

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20674 - L2 Version 2  
Chandra X-Ray Center

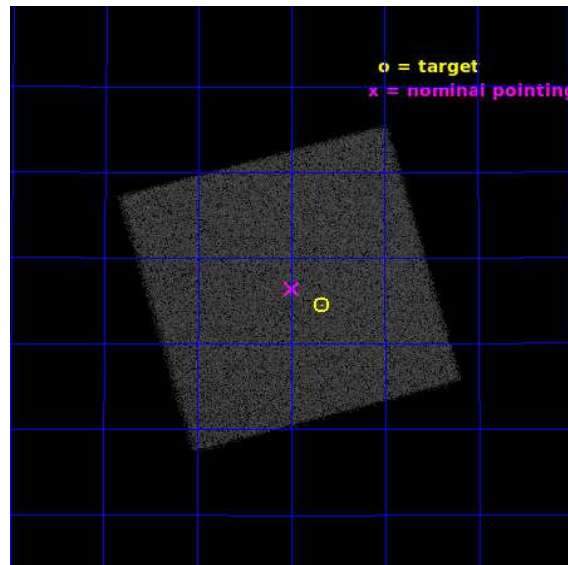
L2 Processing Date : Oct 27 2020

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# 1 Front

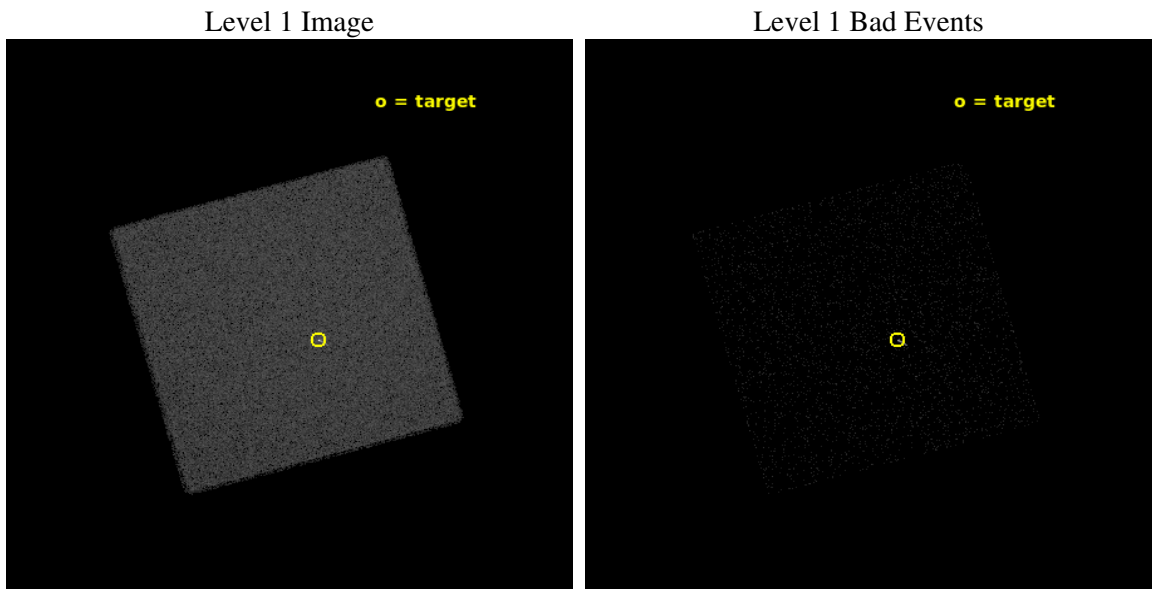
seq_num	291385	Sequence number
obs_id	20674	Observation id
title	AO-19 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.24838697045	Nominal RA [deg]
dec_nom	45.774142535749	Nominal Dec [deg]
roll_nom	209.43324130306	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1171.5750697851	[s]
livetime	1154.9100085419	Ontime multiplied by DTCOR
l2events	146179	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	1171.5750697851	[s]
caldbver	4.9.3	&#160	l1events	245458	Number of level 1 events
date	2020-10-27T19:27:27	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

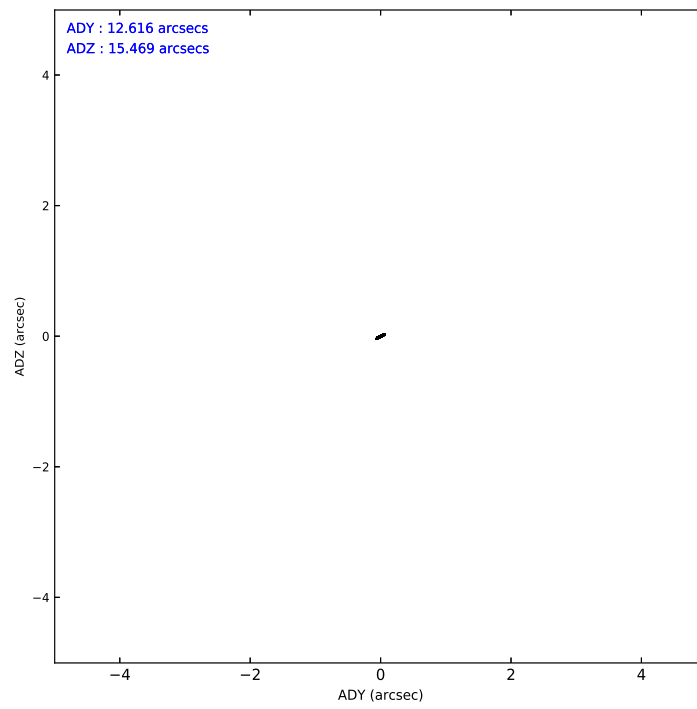
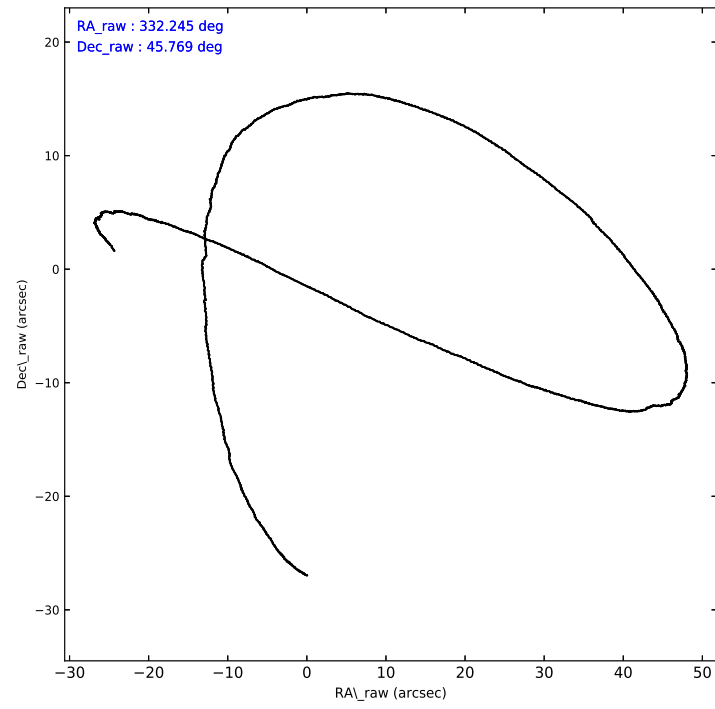
	<b>segment 0</b>
level 1 events	245458
rejected events	54284
rejected %	22%

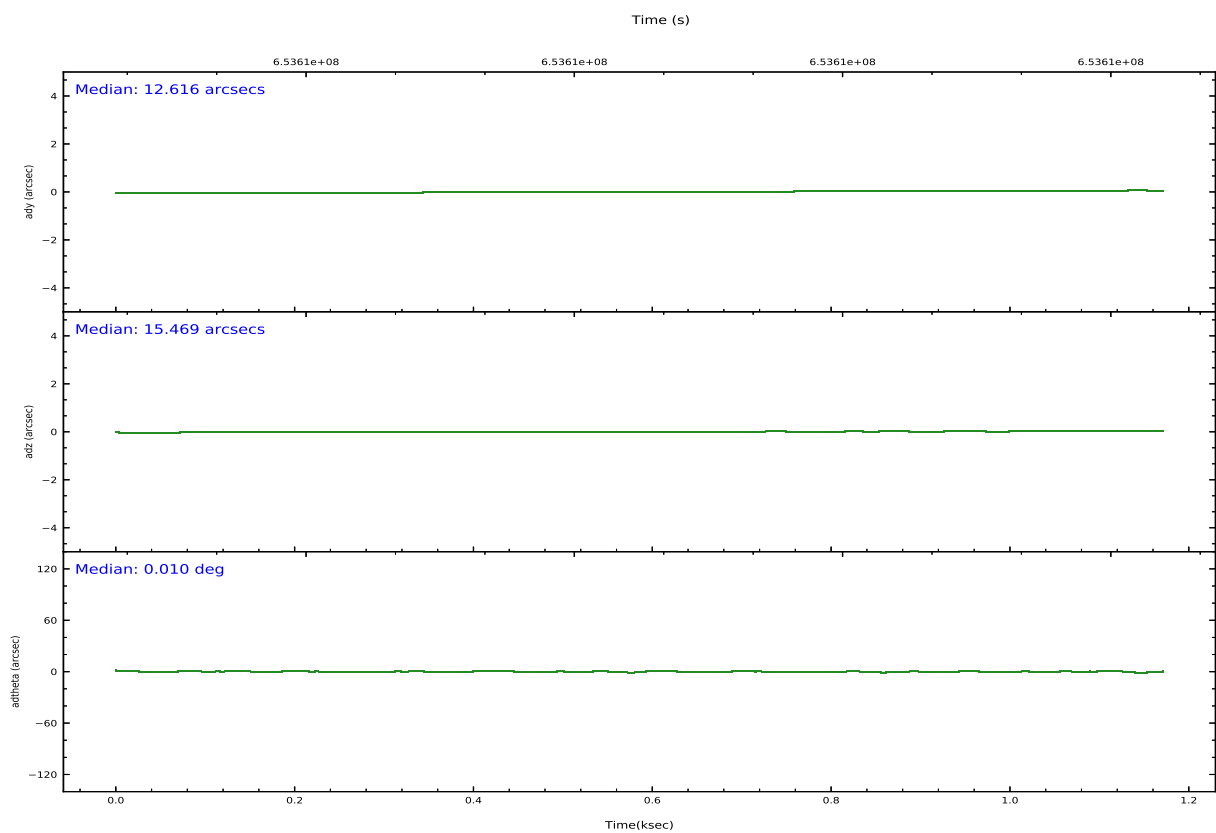
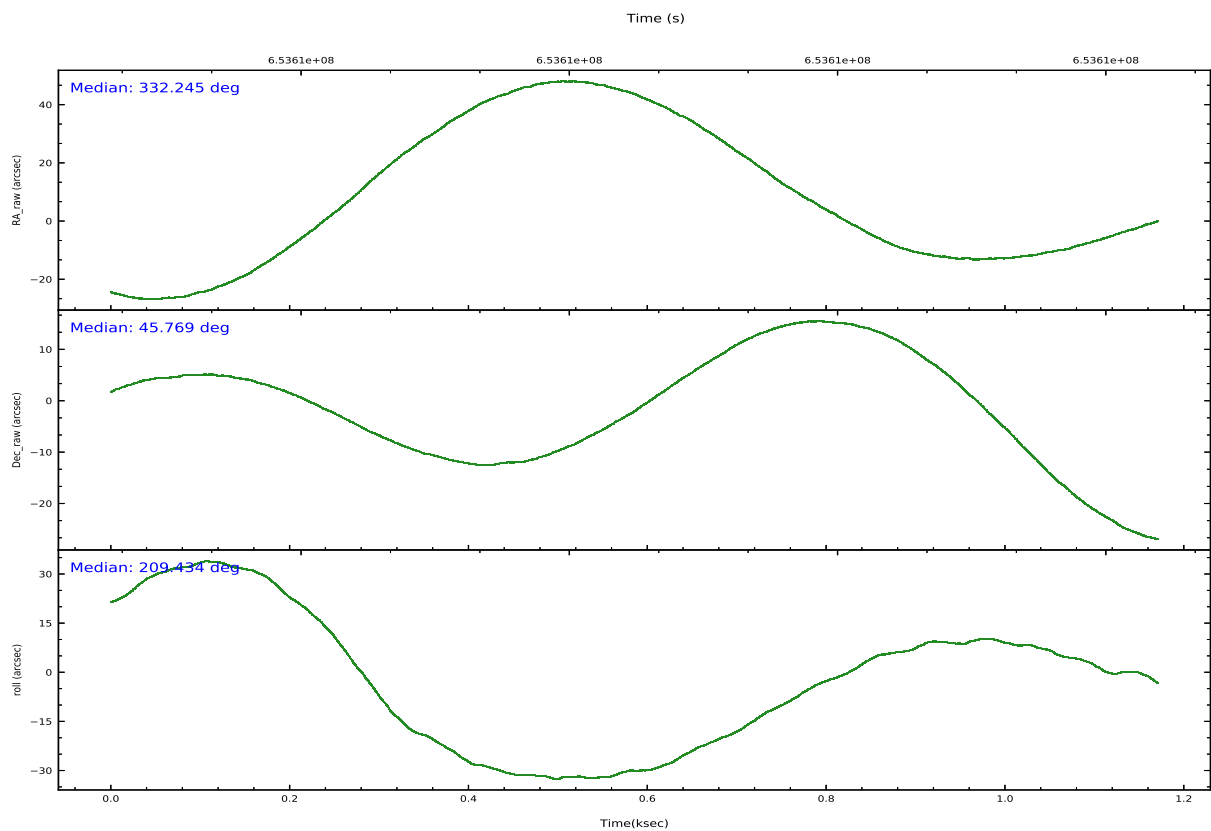
## 2.2 Compared Parameters

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	332.266919	332.24838697045
[deg] Pointing Dec	45.791982	45.774142535749
[deg] Pointing Roll	209.526804	209.43324130306
[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)	653608260.184000	653607884.1167001
Observation start date	2018-09-17T21:49:51	2018-09-17T21:44:44
[s] Observation end time (MET)	653609260.184000	653609393.94179
Observation end date	2018-09-17T22:06:31	2018-09-17T22:09:53

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

## 2.3 Aspect





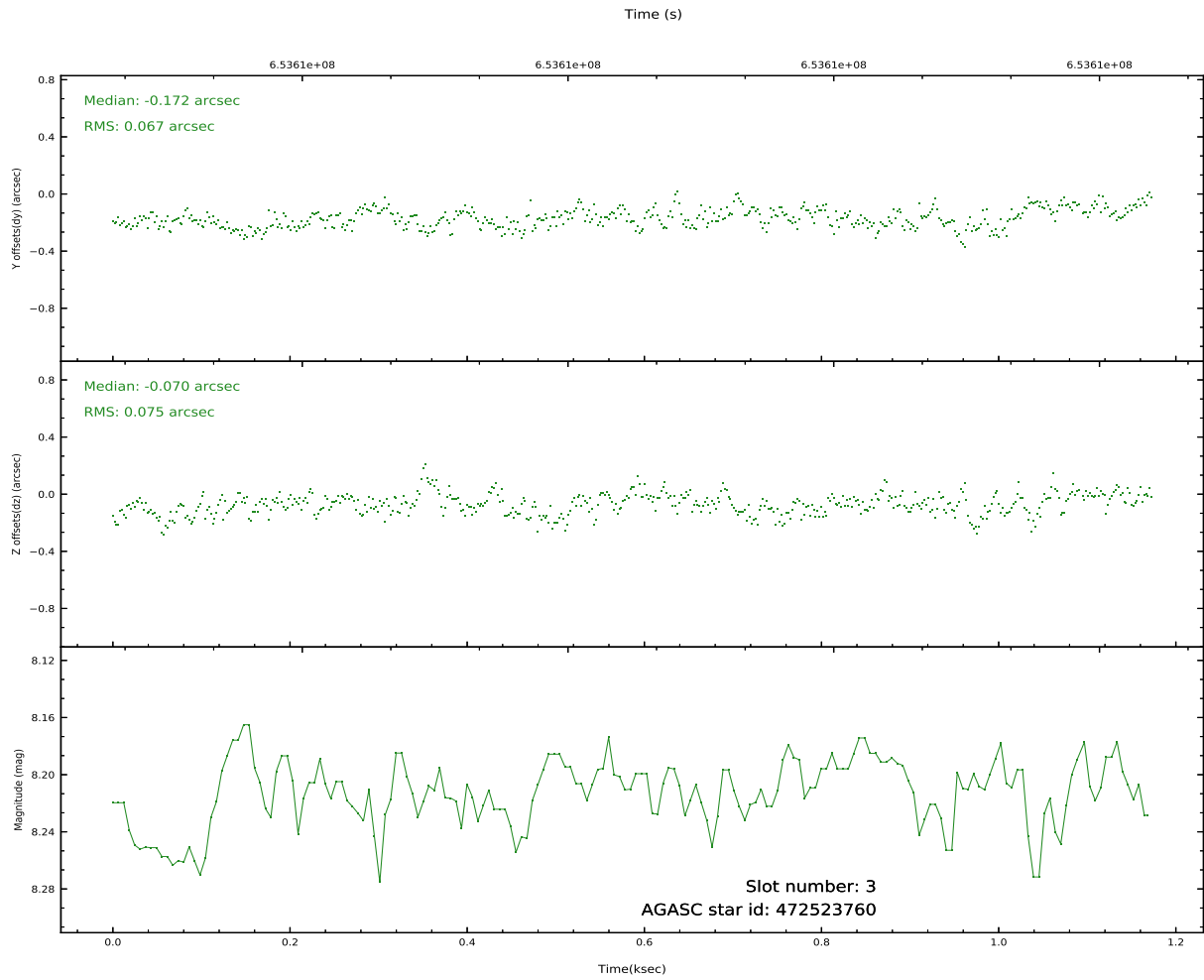
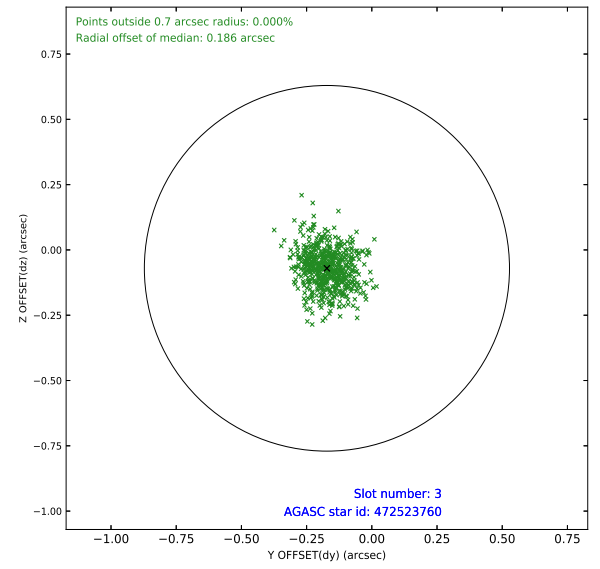
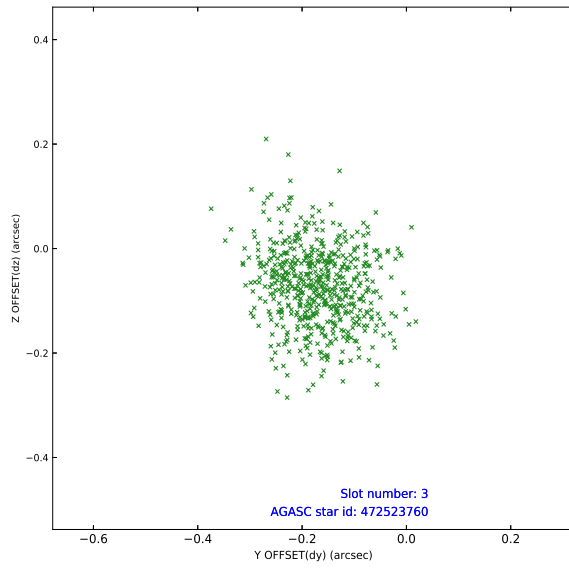
Slot Statistics

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	7.01	286	1.000	-0.076	0.023	0.007	0.012	0.000000	0.000000	-768.45	-1303
1	FID		HRC-I-2	7.04	286	1.000	0.302	-0.208	0.006	0.010	0.000000	0.000000	841.87	-1309
2	FID		HRC-I-3	7.09	287	1.000	-0.107	0.095	0.006	0.012	0.000000	0.000000	-1193.99	996
3	GUIDE	used	472523760	8.21	572	1.000	-0.172	-0.070	0.107	0.175	331.645363	45.403260	2052.72	440
4	GUIDE	used	472665256	8.95	573	1.000	0.045	0.137	0.158	0.263	332.808125	46.195041	-1888.22	-598
5	GUIDE	used	472533912	9.15	571	1.000	0.153	0.038	0.172	0.270	331.791136	46.368695	-0.67	-2390
6	GUIDE	used	472655152	9.39	572	1.000	-0.060	-0.242	0.211	0.405	332.504239	45.862991	-645.23	67
7	GUIDE	used	472663080	9.33	569	1.000	0.041	0.120	0.174	0.279	332.652741	46.473840	-2045.25	-1664

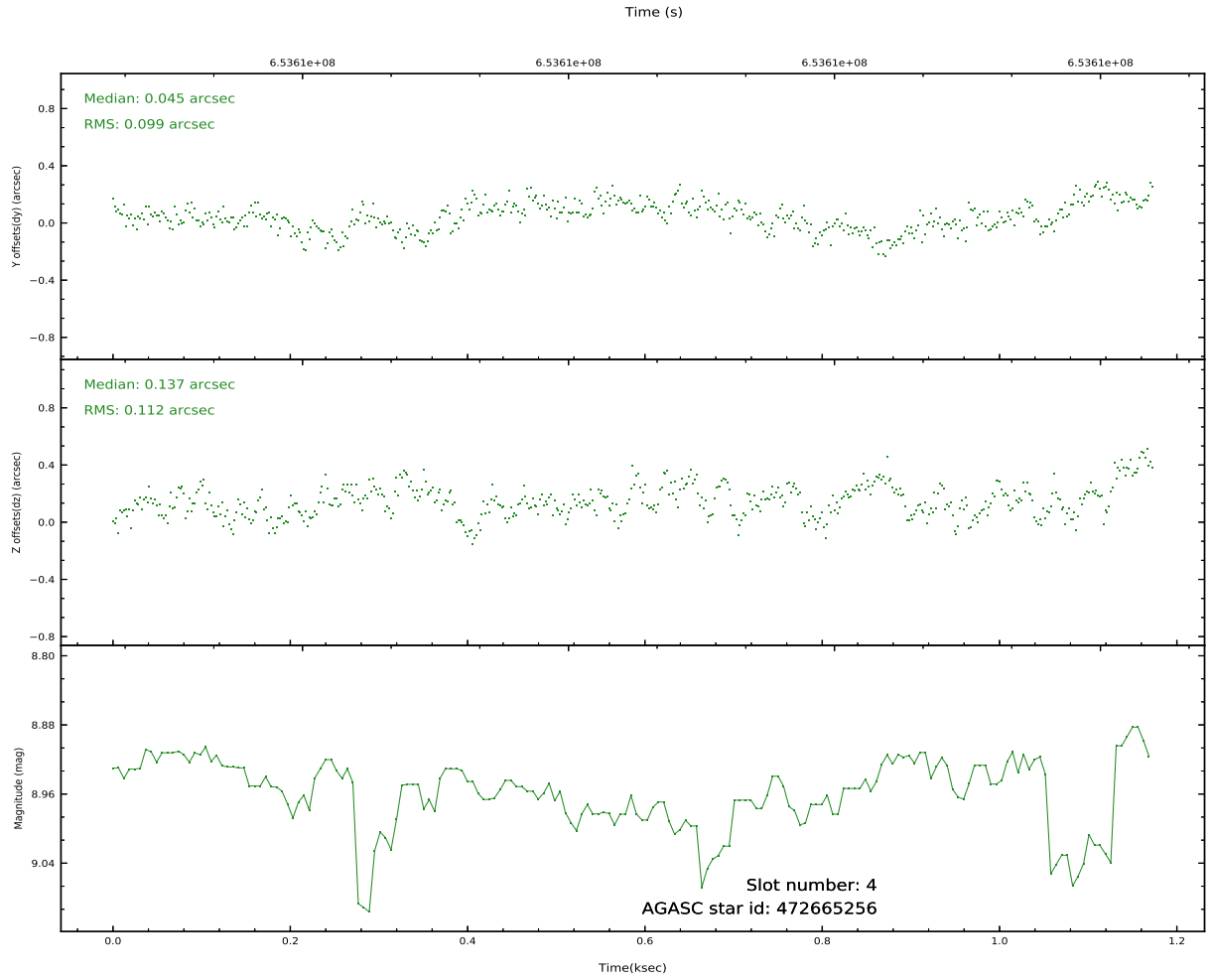
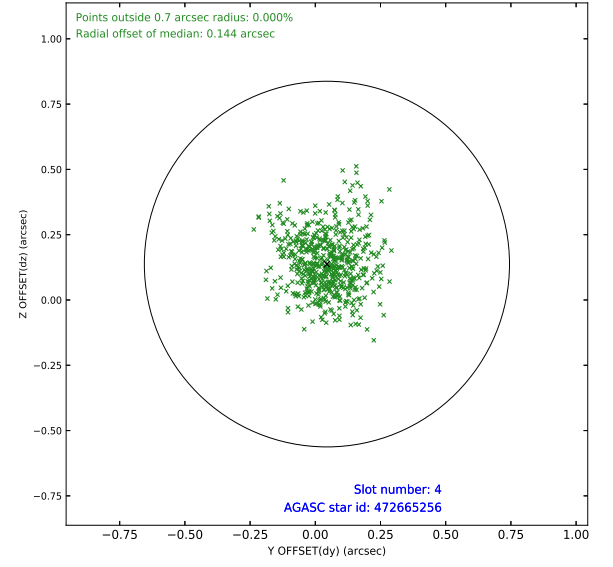
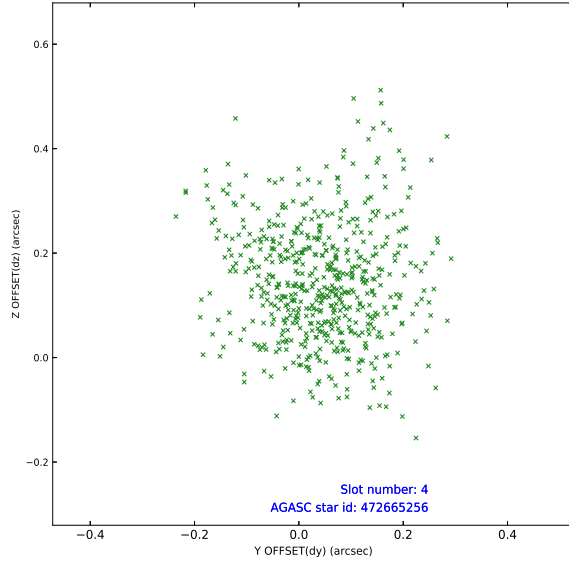


## 2.4 Star Slots

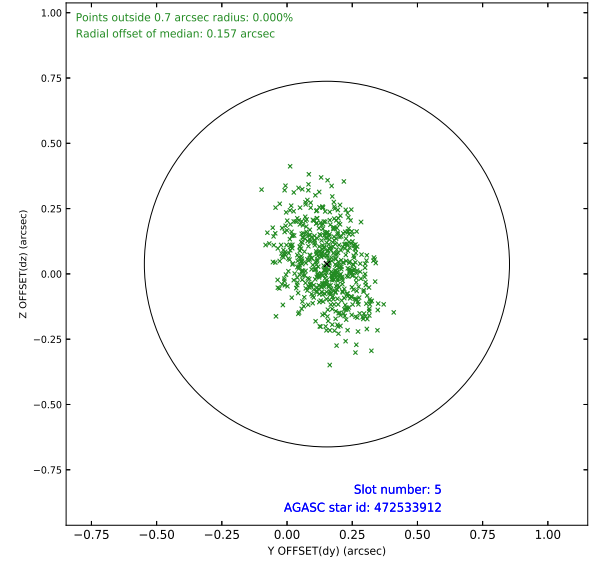
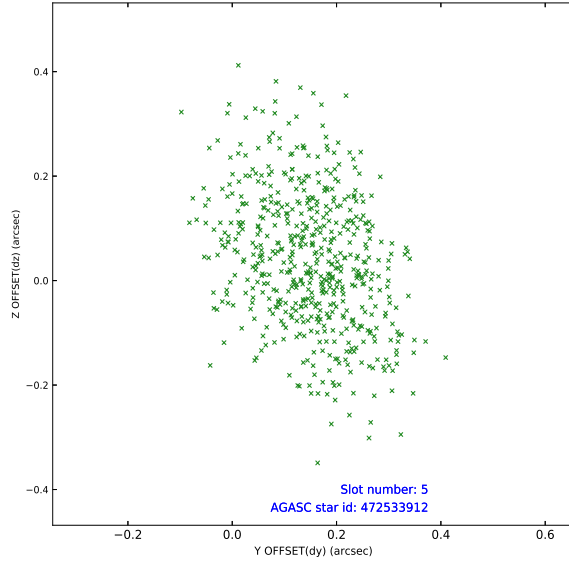
### 2.4.1 Slot 3



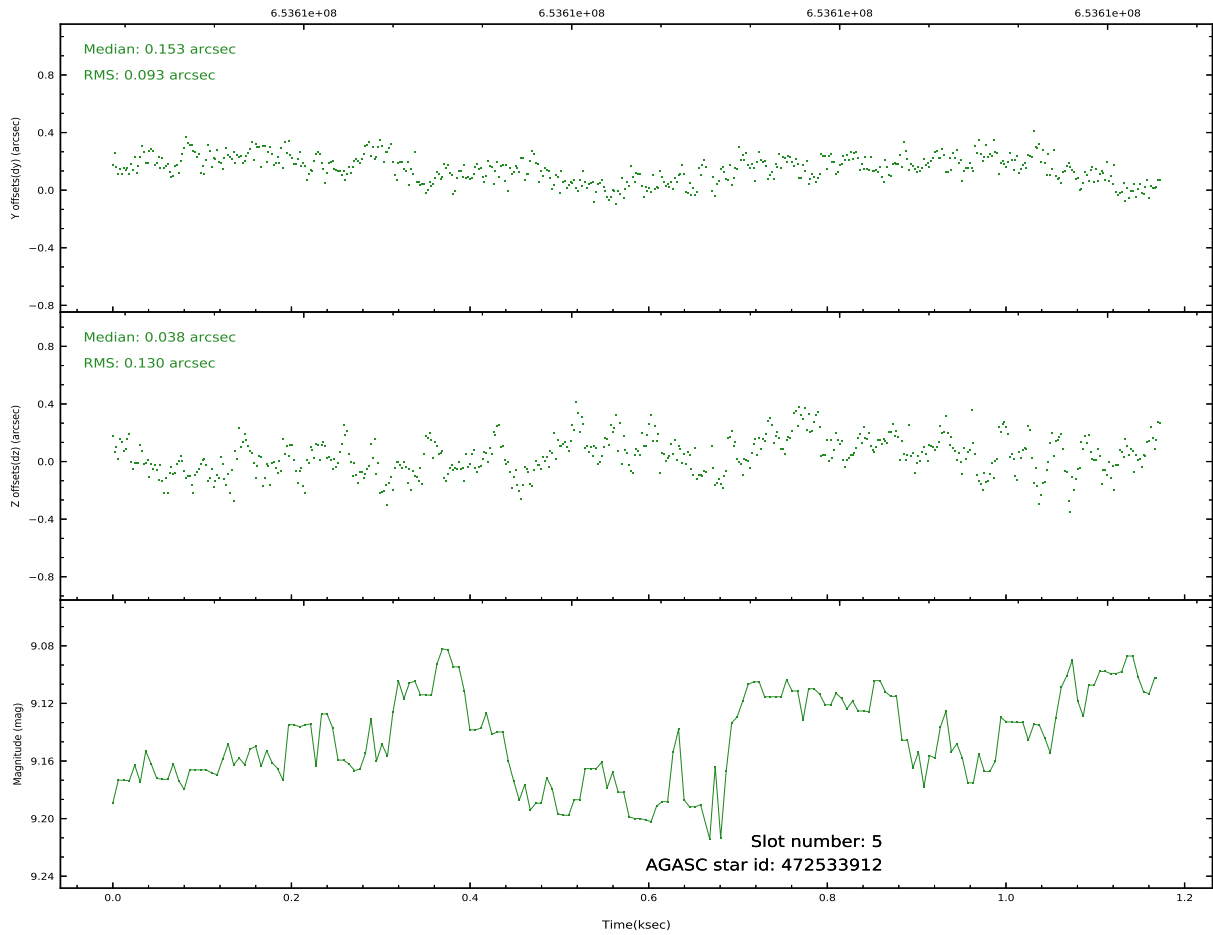
## 2.4.2 Slot 4



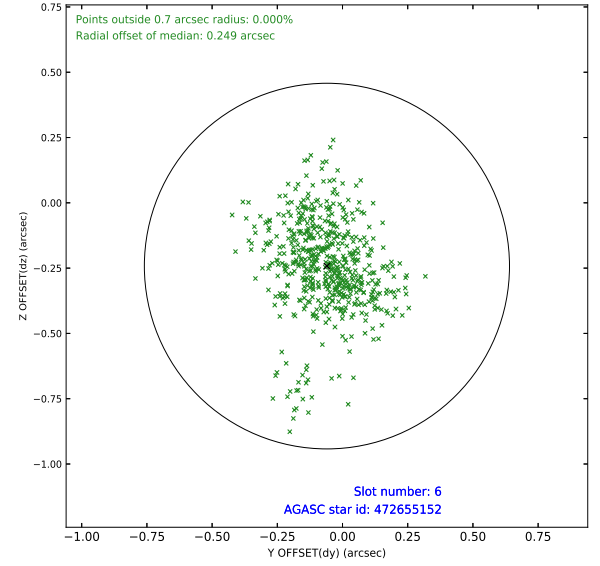
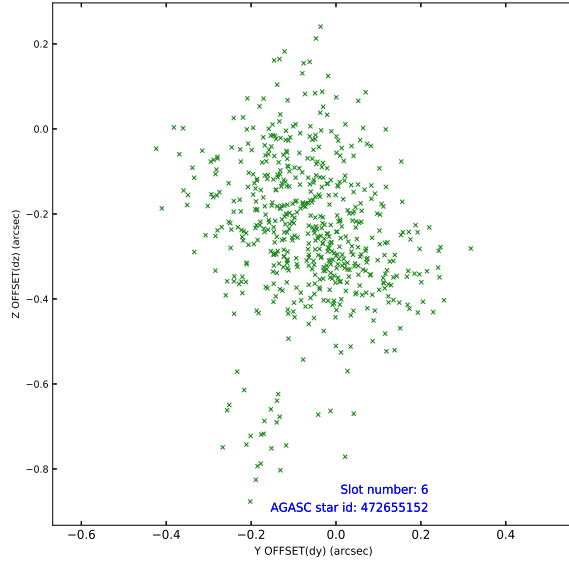
### 2.4.3 Slot 5



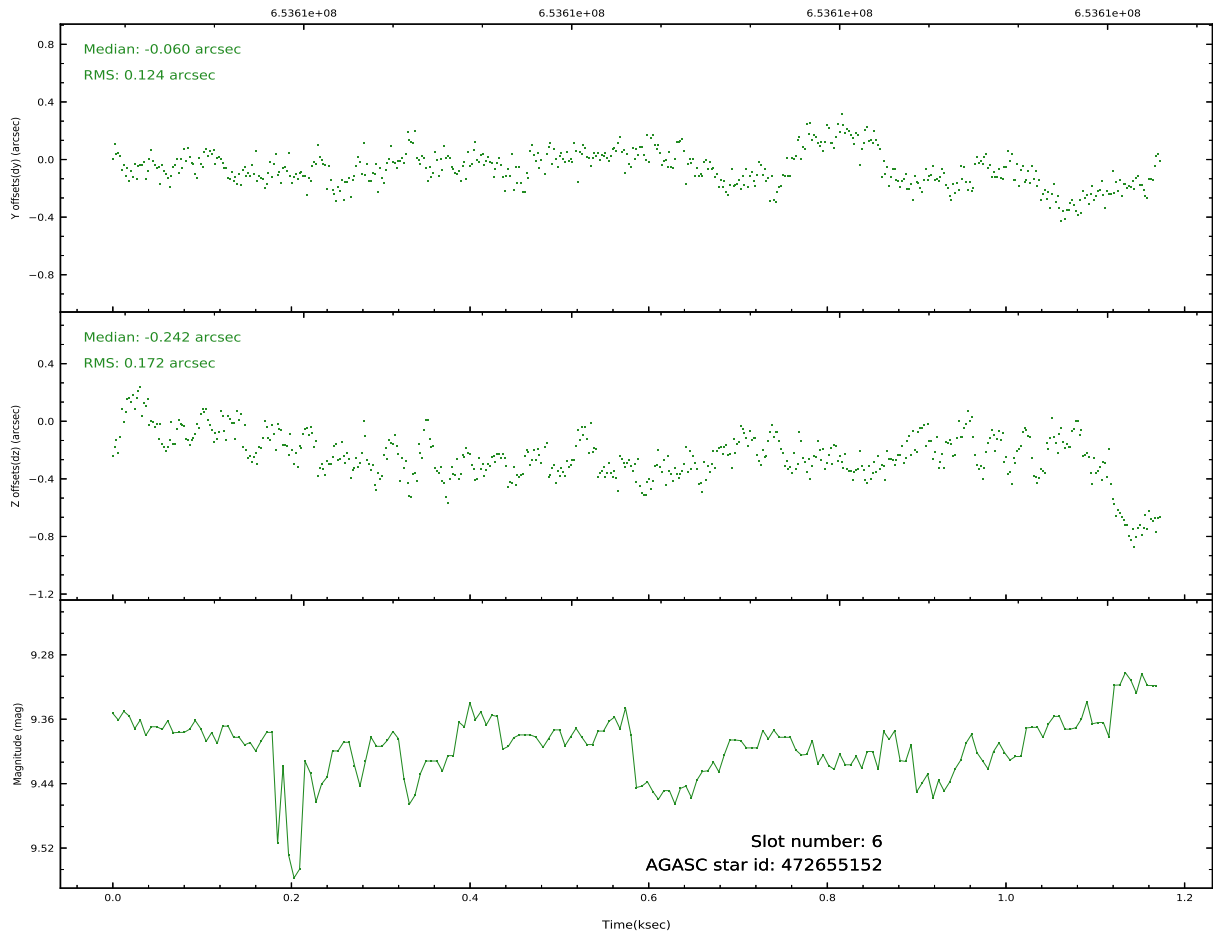
Time (s)



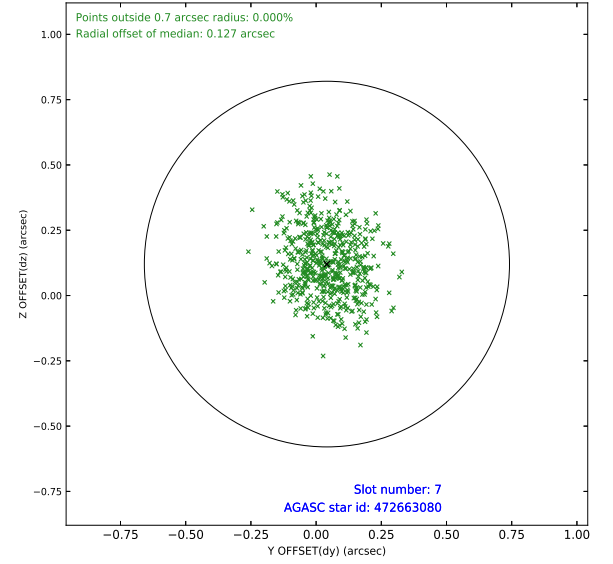
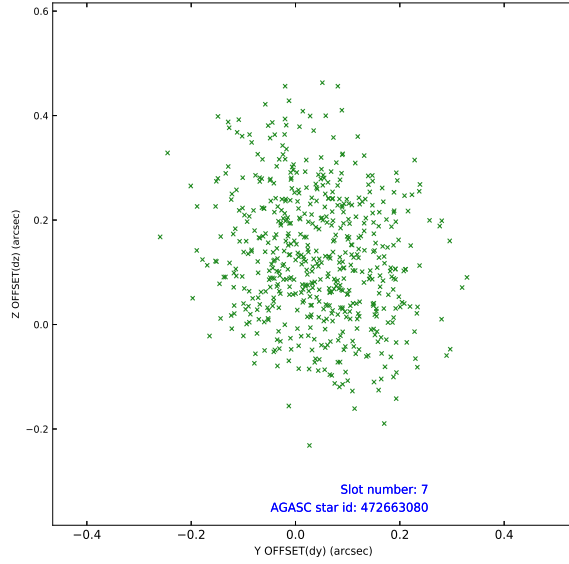
## 2.4.4 Slot 6



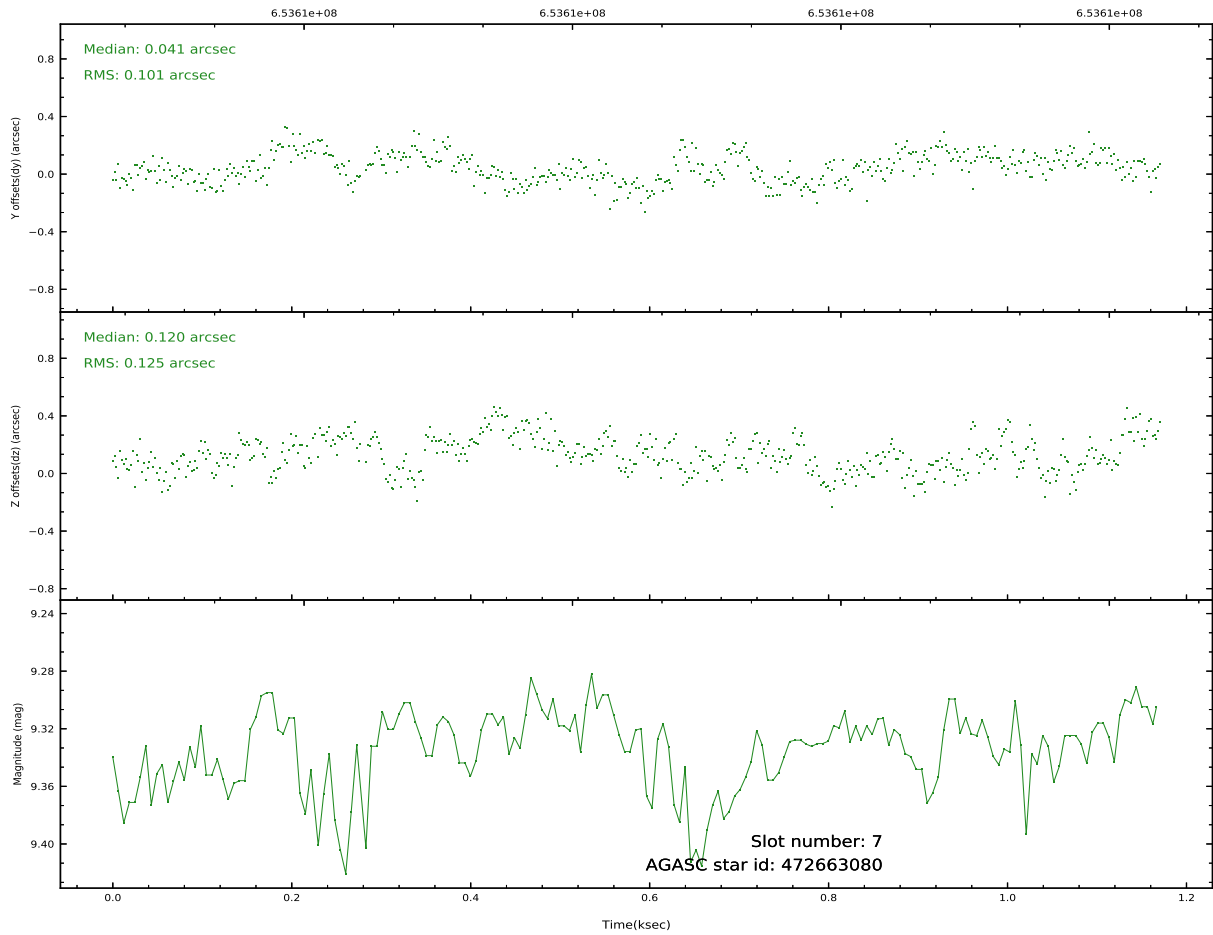
Time (s)



## 2.4.5 Slot 7

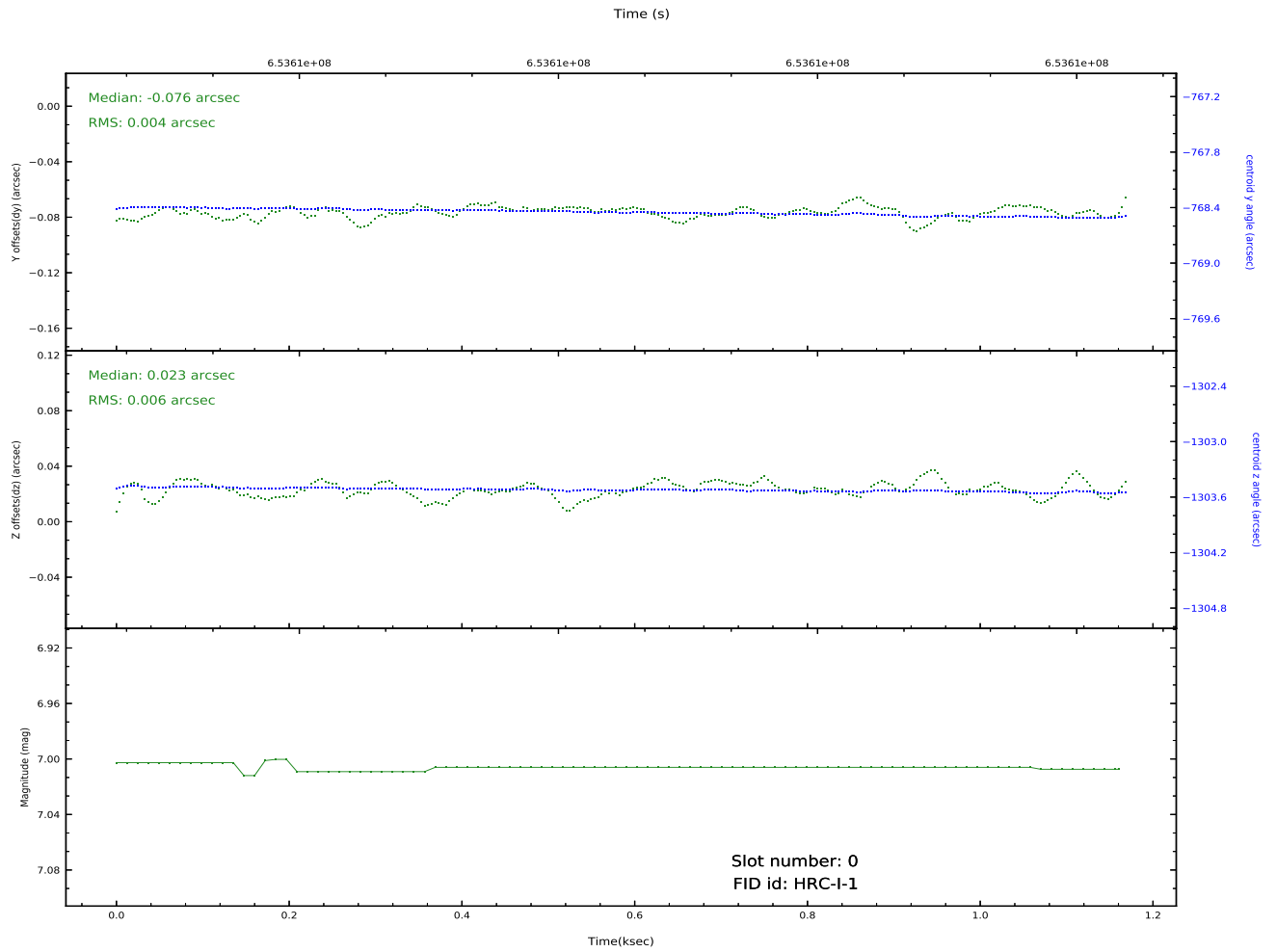
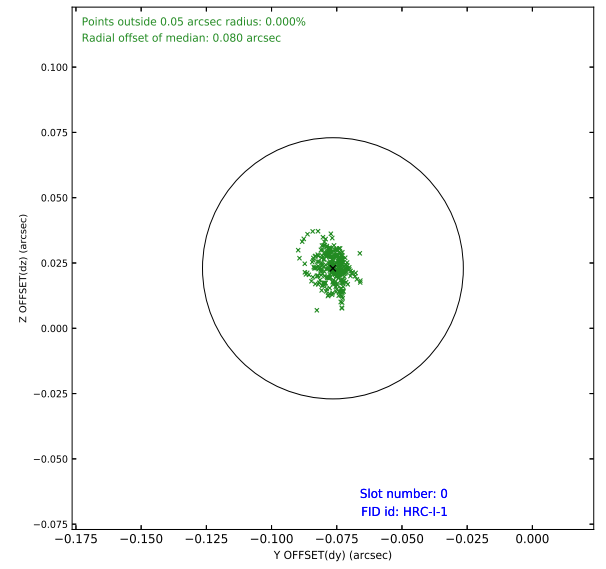
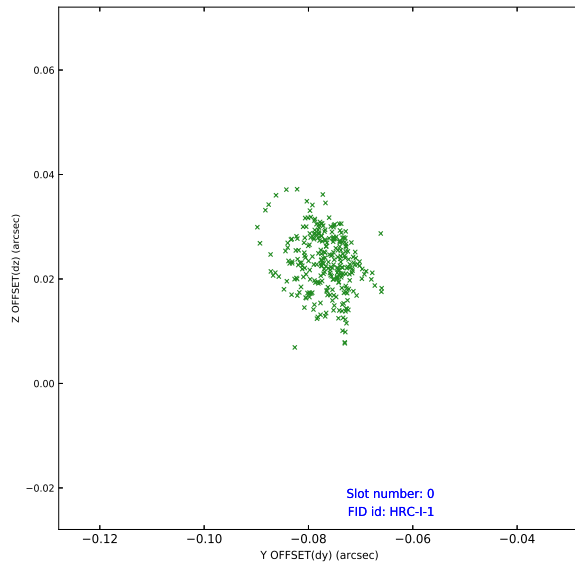


Time (s)

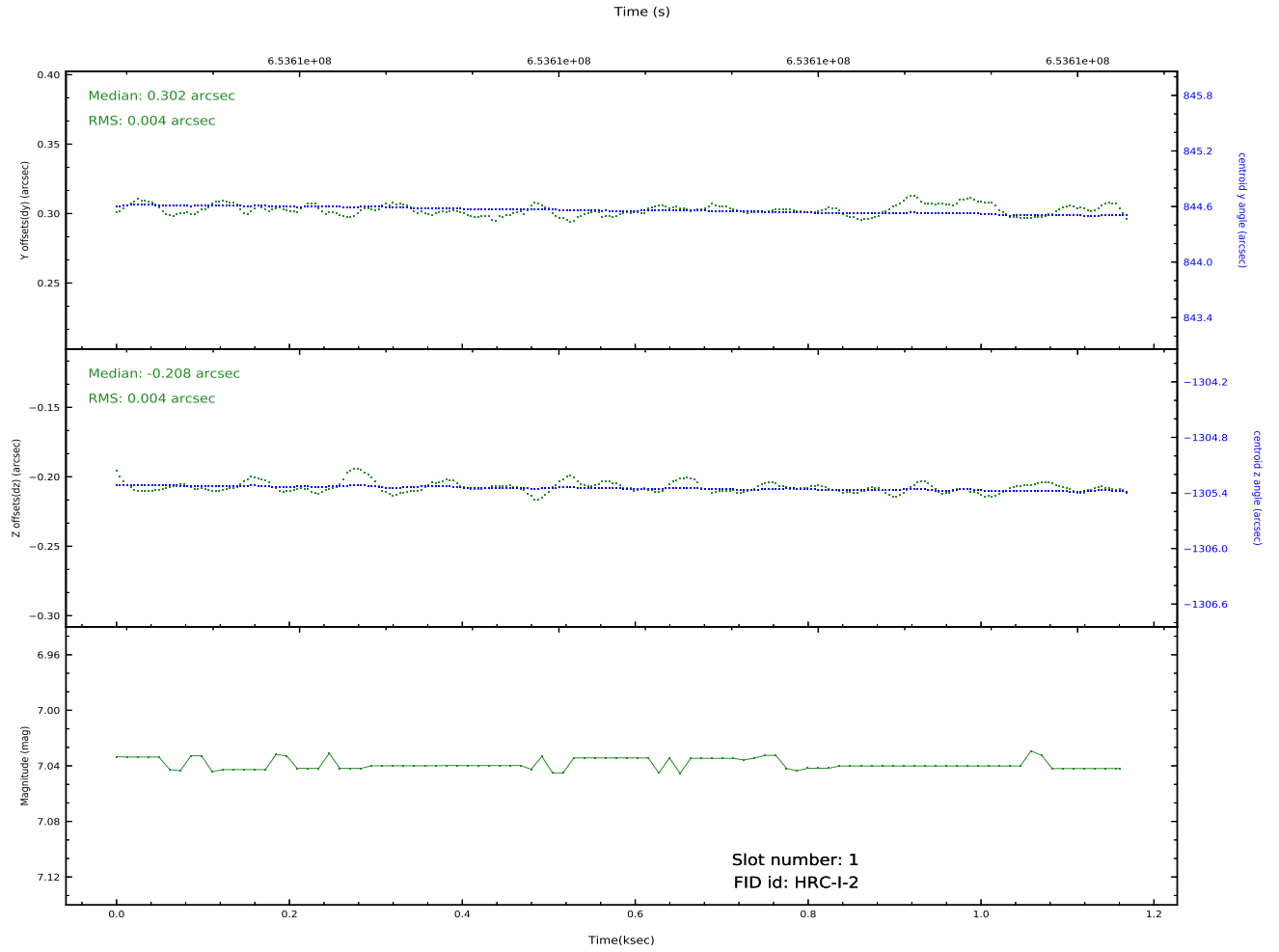
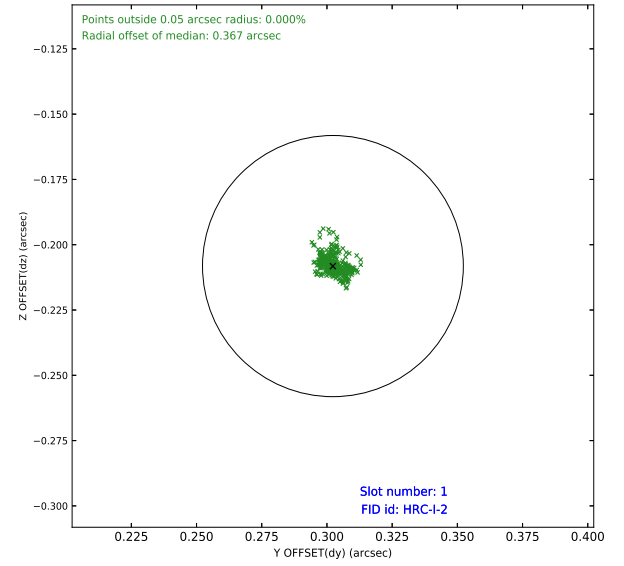
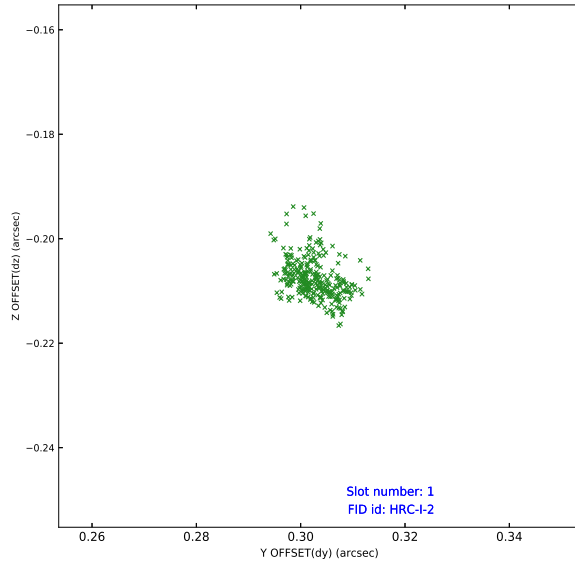


## 2.5 FID Slots

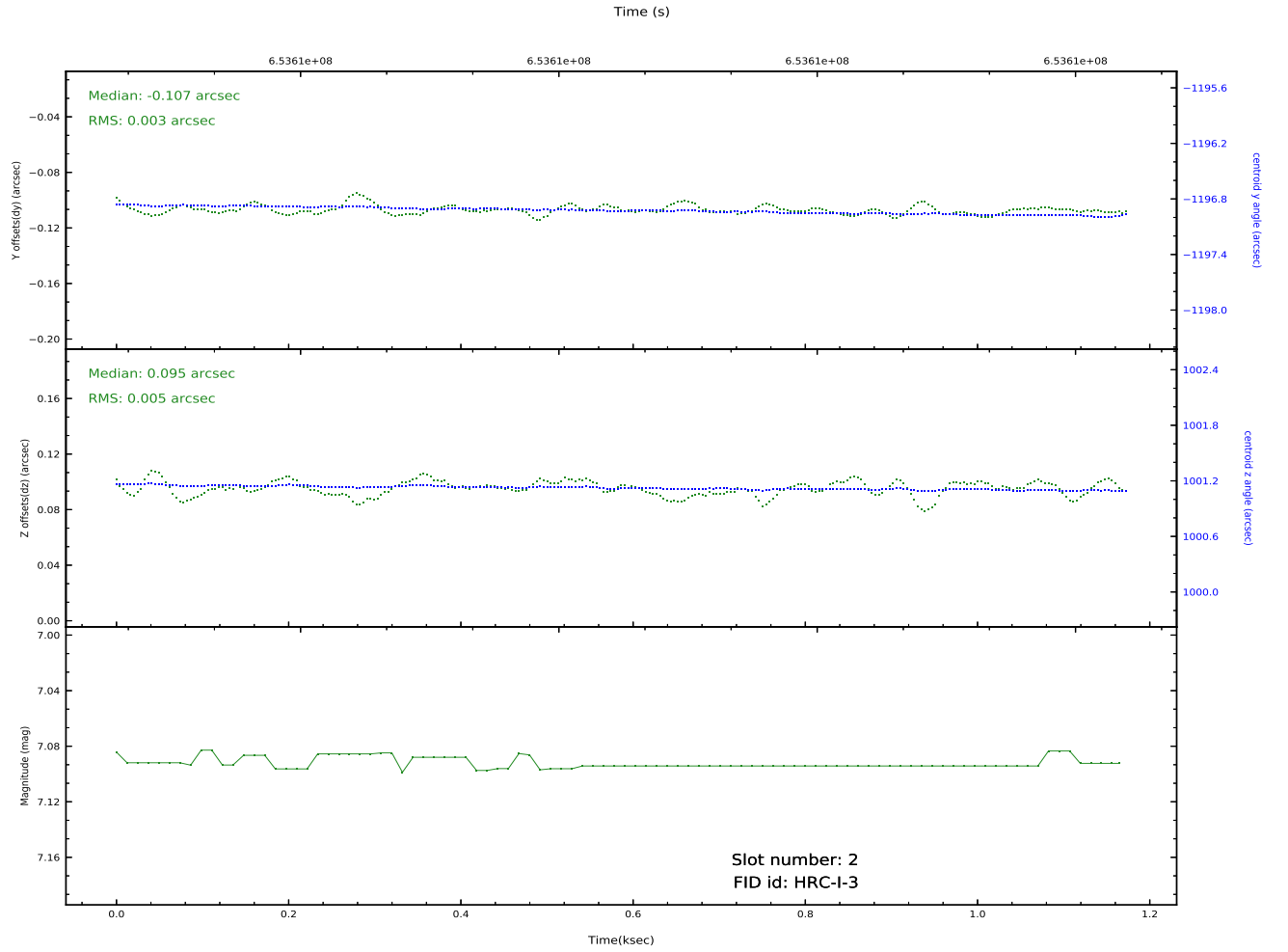
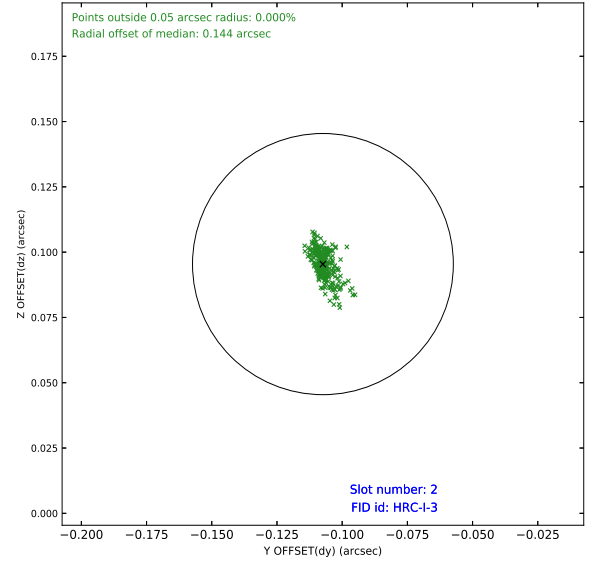
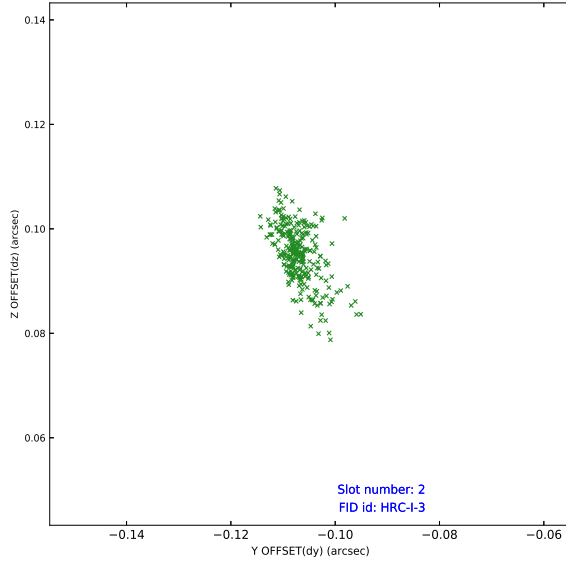
### 2.5.1 Slot 0



## 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	1.171831319809

### A.2 Comments