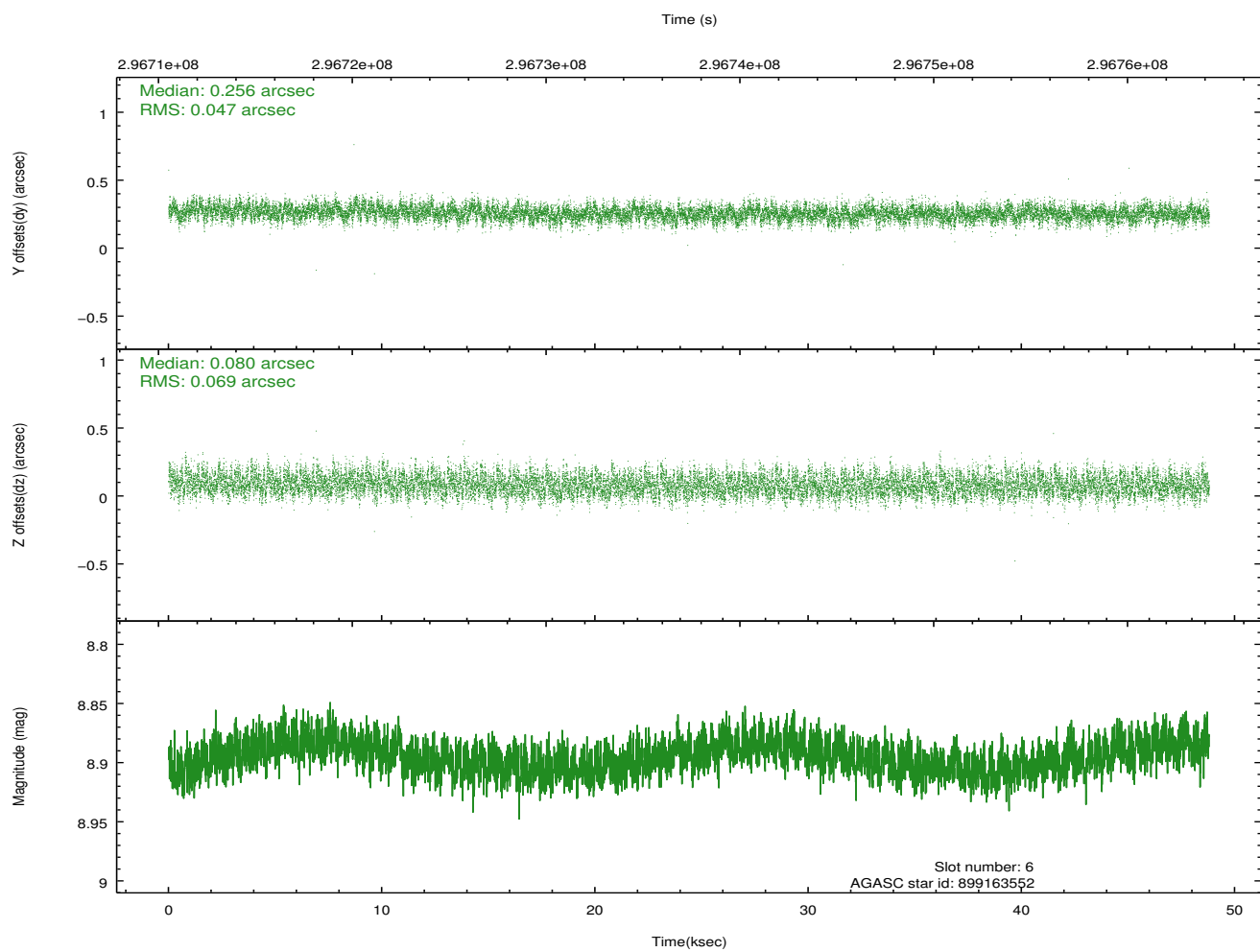
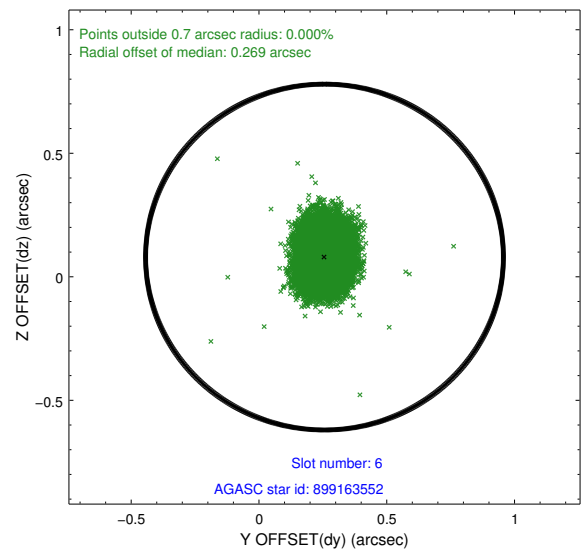
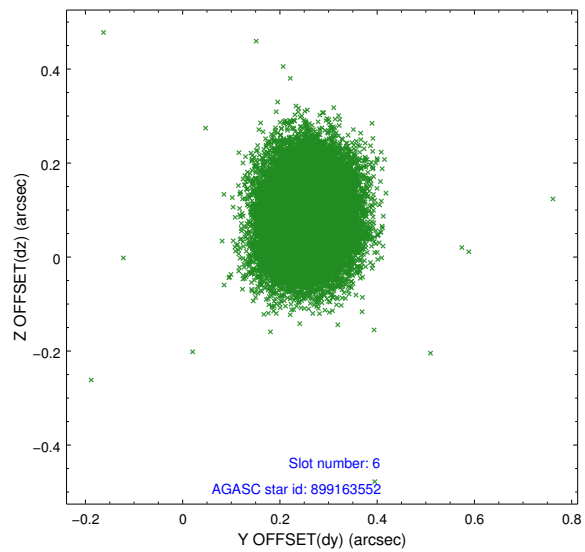
## 2.4.2 Slot 4



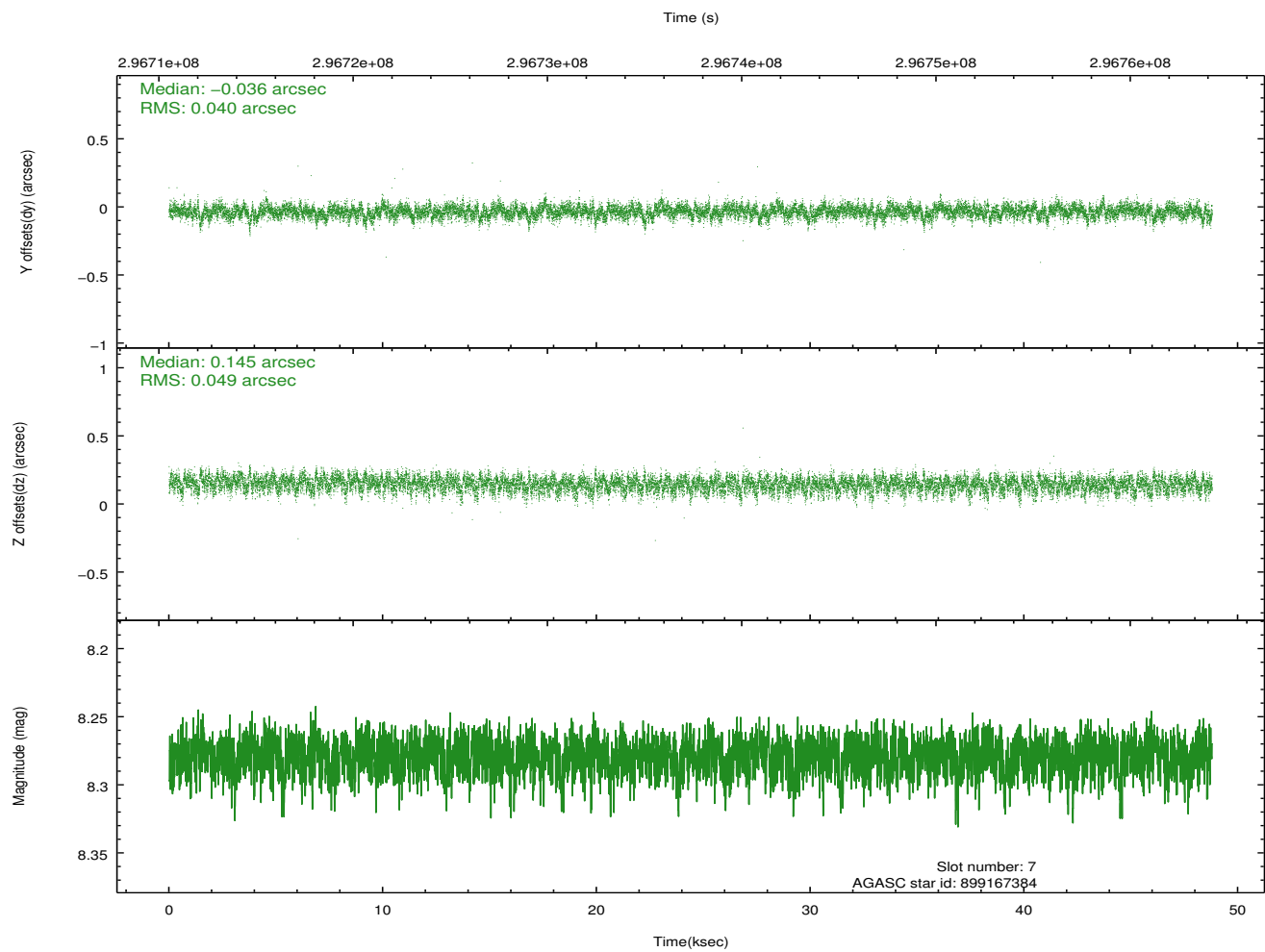
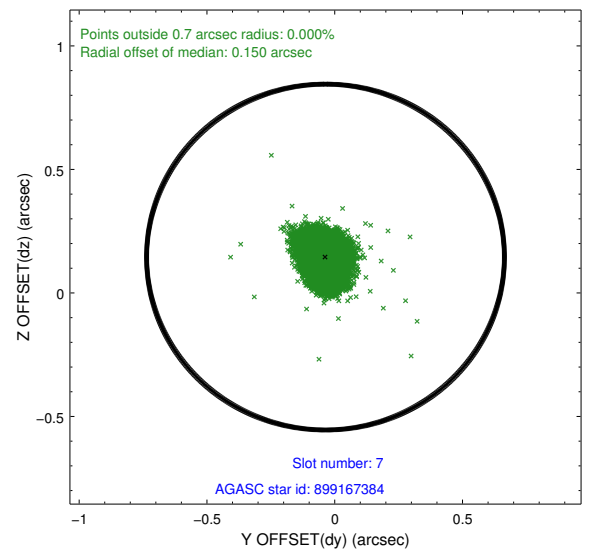
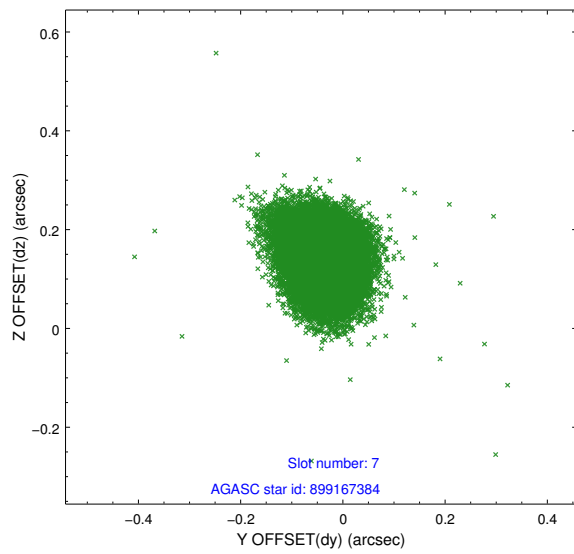
### 2.4.3 Slot 5



## 2.4.4 Slot 6

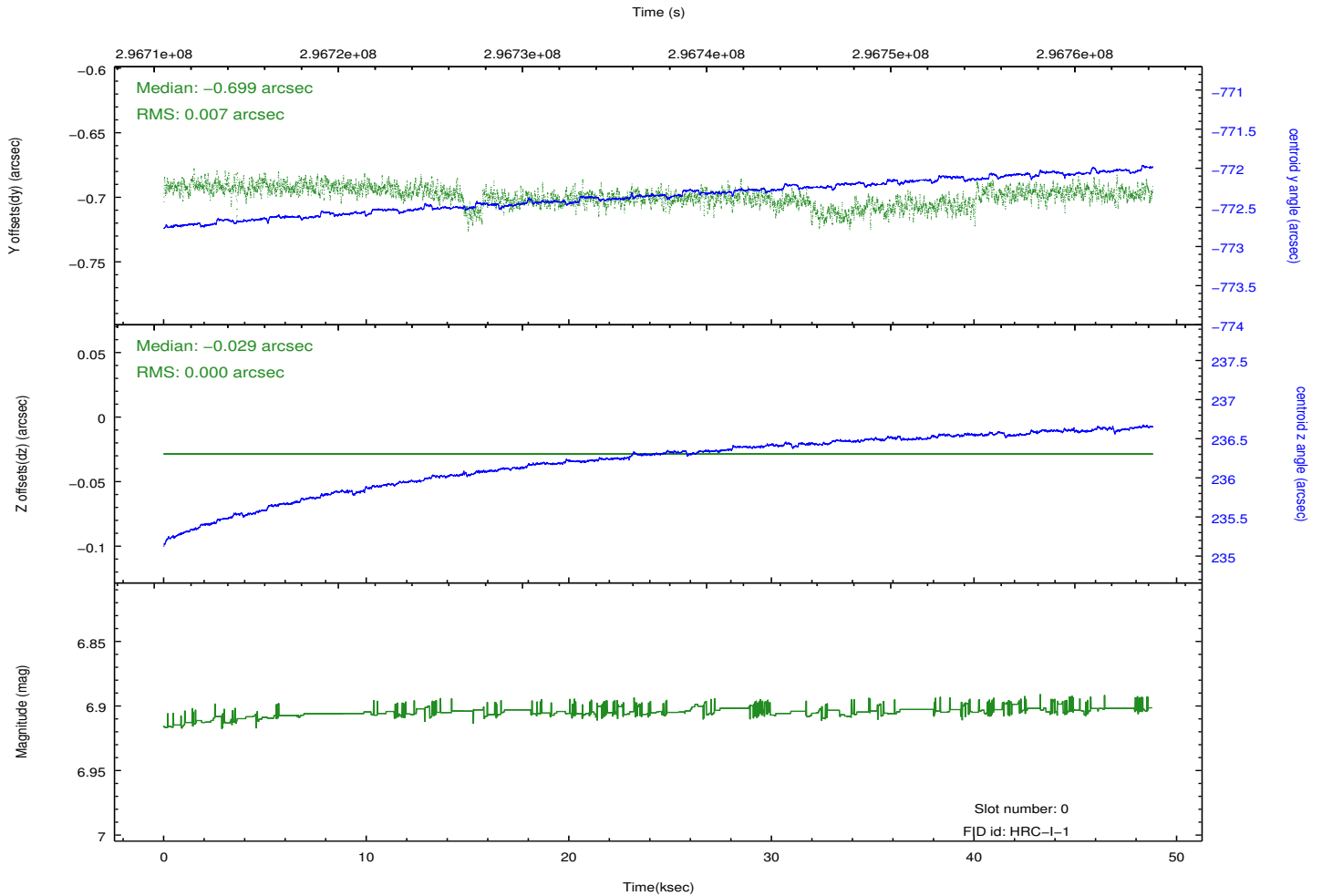
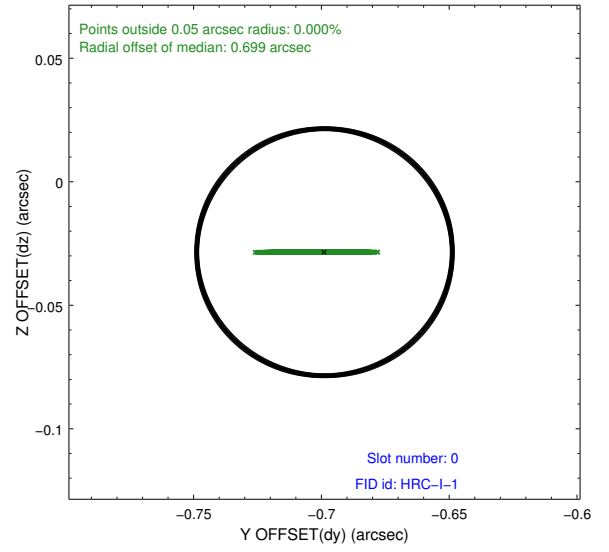
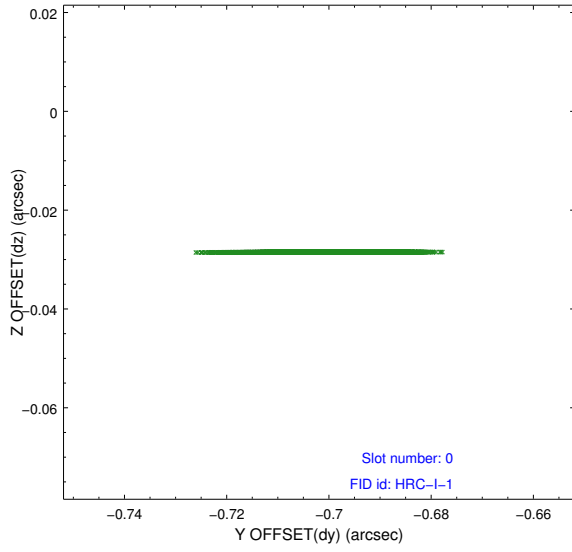


## 2.4.5 Slot 7

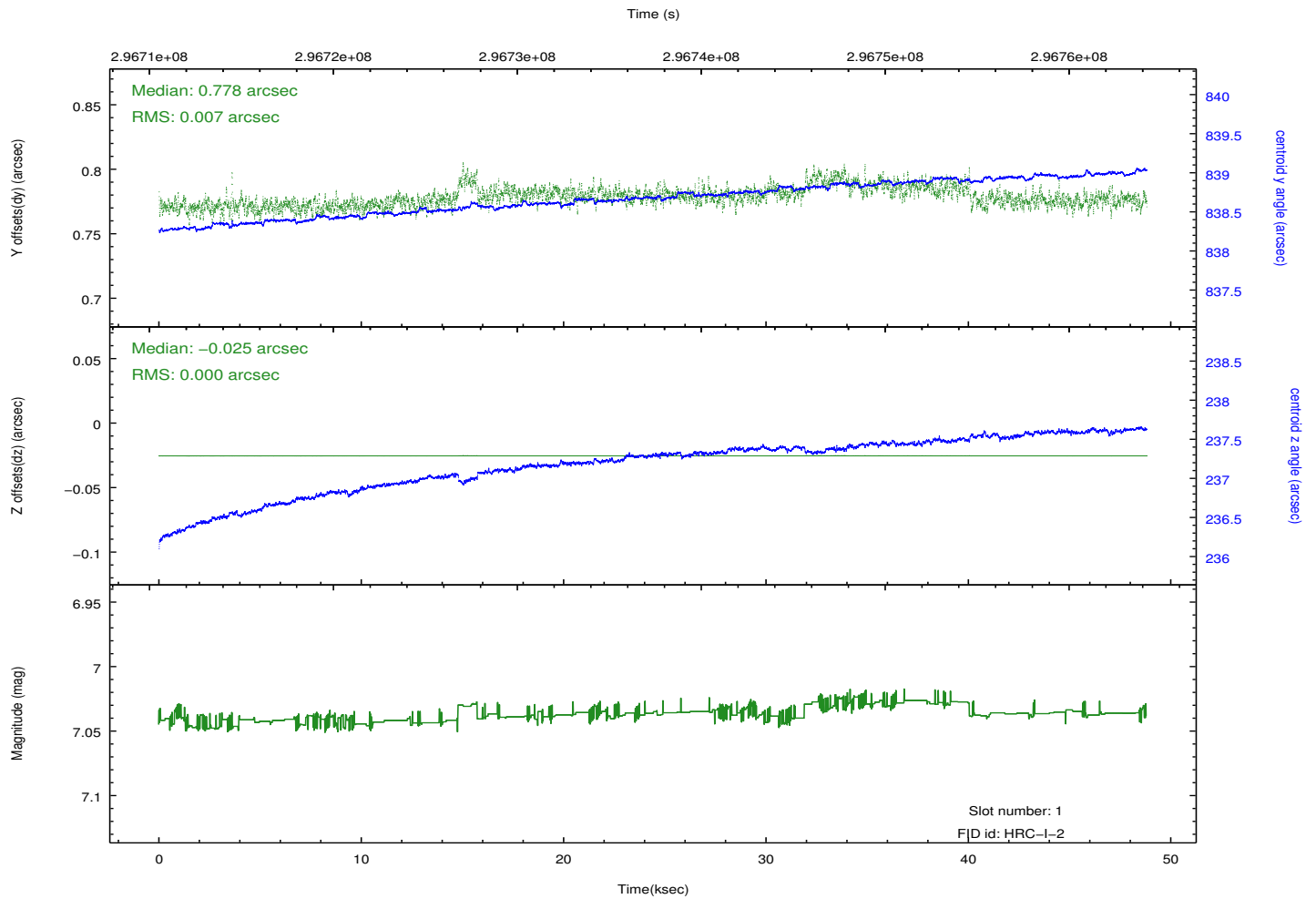
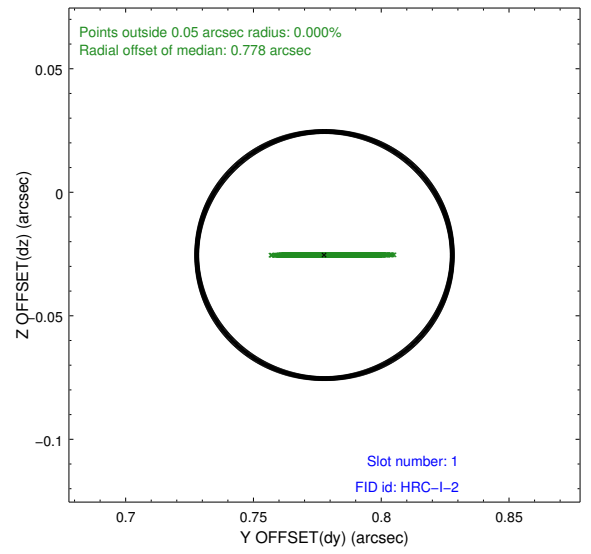
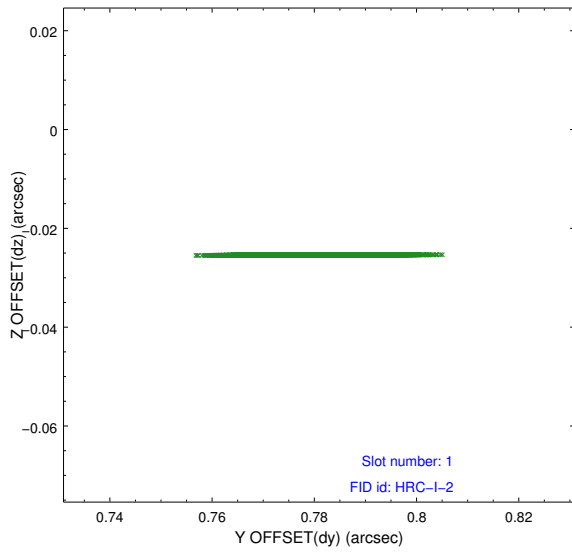


## 2.5 FID Slots

### 2.5.1 Slot 0



## 2.5.2 Slot 1



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.5112023

## A.2 Comments

This HRC CAL observation (the HRC portion of an ACIS undercover) has a `sim_z_offset` of 74.98 [mm]. The radial fid offsets of 0.699 arcsec (slot 0) and 0.778 arcsec (slot 1) are acceptable. The fid light in slot 2 is not included in the aspect solution due to the large spatial offset.