

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20694 - L2 Version 2  
Chandra X-Ray Center

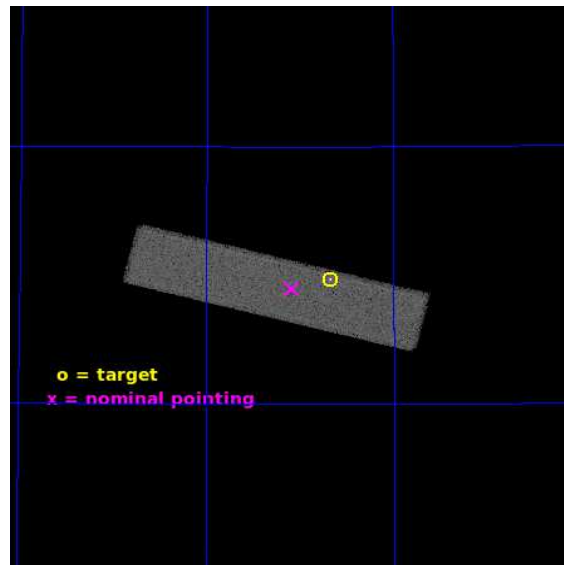
L2 Processing Date : Oct 27 2020

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# 1 Front

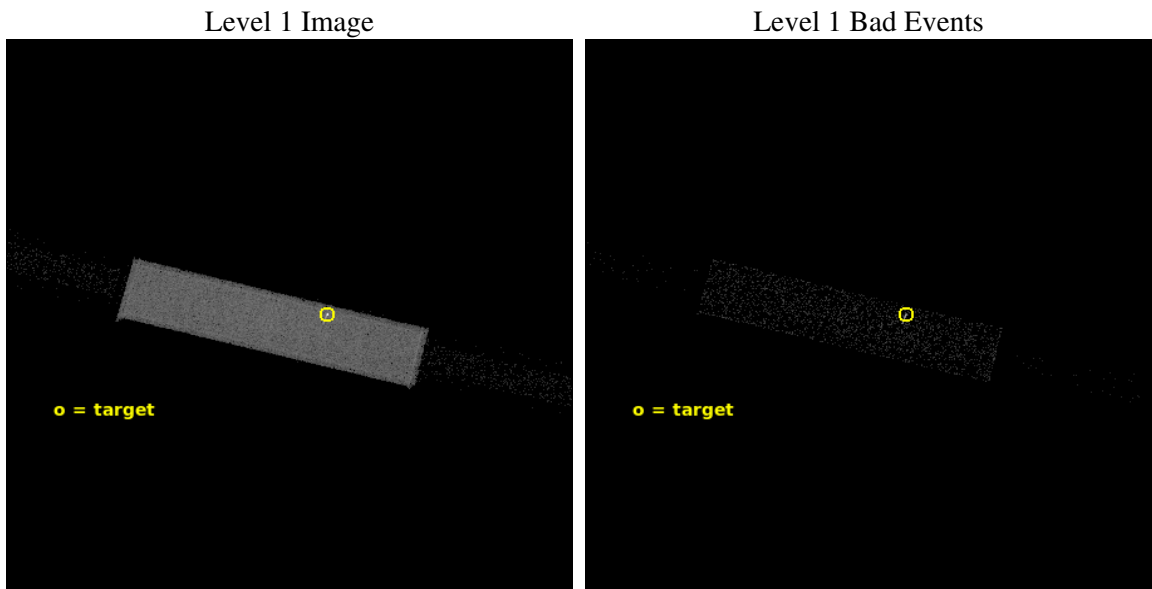
seq_num	291405	Sequence number
obs_id	20694	Observation id
title	AO-19 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.27115376214	Nominal RA [deg]
dec_nom	45.723791285824	Nominal Dec [deg]
roll_nom	193.9753437047	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1175.9313200712	[s]
livetime	1165.9115956333	Ontime multiplied by DTCOR
l2events	77062	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	1175.9313200712	[s]
caldbver	4.9.3	&#160	l1events	116057	Number of level 1 events
date	2020-10-27T16:43:27	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

Level 1 Events

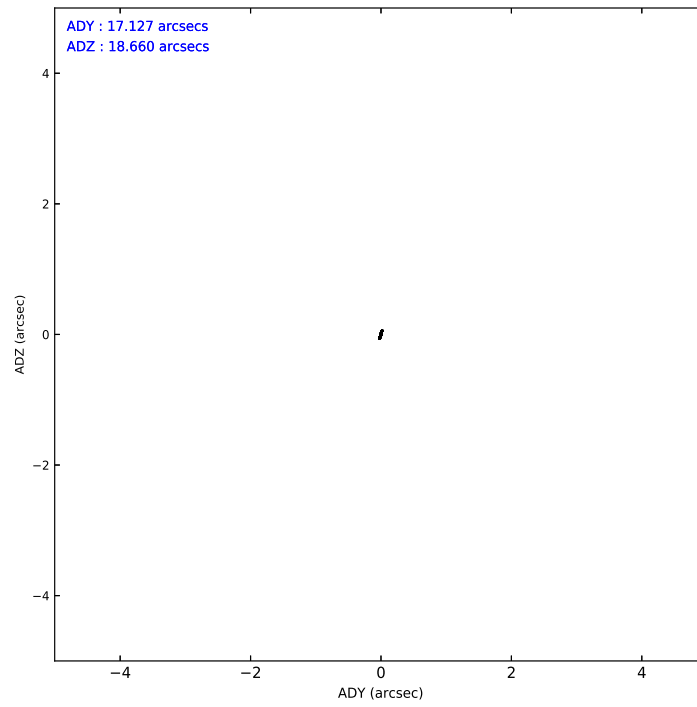
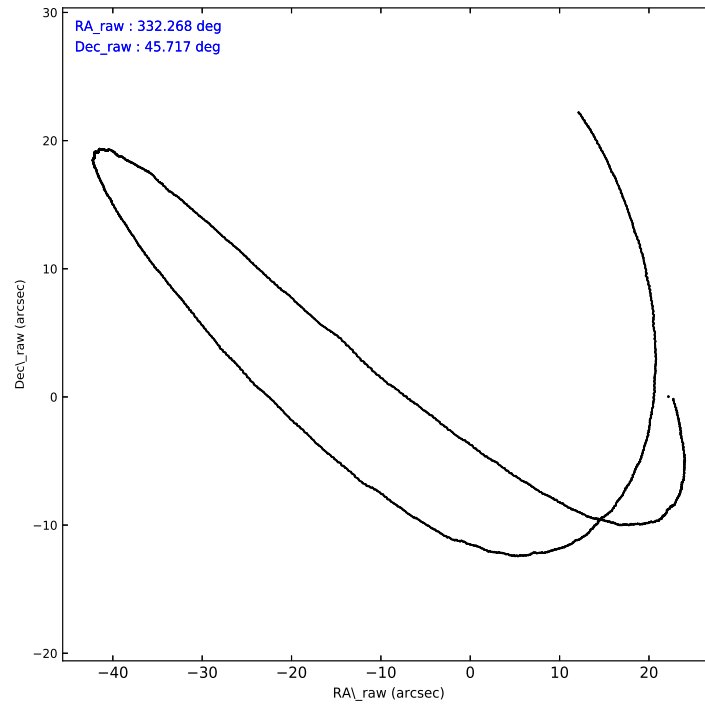
	segment 1	segment 2	segment 3
level 1 events	986	114114	957
rejected events	986	24222	957
rejected %	100%	21%	100%

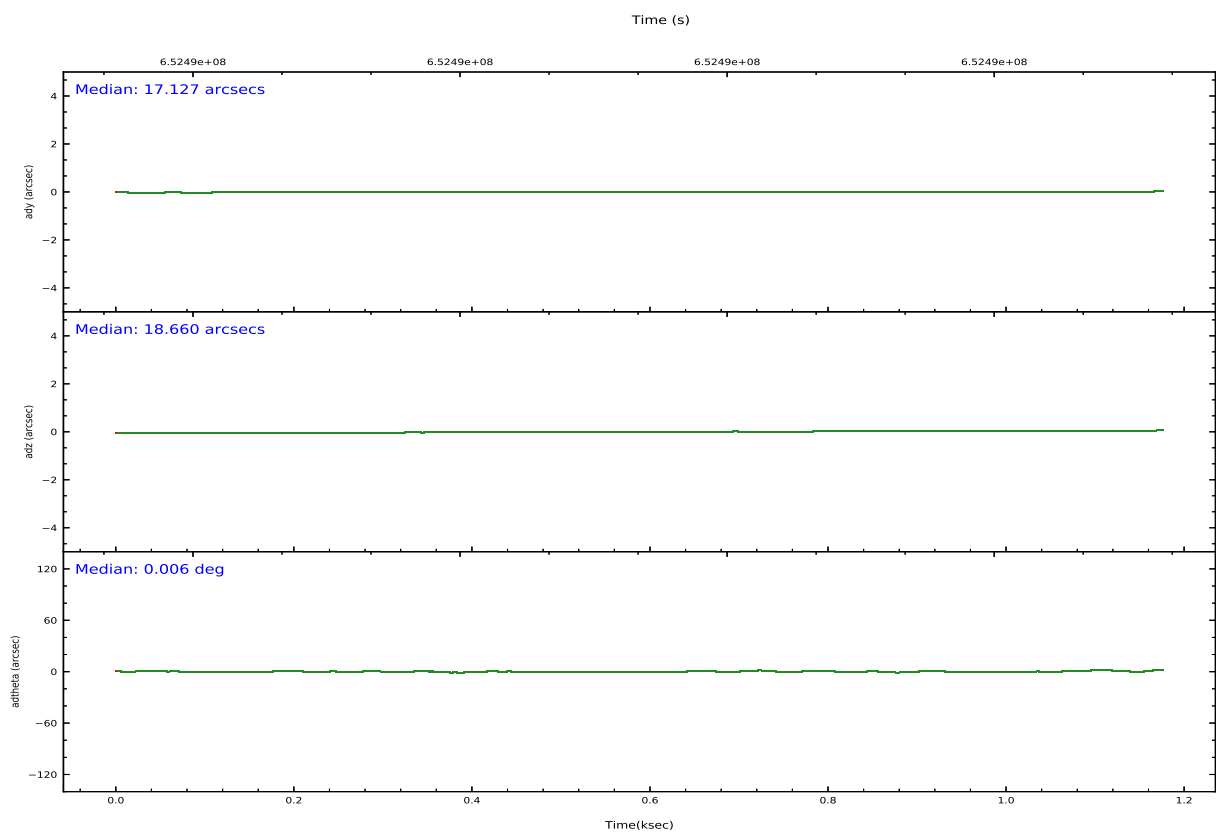
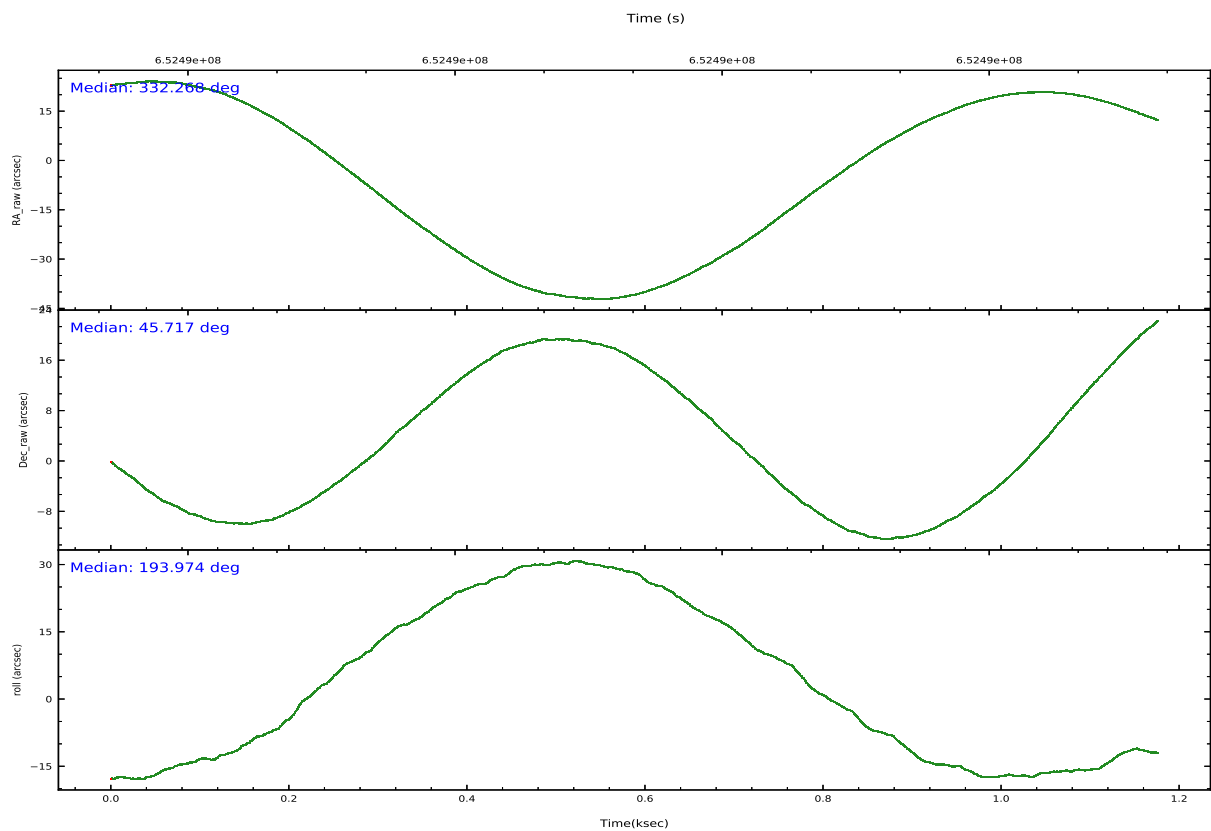
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.293481	332.27115376214
[deg] Pointing Dec	45.739230	45.723791285824
[deg] Pointing Roll	193.897638	193.9753437047
[mm] SIM focus pos	-1.533336	-1.526339935833849
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	652492991.184000	652492614.86296
Observation start date	2018-09-05T00:02:02	2018-09-04T23:56:54
[s] Observation end time (MET)	652493991.184000	652494125.20055
Observation end date	2018-09-05T00:18:42	2018-09-05T00:22:05

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

## 2.3 Aspect





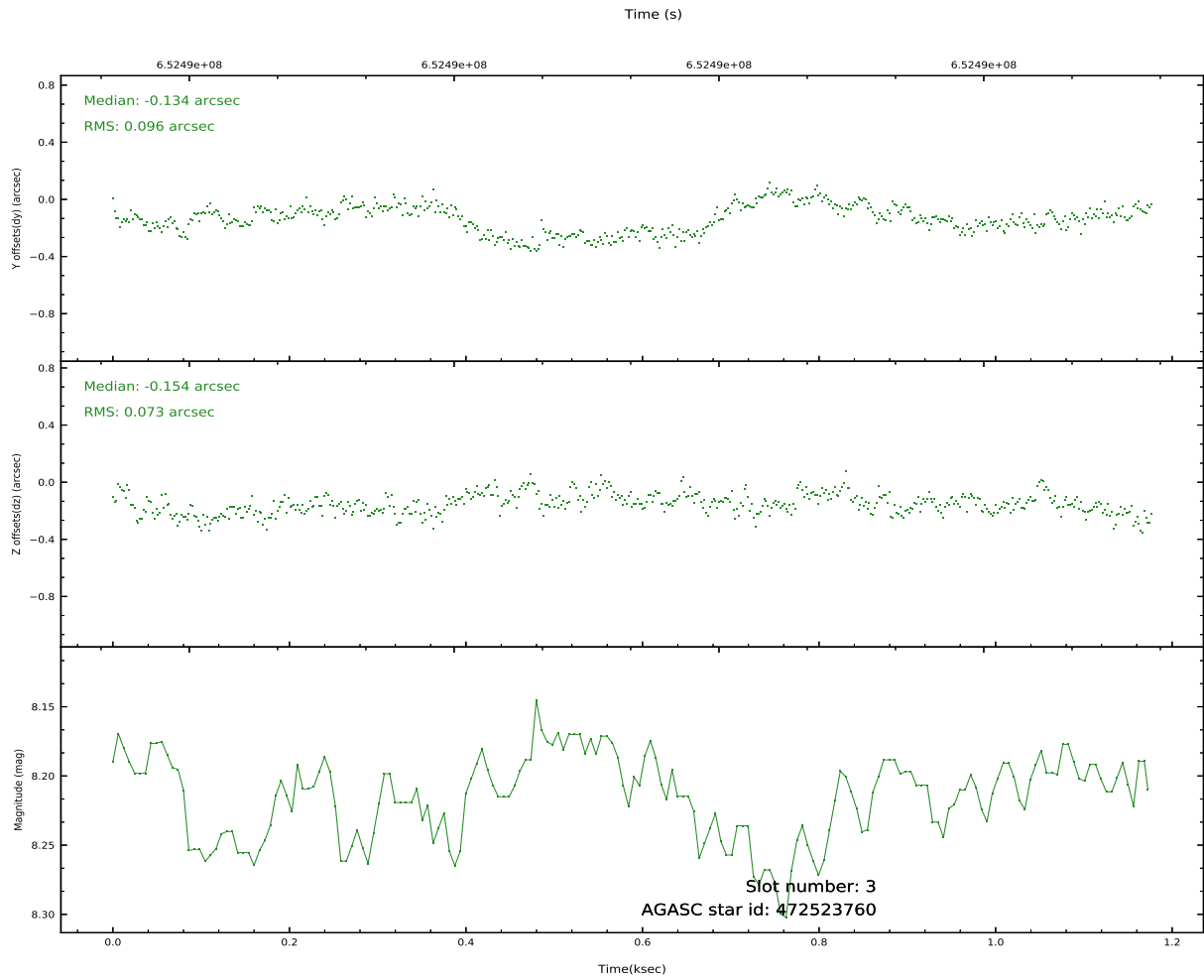
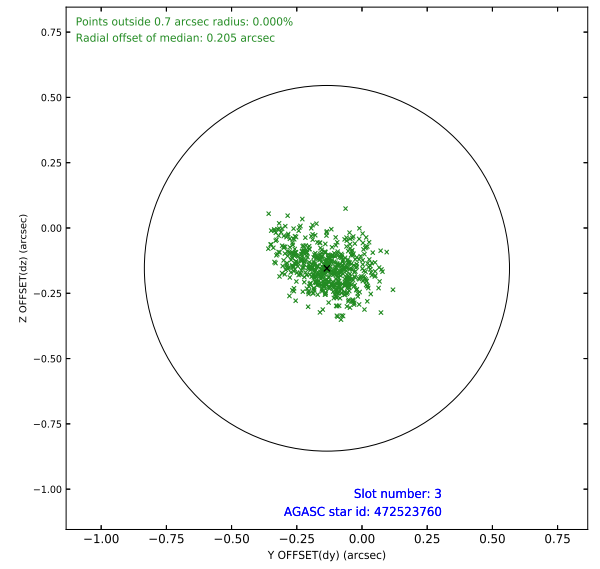
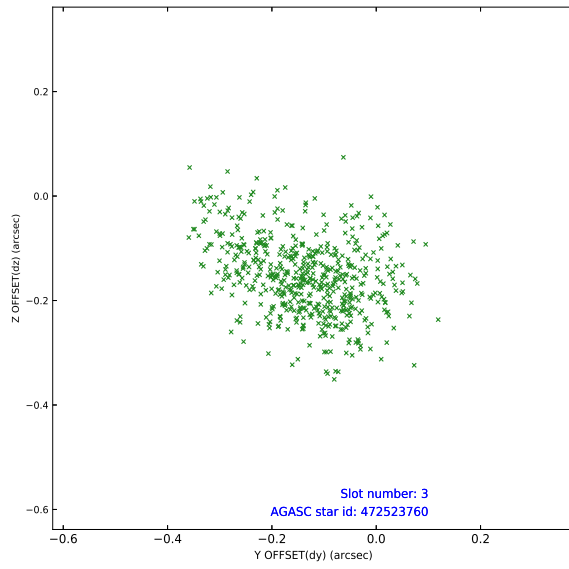
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-2	7.00	288	1.000	0.282	-0.194	0.007	0.013	0.000000	0.000000	1228.21	-460
1	FID		HRC-S-3	7.02	288	1.000	-0.040	-0.036	0.005	0.010	0.000000	0.000000	-1170.06	560
2	FID		HRC-S-4	7.00	288	1.000	0.163	-0.066	0.007	0.012	0.000000	0.000000	1222.77	566
3	GUIDE	used	472523760	8.21	575	1.000	-0.134	-0.154	0.130	0.209	331.645363	45.403260	1881.17	770
4	GUIDE	used	472525528	6.63	575	1.000	-0.317	-0.169	0.131	0.215	331.551102	45.248694	2253.05	1252
5	GUIDE	used	472655152	9.43	575	1.000	0.172	0.083	0.207	0.369	332.504239	45.862991	-614.06	-307
6	GUIDE	used	472665256	8.95	574	1.000	0.260	0.199	0.137	0.227	332.808125	46.195041	-1638.78	-1292
7	GUIDE	used	472535576	7.83	574	1.000	0.031	0.050	0.120	0.183	331.438373	46.291802	1583.65	-2458

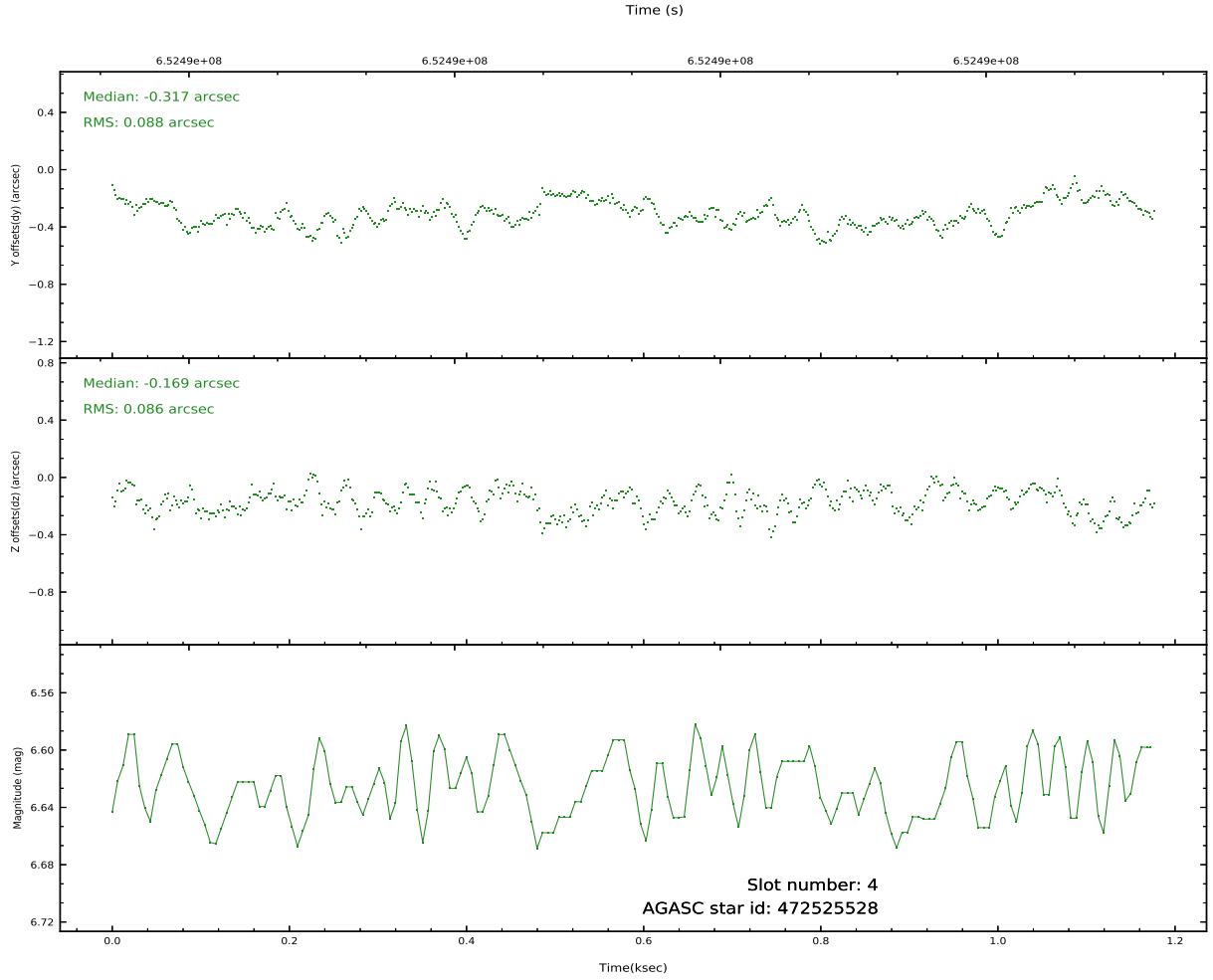
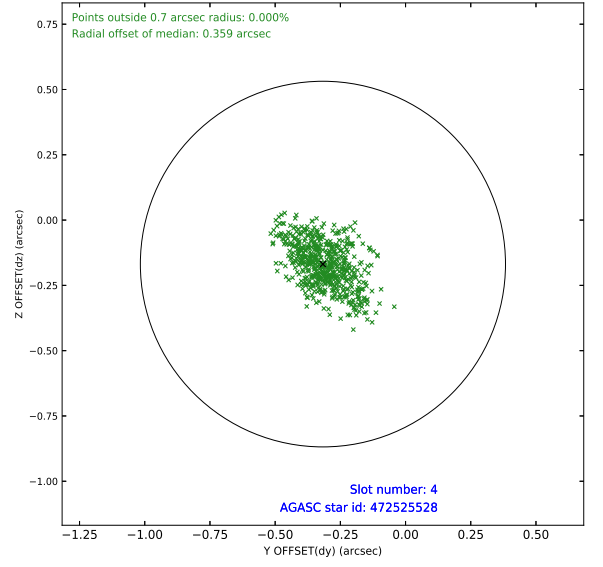
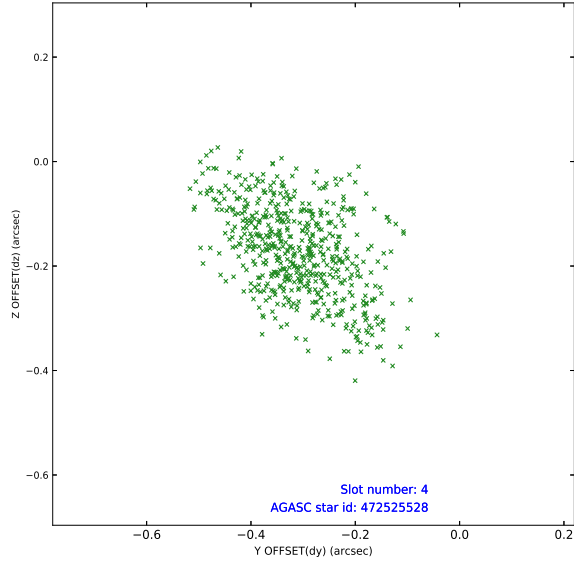


## 2.4 Star Slots

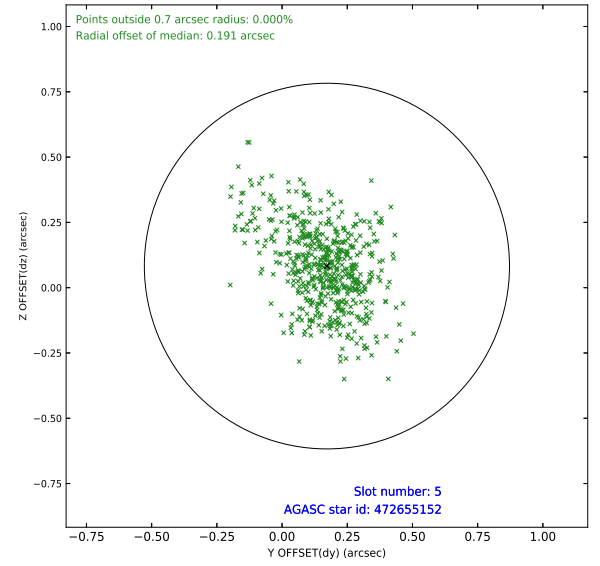
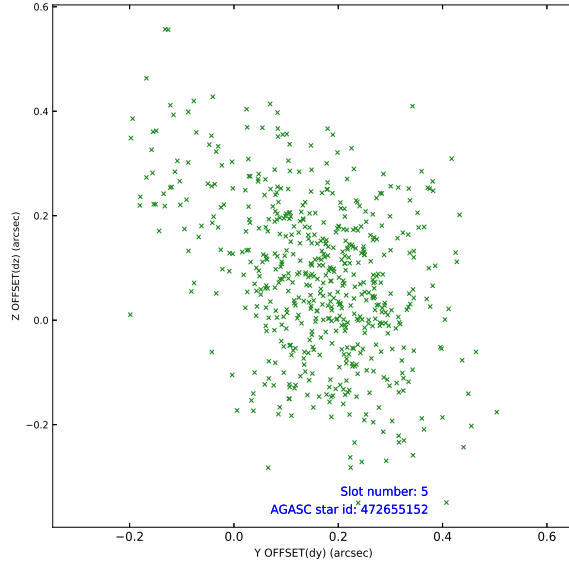
### 2.4.1 Slot 3



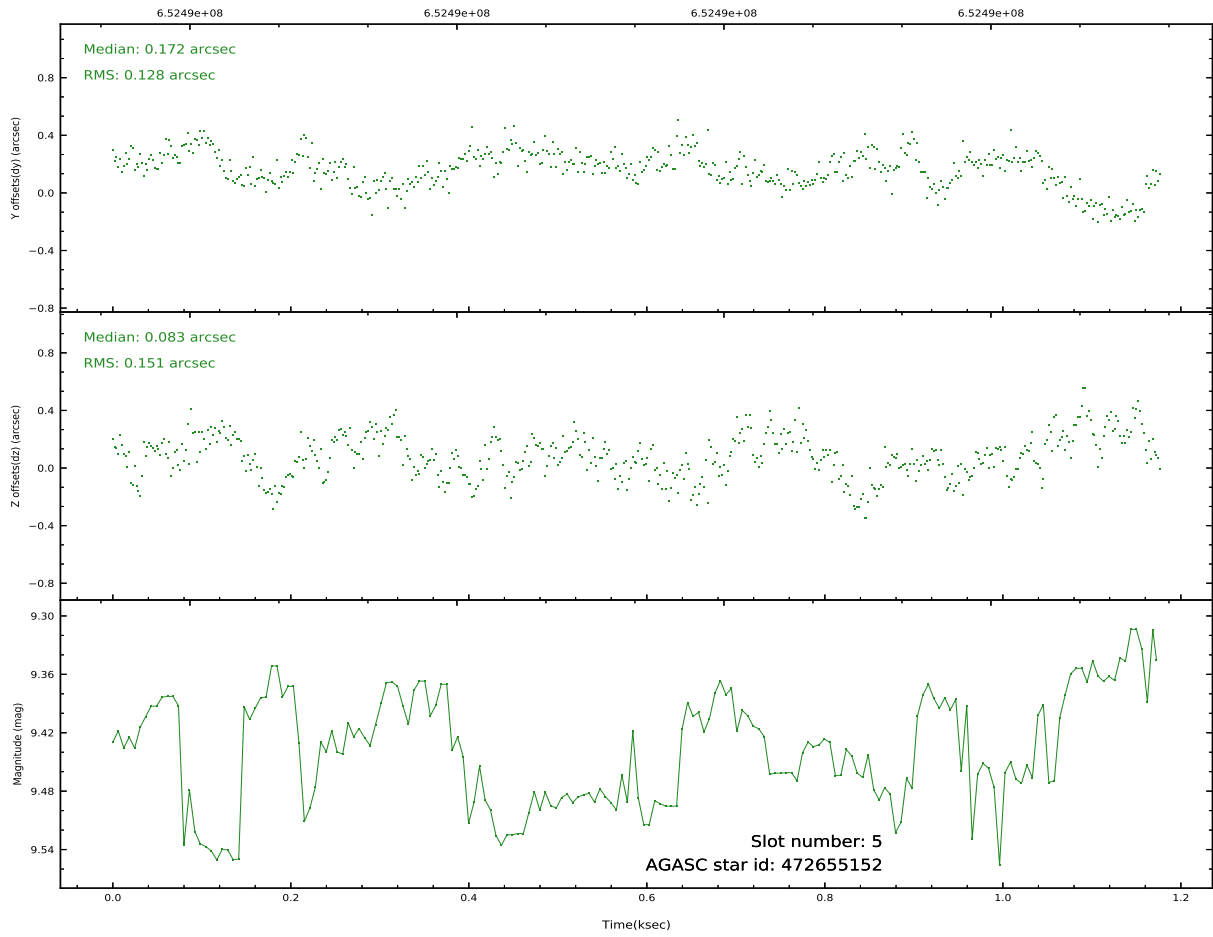
## 2.4.2 Slot 4



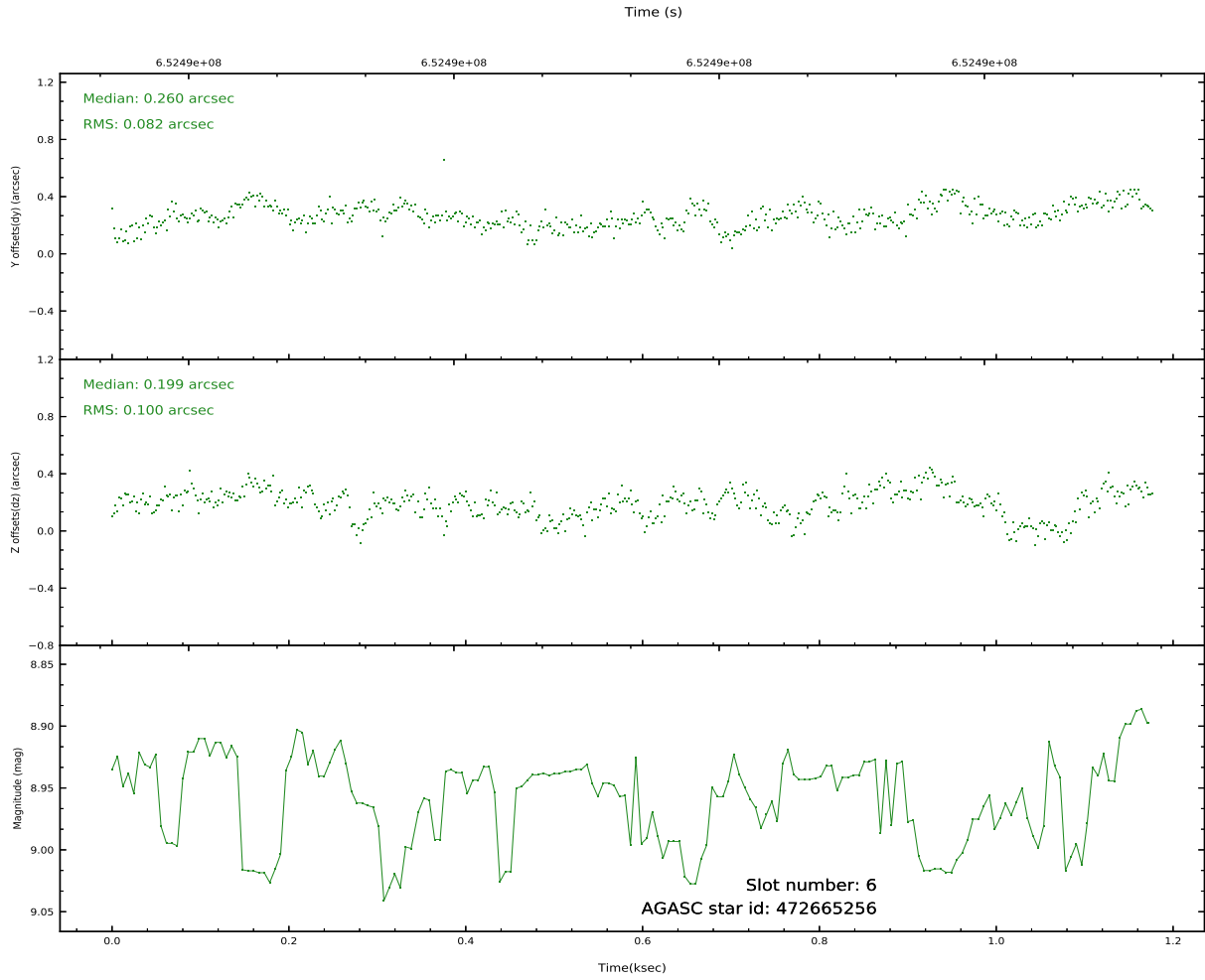
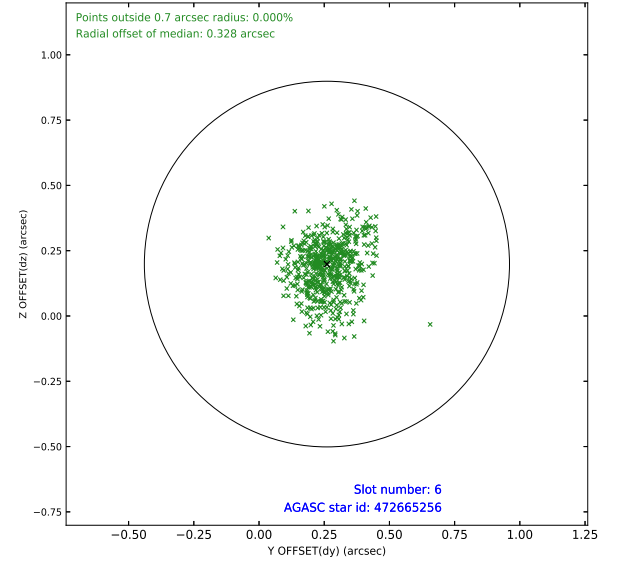
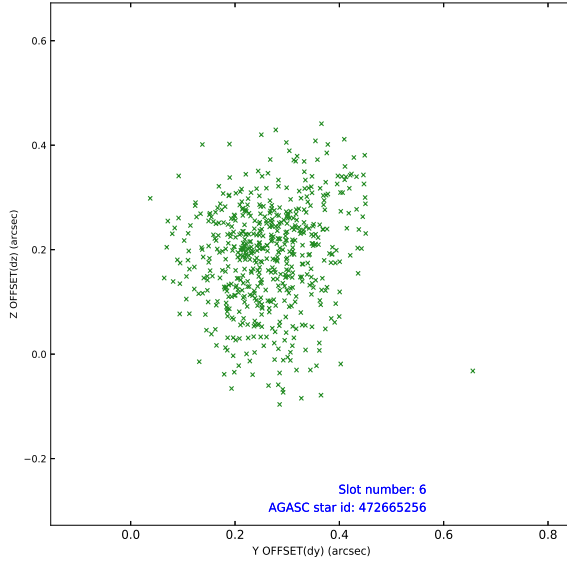
### 2.4.3 Slot 5



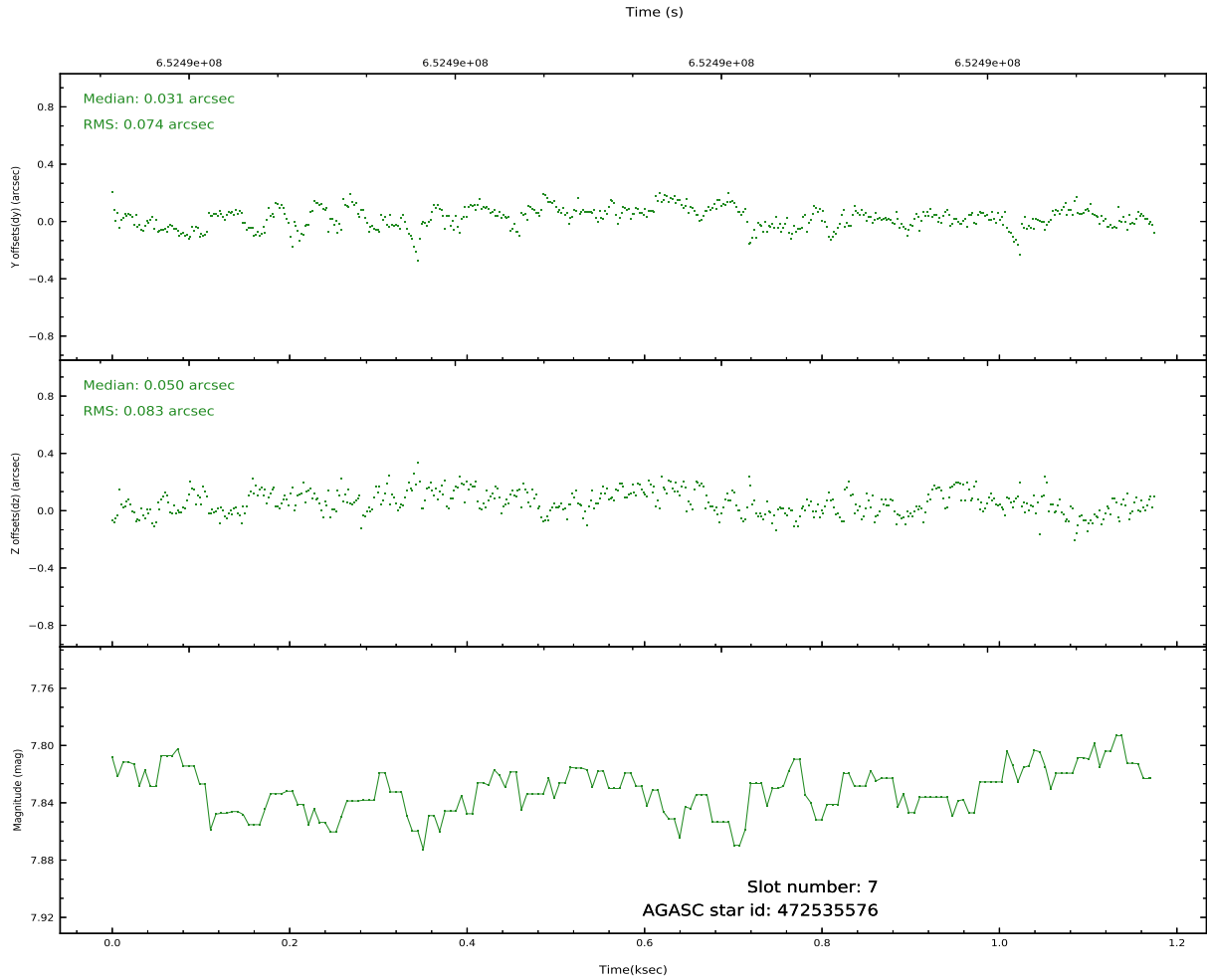
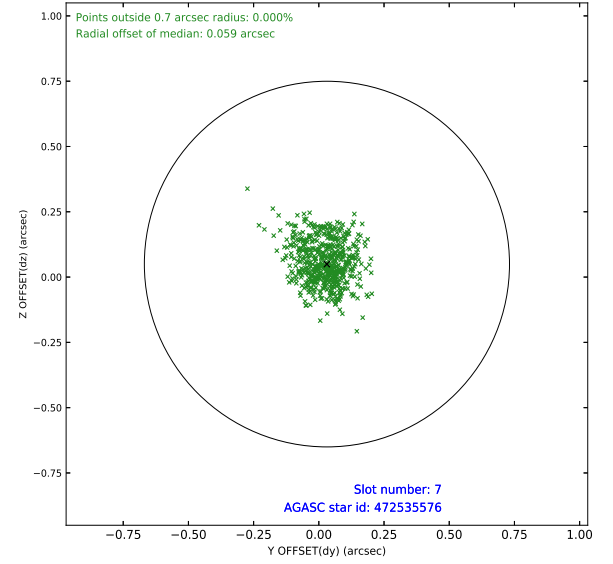
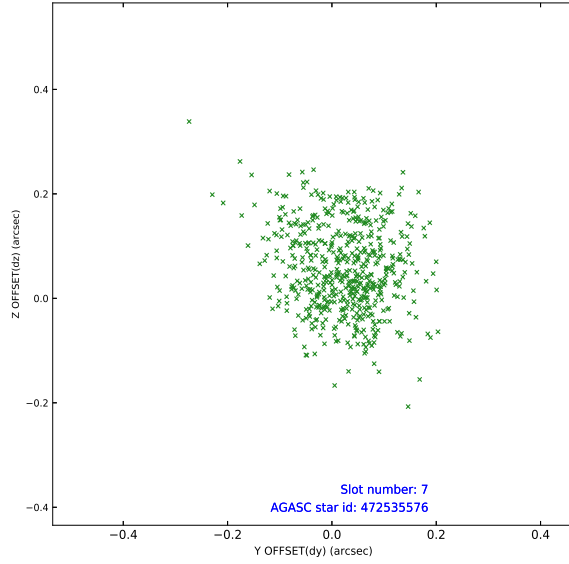
Time (s)



## 2.4.4 Slot 6

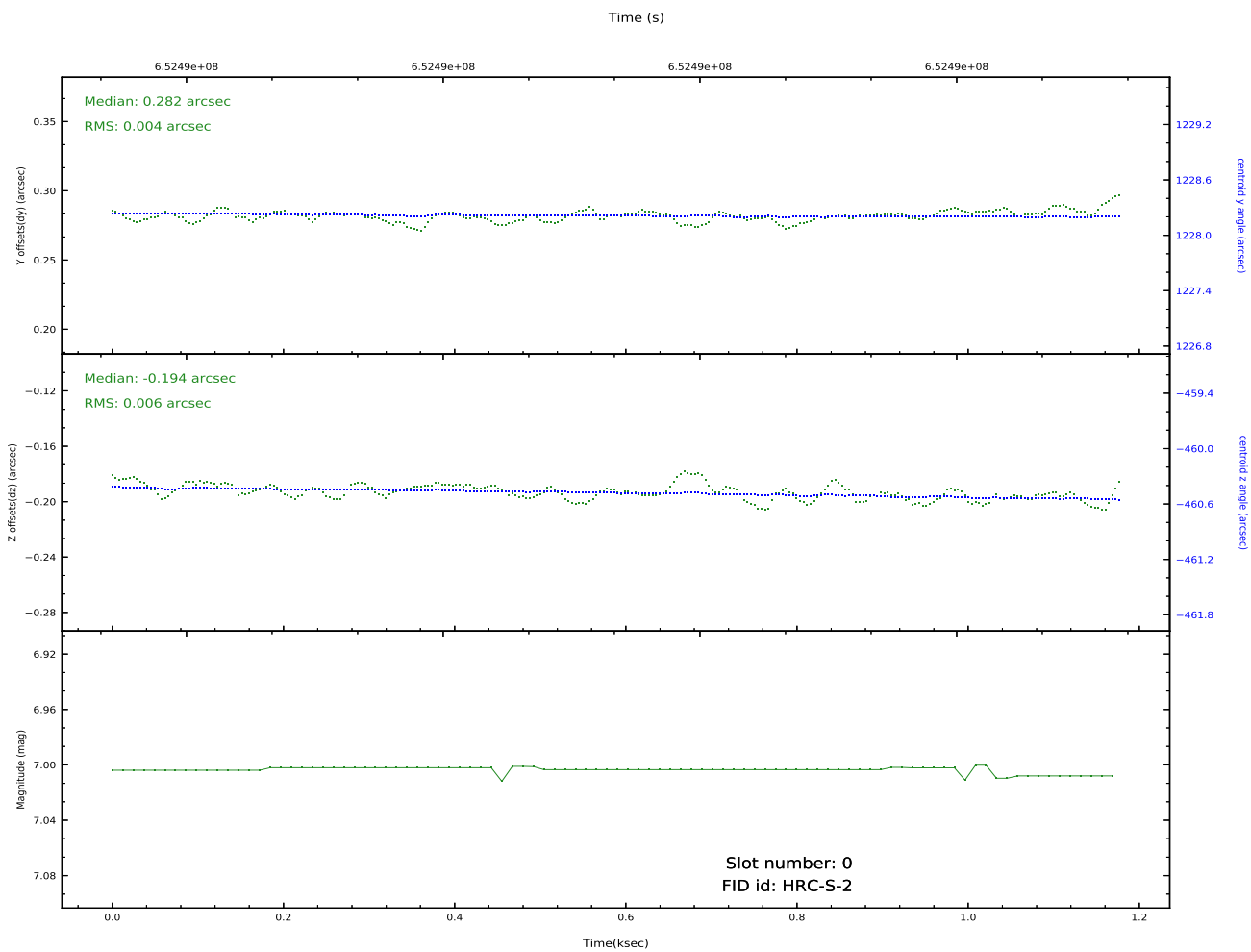
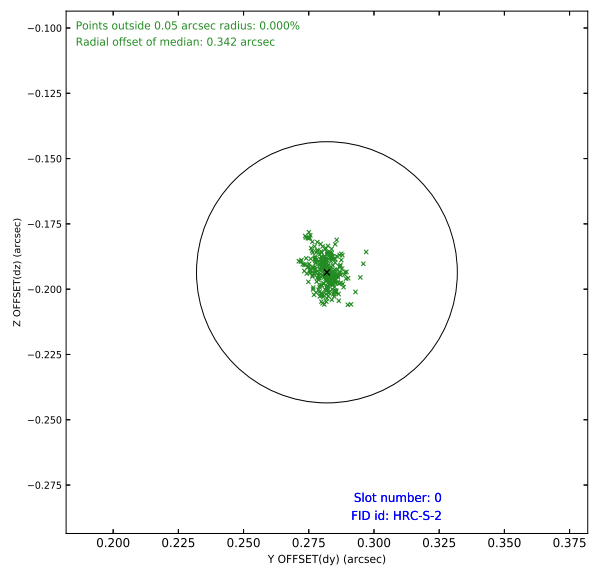
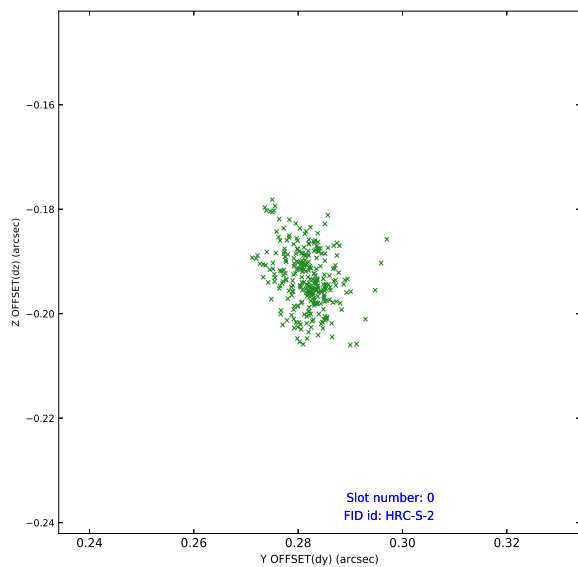


## 2.4.5 Slot 7

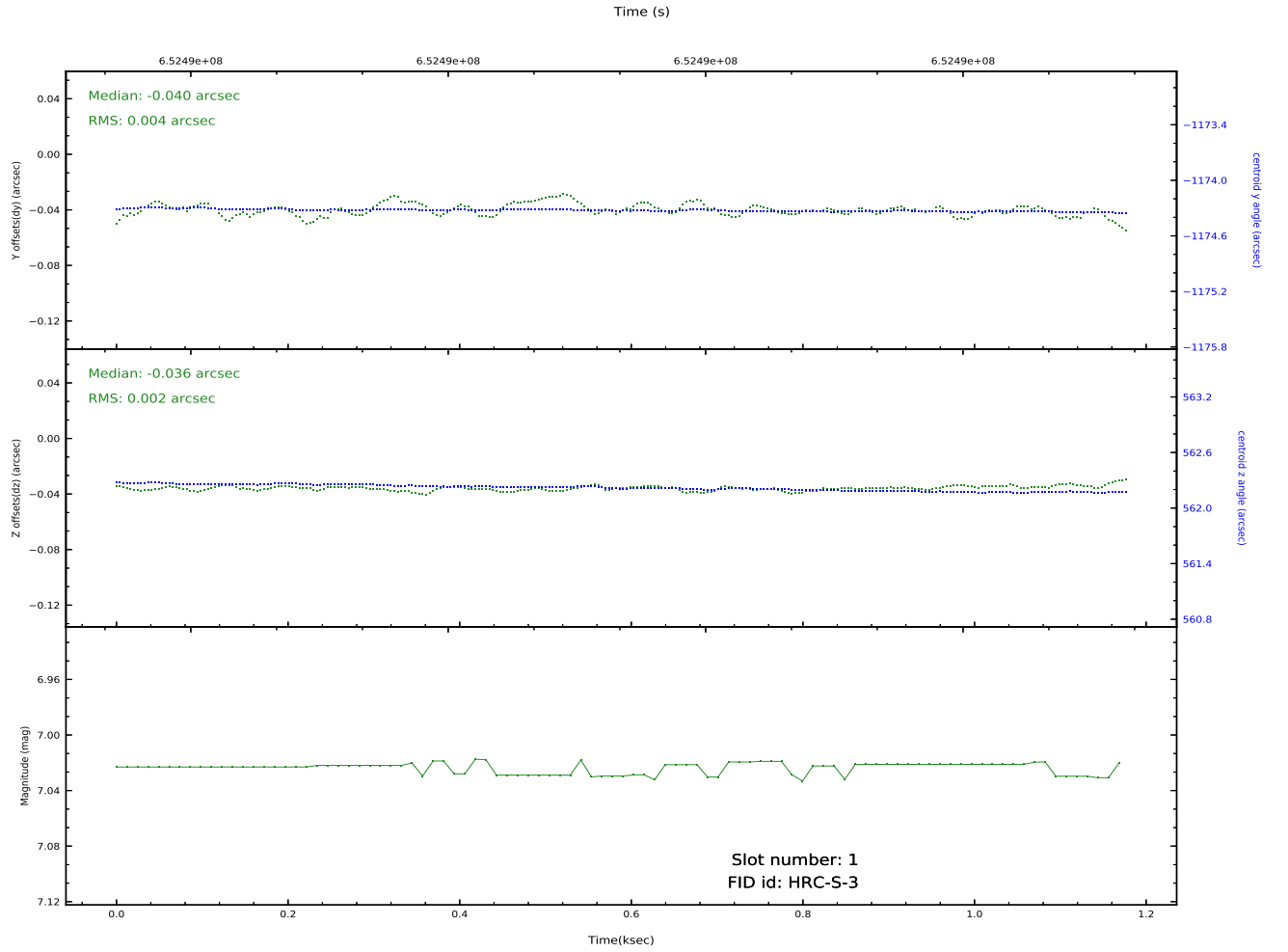
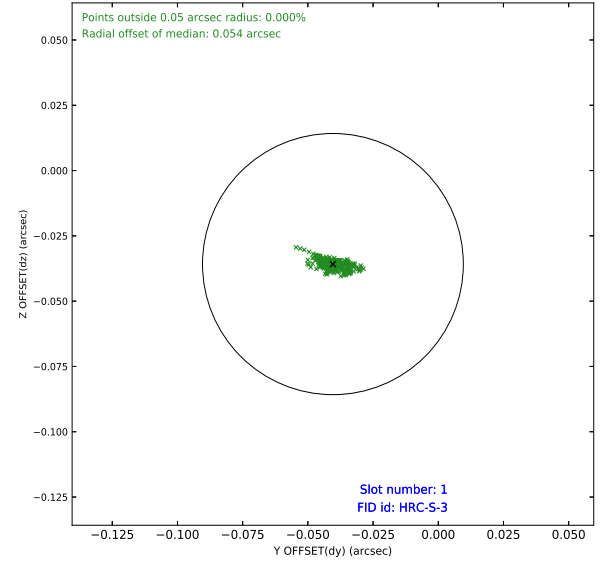
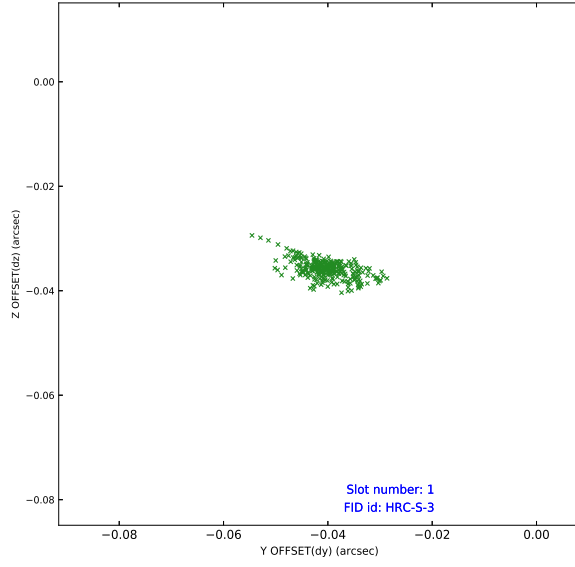


## 2.5 FID Slots

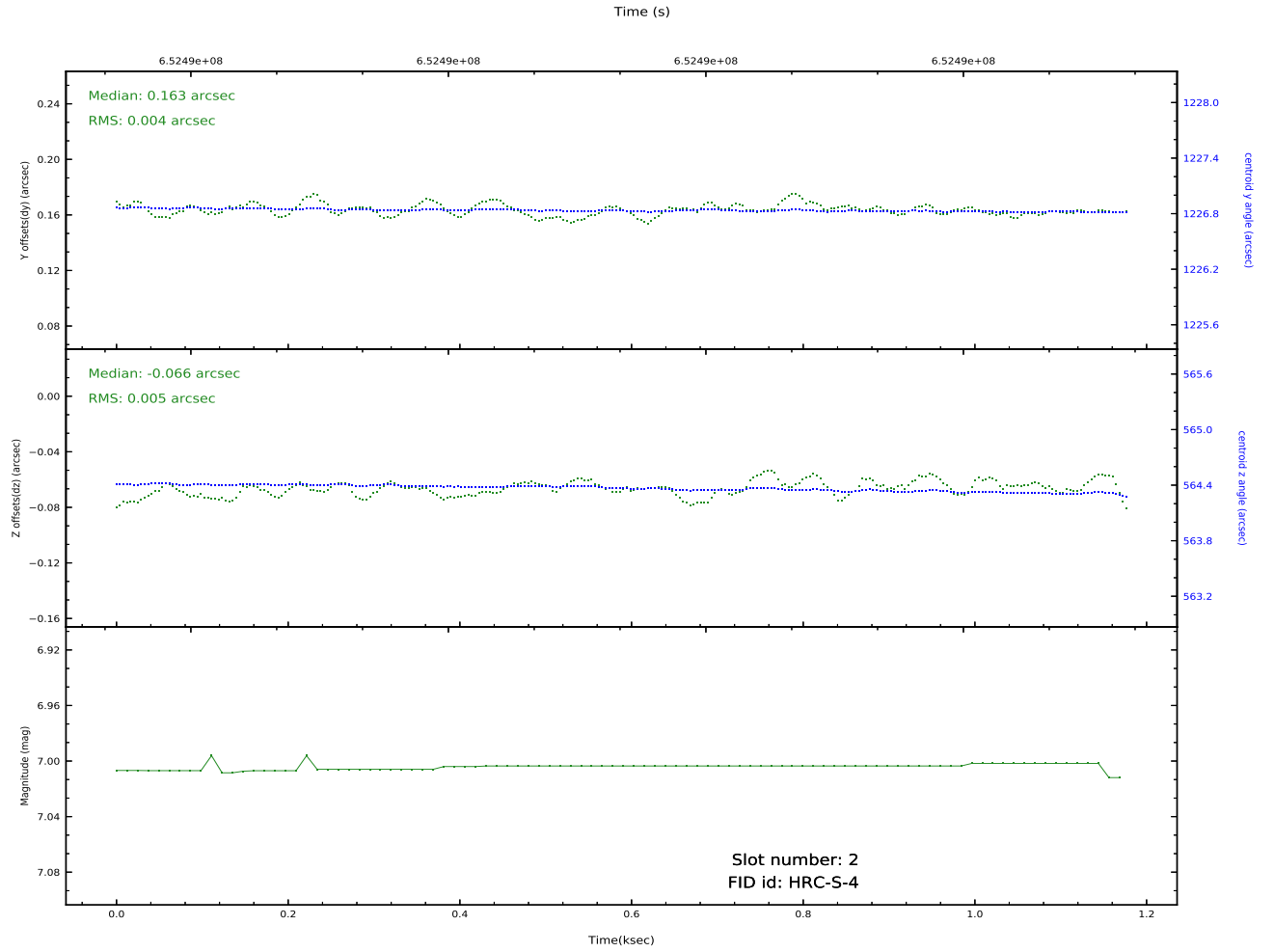
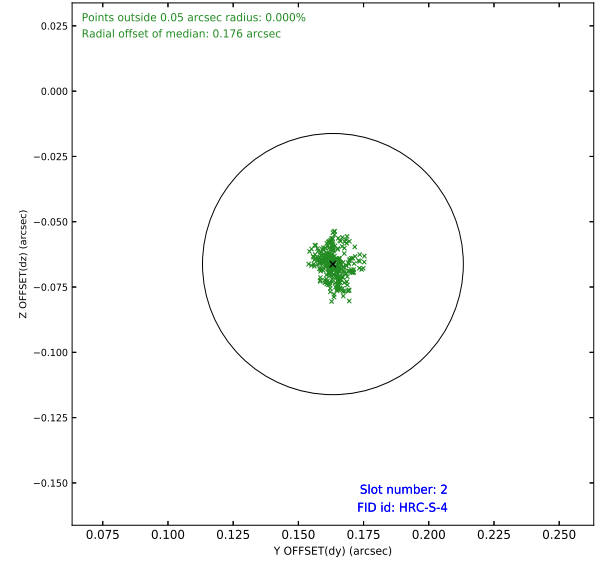
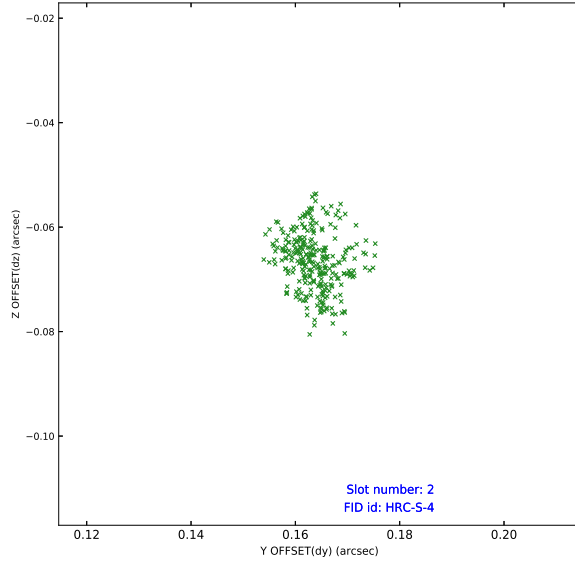
### 2.5.1 Slot 0



## 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	1.175931319952

### A.2 Comments