

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5798 - L2 Version 4  
Chandra X-Ray Center

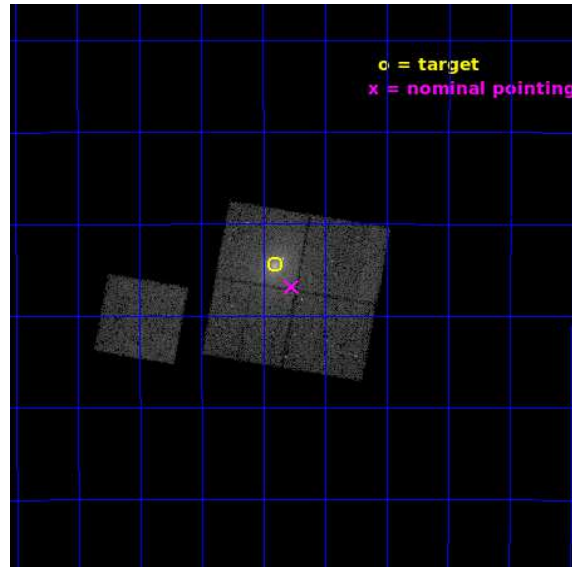
L2 Processing Date : Oct 5 2020

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# 1 Front

seq_num	800511	Sequence number
obs_id	5798	Observation id
title	X-ray Properties of a Mass-Selected Group Catalog	Proposal title
observer	Prof. Pasquale Mazzotta	Principal investigator
object	2PIGG s1935	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	336.975	Observer's specified target RA [deg]
dec_targ	-30.573194	Observer's specified target Dec [deg]
ra_nom	336.94174184669	Nominal RA [deg]
dec_nom	-30.613973930747	Nominal Dec [deg]
roll_nom	279.95673134887	Nominal Roll [deg]
revision	4	Processing version of data
ontime	22564.820779711	Sum of GTIs [s]
livetime	22269.994784245	Livetime [s]
ontime0	22561.556669503	Sum of GTIs [s]
ontime1	22564.738699704	Sum of GTIs [s]
ontime2	22558.497759342	Sum of GTIs [s]
ontime3	22564.820779711	Sum of GTIs [s]
ontime6	22561.515609622	Sum of GTIs [s]
l2events	96174	Number of level 2 events

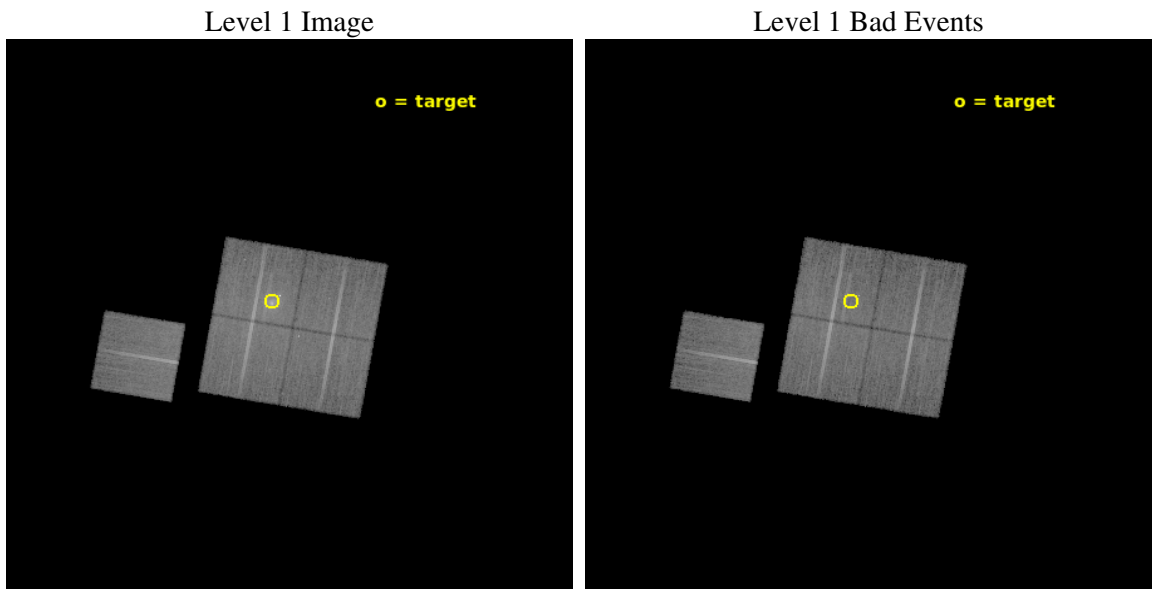




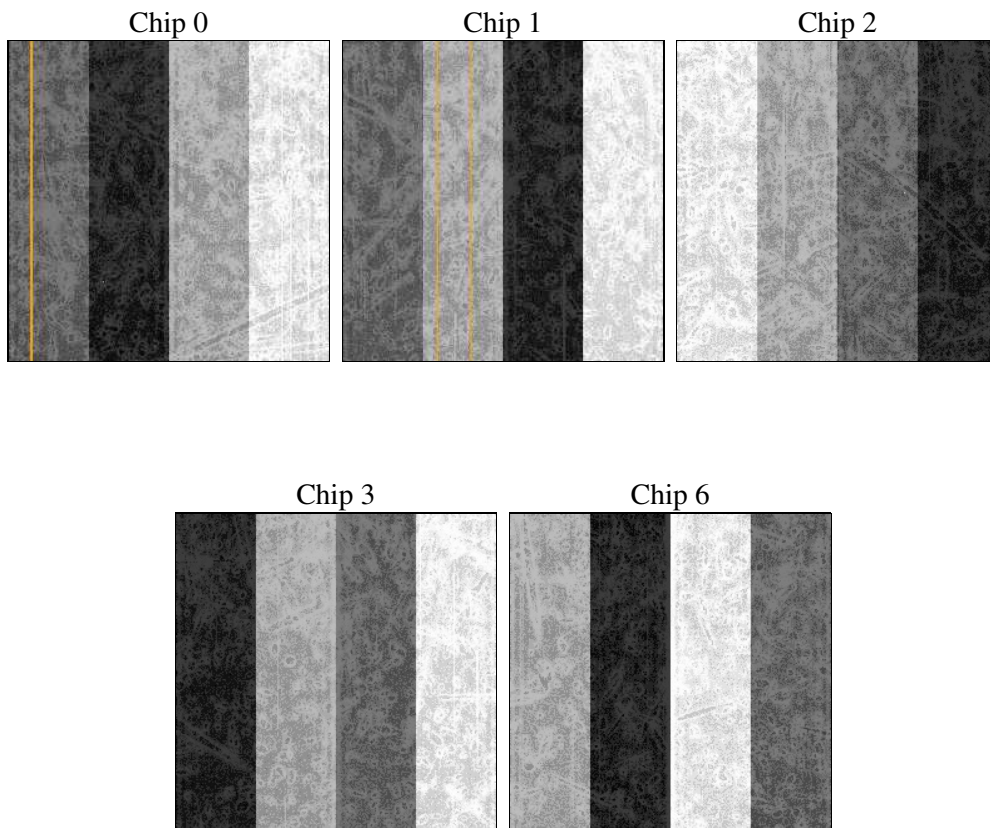
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22791.849000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	22564.820779711	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	22561.556669503	Sum of GTIs [s]
date	2020-10-05T18:18:44	Date and time of file creation	ontime1	22564.738699704	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	22558.497759342	Sum of GTIs [s]
			ontime3	22564.820779711	Sum of GTIs [s]
			ontime6	22561.515609622	Sum of GTIs [s]
			l1events	785883	Number of level 1 events

### 2.1.4 Events

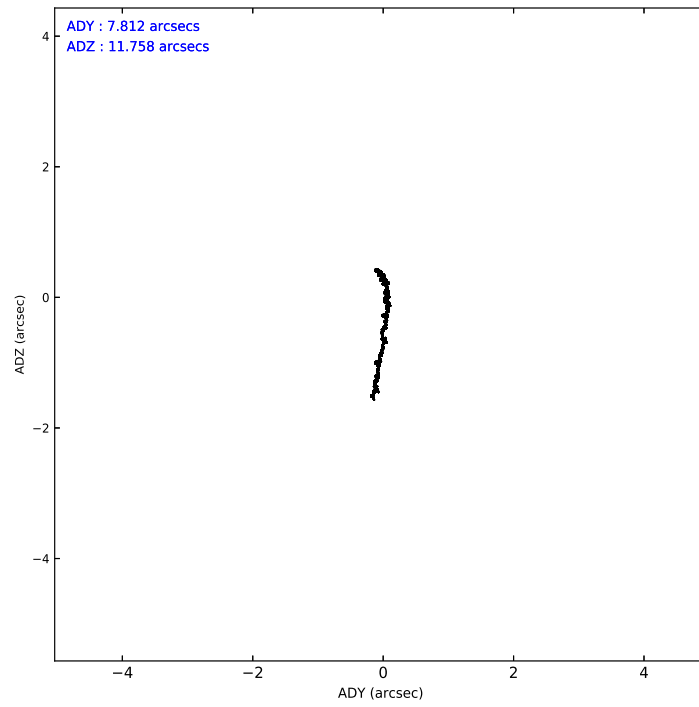
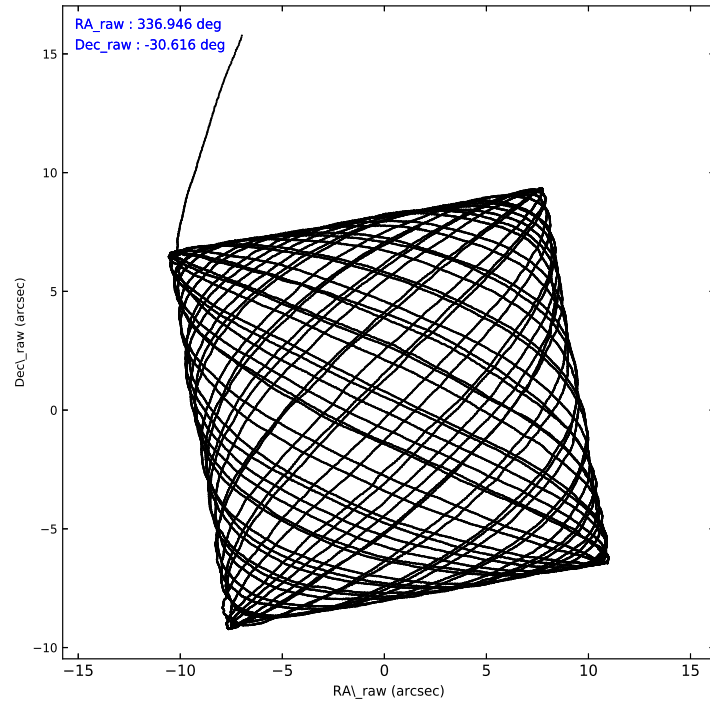
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	143903	142651	163563	180590	155176
rejected events	127242	123791	145310	139914	139367
rejected %	88%	86%	88%	77%	89%

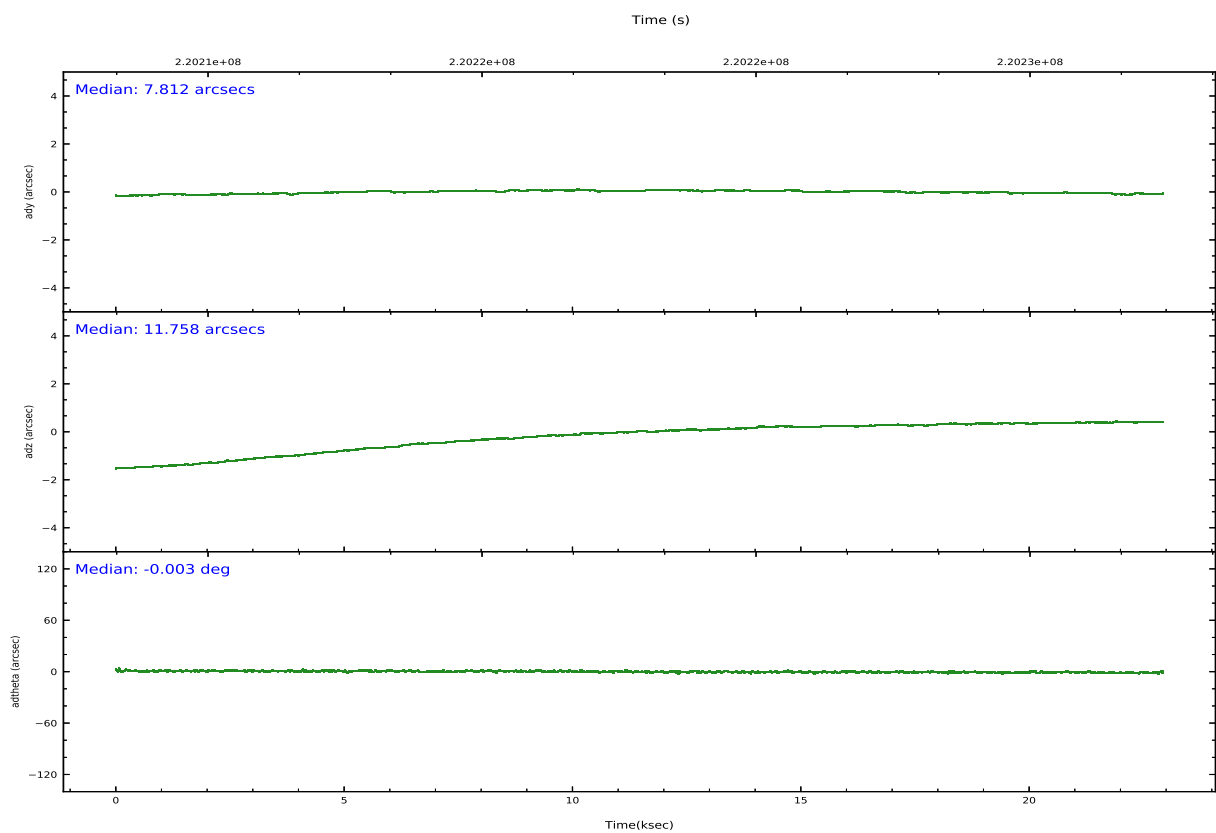
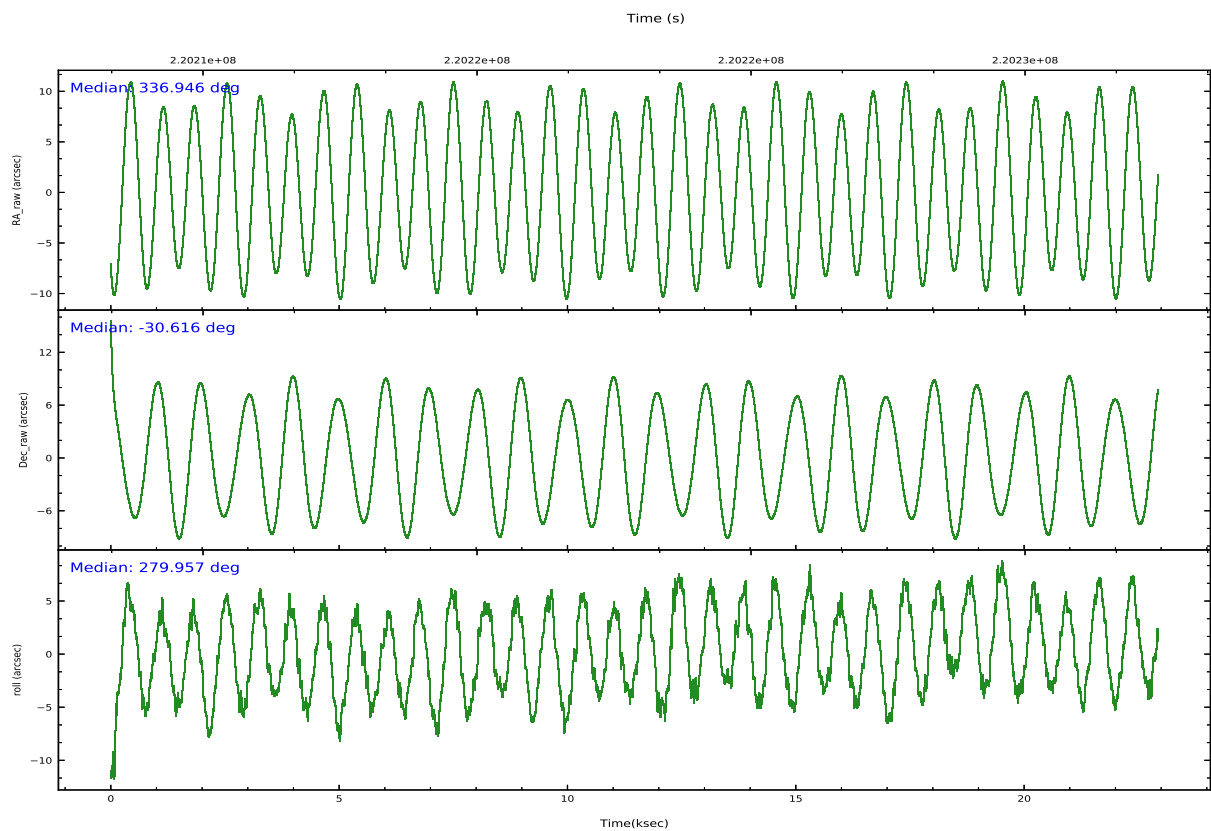
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6588	7955	8373	27386	5992
	4%	5%	5%	15%	3%
grade 1 events	82	79	104	490	70
	0%	0%	0%	0%	0%
grade 2 events	3690	3823	3711	5252	3270
	2%	2%	2%	2%	2%
grade 3 events	1823	1902	1706	2458	1713
	1%	1%	1%	1%	1%
grade 4 events	1761	1848	1755	2318	1600
	1%	1%	1%	1%	1%
grade 5 events	5111	5585	4944	6012	5711
	3%	3%	3%	3%	3%
grade 6 events	2804	3334	2713	3271	3235
	1%	2%	1%	1%	2%
grade 7 events	122044	118125	140257	133403	133585
	84%	82%	85%	73%	86%

## 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	336.925473	336.94174184669	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.594735	-30.613973930747	Alternating exposures requested	N	N
[deg] Pointing Roll	279.740874	279.95673134887	[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)	220208123.184000	220207004.35466			
Observation start date	2004-12-23T16:54:19	2004-12-23T16:36:44			
[s] Observation end time (MET)	220230915.184000	220231147.20575			
Observation end date	2004-12-23T23:14:11	2004-12-23T23:19:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect



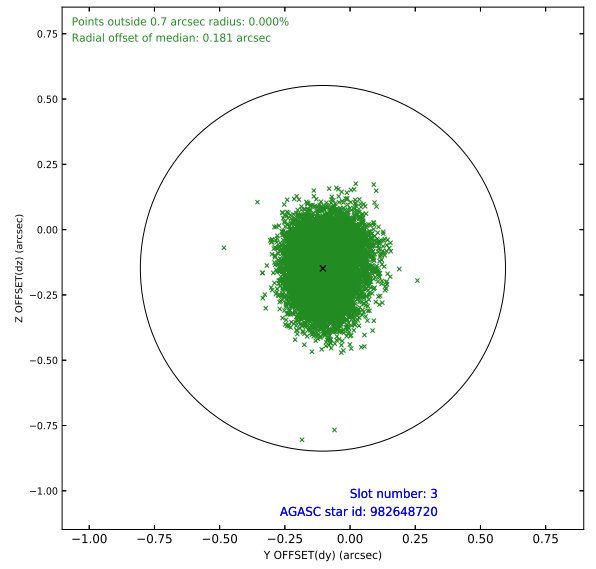
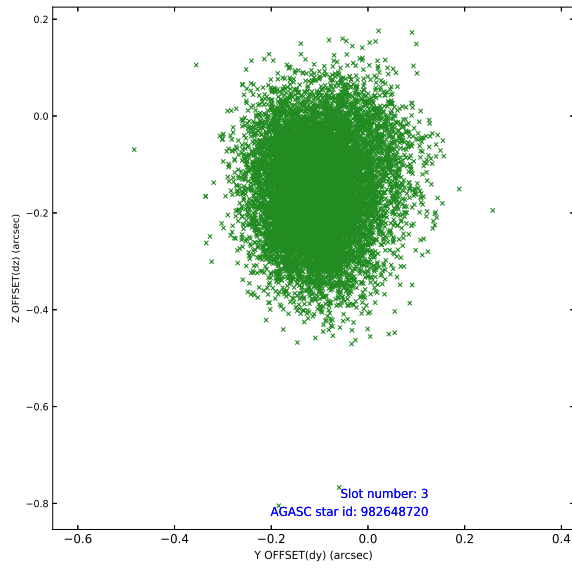


Slot Statistics

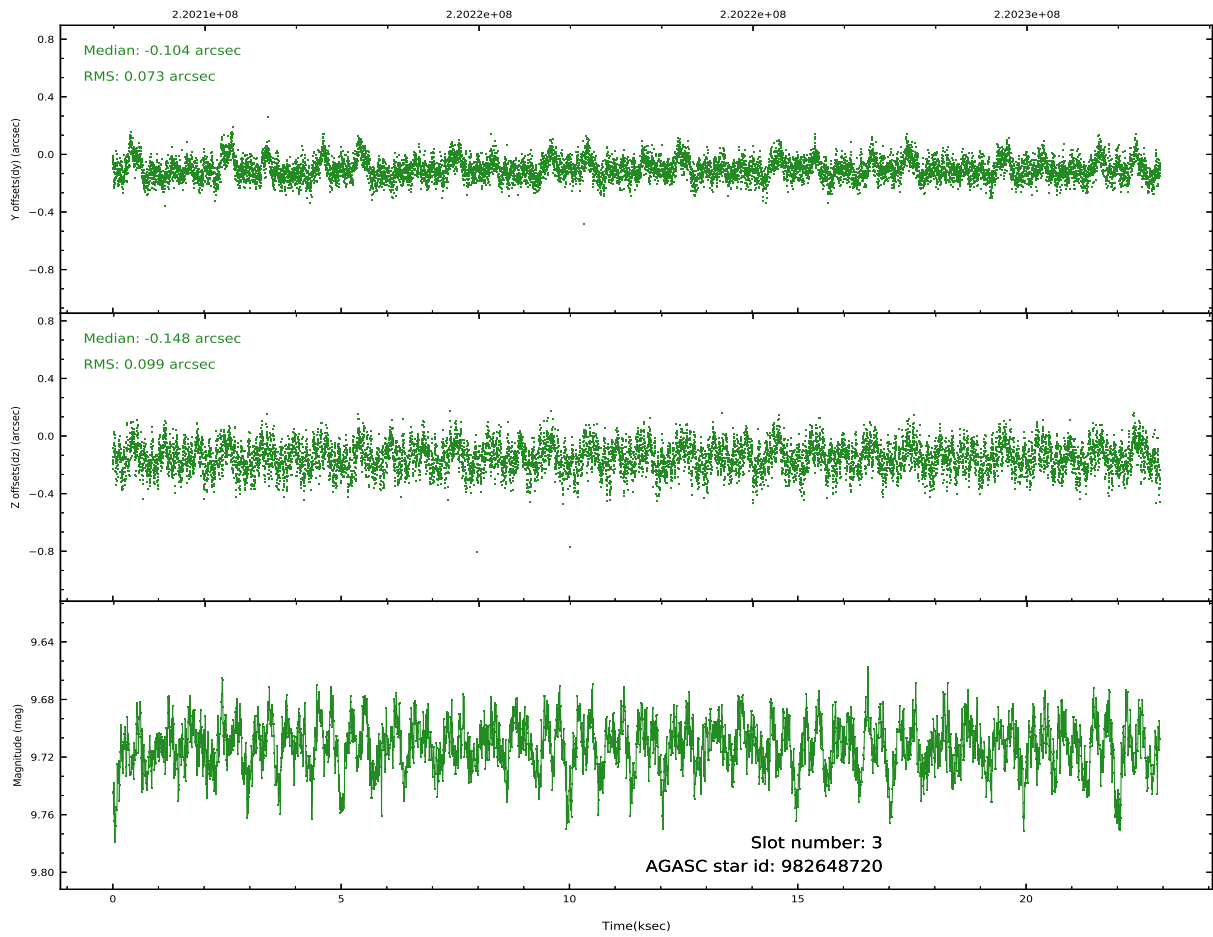
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.14	5594	1.000	-0.124	-0.130	0.014	0.025	0.000000	0.000000	-762.43	-841
1	FID		ACIS-I-4	7.17	5594	1.000	0.237	0.106	0.010	0.017	0.000000	0.000000	2151.90	1064
2	FID		ACIS-I-5	7.22	5594	1.000	-0.216	0.094	0.017	0.026	0.000000	0.000000	-1816.19	1062
3	GUIDE	used	982648720	9.71	11178	1.000	-0.104	-0.148	0.131	0.212	336.252192	-30.720827	101.69	-2131
4	GUIDE	used	982649160	9.15	11185	1.000	-0.086	-0.174	0.097	0.153	336.869379	-30.231158	-1319.26	49
5	GUIDE	used	982654064	8.66	11178	1.000	0.019	0.134	0.072	0.113	337.553377	-30.438964	-217.62	2014
6	GUIDE	used	982654128	8.05	11183	1.000	0.025	-0.136	0.057	0.090	337.038536	-31.076681	1769.48	50
7	GUIDE	used	982654144	7.76	11188	1.000	0.145	0.322	0.066	0.104	337.754433	-31.025688	1971.75	2257

## 2.4 Star Slots

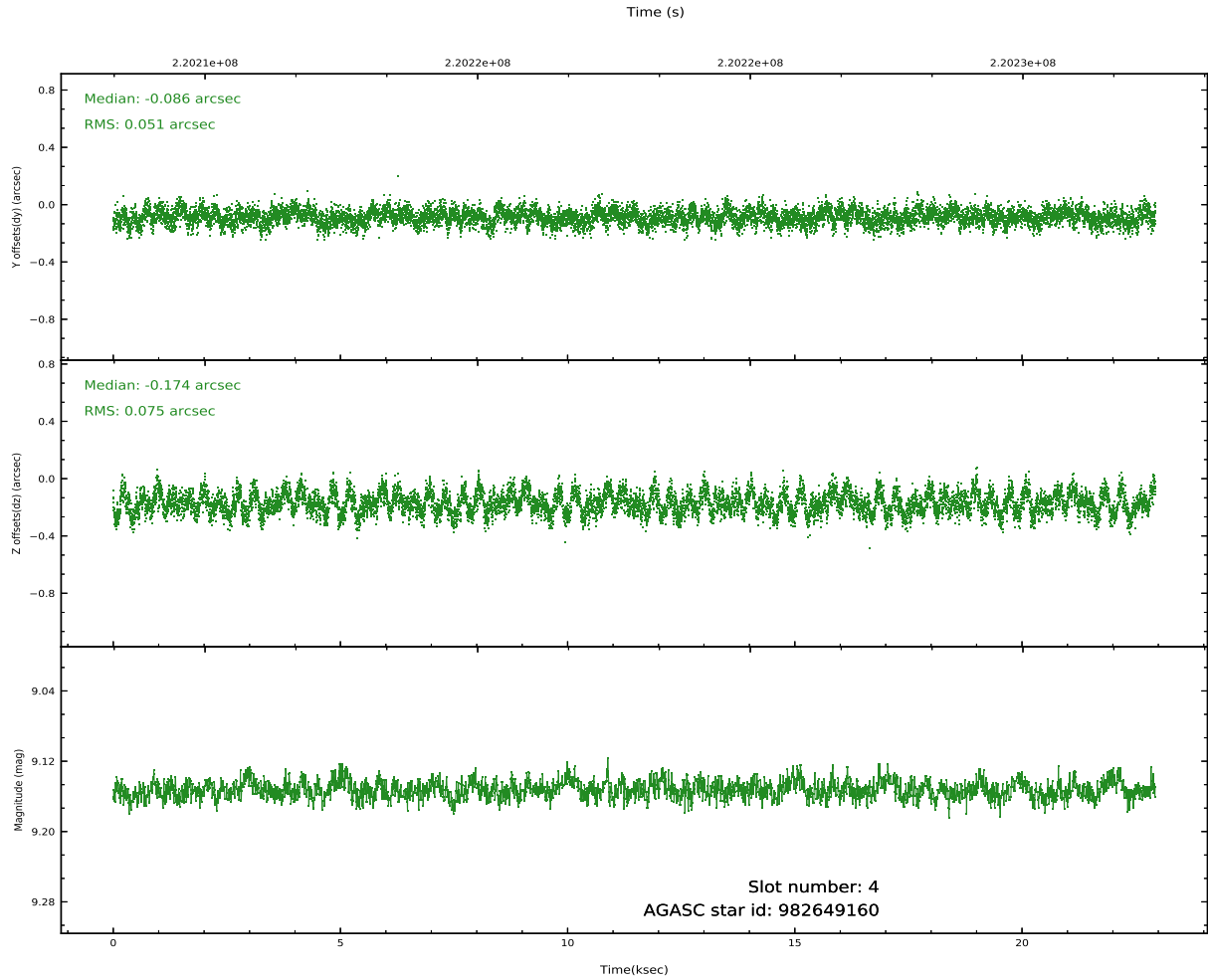
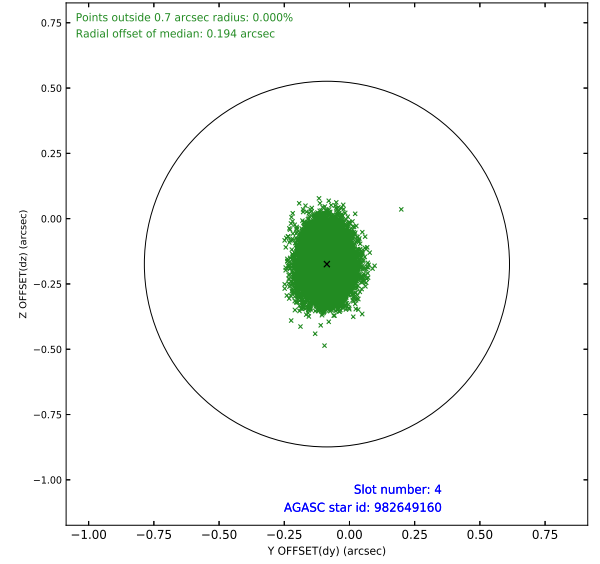
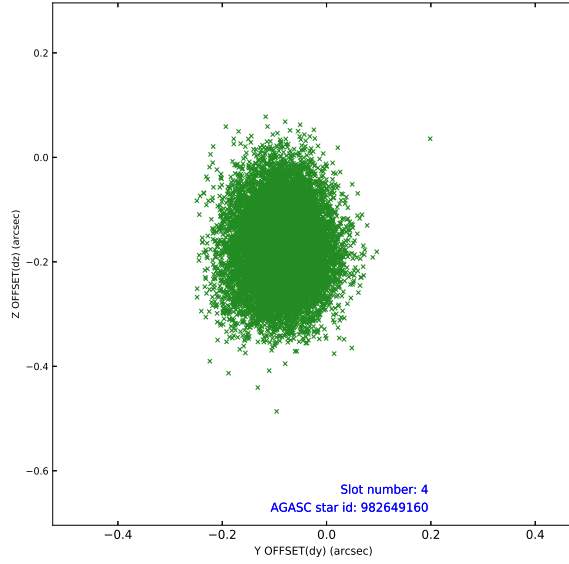
### 2.4.1 Slot 3



Time (s)

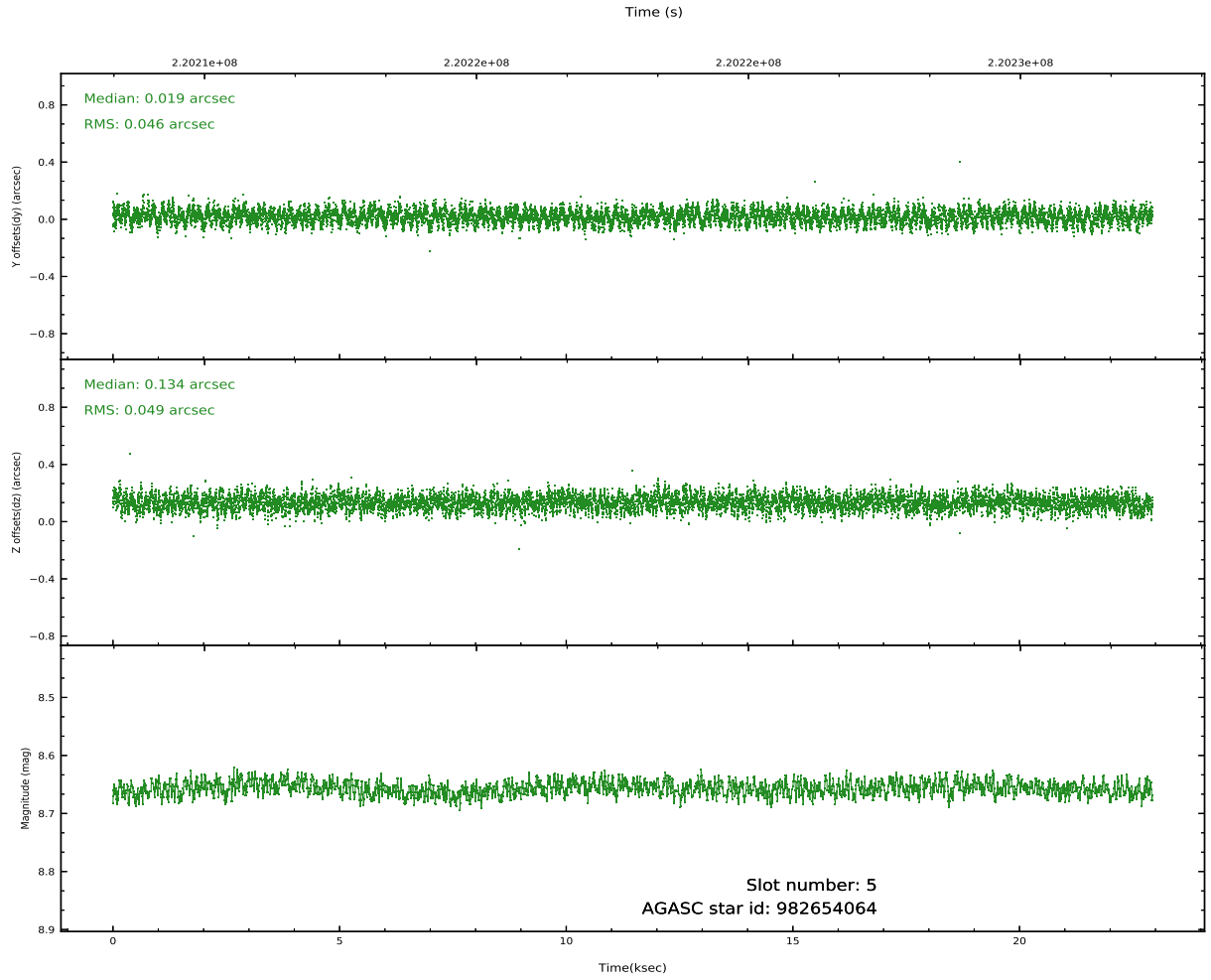
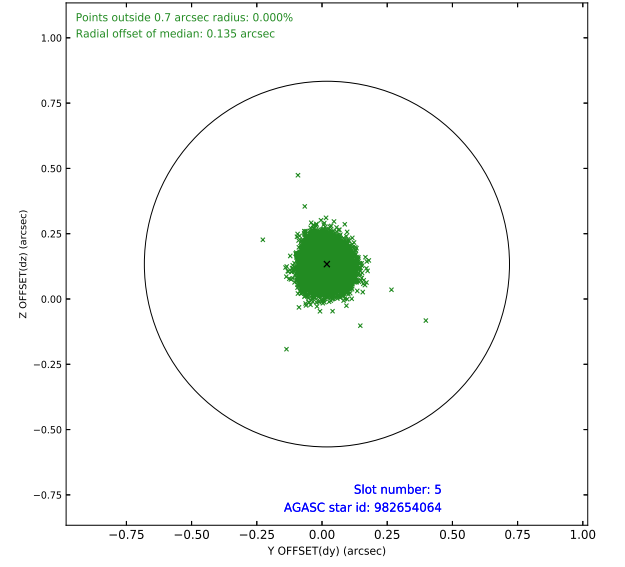
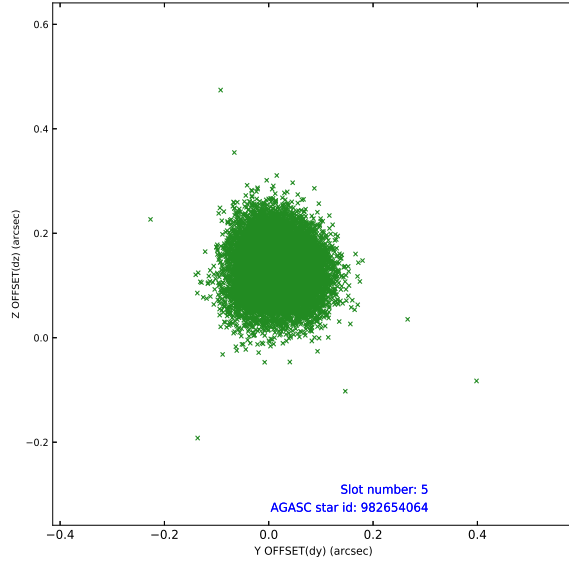


## 2.4.2 Slot 4

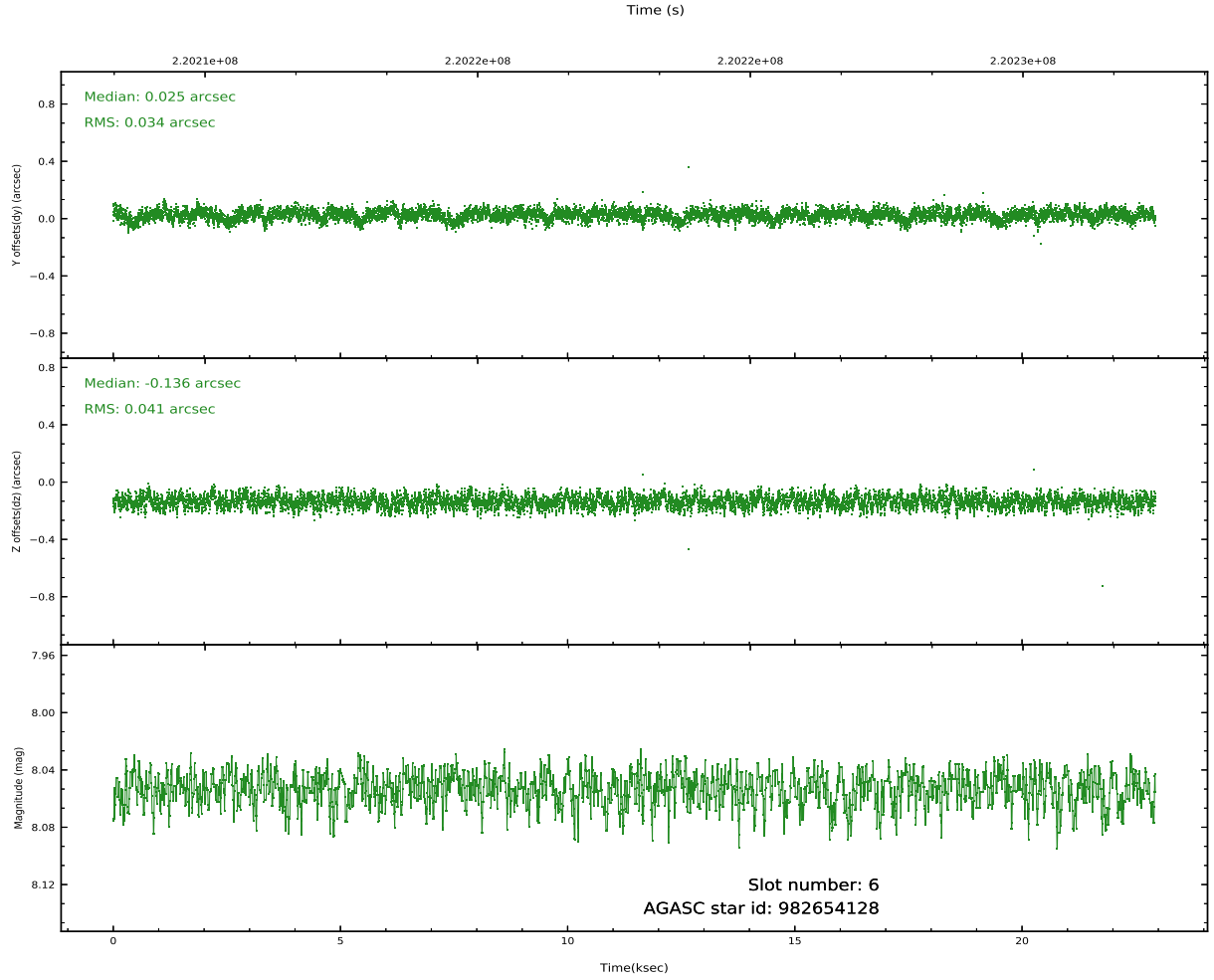
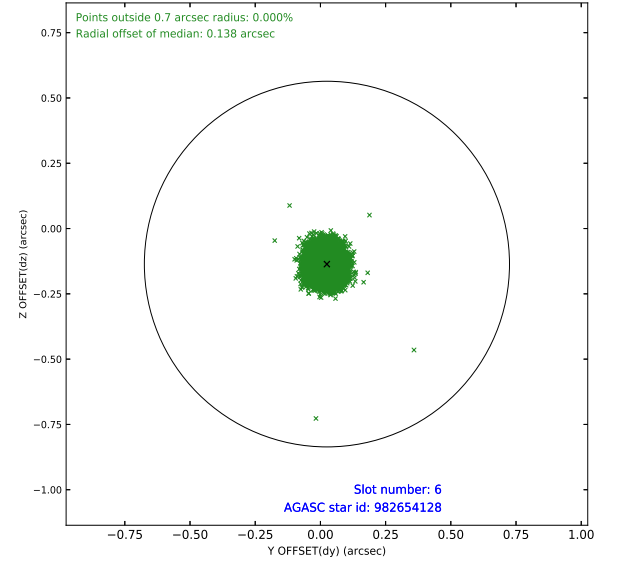
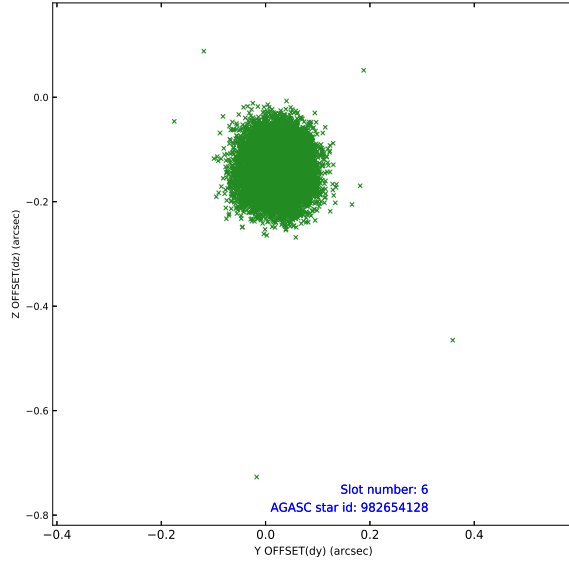




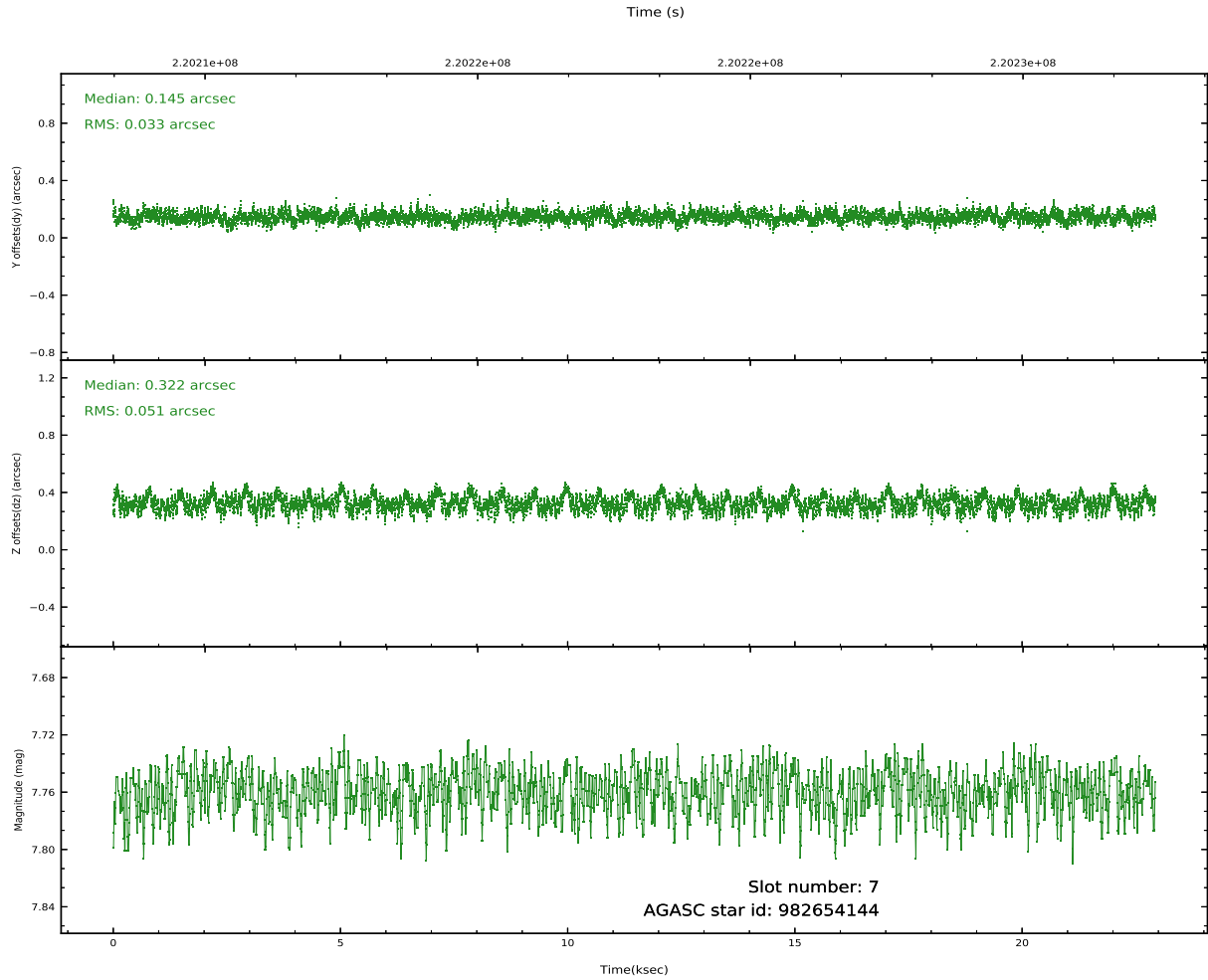
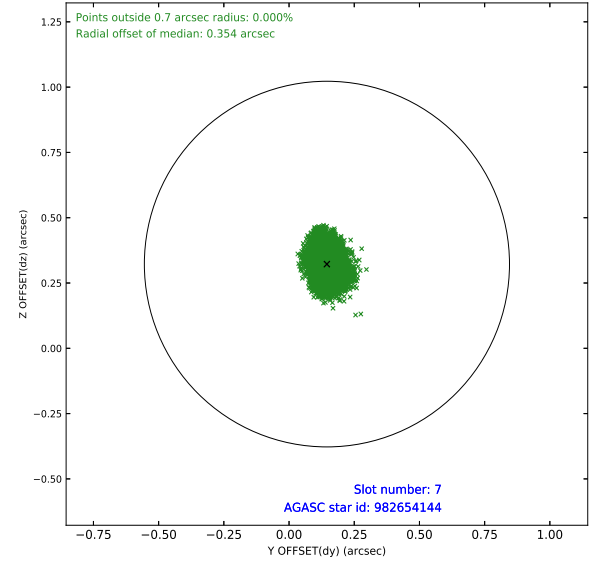
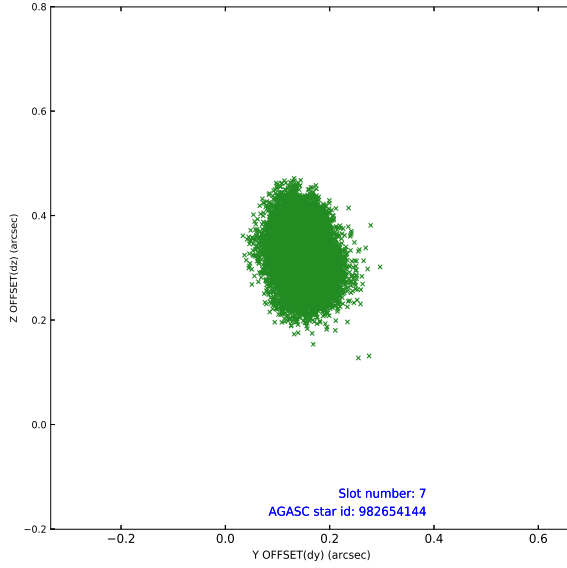
### 2.4.3 Slot 5



## 2.4.4 Slot 6

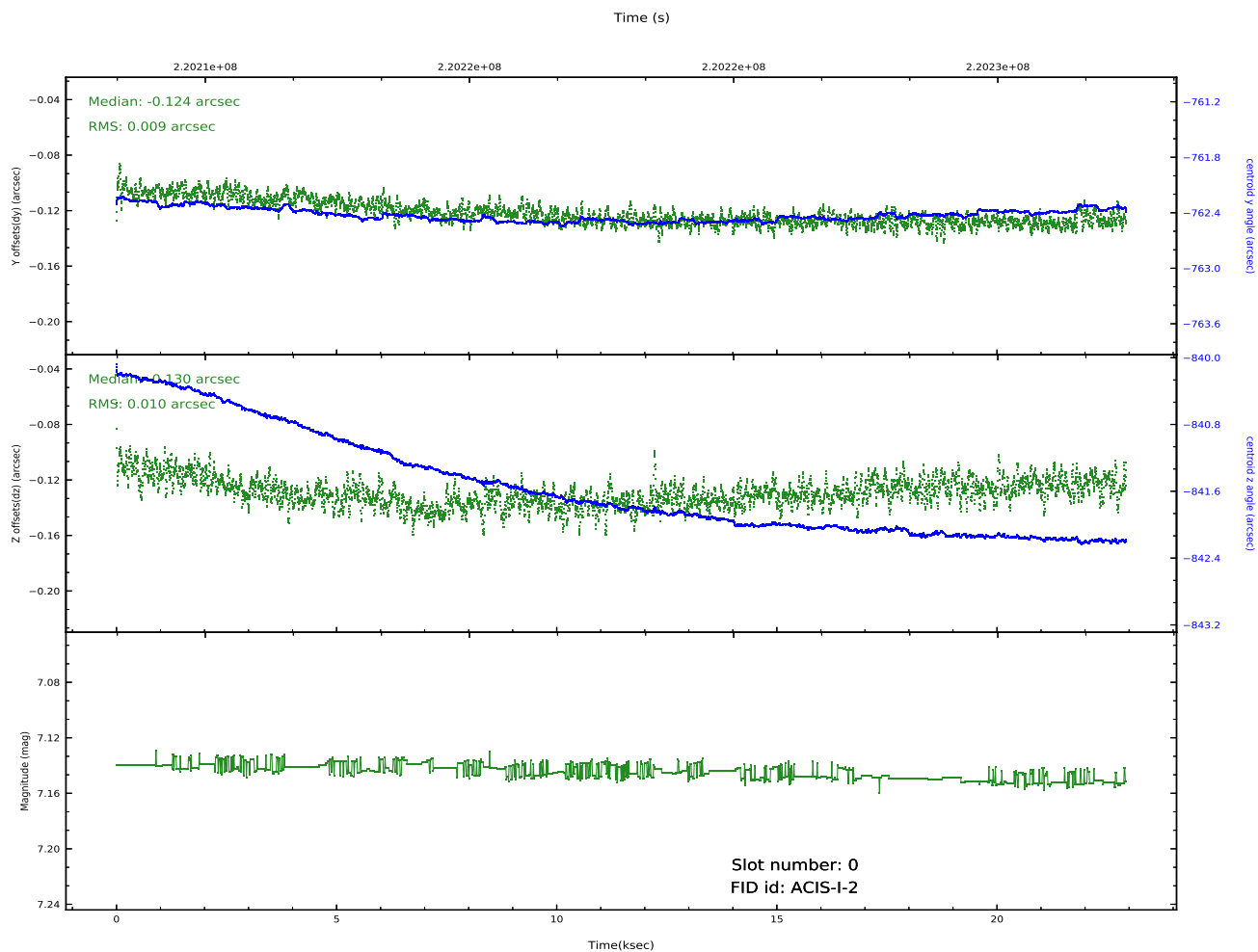
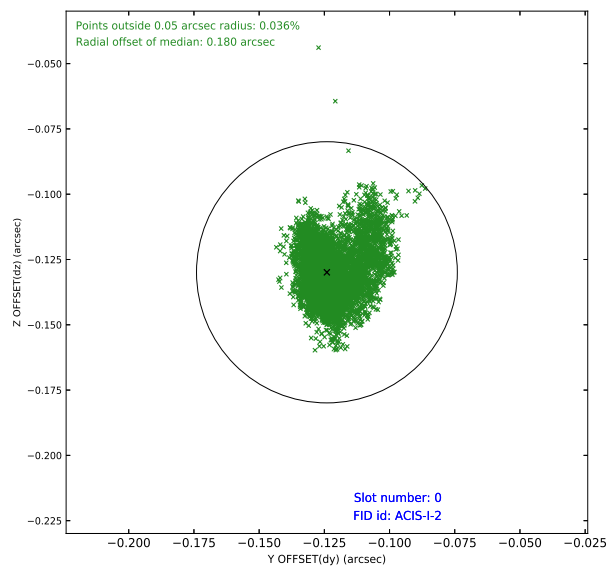
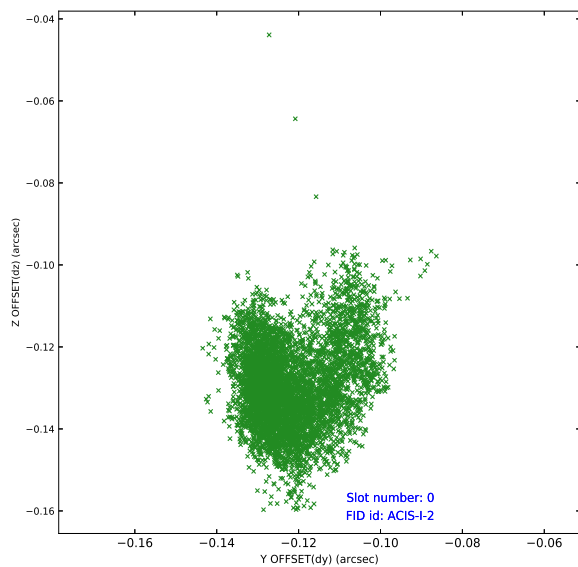


## 2.4.5 Slot 7

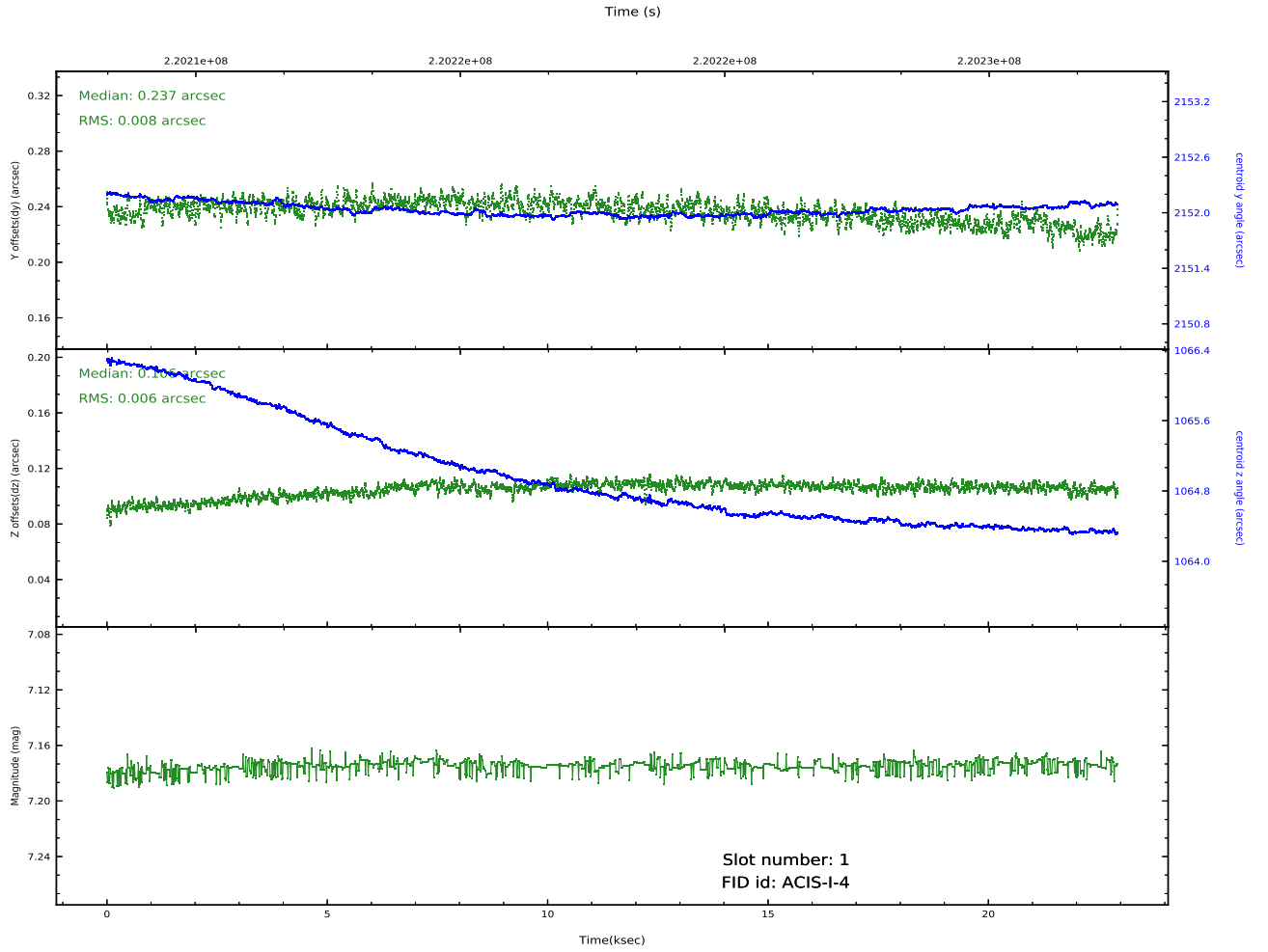
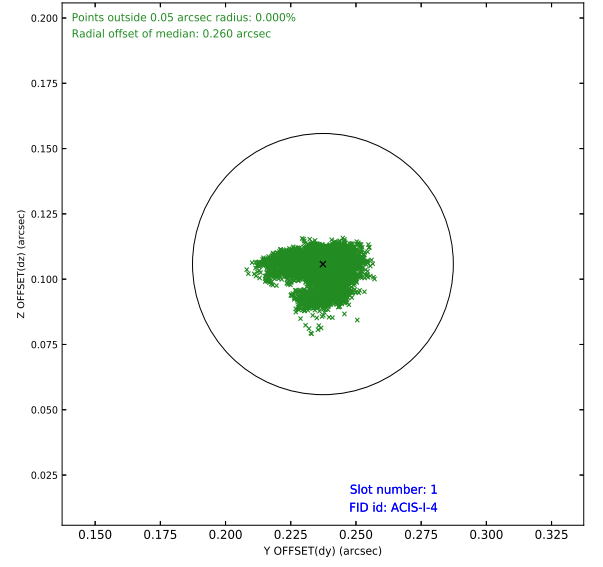
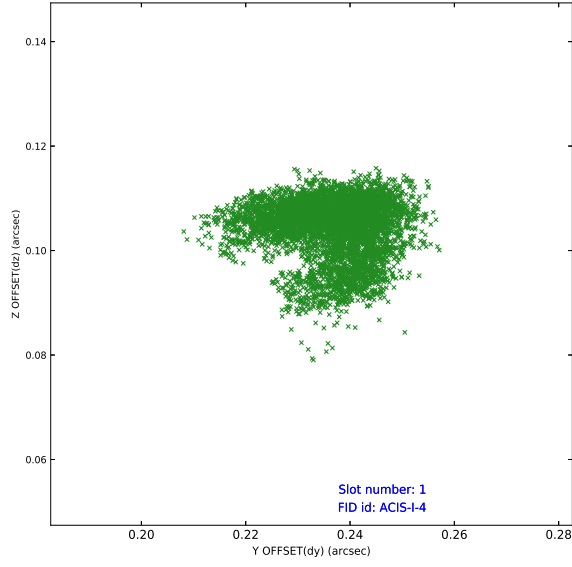


## 2.5 FID Slots

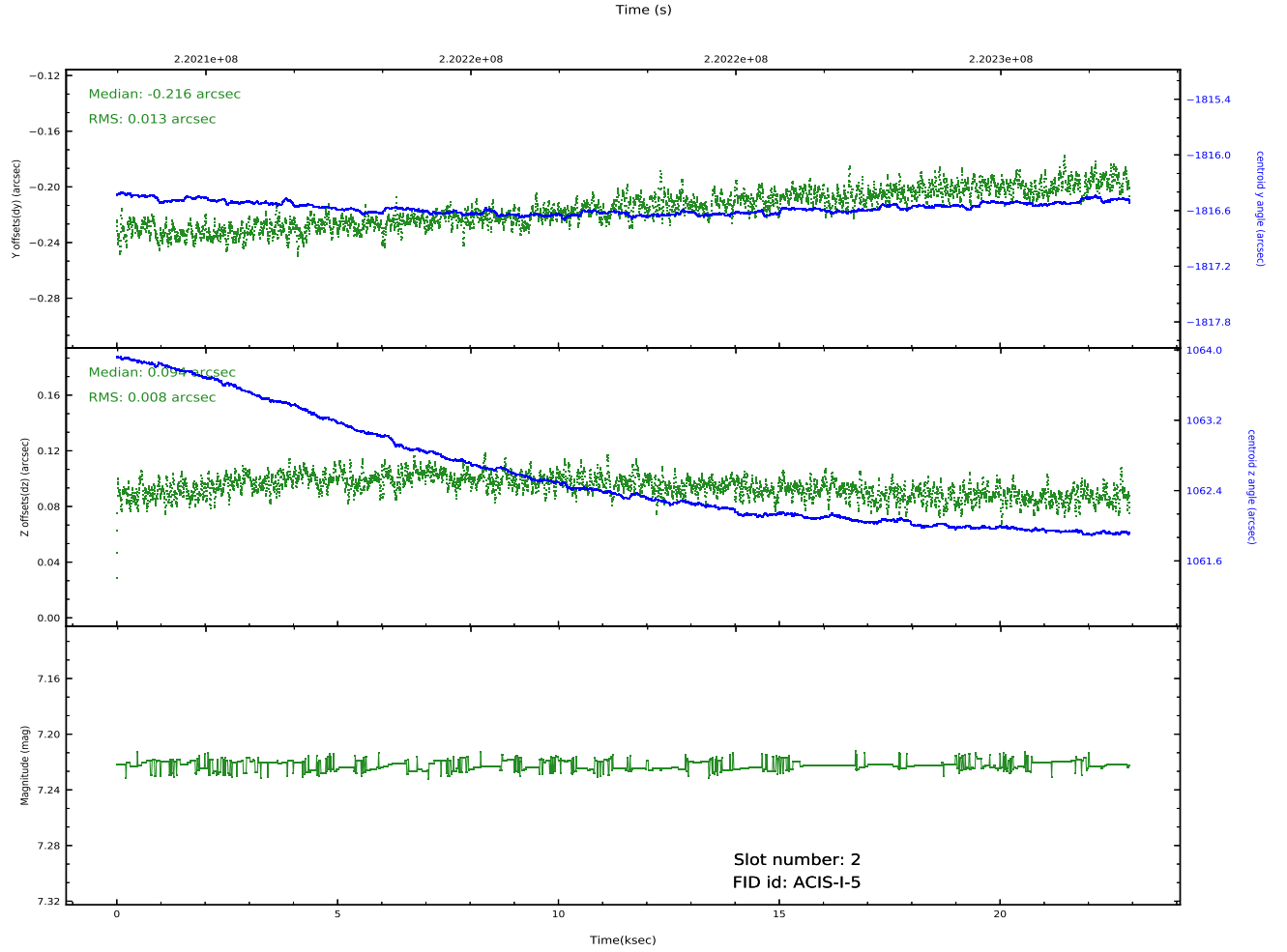
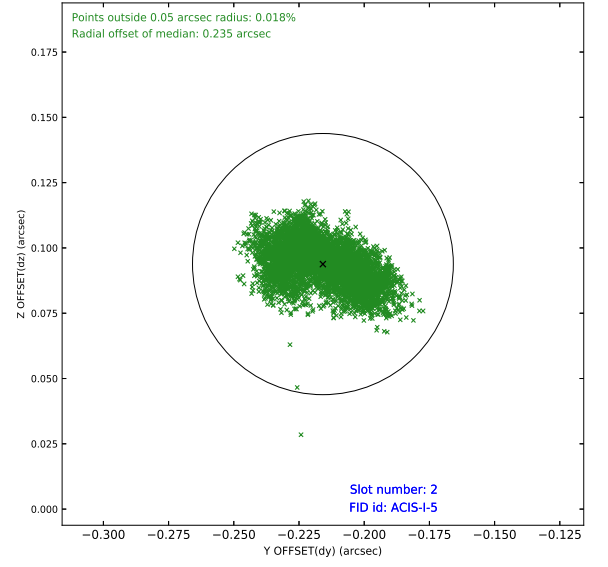
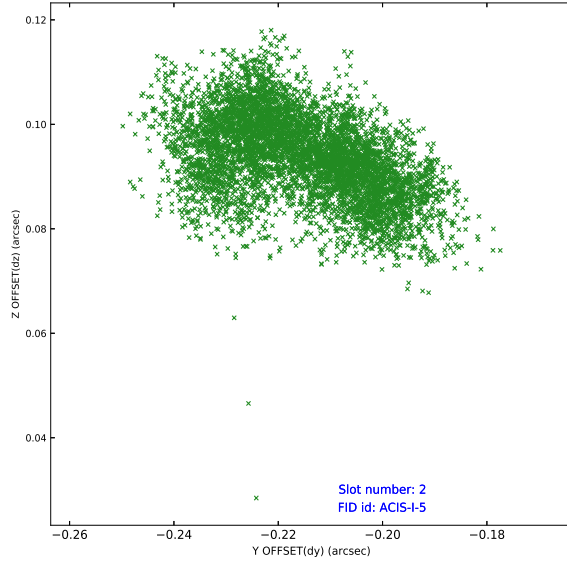
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.56489

### A.2 Comments