

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4702 - L2 Version 4  
Chandra X-Ray Center

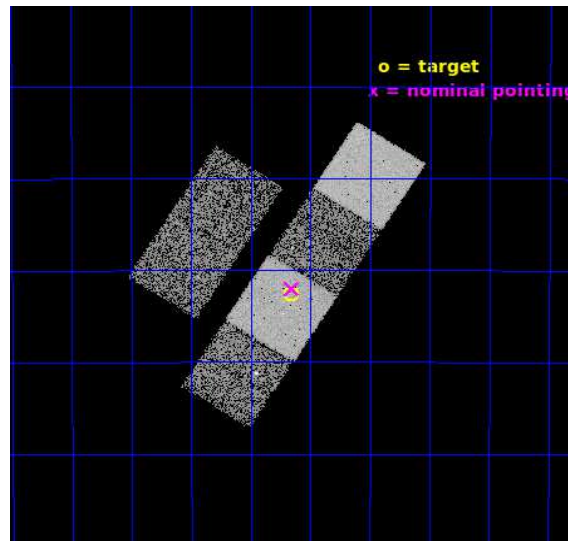
L2 Processing Date : Sep 26 2020

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# 1 Front

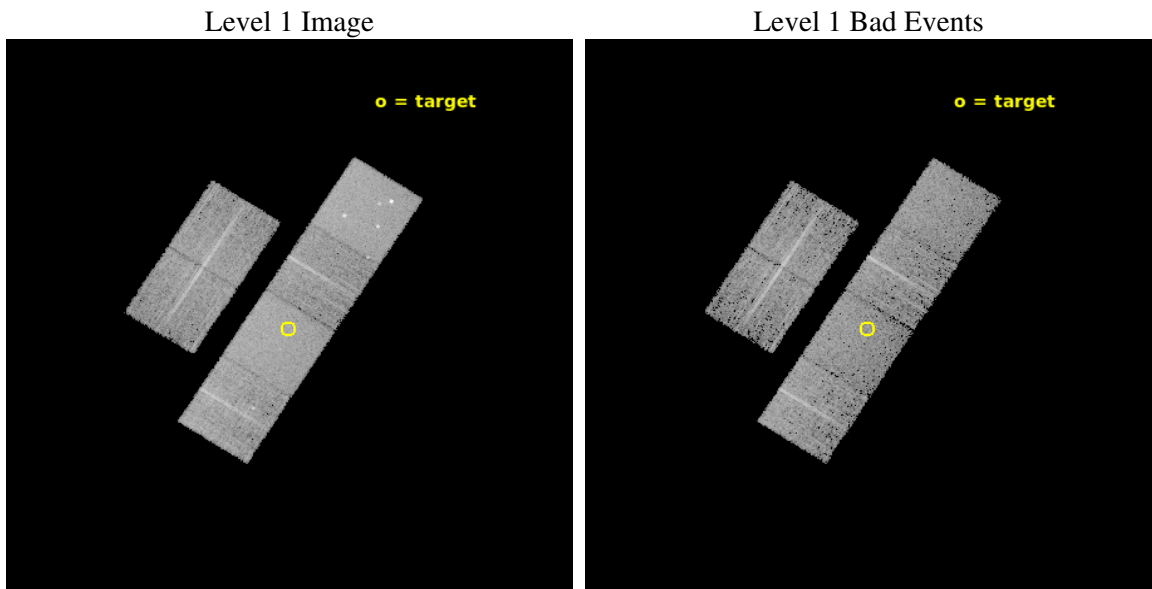
seq_num	600357	Sequence number
obs_id	4702	Observation id
title	Using the Sculptor Dwarf Spheroidal Galaxy to Constrain X-ray Binary Production in Population II	Proposal title
observer	Thomas Maccarone	Principal investigator
object	SCULPTOR DWARF SPHEROIDAL	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.039167	Observer's specified target RA [deg]
dec_targ	-33.708889	Observer's specified target Dec [deg]
ra_nom	15.038767464971	Nominal RA [deg]
dec_nom	-33.700192490775	Nominal Dec [deg]
roll_nom	122.56203487468	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5958.3999778032	Sum of GTIs [s]
livetime	5882.9511295666	Livetime [s]
ontime2	5958.3999778032	Sum of GTIs [s]
ontime3	5958.3999778032	Sum of GTIs [s]
ontime5	5958.3999778032	Sum of GTIs [s]
ontime6	5958.3999778032	Sum of GTIs [s]
ontime7	5958.3999778032	Sum of GTIs [s]
ontime8	5958.3999778032	Sum of GTIs [s]
l2events	68829	Number of level 2 events



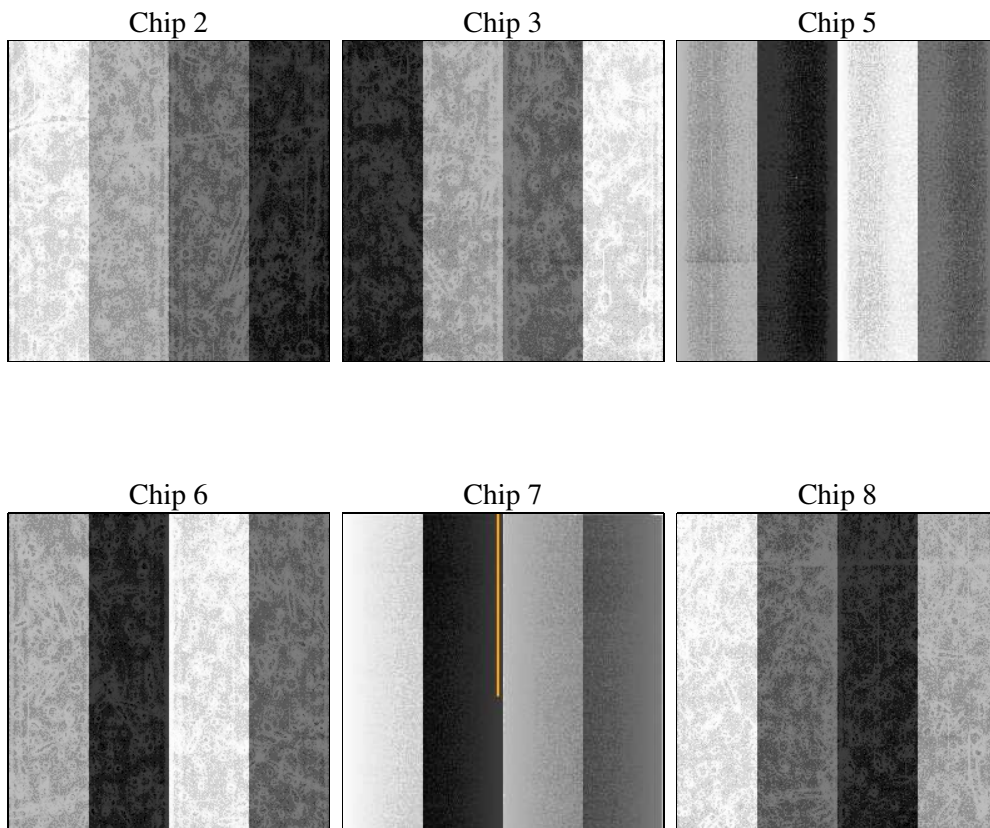
## 2 OBI

### 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	5958.3999778032	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	5958.3999778032	Sum of GTIs [s]
date	2020-09-26T12:07:43	Date and time of file creation	ontime3	5958.3999778032	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	5958.3999778032	Sum of GTIs [s]
			ontime6	5958.3999778032	Sum of GTIs [s]
			ontime7	5958.3999778032	Sum of GTIs [s]
			ontime8	5958.3999778032	Sum of GTIs [s]
			l1events	306971	Number of level 1 events

### 2.1.4 Events

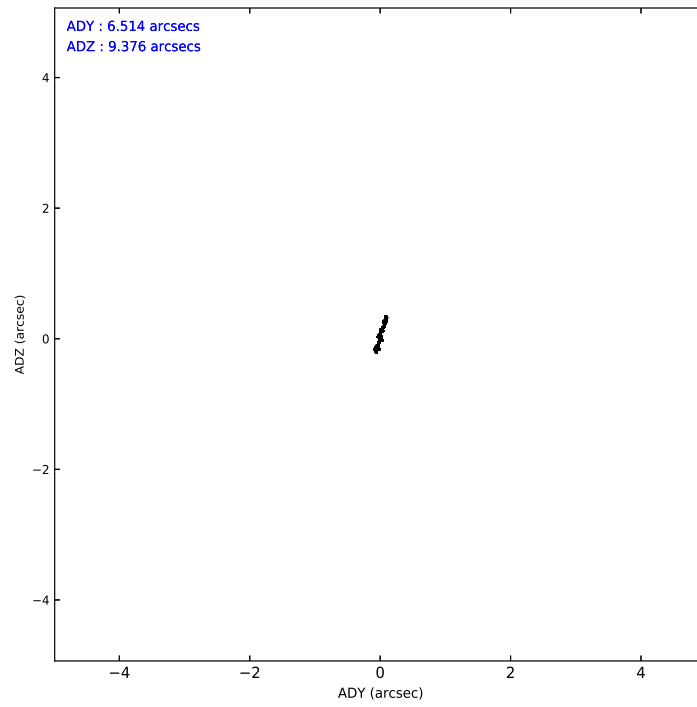
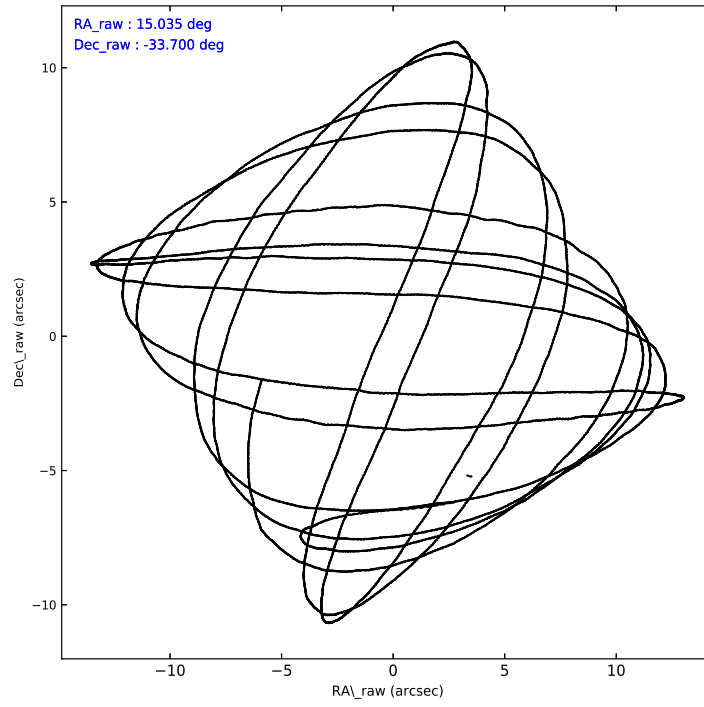
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	43637	41327	66054	42420	58235	55298	grade 0 events	2192	2252	4117	2039	2100	3813
rejected events	38618	36273	34524	37246	34368	43547		5%	5%	6%	4%	3%	6%
rejected %	88%	87%	52%	87%	59%	78%	grade 1 events	24	29	104	22	42	35
								0%	0%	0%	0%	0%	0%
							grade 2 events	1043	1001	9759	1061	4812	2540
								2%	2%	14%	2%	8%	4%
							grade 3 events	455	515	1191	543	2126	1308
								1%	1%	1%	1%	3%	2%
							grade 4 events	502	504	1110	483	2073	1181
								1%	1%	1%	1%	3%	2%
							grade 5 events	1757	1865	4767	1966	5553	2675
								4%	4%	7%	4%	9%	4%
							grade 6 events	835	783	15372	1048	12778	2916
								1%	1%	23%	2%	21%	5%
							grade 7 events	36829	34378	29634	35258	28751	40830
								84%	83%	44%	83%	49%	73%

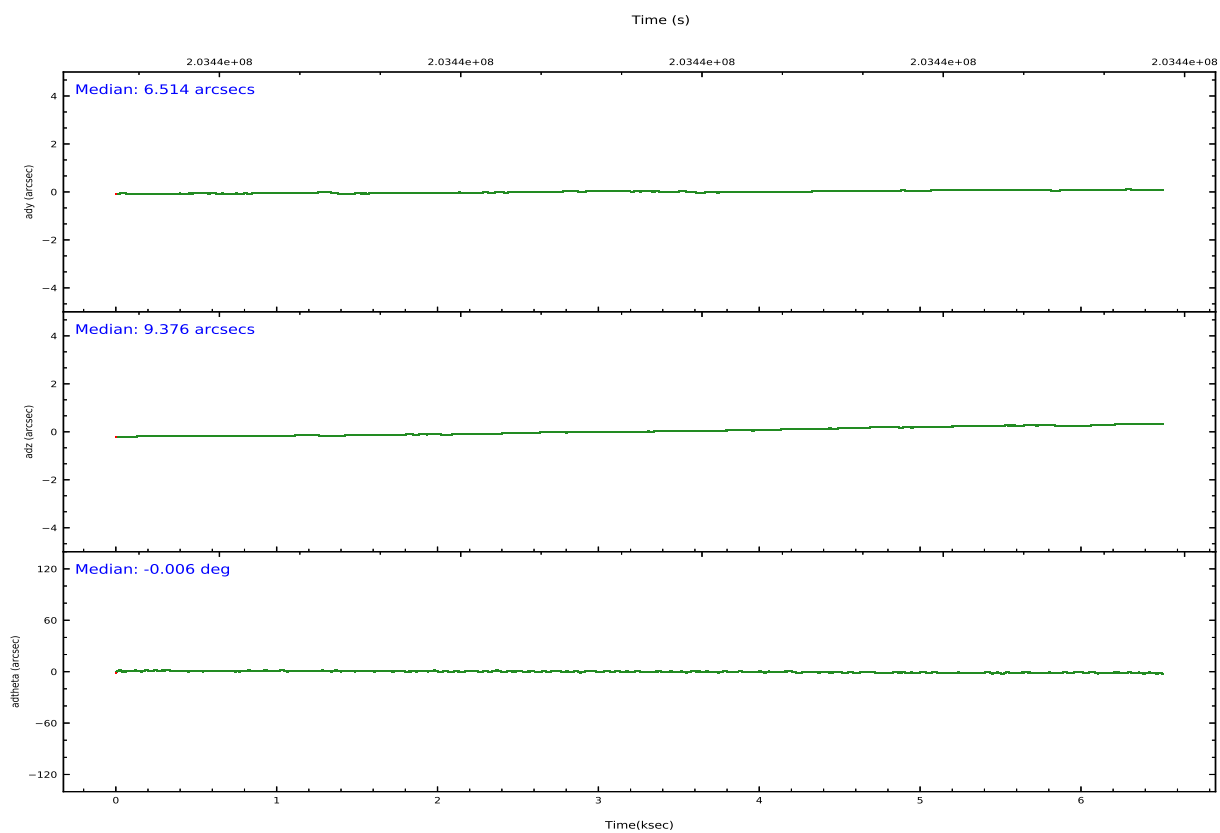
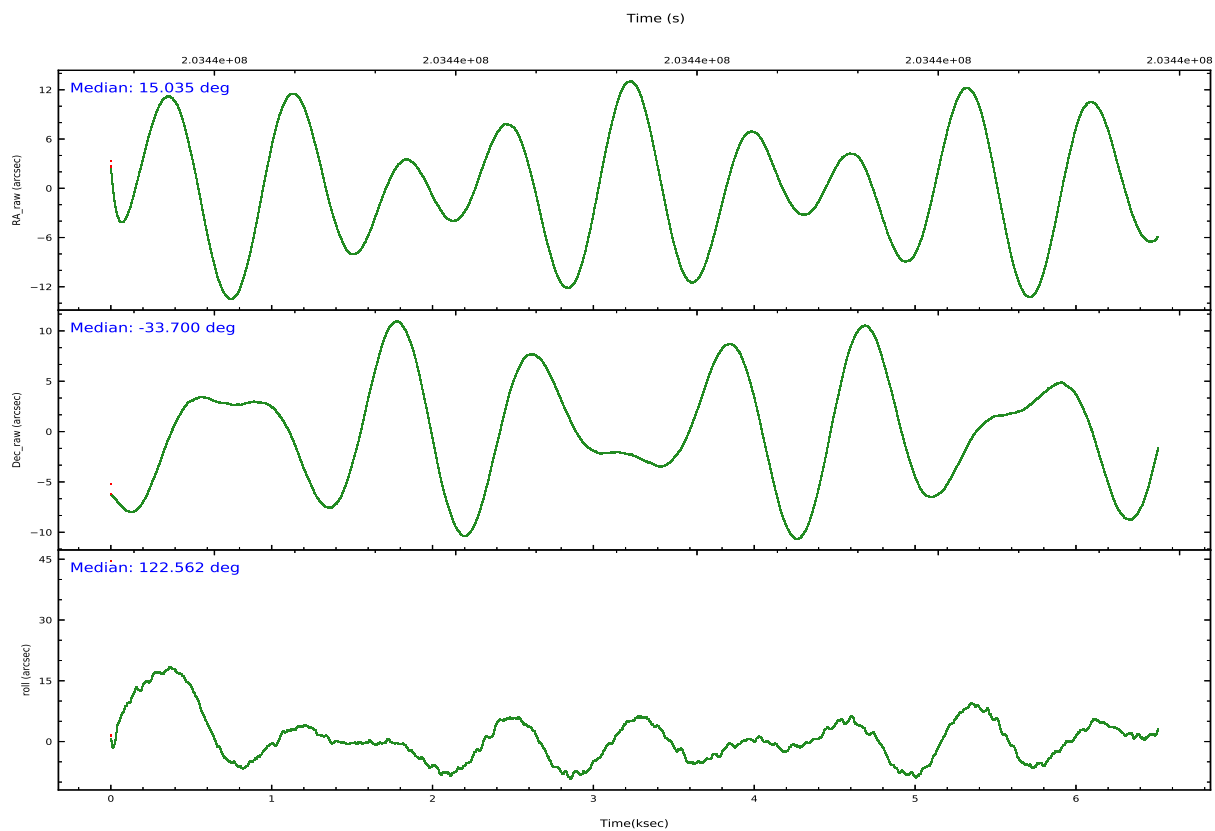


## 2.2 Compared Parameters

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	15.063984	15.038767464971	Subarray requested	NONE	NONE
[deg] Pointing Dec	-33.712164	-33.700192490775	Alternating exposures requested	N	N
[deg] Pointing Roll	122.427083	122.56203487468	[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)	203438366.184000	203437235.88103			
Observation start date	2004-06-12T14:38:22	2004-06-12T14:20:35			
[s] Observation end time (MET)	203444366.184000	203444955.66887			
Observation end date	2004-06-12T16:18:22	2004-06-12T16:29:15			
Read mode	TIMED	TIMED			

## 2.3 Aspect



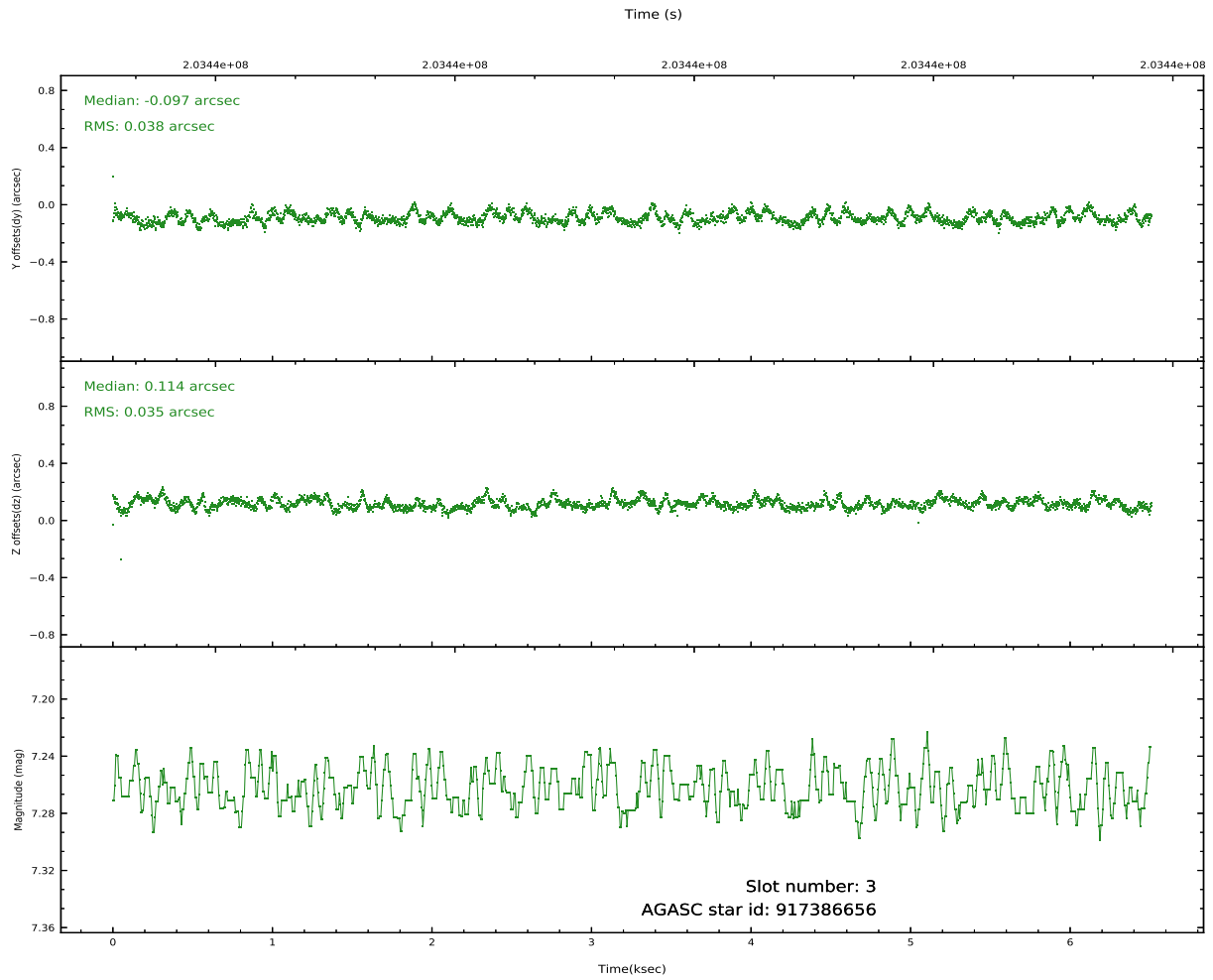
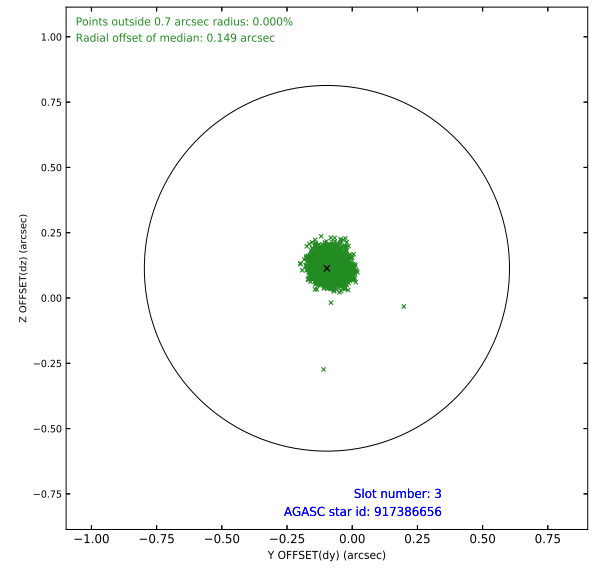
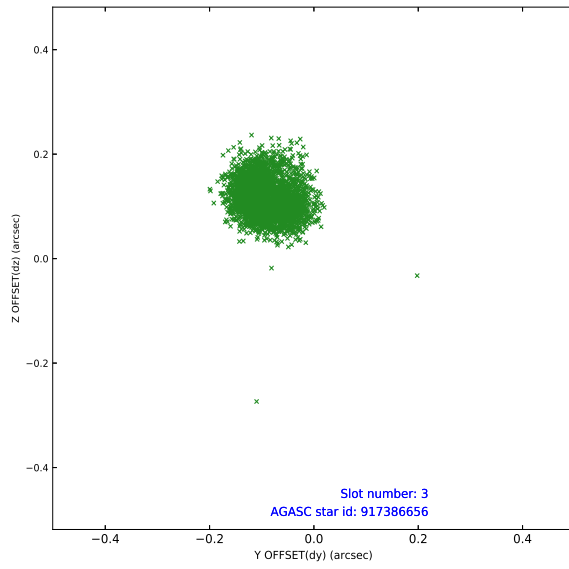


Slot Statistics

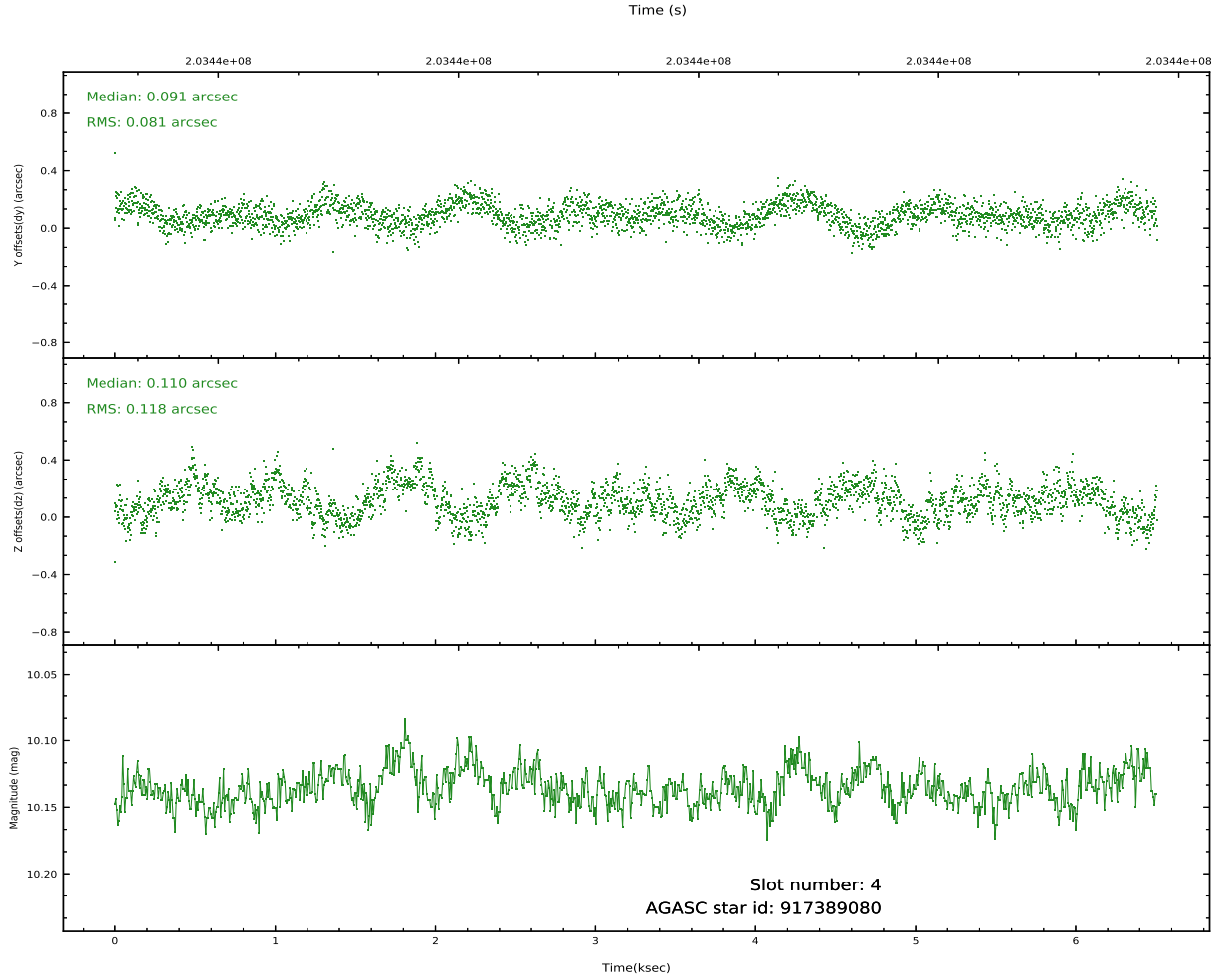
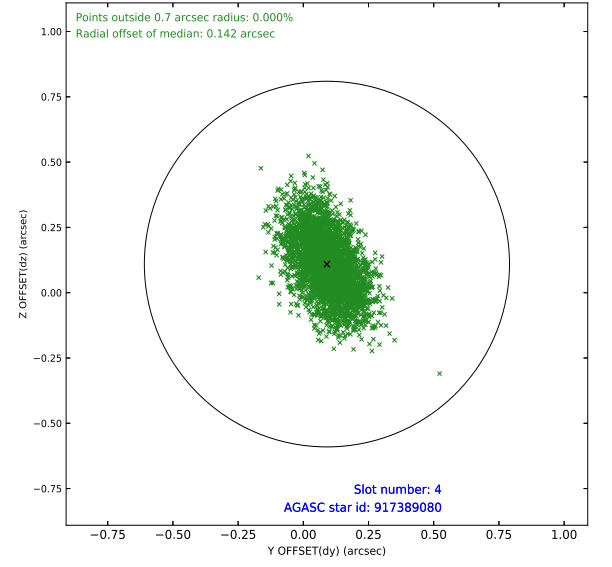
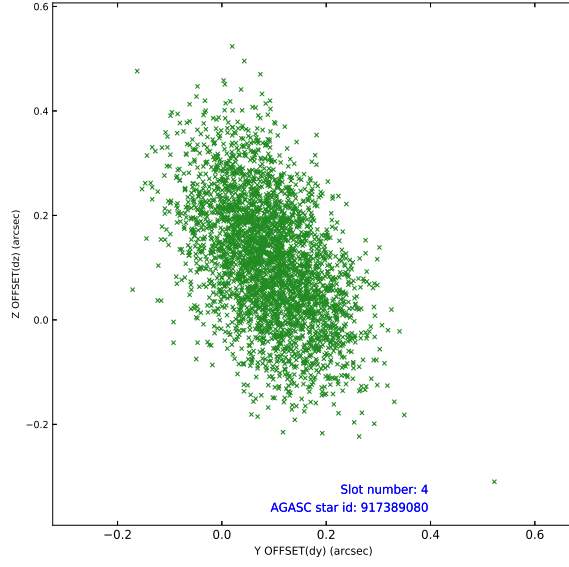
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-4	7.20	1589	1.000	0.096	0.007	0.007	0.011	0.000000	0.000000	2154.18	178
1	FID		ACIS-S-5	7.23	1588	1.000	-0.132	0.003	0.006	0.010	0.000000	0.000000	-1811.08	171
2	FID		ACIS-S-6	7.34	1589	1.000	0.007	0.004	0.009	0.014	0.000000	0.000000	401.37	815
3	GUIDE	used	917386656	7.26	3177	1.000	-0.097	0.114	0.055	0.088	15.342124	-33.359890	621.87	-1385
4	GUIDE	used	917389080	10.14	3175	1.000	0.091	0.110	0.153	0.256	15.722484	-33.662555	-911.39	-1758
5	GUIDE	used	917389288	9.57	3174	1.000	-0.097	0.237	0.103	0.165	15.394706	-33.185862	1064.17	-1856
6	GUIDE	used	917650528	8.72	3171	1.000	-0.045	-0.226	0.090	0.139	14.274554	-33.869842	779.04	2300
7	GUIDE	used	917651048	9.66	3173	1.000	0.144	-0.230	0.180	0.273	14.655628	-34.424089	-1514.66	2399

## 2.4 Star Slots

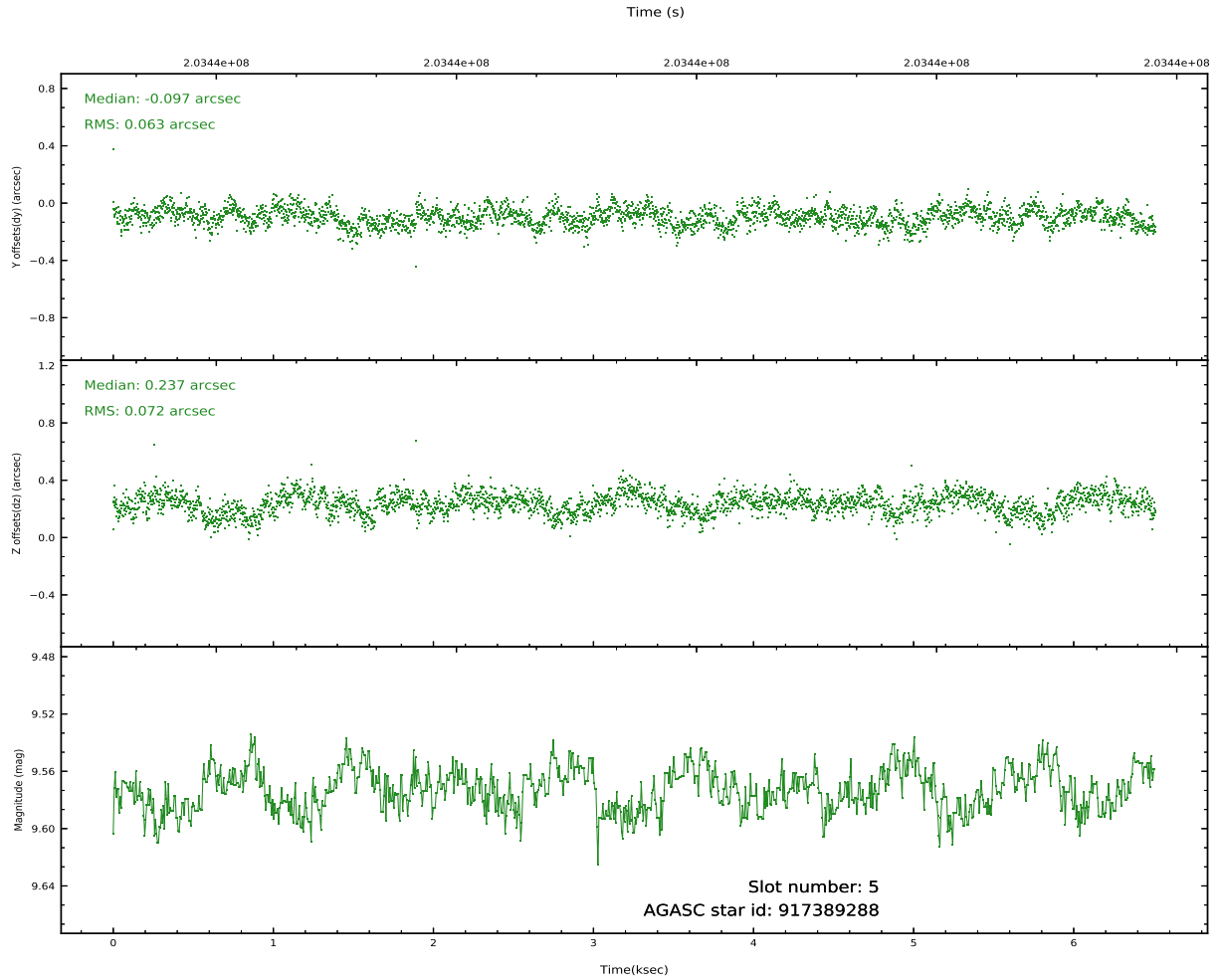
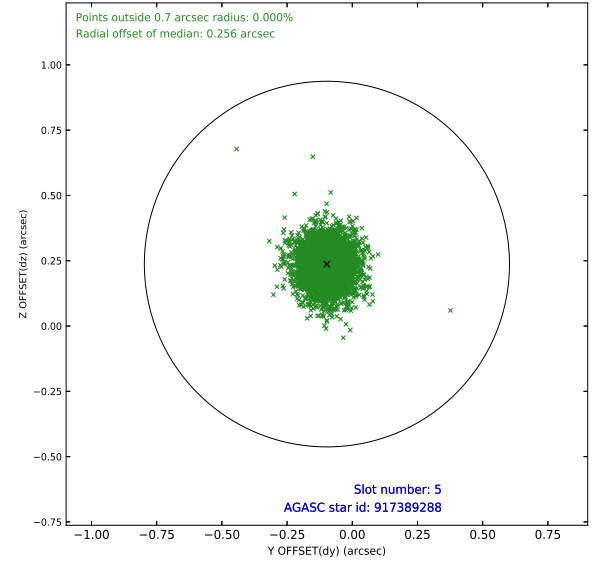
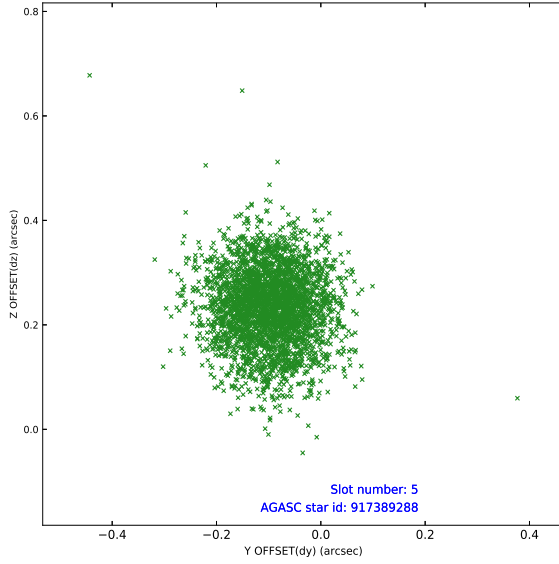
### 2.4.1 Slot 3



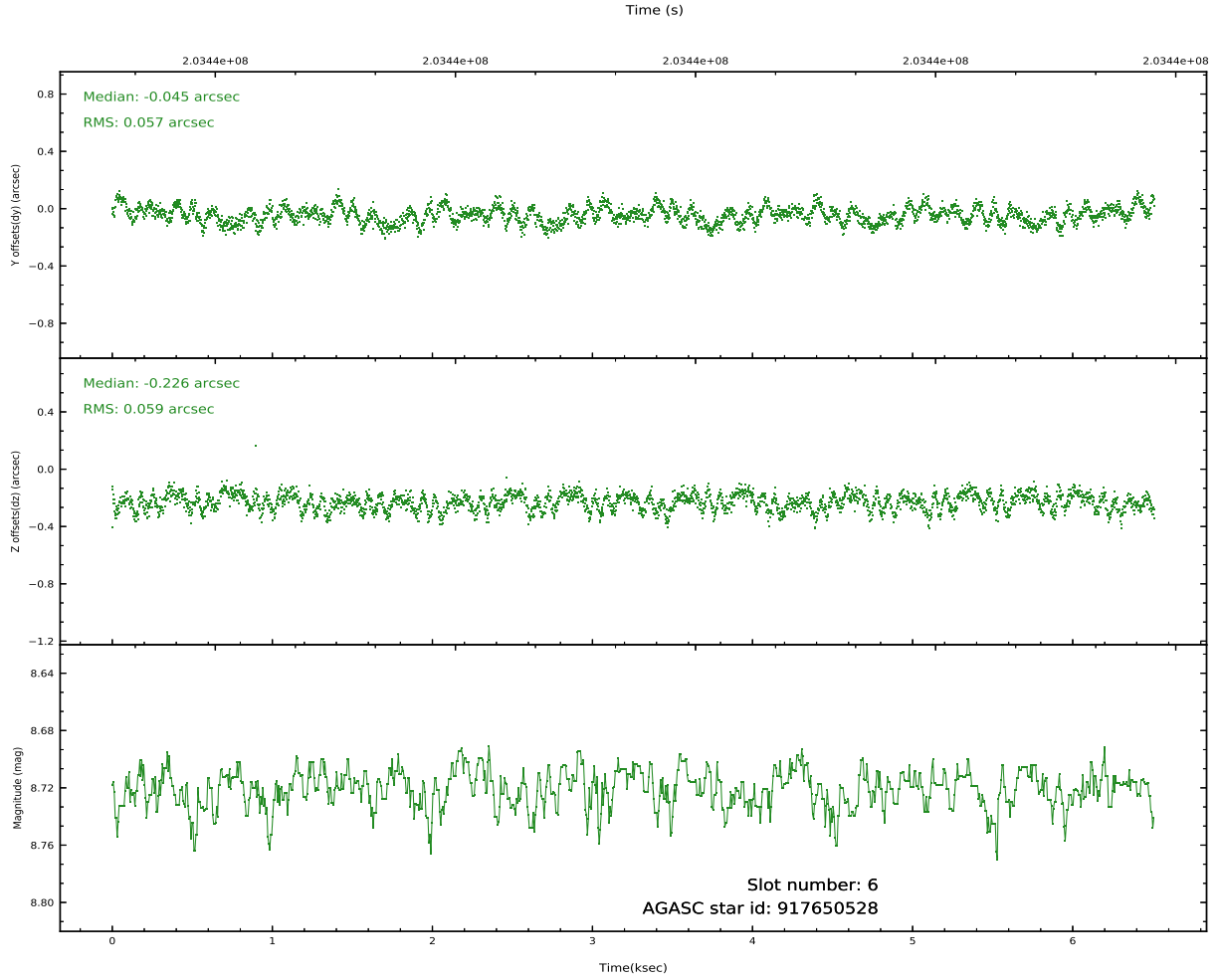
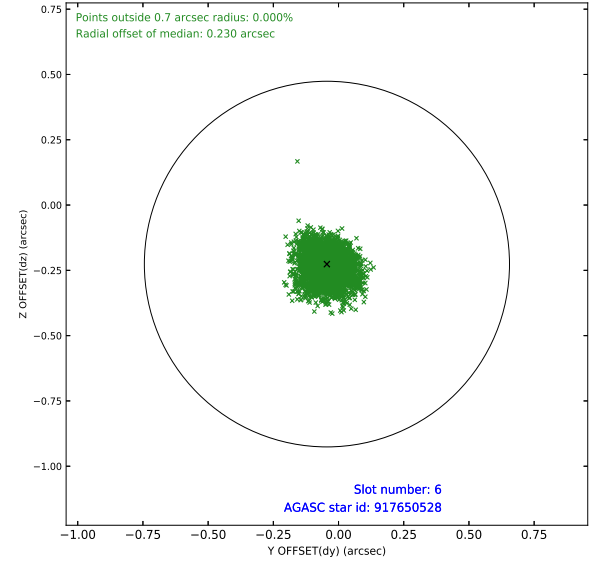
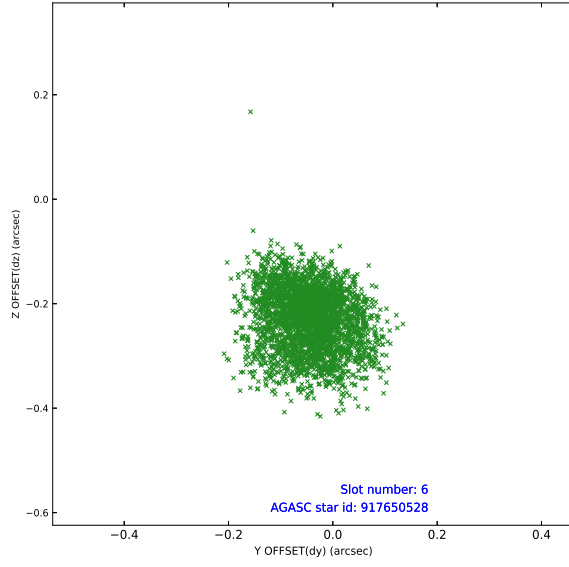
## 2.4.2 Slot 4



### 2.4.3 Slot 5

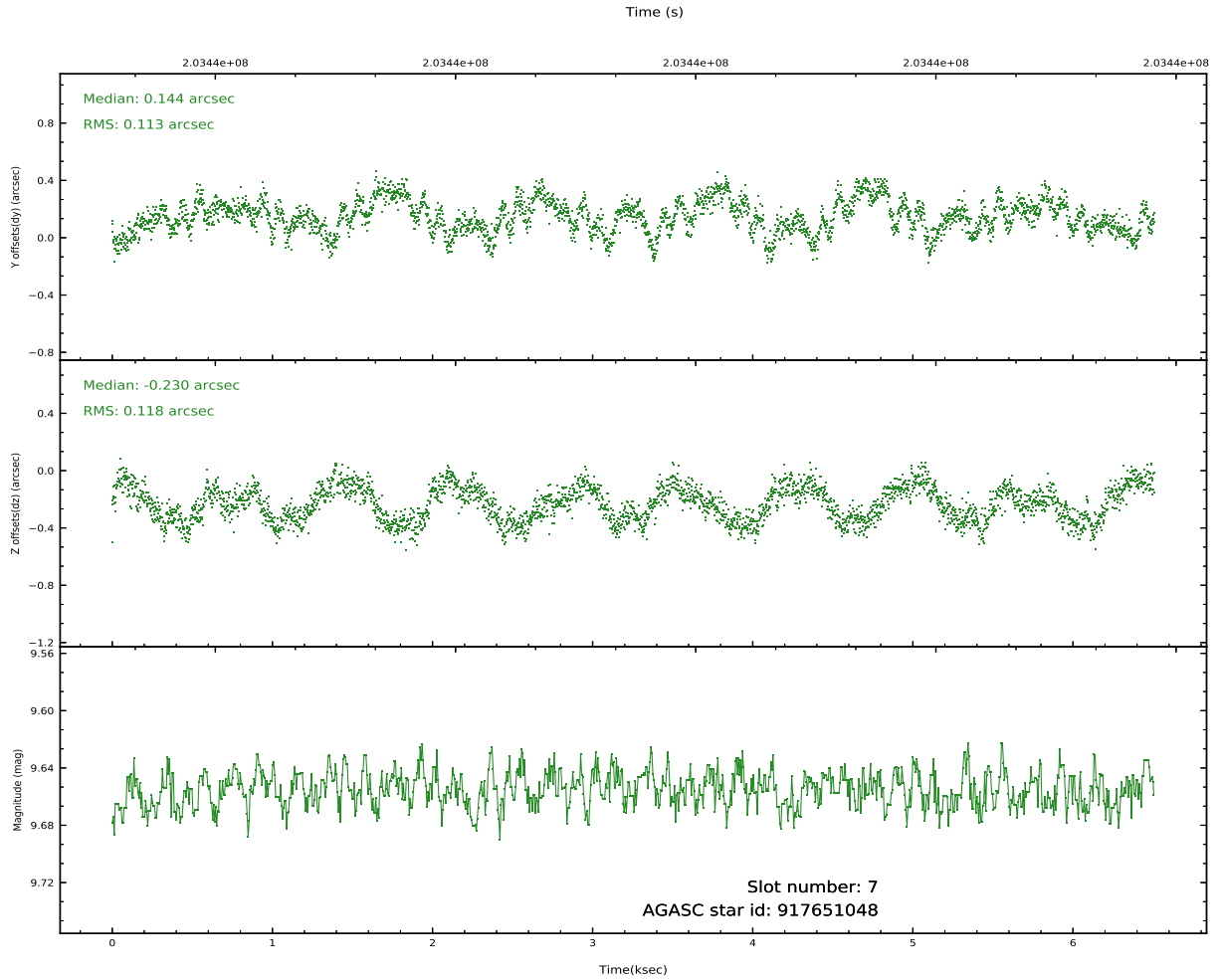
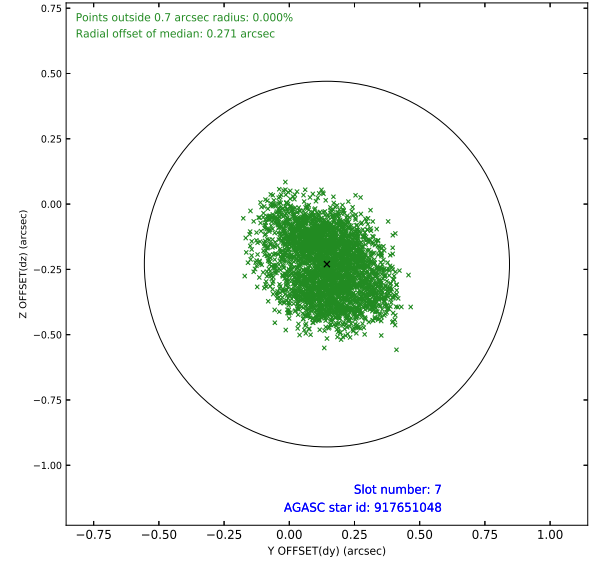
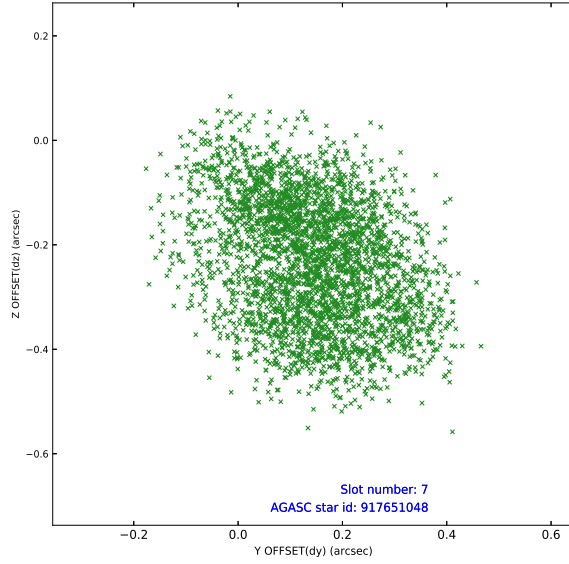


## 2.4.4 Slot 6



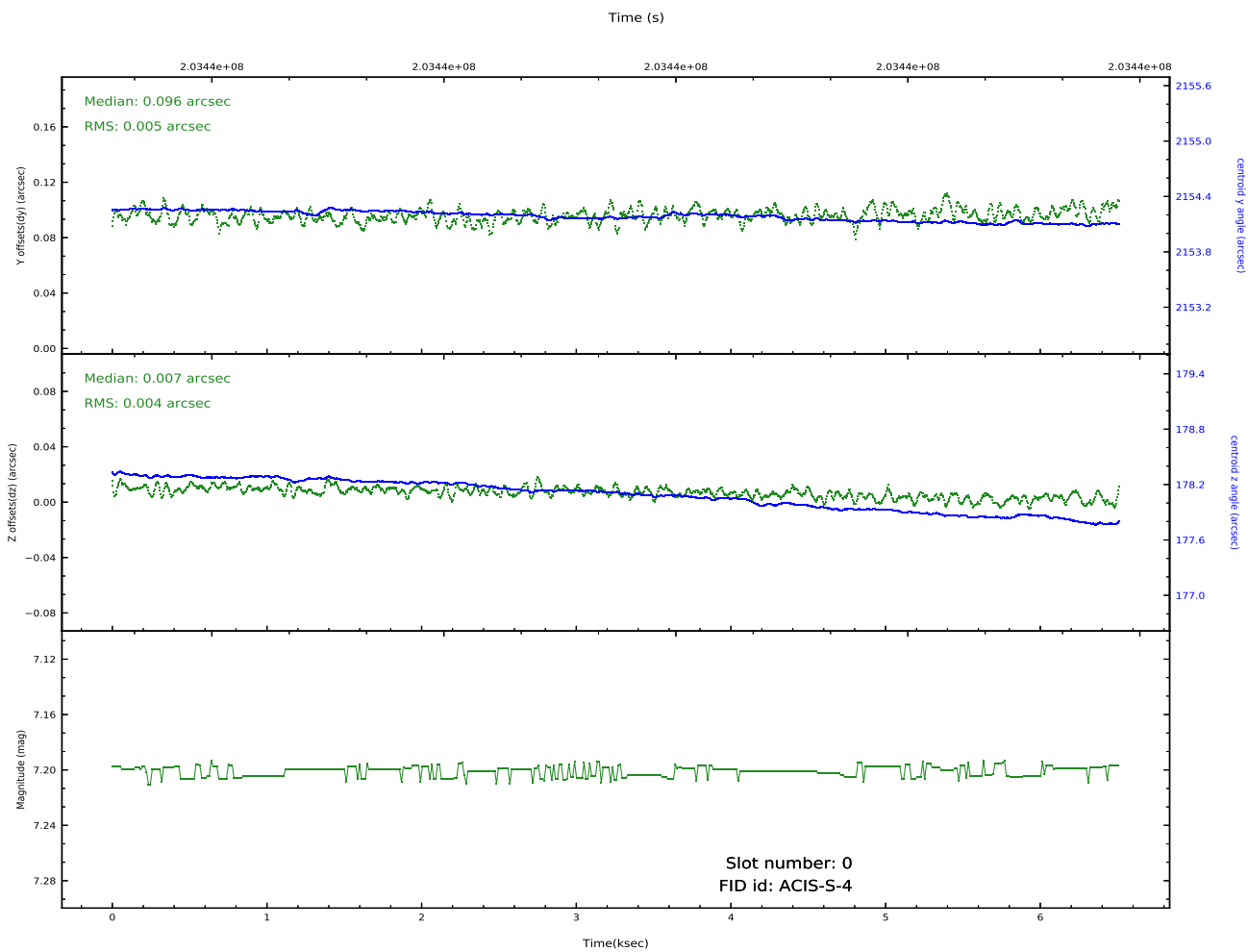
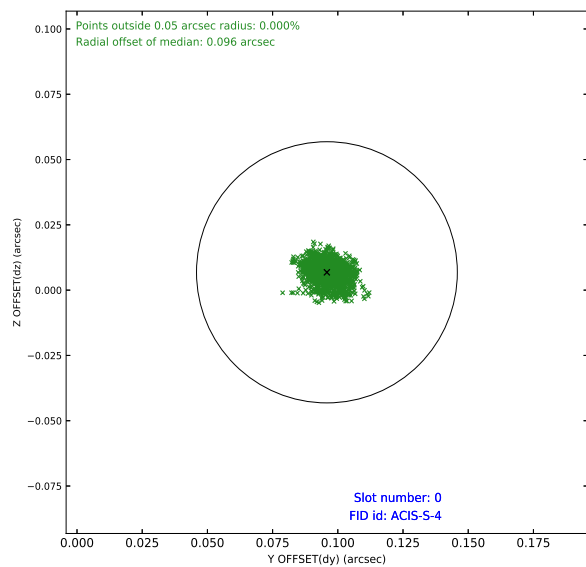
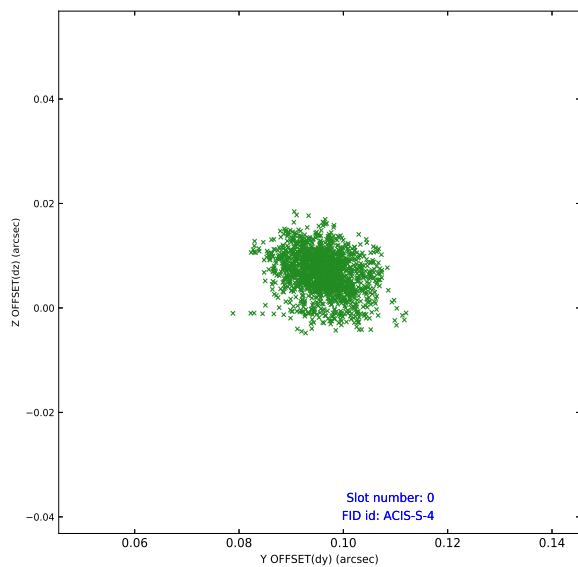


## 2.4.5 Slot 7

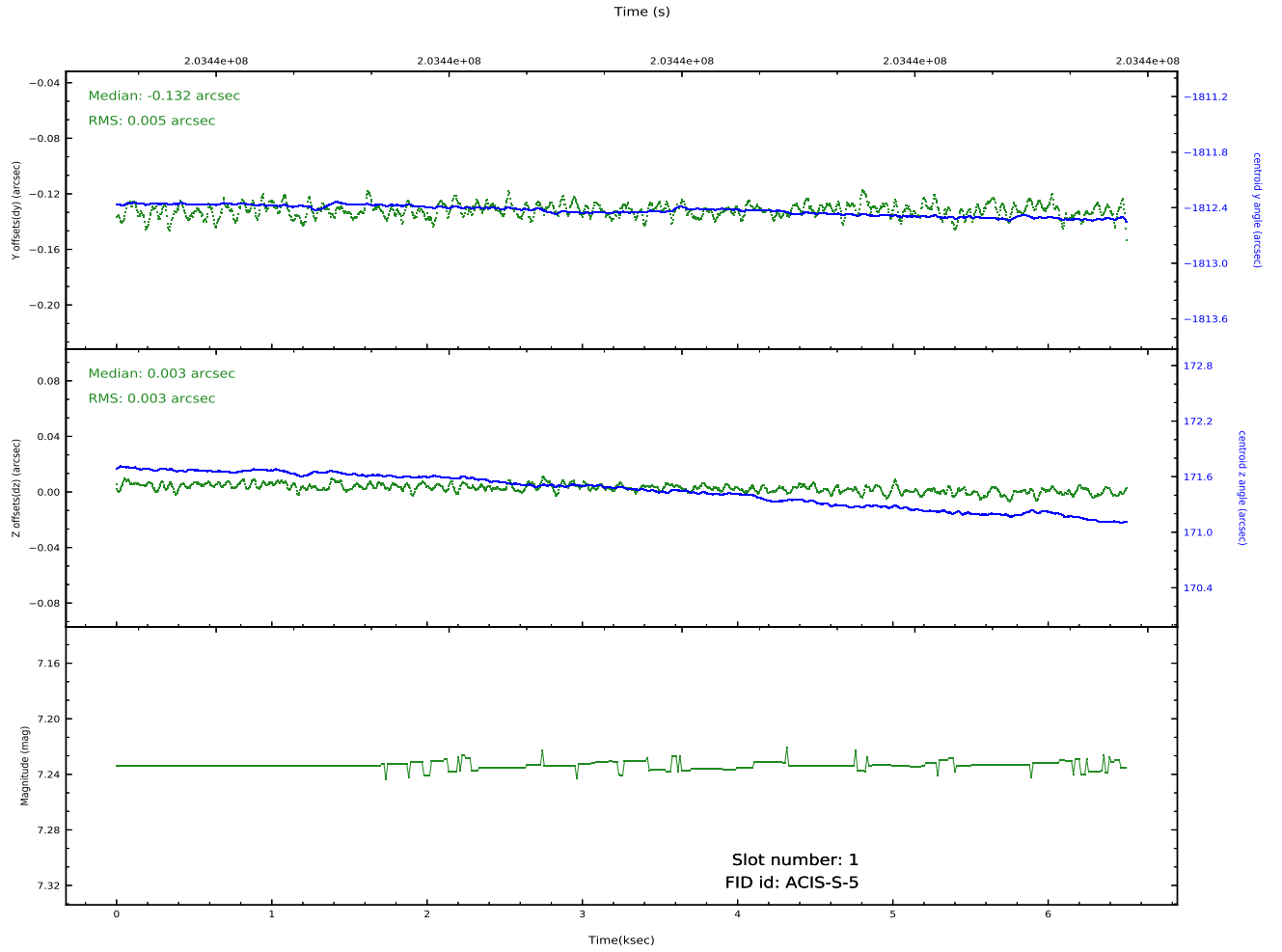
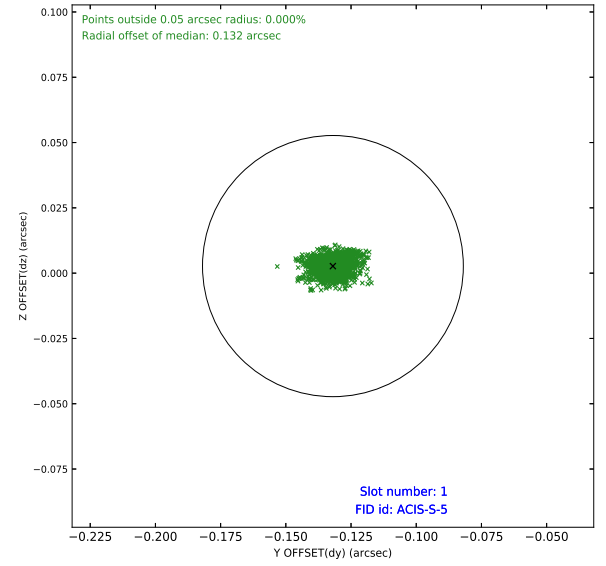
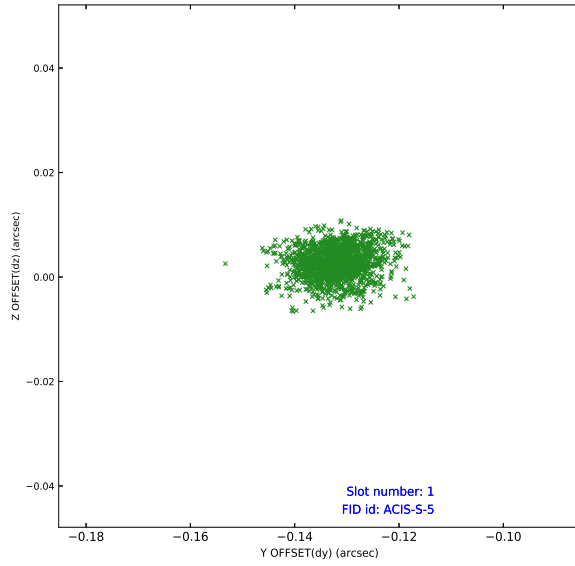


## 2.5 FID Slots

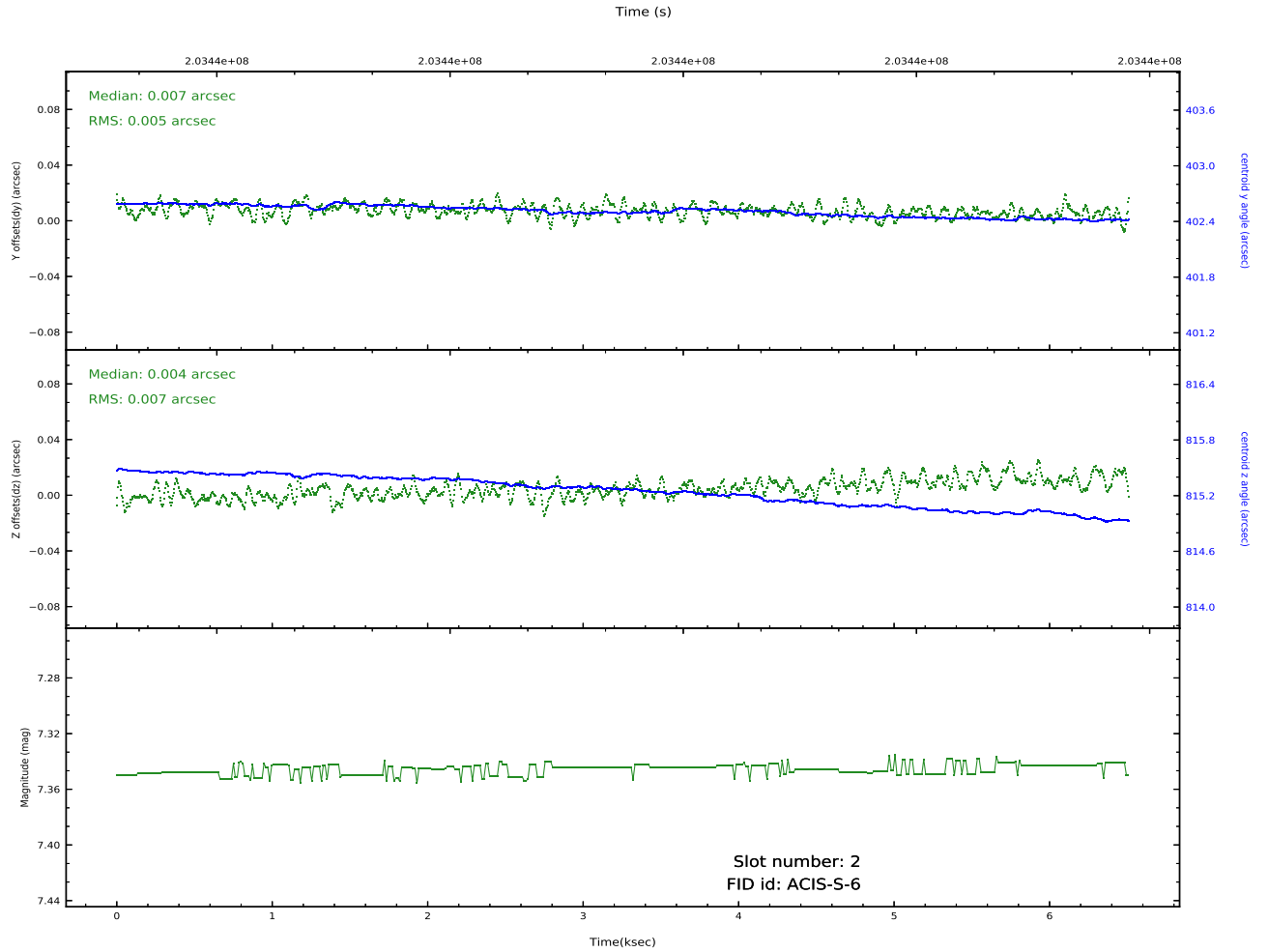
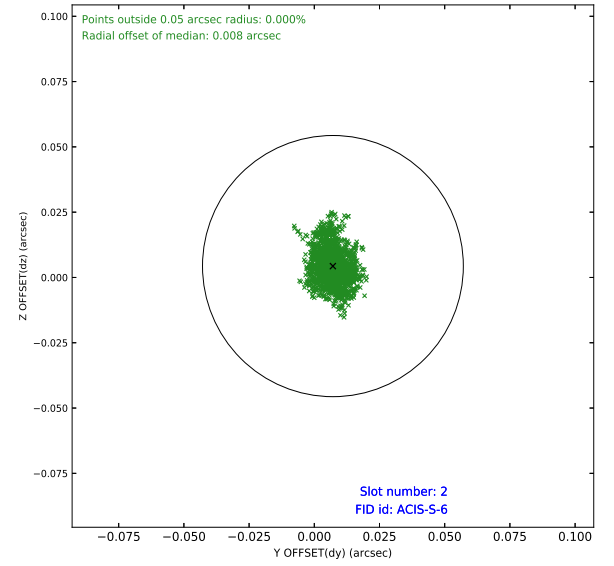
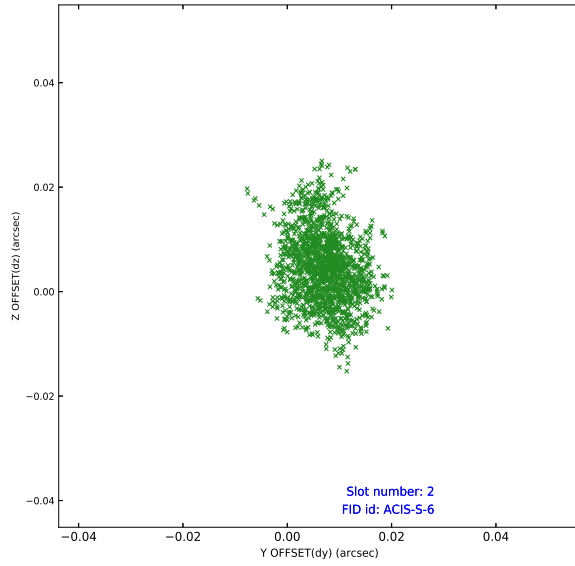
### 2.5.1 Slot 0



## 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)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.961

### A.2 Comments

Monitor constraint met. Joint Proposal: NOAO