

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4995 - L2 Version 4  
Chandra X-Ray Center

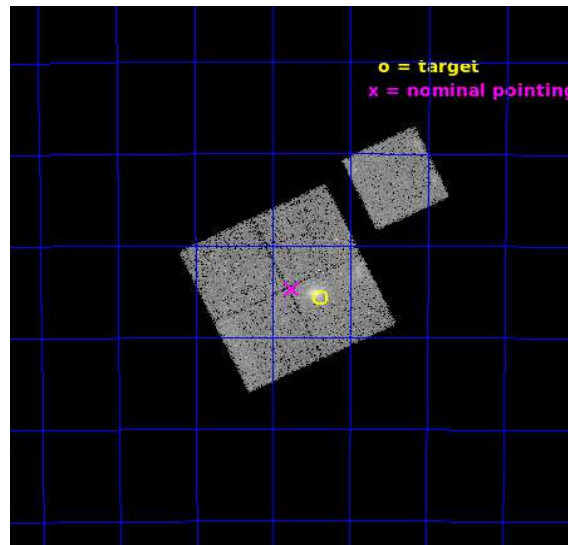
L2 Processing Date : Sep 26 2020

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# 1 Front

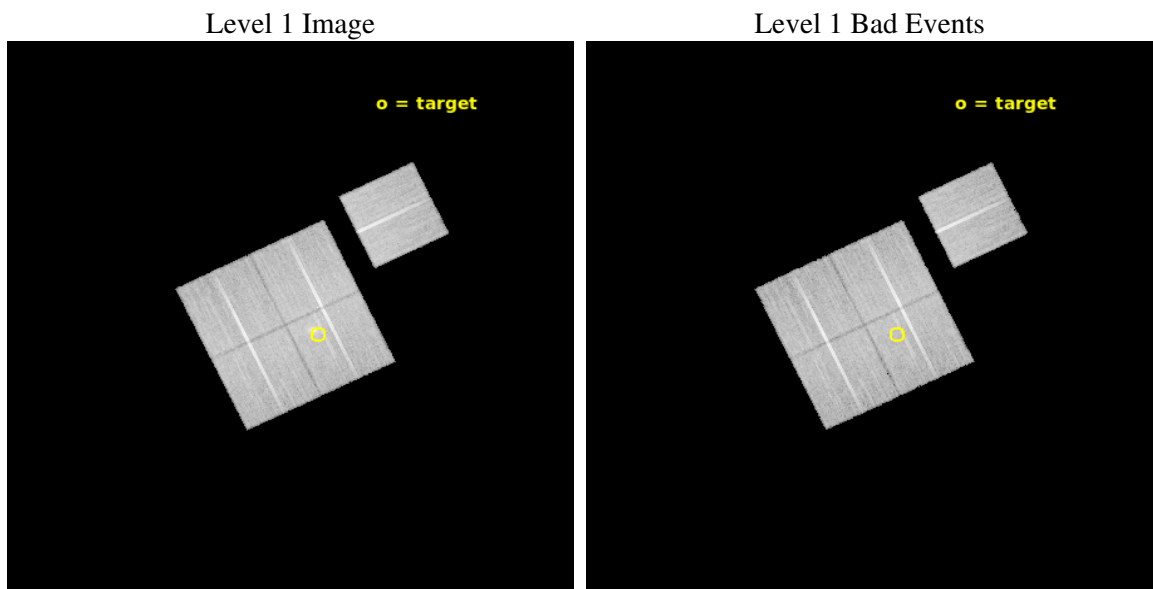
seq_num	800438	Sequence number
obs_id	4995	Observation id
title	Studying the effect of merging clusters in cosmological cluster samples	Proposal title
observer	Prof. Hans Boehringer	Principal investigator
object	RXCJ2011.3-5725	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	302.84625	Observer's specified target RA [deg]
dec_targ	-57.4275	Observer's specified target Dec [deg]
ra_nom	302.93819928158	Nominal RA [deg]
dec_nom	-57.411993470519	Nominal Dec [deg]
roll_nom	64.181401525207	Nominal Roll [deg]
revision	4	Processing version of data
ontime	24313.299953222	Sum of GTIs [s]
livetime	23995.628790142	Livetime [s]
ontime0	24307.017972797	Sum of GTIs [s]
ontime1	24313.299953222	Sum of GTIs [s]
ontime2	24307.017972708	Sum of GTIs [s]
ontime3	24313.299953222	Sum of GTIs [s]
ontime6	24313.299953222	Sum of GTIs [s]
l2events	69216	Number of level 2 events



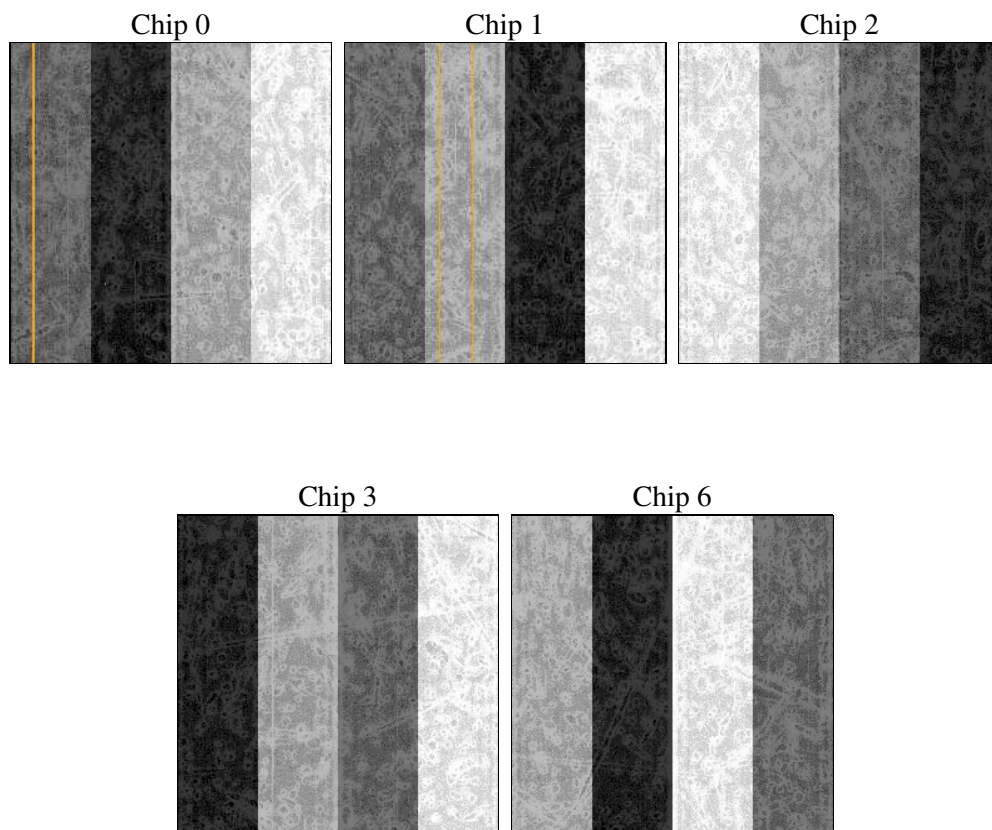
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24142.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	24313.299953222	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	24307.017972797	Sum of GTIs [s]
date	2020-09-26T11:35:24	Date and time of file creation	ontime1	24313.299953222	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	24307.017972708	Sum of GTIs [s]
			ontime3	24313.299953222	Sum of GTIs [s]
			ontime6	24313.299953222	Sum of GTIs [s]
			l1events	773587	Number of level 1 events

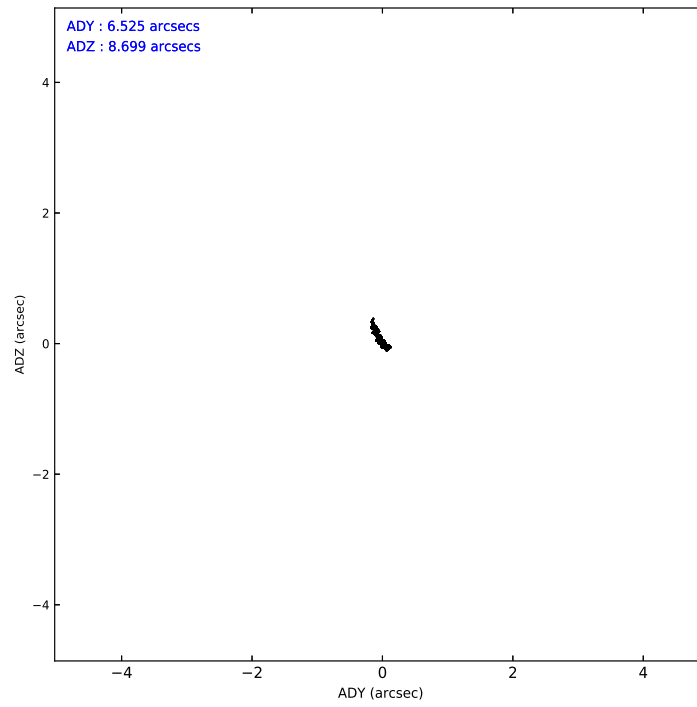
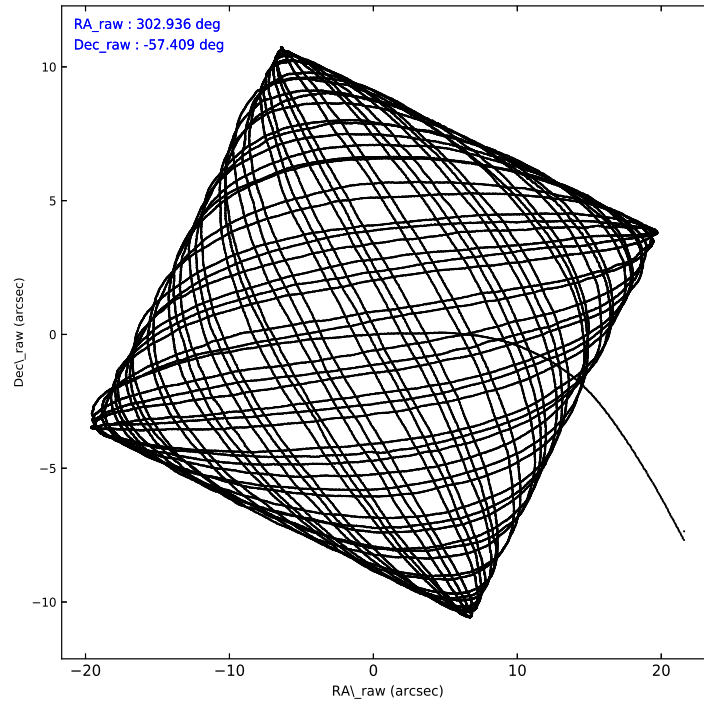
### 2.1.4 Events

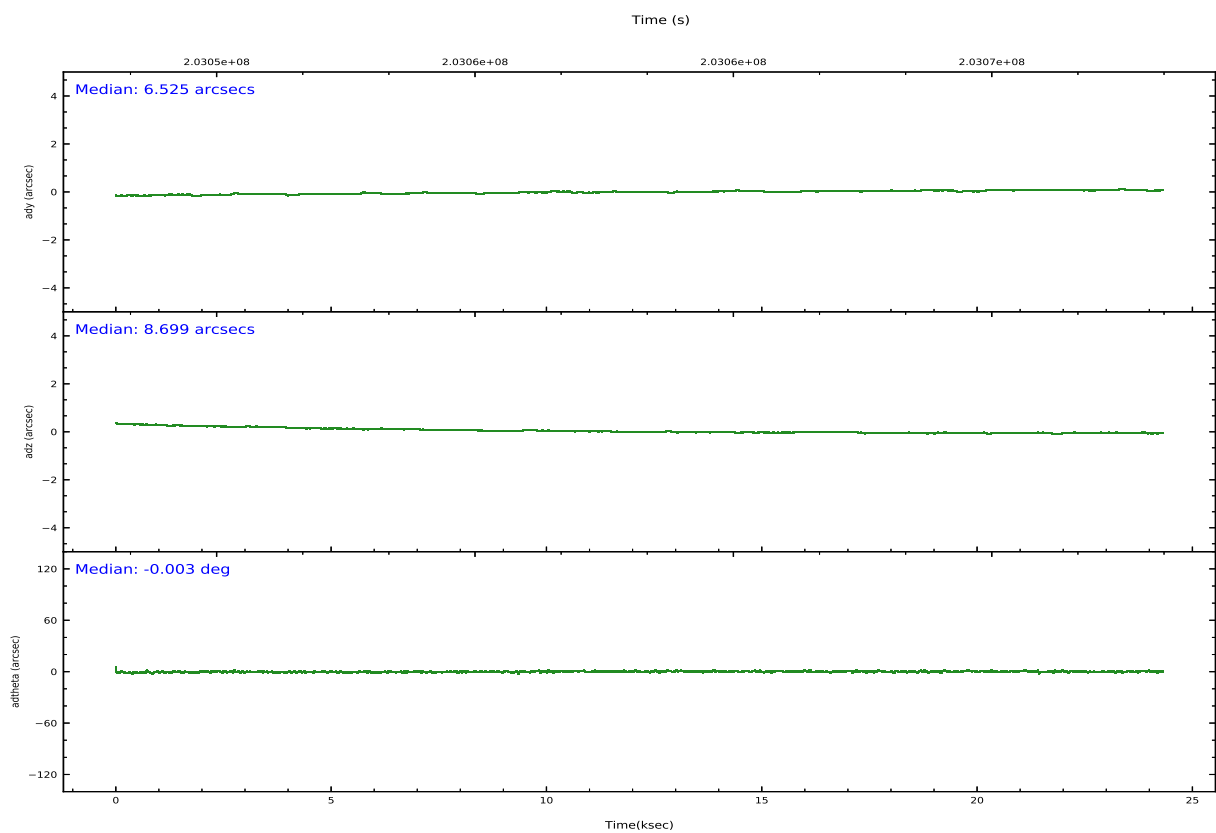
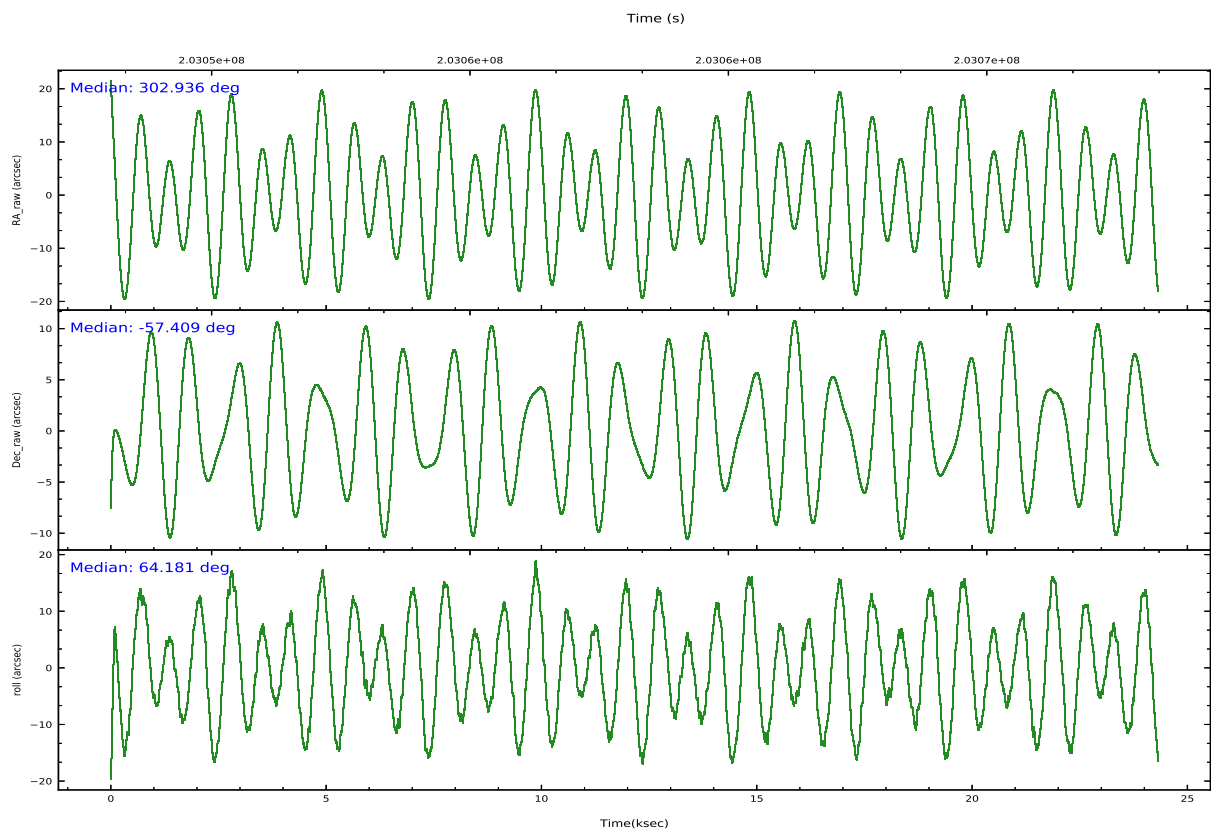
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	146801	147927	161977	158743	158139	grade 0 events	5690	6482	5883	10236	6064
rejected events	131597	131186	147162	138820	142427		3%	4%	3%	6%	3%
rejected %	89%	88%	90%	87%	90%	grade 1 events	75	78	109	105	73
							0%	0%	0%	0%	0%
						grade 2 events	3610	3599	3507	3581	3373
							2%	2%	2%	2%	2%
						grade 3 events	1856	2020	1671	1981	1842
							1%	1%	1%	1%	1%
						grade 4 events	1674	1983	1714	1818	1755
							1%	1%	1%	1%	1%
						grade 5 events	5469	5761	5133	6104	6186
							3%	3%	3%	3%	3%
						grade 6 events	3034	3410	2809	3046	3452
							2%	2%	1%	1%	2%
						grade 7 events	125393	124594	141151	131872	135394
							85%	84%	87%	83%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	302.939444	302.93819928158	Subarray requested	NONE	NONE
[deg] Pointing Dec	-57.436463	-57.411993470519	Alternating exposures requested	N	N
[deg] Pointing Roll	63.975519	64.18140152520699	[s] Primary exposure time	0.000000	3.1
[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)	203047838.184000	203046285.48874			
Observation start date	2004-06-08T02:09:34	2004-06-08T01:44:45			
[s] Observation end time (MET)	203071980.184000	203072700.2524			
Observation end date	2004-06-08T08:51:56	2004-06-08T09:05:00			
Read mode	TIMED	TIMED			

## 2.3 Aspect



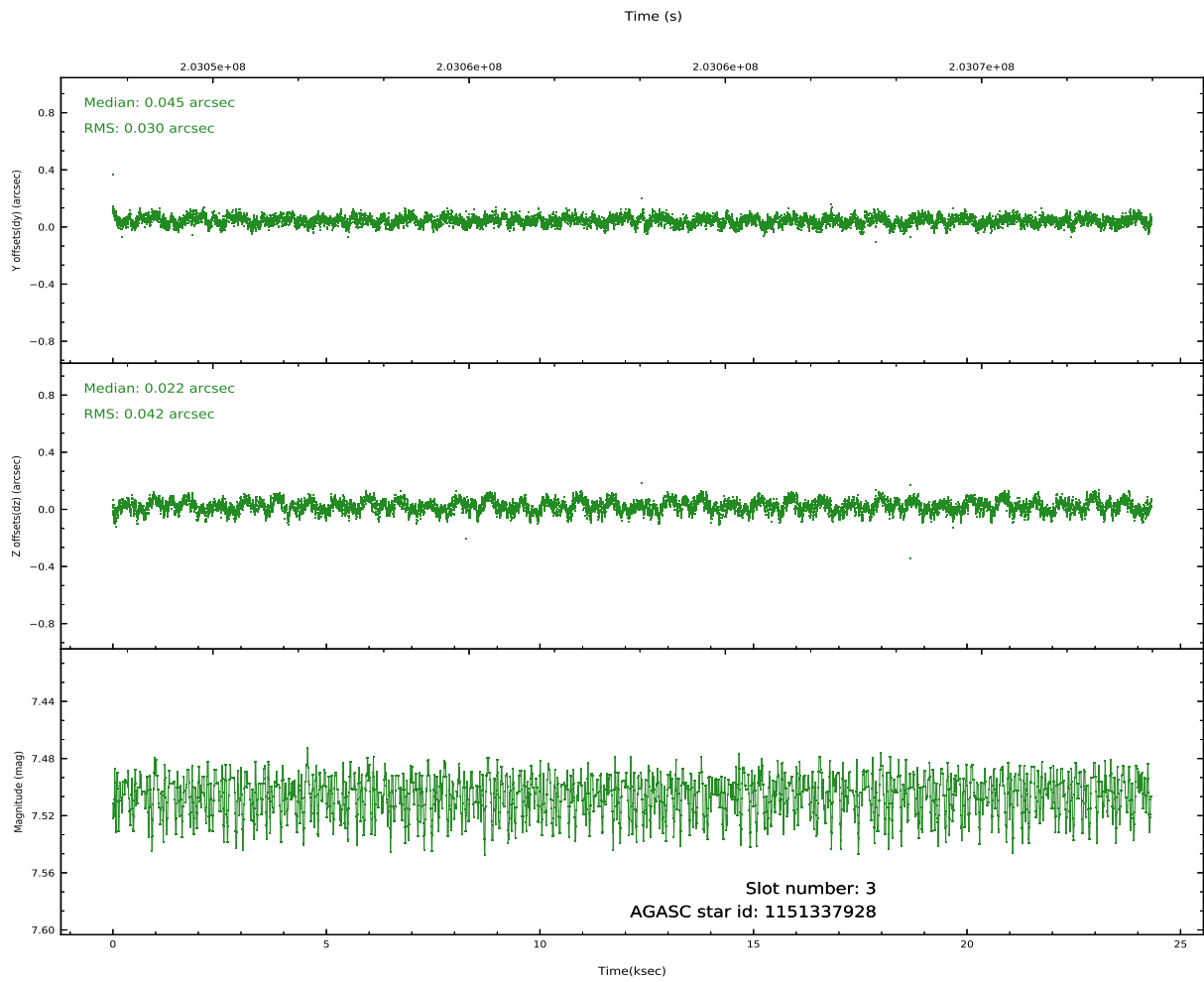
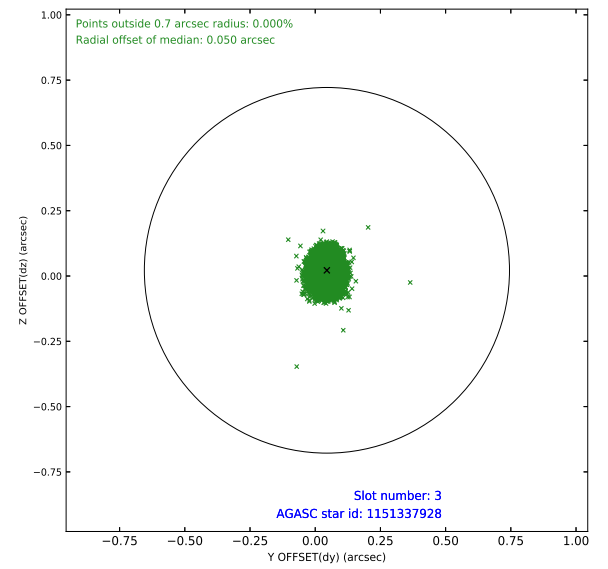
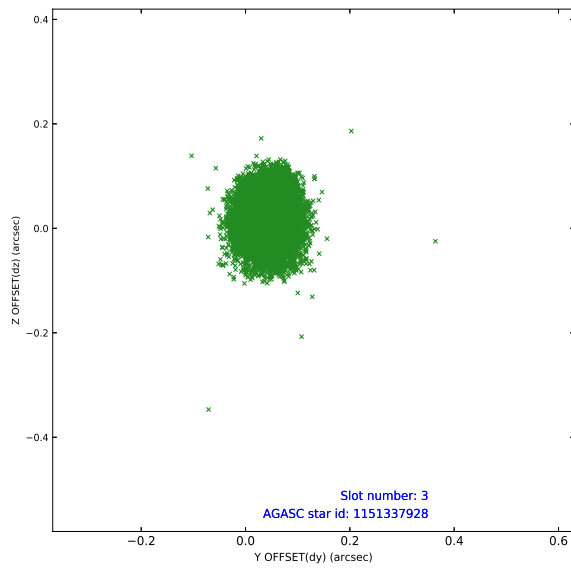


Slot Statistics

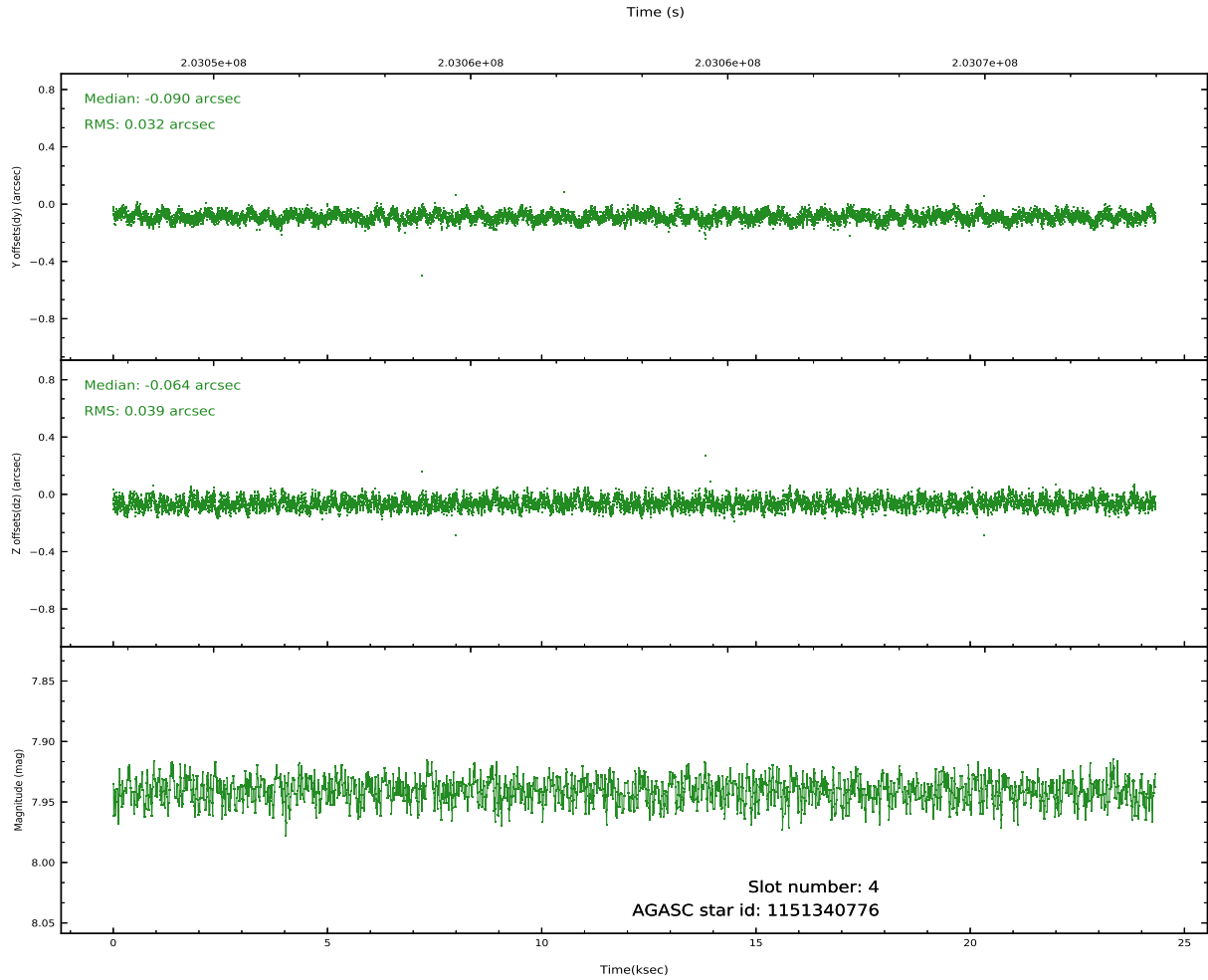
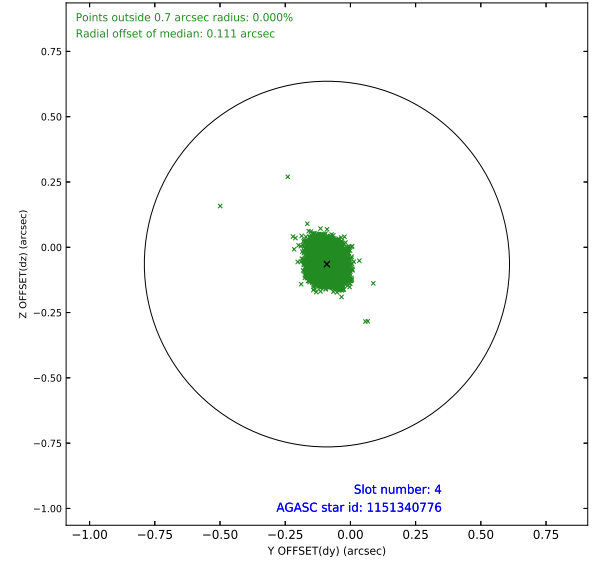
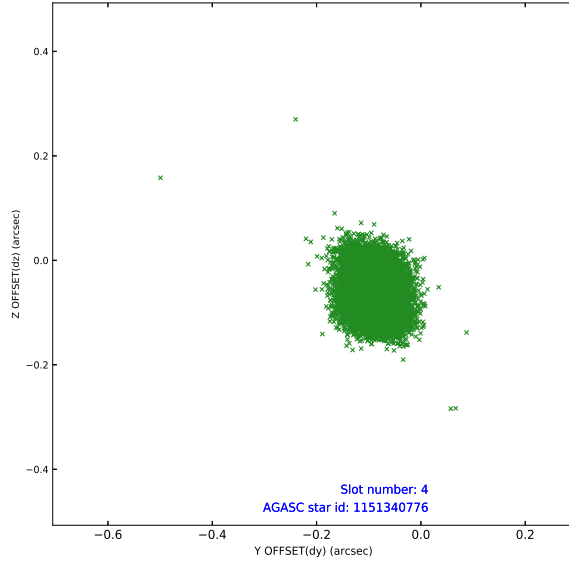
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.14	5932	1.000	-0.084	-0.088	0.010	0.017	0.000000	0.000000	-761.07	-838
1	FID		ACIS-I-4	7.19	5931	1.000	0.179	0.075	0.009	0.017	0.000000	0.000000	2153.18	1067
2	FID		ACIS-I-5	7.23	5932	1.000	-0.195	0.081	0.011	0.017	0.000000	0.000000	-1814.86	1065
3	GUIDE	used	1151337928	7.50	11865	1.000	0.045	0.022	0.055	0.087	303.142902	-58.116577	-2030.64	-1422
4	GUIDE	used	1151340776	7.94	11865	1.000	-0.090	-0.064	0.054	0.085	302.320116	-57.331751	-194.20	1244
5	GUIDE	used	1151350112	9.16	11859	1.000	0.060	-0.087	0.081	0.132	303.241865	-56.846660	2168.37	396
6	GUIDE	used	1151472992	9.61	11854	1.000	0.036	0.055	0.089	0.143	303.531180	-57.237033	1146.99	-722
7	GUIDE	used	1151471432	9.88	11850	1.000	-0.050	0.076	0.113	0.183	303.351325	-57.459643	273.16	-754

## 2.4 Star Slots

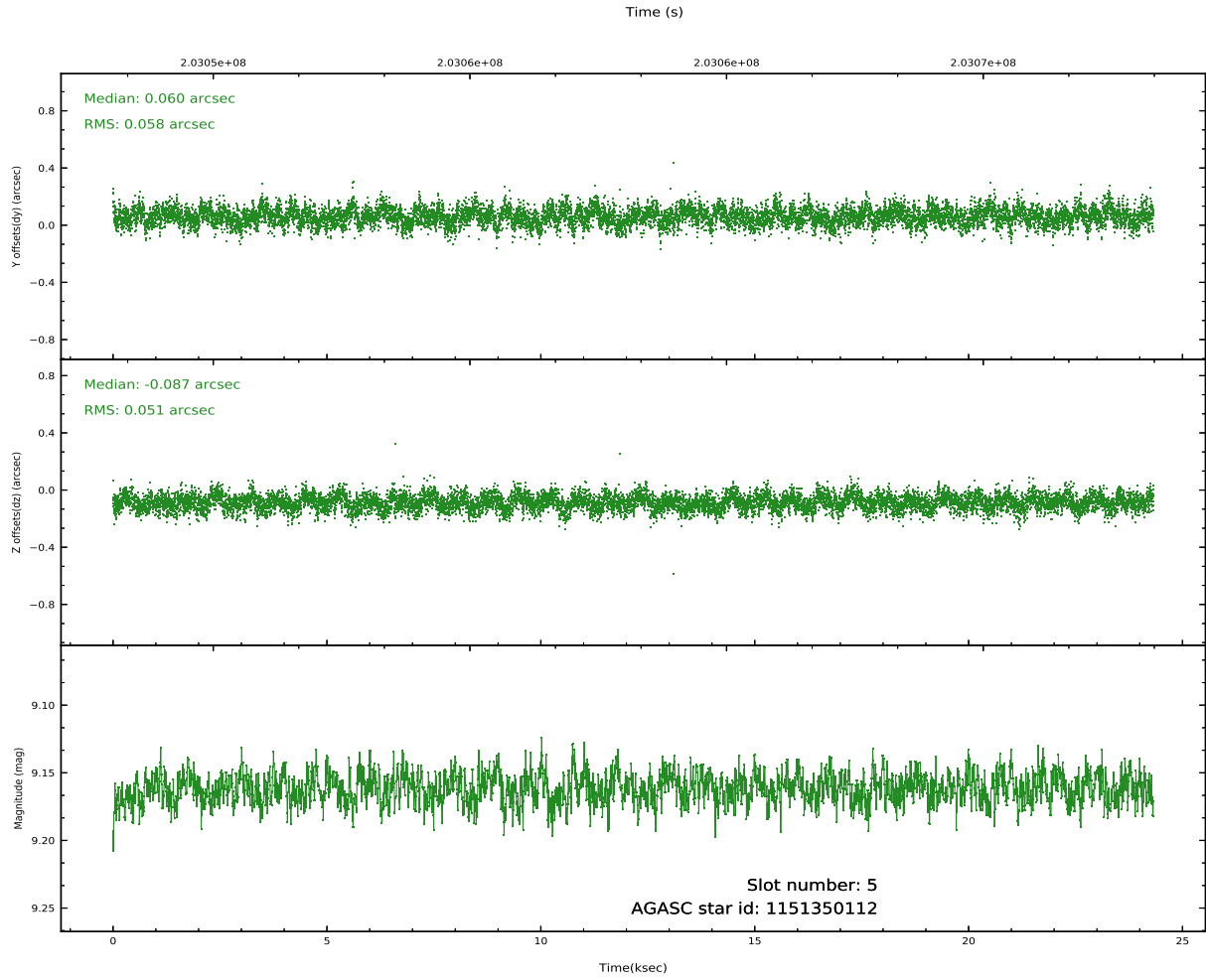
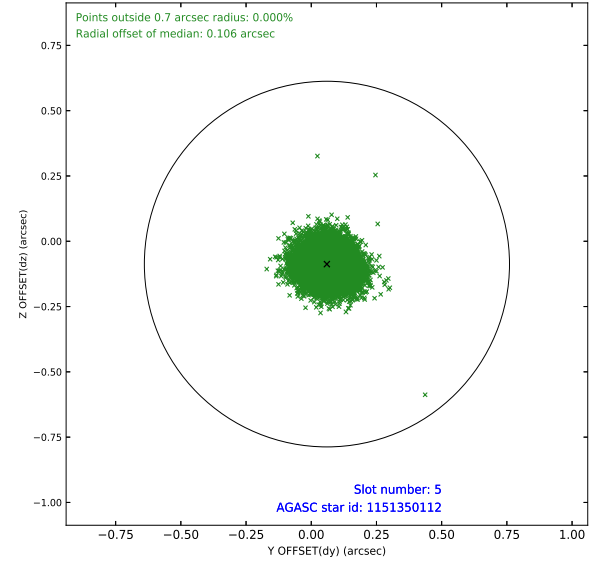
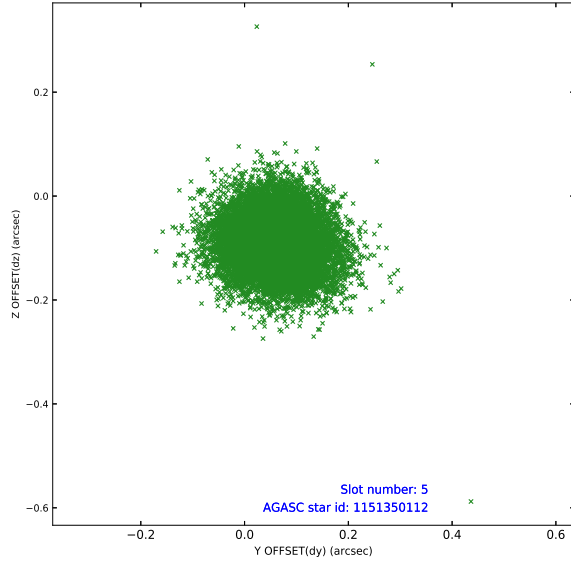
### 2.4.1 Slot 3



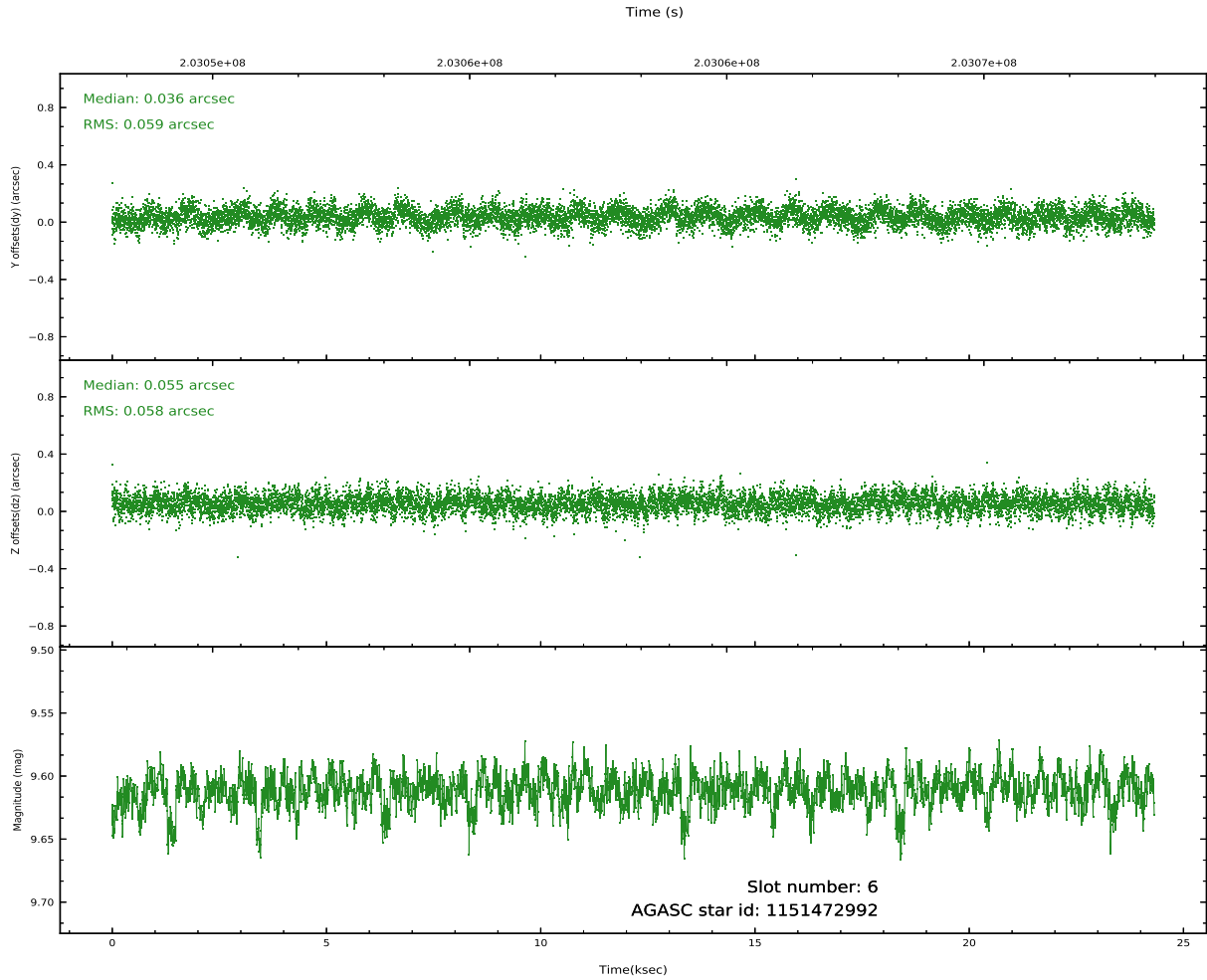
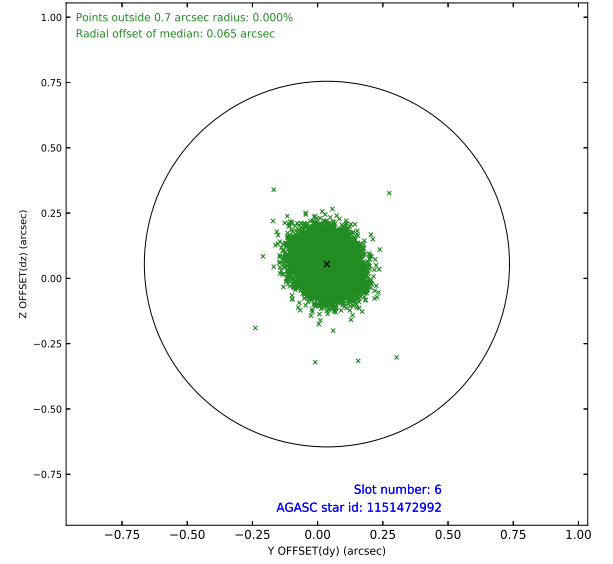
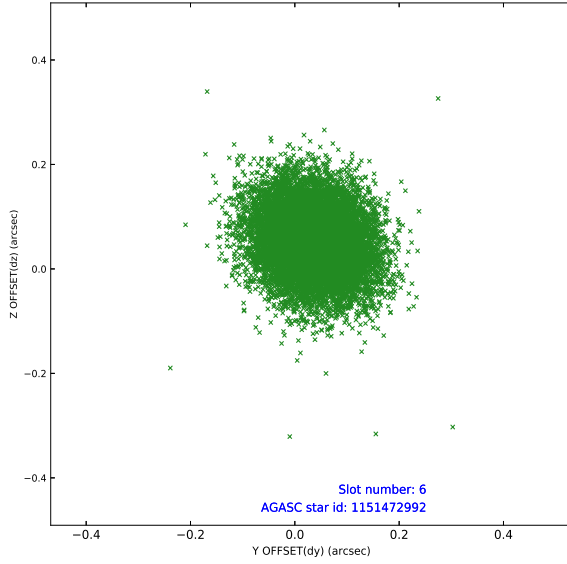
## 2.4.2 Slot 4



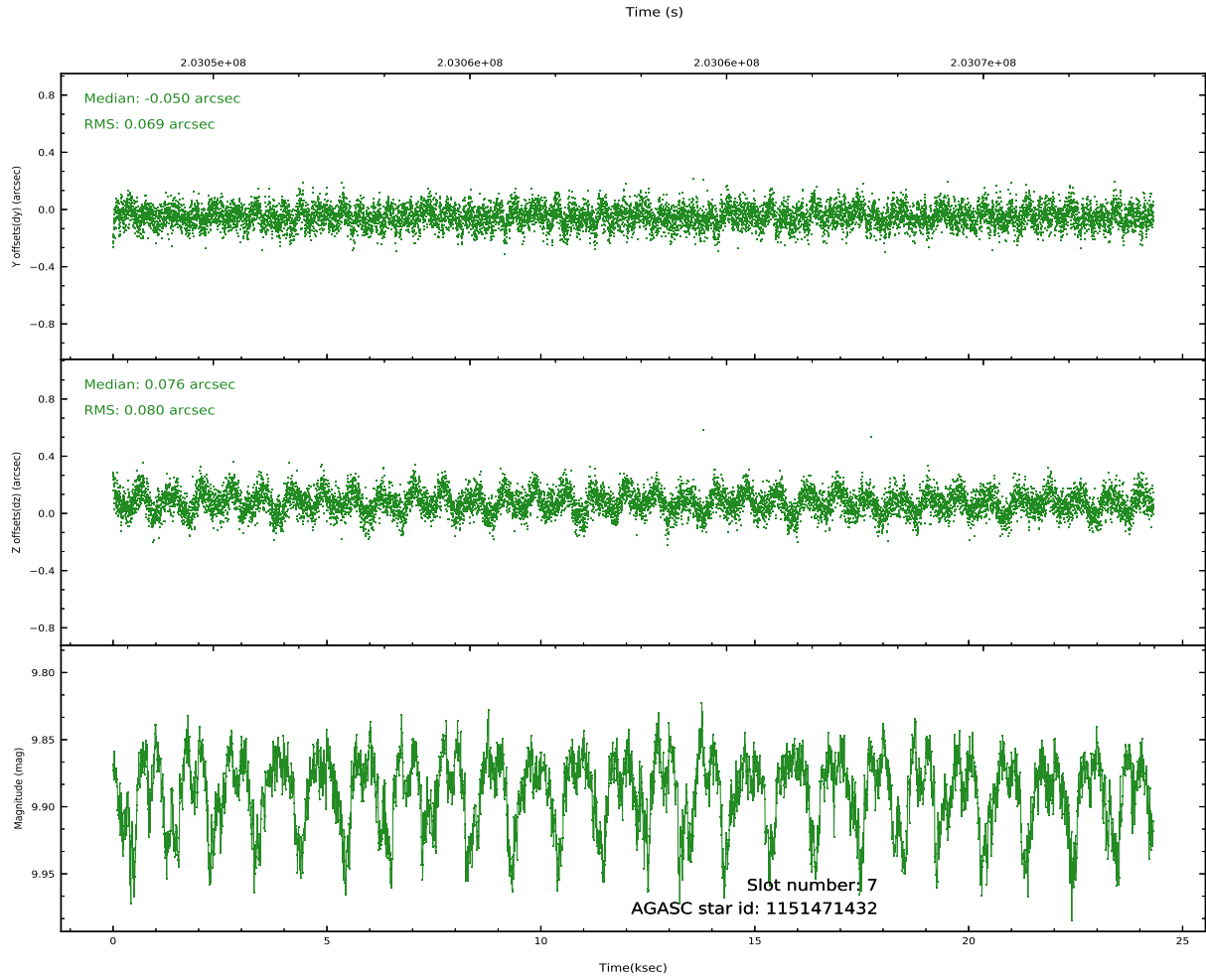
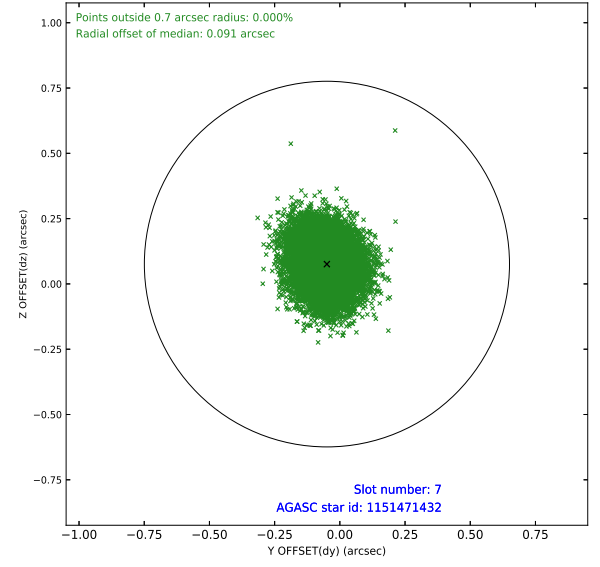
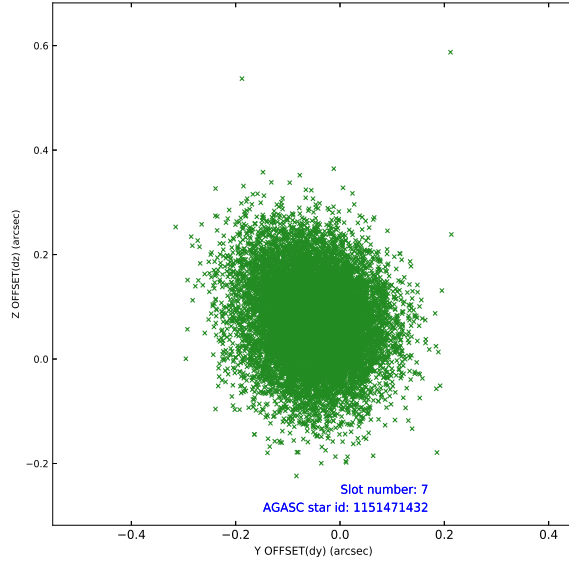
### 2.4.3 Slot 5



## 2.4.4 Slot 6

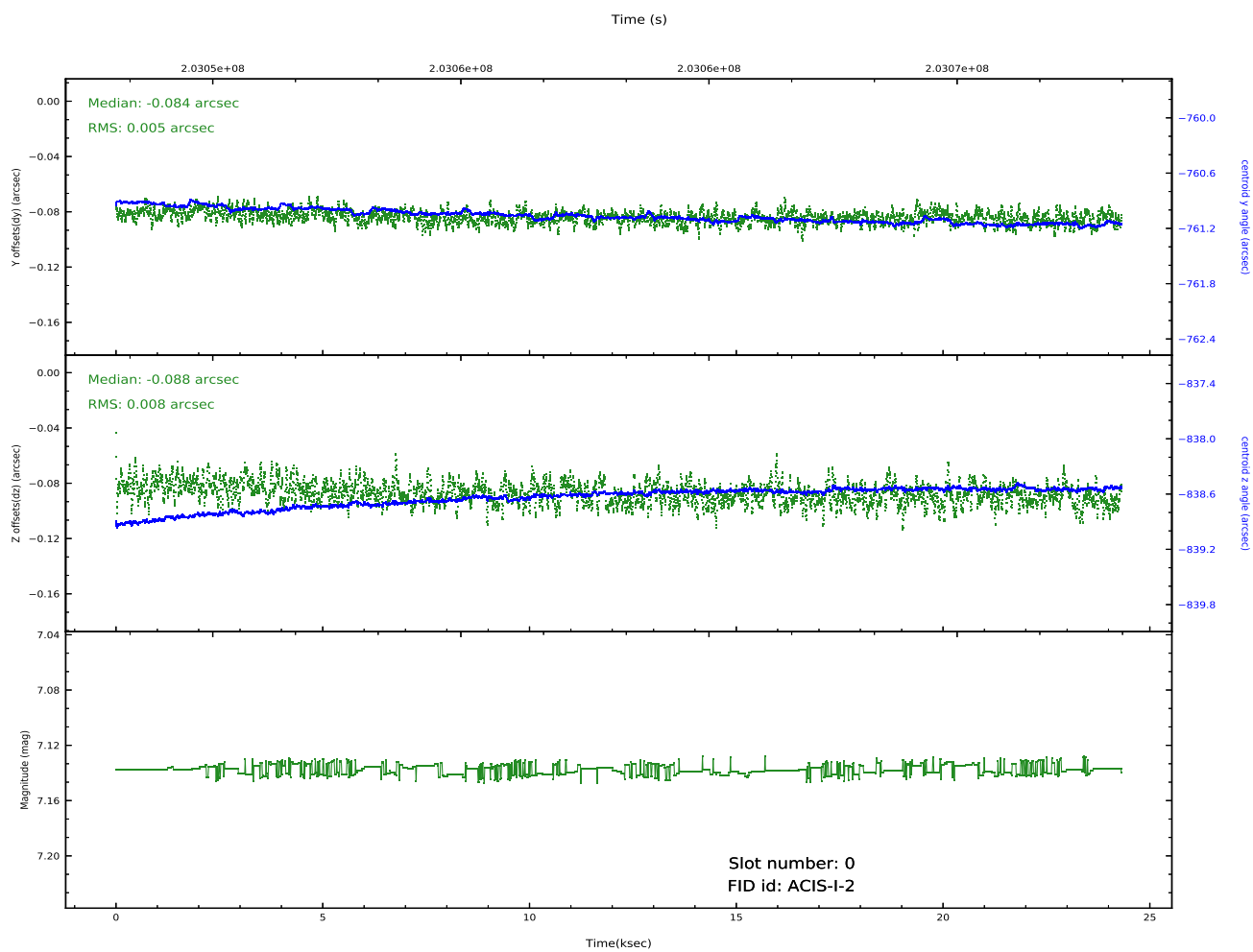
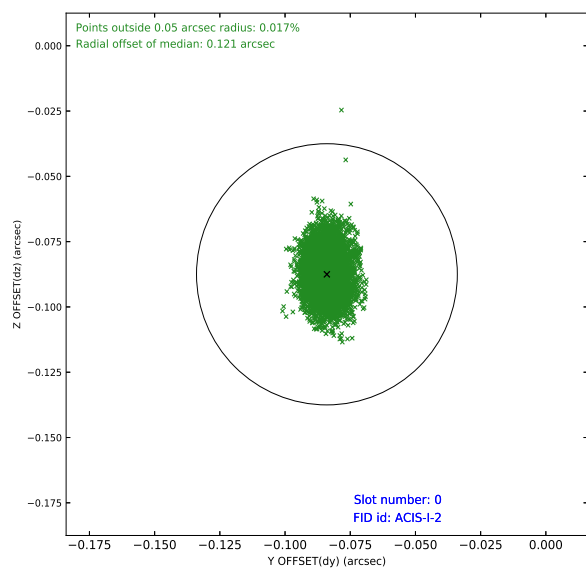
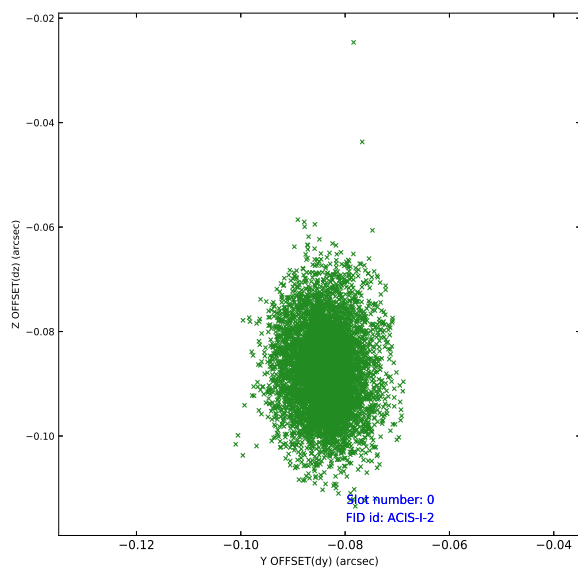


## 2.4.5 Slot 7

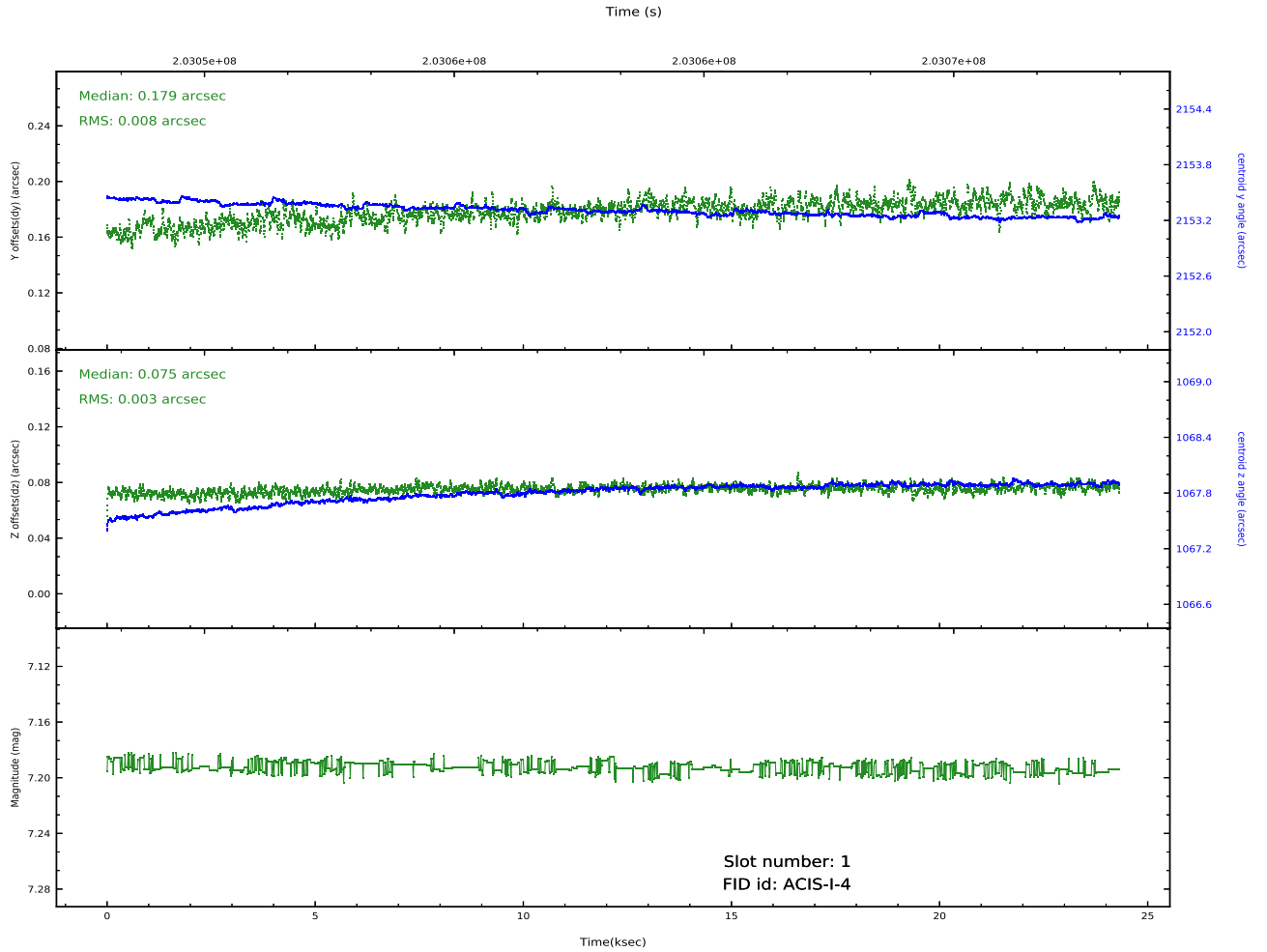
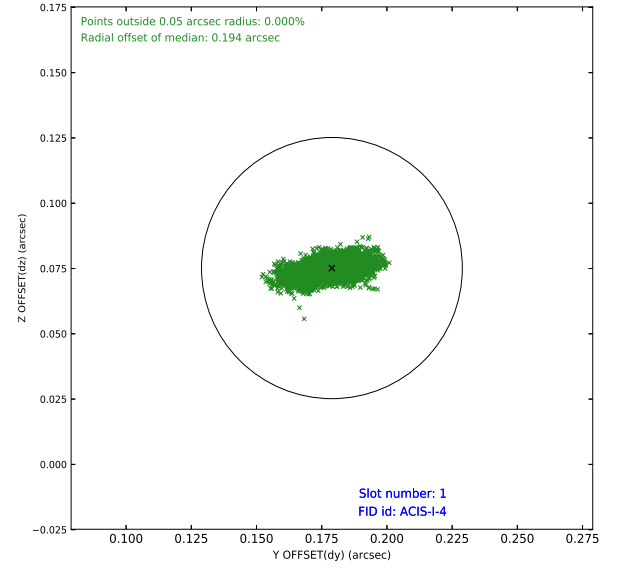
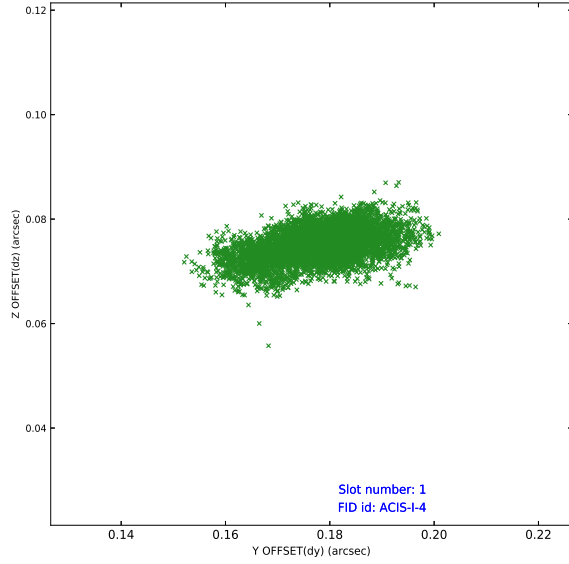


## 2.5 FID Slots

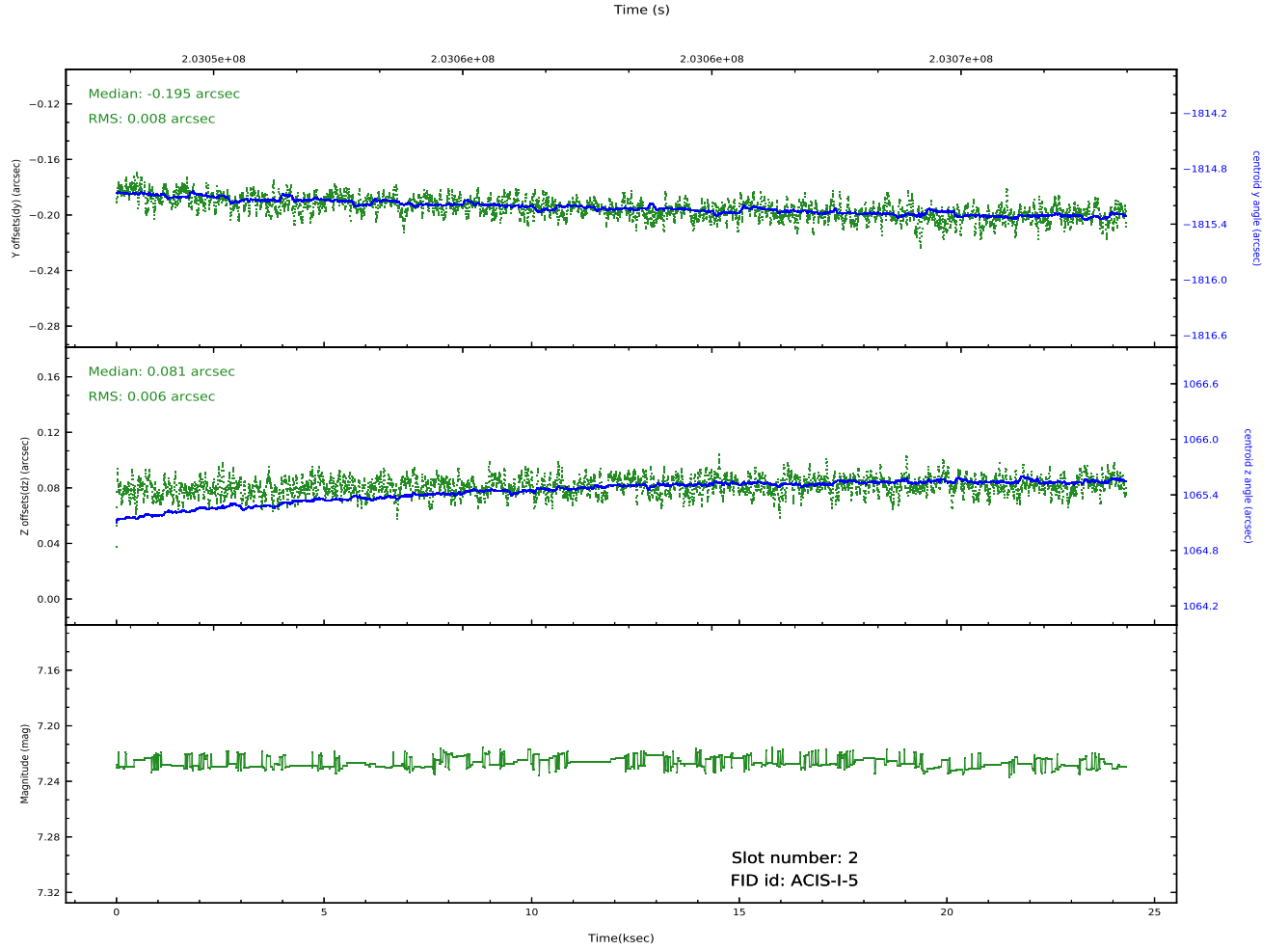
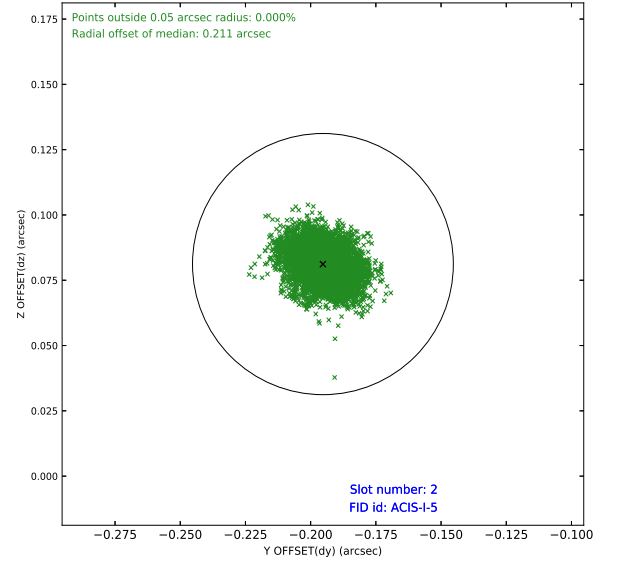
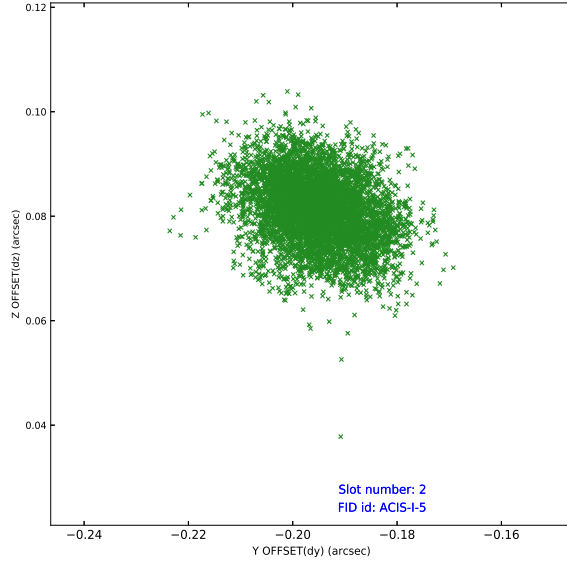
### 2.5.1 Slot 0



## 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)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.313

### A.2 Comments