

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2657 - L2 Version 3  
Chandra X-Ray Center

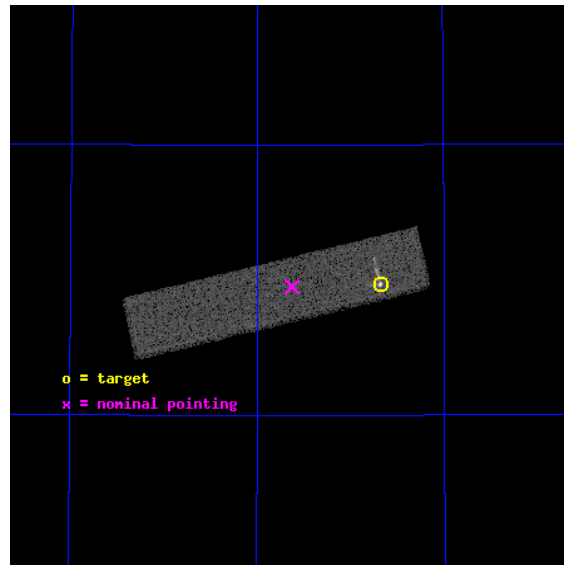
L2 Processing Date : Oct 13 2012

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# 1 Front

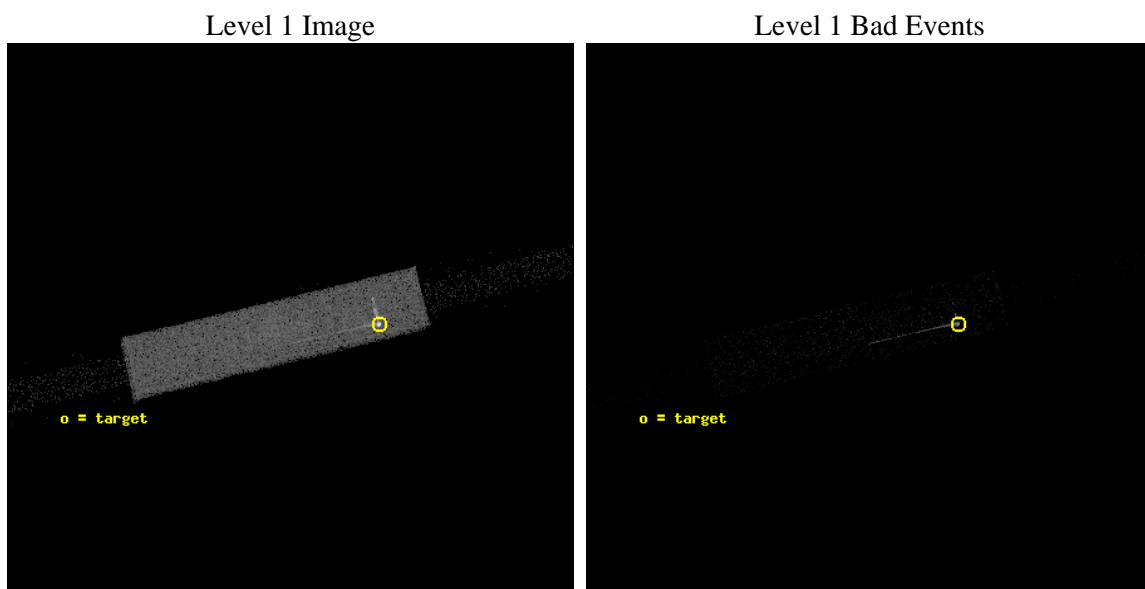
seq_num	290213	Sequence number
obs_id	2657	Observation id
title	AO3B HRC-S CALIBRATION OBSERVATION: MINI-SCAN OF ARLAC	Proposal ti
observer	Dr. CXC Calibration	Principal investigator
object	ARLAC	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.40675420527	Nominal RA [deg]
dec_nom	45.737894141391	Nominal Dec [deg]
roll_nom	166.39614007904	Nominal Roll [deg]
revision	3	Processing version of data
ontime	1143.1312970817	[s]
livetime	1137.5080307563	Ontime multiplied by DTCOR
l2events	38857	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	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1143.1312970817	[s]
caldsver	4.5.2	&#160	l1events	66155	Number of level 1 events
date	2012-10-14T00:24:04	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

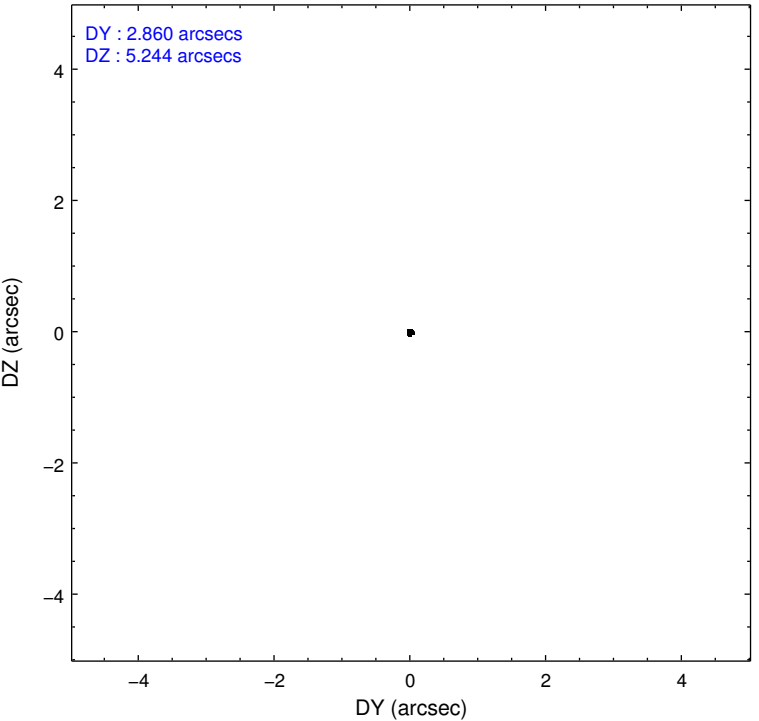
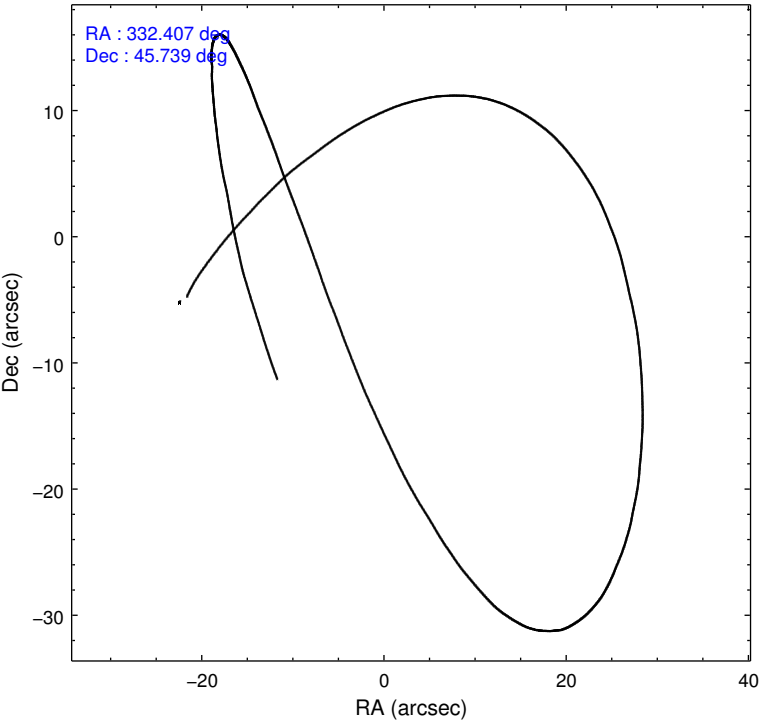
Level 1 Events

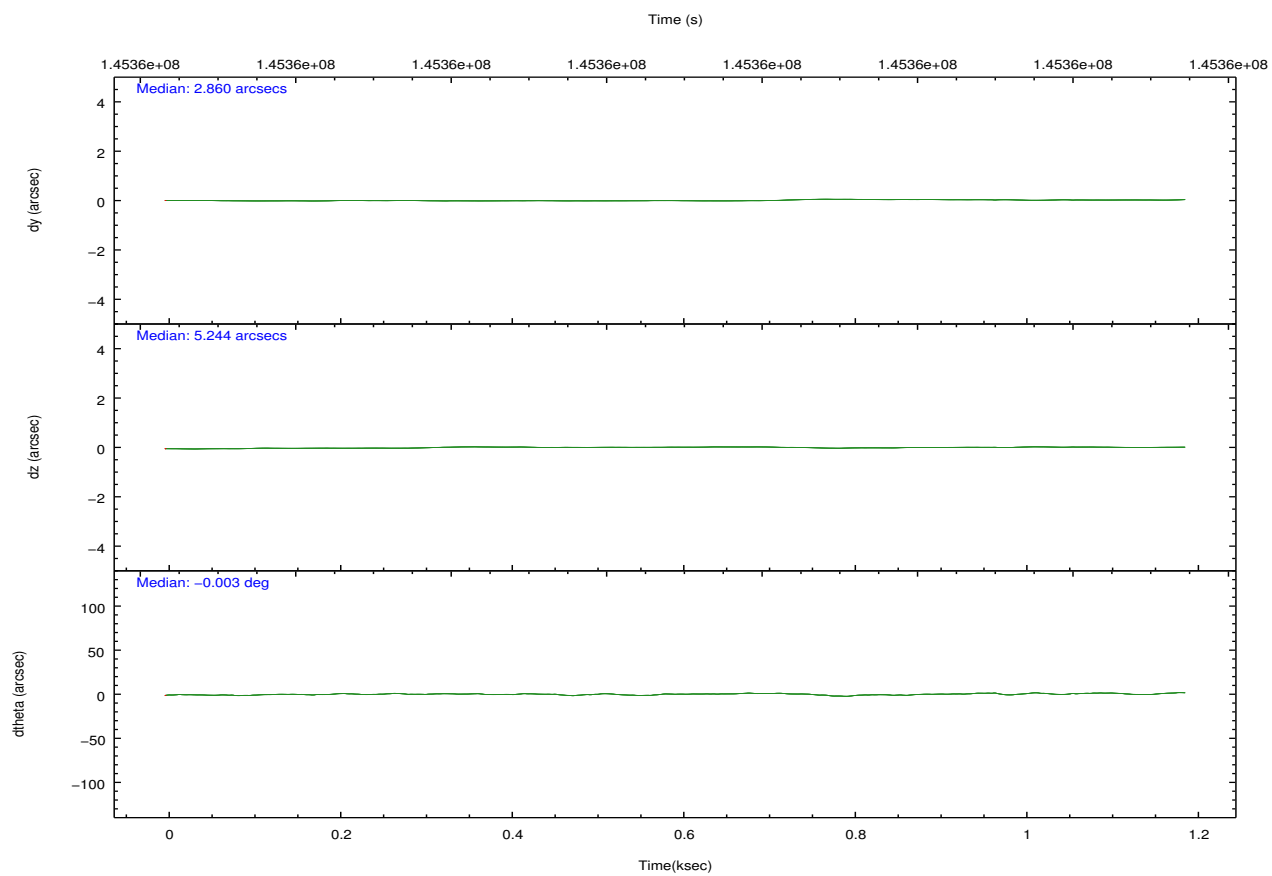
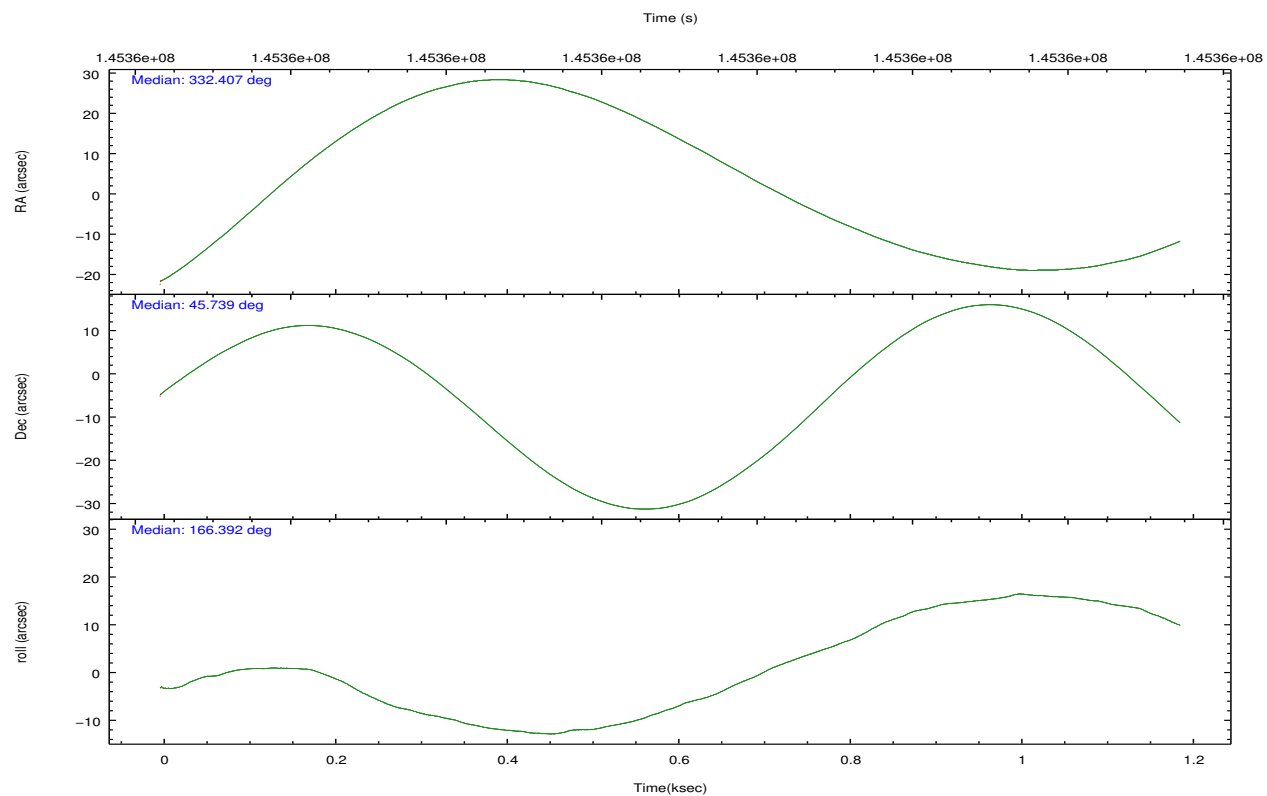
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	1033	64098	1024
rejected events	1033	15924	1024
rejected %	100%	24%	100%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
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			
[deg] Pointing RA	332.445567	332.4067542052741			
[deg] Pointing Dec	45.746183	45.73789414139139			
[deg] Pointing Roll	166.301045	166.3961400790369			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	145355880.184000	145355504.36475			
Observation start date	2002-08-10T08:36:56	2002-08-10T08:31:44			
[s] Observation end time (MET)	145356880.184000	145357014.18981			
Observation end date	2002-08-10T08:53:36	2002-08-10T08:56:54			

2.3 Aspect





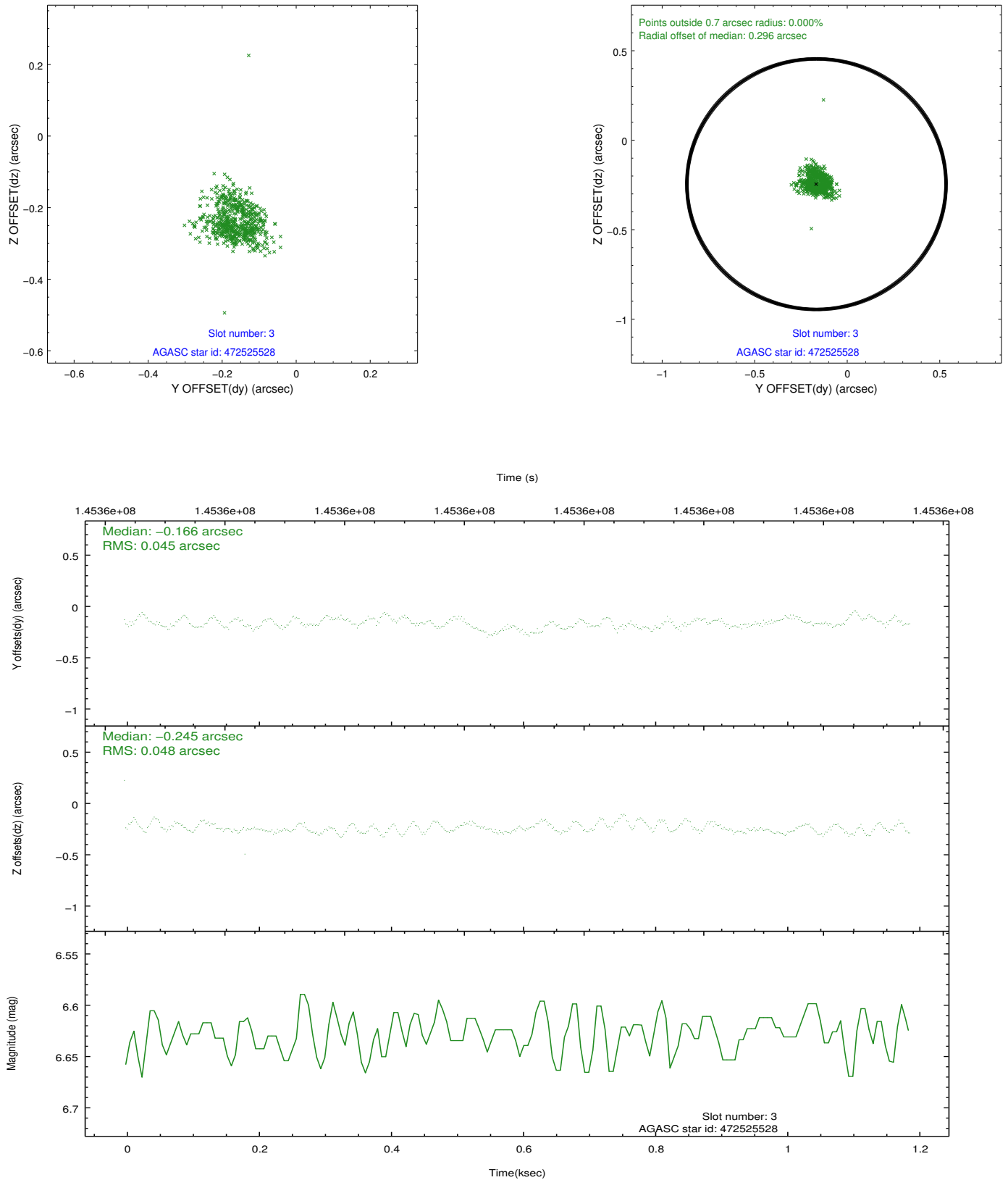
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.99	291	0.157	-0.160	0.007	0.013	0.000000	0.000000	-1156.89	-453.76
1	FID	HRC-S-2	6.98	291	0.097	-0.098	0.007	0.016	0.000000	0.000000	1238.75	-447.92
2	FID	HRC-S-3	7.01	291	0.135	-0.043	0.009	0.013	0.000000	0.000000	-1155.37	574.34
3	GUIDE	472525528	6.63	581	-0.166	-0.245	0.066	0.109	331.551102	45.248694	1781.34	2268.64
4	GUIDE	472523760	8.24	581	-0.135	-0.046	0.061	0.093	331.645363	45.403260	1678.15	1676.70
5	GUIDE	472660976	8.60	581	0.023	0.184	0.081	0.133	333.433329	46.196713	-2000.46	-2166.56
6	GUIDE	472665256	9.02	581	0.116	0.173	0.081	0.129	332.808125	46.195041	-497.65	-1785.37
7	GUIDE	472646552	9.62	580	0.163	-0.062	0.111	0.192	333.120915	45.571877	-1800.89	200.50

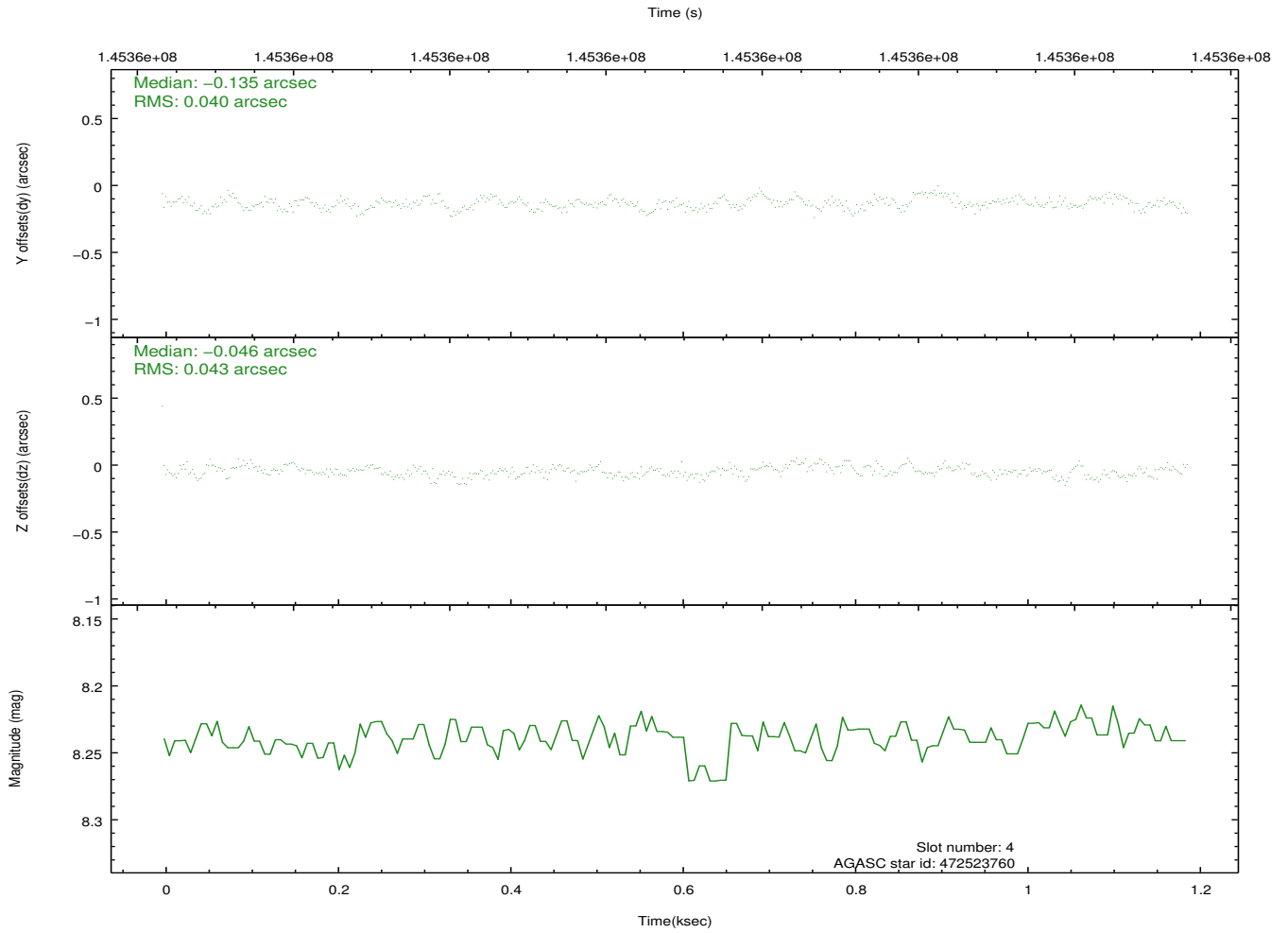
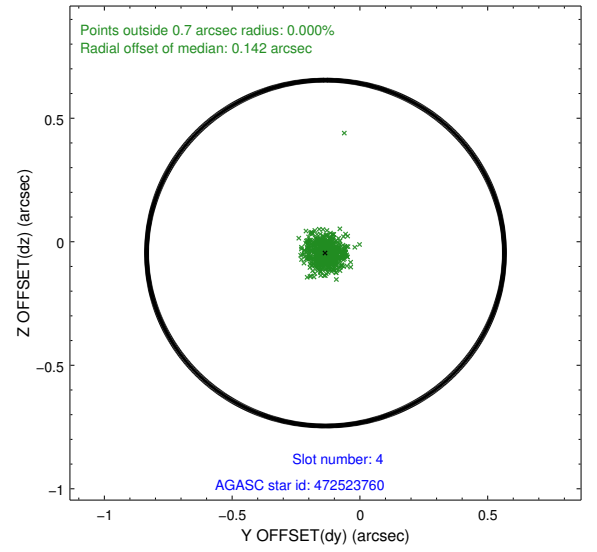
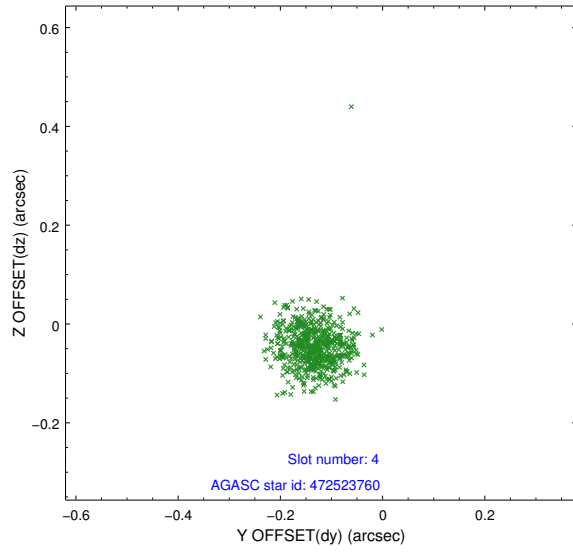


## 2.4 Star Slots

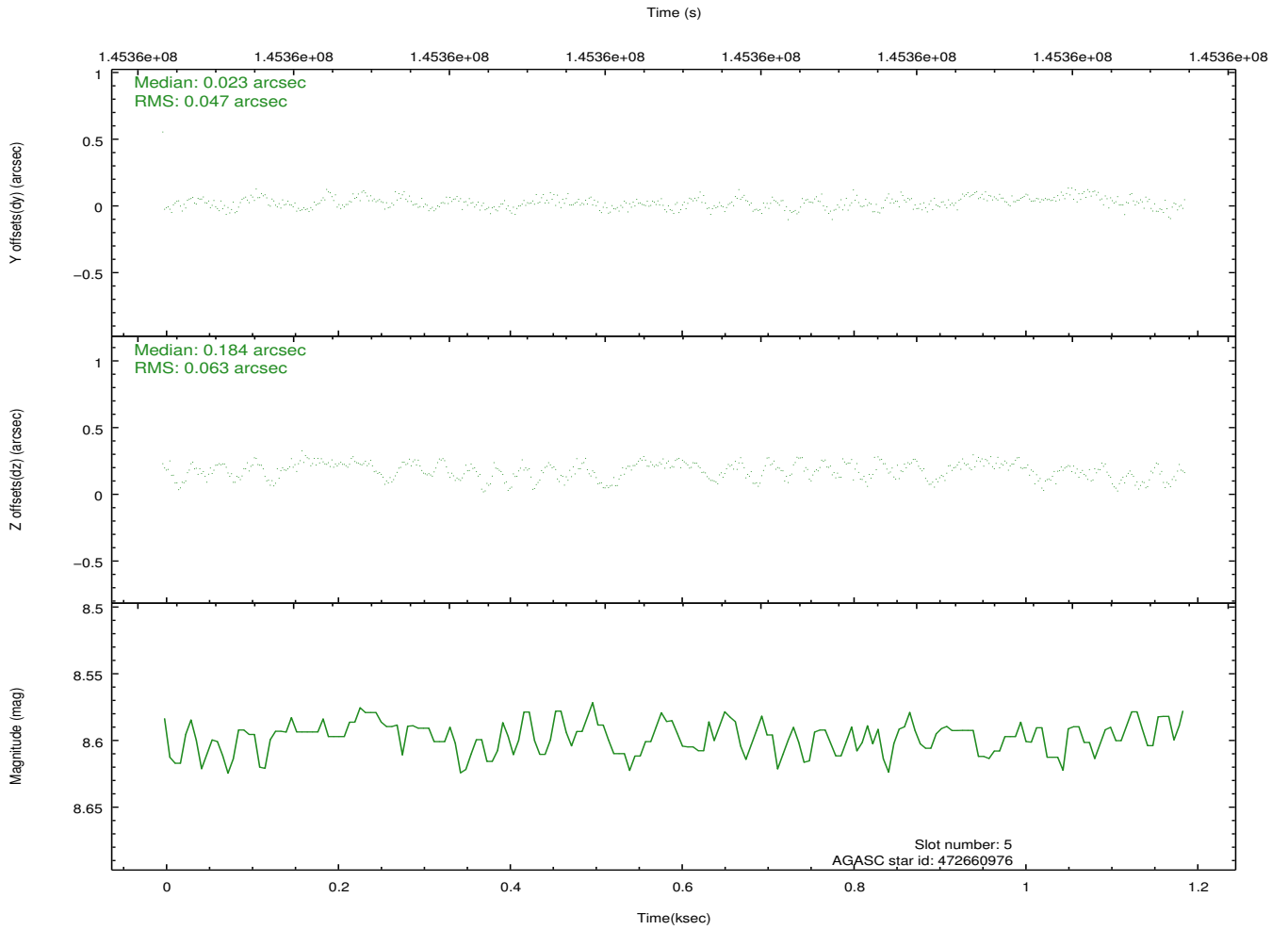
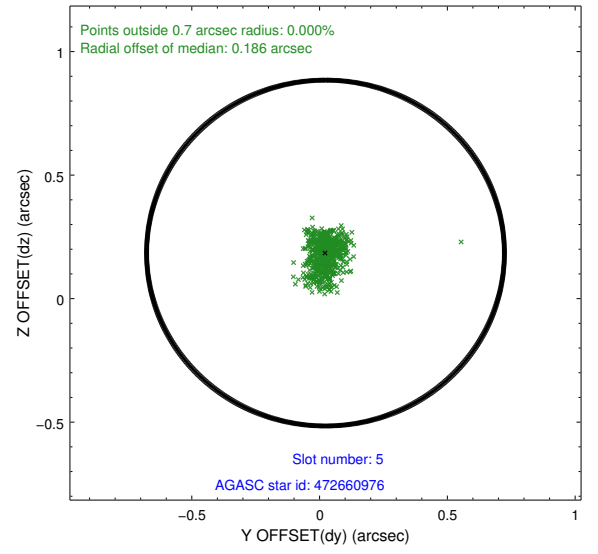
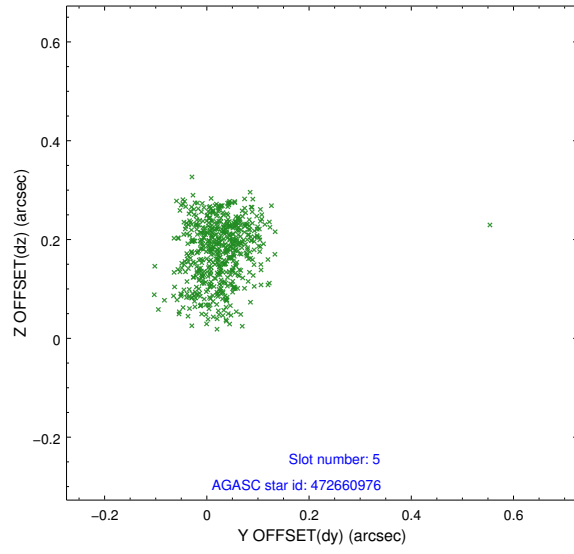
### 2.4.1 Slot 3



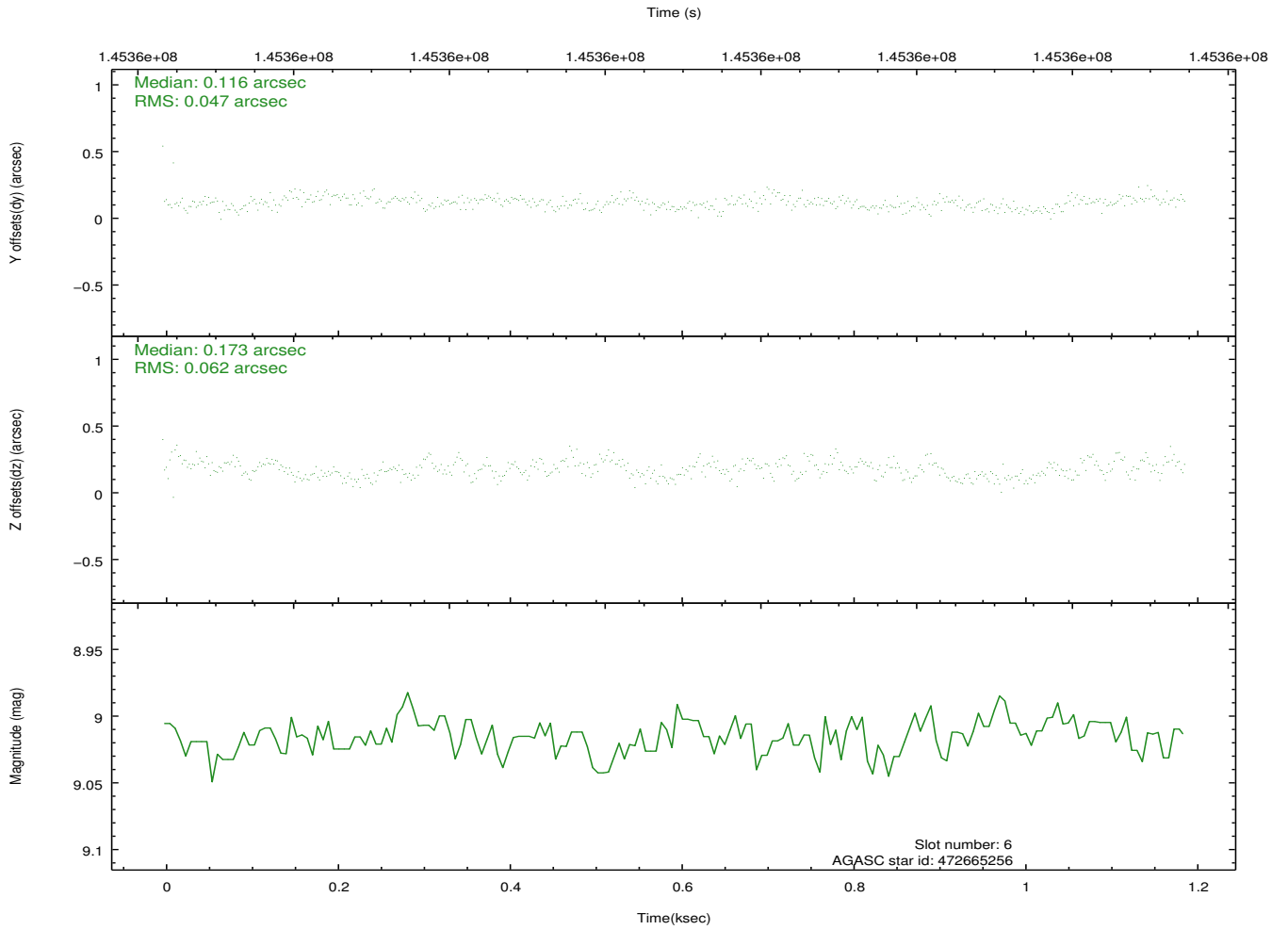
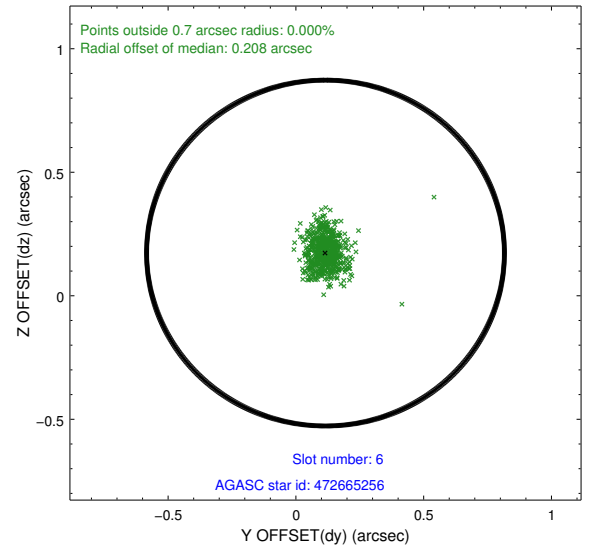
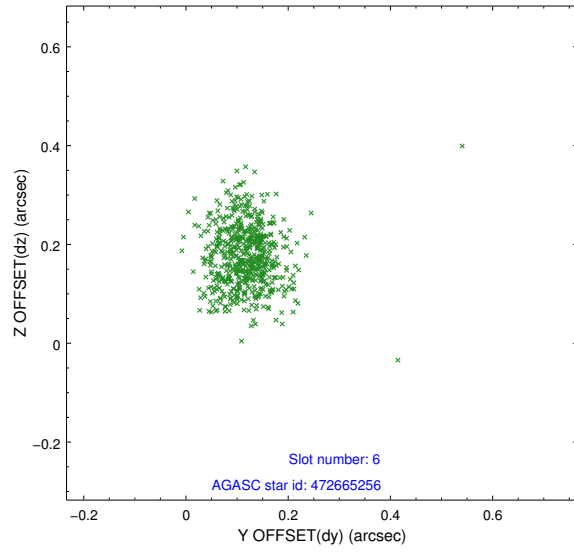
## 2.4.2 Slot 4



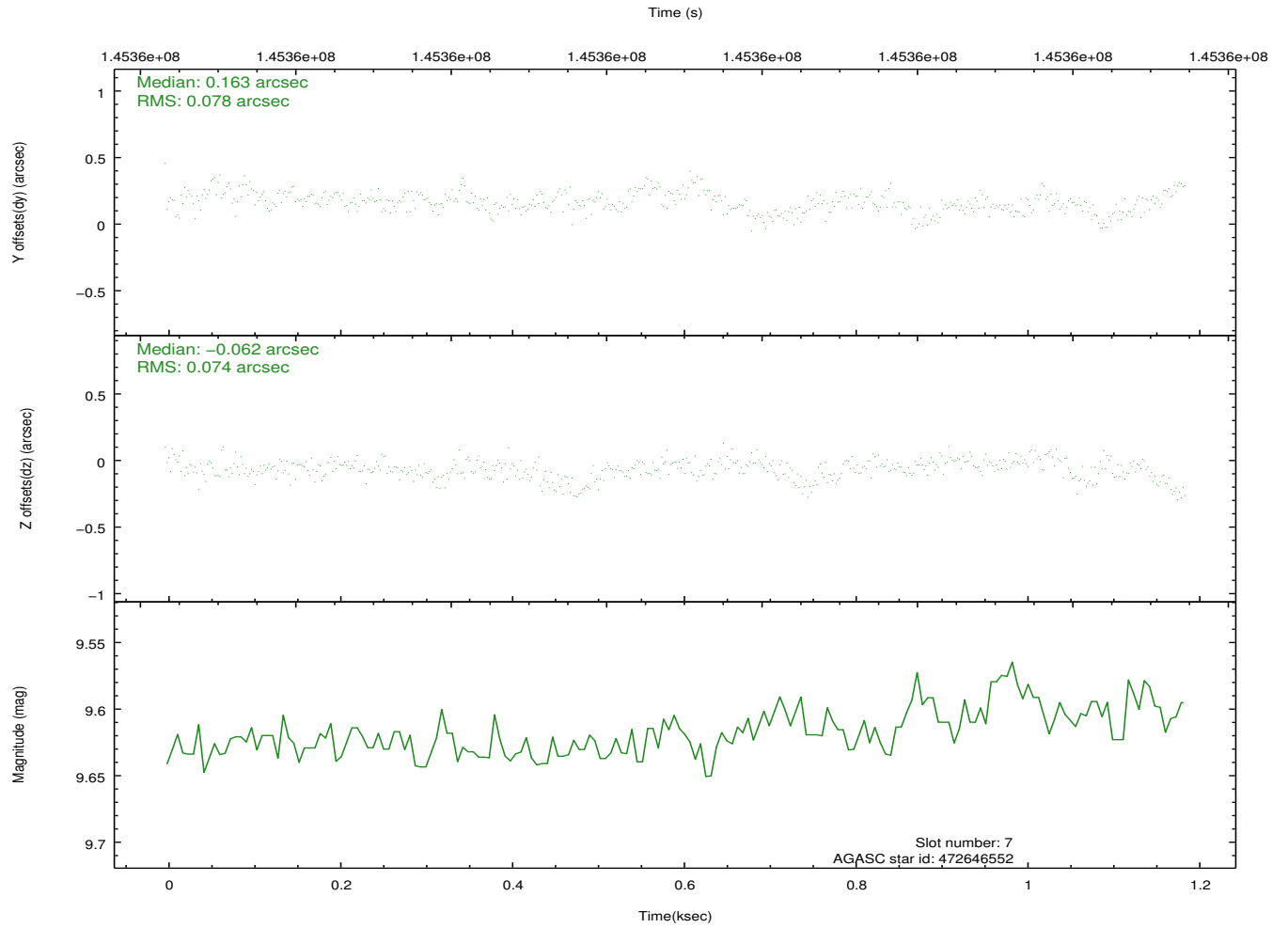
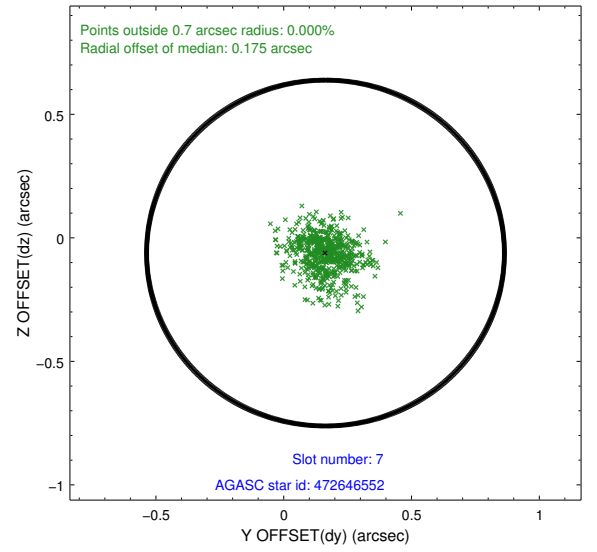
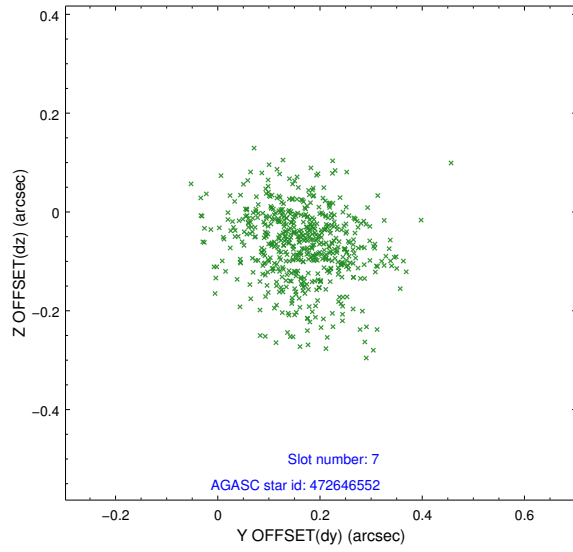
### 2.4.3 Slot 5



## 2.4.4 Slot 6

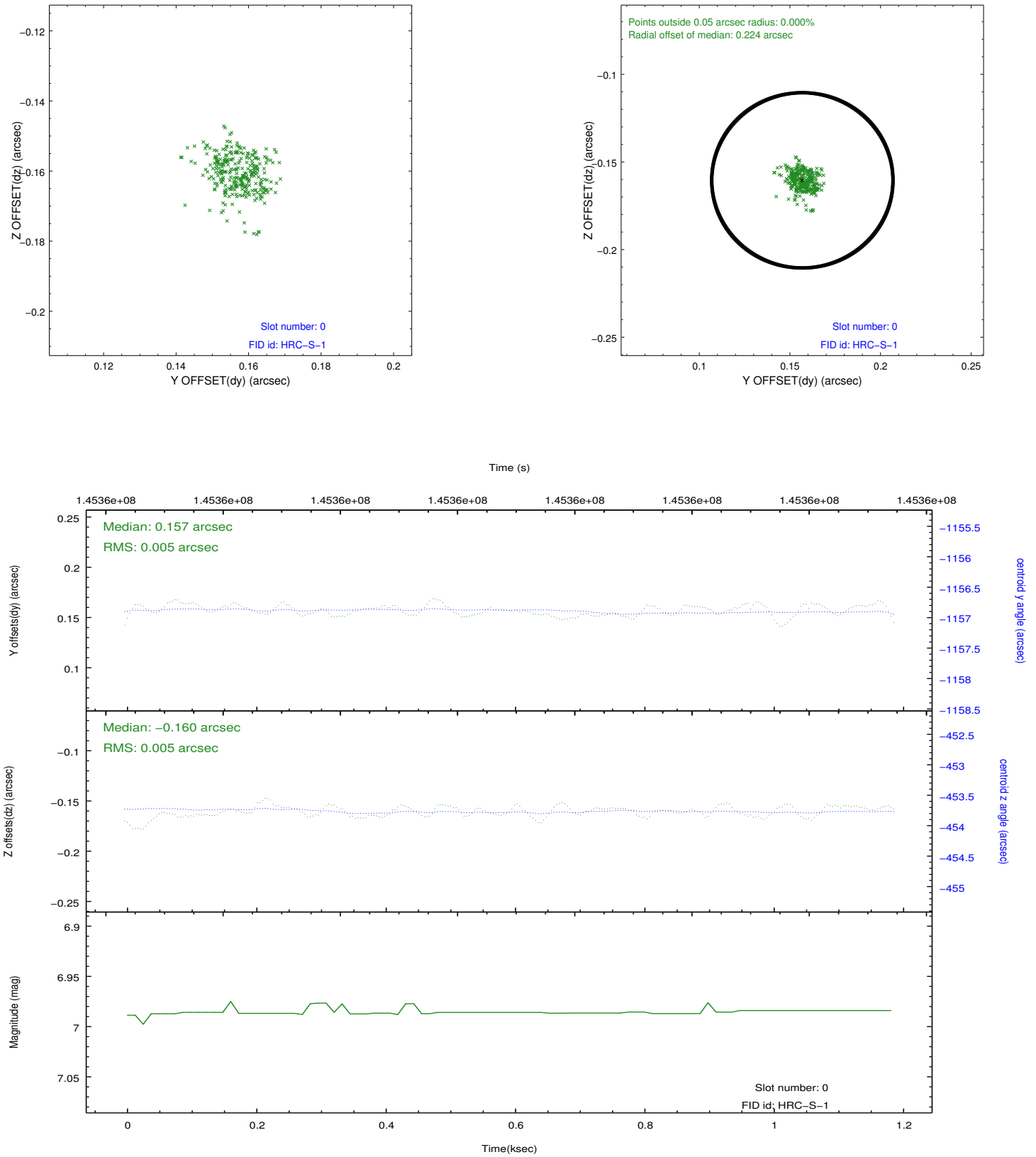


## 2.4.5 Slot 7

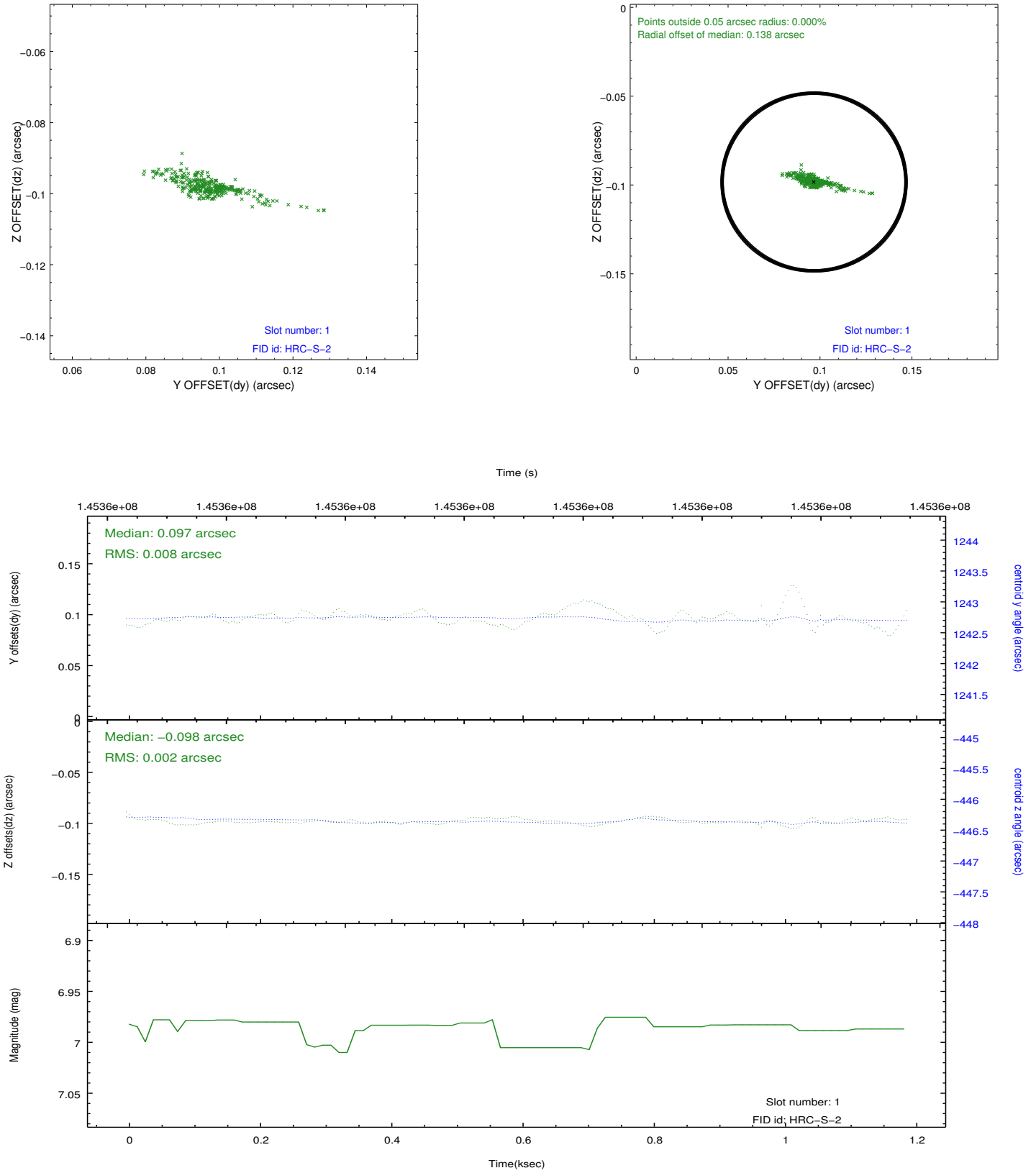


## 2.5 FID Slots

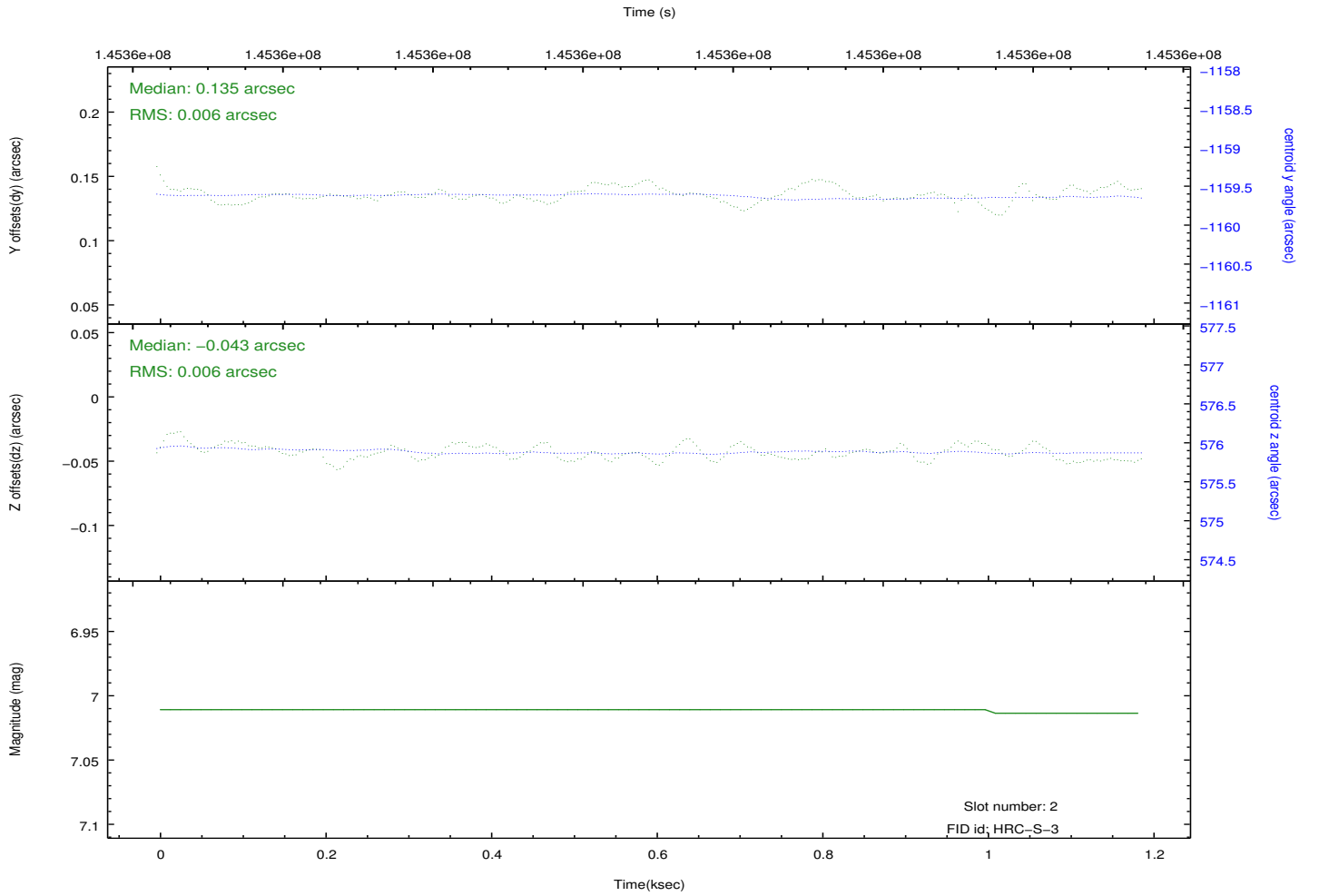
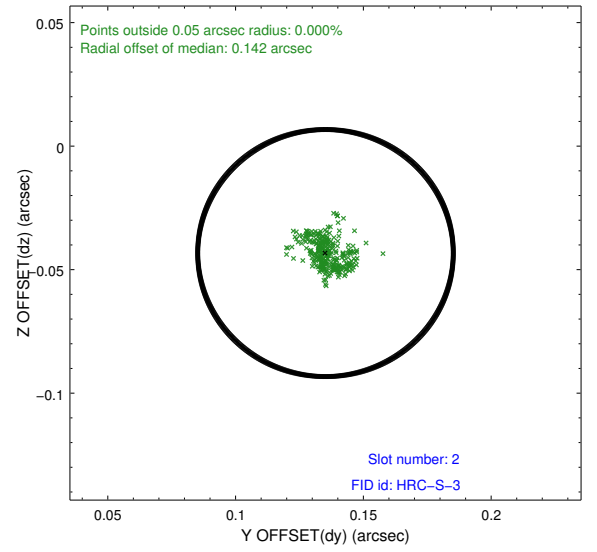
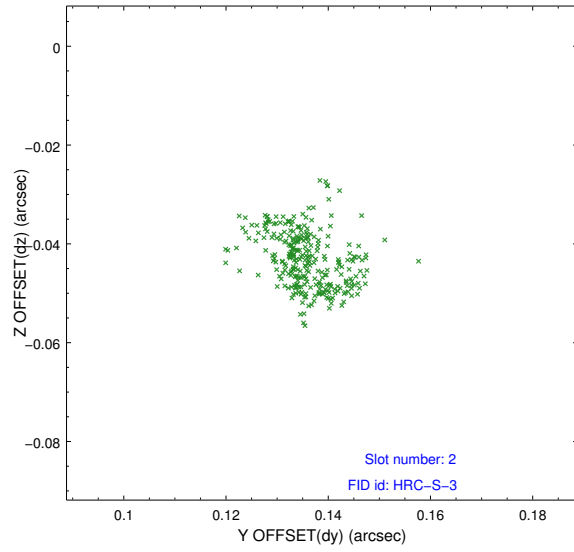
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.182

## A.2 Comments

Charge time for this ObsId remains at original value of 1.182 ks, although with the current processing the charge time would have been 1.143 ksec. A faint reflection from the high-energy filter is visible in the Level 2 image, pointed toward the center of the detector. Most of this reflection is removed in the Level 2 data, but not all. The more apparent tap ringing displacement of a few of the events can be seen perpendicular to the long dimension of the detector. Tap ringing is instrumental in origin. Monitoring constraint met.