

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 7217 - L2 Version 3  
Chandra X-Ray Center

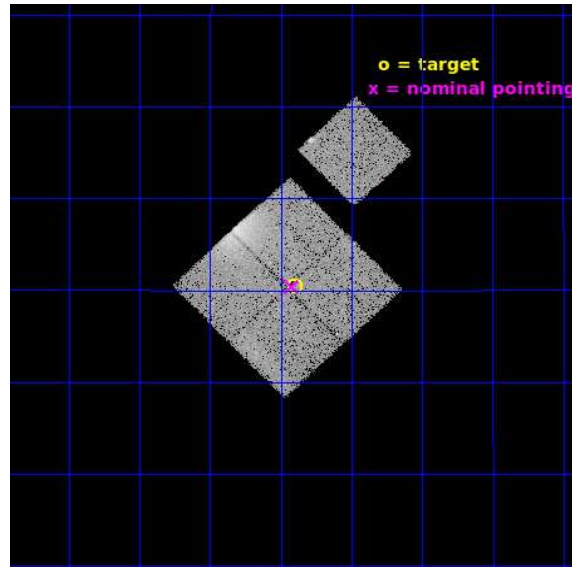
L2 Processing Date : Oct 11 2020

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# 1 Front

seq_num	800562	Sequence number
obs_id	7217	Observation id
title	Temperature profiles of relaxed galaxy clusters	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	A478	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	63.225	Observer's specified target RA [deg]
dec_targ	10.341667	Observer's specified target Dec [deg]
ra_nom	63.230292923591	Nominal RA [deg]
dec_nom	10.340029447395	Nominal Dec [deg]
roll_nom	46.2070369307	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18556.55895412	Sum of GTIs [s]
livetime	18314.103850244	Livetime [s]
ontime0	18556.558984011	Sum of GTIs [s]
ontime1	18559.699964285	Sum of GTIs [s]
ontime2	18556.558954149	Sum of GTIs [s]
ontime3	18556.55895412	Sum of GTIs [s]
ontime6	18559.699964285	Sum of GTIs [s]
l2events	68896	Number of level 2 events

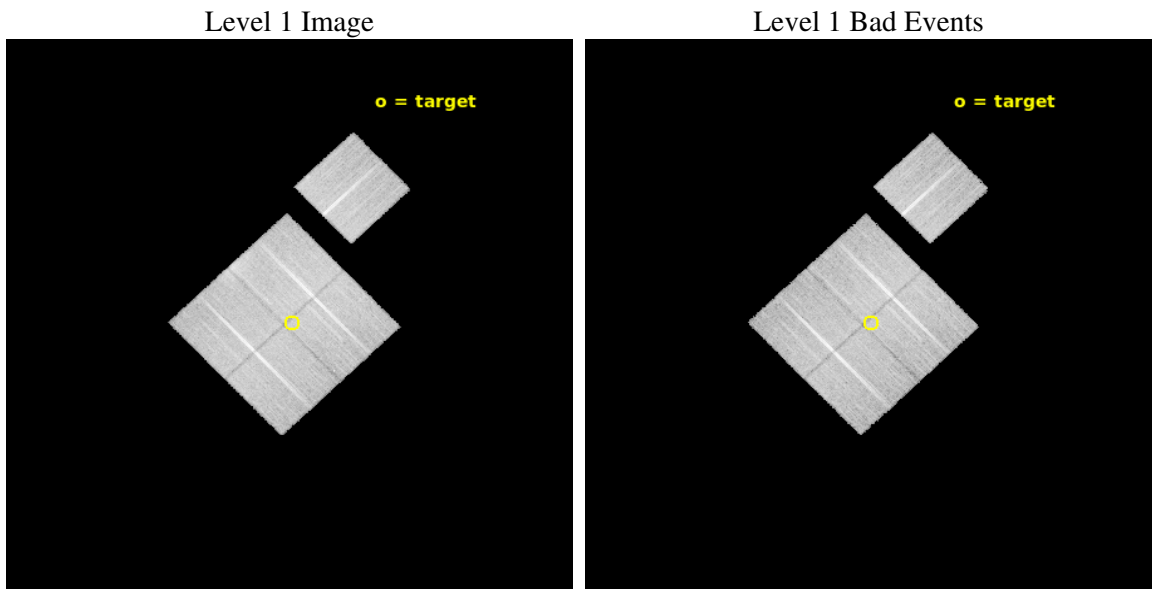




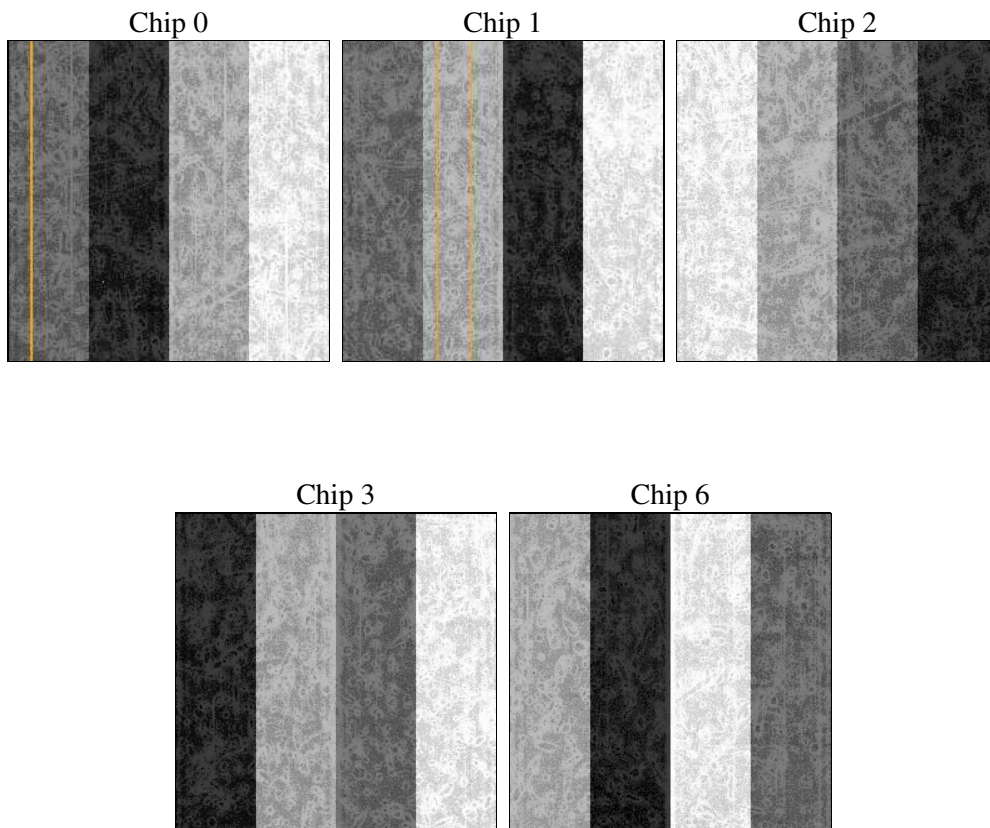
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18450.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	18556.55895412	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	18556.558984011	Sum of GTIs [s]
date	2020-10-11T13:43:03	Date and time of file creation	ontime1	18559.699964285	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	18556.558954149	Sum of GTIs [s]
			ontime3	18556.55895412	Sum of GTIs [s]
			ontime6	18559.699964285	Sum of GTIs [s]
			l1events	670820	Number of level 1 events

### 2.1.4 Events

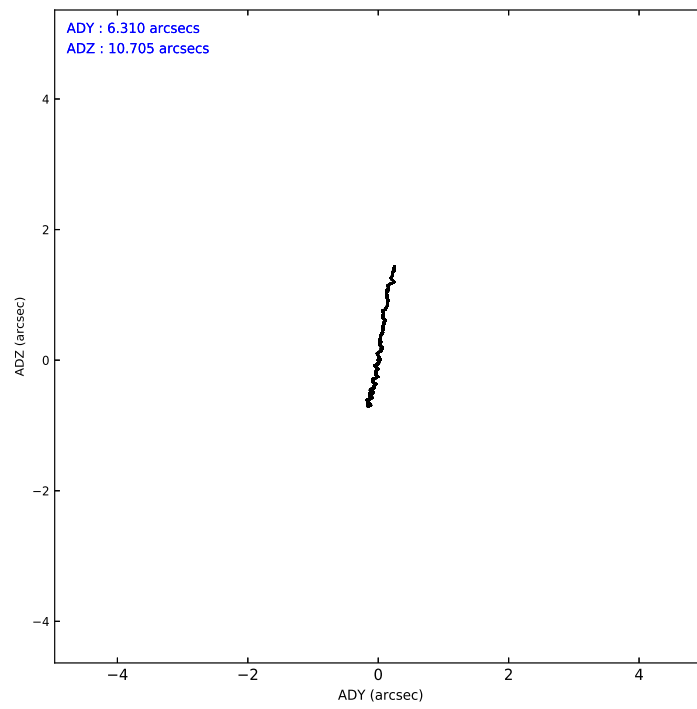
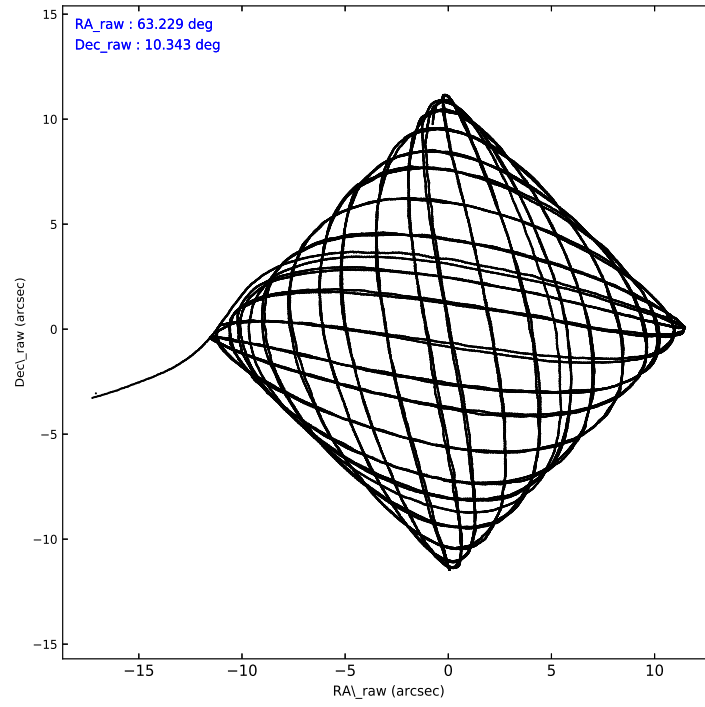
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	130286	123404	152192	132983	131955
rejected events	111342	109109	129726	120578	118764
rejected %	85%	88%	85%	90%	90%

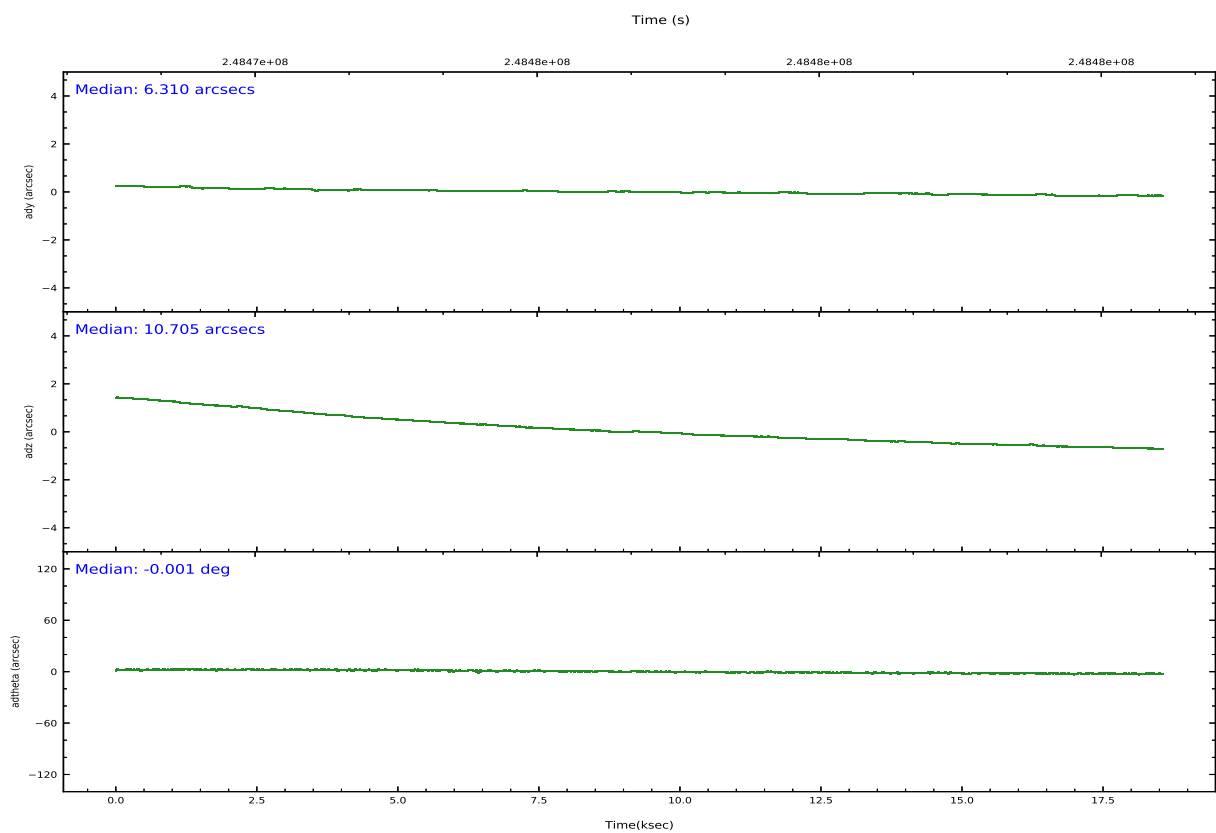
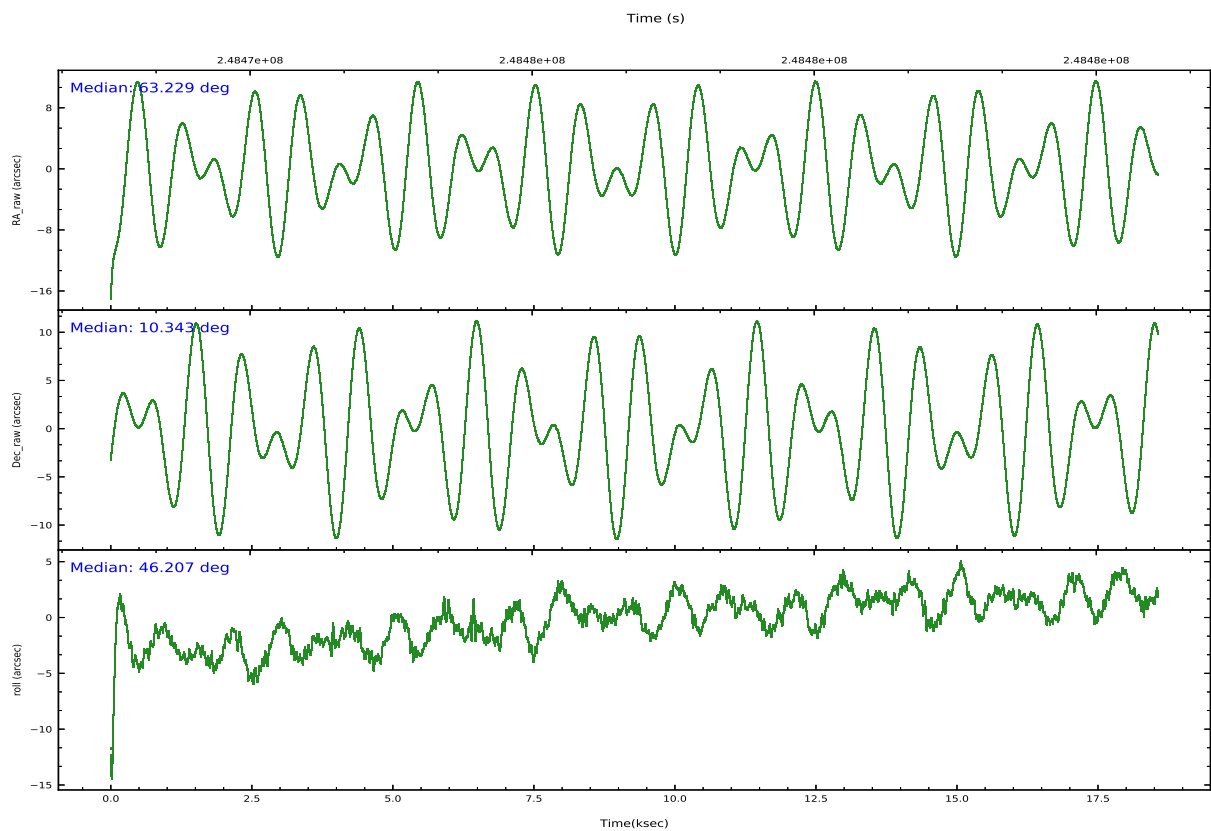
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9731	5386	12672	4829	5042
	7%	4%	8%	3%	3%
grade 1 events	100	62	120	96	56
	0%	0%	0%	0%	0%
grade 2 events	3754	3335	4218	2782	2910
	2%	2%	2%	2%	2%
grade 3 events	1729	1655	1754	1428	1495
	1%	1%	1%	1%	1%
grade 4 events	1633	1515	1838	1461	1518
	1%	1%	1%	1%	1%
grade 5 events	4528	5100	4278	5304	5181
	3%	4%	2%	3%	3%
grade 6 events	2675	3003	2579	2438	2812
	2%	2%	1%	1%	2%
grade 7 events	106136	103348	124733	114645	112941
	81%	83%	81%	86%	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	63.222805	63.230292923591	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.316874	10.340029447395	Alternating exposures requested	N	N
[deg] Pointing Roll	46.000390	46.2070369307	[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)	248467646.184000	248466286.90623			
Observation start date	2005-11-15T18:46:22	2005-11-15T18:24:46			
[s] Observation end time (MET)	248486096.184000	248486867.88218			
Observation end date	2005-11-15T23:53:52	2005-11-16T00:07:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect



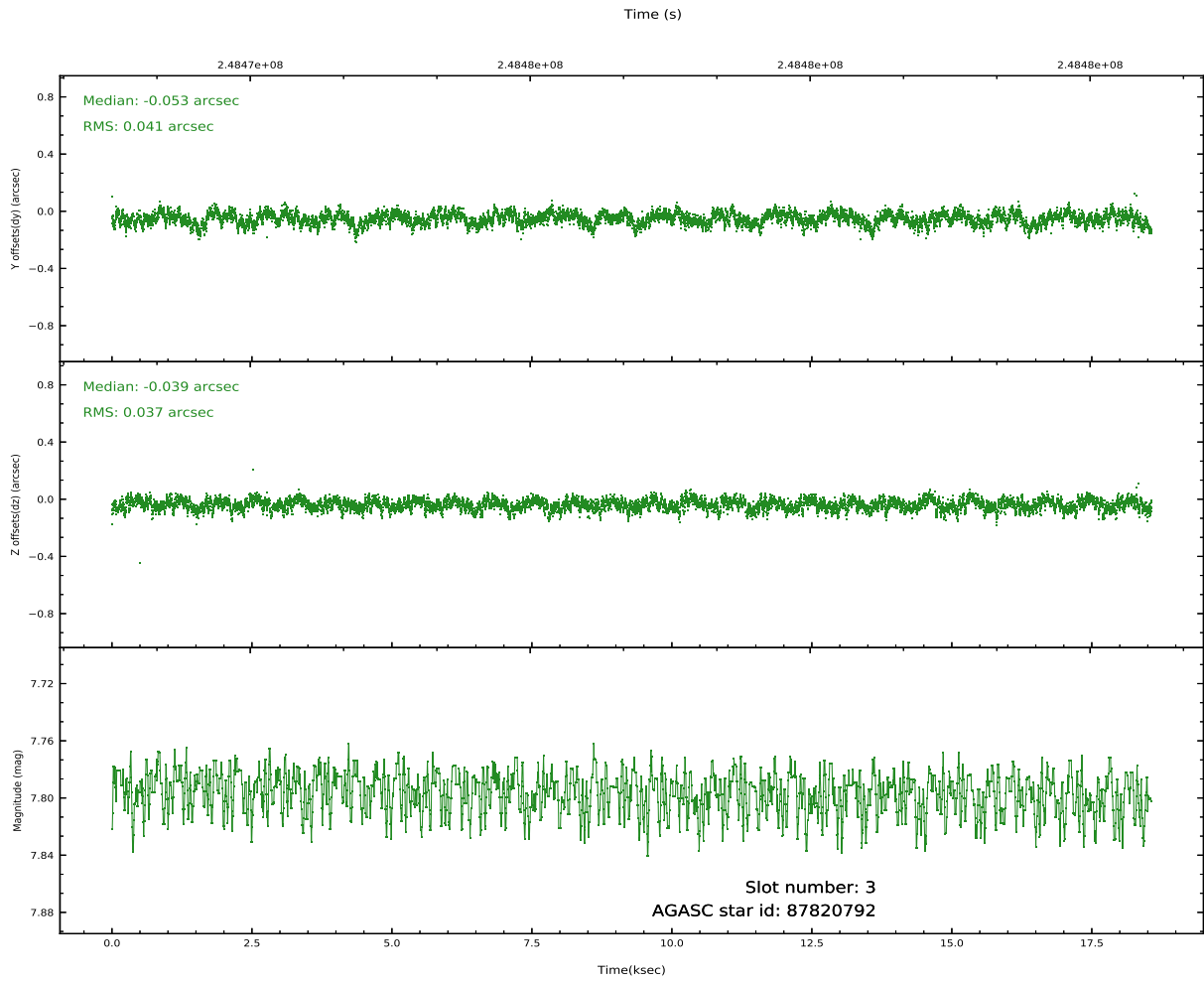
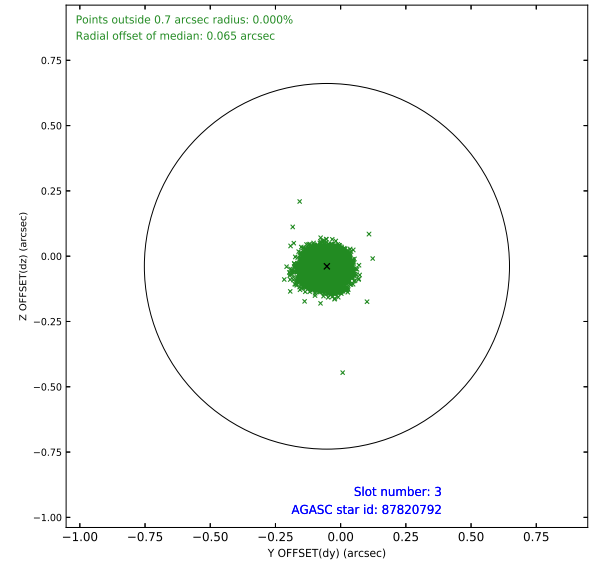
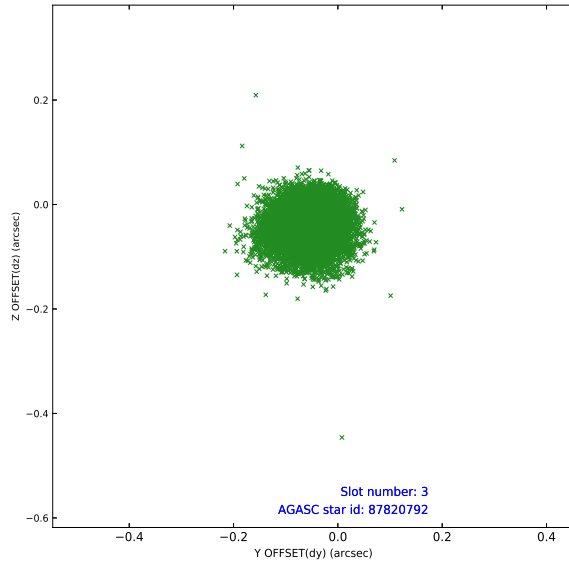


Slot Statistics

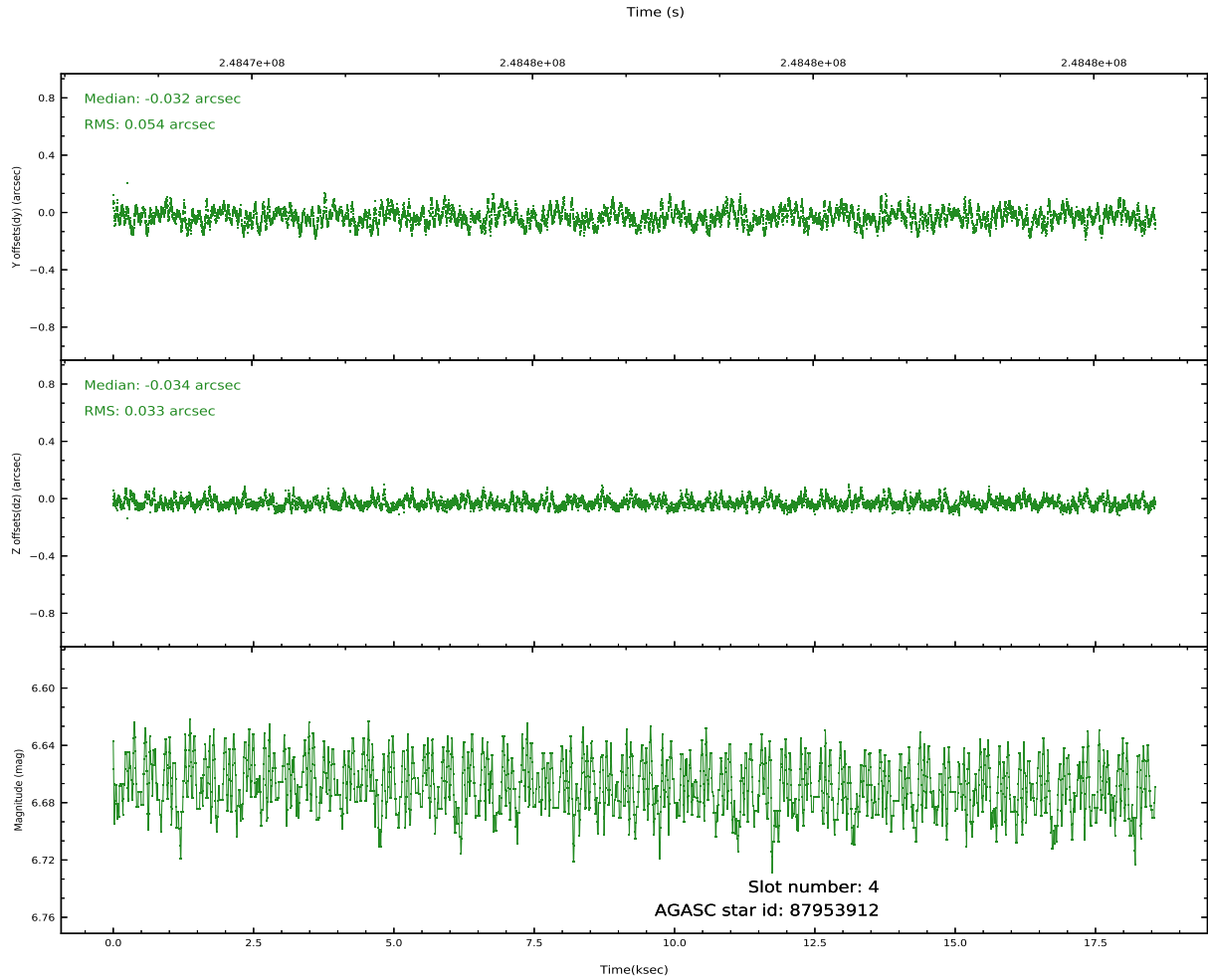
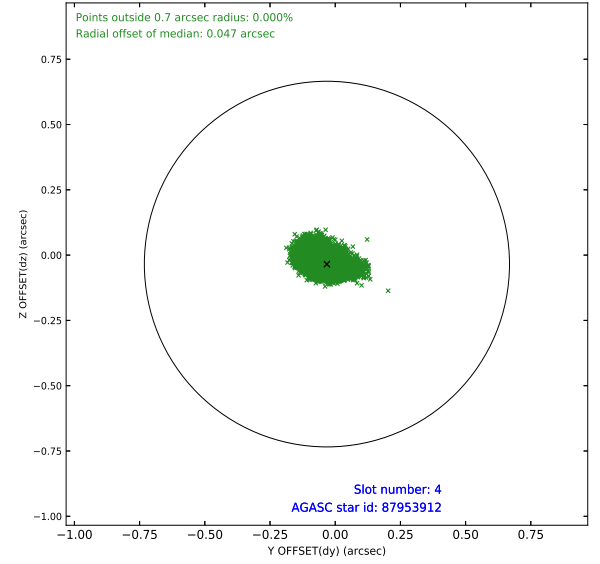
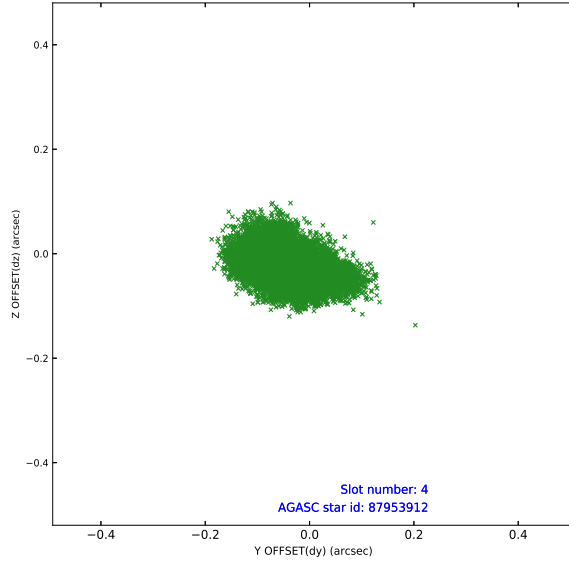
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.25	4529	1.000	0.038	-0.039	0.023	0.031	0.000000	0.000000	933.41	-834
1	FID		ACIS-I-5	7.23	4529	1.000	-0.197	0.039	0.016	0.027	0.000000	0.000000	-1814.79	1063
2	FID		ACIS-I-6	7.26	4529	1.000	0.068	0.068	0.014	0.027	0.000000	0.000000	398.78	1707
3	GUIDE	used	87820792	7.79	9055	1.000	-0.053	-0.039	0.058	0.093	63.068647	9.650157	-2106.37	-1273
4	GUIDE	used	87953912	6.67	9058	1.000	-0.032	-0.034	0.067	0.115	63.394036	10.212467	151.16	-697
5	GUIDE	used	87954016	9.27	9051	1.000	0.041	-0.085	0.089	0.146	63.197646	10.607026	689.70	789
6	GUIDE	used	87954552	8.33	9054	1.000	0.110	0.025	0.051	0.085	63.195345	11.171305	2145.56	2206
7	GUIDE	used	87950304	8.06	9043	1.000	-0.074	0.129	0.068	0.109	63.753878	10.748130	2423.05	-271

## 2.4 Star Slots

### 2.4.1 Slot 3

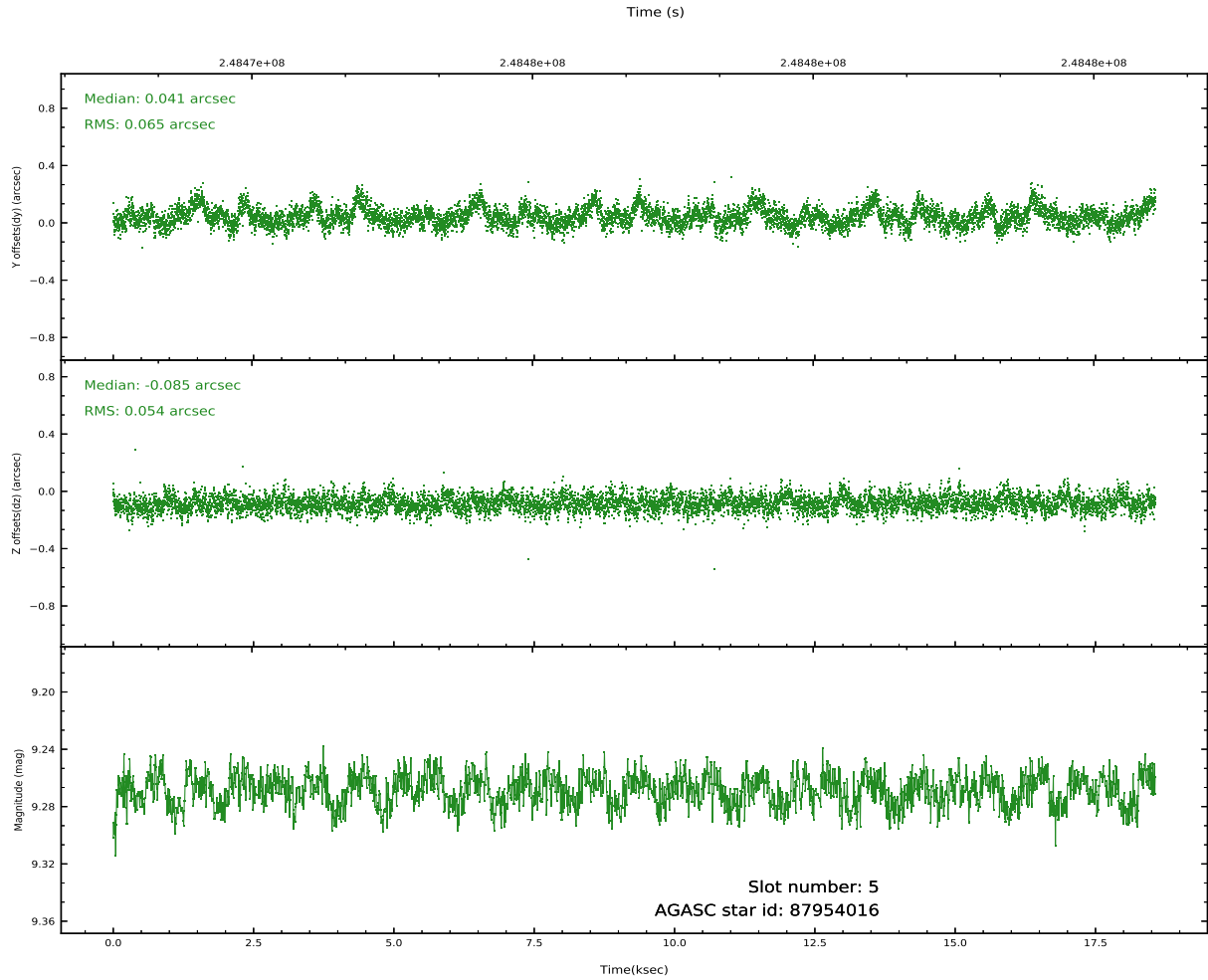
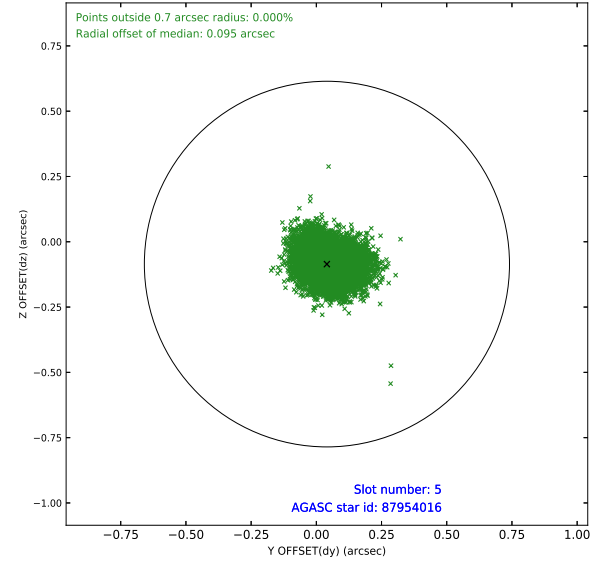
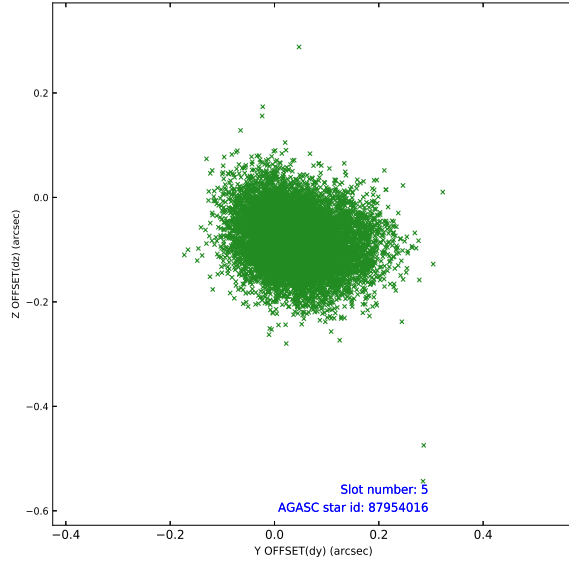


## 2.4.2 Slot 4

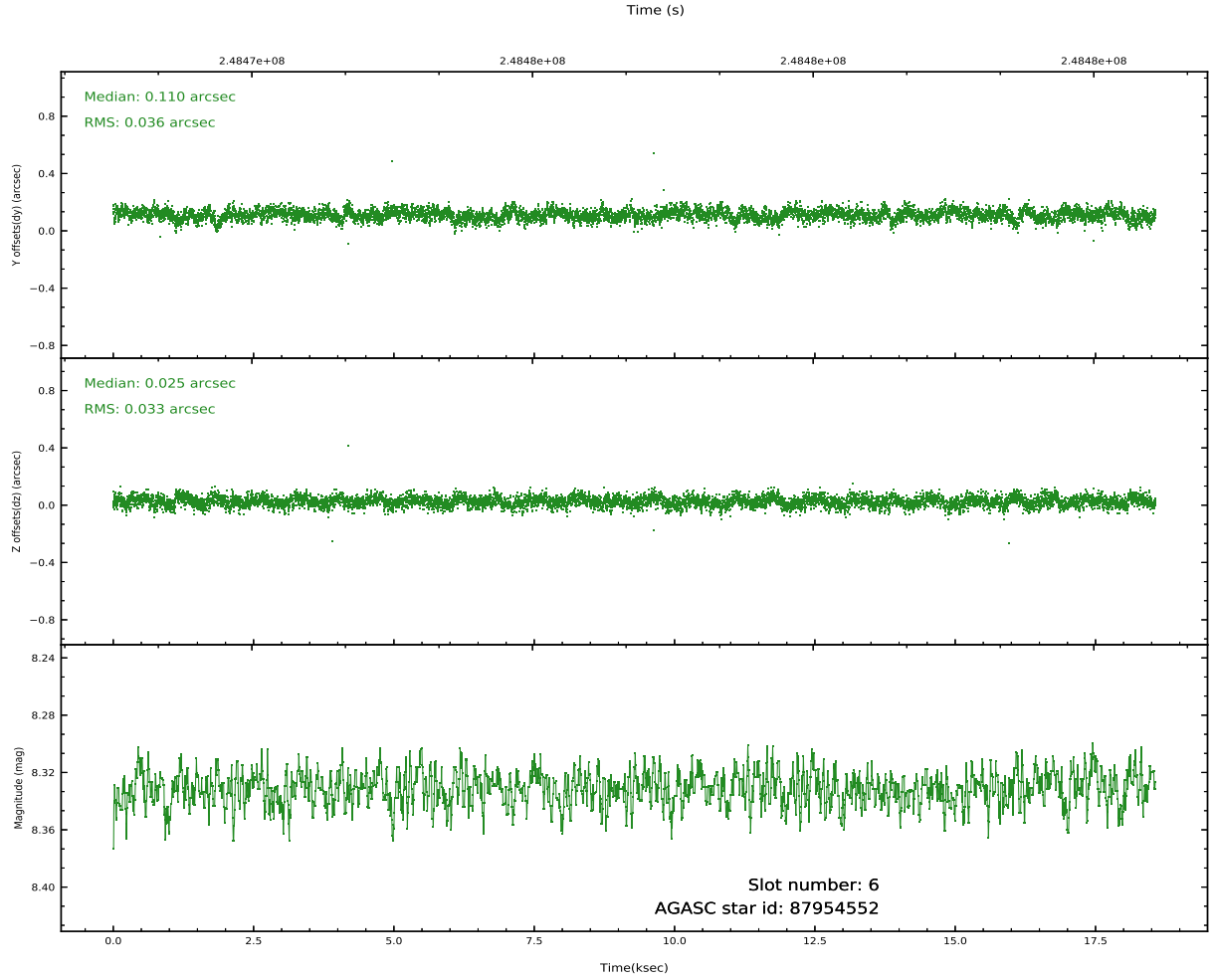
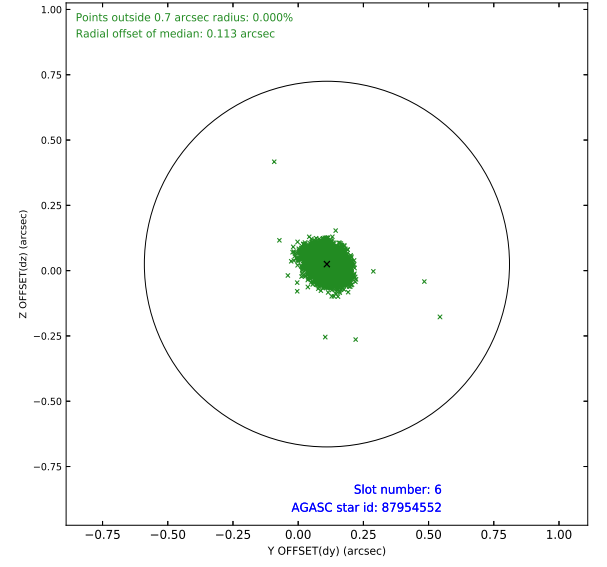
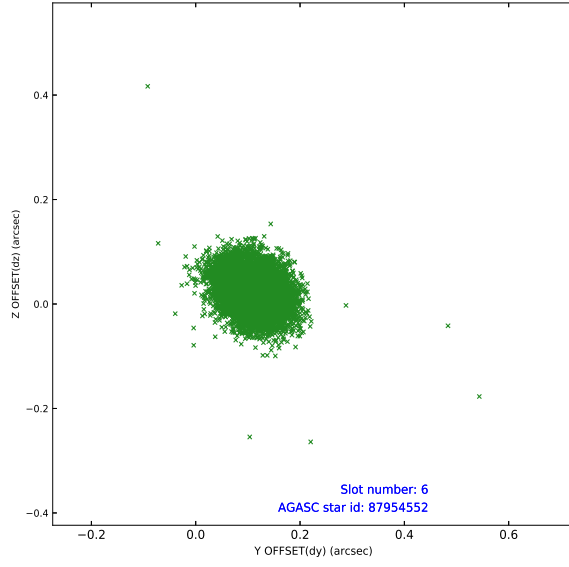




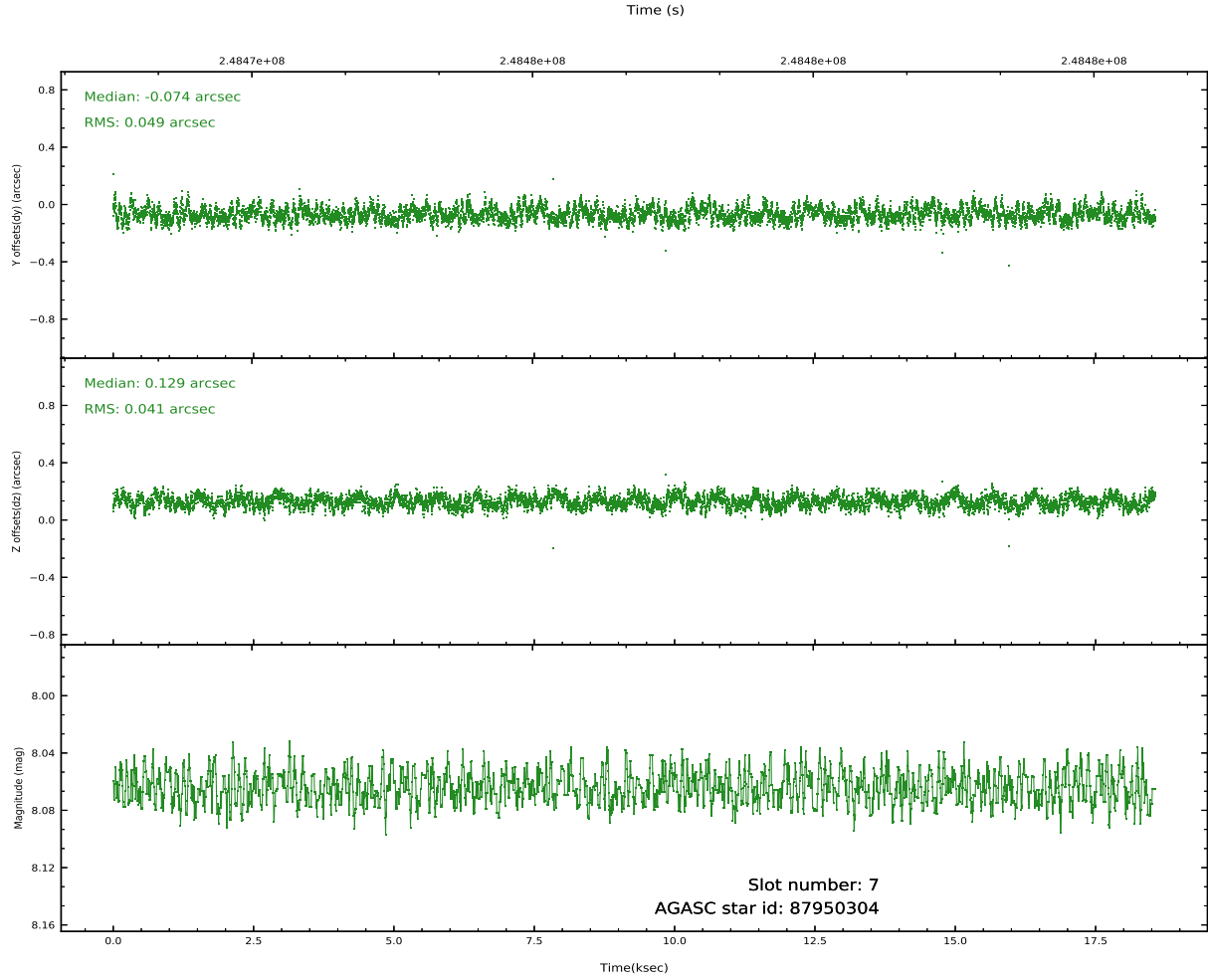
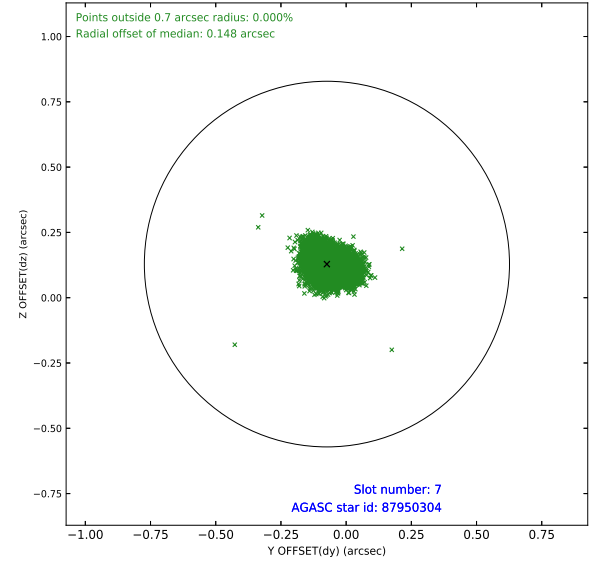
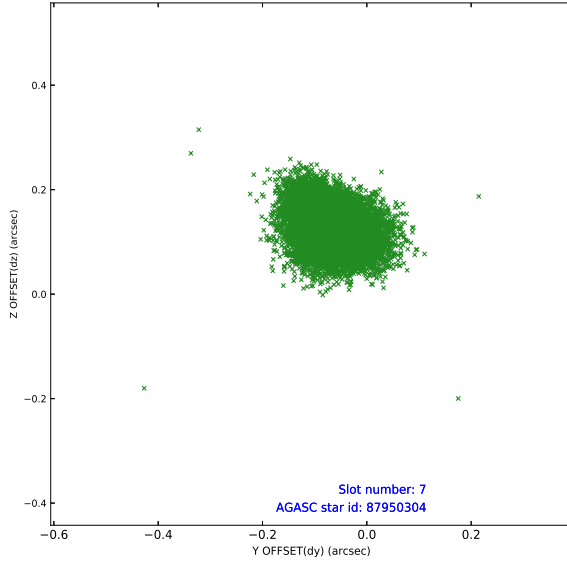
### 2.4.3 Slot 5



## 2.4.4 Slot 6

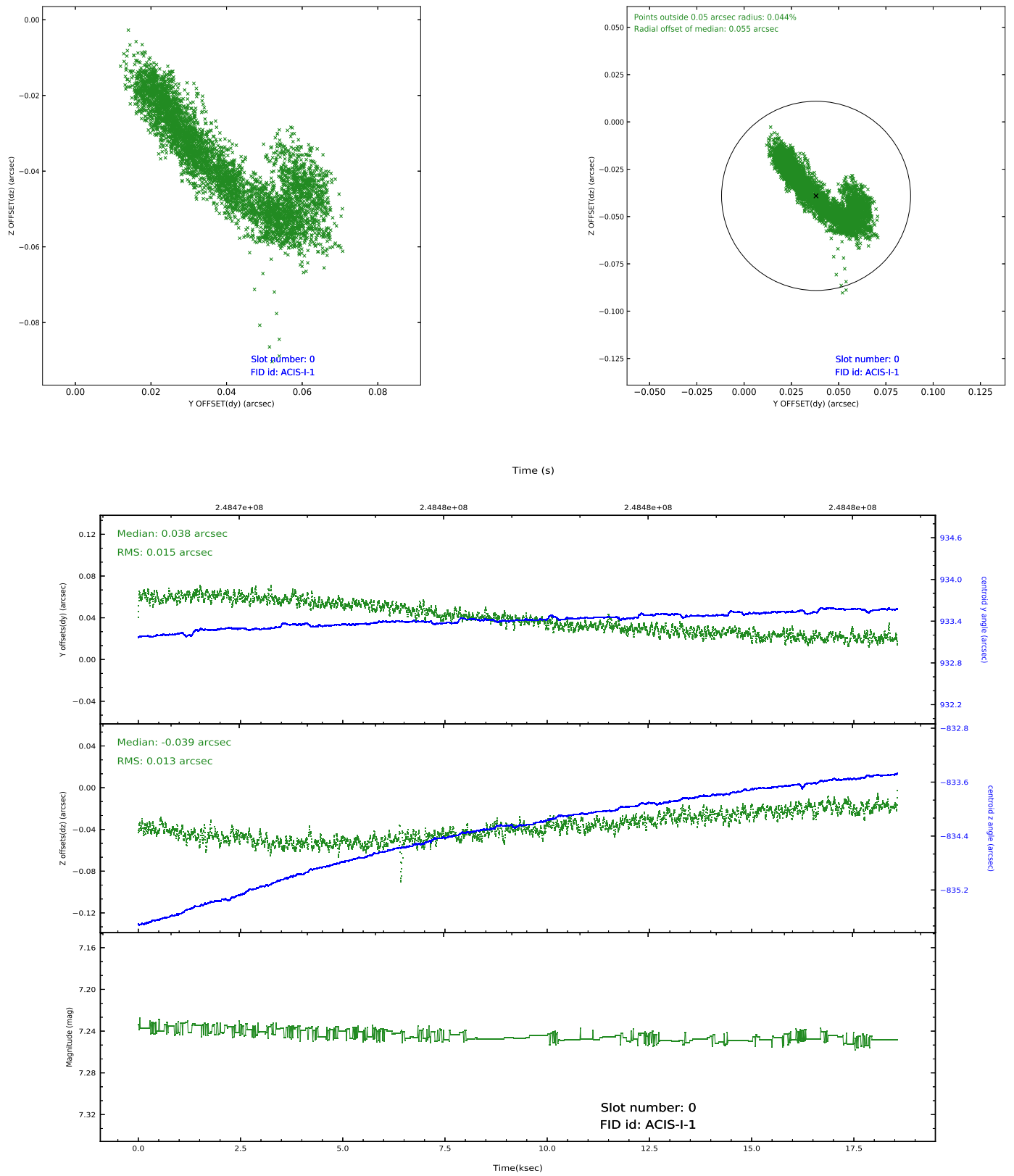


## 2.4.5 Slot 7

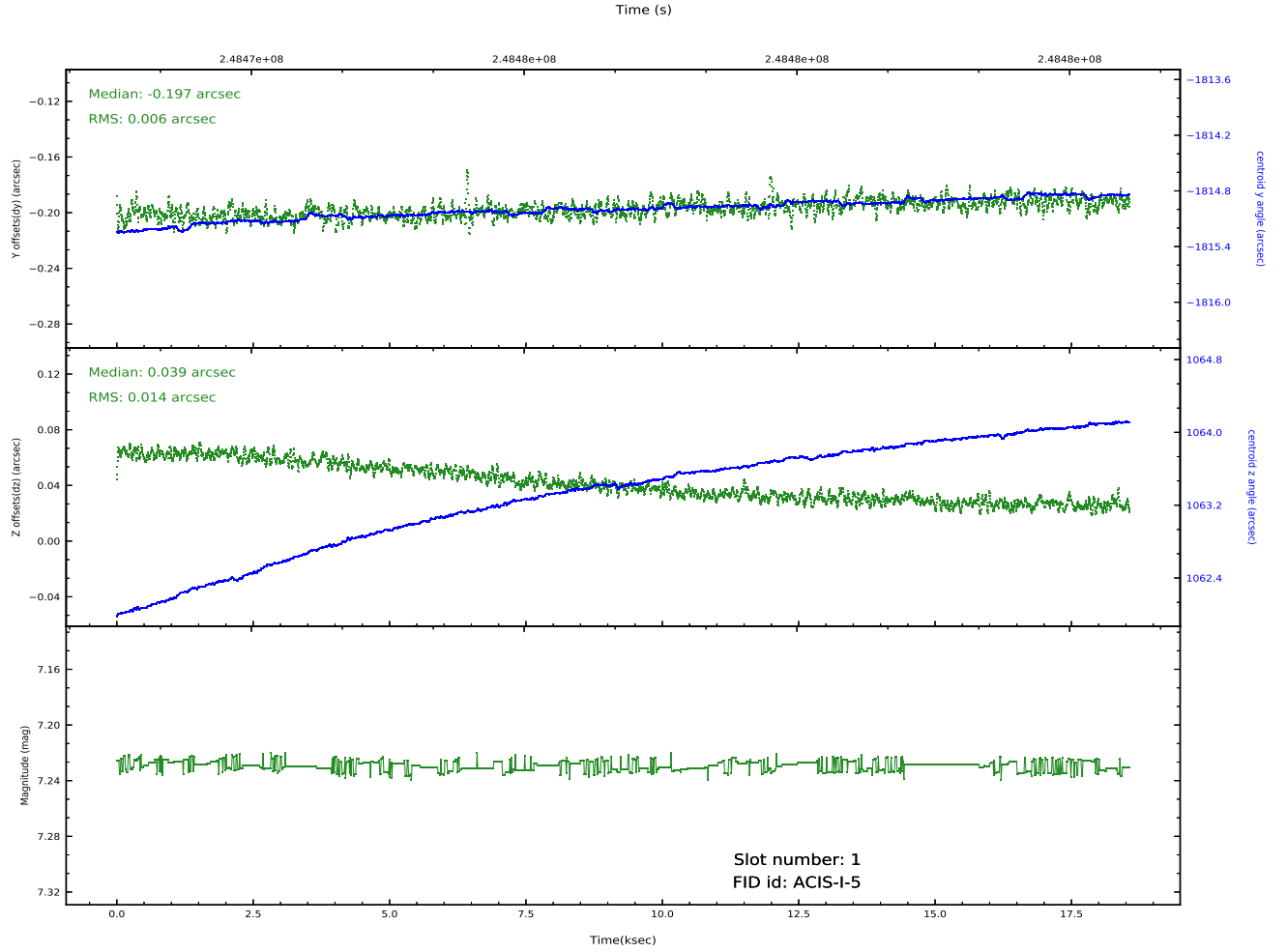
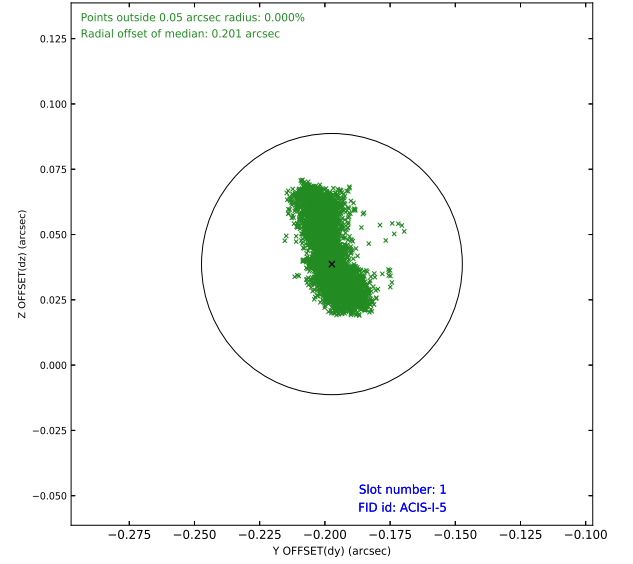
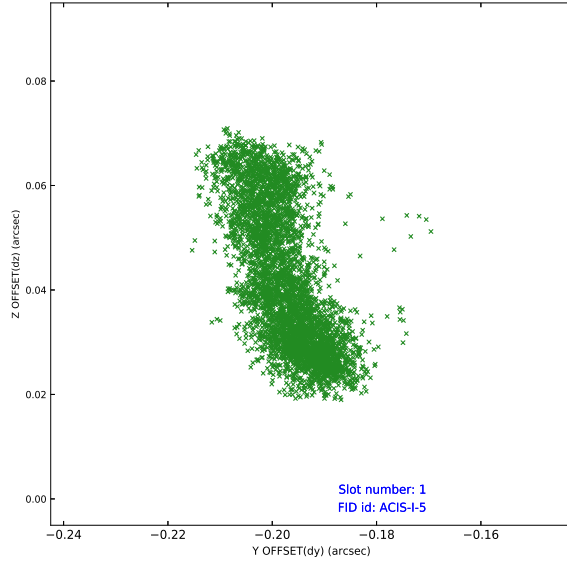


## 2.5 FID Slots

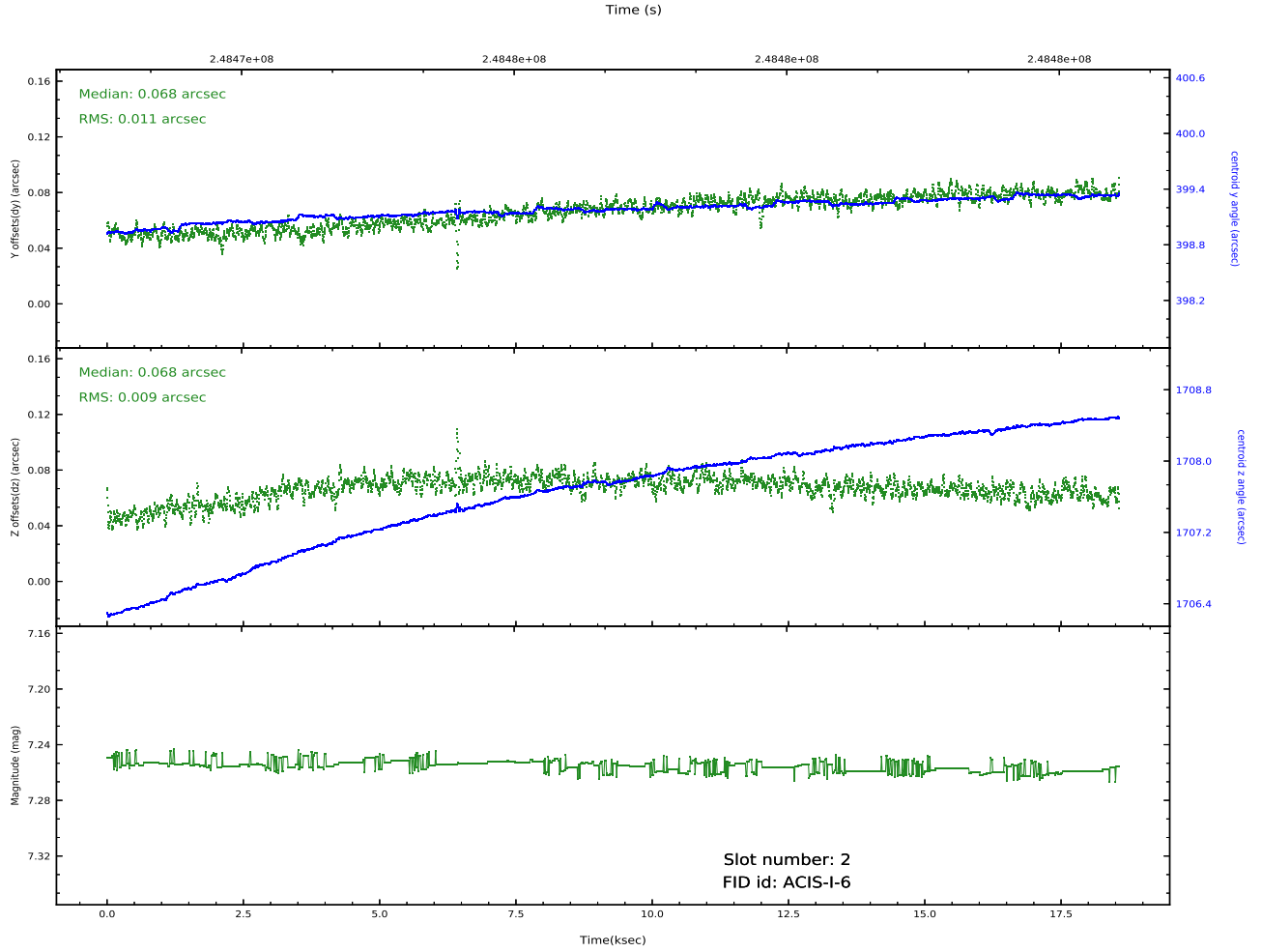
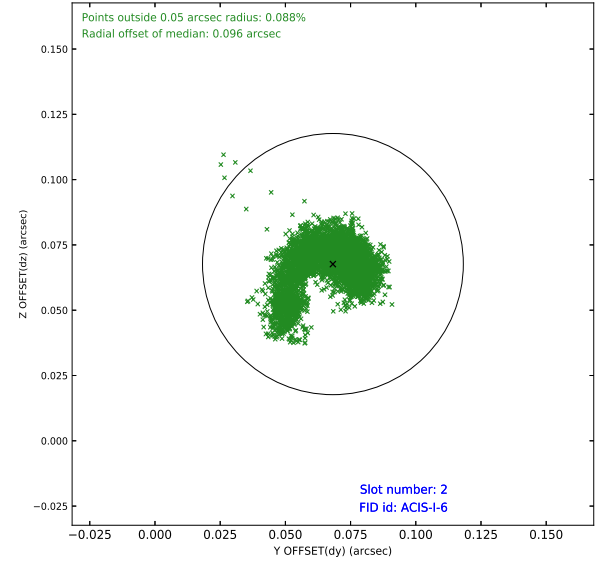
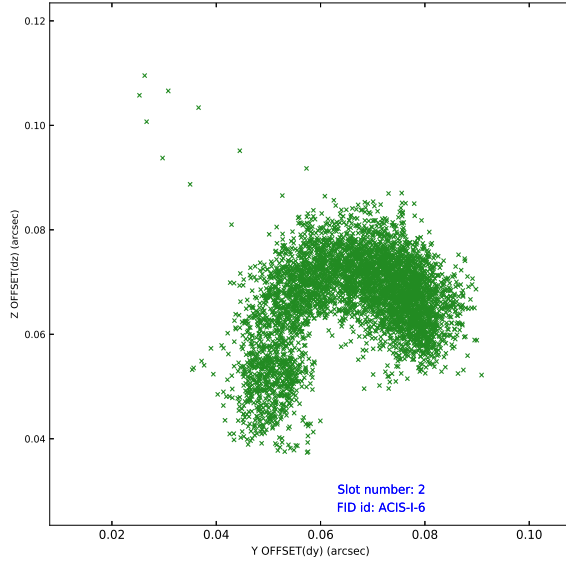
### 2.5.1 Slot 0



## 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)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.55655

### A.2 Comments