

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 7218 - L2 Version 3  
Chandra X-Ray Center

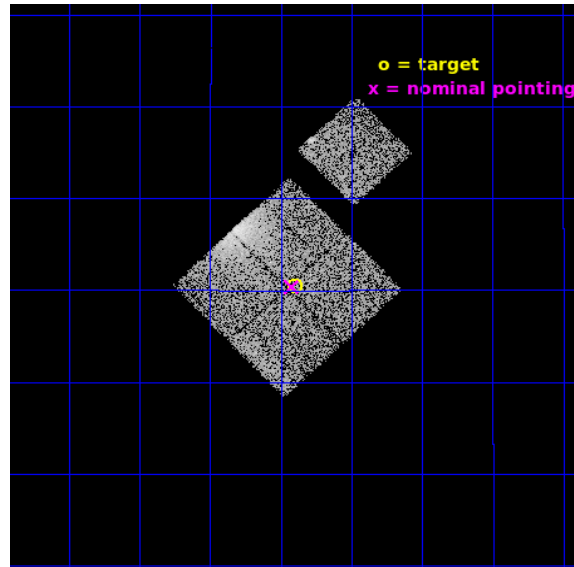
L2 Processing Date : Oct 11 2020

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# 1 Front

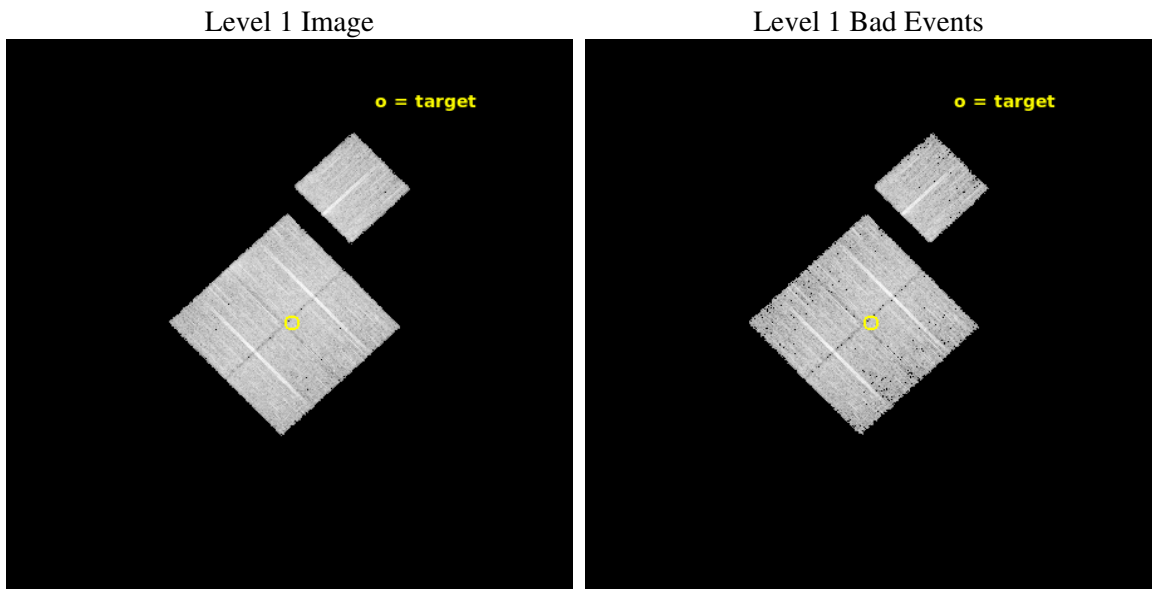
seq_num	800562	Sequence number
obs_id	7218	Observation id
title	Temperature profiles of relaxed galaxy clusters	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	A478	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	63.225	Observer's specified target RA [deg]
dec_targ	10.341667	Observer's specified target Dec [deg]
ra_nom	63.23033386055	Nominal RA [deg]
dec_nom	10.339923895069	Nominal Dec [deg]
roll_nom	46.206698866728	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8016.5999845564	Sum of GTIs [s]
livetime	7911.8572040232	Livetime [s]
ontime0	8016.5999845564	Sum of GTIs [s]
ontime1	8016.5999845564	Sum of GTIs [s]
ontime2	8016.5999845564	Sum of GTIs [s]
ontime3	8016.5999845564	Sum of GTIs [s]
ontime6	8016.5999845564	Sum of GTIs [s]
l2events	29509	Number of level 2 events



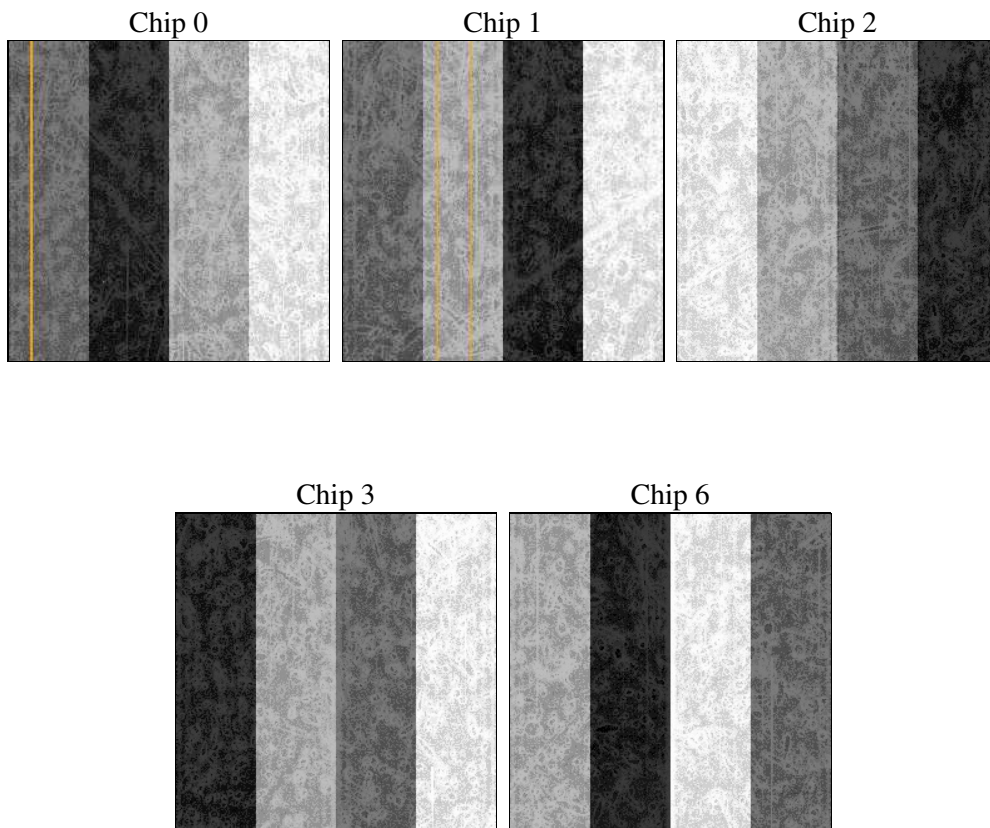
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7900.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8016.5999845564	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	8016.5999845564	Sum of GTIs [s]
date	2020-10-11T15:51:22	Date and time of file creation	ontime1	8016.5999845564	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8016.5999845564	Sum of GTIs [s]
			ontime3	8016.5999845564	Sum of GTIs [s]
			ontime6	8016.5999845564	Sum of GTIs [s]
			l1events	303295	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	59469	54660	68868	59811	60487
rejected events	51272	48527	59297	54475	54777
rejected %	86%	88%	86%	91%	90%

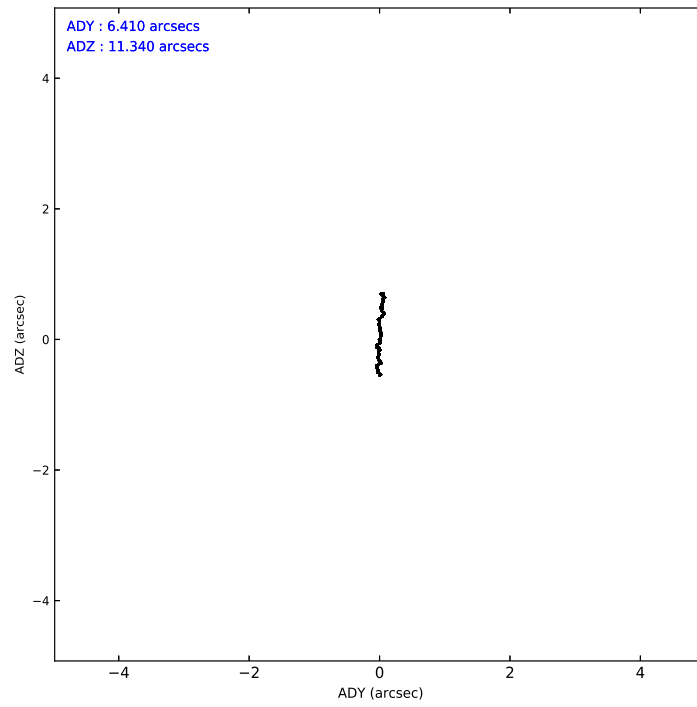
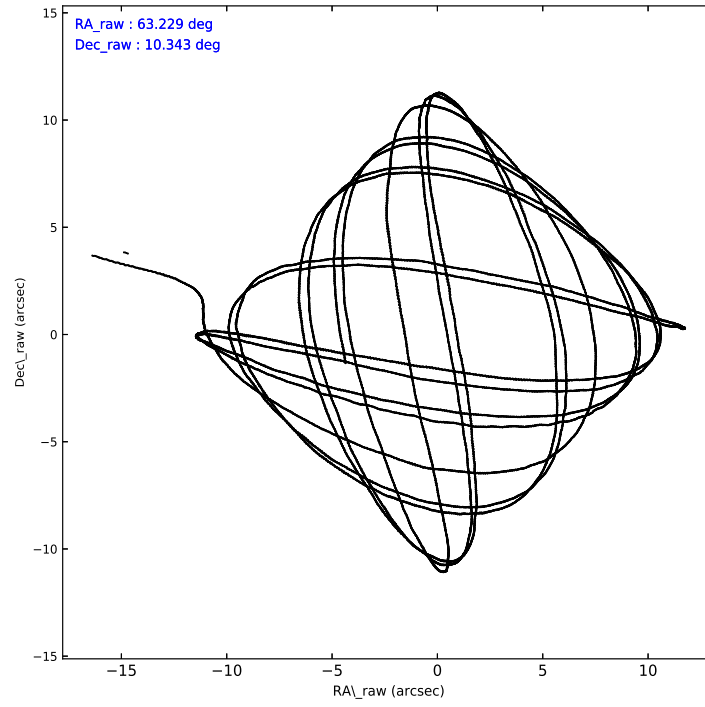
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4253	2448	5486	2169	2330
	7%	4%	7%	3%	3%
grade 1 events	34	36	59	34	23
	0%	0%	0%	0%	0%
grade 2 events	1683	1466	1897	1233	1338
	2%	2%	2%	2%	2%
grade 3 events	884	756	774	659	699
	1%	1%	1%	1%	1%
grade 4 events	795	739	812	683	687
	1%	1%	1%	1%	1%
grade 5 events	2050	2286	1989	2379	2357
	3%	4%	2%	3%	3%
grade 6 events	1213	1355	1197	1175	1323
	2%	2%	1%	1%	2%
grade 7 events	48557	45574	56654	51479	51730
	81%	83%	82%	86%	85%

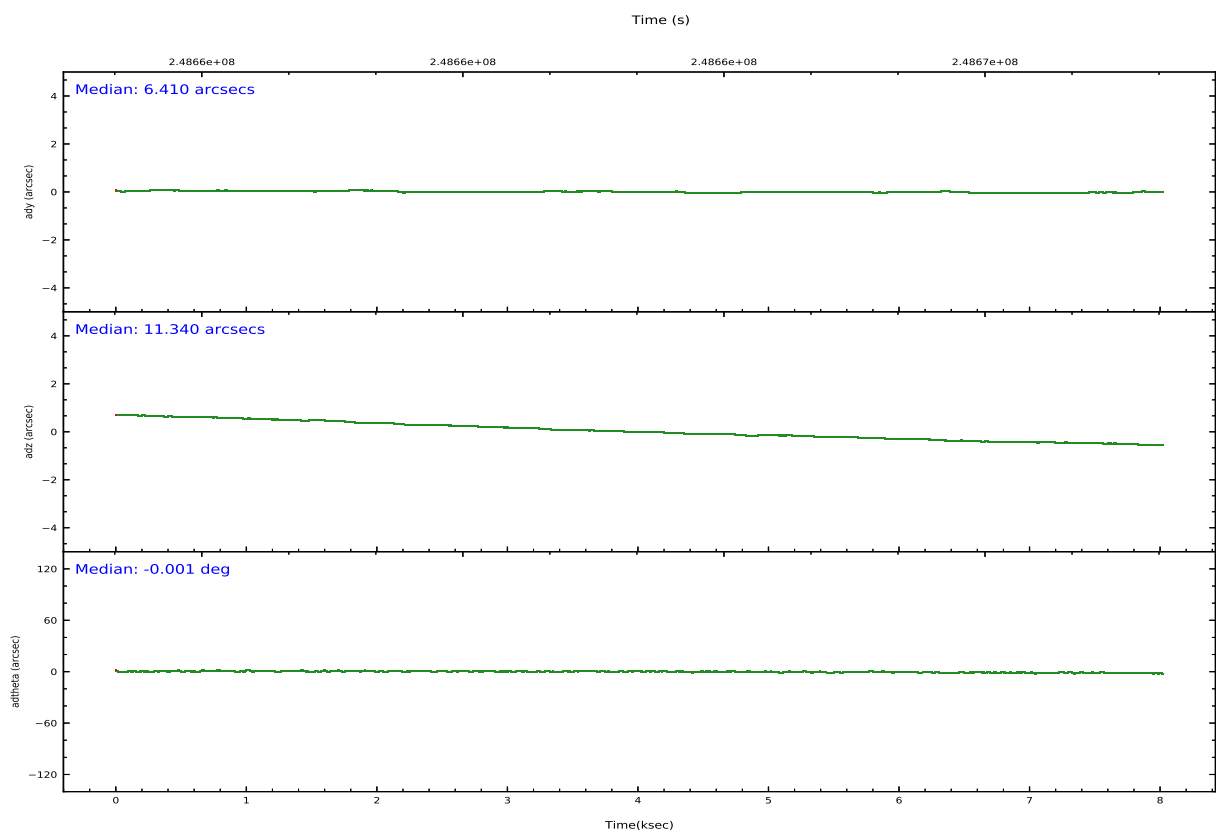
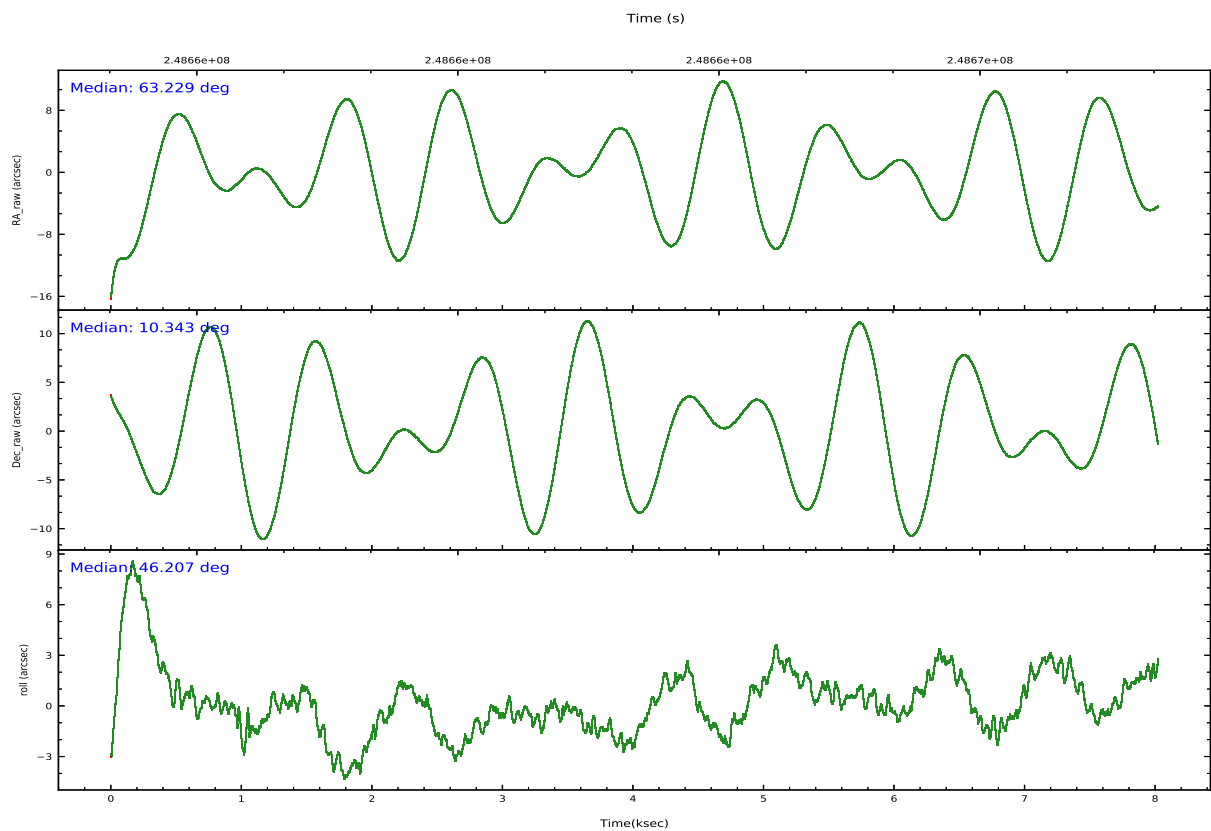


## 2.2 Compared Parameters

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	63.23033386055	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.316874	10.339923895069	Alternating exposures requested	N	N
[deg] Pointing Roll	46.000390	46.206698866728	[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)	248659465.184000	248658104.90259			
Observation start date	2005-11-18T00:03:21	2005-11-17T23:41:44			
[s] Observation end time (MET)	248667365.184000	248668140.16555			
Observation end date	2005-11-18T02:15:01	2005-11-18T02:29:00			
Read mode	TIMED	TIMED			

## 2.3 Aspect



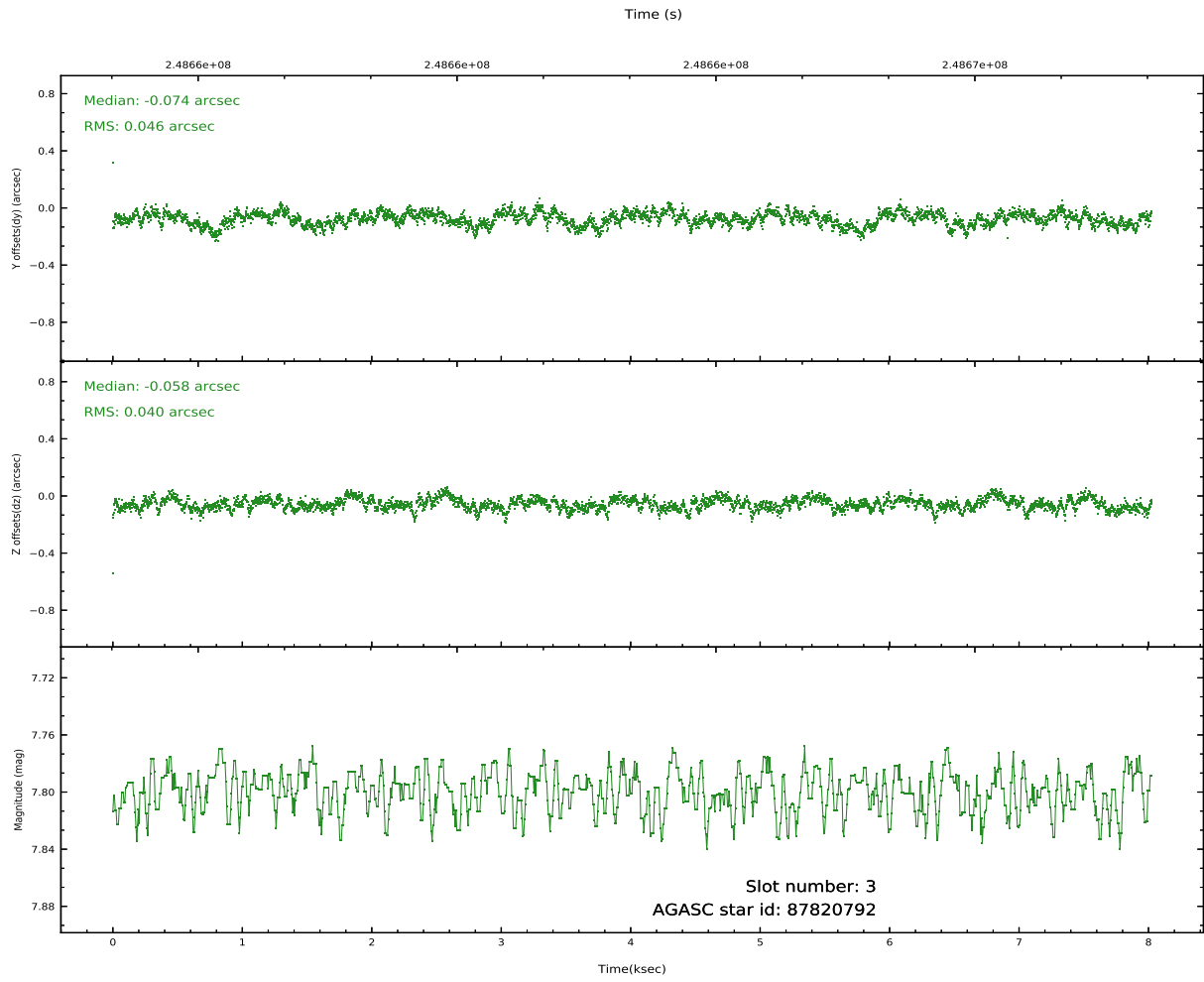
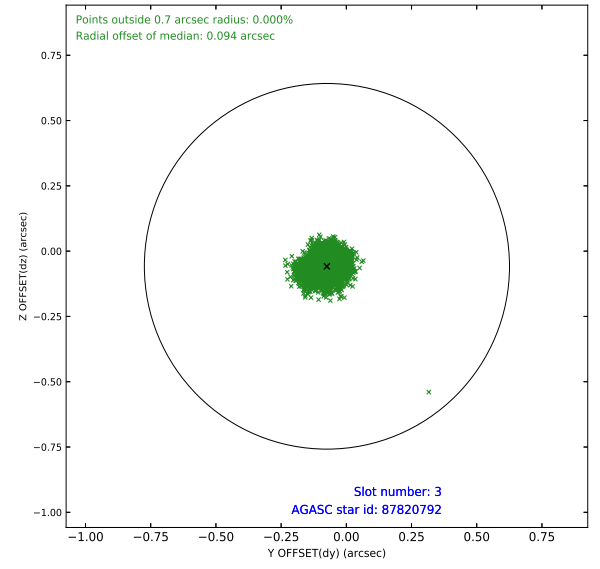
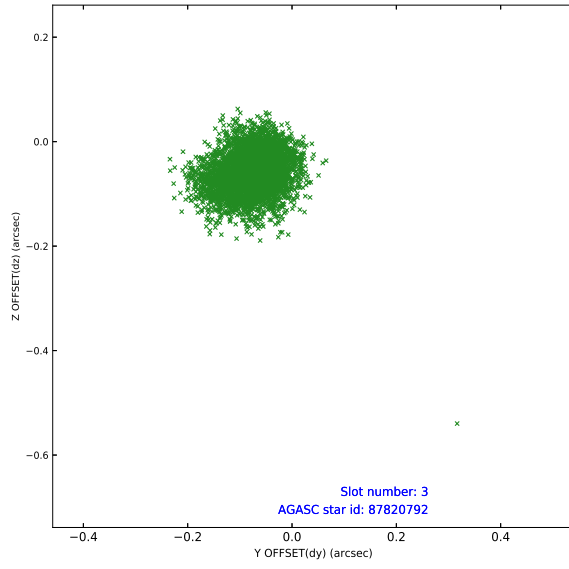


Slot Statistics

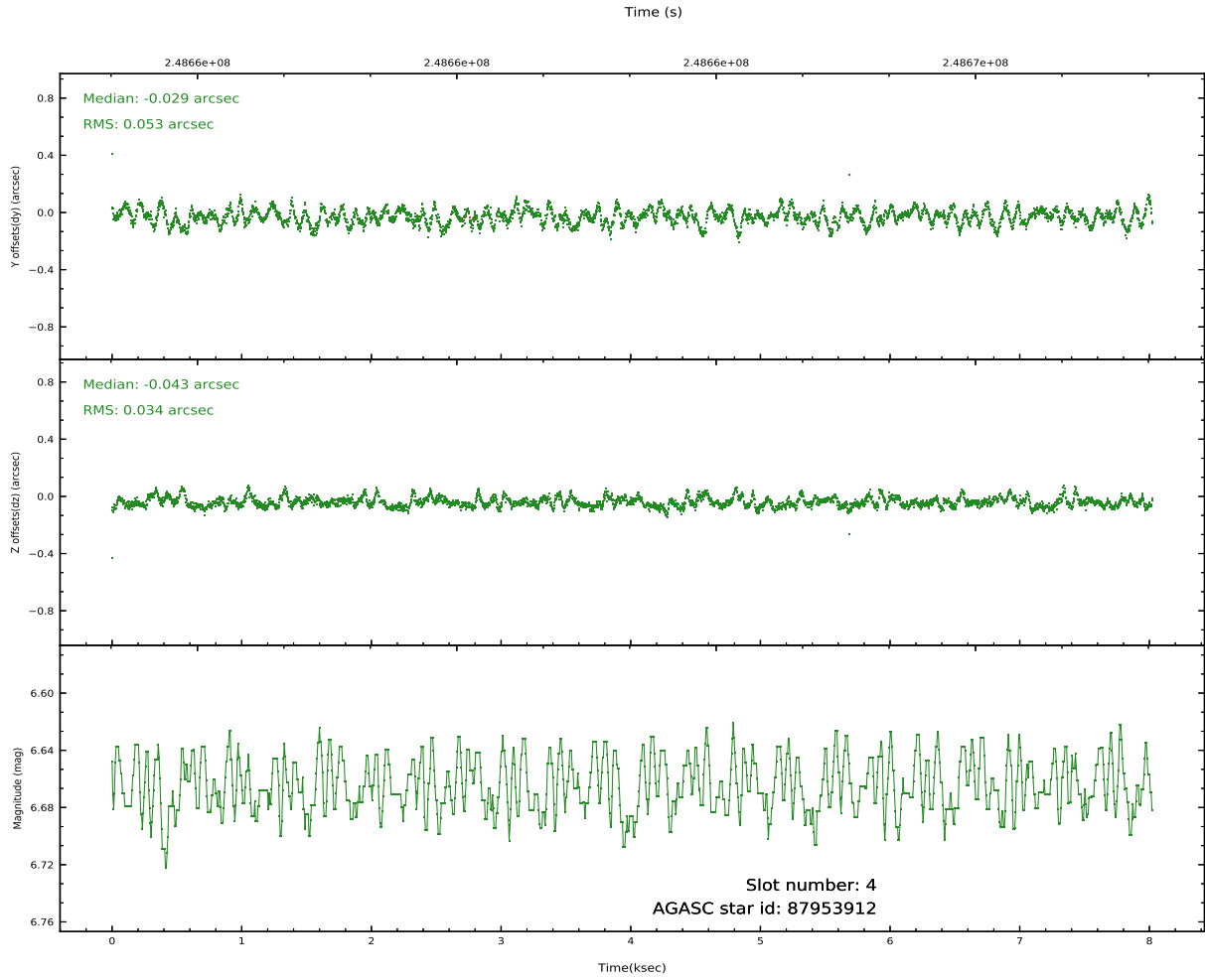
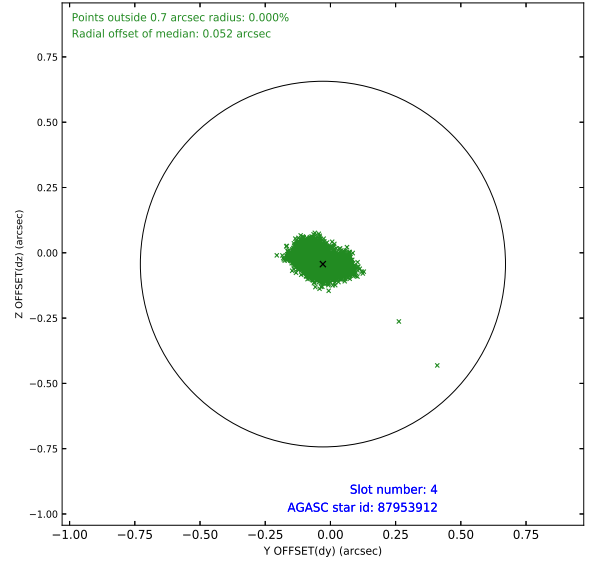
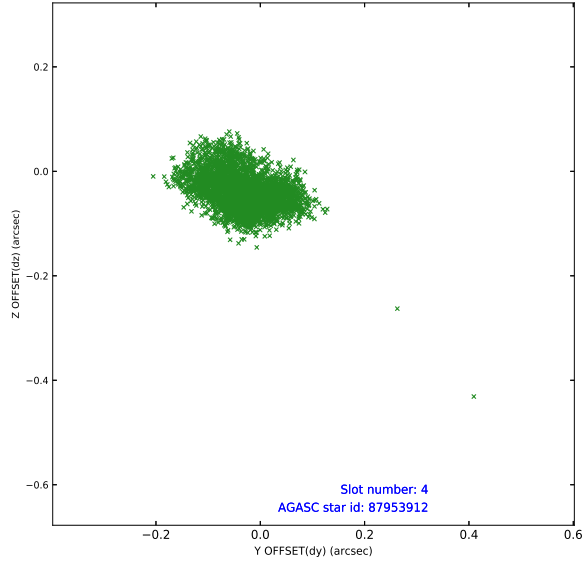
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	1958	1.000	0.053	-0.049	0.011	0.019	0.000000	0.000000	933.32	-834
1	FID		ACIS-I-5	7.23	1958	1.000	-0.197	0.054	0.011	0.017	0.000000	0.000000	-1814.62	1062
2	FID		ACIS-I-6	7.26	1958	1.000	0.052	0.066	0.012	0.020	0.000000	0.000000	398.15	1707
3	GUIDE	used	87820792	7.80	3915	1.000	-0.074	-0.058	0.064	0.101	63.068647	9.650157	-2106.33	-1274
4	GUIDE	used	87953912	6.67	3915	1.000	-0.029	-0.043	0.066	0.111	63.394036	10.212467	150.93	-698
5	GUIDE	used	87954016	9.27	3914	1.000	0.045	-0.054	0.082	0.131	63.197646	10.607026	689.79	788
6	GUIDE	used	87954552	8.33	3915	1.000	0.120	0.024	0.049	0.082	63.195345	11.171305	2145.75	2206
7	GUIDE	used	87950304	8.06	3913	1.000	-0.060	0.129	0.069	0.109	63.753878	10.748130	2423.44	-271

## 2.4 Star Slots

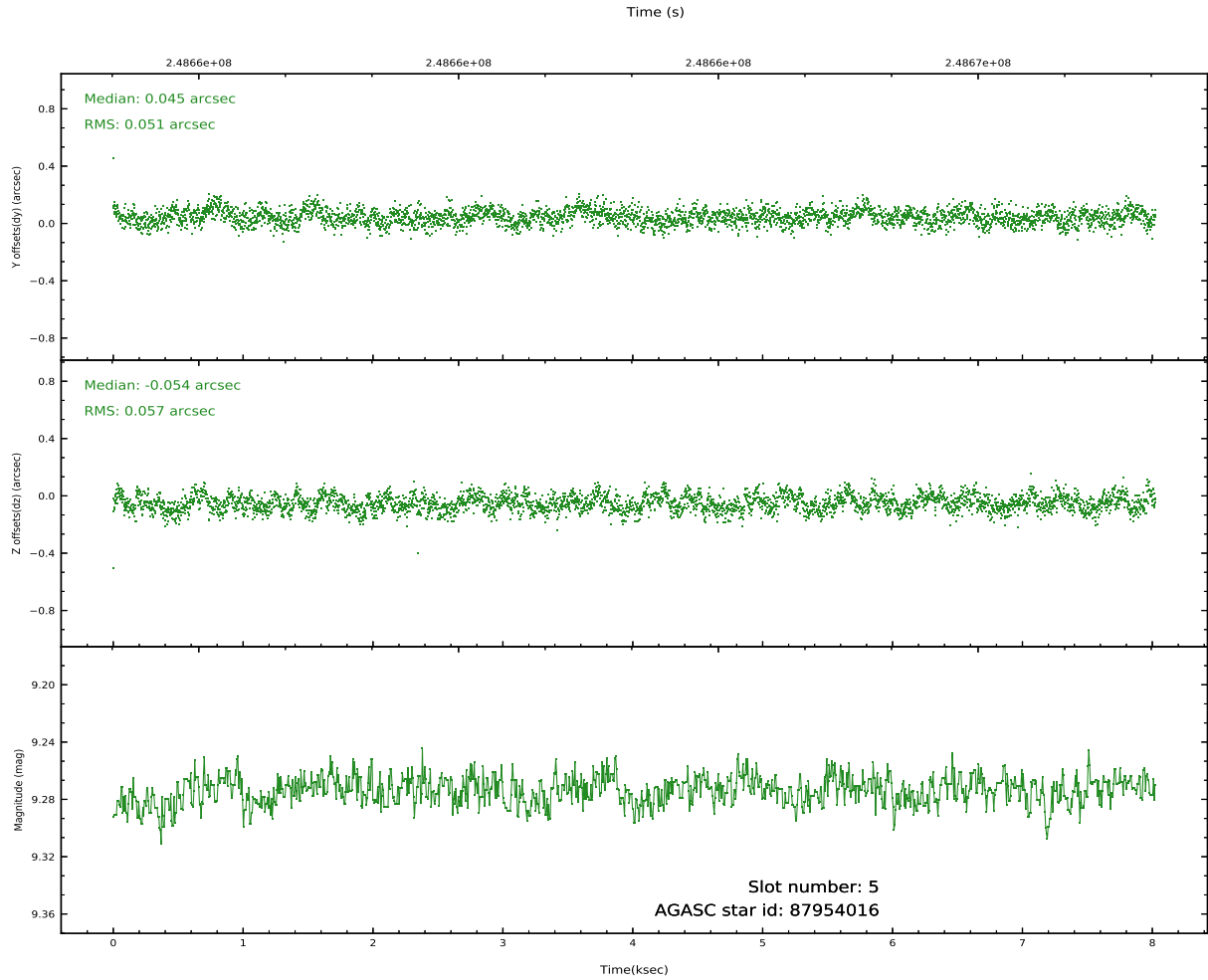
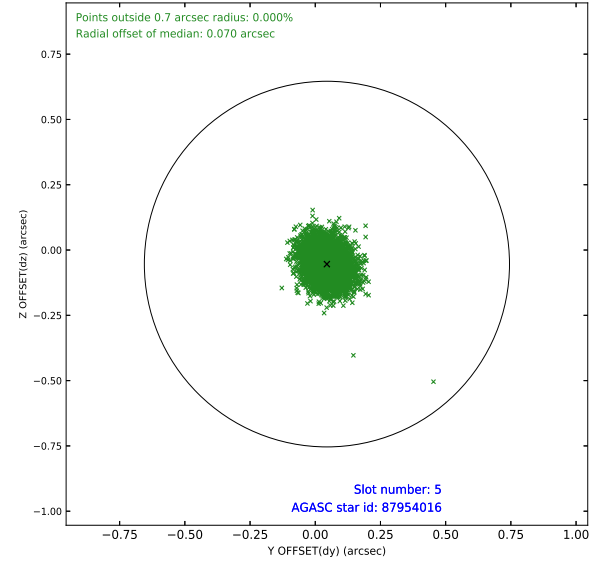
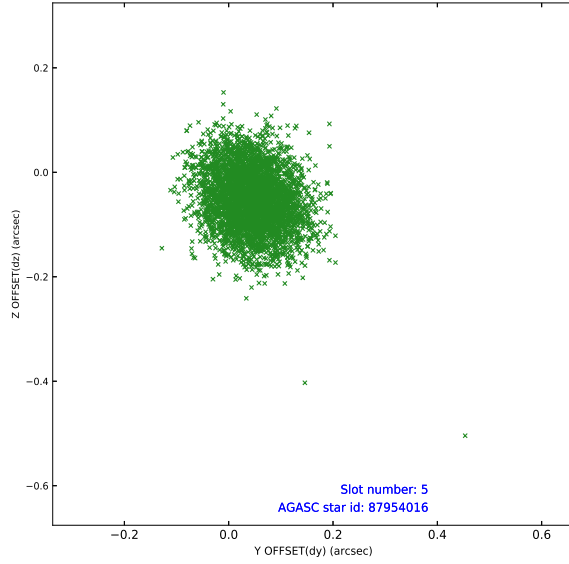
### 2.4.1 Slot 3



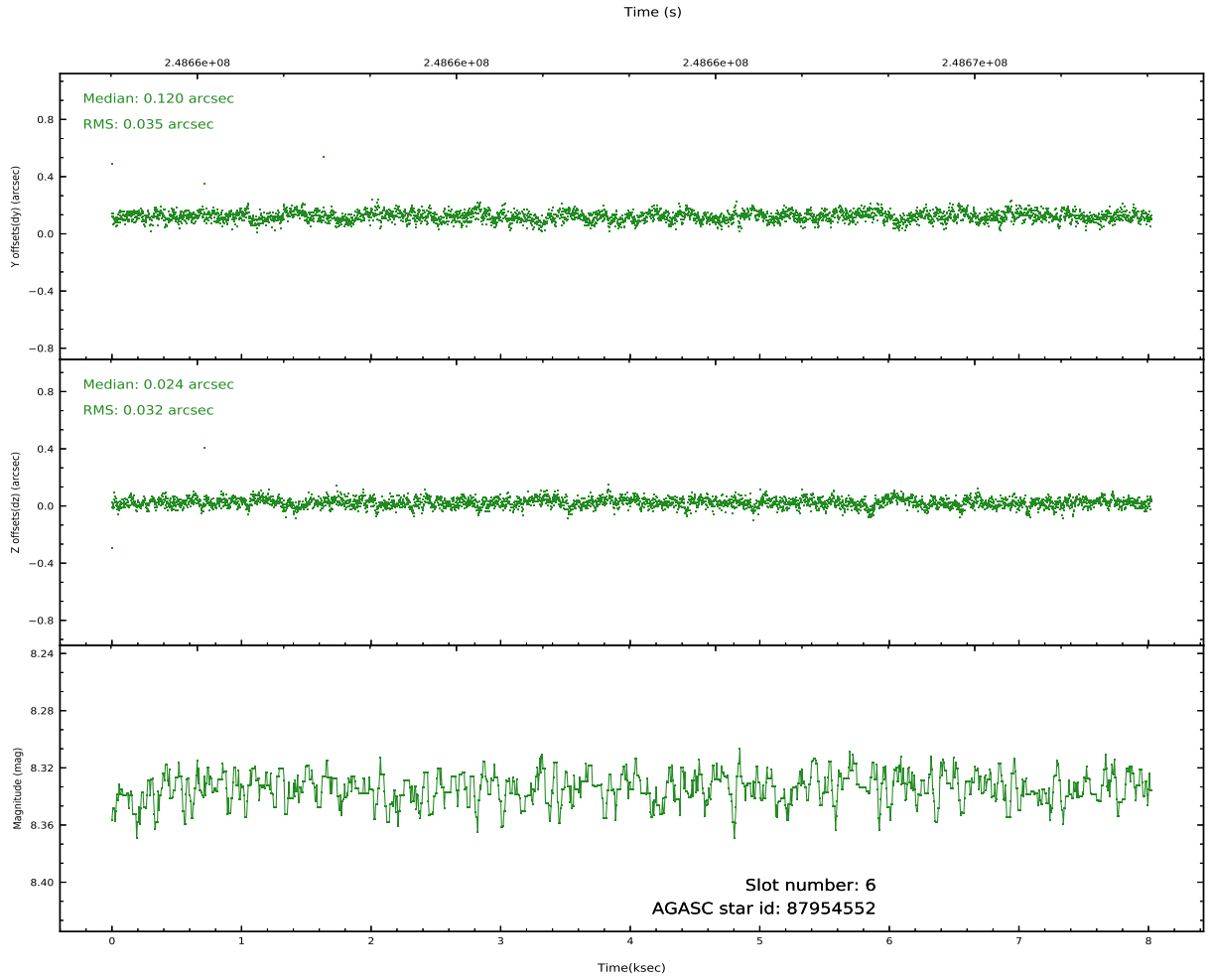
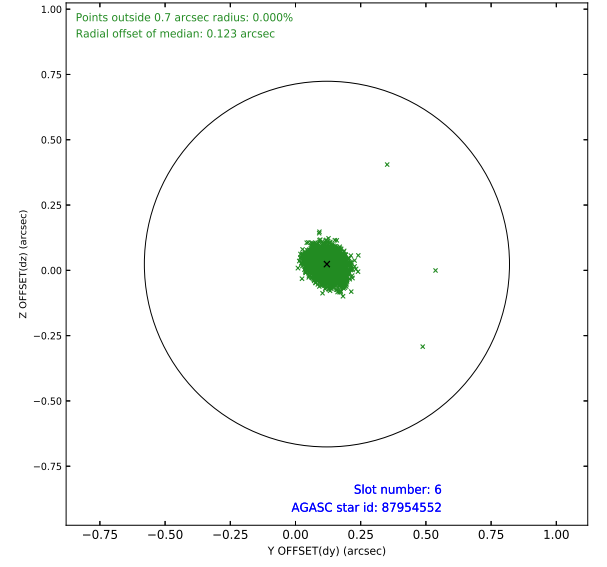
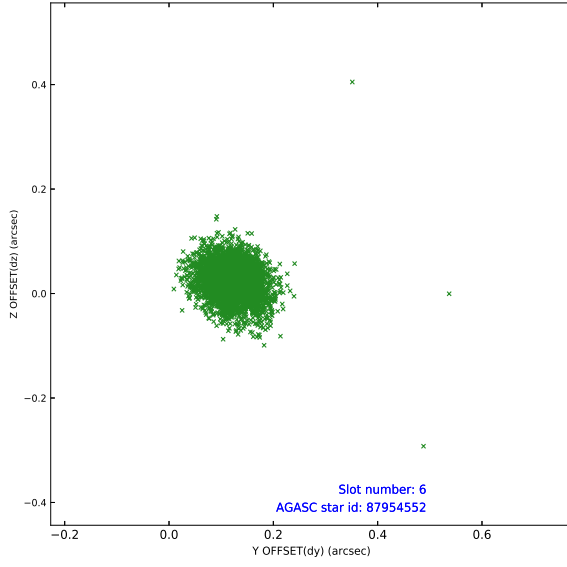
## 2.4.2 Slot 4



### 2.4.3 Slot 5

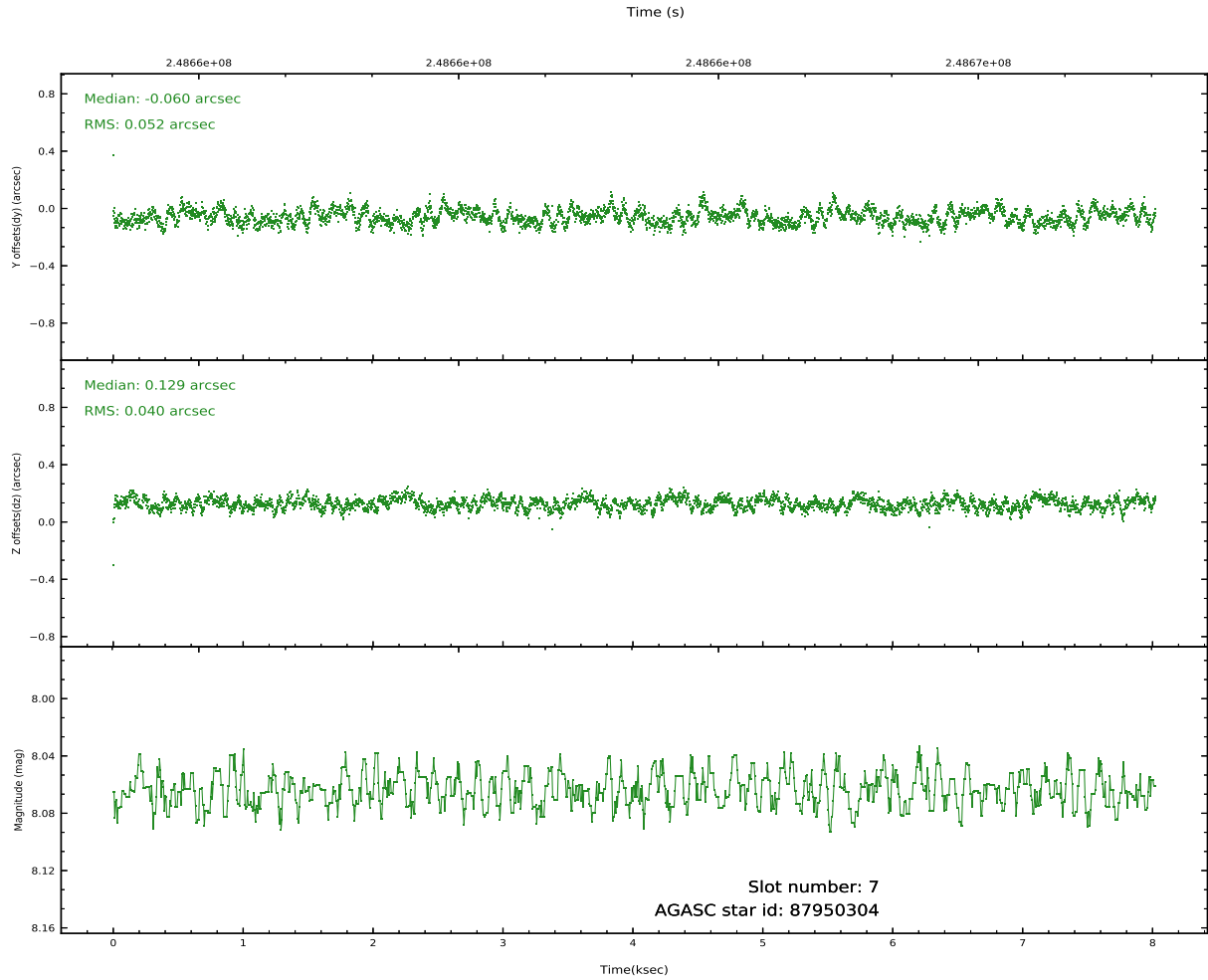
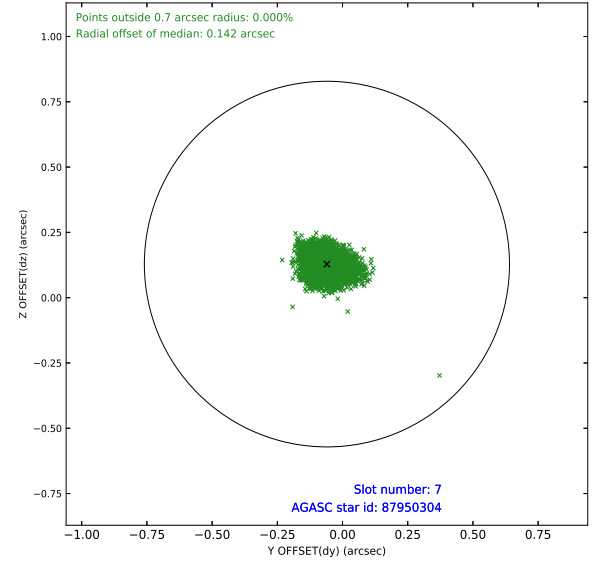
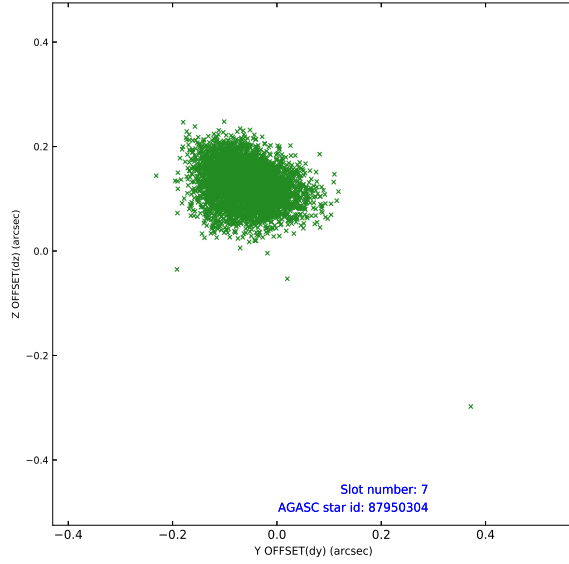


## 2.4.4 Slot 6



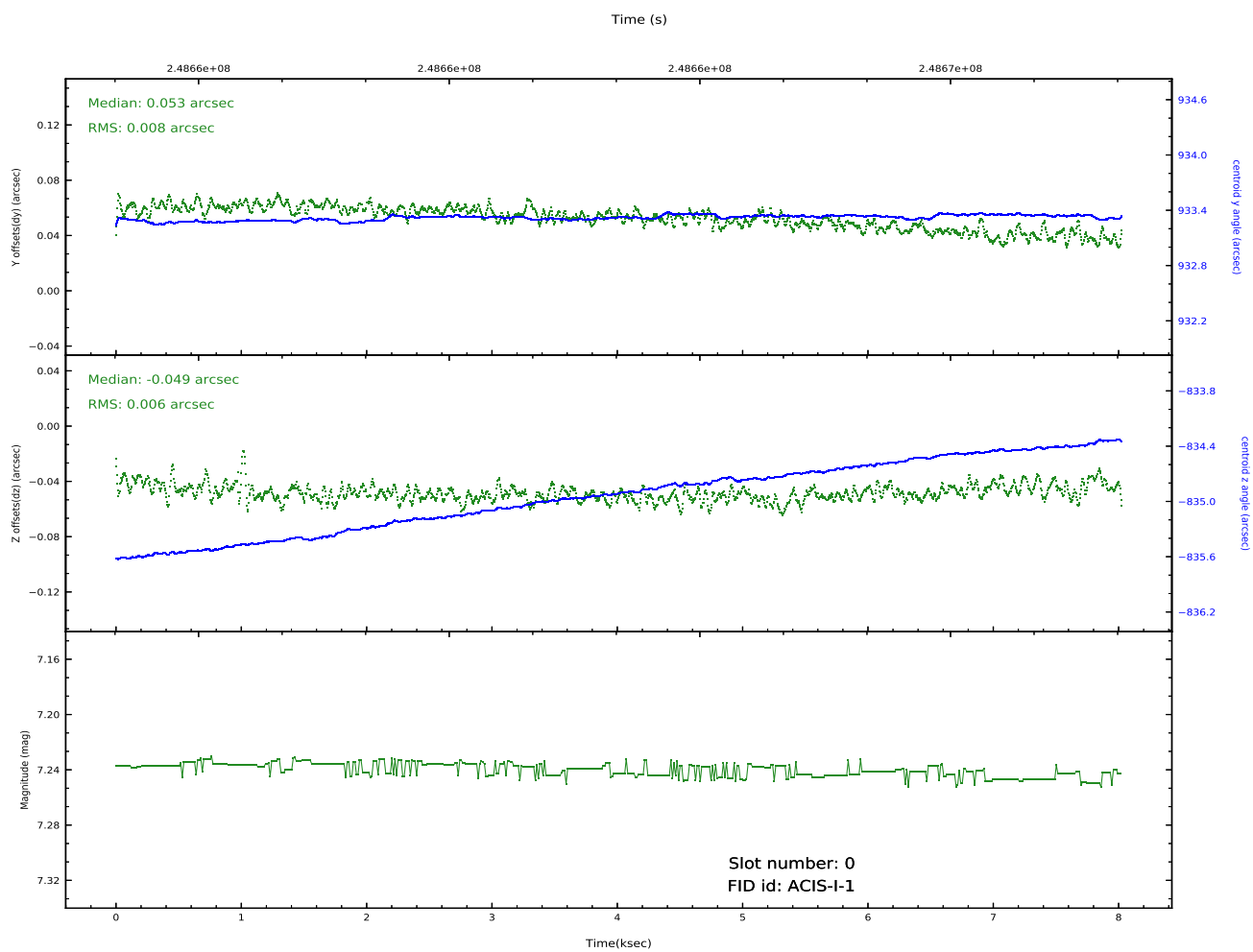
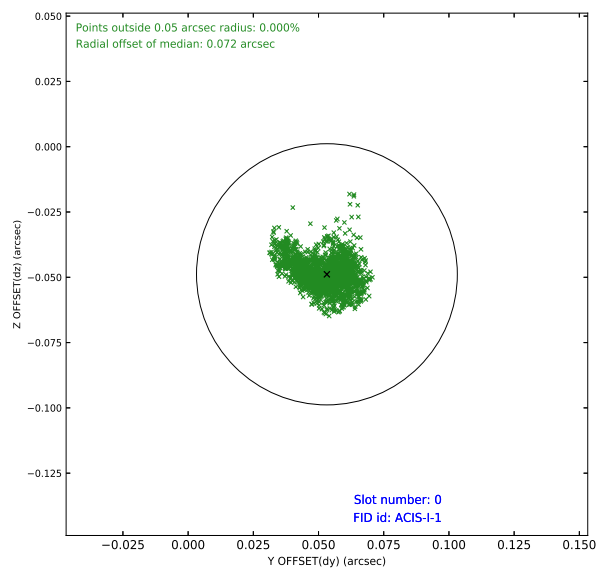
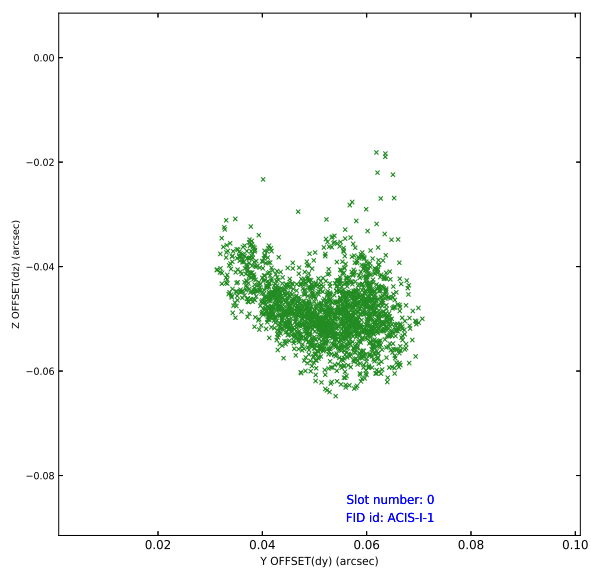


## 2.4.5 Slot 7

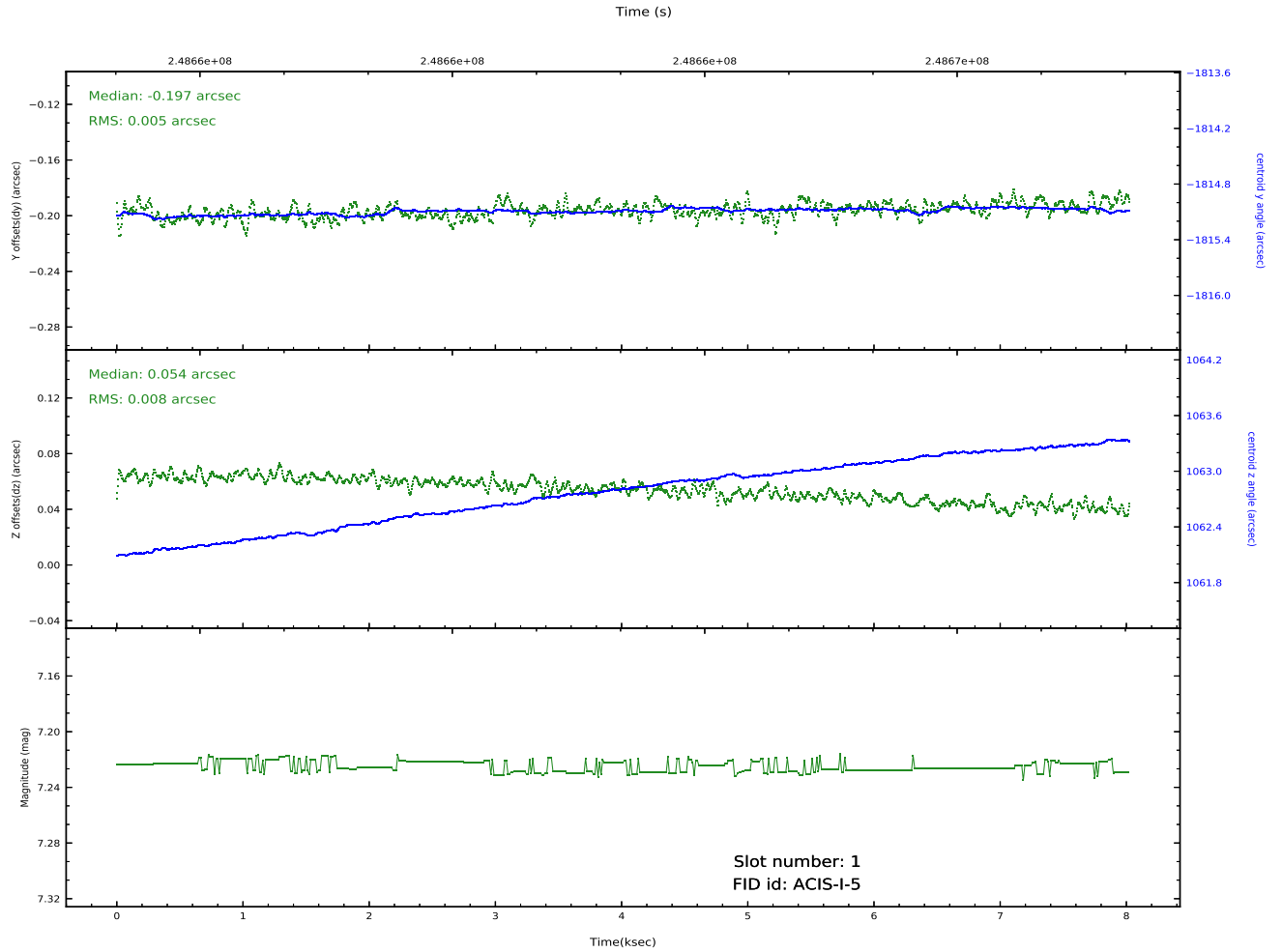
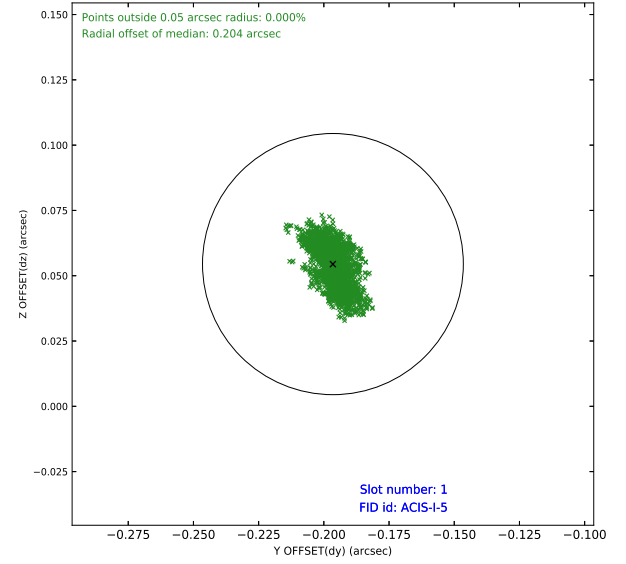
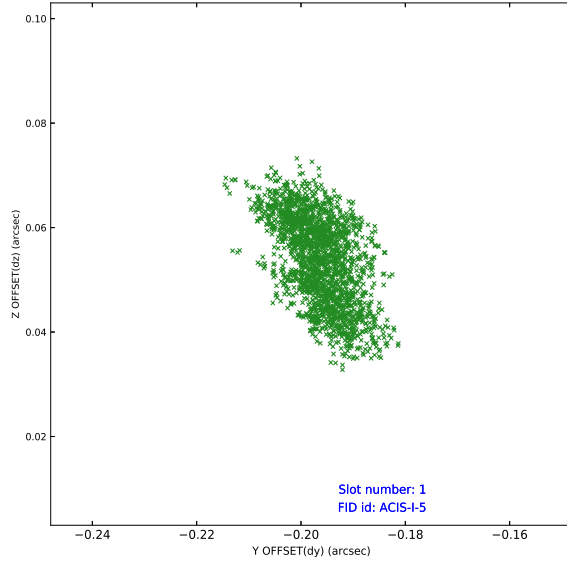


## 2.5 FID Slots

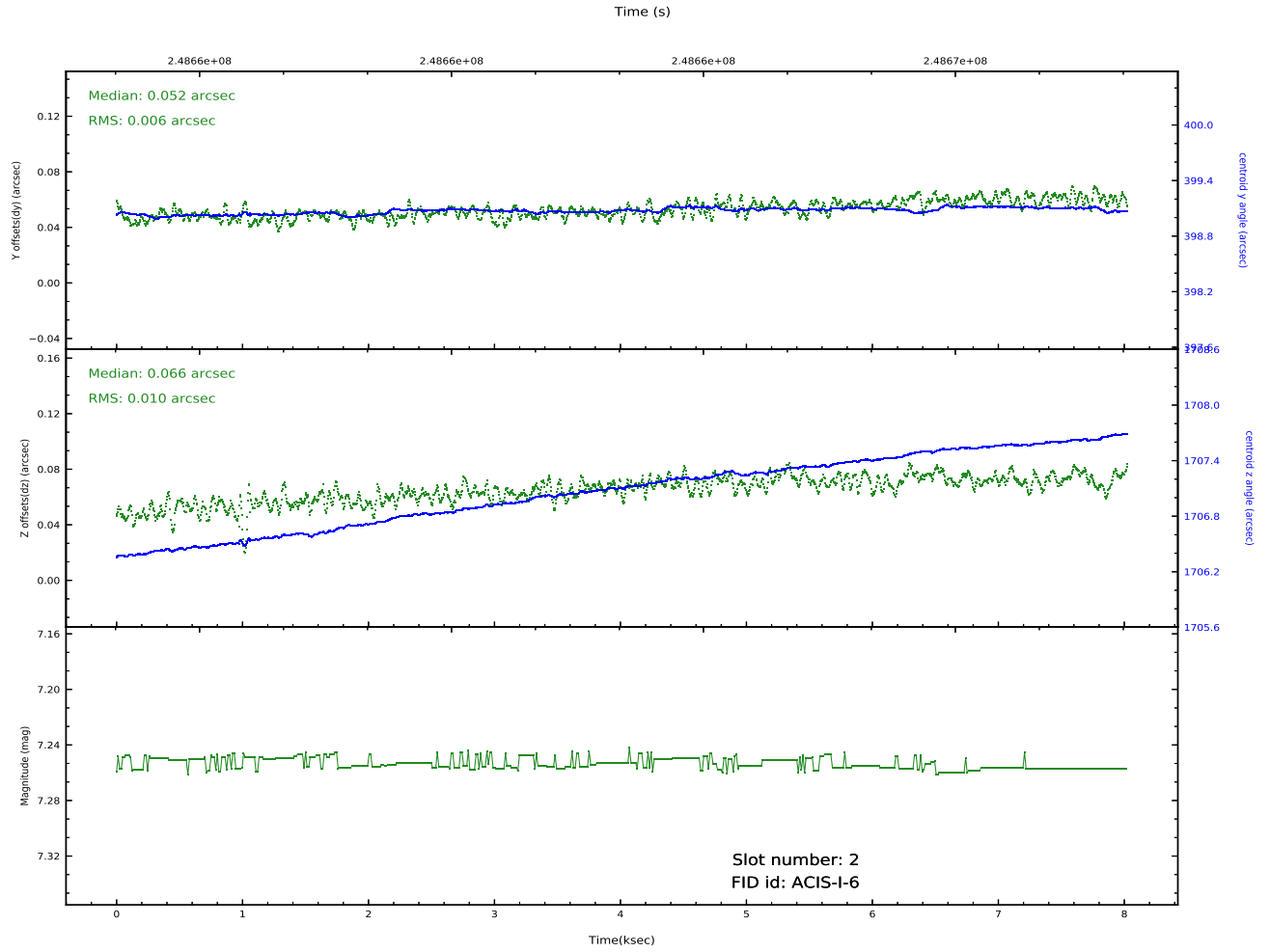
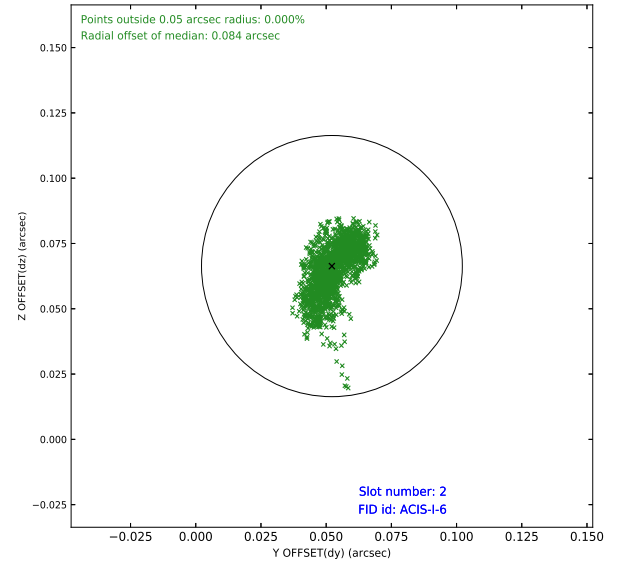
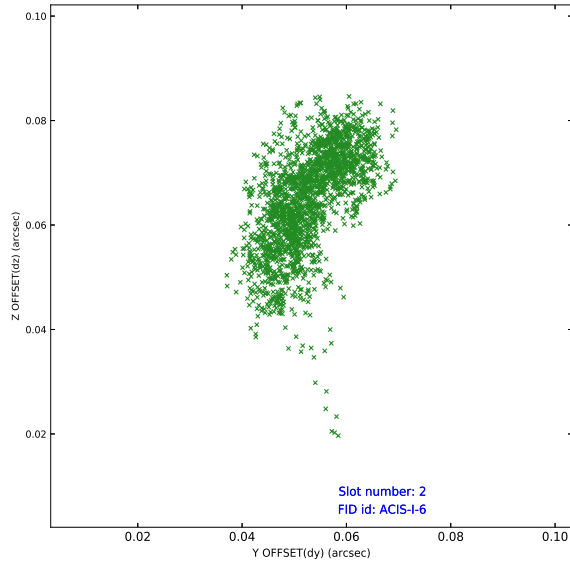
### 2.5.1 Slot 0



## 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	8.016599

### A.2 Comments