

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5394 - L2 Version 4  
Chandra X-Ray Center

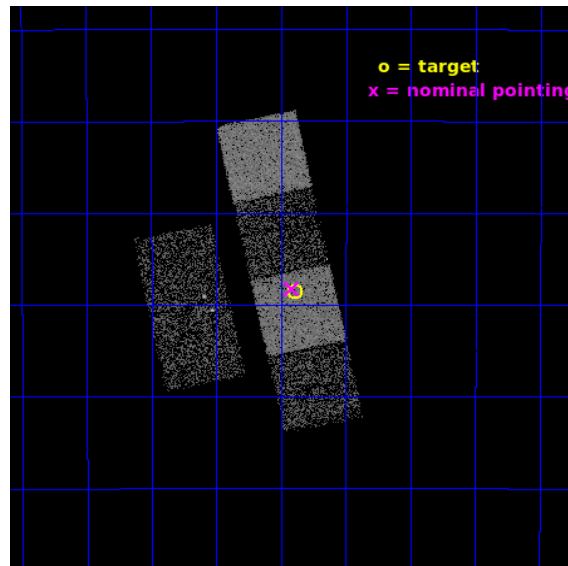
L2 Processing Date : Oct 7 2020

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# 1 Front

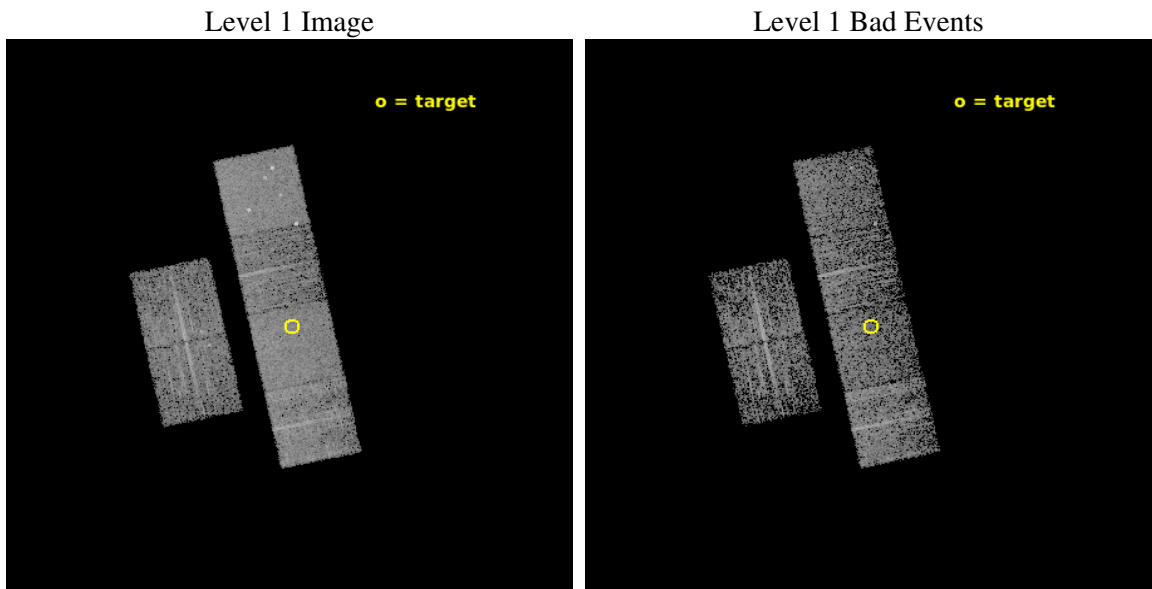
seq_num	200329	Sequence number
obs_id	5394	Observation id
title	The puzzle of X-ray emission from magnetic stars without convective envelopes	Proposal title
observer	J rgen Schmitt	Principal investigator
object	HD 146001	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	243.7225	Observer's specified target RA [deg]
dec_targ	-25.476972	Observer's specified target Dec [deg]
ra_nom	243.72903917405	Nominal RA [deg]
dec_nom	-25.470813418344	Nominal Dec [deg]
roll_nom	77.902776297775	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2751.999989748	Sum of GTIs [s]
livetime	2717.1525088224	Livetime [s]
ontime2	2751.999989748	Sum of GTIs [s]
ontime3	2751.999989748	Sum of GTIs [s]
ontime5	2751.999989748	Sum of GTIs [s]
ontime6	2751.999989748	Sum of GTIs [s]
ontime7	2751.999989748	Sum of GTIs [s]
ontime8	2748.7590094507	Sum of GTIs [s]
l2events	33661	Number of level 2 events



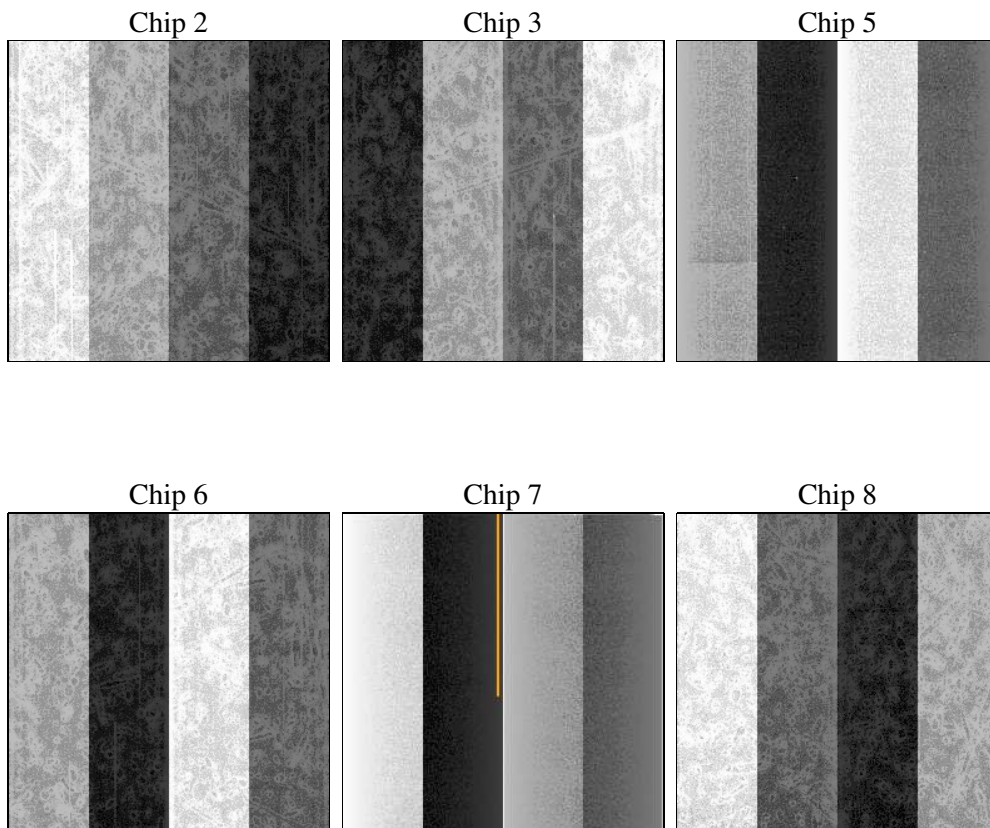
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	2751.999989748	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	2751.999989748	Sum of GTIs [s]
date	2020-10-07T10:41:32	Date and time of file creation	ontime3	2751.999989748	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	2751.999989748	Sum of GTIs [s]
			ontime6	2751.999989748	Sum of GTIs [s]
			ontime7	2751.999989748	Sum of GTIs [s]
			ontime8	2748.7590094507	Sum of GTIs [s]
			l1events	147875	Number of level 1 events

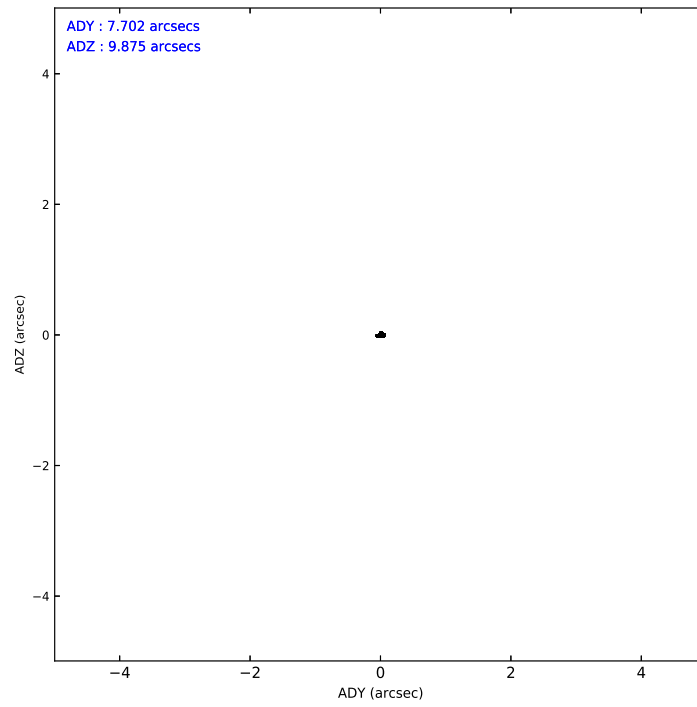
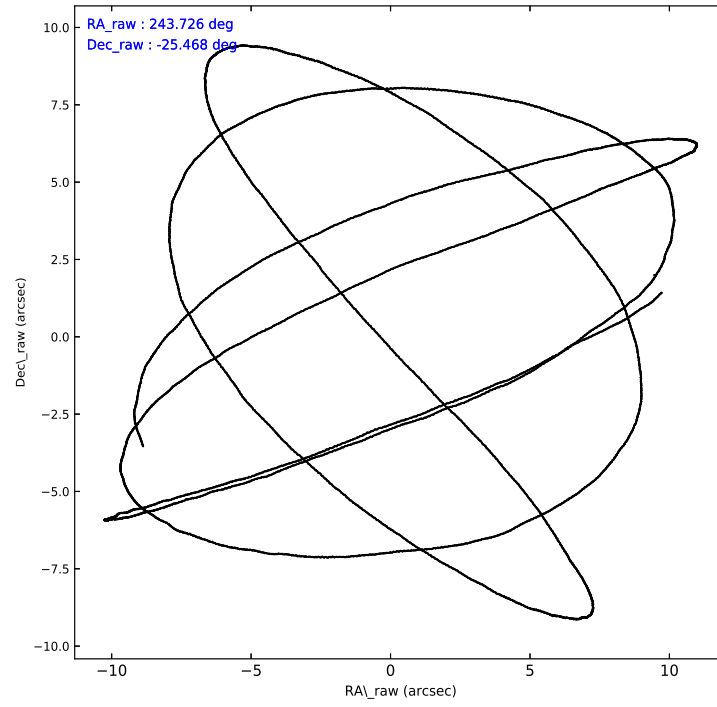
### 2.1.4 Events

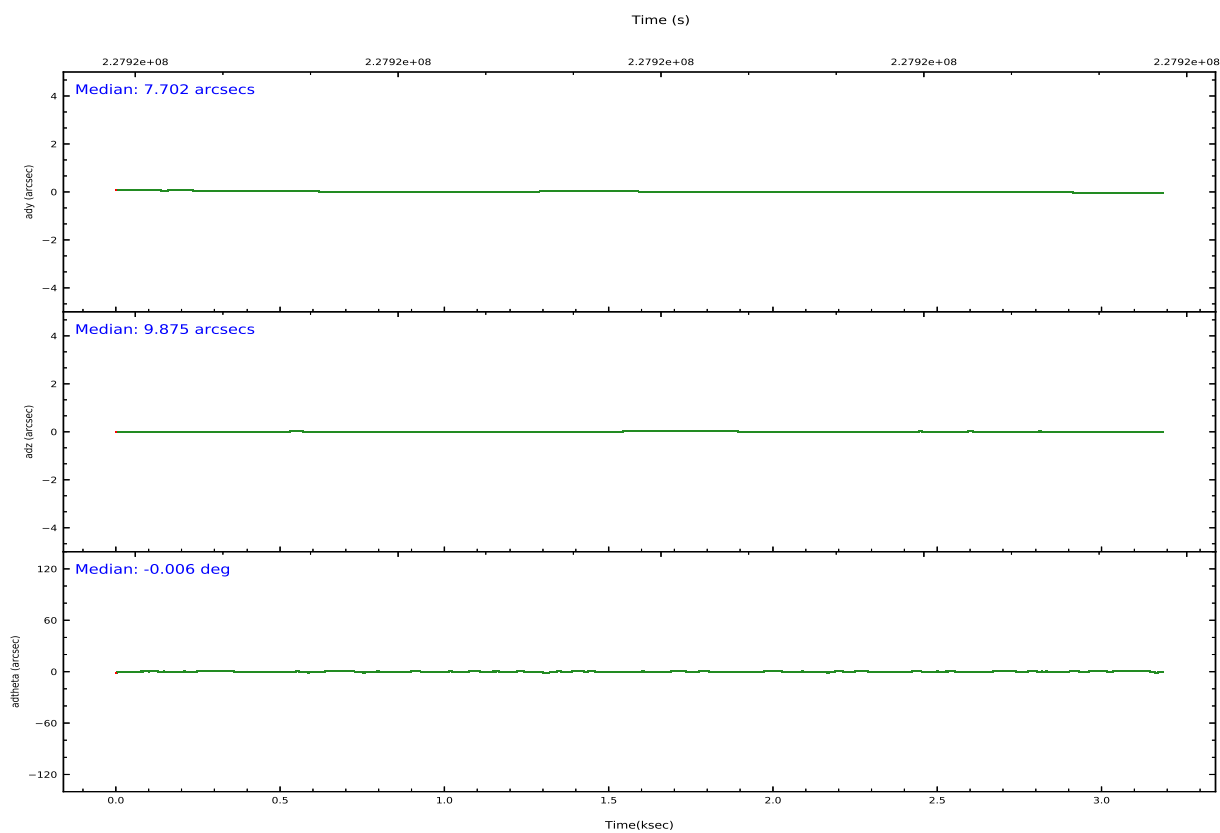
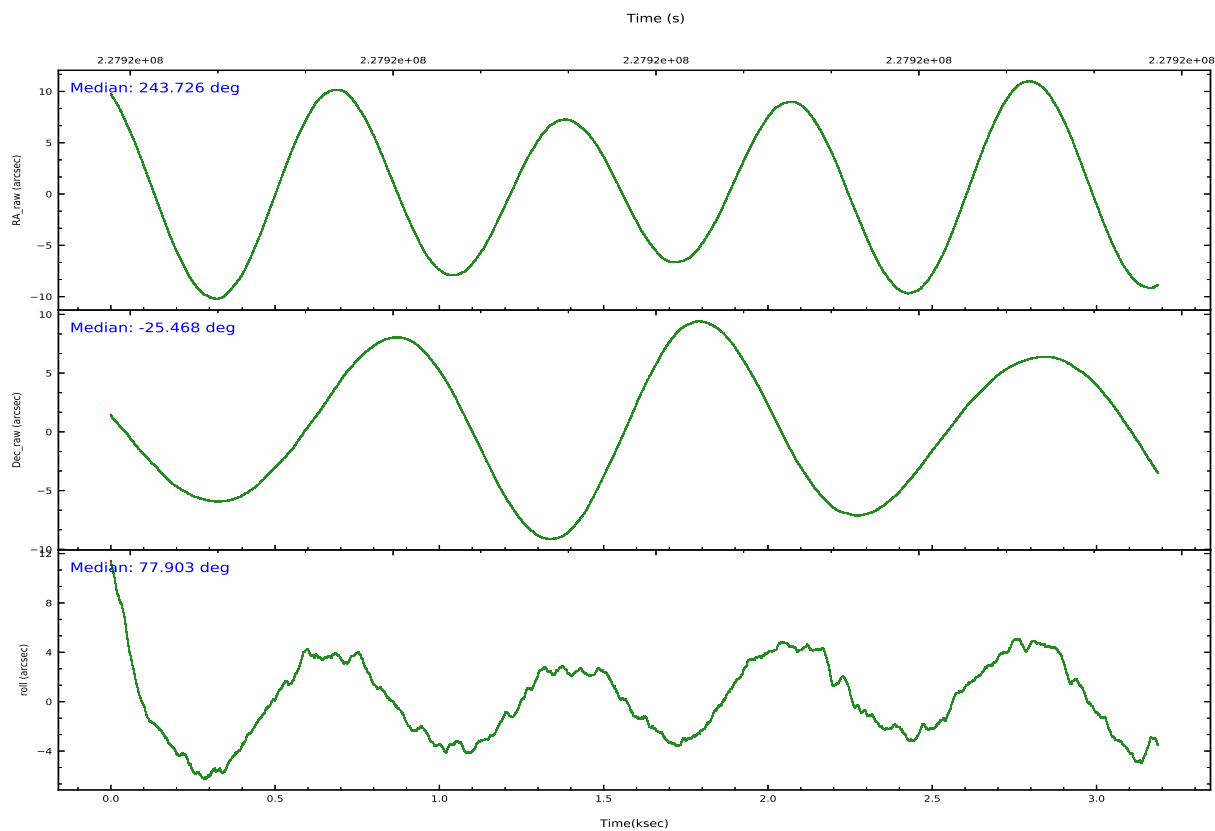
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	20473	18932	32018	20172	28197	28083	grade 0 events	1153	1201	2080	1121	1136	1666
rejected events	17990	16391	16826	17620	16282	22755		5%	6%	6%	5%	4%	5%
rejected %	87%	86%	52%	87%	57%	81%	grade 1 events	8	10	118	7	32	30
								0%	0%	0%	0%	0%	0%
							grade 2 events	514	464	4418	485	2404	1188
								2%	2%	13%	2%	8%	4%
							grade 3 events	234	220	616	224	1061	568
								1%	1%	1%	1%	3%	2%
							grade 4 events	217	214	600	241	1040	539
								1%	1%	1%	1%	3%	1%
							grade 5 events	855	864	2324	929	2671	1227
								4%	4%	7%	4%	9%	4%
							grade 6 events	366	448	7502	486	6302	1375
								1%	2%	23%	2%	22%	4%
							grade 7 events	17126	15511	14360	16679	13551	21490
								83%	81%	44%	82%	48%	76%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	243.736208	243.72903917405	Subarray requested	NONE	NONE
[deg] Pointing Dec	-25.493817	-25.470813418344	Alternating exposures requested	N	N
[deg] Pointing Roll	77.751352	77.90277629777501	[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	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	227920929.184000	227920489.99086			
Observation start date	2005-03-22T23:21:05	2005-03-22T23:14:49			
[s] Observation end time (MET)	227923929.184000	227924703.76605			
Observation end date	2005-03-23T00:11:05	2005-03-23T00:25:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect





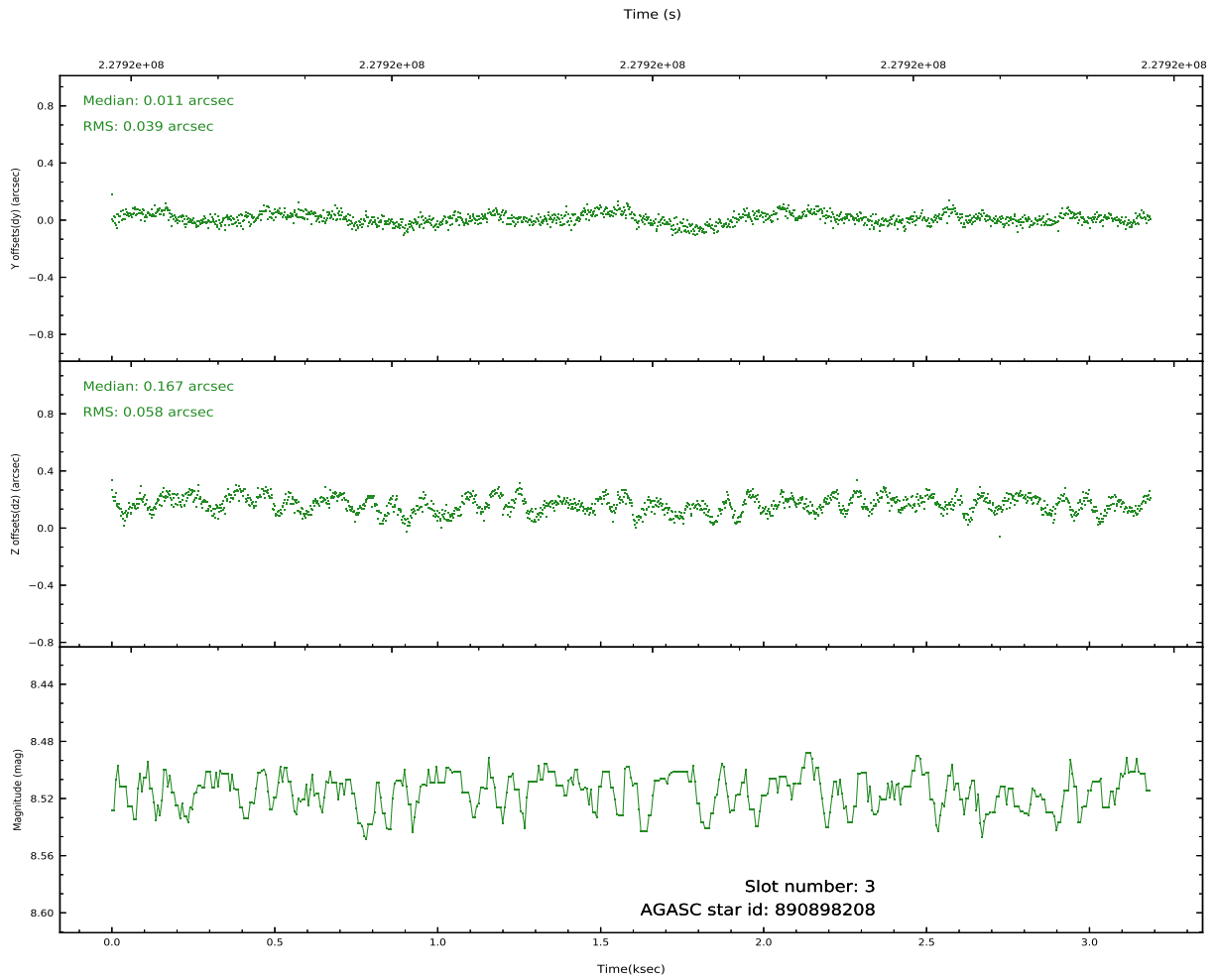
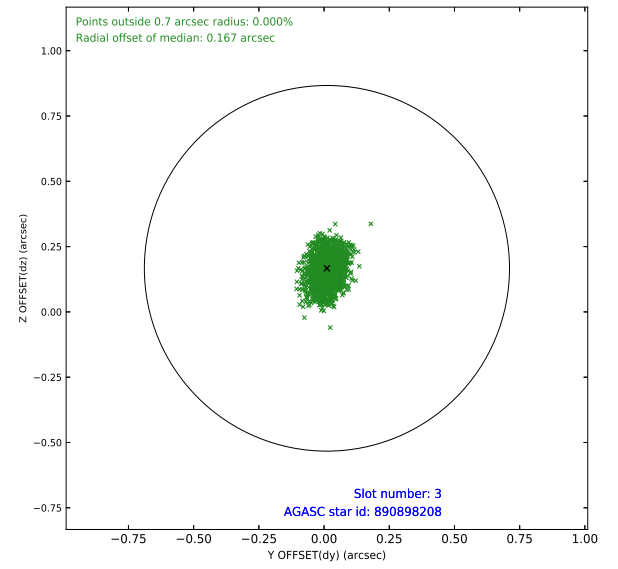
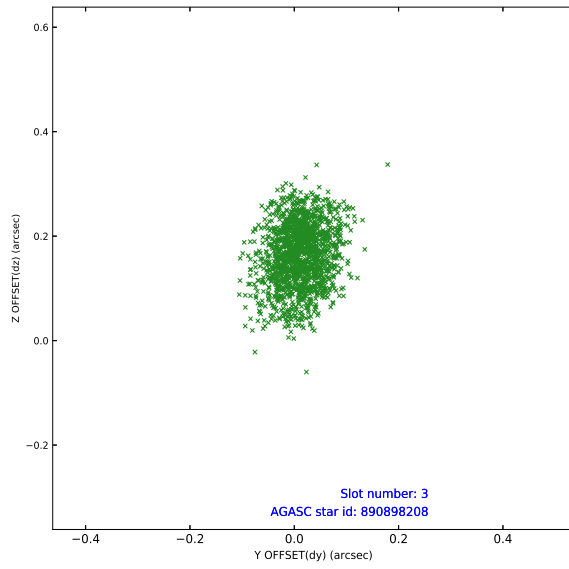
Slot Statistics

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	778	1.000	-0.072	-0.065	0.007	0.011	0.000000	0.000000	-760.48	-1731
1	FID		ACIS-S-4	7.21	778	1.000	0.166	0.052	0.005	0.009	0.000000	0.000000	2152.05	175
2	FID		ACIS-S-5	7.23	778	1.000	-0.126	0.022	0.007	0.013	0.000000	0.000000	-1810.89	171
3	GUIDE	used	890898208	8.51	1555	1.000	0.011	0.167	0.074	0.122	244.210941	-25.862972	-974.77	-1785
4	GUIDE	used	890900136	8.54	1556	1.000	0.120	-0.087	0.056	0.093	243.262361	-25.914713	-1809.48	1175
5	GUIDE	used	890900216	7.78	1556	1.000	-0.174	0.070	0.052	0.083	243.945266	-25.121526	1452.20	-380
6	GUIDE	used	890900832	7.59	1556	1.000	0.185	-0.226	0.056	0.090	242.963556	-25.883569	-1908.60	2146
7	GUIDE	used	890901472	8.22	1554	1.000	-0.143	0.083	0.067	0.105	244.104882	-24.988748	2029.33	-788

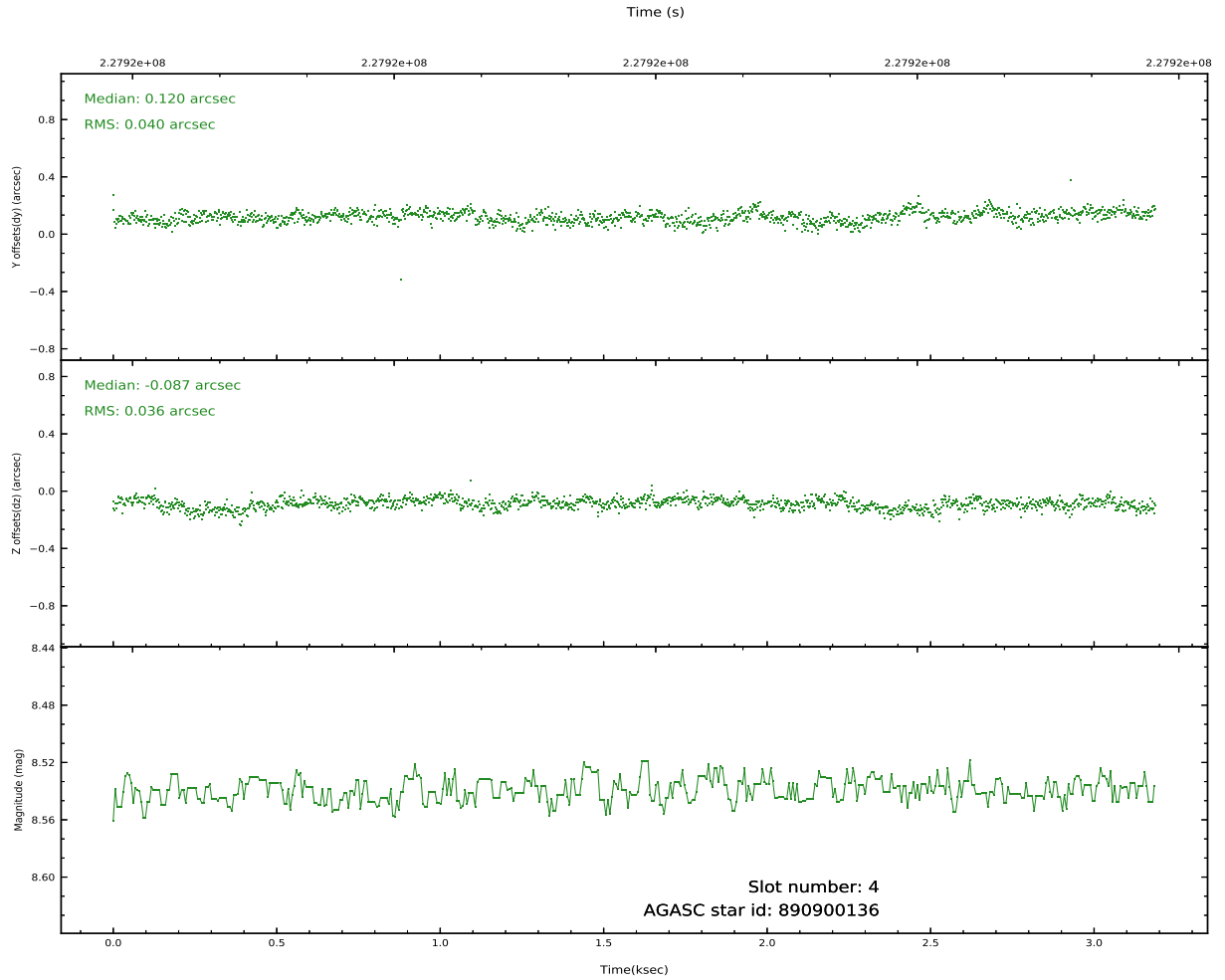
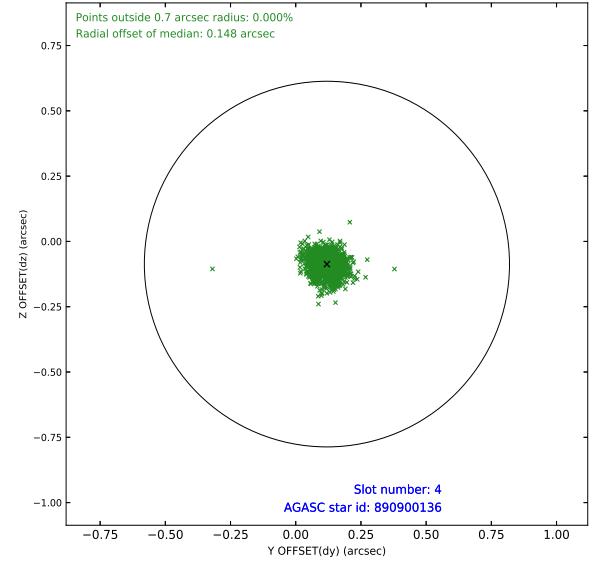
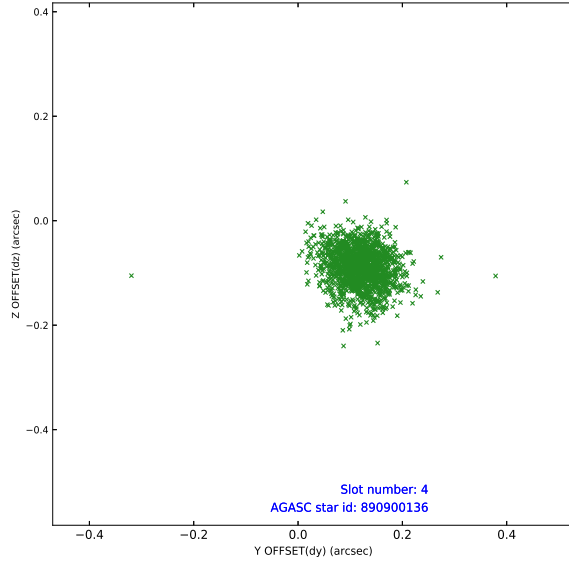


## 2.4 Star Slots

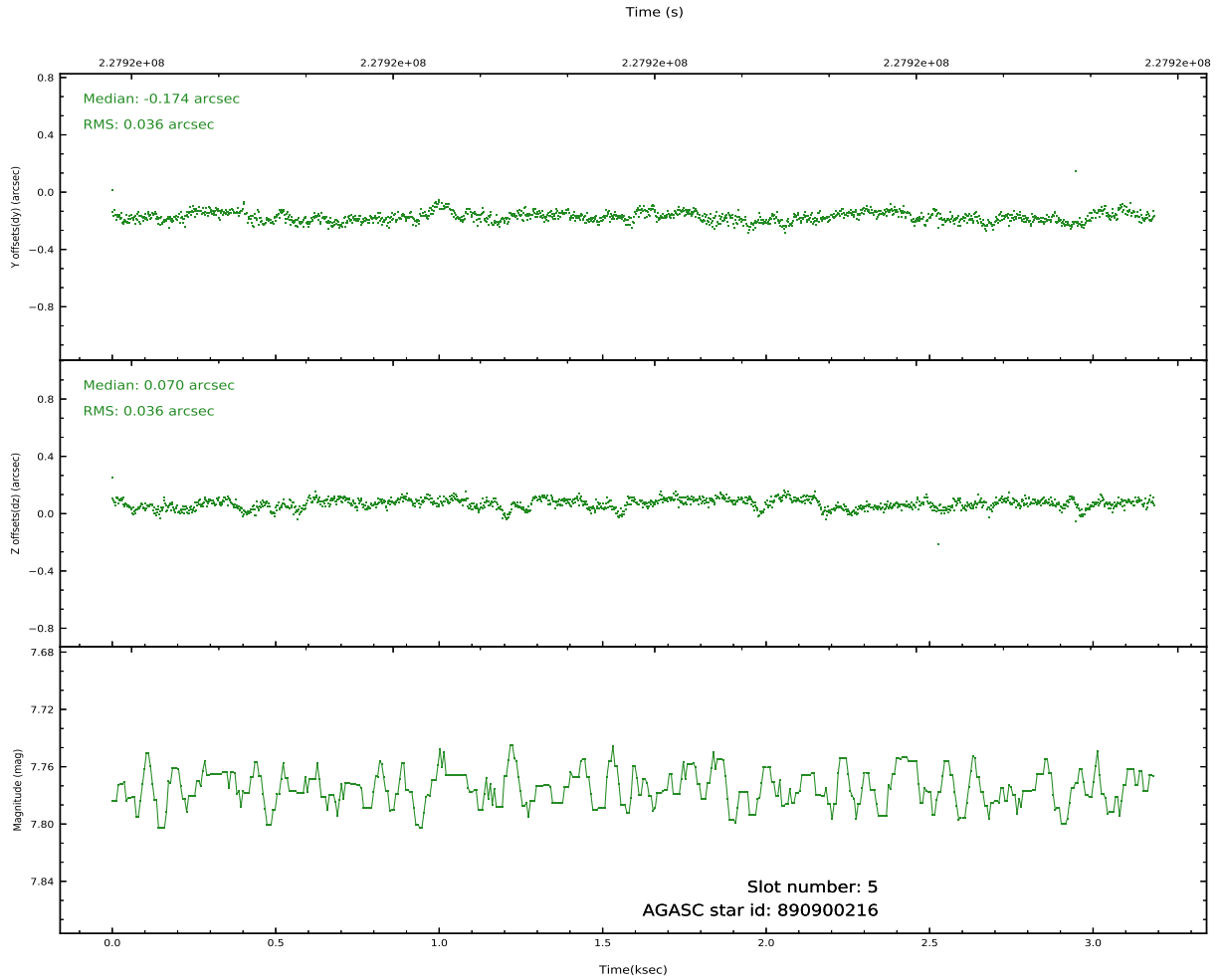
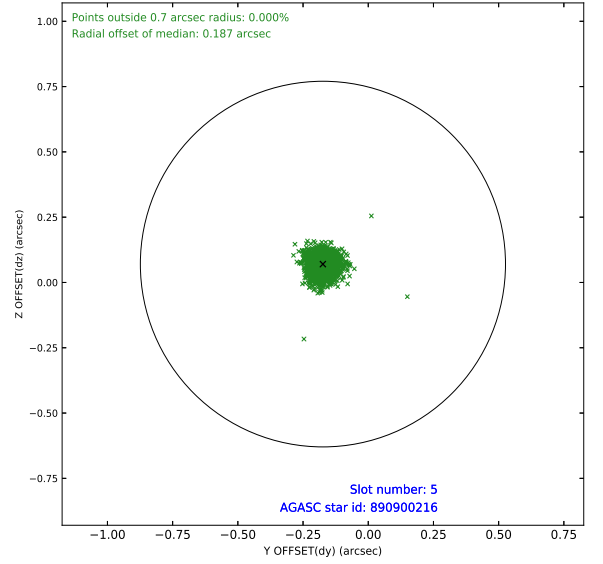
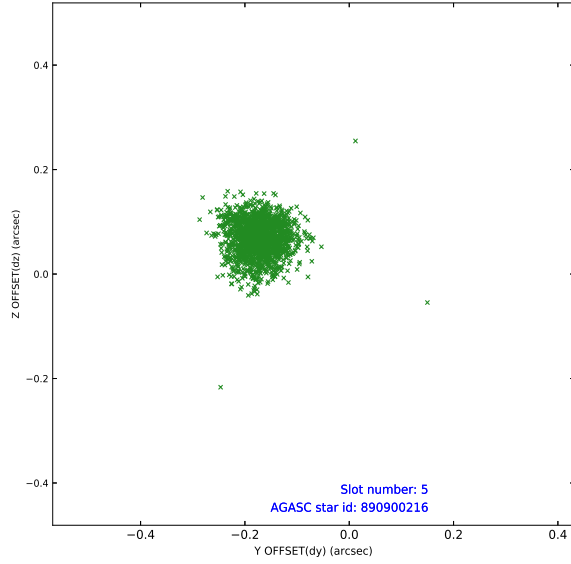
### 2.4.1 Slot 3



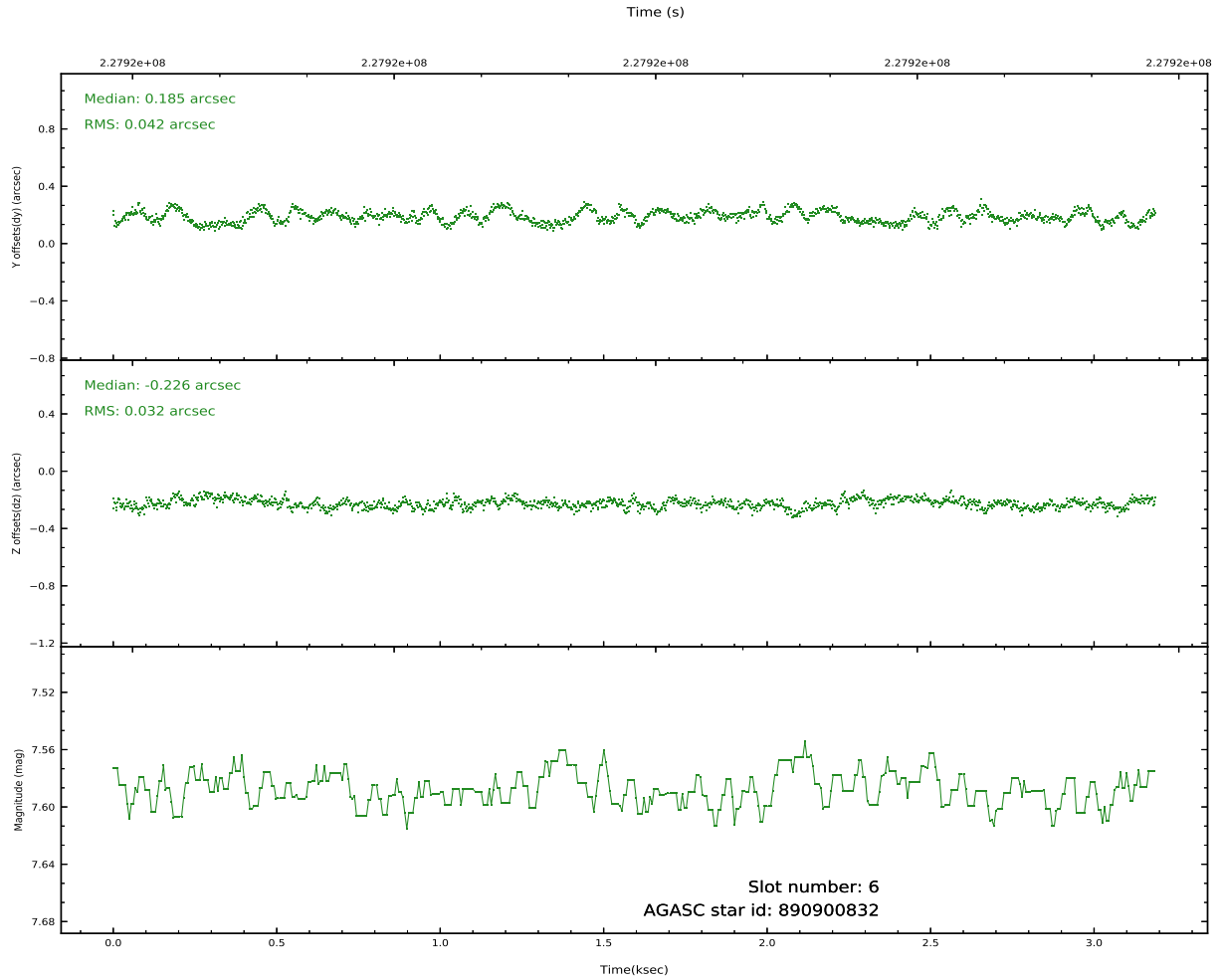
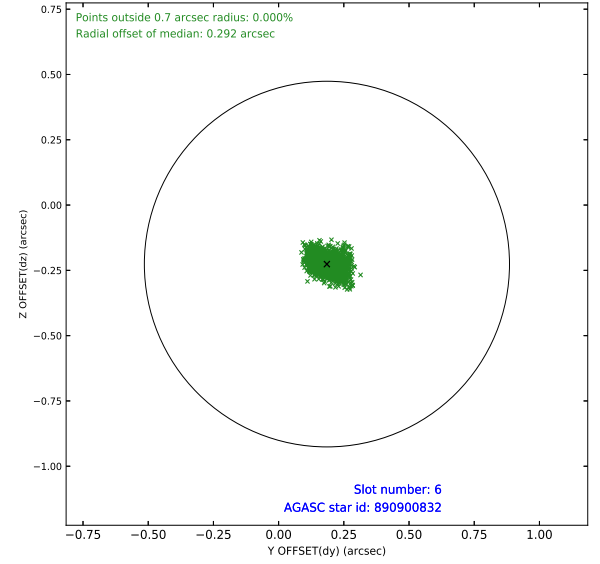
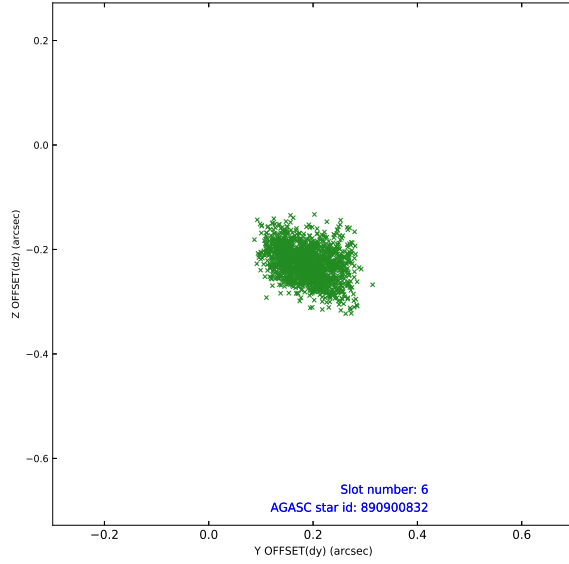
## 2.4.2 Slot 4



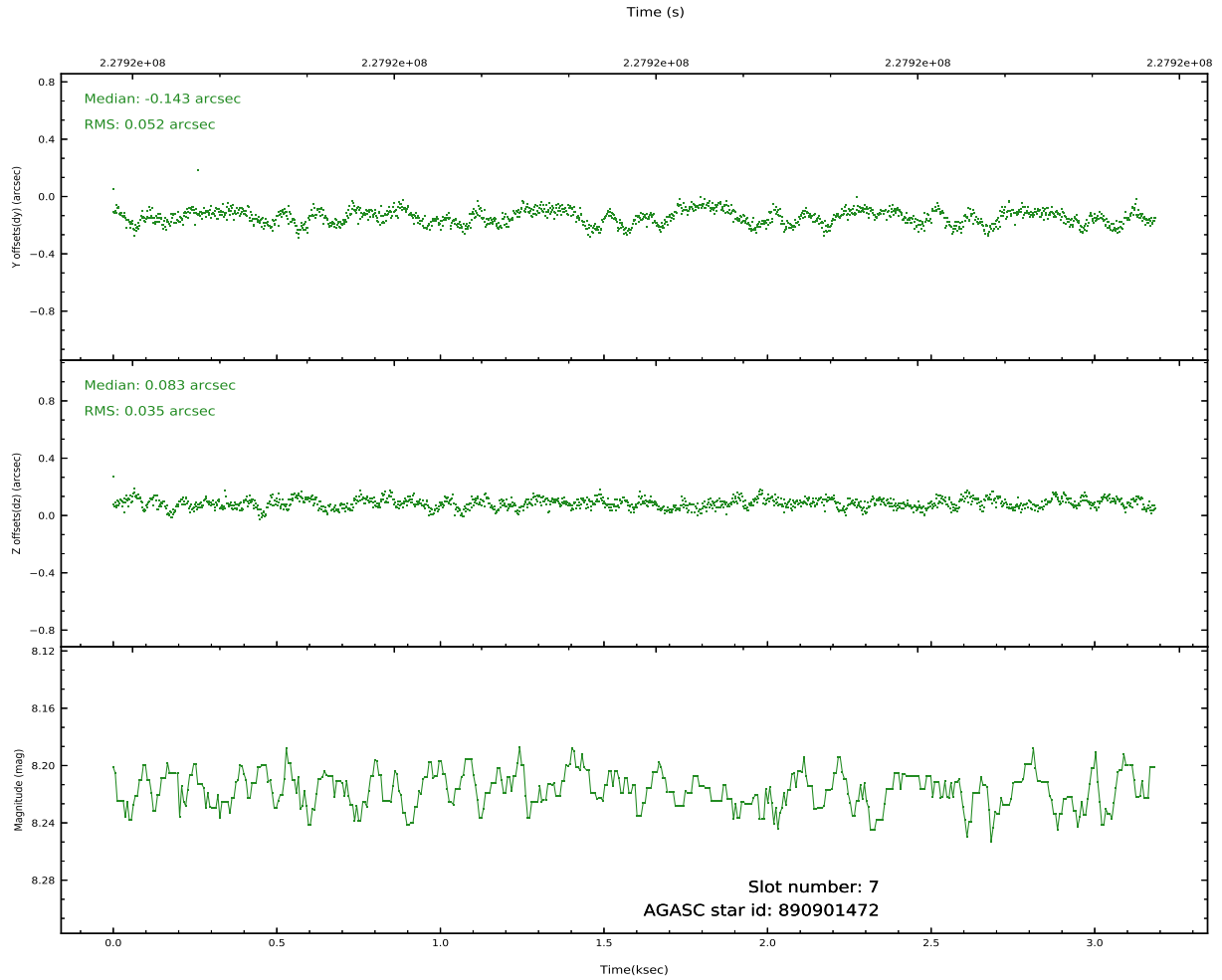
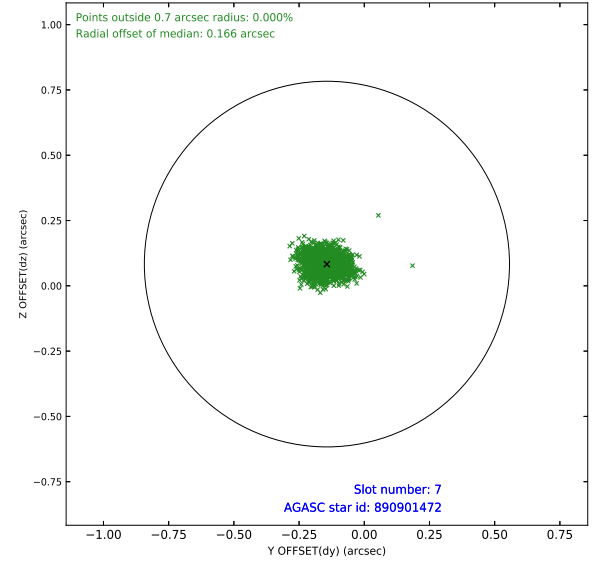
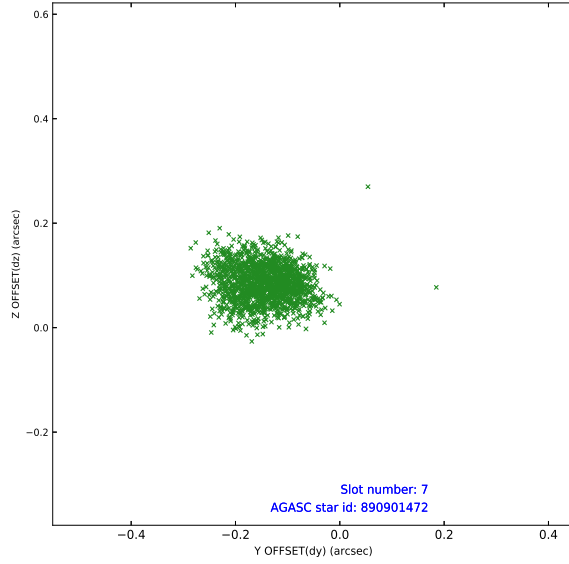
### 2.4.3 Slot 5



## 2.4.4 Slot 6

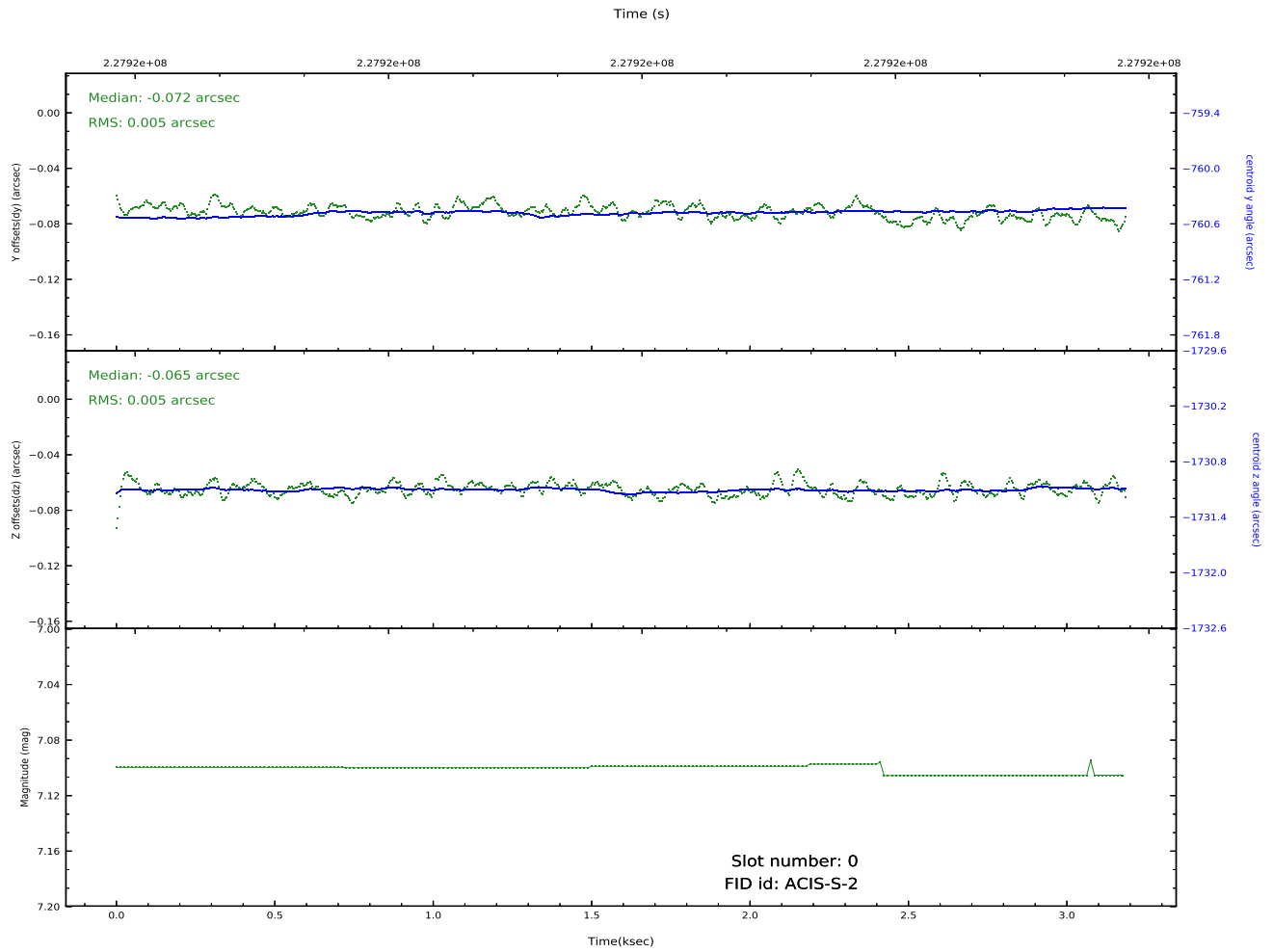
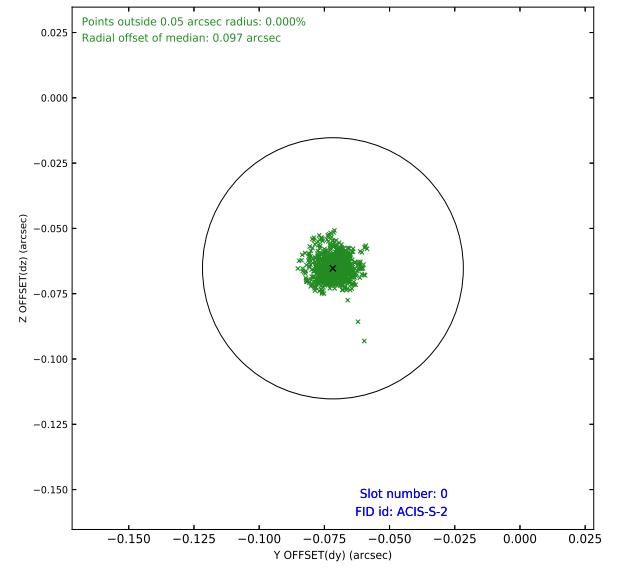
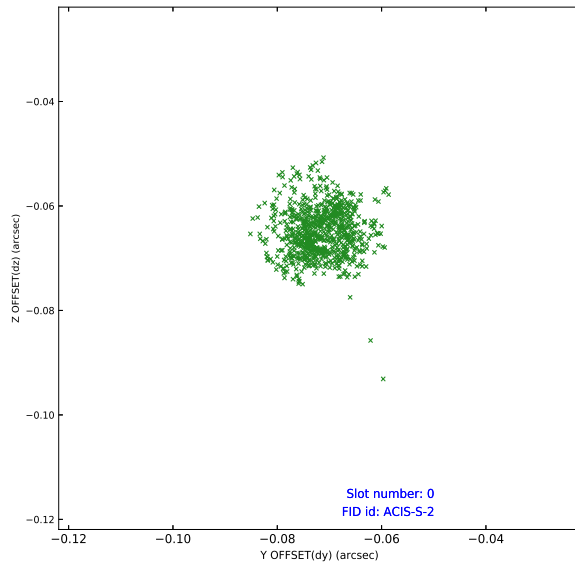


## 2.4.5 Slot 7

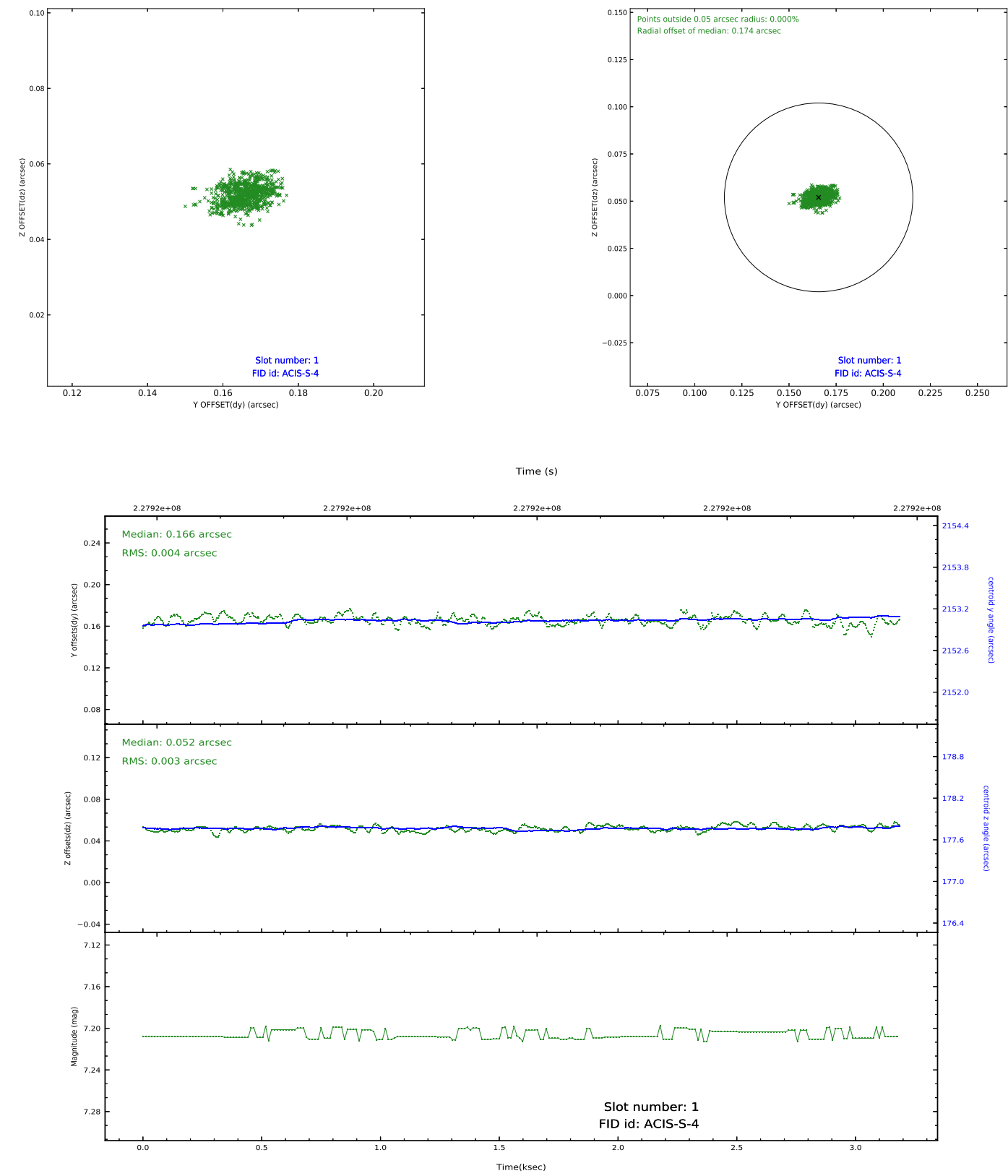


## 2.5 FID Slots

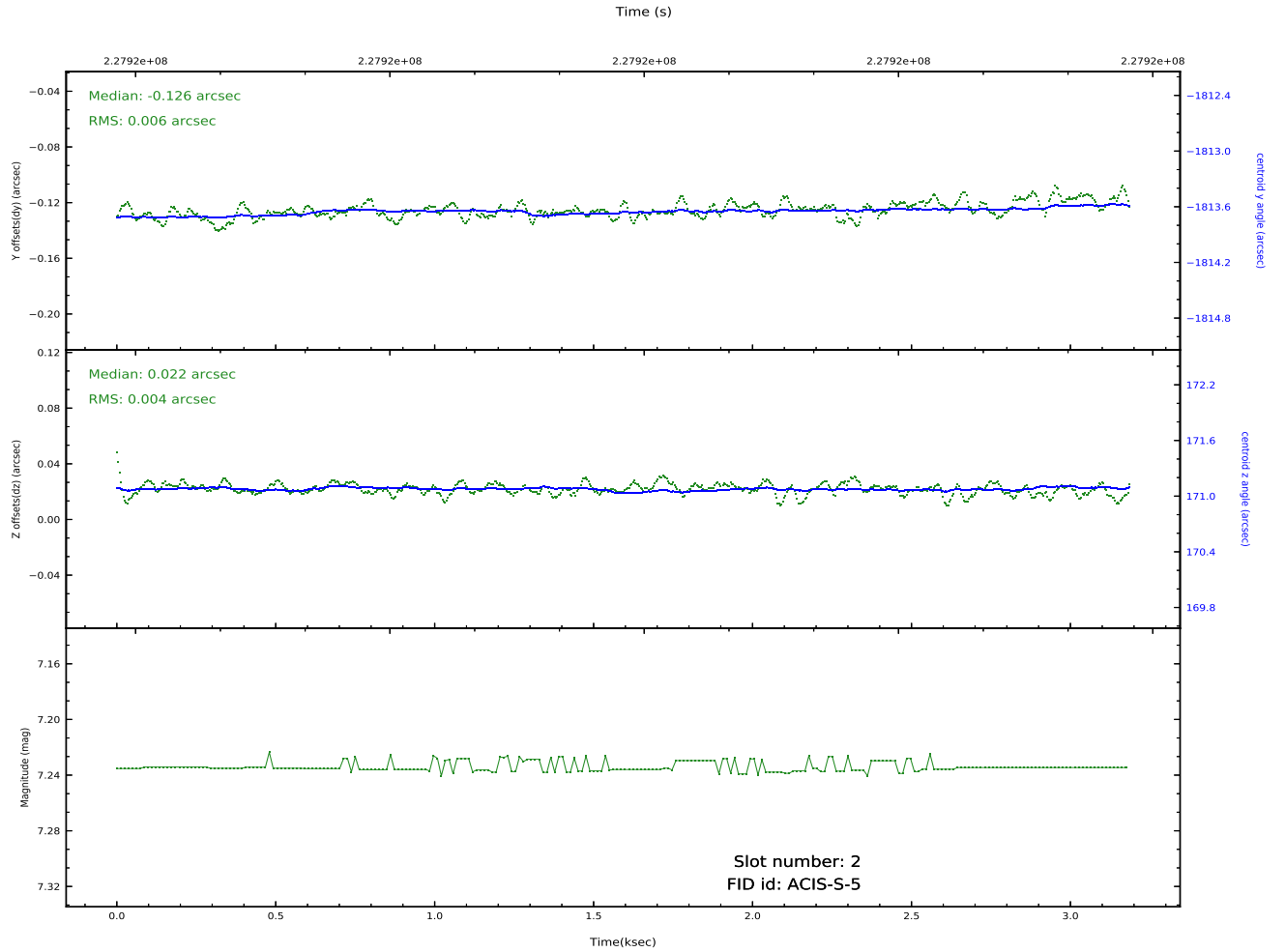
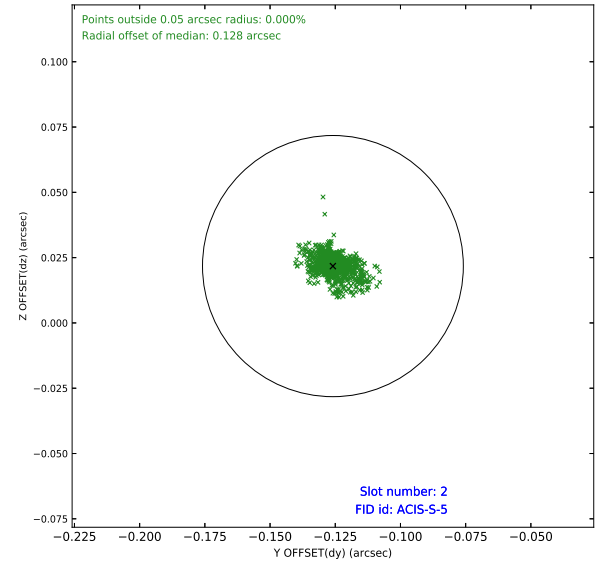
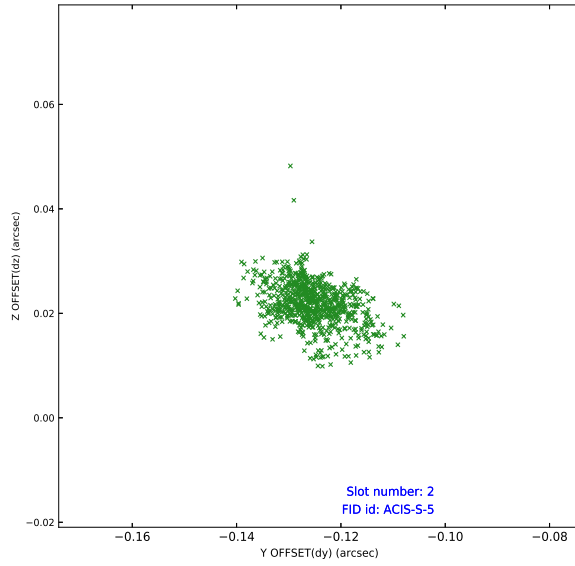
### 2.5.1 Slot 0



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)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.751999

### A.2 Comments