

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21760 - L2 Version 1  
Chandra X-Ray Center

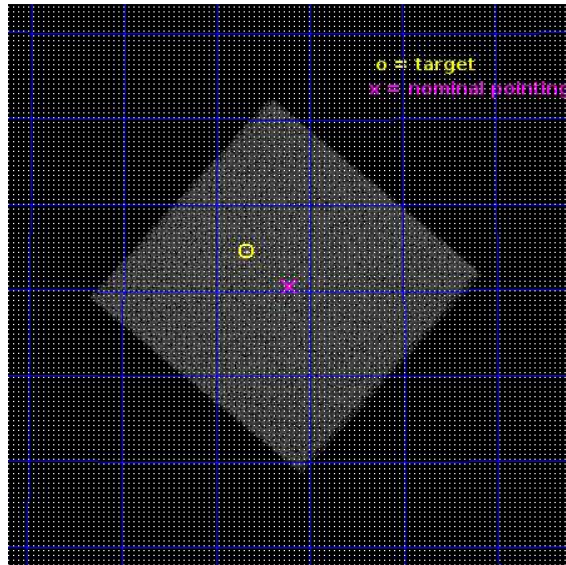
L2 Processing Date : Sep 4 2019

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# 1 Front

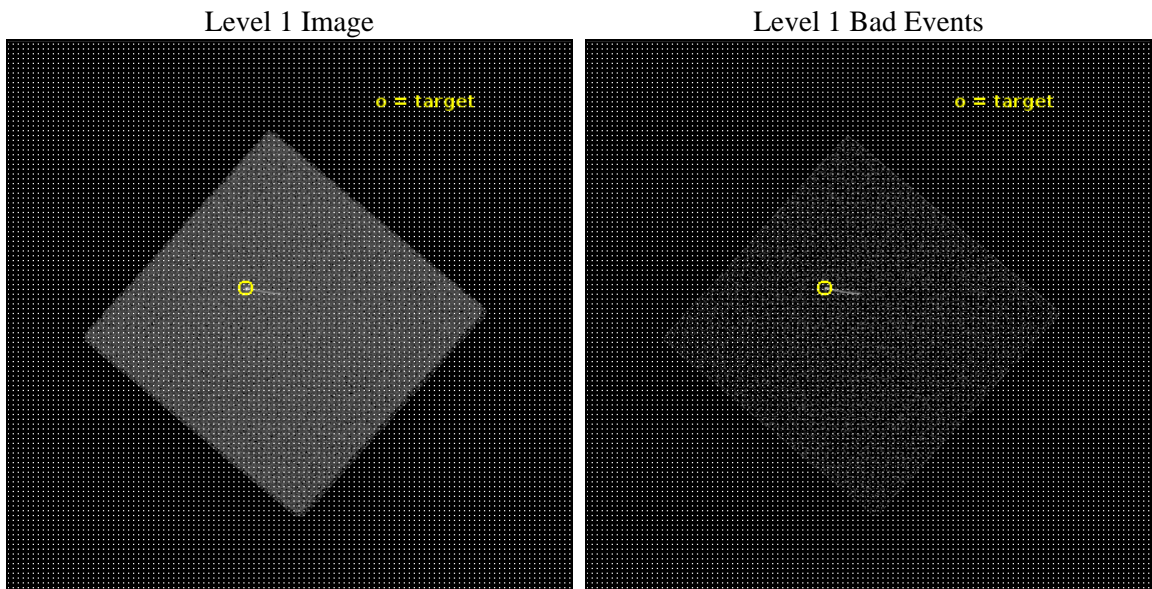
seq_num	291446	Sequence number
obs_id	21760	Observation id
title	AO-20 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.169666	Observer's specified target RA [deg]
dec_targ	45.742509	Observer's specified target Dec [deg]
ra_nom	332.05465135933	Nominal RA [deg]
dec_nom	45.67448168038	Nominal Dec [deg]
roll_nom	175.98672349647	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1185.9250714779	[s]
livetime	1169.1194897155	Ontime multiplied by DTCOR
l2events	148580	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	10.8	Processing system revision	ontime	1185.9250714779	[s]
caldsver	4.8.4	&#160	l1events	337133	Number of level 1 events
date	2019-09-04T23:54:28	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

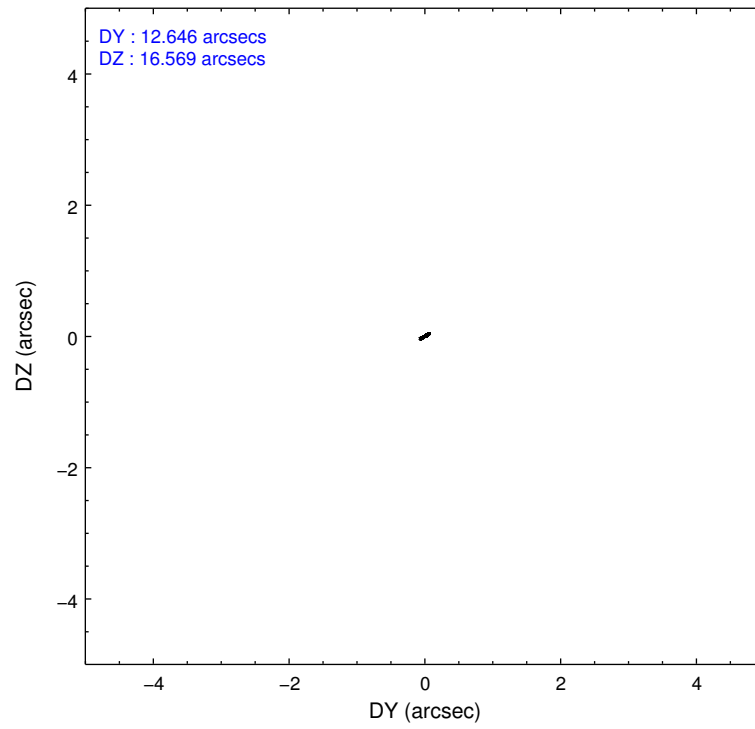
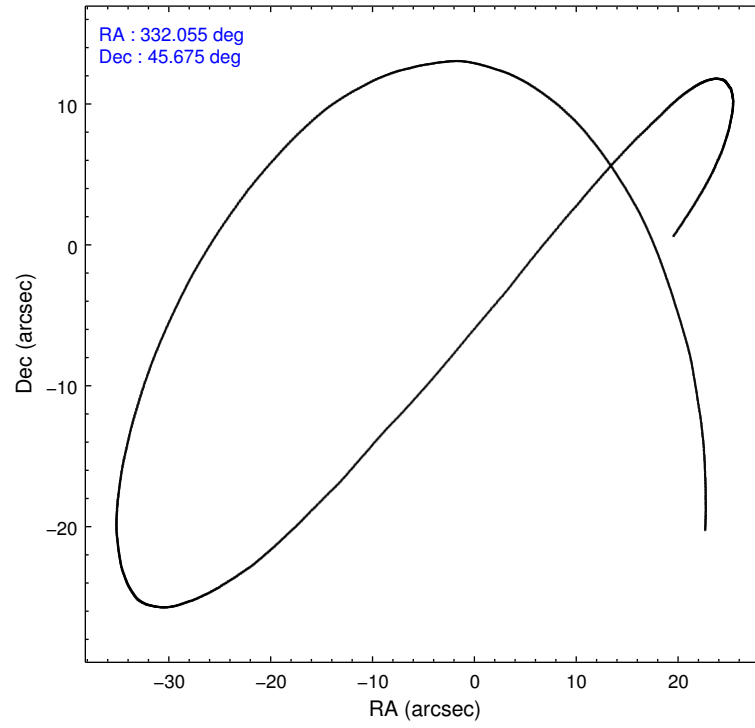
#### Level 1 Events

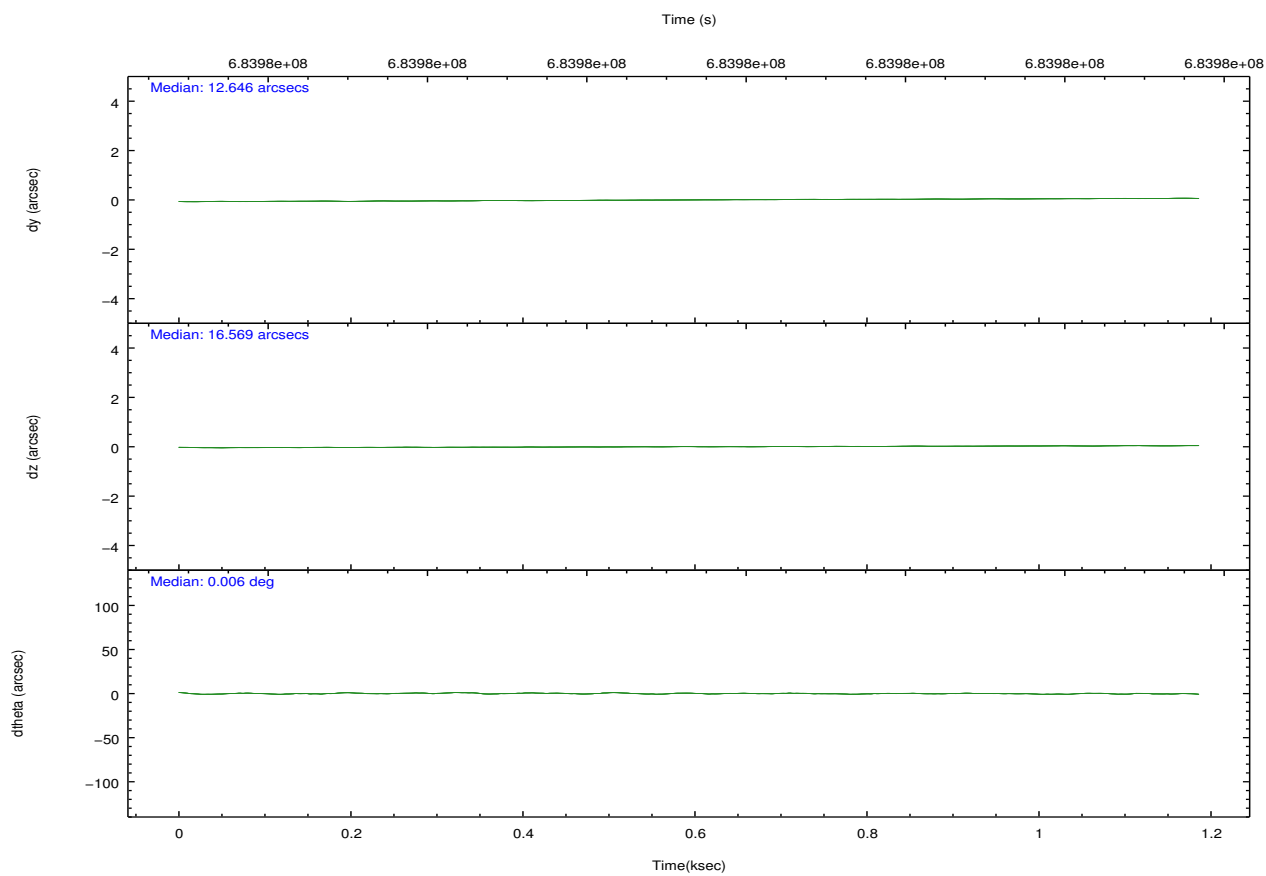
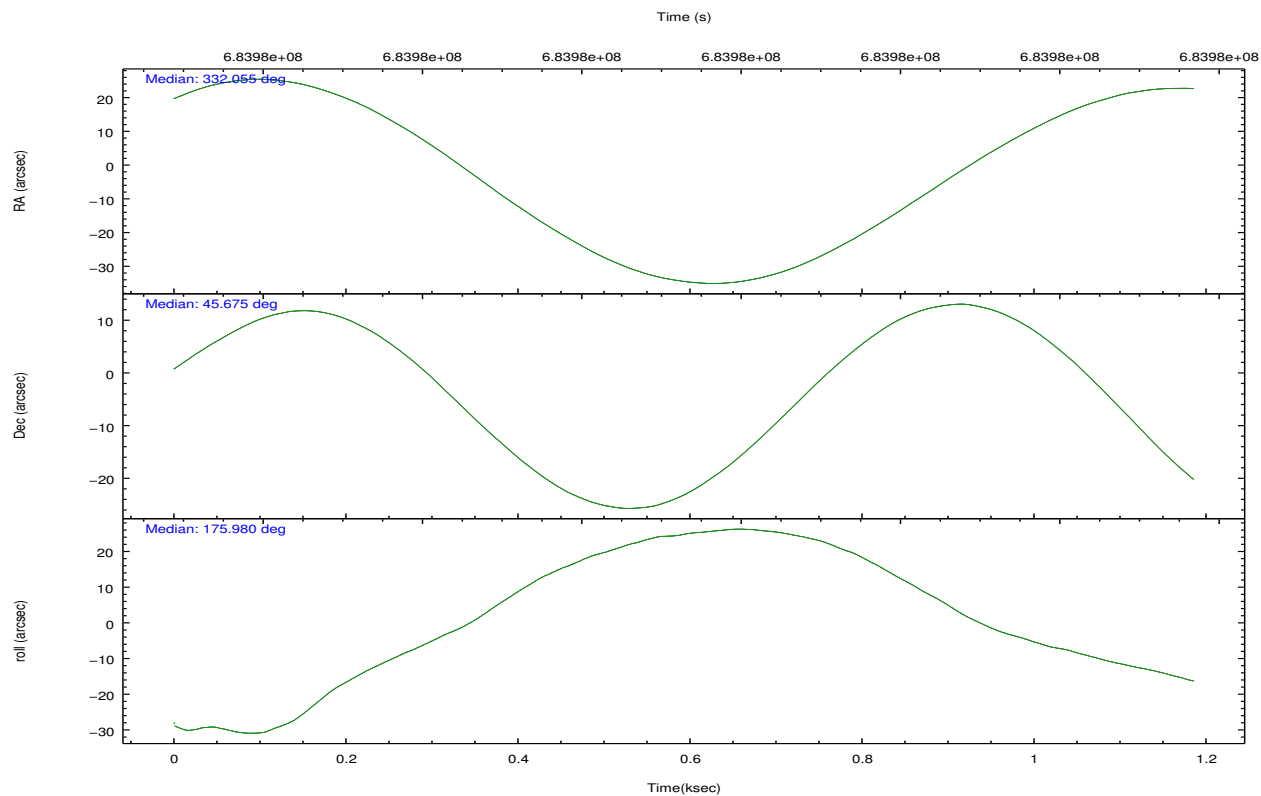
	<b>segment 0</b>
level 1 events	337133
rejected events	143514
rejected %	42%

## 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	332.088685	332.0546513593349			
[deg] Pointing Dec	45.686058	45.67448168038008			
[deg] Pointing Roll	176.057931	175.9867234964674			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9854943052878			
[mm] SIM translation stage offset	0	-5.413686238853188e-06			
[s] Observation start time (MET)	683977324.184000	683976668.01264			
Observation start date	2019-09-04T09:40:55	2019-09-04T09:31:08			
[s] Observation end time (MET)	683978324.184000	683978738.00026			
Observation end date	2019-09-04T09:57:35	2019-09-04T10:05:38			

## 2.3 Aspect





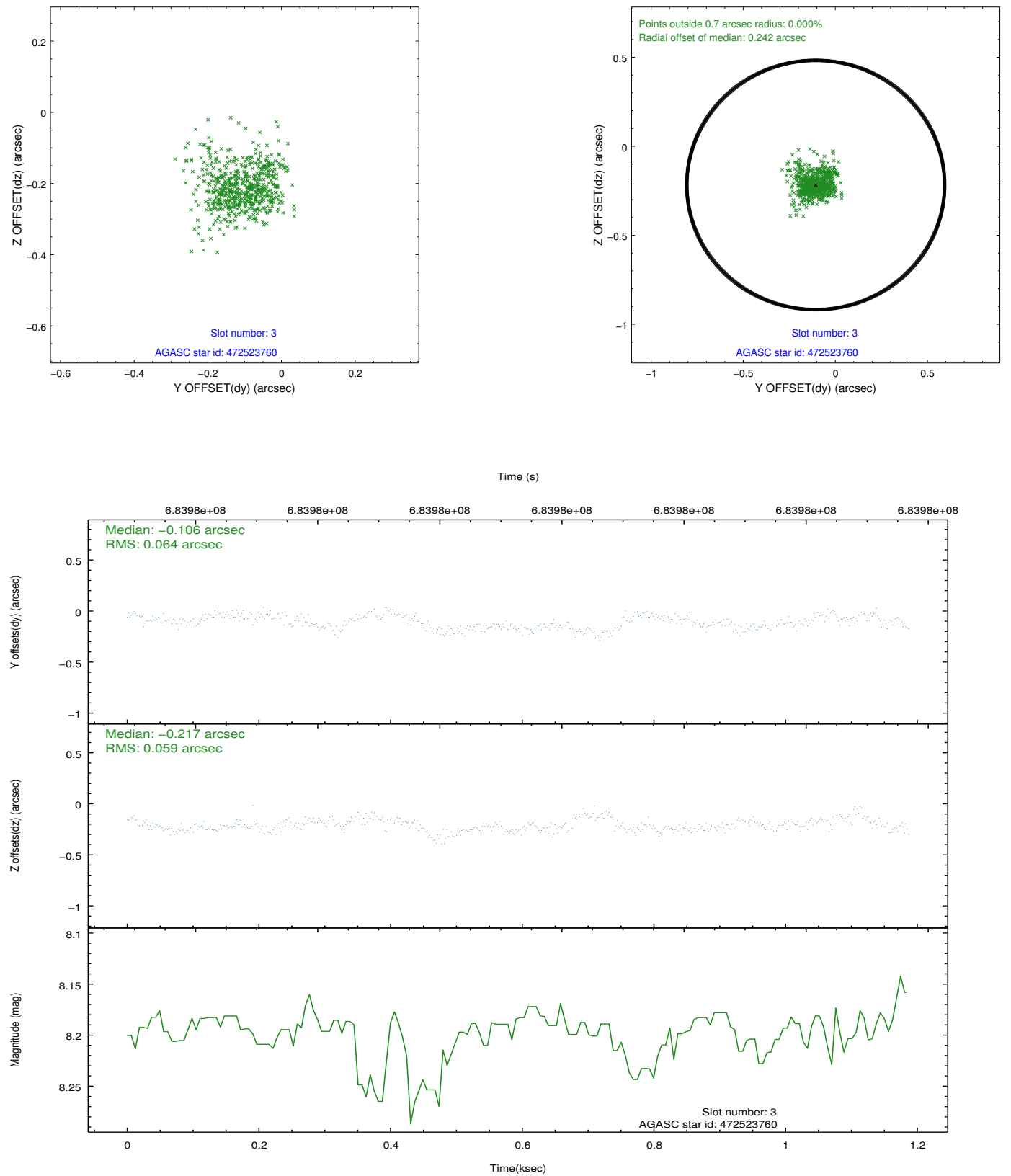
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-I-1	7.05	290	1.000	-0.268	-0.020	0.007	0.011	0.000000	0.000000	-768.59	-1304
1	FID		HRC-I-2	7.07	290	1.000	0.464	-0.165	0.006	0.011	0.000000	0.000000	842.12	-1310
2	FID		HRC-I-3	7.13	289	1.000	-0.077	0.094	0.007	0.013	0.000000	0.000000	-1194.06	995
3	GUIDE	used	472523760	8.20	580	1.000	-0.106	-0.217	0.090	0.161	331.645363	45.403260	1049.91	1093
4	GUIDE	used	472525528	6.63	580	1.000	-0.281	-0.367	0.121	0.182	331.551102	45.248694	1254.10	1665
5	GUIDE	used	472527720	6.98	580	1.000	-0.244	-0.468	0.116	0.185	331.460205	45.112509	1454.70	2169
6	GUIDE	used	472535576	7.84	580	1.000	0.082	0.207	0.125	0.215	331.438373	46.291802	1768.98	-2063
7	GUIDE	used	472665256	8.93	577	1.000	0.549	0.813	0.176	0.290	332.808125	46.195041	-1656.41	-1958

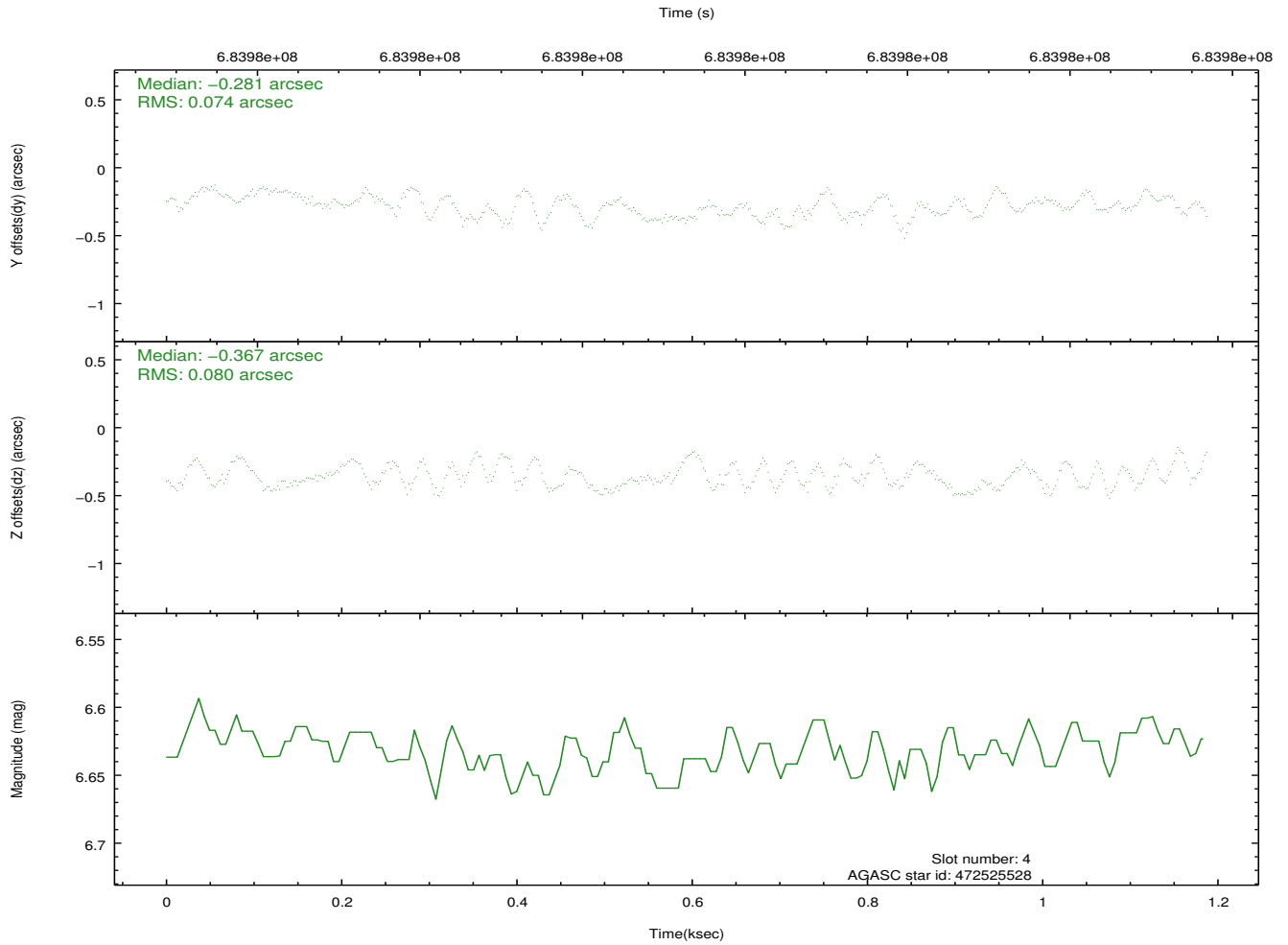
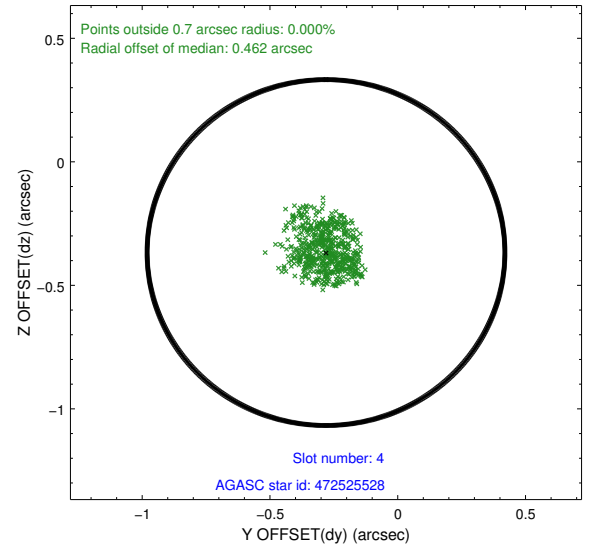
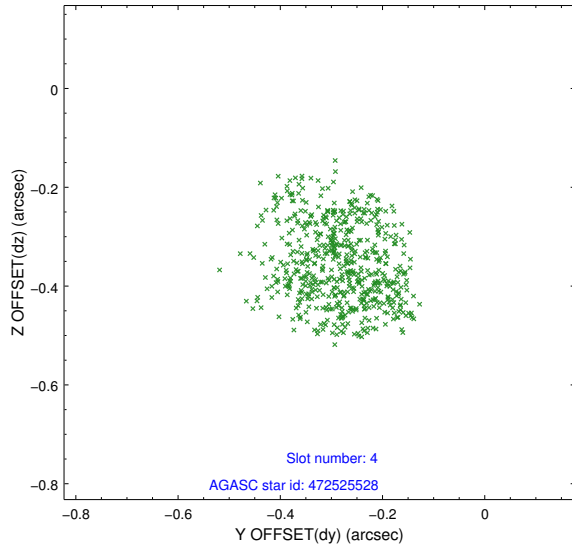


## 2.4 Star Slots

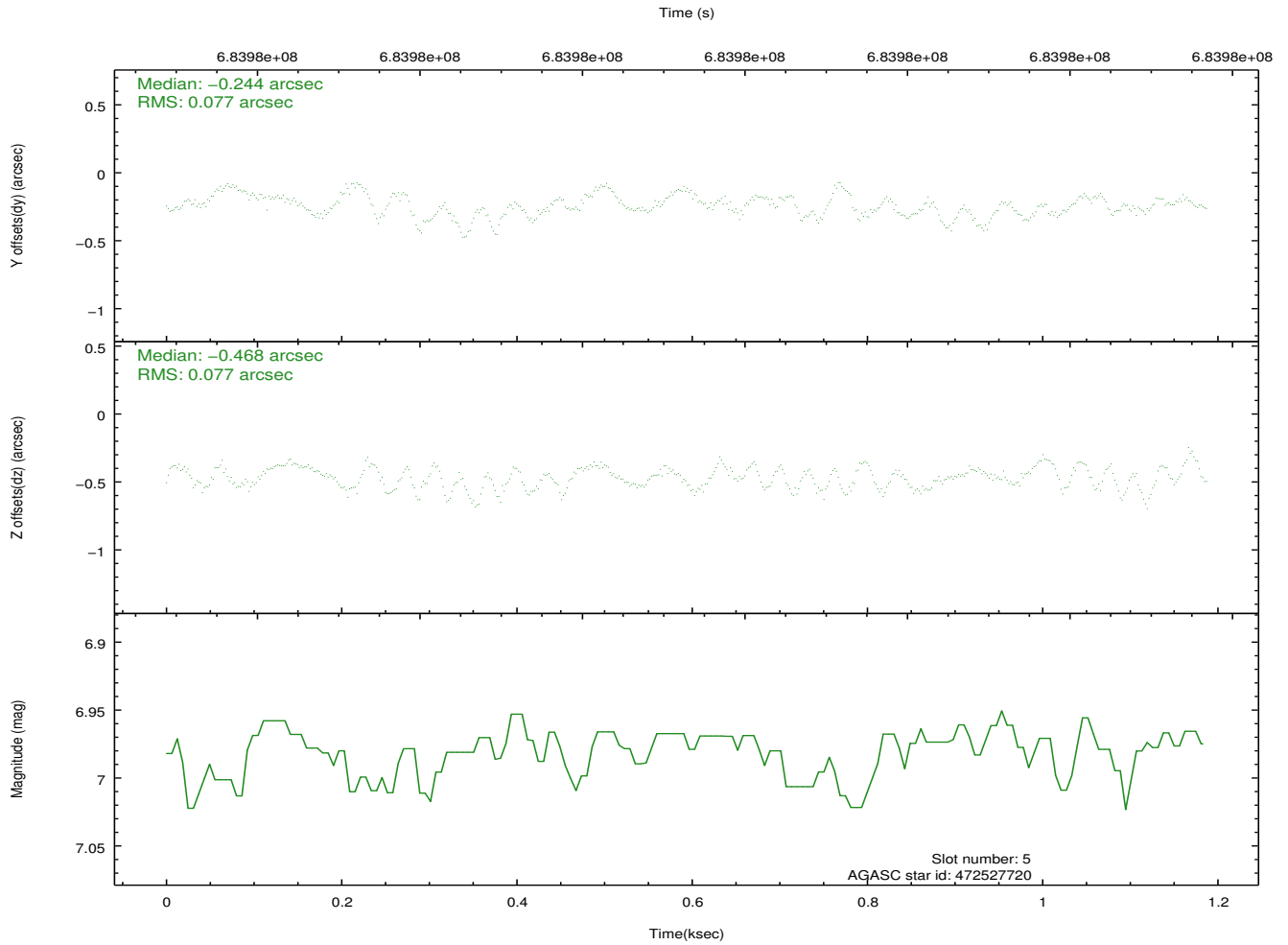
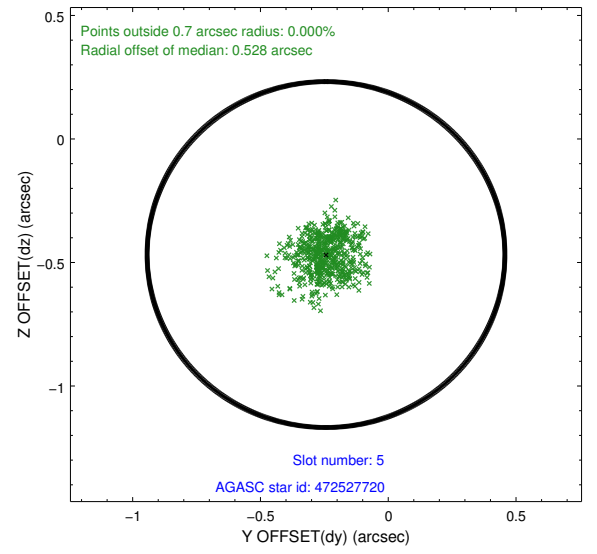
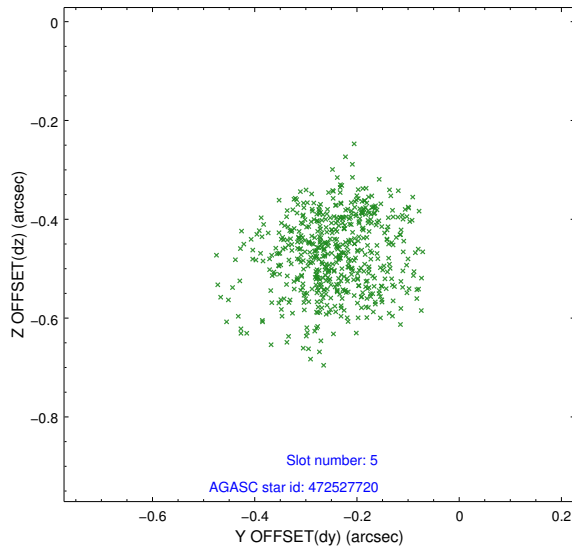
### 2.4.1 Slot 3



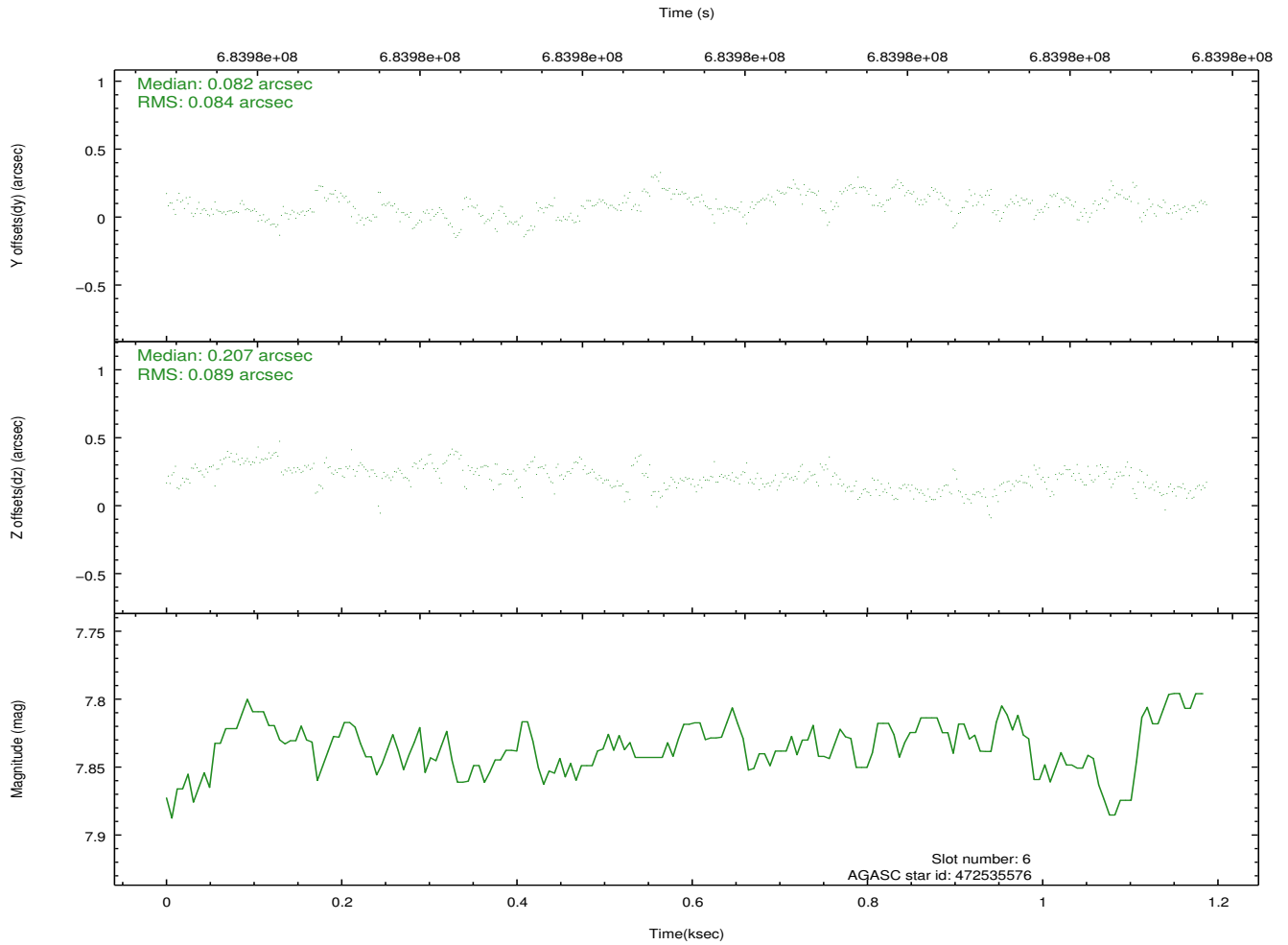
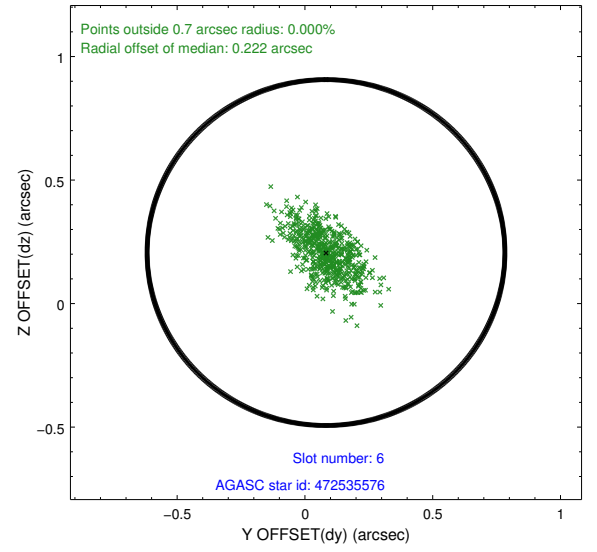
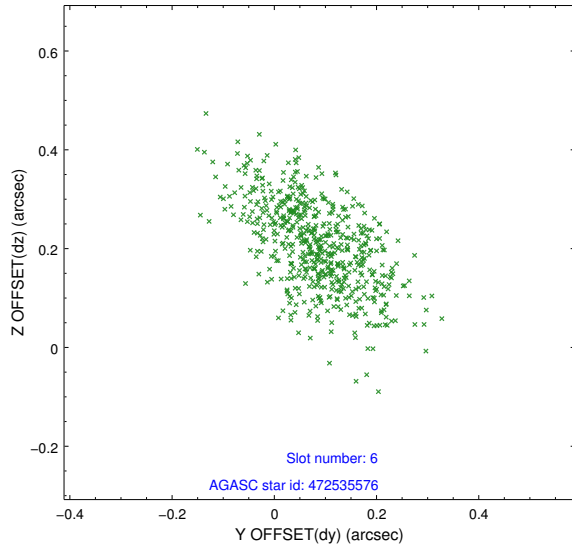
## 2.4.2 Slot 4



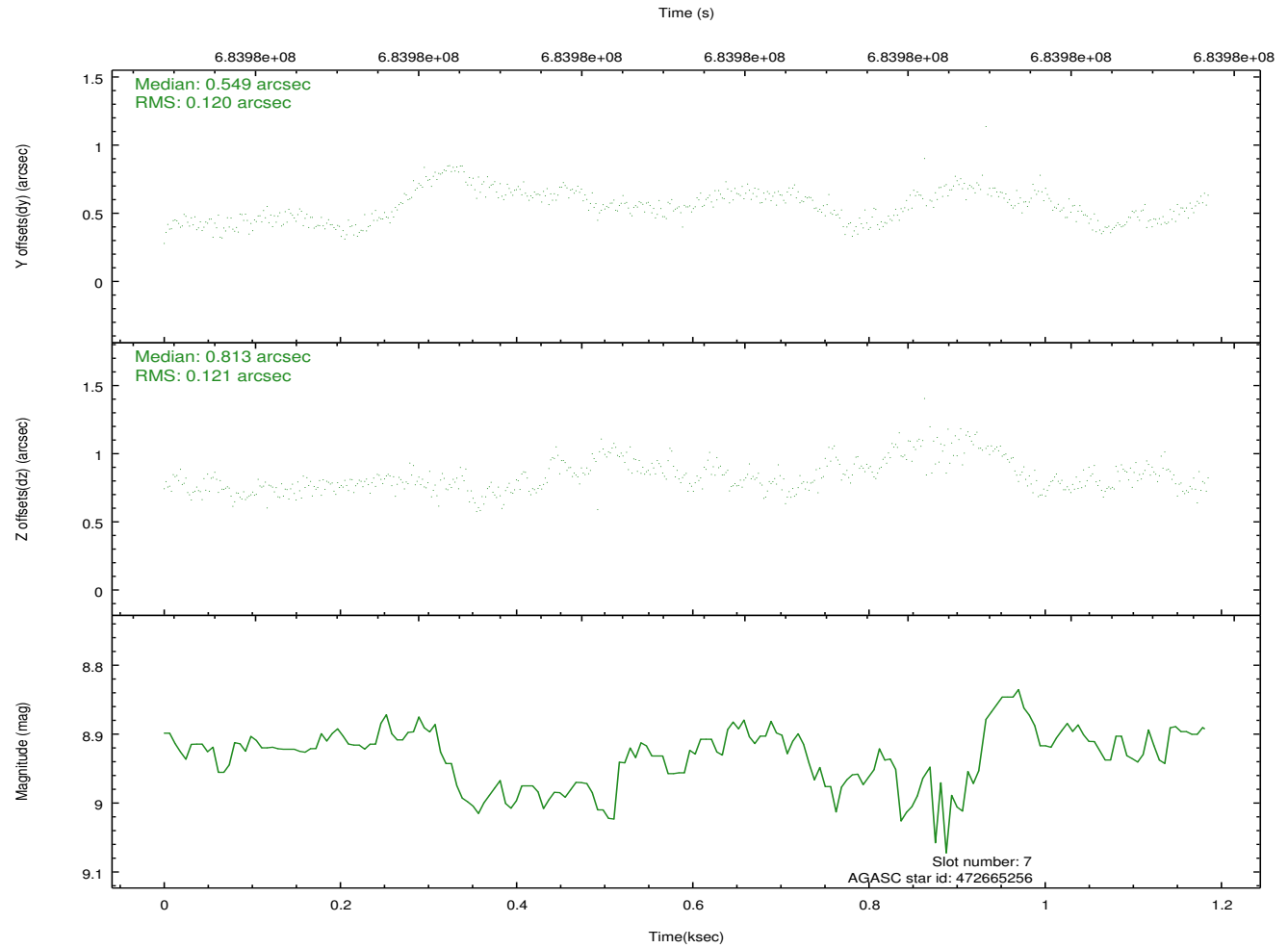
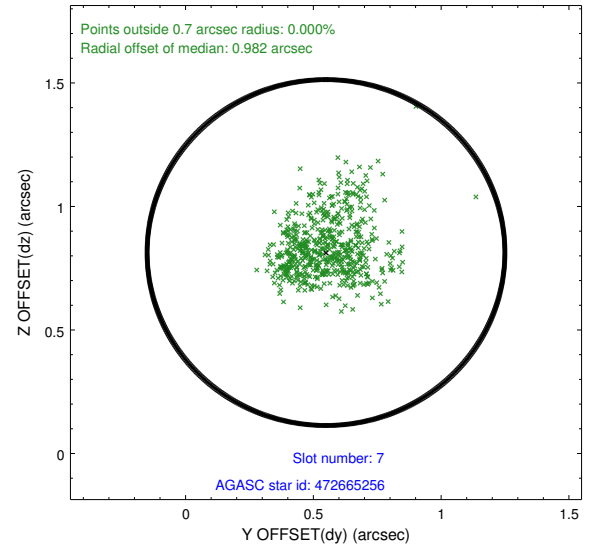
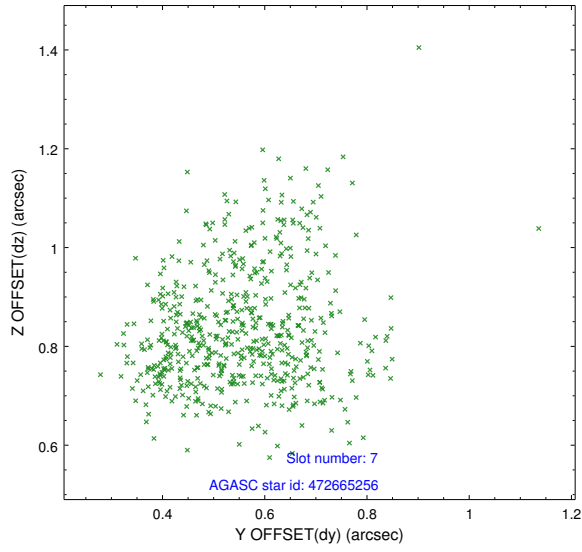
### 2.4.3 Slot 5



## 2.4.4 Slot 6

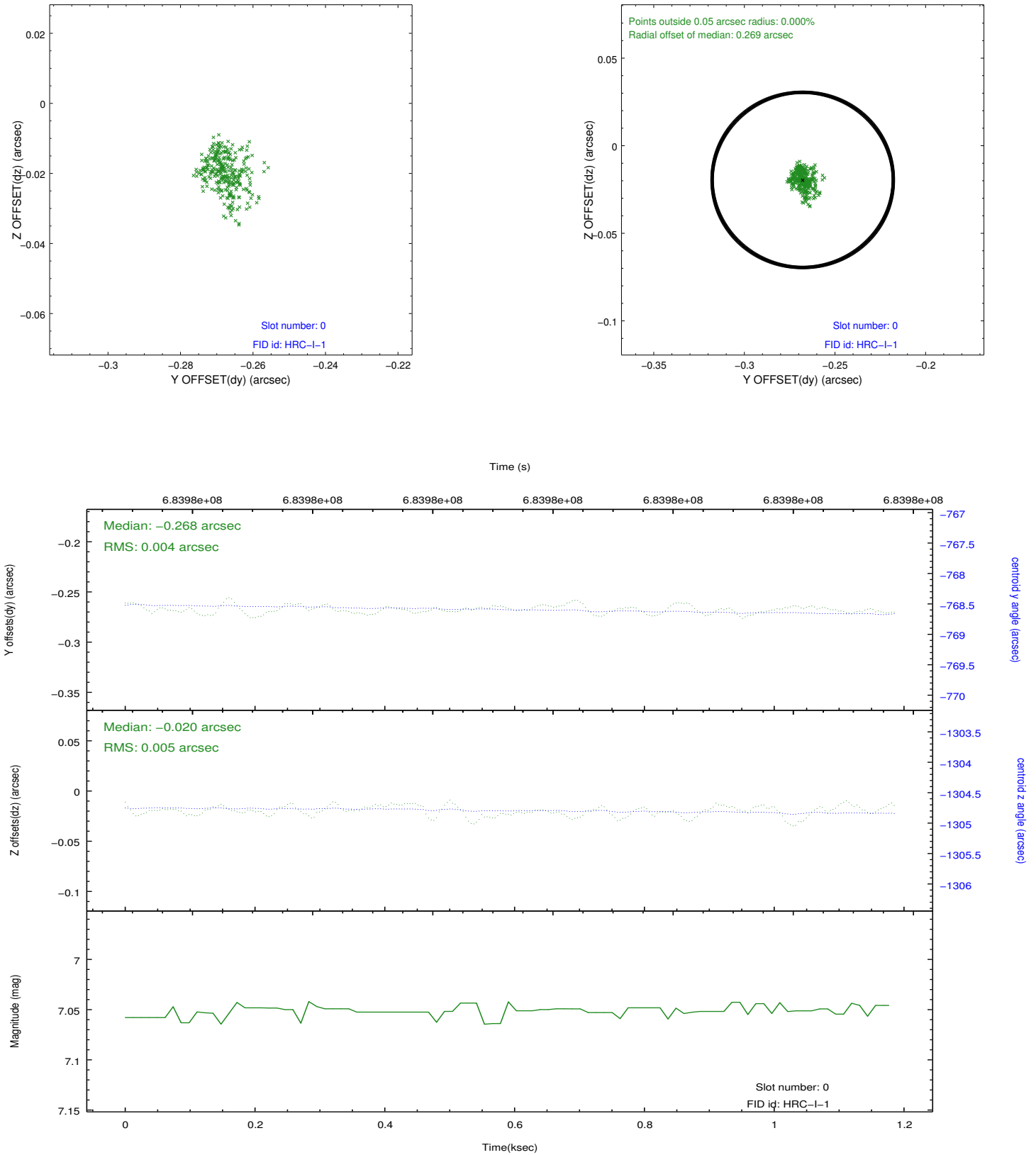


## 2.4.5 Slot 7

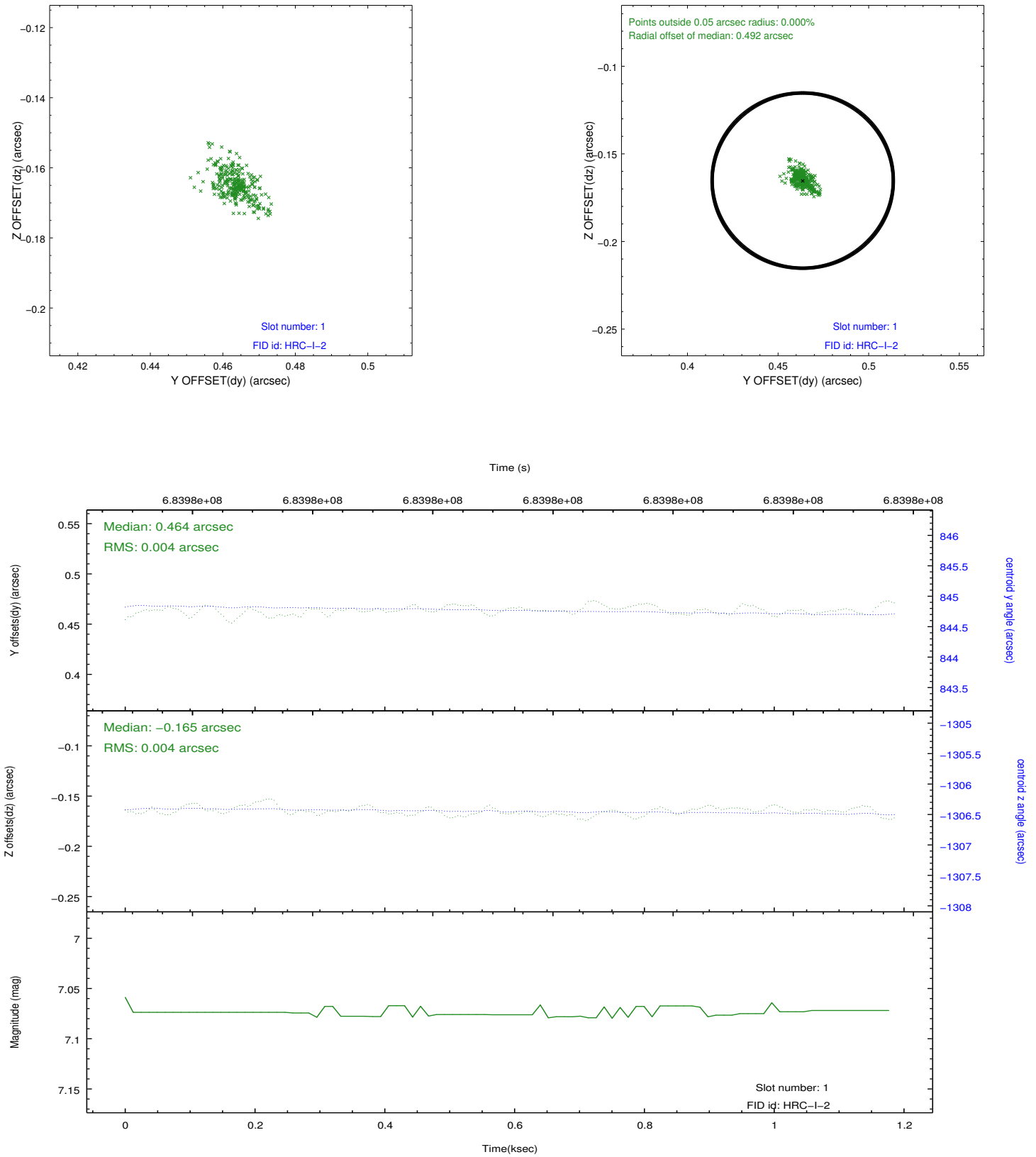


## 2.5 FID Slots

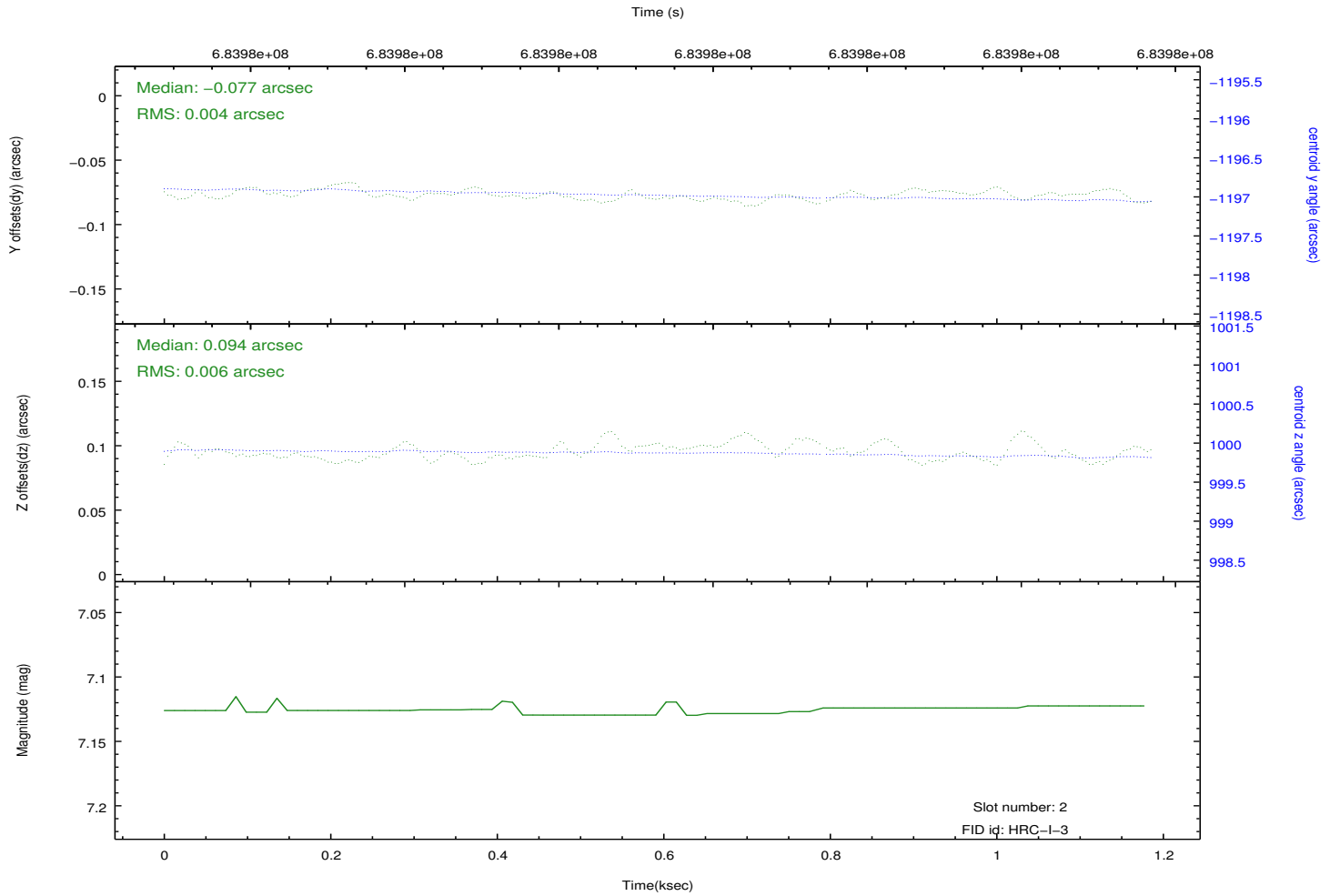
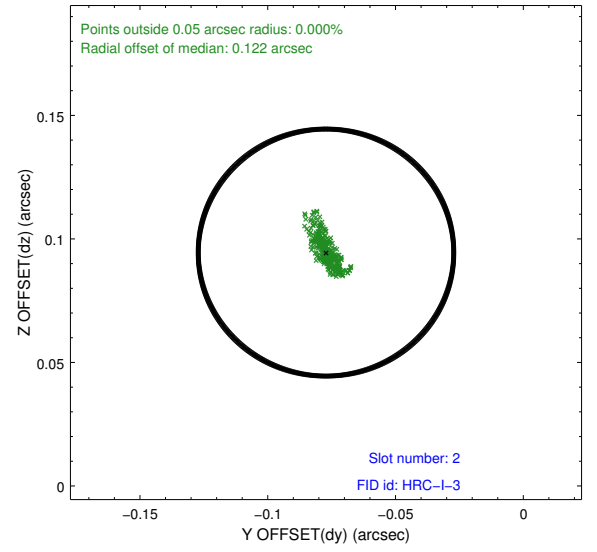
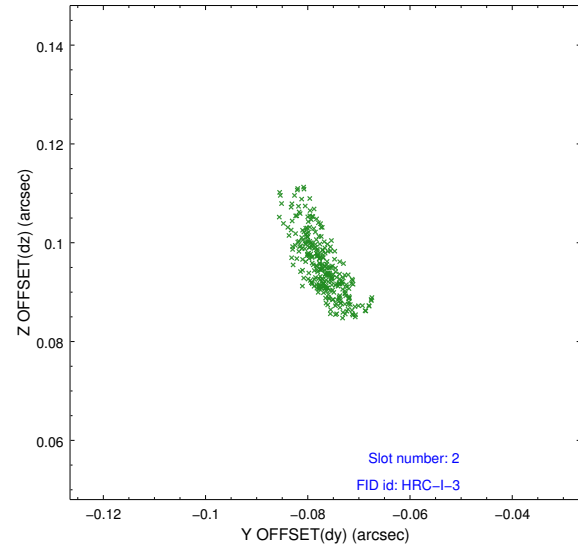
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.09.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1859250714779

### A.2 Comments