

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5894 - L2 Version 4  
Chandra X-Ray Center

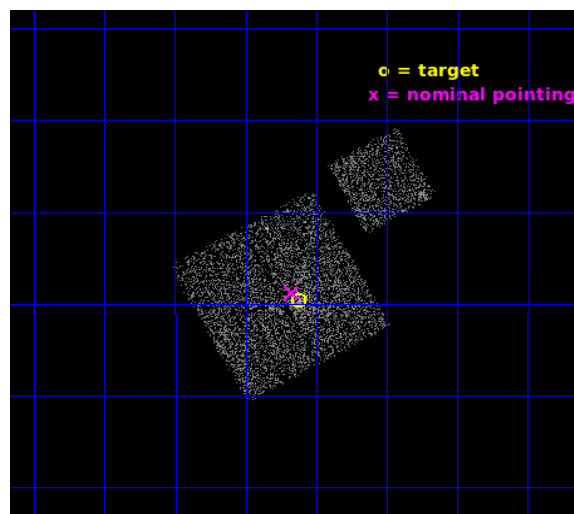
L2 Processing Date : Oct 7 2020

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# 1 Front

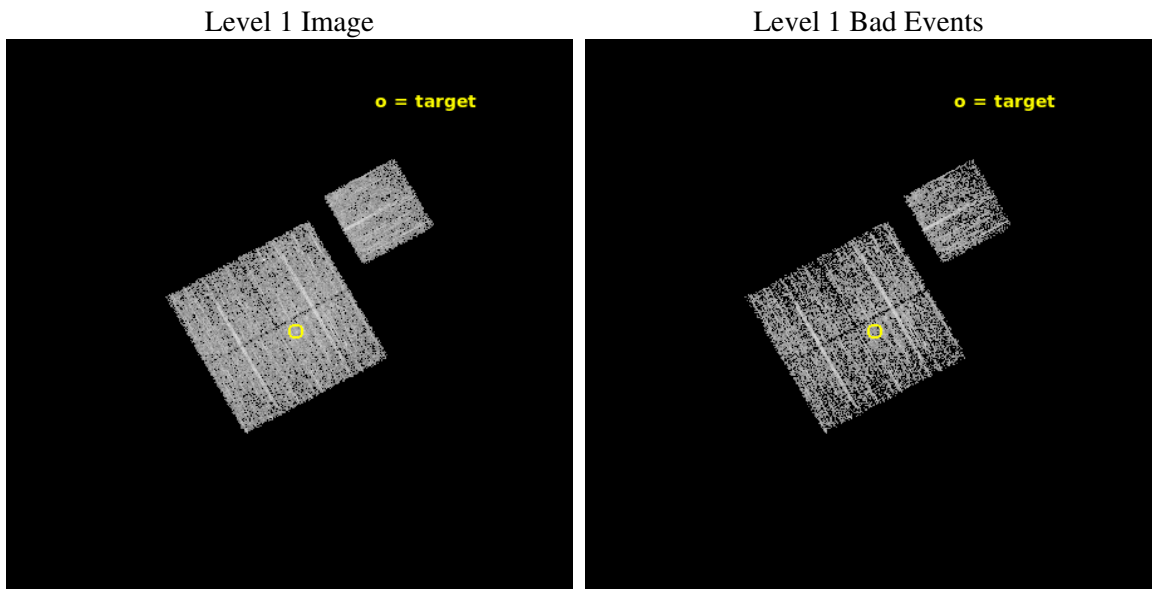
seq_num	600413	Sequence number
obs_id	5894	Observation id
title	Testing Formation Models and Heating and Feedback Mechanisms In Galaxy Groups	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	NGC4760	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	193.28	Observer's specified target RA [deg]
dec_targ	-10.494167	Observer's specified target Dec [deg]
ra_nom	193.29318152613	Nominal RA [deg]
dec_nom	-10.479829062301	Nominal Dec [deg]
roll_nom	60.893840852847	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2749.6999946833	Sum of GTIs [s]
livetime	2713.773139953	Livetime [s]
ontime0	2749.6999946833	Sum of GTIs [s]
ontime1	2749.6999946833	Sum of GTIs [s]
ontime2	2749.6999946833	Sum of GTIs [s]
ontime3	2749.6999946833	Sum of GTIs [s]
ontime6	2749.6999946833	Sum of GTIs [s]
l2events	8406	Number of level 2 events



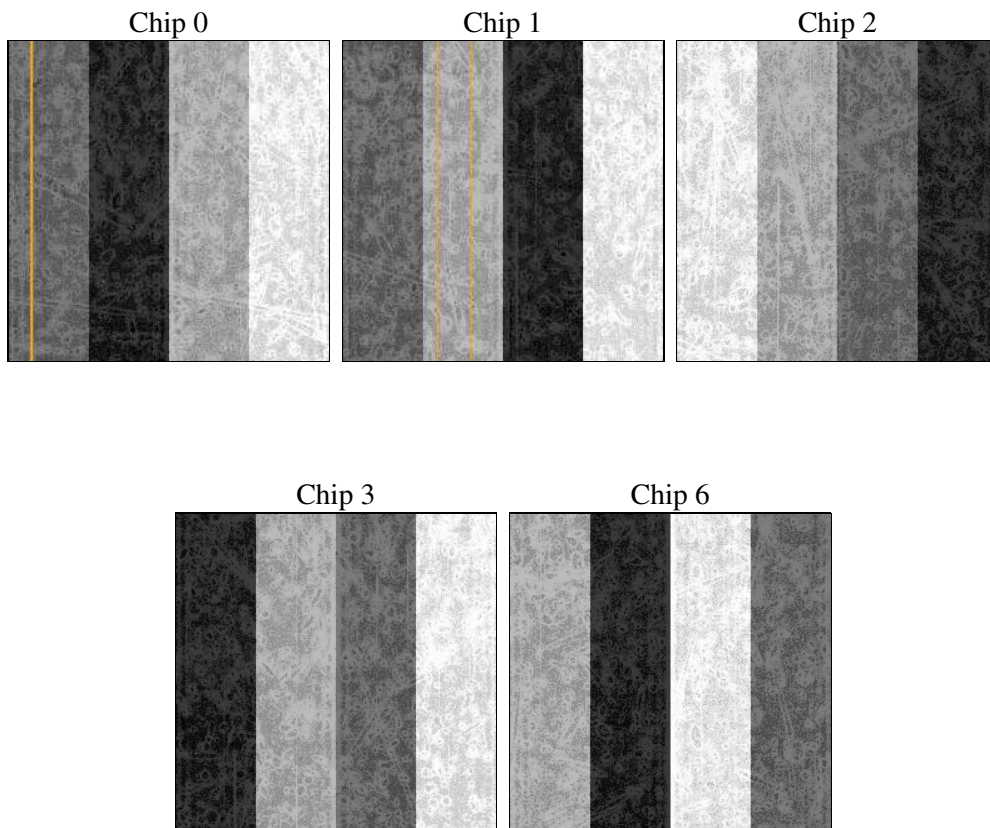
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2700.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	2749.6999946833	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	2749.6999946833	Sum of GTIs [s]
date	2020-10-07T03:45:11	Date and time of file creation	ontime1	2749.6999946833	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	2749.6999946833	Sum of GTIs [s]
			ontime3	2749.6999946833	Sum of GTIs [s]
			ontime6	2749.6999946833	Sum of GTIs [s]
			l1events	87086	Number of level 1 events

### 2.1.4 Events

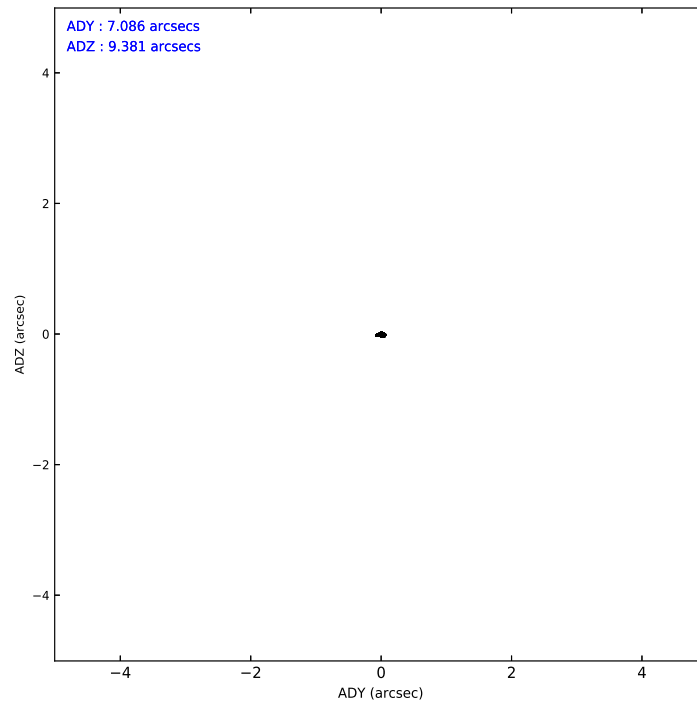
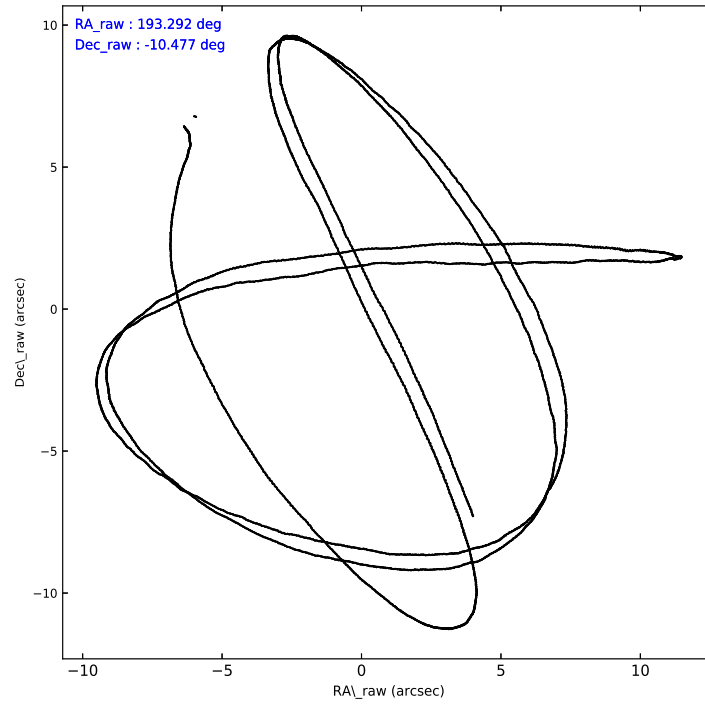
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	16540	16477	18657	18124	17288
rejected events	14754	14349	16590	16026	15454
rejected %	89%	87%	88%	88%	89%

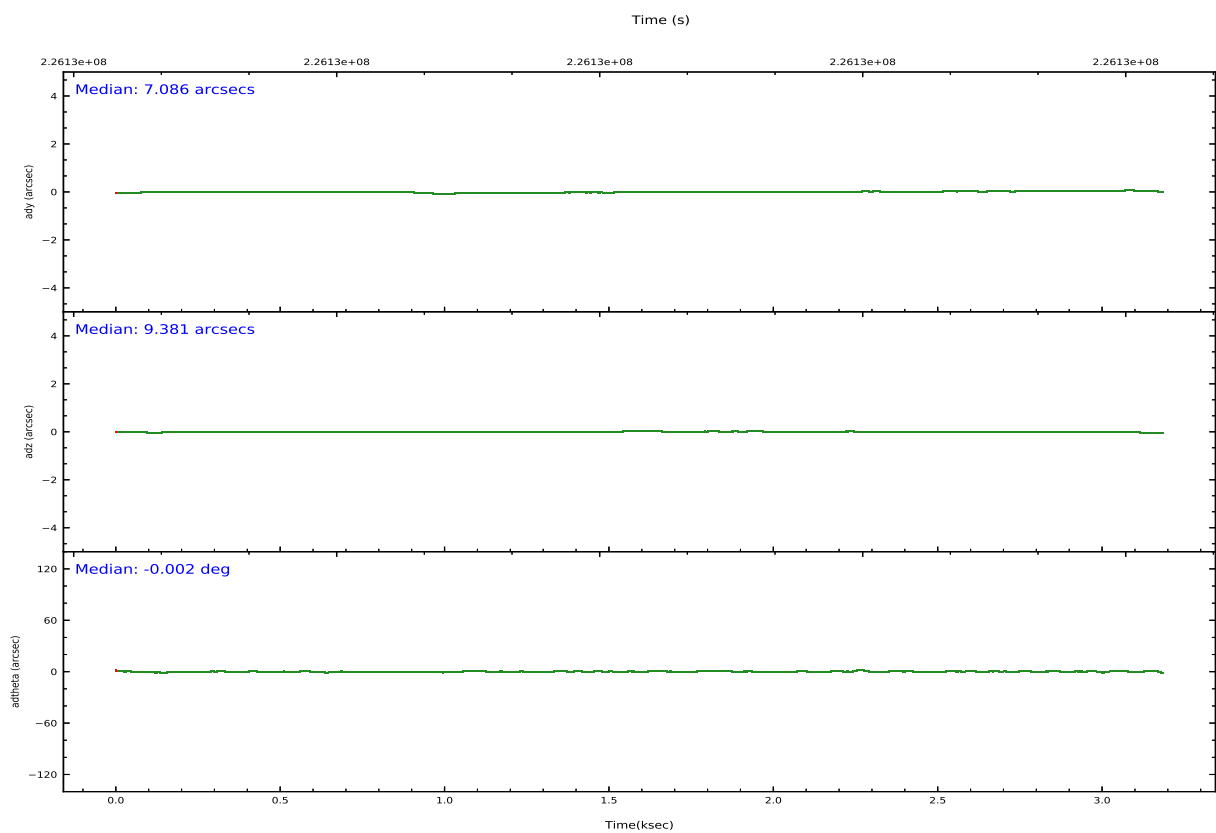
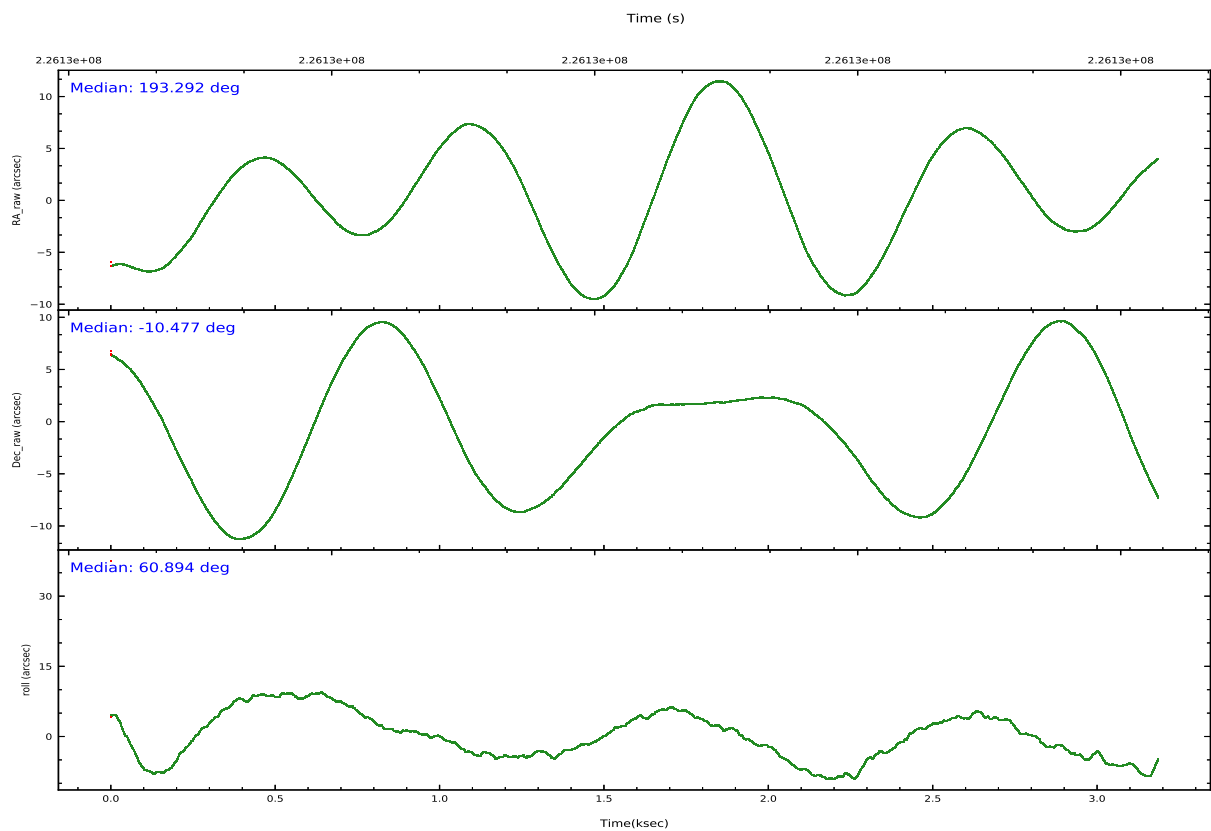
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	659	886	940	953	671
	3%	5%	5%	5%	3%
grade 1 events	14	7	9	12	11
	0%	0%	0%	0%	0%
grade 2 events	425	396	412	414	360
	2%	2%	2%	2%	2%
grade 3 events	215	228	205	207	216
	1%	1%	1%	1%	1%
grade 4 events	191	204	193	192	202
	1%	1%	1%	1%	1%
grade 5 events	579	655	532	683	694
	3%	3%	2%	3%	4%
grade 6 events	299	415	321	337	390
	1%	2%	1%	1%	2%
grade 7 events	14158	13686	16045	15326	14744
	85%	83%	85%	84%	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	193.292565	193.29318152613	Subarray requested	NONE	NONE
[deg] Pointing Dec	-10.504163	-10.479829062301	Alternating exposures requested	N	N
[deg] Pointing Roll	60.694481	60.893840852847	[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	-231.092463	-231.0932336816812			
[mm] SIM translation stage offset	-2.5	-2.499219321248518			
[s] Observation start time (MET)	226131814.184000	226130734.84722			
Observation start date	2005-03-02T06:22:30	2005-03-02T06:05:34			
[s] Observation end time (MET)	226134514.184000	226135871.12245			
Observation end date	2005-03-02T07:07:30	2005-03-02T07:31:11			
Read mode	TIMED	TIMED			

## 2.3 Aspect





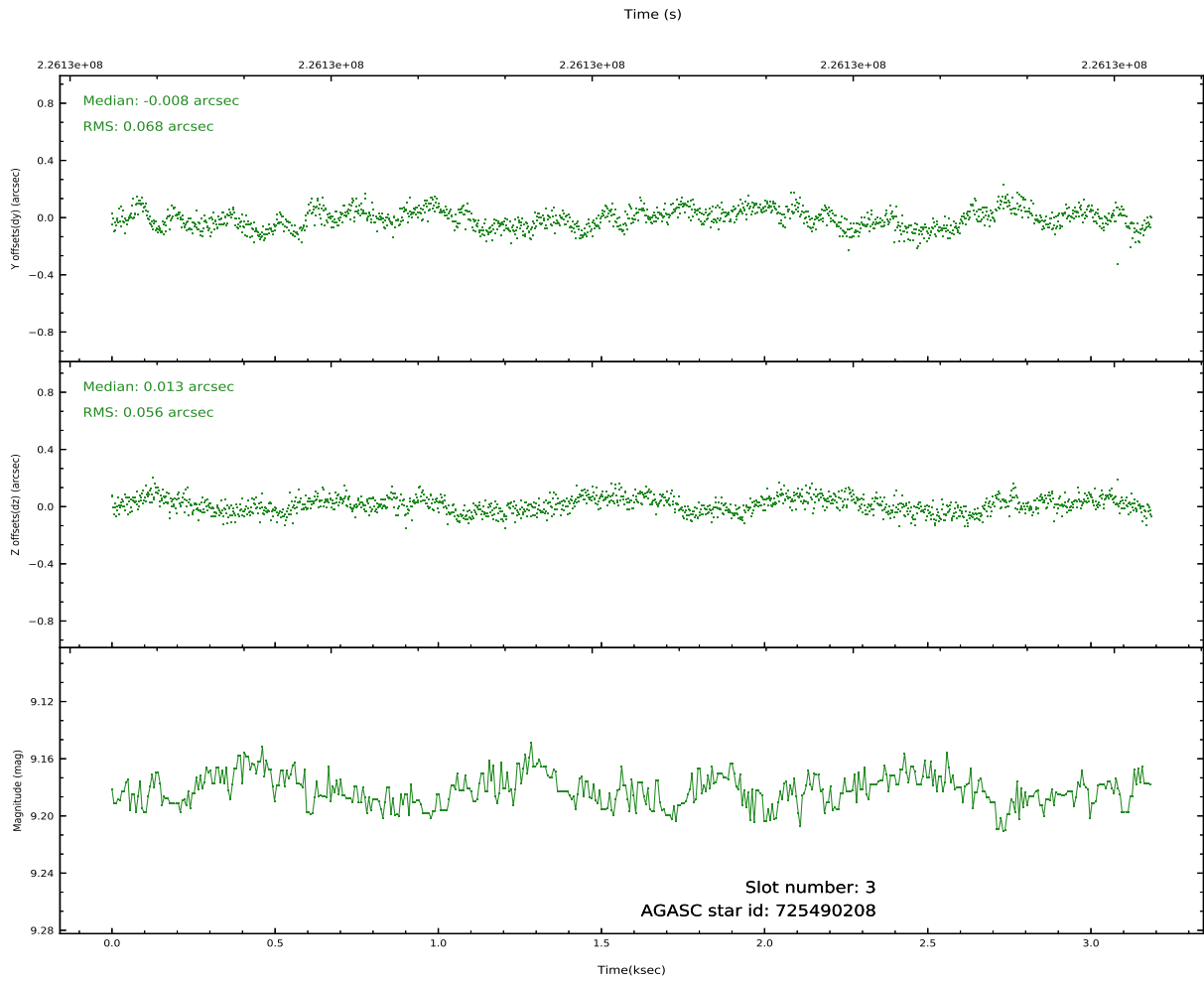
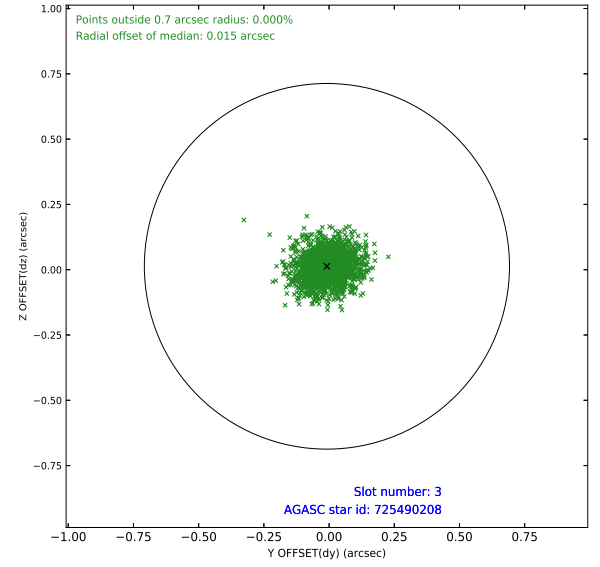
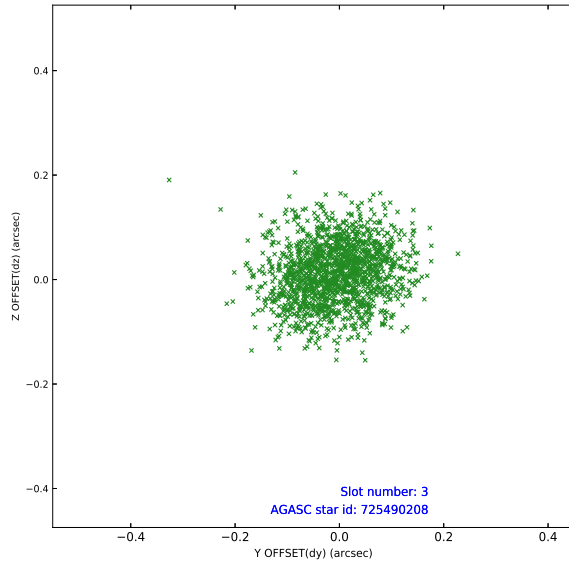
Slot Statistics

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	778	1.000	0.041	-0.064	0.007	0.012	0.000000	0.000000	932.59	-884
1	FID		ACIS-I-5	7.23	778	1.000	-0.224	0.029	0.006	0.011	0.000000	0.000000	-1814.67	1012
2	FID		ACIS-I-6	7.25	778	1.000	0.092	0.106	0.006	0.011	0.000000	0.000000	396.03	1659
3	GUIDE	used	725490208	9.18	1554	1.000	-0.008	0.013	0.093	0.150	193.035827	-9.691293	2105.52	2226
4	GUIDE	used	725877536	9.20	1555	1.000	0.160	-0.111	0.082	0.134	193.233989	-10.560716	-277.22	81
5	GUIDE	used	725878176	8.72	1554	1.000	-0.016	0.081	0.110	0.155	193.713230	-10.434131	948.29	-1176
6	GUIDE	used	725878456	8.83	1554	1.000	0.030	-0.105	0.065	0.107	193.306402	-10.183063	1032.84	521
7	GUIDE	used	725878856	9.71	1552	1.000	-0.161	0.130	0.099	0.159	193.967362	-10.221801	2055.54	-1588

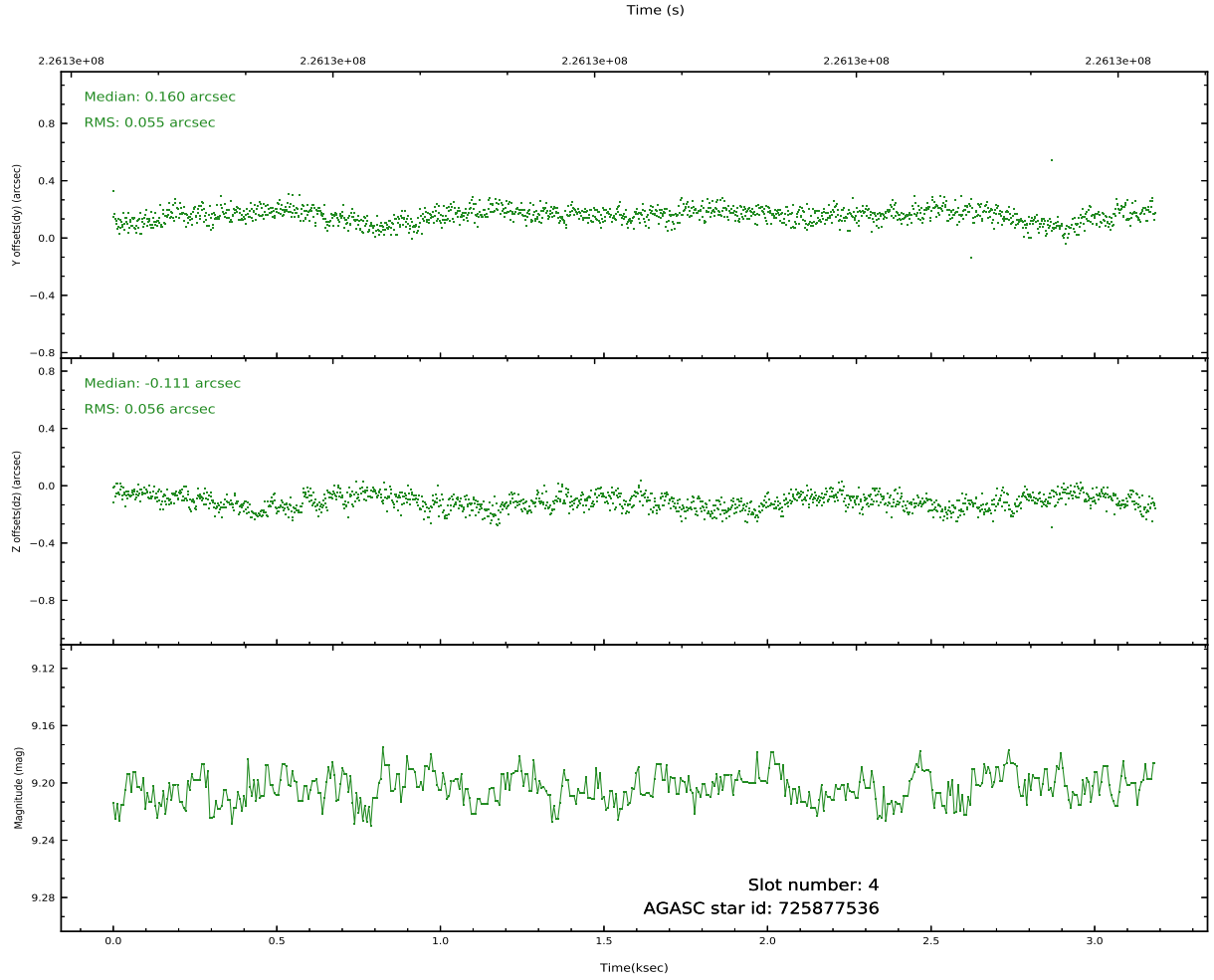
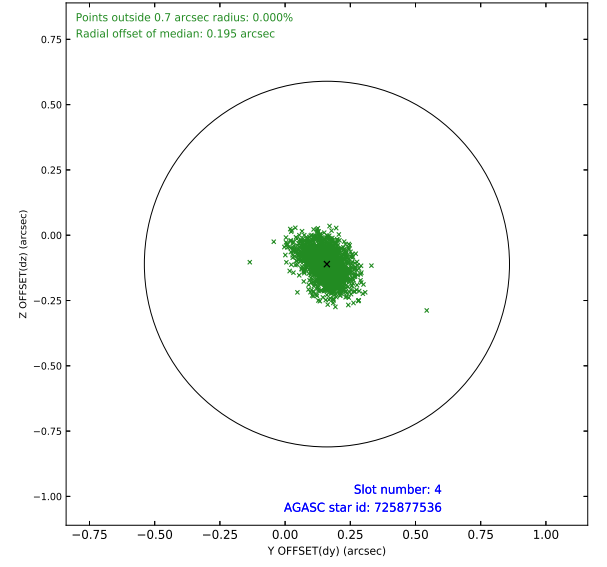
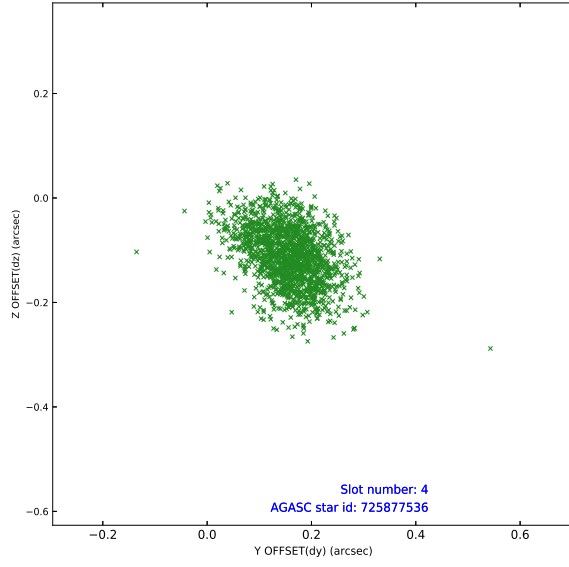


## 2.4 Star Slots

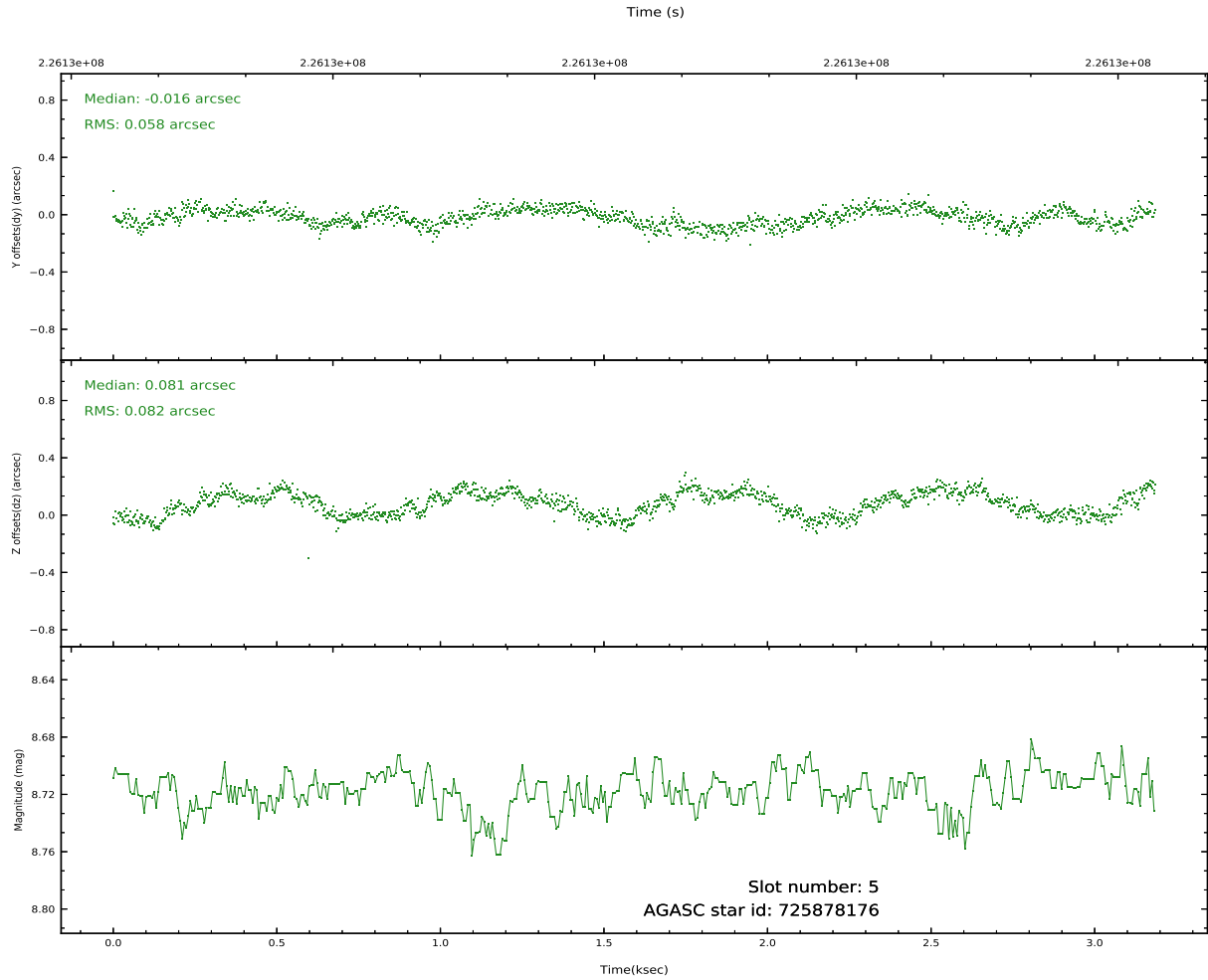
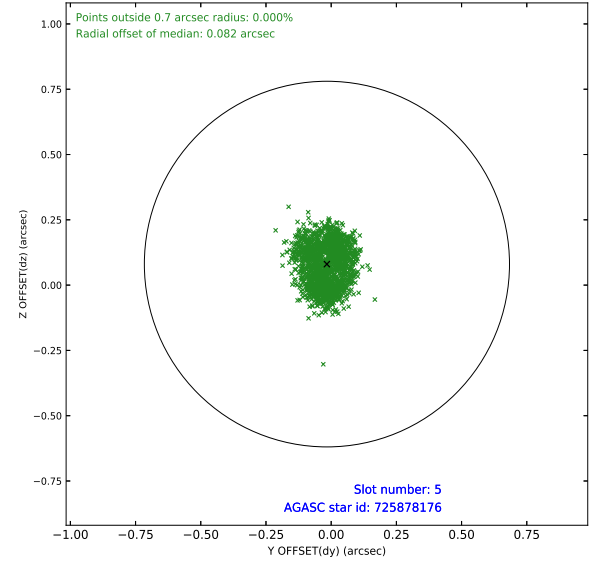
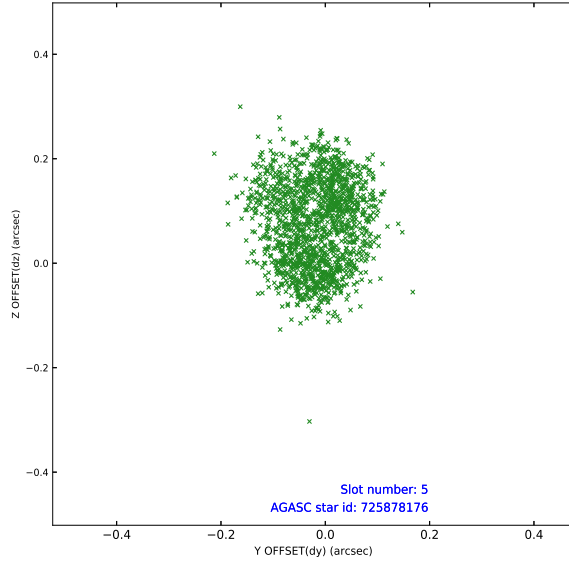
### 2.4.1 Slot 3



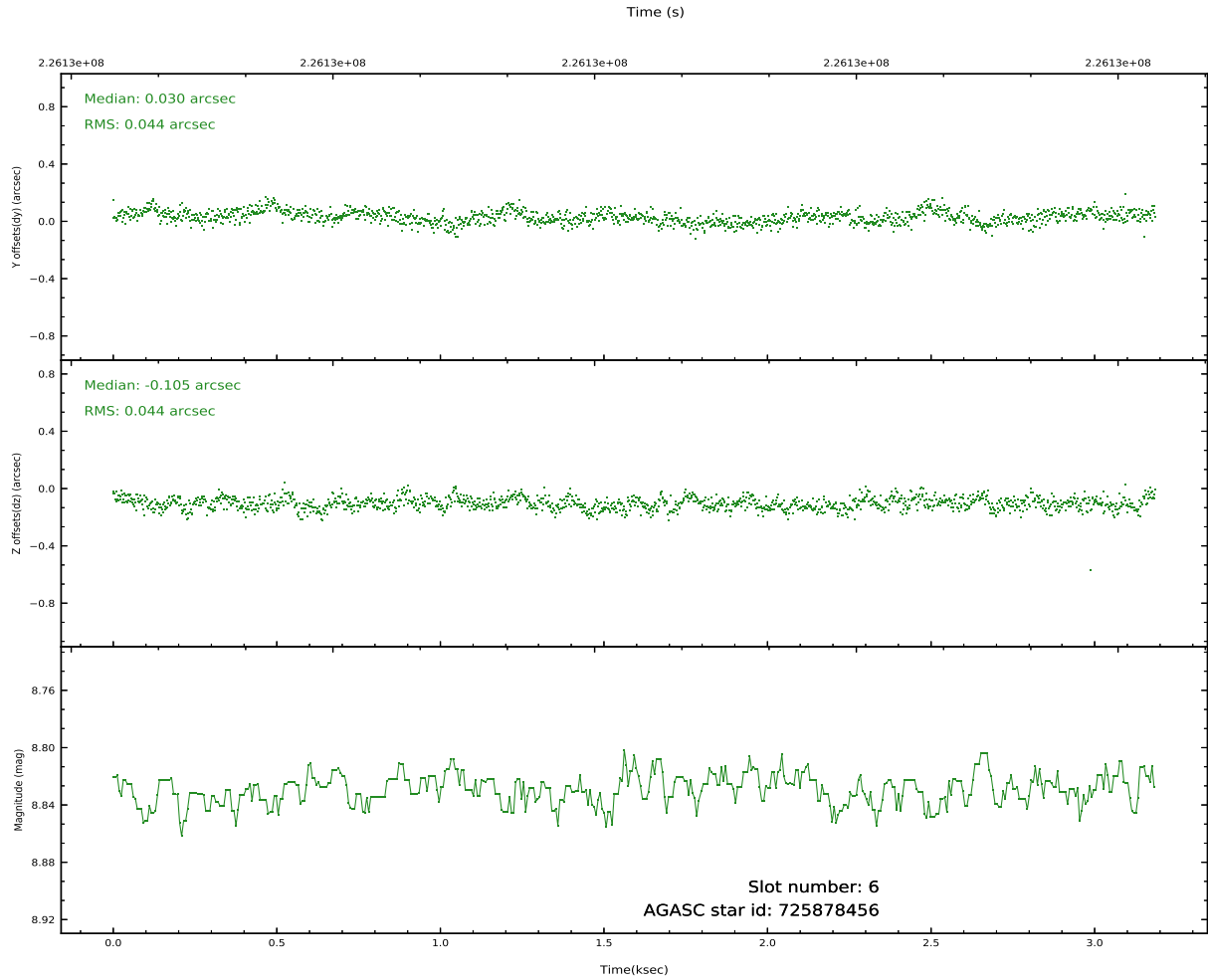
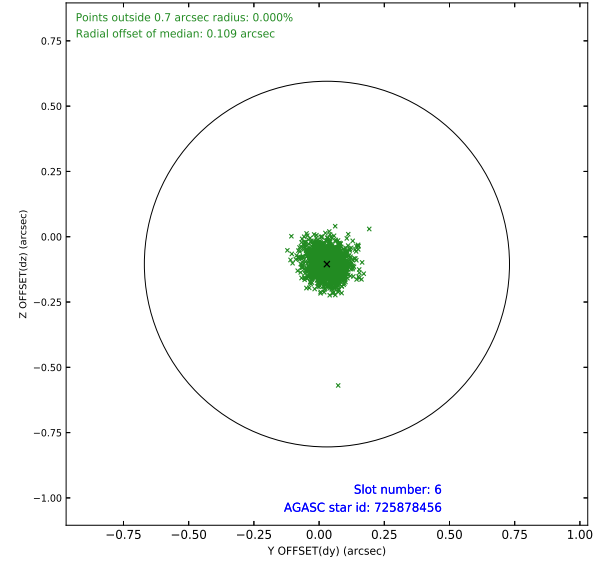
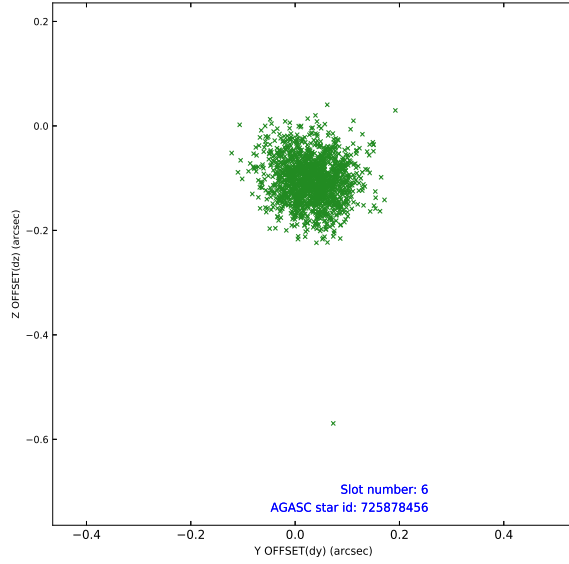
## 2.4.2 Slot 4



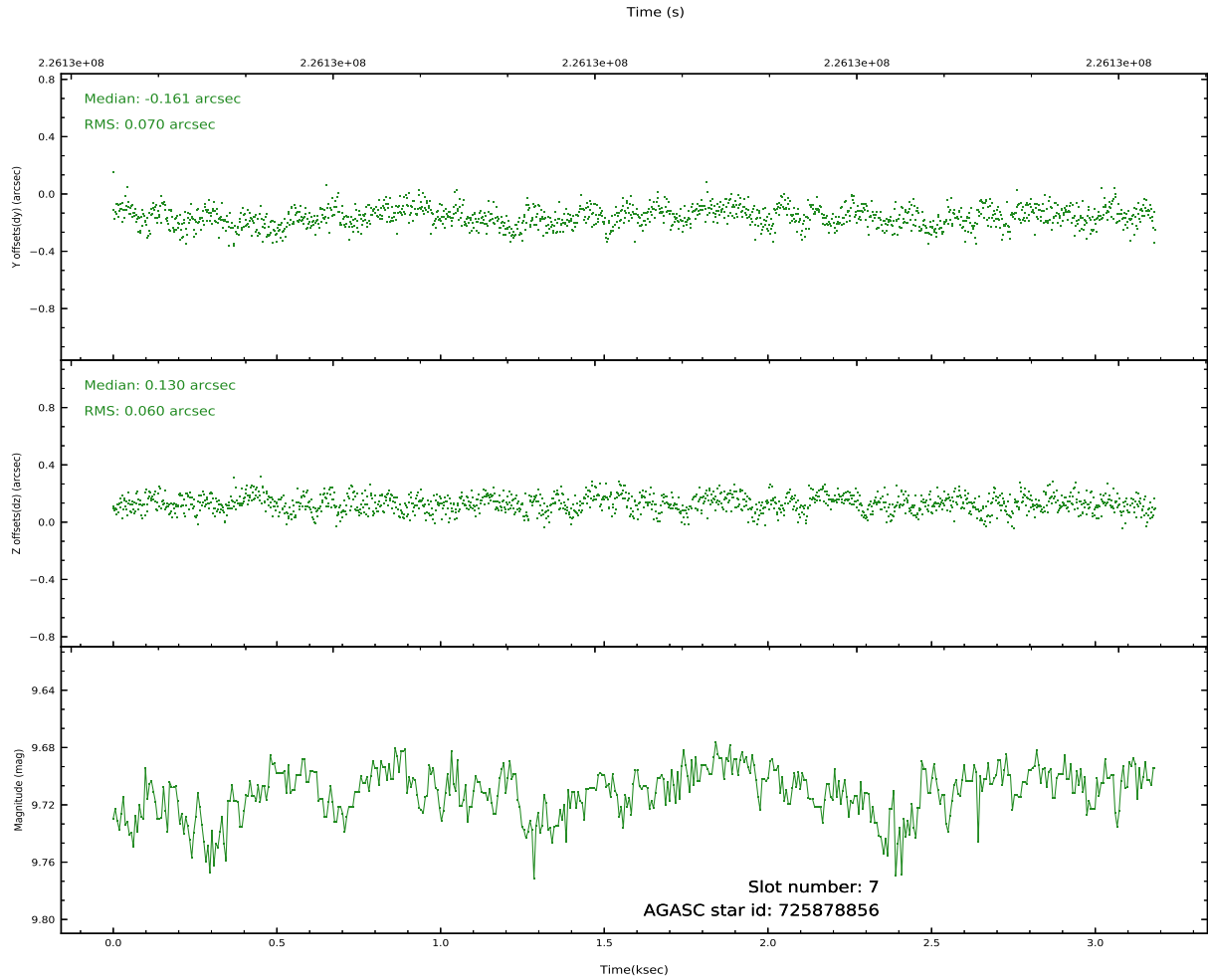
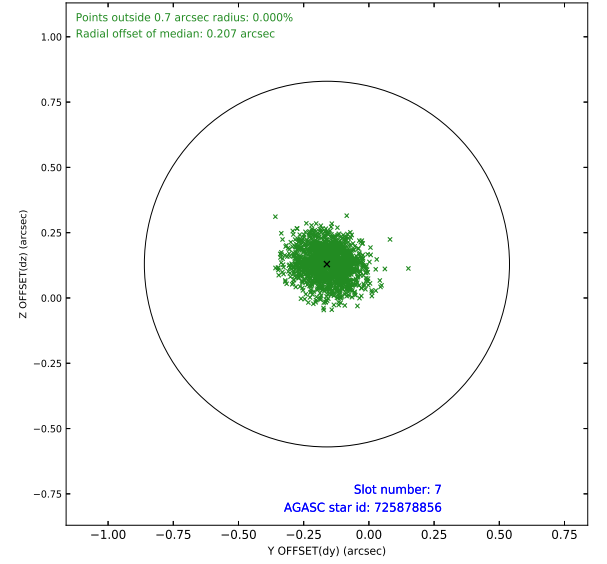
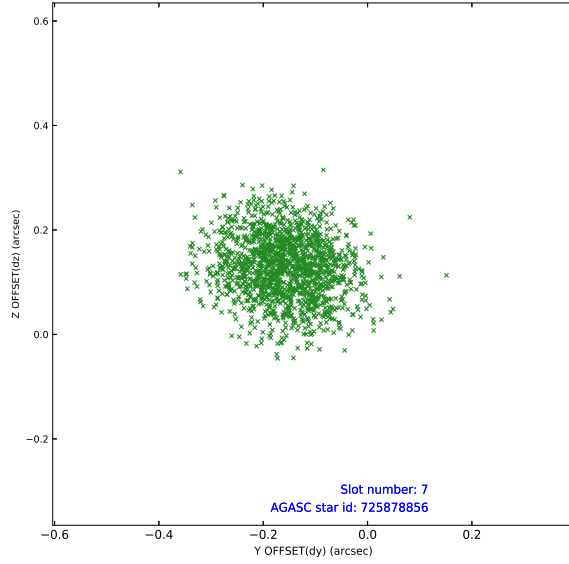
### 2.4.3 Slot 5



## 2.4.4 Slot 6

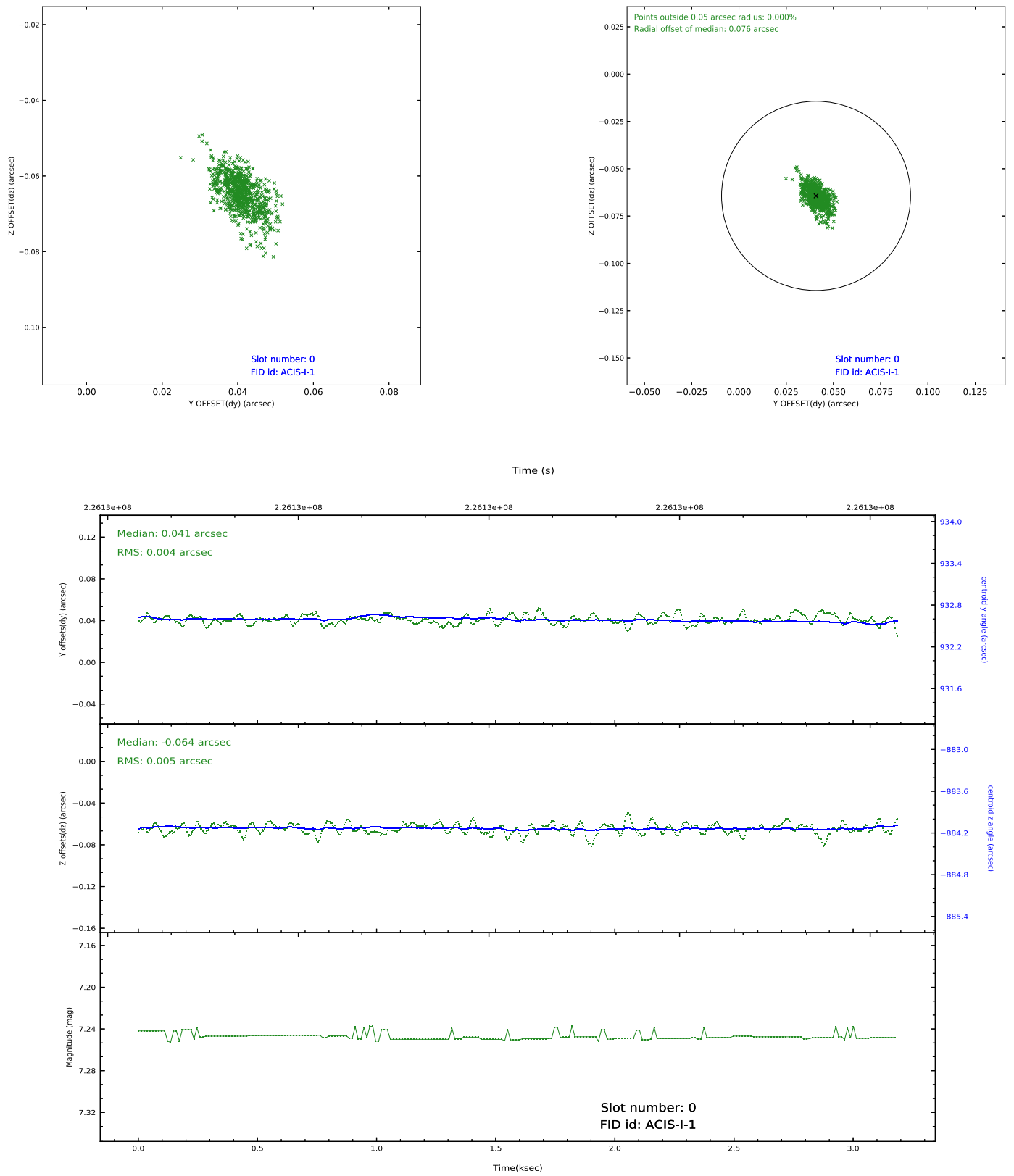


## 2.4.5 Slot 7

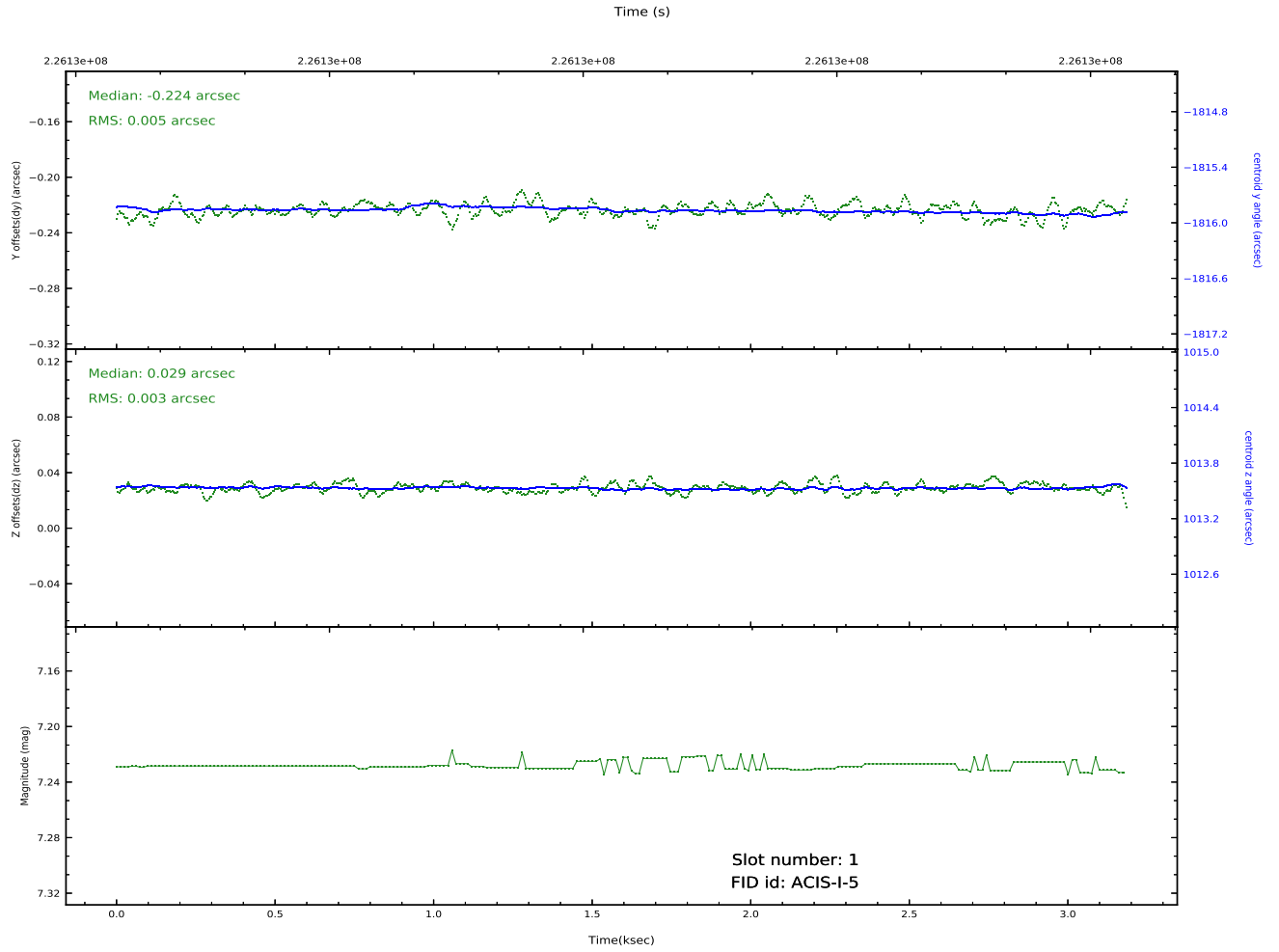
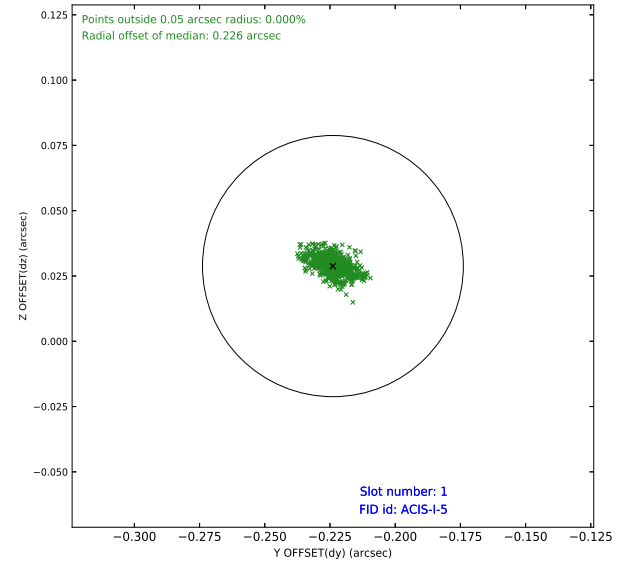
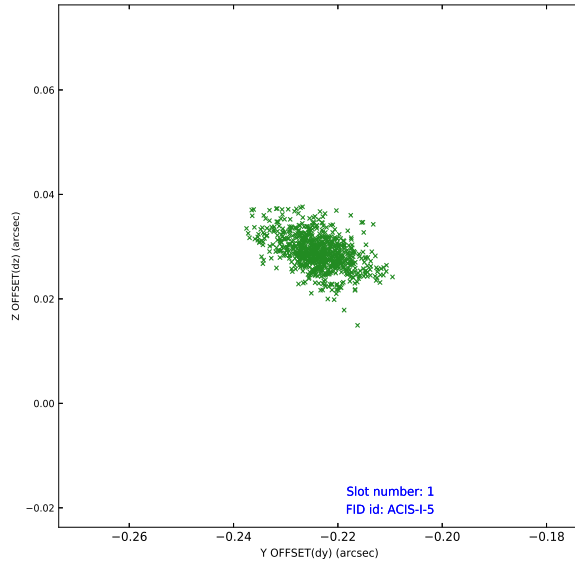


## 2.5 FID Slots

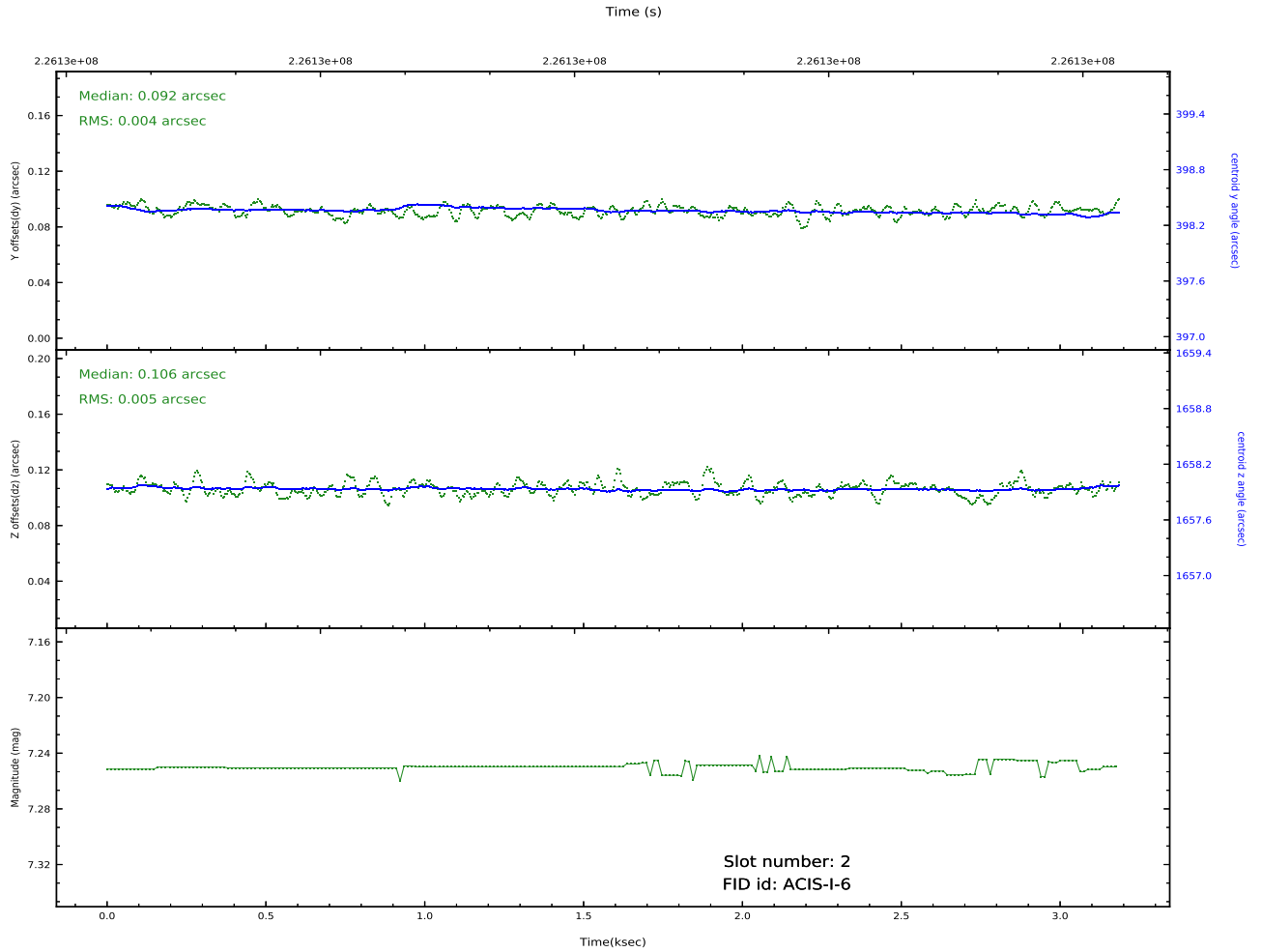
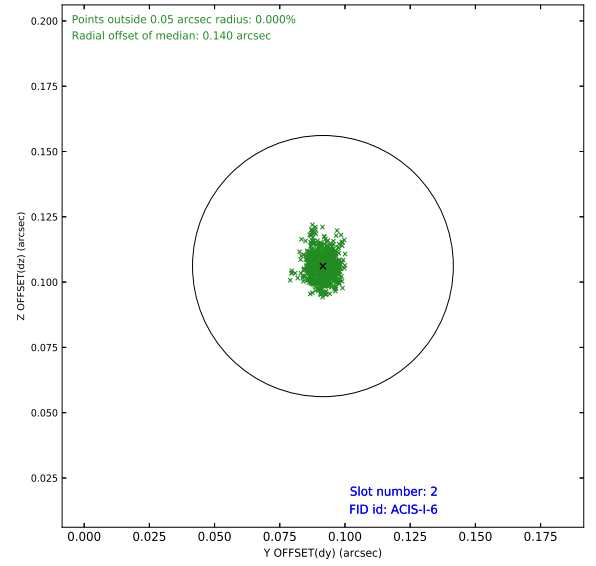
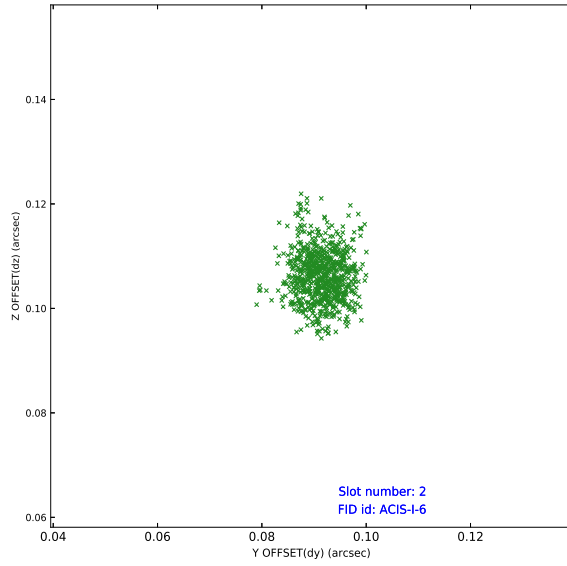
### 2.5.1 Slot 0



## 2.5.2 Slot 1



## 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.749699

### A.2 Comments