

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 7233 - L2 Version 3  
Chandra X-Ray Center

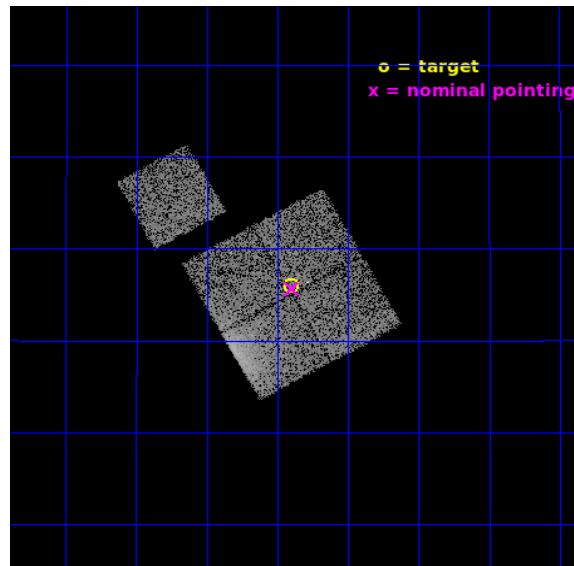
L2 Processing Date : Oct 11 2020

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# 1 Front

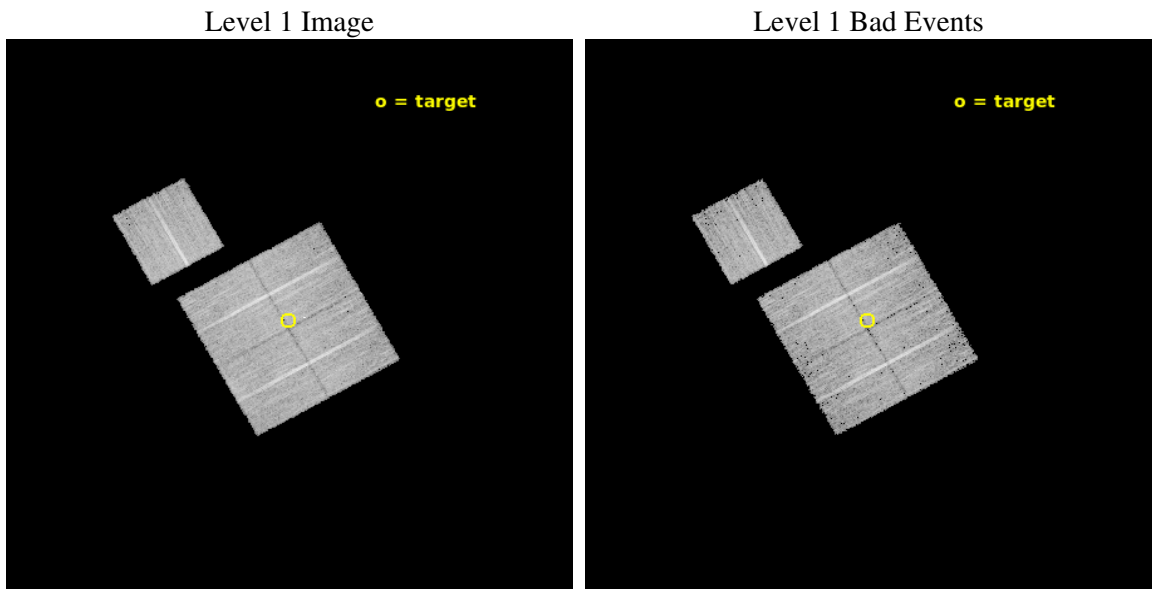
seq_num	800561	Sequence number
obs_id	7233	Observation id
title	Temperature profiles of relaxed galaxy clusters	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	A478	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	63.225	Observer's specified target RA [deg]
dec_targ	10.6	Observer's specified target Dec [deg]
ra_nom	63.224325250847	Nominal RA [deg]
dec_nom	10.594410793746	Nominal Dec [deg]
roll_nom	330.80597115452	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9138.7999823987	Sum of GTIs [s]
livetime	9019.394832742	Livetime [s]
ontime0	9129.3770417273	Sum of GTIs [s]
ontime1	9138.7999823987	Sum of GTIs [s]
ontime2	9129.3771114051	Sum of GTIs [s]
ontime3	9138.7999823987	Sum of GTIs [s]
ontime6	9138.7999823987	Sum of GTIs [s]
l2events	32316	Number of level 2 events



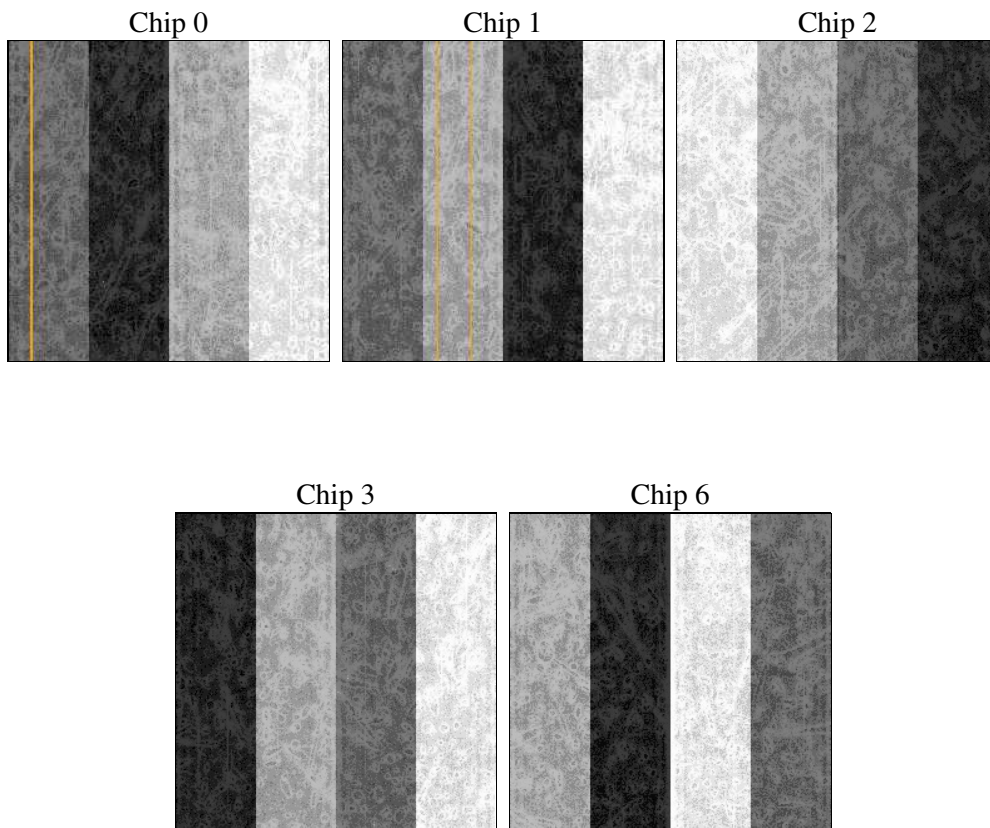
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	9138.7999823987	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	9129.3770417273	Sum of GTIs [s]
date	2020-10-12T03:17:35	Date and time of file creation	ontime1	9138.7999823987	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9129.3771114051	Sum of GTIs [s]
			ontime3	9138.7999823987	Sum of GTIs [s]
			ontime6	9138.7999823987	Sum of GTIs [s]
			l1events	336770	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	67375	63073	71918	65275	69129
rejected events	55796	56117	64700	59211	62826
rejected %	82%	88%	89%	90%	90%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6675	2803	3332	2454	2324
	9%	4%	4%	3%	3%
grade 1 events	44	30	45	36	47
	0%	0%	0%	0%	0%
grade 2 events	2111	1608	1705	1299	1471
	3%	2%	2%	1%	2%
grade 3 events	1008	787	738	738	747
	1%	1%	1%	1%	1%
grade 4 events	896	835	725	746	780
	1%	1%	1%	1%	1%
grade 5 events	2274	2559	2252	2651	2691
	3%	4%	3%	4%	3%
grade 6 events	1439	1447	1195	1244	1491
	2%	2%	1%	1%	2%
grade 7 events	52928	53004	61926	56107	59578
	78%	84%	86%	85%	86%

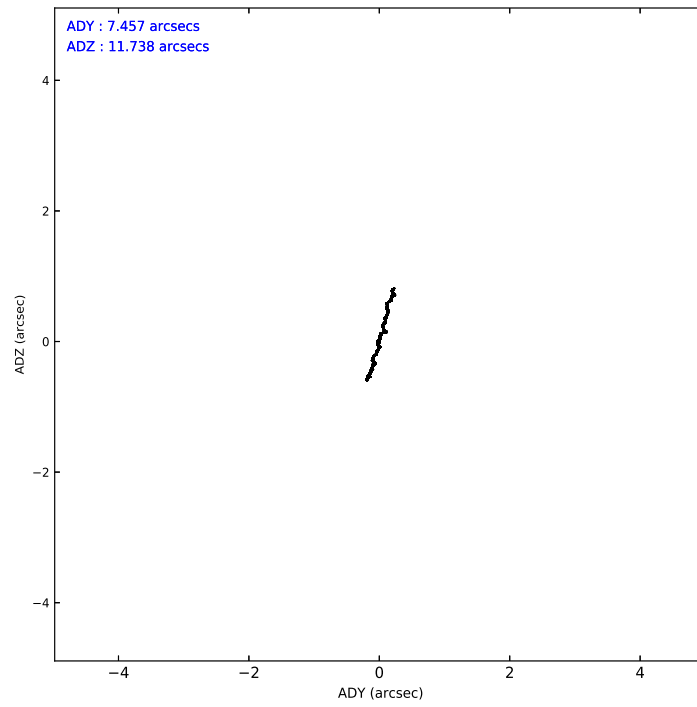
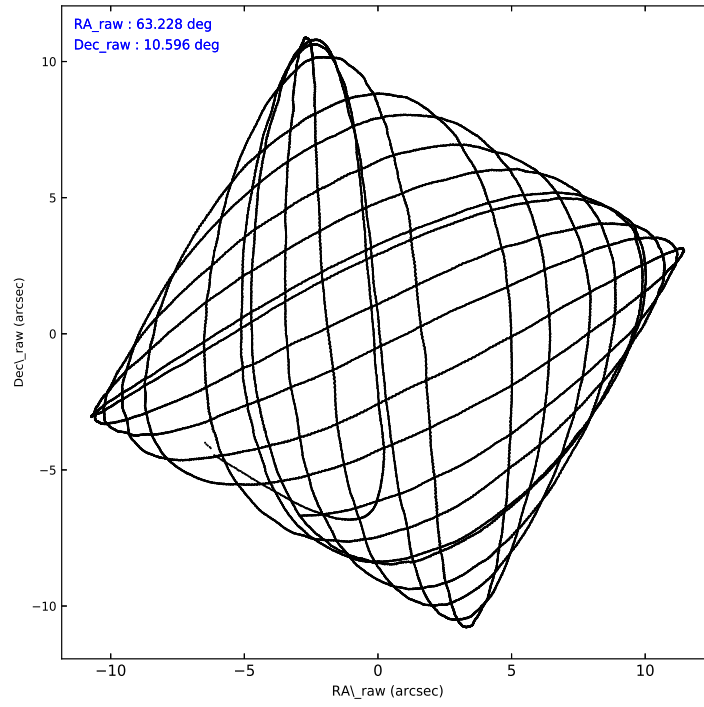


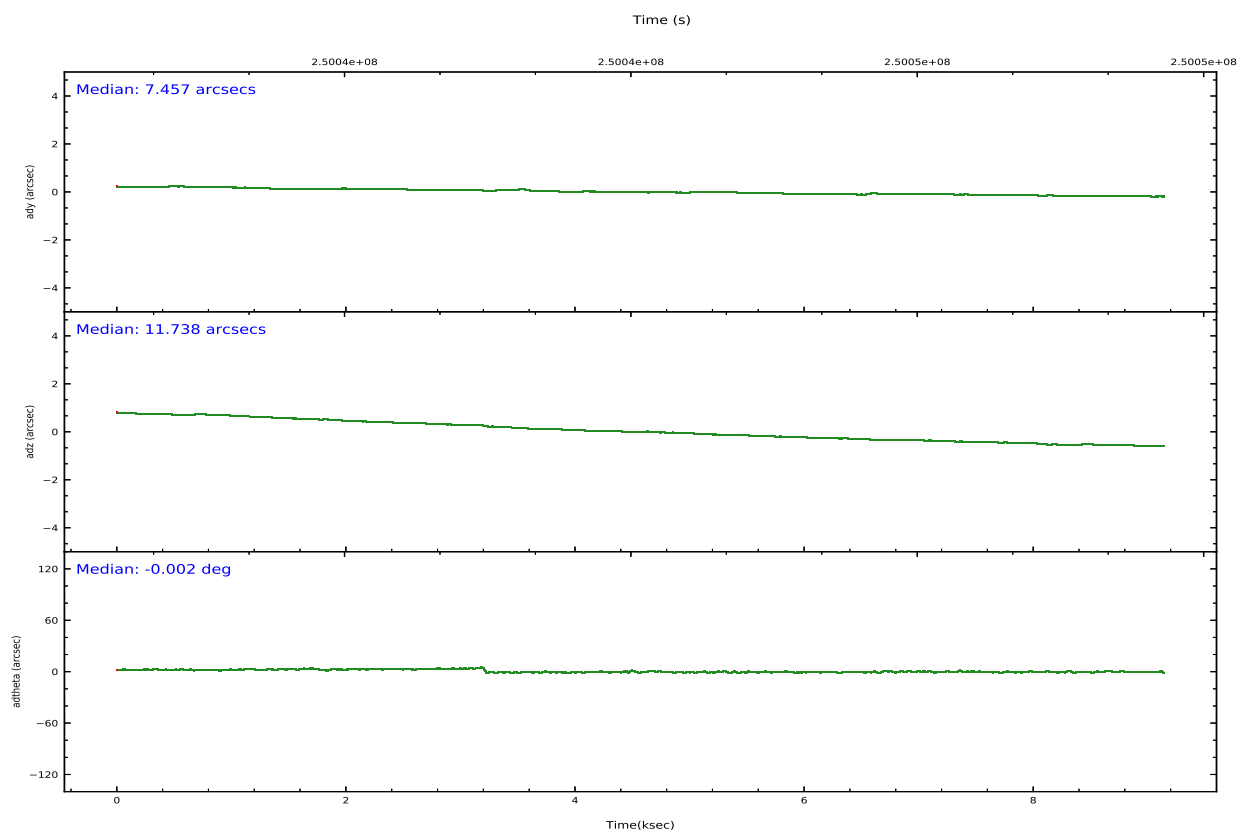
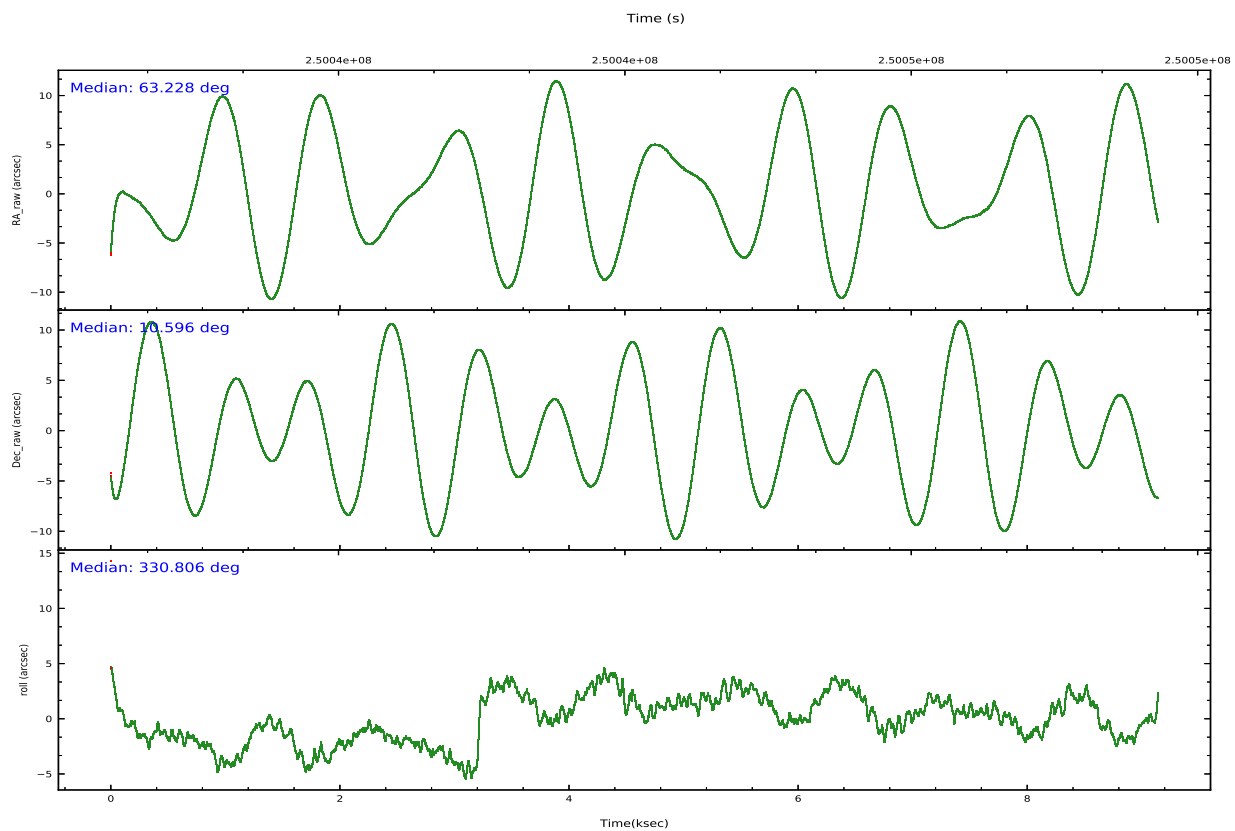
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	63.200047	63.224325250847
[deg] Pointing Dec	10.595840	10.594410793746
[deg] Pointing Roll	330.604581	330.80597115452
[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)	250040656.184000	250039280.1664
Observation start date	2005-12-03T23:43:12	2005-12-03T23:21:20
[s] Observation end time (MET)	250049656.184000	250050074.9544
Observation end date	2005-12-04T02:13:12	2005-12-04T02:21:14
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



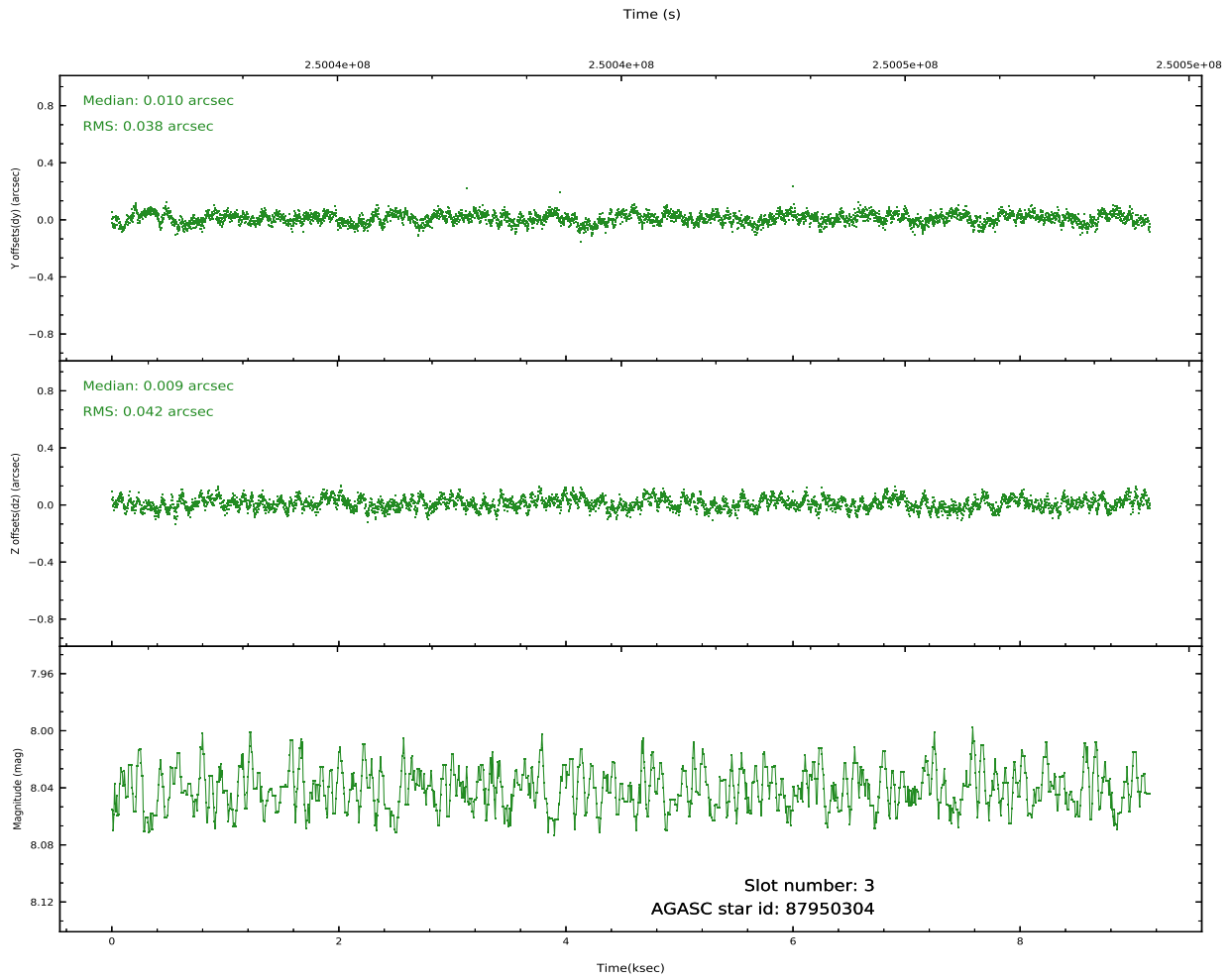
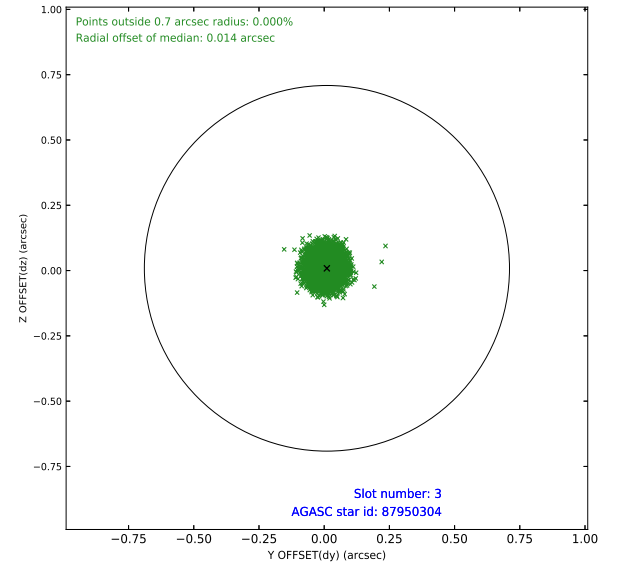
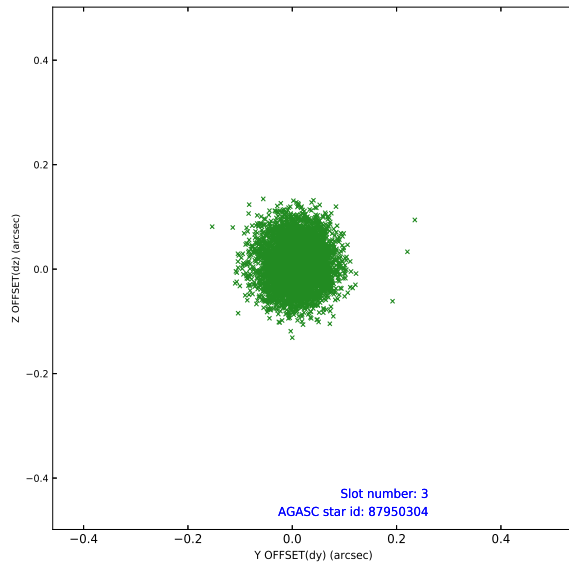


Slot Statistics

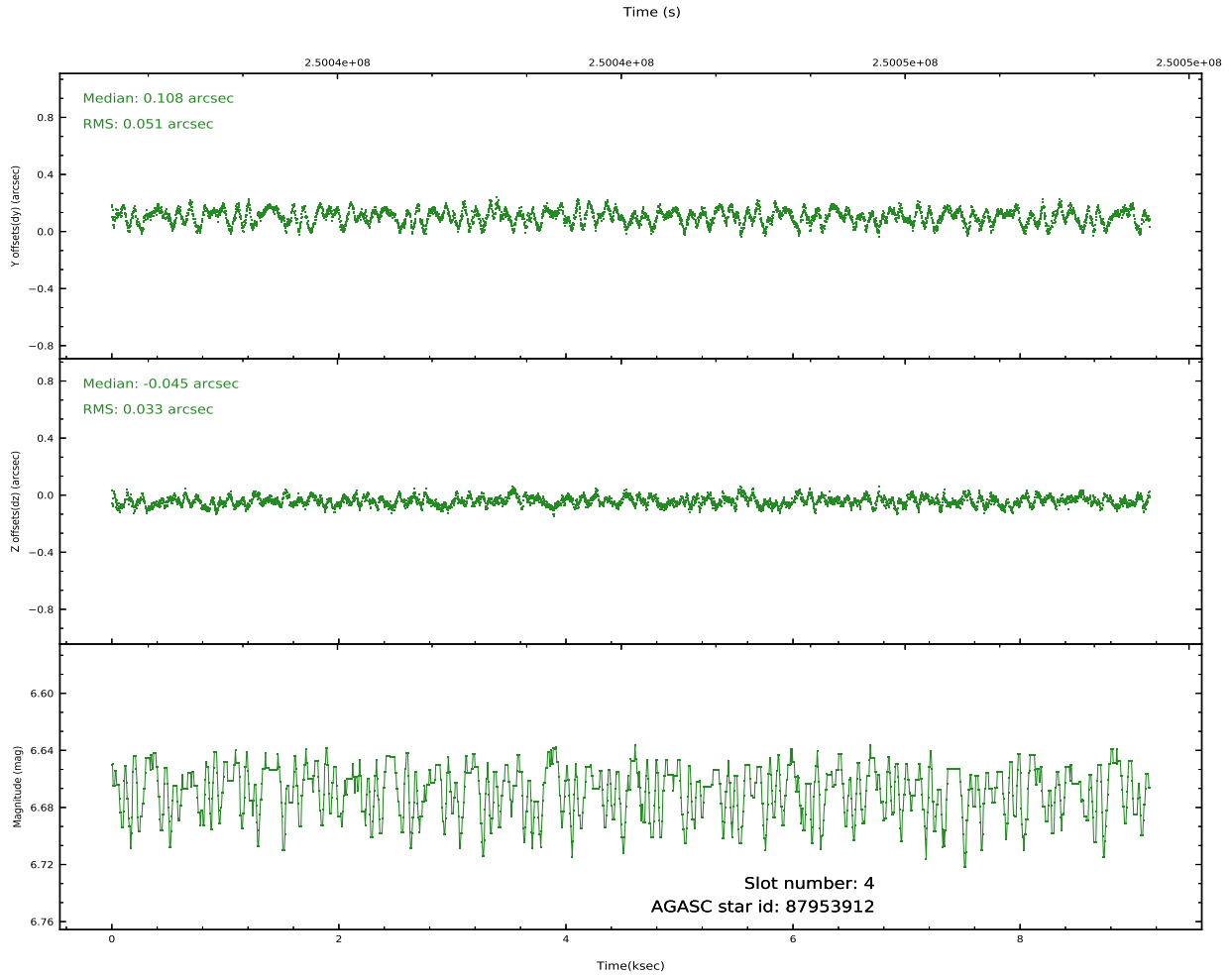
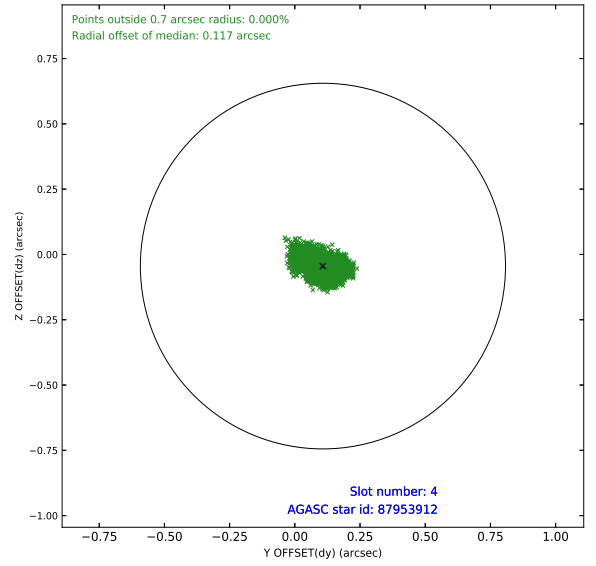
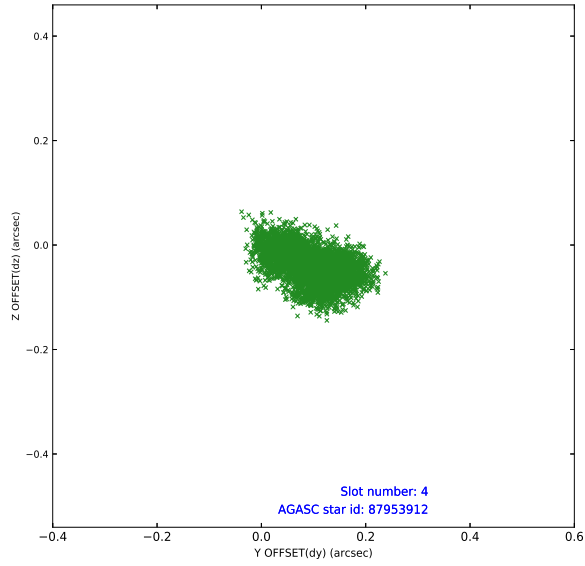
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	2231	1.000	-0.020	-0.090	0.036	0.050	0.000000	0.000000	932.18	-835
1	FID		ACIS-I-4	7.18	2231	1.000	0.174	0.095	0.029	0.040	0.000000	0.000000	2152.76	1064
2	FID		ACIS-I-5	7.22	2231	1.000	-0.252	0.065	0.018	0.028	0.000000	0.000000	-1815.28	1062
3	GUIDE	used	87950304	8.04	4461	1.000	0.010	0.009	0.061	0.095	63.753878	10.748130	1436.68	1440
4	GUIDE	used	87953912	6.67	4460	1.000	0.108	-0.045	0.065	0.107	63.394036	10.212467	1276.88	-864
5	GUIDE	used	87954552	8.33	4458	1.000	-0.071	-0.010	0.068	0.112	63.195345	11.171305	-1031.07	1796
6	GUIDE	used	88343064	8.78	4461	1.000	-0.011	-0.133	0.064	0.102	63.058020	11.314635	-1707.36	2008
7	GUIDE	used	87818344	8.36	4459	1.000	-0.037	0.176	0.054	0.087	62.599114	10.854229	-2308.99	-230

## 2.4 Star Slots

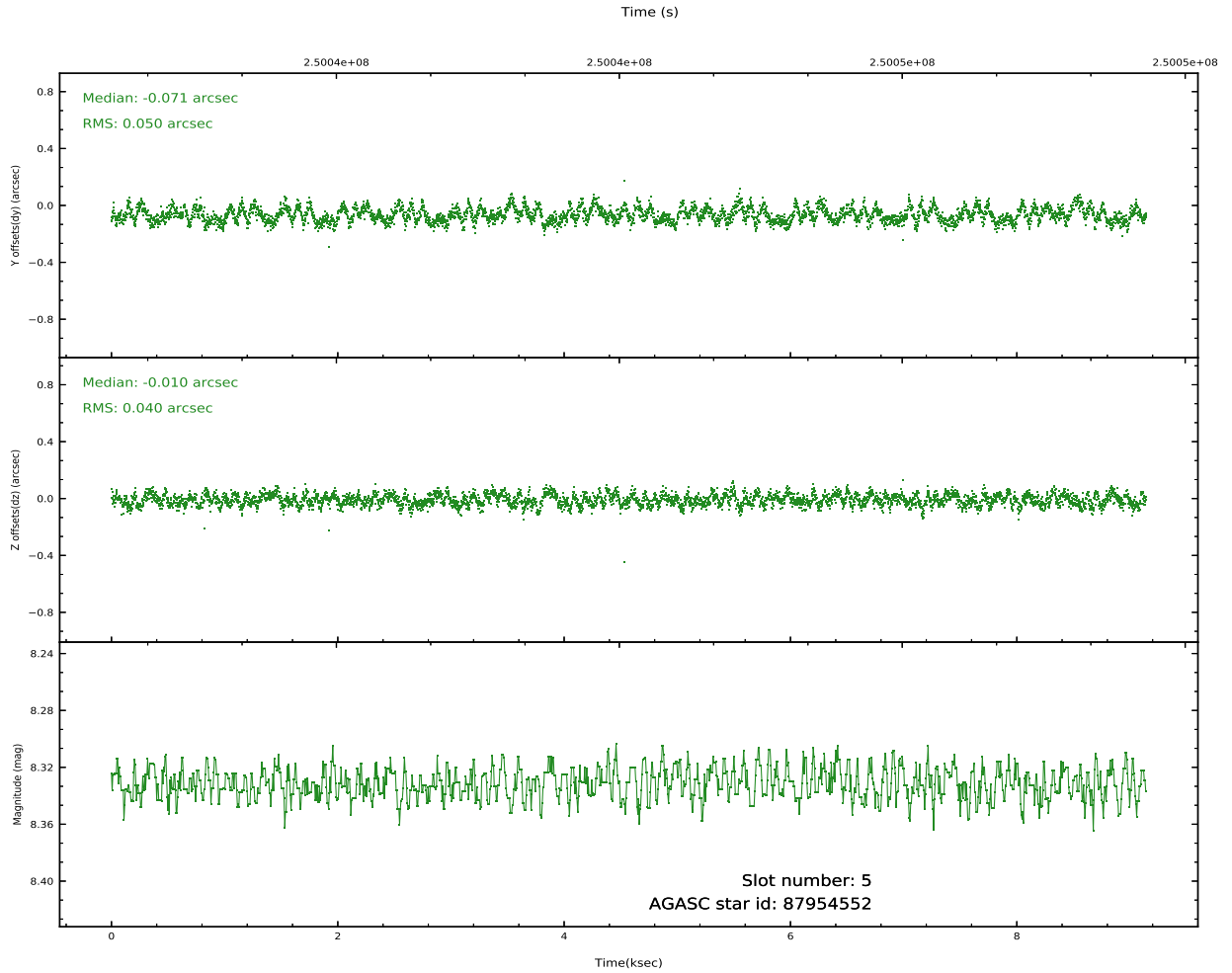
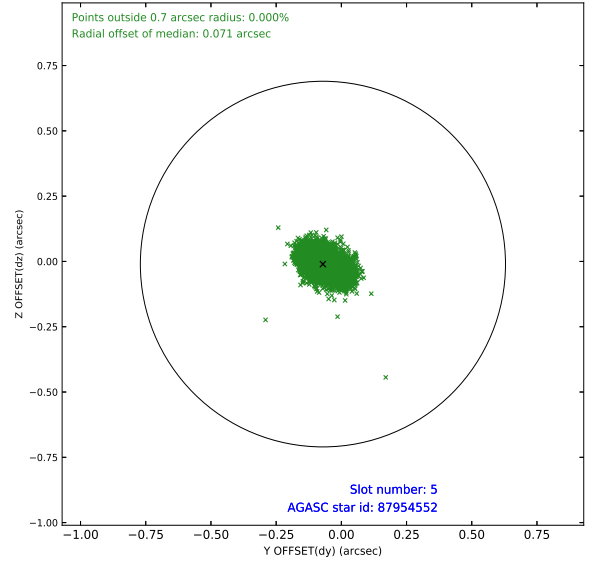
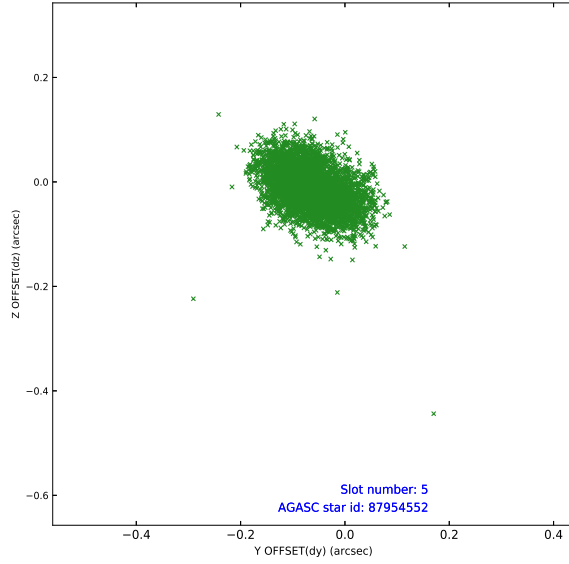
### 2.4.1 Slot 3



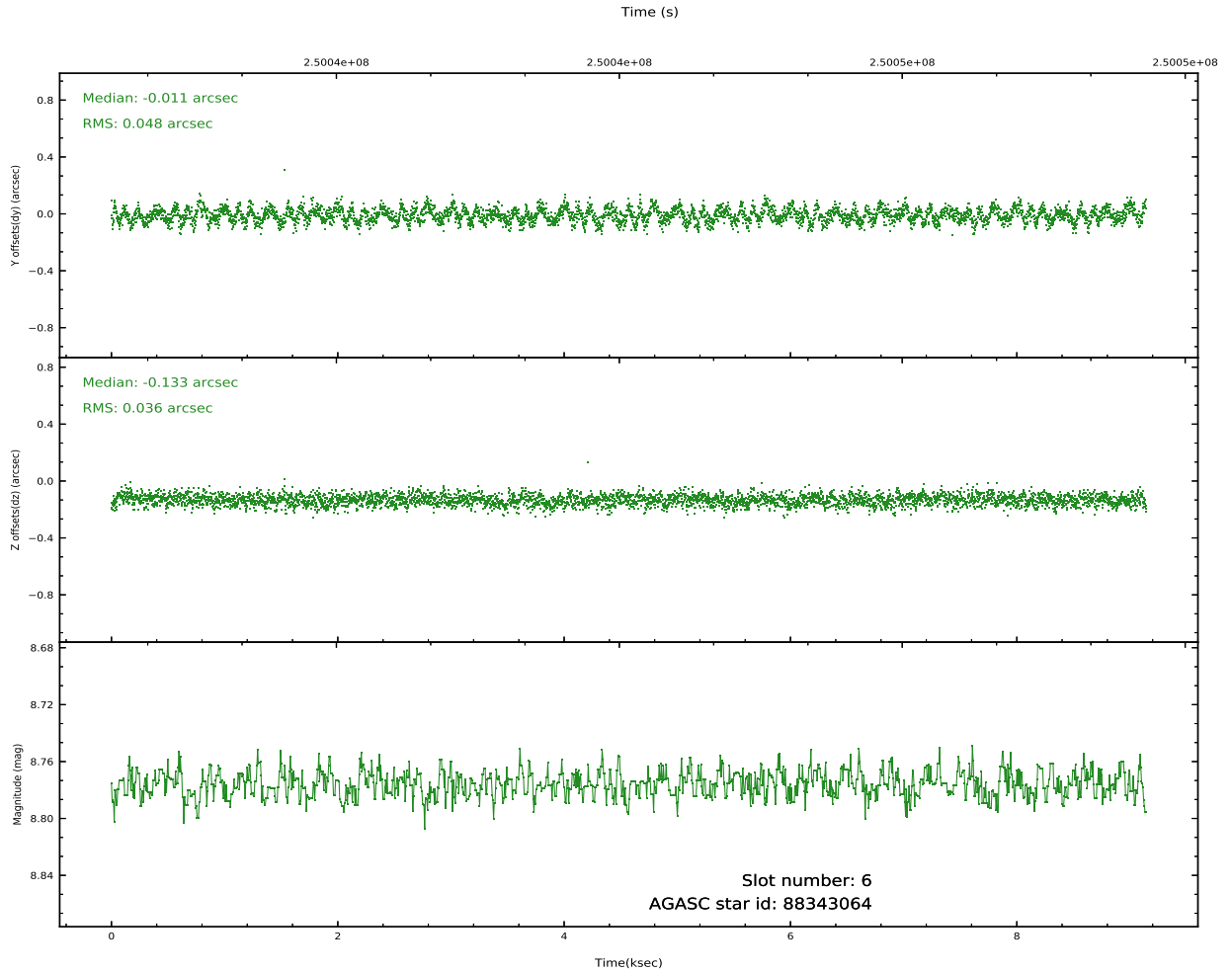
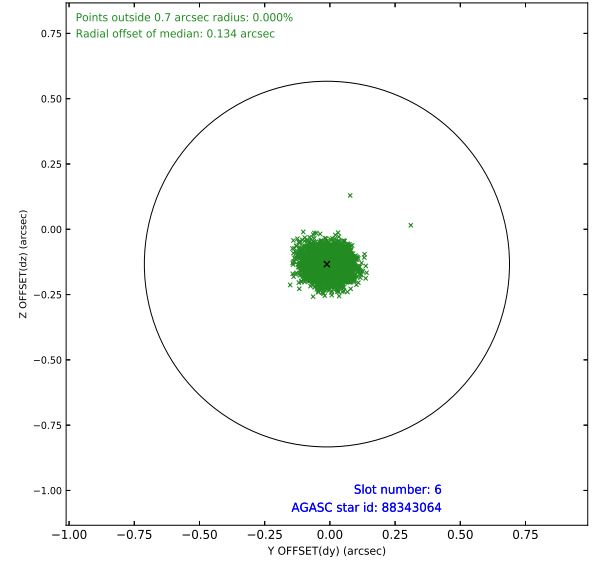
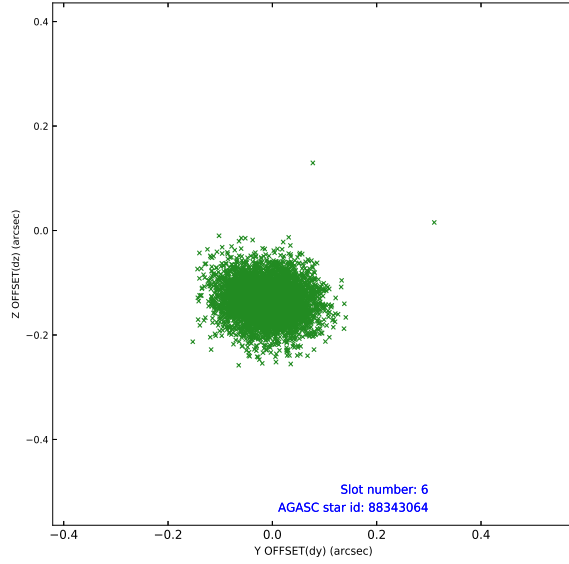
## 2.4.2 Slot 4



### 2.4.3 Slot 5

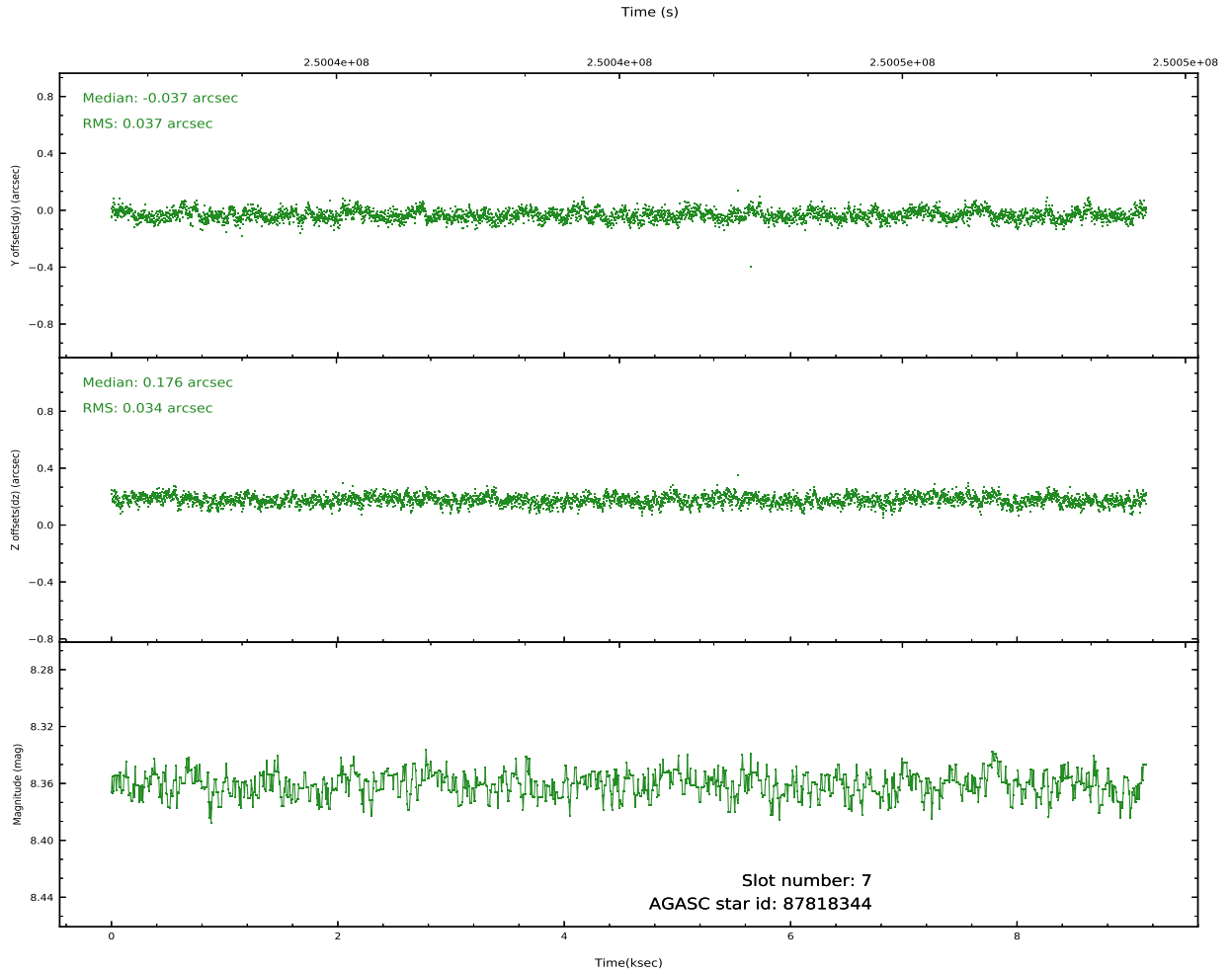
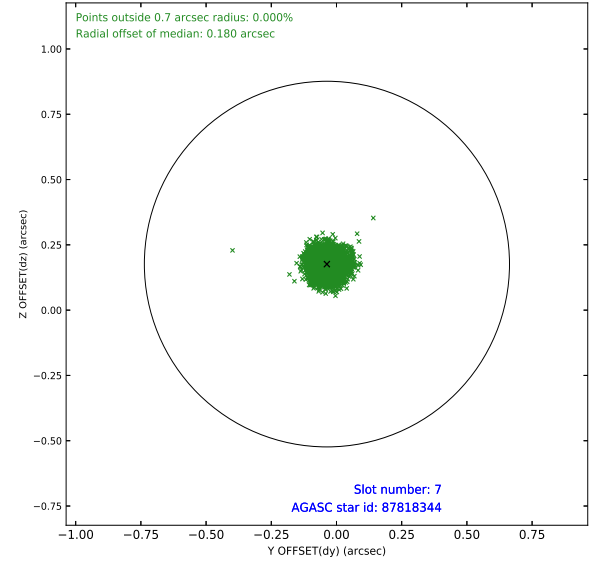
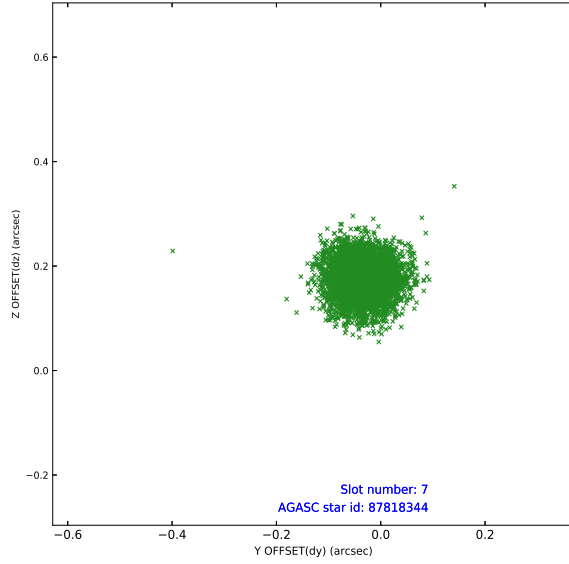


## 2.4.4 Slot 6



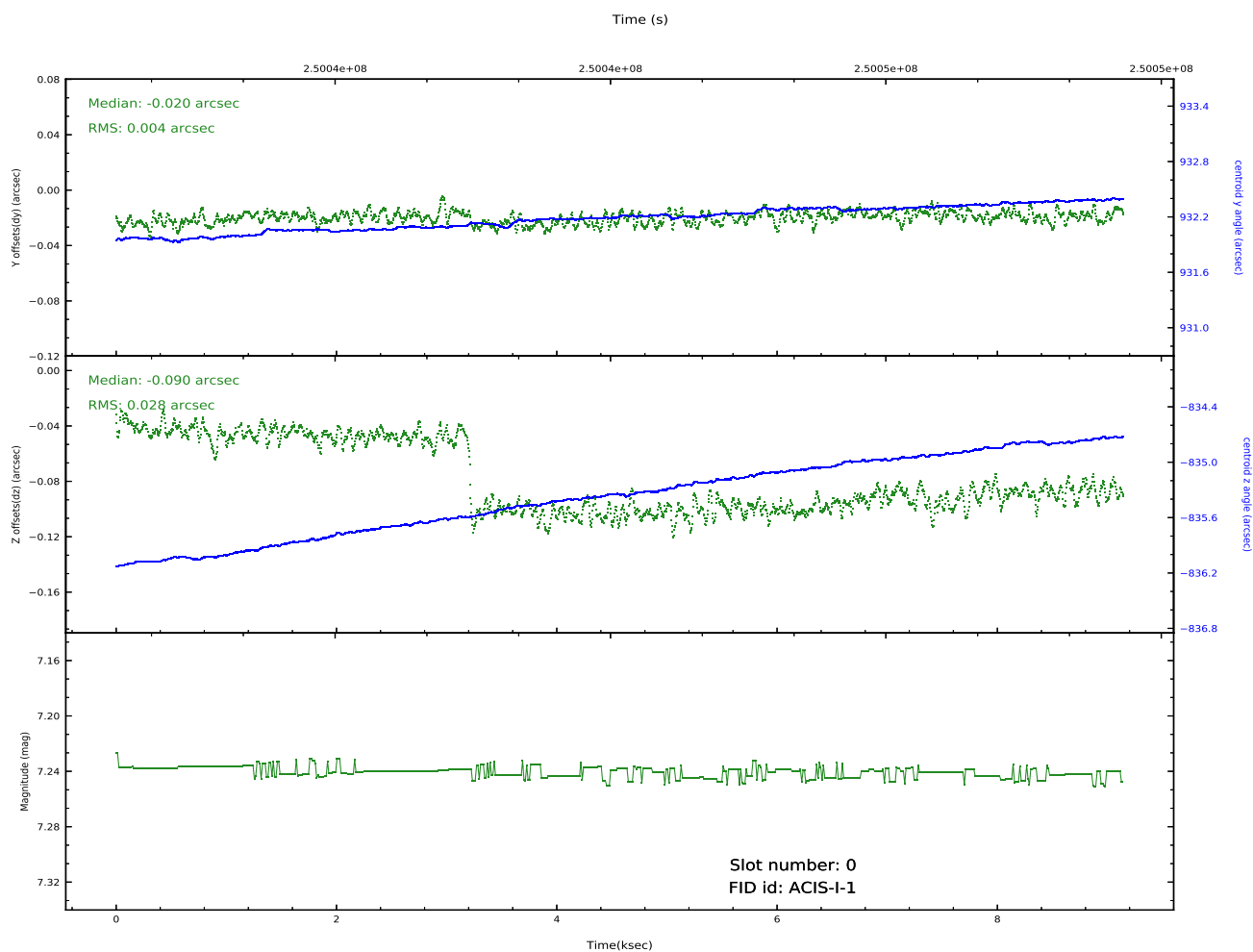
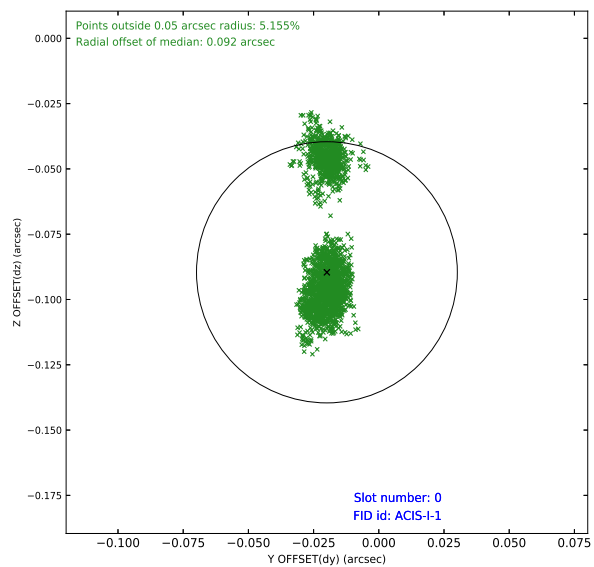
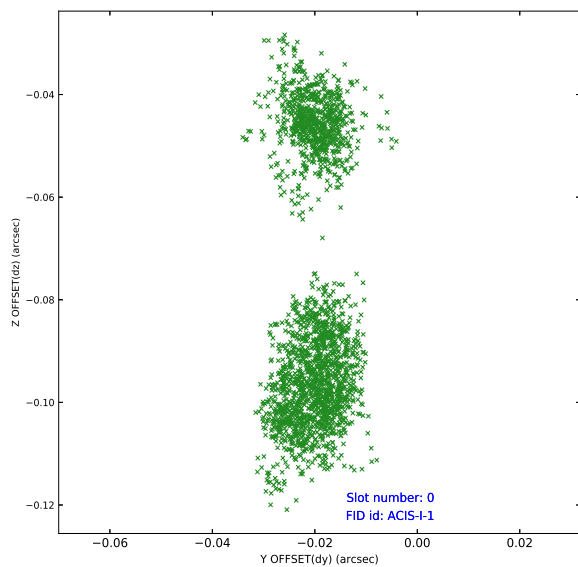


## 2.4.5 Slot 7

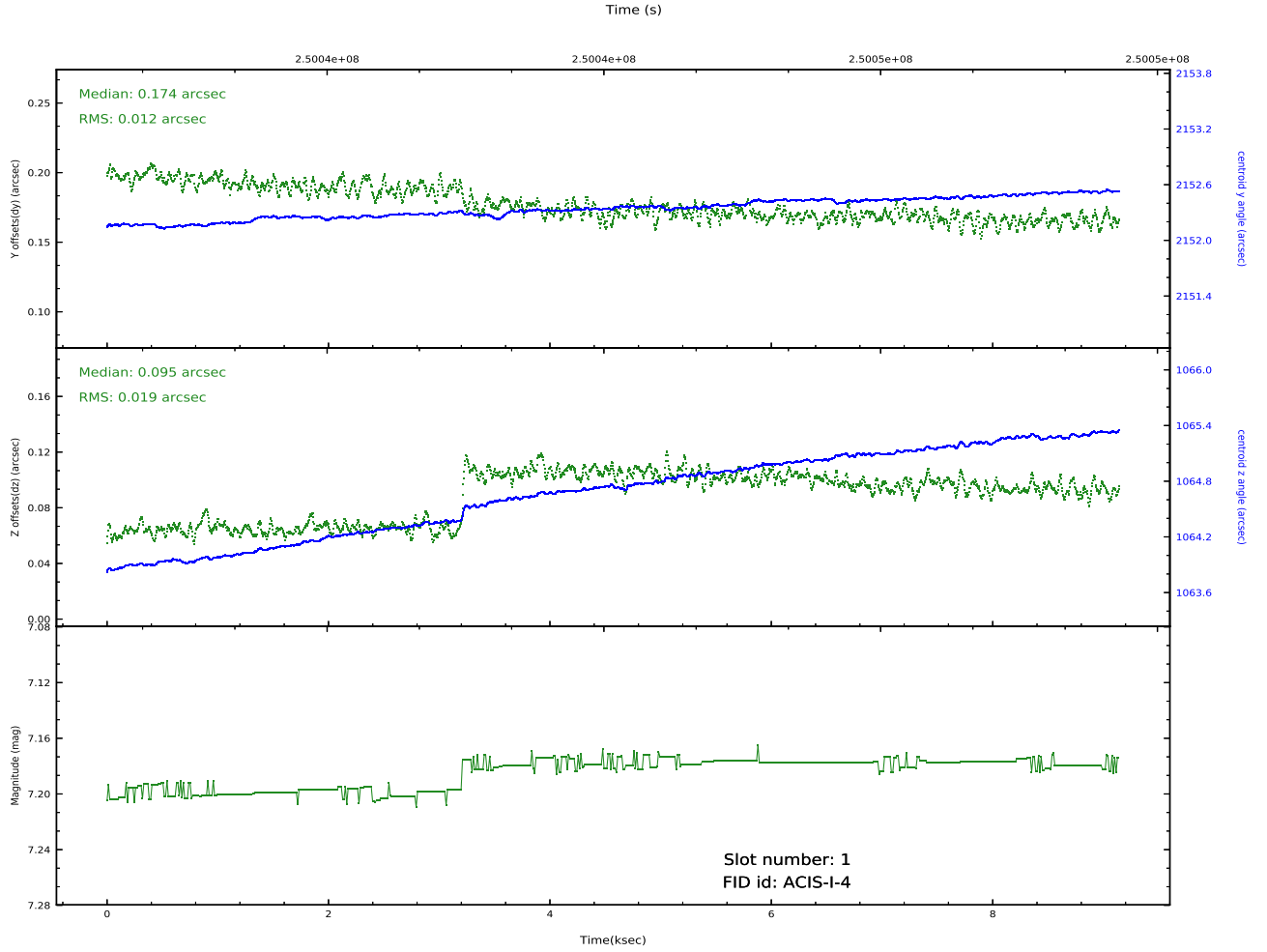
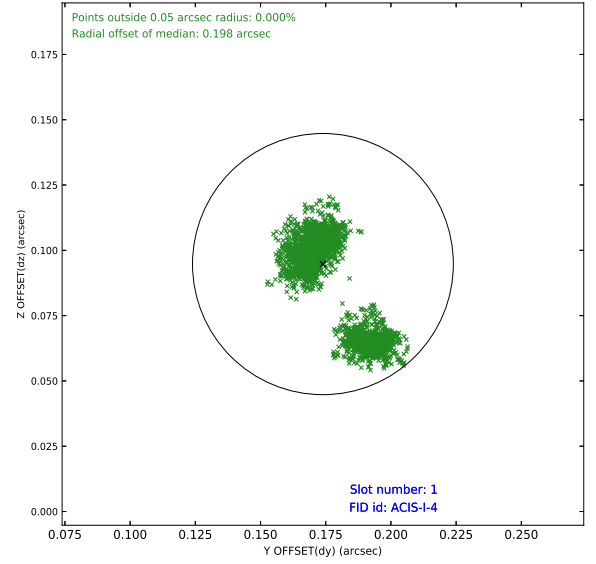
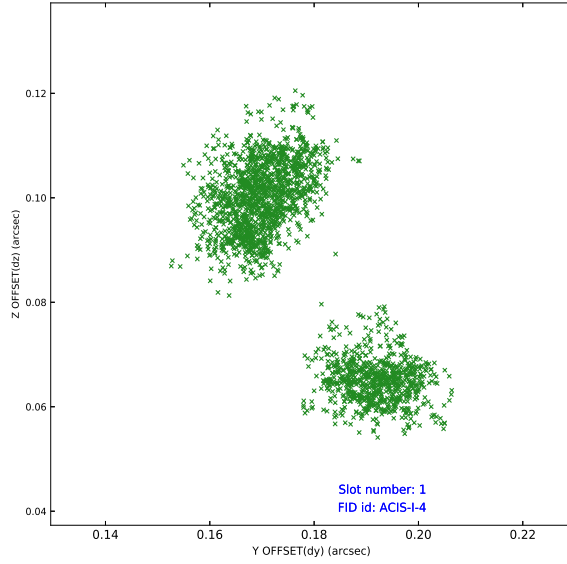


## 2.5 FID Slots

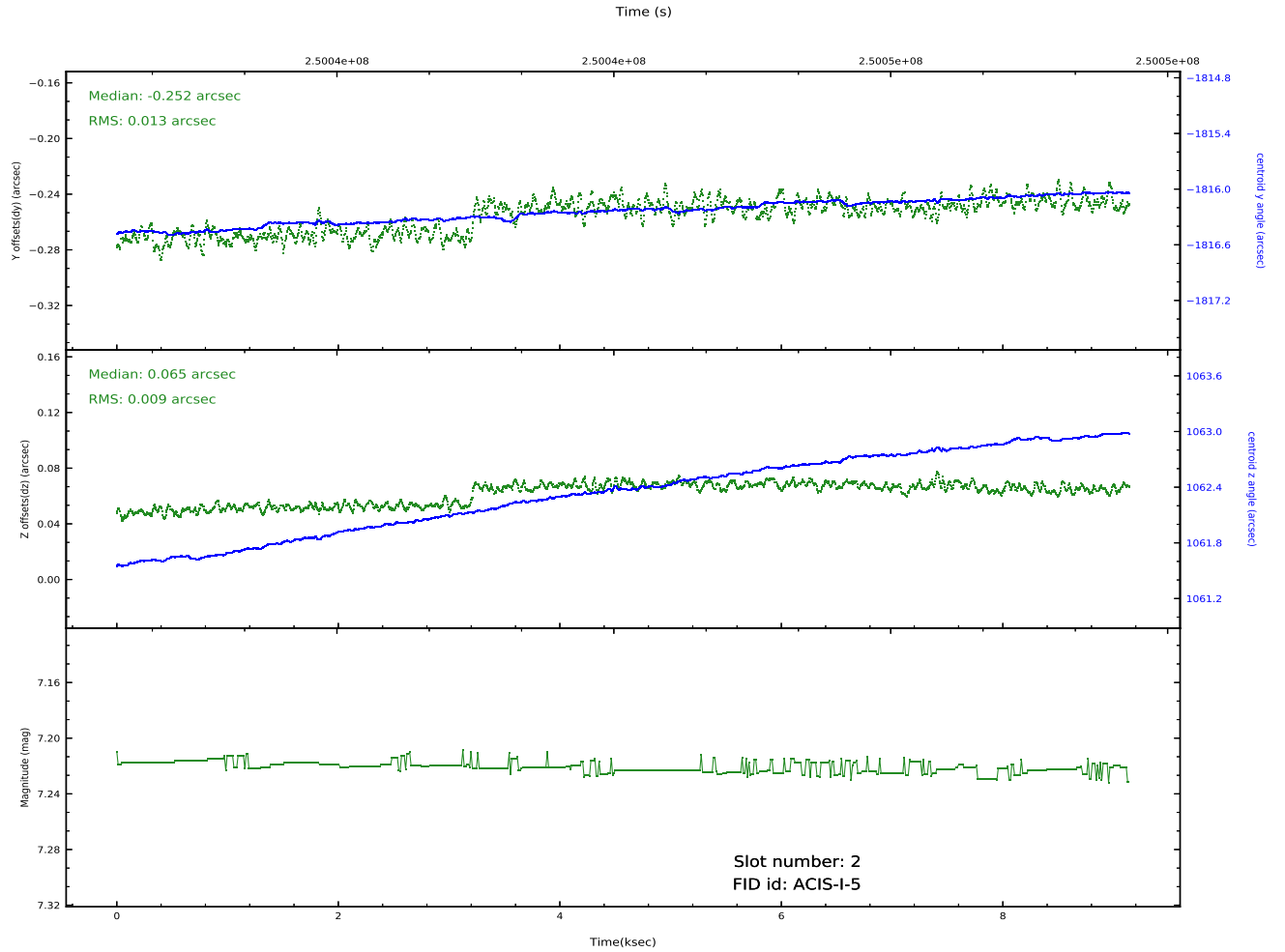
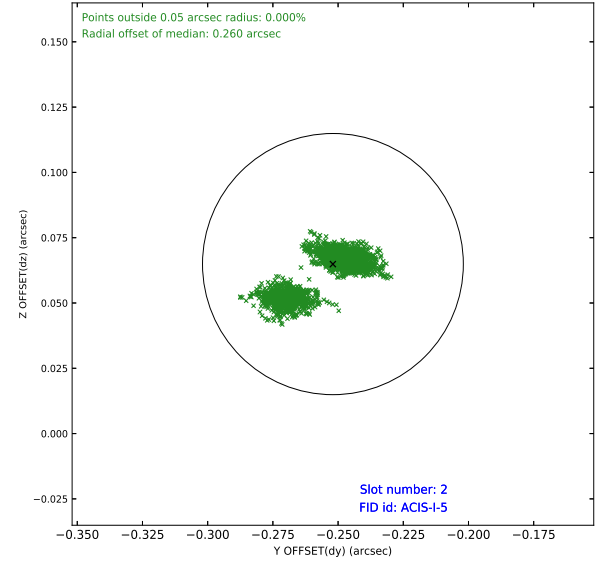
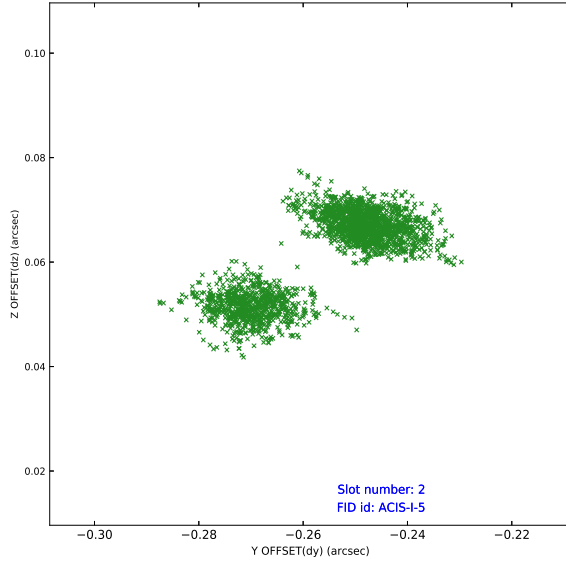
### 2.5.1 Slot 0



## 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	9.138799

### A.2 Comments