

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4944 - L2 Version 4  
Chandra X-Ray Center

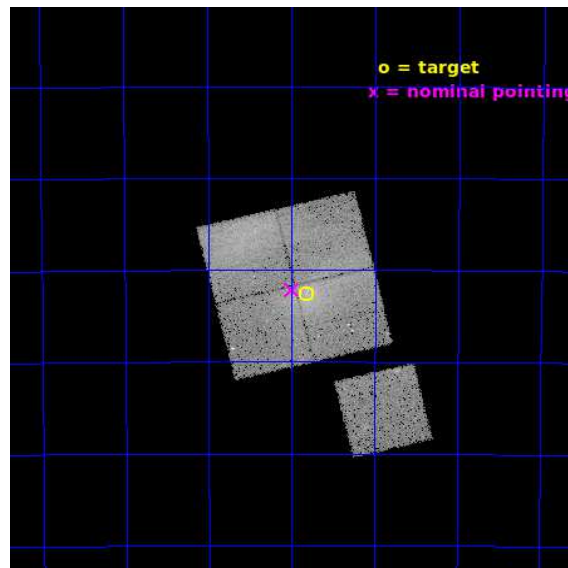
L2 Processing Date : Sep 27 2020

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# 1 Front

seq_num	800395	Sequence number
obs_id	4944	Observation id
title	THE HIFLUGCS CLUSTER SURVEY: A CORNERSTONE FOR COSMOLOGY	Proposal
observer	Dr. Thomas Reiprich	Principal investigator
object	A3395	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	96.7065	Observer's specified target RA [deg]
dec_targ	-54.5431	Observer's specified target Dec [deg]
ra_nom	96.74917170432	Nominal RA [deg]
dec_nom	-54.535793177013	Nominal Dec [deg]
roll_nom	166.40404574536	Nominal Roll [deg]
revision	4	Processing version of data
ontime	22174.217976987	Sum of GTIs [s]
livetime	21884.495494696	Livetime [s]
ontime0	22180.499957323	Sum of GTIs [s]
ontime1	22171.077046573	Sum of GTIs [s]
ontime2	22174.217976987	Sum of GTIs [s]
ontime3	22174.218026817	Sum of GTIs [s]
ontime6	22180.499957323	Sum of GTIs [s]
l2events	102903	Number of level 2 events

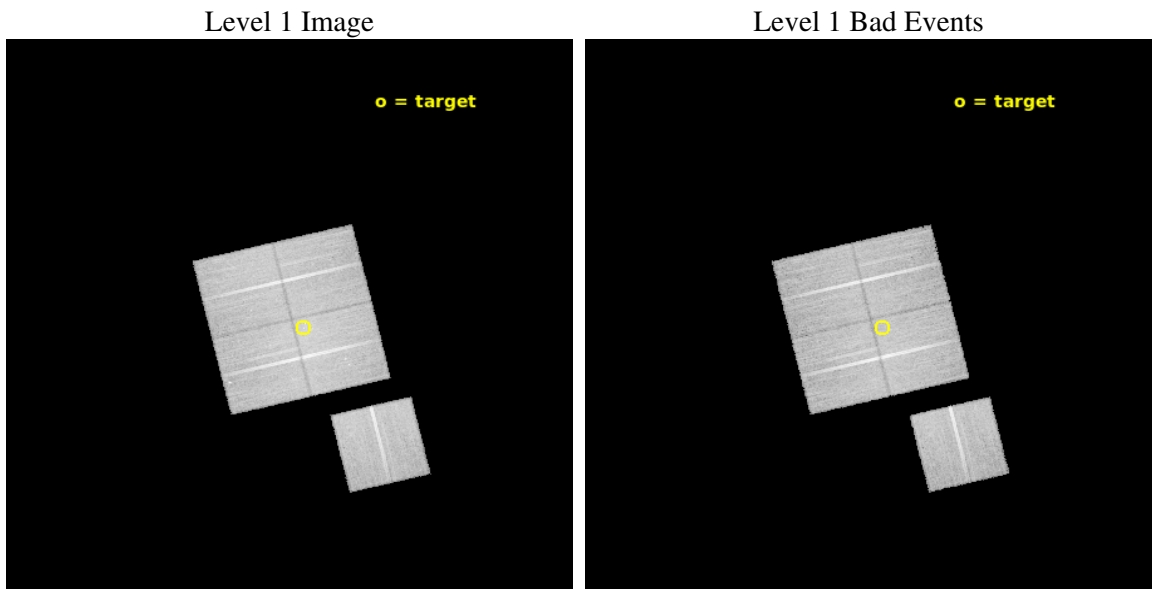




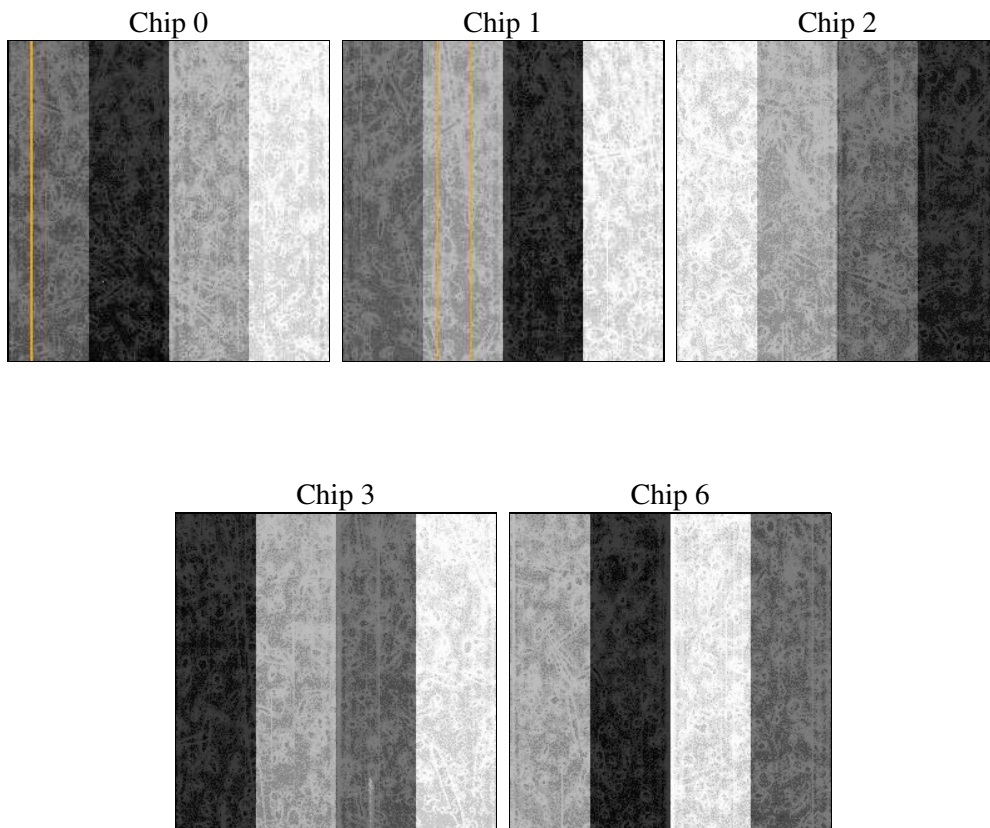
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	22174.217976987	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	22180.499957323	Sum of GTIs [s]
date	2020-09-27T04:10:52	Date and time of file creation	ontime1	22171.077046573	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	22174.217976987	Sum of GTIs [s]
			ontime3	22174.218026817	Sum of GTIs [s]
			ontime6	22180.499957323	Sum of GTIs [s]
			l1events	760916	Number of level 1 events

### 2.1.4 Events

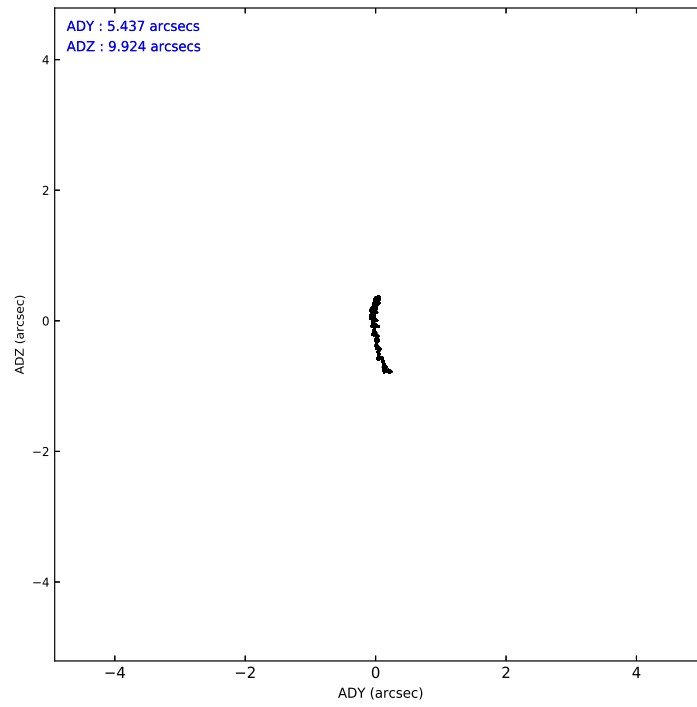
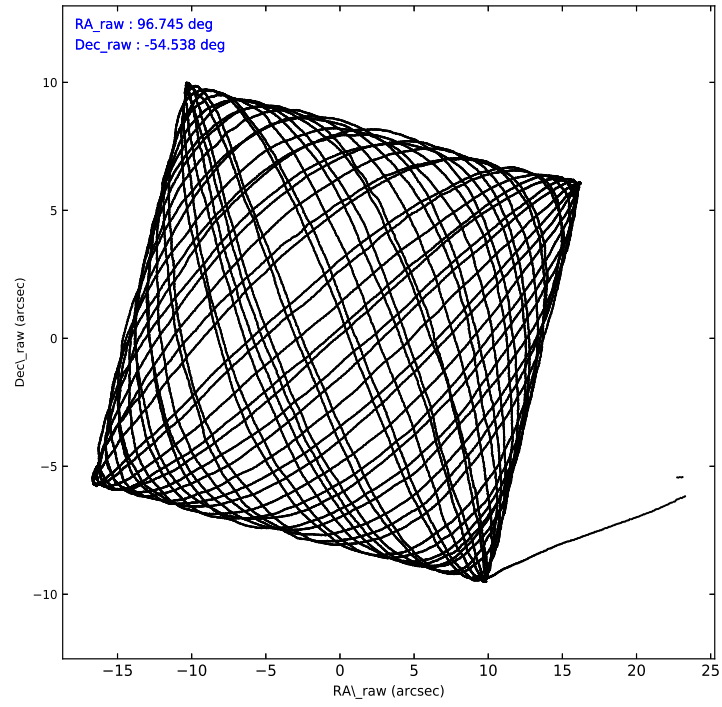
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	146554	150885	168011	153122	142344
rejected events	122442	119490	140263	133853	126820
rejected %	83%	79%	83%	87%	89%

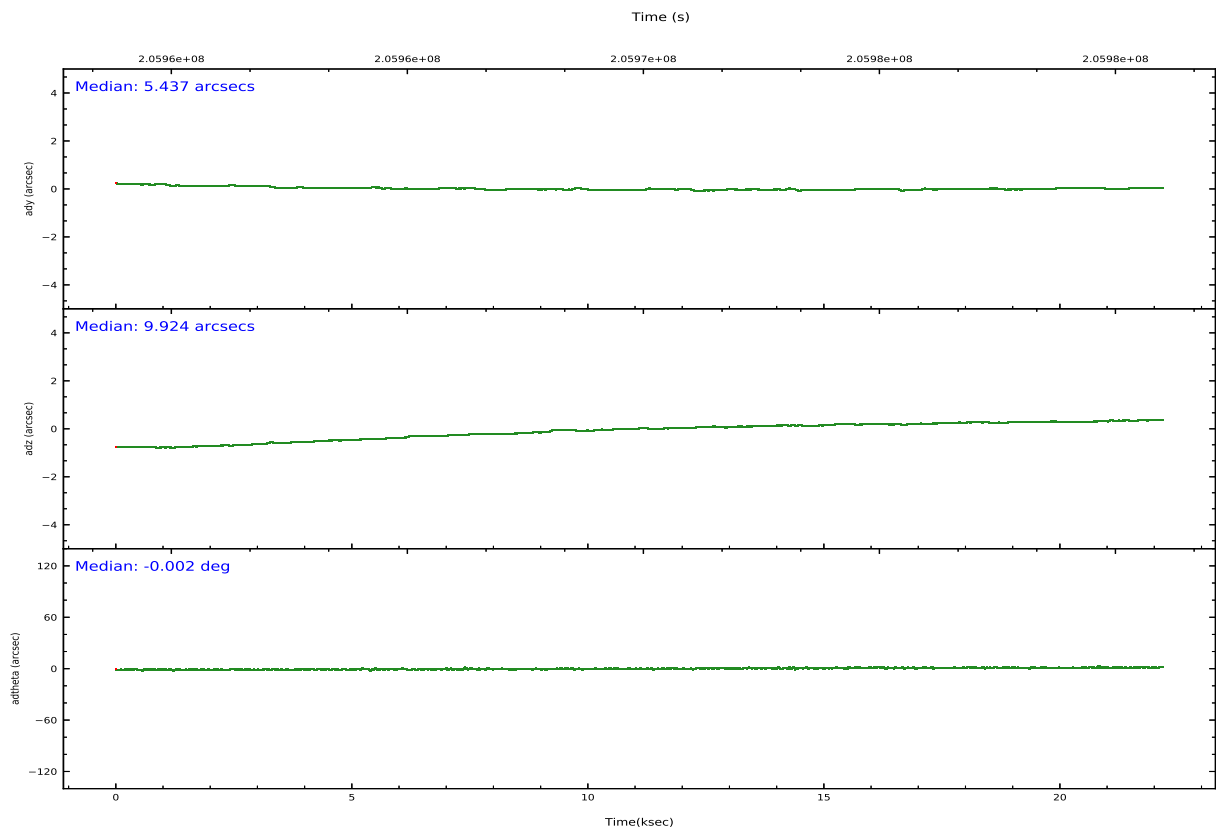
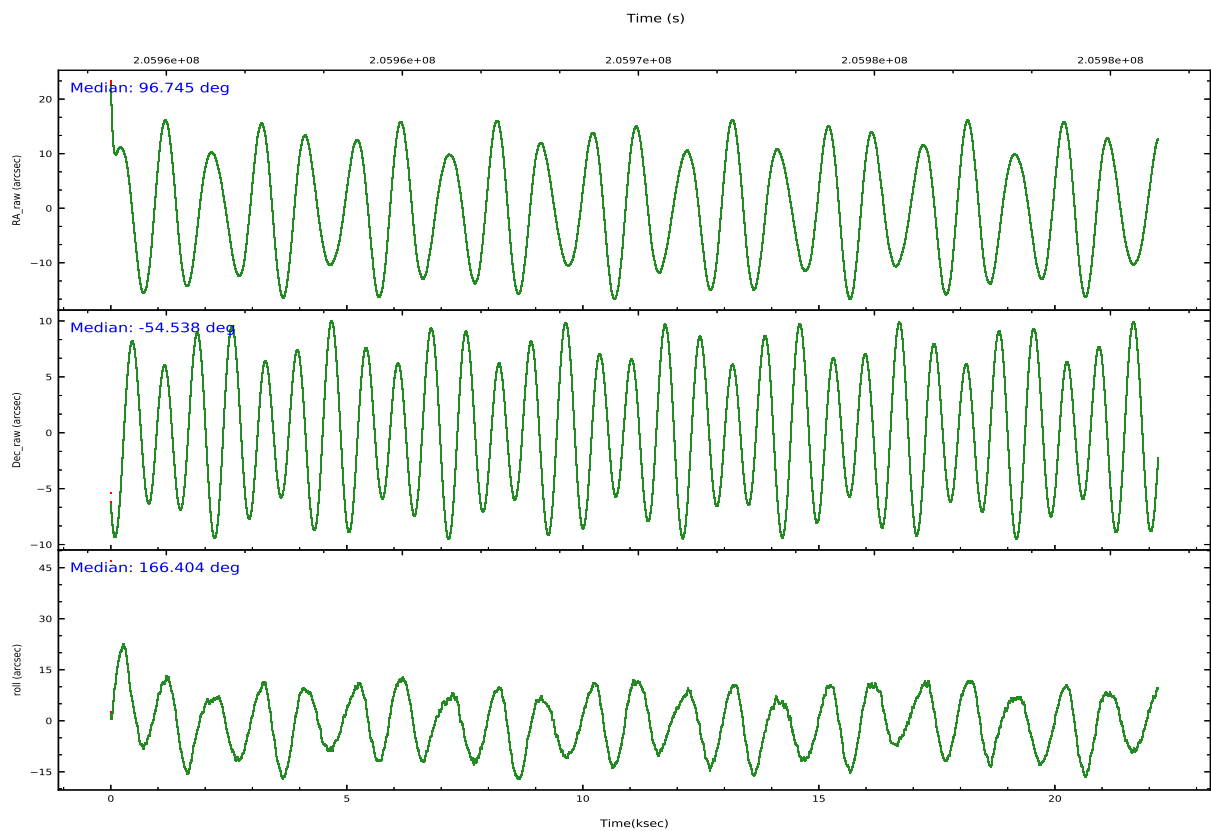
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	13259	18525	16507	9799	6123
	9%	12%	9%	6%	4%
grade 1 events	102	115	151	90	81
	0%	0%	0%	0%	0%
grade 2 events	4503	5016	4639	3439	3213
	3%	3%	2%	2%	2%
grade 3 events	1947	2272	1994	1721	1680
	1%	1%	1%	1%	1%
grade 4 events	1857	2296	2003	1755	1616
	1%	1%	1%	1%	1%
grade 5 events	5113	5422	4719	5620	5469
	3%	3%	2%	3%	3%
grade 6 events	2853	3628	2892	2796	3105
	1%	2%	1%	1%	2%
grade 7 events	116920	113611	135106	127902	121057
	79%	75%	80%	83%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	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	96.790572	96.74917170432001	Subarray requested	NONE	NONE
[deg] Pointing Dec	-54.530362	-54.535793177013	Alternating exposures requested	N	N
[deg] Pointing Roll	166.237681	166.40404574536	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	205959011.184000	205957858.08021			
Observation start date	2004-07-11T18:49:07	2004-07-11T18:30:58			
[s] Observation end time (MET)	205981011.184000	205981745.70627			
Observation end date	2004-07-12T00:55:47	2004-07-12T01:09:05			
Read mode	TIMED	TIMED			

## 2.3 Aspect



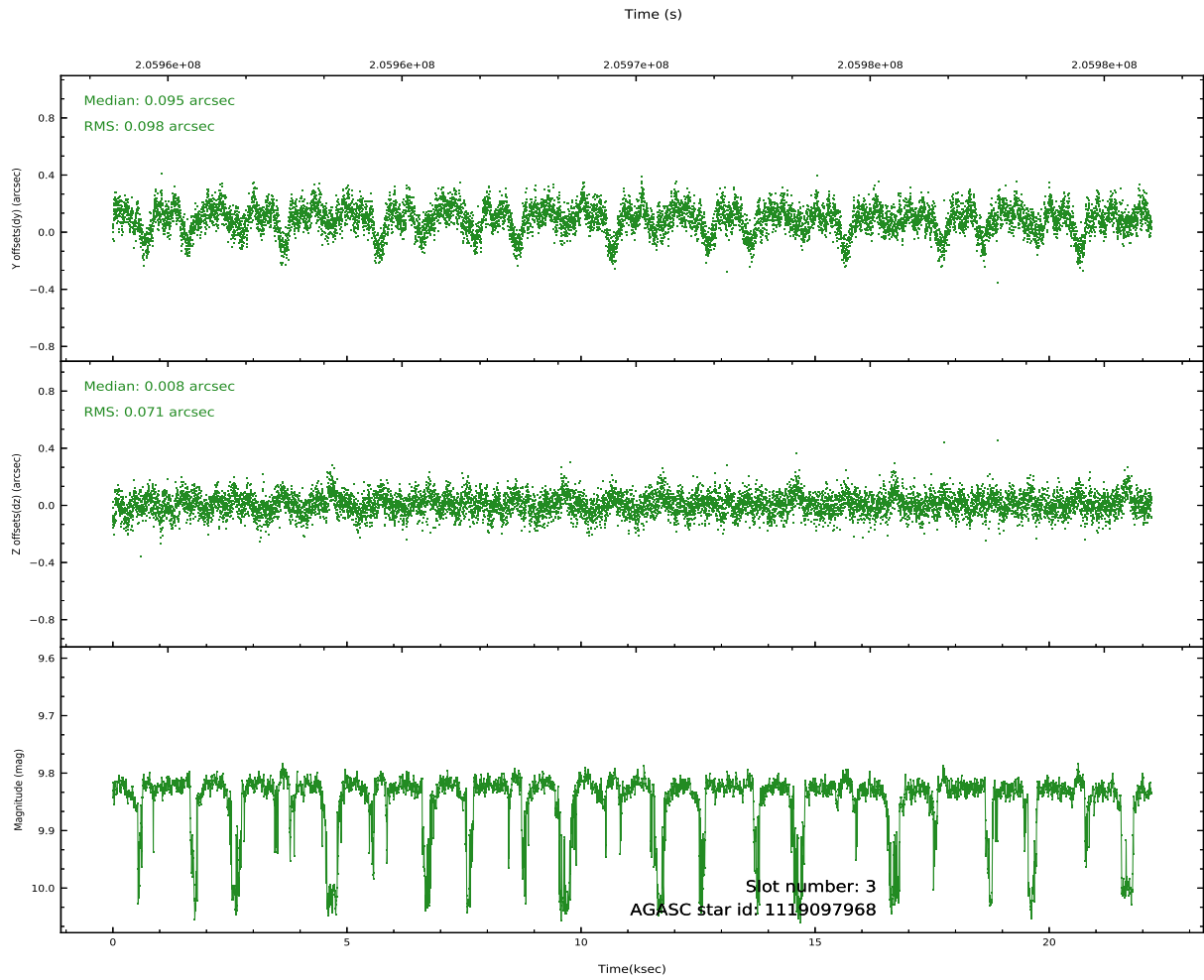
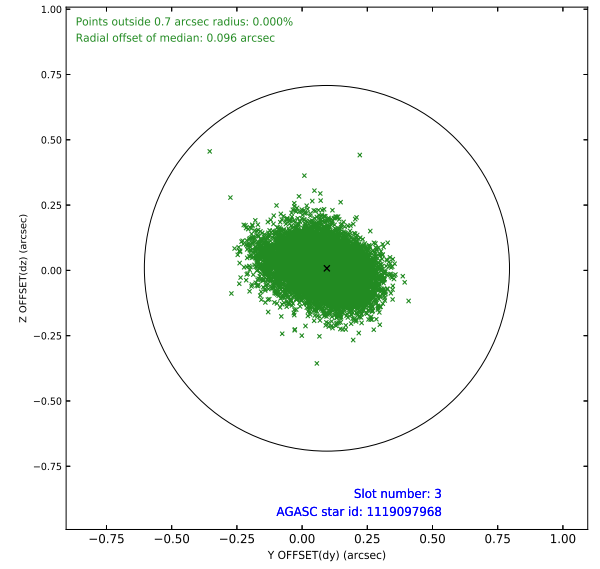
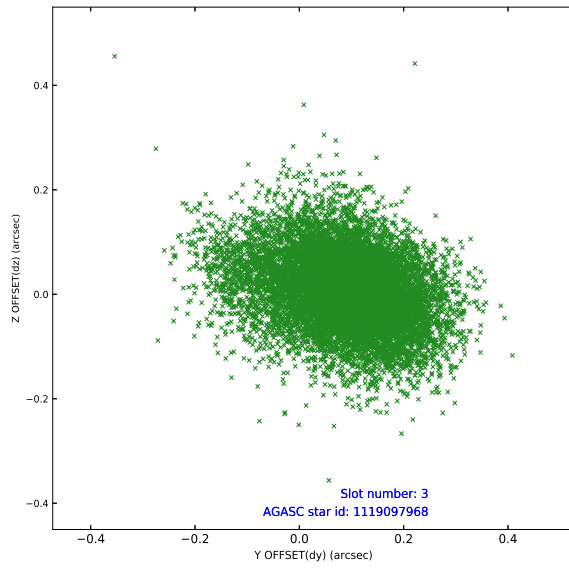


Slot Statistics

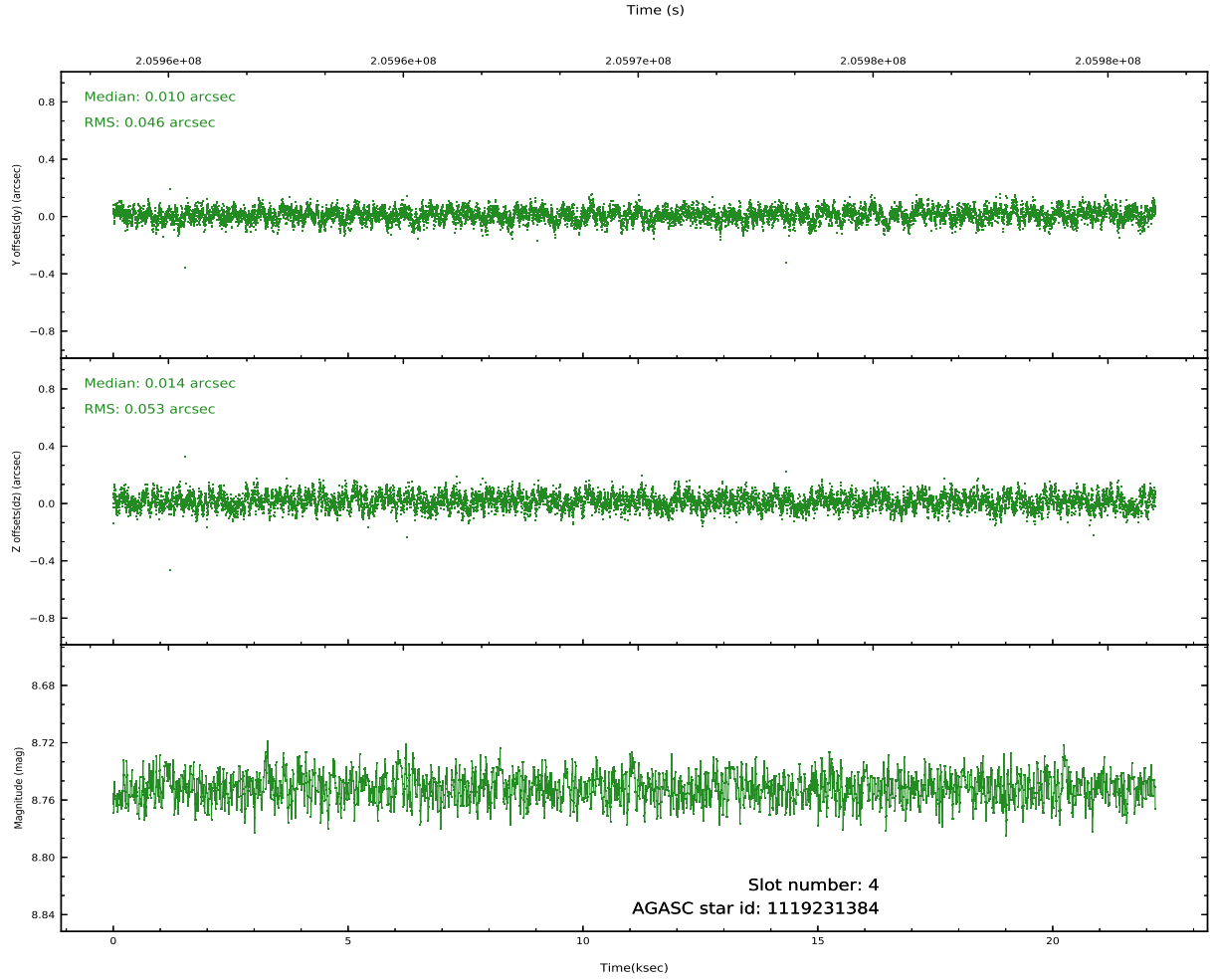
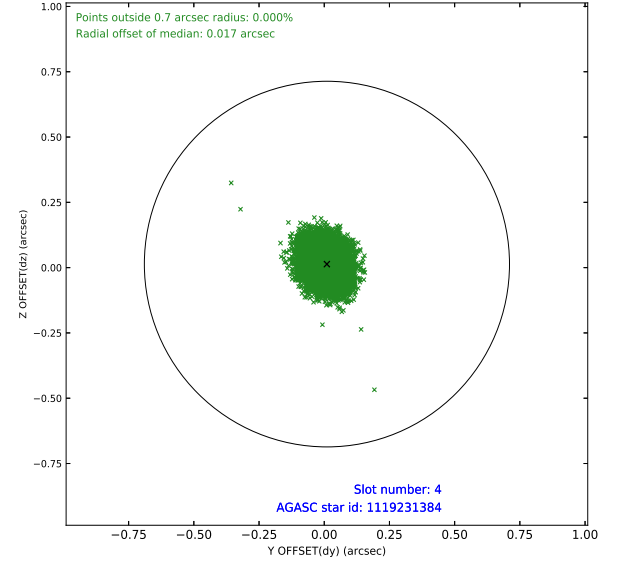
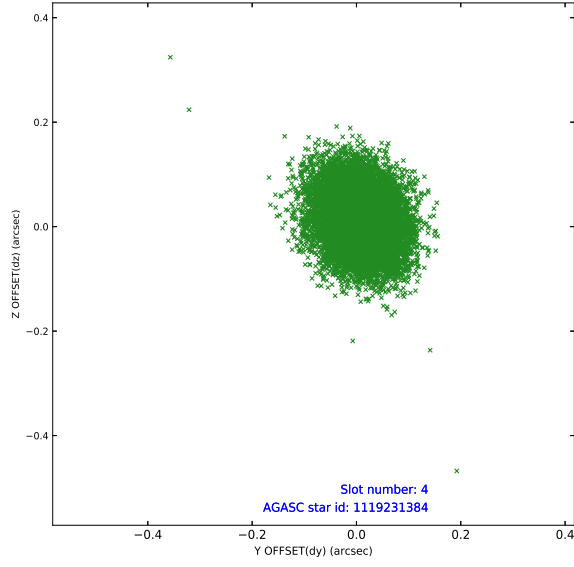
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	5411	1.000	0.014	0.000	0.016	0.031	0.000000	0.000000	934.29	-833
1	FID		ACIS-I-5	7.22	5412	1.000	-0.191	0.023	0.007	0.012	0.000000	0.000000	-1813.96	1064
2	FID		ACIS-I-6	7.25	5412	1.000	0.087	0.047	0.014	0.027	0.000000	0.000000	399.72	1708
3	GUIDE	used	1119097968	9.83	10751	1.000	0.095	0.008	0.125	0.220	96.398409	-54.760570	593.79	1000
4	GUIDE	used	1119231384	8.75	10823	1.000	0.010	0.014	0.075	0.118	96.745135	-55.033251	-339.69	1780
5	GUIDE	used	1119231392	9.38	10813	1.000	-0.087	0.005	0.093	0.151	96.919371	-55.004394	-664.50	1594
6	GUIDE	used	1119232832	9.89	10815	1.000	0.039	-0.041	0.122	0.197	97.472116	-54.403559	-1280.00	-776
7	GUIDE	used	1118715408	9.88	10814	1.000	-0.049	0.013	0.113	0.185	98.062690	-54.220510	-2340.76	-1697

## 2.4 Star Slots

### 2.4.1 Slot 3

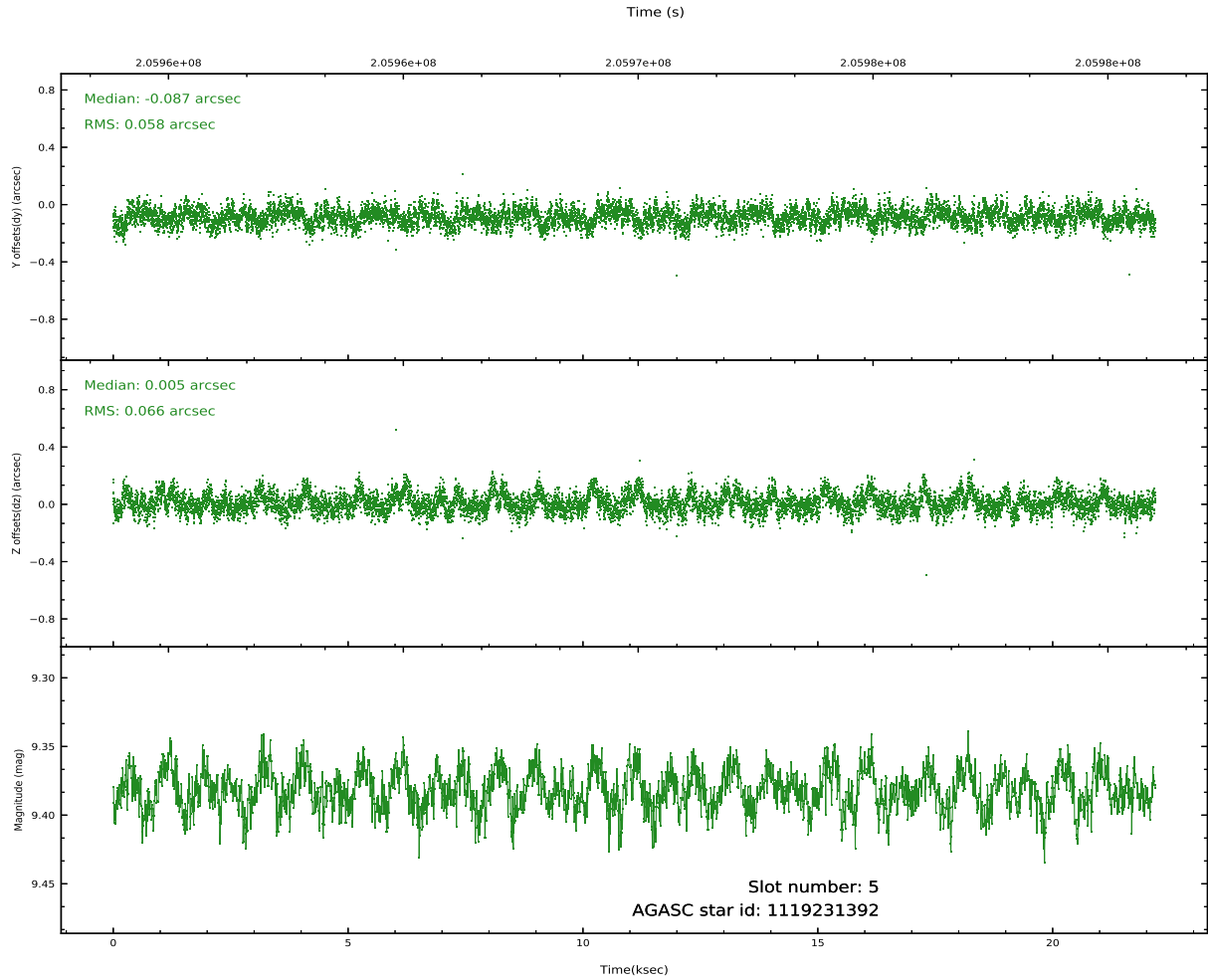
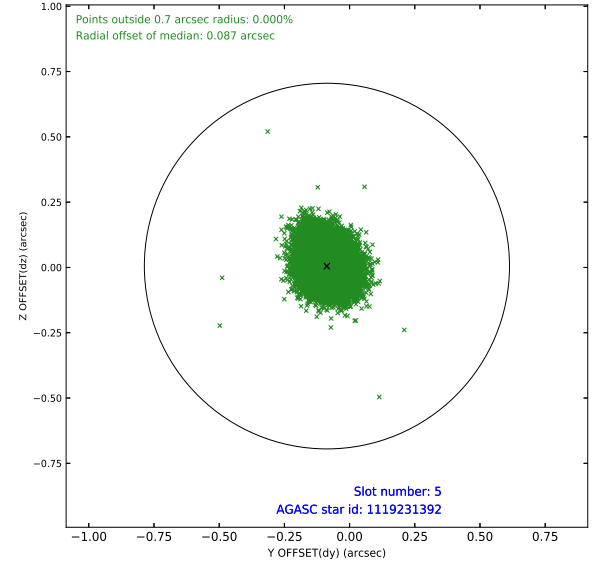
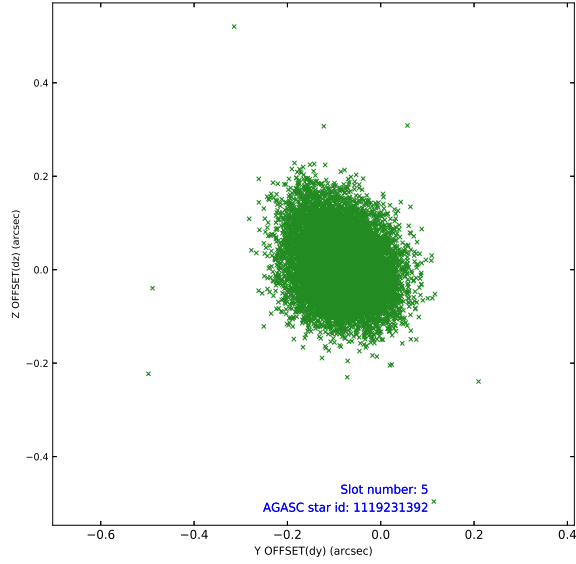


## 2.4.2 Slot 4

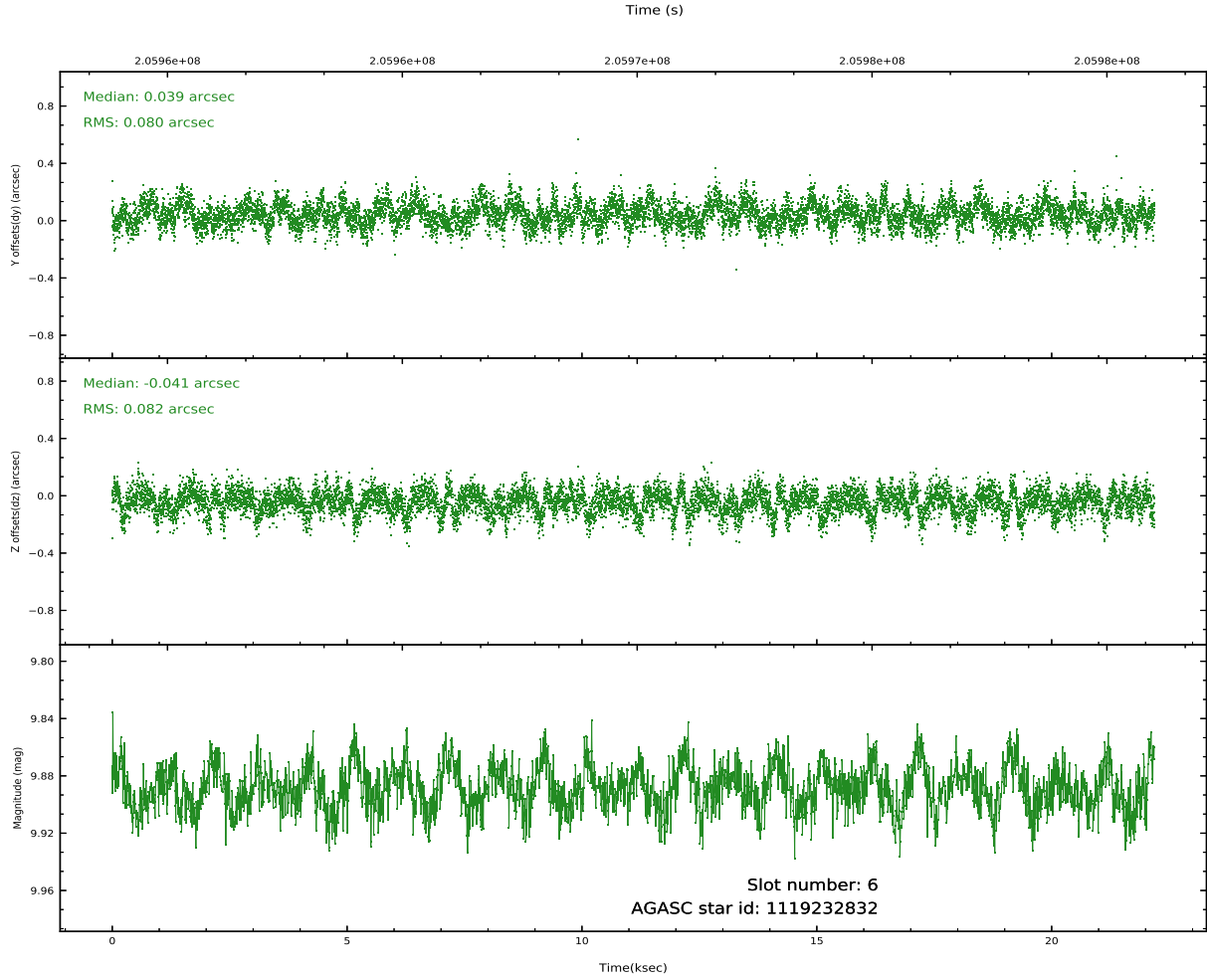
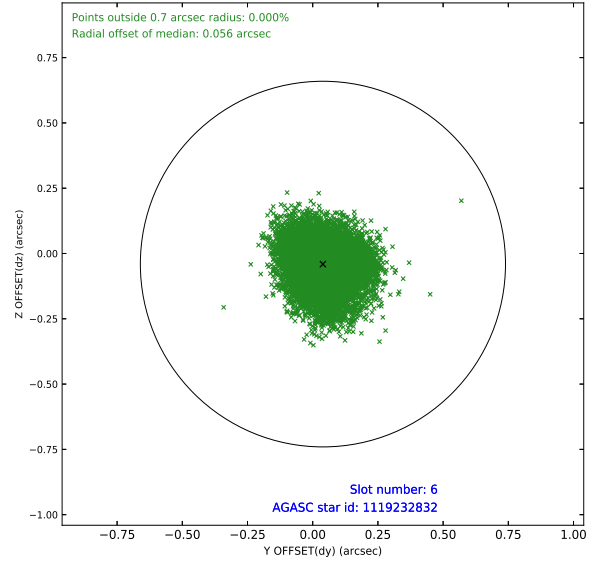
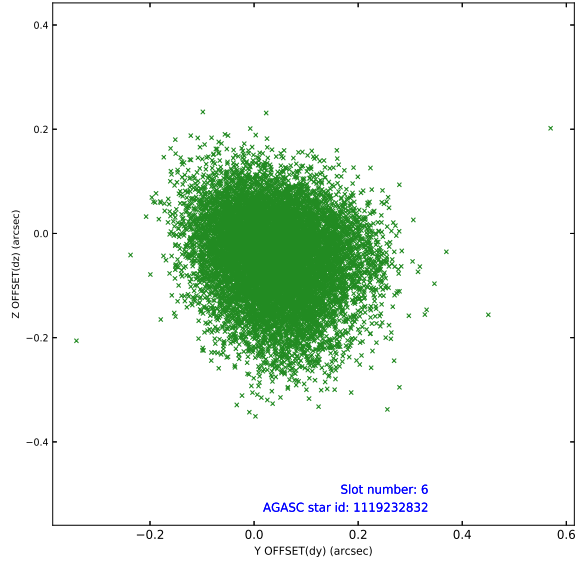




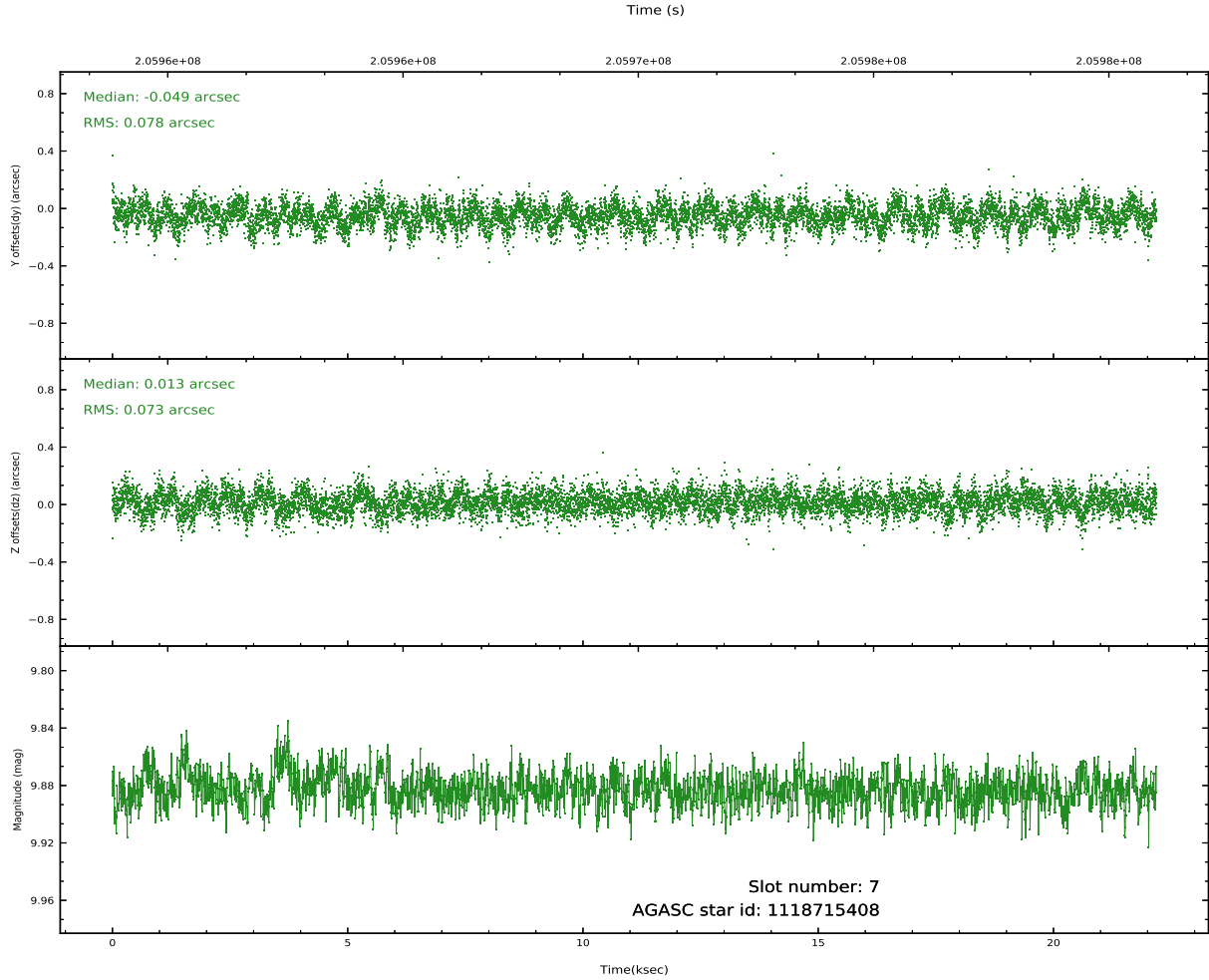
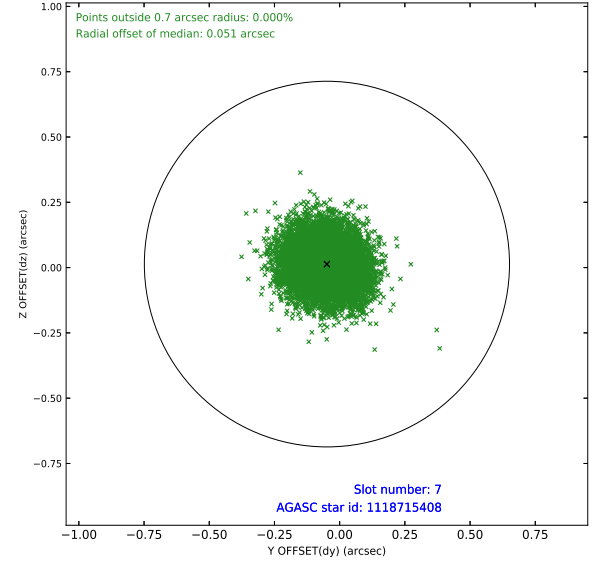
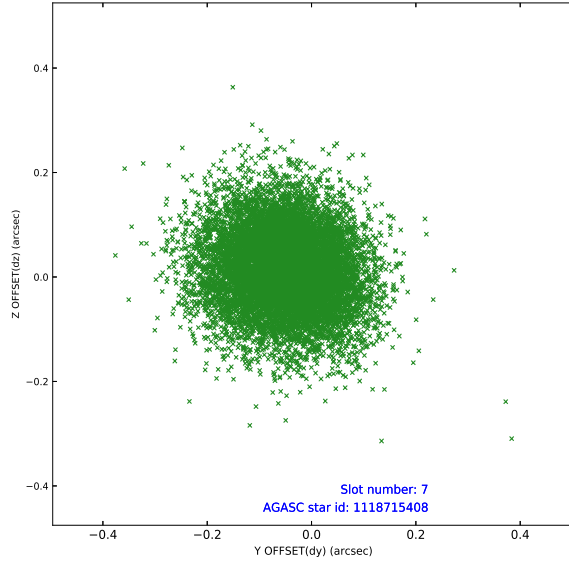
### 2.4.3 Slot 5



## 2.4.4 Slot 6

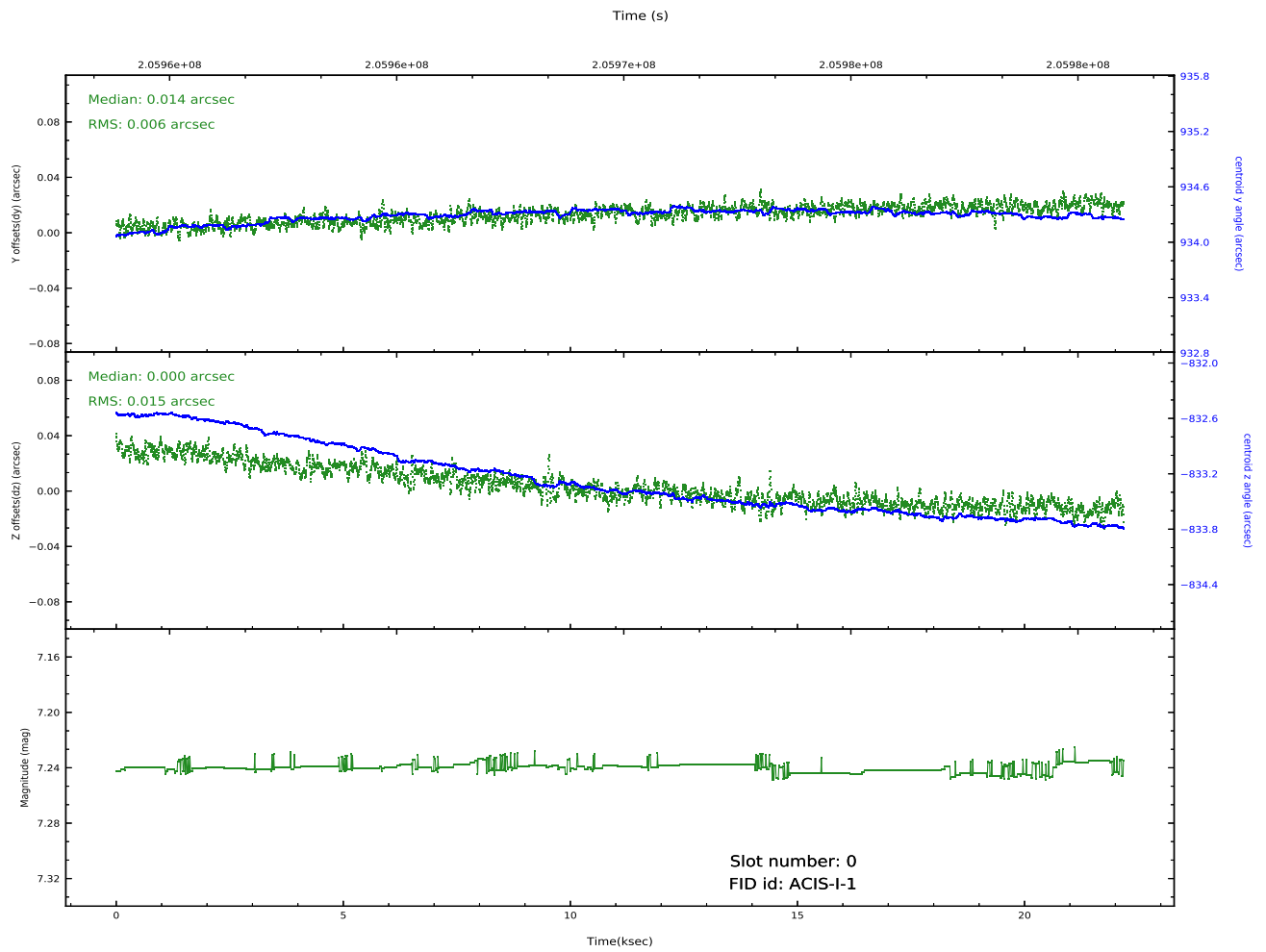
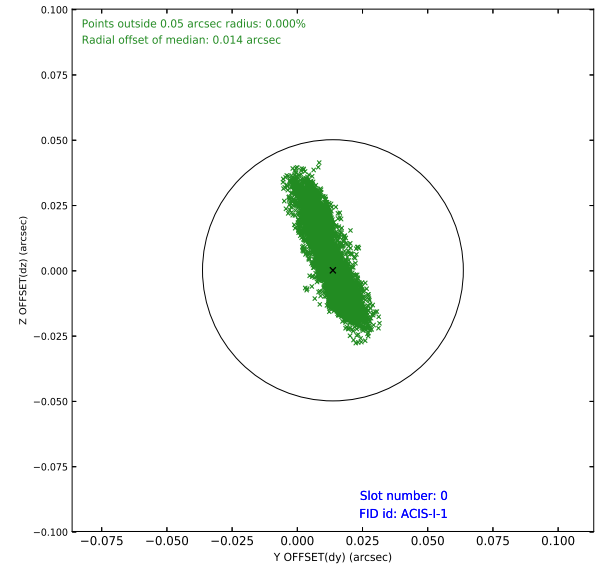
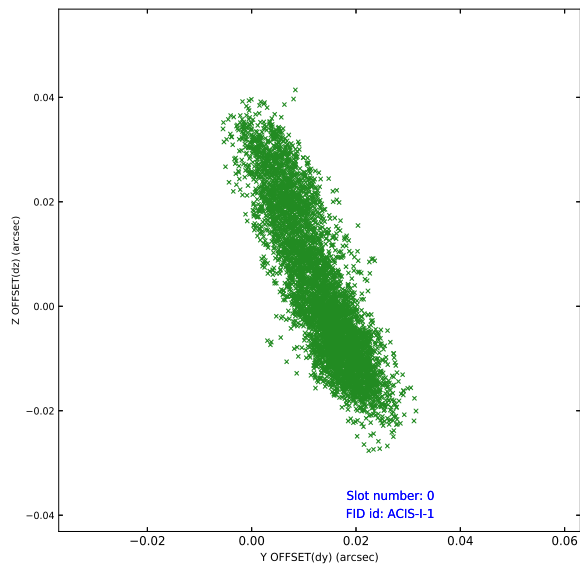


## 2.4.5 Slot 7

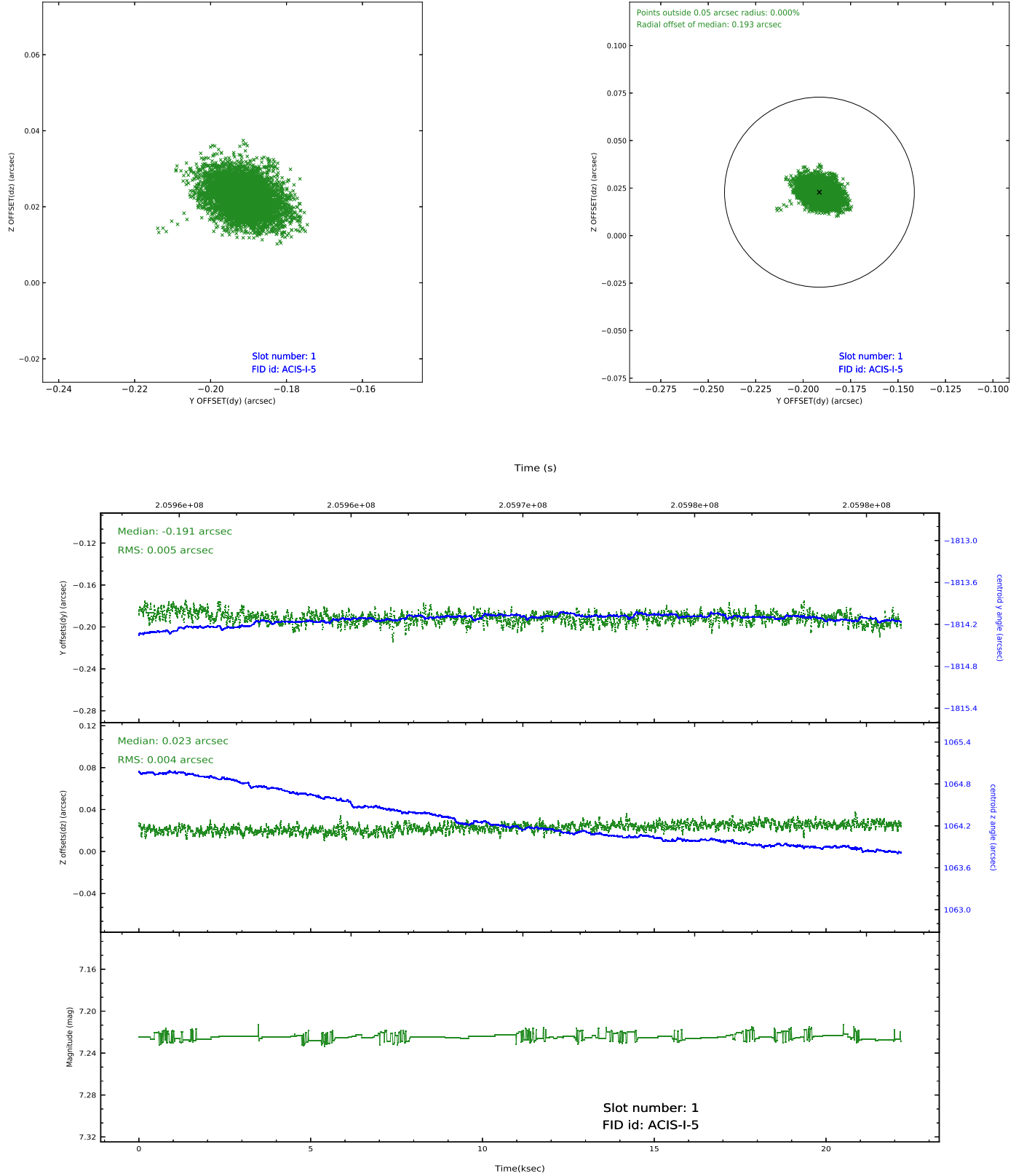


## 2.5 FID Slots

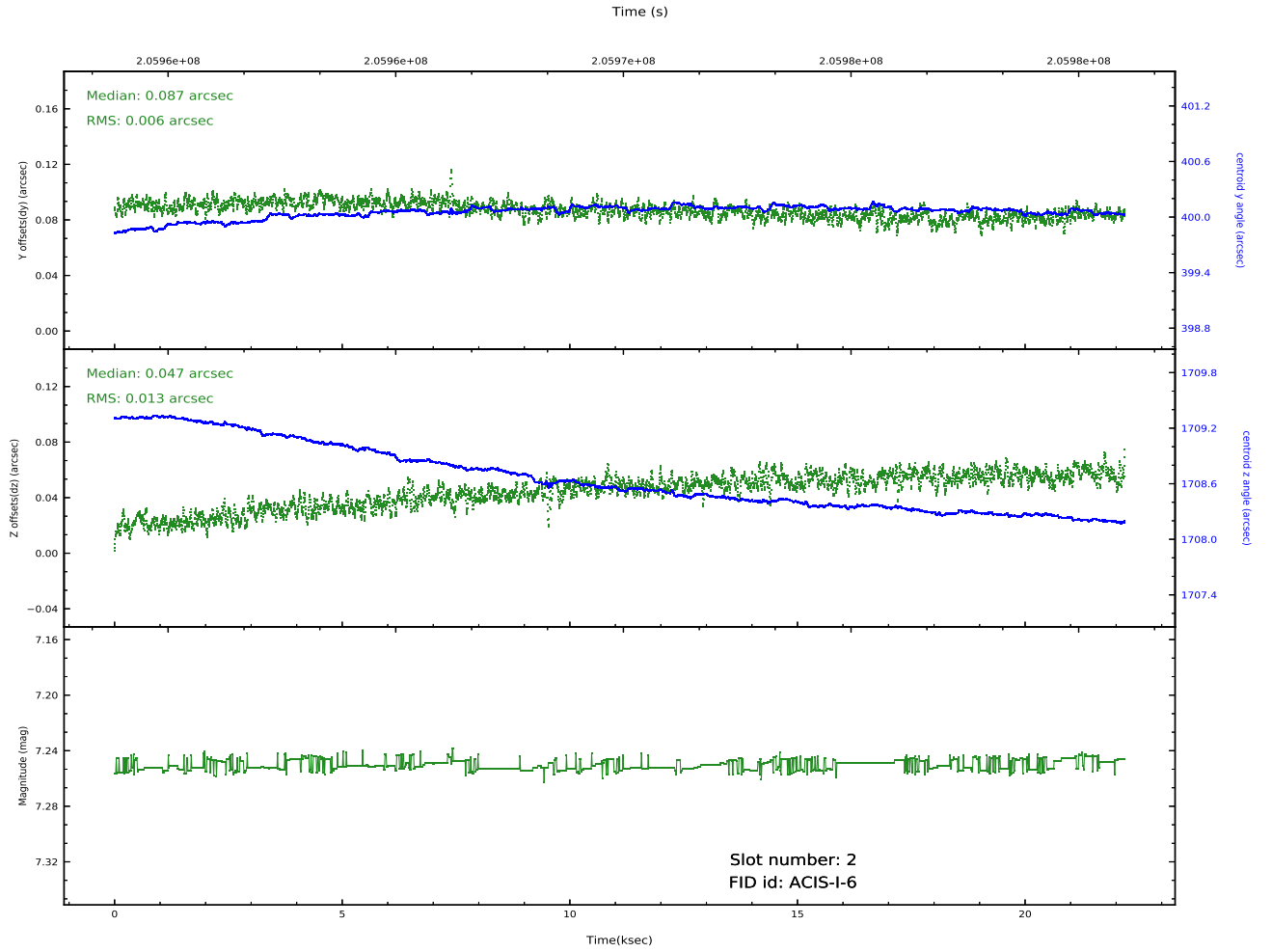
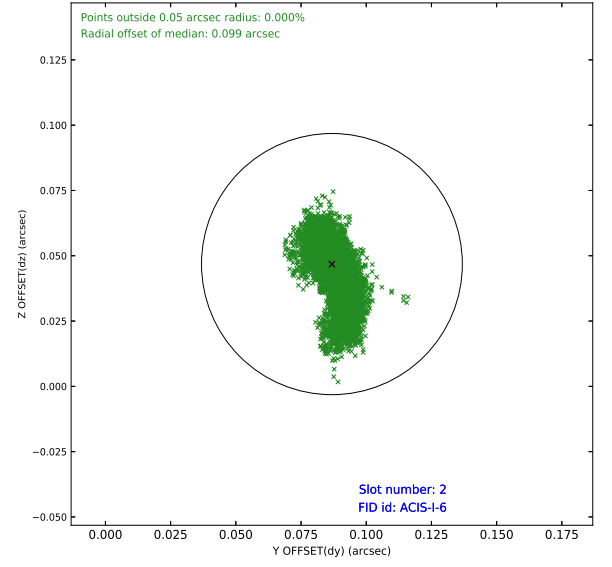
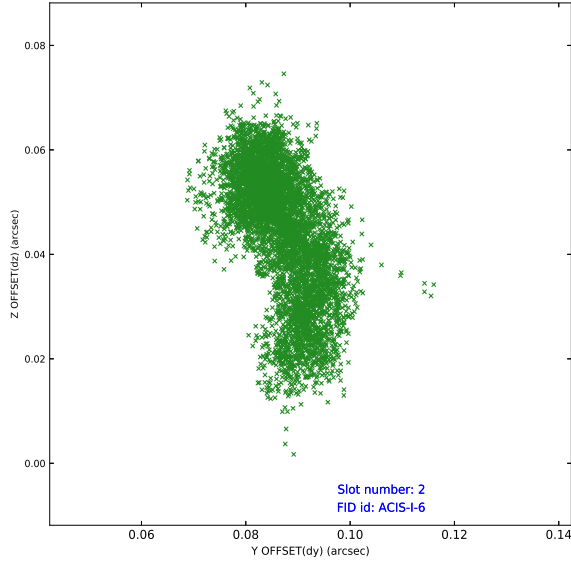
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.174

### A.2 Comments