

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5376 - L2 Version 4  
Chandra X-Ray Center

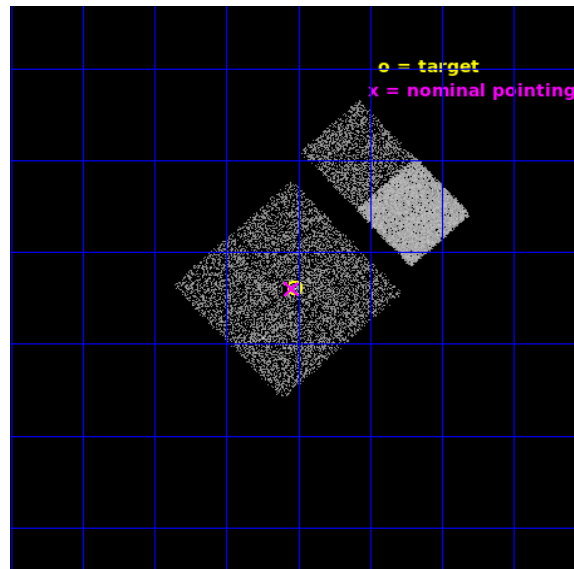
L2 Processing Date : Oct 5 2020

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# 1 Front

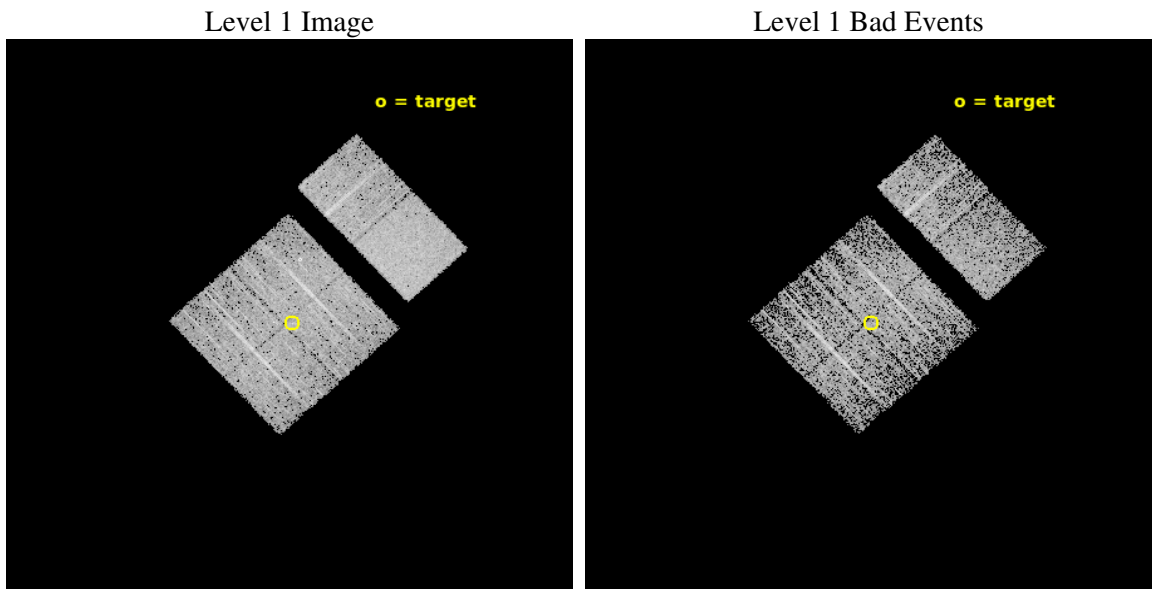
seq_num	200311	Sequence number
obs_id	5376	Observation id
title	Search for beta Pic analogs	Proposal title
observer	Gordon Garmire	Principal investigator
object	HR 1940	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.88125	Observer's specified target RA [deg]
dec_targ	-3.564722	Observer's specified target Dec [deg]
ra_nom	84.886005762643	Nominal RA [deg]
dec_nom	-3.5662983892006	Nominal Dec [deg]
roll_nom	47.173564114271	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3001.5999888182	Sum of GTIs [s]
livetime	2963.5919224132	Livetime [s]
ontime0	3001.5999888182	Sum of GTIs [s]
ontime1	3001.5999888182	Sum of GTIs [s]
ontime2	3001.5999888182	Sum of GTIs [s]
ontime3	3001.5999888182	Sum of GTIs [s]
ontime6	3001.5999888182	Sum of GTIs [s]
ontime7	3001.5999888182	Sum of GTIs [s]
l2events	25864	Number of level 2 events



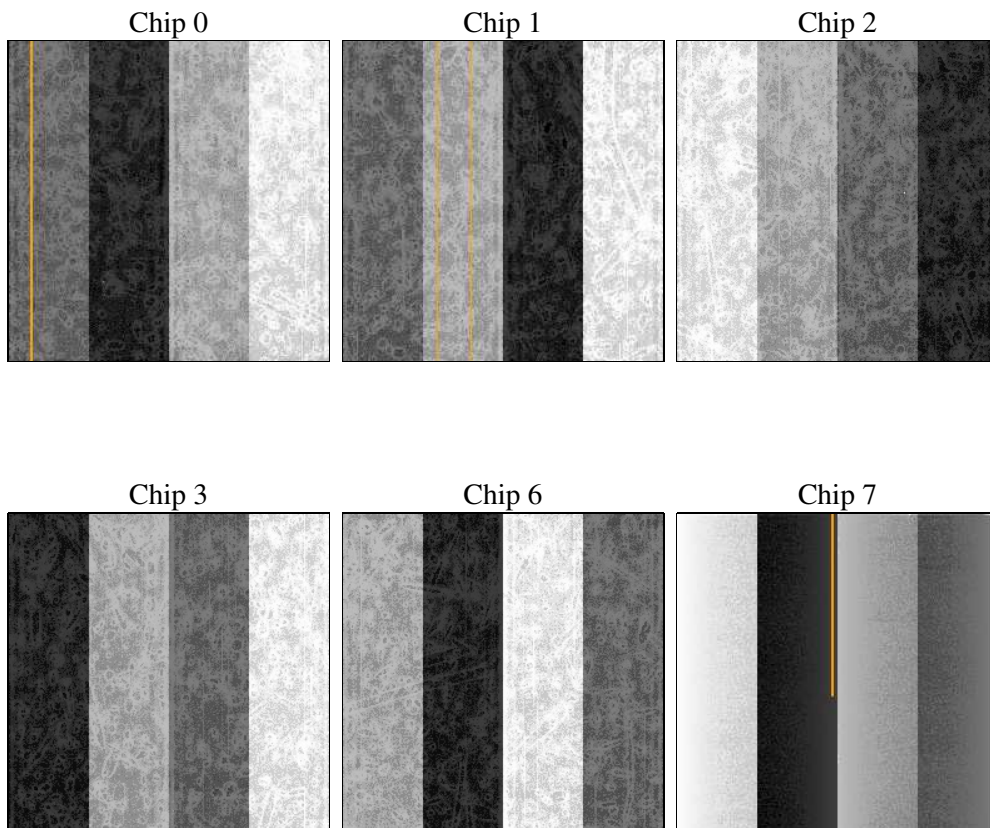
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3044.047000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	3001.5999888182	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	3001.5999888182	Sum of GTIs [s]
date	2020-10-05T06:21:13	Date and time of file creation	ontime1	3001.5999888182	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	3001.5999888182	Sum of GTIs [s]
			ontime3	3001.5999888182	Sum of GTIs [s]
			ontime6	3001.5999888182	Sum of GTIs [s]
			ontime7	3001.5999888182	Sum of GTIs [s]
			l1events	145657	Number of level 1 events

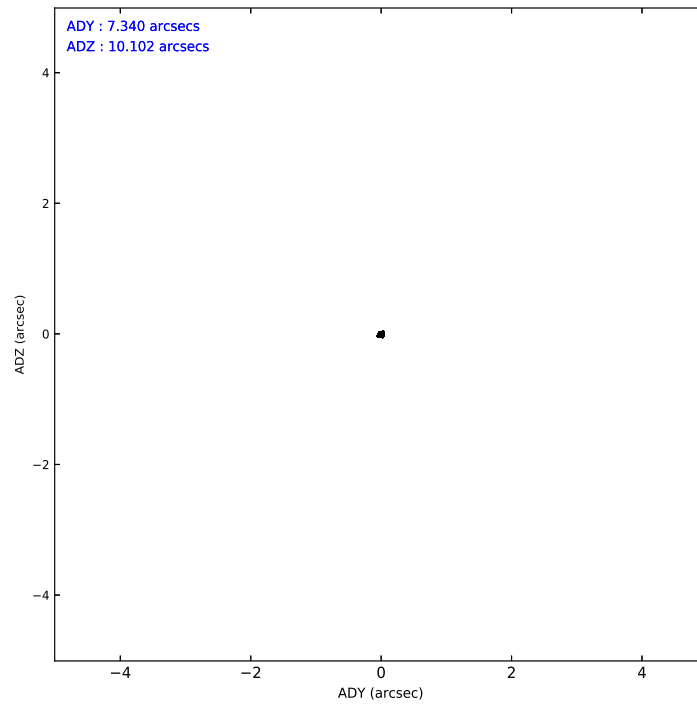
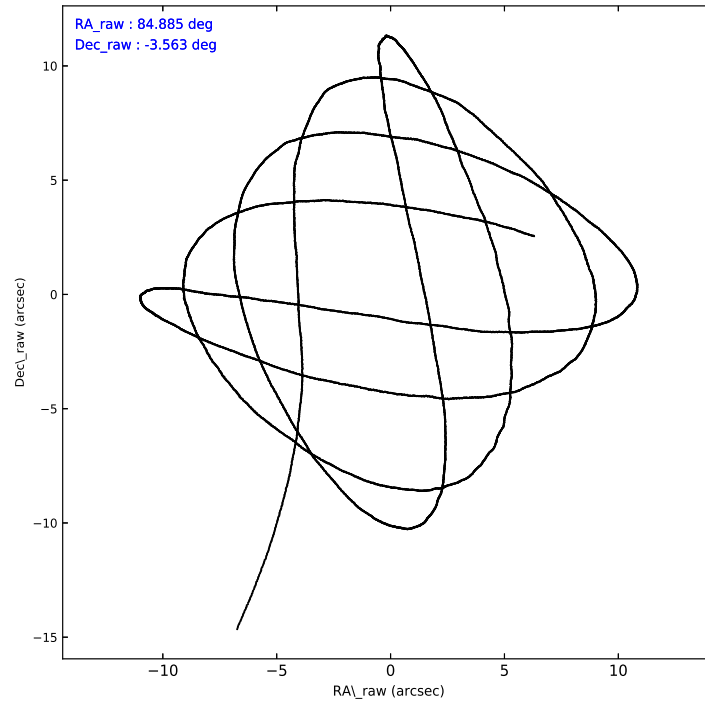
### 2.1.4 Events

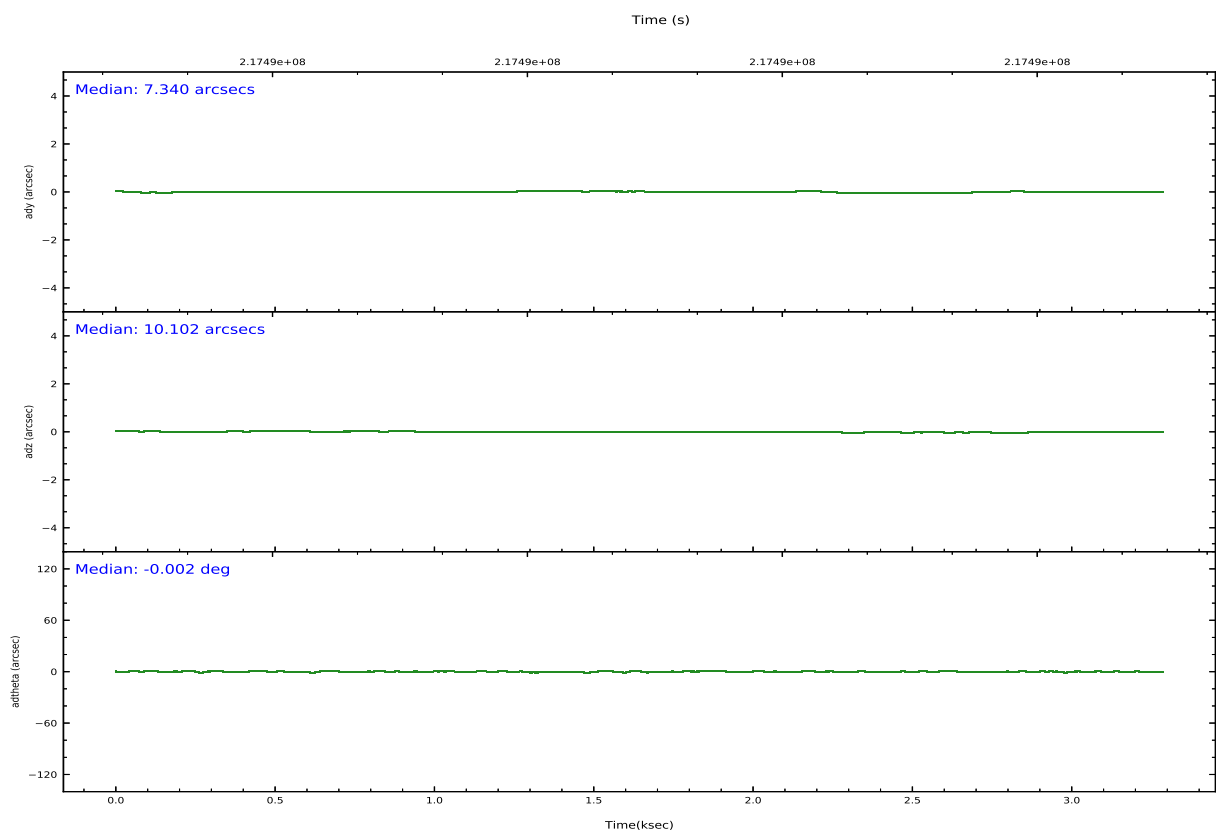
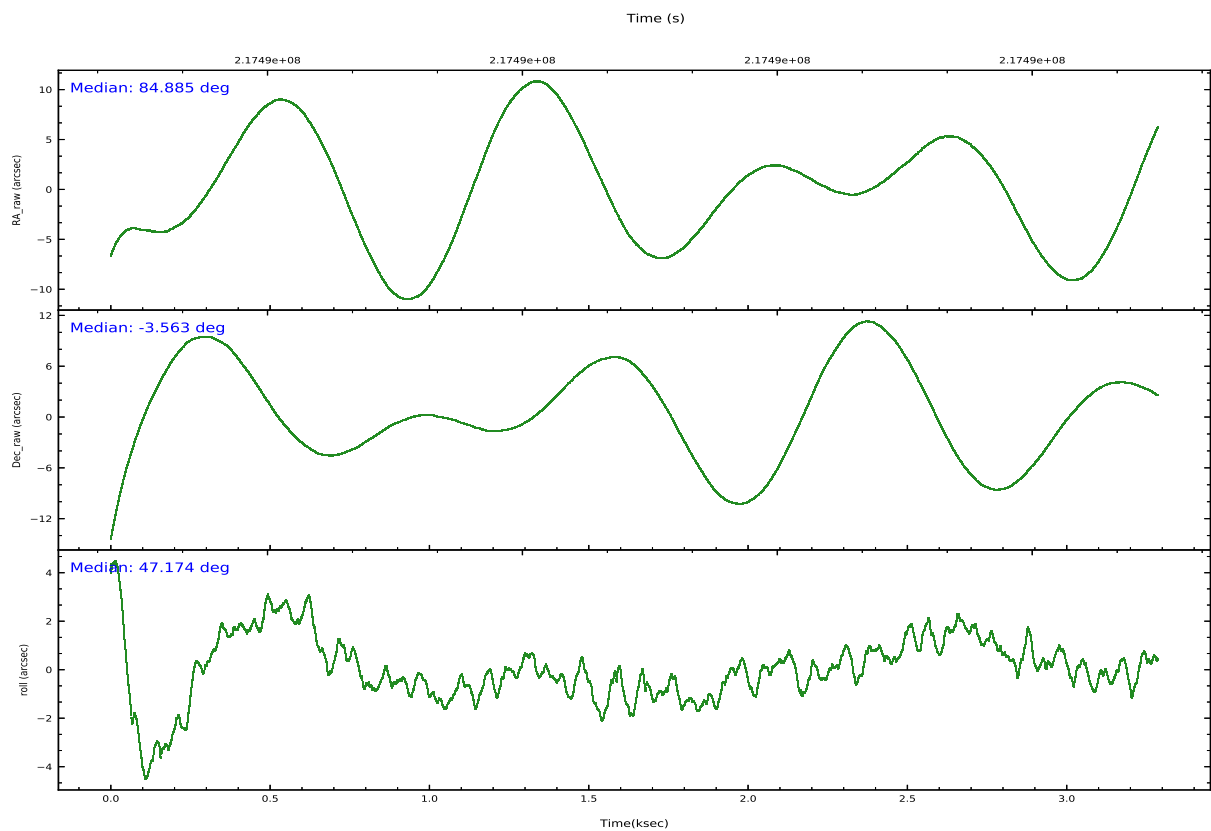
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	21517	21110	23557	22429	24376	32668	grade 0 events	1215	1272	1522	1175	1100	1284
rejected events	18653	18038	20563	19760	21532	18475		5%	6%	6%	5%	4%	3%
rejected %	86%	85%	87%	88%	88%	56%	grade 1 events	15	12	15	11	13	32
								0%	0%	0%	0%	0%	0%
							grade 2 events	609	677	520	507	625	2883
								2%	3%	2%	2%	2%	8%
							grade 3 events	273	292	263	283	297	1225
								1%	1%	1%	1%	1%	3%
							grade 4 events	265	290	253	268	269	1179
								1%	1%	1%	1%	1%	3%
							grade 5 events	882	991	945	1040	1088	3002
								4%	4%	4%	4%	4%	9%
							grade 6 events	509	549	442	438	557	7633
								2%	2%	1%	1%	2%	23%
							grade 7 events	17749	17027	19597	18707	20427	15430
								82%	80%	83%	83%	83%	47%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	84.879506	84.88600576264299	Subarray requested	NONE	NONE
[deg] Pointing Dec	-3.589547	-3.5662983892006	Alternating exposures requested	N	N
[deg] Pointing Roll	46.967542	47.173564114271	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	217486151.184000	217485159.78222			
Observation start date	2004-11-22T04:48:07	2004-11-22T04:32:39			
[s] Observation end time (MET)	217489195.184000	217489430.44491			
Observation end date	2004-11-22T05:38:51	2004-11-22T05:43:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect





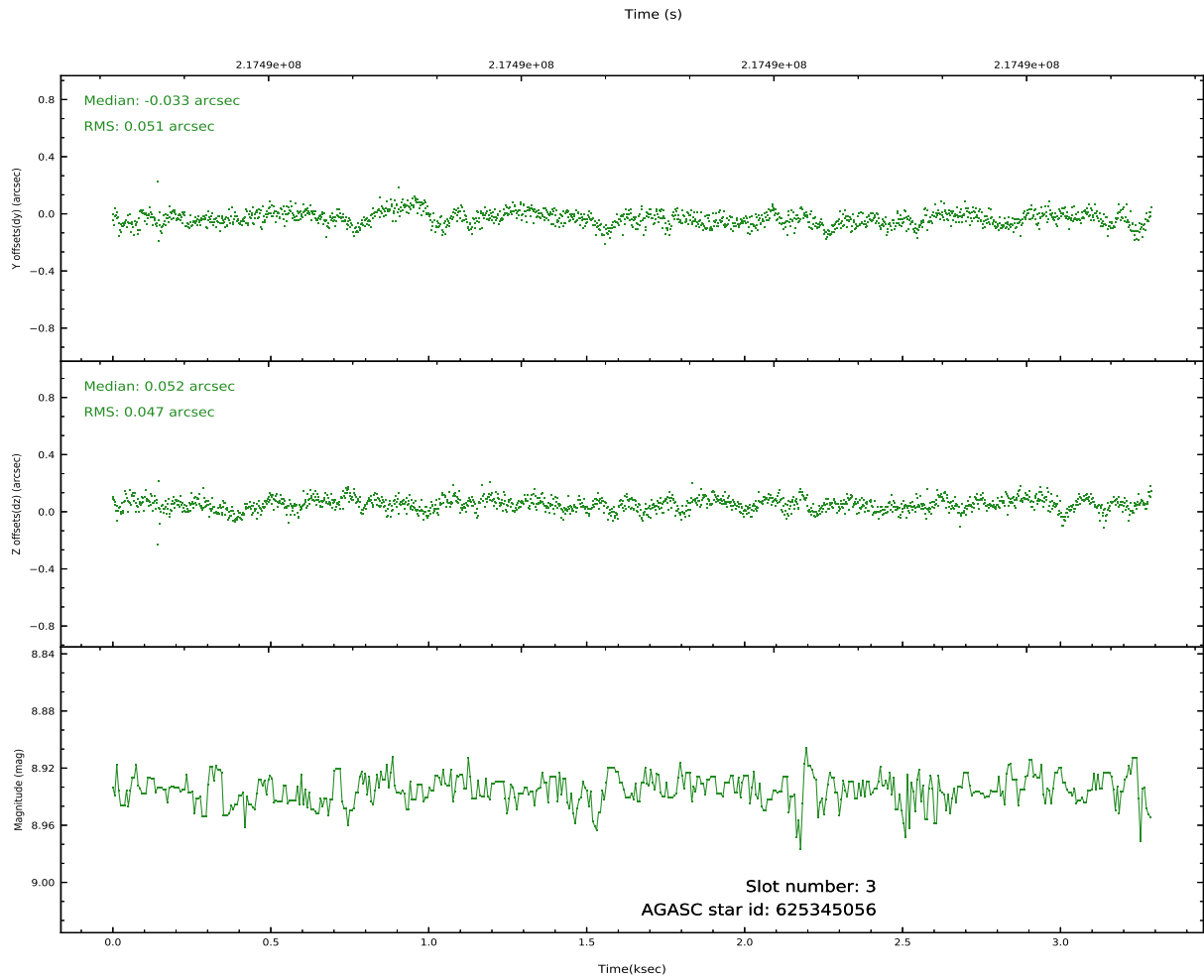
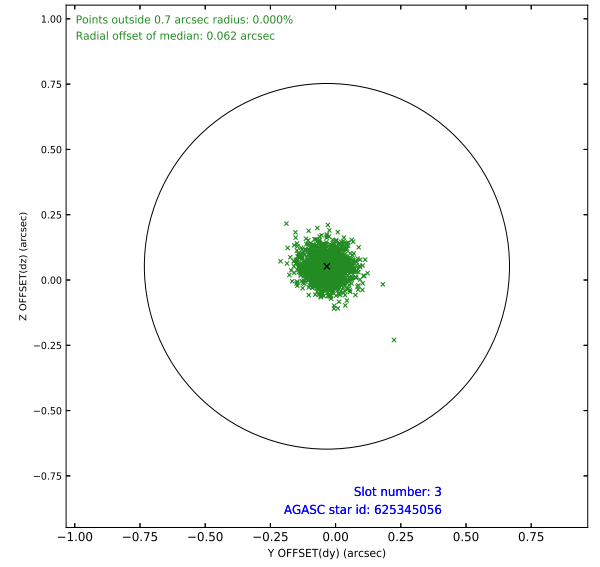
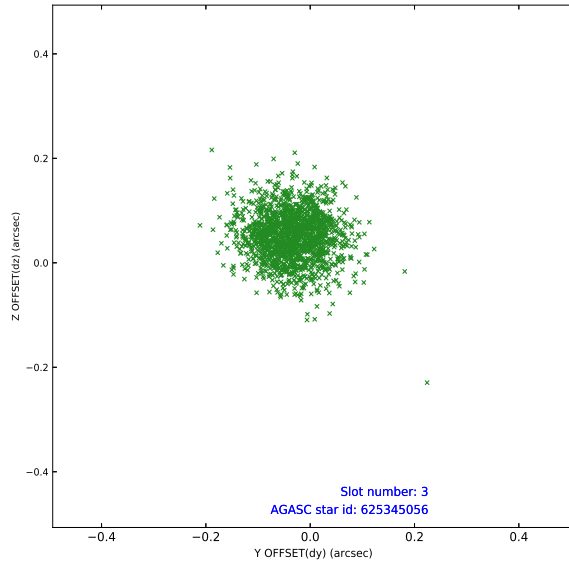
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	802	1.000	0.013	-0.004	0.007	0.011	0.000000	0.000000	932.35	-833
1	FID		ACIS-I-5	7.23	802	1.000	-0.200	0.018	0.007	0.011	0.000000	0.000000	-1814.91	1062
2	FID		ACIS-I-6	7.25	802	1.000	0.096	0.057	0.007	0.011	0.000000	0.000000	395.87	1709
3	GUIDE	used	625345056	8.94	1605	1.000	-0.033	0.052	0.072	0.118	85.456723	-3.492266	1671.49	-1277
4	GUIDE	used	625346624	8.76	1605	1.000	0.027	-0.086	0.060	0.097	84.578621	-3.554993	-645.48	873
5	GUIDE	used	625354136	8.19	1605	1.000	-0.030	0.006	0.061	0.099	85.400150	-3.731186	903.46	-1715
6	GUIDE	used	625874648	7.29	1605	1.000	-0.011	0.020	0.066	0.103	84.563727	-4.108233	-2137.81	-447
7	GUIDE	used	625354112	7.42	1604	1.000	0.041	0.014	0.060	0.093	85.082179	-3.427078	923.65	-133

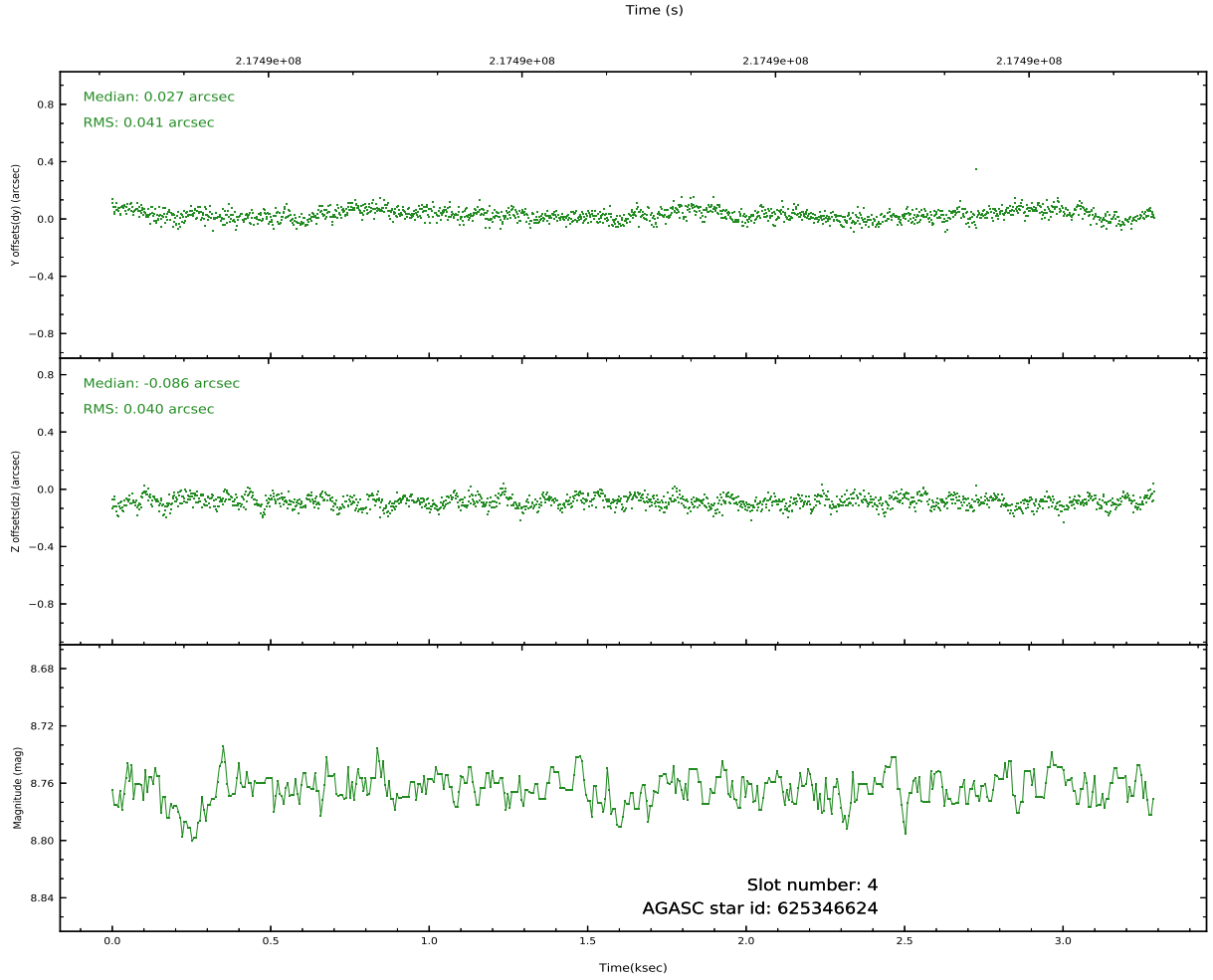
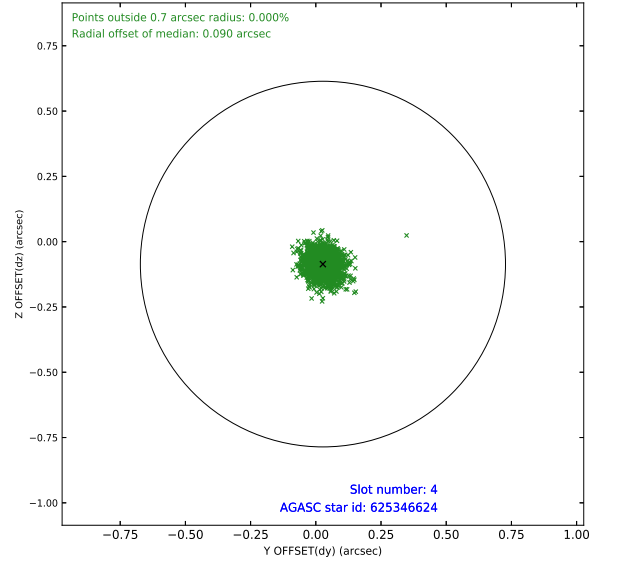
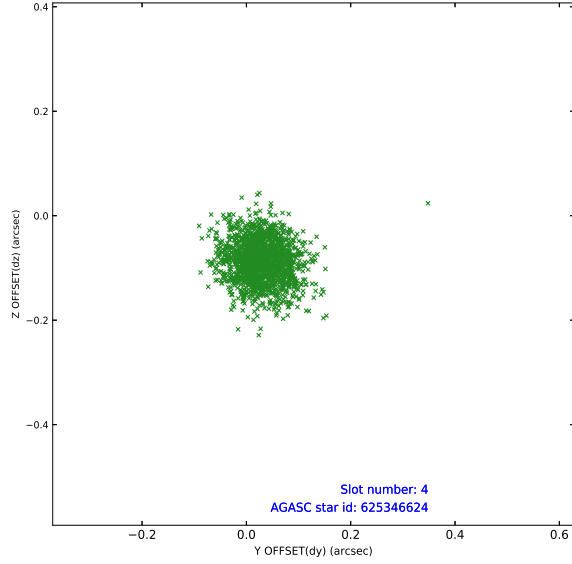


## 2.4 Star Slots

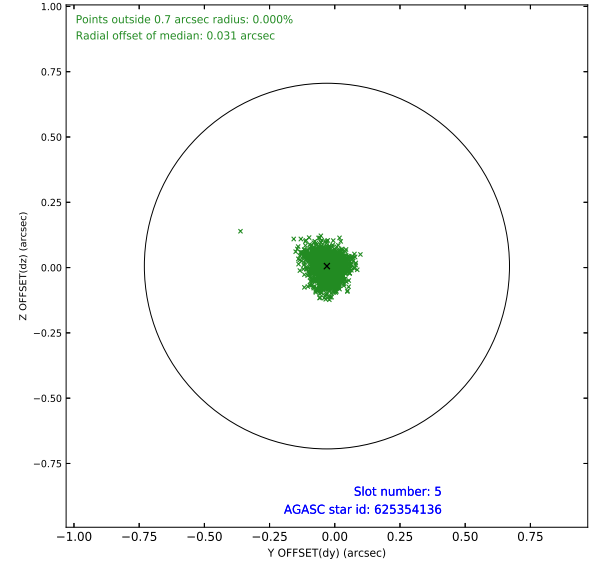
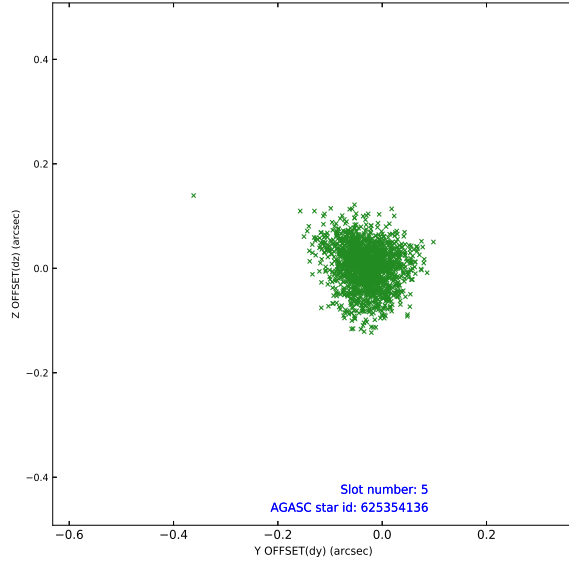
### 2.4.1 Slot 3



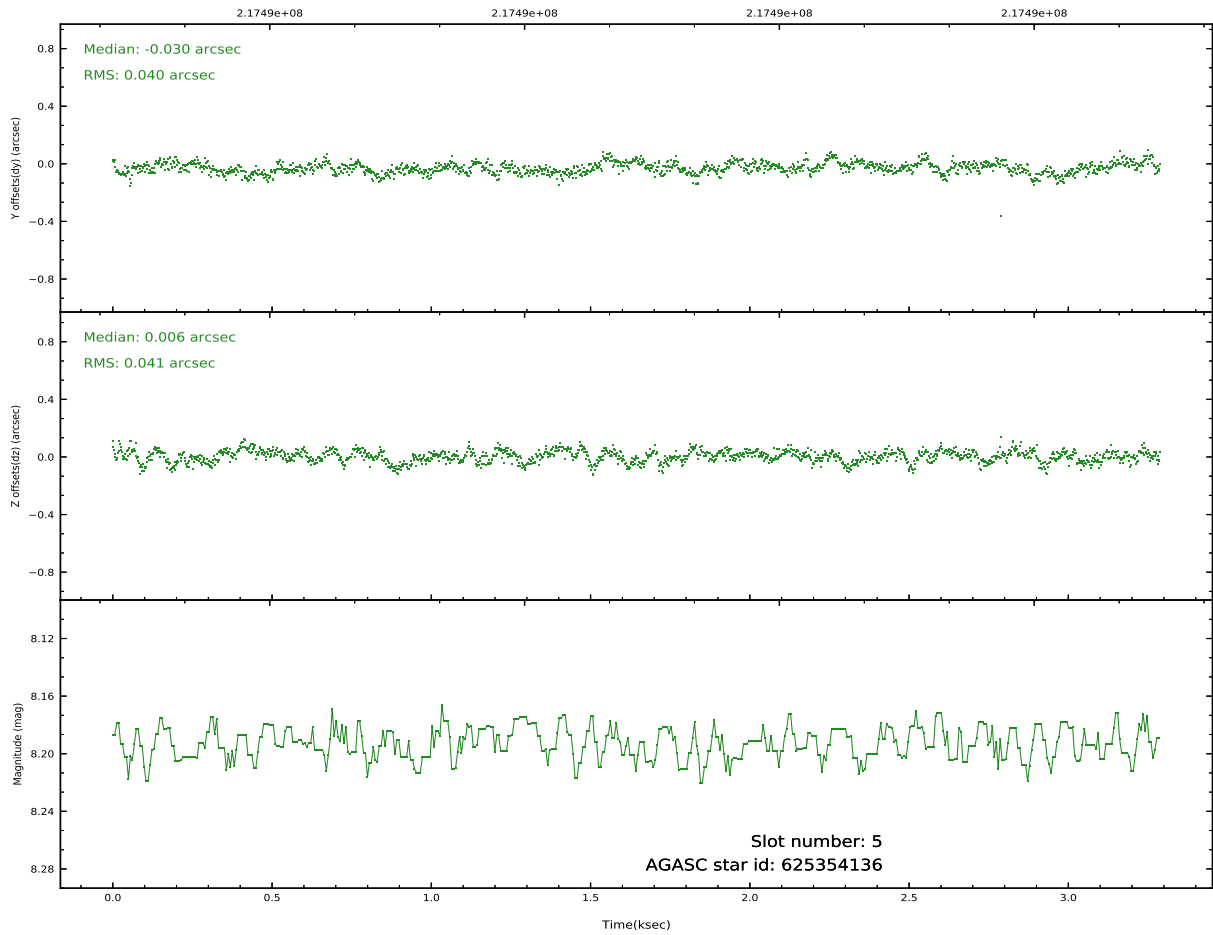
## 2.4.2 Slot 4



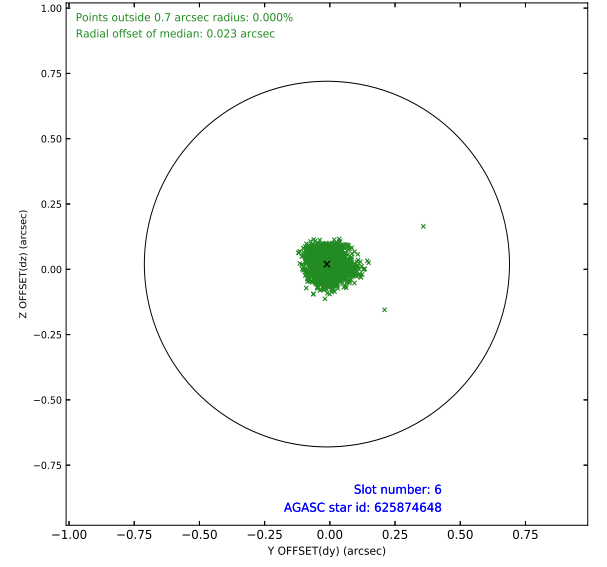
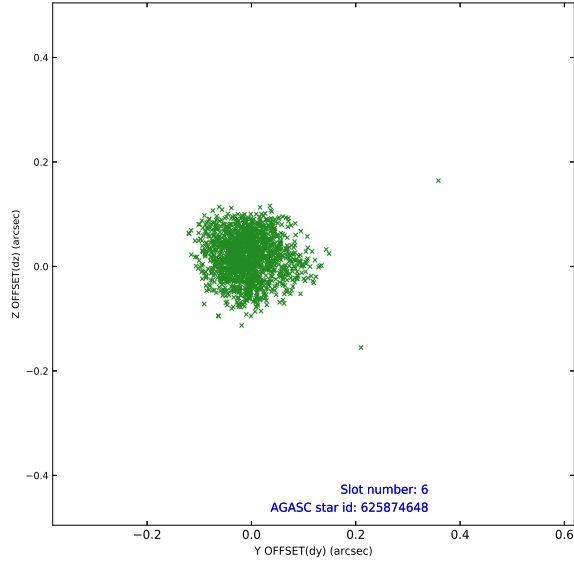
### 2.4.3 Slot 5



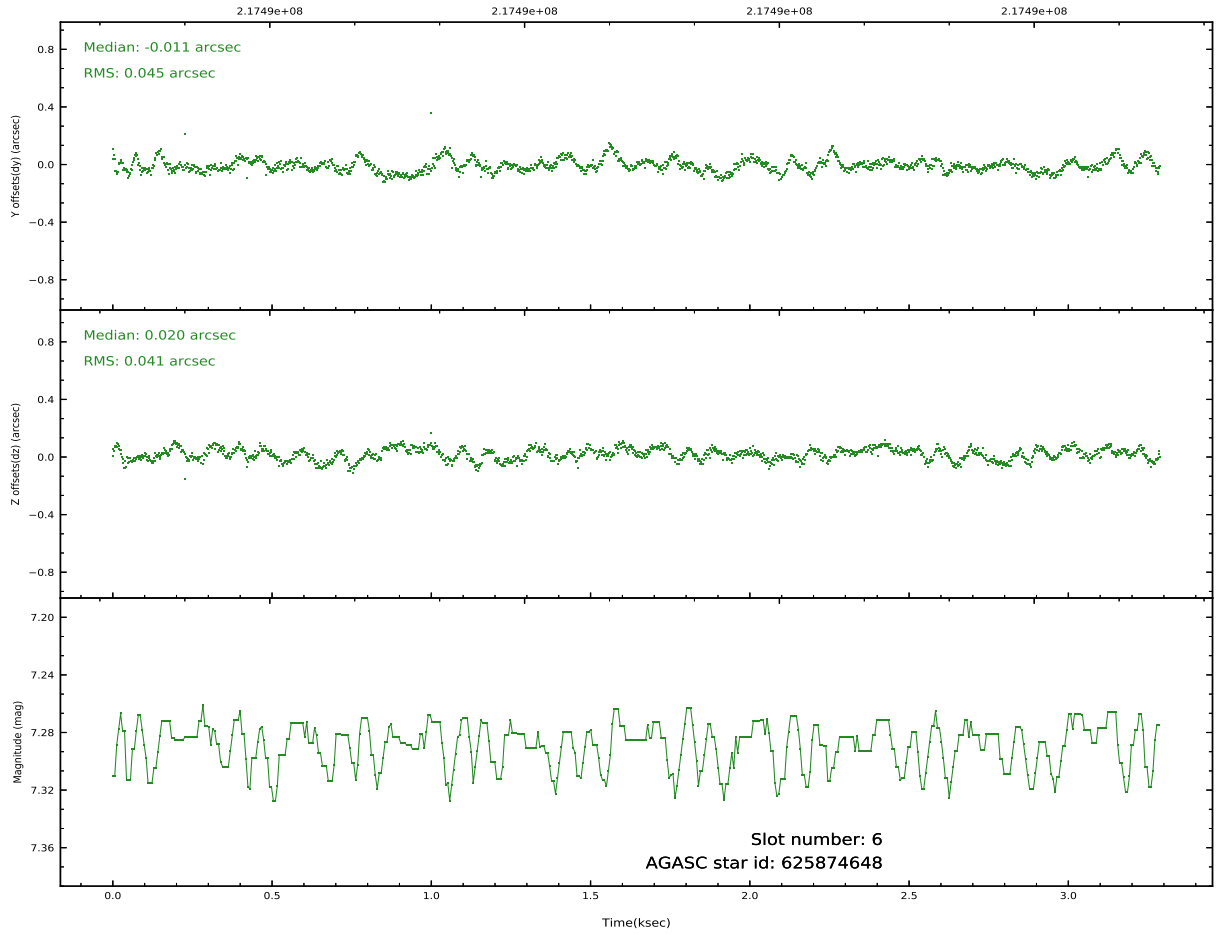
Time (s)



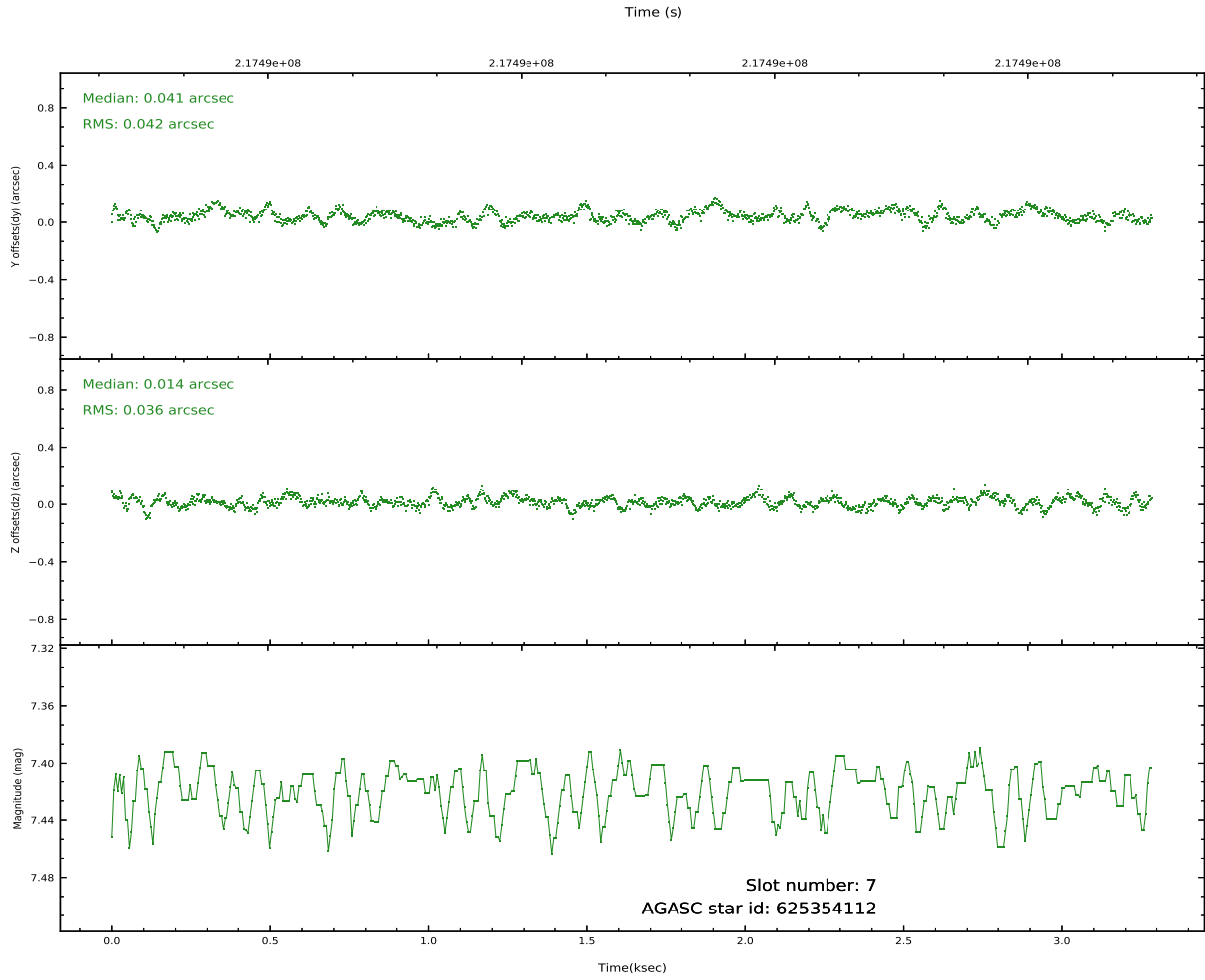
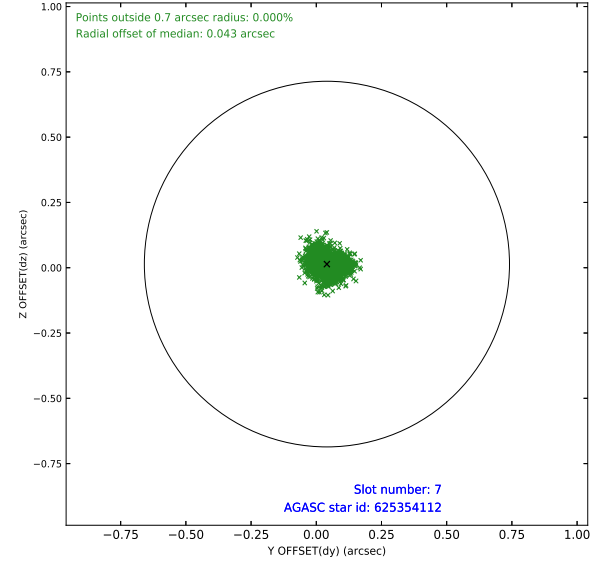
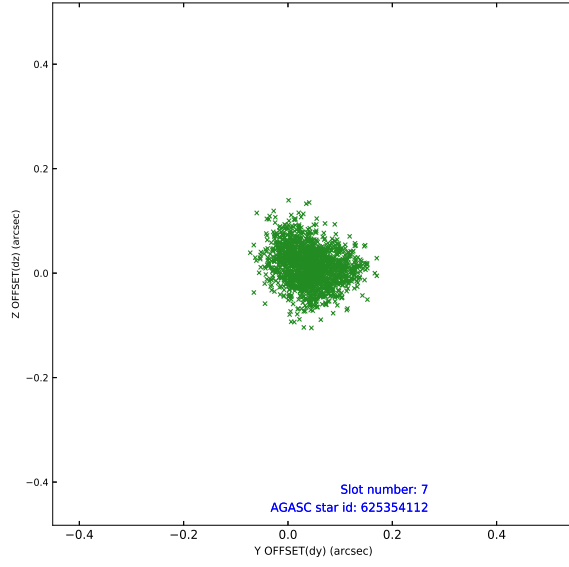
## 2.4.4 Slot 6



Time (s)

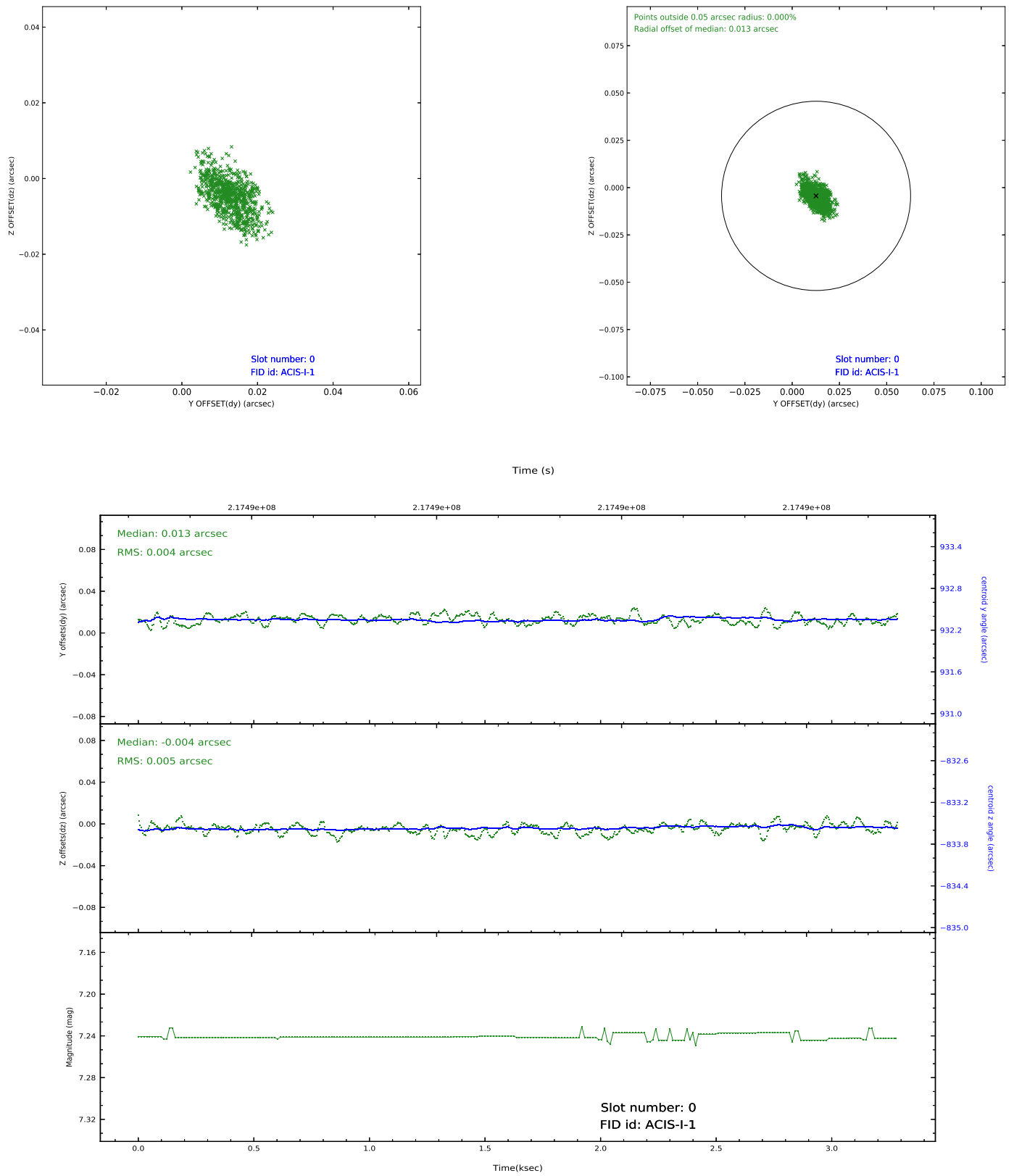


## 2.4.5 Slot 7

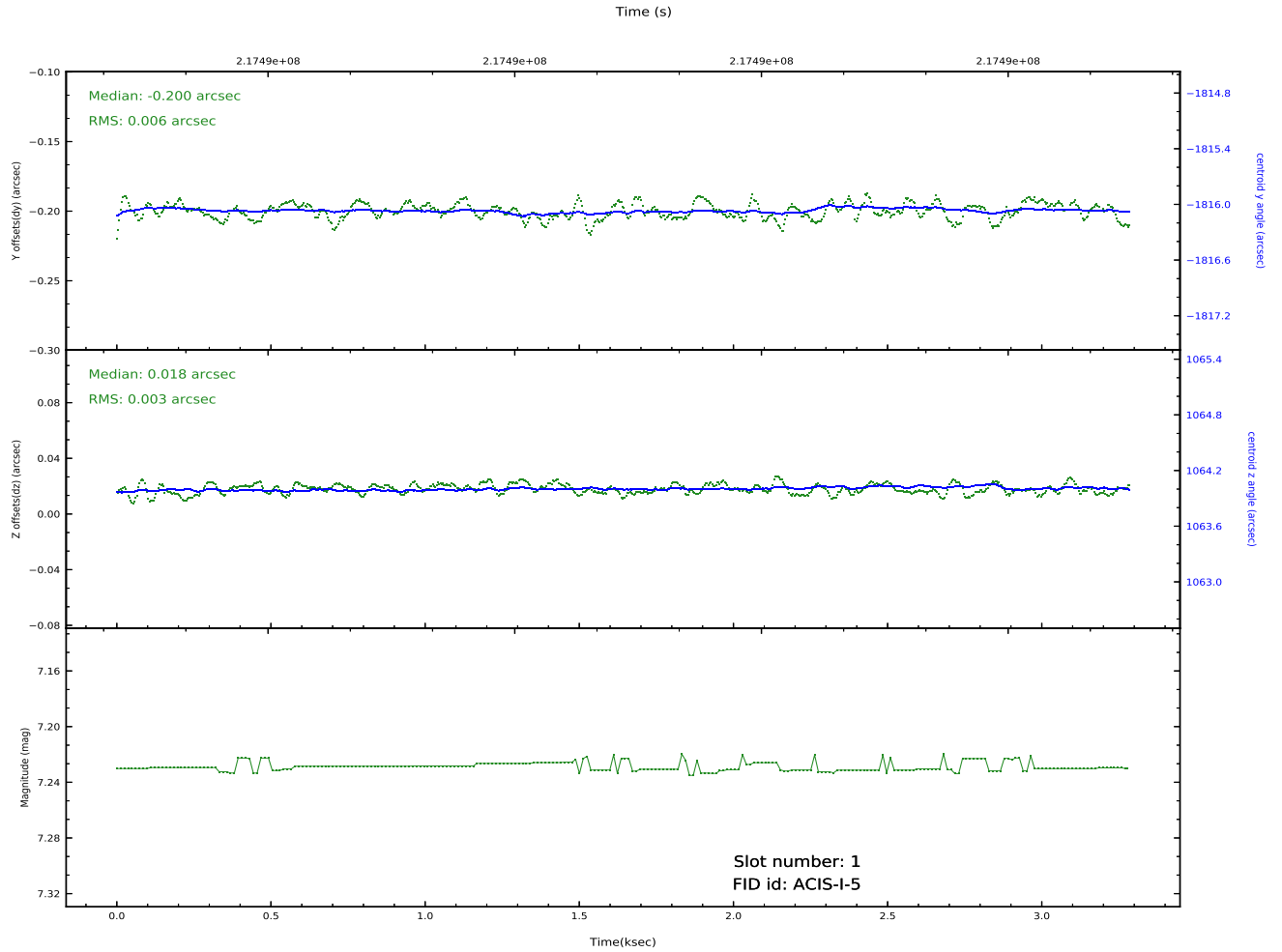
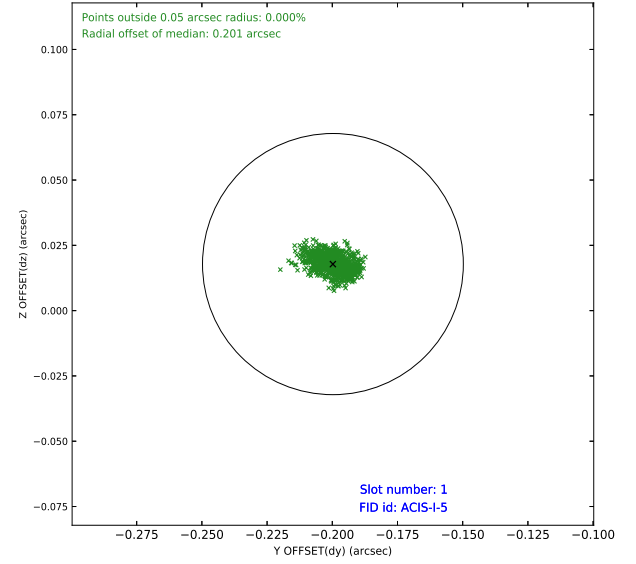
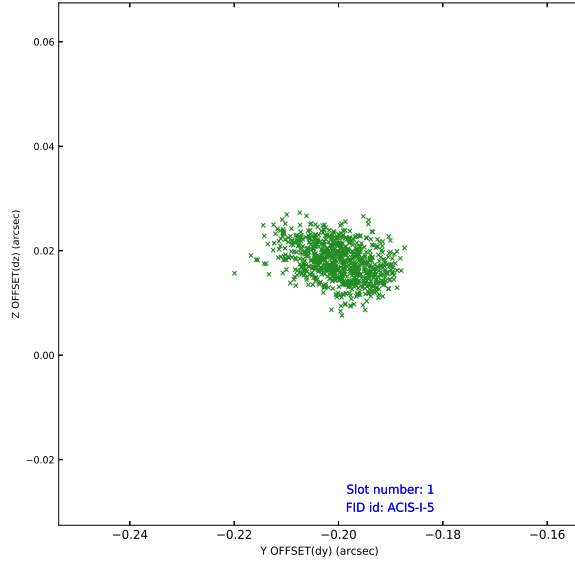


## 2.5 FID Slots

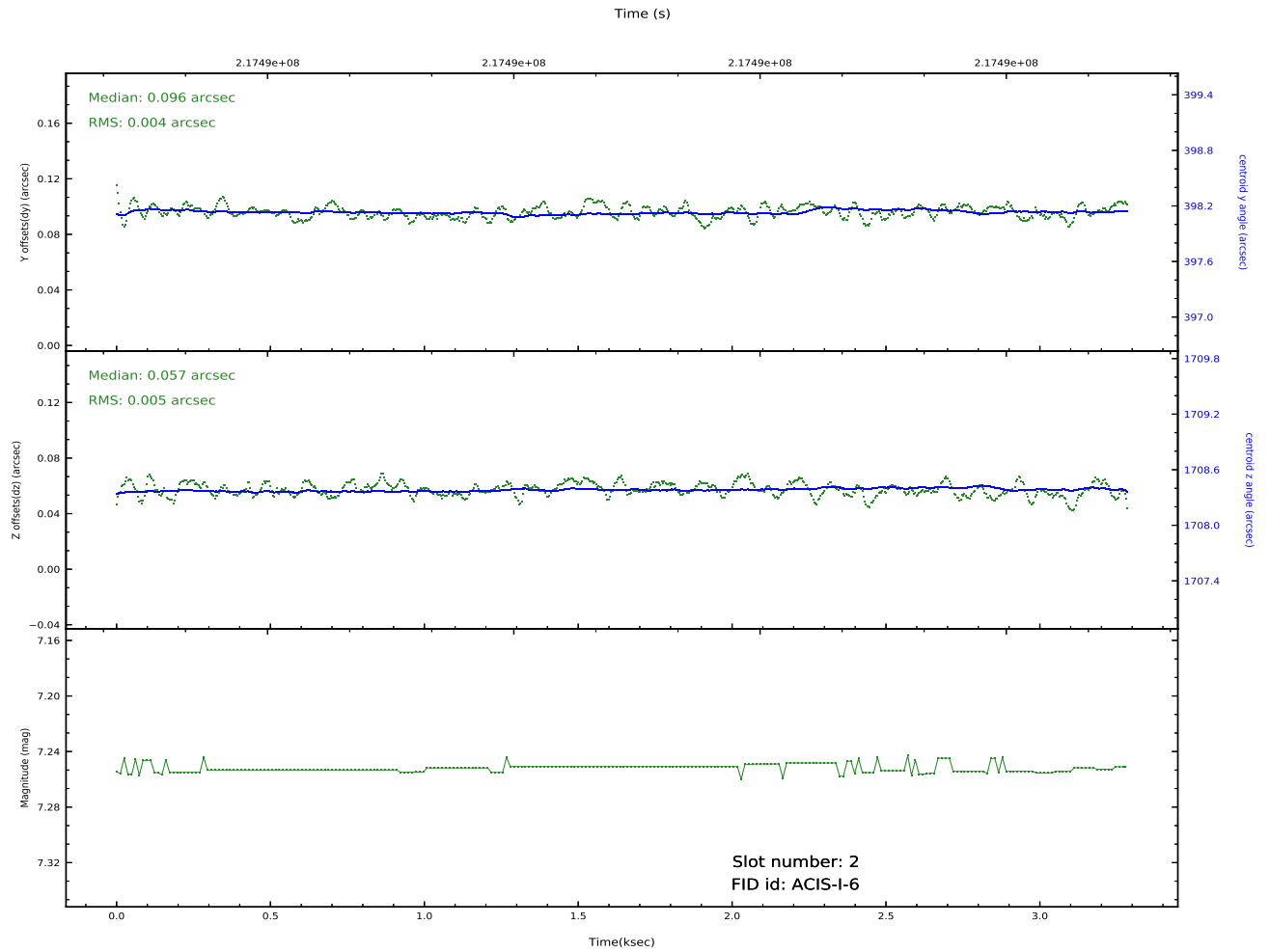
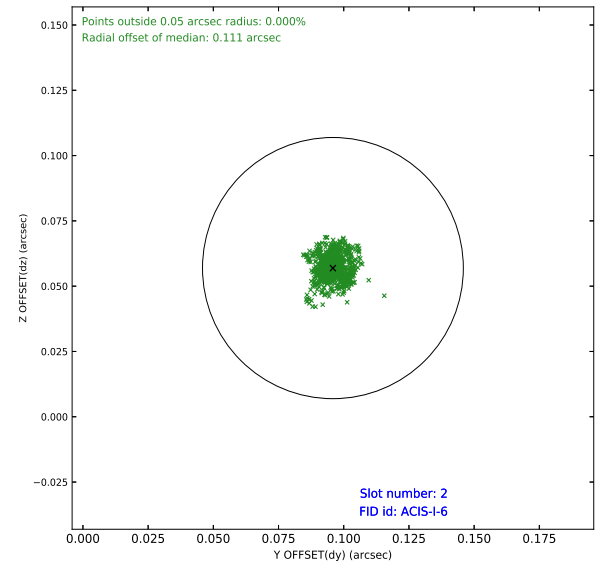
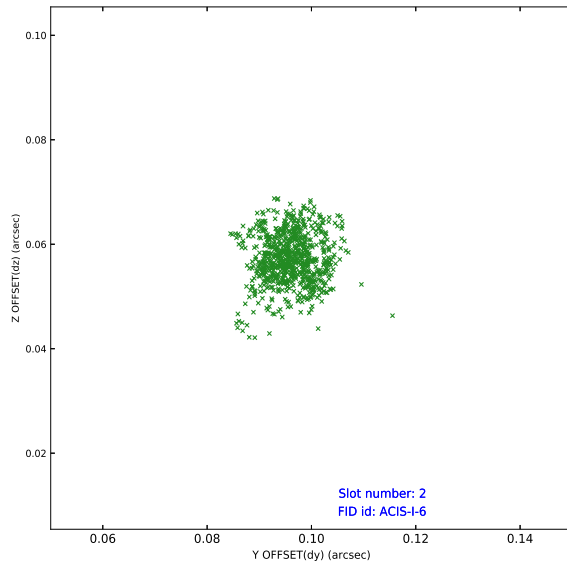
### 2.5.1 Slot 0



## 2.5.2 Slot 1



## 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.001

### A.2 Comments