

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21776 - L2 Version 1  
Chandra X-Ray Center

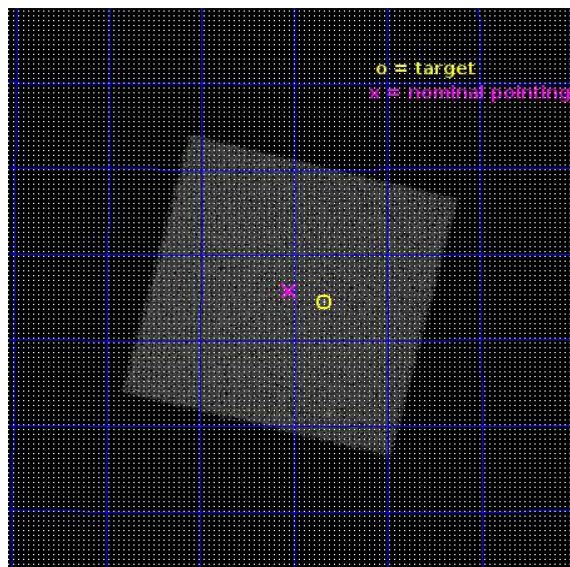
L2 Processing Date : Apr 9 2019

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# 1 Front

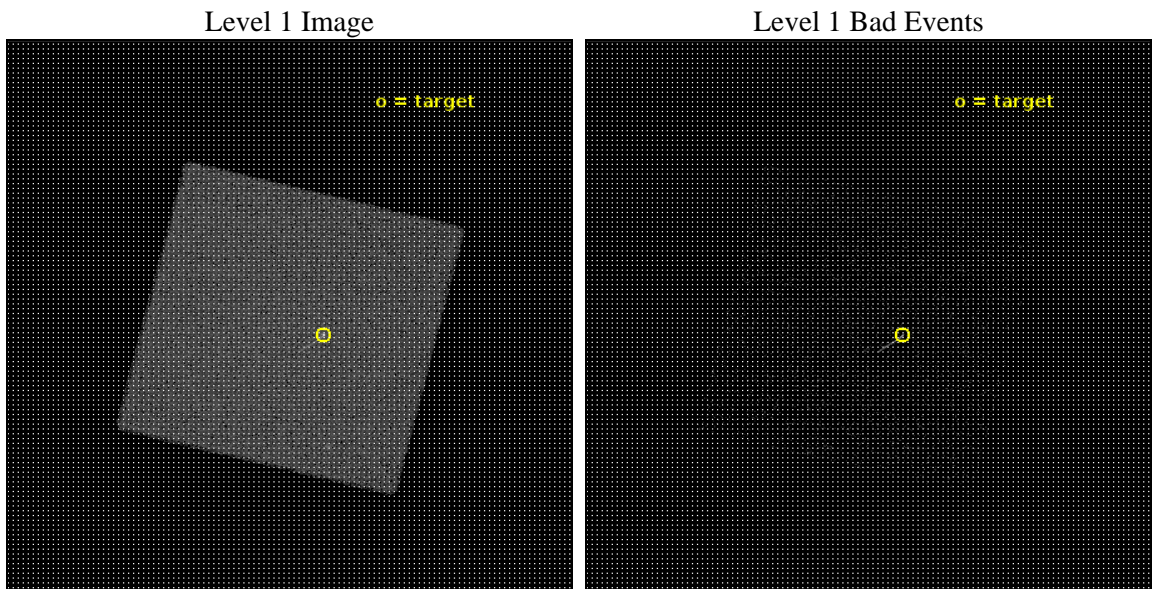
seq_num	291462	Sequence number
obs_id	21776	Observation id
title	AO-20 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.169666	Observer's specified target RA [deg]
dec_targ	45.742509	Observer's specified target Dec [deg]
ra_nom	332.26190865002	Nominal RA [deg]
dec_nom	45.76375002184	Nominal Dec [deg]
roll_nom	59.018768155577	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1190.2813212872	[s]
livetime	1172.4687111783	Ontime multiplied by DTCOR
l2events	153790	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	254431	Number of level 1 events
date	2019-04-09T03:55:42	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

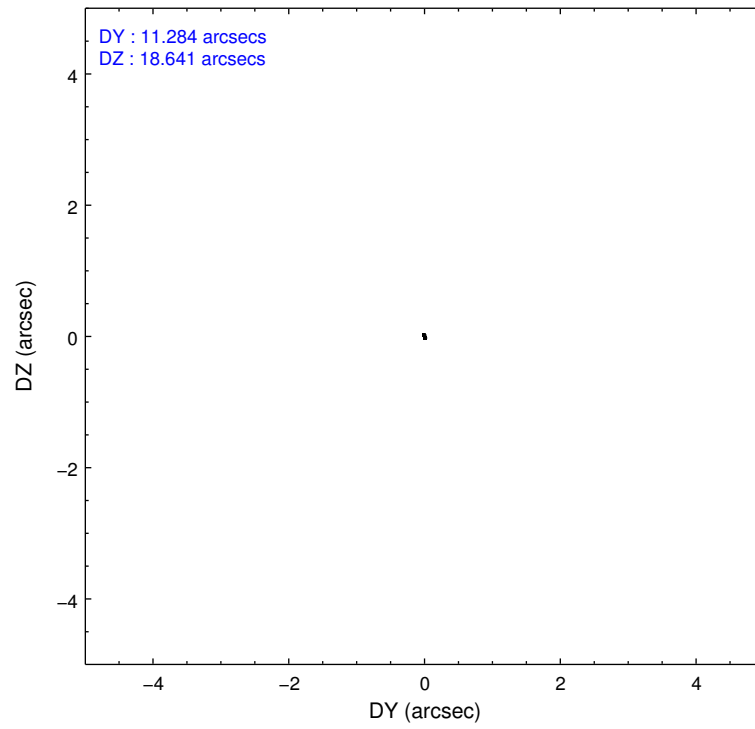
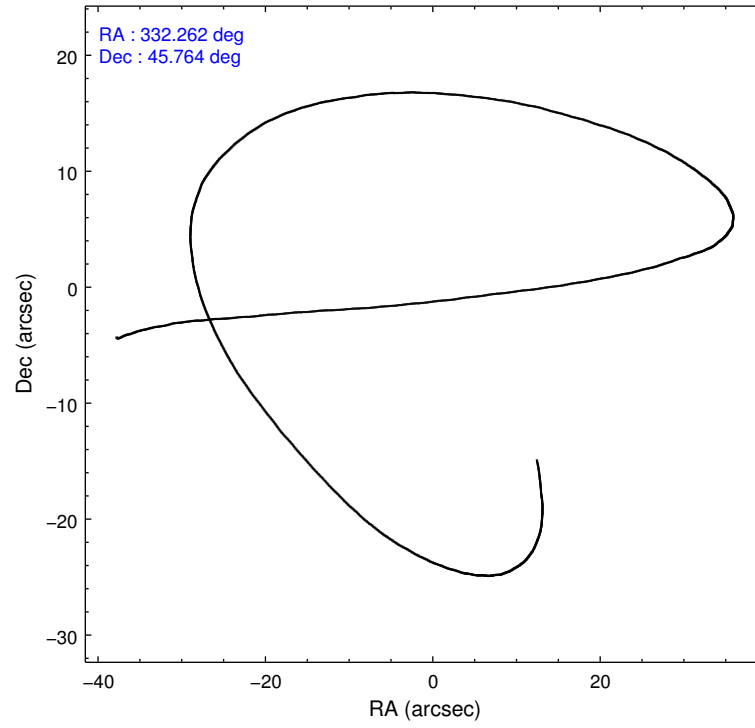
	<b>segment 0</b>
level 1 events	254431
rejected events	53977
rejected %	21%

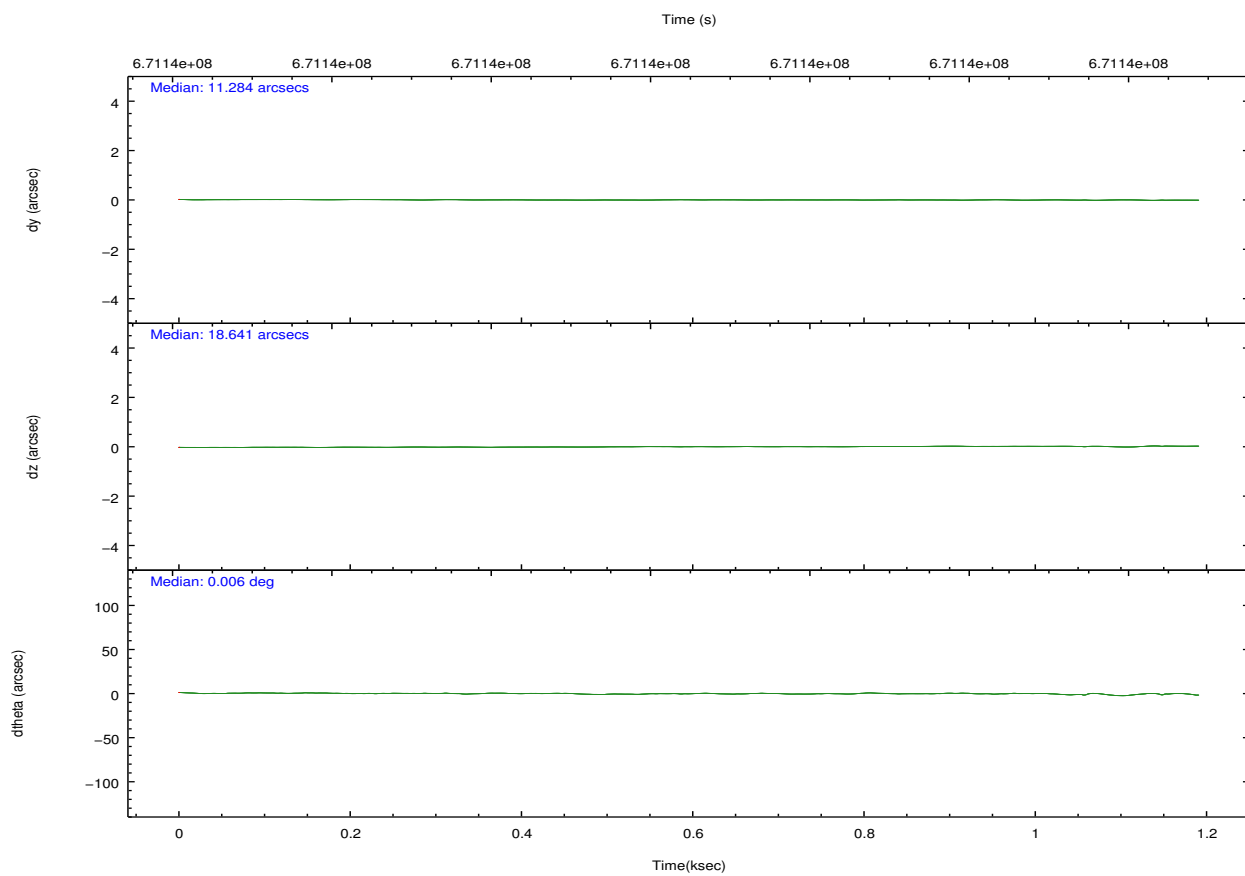
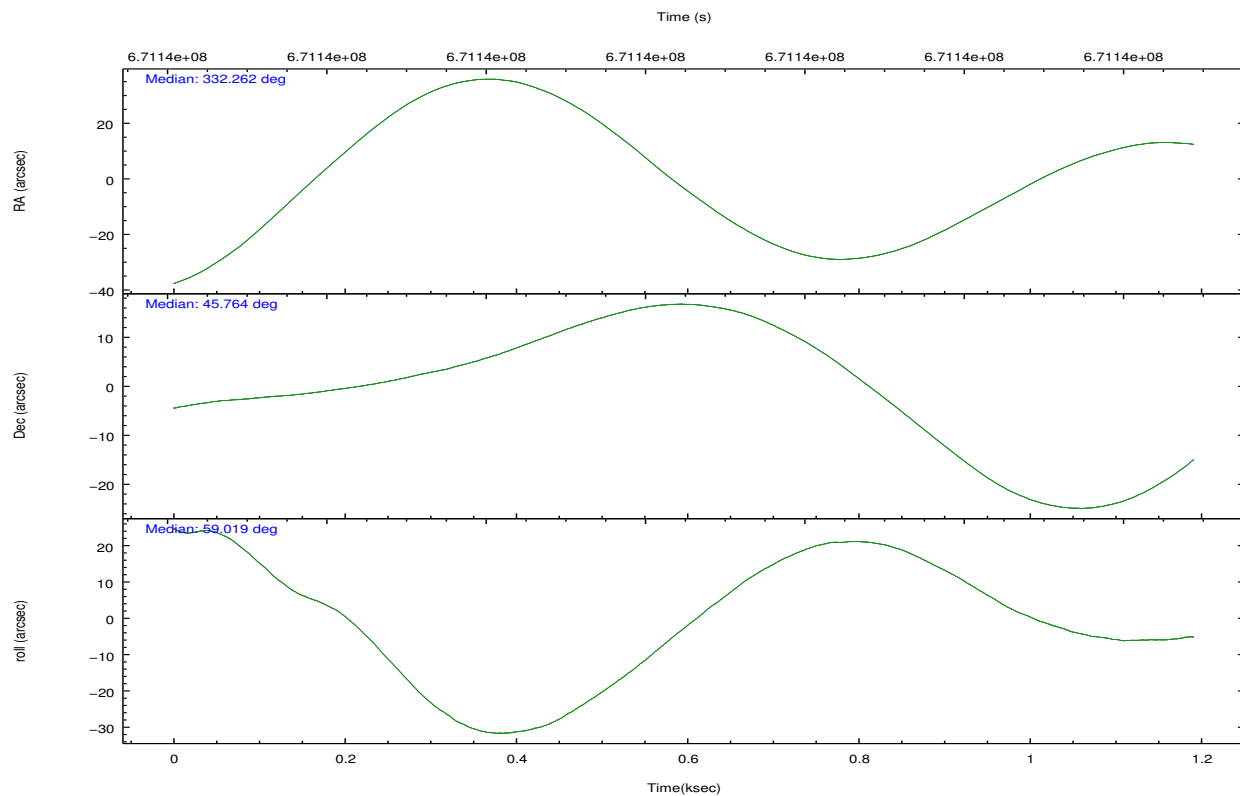
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.261745	332.2619086500247
[deg] Pointing Dec	45.736973	45.76375002183963
[deg] Pointing Roll	59.114500	59.01876815557749
[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)	671136044.184000	671135667.6295
Observation start date	2019-04-08T18:39:35	2019-04-08T18:34:27
[s] Observation end time (MET)	671137044.184000	671137177.45459
Observation end date	2019-04-08T18:56:15	2019-04-08T18:59:37

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

## 2.3 Aspect





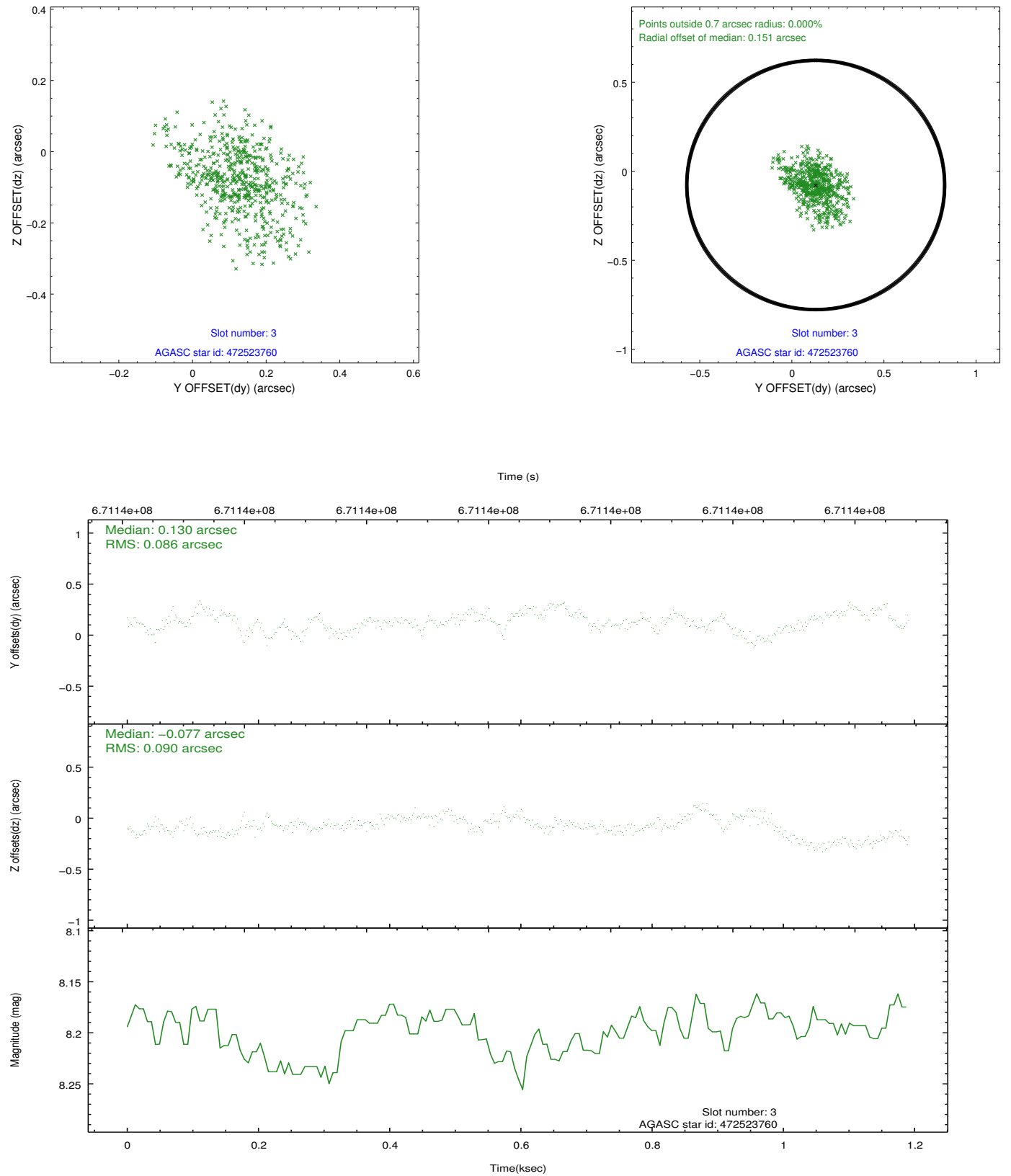
Slot Statistics

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	-0.239	-0.055	0.010	0.017	0.000000	0.000000	-767.16	-1306
1	FID		HRC-I-2	7.04	291	1.000	0.390	-0.107	0.008	0.017	0.000000	0.000000	843.46	-1312
2	FID		HRC-I-3	7.09	291	1.000	-0.032	0.073	0.007	0.013	0.000000	0.000000	-1192.64	993
3	GUIDE	used	472523760	8.20	582	1.000	0.130	-0.077	0.132	0.219	331.645363	45.403260	-1824.31	725
4	GUIDE	used	472533912	9.12	582	1.000	-0.143	-0.492	0.199	0.507	331.791136	46.368695	1352.71	2175
5	GUIDE	used	472665256	8.98	581	1.000	0.005	0.139	0.165	0.286	332.808125	46.195041	2121.82	-313
6	GUIDE	used	472649352	9.70	581	1.000	0.560	0.543	0.223	0.322	332.034169	45.325407	-1560.98	-263
7	GUIDE	used	472661712	9.90	577	1.000	-0.545	-0.083	0.282	0.490	331.914954	46.059715	552.03	1342

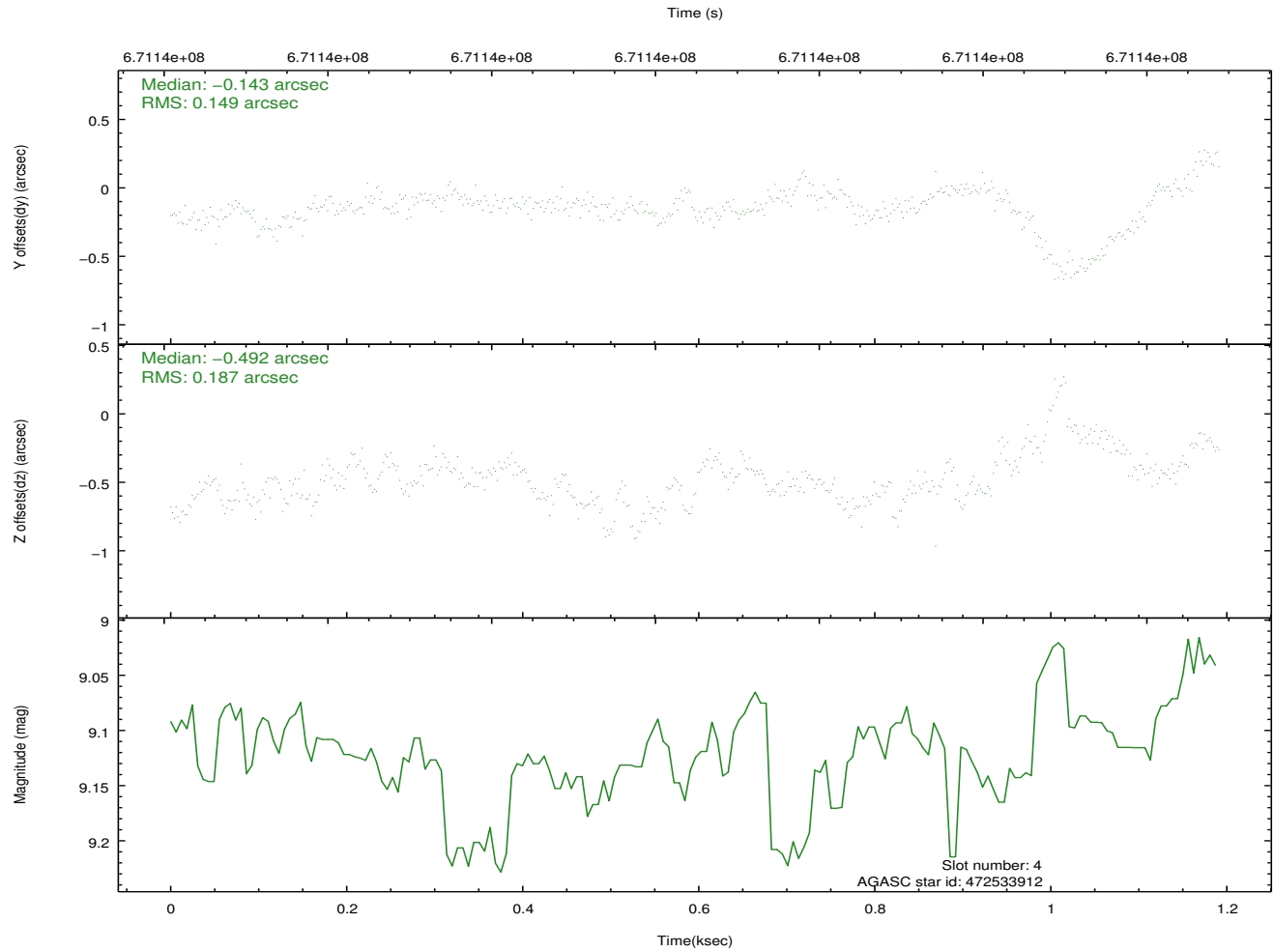
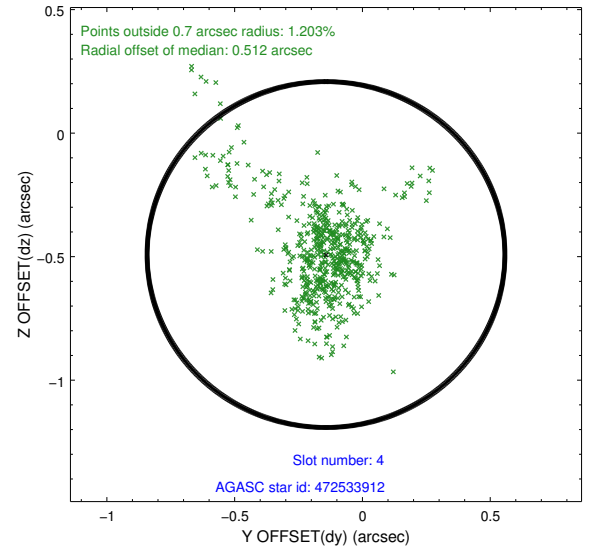
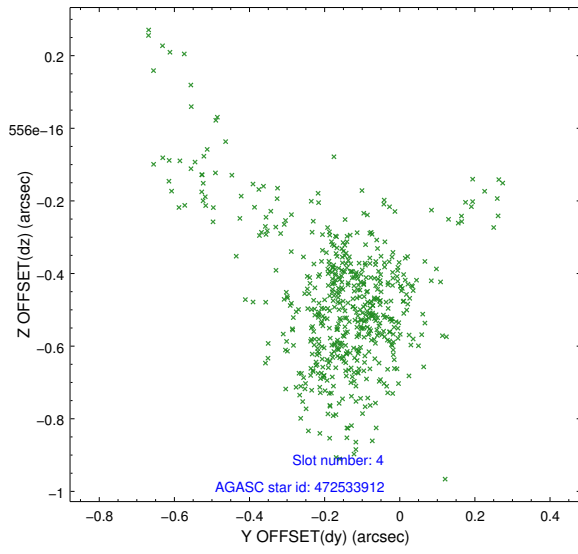


## 2.4 Star Slots

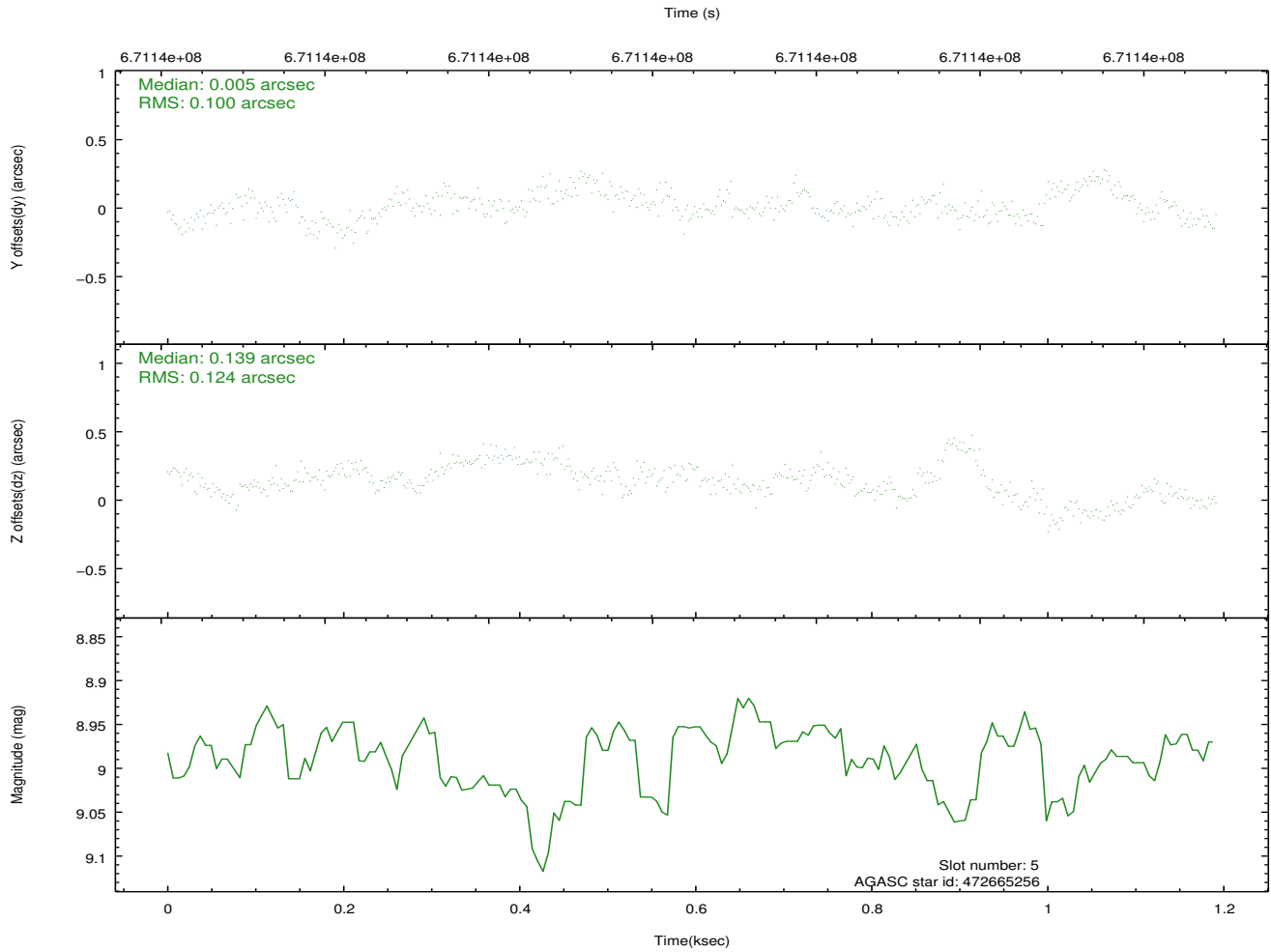
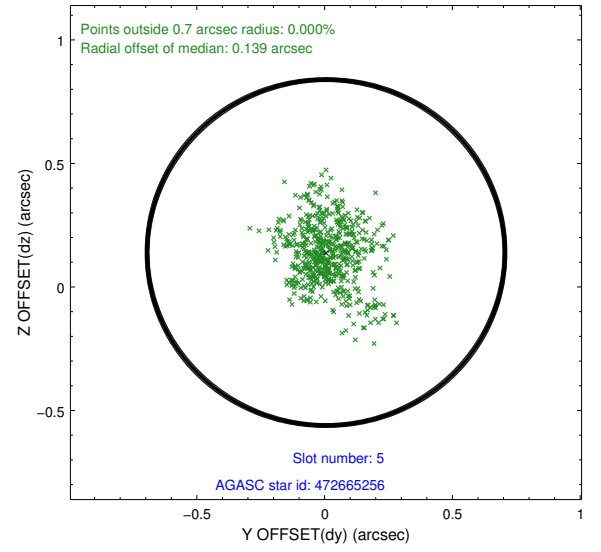
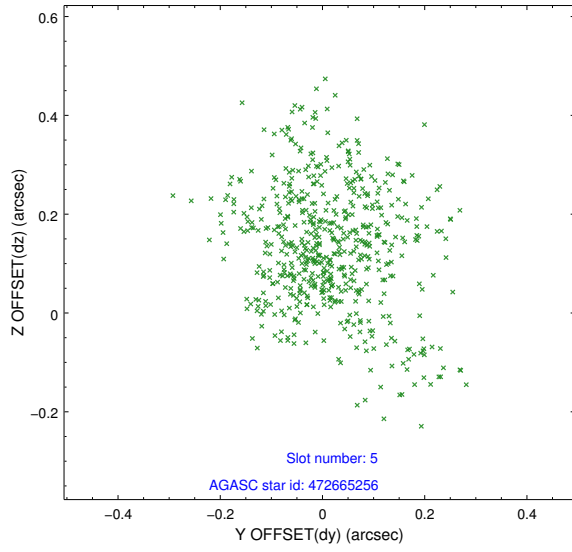
### 2.4.1 Slot 3



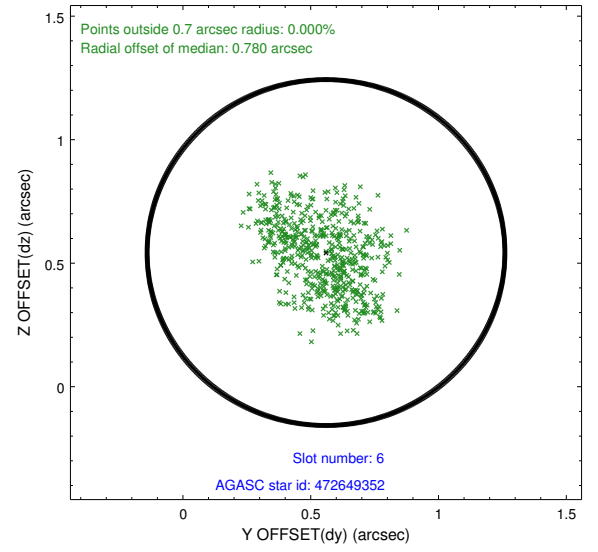
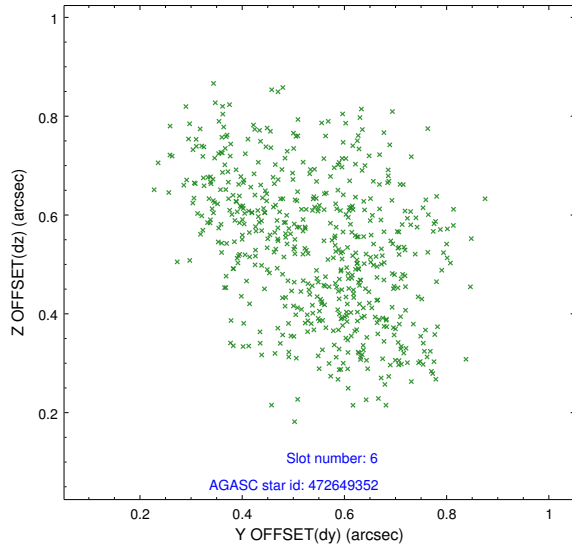
## 2.4.2 Slot 4



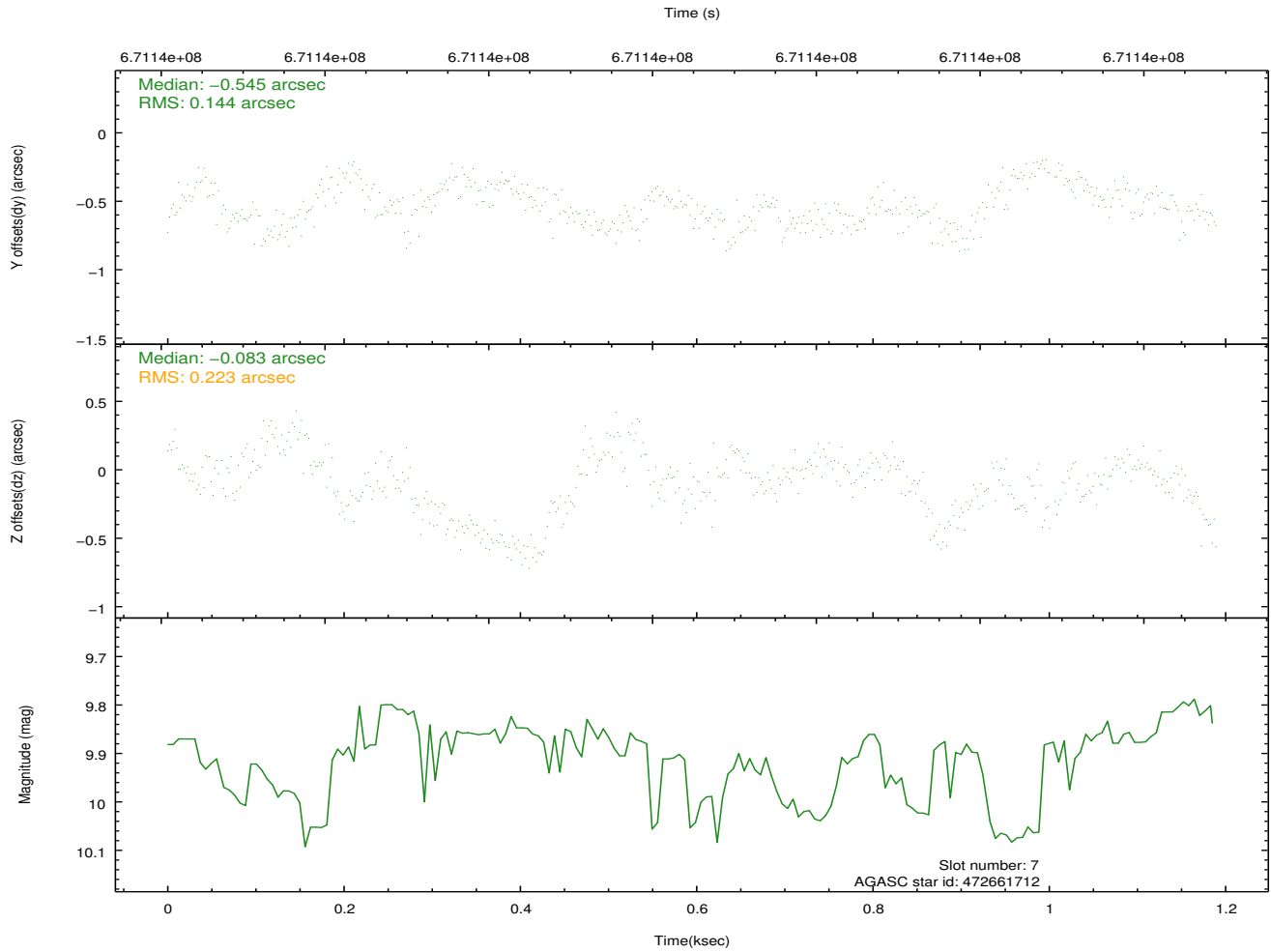
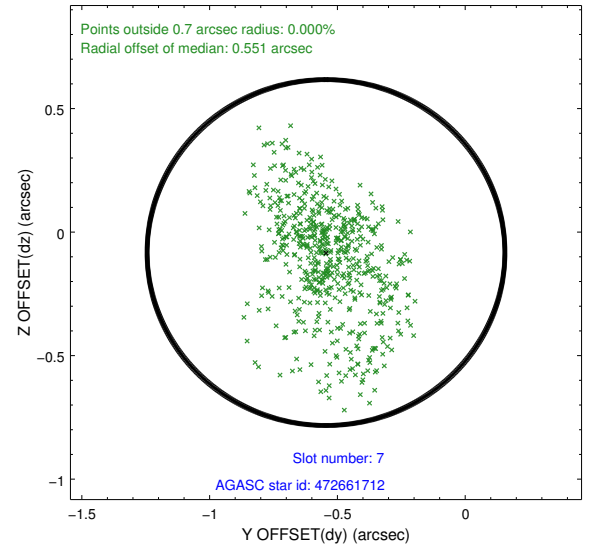
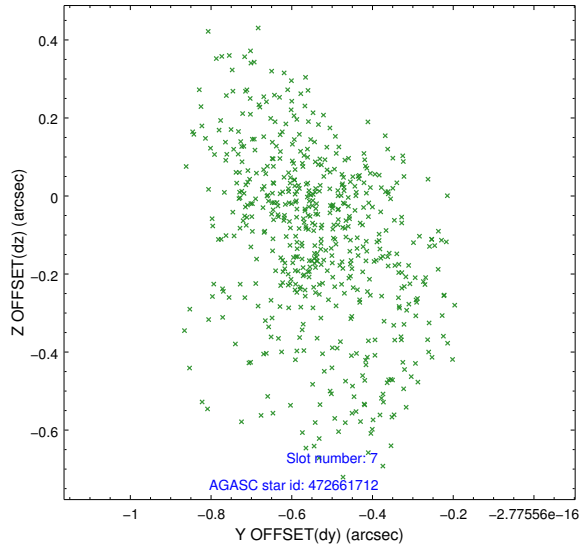
### 2.4.3 Slot 5



## 2.4.4 Slot 6

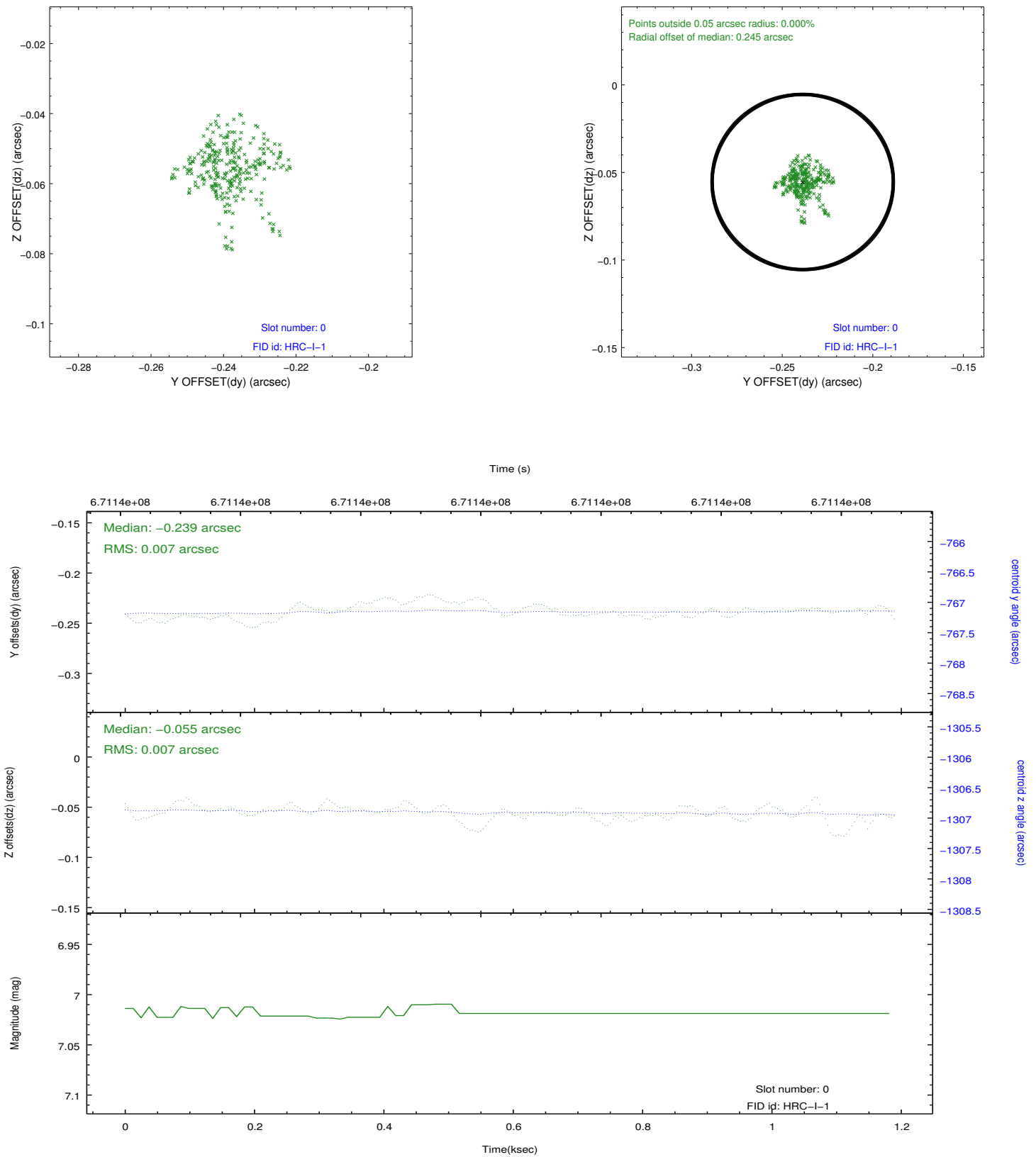


## 2.4.5 Slot 7

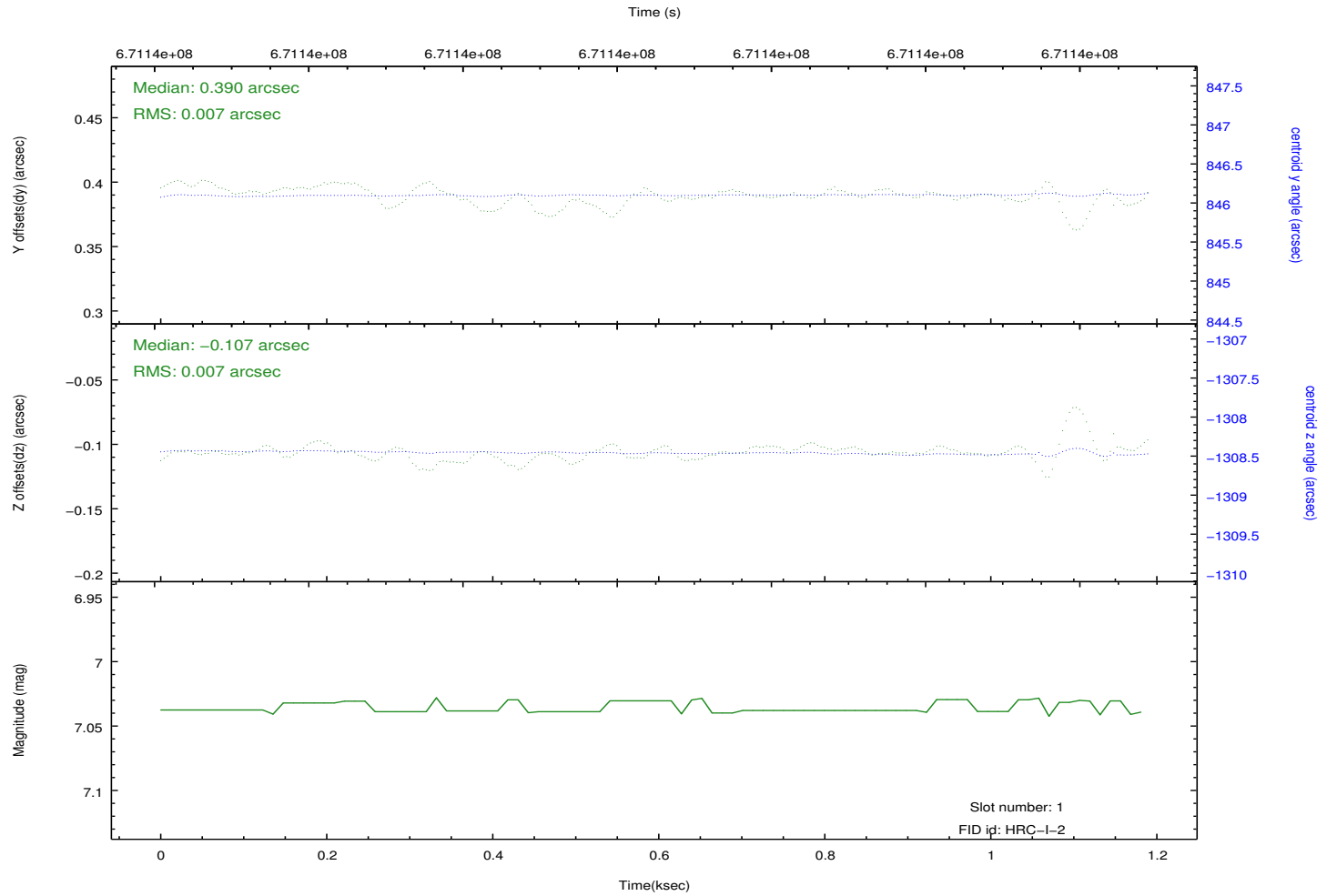
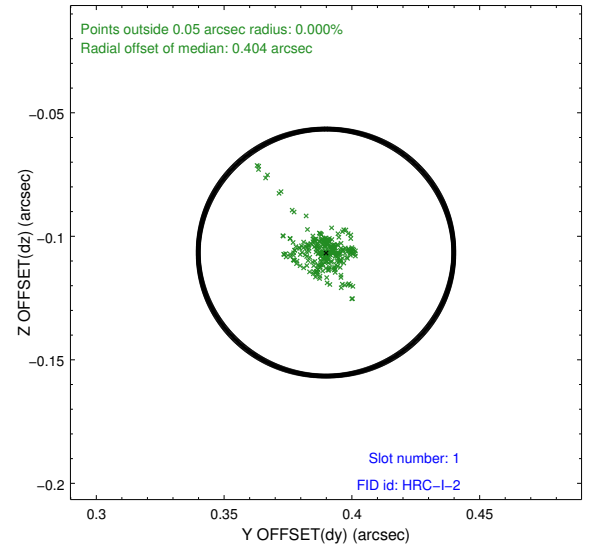
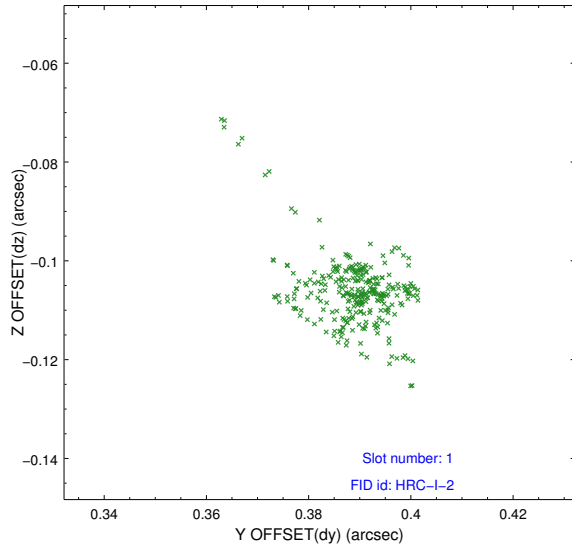


## 2.5 FID Slots

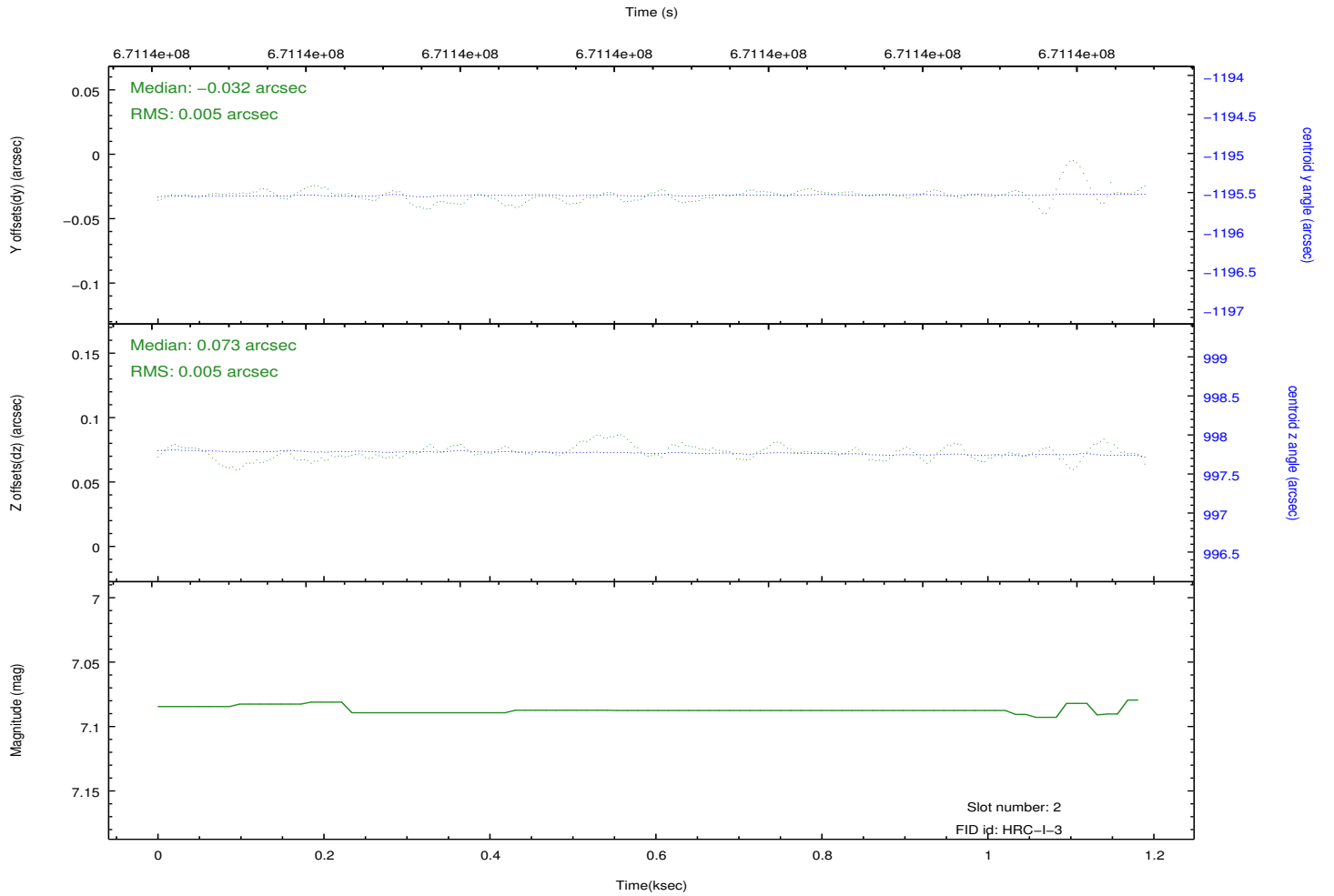
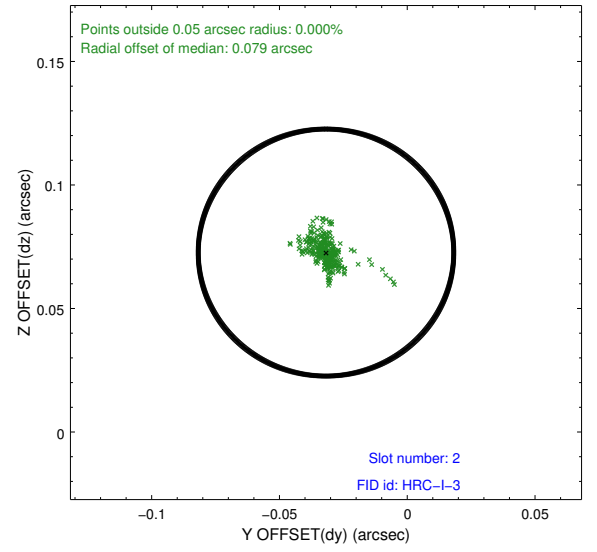
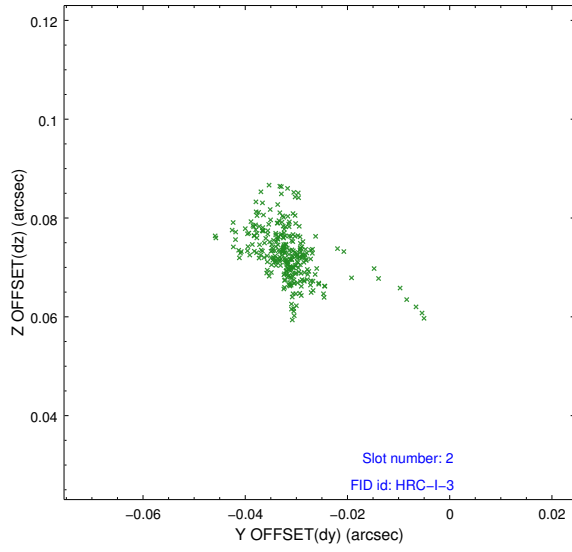
### 2.5.1 Slot 0



## 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**