

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5380 - L2 Version 4  
Chandra X-Ray Center

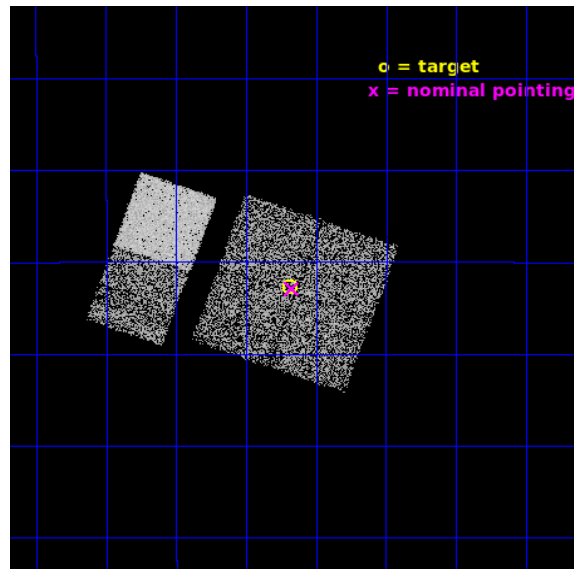
L2 Processing Date : Oct 5 2020

## 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

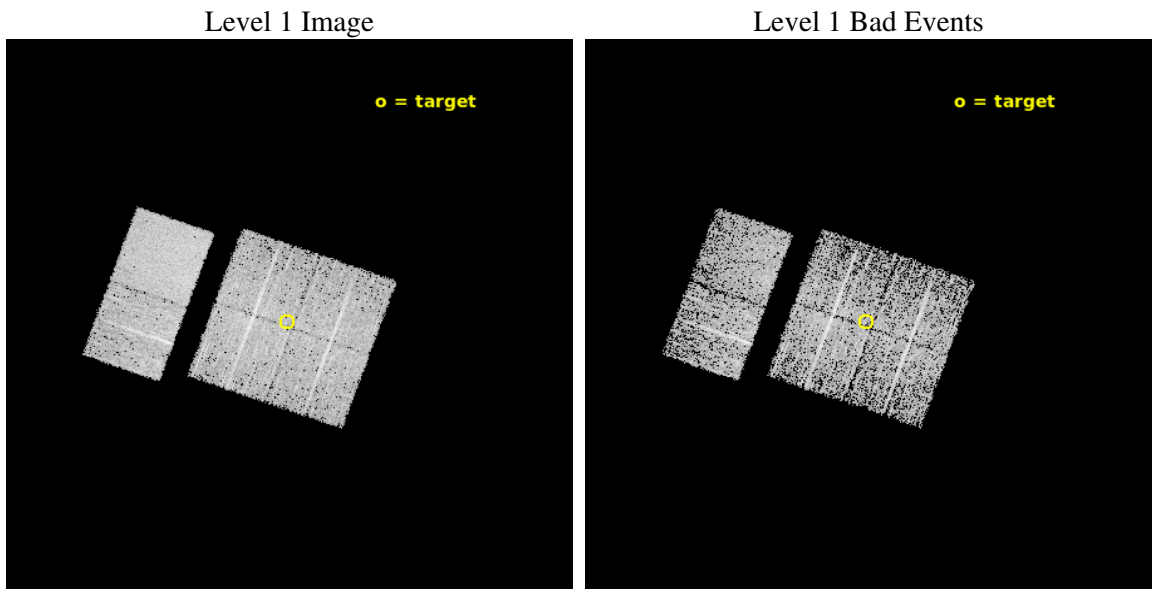
seq_num	200315	Sequence number
obs_id	5380	Observation id
title	Search for beta Pic analogs	Proposal title
observer	Gordon Garmire	Principal investigator
object	18 Aqr	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	321.0475	Observer's specified target RA [deg]
dec_targ	-12.878056	Observer's specified target Dec [deg]
ra_nom	321.04323040855	Nominal RA [deg]
dec_nom	-12.88171191468	Nominal Dec [deg]
roll_nom	289.68343304056	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3171.1999881864	Sum of GTIs [s]
livetime	3131.0443444686	Livetime [s]
ontime0	3171.1999881864	Sum of GTIs [s]
ontime1	3171.1999881864	Sum of GTIs [s]
ontime2	3171.1999881864	Sum of GTIs [s]
ontime3	3171.1999881864	Sum of GTIs [s]
ontime6	3171.1999881864	Sum of GTIs [s]
ontime7	3171.1999881864	Sum of GTIs [s]
l2events	31096	Number of level 2 events



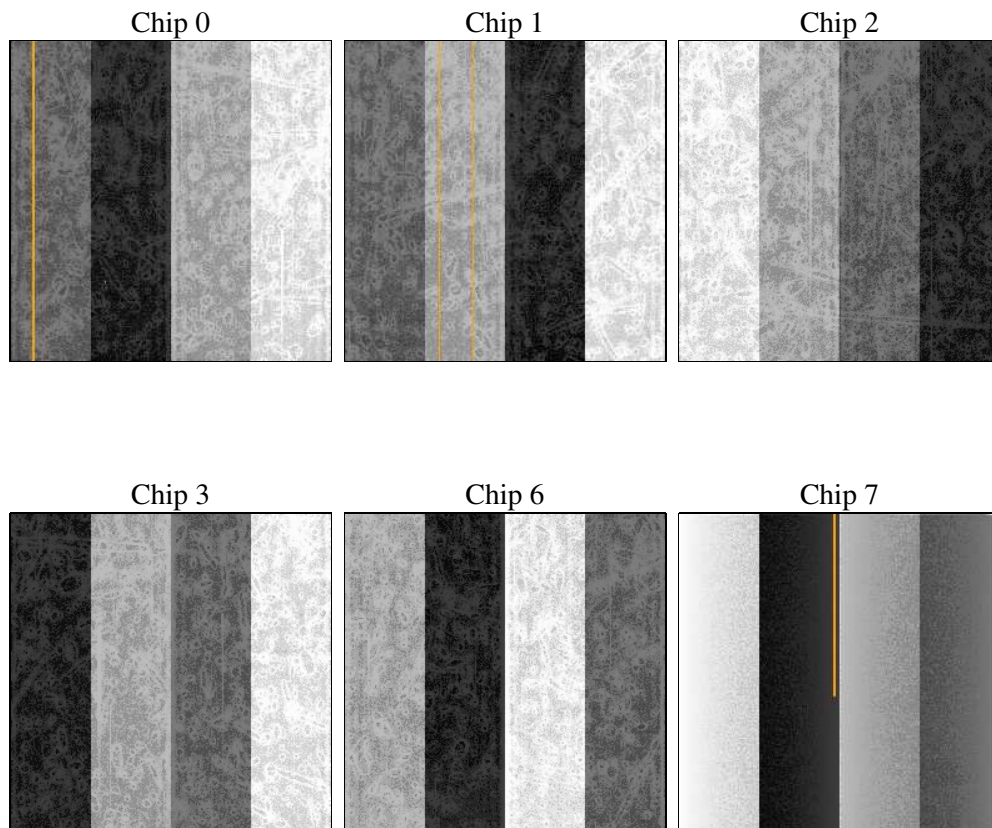
## 2 OBI

### 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	3171.1999881864	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	3171.1999881864	Sum of GTIs [s]
date	2020-10-05T12:52:08	Date and time of file creation	ontime1	3171.1999881864	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	3171.1999881864	Sum of GTIs [s]
			ontime3	3171.1999881864	Sum of GTIs [s]
			ontime6	3171.1999881864	Sum of GTIs [s]
			ontime7	3171.1999881864	Sum of GTIs [s]
			l1events	154786	Number of level 1 events

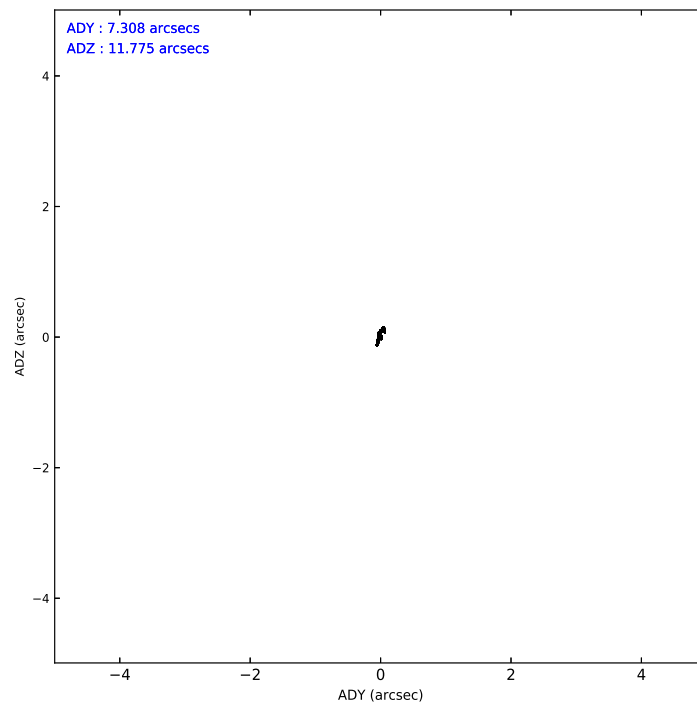
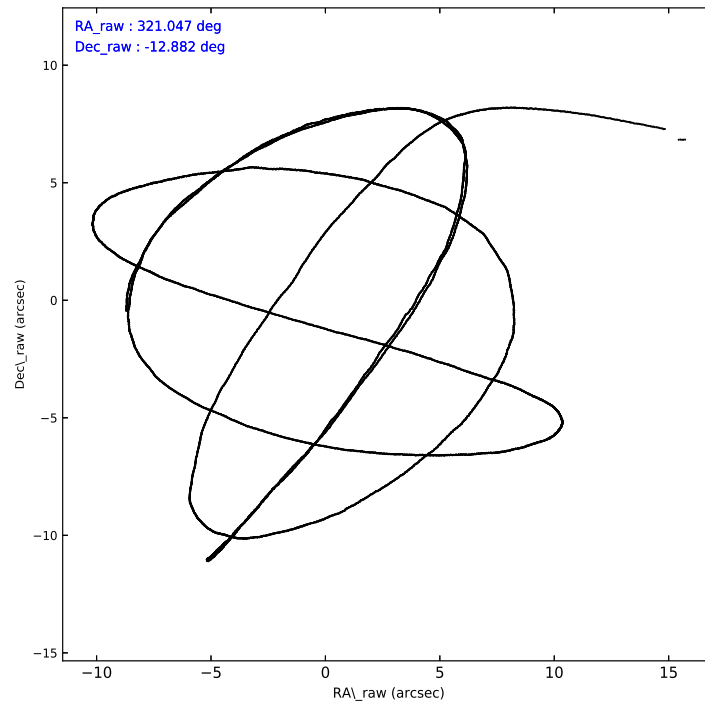
### 2.1.4 Events

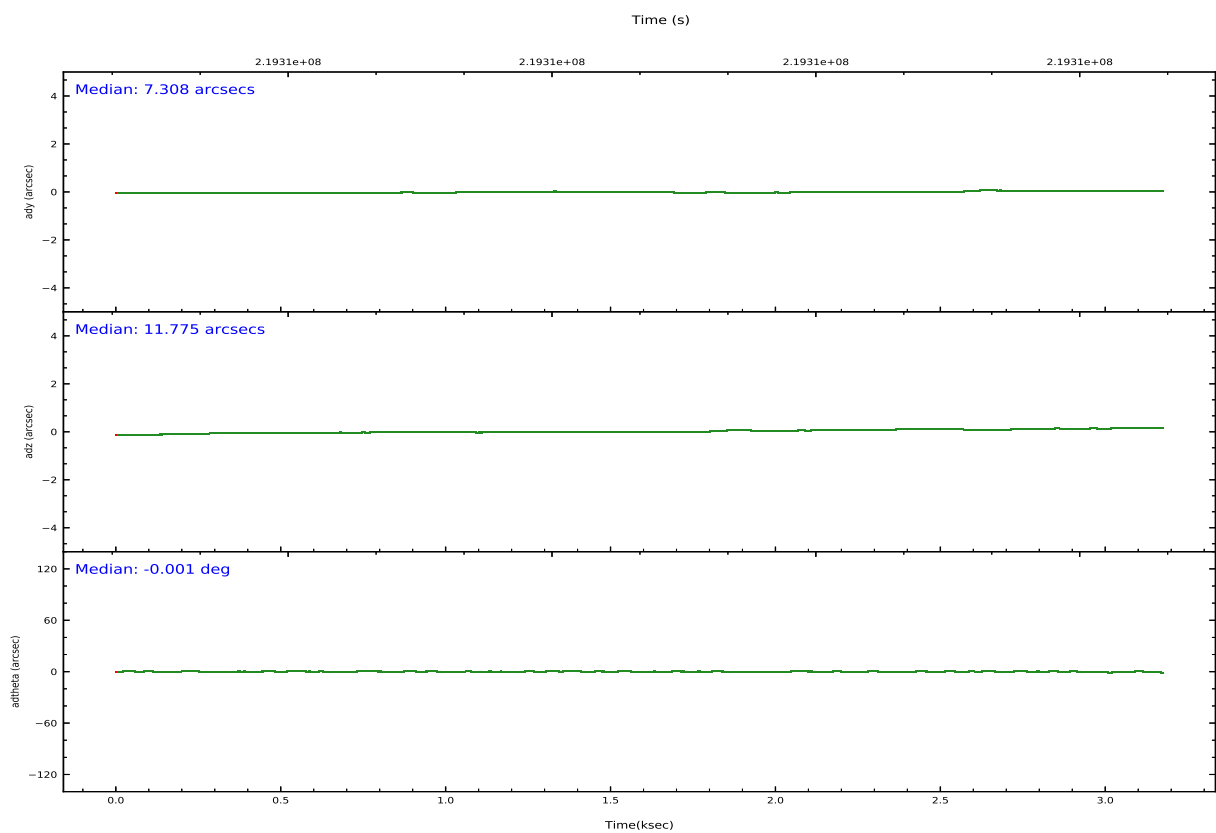
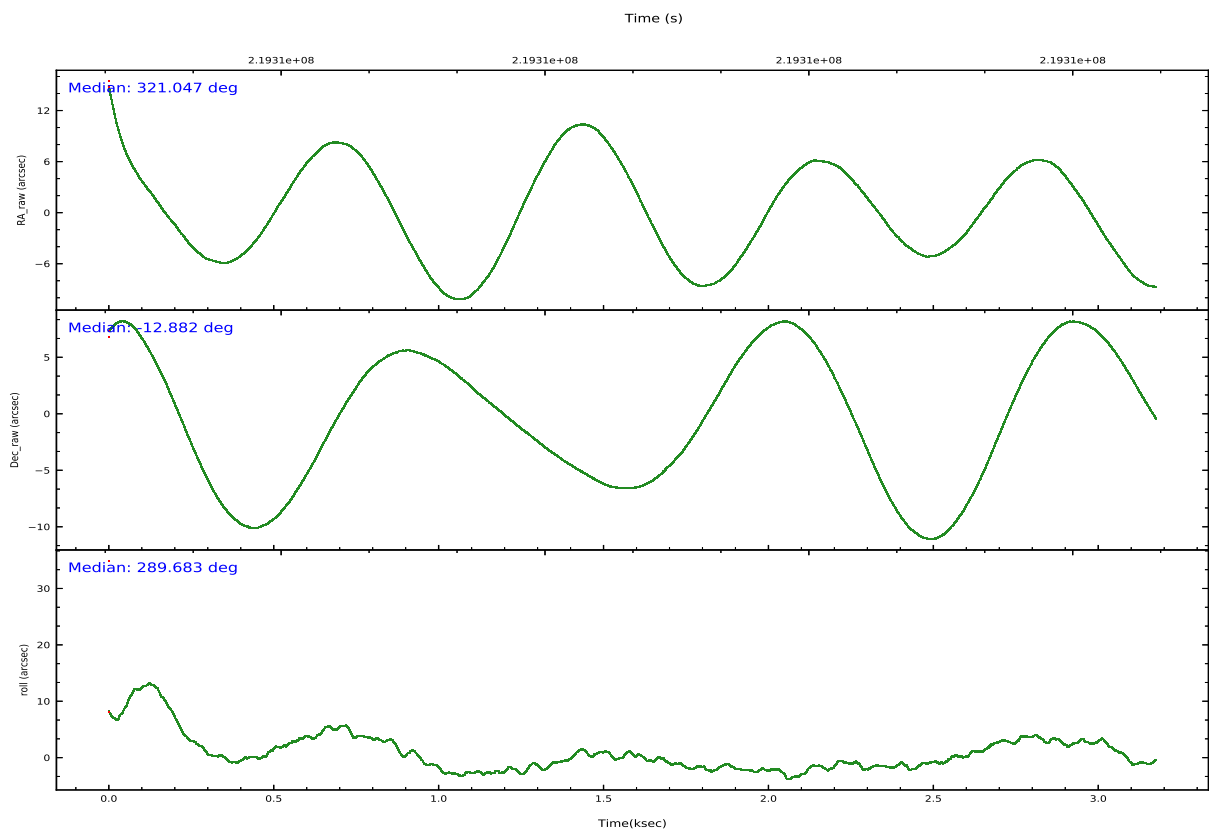
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	22886	22924	26621	23167	25586	33602	grade 0 events	2068	1894	2059	2004	1896	1333
rejected events	18961	18883	22753	19408	21747	19231		9%	8%	7%	8%	7%	3%
rejected %	82%	82%	85%	83%	84%	57%	grade 1 events	9	11	21	19	10	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	696	827	696	648	711	2894
								3%	3%	2%	2%	2%	8%
							grade 3 events	377	351	343	303	314	1270
								1%	1%	1%	1%	1%	3%
							grade 4 events	287	321	307	285	273	1194
								1%	1%	1%	1%	1%	3%
							grade 5 events	930	996	930	1091	1090	3125
								4%	4%	3%	4%	4%	9%
							grade 6 events	536	694	495	554	686	7798
								2%	3%	1%	2%	2%	23%
							grade 7 events	17983	17830	21770	18263	20606	15951
								78%	77%	81%	78%	80%	47%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	321.025732	321.04323040855	Subarray requested	NONE	NONE
[deg] Pointing Dec	-12.865058	-12.88171191468	Alternating exposures requested	N	N
[deg] Pointing Roll	289.477232	289.68343304056	[s] Primary exposure time	0.000000	3.2
[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)	219306053.184000	219304973.56404			
Observation start date	2004-12-13T06:19:49	2004-12-13T06:02:53			
[s] Observation end time (MET)	219309053.184000	219310419.90179			
Observation end date	2004-12-13T07:09:49	2004-12-13T07:33:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect





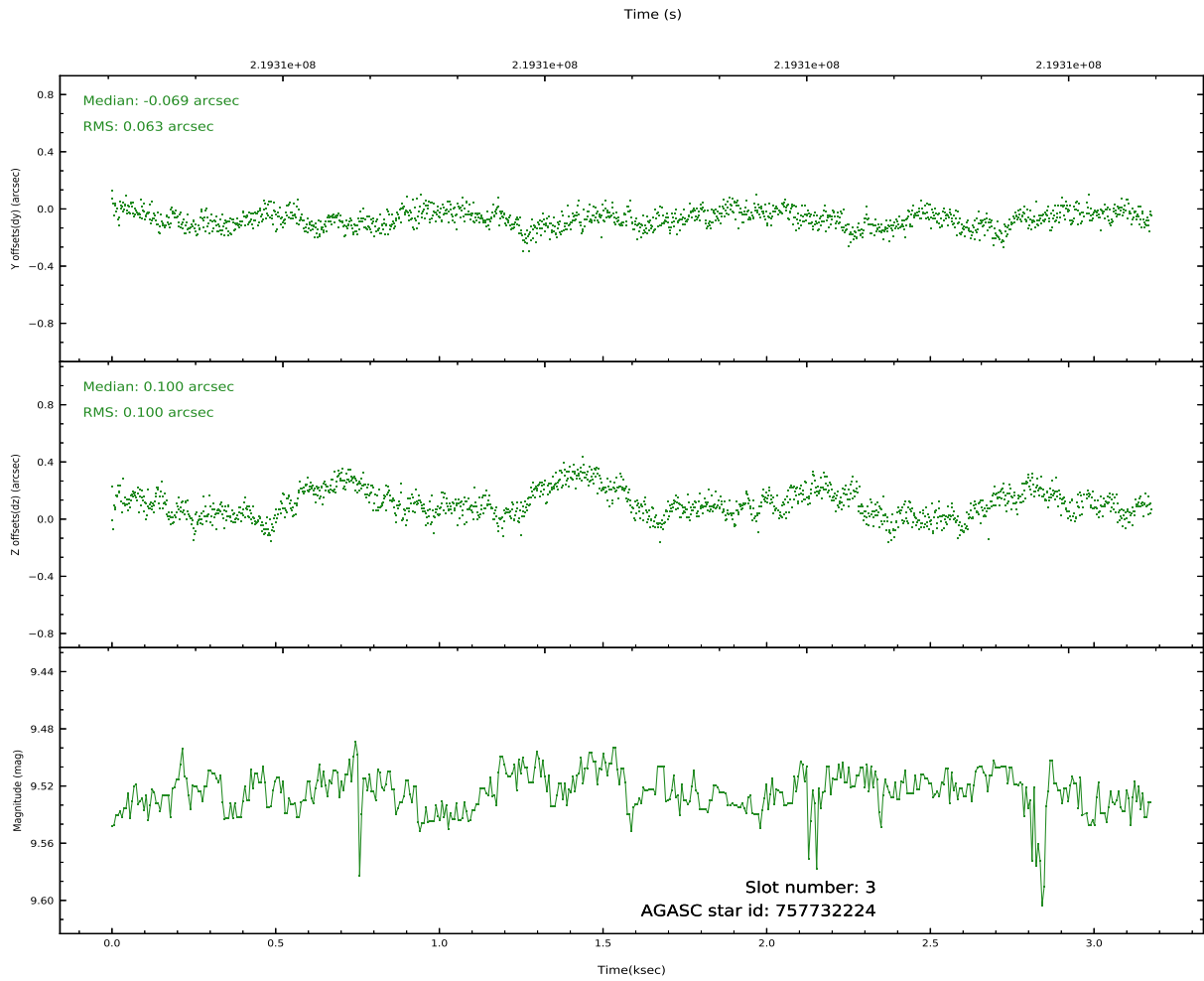
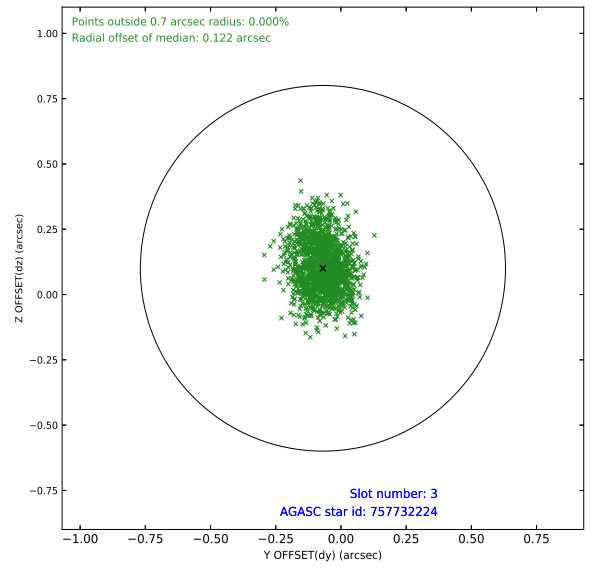
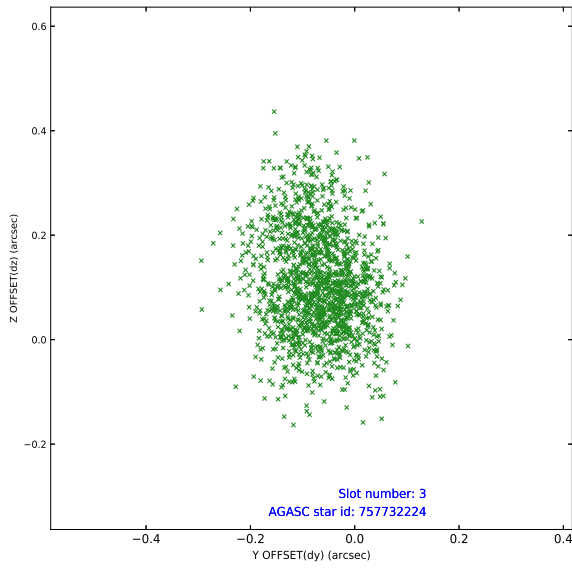
Slot Statistics

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	775	1.000	0.056	-0.038	0.006	0.011	0.000000	0.000000	932.41	-835
1	FID		ACIS-I-5	7.23	775	1.000	-0.210	0.056	0.006	0.011	0.000000	0.000000	-1814.82	1061
2	FID		ACIS-I-6	7.25	775	1.000	0.062	0.052	0.007	0.012	0.000000	0.000000	395.83	1707
3	GUIDE	used	757732224	9.52	1547	1.000	-0.069	0.100	0.124	0.211	321.353233	-12.547654	-692.31	1465
4	GUIDE	used	757732672	9.12	1547	1.000	0.189	-0.007	0.147	0.215	320.736756	-12.767141	-669.40	-838
5	GUIDE	used	758258008	9.33	1549	1.000	0.066	-0.079	0.147	0.224	320.564173	-13.429101	1377.67	-2201
6	GUIDE	used	758261352	7.52	1550	1.000	0.052	-0.013	0.062	0.099	320.837098	-13.513417	1982.34	-1402
7	GUIDE	used	757732536	9.39	1547	1.000	-0.244	-0.008	0.099	0.168	320.458395	-12.367680	-2349.32	-1285

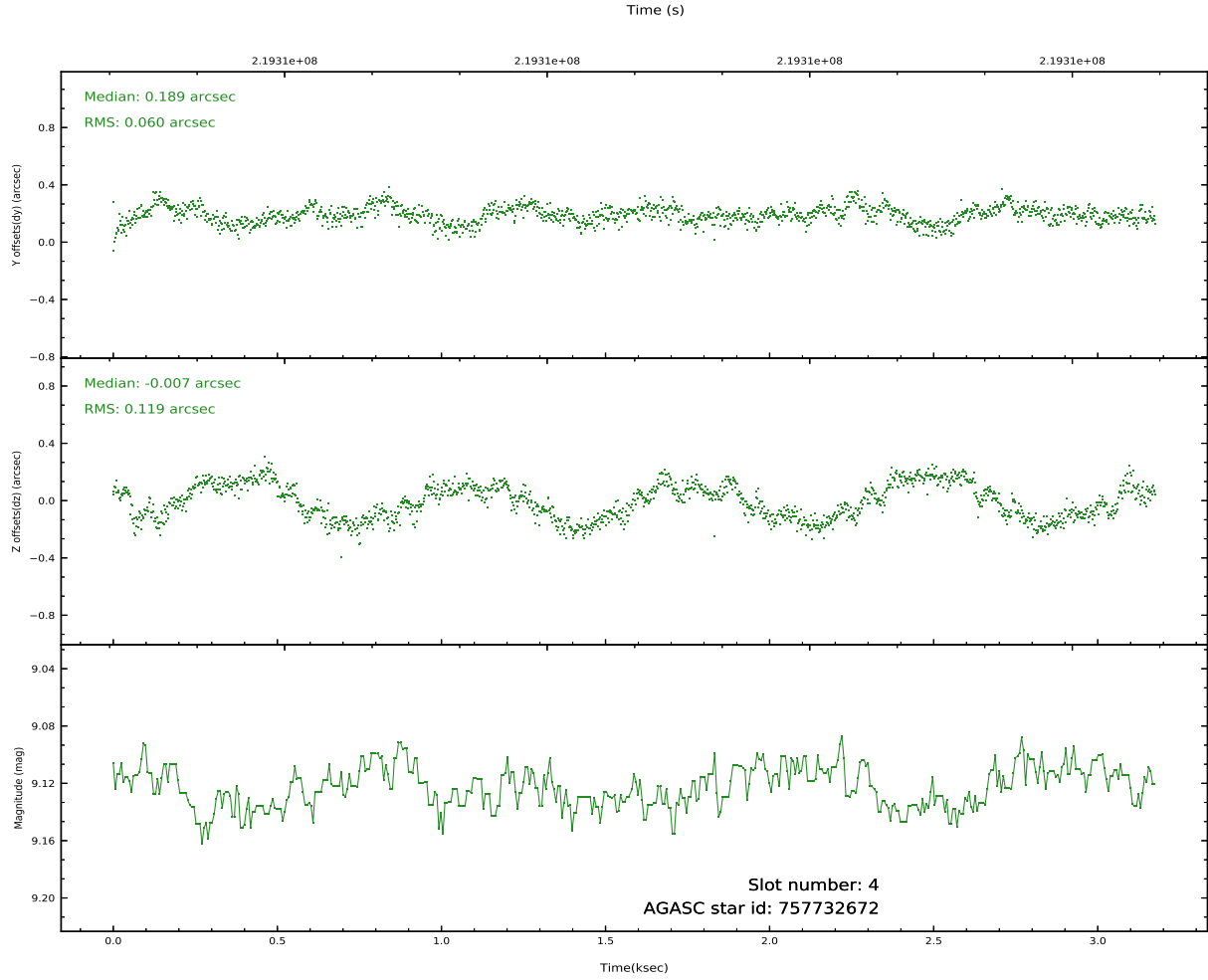
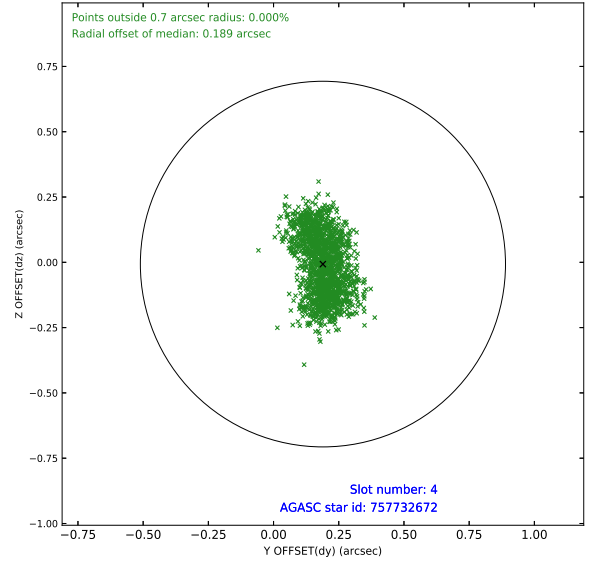
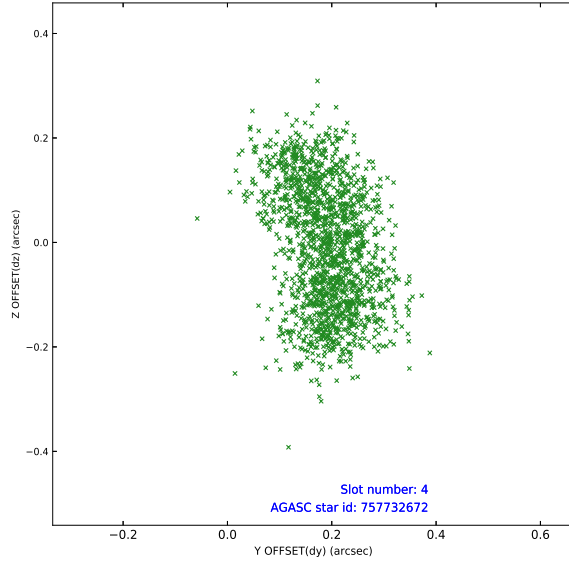


## 2.4 Star Slots

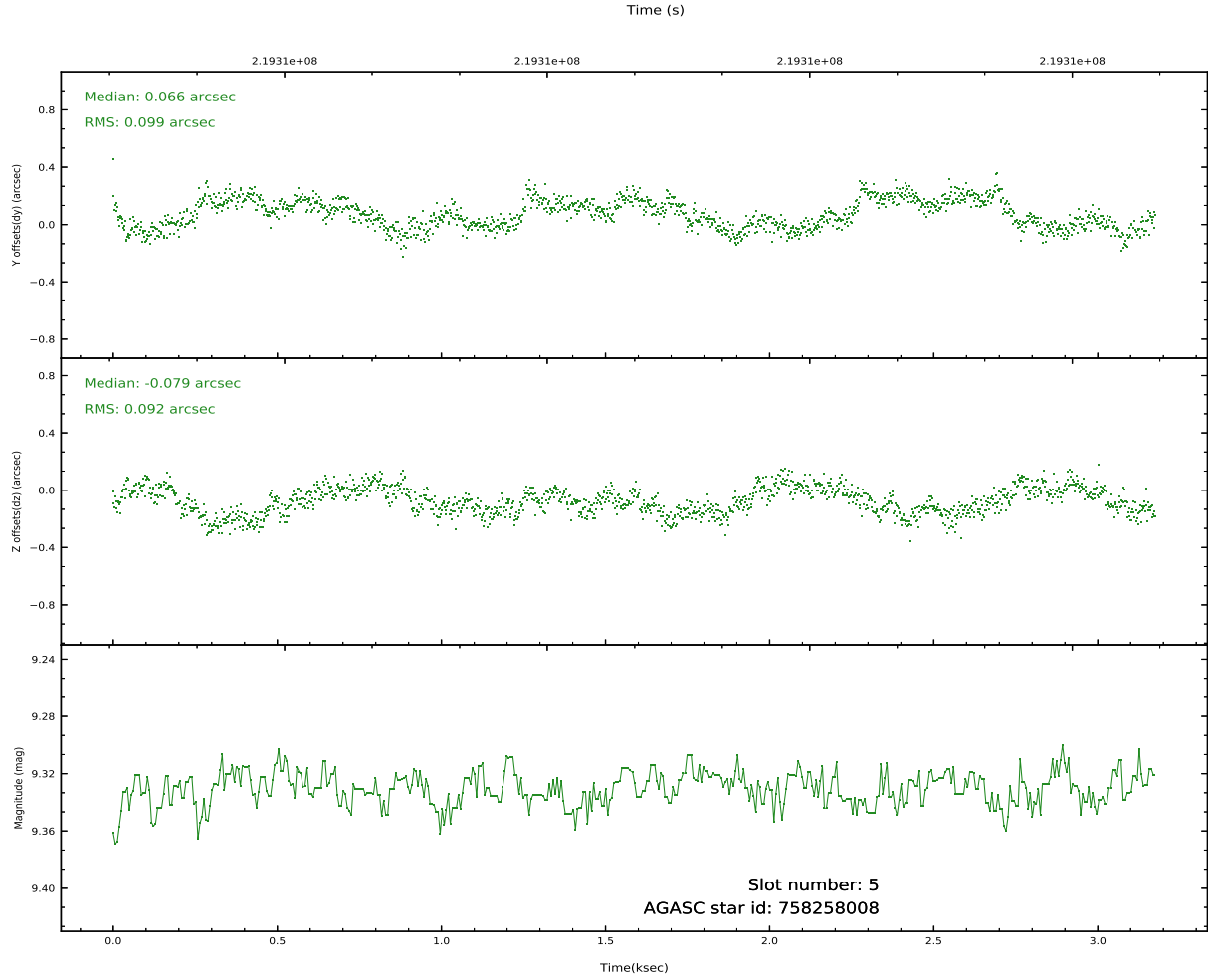
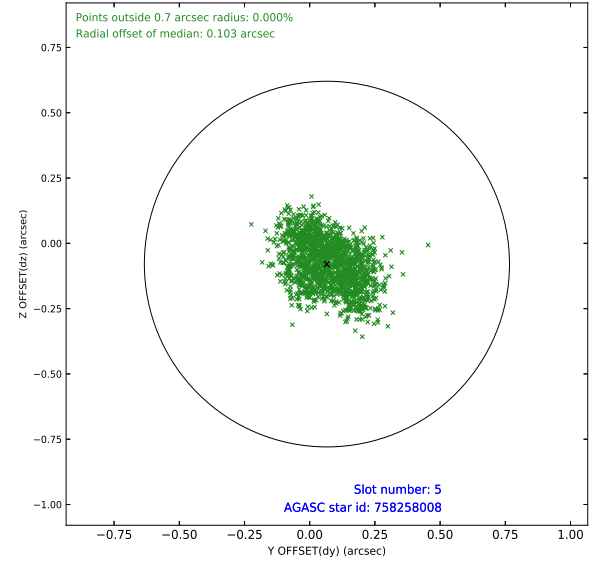
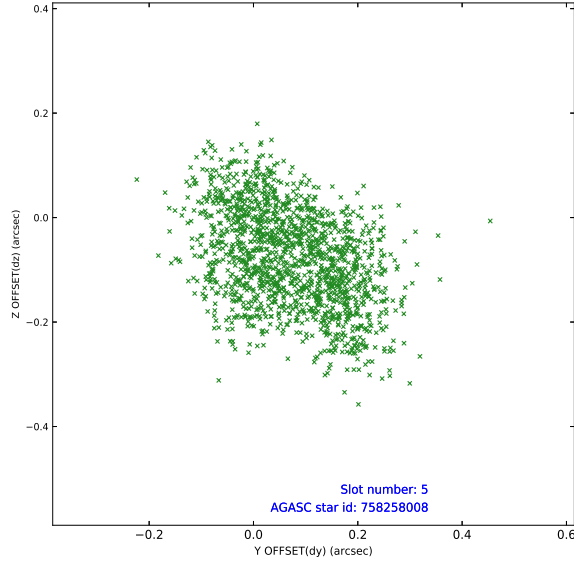
### 2.4.1 Slot 3



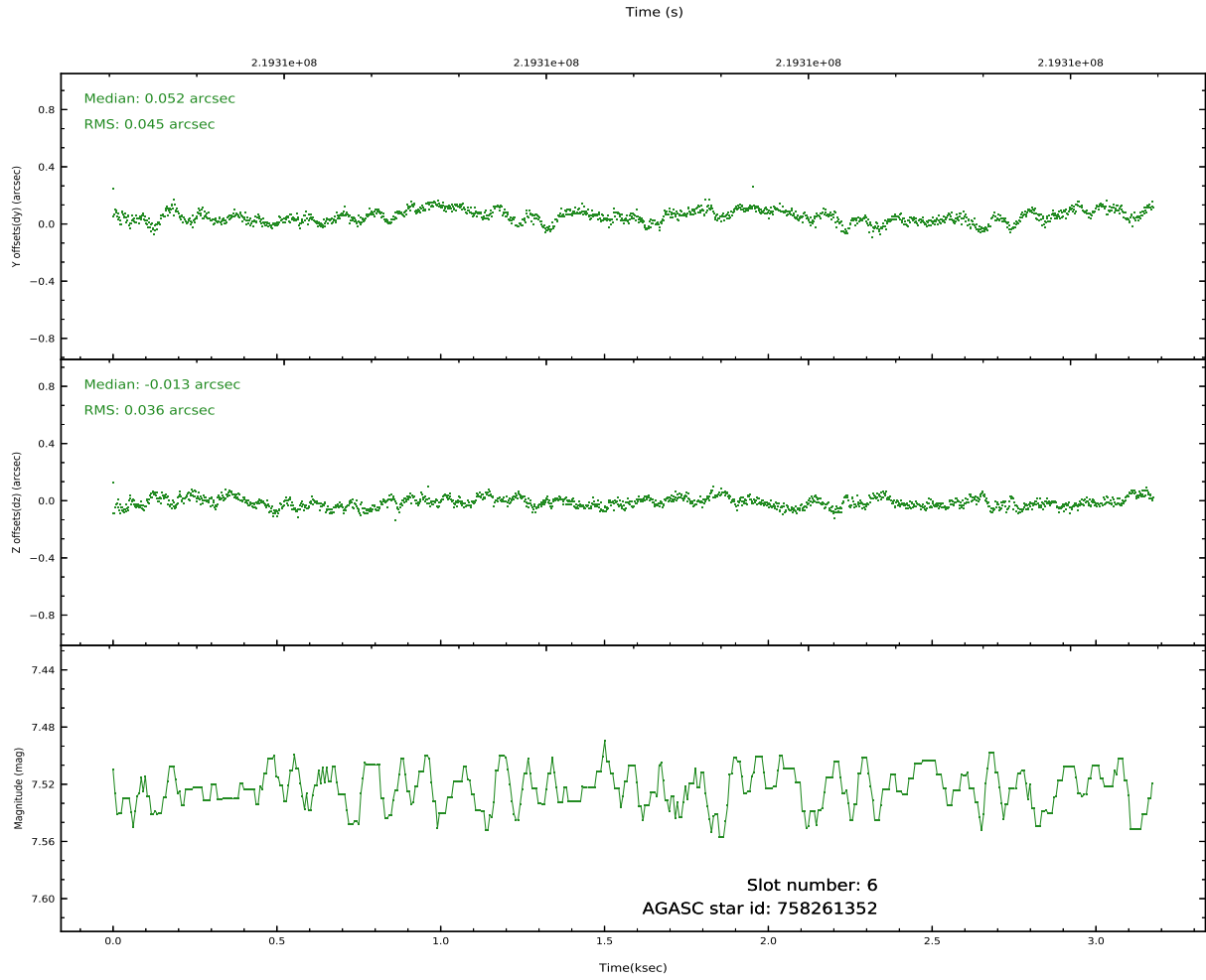
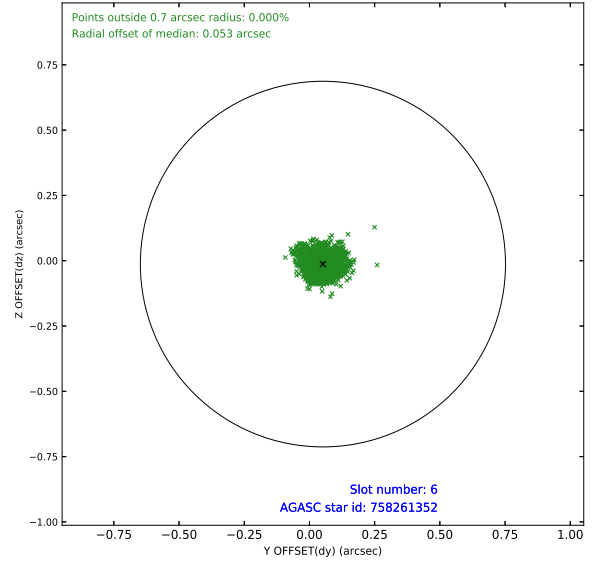
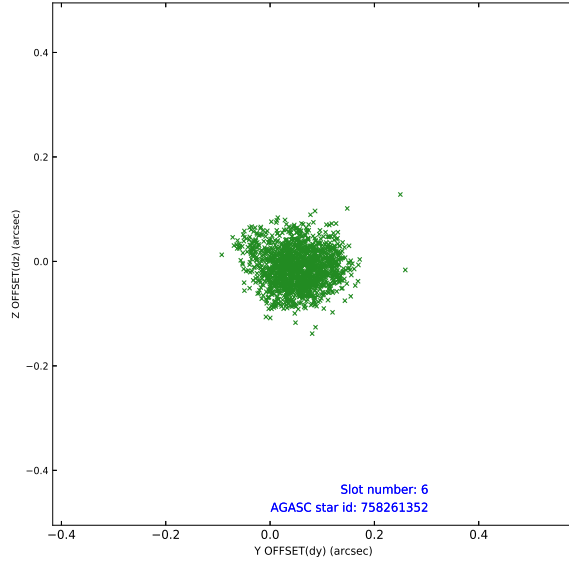
## 2.4.2 Slot 4



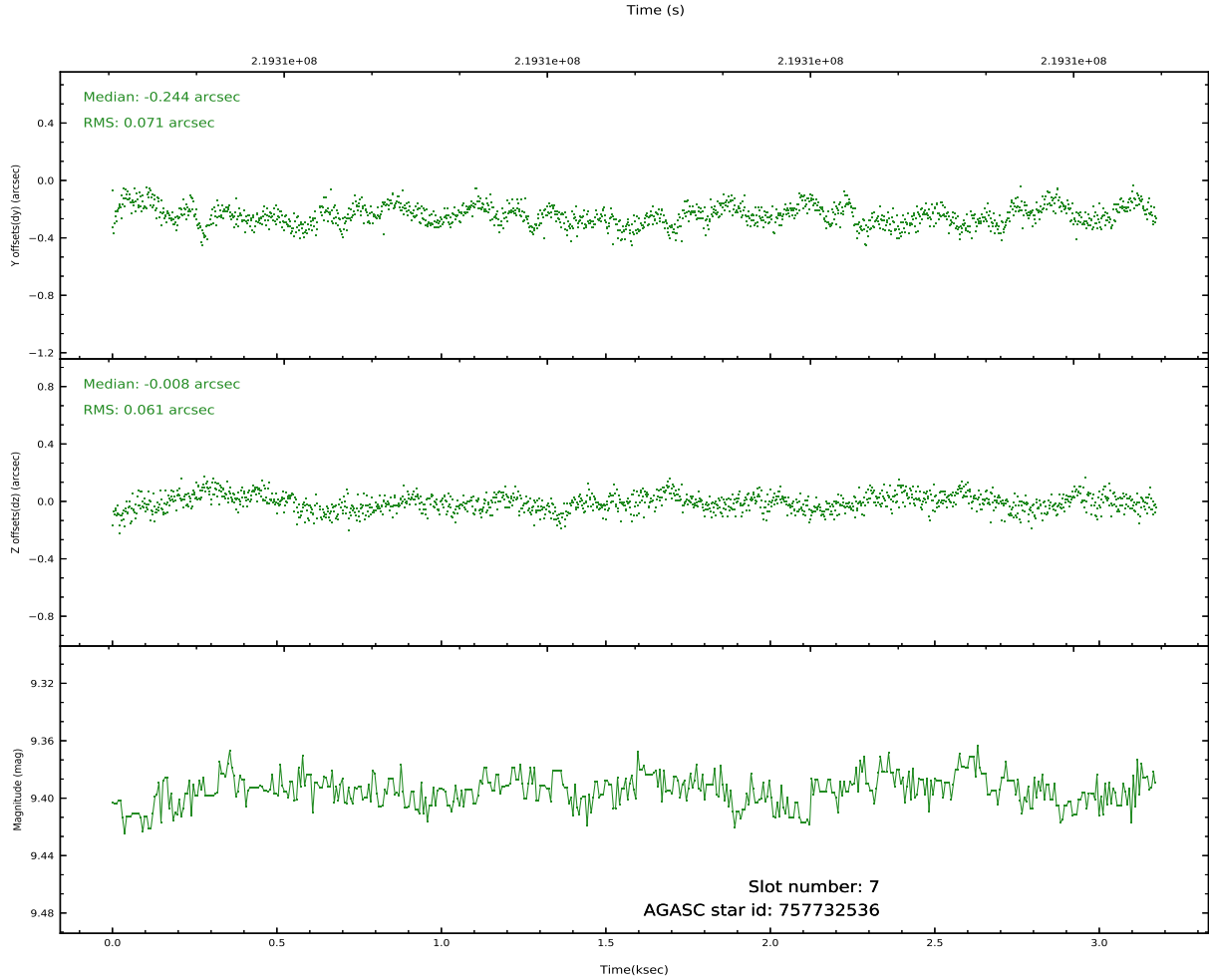
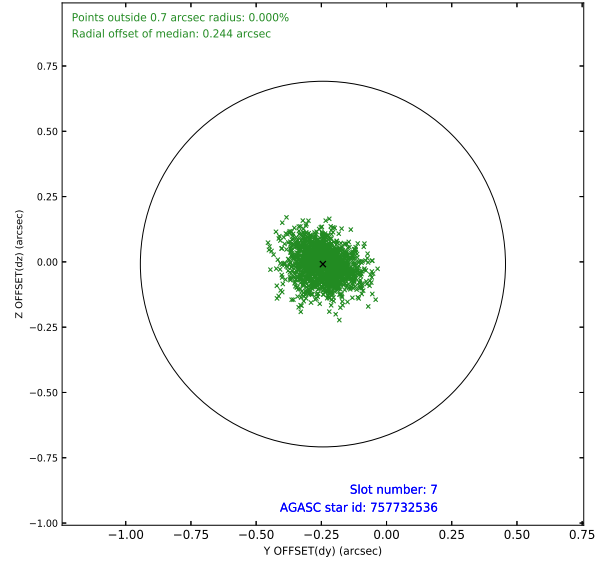
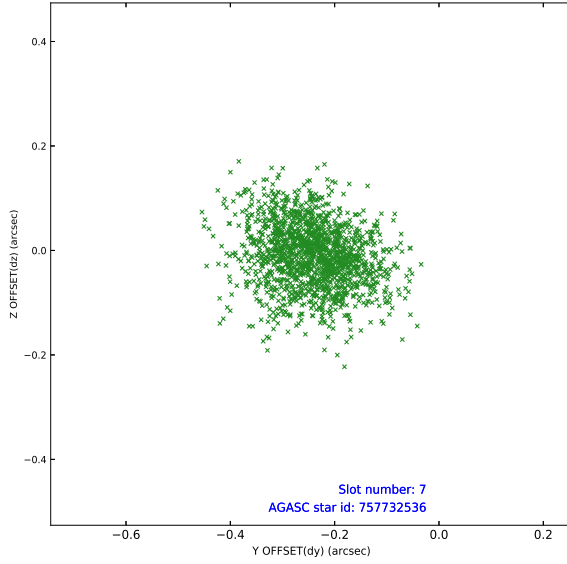
### 2.4.3 Slot 5



## 2.4.4 Slot 6

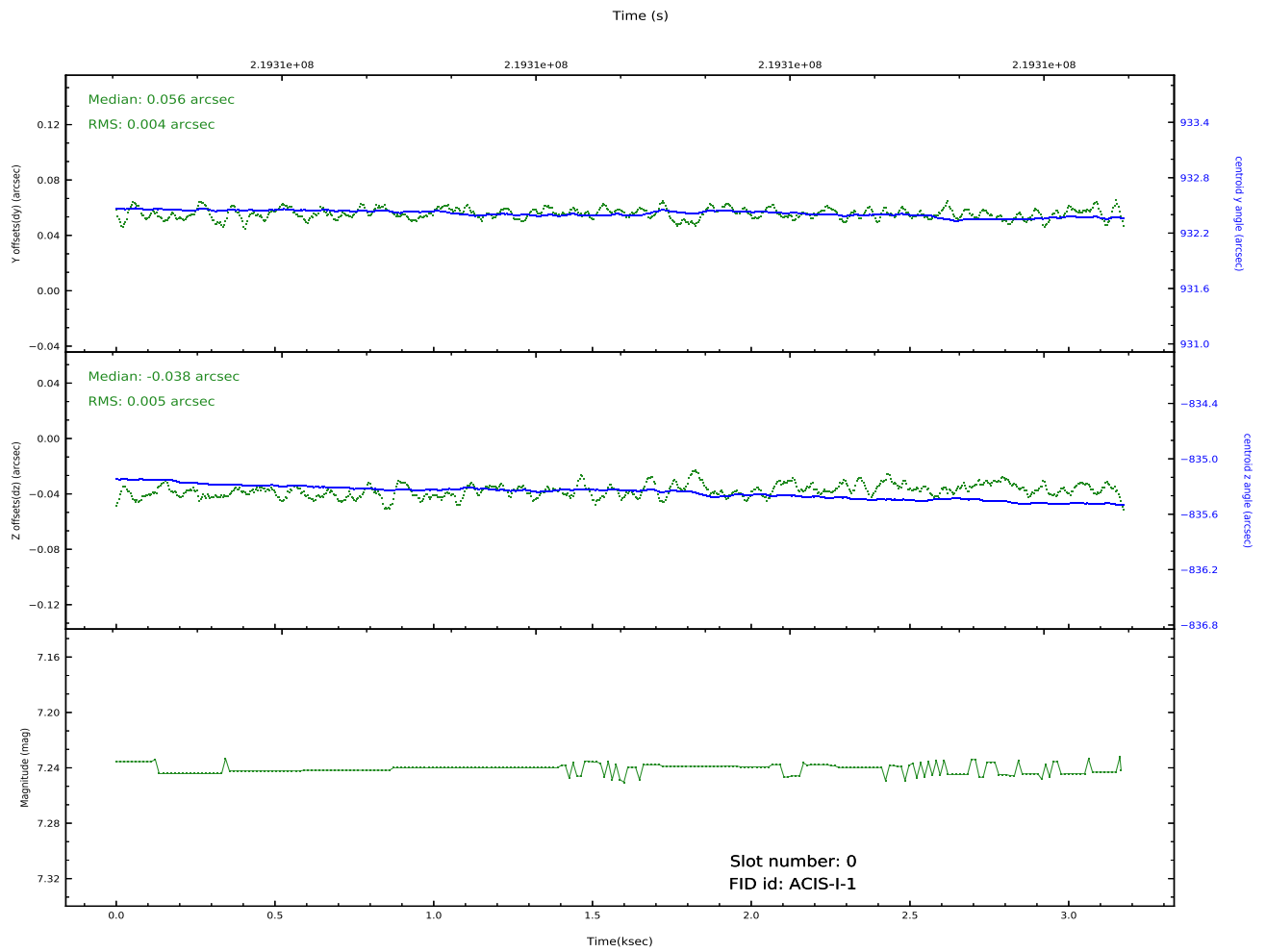
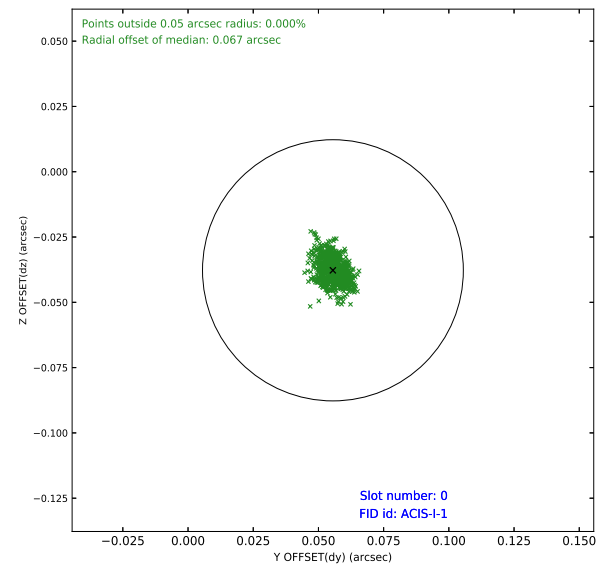
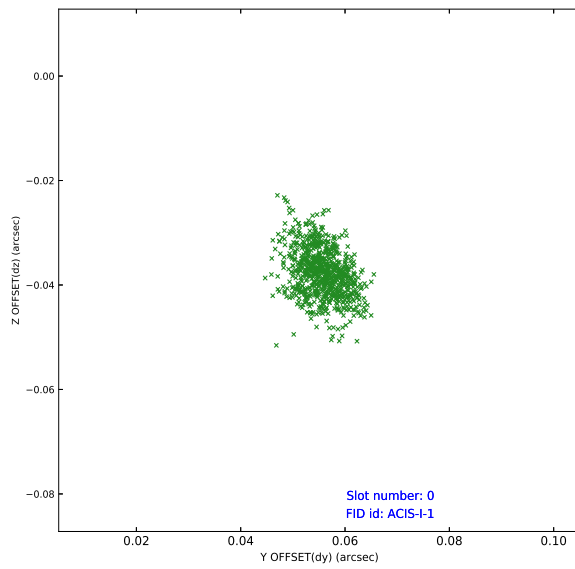


## 2.4.5 Slot 7

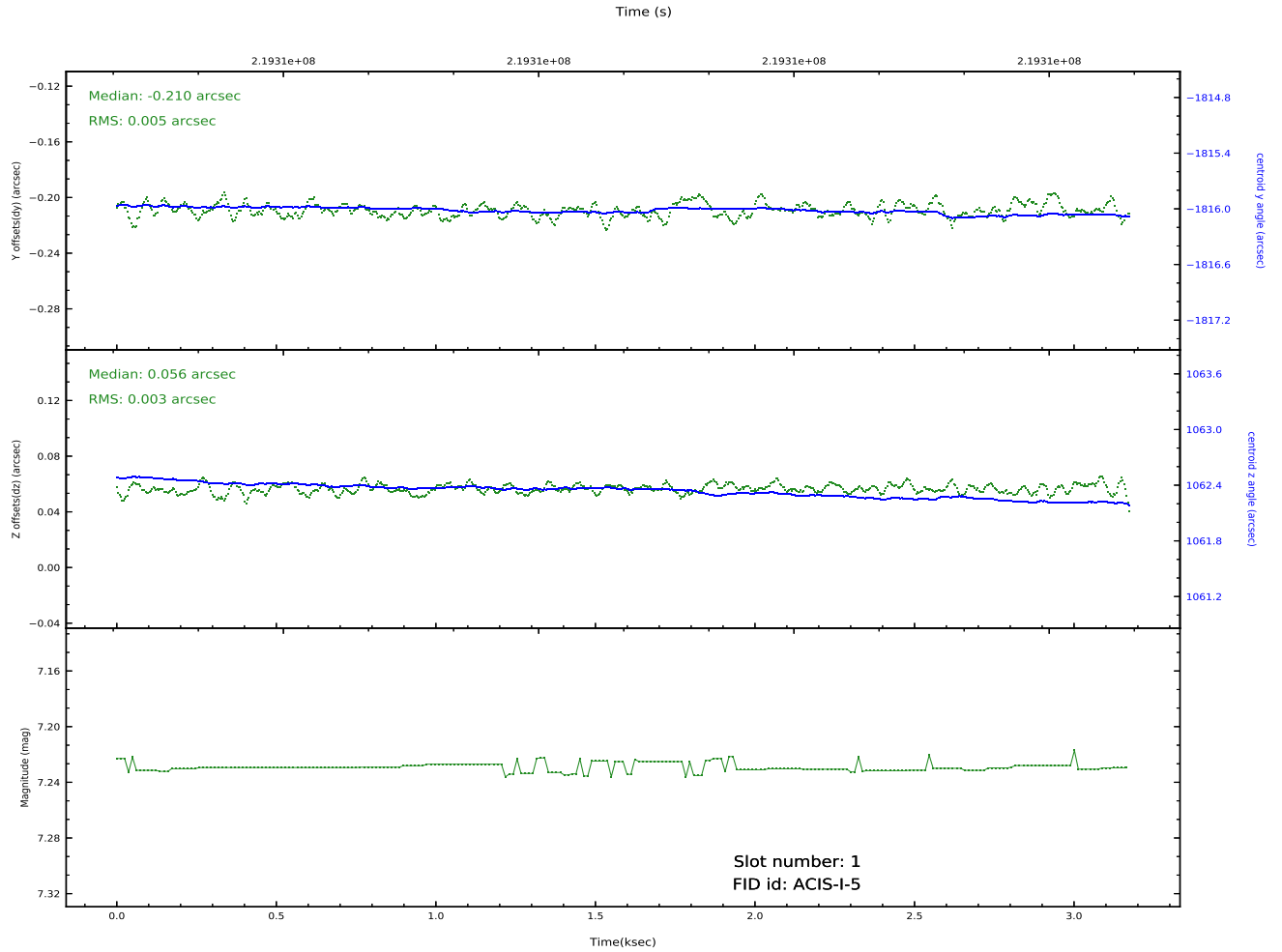
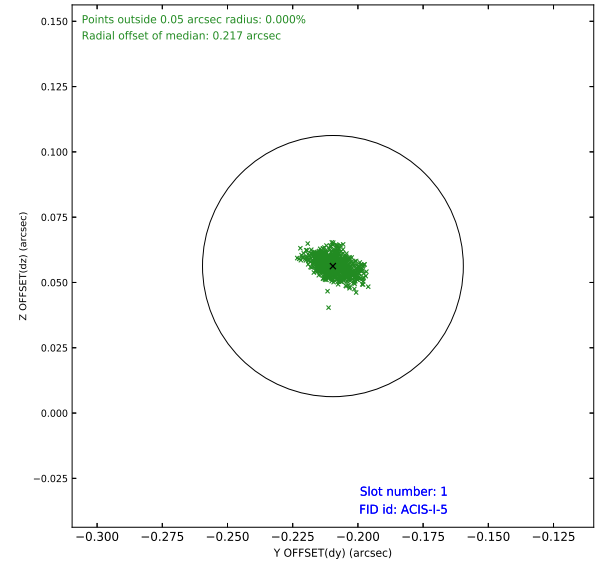
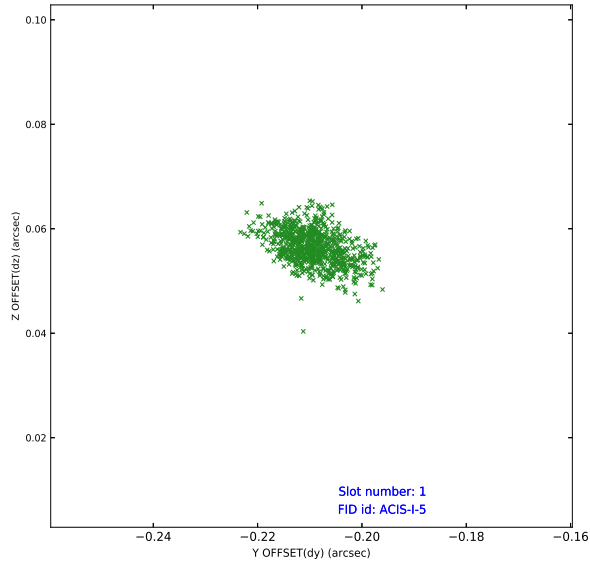


## 2.5 FID Slots

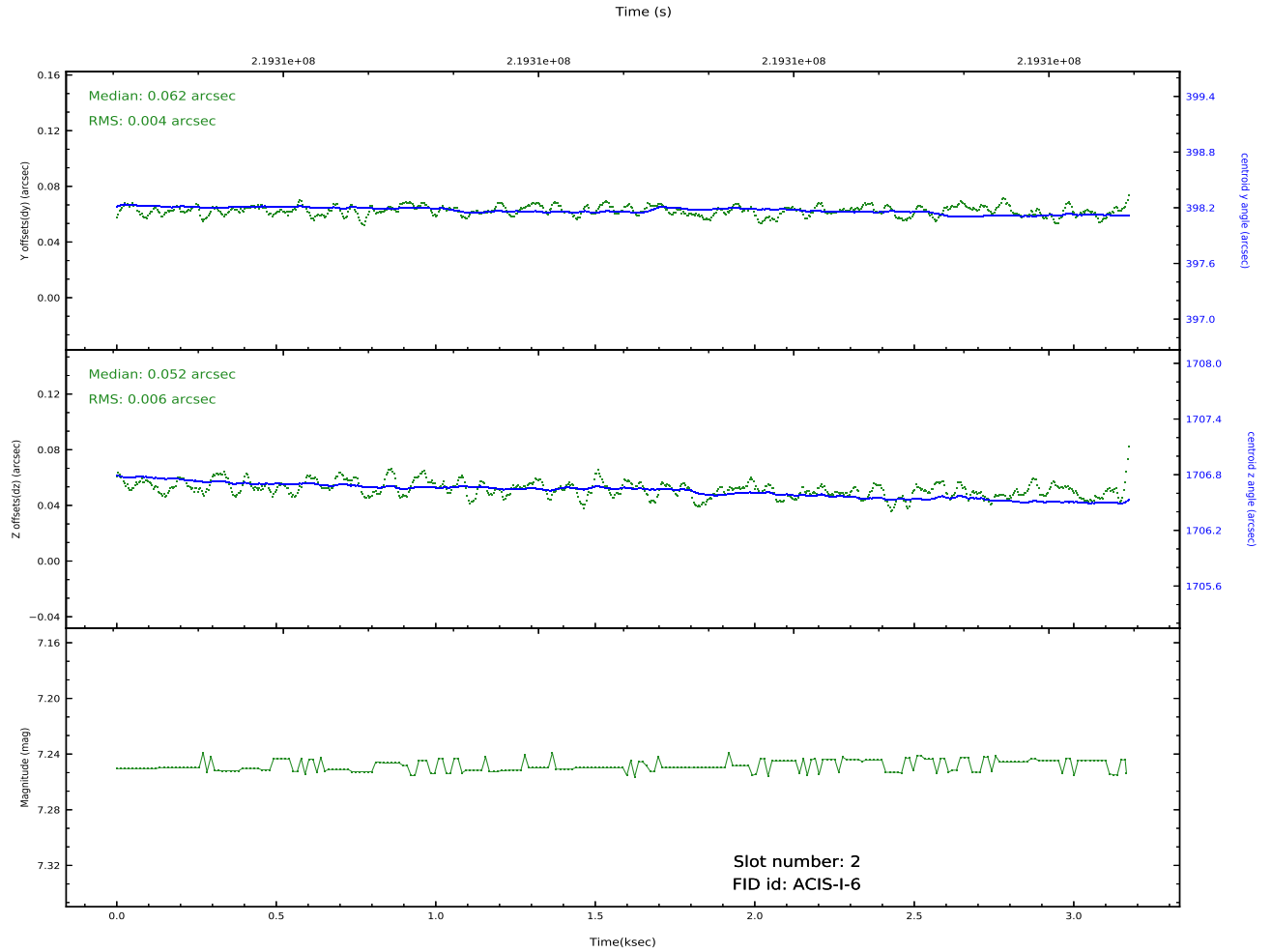
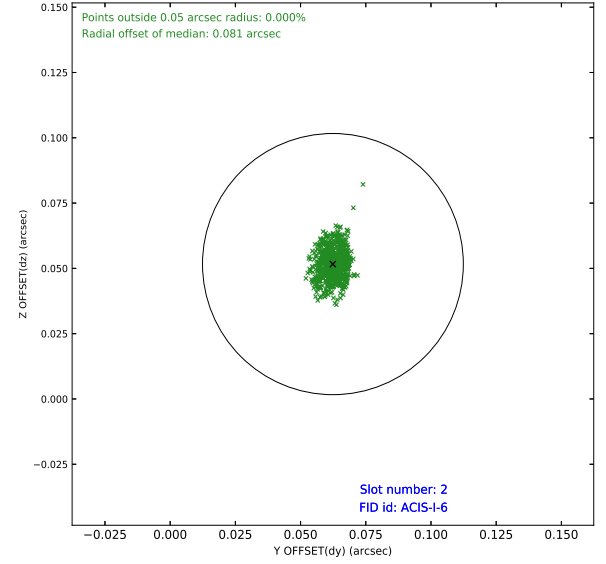
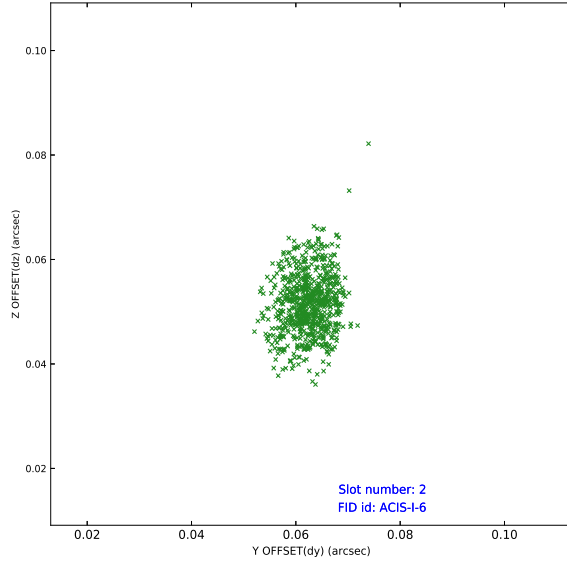
### 2.5.1 Slot 0



## 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)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.171199

### A.2 Comments