

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20683 - L2 Version 2  
Chandra X-Ray Center

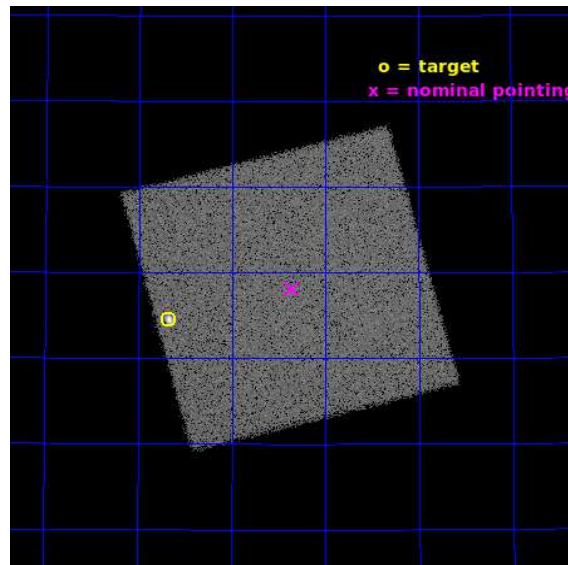
L2 Processing Date : Oct 27 2020

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# 1 Front

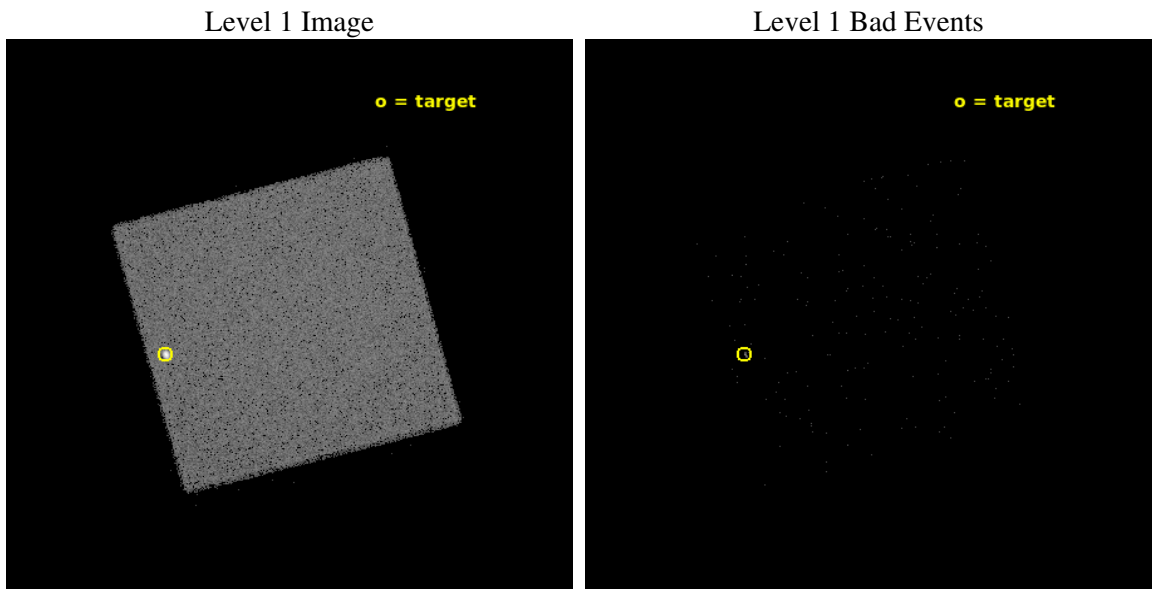
seq_num	291394	Sequence number
obs_id	20683	Observation id
title	AO-19 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	331.8397700507	Nominal RA [deg]
dec_nom	45.802378699741	Nominal Dec [deg]
roll_nom	210.09985415289	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1177.9813201427	[s]
livetime	1161.5151742991	Ontime multiplied by DTCOR
l2events	143830	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	10.9.2	Processing system revision	ontime	1177.9813201427	[s]
caldbver	4.9.3	&#160	l1events	224710	Number of level 1 events
date	2020-10-27T19:47:03	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

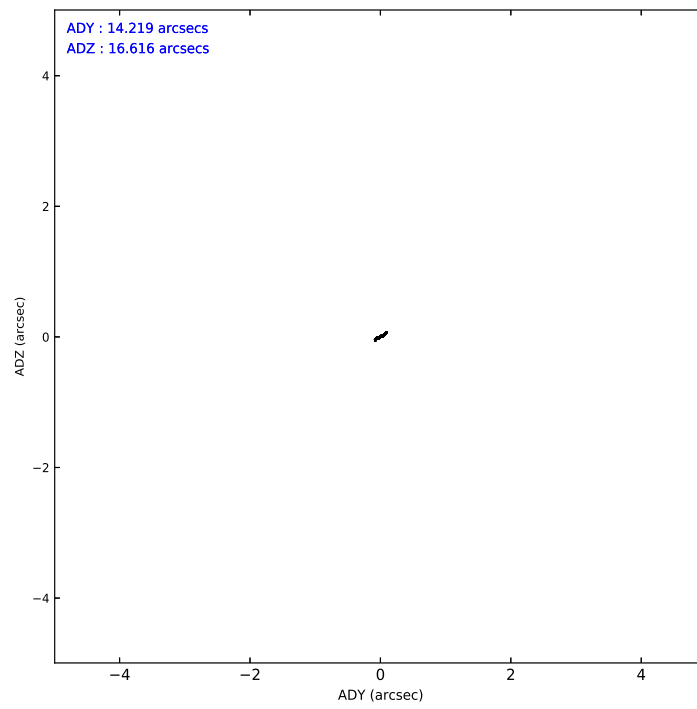
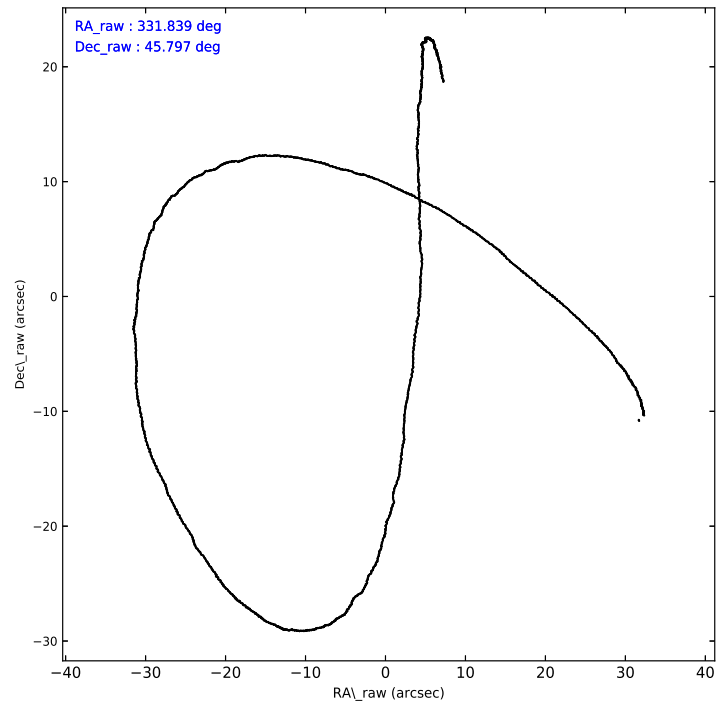
	<b>segment 0</b>
level 1 events	224710
rejected events	35728
rejected %	15%

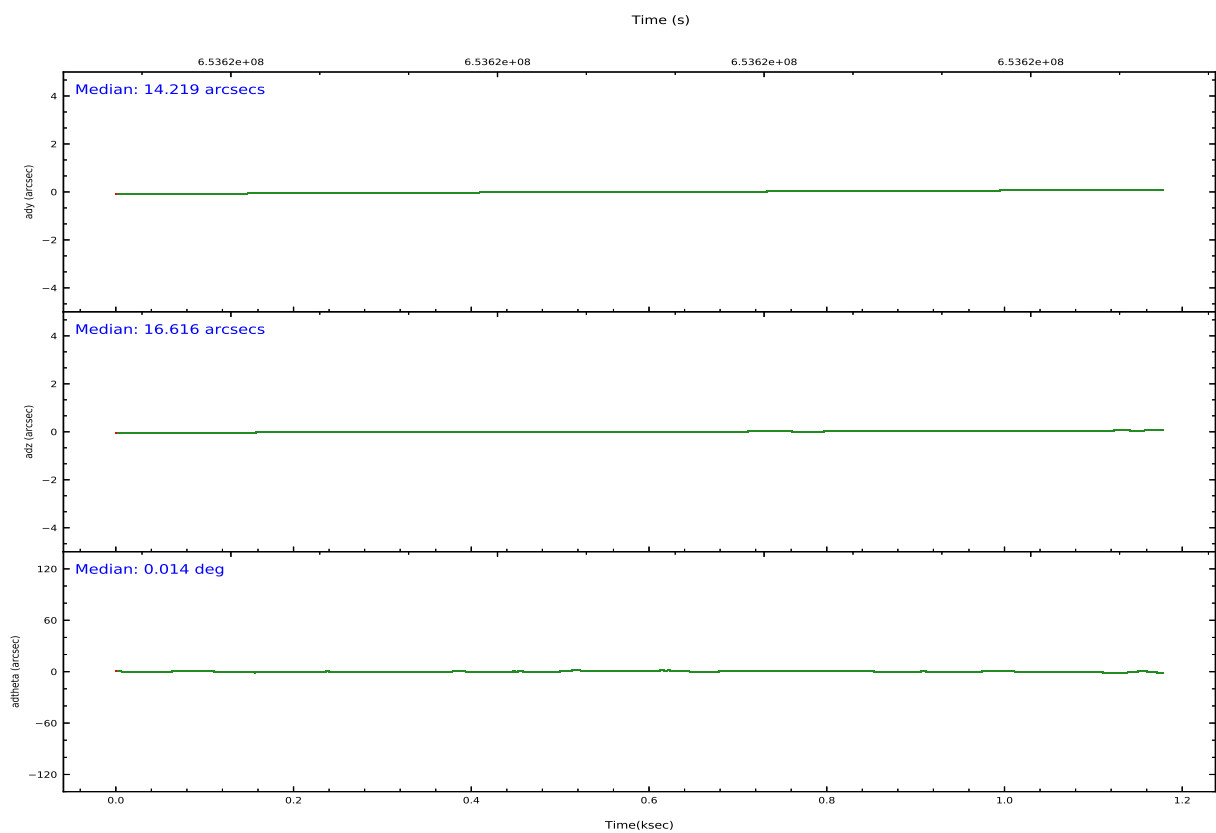
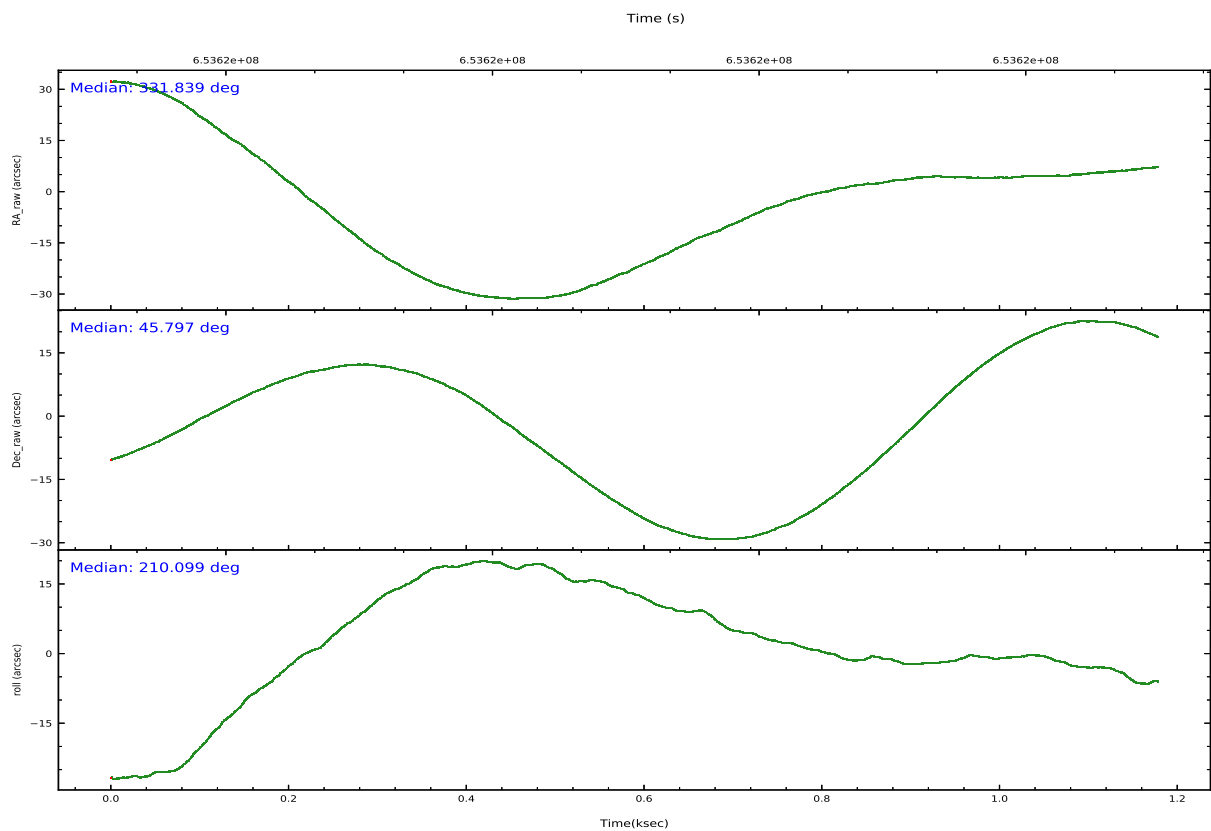
## 2.2 Compared Parameters

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	331.856675	331.8397700507
[deg] Pointing Dec	45.819496	45.802378699741
[deg] Pointing Roll	210.203426	210.09985415289
[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)	653621850.184000	653621474.0800101
Observation start date	2018-09-18T01:36:21	2018-09-18T01:31:14
[s] Observation end time (MET)	653622850.184000	653623753.16764
Observation end date	2018-09-18T01:53:01	2018-09-18T02:09:13

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

## 2.3 Aspect





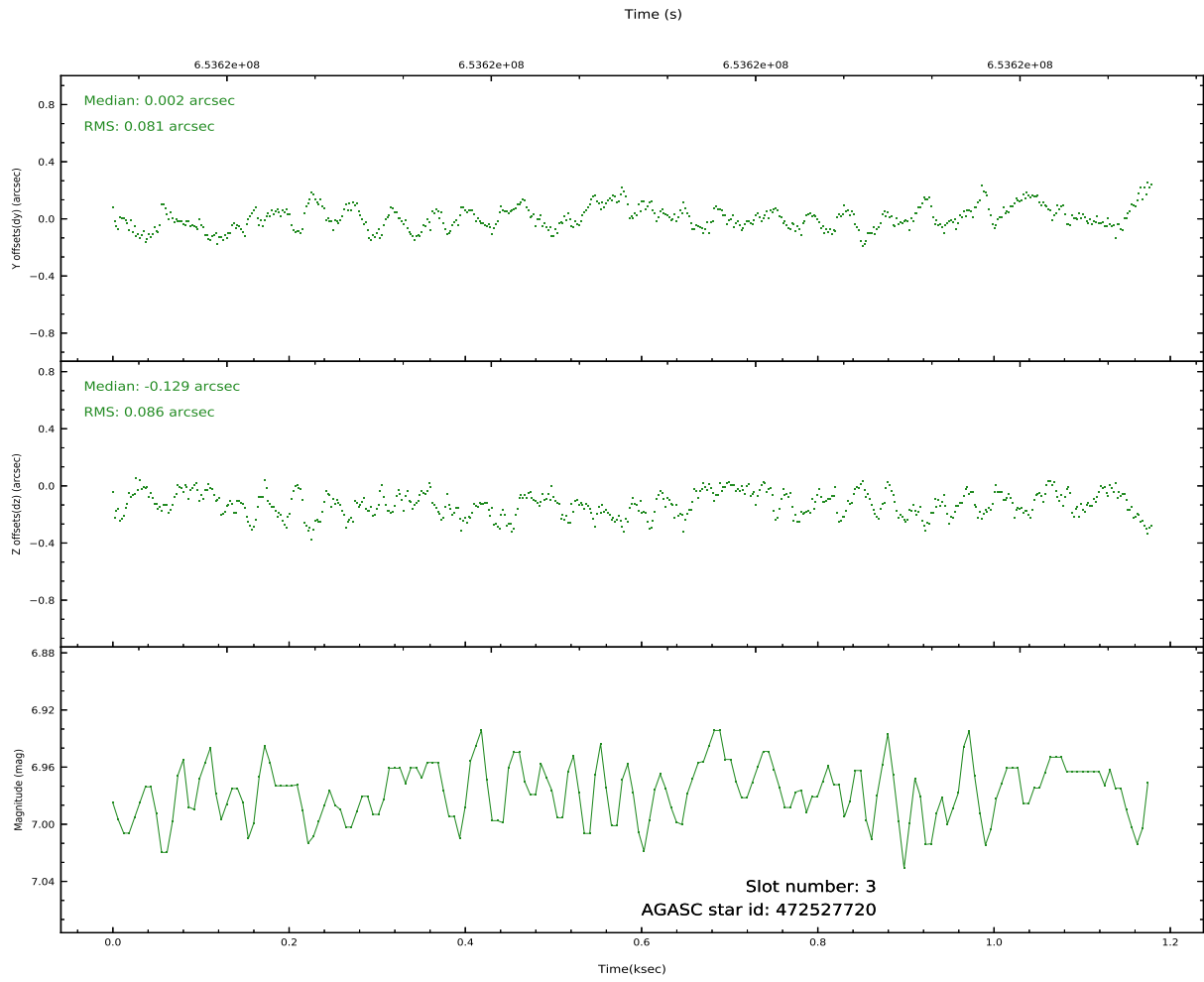
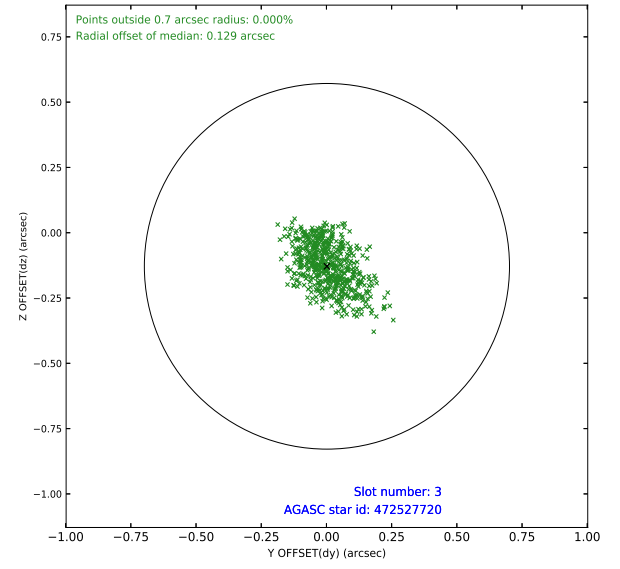
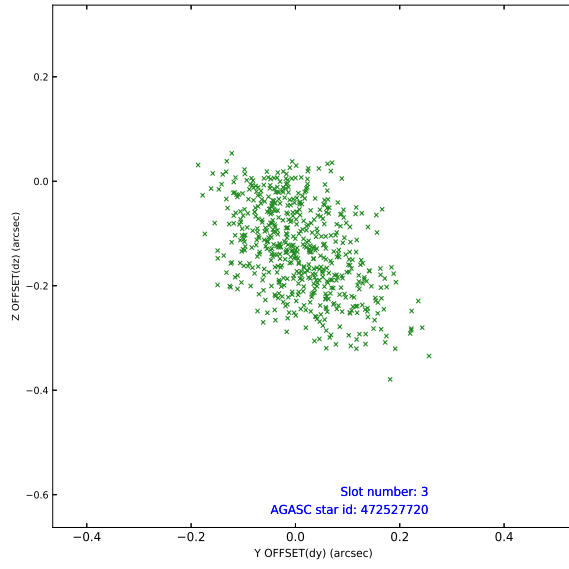
Slot Statistics

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	288	1.000	-0.132	0.079	0.006	0.015	0.000000	0.000000	-770.26	-1304
1	FID		HRC-I-2	7.05	288	1.000	0.287	-0.148	0.007	0.010	0.000000	0.000000	840.11	-1311
2	FID		HRC-I-4	7.04	288	1.000	-0.039	-0.021	0.006	0.012	0.000000	0.000000	1275.77	992
3	GUIDE	used	472527720	6.98	576	1.000	0.002	-0.129	0.126	0.200	331.460205	45.112509	2151.16	1693
4	GUIDE	used	472535576	7.85	575	1.000	-0.067	0.117	0.113	0.191	331.438373	46.291802	48.28	-1990
5	GUIDE	used	472651904	6.15	576	1.000	-0.108	-0.161	0.117	0.203	332.170077	45.742257	-539.25	632
6	GUIDE	used	472655152	9.38	568	1.000	0.020	0.018	0.180	0.315	332.504239	45.862991	-1484.41	679
7	GUIDE	used	472536328	8.07	574	1.000	0.139	0.179	0.106	0.172	331.496671	46.454831	-380.34	-2424

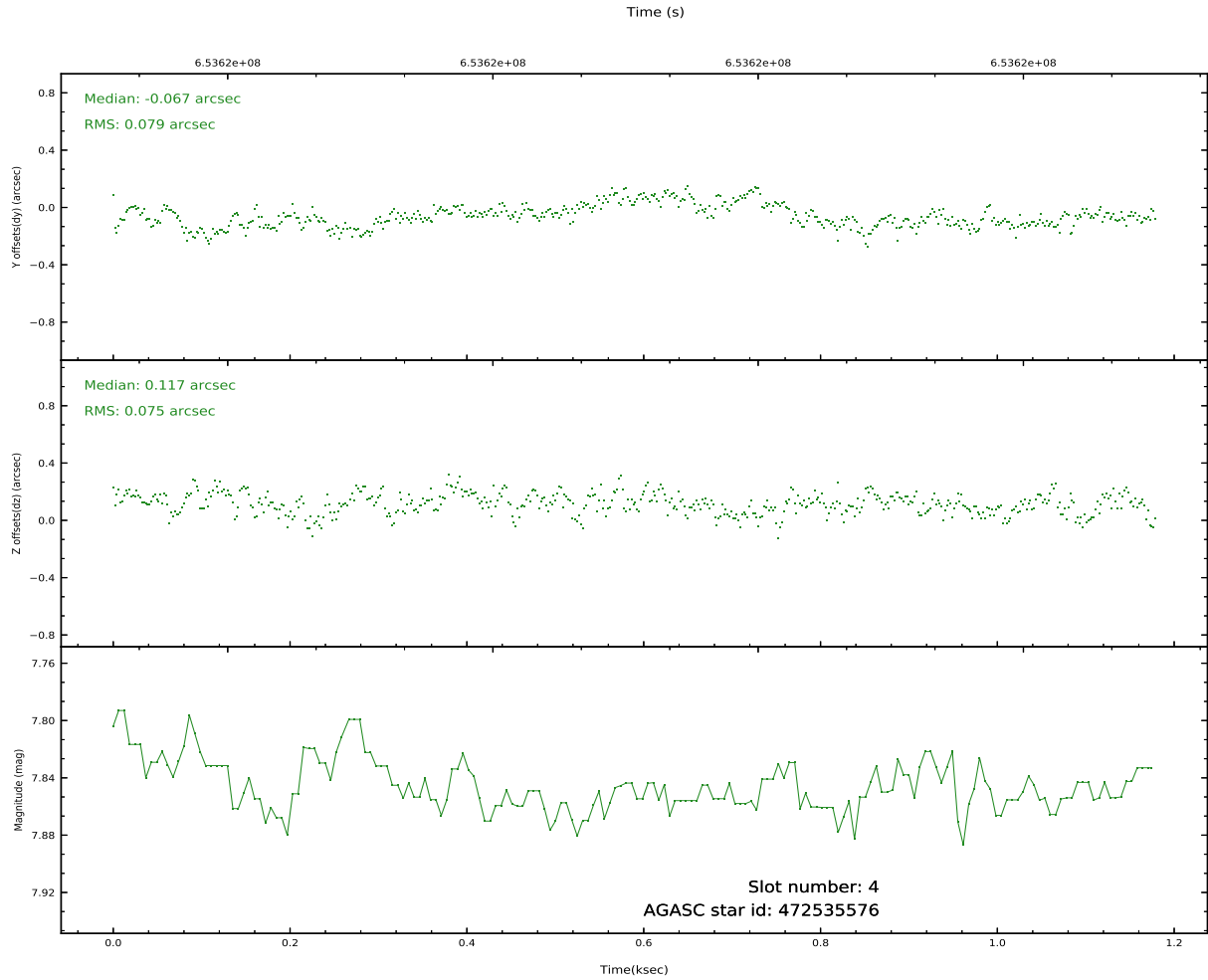
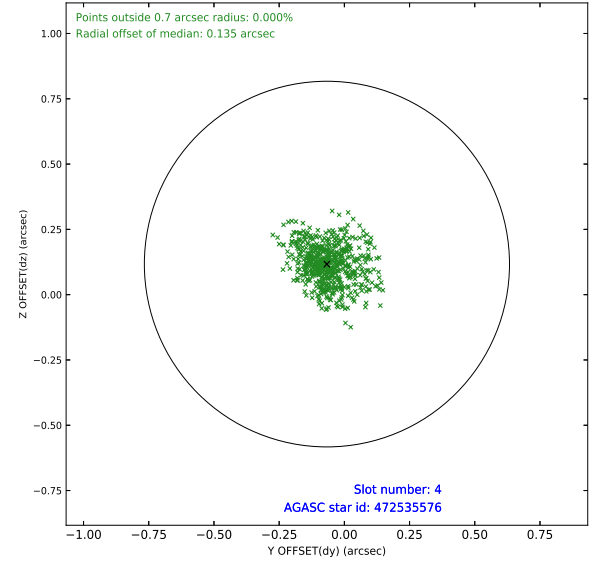
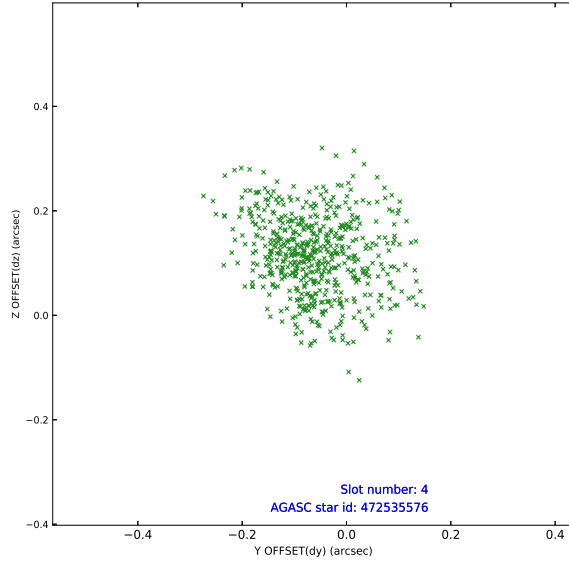


## 2.4 Star Slots

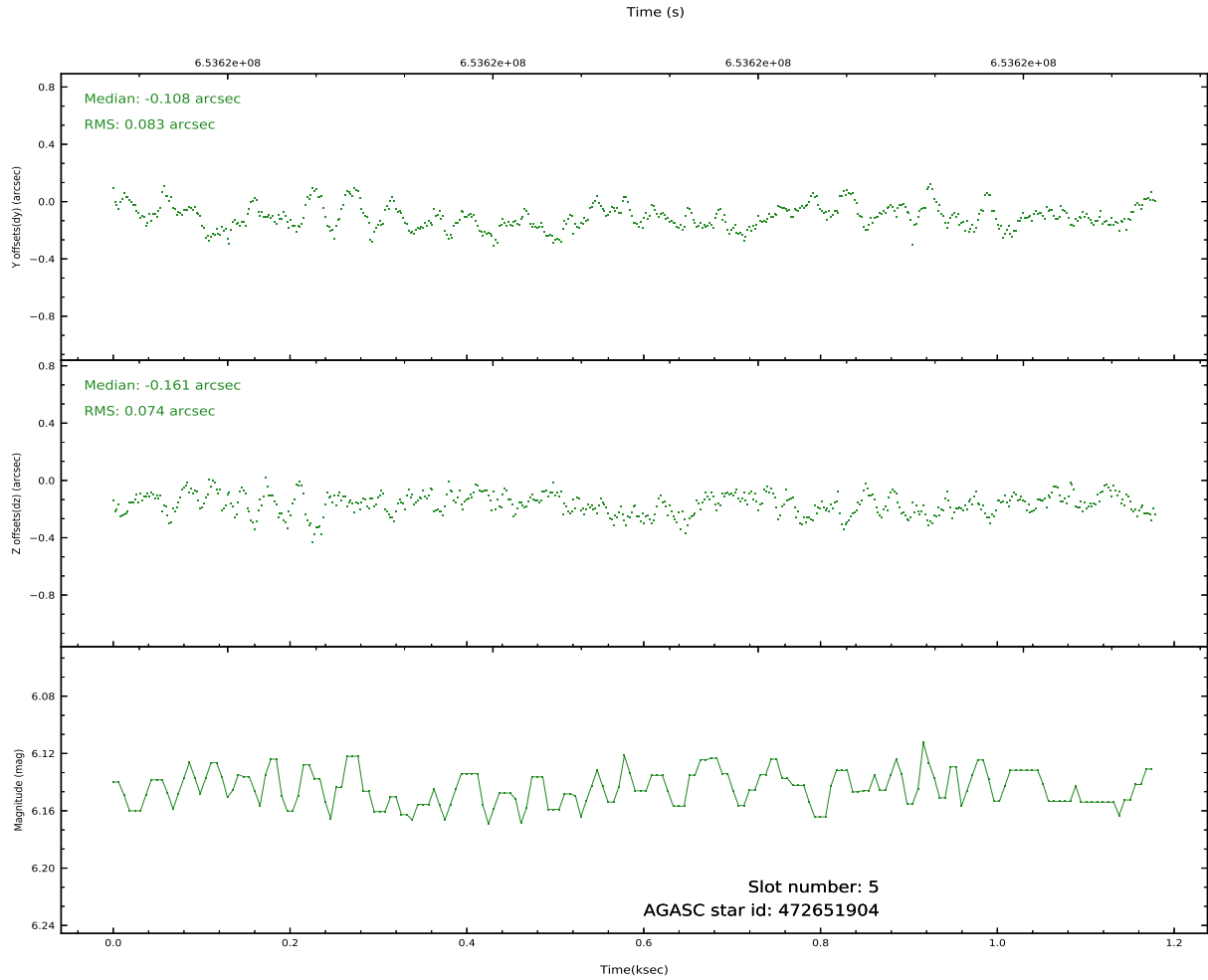
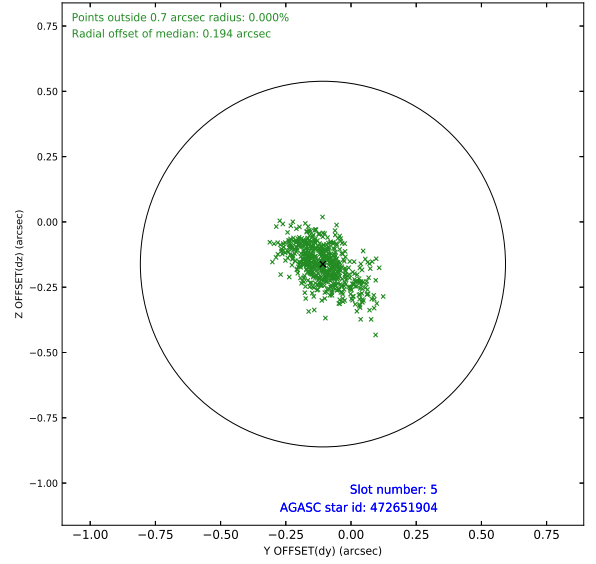
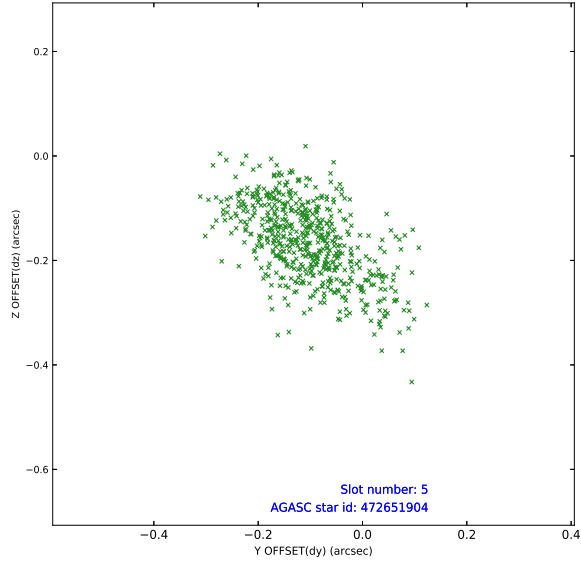
### 2.4.1 Slot 3



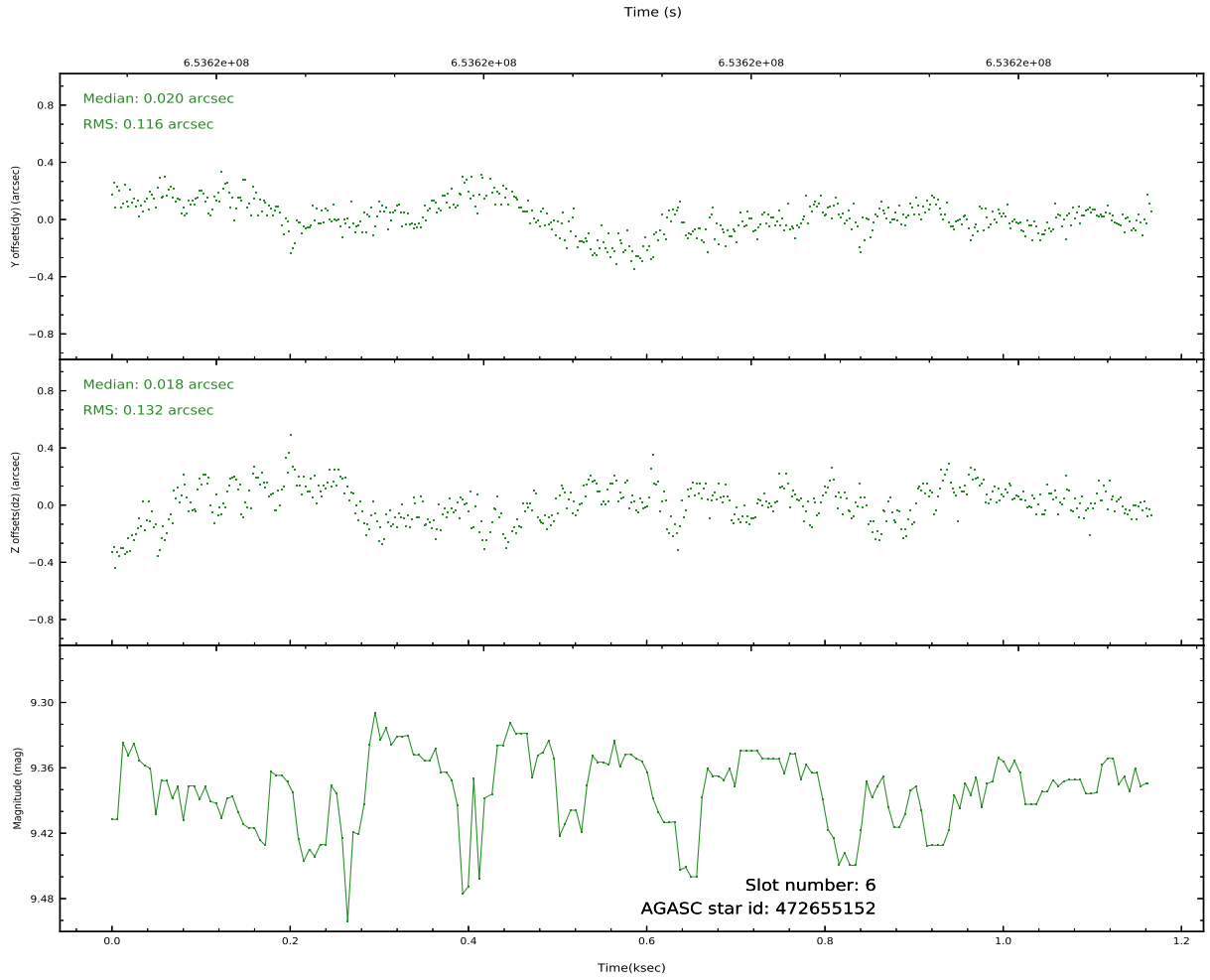
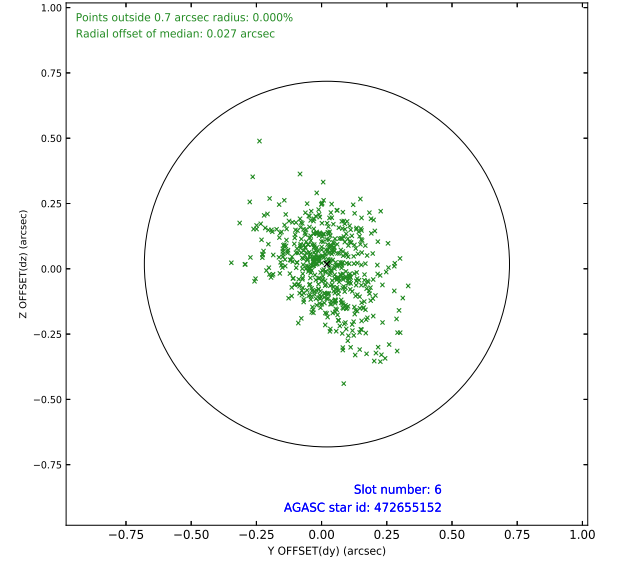
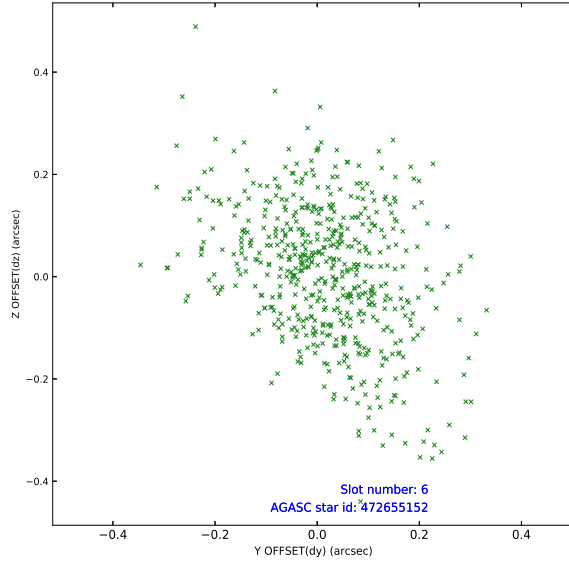
## 2.4.2 Slot 4



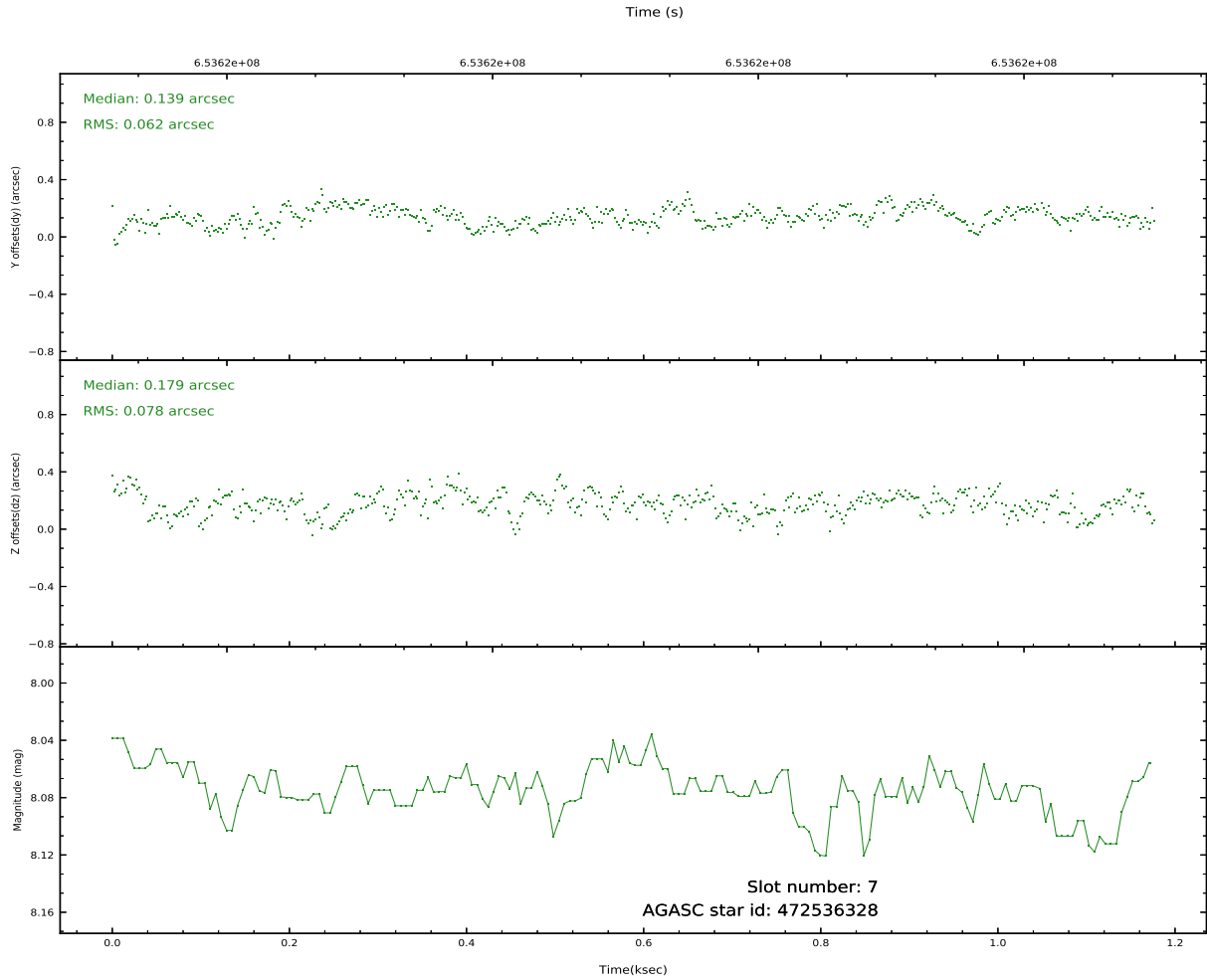
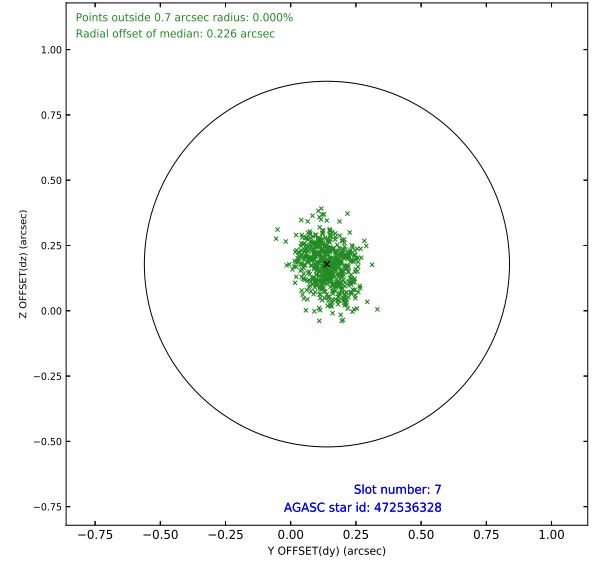
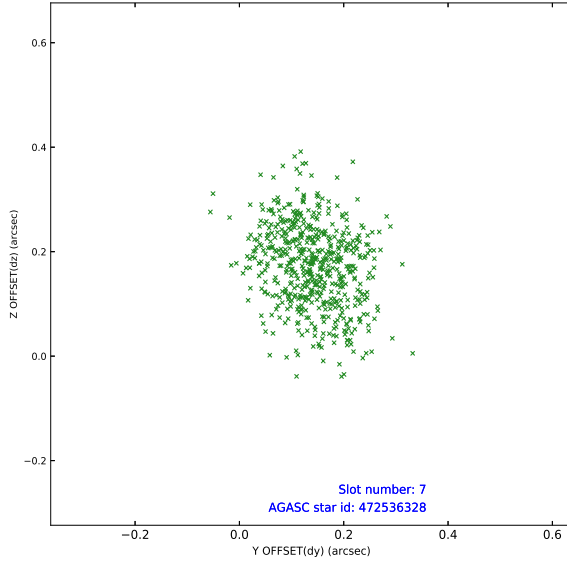
### 2.4.3 Slot 5



## 2.4.4 Slot 6

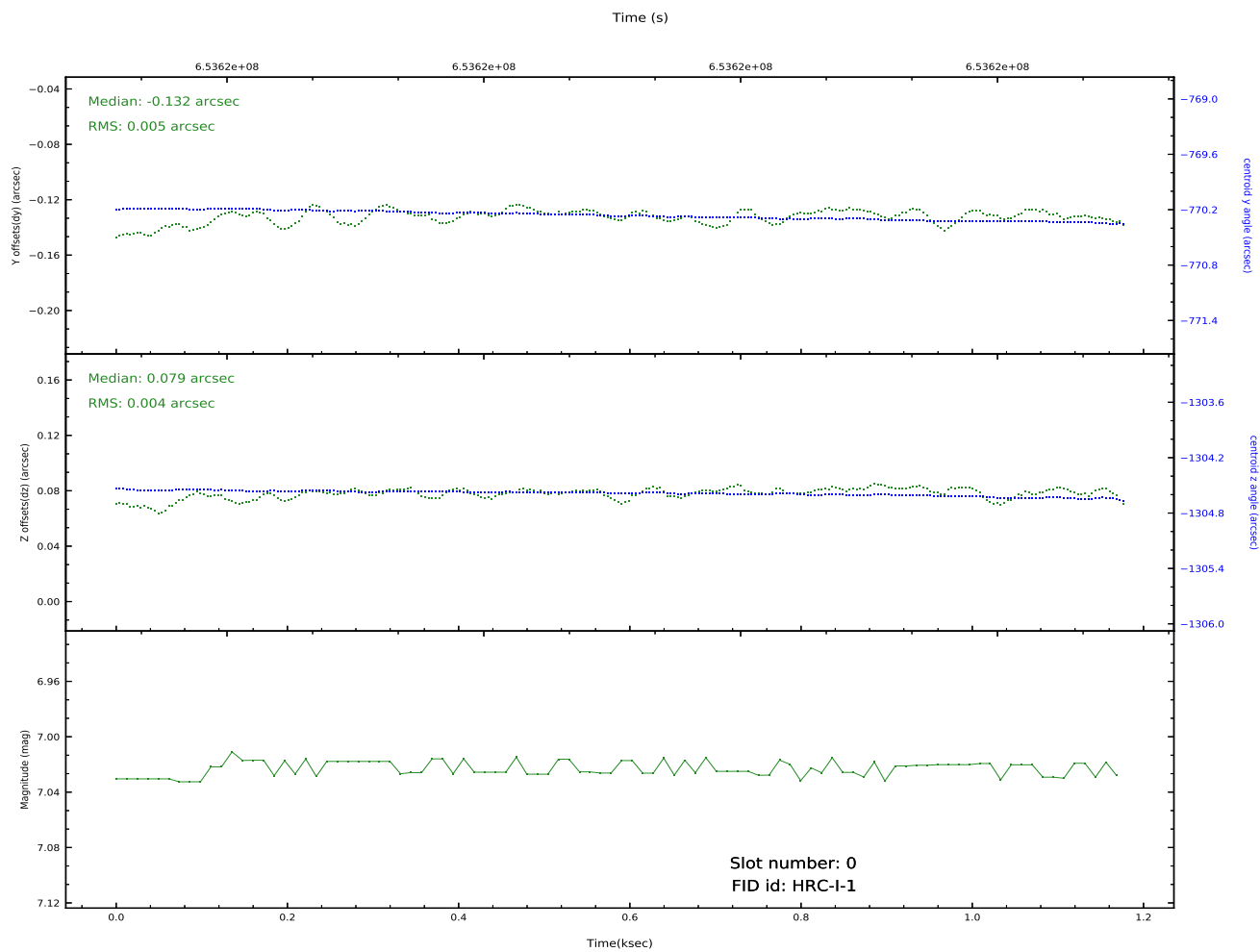
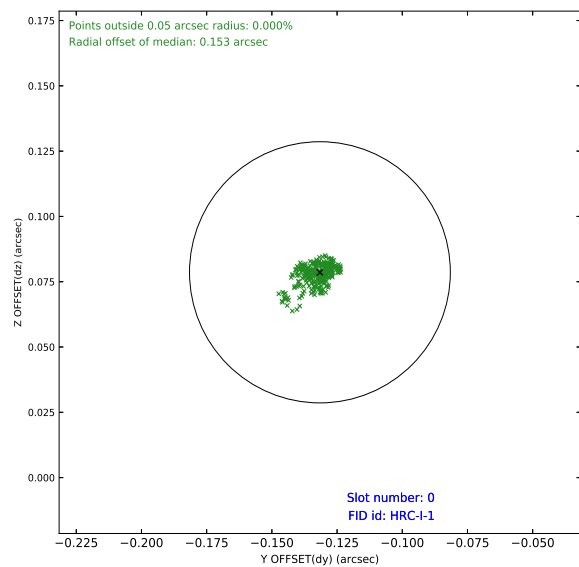
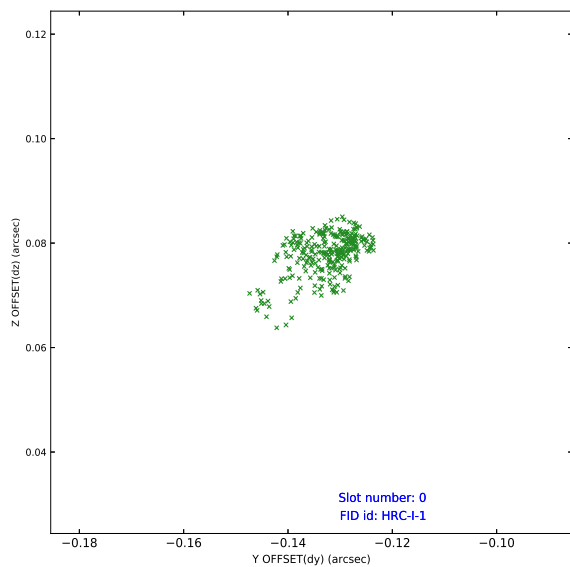


## 2.4.5 Slot 7

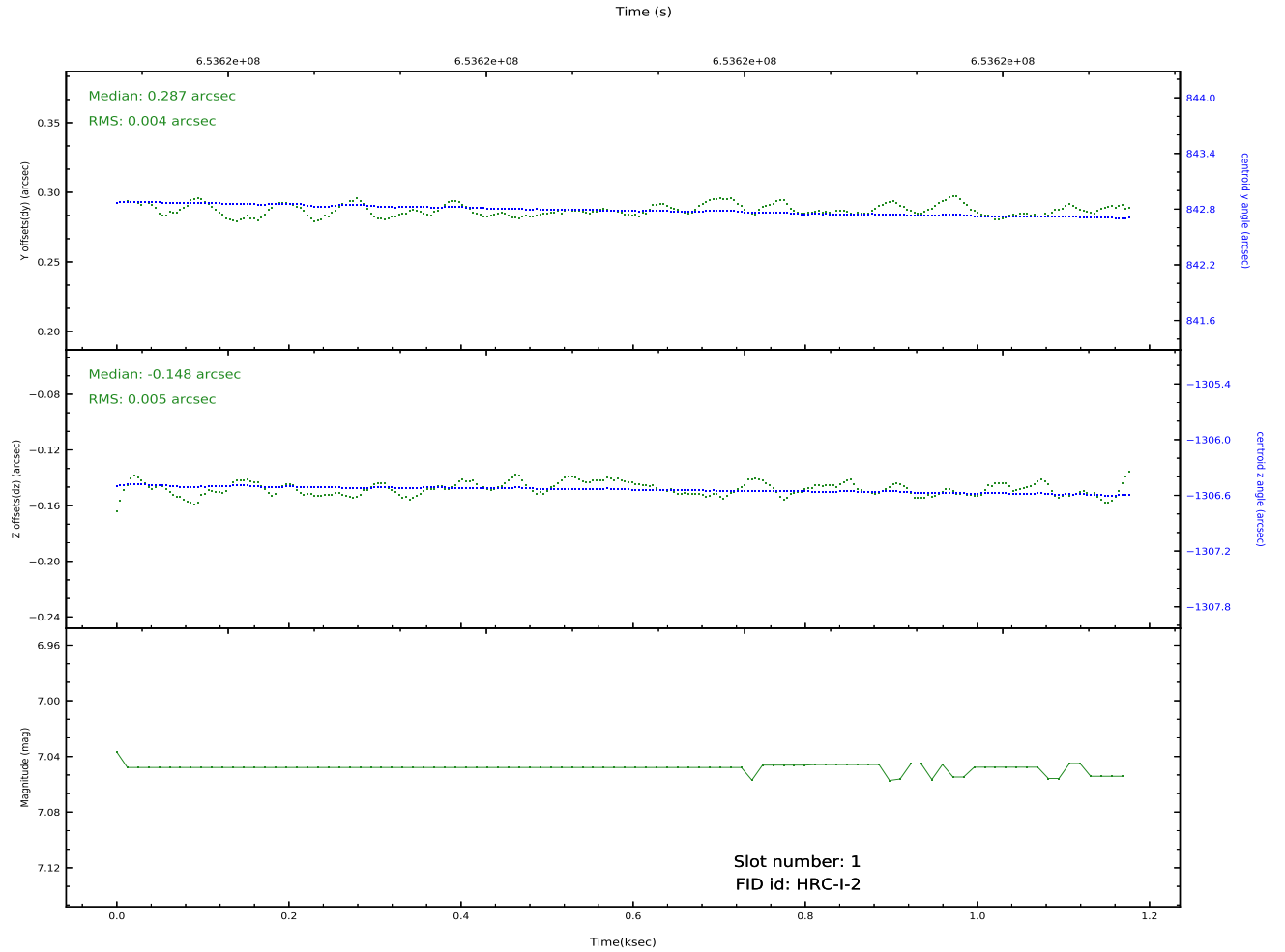
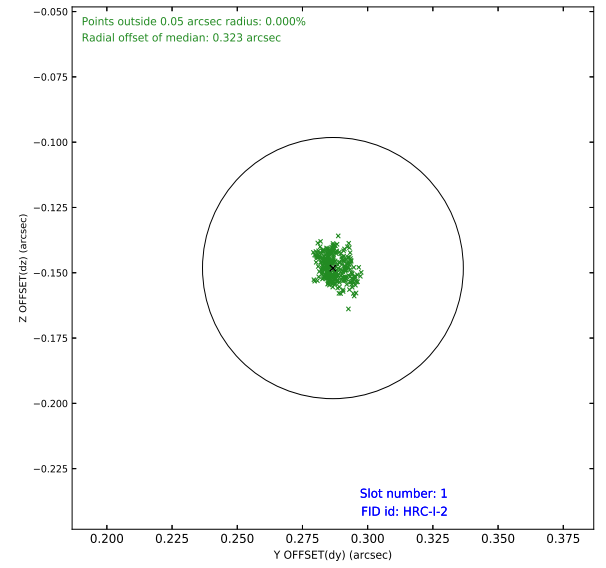
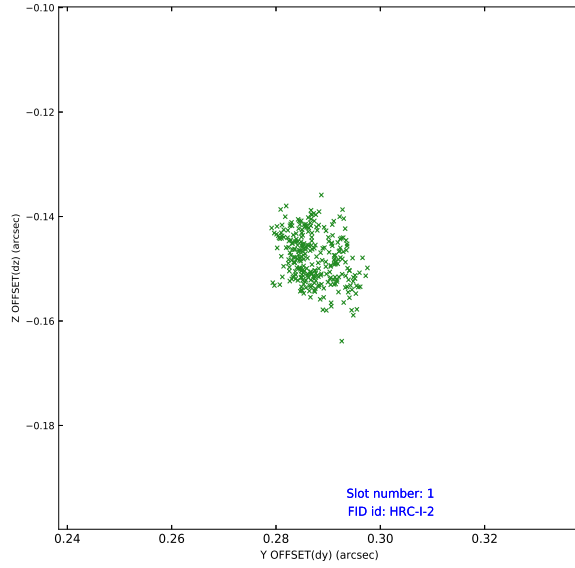


## 2.5 FID Slots

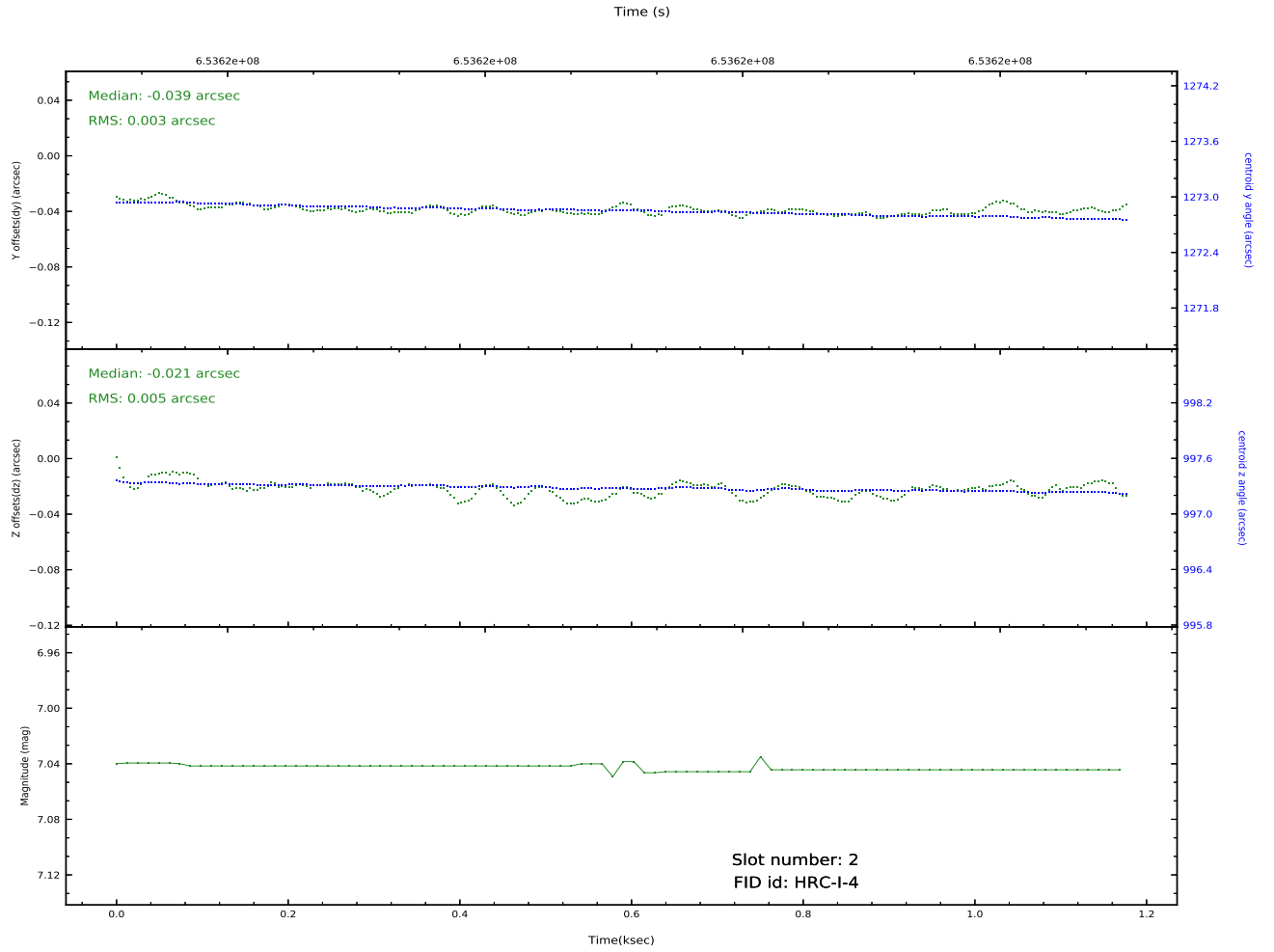
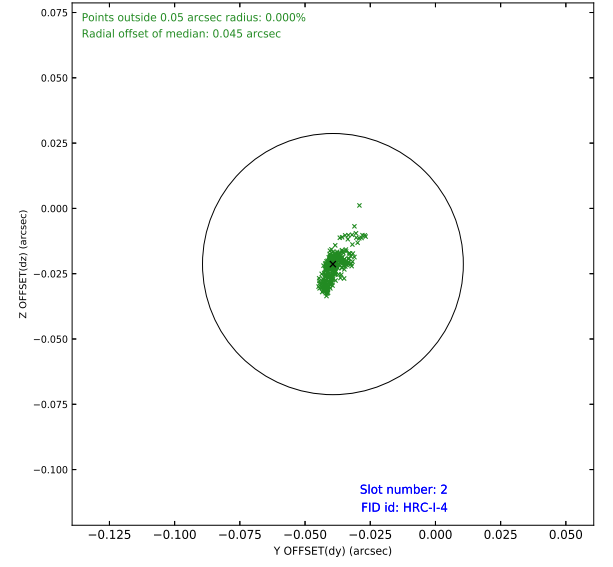
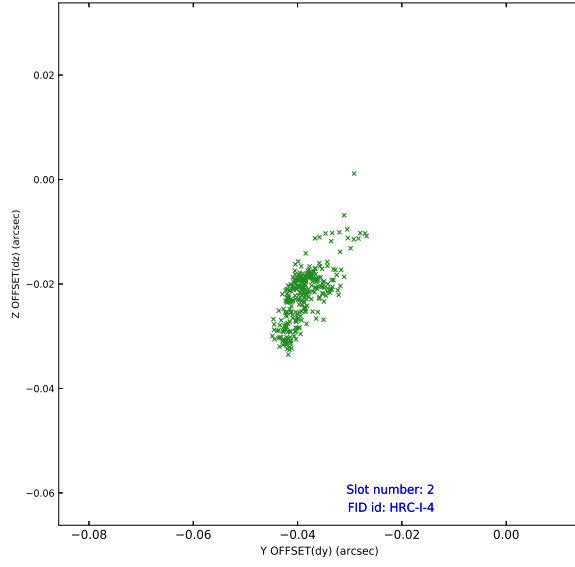
### 2.5.1 Slot 0



## 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)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1779813201427

### **A.2 Comments**