

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5530 - L2 Version 4  
Chandra X-Ray Center

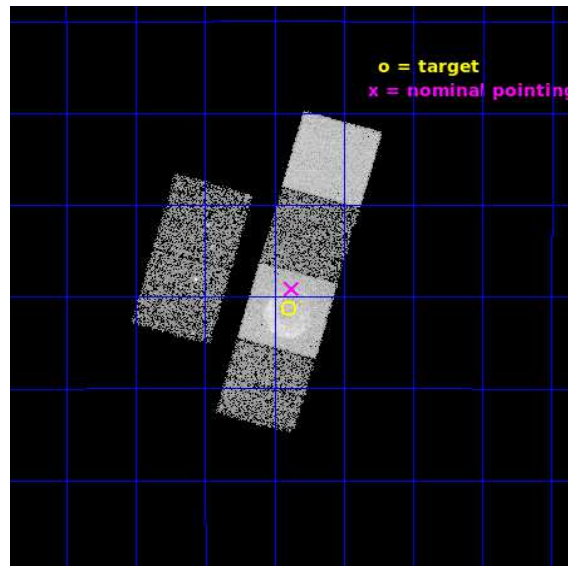
L2 Processing Date : Oct 8 2020

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# 1 Front

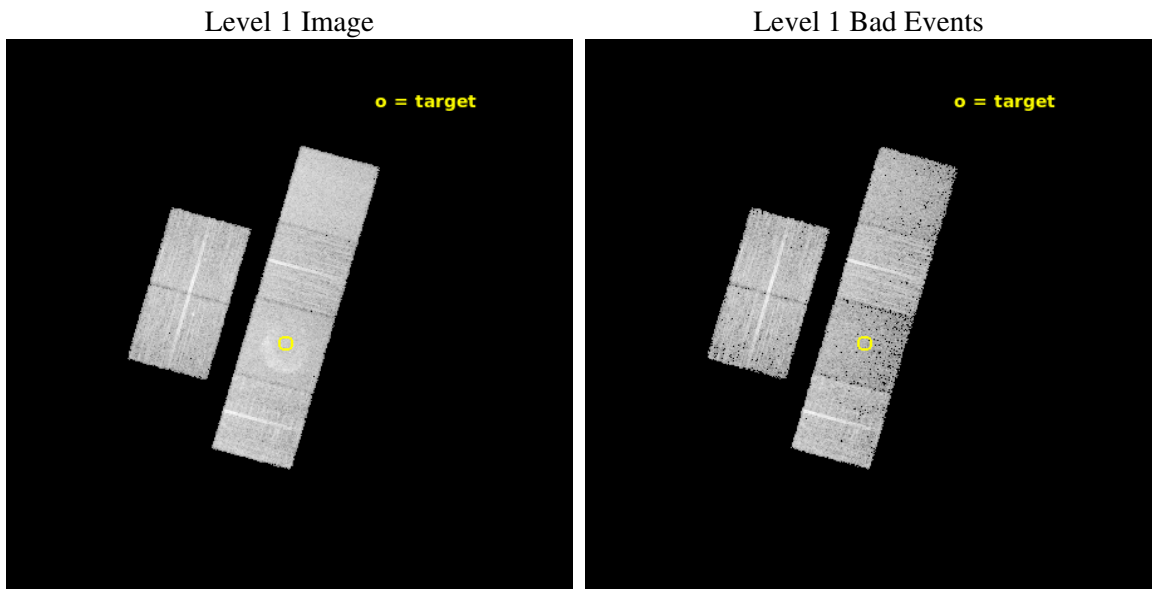
seq_num	500524	Sequence number
obs_id	5530	Observation id
title	Small-Diameter Galactic Supernova Remnants: The Missing Young Remnants?	Proposal title
observer	Stephen Reynolds	Principal investigator
object	SNR G15.9+0.2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	274.72375	Observer's specified target RA [deg]
dec_targ	-15.020556	Observer's specified target Dec [deg]
ra_nom	274.7184795036	Nominal RA [deg]
dec_nom	-14.985474262474	Nominal Dec [deg]
roll_nom	105.75641014763	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9177.5999658108	Sum of GTIs [s]
livetime	9061.3876689564	Livetime [s]
ontime2	9177.5999658108	Sum of GTIs [s]
ontime3	9174.3589755297	Sum of GTIs [s]
ontime5	9177.5999658108	Sum of GTIs [s]
ontime6	9177.5999658108	Sum of GTIs [s]
ontime7	9177.5999658108	Sum of GTIs [s]
ontime8	9177.5999658108	Sum of GTIs [s]
l2events	83021	Number of level 2 events



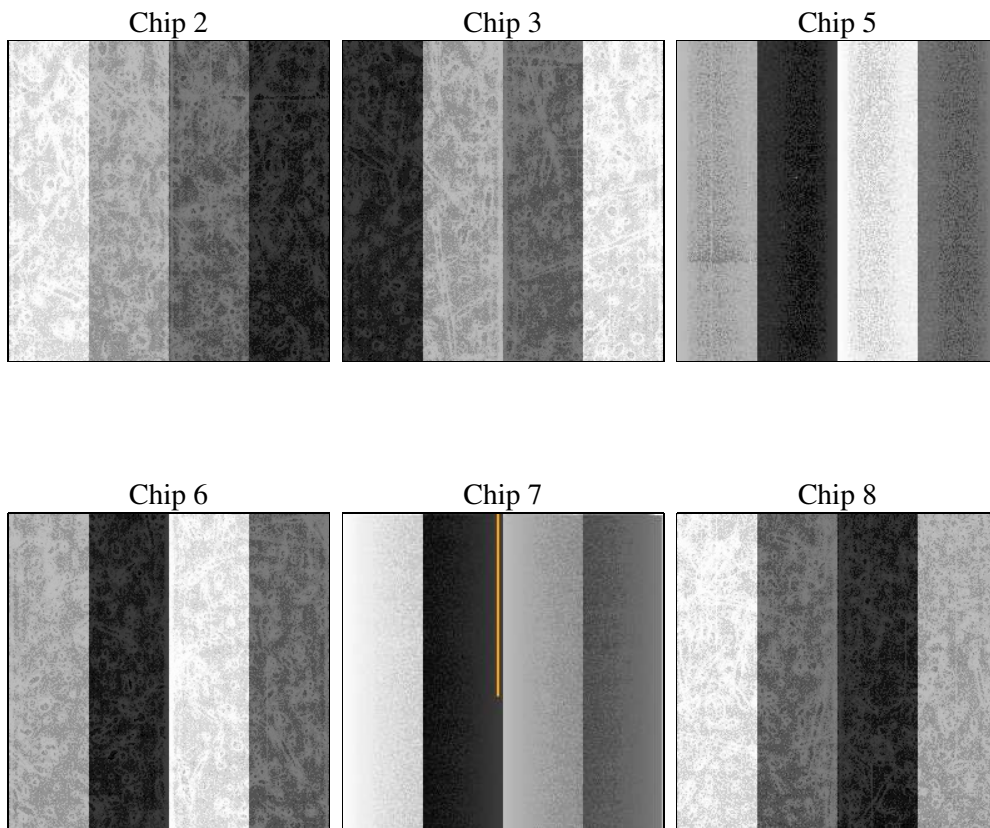
## 2 OBI

### 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	9177.5999658108	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	9177.5999658108	Sum of GTIs [s]
date	2020-10-08T12:02:03	Date and time of file creation	ontime3	9174.3589755297	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	9177.5999658108	Sum of GTIs [s]
			ontime6	9177.5999658108	Sum of GTIs [s]
			ontime7	9177.5999658108	Sum of GTIs [s]
			ontime8	9177.5999658108	Sum of GTIs [s]
			l1events	339608	Number of level 1 events

### 2.1.4 Events

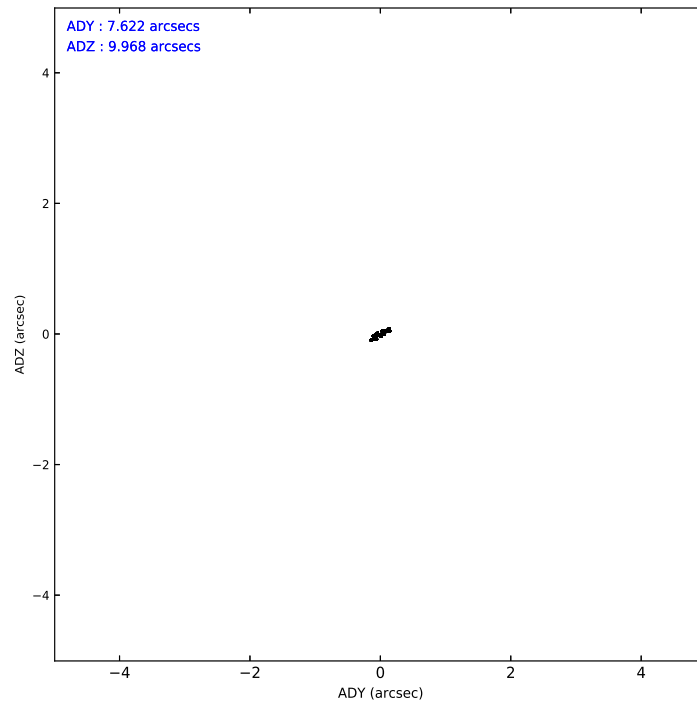
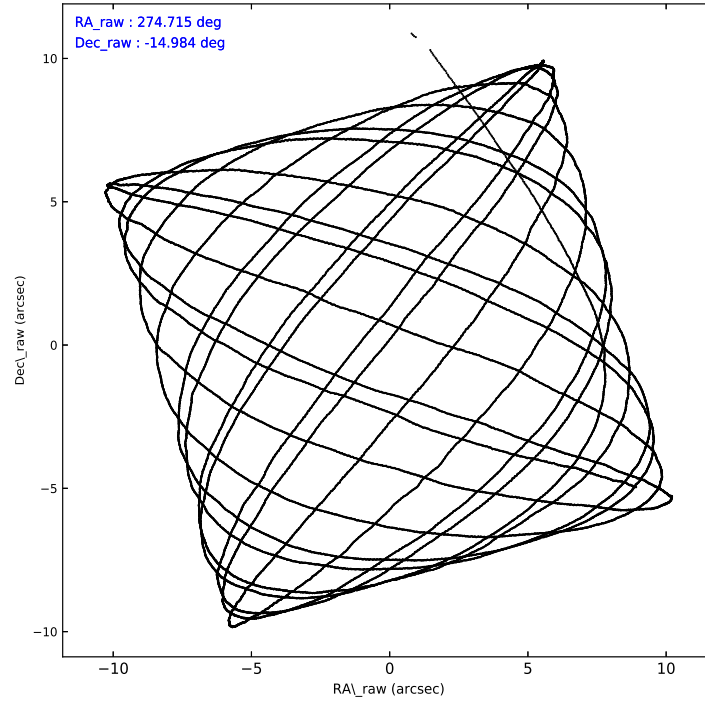
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	55103	48388	62712	52782	61316	59307	grade 0 events	2355	2464	1694	2246	4170	2900
rejected events	49790	42812	32220	47191	28148	48668		4%	5%	2%	4%	6%	4%
rejected %	90%	88%	51%	89%	45%	82%	grade 1 events	26	31	27	19	45	28
								0%	0%	0%	0%	0%	0%
							grade 2 events	1067	1113	8898	1161	7106	2237
								1%	2%	14%	2%	11%	3%
							grade 3 events	498	524	1117	540	3225	1053
								0%	1%	1%	1%	5%	1%
							grade 4 events	481	498	1127	563	3309	941
								0%	1%	1%	1%	5%	1%
							grade 5 events	1584	1821	5116	1936	5661	2735
								2%	3%	8%	3%	9%	4%
							grade 6 events	942	1005	17835	1109	15534	3577
								1%	2%	28%	2%	25%	6%
							grade 7 events	48150	40932	26898	45208	22266	45836
								87%	84%	42%	85%	36%	77%

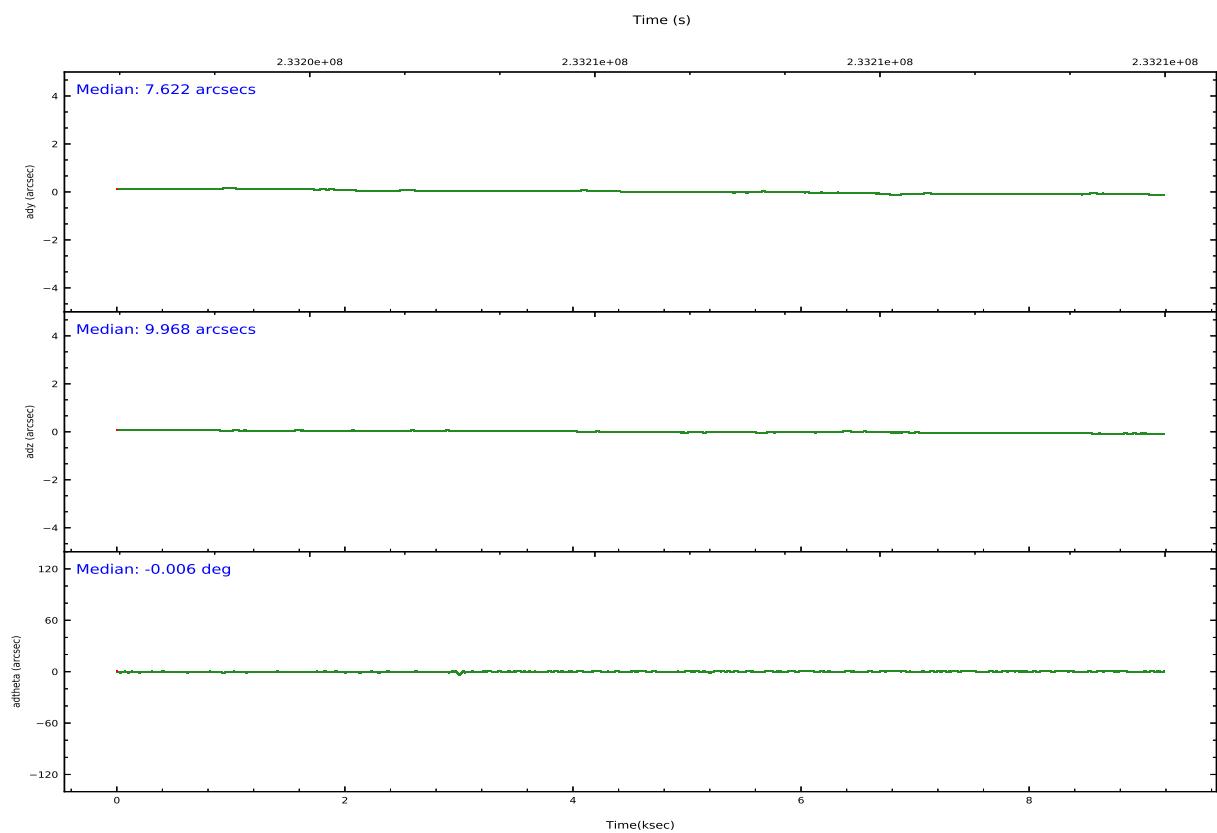
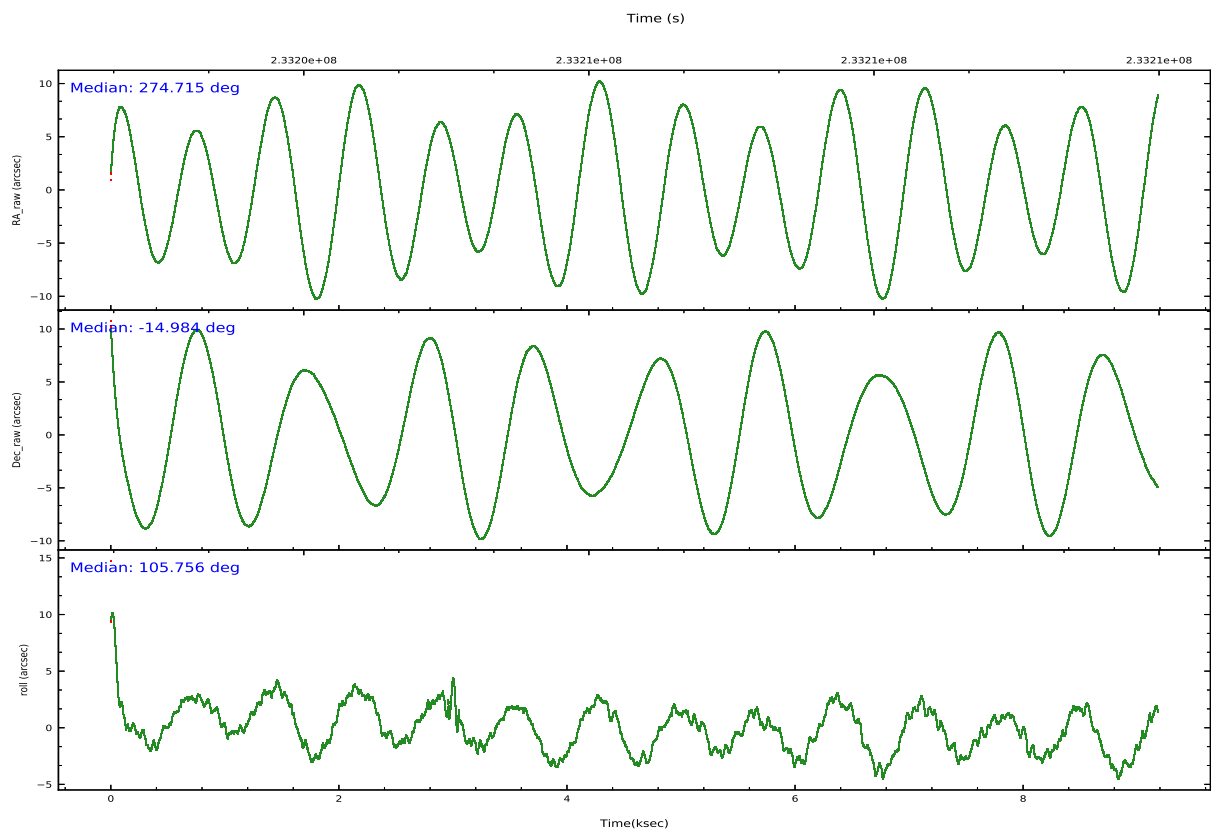


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	274.735477	274.7184795036	Subarray requested	NONE	NONE
[deg] Pointing Dec	-15.002863	-14.985474262474	Alternating exposures requested	N	N
[deg] Pointing Roll	105.603030	105.75641014763	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	233203493.184000	233202399.28108			
Observation start date	2005-05-23T02:43:49	2005-05-23T02:26:39			
[s] Observation end time (MET)	233212493.184000	233213330.39407			
Observation end date	2005-05-23T05:13:49	2005-05-23T05:28:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect



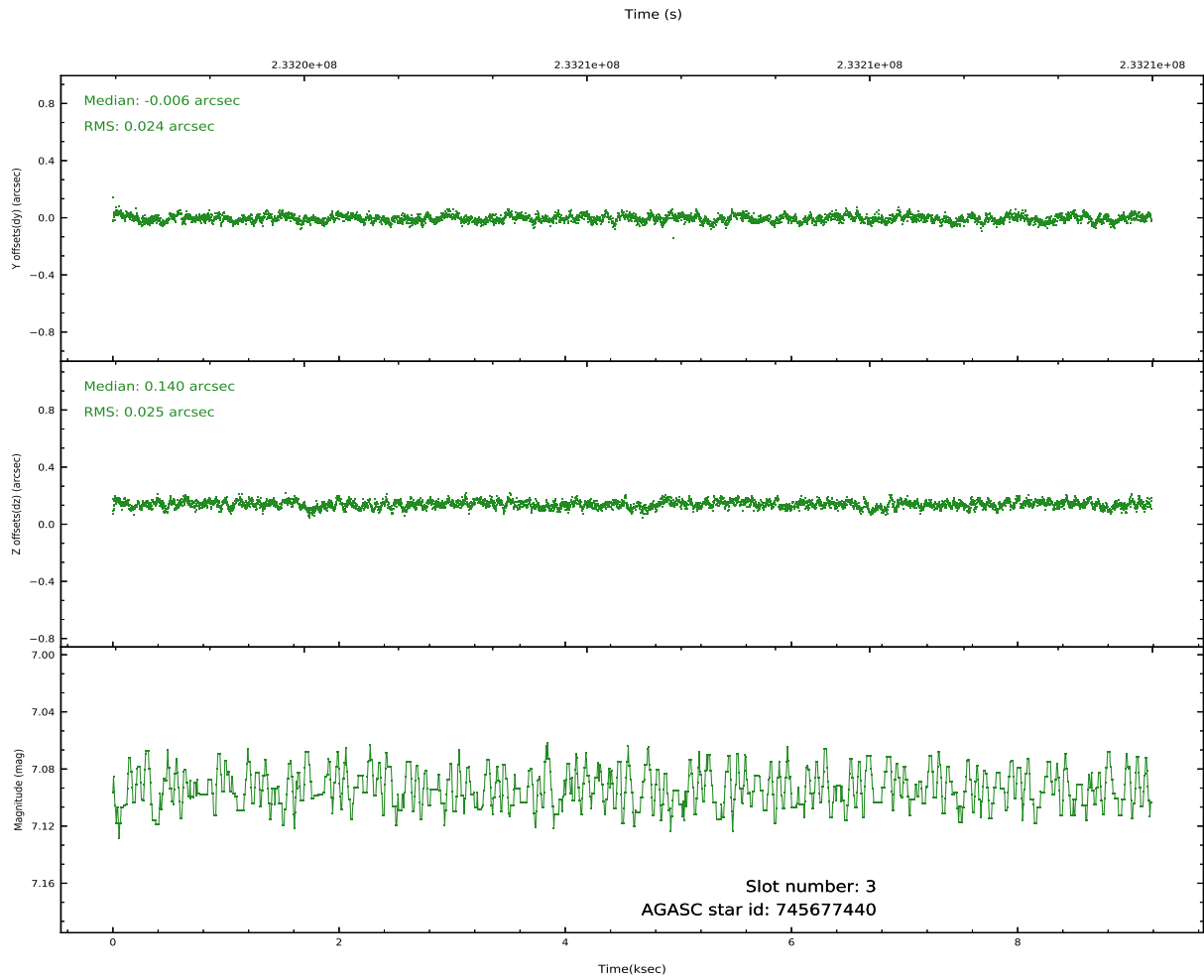
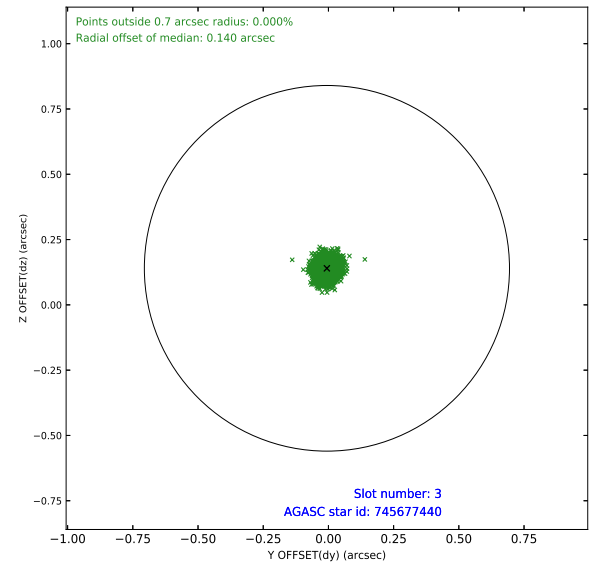
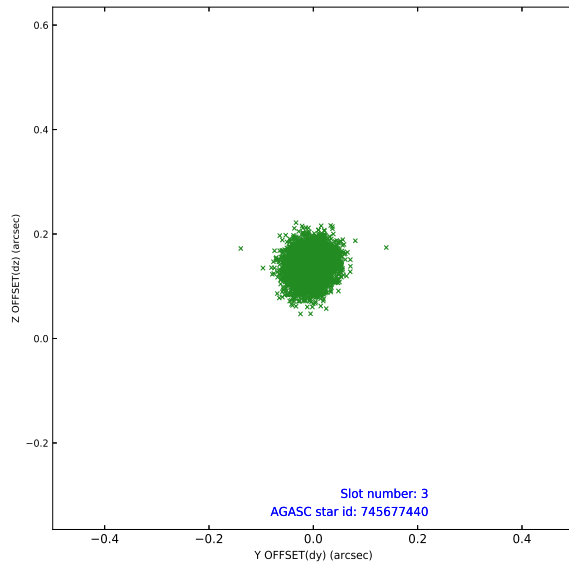


Slot Statistics

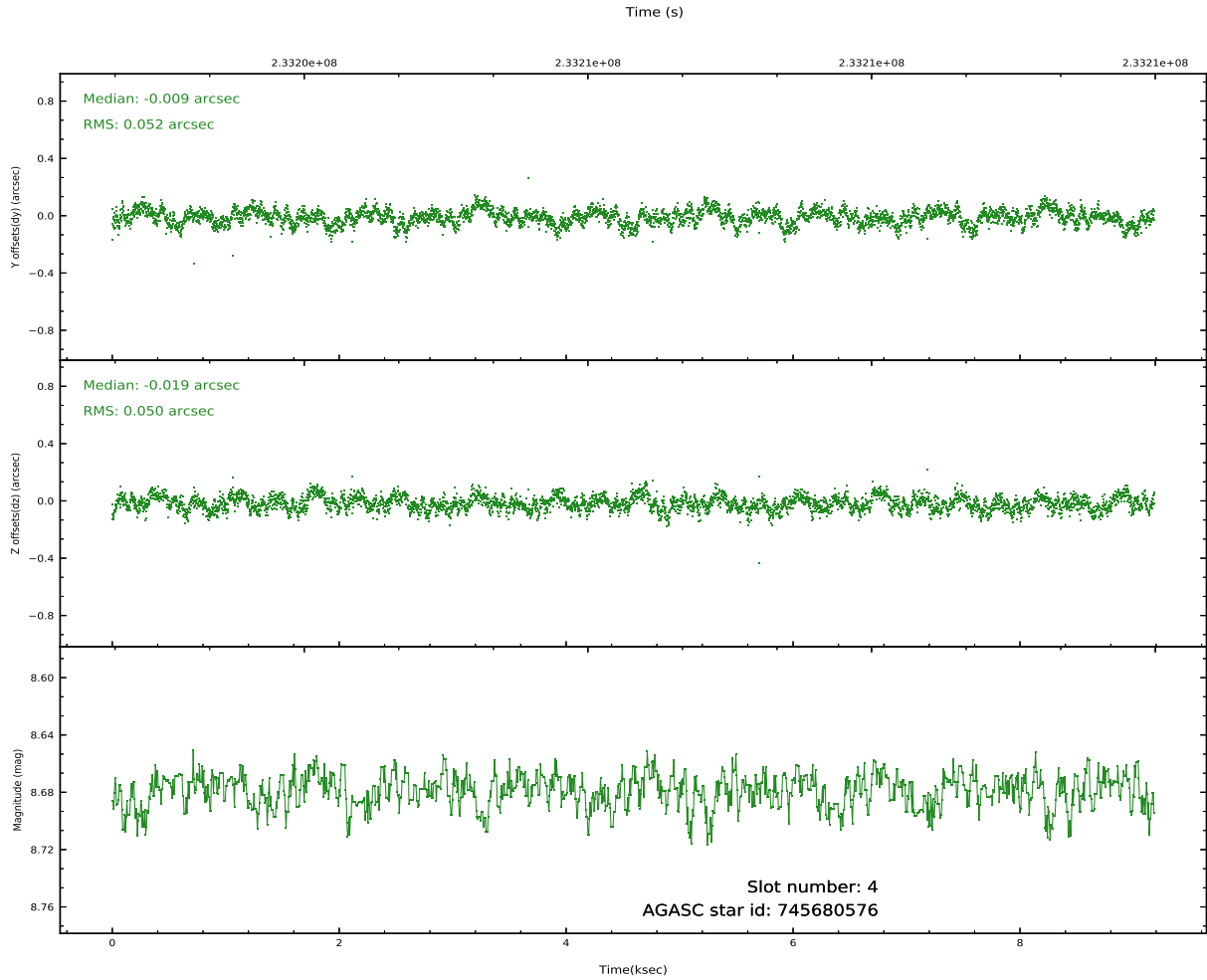
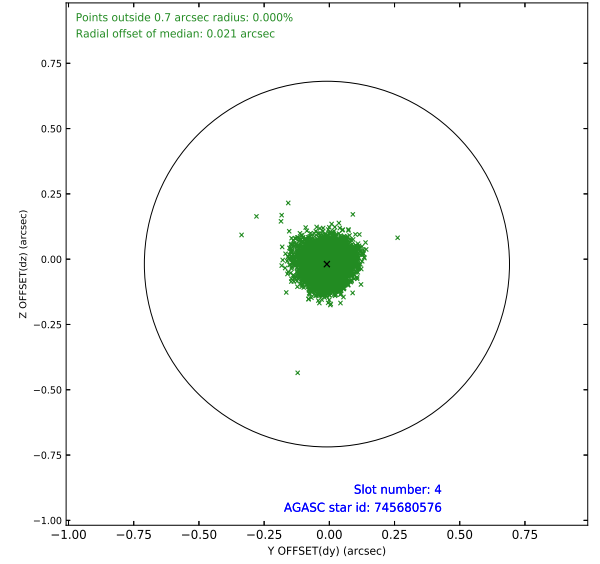
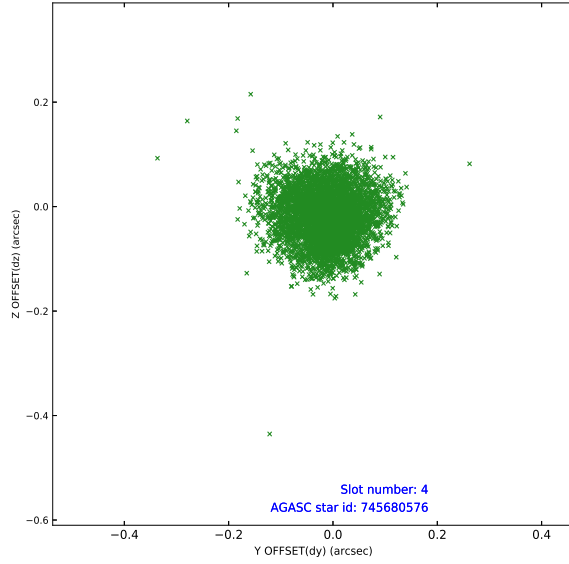
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2241	1.000	-0.077	-0.064	0.006	0.011	0.000000	0.000000	-760.40	-1731
1	FID		ACIS-S-4	7.21	2240	1.000	0.169	0.054	0.007	0.012	0.000000	0.000000	2152.77	176
2	FID		ACIS-S-5	7.23	2240	1.000	-0.123	0.019	0.009	0.015	0.000000	0.000000	-1812.61	170
3	GUIDE	used	745677440	7.09	4481	1.000	-0.006	0.140	0.037	0.059	275.264510	-14.978543	-412.62	-1794
4	GUIDE	used	745680576	8.68	4478	1.000	-0.009	-0.019	0.077	0.121	274.063292	-14.644899	1867.47	1909
5	GUIDE	used	821172096	7.76	4480	1.000	0.022	0.093	0.050	0.079	275.077024	-15.219483	-1070.45	-932
6	GUIDE	used	821179256	7.40	4481	1.000	0.139	-0.018	0.048	0.073	274.840900	-15.612800	-2213.22	238
7	GUIDE	used	745679408	7.61	4479	1.000	-0.147	-0.197	0.058	0.091	274.073517	-14.949069	801.81	2166

## 2.4 Star Slots

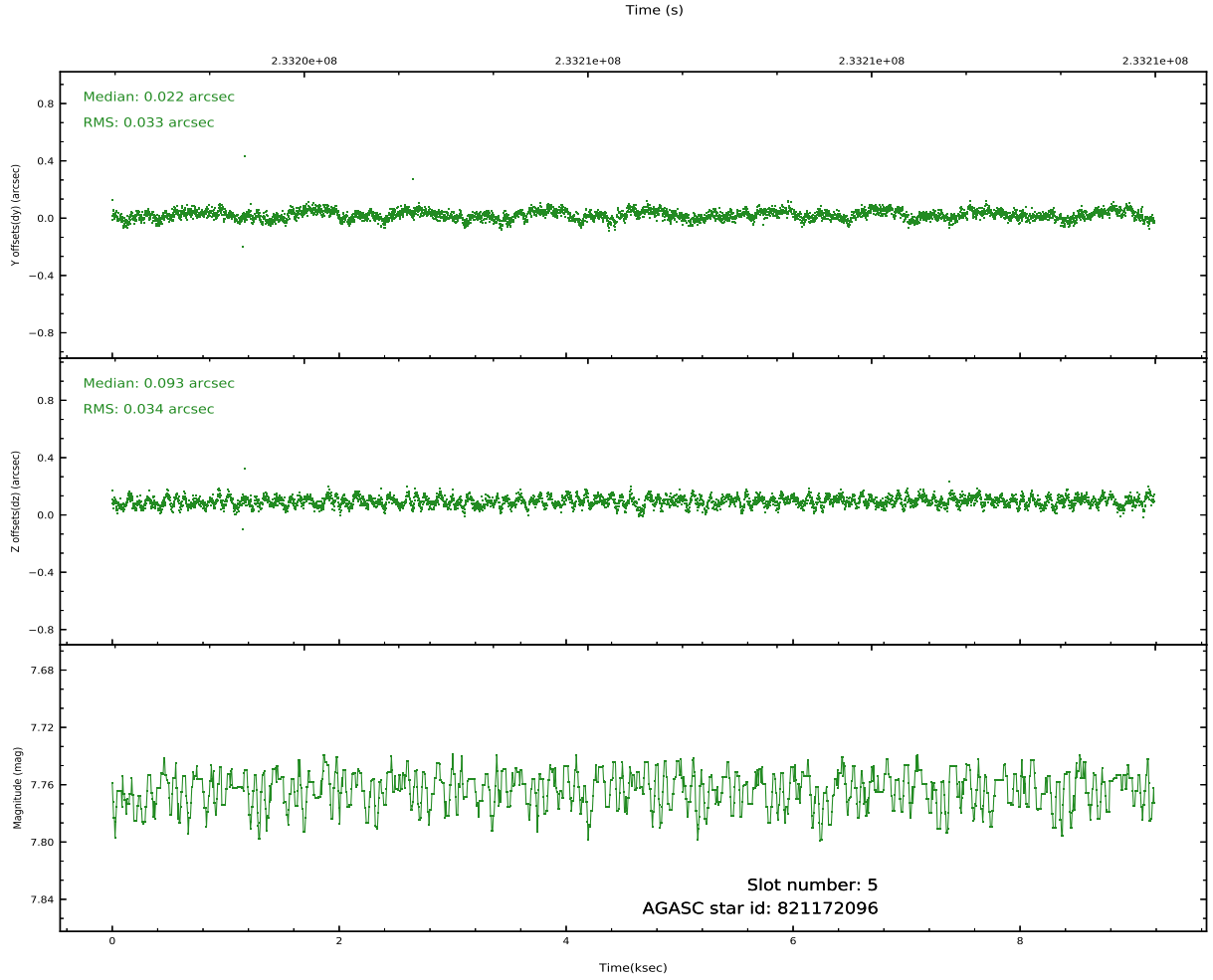
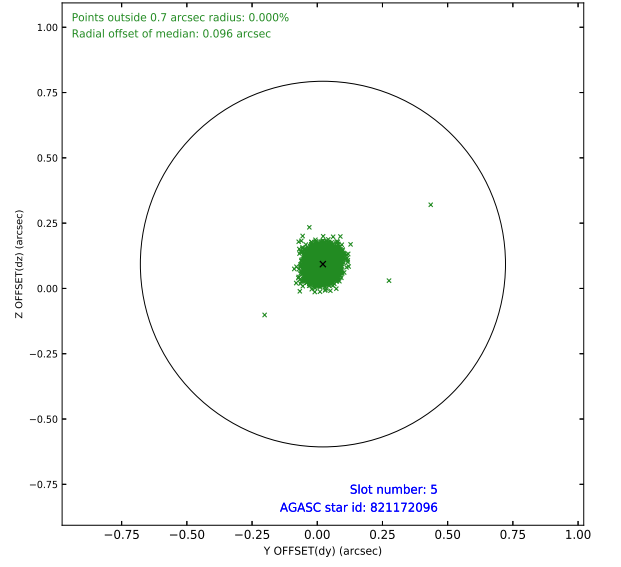
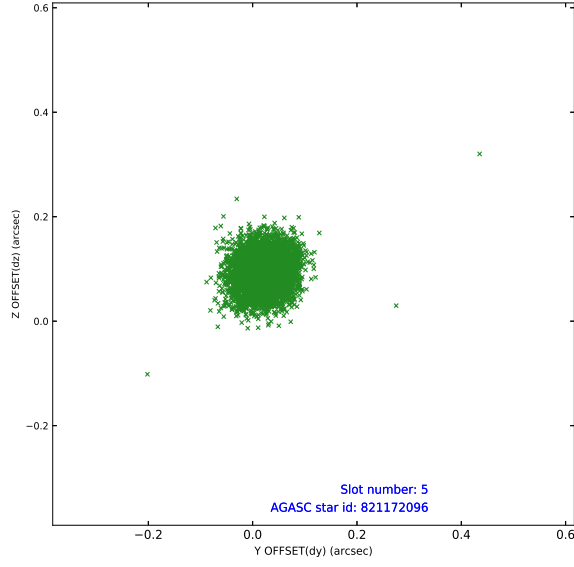
### 2.4.1 Slot 3



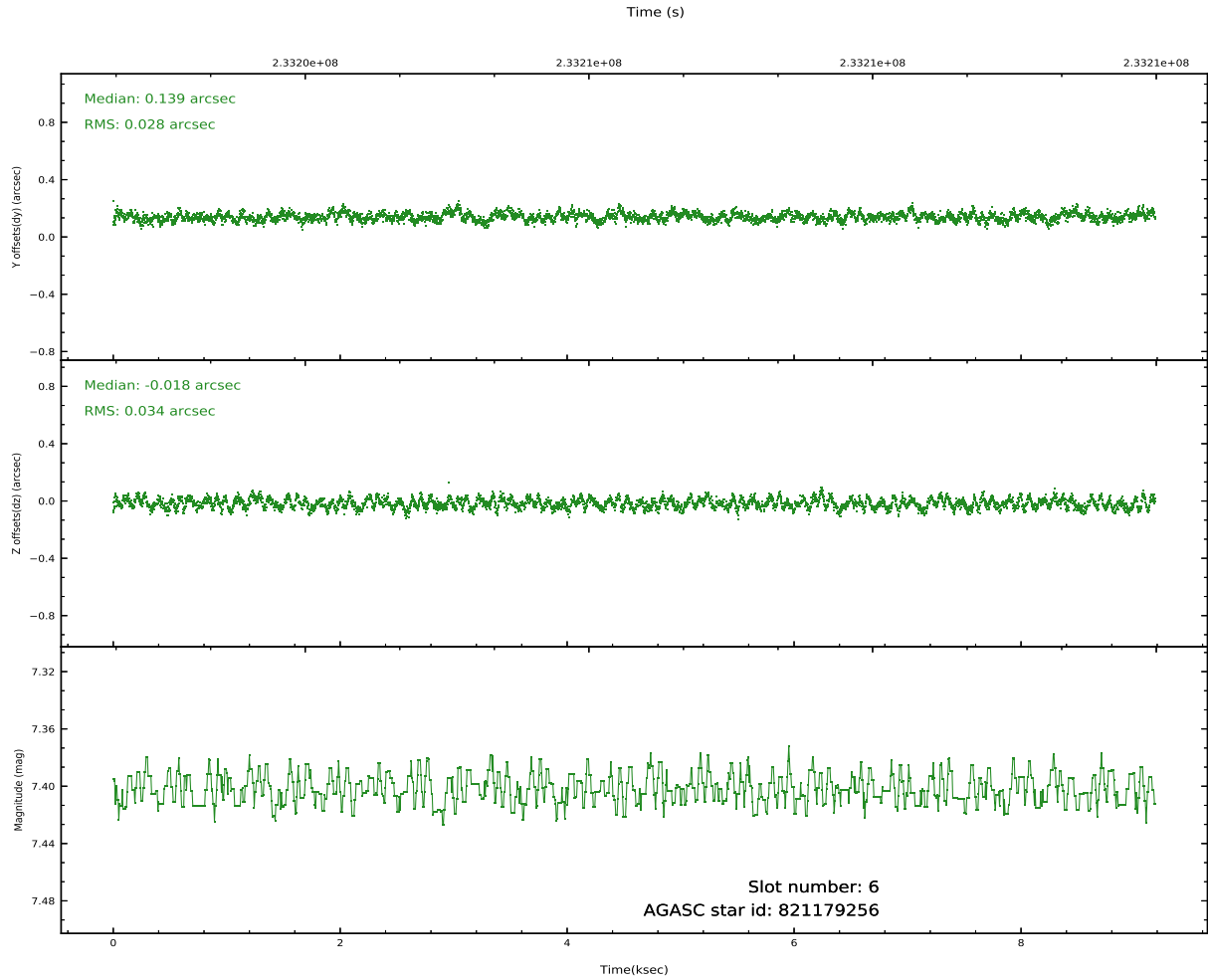
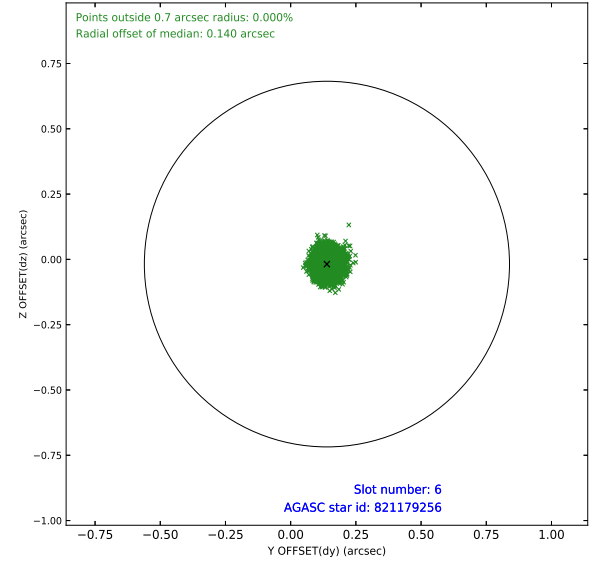
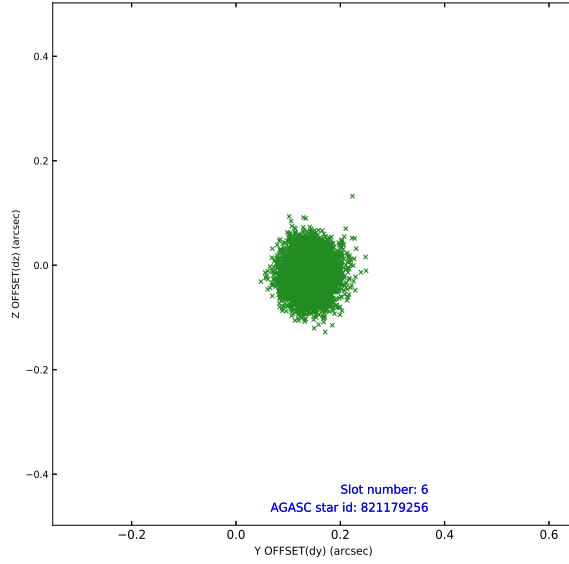
## 2.4.2 Slot 4



### 2.4.3 Slot 5

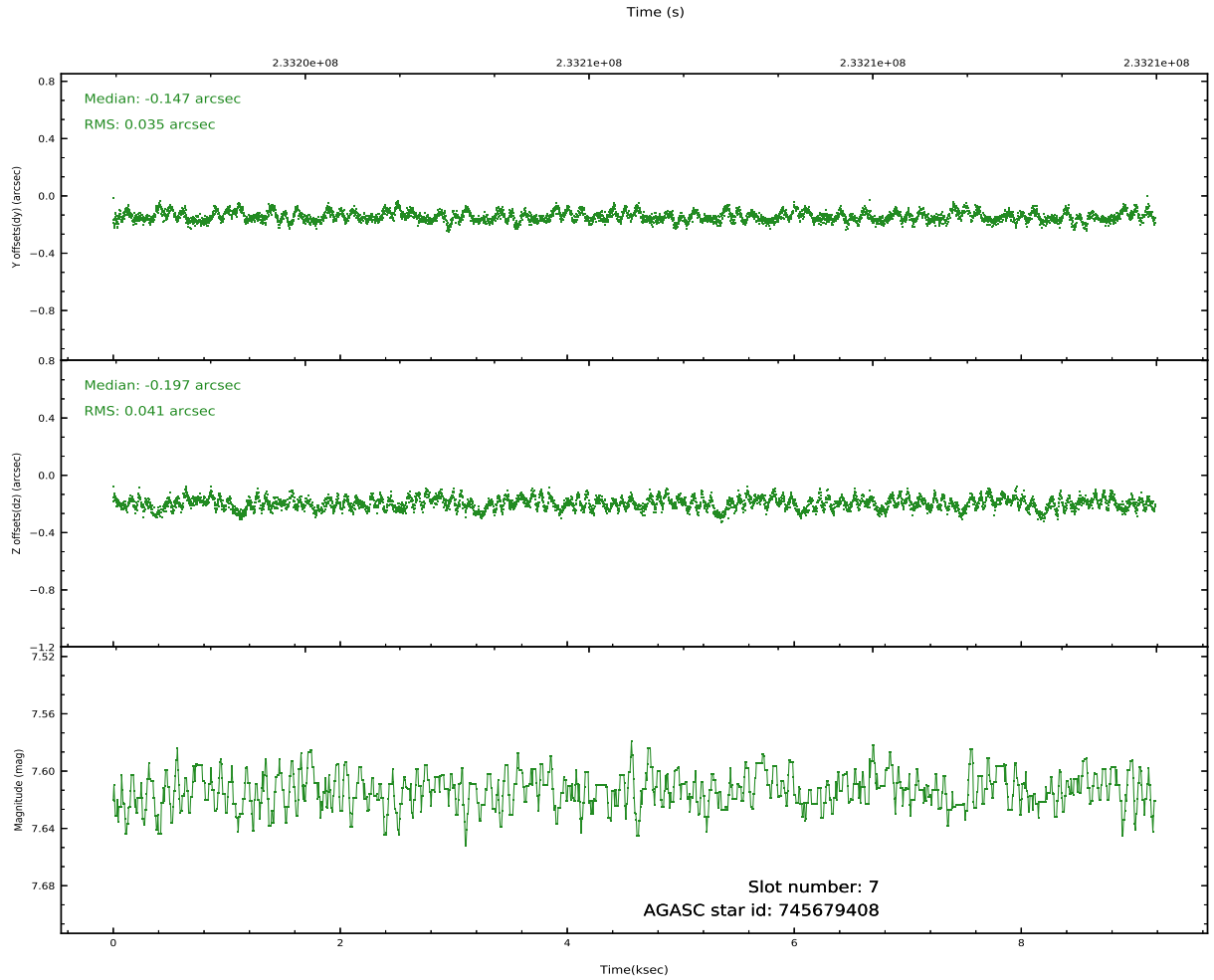
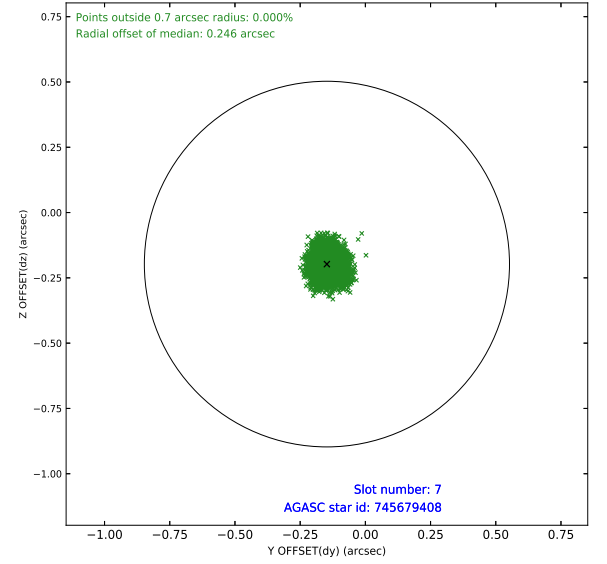
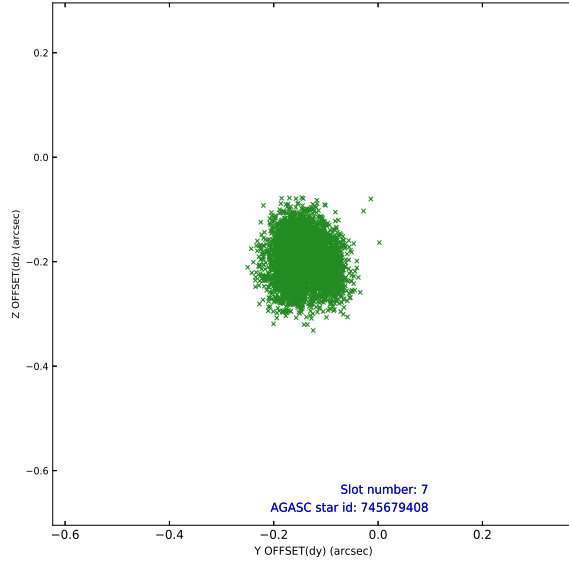


## 2.4.4 Slot 6



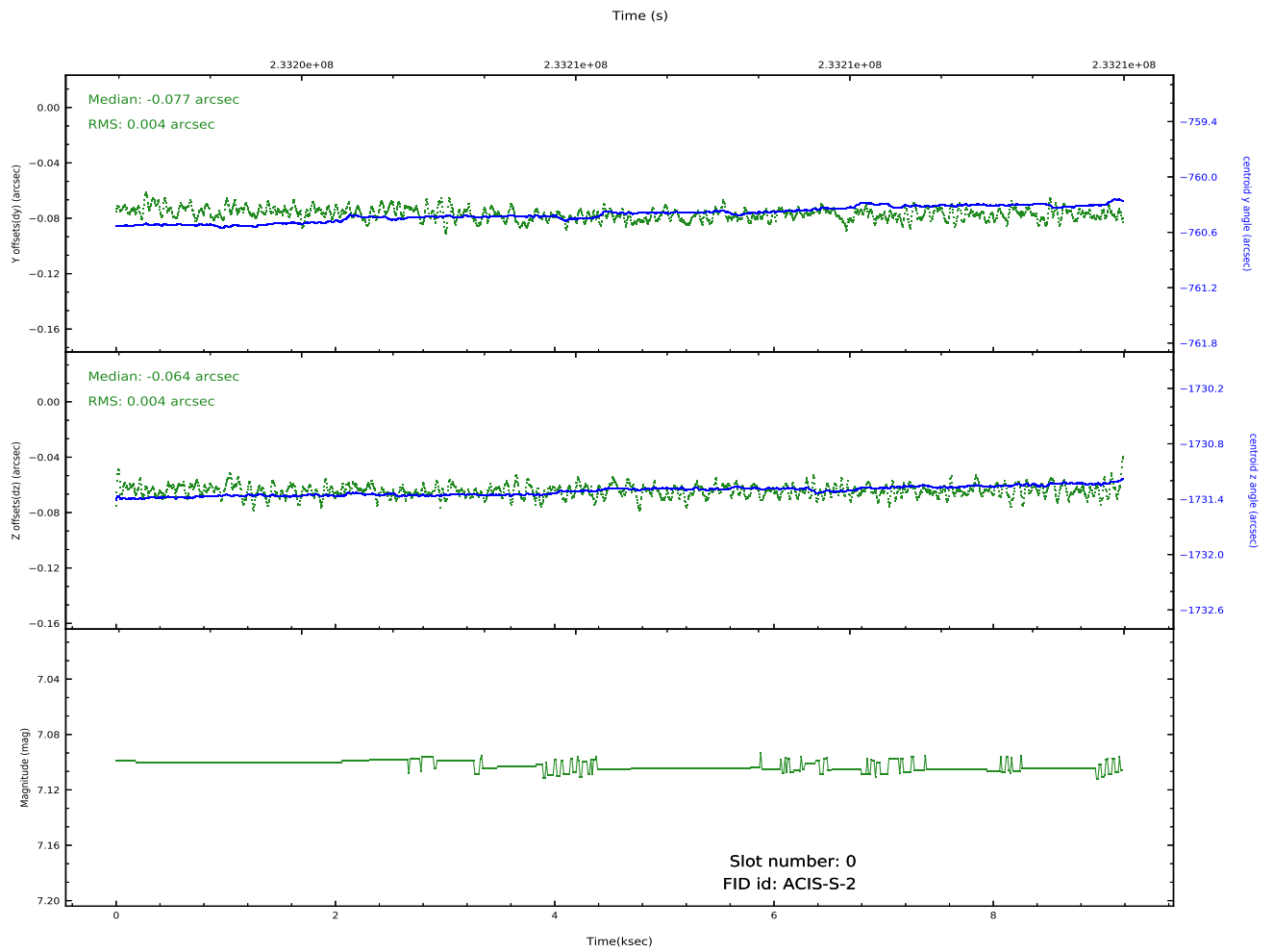
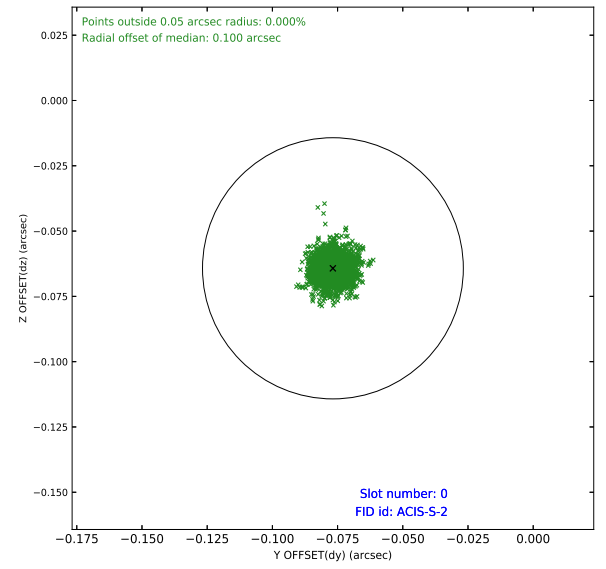
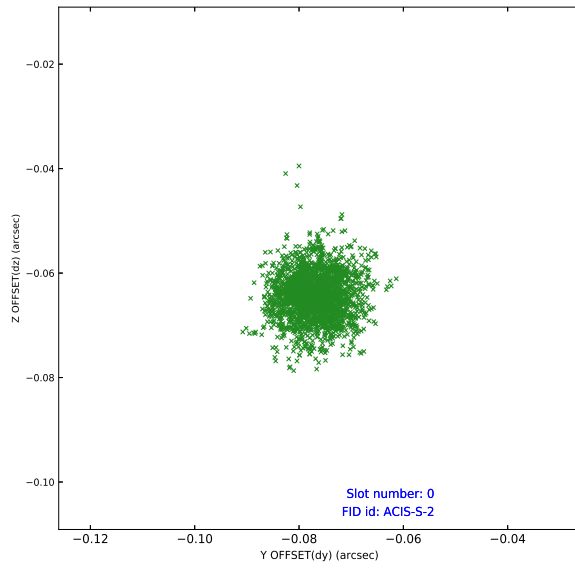


## 2.4.5 Slot 7

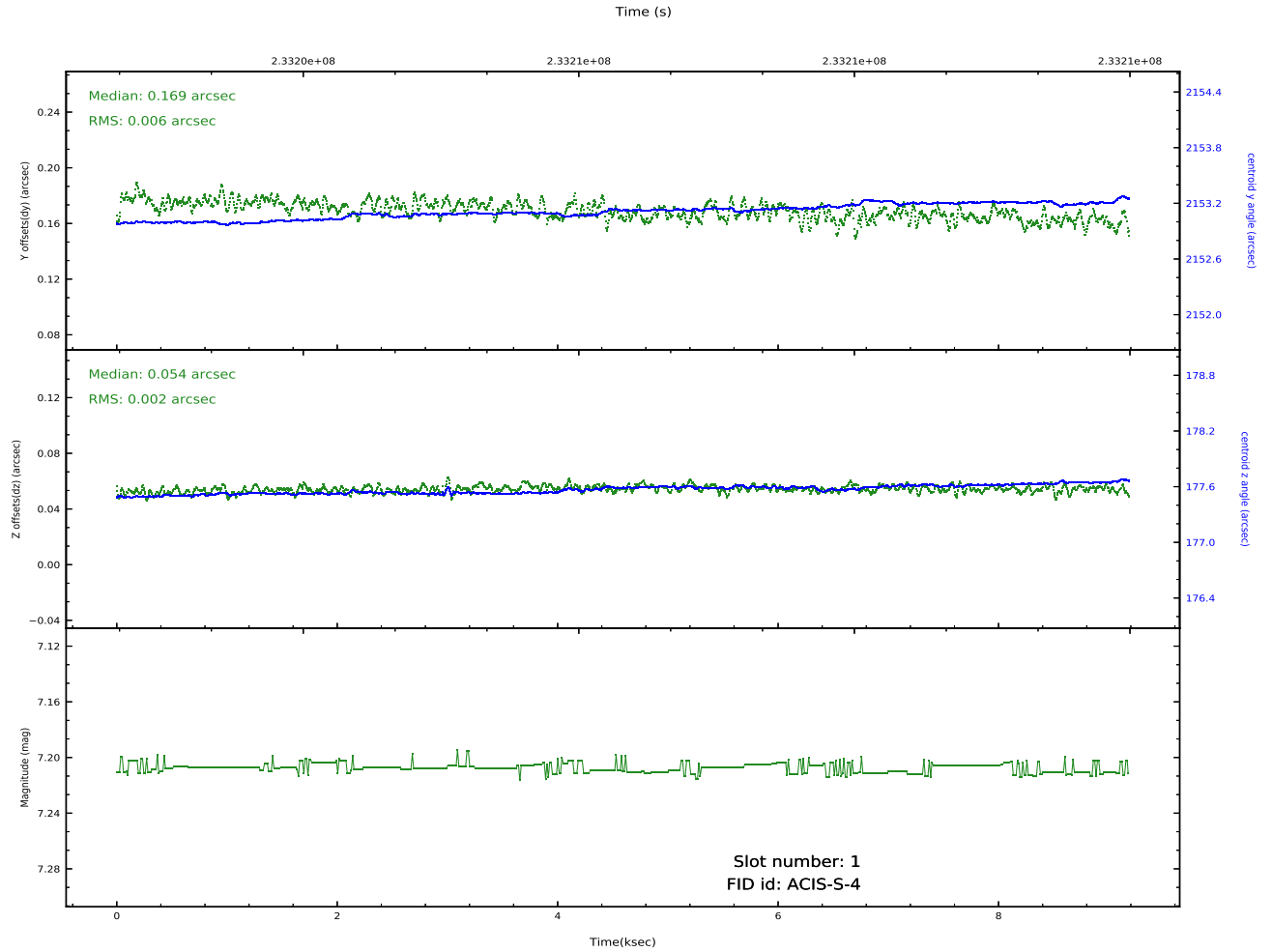
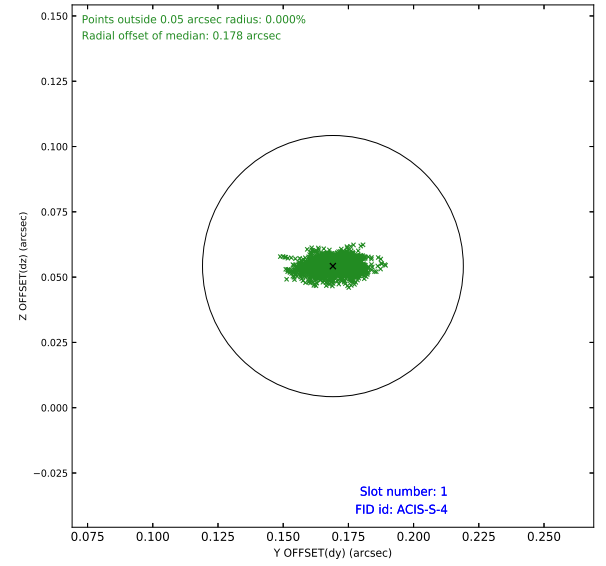
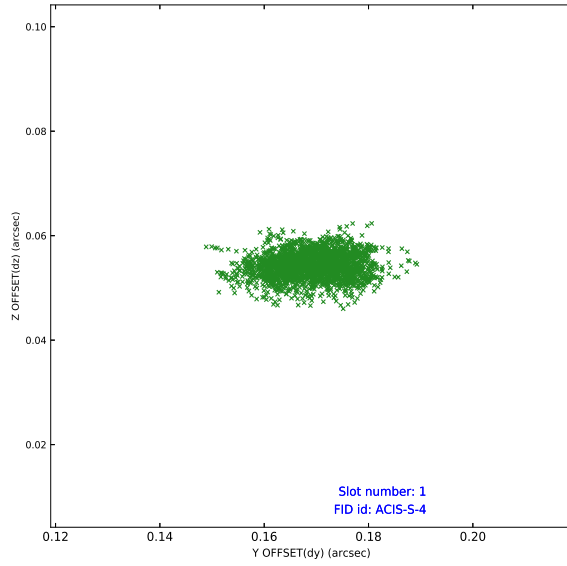


## 2.5 FID Slots

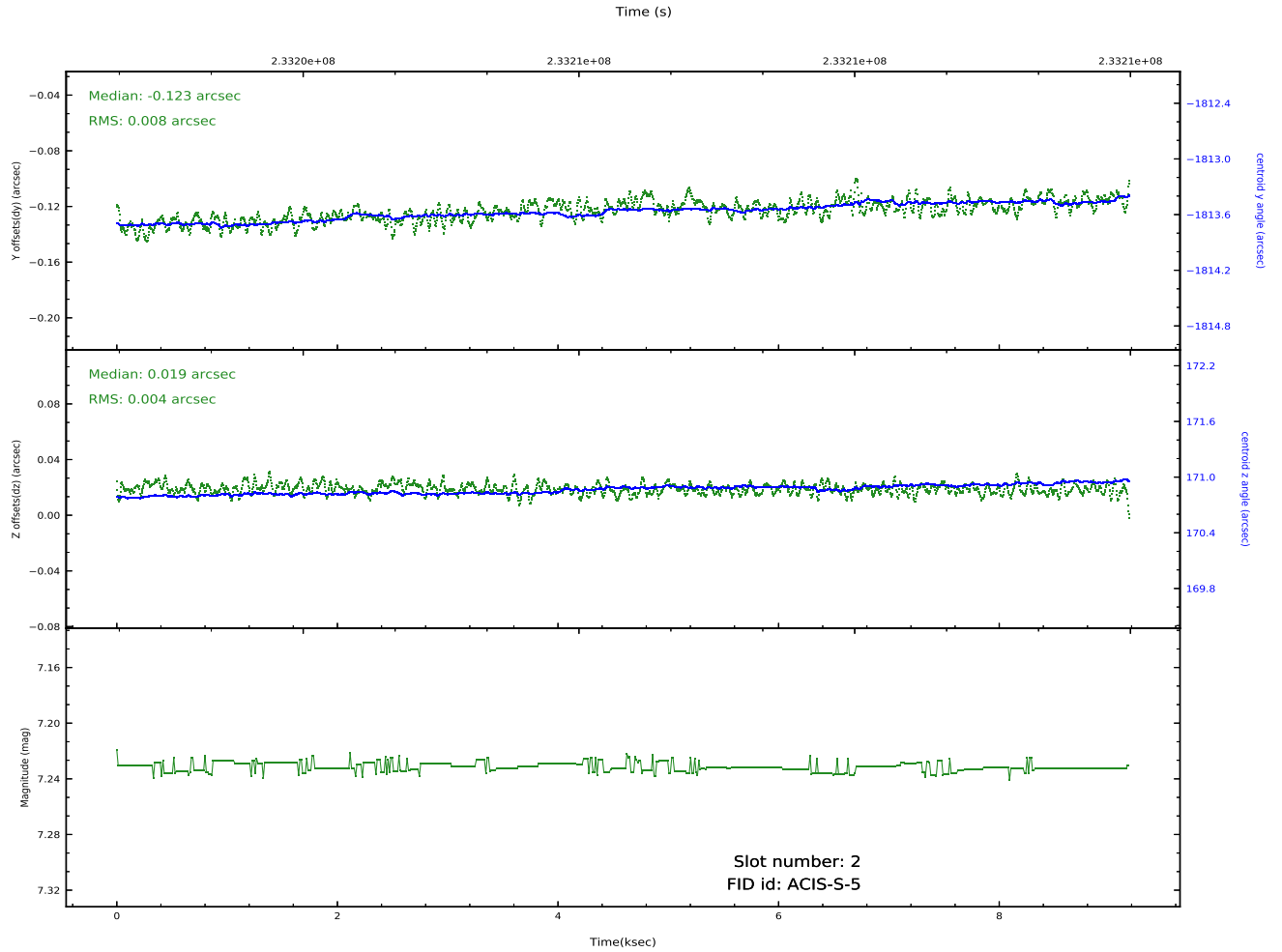
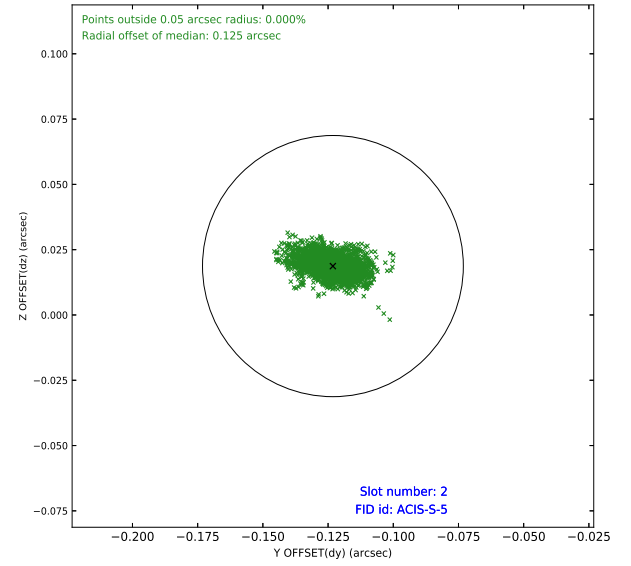
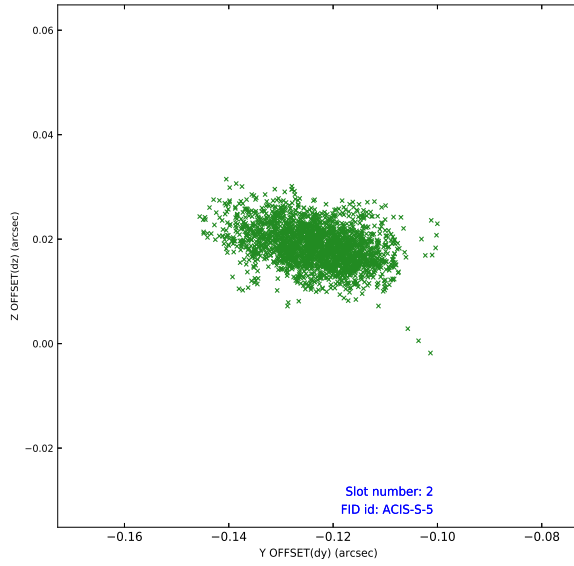
### 2.5.1 Slot 0



## 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)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.177599

### A.2 Comments