

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4832 - L2 Version 4  
Chandra X-Ray Center

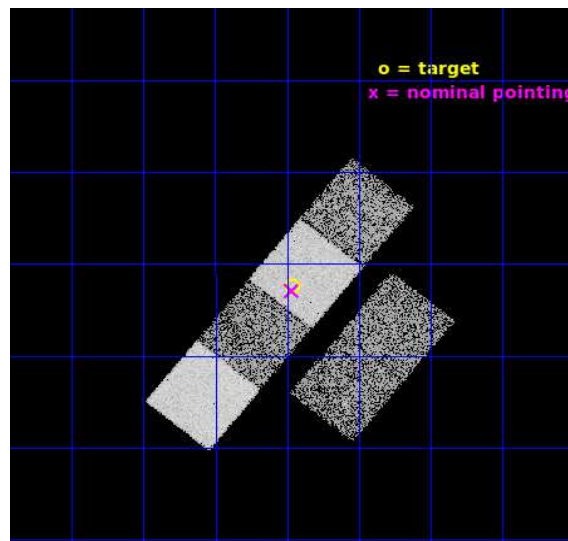
L2 Processing Date : Oct 4 2020

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# 1 Front

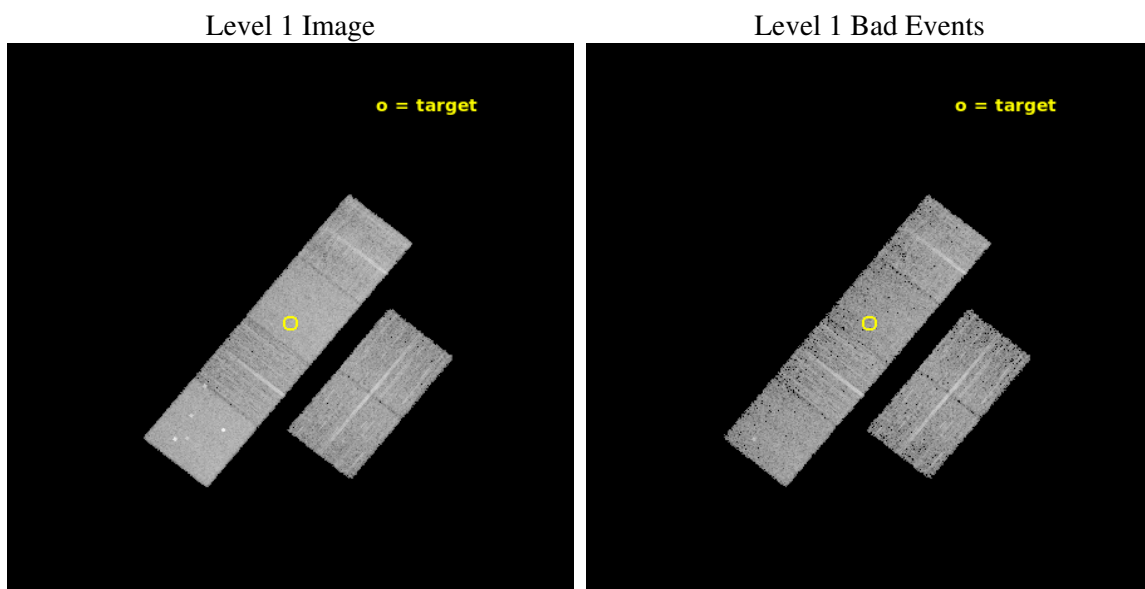
seq_num	700914	Sequence number
obs_id	4832	Observation id
title	Constraining the Hard-X-ray Through Submm SEDs of a Complete Sample of Broad Absorption Line Quasars	Proposal title
observer	Dr. Sarah Gallagher	Principal investigator
object	LBQS 0109-0128	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	18.115	Observer's specified target RA [deg]
dec_targ	-1.206083	Observer's specified target Dec [deg]
ra_nom	18.116580992324	Nominal RA [deg]
dec_nom	-1.2148958090461	Nominal Dec [deg]
roll_nom	308.91525316564	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5955.1999778152	Sum of GTIs [s]
livetime	5879.7916499051	Livetime [s]
ontime2	5955.1999778152	Sum of GTIs [s]
ontime3	5951.9590174556	Sum of GTIs [s]
ontime5	5955.1999778152	Sum of GTIs [s]
ontime6	5955.1999778152	Sum of GTIs [s]
ontime7	5955.1999778152	Sum of GTIs [s]
ontime8	5955.1999778152	Sum of GTIs [s]
l2events	75344	Number of level 2 events



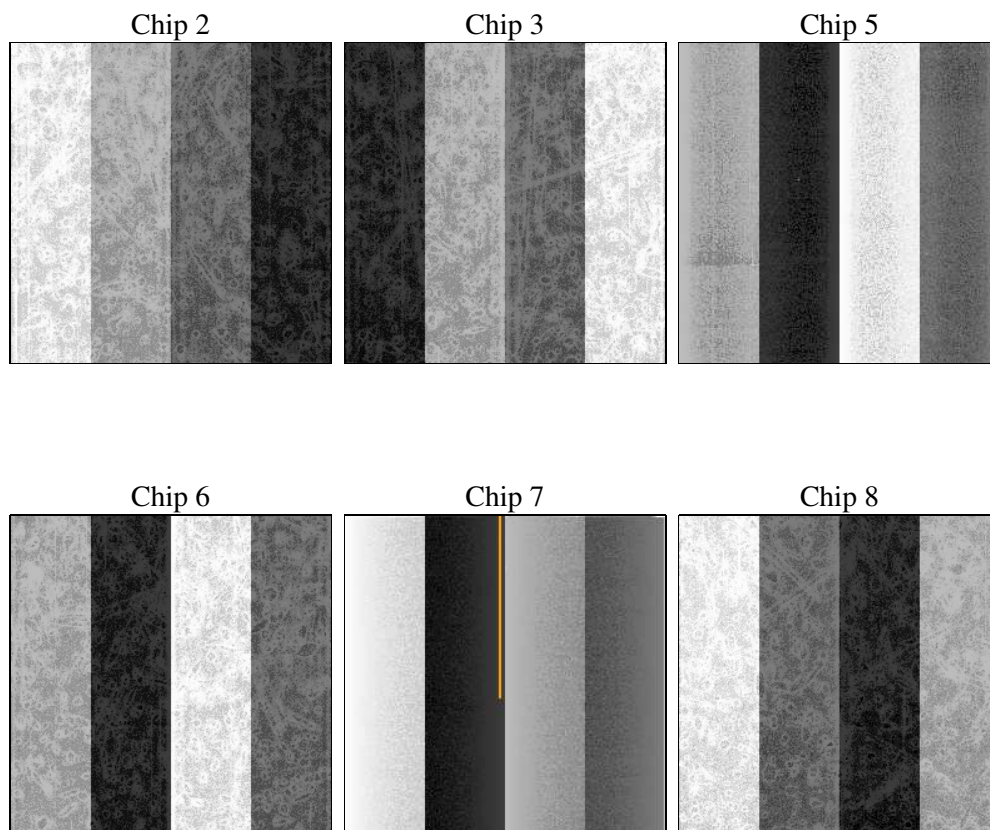
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	5955.1999778152	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	5955.1999778152	Sum of GTIs [s]
date	2020-10-04T23:37:01	Date and time of file creation	ontime3	5951.9590174556	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	5955.1999778152	Sum of GTIs [s]
			ontime6	5955.1999778152	Sum of GTIs [s]
			ontime7	5955.1999778152	Sum of GTIs [s]
			ontime8	5955.1999778152	Sum of GTIs [s]
			l1events	334094	Number of level 1 events

### 2.1.4 Events

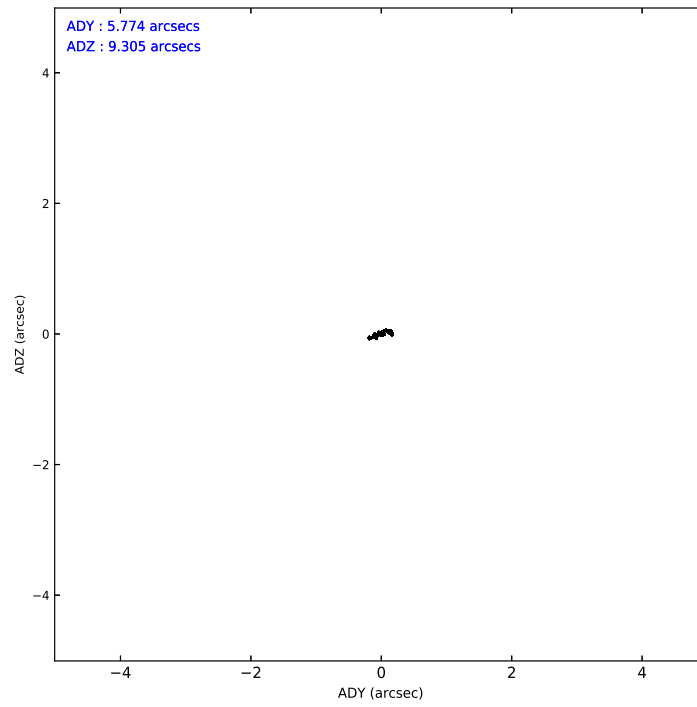
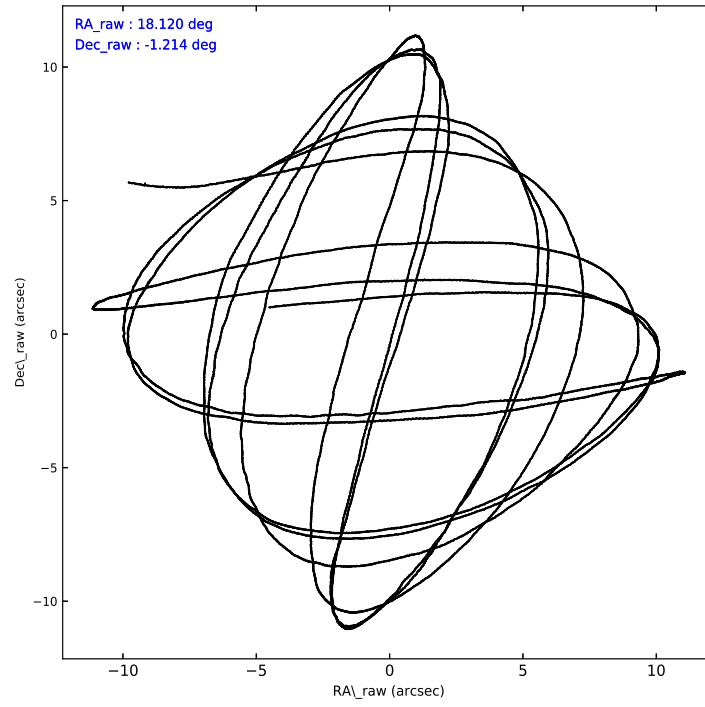
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	45528	45139	71072	48658	63681	60016	grade 0 events	2422	2358	4187	2369	2319	4252
rejected events	40081	39823	37512	42968	37356	46641		5%	5%	5%	4%	3%	7%
rejected %	88%	88%	52%	88%	58%	77%	grade 1 events	34	21	112	22	54	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	1123	978	9886	1162	5153	2834
								2%	2%	13%	2%	8%	4%
							grade 3 events	470	515	1344	538	2253	1385
								1%	1%	1%	1%	3%	2%
							grade 4 events	532	567	1248	518	2463	1319
								1%	1%	1%	1%	3%	2%
							grade 5 events	1808	2022	5217	2113	6025	2800
								3%	4%	7%	4%	9%	4%
							grade 6 events	906	900	16911	1104	14155	3598
								1%	1%	23%	2%	22%	5%
							grade 7 events	38233	37778	32167	40832	31259	43791
								83%	83%	45%	83%	49%	72%

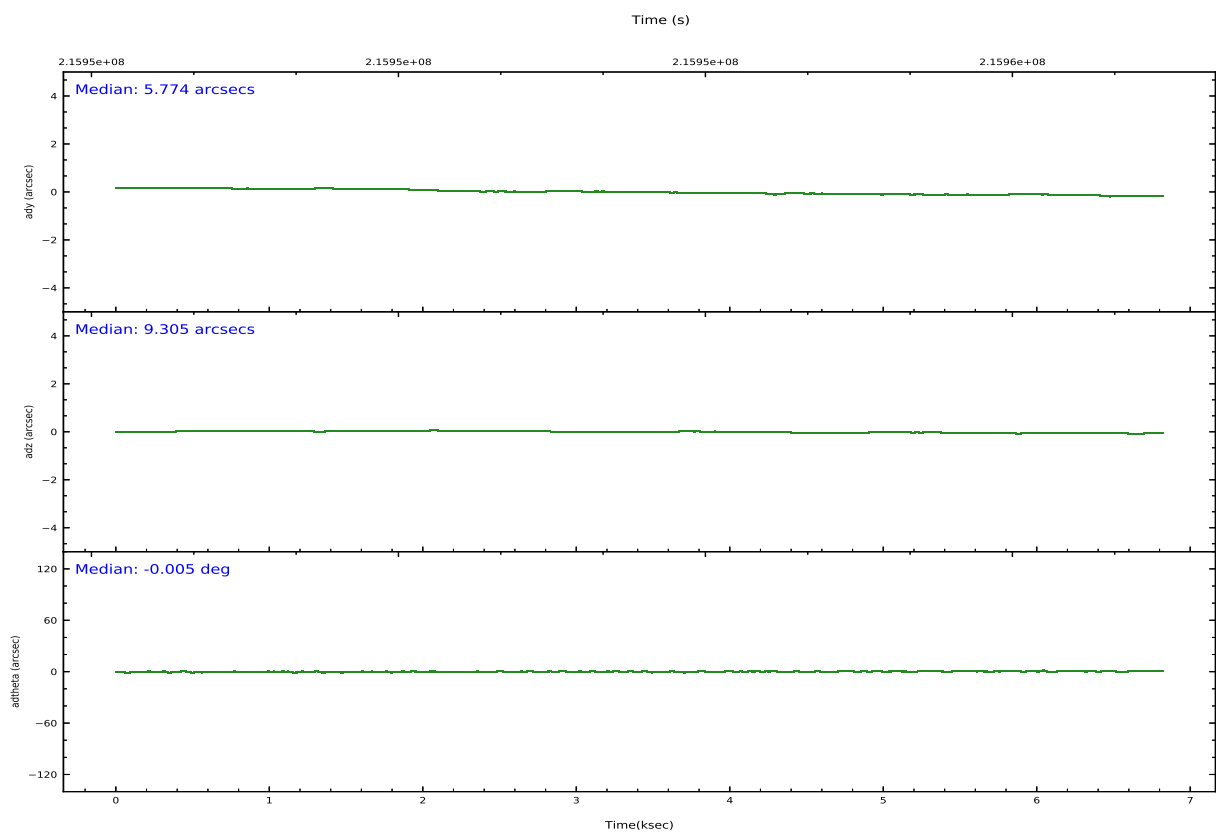
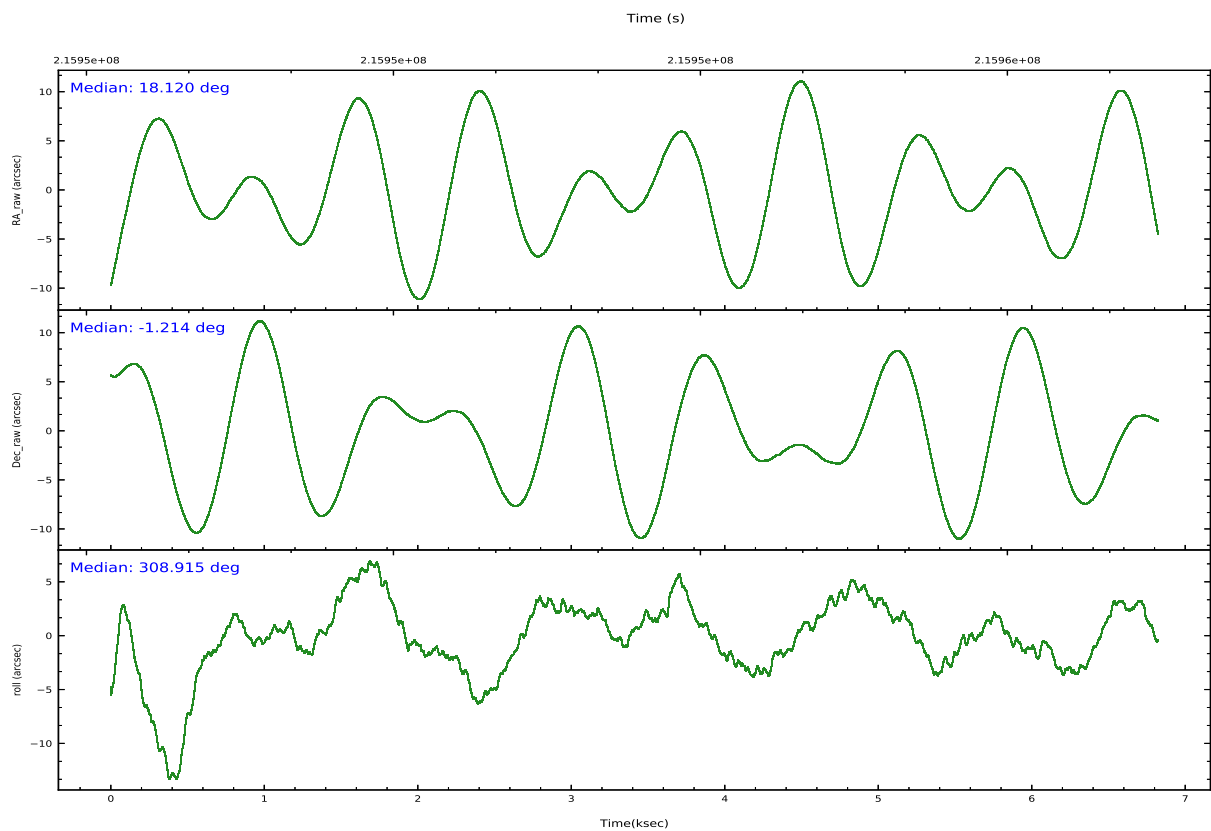


## 2.2 Compared Parameters

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	18.094113	18.116580992324	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.205105	-1.2148958090461	Alternating exposures requested	N	N
[deg] Pointing Roll	308.760155	308.91525316564	[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)	215950983.184000	215949647.70085			
Observation start date	2004-11-04T10:21:59	2004-11-04T10:00:47			
[s] Observation end time (MET)	215956983.184000	215957945.58872			
Observation end date	2004-11-04T12:01:59	2004-11-04T12:19:05			
Read mode	TIMED	TIMED			

## 2.3 Aspect



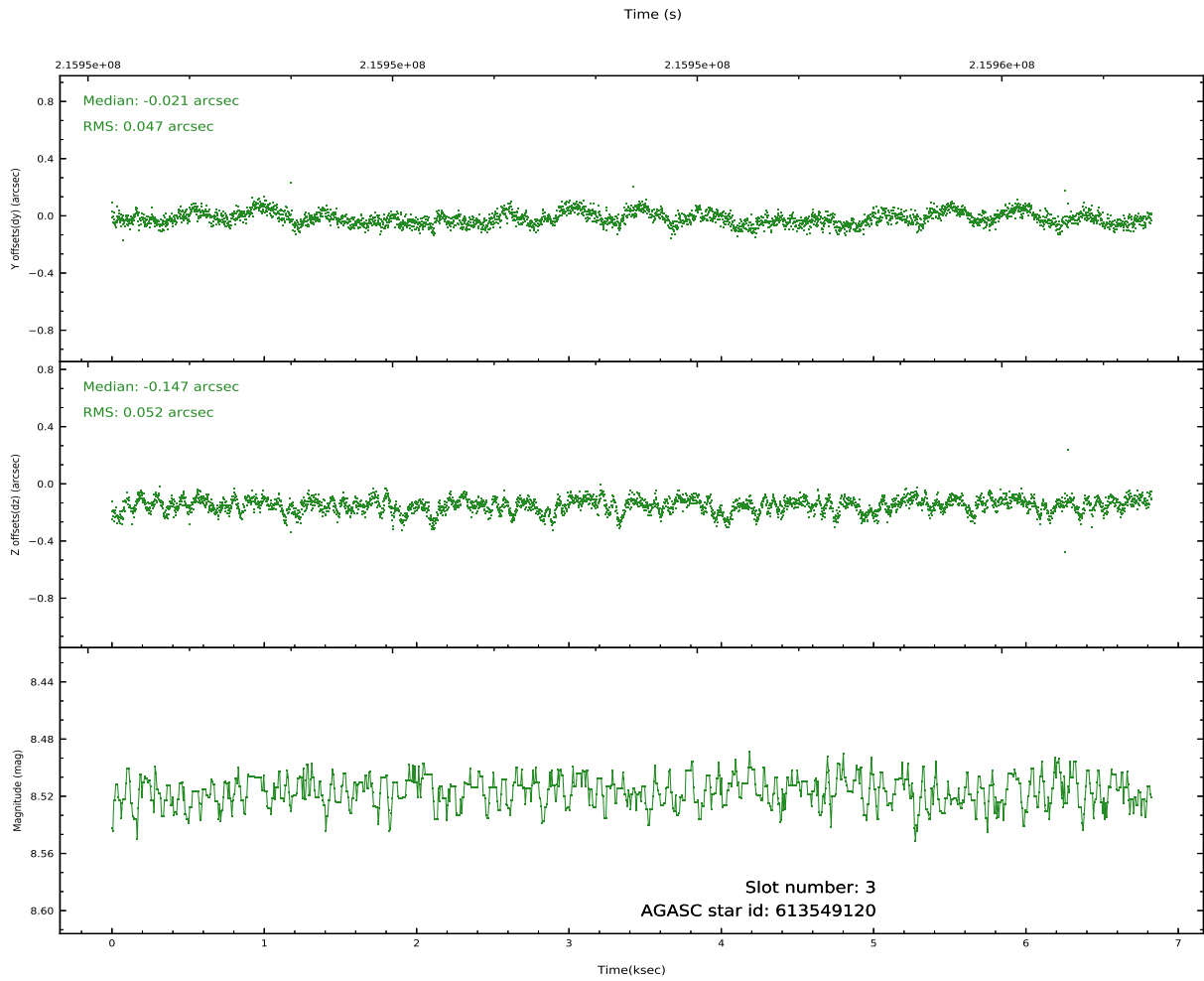
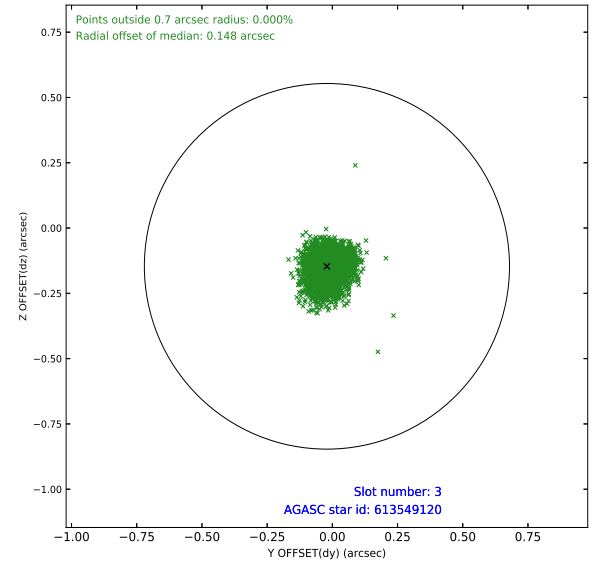
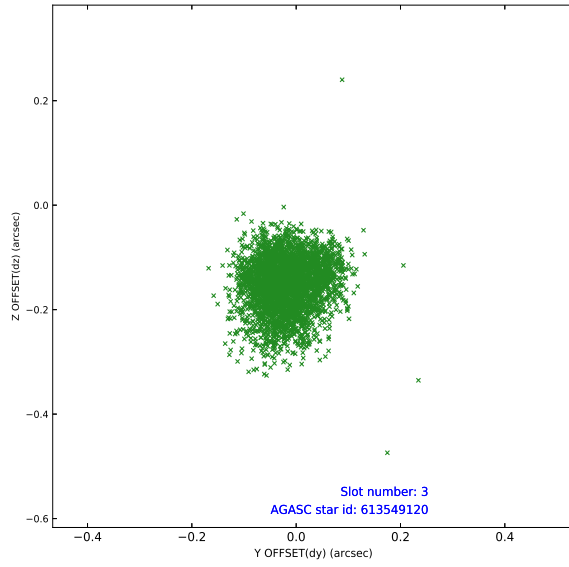


Slot Statistics

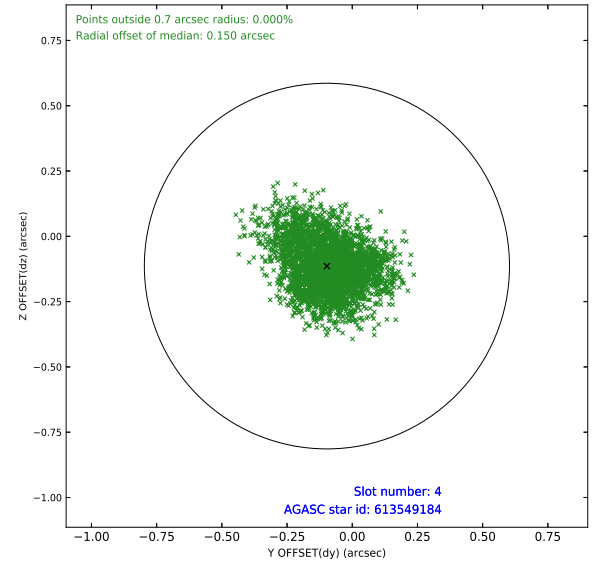
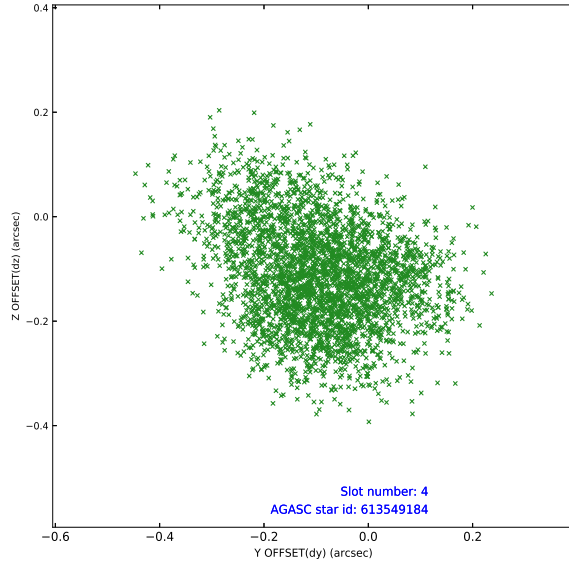
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1665	1.000	-0.094	-0.082	0.007	0.011	0.000000	0.000000	-758.55	-1730
1	FID		ACIS-S-4	7.20	1665	1.000	0.172	0.067	0.006	0.010	0.000000	0.000000	2154.57	177
2	FID		ACIS-S-5	7.23	1665	1.000	-0.109	0.023	0.007	0.012	0.000000	0.000000	-1810.35	171
3	GUIDE	used	613549120	8.52	3328	1.000	-0.021	-0.147	0.074	0.118	17.803287	-1.274359	-460.55	-972
4	GUIDE	used	613549184	9.90	3326	1.000	-0.097	-0.114	0.157	0.253	18.424548	-1.246000	859.29	834
5	GUIDE	used	613549704	10.04	3328	1.000	-0.060	0.094	0.125	0.203	17.734307	-0.994159	-1402.46	-534
6	GUIDE	used	613552008	8.97	3330	1.000	0.056	0.029	0.172	0.235	18.328422	-1.862158	2371.92	-824
7	GUIDE	used	613686640	10.64	3325	1.000	0.125	0.148	0.170	0.273	18.866209	-1.278950	1948.16	2000

## 2.4 Star Slots

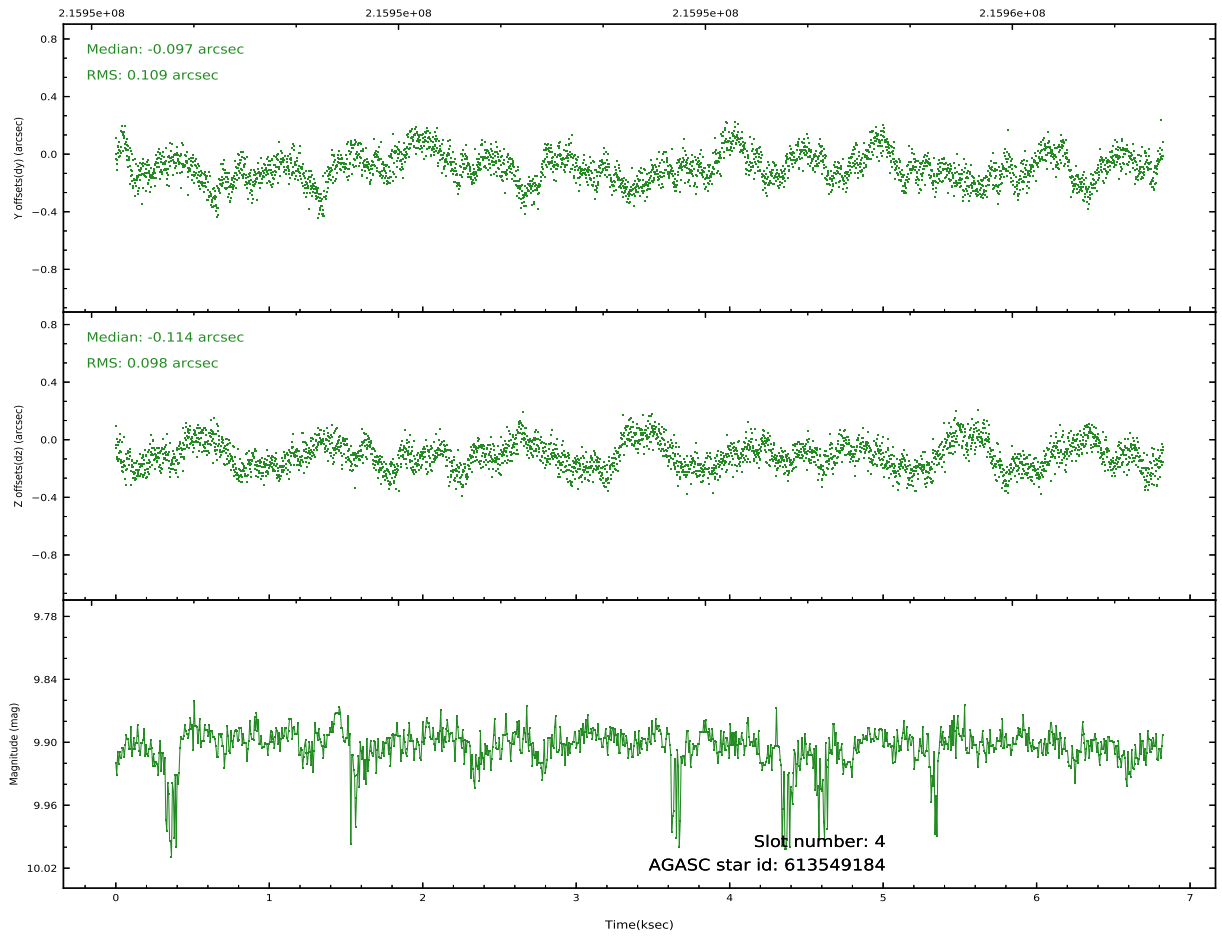
### 2.4.1 Slot 3



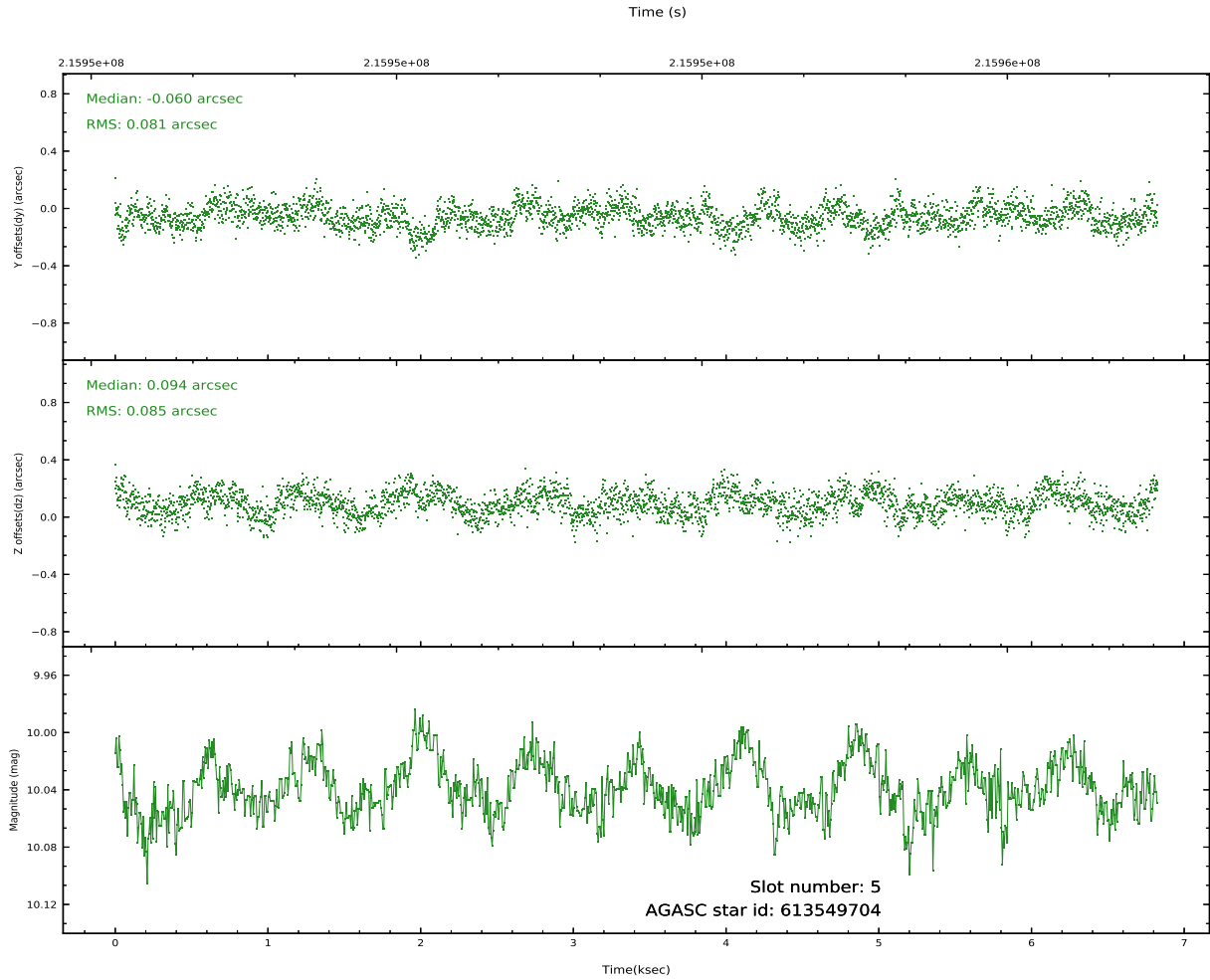
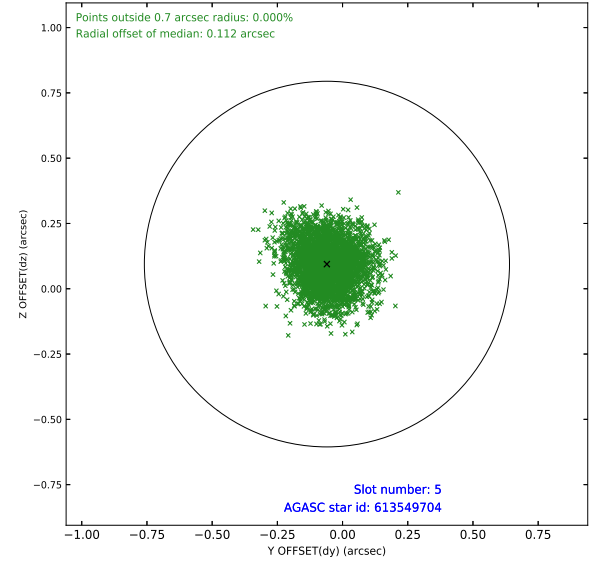
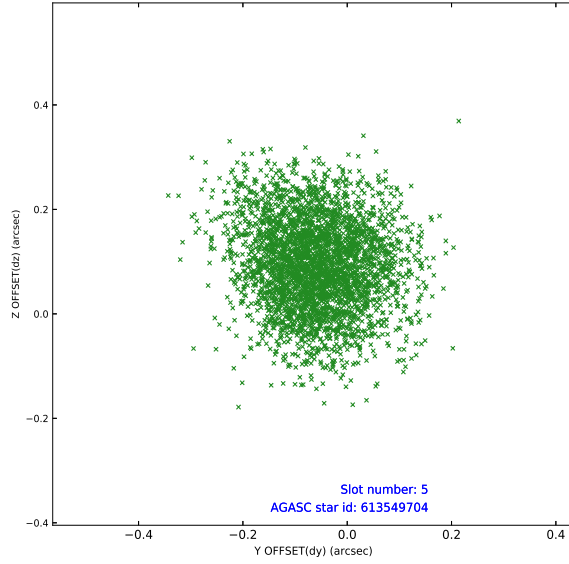
## 2.4.2 Slot 4



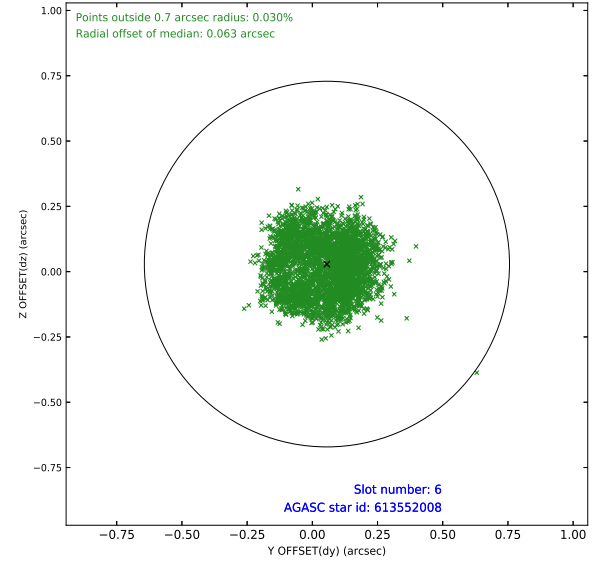
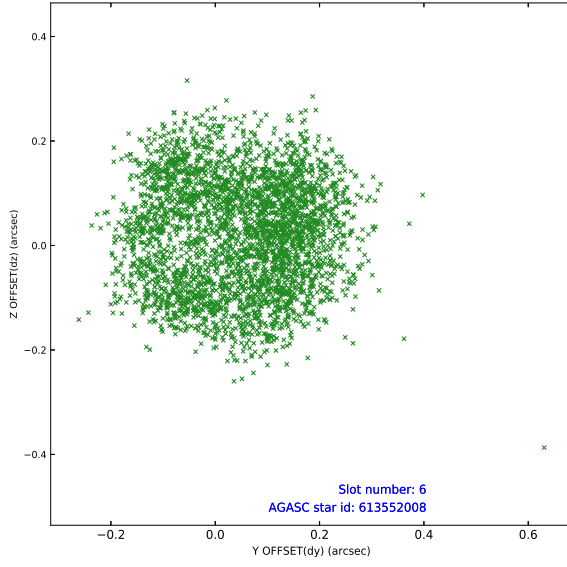
Time (s)



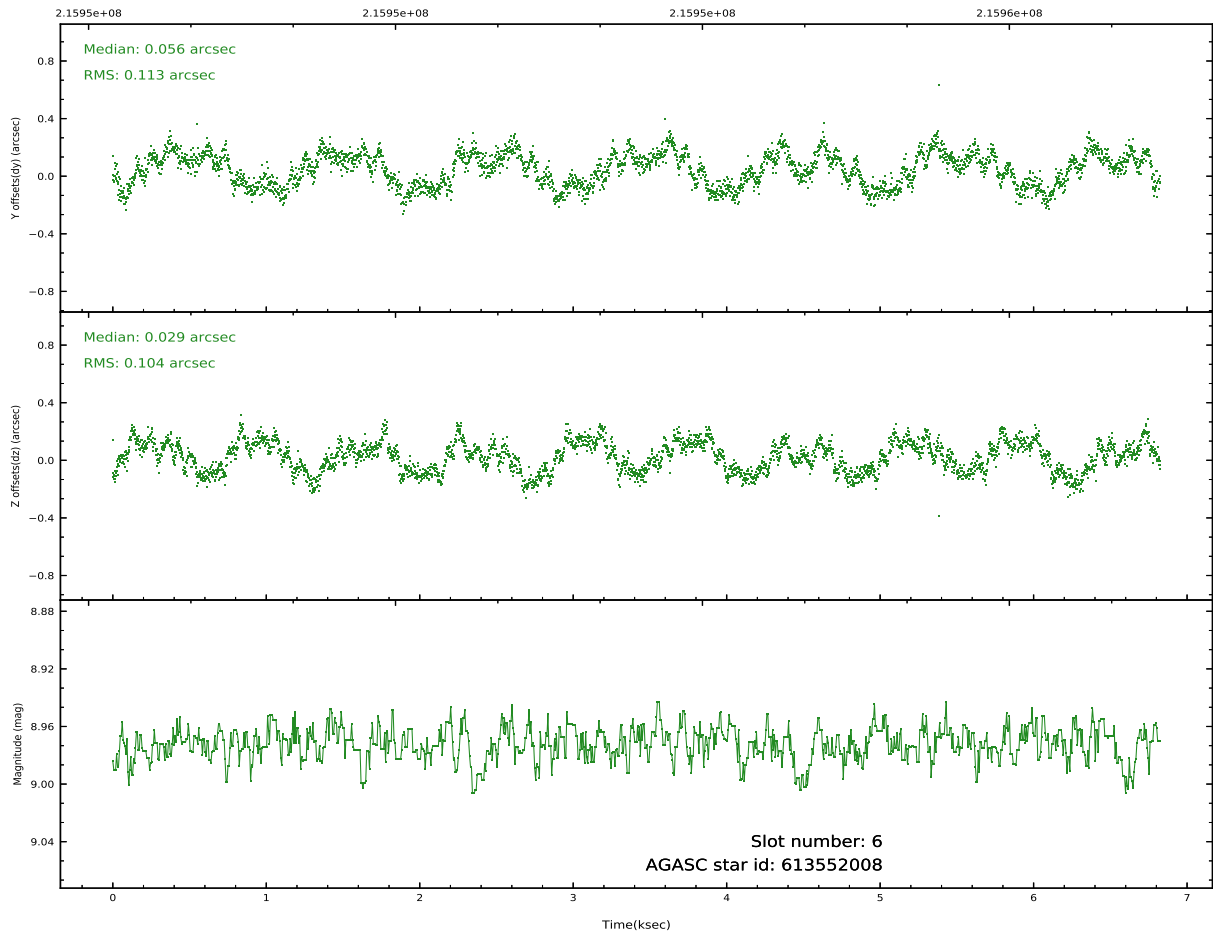
### 2.4.3 Slot 5



## 2.4.4 Slot 6

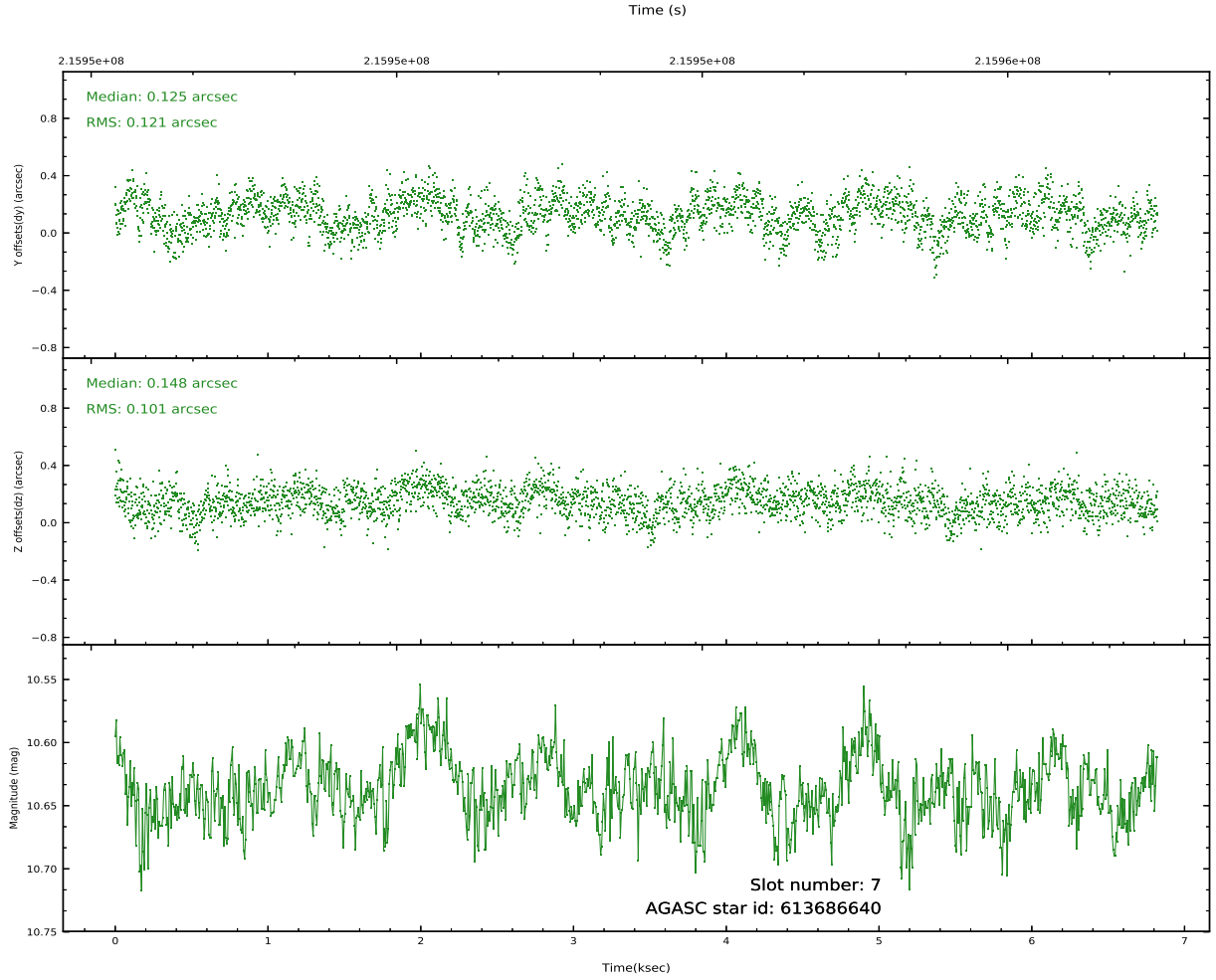
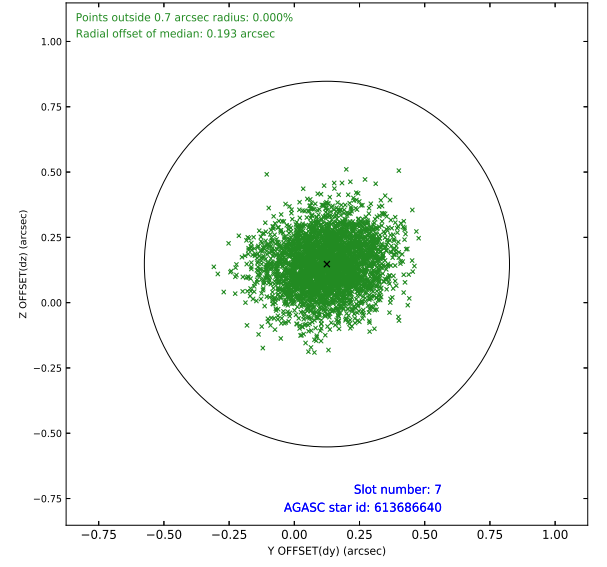
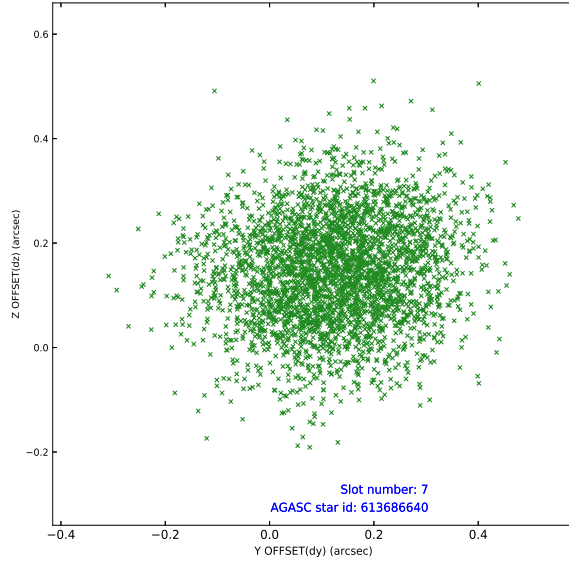


Time (s)



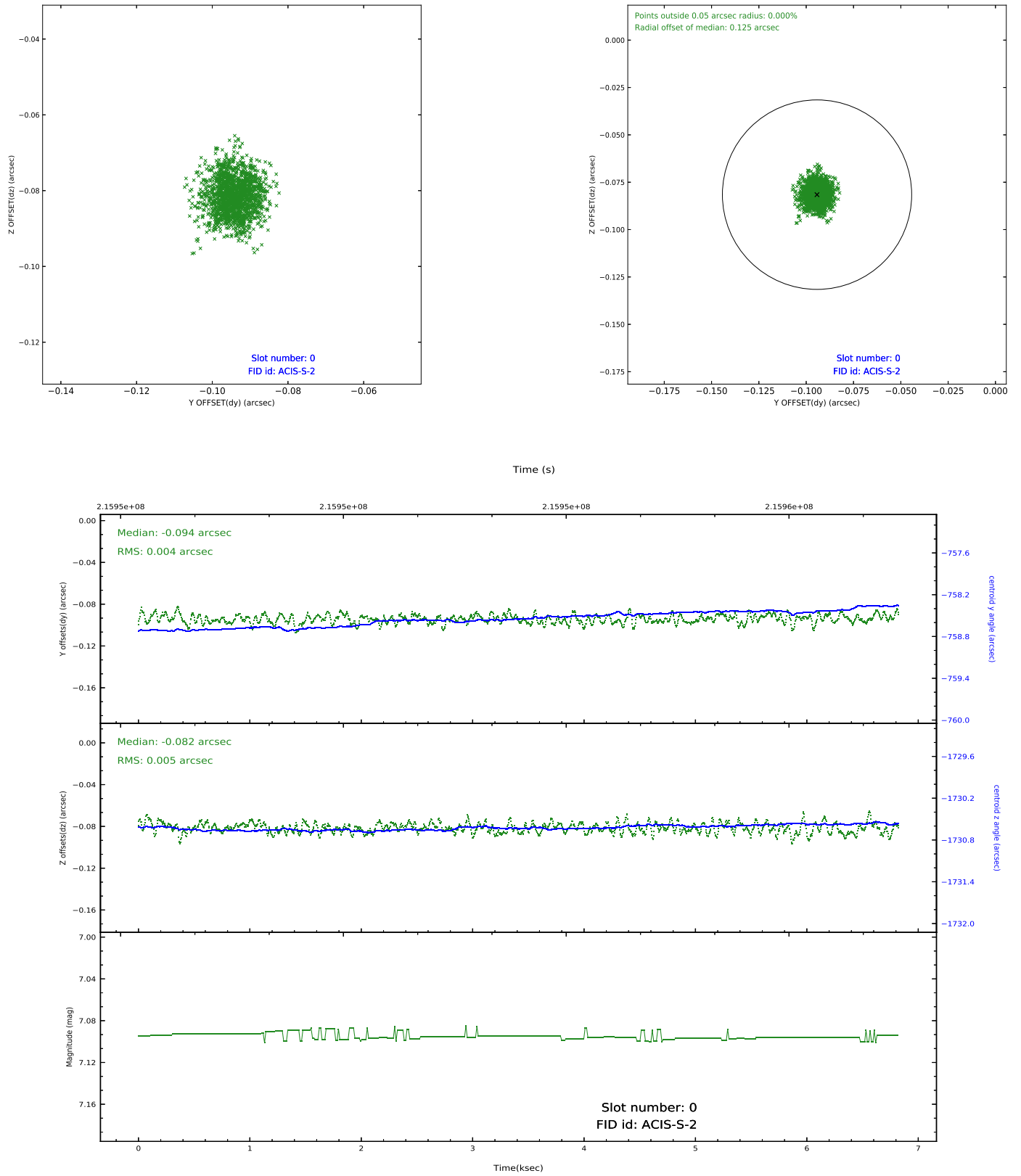


## 2.4.5 Slot 7

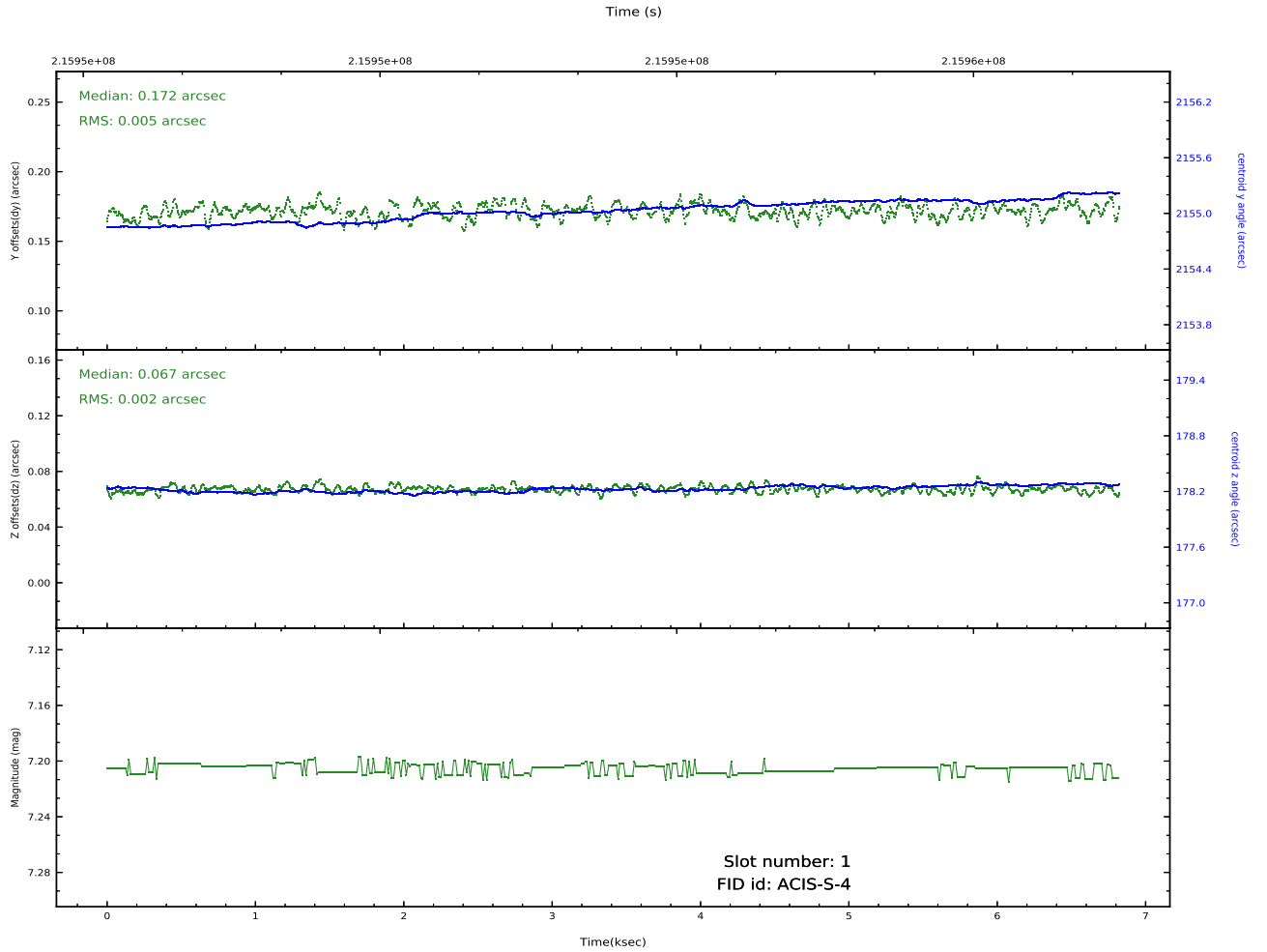
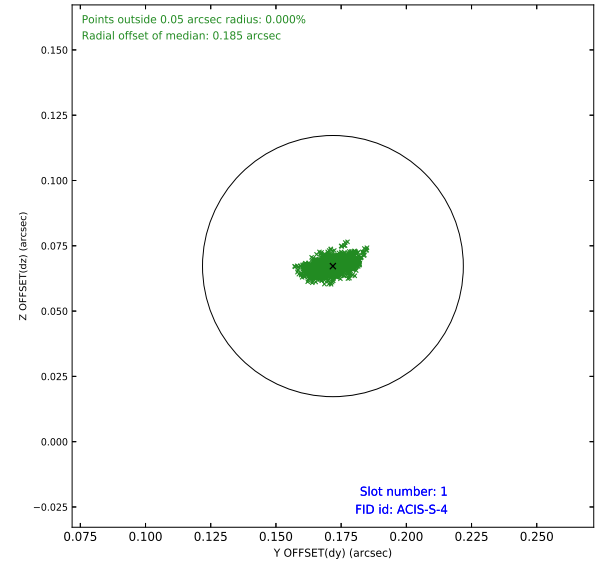
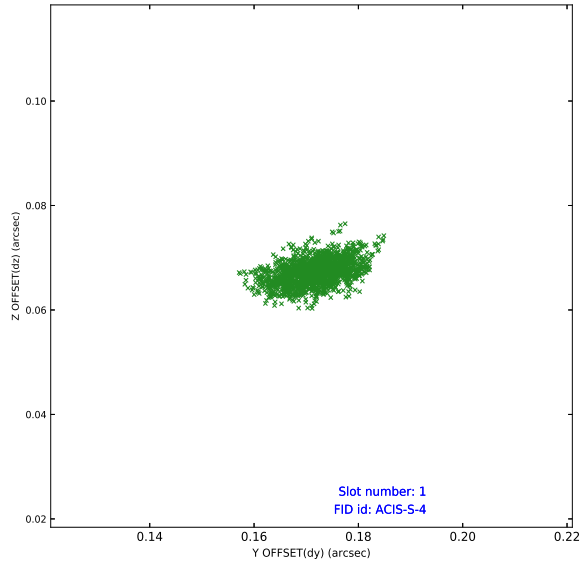


## 2.5 FID Slots

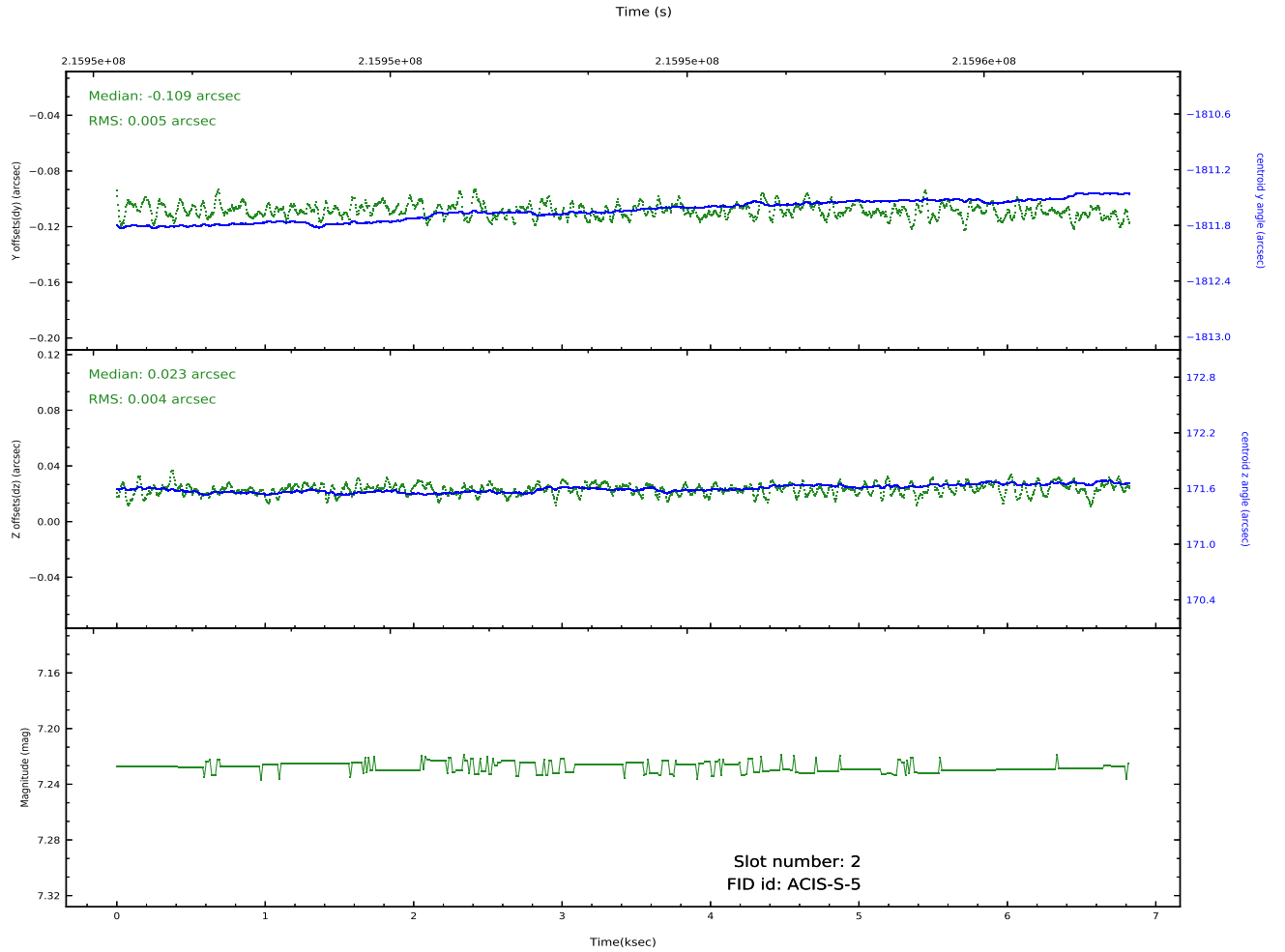
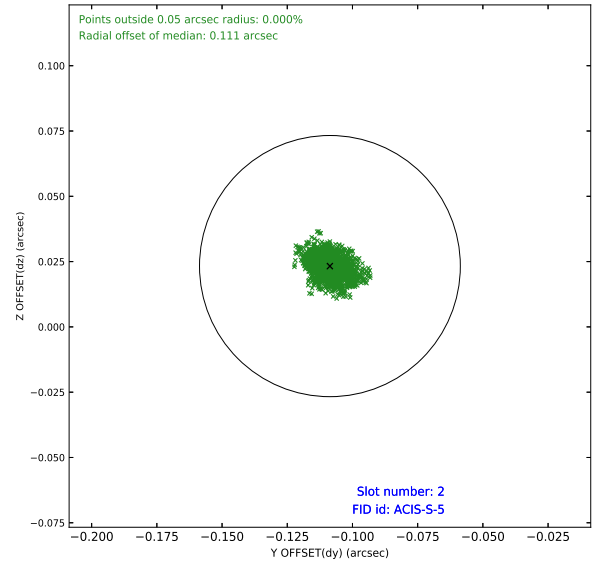
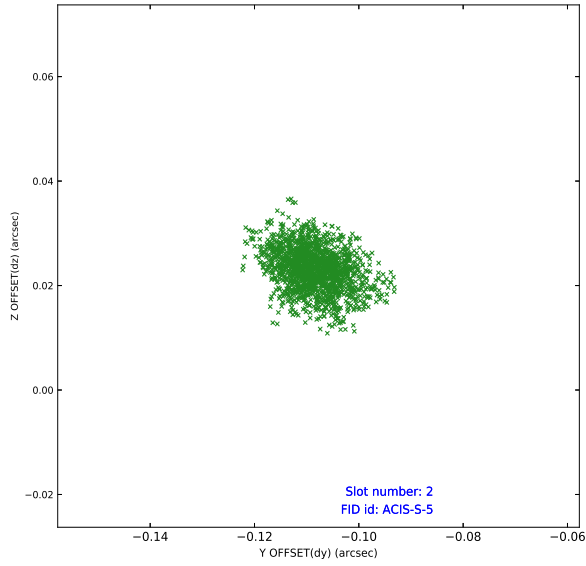
### 2.5.1 Slot 0



## 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)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.955199

### A.2 Comments