

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20697 - L2 Version 2  
Chandra X-Ray Center

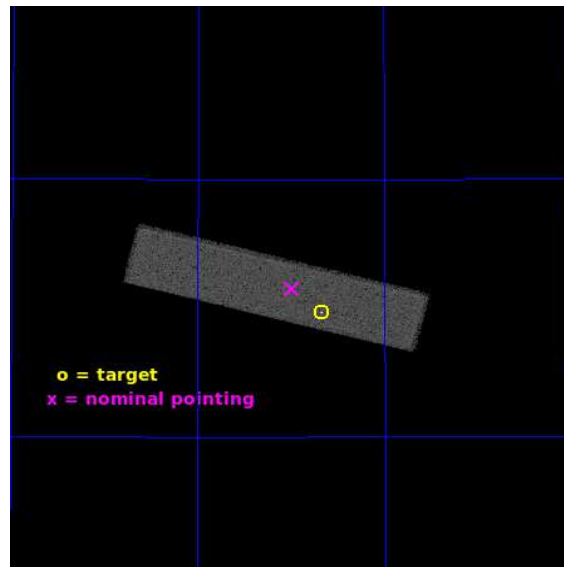
L2 Processing Date : Oct 27 2020

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# 1 Front

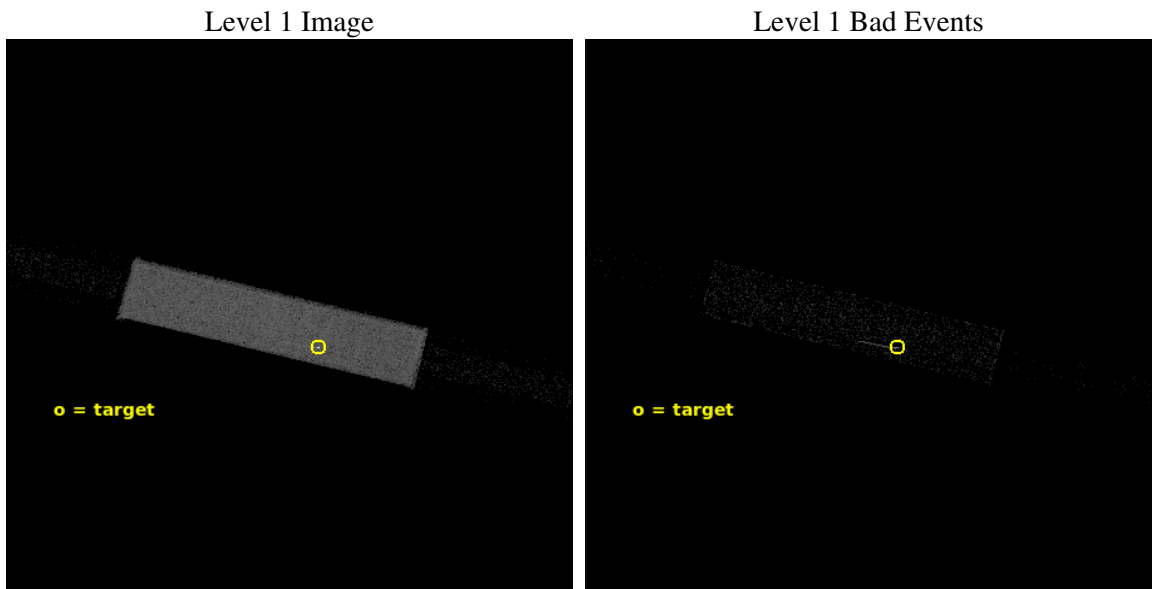
seq_num	291408	Sequence number
obs_id	20697	Observation id
title	AO-19 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.24774673135	Nominal RA [deg]
dec_nom	45.788373526934	Nominal Dec [deg]
roll_nom	194.0548724685	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1177.7250699997	[s]
livetime	1167.7218174288	Ontime multiplied by DTCOR
l2events	76723	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	1177.7250699997	[s]
caldsver	4.9.3	&#160	l1events	115984	Number of level 1 events
date	2020-10-27T16:45:09	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

Level 1 Events

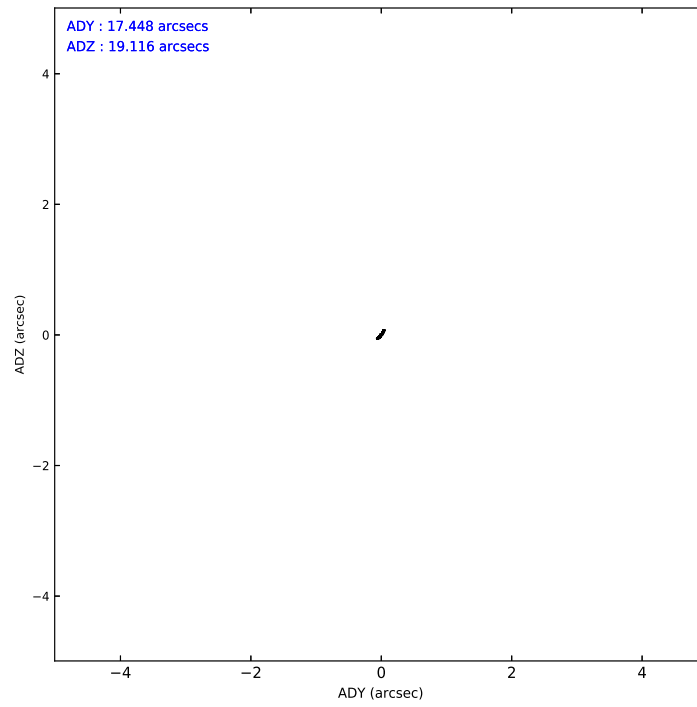
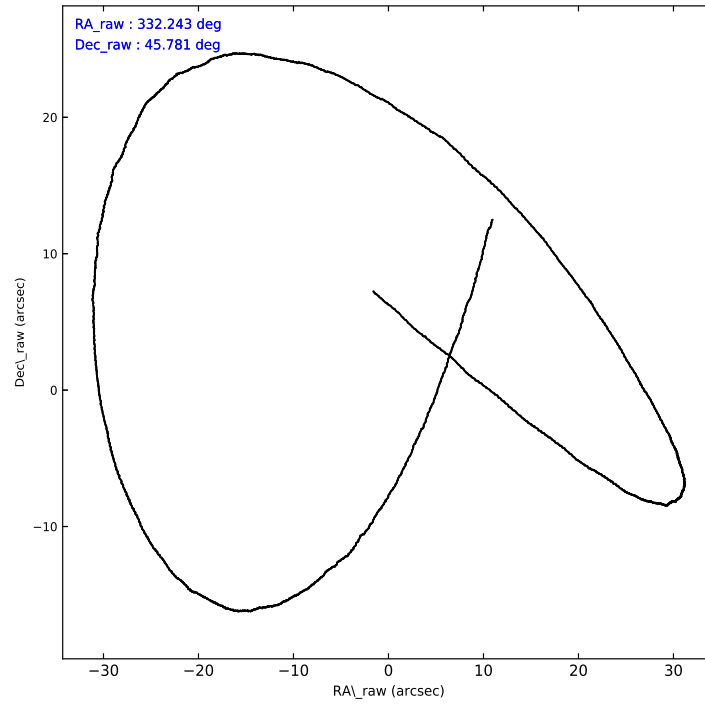
	segment 1	segment 2	segment 3
level 1 events	1083	113883	1018
rejected events	1083	24328	1018
rejected %	100%	21%	100%

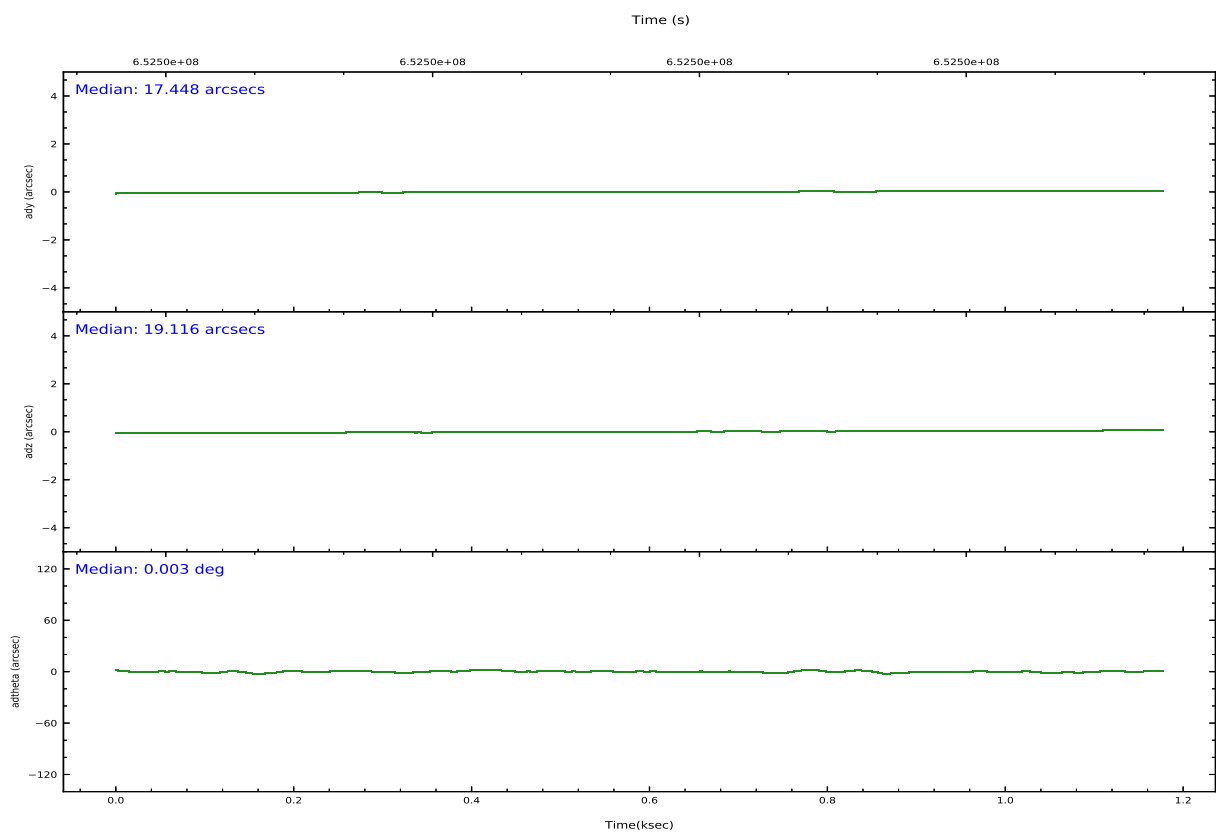
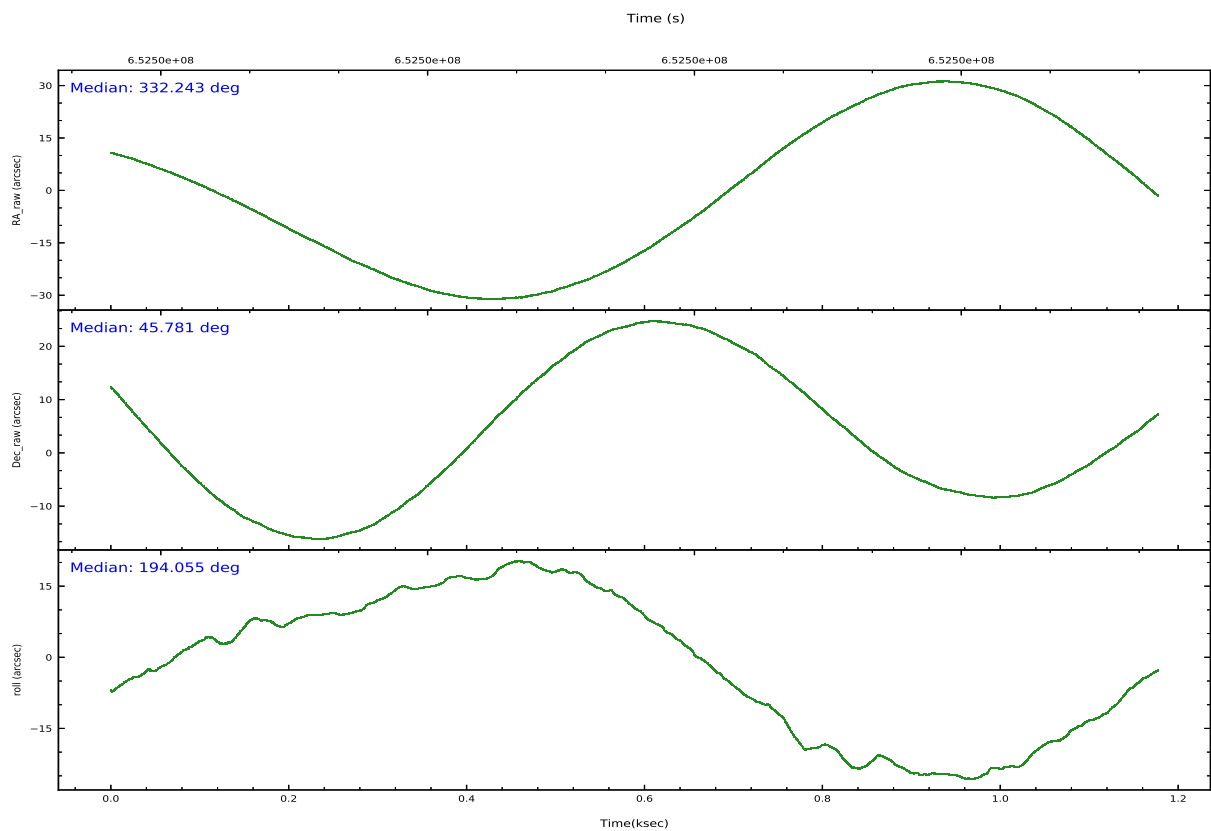
## 2.2 Compared Parameters

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	332.270337	332.24774673135
[deg] Pointing Dec	45.803984	45.788373526934
[deg] Pointing Roll	193.977781	194.0548724685
[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)	652497521.184000	652497145.36323
Observation start date	2018-09-05T01:17:32	2018-09-05T01:12:25
[s] Observation end time (MET)	652498521.184000	652498655.18832
Observation end date	2018-09-05T01:34:12	2018-09-05T01:37:35

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

## 2.3 Aspect





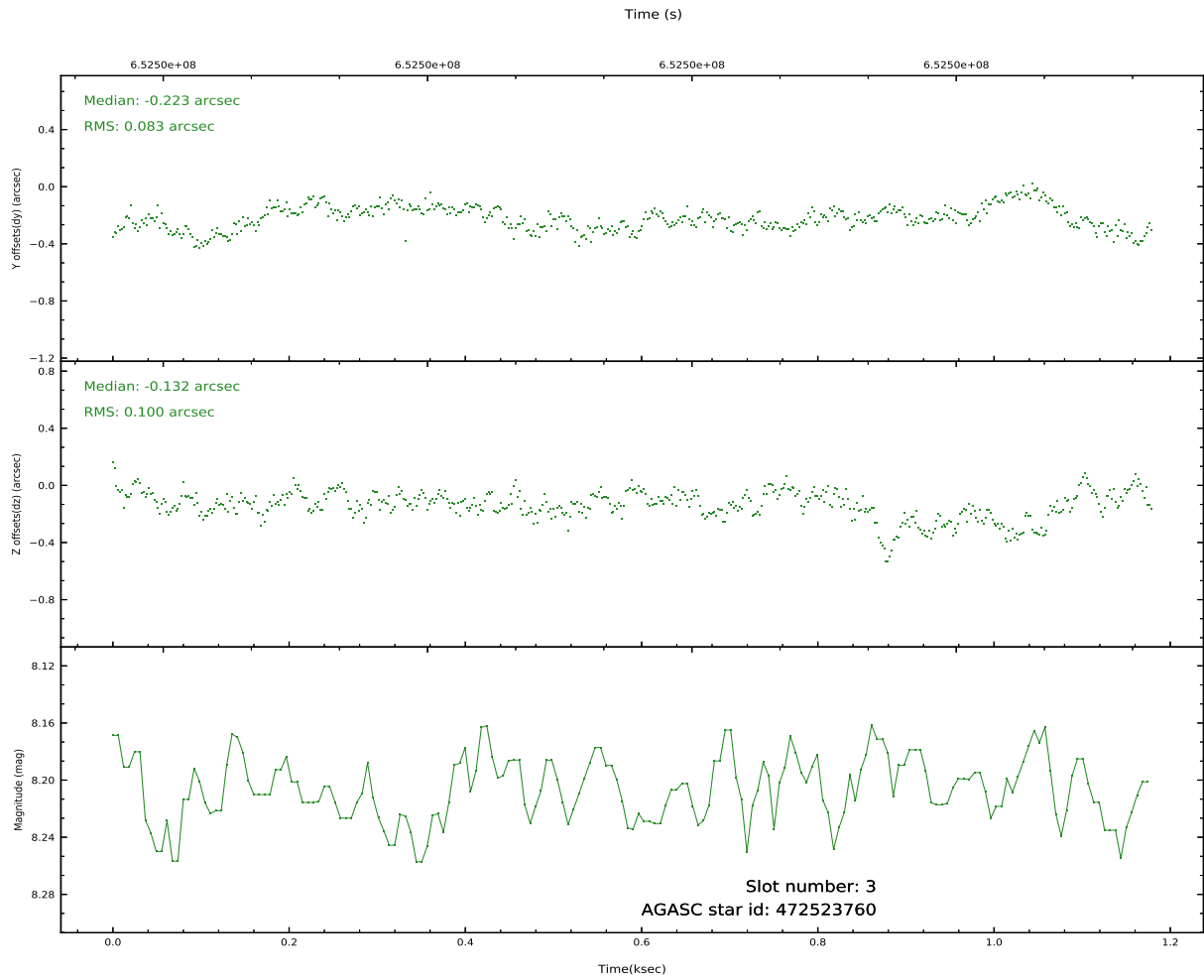
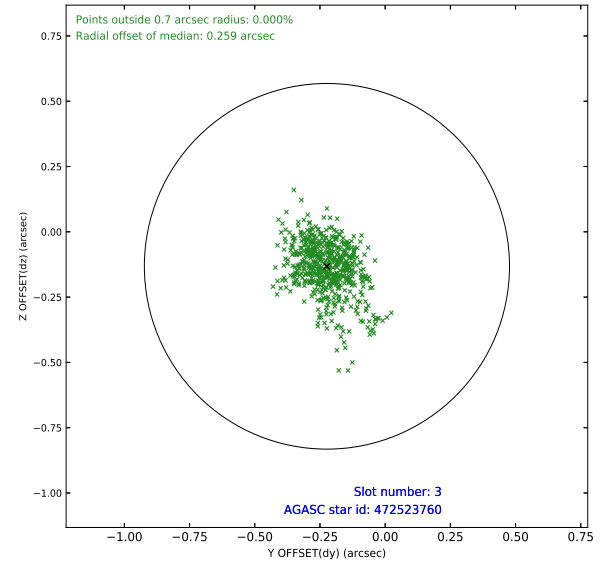
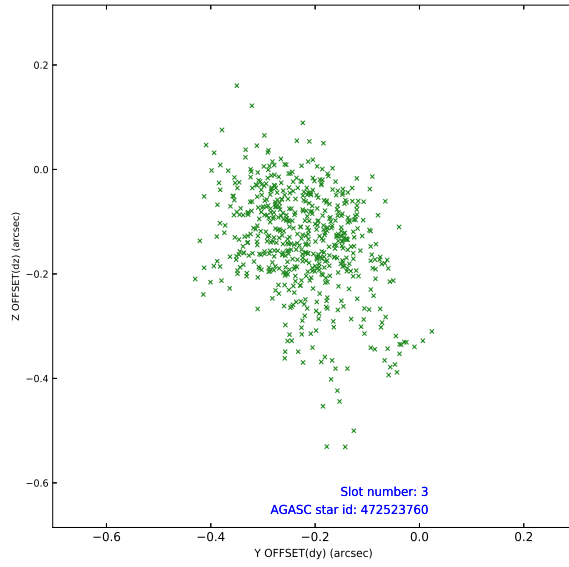
Slot Statistics

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	7.04	288	1.000	0.107	-0.277	0.007	0.012	0.000000	0.000000	-1171.92	-468
1	FID		HRC-S-3	7.03	288	1.000	0.044	0.070	0.008	0.012	0.000000	0.000000	-1178.66	560
2	FID		HRC-S-4	7.01	288	1.000	0.237	-0.090	0.004	0.008	0.000000	0.000000	1222.46	565
3	GUIDE	used	472523760	8.21	576	1.000	-0.223	-0.132	0.129	0.253	331.645363	45.403260	1880.64	1008
4	GUIDE	used	472535576	7.83	576	1.000	-0.027	0.035	0.130	0.208	331.438373	46.291802	1585.90	-2216
5	GUIDE	used	472665256	8.95	576	1.000	0.183	-0.027	0.158	0.247	332.808125	46.195041	-1637.65	-1054
6	GUIDE	used	472533912	9.13	574	1.000	0.072	-0.020	0.201	0.319	331.791136	46.368695	661.65	-2269
7	GUIDE	used	472663088	8.94	575	1.000	0.001	0.141	0.146	0.263	332.931735	46.600119	-2279.24	-2400

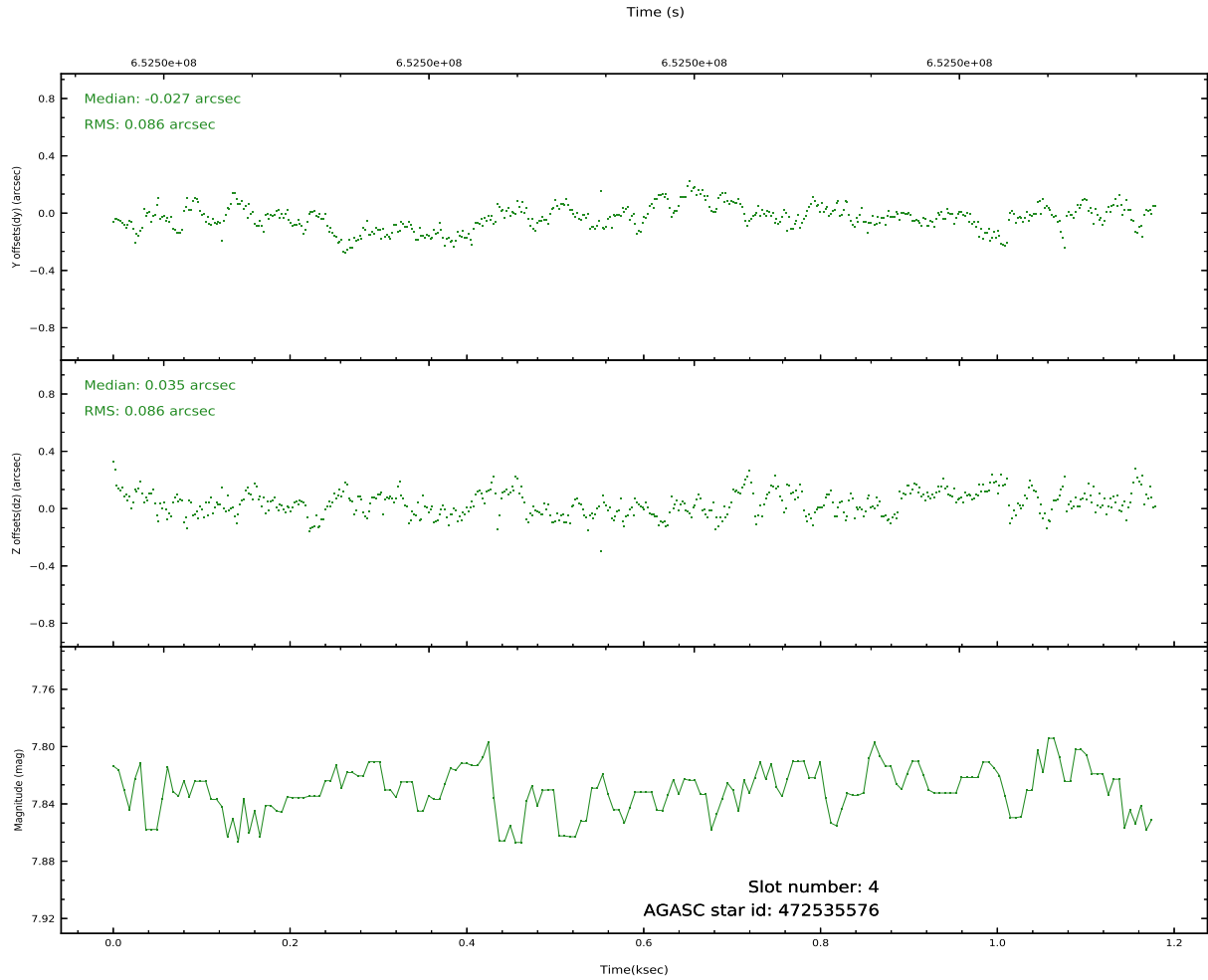
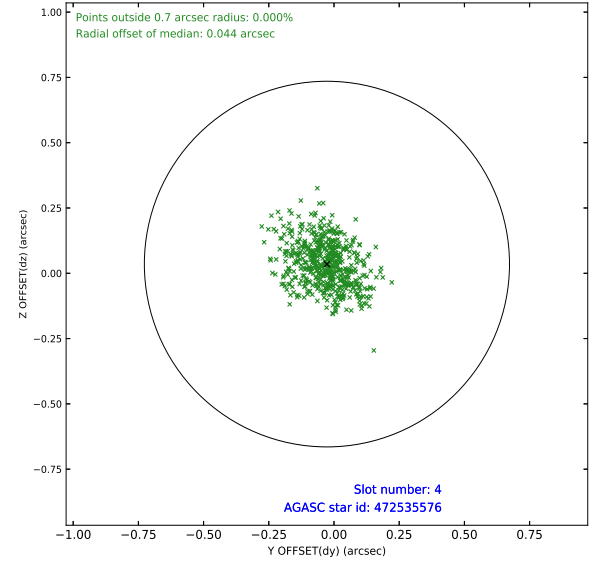
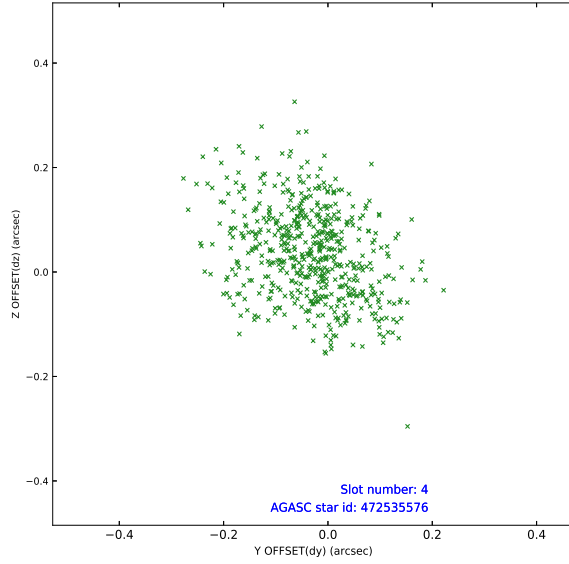


## 2.4 Star Slots

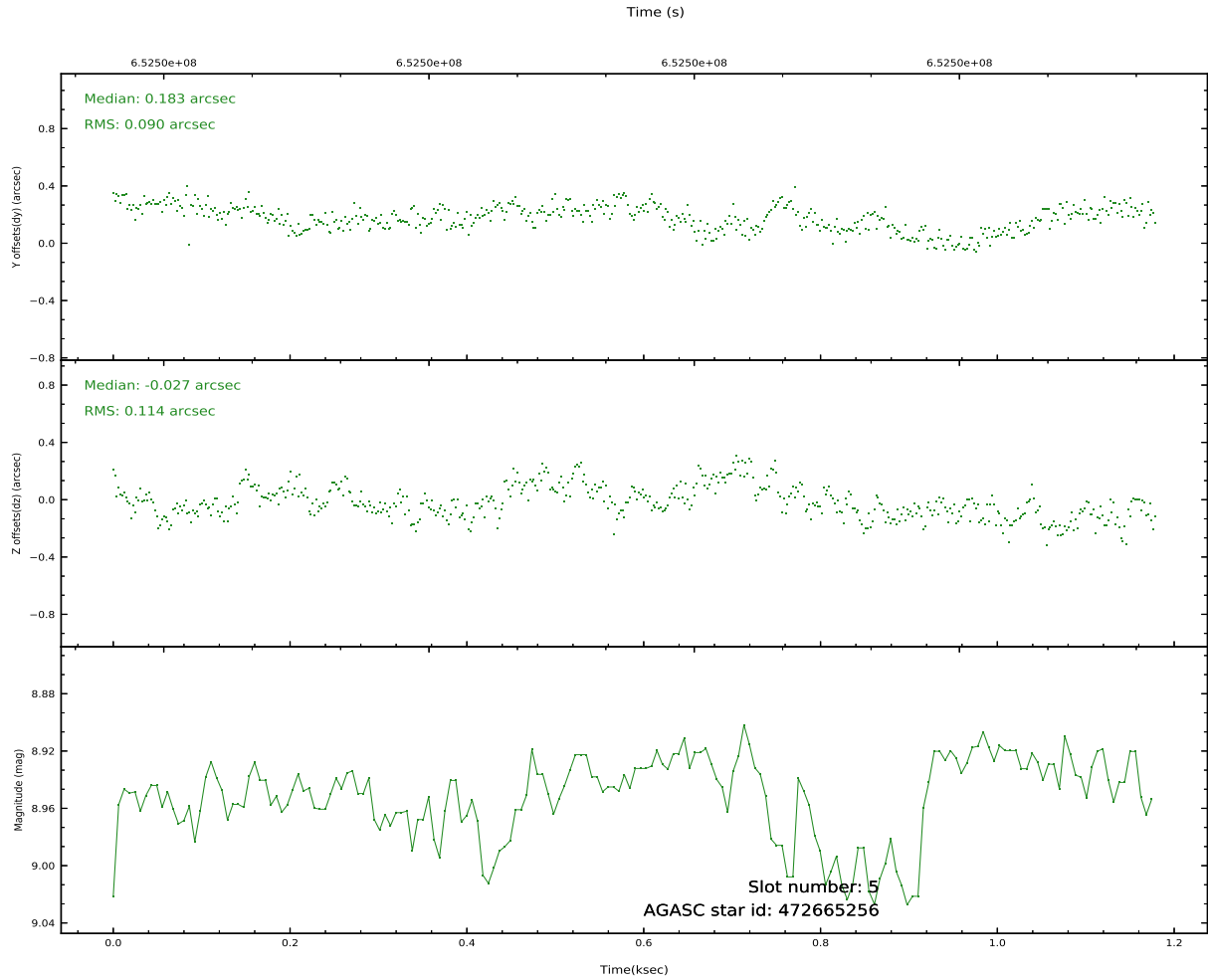
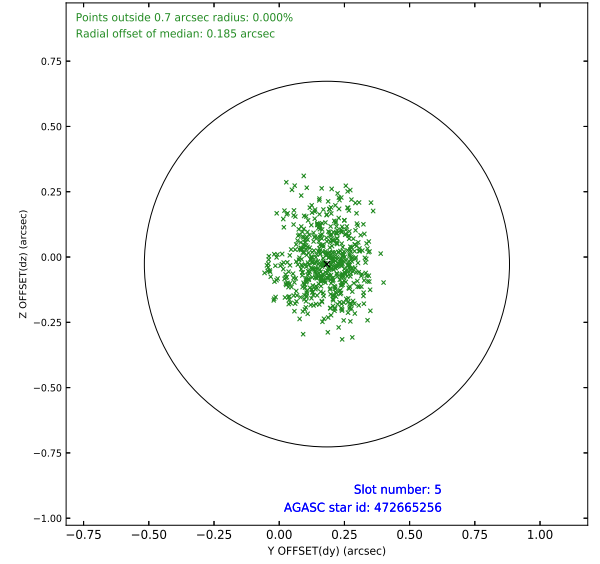
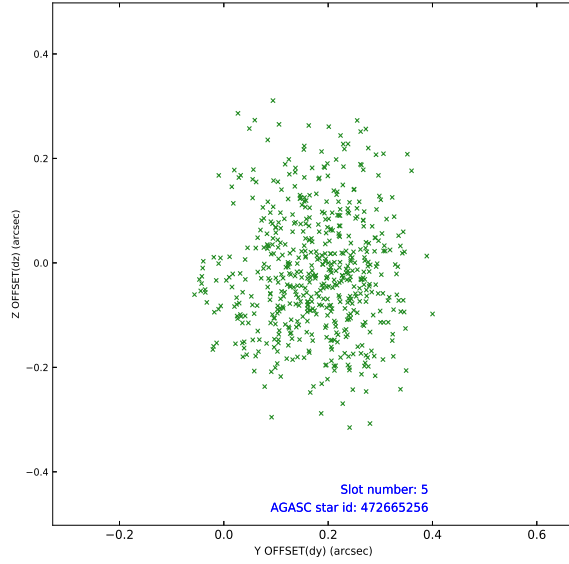
### 2.4.1 Slot 3



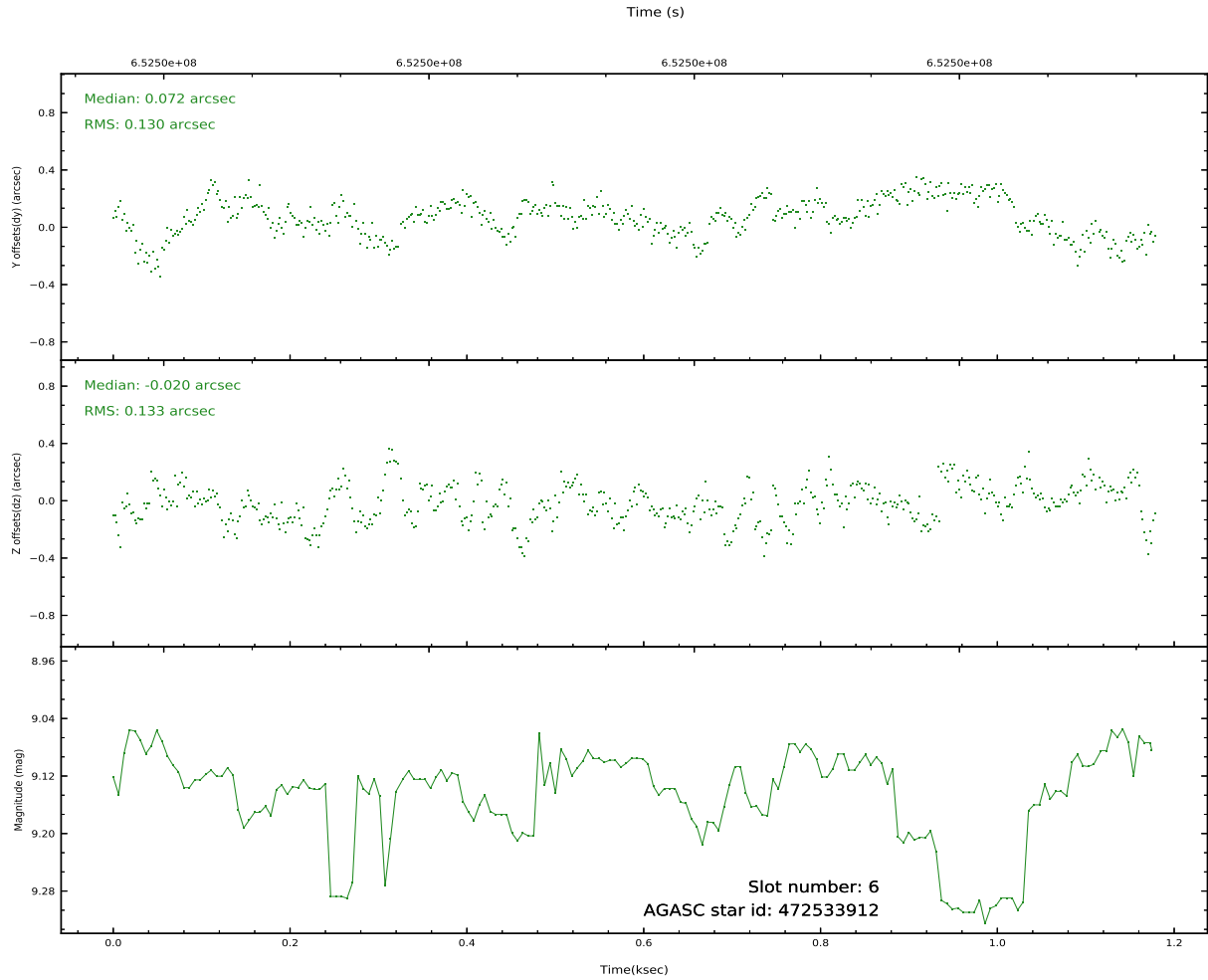
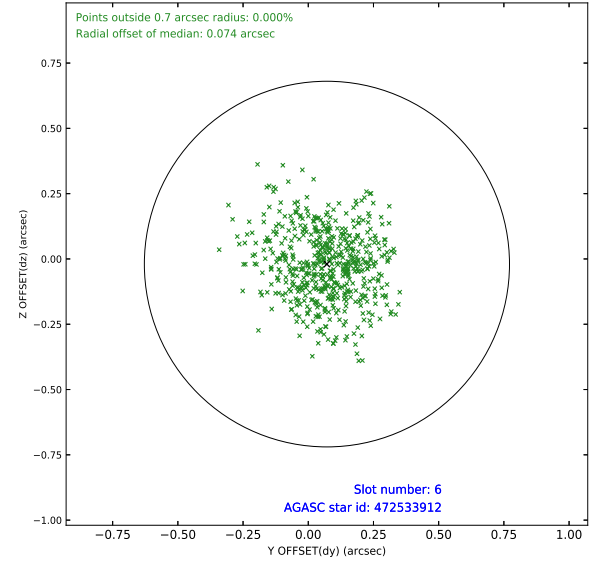
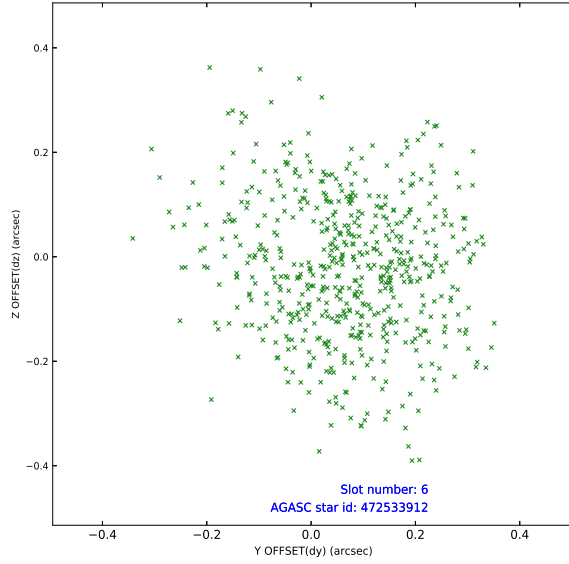
## 2.4.2 Slot 4



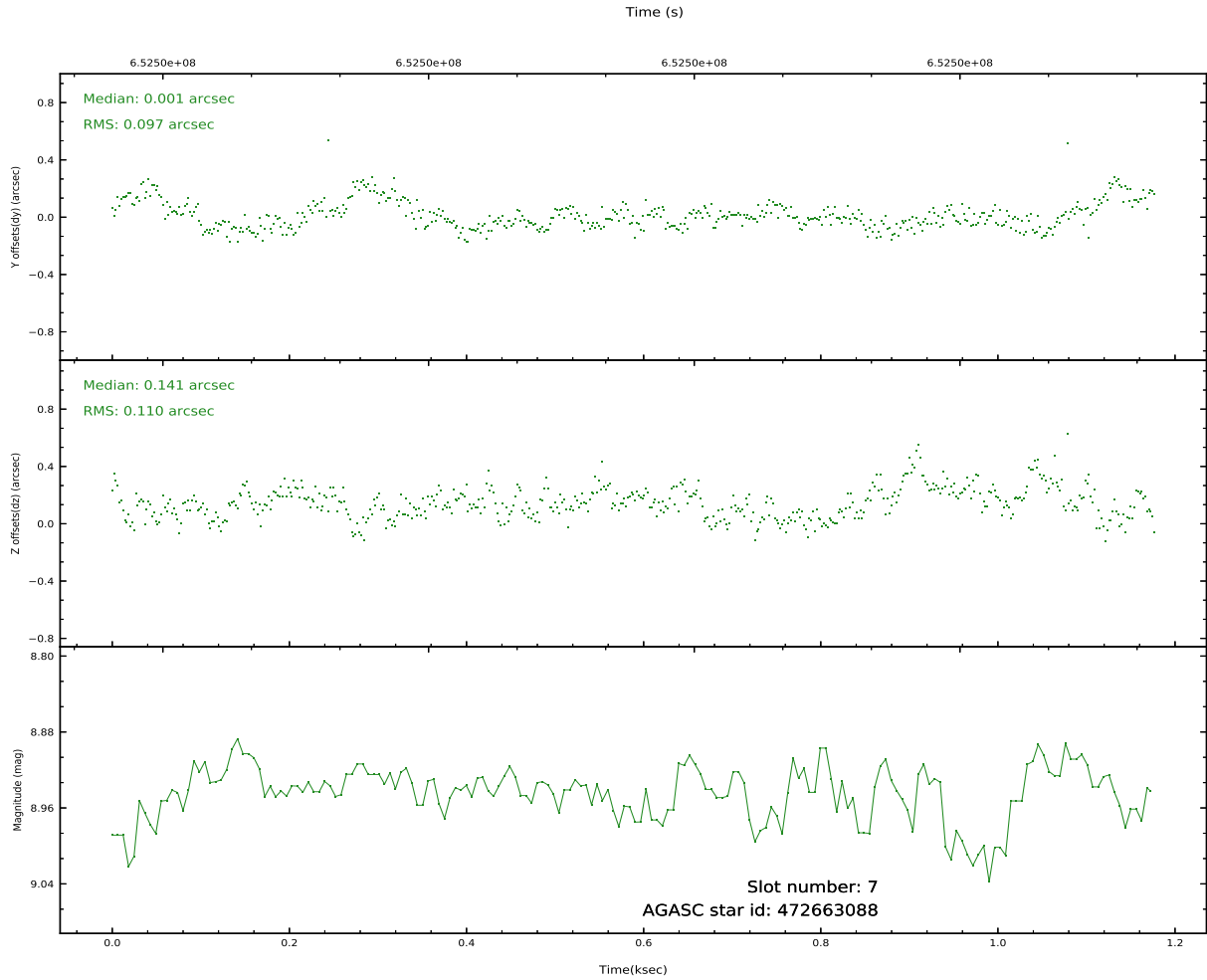
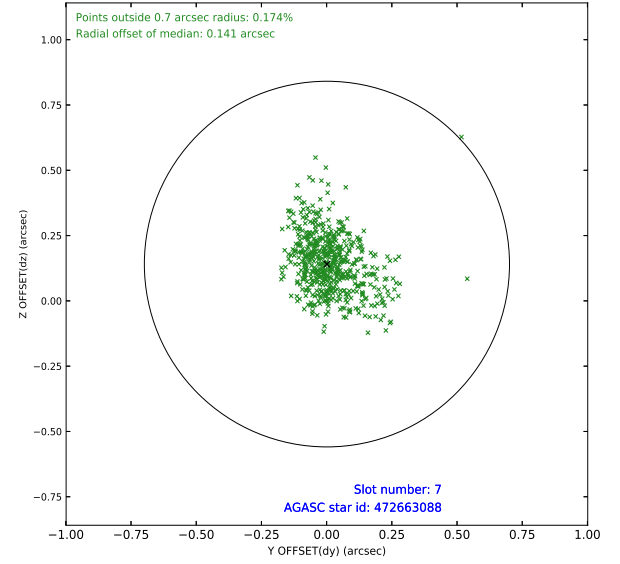
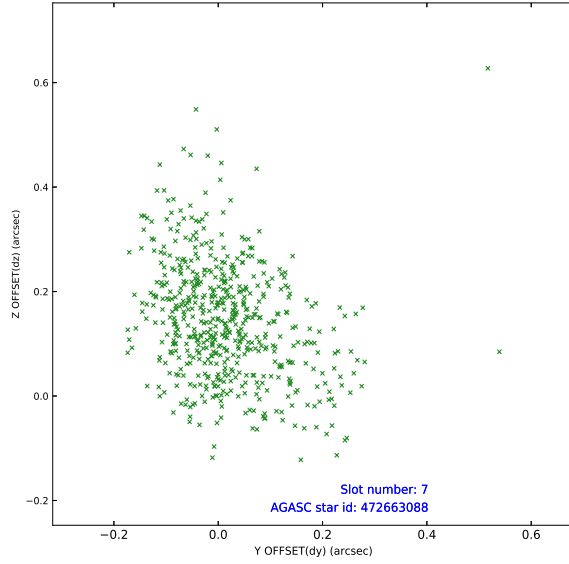
### 2.4.3 Slot 5



## 2.4.4 Slot 6

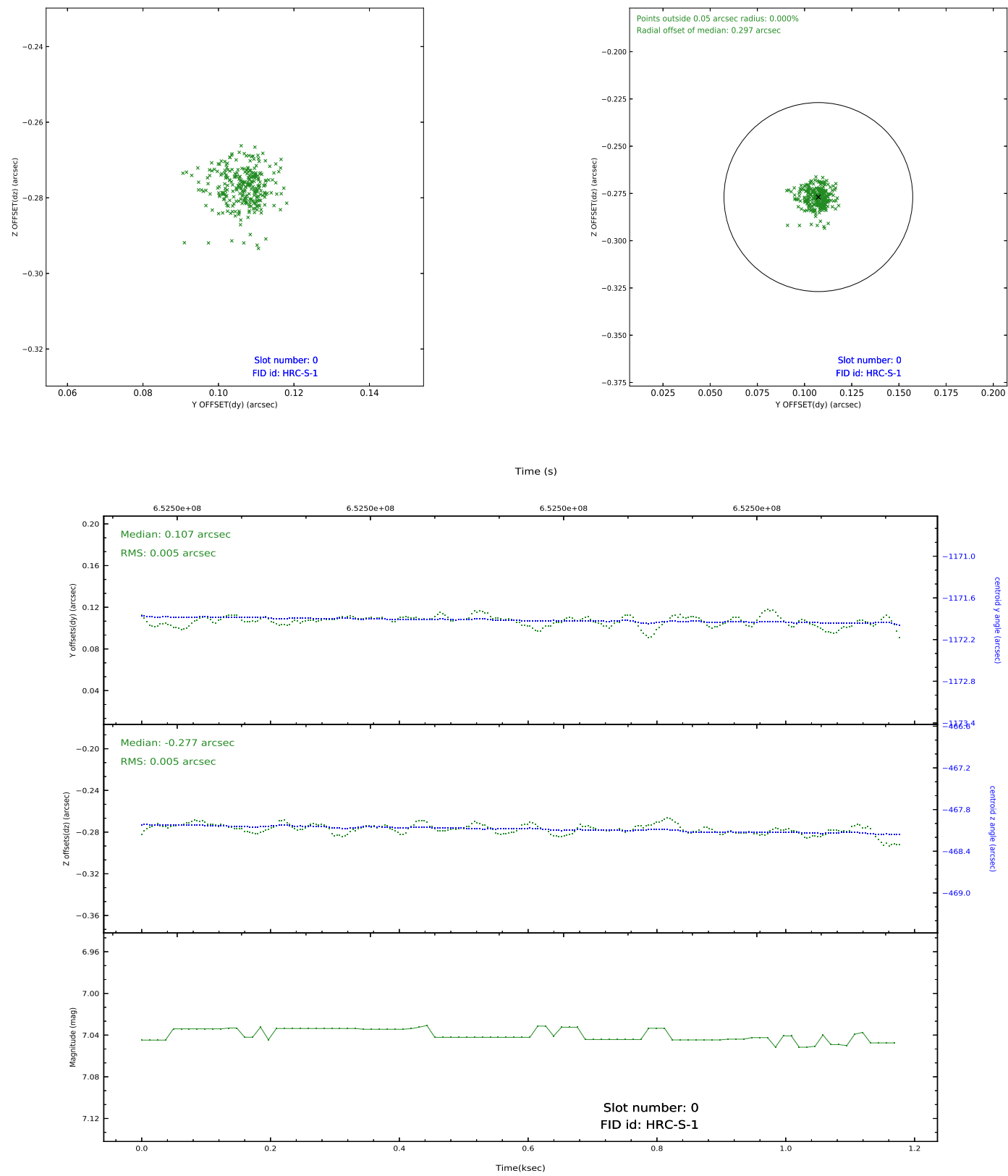


## 2.4.5 Slot 7

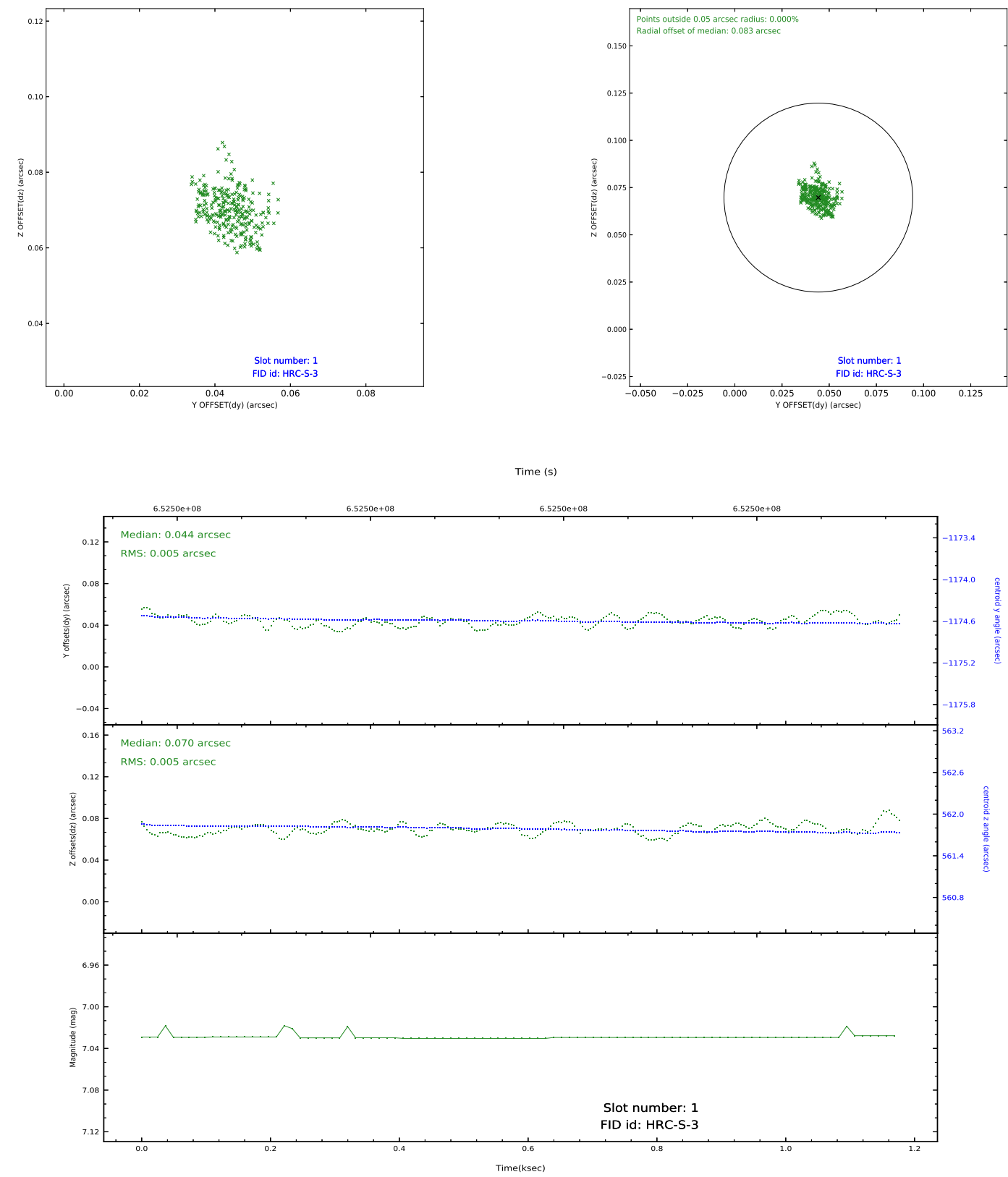


# 2.5 FID Slots

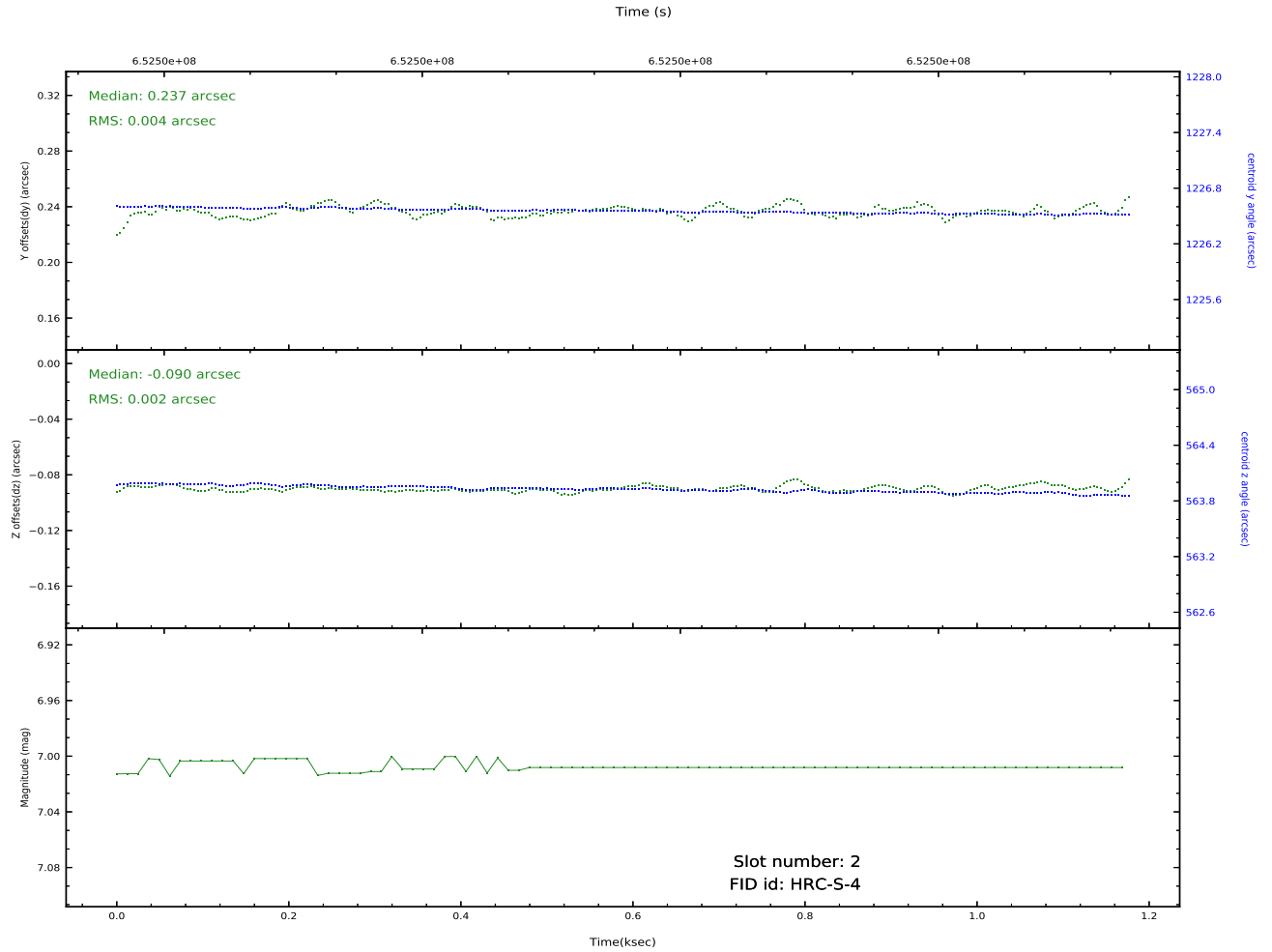
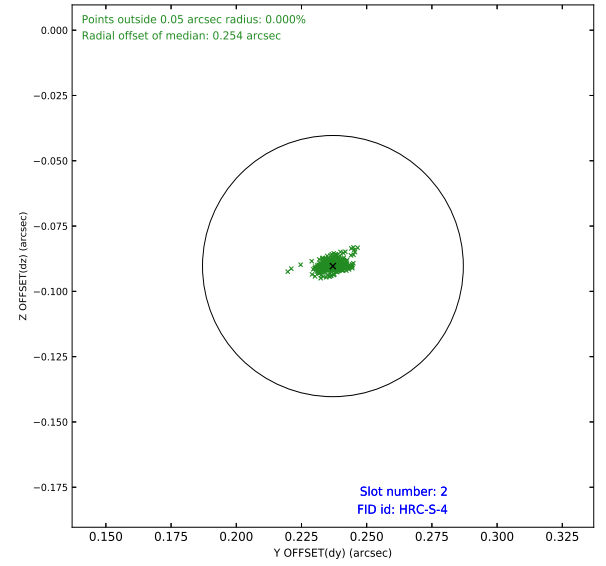
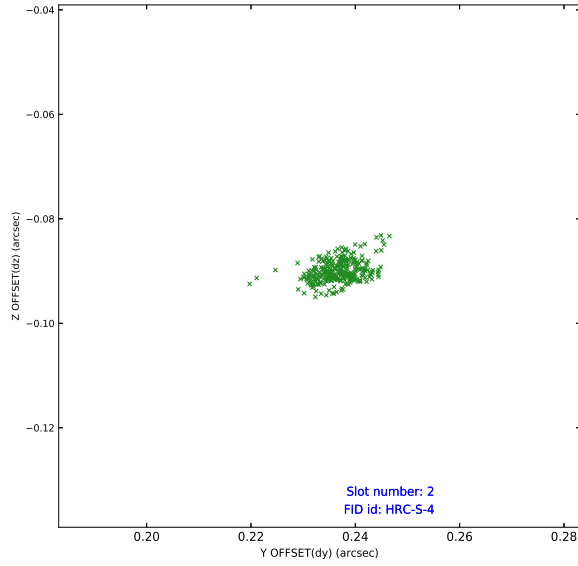
## 2.5.1 Slot 0



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**