

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21771 - L2 Version 1  
Chandra X-Ray Center

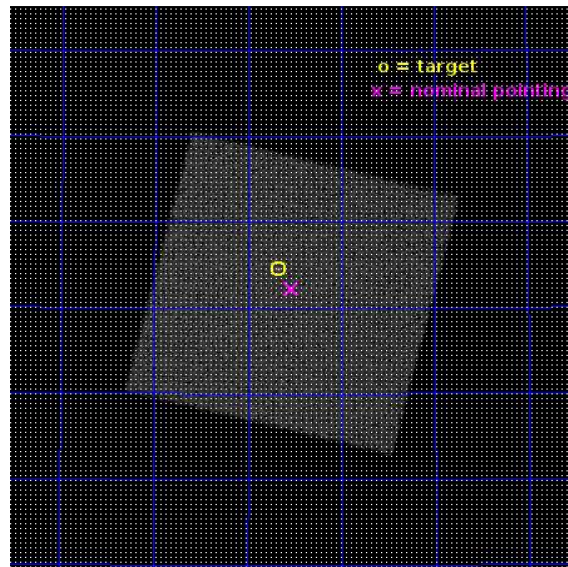
L2 Processing Date : Apr 8 2019

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# 1 Front

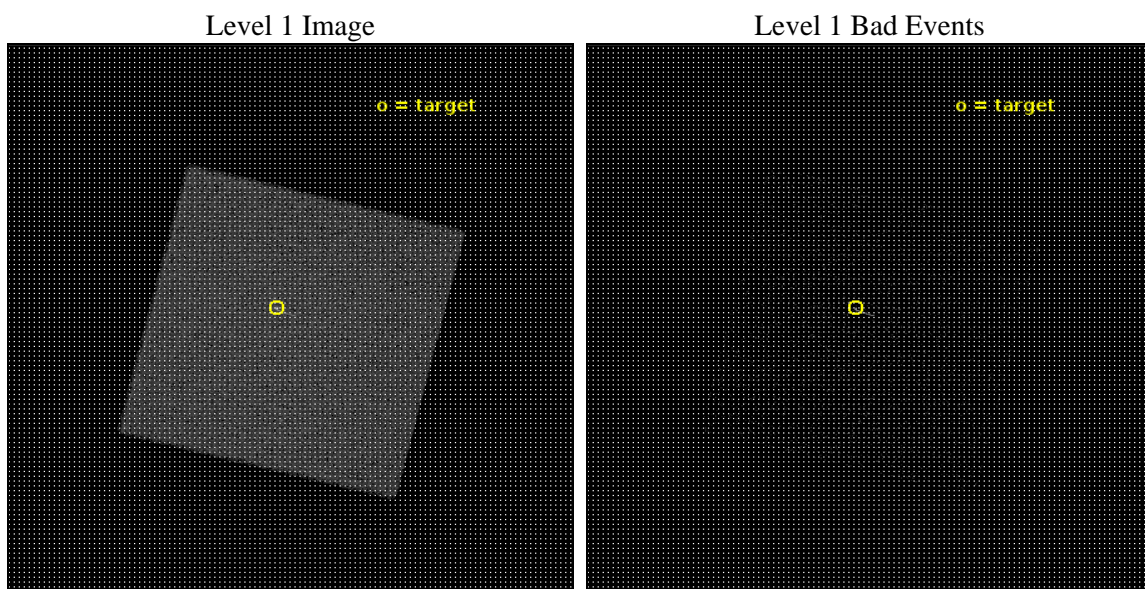
seq_num	291457	Sequence number
obs_id	21771	Observation id
title	AO-20 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.169666	Observer's specified target RA [deg]
dec_targ	45.742509	Observer's specified target Dec [deg]
ra_nom	332.13340018129	Nominal RA [deg]
dec_nom	45.704284986566	Nominal Dec [deg]
roll_nom	59.080475827832	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1190.2813212872	[s]
livetime	1172.6412288866	Ontime multiplied by DTCOR
l2events	152065	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	10.7.1	Processing system revision	ontime	1190.2813212872	[s]
caldbver	4.8.2	&#160	l1events	252049	Number of level 1 events
date	2019-04-08T23:02:20	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

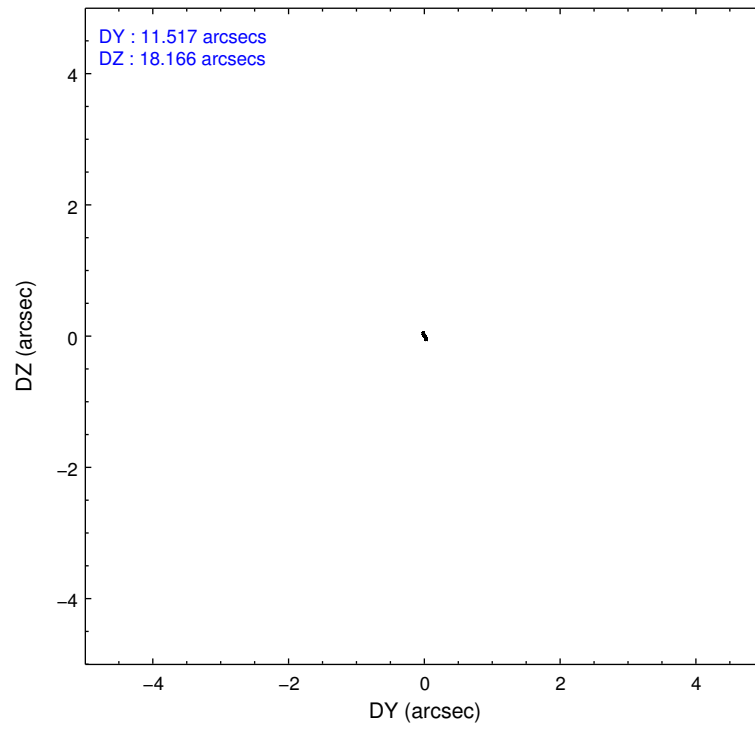
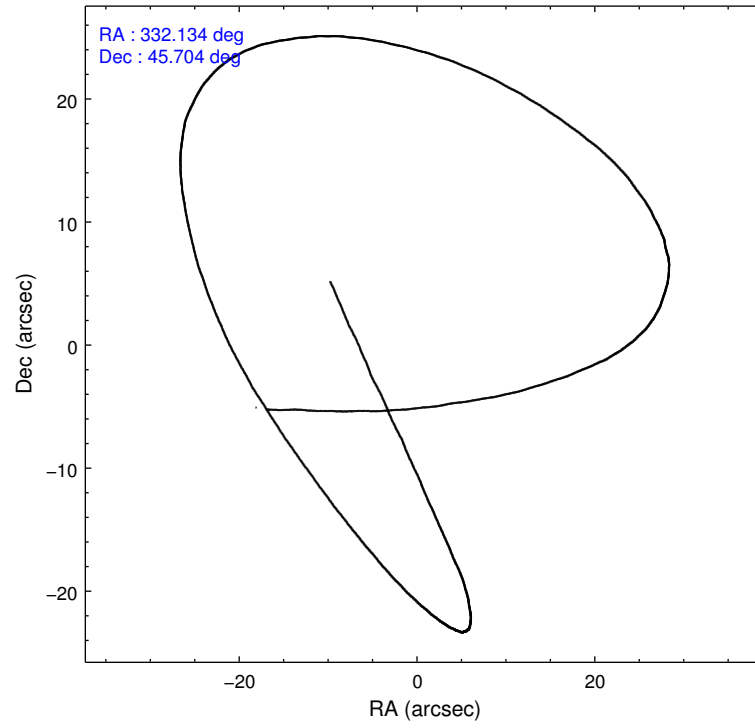
#### Level 1 Events

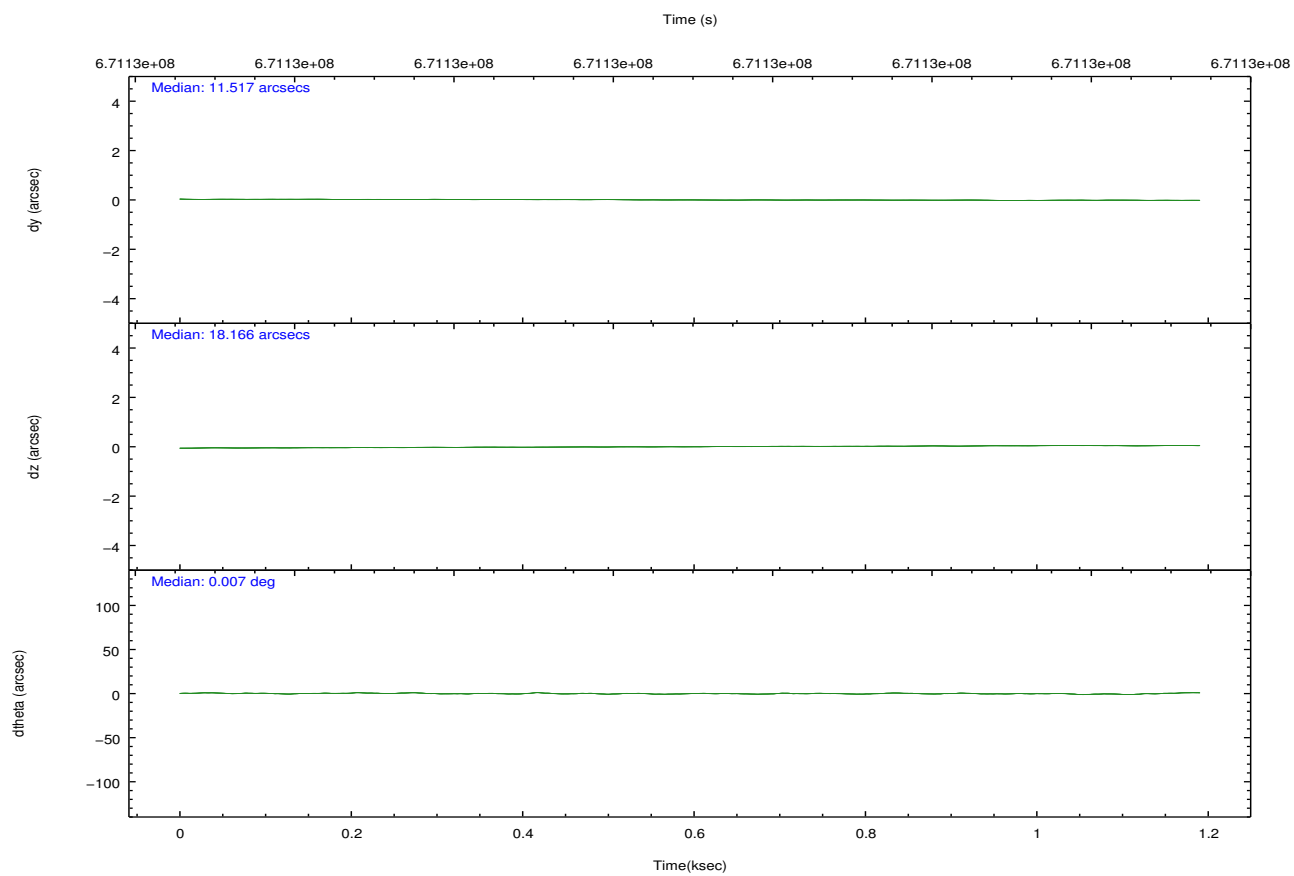
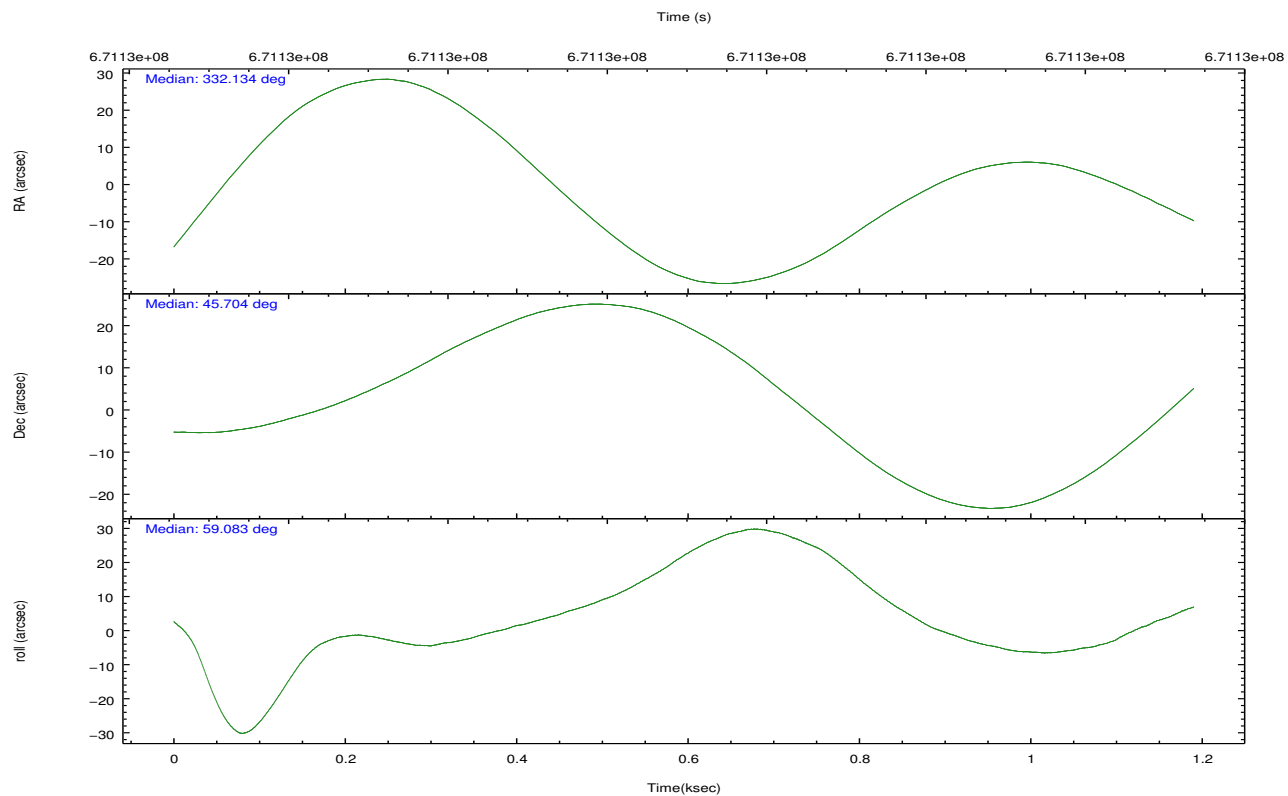
	<b>segment 0</b>
level 1 events	252049
rejected events	53642
rejected %	21%

## 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	332.132406	332.133400181292			
[deg] Pointing Dec	45.677684	45.70428498656582			
[deg] Pointing Roll	59.176784	59.08047582783227			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9829799899862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	671128494.184000	671128117.47905			
Observation start date	2019-04-08T16:33:45	2019-04-08T16:28:37			
[s] Observation end time (MET)	671129494.184000	671129627.81664			
Observation end date	2019-04-08T16:50:25	2019-04-08T16:53:47			

## 2.3 Aspect





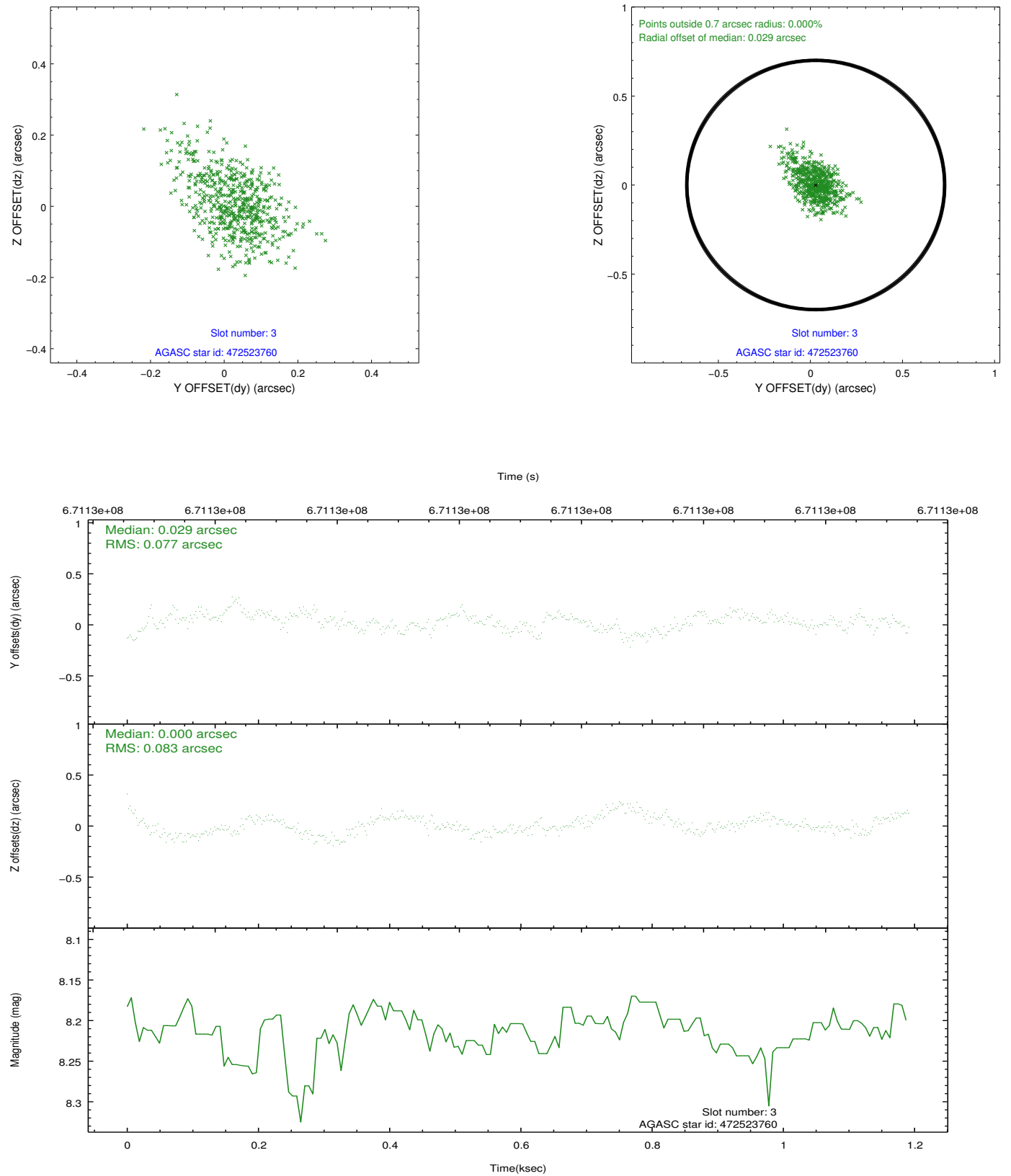
Slot Statistics

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	7.02	291	1.000	-0.242	-0.036	0.009	0.016	0.000000	0.000000	-767.42	-1306
1	FID		HRC-I-2	7.03	291	1.000	0.411	-0.131	0.006	0.010	0.000000	0.000000	843.23	-1312
2	FID		HRC-I-3	7.09	291	1.000	-0.050	0.077	0.006	0.012	0.000000	0.000000	-1192.89	993
3	GUIDE	used	472523760	8.21	582	1.000	0.029	0.000	0.114	0.208	331.645363	45.403260	-1475.55	557
4	GUIDE	used	472525528	6.62	582	1.000	0.089	-0.030	0.118	0.195	331.551102	45.248694	-2078.21	481
5	GUIDE	used	472533912	9.10	581	1.000	-0.094	-0.377	0.178	0.330	331.791136	46.368695	1700.50	2008
6	GUIDE	used	472649352	9.70	581	1.000	0.605	0.401	0.255	0.422	332.034169	45.325407	-1212.30	-427
7	GUIDE	used	472661712	9.94	566	1.000	-0.628	0.006	0.267	0.516	331.914954	46.059715	901.44	1174

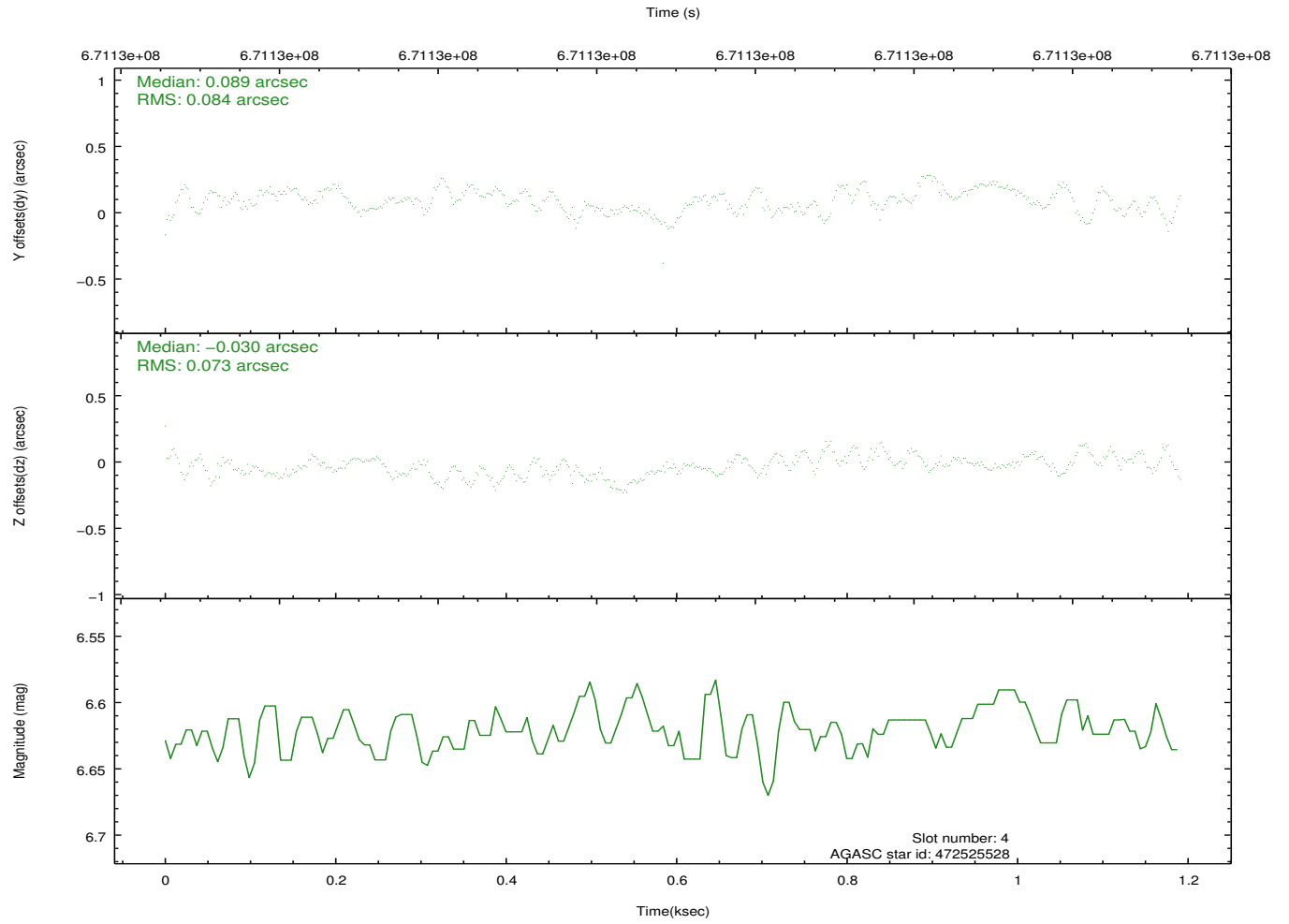
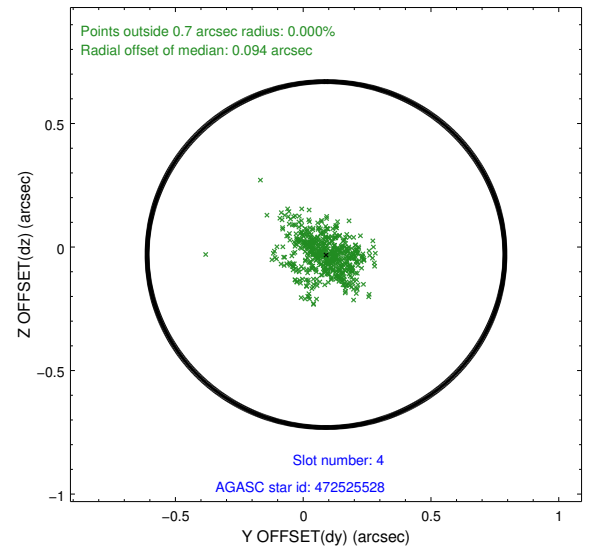
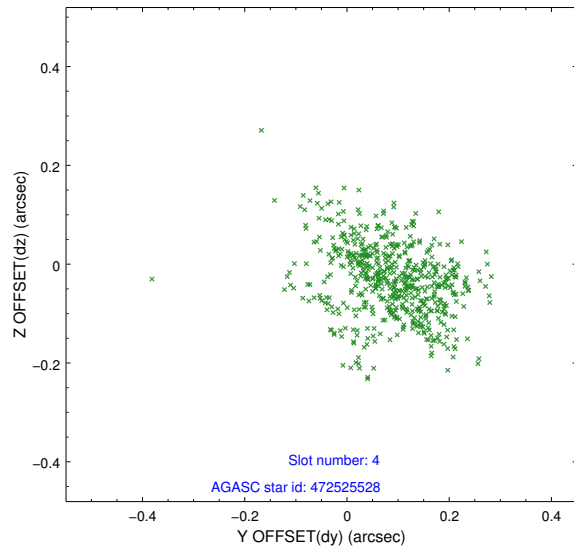


## 2.4 Star Slots

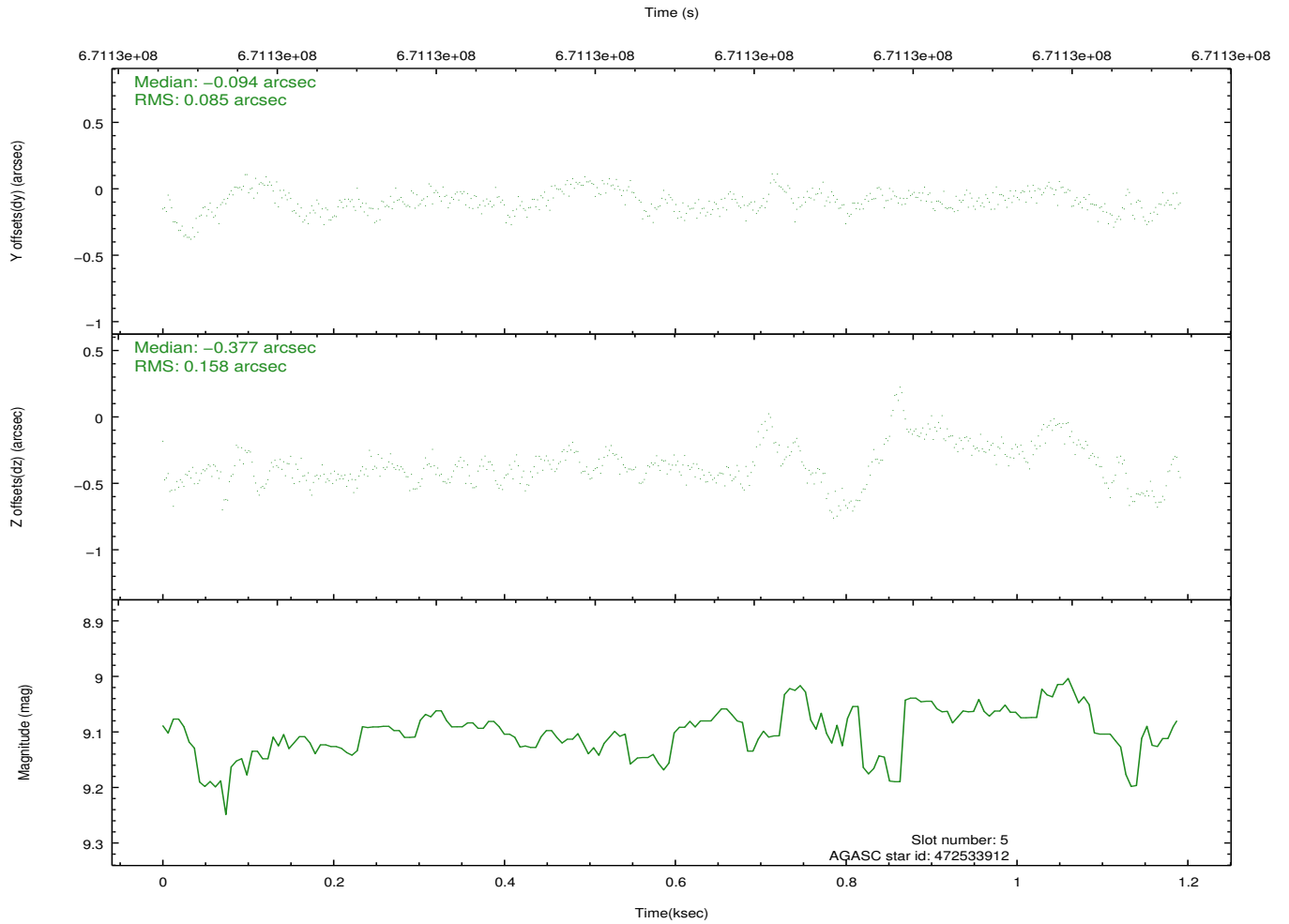
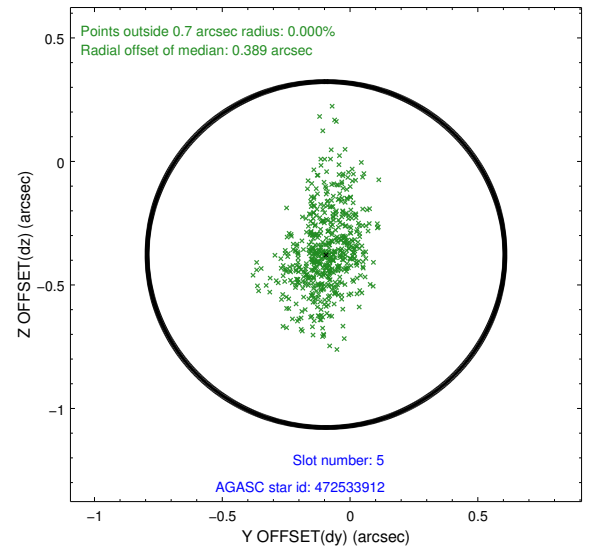
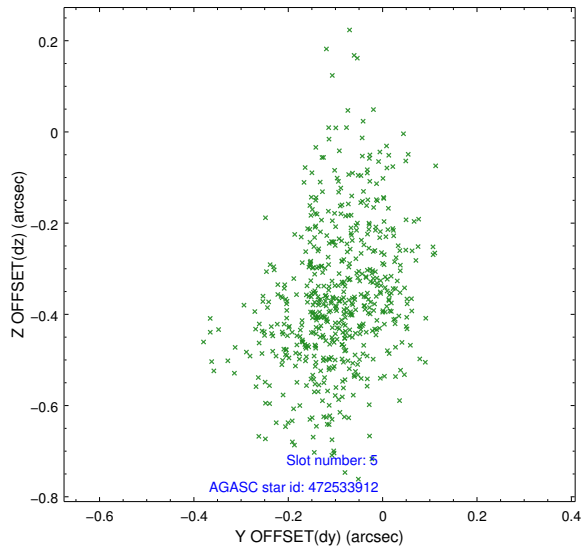
### 2.4.1 Slot 3



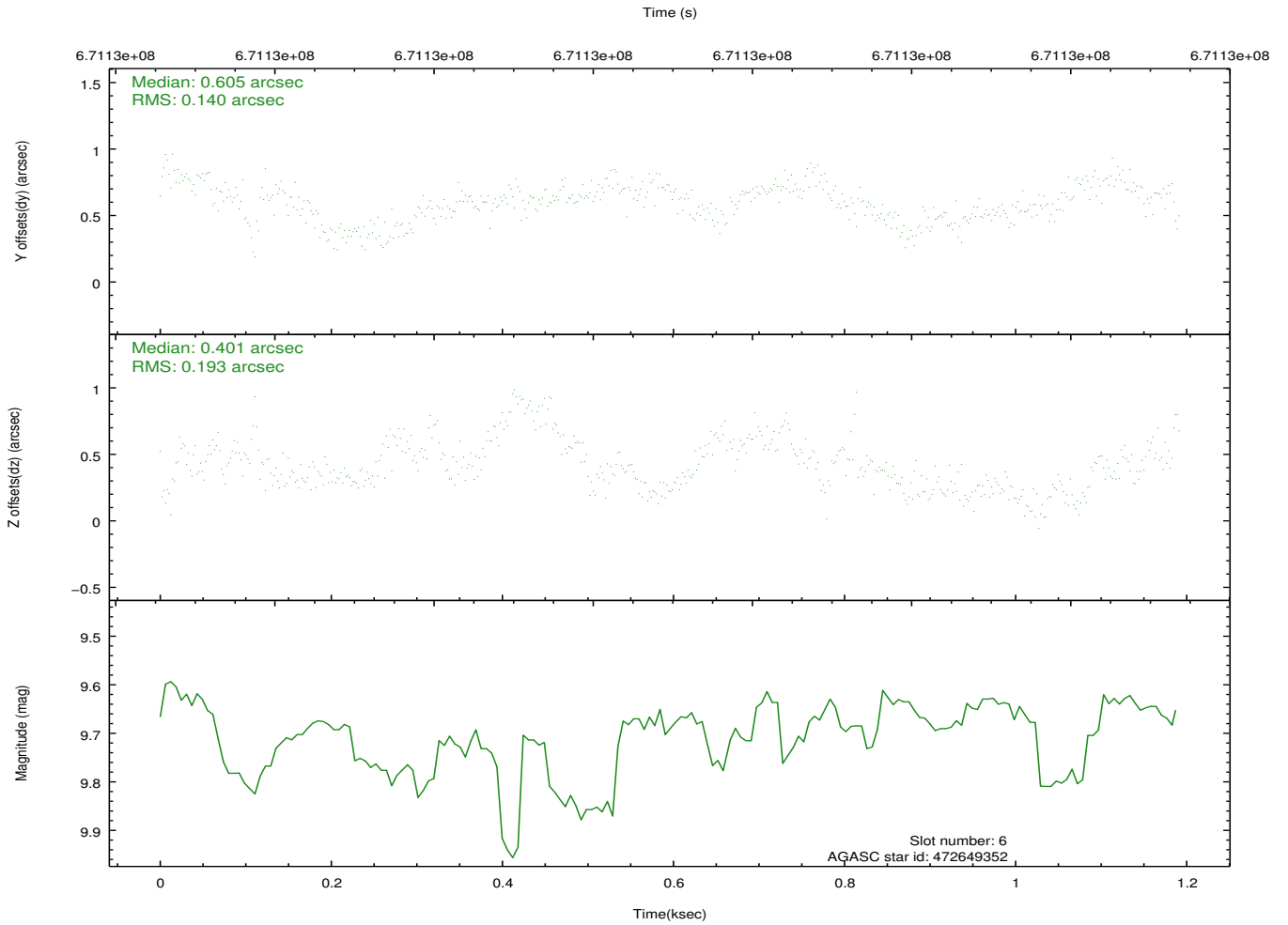
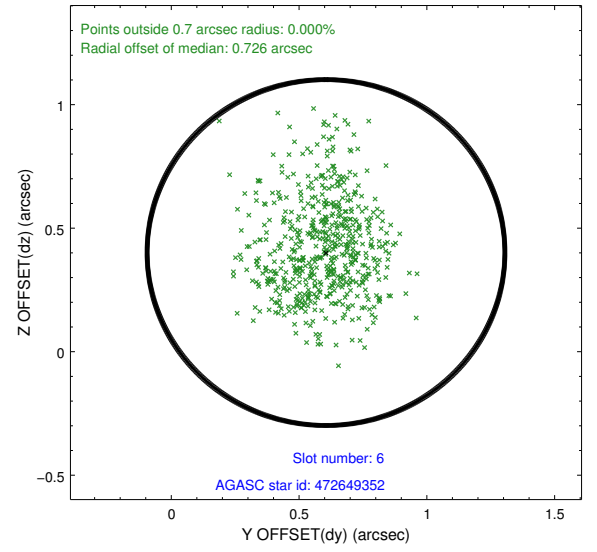
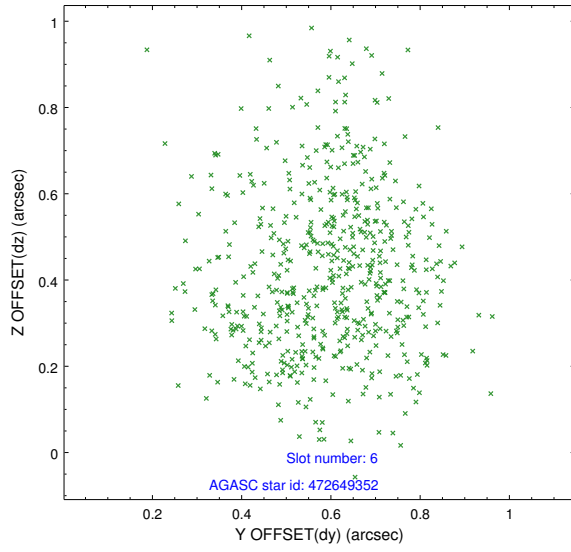
## 2.4.2 Slot 4



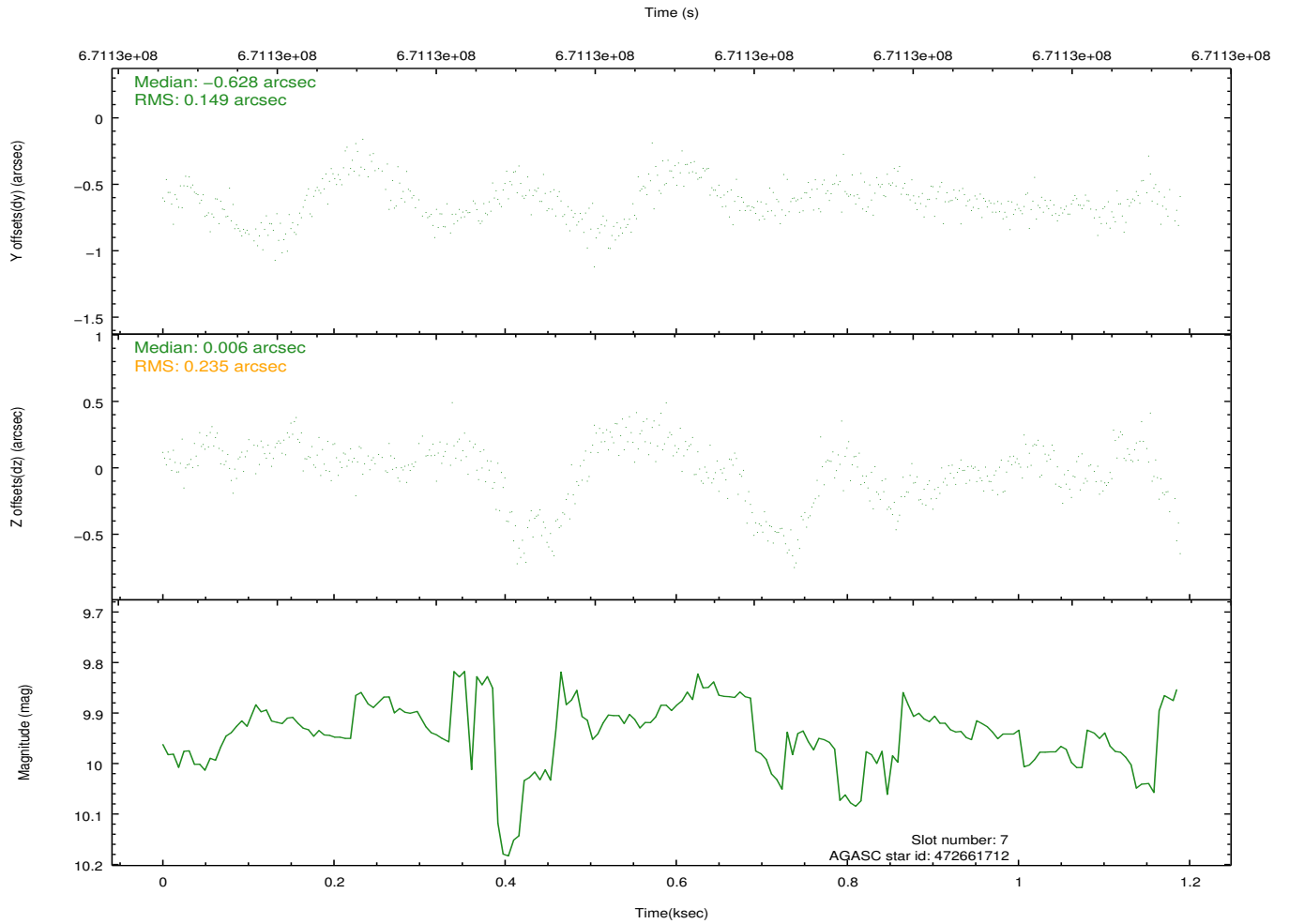
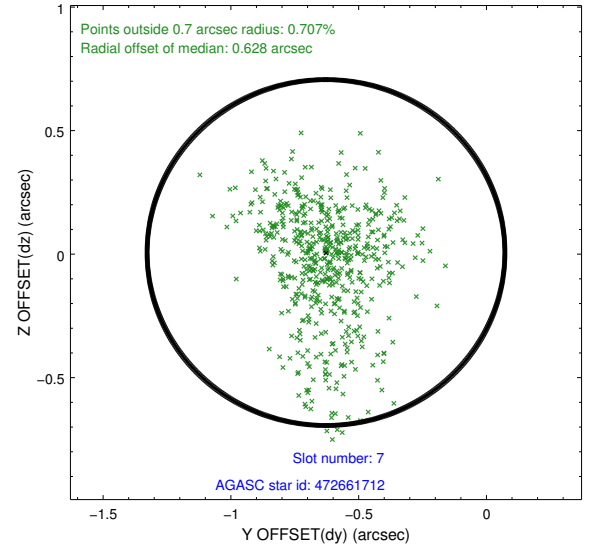
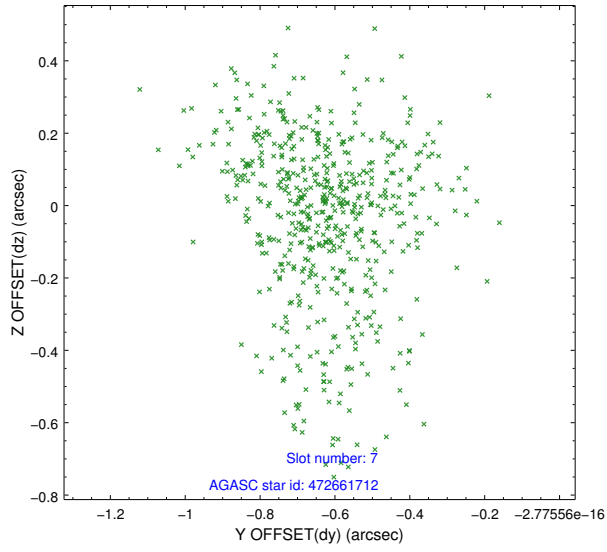
### 2.4.3 Slot 5



## 2.4.4 Slot 6

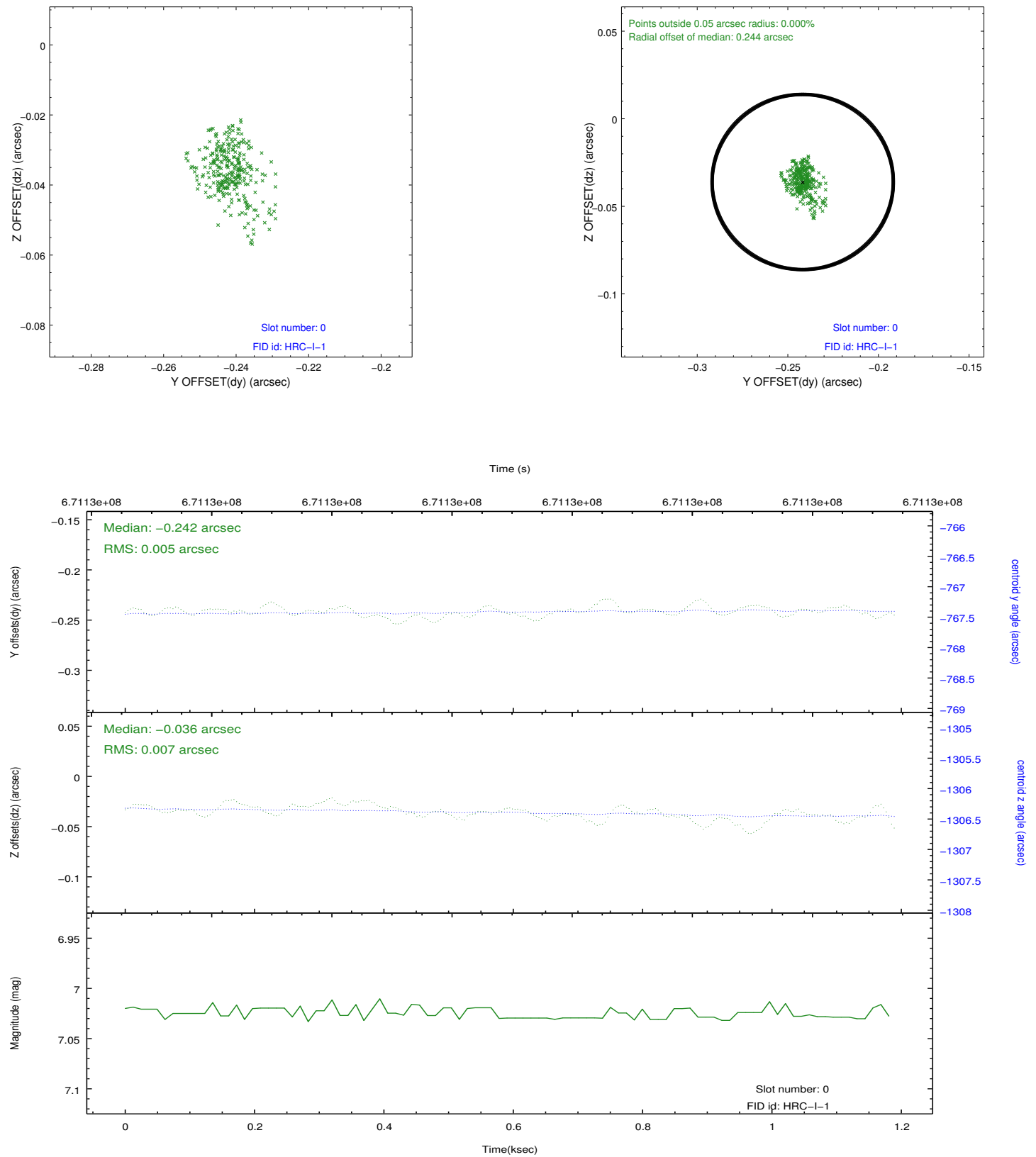


## 2.4.5 Slot 7

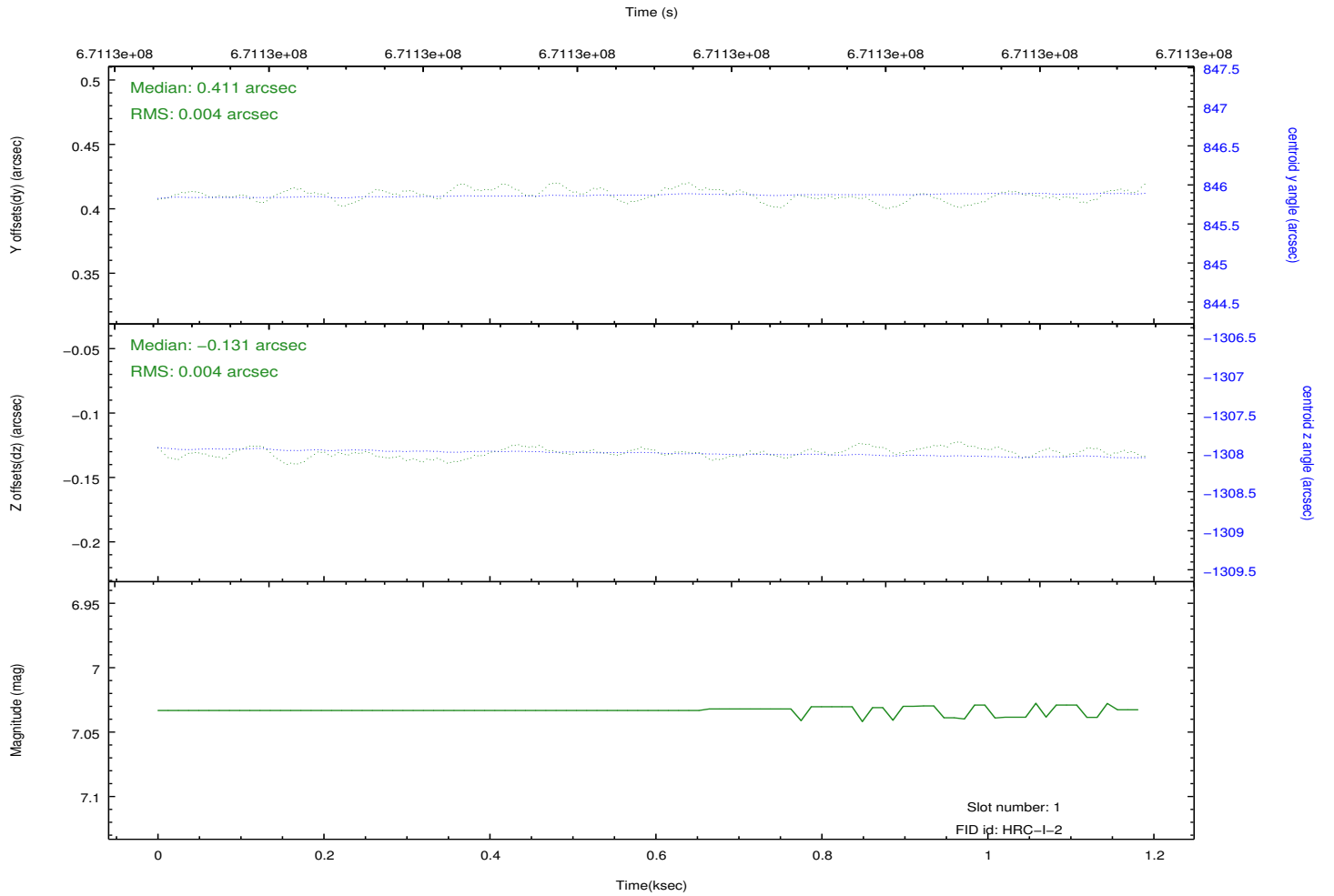
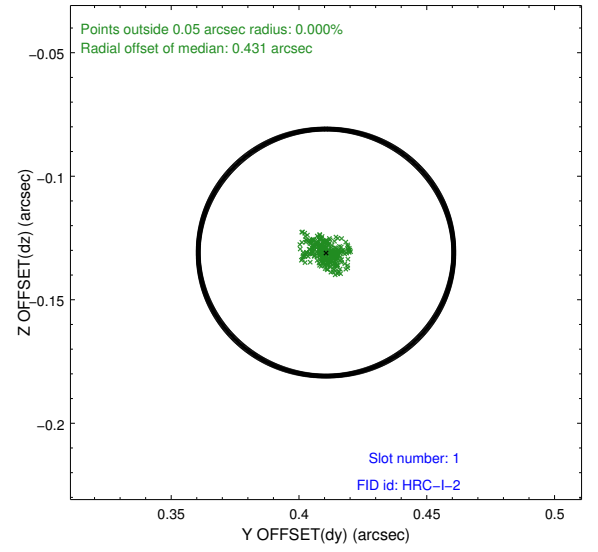
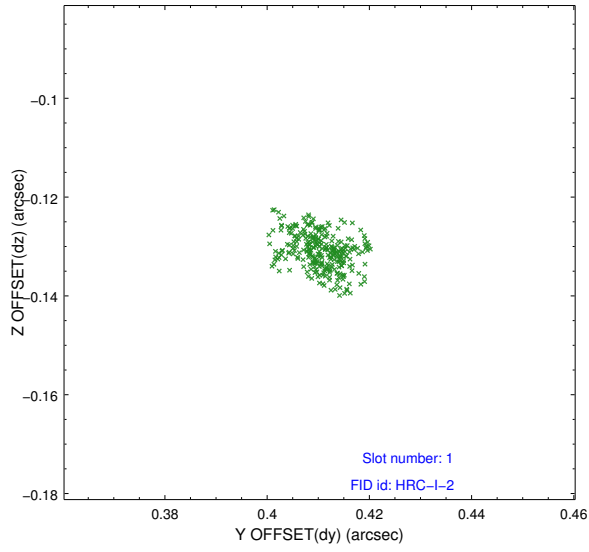


## 2.5 FID Slots

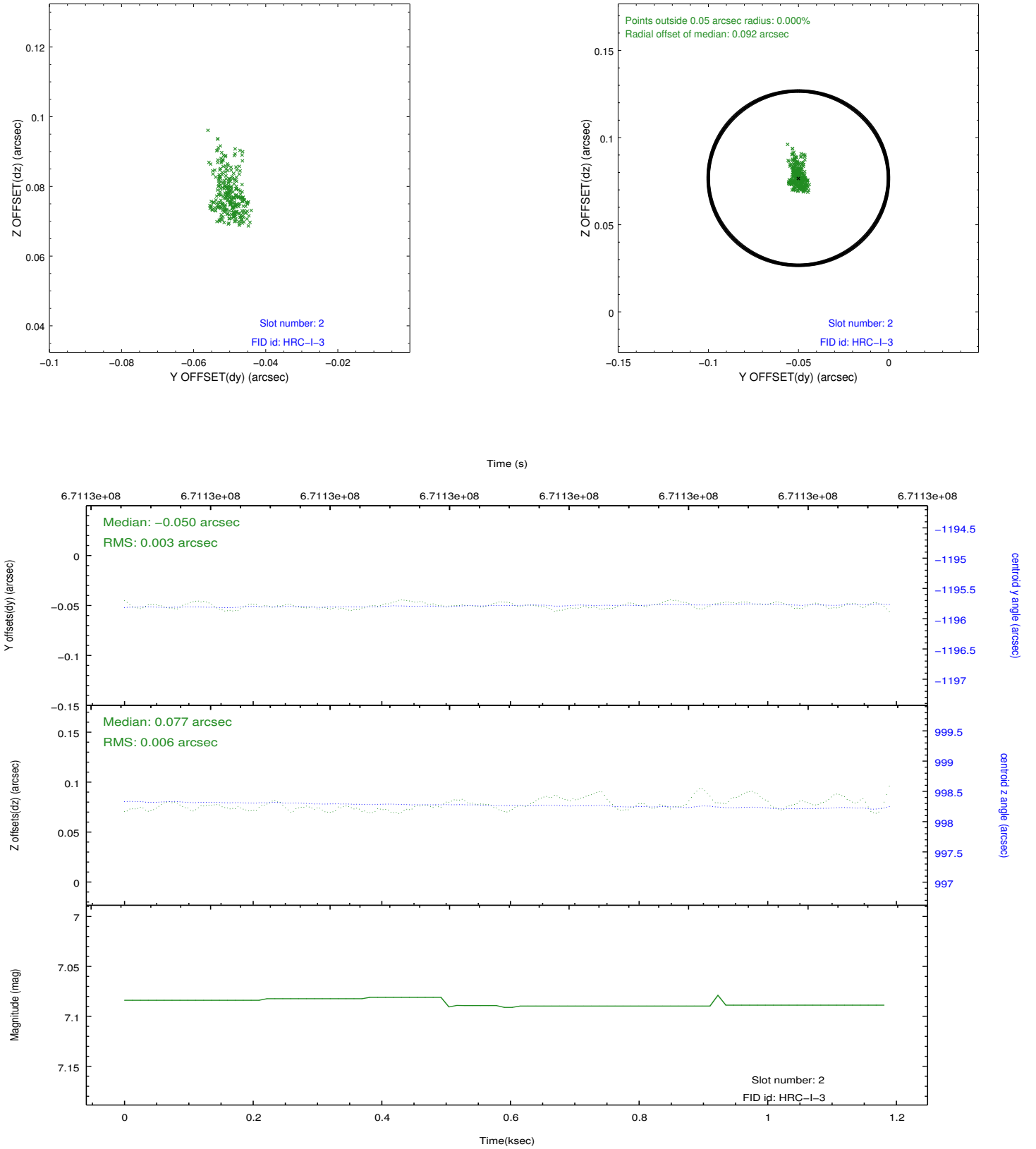
### 2.5.1 Slot 0



## 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)	2019.04.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1902813212872

### A.2 Comments