

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5303 - L2 Version 4  
Chandra X-Ray Center

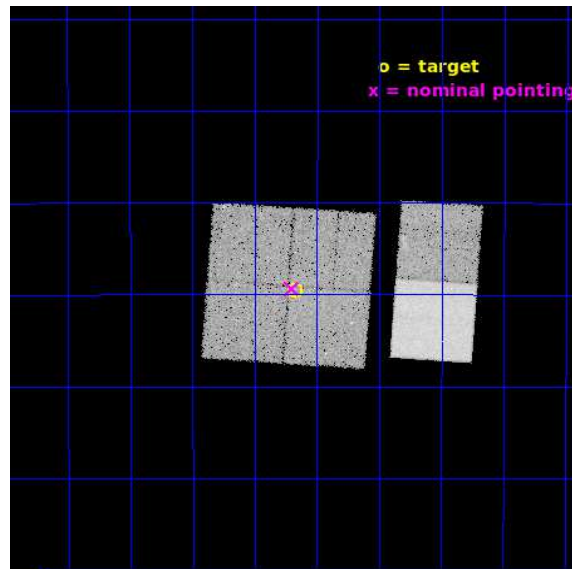
L2 Processing Date : Sep 23 2020

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# 1 Front

seq_num	300141	Sequence number
obs_id	5303	Observation id
title	Galactic Bulge Deep Survey	Proposal title
observer	Jonathan Grindlay	Principal investigator
object	Stanek window	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	268.67	Observer's specified target RA [deg]
dec_targ	-29.825556	Observer's specified target Dec [deg]
ra_nom	268.67525360388	Nominal RA [deg]
dec_nom	-29.822832433631	Nominal Dec [deg]
roll_nom	94.003444376804	Nominal Roll [deg]
revision	4	Processing version of data
ontime	18748.75895986	Sum of GTIs [s]
livetime	18511.350884763	Livetime [s]
ontime0	18751.999930143	Sum of GTIs [s]
ontime1	18751.999930143	Sum of GTIs [s]
ontime2	18751.999930143	Sum of GTIs [s]
ontime3	18748.75895986	Sum of GTIs [s]
ontime6	18751.999930143	Sum of GTIs [s]
ontime7	18751.999930143	Sum of GTIs [s]
l2events	159285	Number of level 2 events

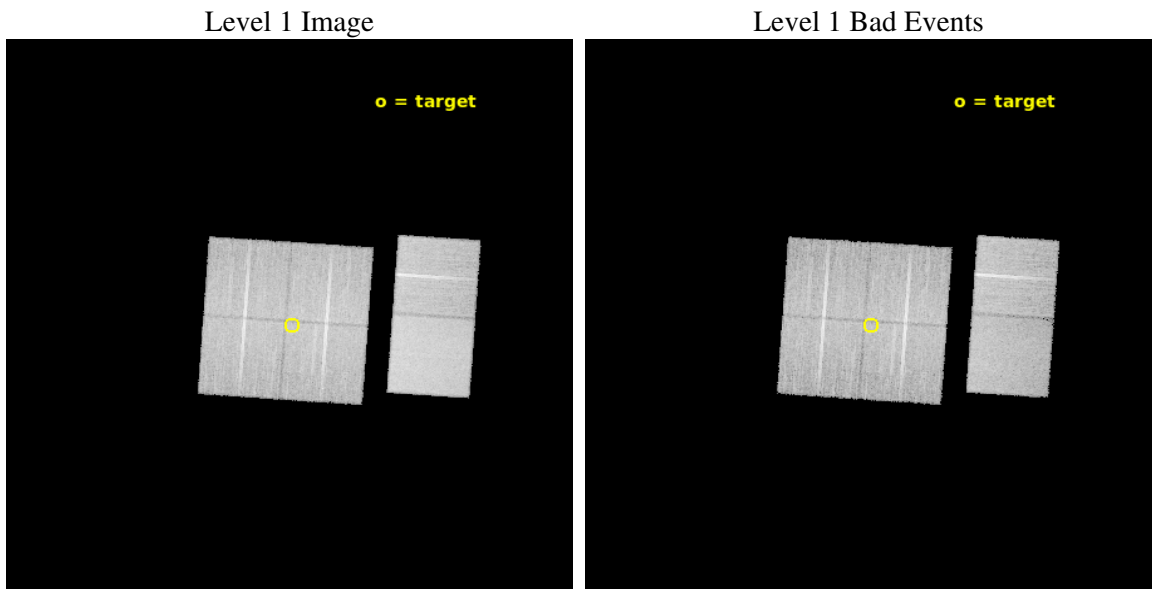




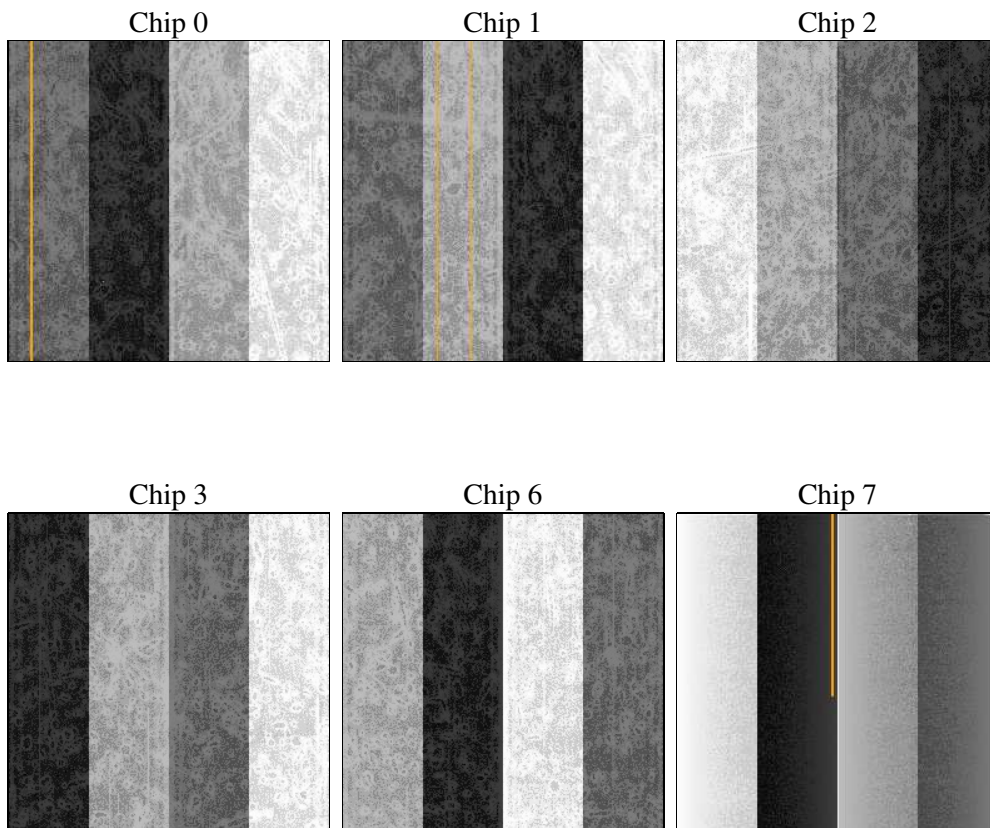
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	18748.75895986	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	18751.999930143	Sum of GTIs [s]
date	2020-09-24T01:31:03	Date and time of file creation	ontime1	18751.999930143	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	18751.999930143	Sum of GTIs [s]
			ontime3	18748.75895986	Sum of GTIs [s]
			ontime6	18751.999930143	Sum of GTIs [s]
			ontime7	18751.999930143	Sum of GTIs [s]
			l1events	781717	Number of level 1 events

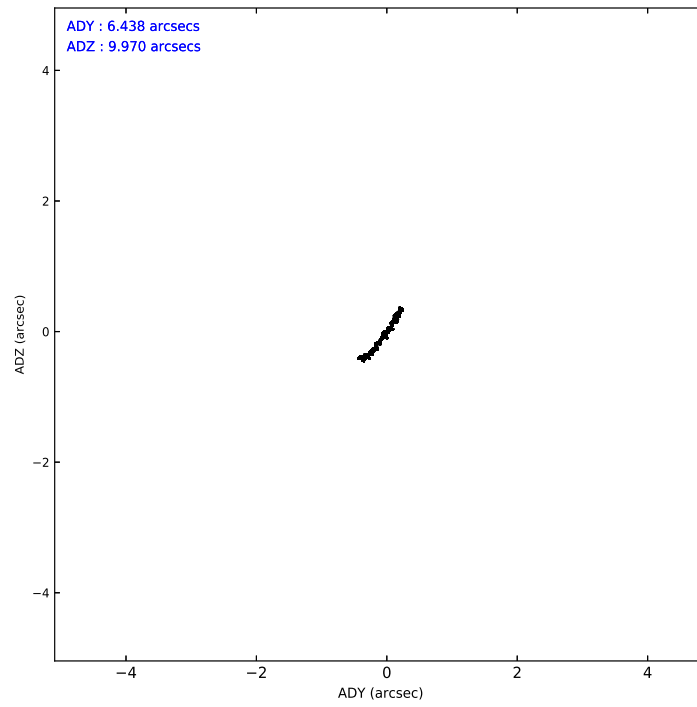
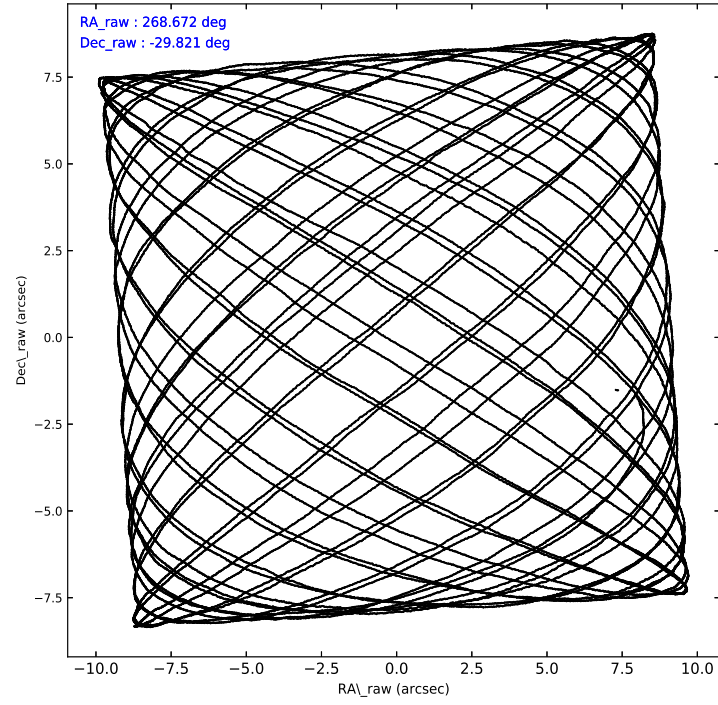
### 2.1.4 Events

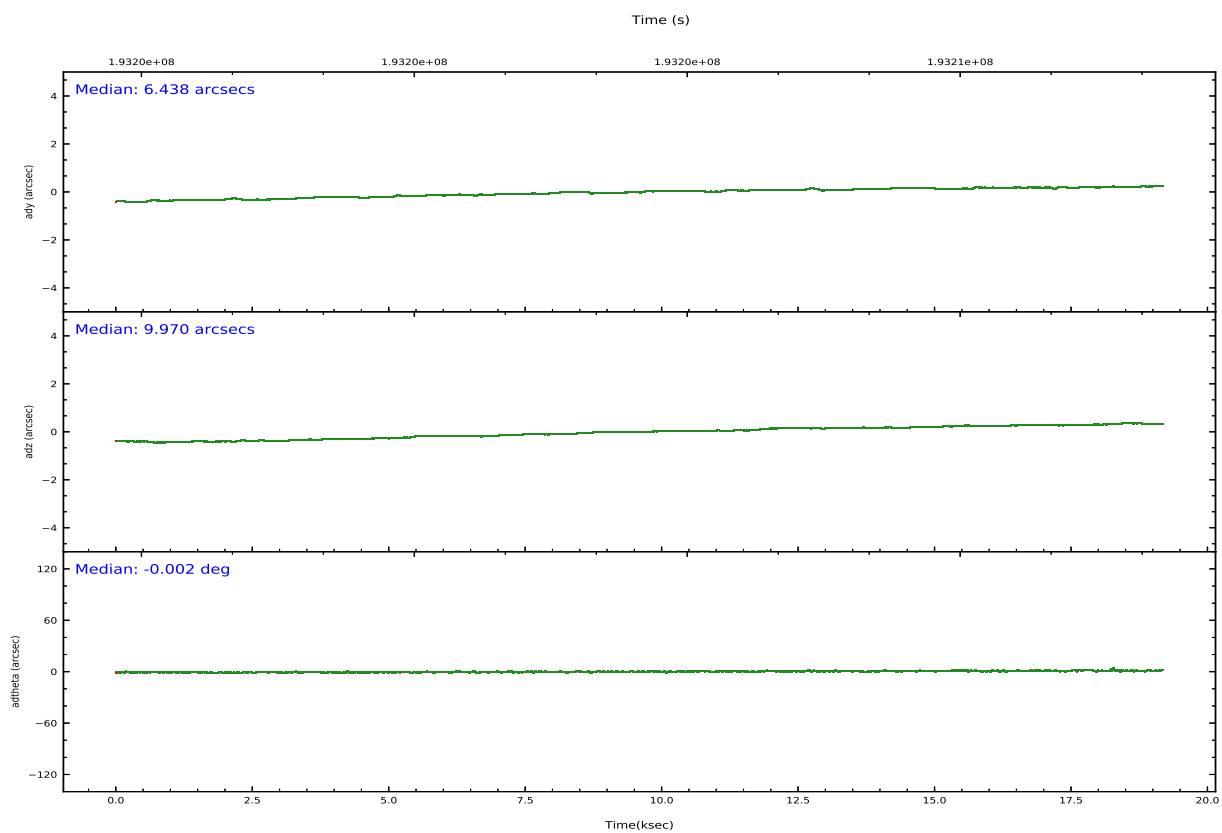
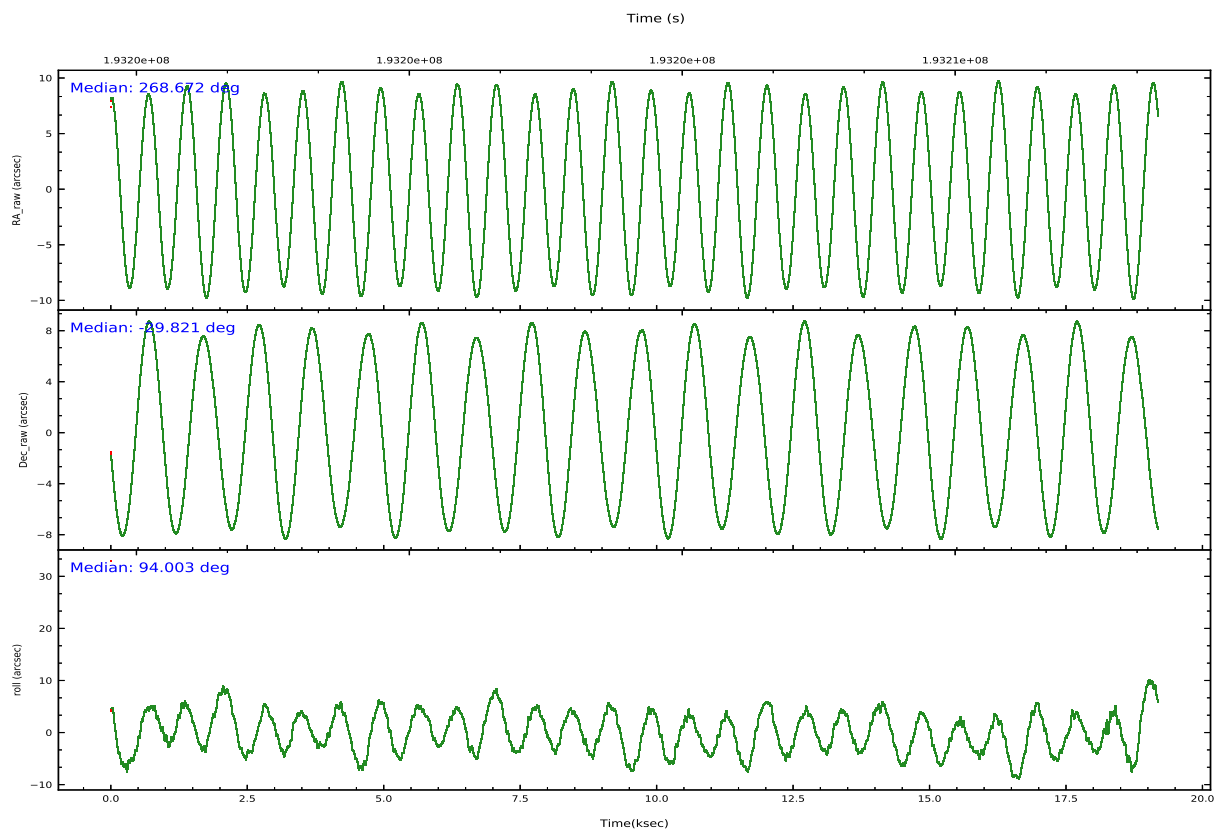
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	116864	116281	125492	120898	130136	172046	grade 0 events	10034	9642	11130	10701	10570	8204
rejected events	97602	96837	105696	101575	109820	97079		8%	8%	8%	8%	8%	4%
rejected %	83%	83%	84%	84%	84%	56%	grade 1 events	70	66	89	100	74	184
								0%	0%	0%	0%	0%	0%
							grade 2 events	3473	3515	3395	3107	3570	15490
								2%	3%	2%	2%	2%	9%
							grade 3 events	1573	1584	1394	1544	1585	6956
								1%	1%	1%	1%	1%	4%
							grade 4 events	1497	1652	1493	1456	1502	6787
								1%	1%	1%	1%	1%	3%
							grade 5 events	5021	5082	4706	5478	5724	16062
								4%	4%	3%	4%	4%	9%
							grade 6 events	2694	3056	2393	2518	3100	37548
								2%	2%	1%	2%	2%	21%
							grade 7 events	92502	91684	100892	95994	104011	80815
								79%	78%	80%	79%	79%	46%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	268.689497	268.67525360388	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.843806	-29.822832433631	Alternating exposures requested	N	N
[deg] Pointing Roll	93.809701	94.003444376804	[s] Primary exposure time	0.000000	3.2
[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)	193194718.184000	193191309.80514			
Observation start date	2004-02-15T01:10:54	2004-02-15T00:15:09			
[s] Observation end time (MET)	193213718.184000	193214472.75615			
Observation end date	2004-02-15T06:27:34	2004-02-15T06:41:12			
Read mode	TIMED	TIMED			

## 2.3 Aspect



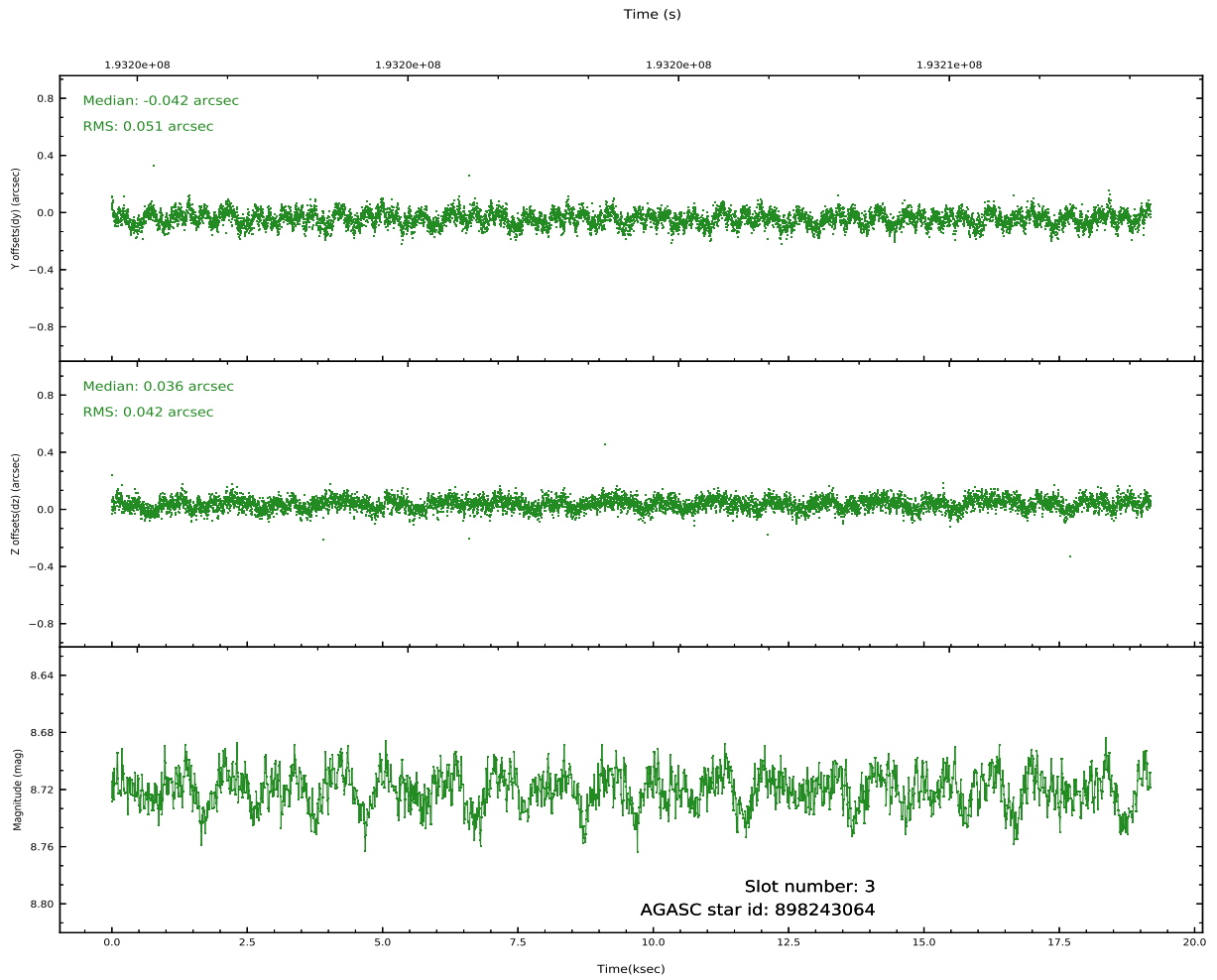
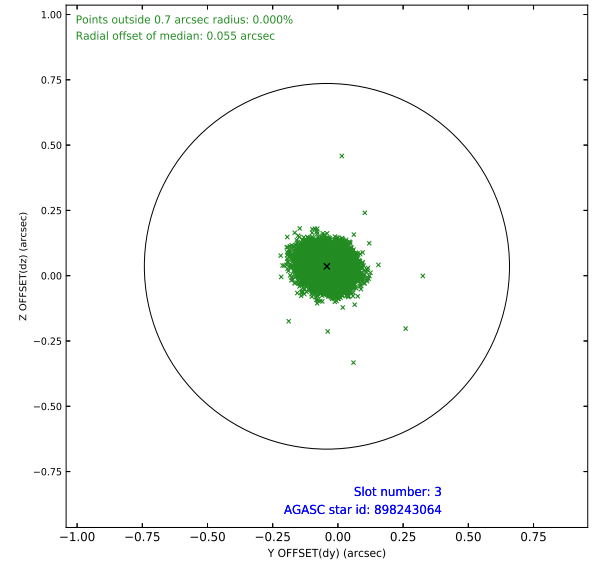
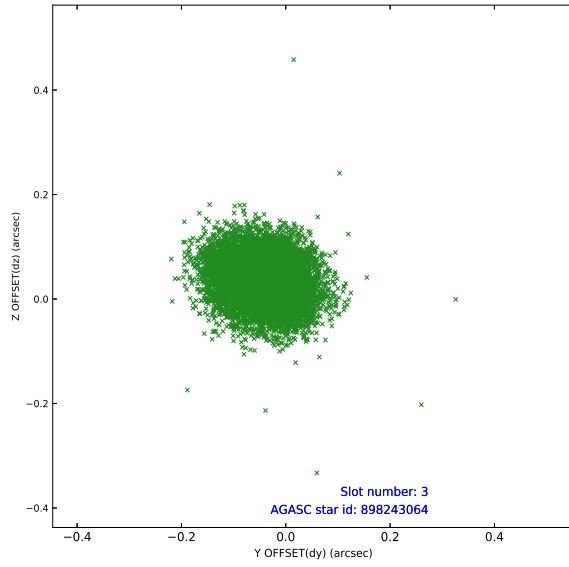


Slot Statistics

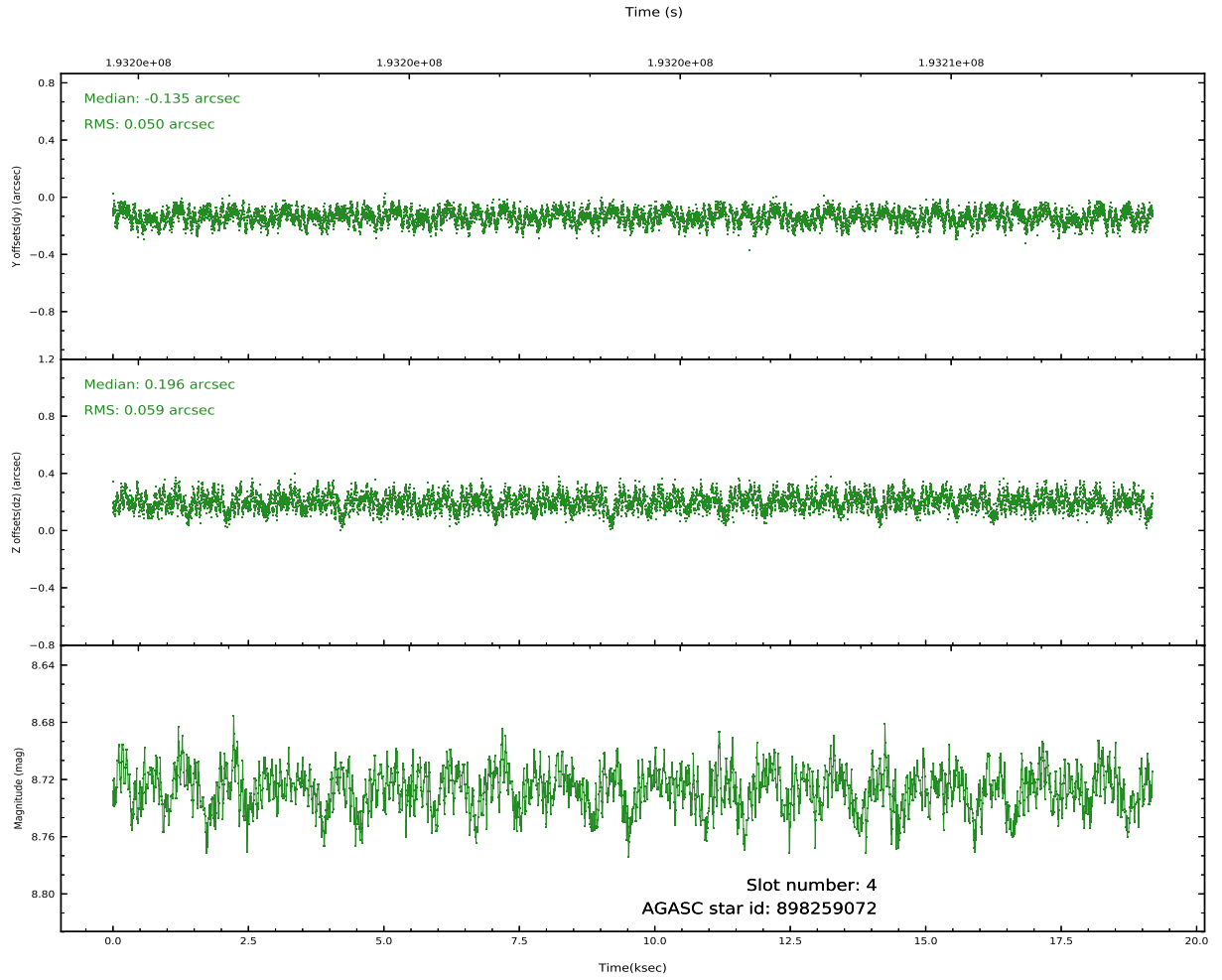
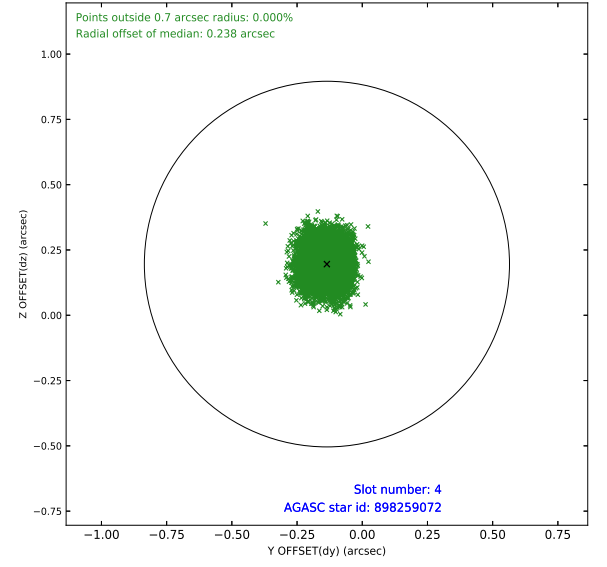
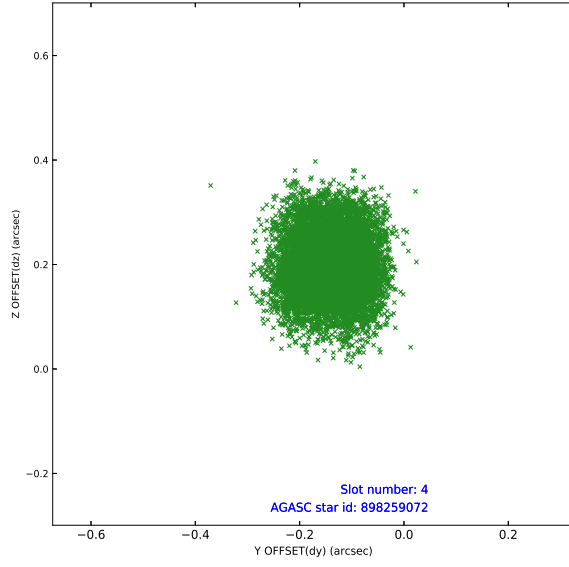
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	4681	1.000	0.010	0.001	0.011	0.019	0.000000	0.000000	933.31	-833
1	FID		ACIS-I-5	7.23	4680	1.000	-0.172	0.024	0.007	0.012	0.000000	0.000000	-1814.87	1064
2	FID		ACIS-I-6	7.25	4681	1.000	0.071	0.045	0.012	0.019	0.000000	0.000000	398.69	1708
3	GUIDE	used	898243064	8.72	9360	1.000	-0.042	0.036	0.070	0.113	268.852106	-29.678564	559.65	-546
4	GUIDE	used	898259072	8.73	9358	1.000	-0.135	0.196	0.084	0.131	269.401862	-29.860959	-215.77	-2214
5	GUIDE	used	967057128	9.35	9353	1.000	0.045	-0.136	0.110	0.182	267.996939	-30.494743	-2202.09	2299
6	GUIDE	used	967070136	8.74	9358	1.000	0.112	0.055	0.080	0.133	269.219754	-30.286661	-1703.81	-1538
7	GUIDE	used	967053960	9.24	9355	1.000	0.016	-0.149	0.079	0.128	268.185736	-30.091336	-788.54	1625

## 2.4 Star Slots

### 2.4.1 Slot 3

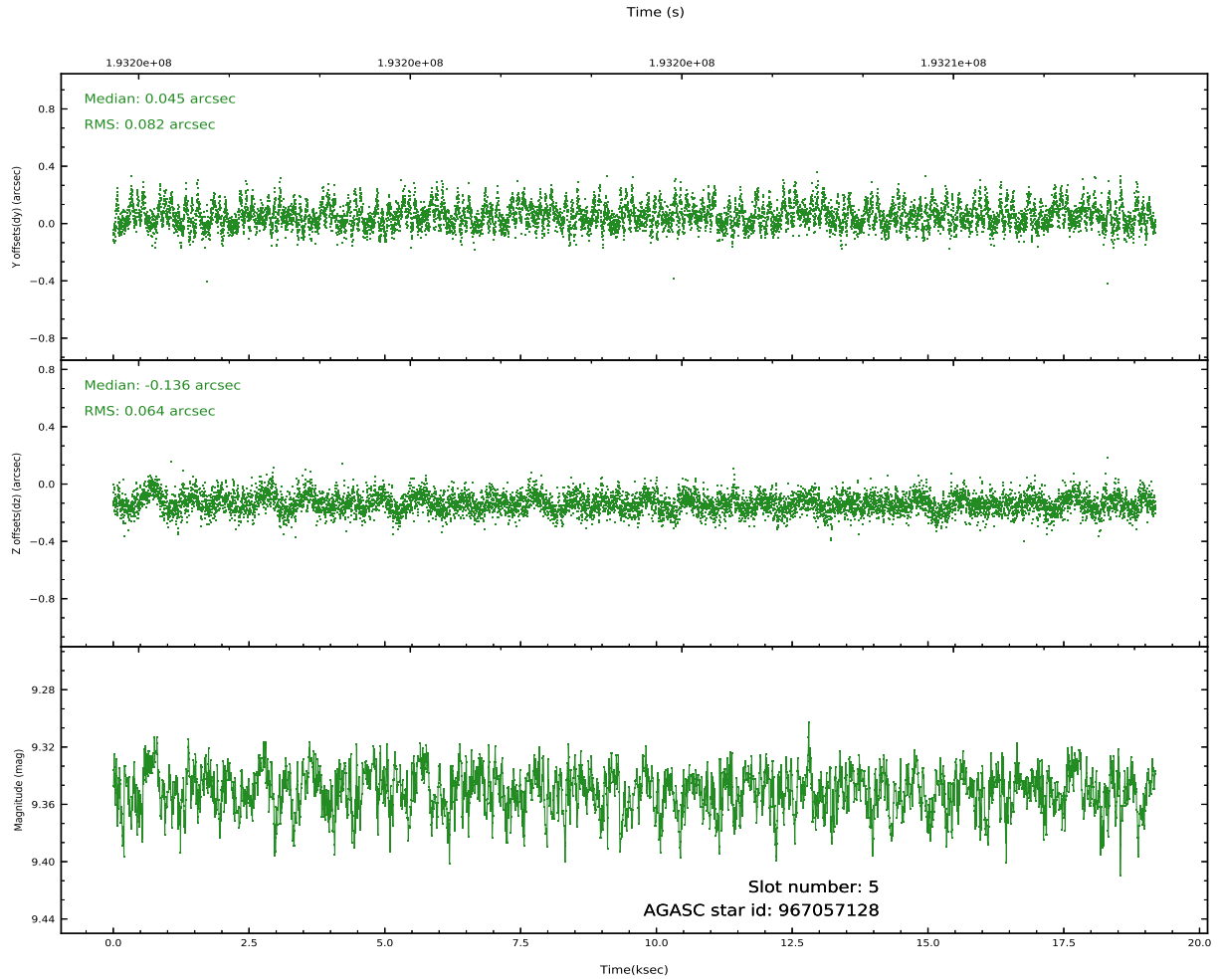
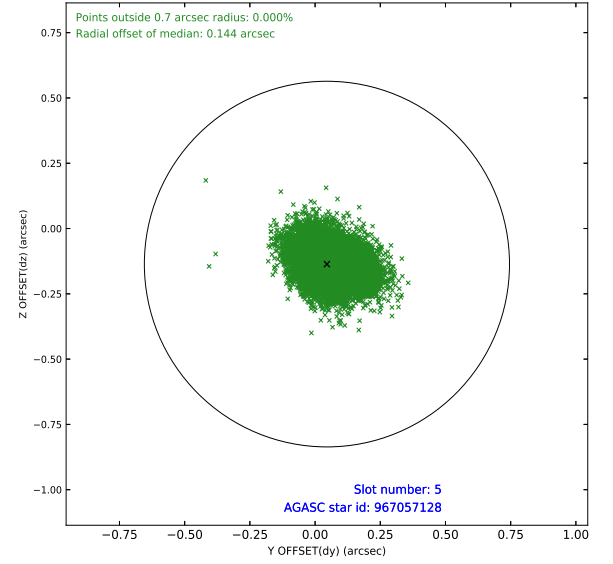
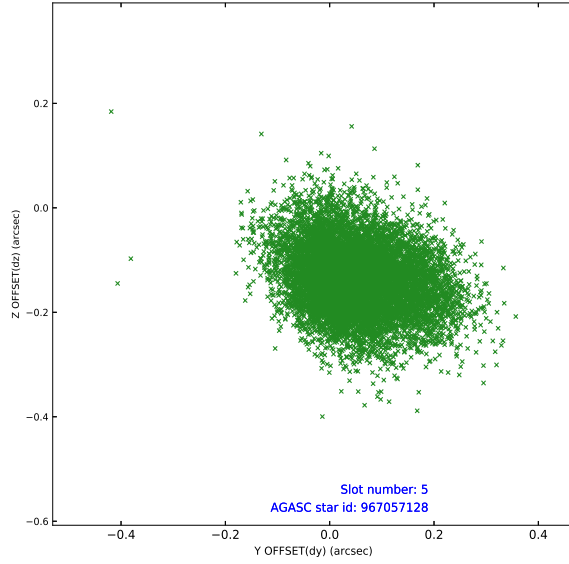


## 2.4.2 Slot 4

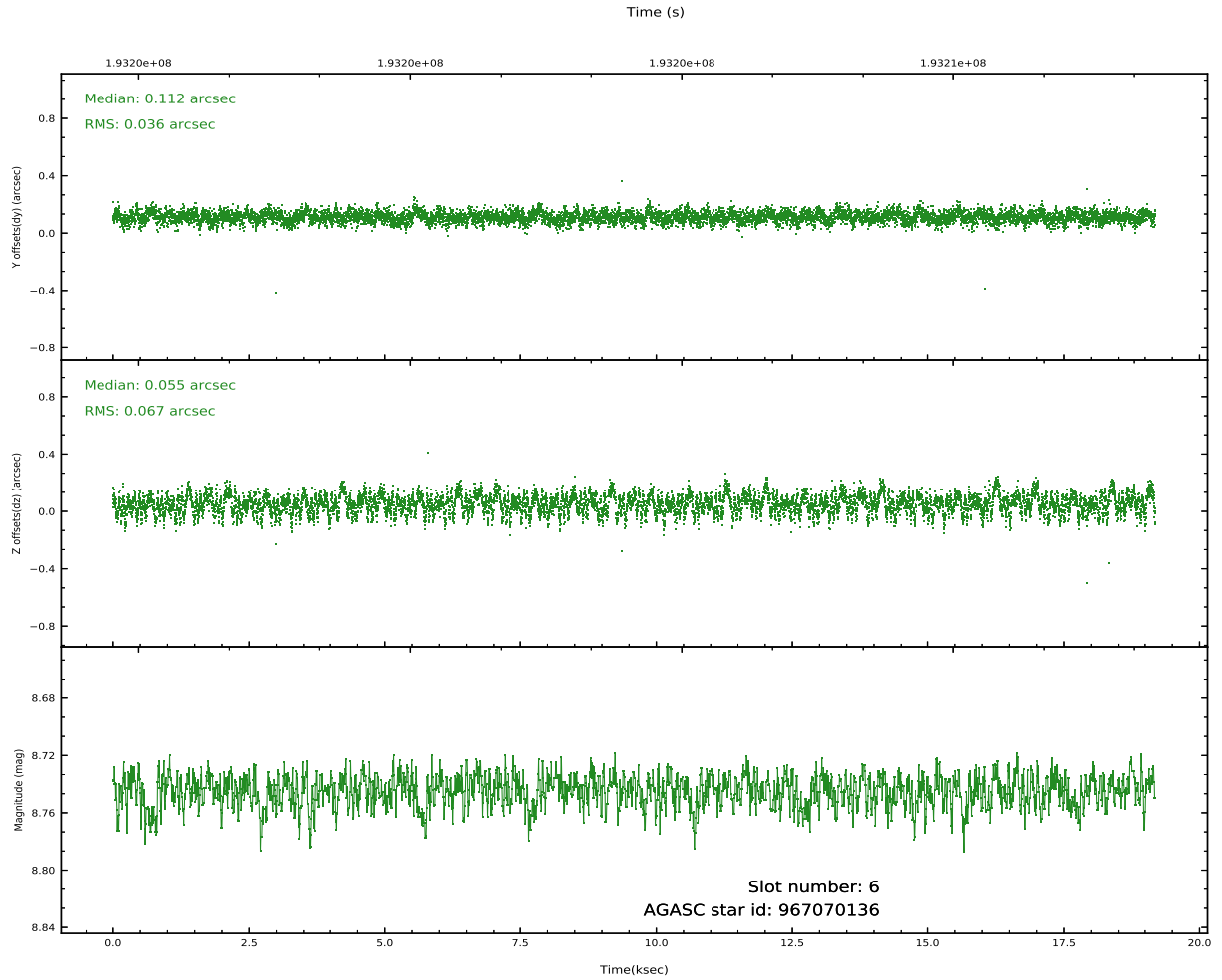
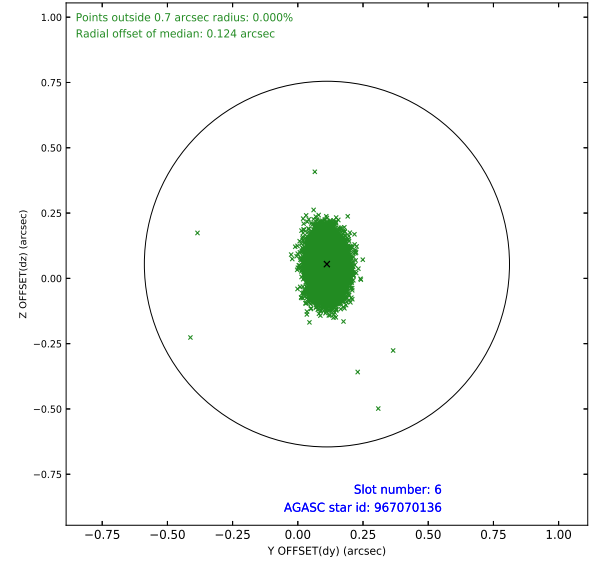
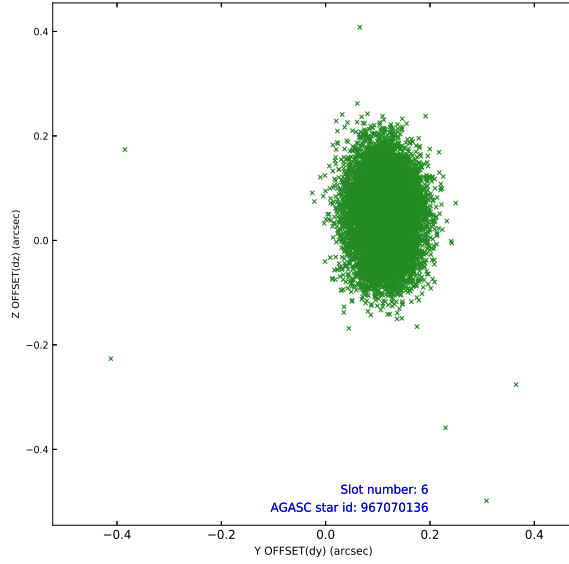




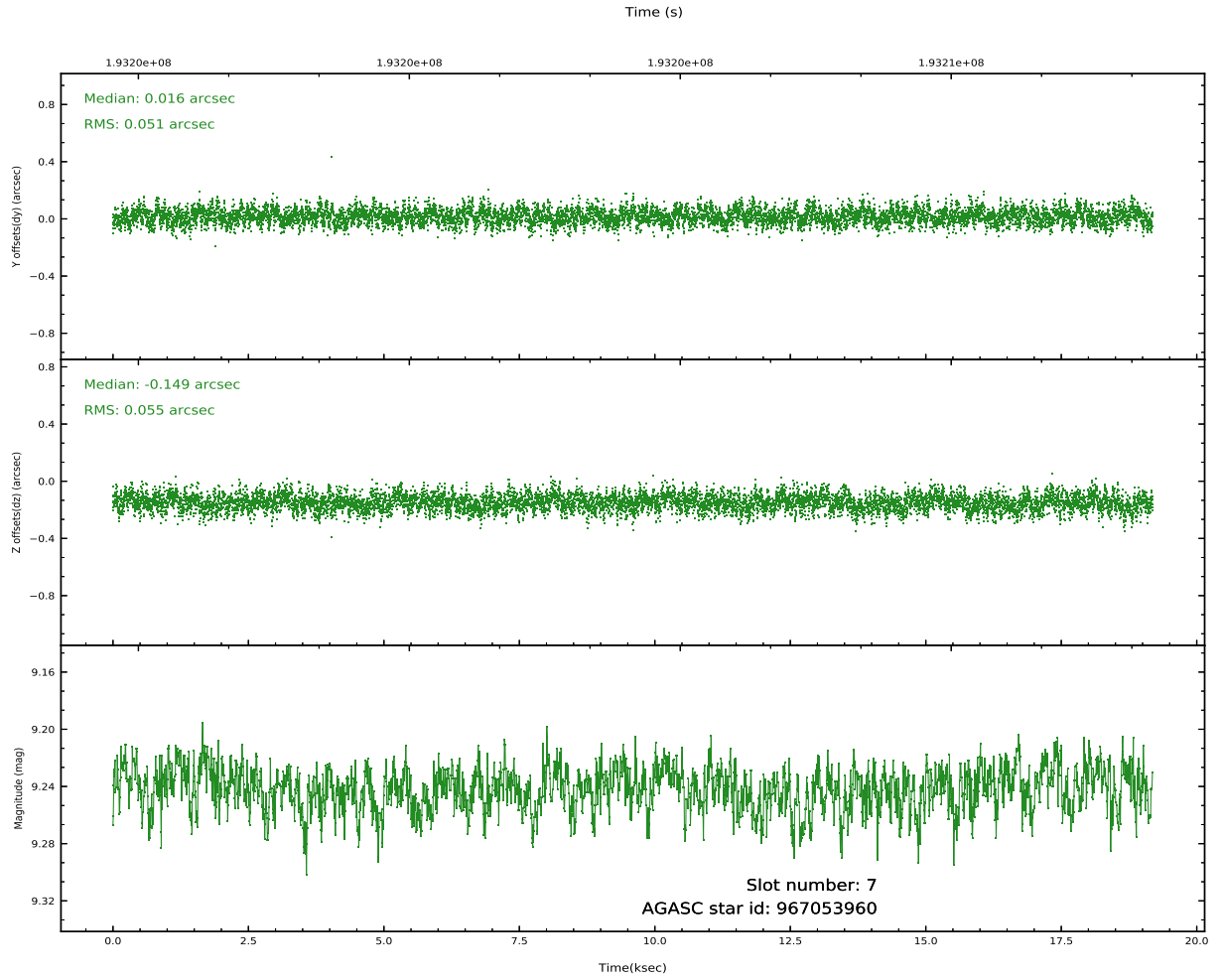
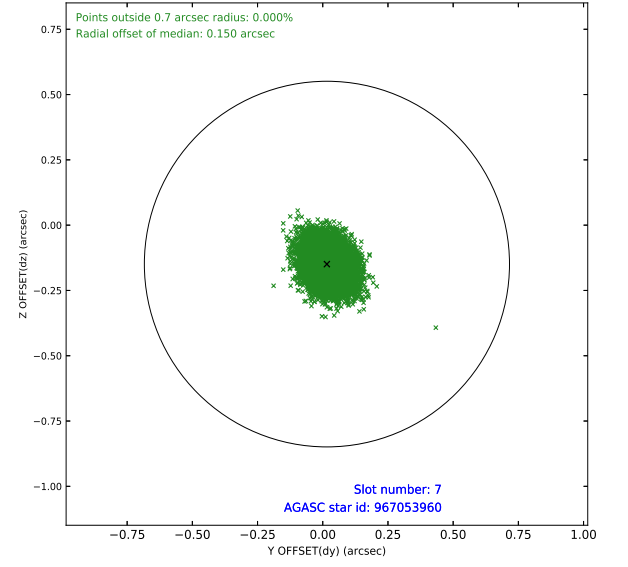
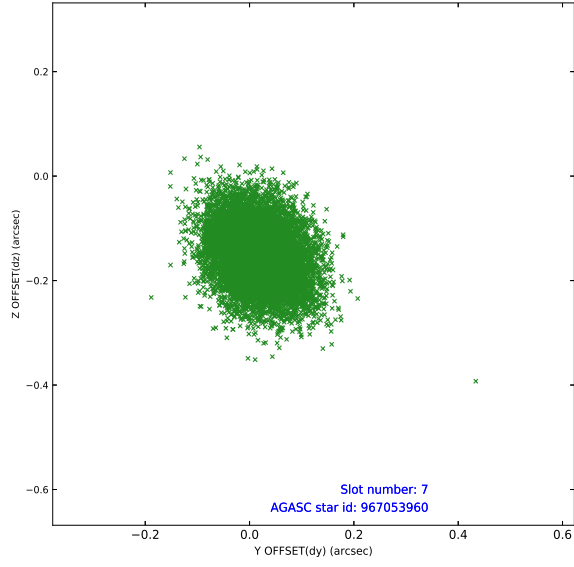
### 2.4.3 Slot 5



## 2.4.4 Slot 6

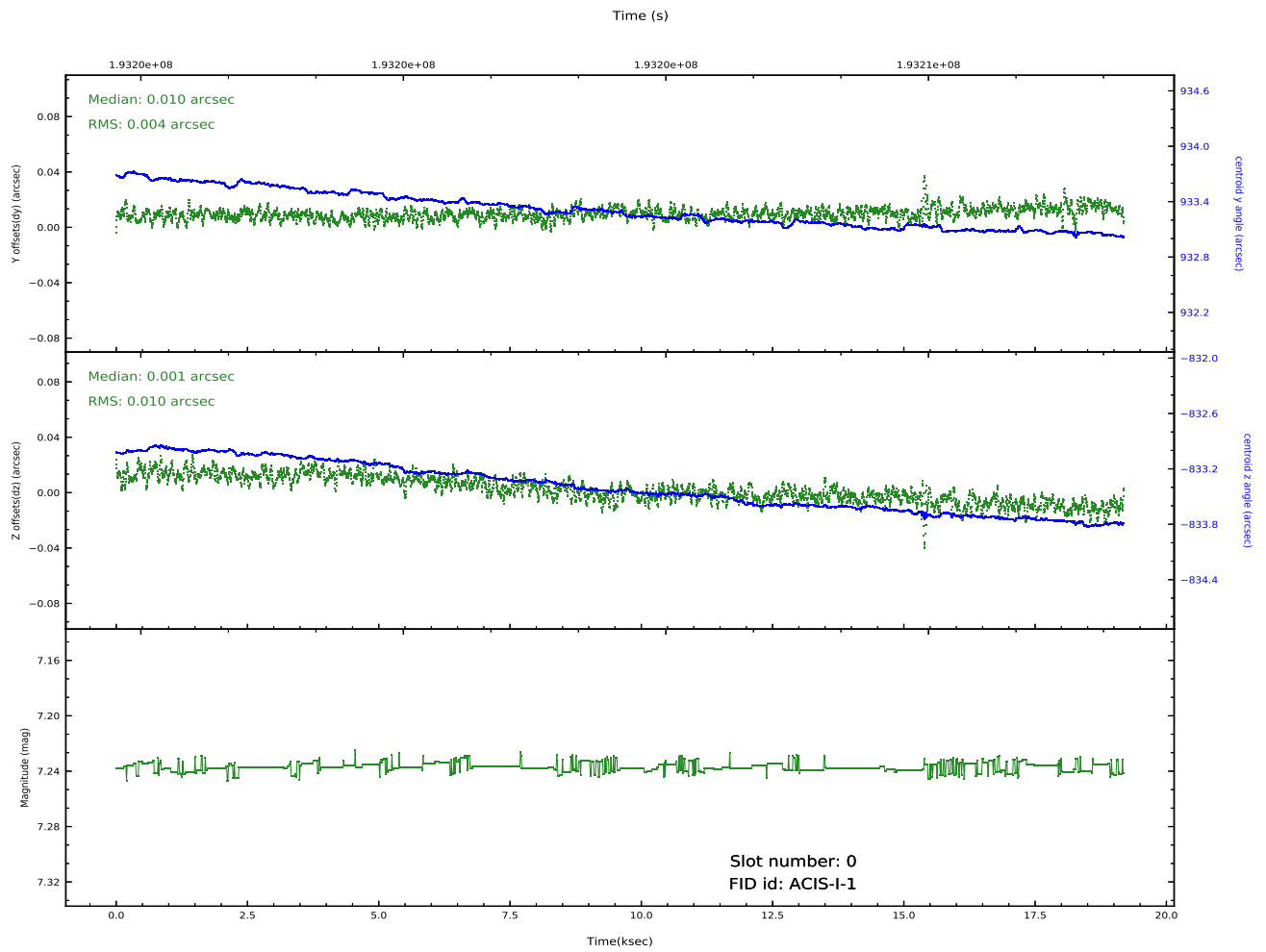
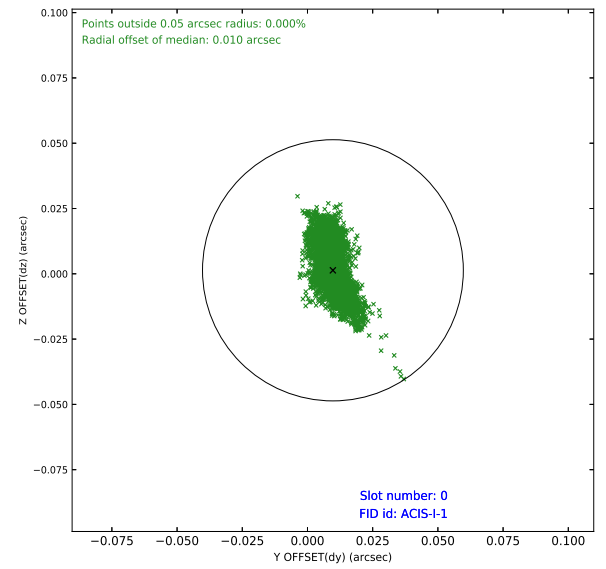
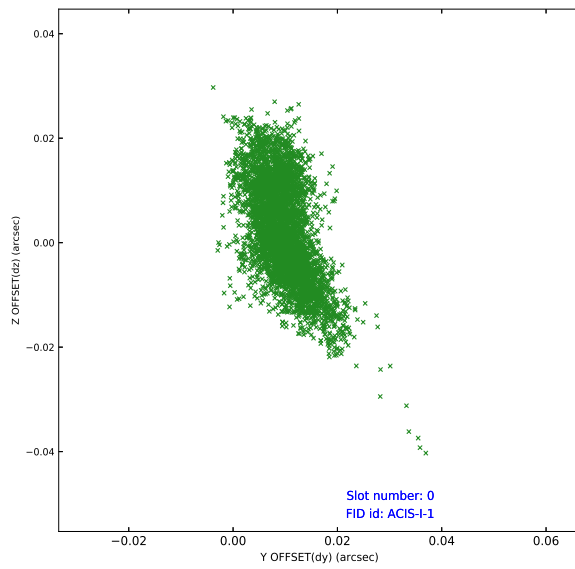


## 2.4.5 Slot 7

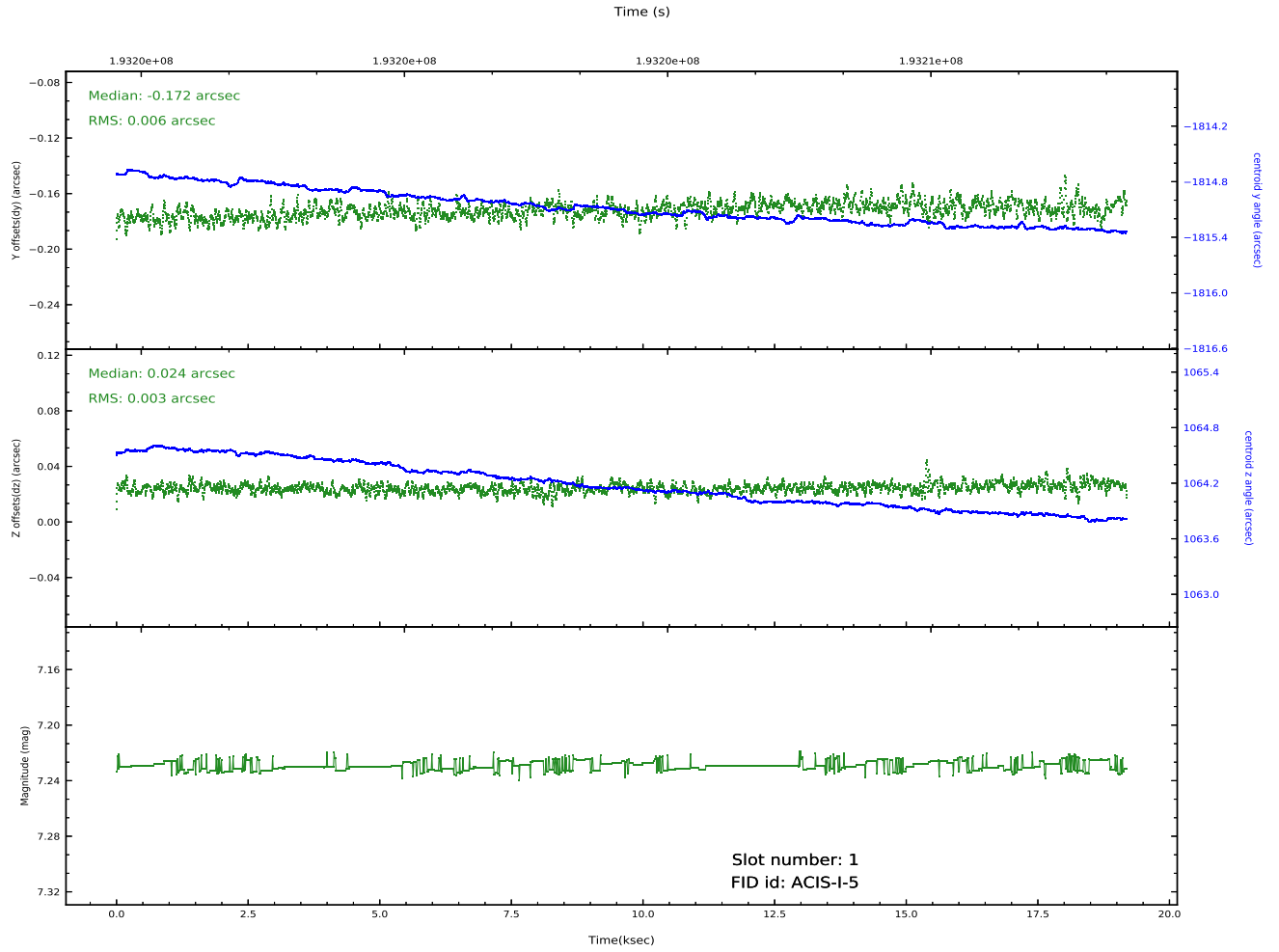
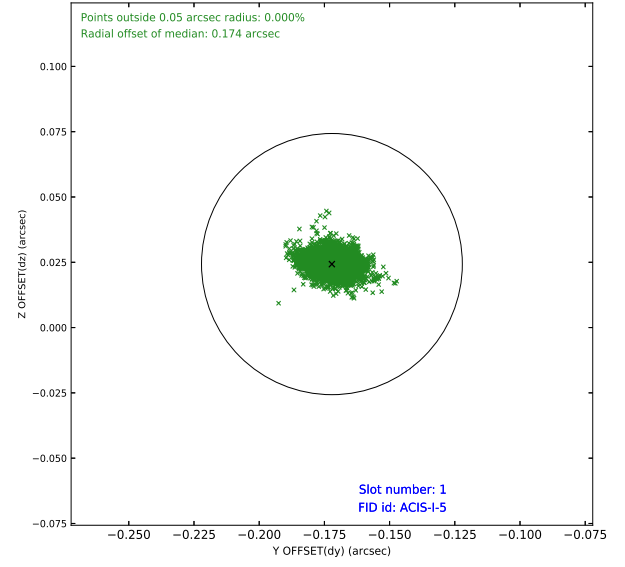
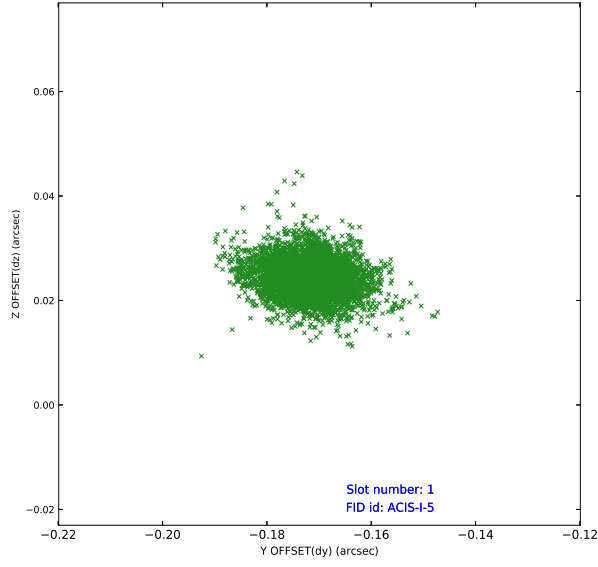


## 2.5 FID Slots

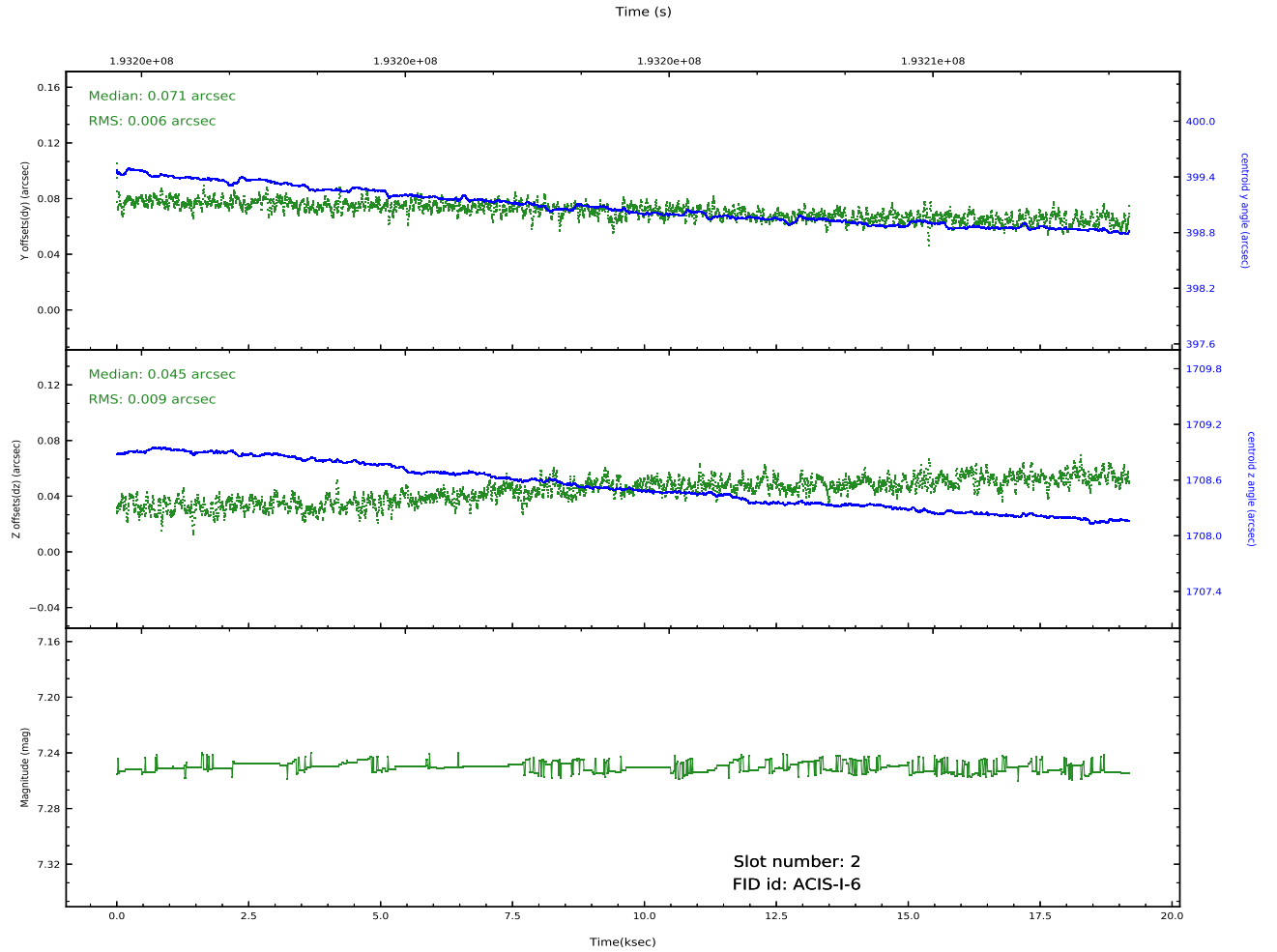
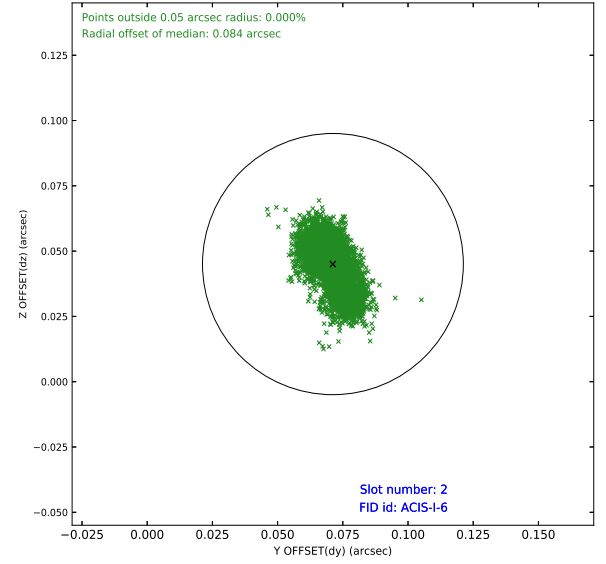
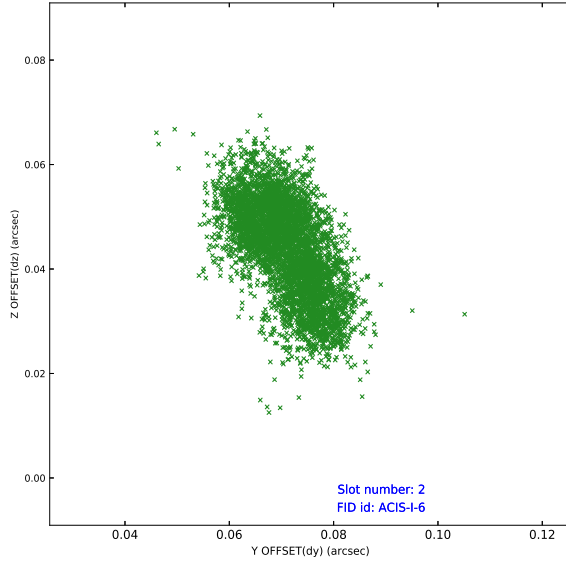
### 2.5.1 Slot 0



## 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)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.755

### A.2 Comments

Joint Proposal: HST