

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5615 - L2 Version 4  
Chandra X-Ray Center

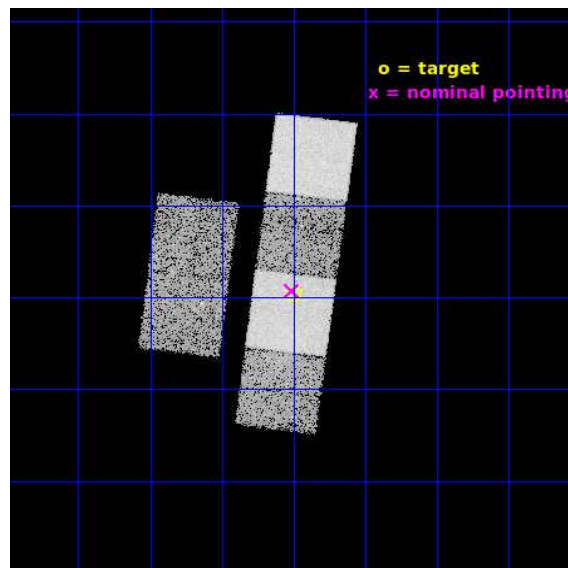
L2 Processing Date : Oct 7 2020

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# 1 Front

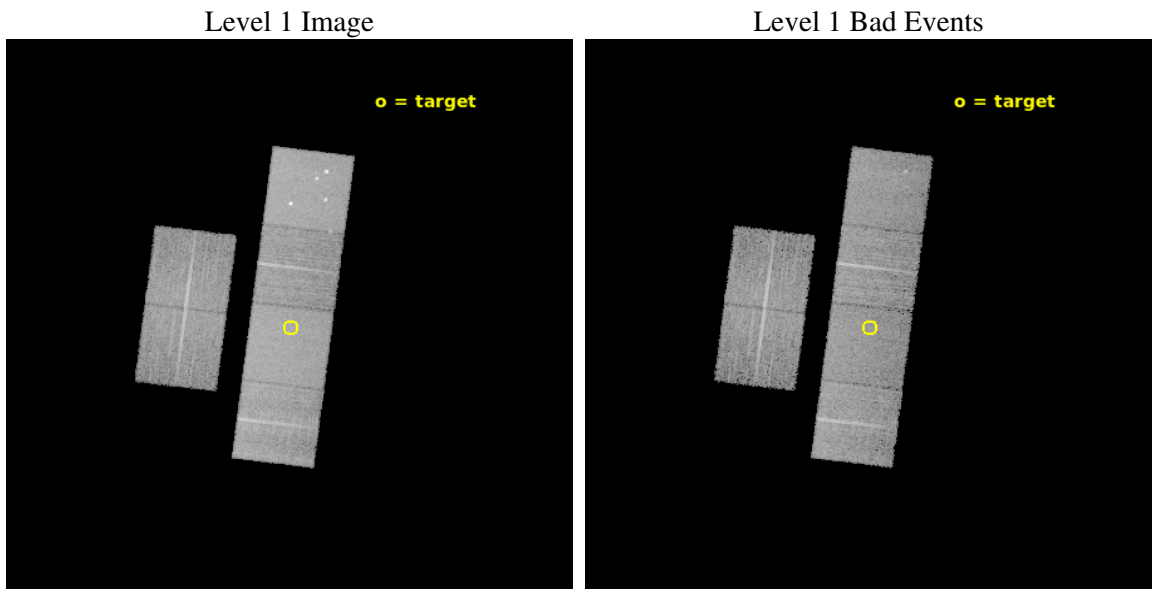
seq_num	701038	Sequence number
obs_id	5615	Observation id
title	A Chandra Survey of the Most Distant Quasars: X-raying the First Massive Black Holes	Proposal title
observer	William Brandt	Principal investigator
object	SDSS J1532-0039	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	233.249583	Observer's specified target RA [deg]
dec_targ	-0.66225	Observer's specified target Dec [deg]
ra_nom	233.25312140403	Nominal RA [deg]
dec_nom	-0.65438482170188	Nominal Dec [deg]
roll_nom	97.200385969273	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9954.8929784894	Sum of GTIs [s]
livetime	9828.8381294789	Livetime [s]
ontime2	9954.9340184927	Sum of GTIs [s]
ontime3	9954.7698584795	Sum of GTIs [s]
ontime5	9954.8519384861	Sum of GTIs [s]
ontime6	9954.8108984828	Sum of GTIs [s]
ontime7	9954.8929784894	Sum of GTIs [s]
ontime8	9954.728818506	Sum of GTIs [s]
l2events	122776	Number of level 2 events



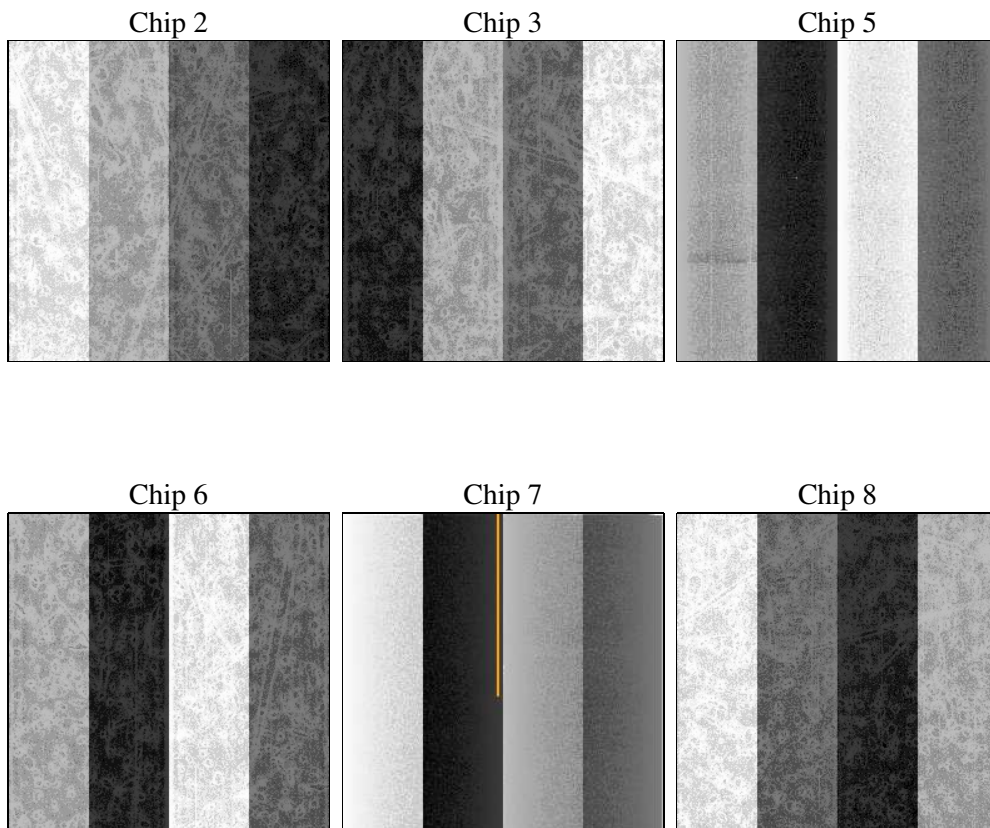
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	9954.8929784894	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	9954.9340184927	Sum of GTIs [s]
date	2020-10-07T16:28:55	Date and time of file creation	ontime3	9954.7698584795	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	9954.8519384861	Sum of GTIs [s]
			ontime6	9954.8108984828	Sum of GTIs [s]
			ontime7	9954.8929784894	Sum of GTIs [s]
			ontime8	9954.728818506	Sum of GTIs [s]
			l1events	531227	Number of level 1 events

### 2.1.4 Events

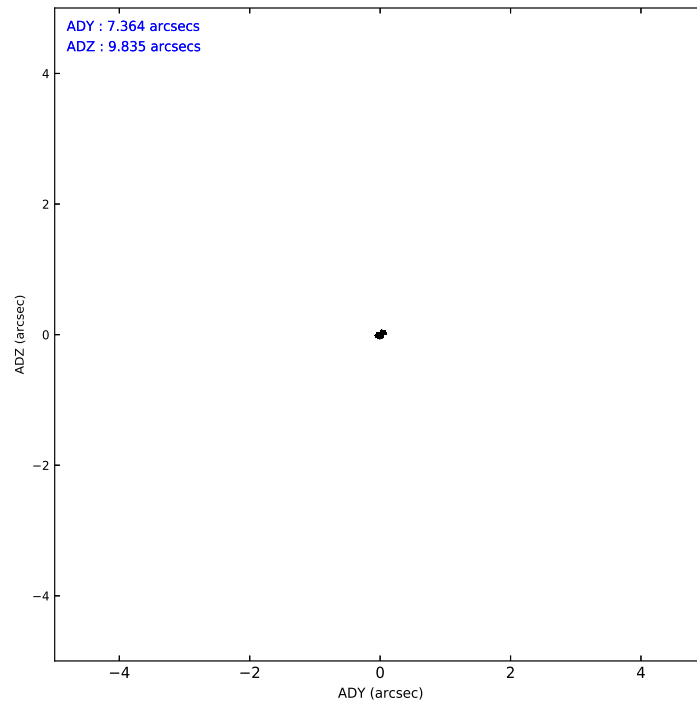
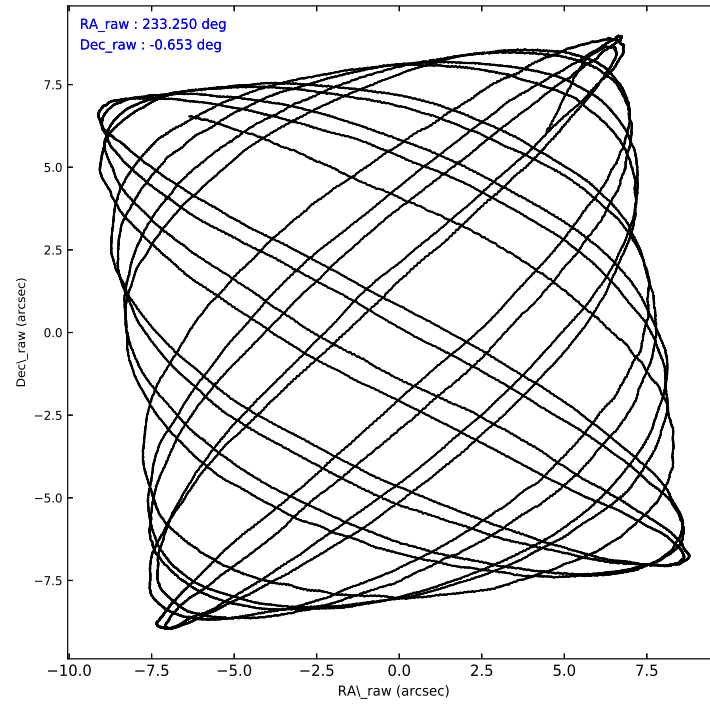
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	72287	68595	115998	75758	103177	95412	grade 0 events	3957	3927	8816	3691	4310	7547
rejected events	63350	59712	60792	66669	59608	74278		5%	5%	7%	4%	4%	7%
rejected %	87%	87%	52%	88%	57%	77%	grade 1 events	53	40	408	35	87	74
								0%	0%	0%	0%	0%	0%
							grade 2 events	1878	1702	15455	1855	8820	4448
								2%	2%	13%	2%	8%	4%
							grade 3 events	865	897	1914	864	3801	2123
								1%	1%	1%	1%	3%	2%
							grade 4 events	793	850	1873	811	3882	2033
								1%	1%	1%	1%	3%	2%
							grade 5 events	3053	3337	7985	3440	9696	4680
								4%	4%	6%	4%	9%	4%
							grade 6 events	1447	1514	27172	1872	22779	4994
								2%	2%	23%	2%	22%	5%
							grade 7 events	60241	56328	52375	63190	49802	69513
								83%	82%	45%	83%	48%	72%

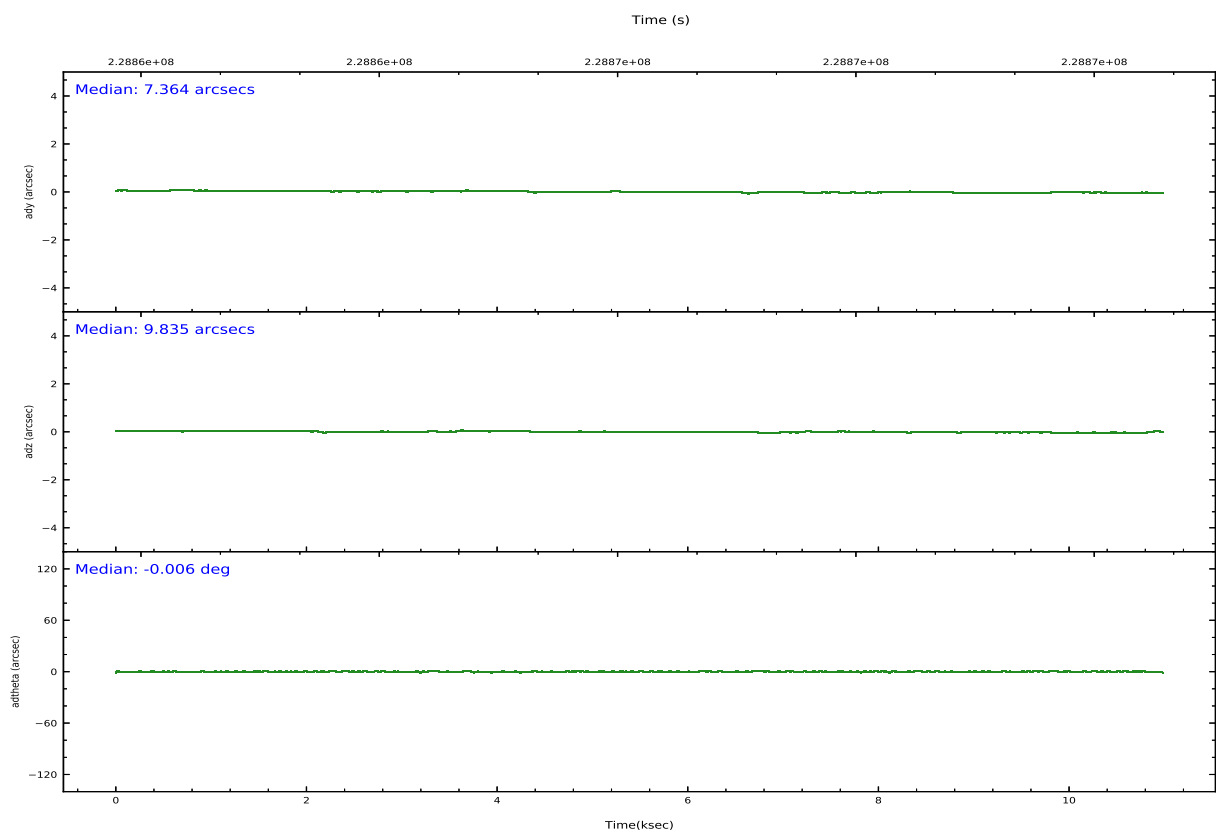
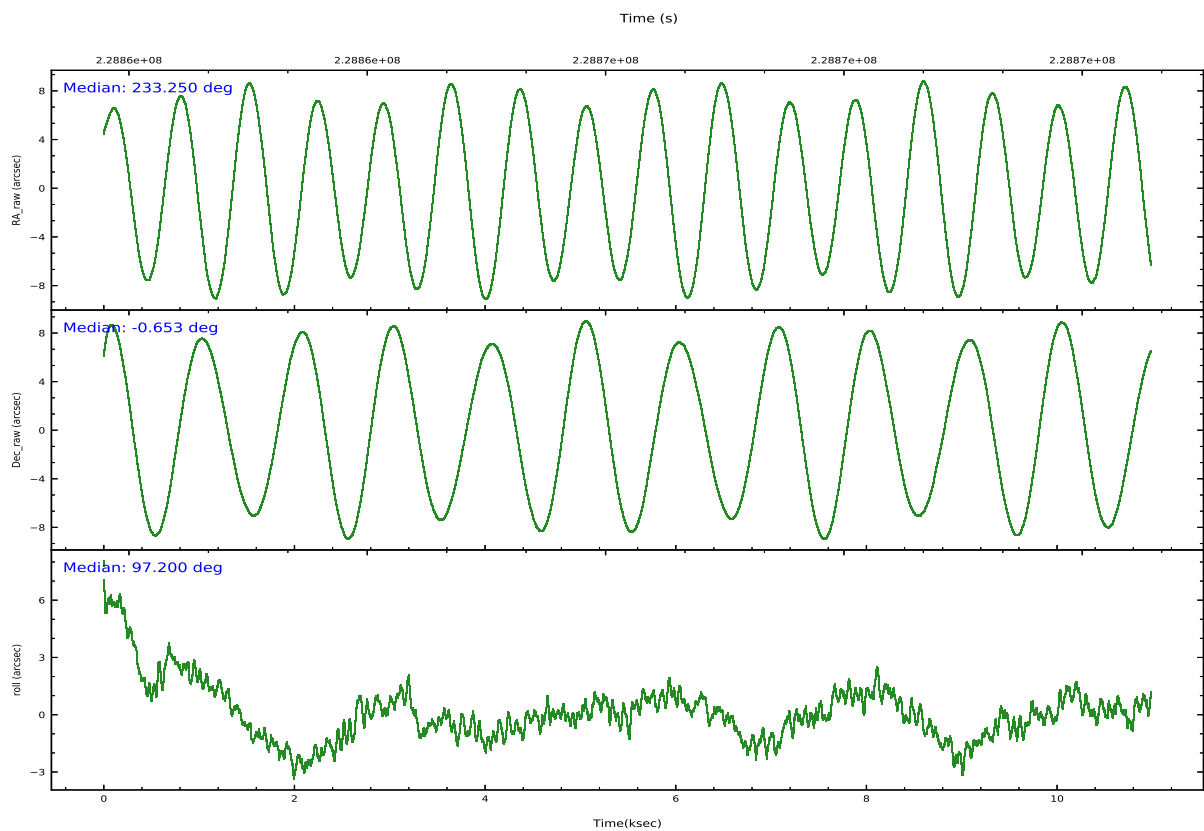


## 2.2 Compared Parameters

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	233.266828	233.25312140403	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.674057	-0.6543848217018799	Alternating exposures requested	N	N
[deg] Pointing Roll	97.050091	97.200385969273	[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)	228863223.184000	228861861.30859			
Observation start date	2005-04-02T21:05:59	2005-04-02T20:44:21			
[s] Observation end time (MET)	228873223.184000	228873582.69662			
Observation end date	2005-04-02T23:52:39	2005-04-02T23:59:42			
Read mode	TIMED	TIMED			

## 2.3 Aspect



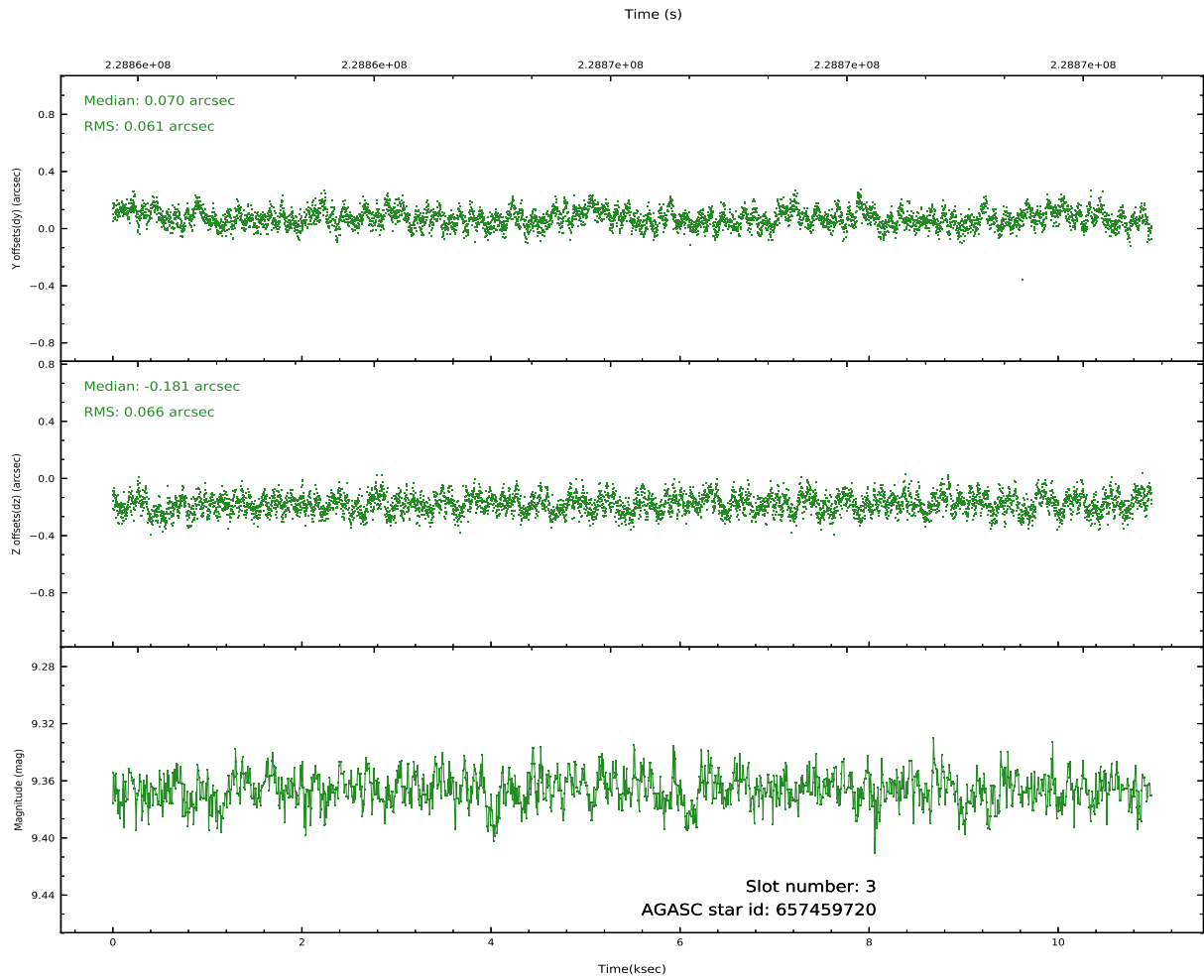
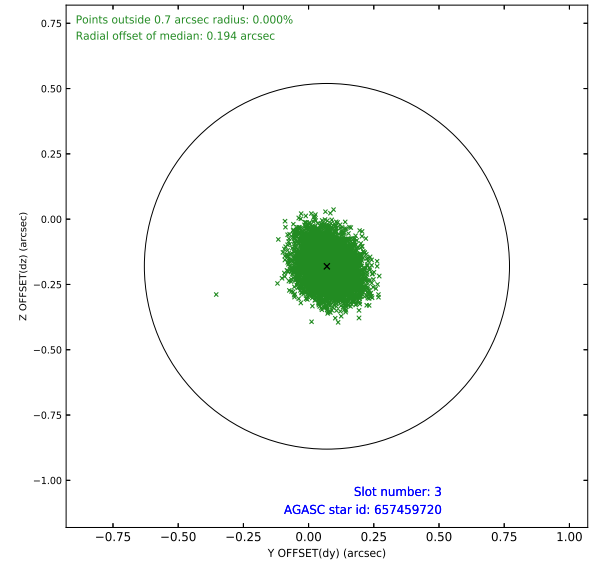
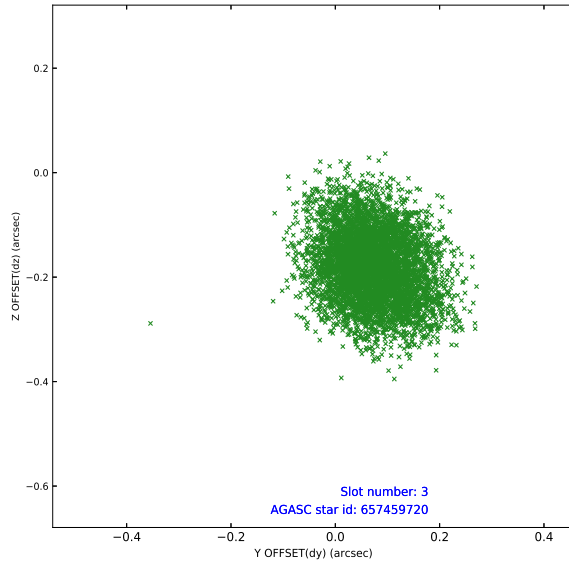


Slot Statistics

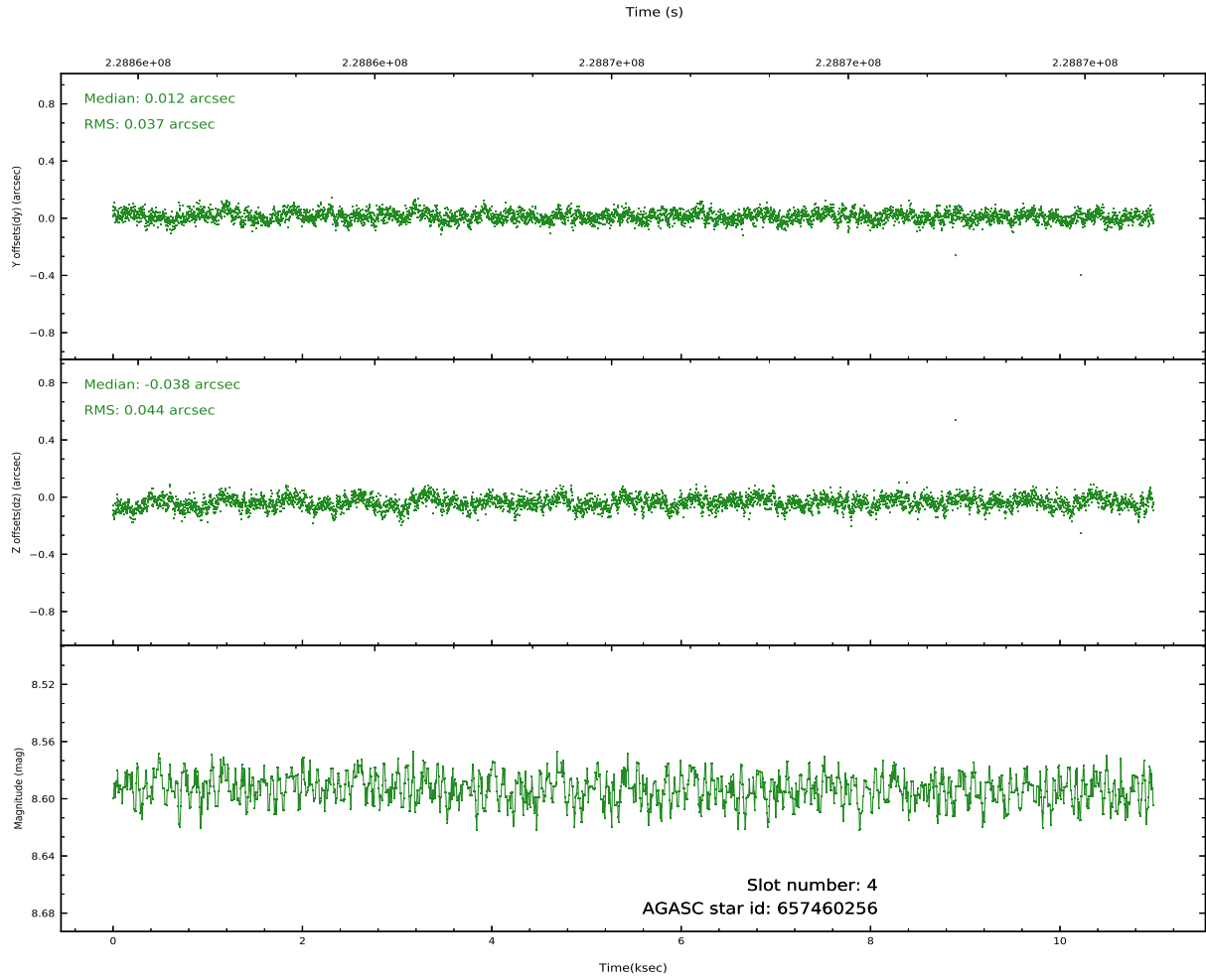
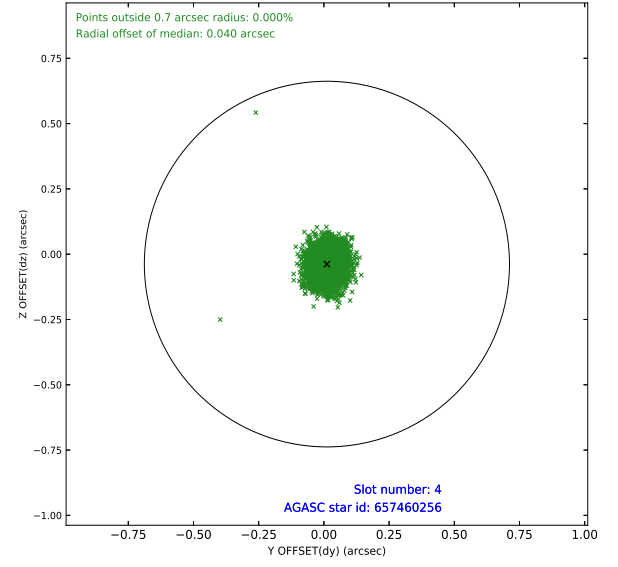
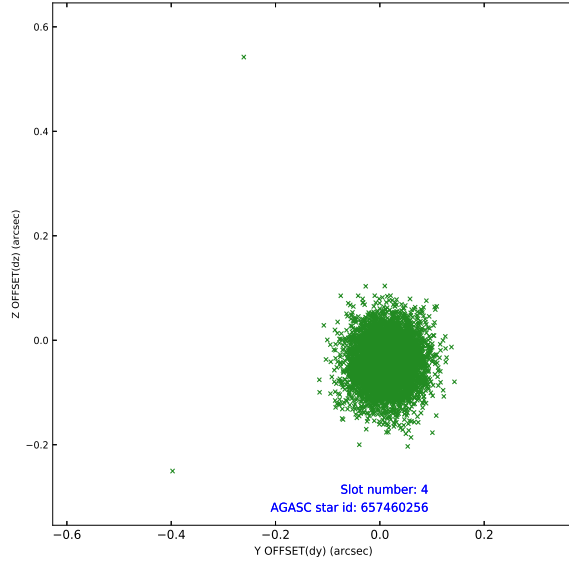
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2680	1.000	-0.075	-0.072	0.007	0.011	0.000000	0.000000	-760.14	-1731
1	FID		ACIS-S-4	7.21	2680	1.000	0.163	0.055	0.006	0.012	0.000000	0.000000	2153.09	177
2	FID		ACIS-S-5	7.23	2680	1.000	-0.120	0.025	0.007	0.011	0.000000	0.000000	-1812.49	171
3	GUIDE	used	657459720	9.37	5353	1.000	0.070	-0.181	0.096	0.155	232.649919	-0.849723	-355.35	2281
4	GUIDE	used	657460256	8.59	5357	1.000	0.012	-0.038	0.060	0.097	232.775604	-0.780171	-162.41	1802
5	GUIDE	used	657461368	7.41	5361	1.000	-0.187	0.217	0.062	0.098	233.706562	-0.146540	1690.76	-1803
6	GUIDE	used	657461824	9.48	5358	1.000	0.022	0.110	0.118	0.201	233.607297	-0.096573	1913.61	-1471
7	GUIDE	used	657463000	9.17	5359	1.000	0.080	-0.106	0.079	0.128	233.155519	-0.333918	1265.02	247

## 2.4 Star Slots

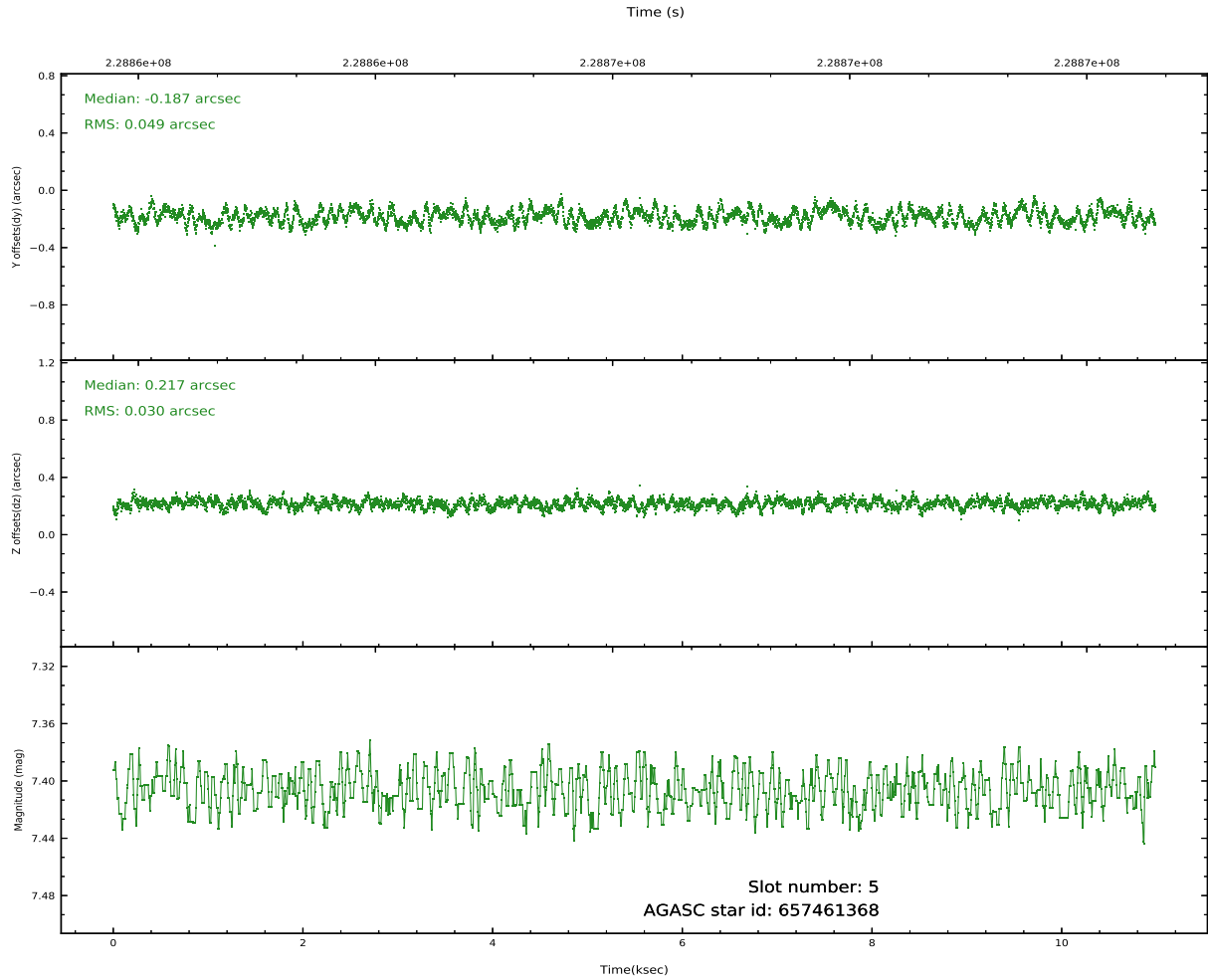
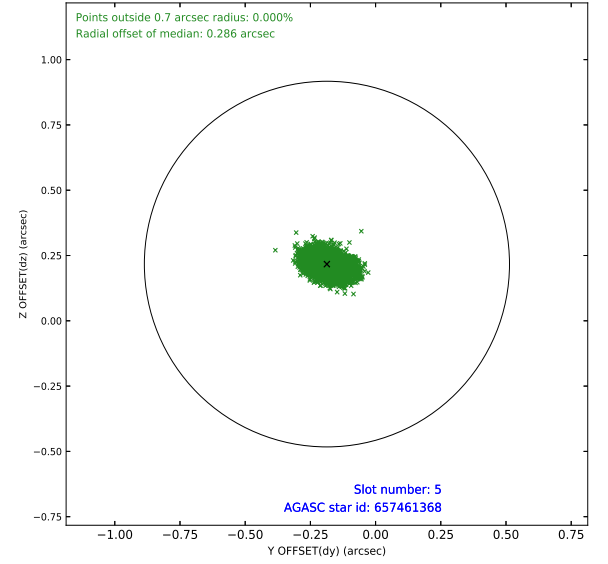
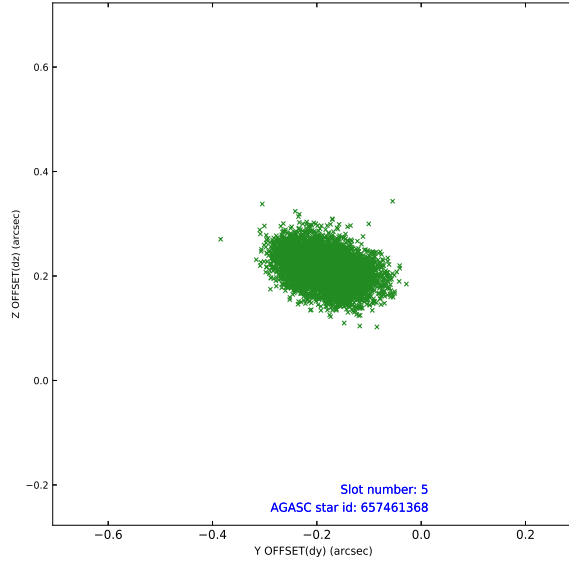
### 2.4.1 Slot 3



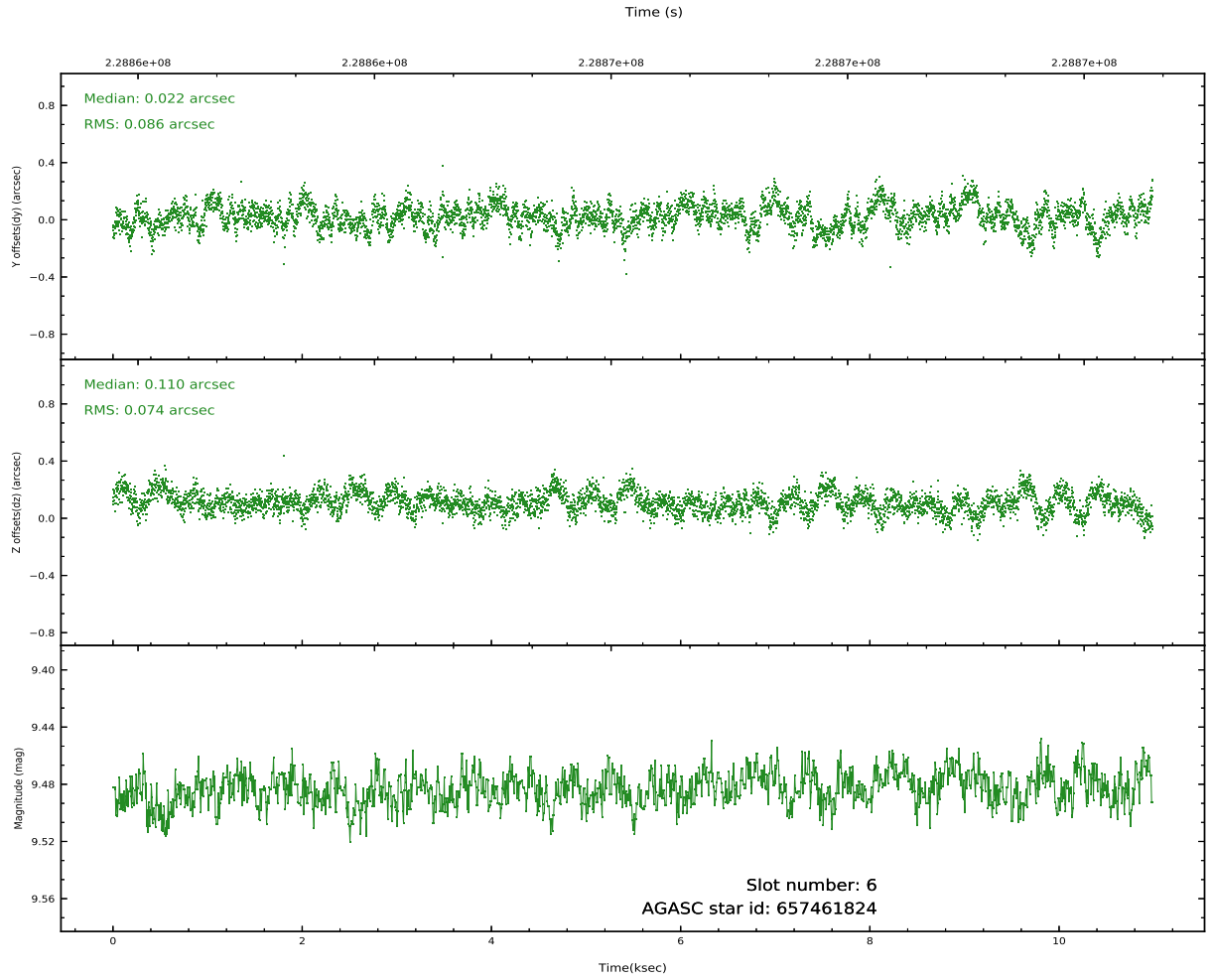
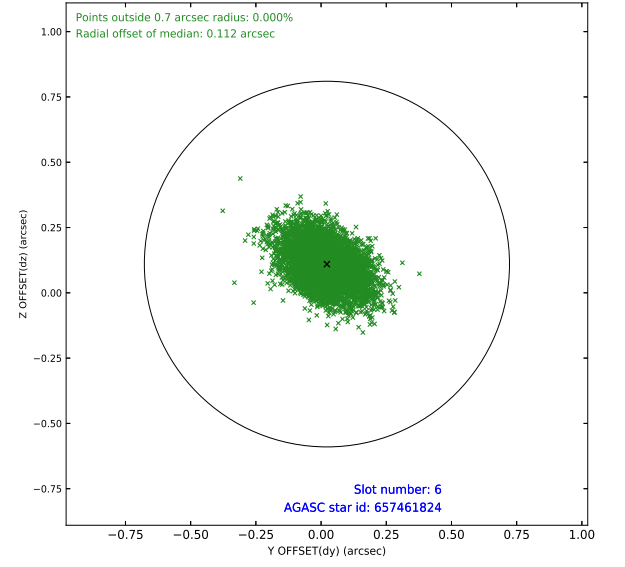
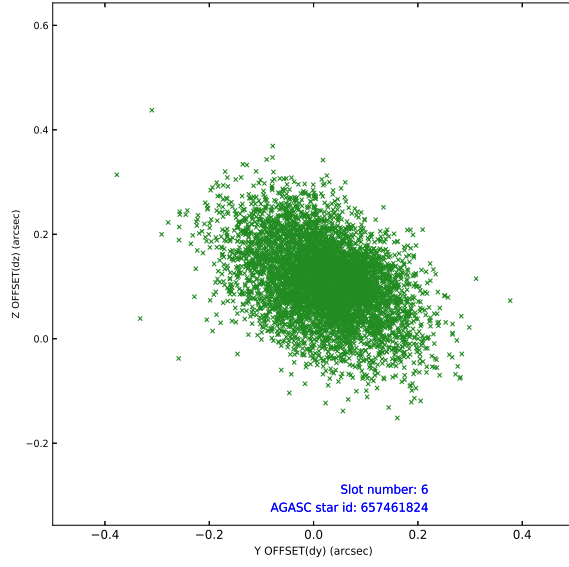
## 2.4.2 Slot 4



### 2.4.3 Slot 5

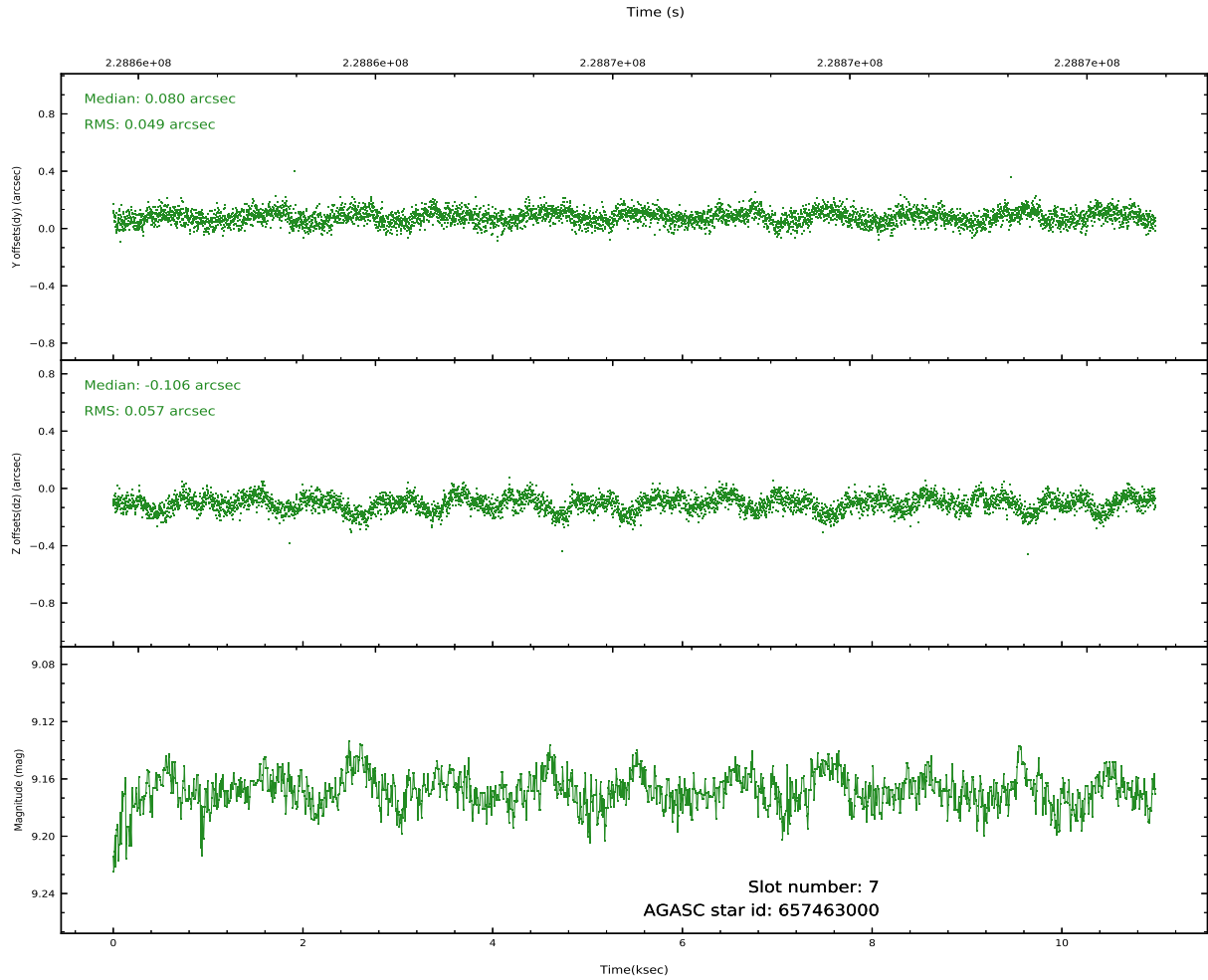
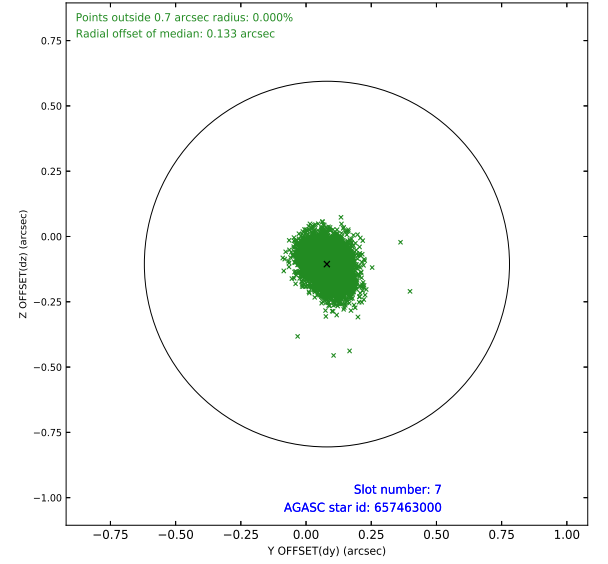
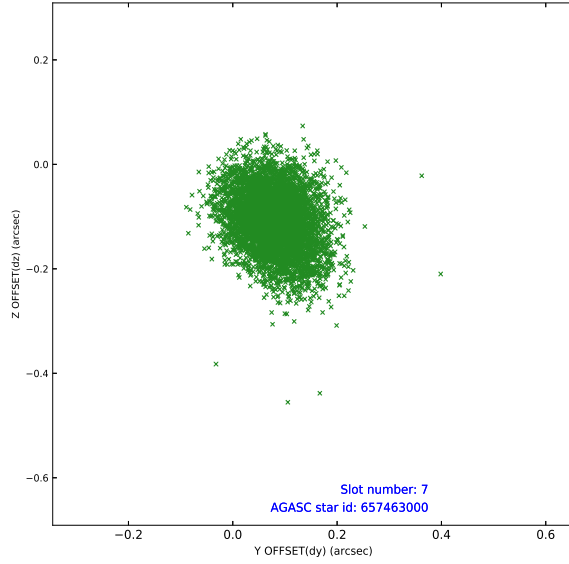


## 2.4.4 Slot 6



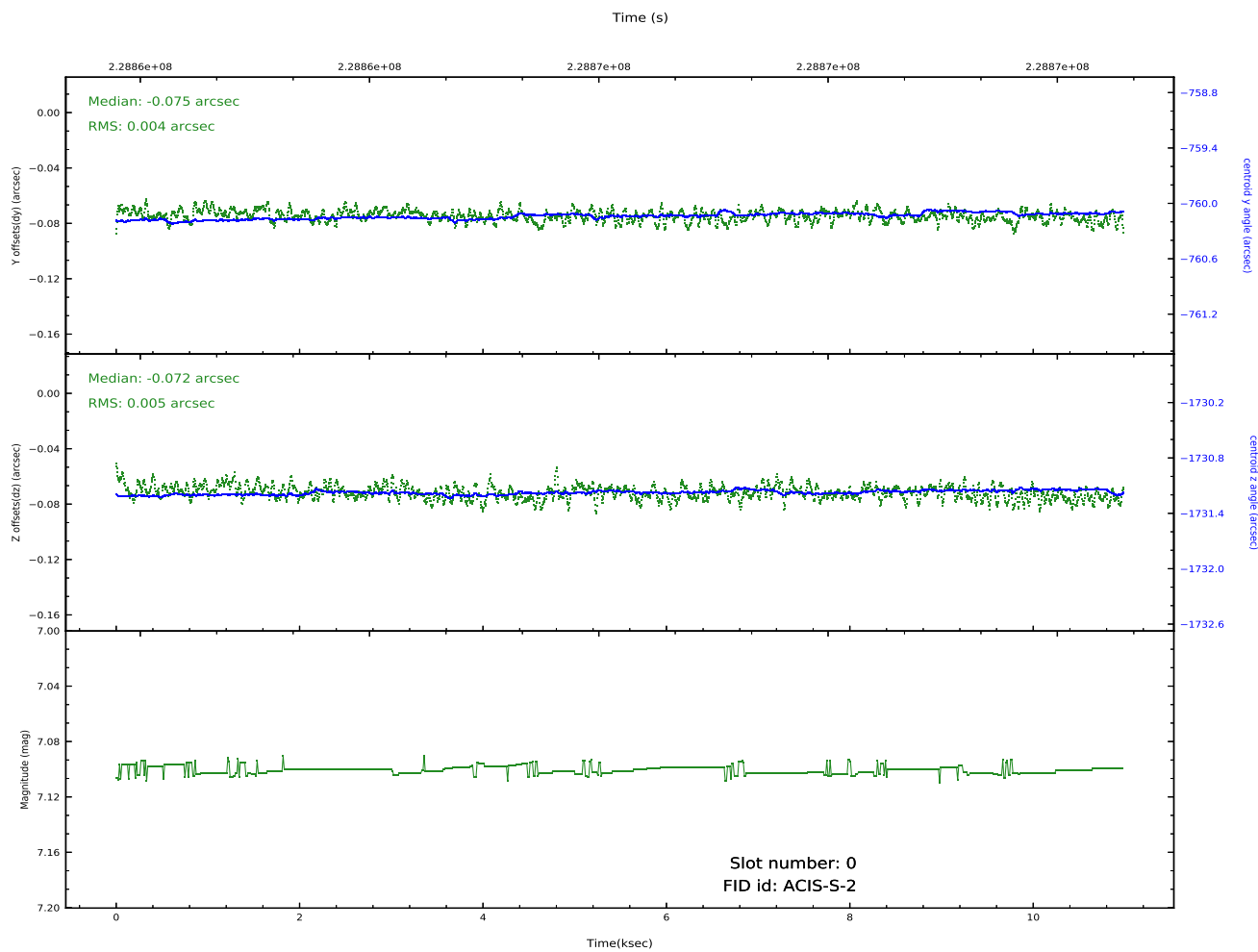
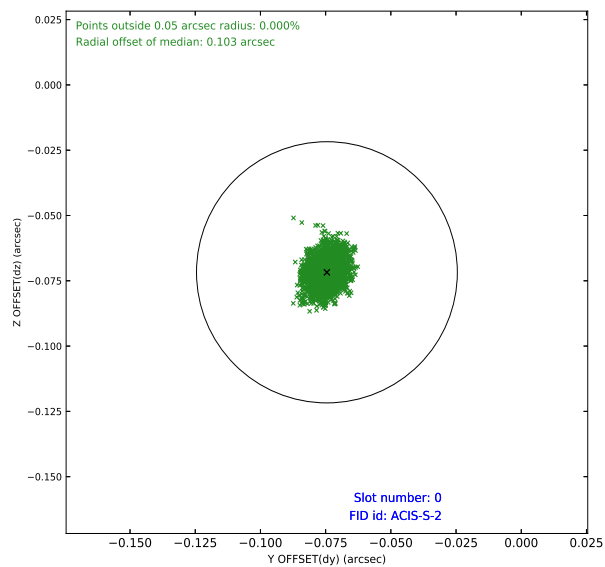
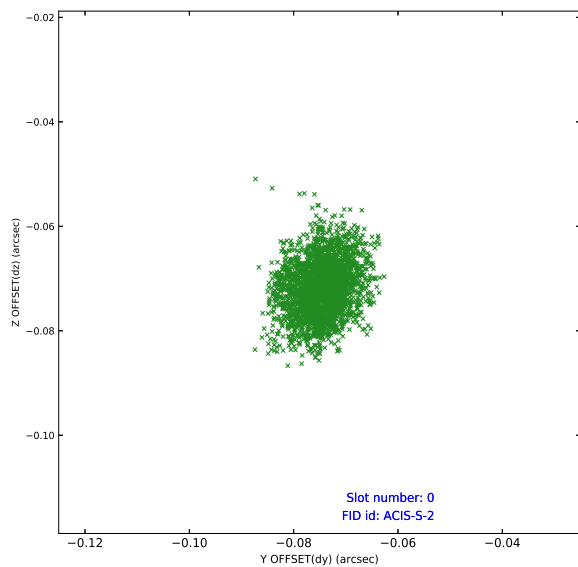


## 2.4.5 Slot 7

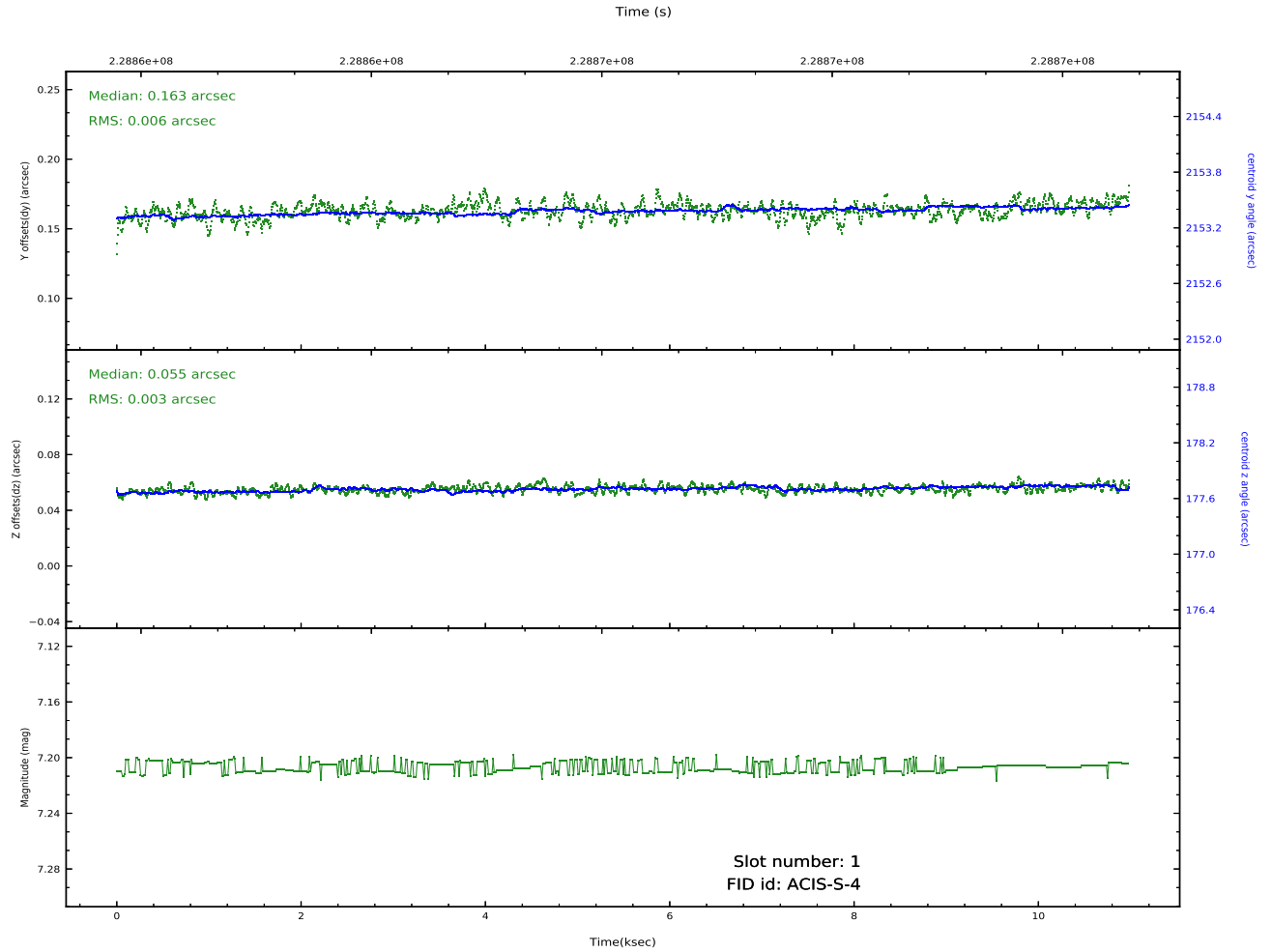
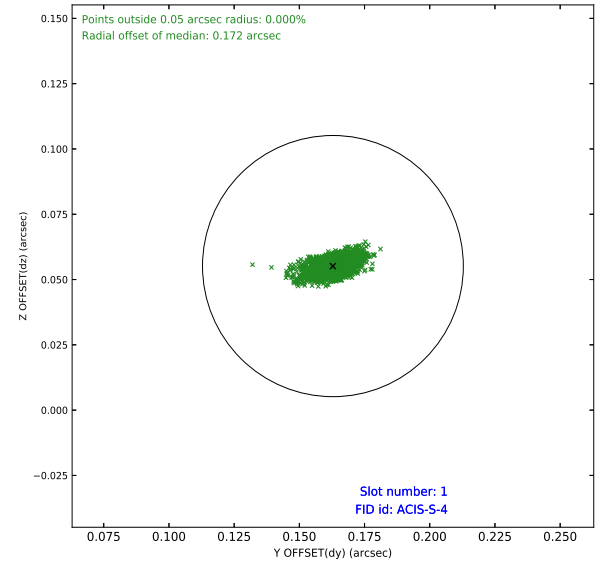
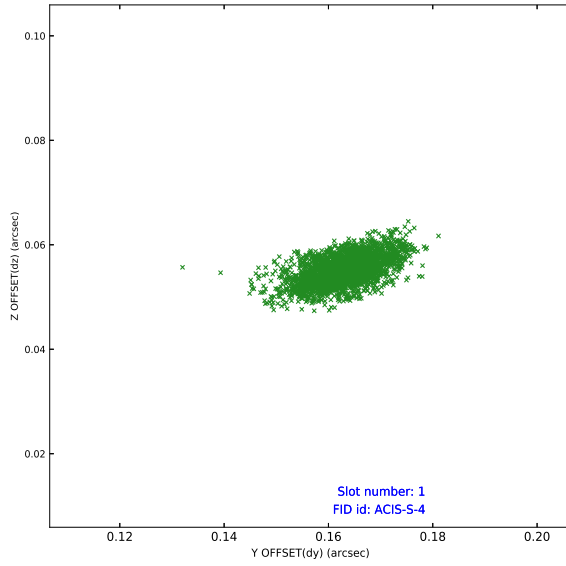


## 2.5 FID Slots

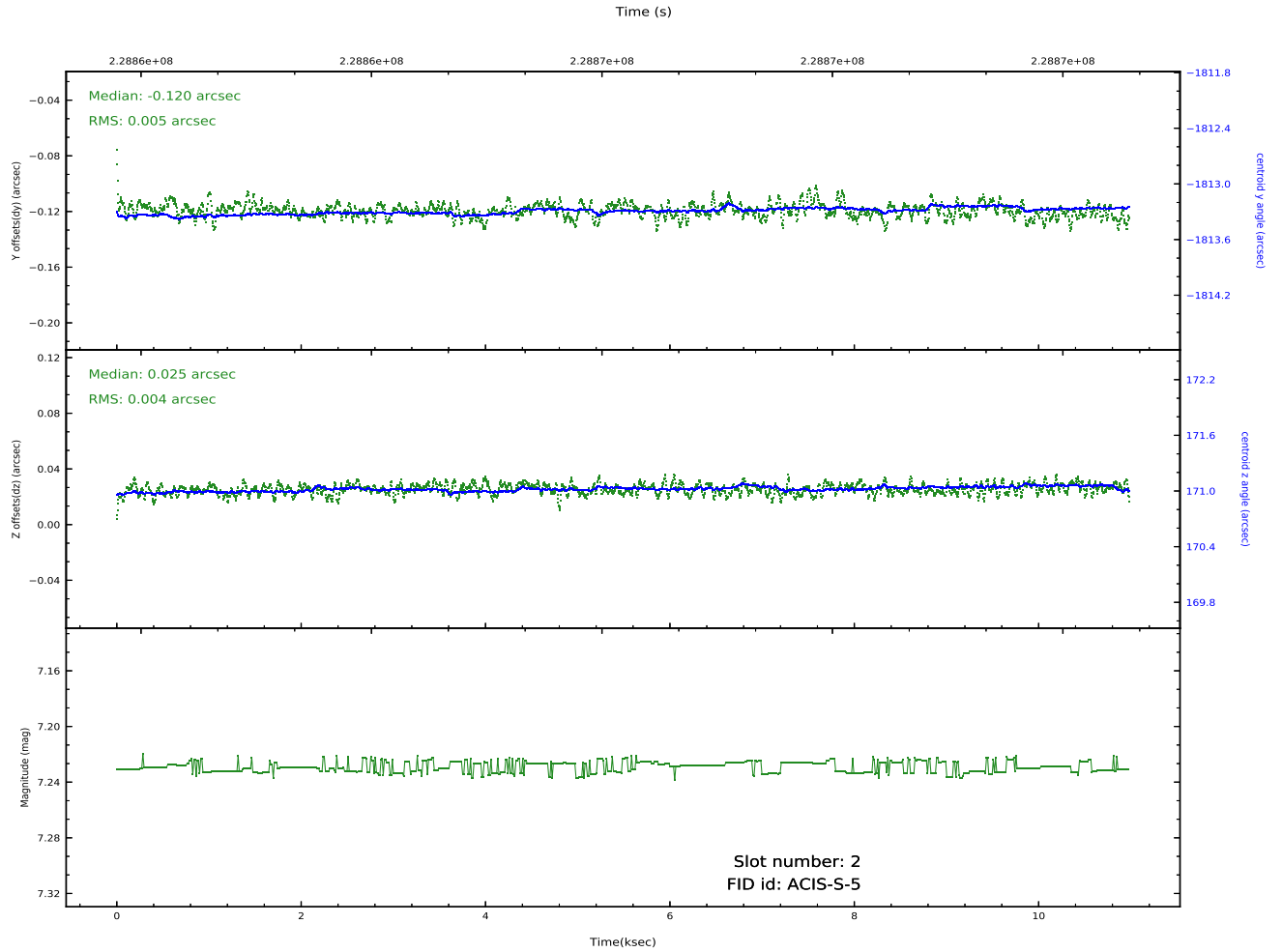
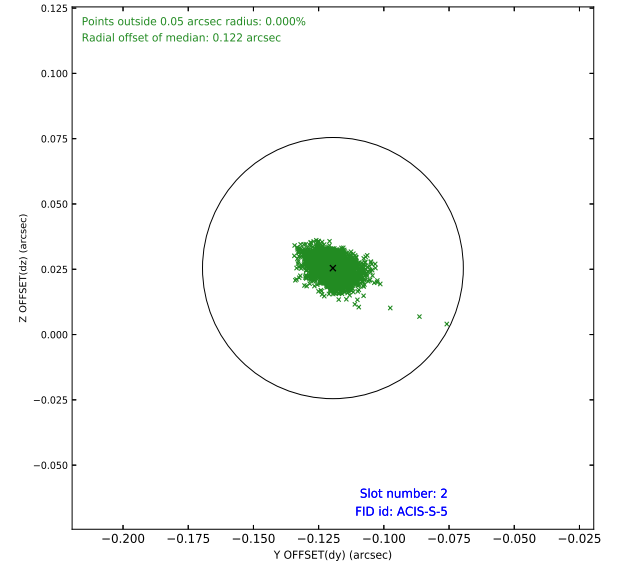
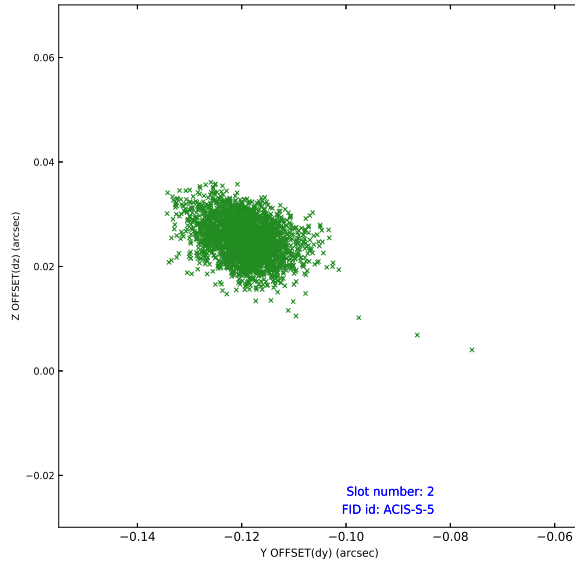
### 2.5.1 Slot 0



## 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	9.955199

### A.2 Comments