

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5710 - L2 Version 4  
Chandra X-Ray Center

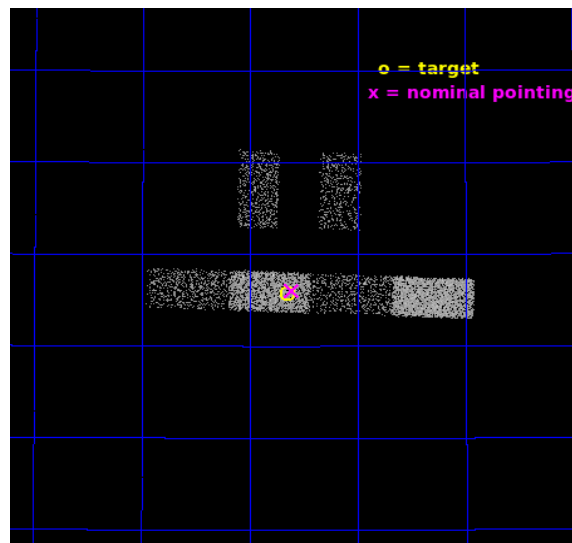
L2 Processing Date : Oct 7 2020

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

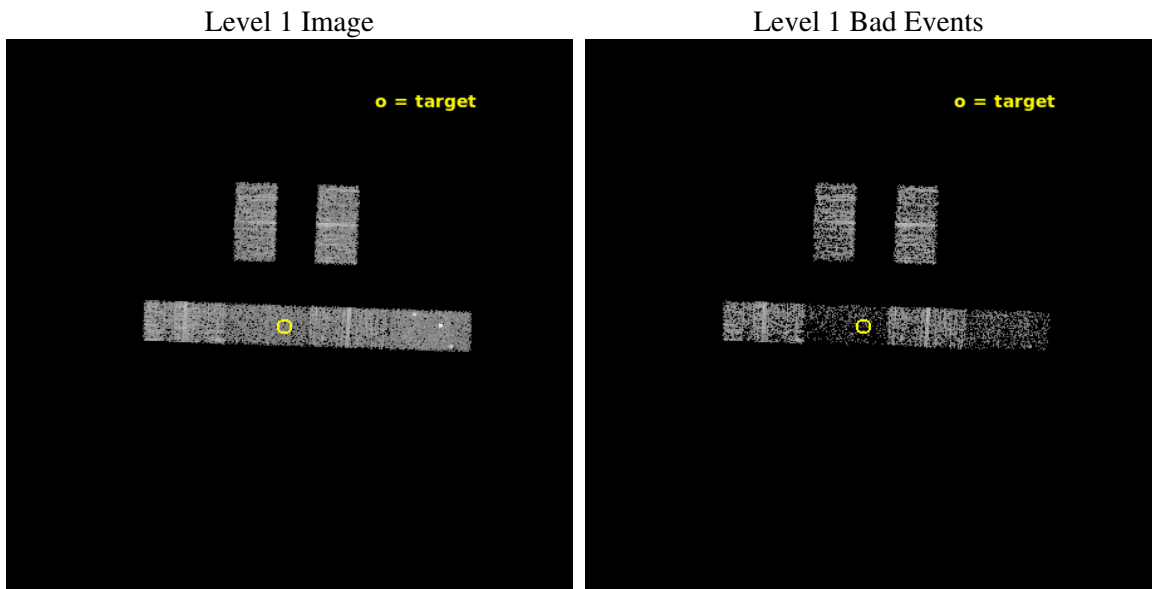
seq_num	701132	Sequence number
obs_id	5710	Observation id
title	What kind of Jets does Nature make? X-ray characterization of the FIRST Flat Spectrum Sample	Proposal title
observer	Dr. Giovanni Fossati	Principal investigator
object	FIRST J131739.2+411545	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	199.413333	Observer's specified target RA [deg]
dec_targ	41.262778	Observer's specified target Dec [deg]
ra_nom	199.40295950793	Nominal RA [deg]
dec_nom	41.267261085752	Nominal Dec [deg]
roll_nom	182.04525420286	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3180.6000210643	Sum of GTIs [s]
livetime	3109.6988864532	Livetime [s]
ontime2	3180.6000210643	Sum of GTIs [s]
ontime3	3180.6000210643	Sum of GTIs [s]
ontime5	3180.6000210643	Sum of GTIs [s]
ontime6	3180.6000210643	Sum of GTIs [s]
ontime7	3180.6000210643	Sum of GTIs [s]
ontime8	3180.6000210643	Sum of GTIs [s]
l2events	10199	Number of level 2 events



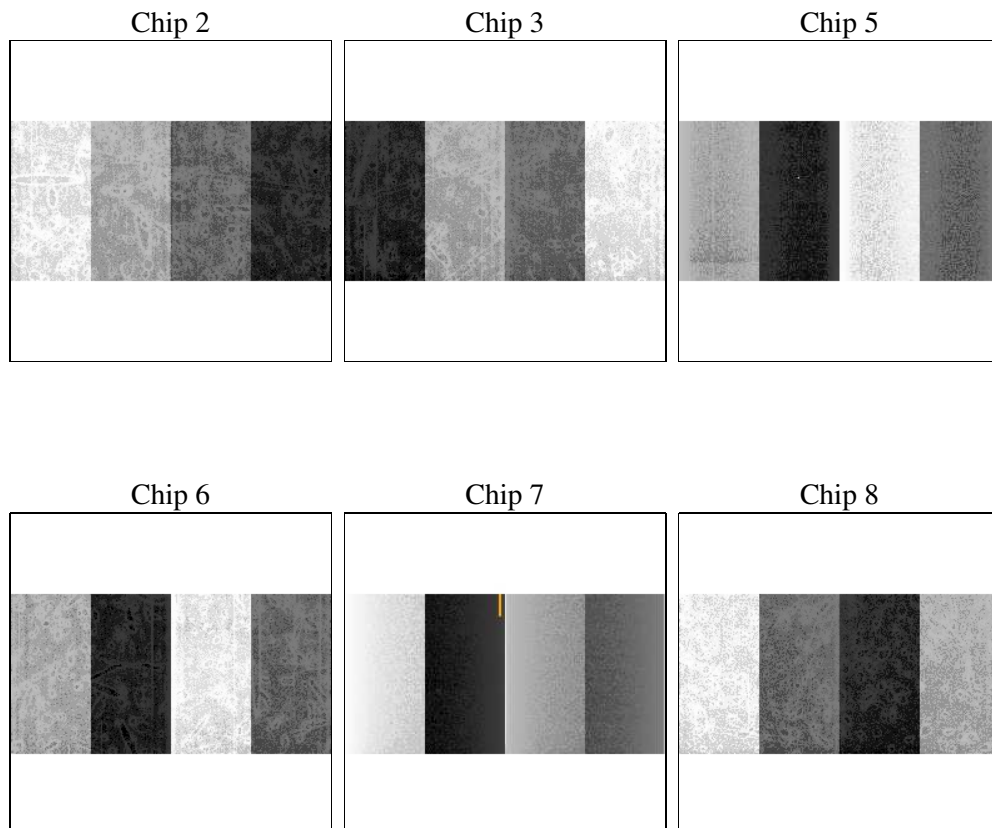
## 2 OBI

### 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	3180.6000210643	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	3180.6000210643	Sum of GTIs [s]
date	2020-10-07T18:13:56	Date and time of file creation	ontime3	3180.6000210643	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	3180.6000210643	Sum of GTIs [s]
			ontime6	3180.6000210643	Sum of GTIs [s]
			ontime7	3180.6000210643	Sum of GTIs [s]
			ontime8	3180.6000210643	Sum of GTIs [s]
			l1events	63925	Number of level 1 events

### 2.1.4 Events

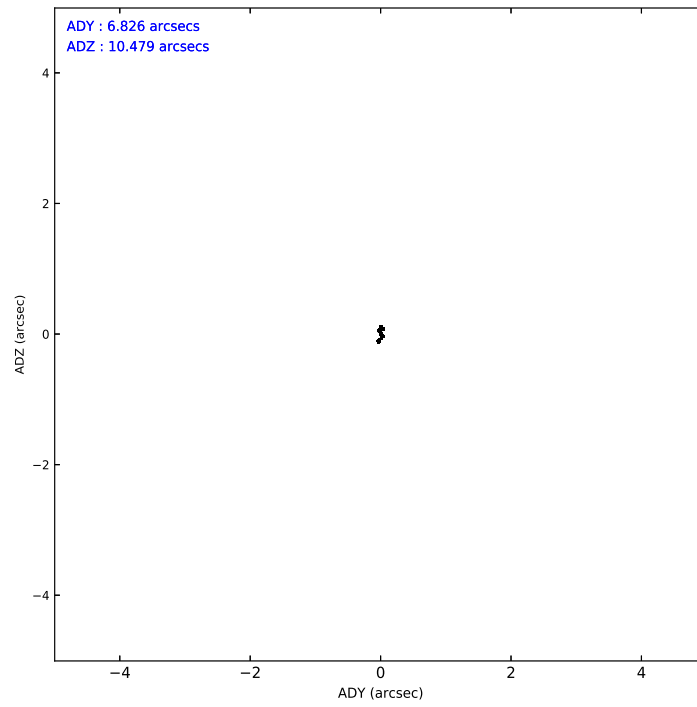
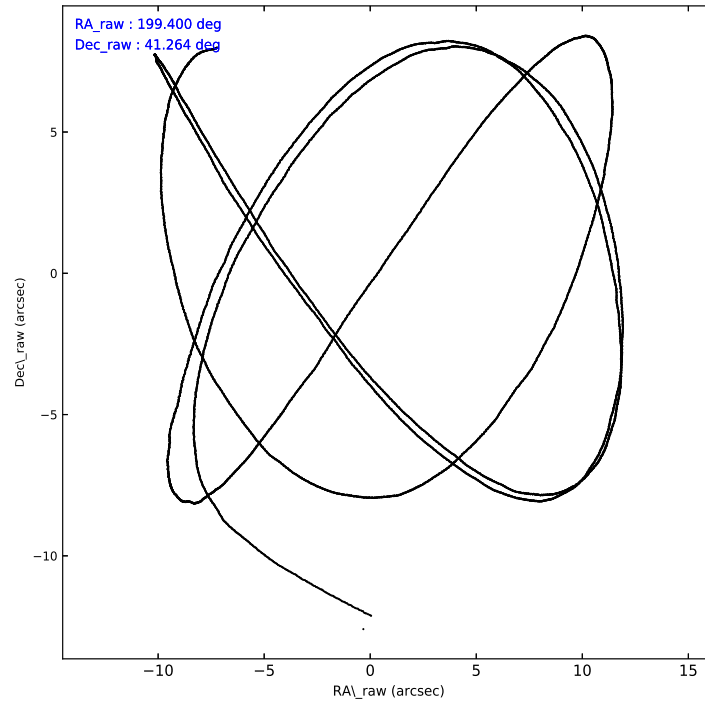
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	12174	10454	11107	10277	6342	13571
rejected events	11372	9629	4709	9435	3022	10729
rejected %	93%	92%	42%	91%	47%	79%

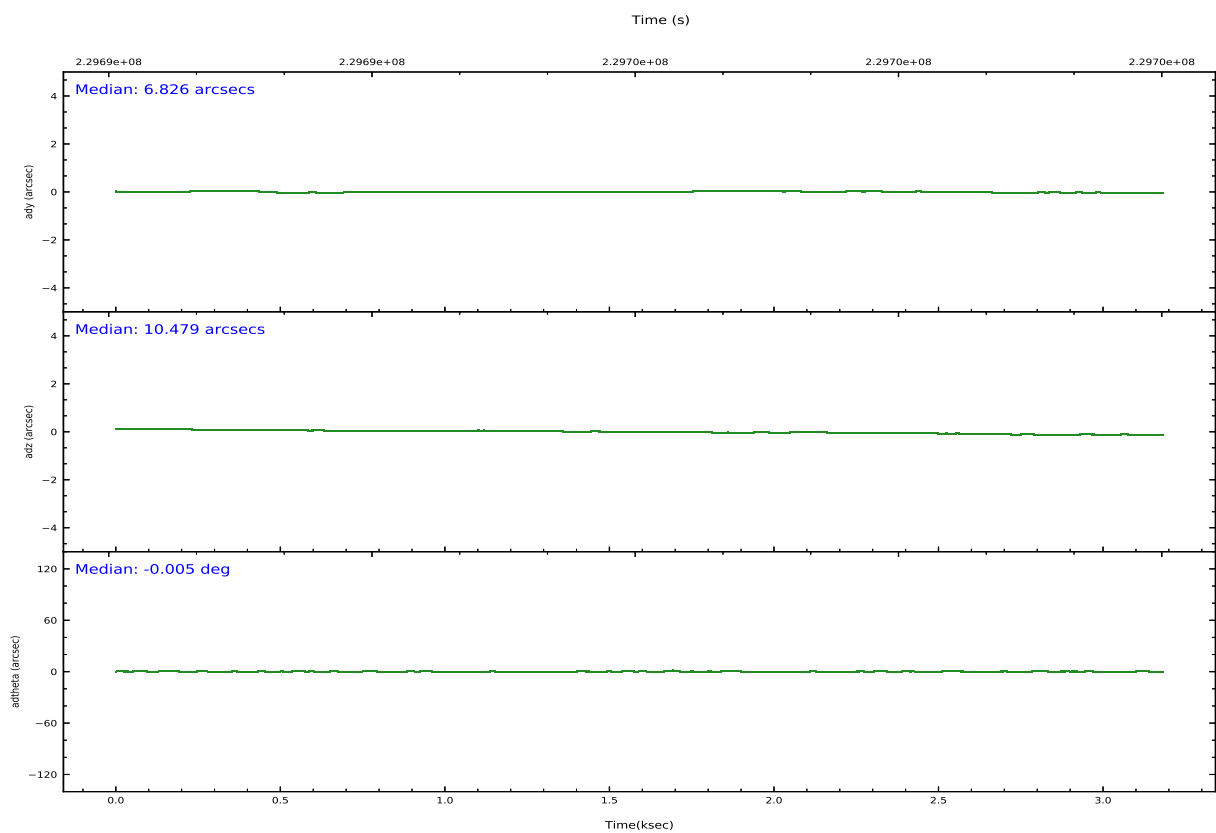
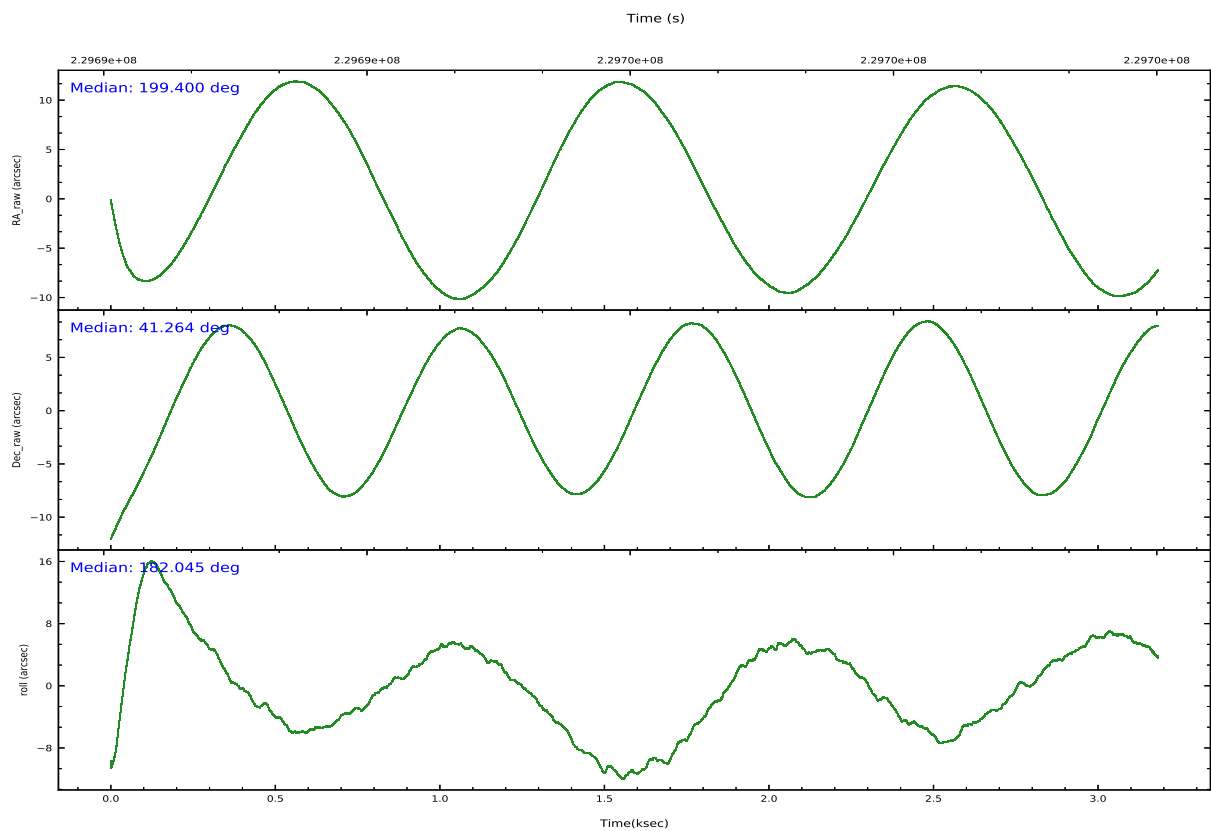
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	321	354	2507	368	538	859
	2%	3%	22%	3%	8%	6%
grade 1 events	1	6	8	1	8	9
	0%	0%	0%	0%	0%	0%
grade 2 events	195	187	1879	192	893	736
	1%	1%	16%	1%	14%	5%
grade 3 events	116	131	392	133	433	440
	0%	1%	3%	1%	6%	3%
grade 4 events	138	146	335	169	455	369
	1%	1%	3%	1%	7%	2%
grade 5 events	160	202	811	204	673	349
	1%	1%	7%	1%	10%	2%
grade 6 events	162	126	2291	132	1503	809
	1%	1%	20%	1%	23%	5%
grade 7 events	11081	9302	2884	9078	1839	10000
	91%	88%	25%	88%	28%	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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	199.431043	199.40295950793	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	41.278887	41.267261085752	Subarray start row	257	257
[deg] Pointing Roll	181.870598	182.04525420286	Subarray row count	512	512
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.8
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	229693804.184000	229692703.79634			
Observation start date	2005-04-12T11:49:00	2005-04-12T11:31:43			
[s] Observation end time (MET)	229696804.184000	229697698.62157			
Observation end date	2005-04-12T12:39:00	2005-04-12T12:54:58			
Read mode	TIMED	TIMED			

## 2.3 Aspect





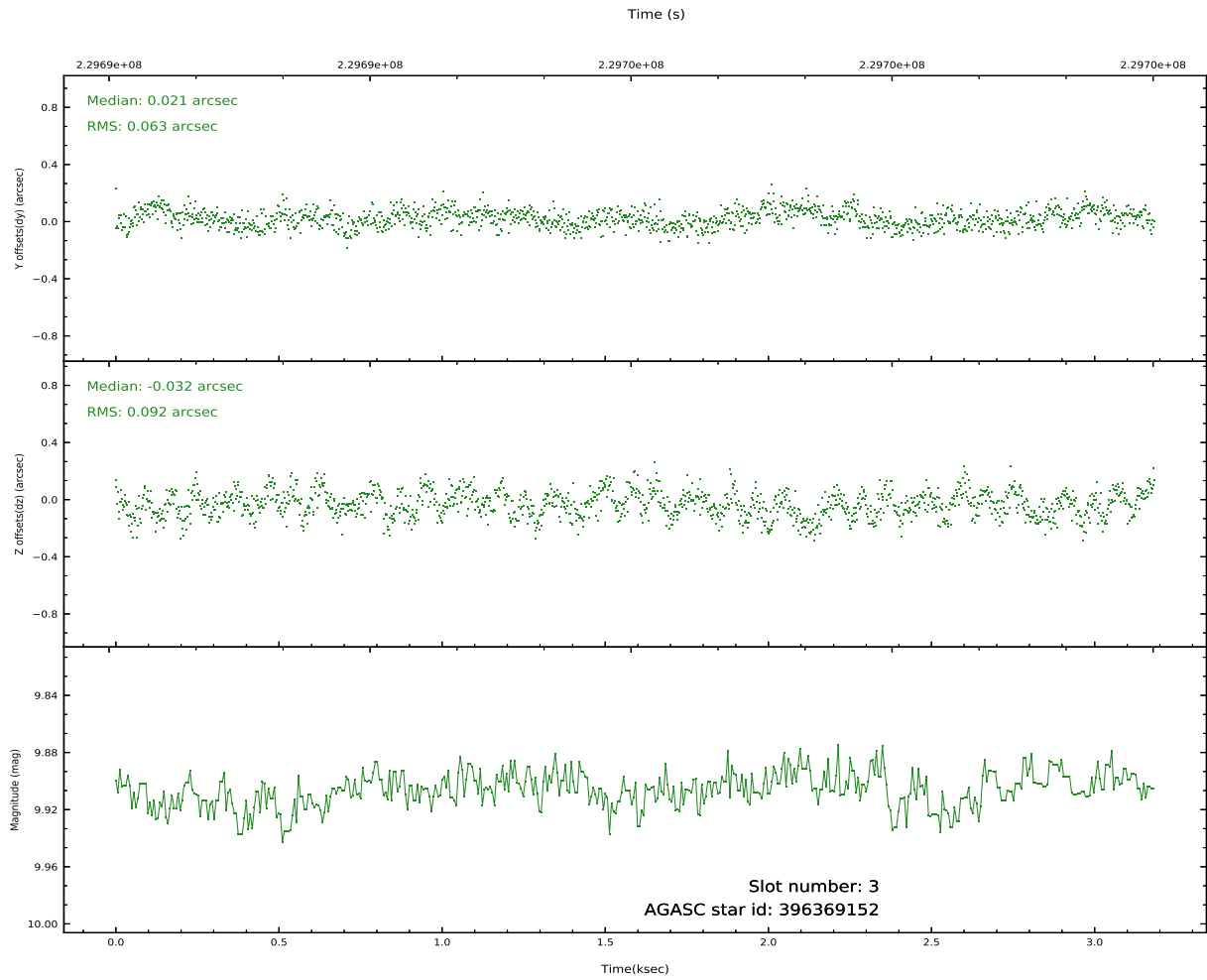
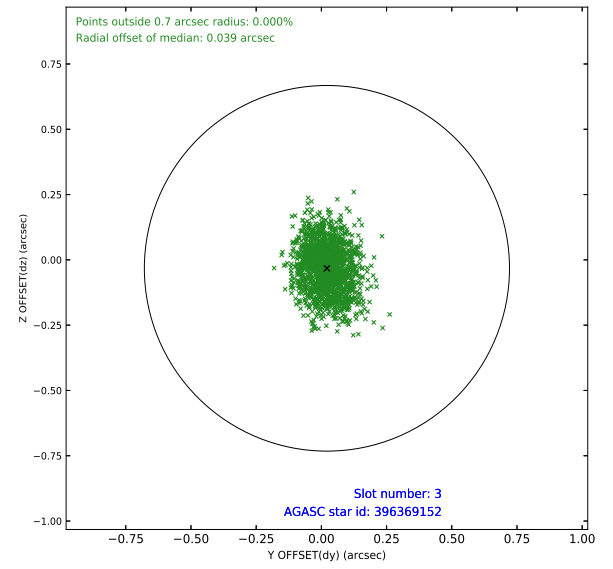
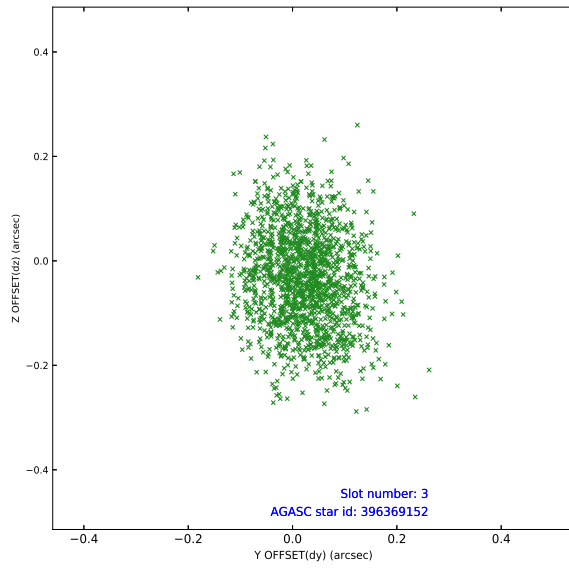
Slot Statistics

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	7.09	777	1.000	-0.108	-0.090	0.005	0.009	0.000000	0.000000	-759.64	-1731
1	FID		ACIS-S-4	7.20	777	1.000	0.093	0.051	0.006	0.010	0.000000	0.000000	2152.89	174
2	FID		ACIS-S-6	7.35	777	1.000	-0.013	0.046	0.007	0.011	0.000000	0.000000	404.95	814
3	GUIDE	used	396369152	9.91	1550	1.000	0.021	-0.032	0.120	0.193	199.790482	41.802601	-1025.50	-1854
4	GUIDE	used	396890600	9.66	1551	1.000	-0.043	0.049	0.129	0.210	200.243162	40.905071	-2165.84	1405
5	GUIDE	used	396892328	8.91	1554	1.000	-0.081	0.051	0.084	0.133	200.225719	41.751860	-2190.42	-1641
6	GUIDE	used	396892648	8.67	1553	1.000	-0.089	-0.022	0.089	0.142	200.297584	41.656880	-2375.80	-1296
7	GUIDE	used	396372232	9.92	1551	1.000	0.189	-0.056	0.173	0.272	198.497284	41.878058	2429.61	-2251

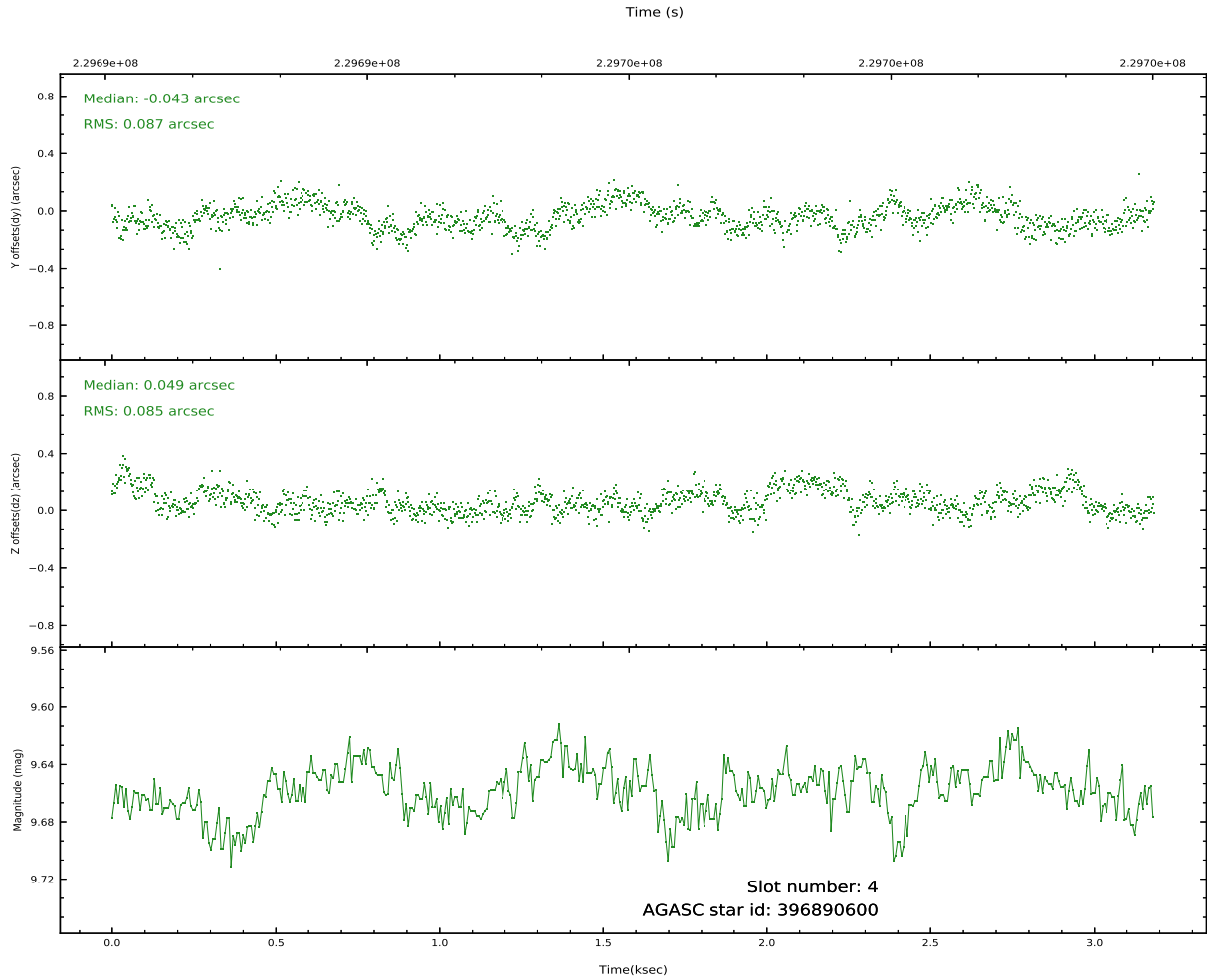
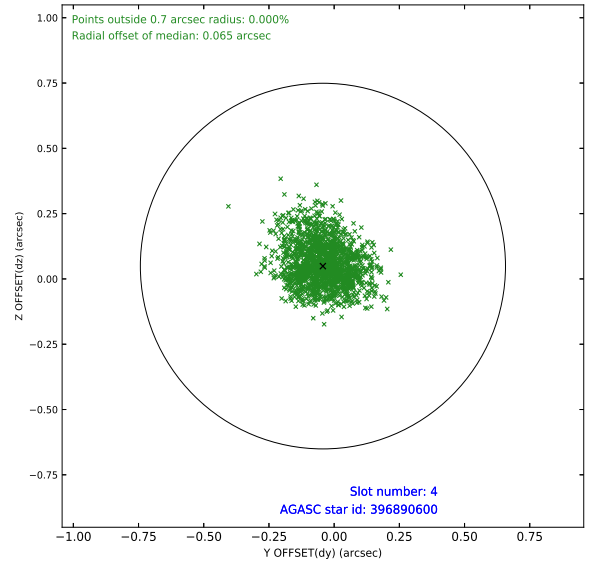
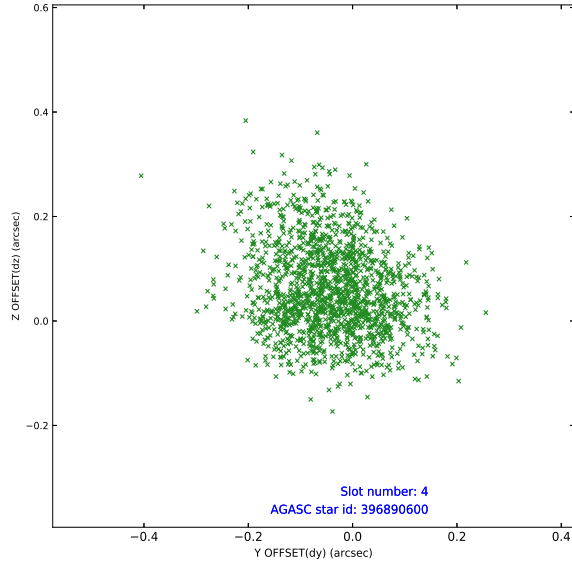


## 2.4 Star Slots

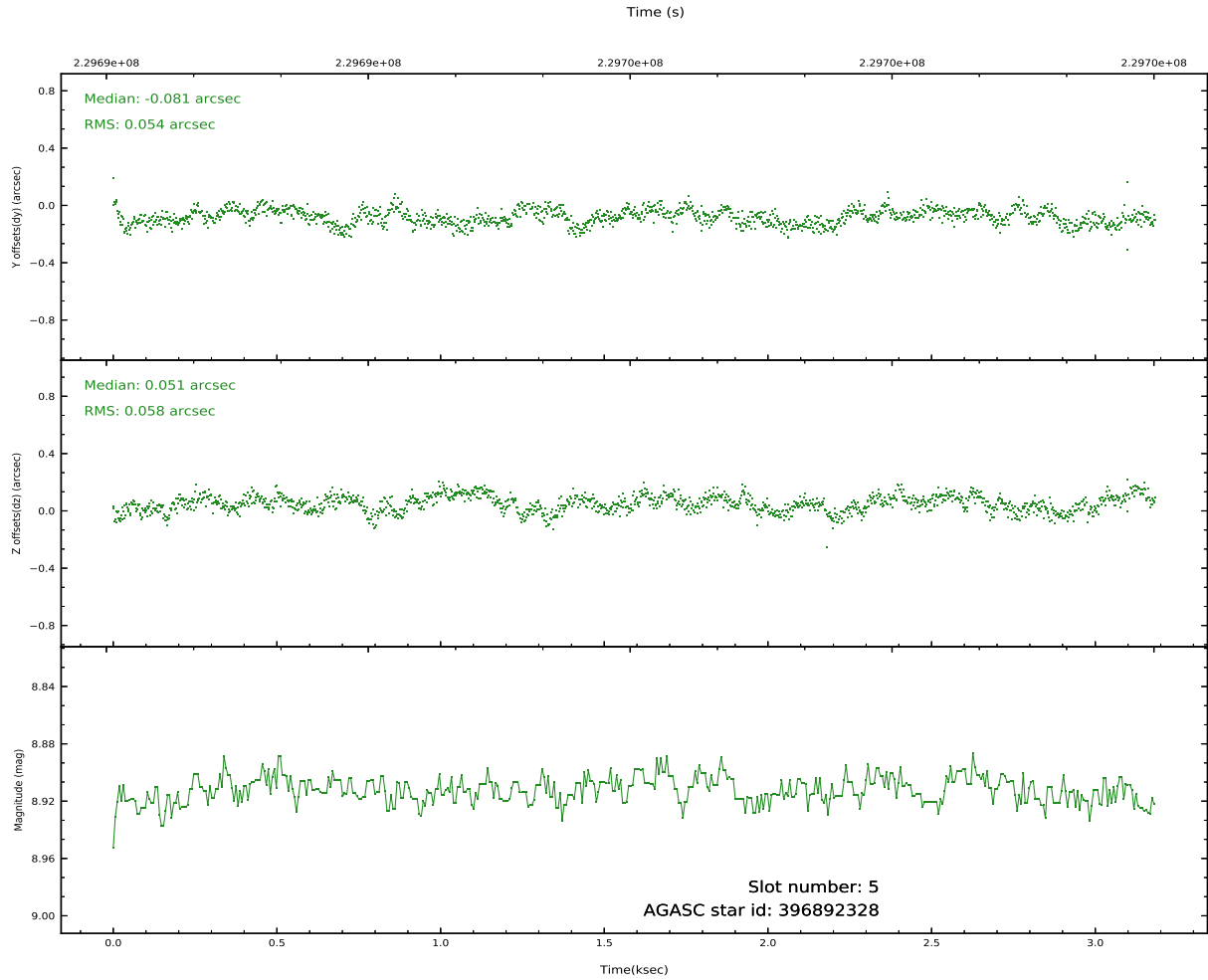
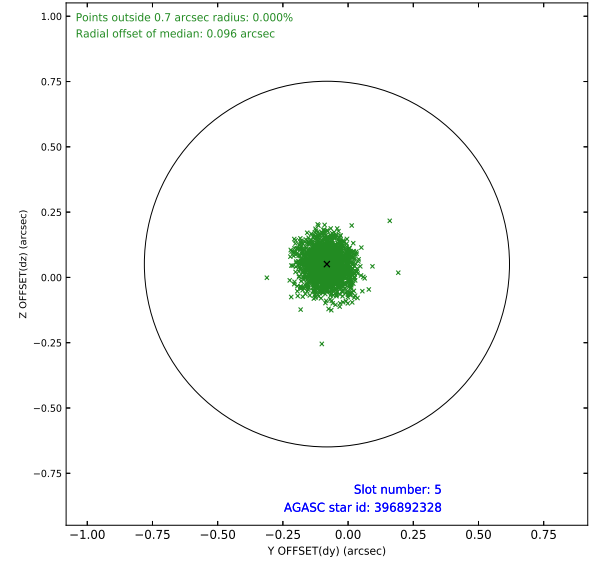
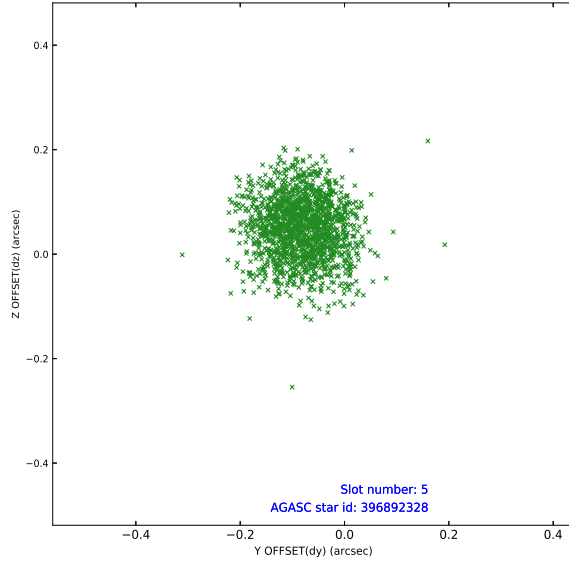
### 2.4.1 Slot 3



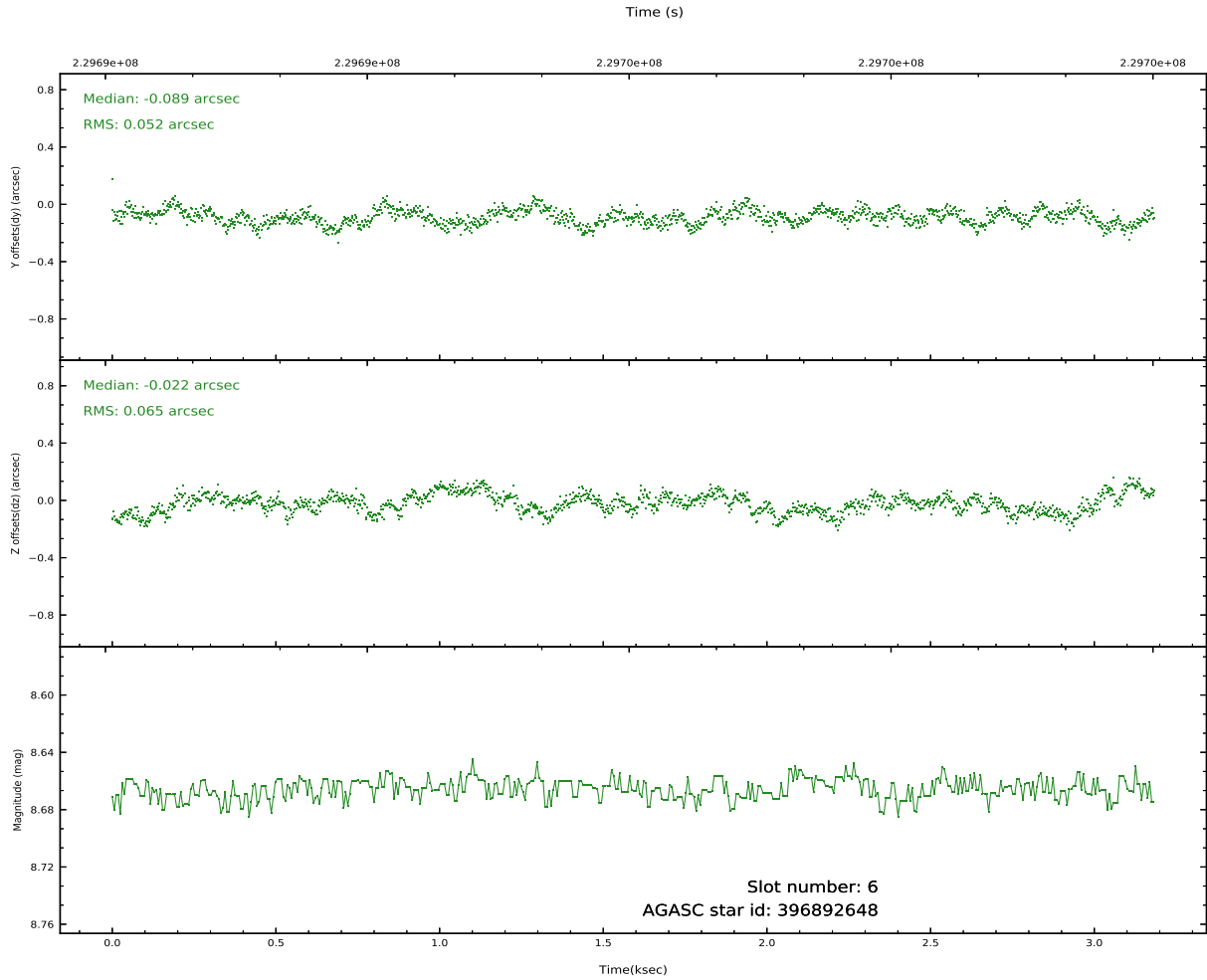
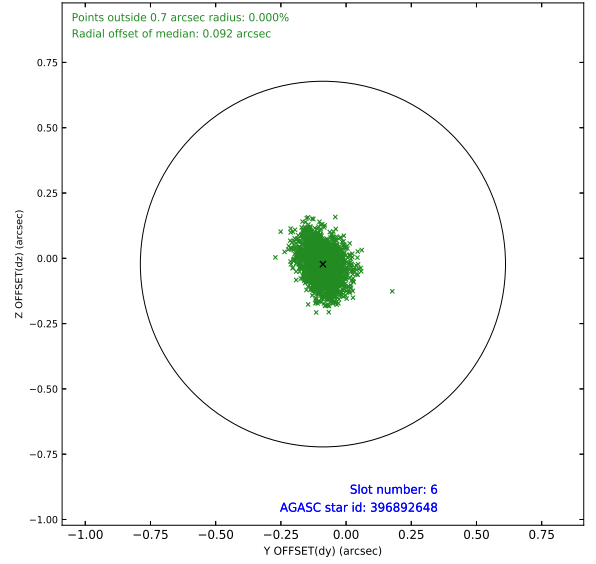
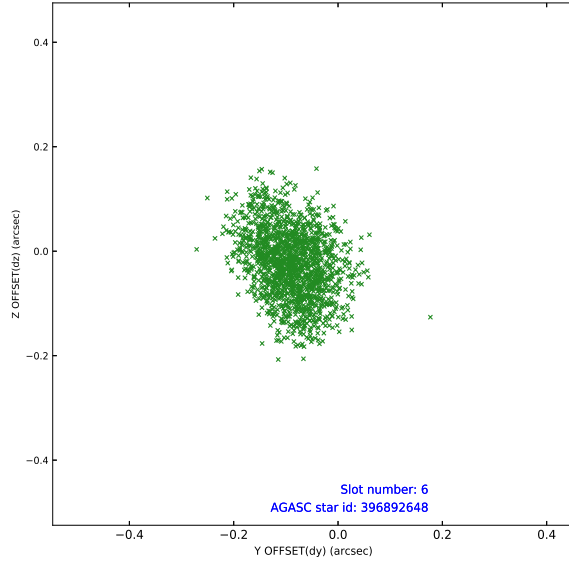
## 2.4.2 Slot 4



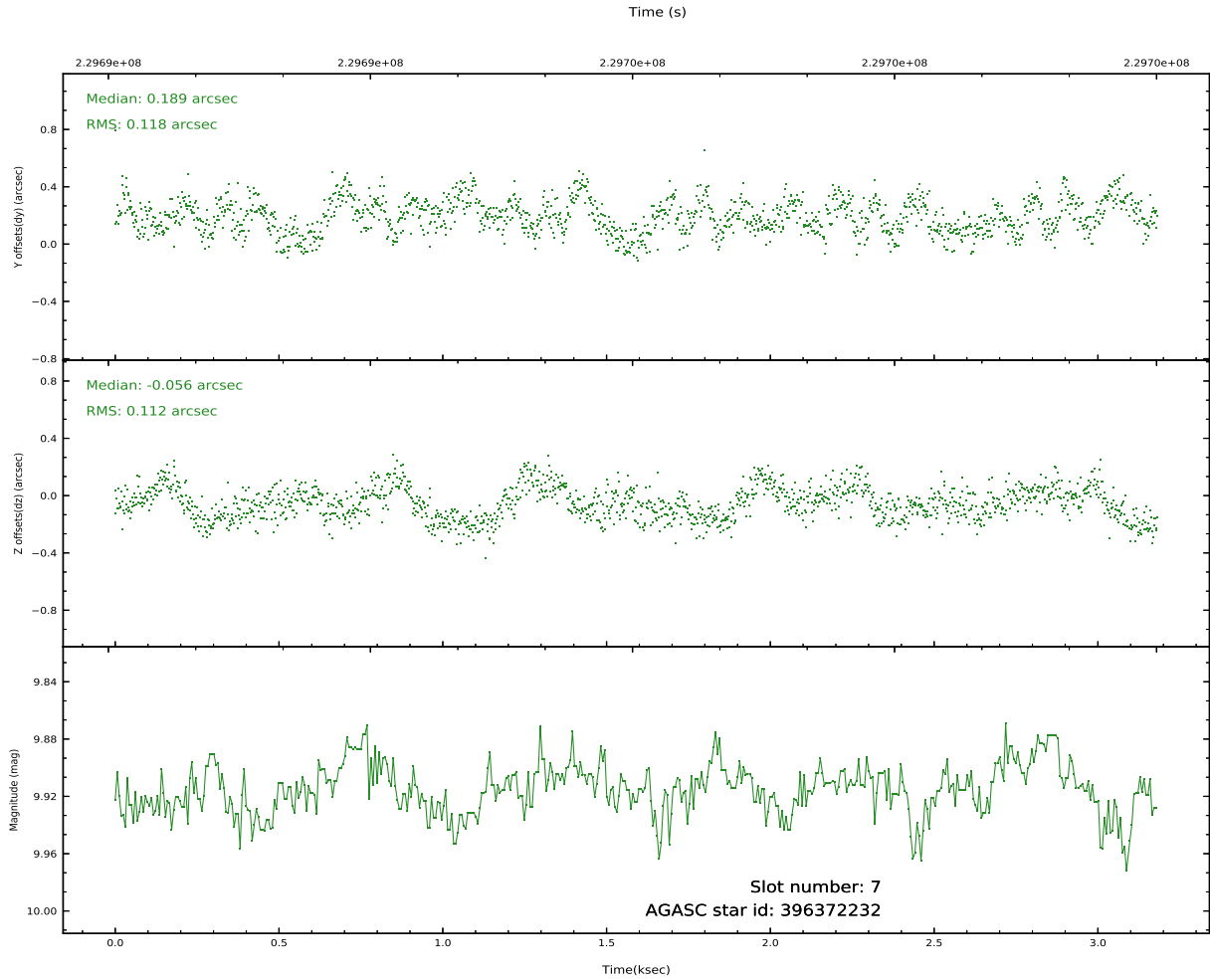
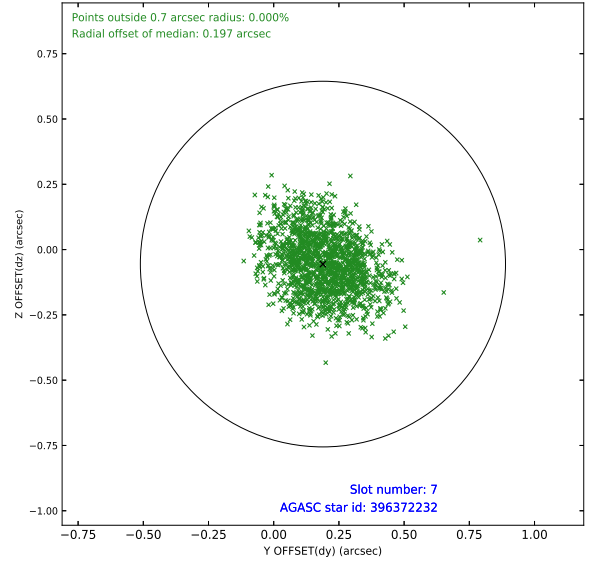
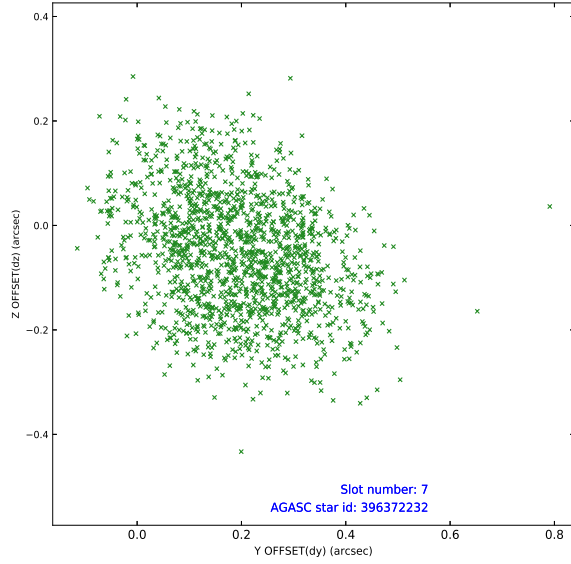
### 2.4.3 Slot 5



## 2.4.4 Slot 6

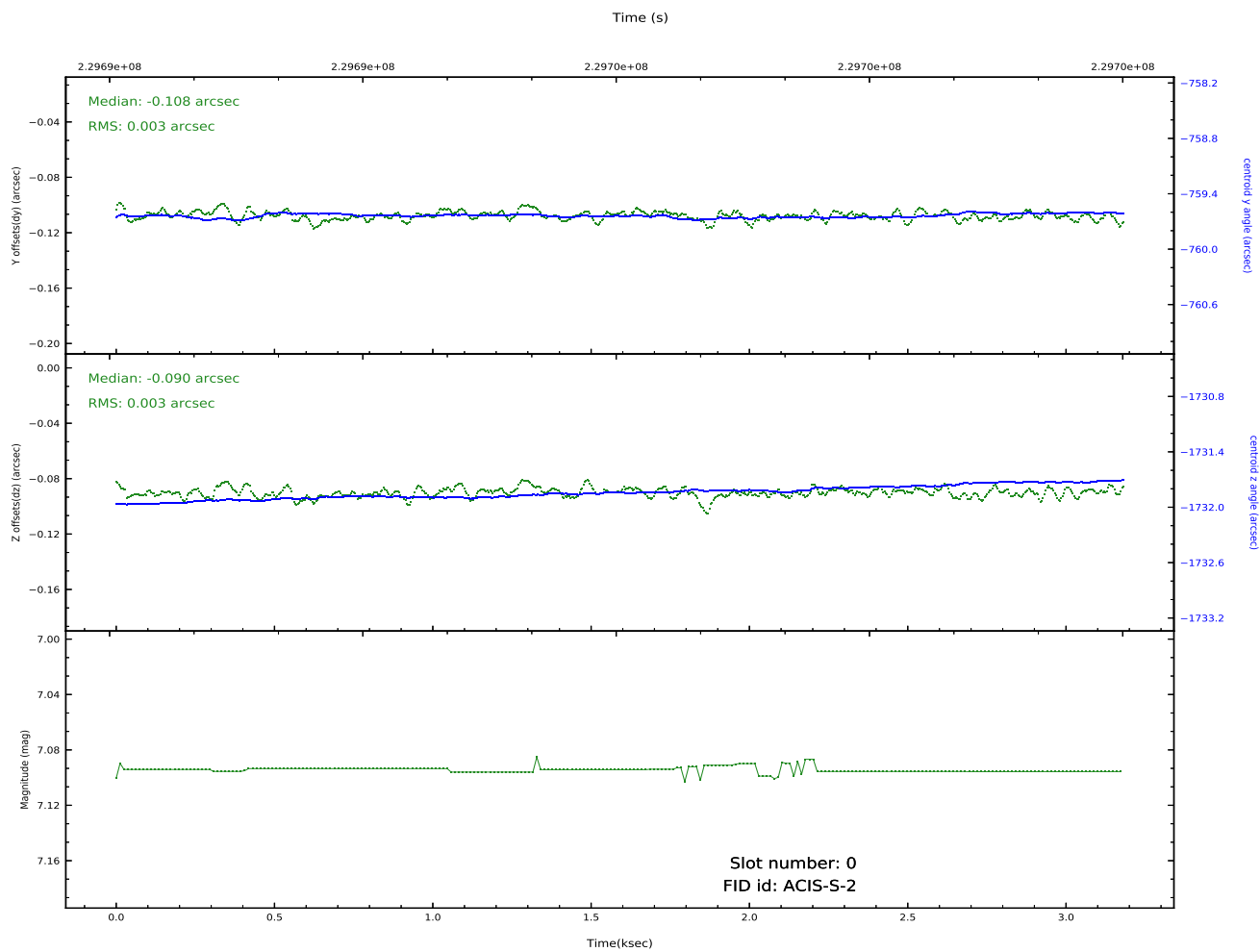
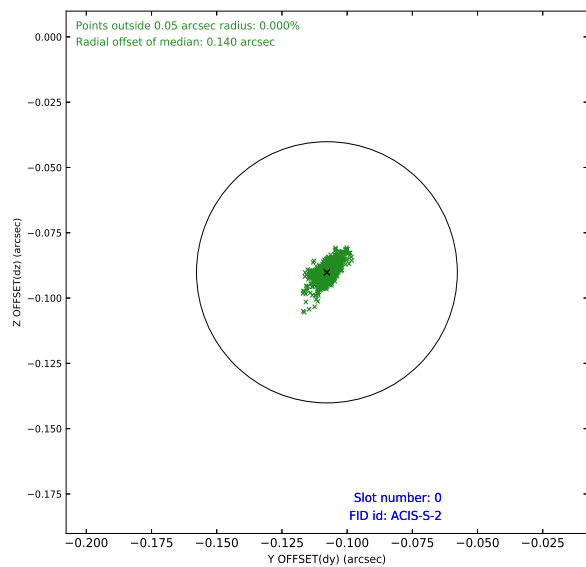
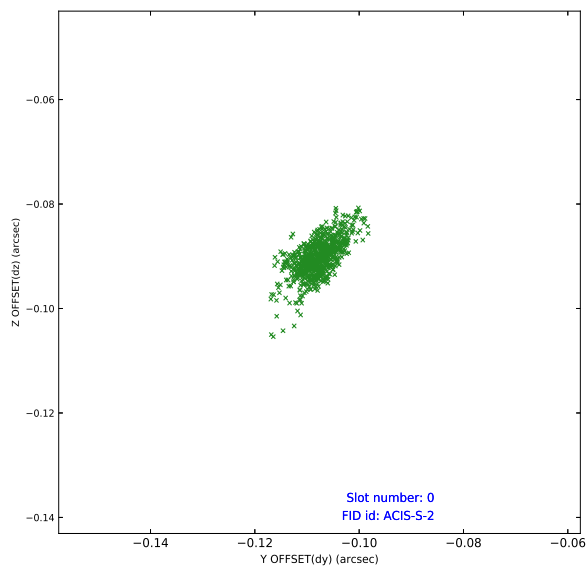


## 2.4.5 Slot 7

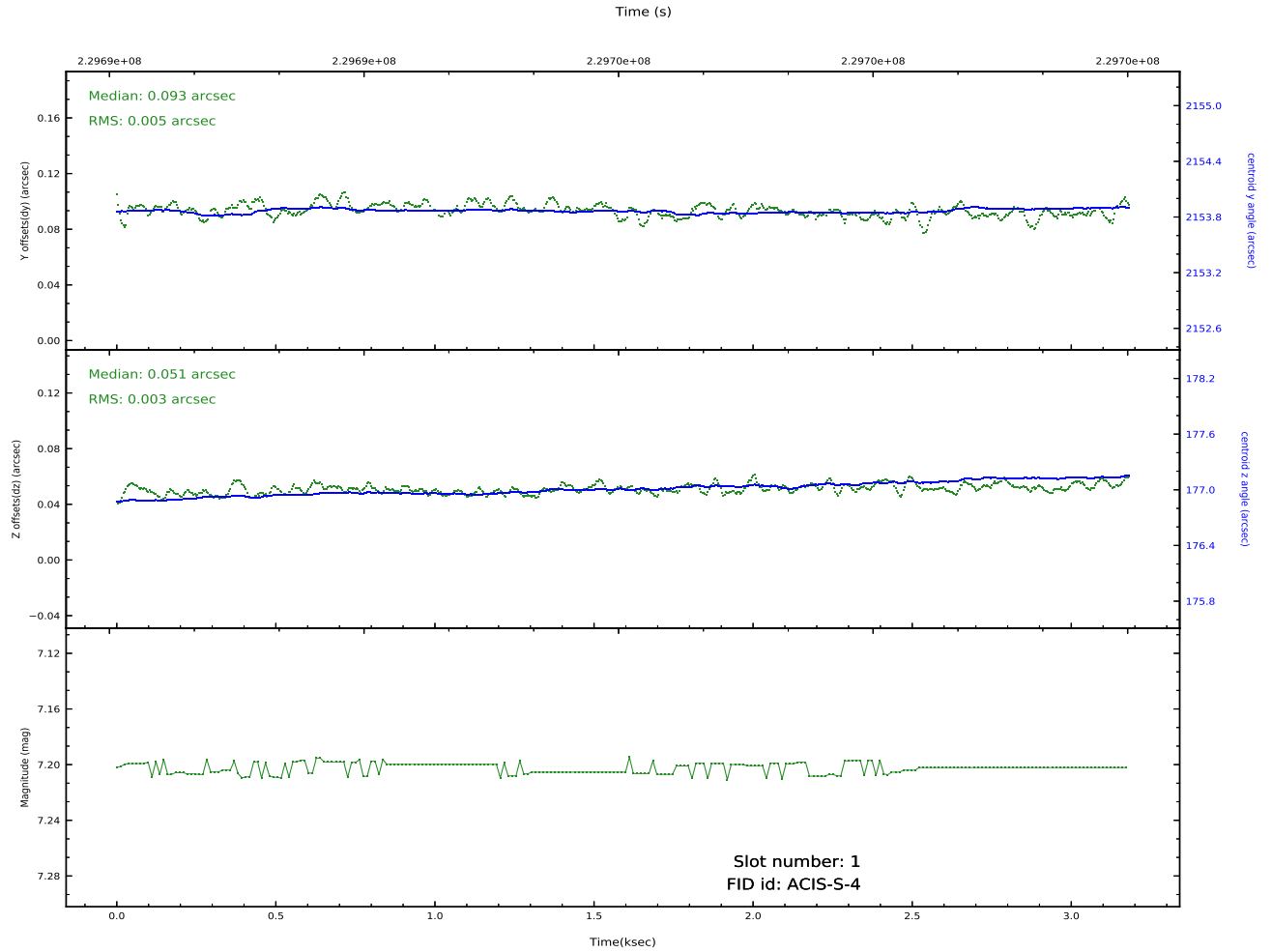
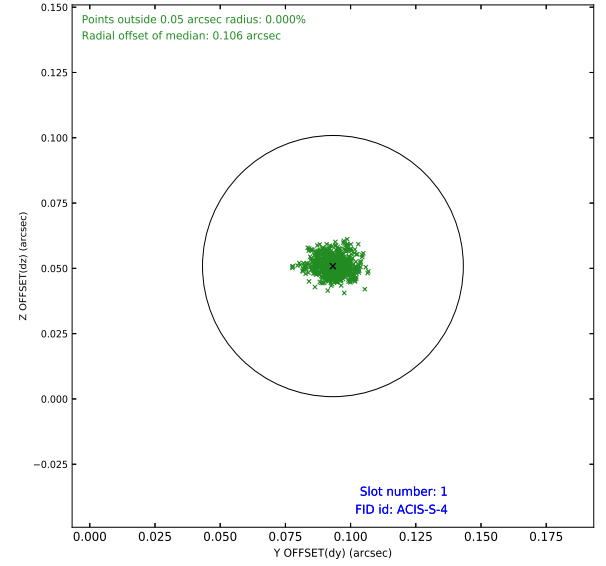
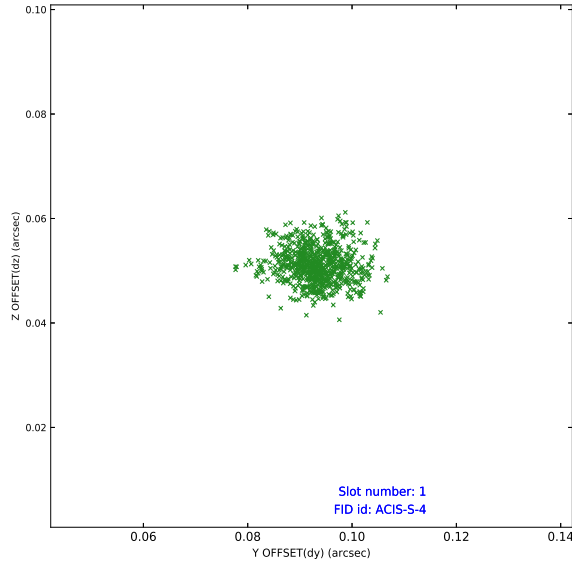


## 2.5 FID Slots

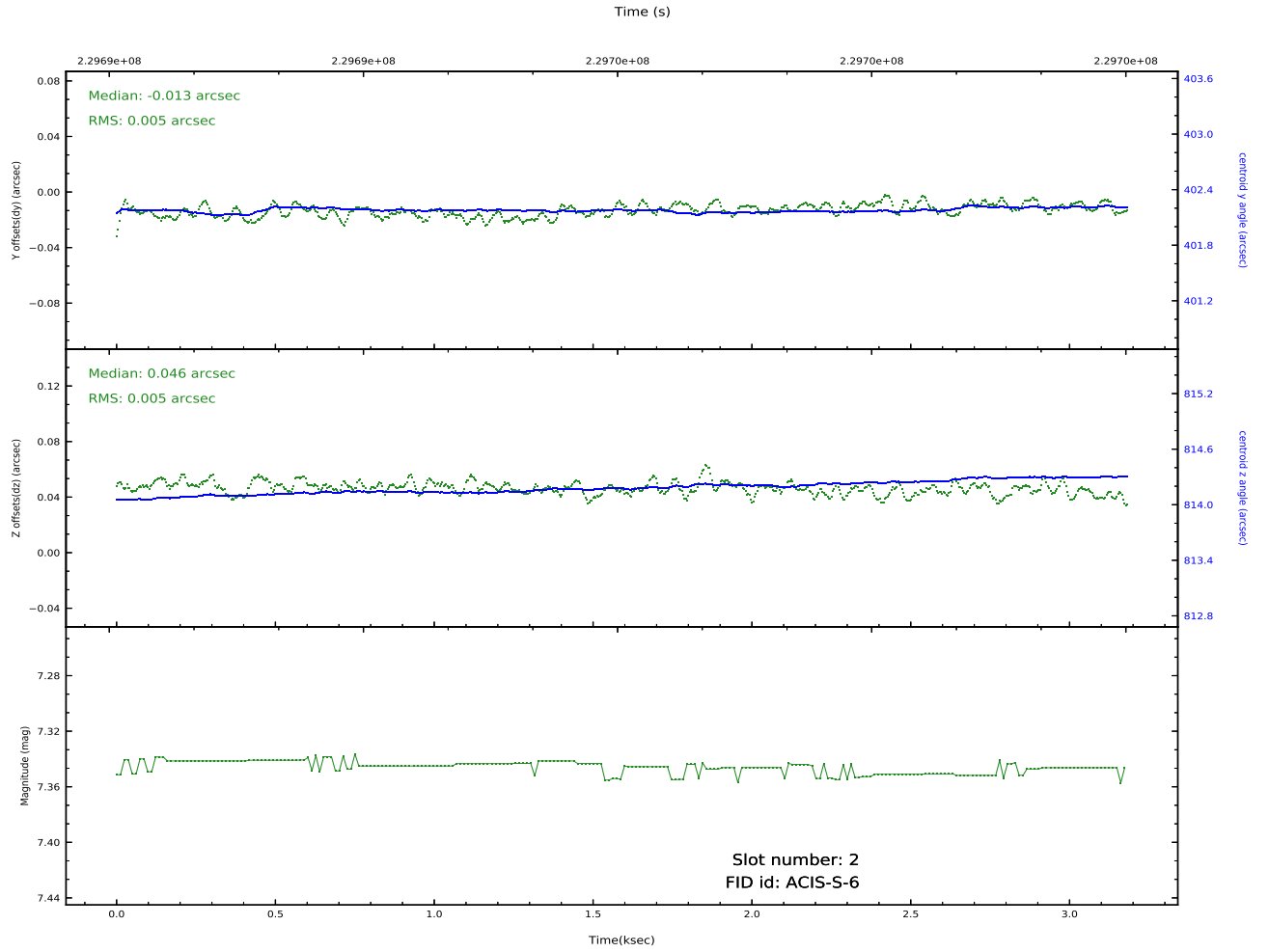
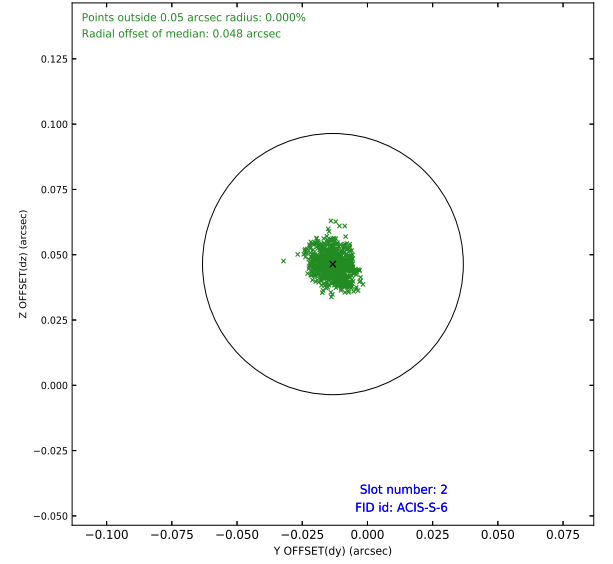
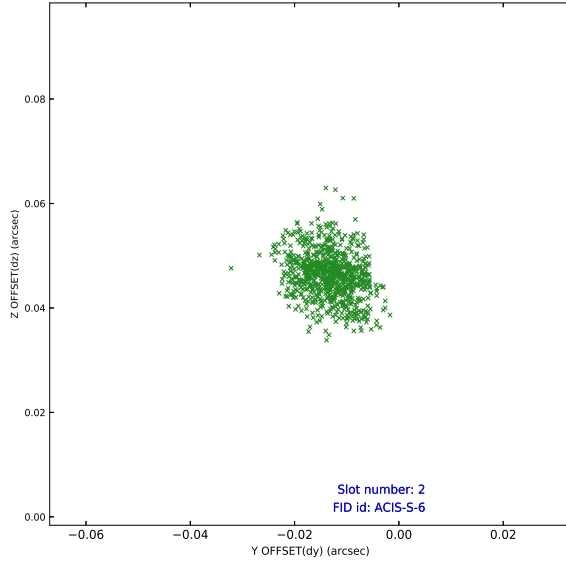
### 2.5.1 Slot 0



## 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)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.1806

### A.2 Comments