

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5082 - L2 Version 4  
Chandra X-Ray Center

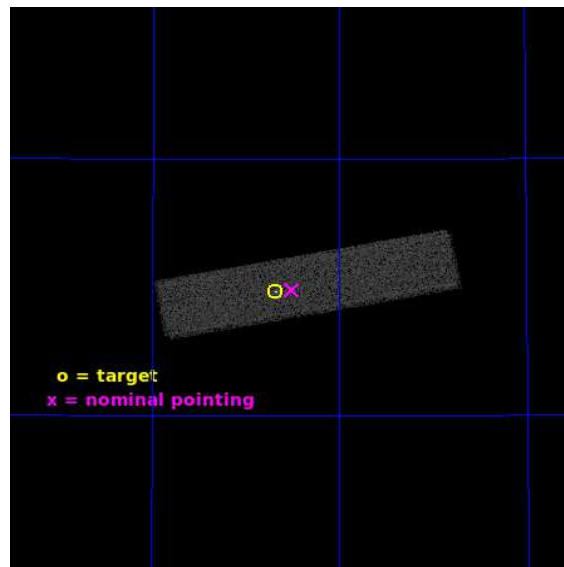
L2 Processing Date : Sep 23 2020

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# 1 Front

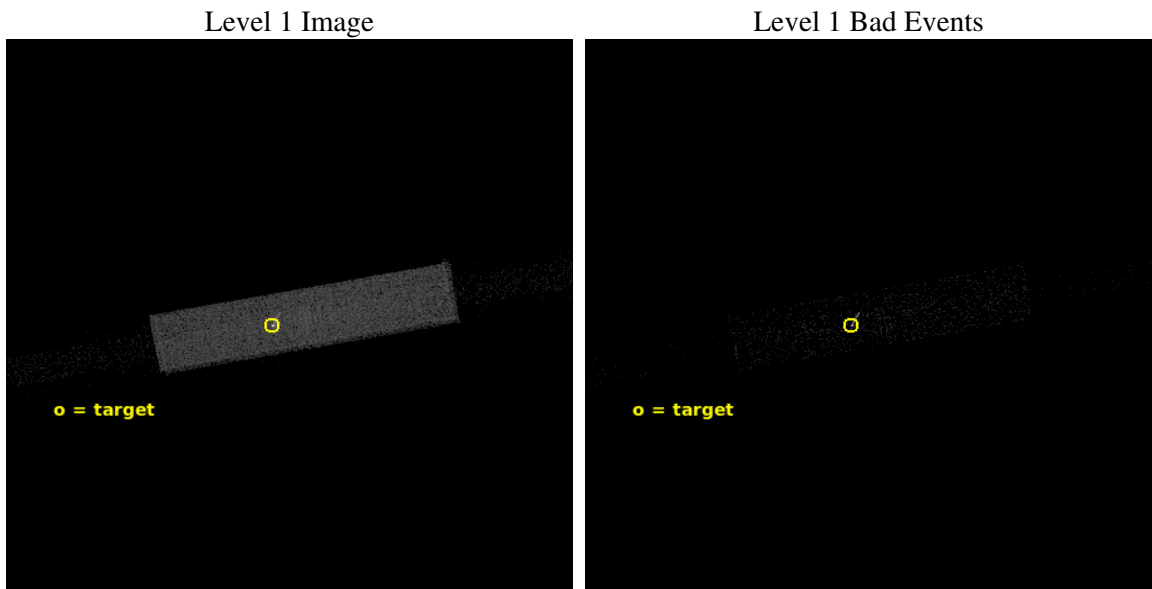
seq_num	290355	Sequence number
obs_id	5082	Observation id
title	AO5A Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.12616843692	Nominal RA [deg]
dec_nom	45.745690667426	Nominal Dec [deg]
roll_nom	349.47078181251	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1088.8062976301	[s]
livetime	1082.9537133124	Ontime multiplied by DTCOR
l2events	40360	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	946.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	1088.8062976301	[s]
caldbver	4.9.2	&#160	l1events	68373	Number of level 1 events
date	2020-09-23T04:19:41	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

Level 1 Events

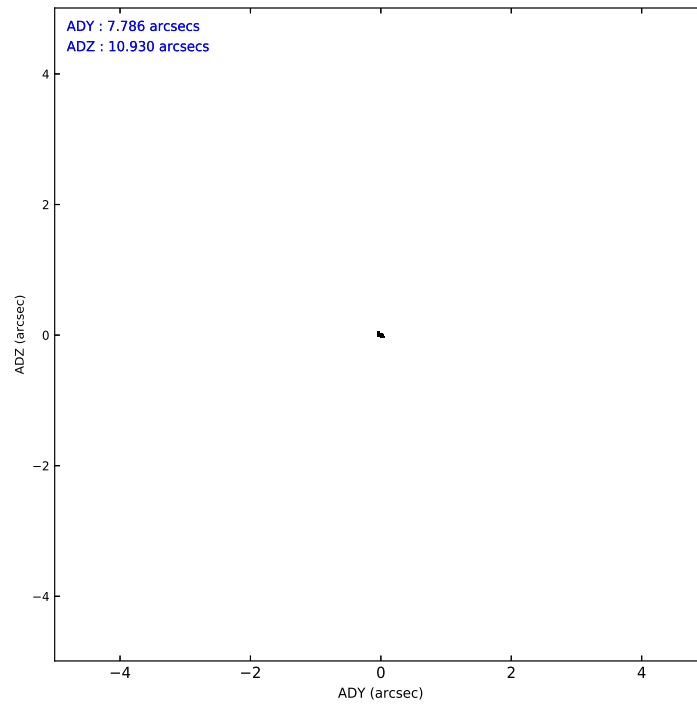
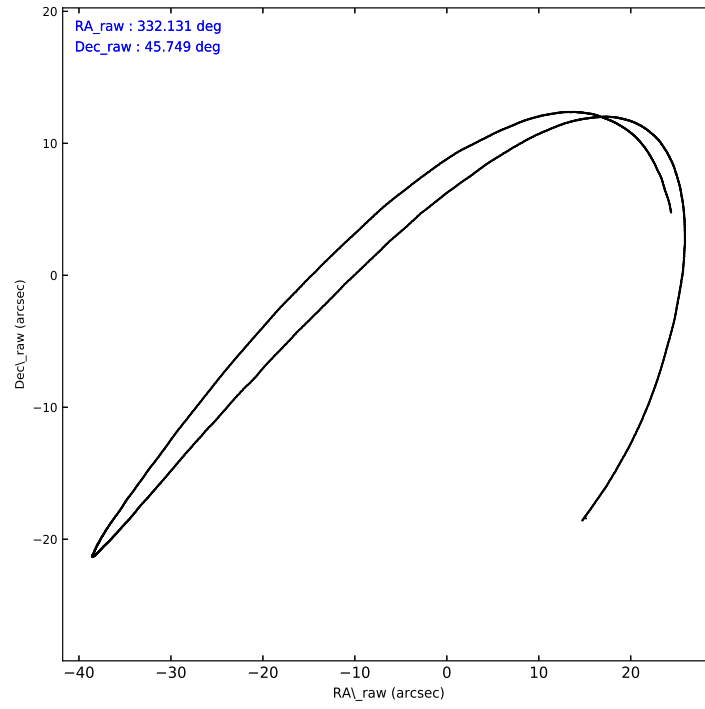
	segment 1	segment 2	segment 3
level 1 events	1148	66118	1107
rejected events	1148	15658	1107
rejected %	100%	23%	100%

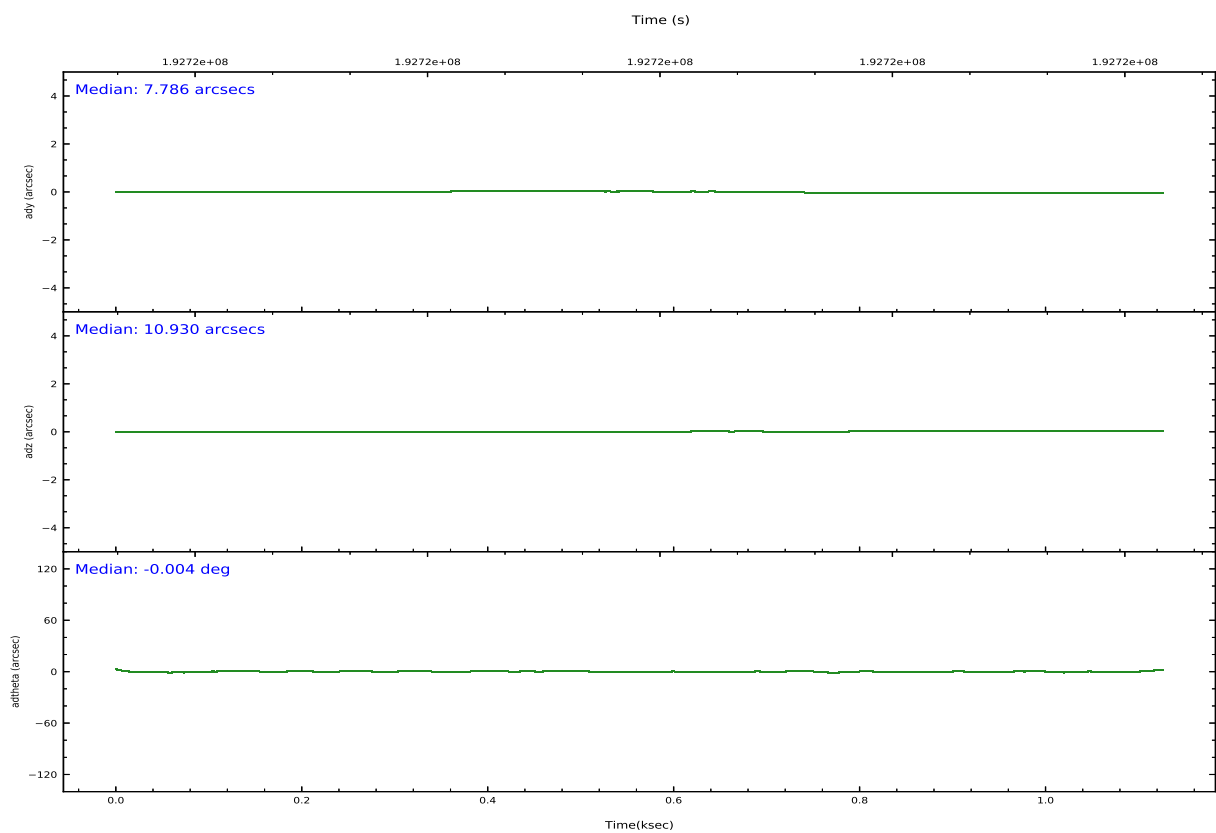
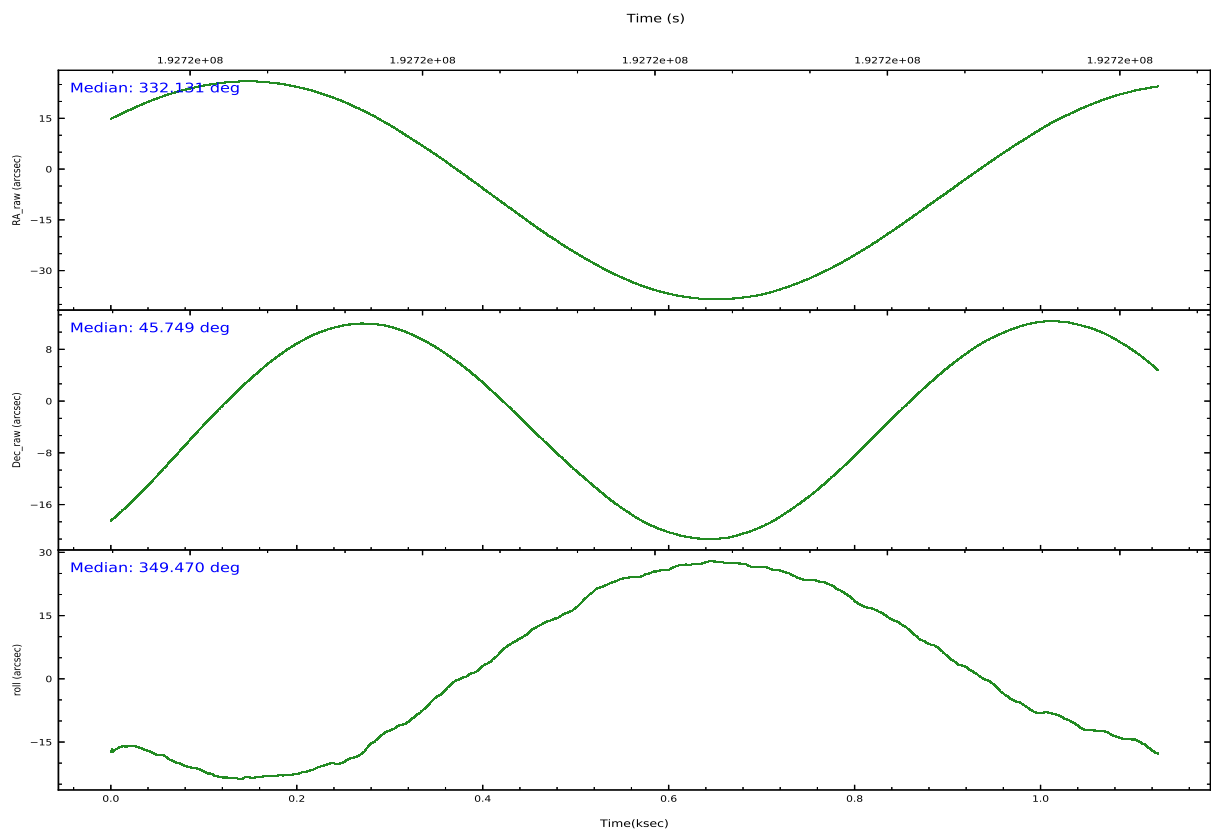
## 2.2 Compared Parameters

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	332.091689	332.12616843692
[deg] Pointing Dec	45.736588	45.745690667426
[deg] Pointing Roll	349.435596	349.47078181251
[mm] SIM focus pos	-1.429586	-1.428180813131781
[mm] SIM defocus	0.1037507710433287	0.1051558262725154
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	192721345.184000	192720968.54706
Observation start date	2004-02-09T13:41:21	2004-02-09T13:36:08
[s] Observation end time (MET)	192722291.184000	192722425.07213
Observation end date	2004-02-09T13:57:07	2004-02-09T14:00:25

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

## 2.3 Aspect





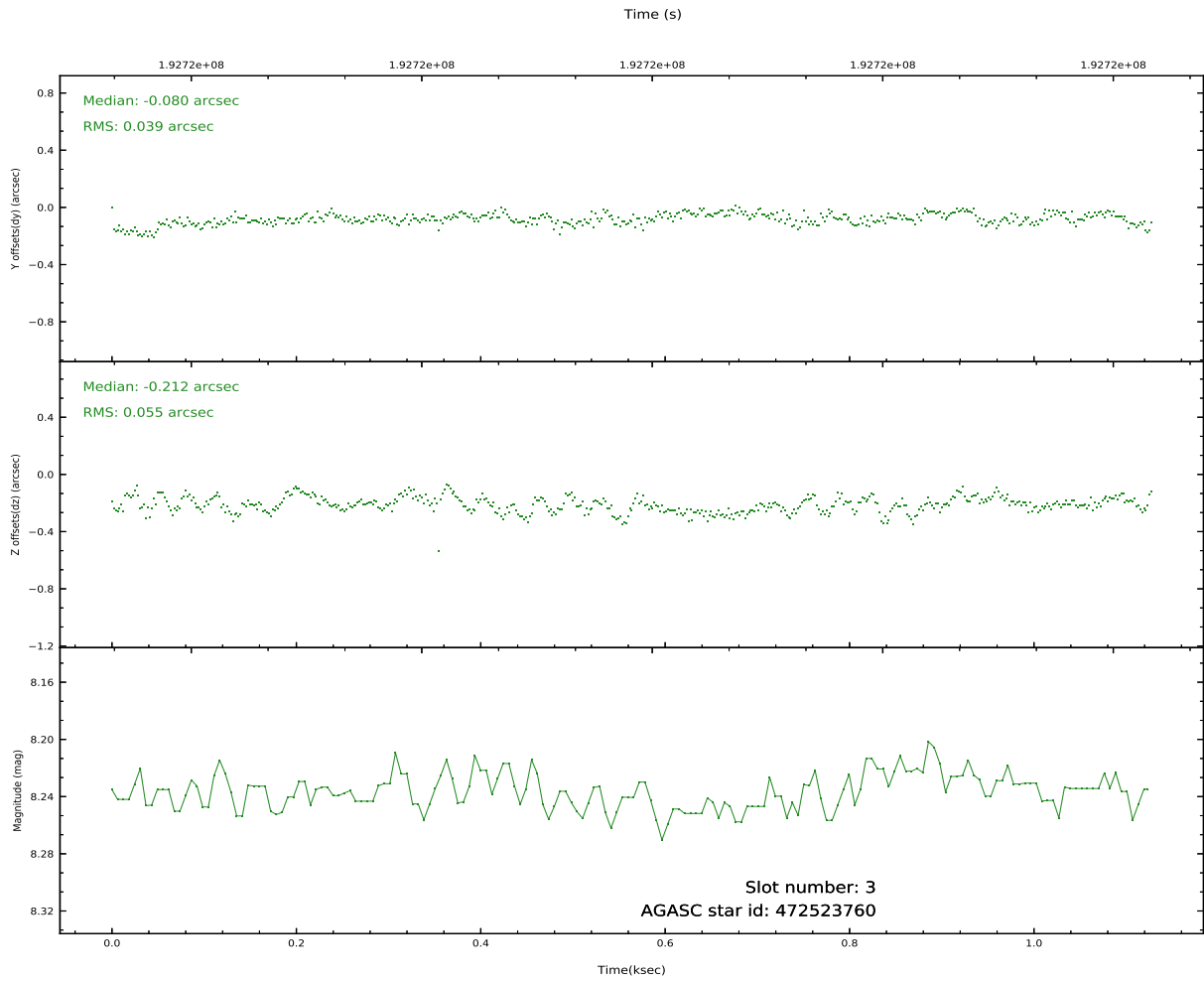
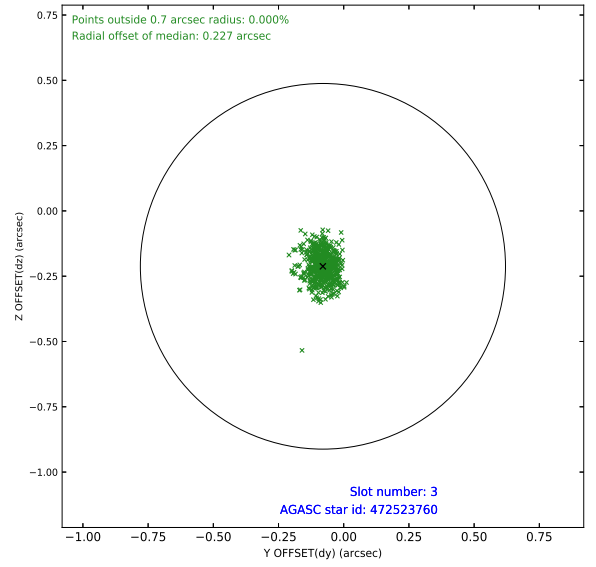
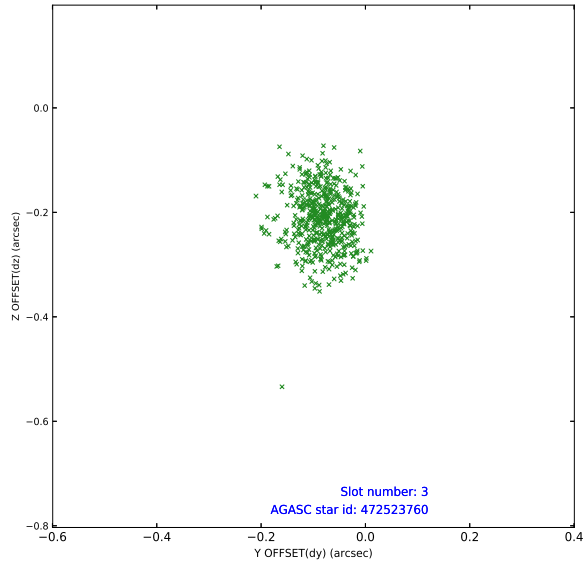
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.05	275	1.000	0.118	-0.184	0.007	0.012	0.000000	0.000000	-1161.95	-459
1	FID		HRC-S-2	7.04	275	1.000	0.171	-0.113	0.005	0.009	0.000000	0.000000	1233.55	-453
2	FID		HRC-S-3	7.05	275	1.000	0.100	-0.005	0.007	0.012	0.000000	0.000000	-1160.21	568
3	GUIDE	used	472523760	8.24	551	1.000	-0.080	-0.212	0.072	0.119	331.645363	45.403260	-889.94	-1387
4	GUIDE	used	472533912	9.17	551	1.000	-0.038	0.069	0.112	0.172	331.791136	46.368695	-1153.83	2095
5	GUIDE	used	472654568	9.43	551	1.000	-0.043	0.012	0.113	0.182	332.194449	45.063576	698.87	-2333
6	GUIDE	used	472655152	9.42	550	1.000	0.110	0.035	0.093	0.190	332.504239	45.862991	933.73	632
7	GUIDE	used	472659832	9.46	550	1.000	0.039	0.098	0.100	0.151	332.780399	46.098139	1451.28	1600

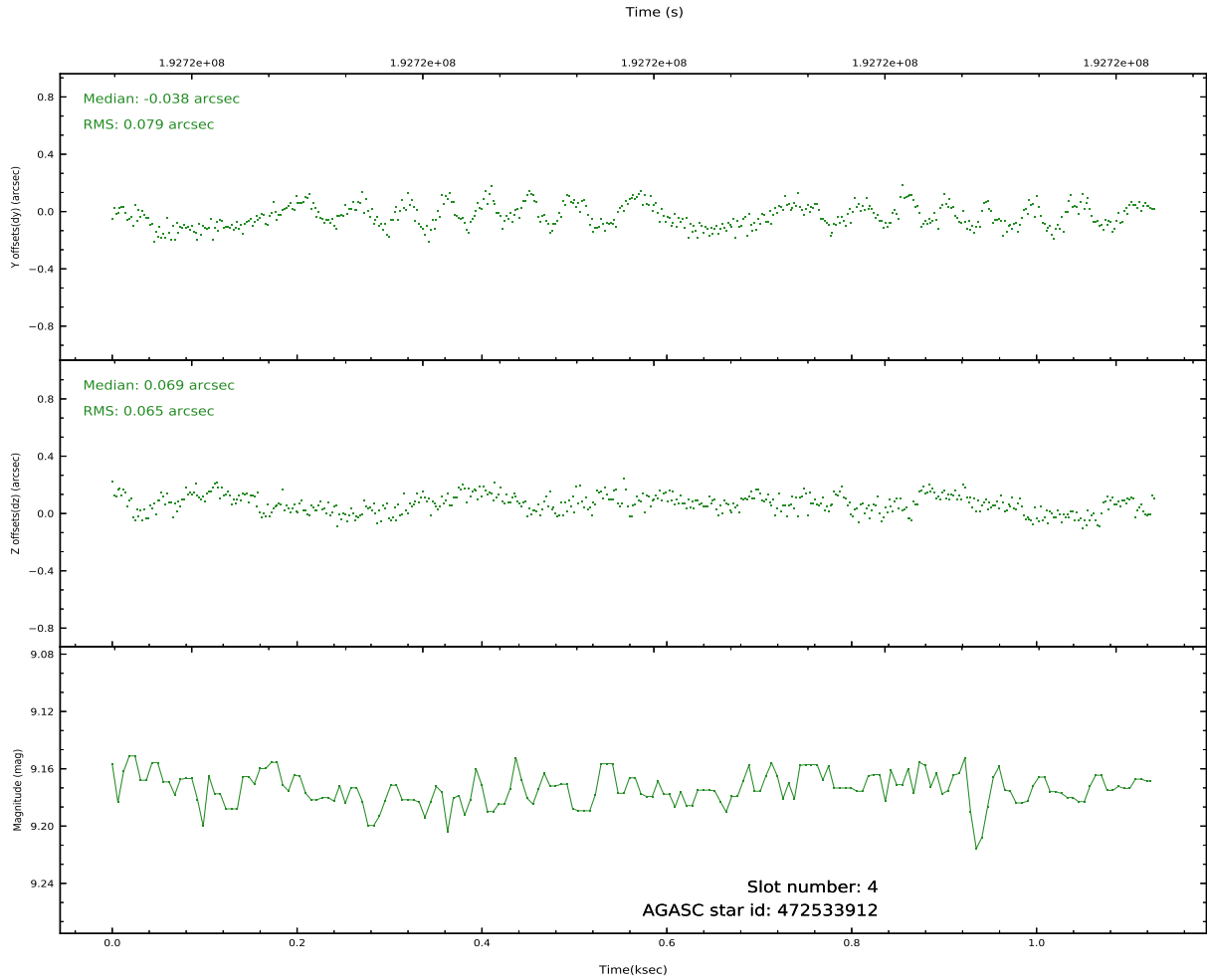
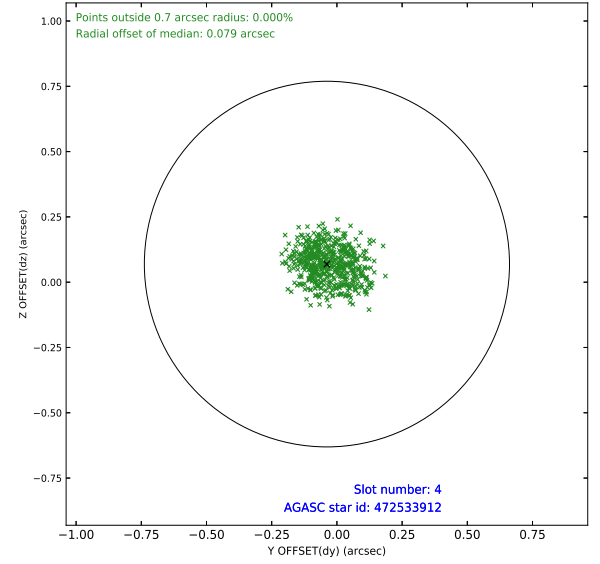
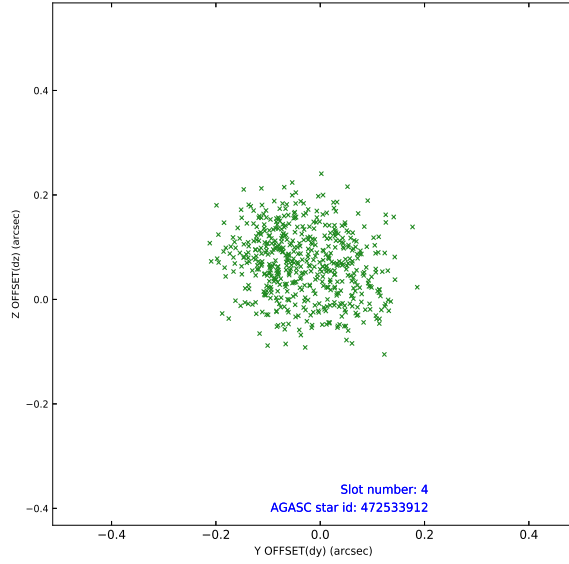


## 2.4 Star Slots

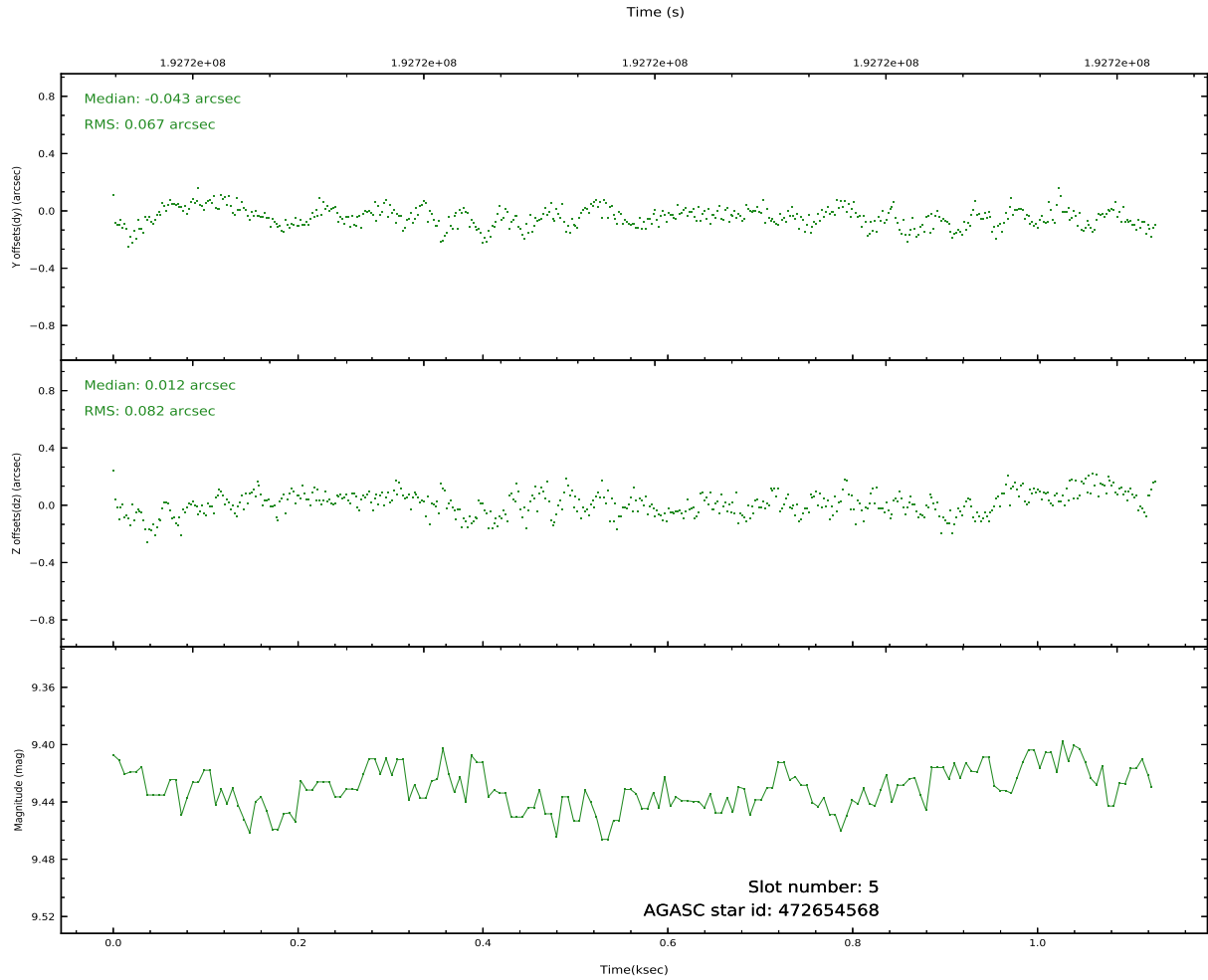
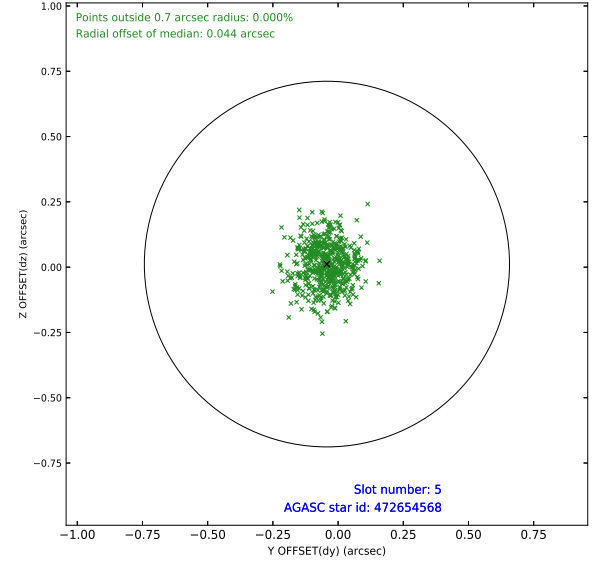
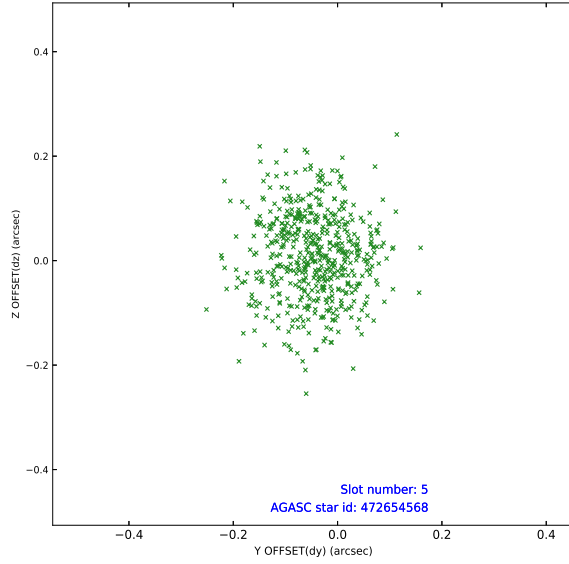
### 2.4.1 Slot 3



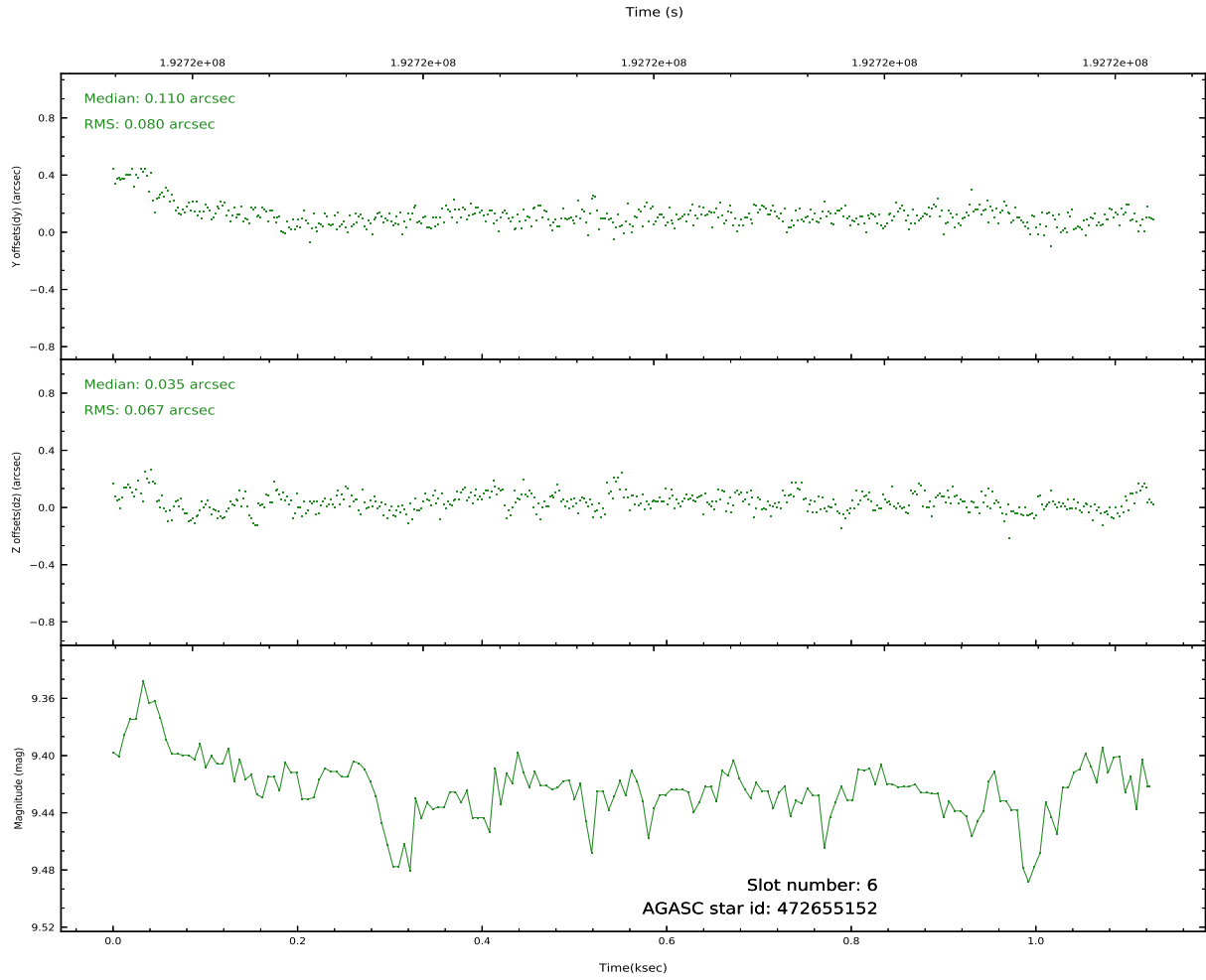
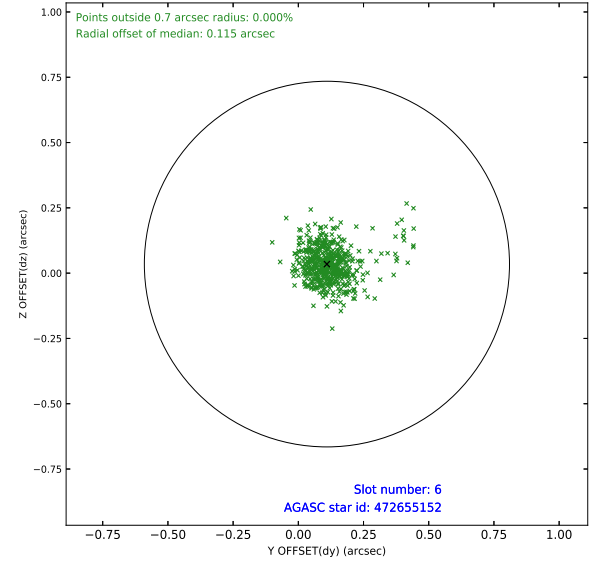
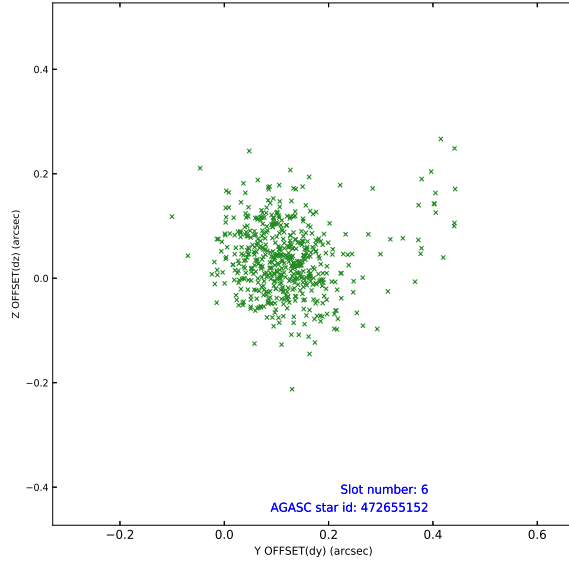
## 2.4.2 Slot 4



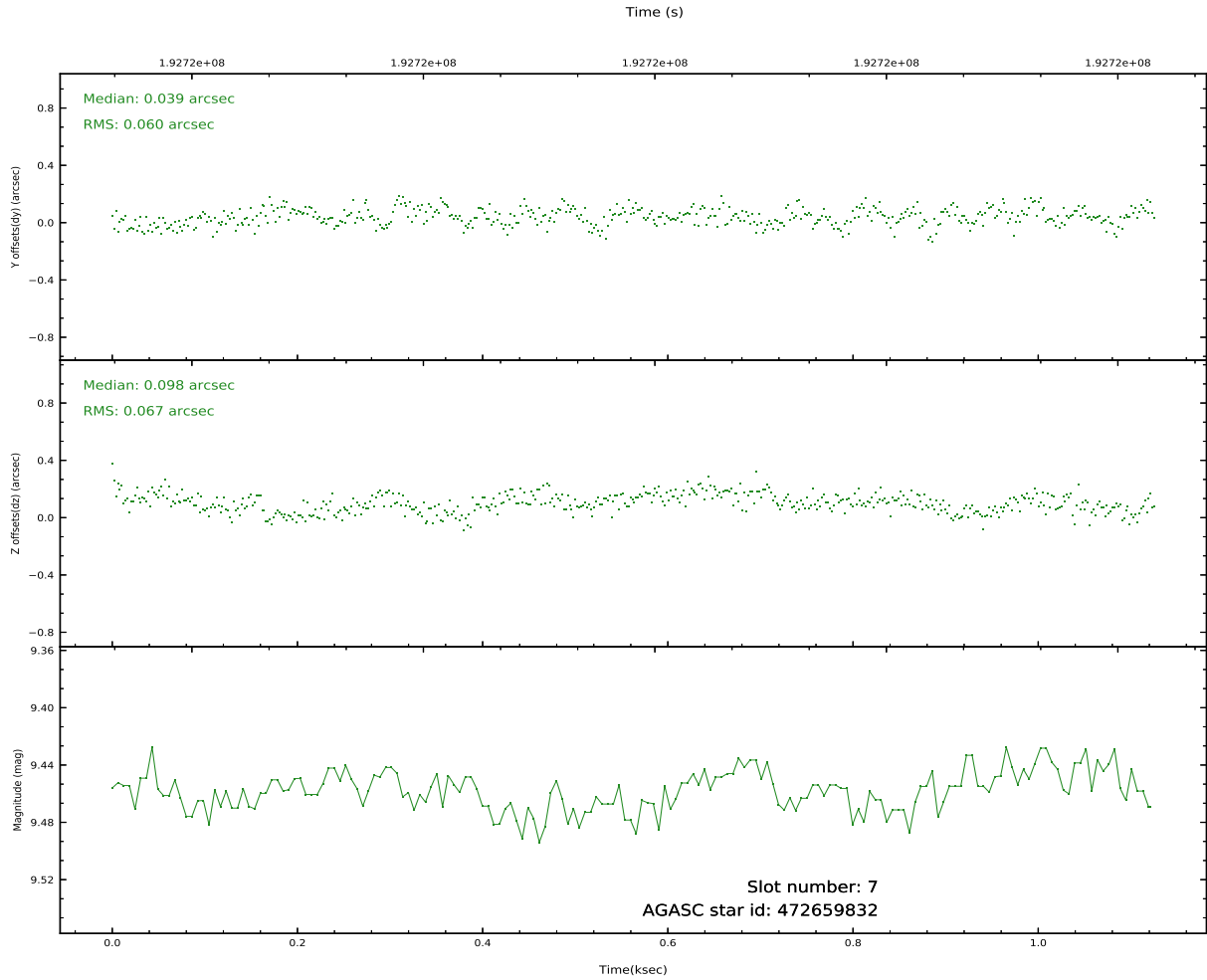
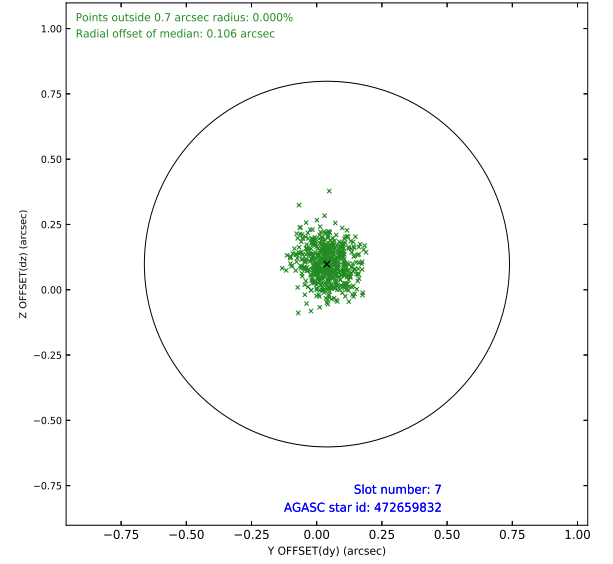
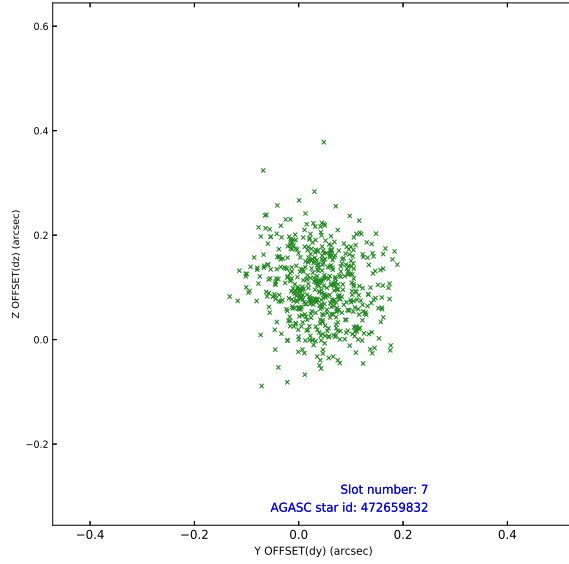
### 2.4.3 Slot 5



## 2.4.4 Slot 6

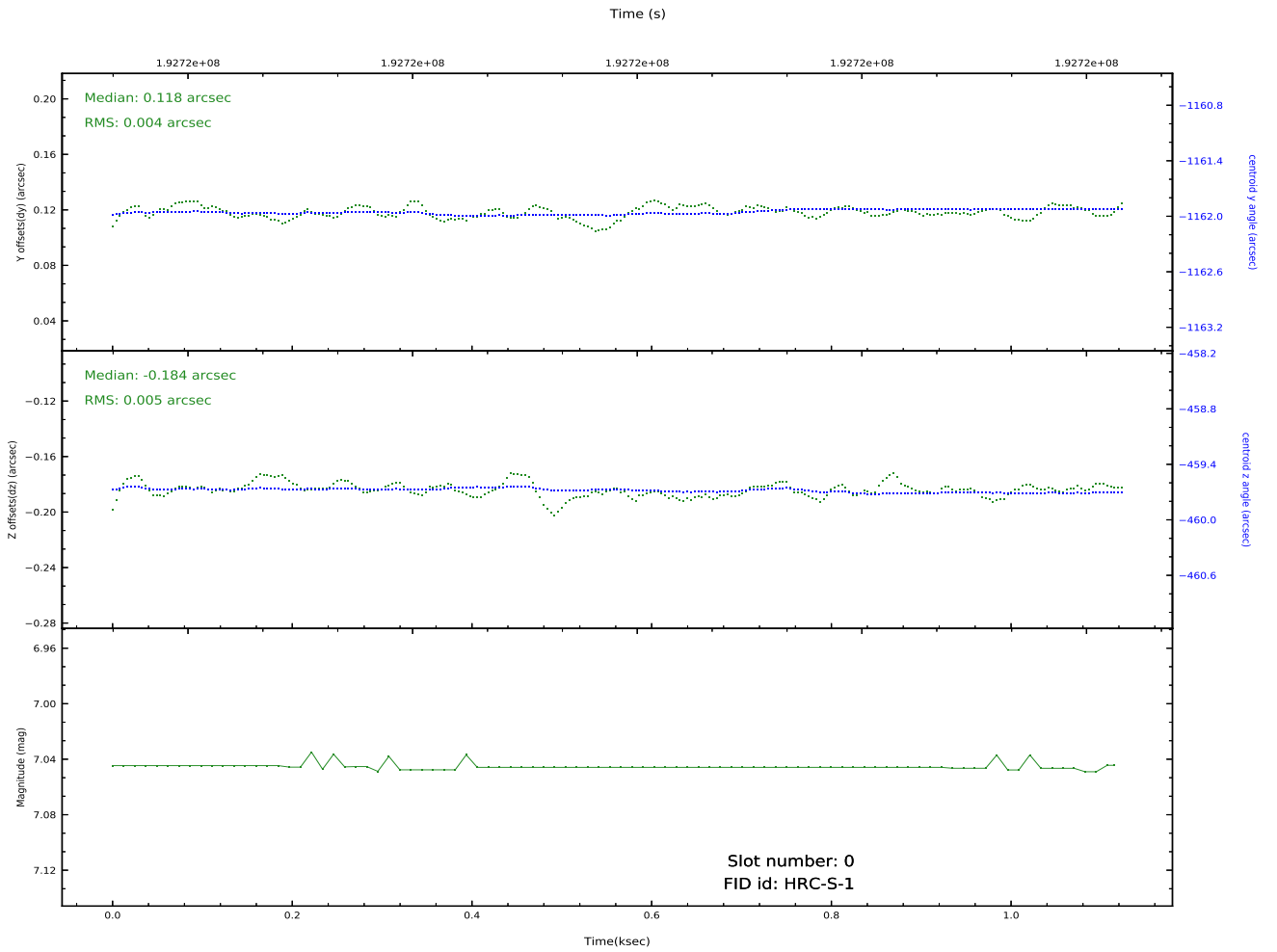
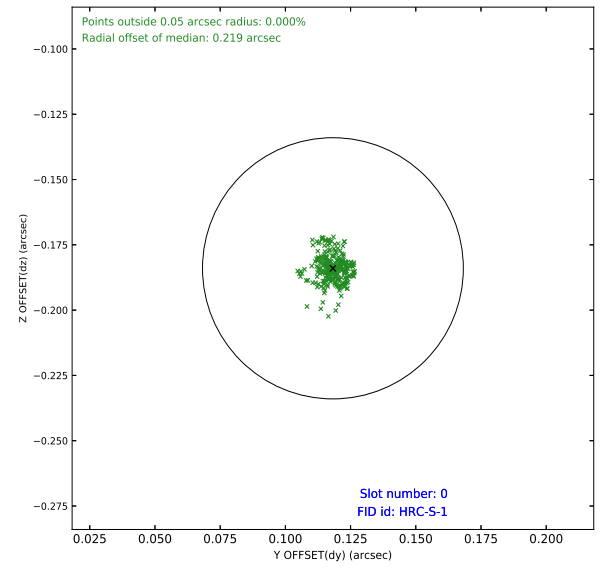
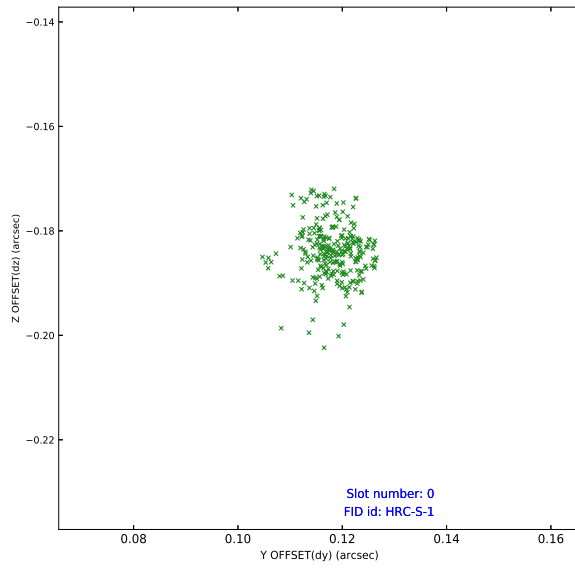


## 2.4.5 Slot 7

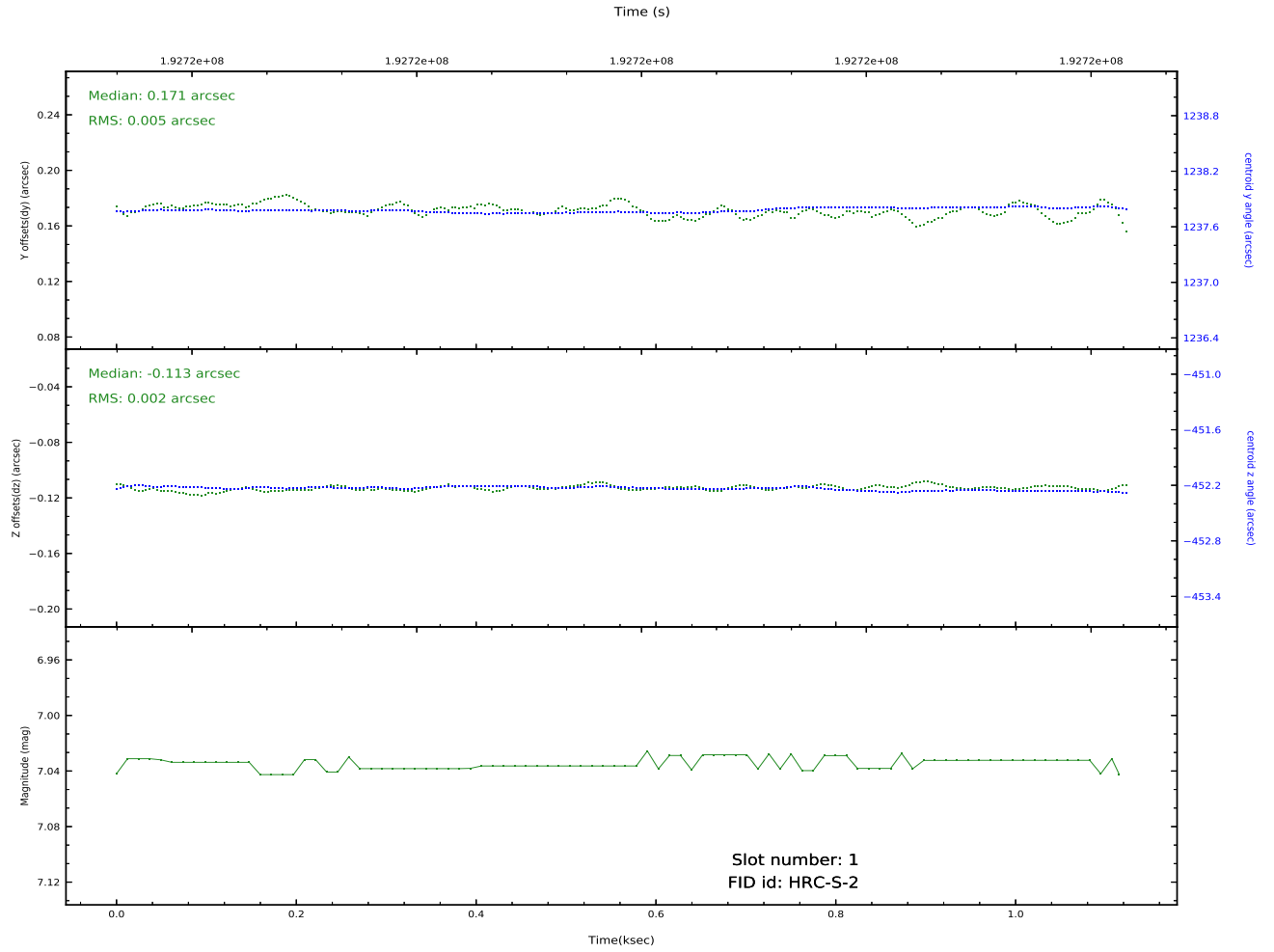
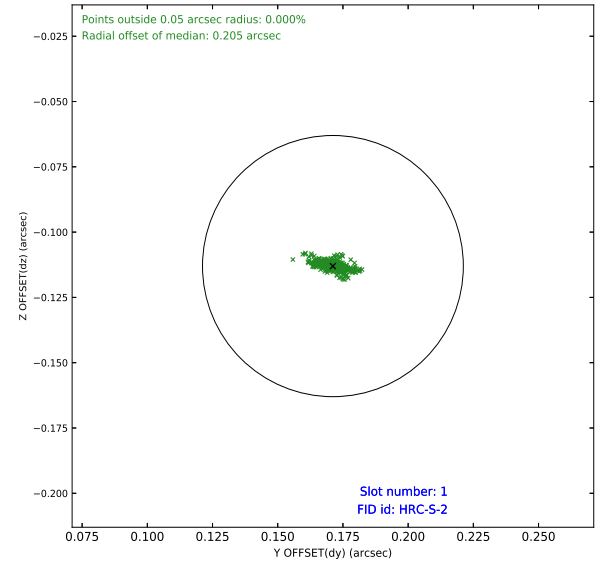
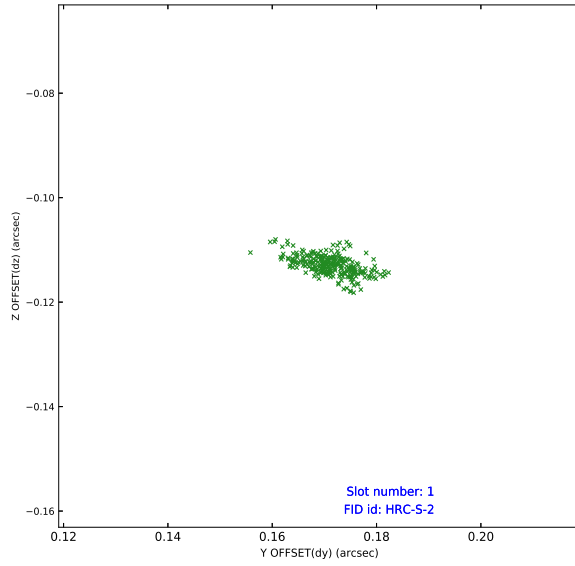


## 2.5 FID Slots

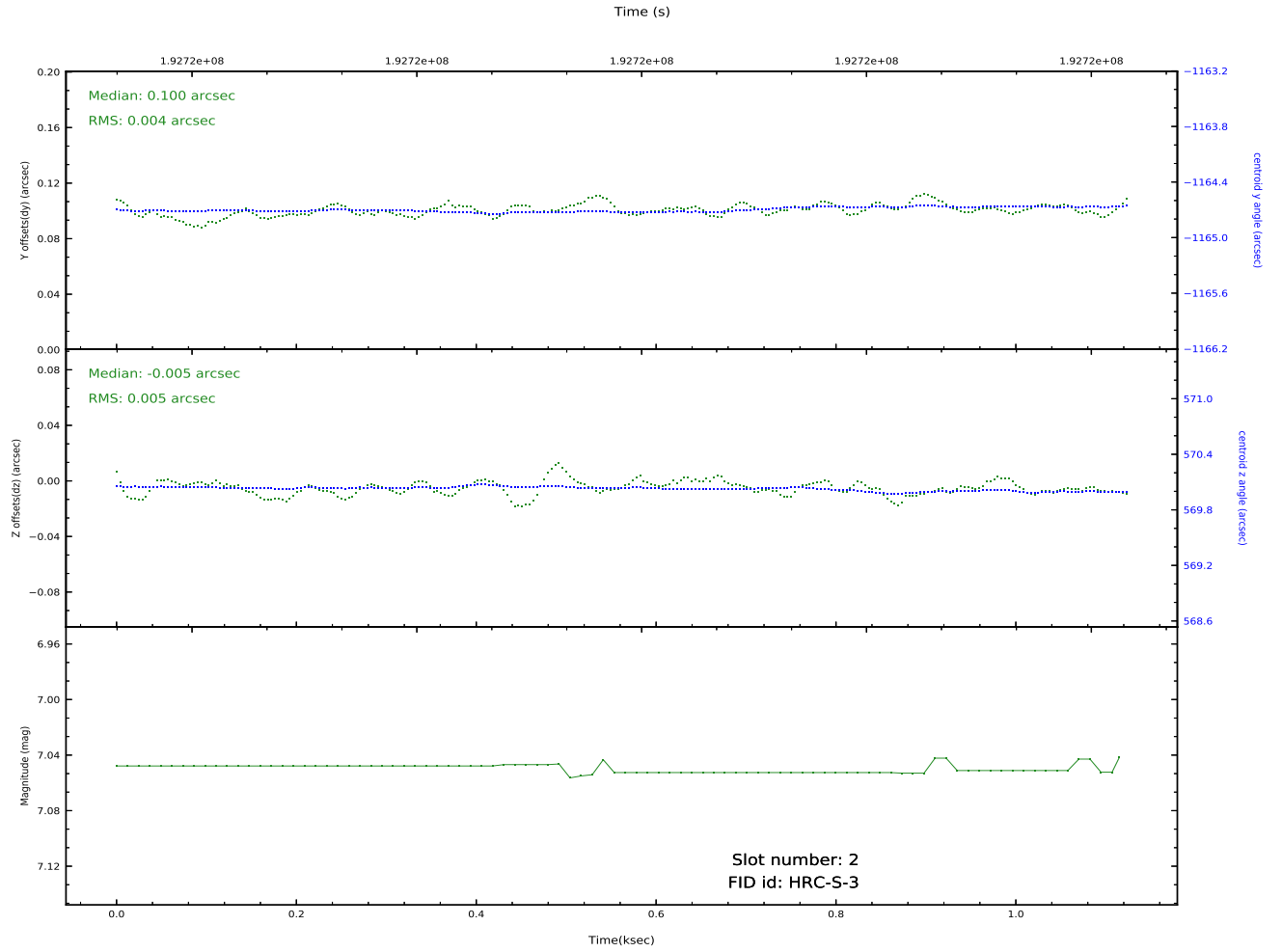
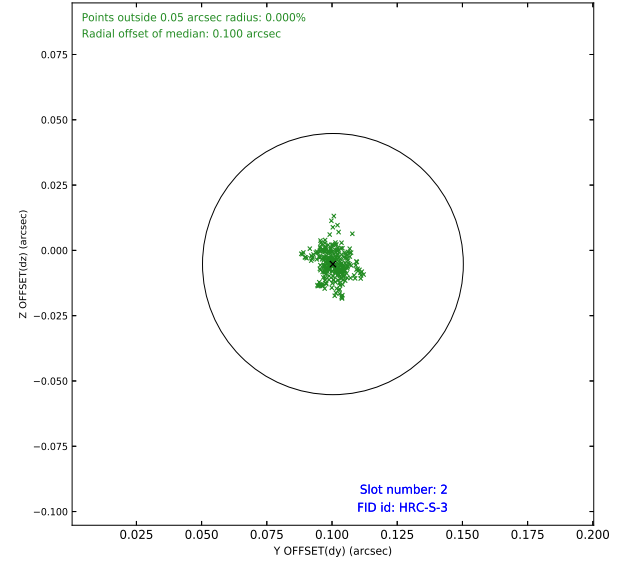
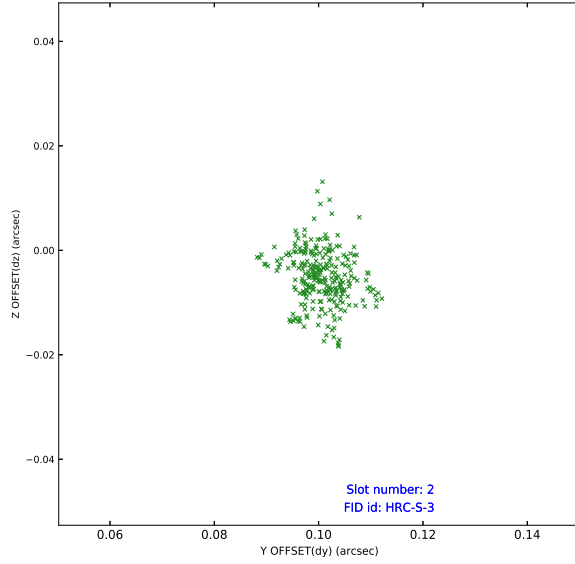
### 2.5.1 Slot 0



## 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)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.088

### A.2 Comments