

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6996 - L2 Version 4  
Chandra X-Ray Center

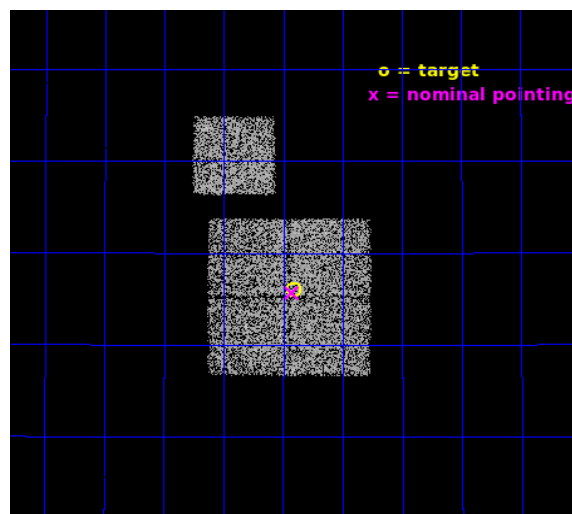
L2 Processing Date : Oct 11 2020

## 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

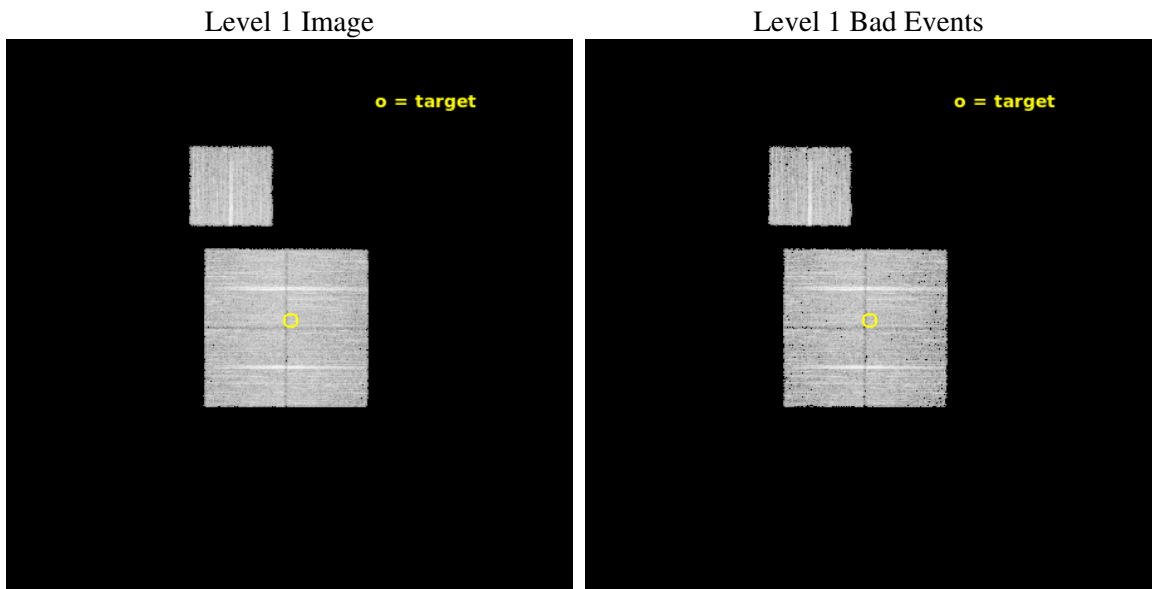
seq_num	900412	Sequence number
obs_id	6996	Observation id
title	Chandra Large Scale Survey of the NOAO Bootes Deep Field (A)	Propo
observer	Dr. Stephen Murray	Principal investigator
object	XBootes	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.853833	Observer's specified target RA [deg]
dec_targ	33.933639	Observer's specified target Dec [deg]
ra_nom	216.85658102558	Nominal RA [deg]
dec_nom	33.928283044888	Nominal Dec [deg]
roll_nom	0.2065411680289	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9771.1999811828	Sum of GTIs [s]
livetime	9643.5320599759	Livetime [s]
ontime0	9771.1999811828	Sum of GTIs [s]
ontime1	9771.1999811828	Sum of GTIs [s]
ontime2	9768.0590209067	Sum of GTIs [s]
ontime3	9771.1999811828	Sum of GTIs [s]
ontime6	9771.1999811828	Sum of GTIs [s]
l2events	24108	Number of level 2 events



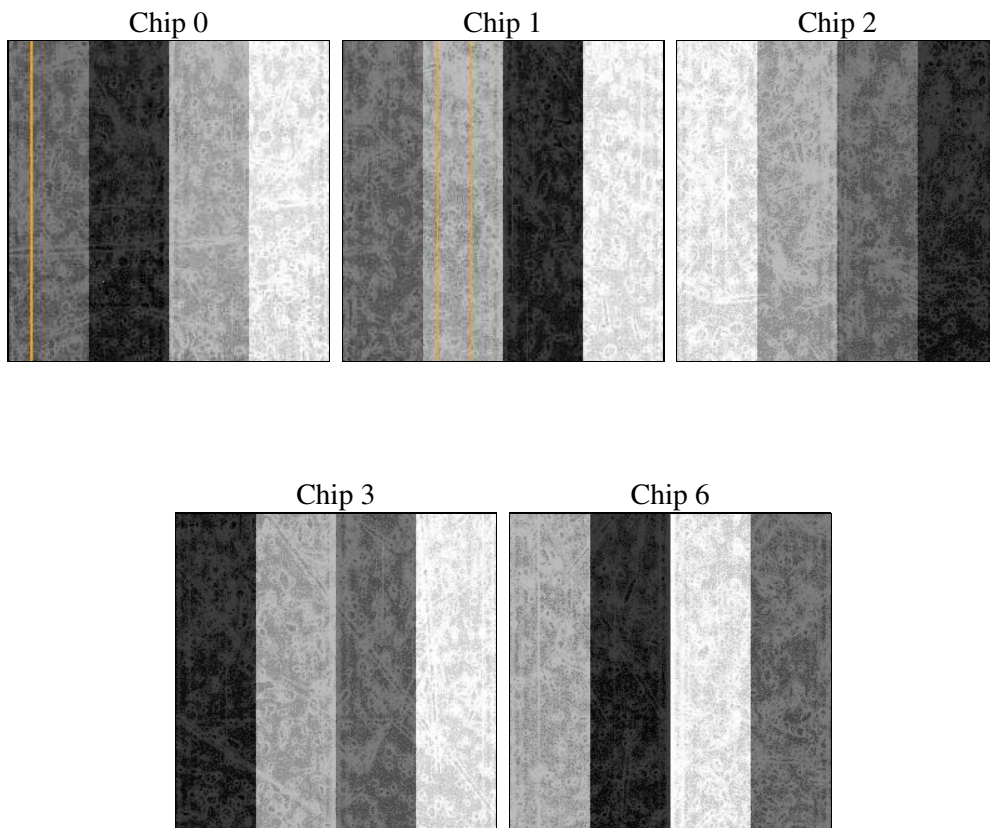
## 2 OBI

### 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	9771.1999811828	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	9771.1999811828	Sum of GTIs [s]
date	2020-10-11T13:39:04	Date and time of file creation	ontime1	9771.1999811828	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	9768.0590209067	Sum of GTIs [s]
			ontime3	9771.1999811828	Sum of GTIs [s]
			ontime6	9771.1999811828	Sum of GTIs [s]
			l1events	300286	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	57934	55621	66025	60413	60293
rejected events	52002	49518	60207	54812	54139
rejected %	89%	89%	91%	90%	89%

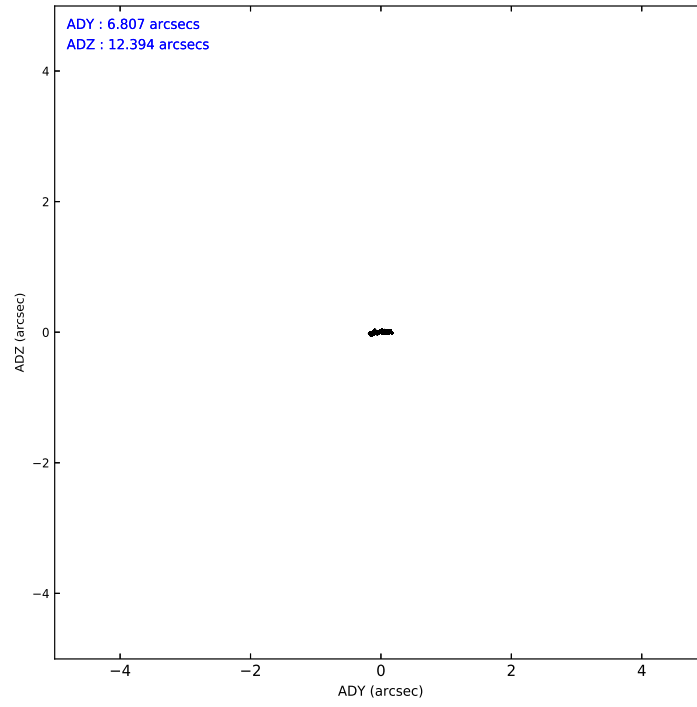
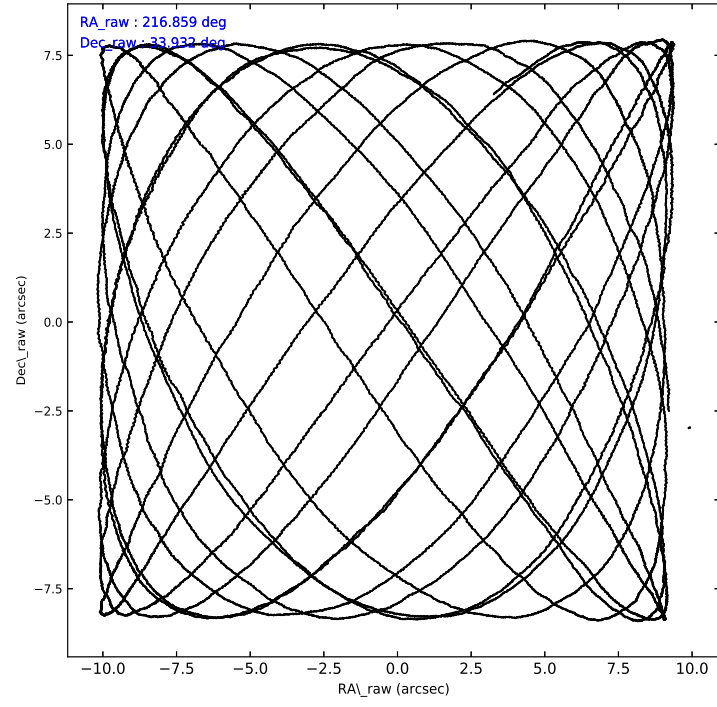
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2203	2116	2230	2050	2289
	3%	3%	3%	3%	3%
grade 1 events	38	24	27	33	26
	0%	0%	0%	0%	0%
grade 2 events	1449	1345	1357	1284	1305
	2%	2%	2%	2%	2%
grade 3 events	655	740	641	626	639
	1%	1%	0%	1%	1%
grade 4 events	591	715	668	602	697
	1%	1%	1%	0%	1%
grade 5 events	1758	1965	1600	2118	1989
	3%	3%	2%	3%	3%
grade 6 events	1041	1191	925	1040	1228
	1%	2%	1%	1%	2%
grade 7 events	50199	47525	58577	52660	52120
	86%	85%	88%	87%	86%

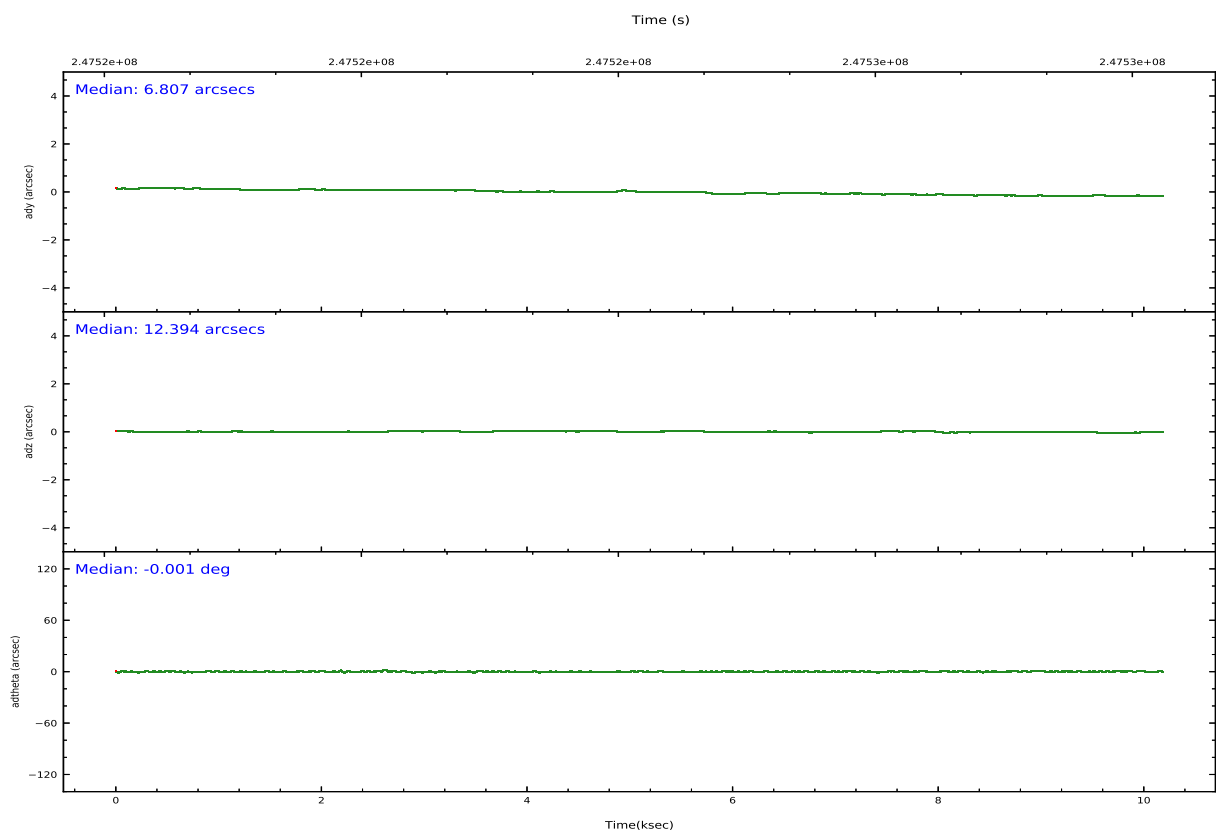
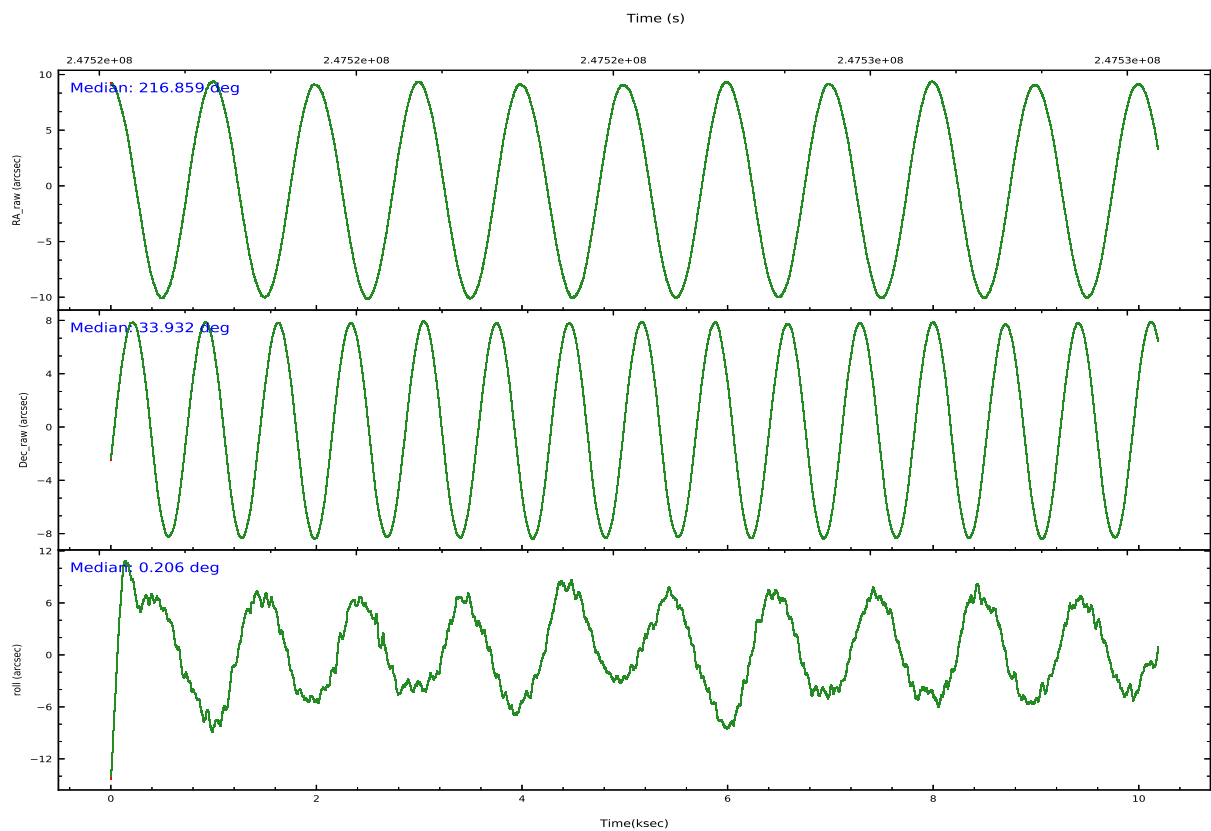


## 2.2 Compared Parameters

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	216.830535	216.85658102558	Subarray requested	NONE	NONE
[deg] Pointing Dec	33.917966	33.928283044888	Alternating exposures requested	N	N
[deg] Pointing Roll	0.012996	0.2065411680289	[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)	247520300.184000	247519924.35005			
Observation start date	2005-11-04T19:37:16	2005-11-04T19:32:04			
[s] Observation end time (MET)	247530300.184000	247530434.18803			
Observation end date	2005-11-04T22:23:56	2005-11-04T22:27:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect



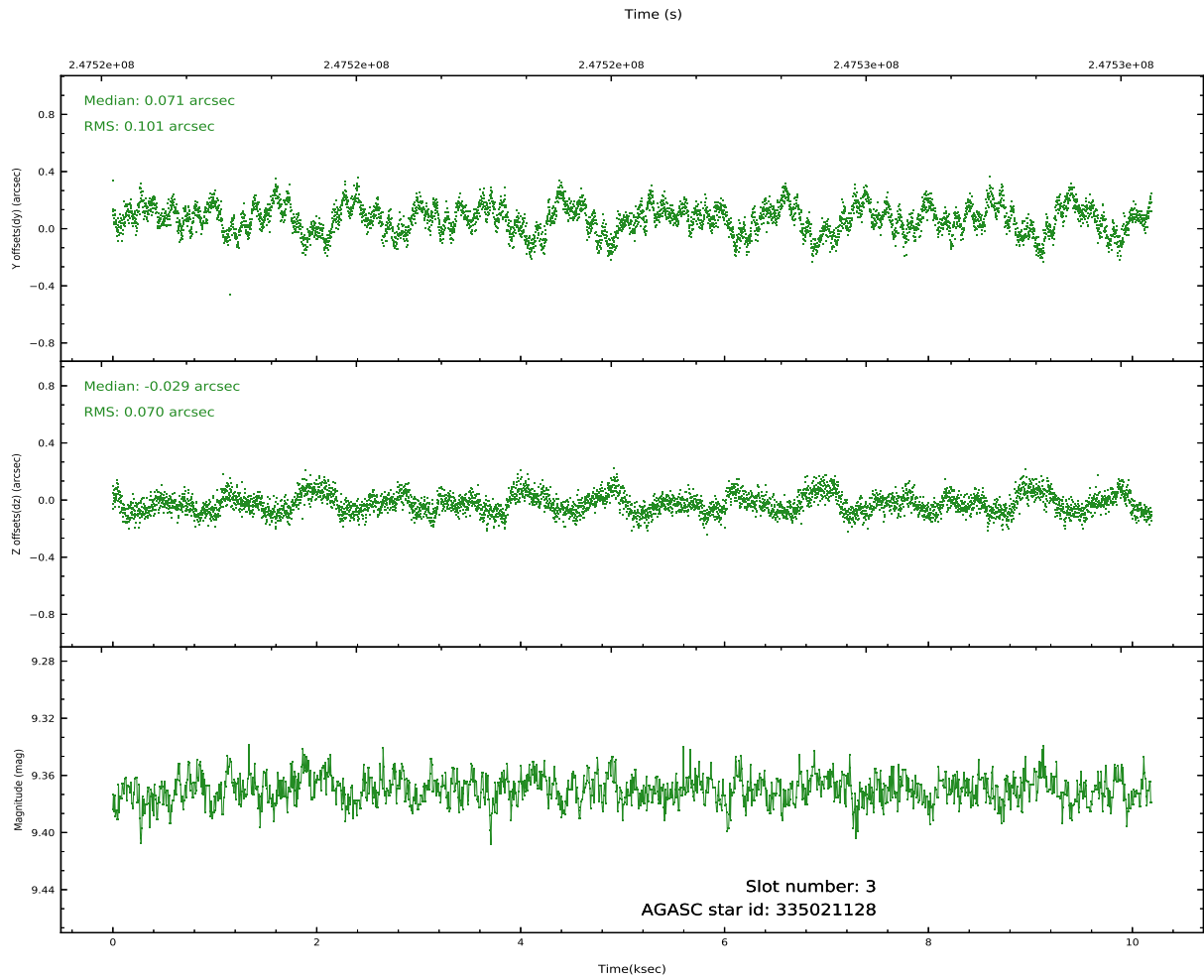
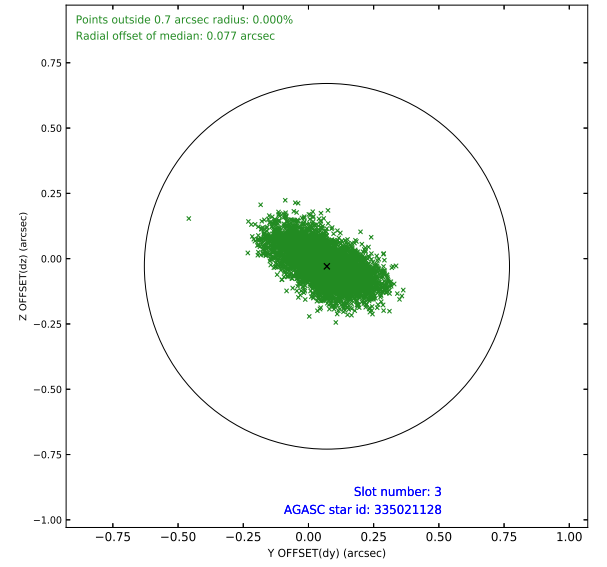
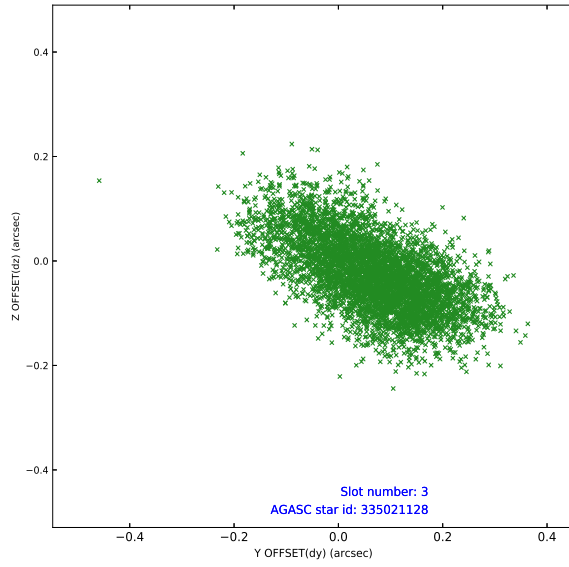


Slot Statistics

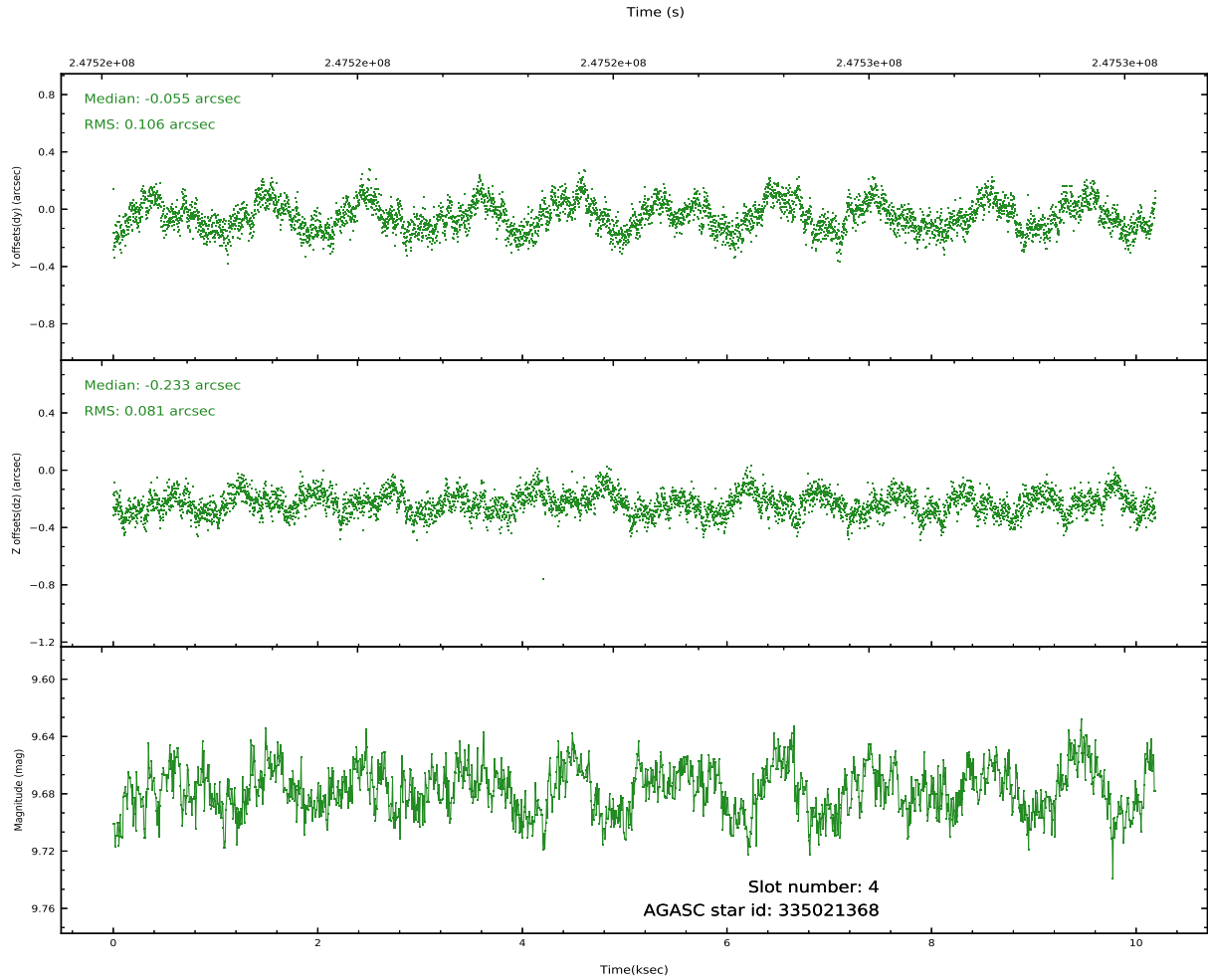
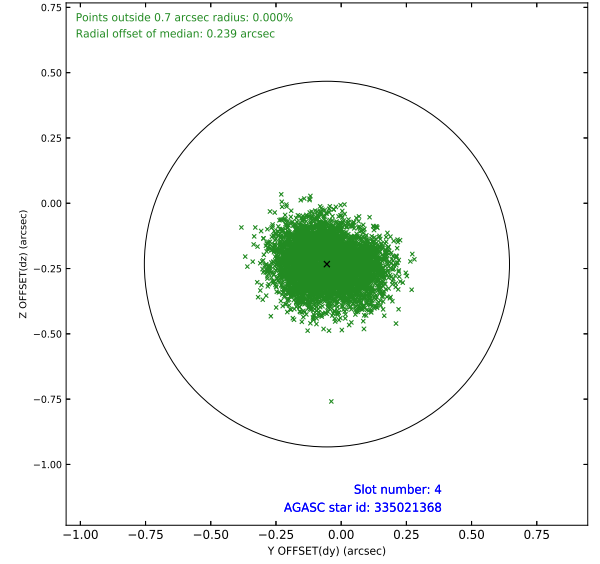
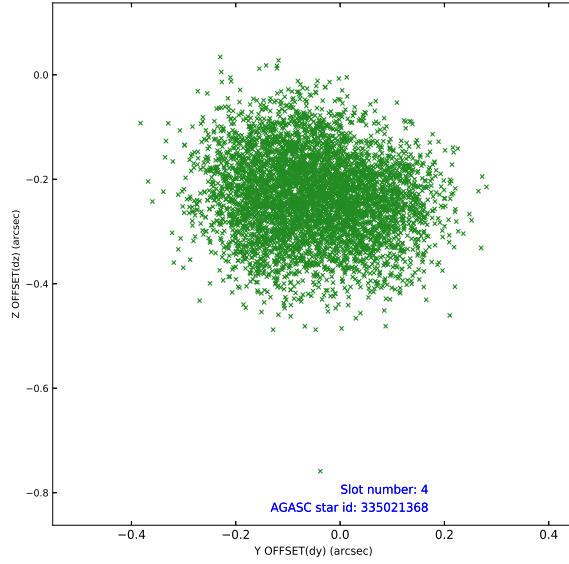
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	2486	1.000	0.052	-0.023	0.006	0.011	0.000000	0.000000	932.93	-835
1	FID		ACIS-I-5	7.23	2485	1.000	-0.198	0.060	0.006	0.011	0.000000	0.000000	-1815.11	1061
2	FID		ACIS-I-6	7.25	2486	1.000	0.054	0.034	0.007	0.012	0.000000	0.000000	397.95	1706
3	GUIDE	used	335021128	9.37	4970	1.000	0.071	-0.029	0.128	0.221	216.159551	34.422539	-1992.21	1823
4	GUIDE	used	335021368	9.68	4965	1.000	-0.055	-0.233	0.146	0.222	217.529643	33.934817	2087.72	67
5	GUIDE	used	335025848	9.68	4965	1.000	-0.127	0.199	0.293	0.412	217.530531	33.778292	2094.92	-495
6	GUIDE	used	335028240	9.21	4967	1.000	0.175	0.066	0.209	0.290	216.746851	33.385009	-251.45	-1918
7	GUIDE	used	335028696	9.16	4967	1.000	-0.027	0.031	0.099	0.163	217.260519	33.844112	1285.41	-263

## 2.4 Star Slots

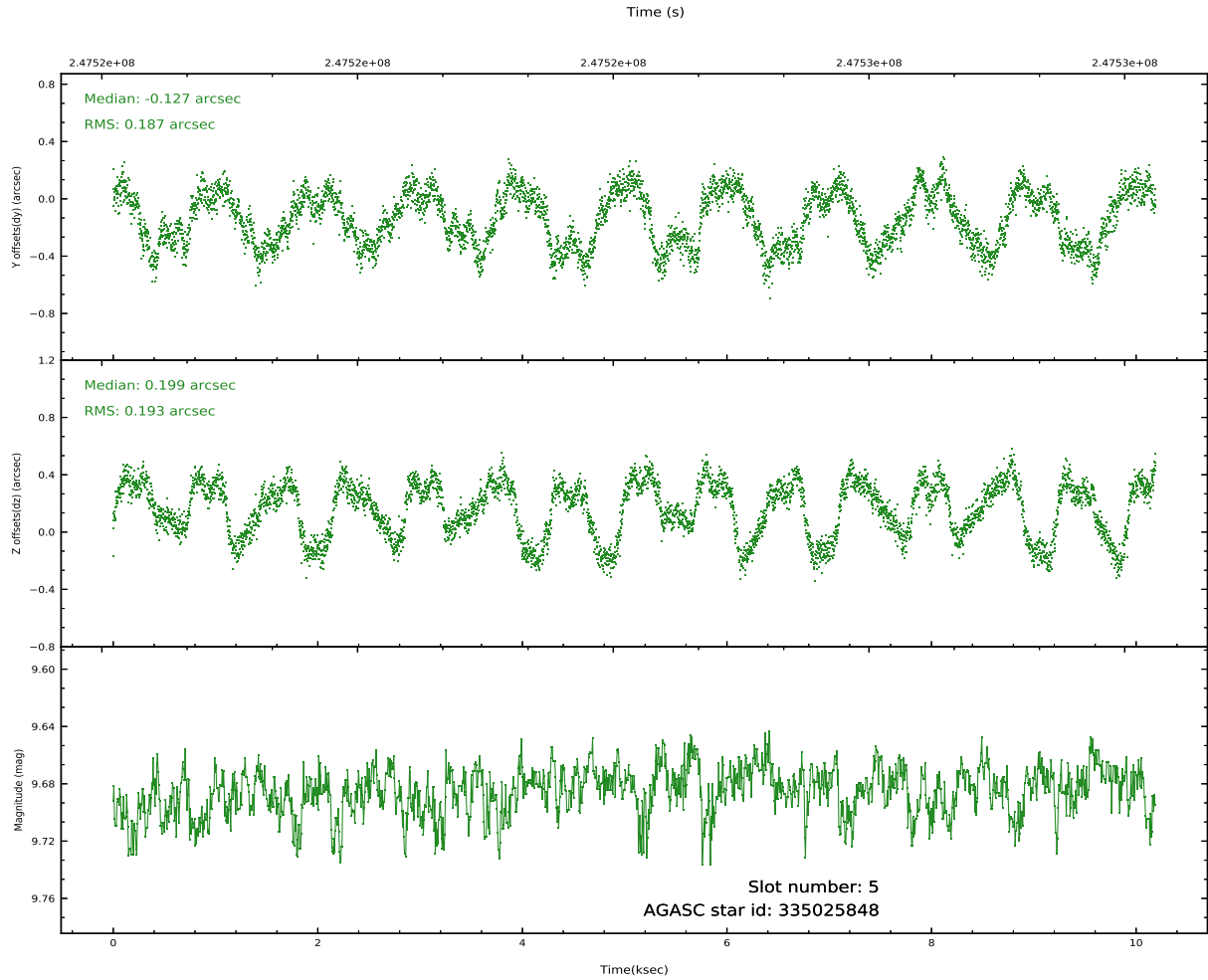
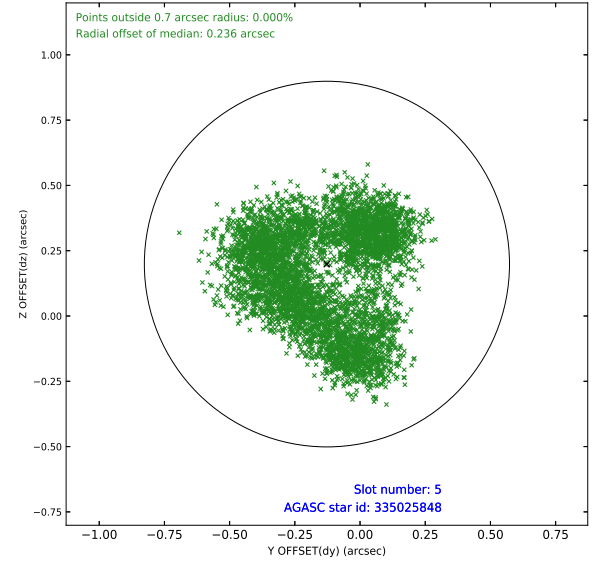
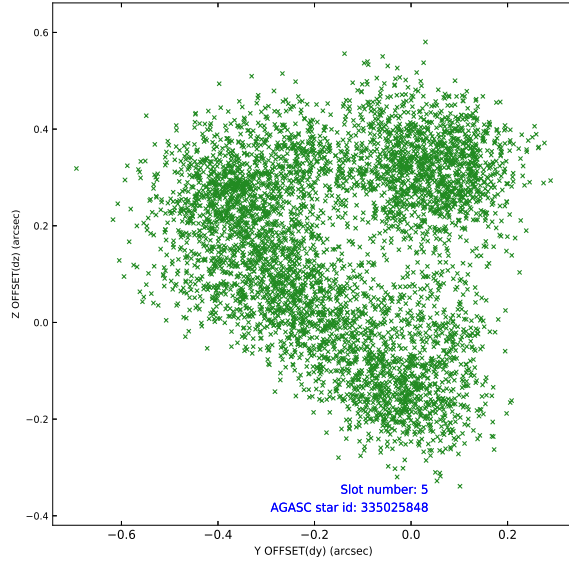
### 2.4.1 Slot 3



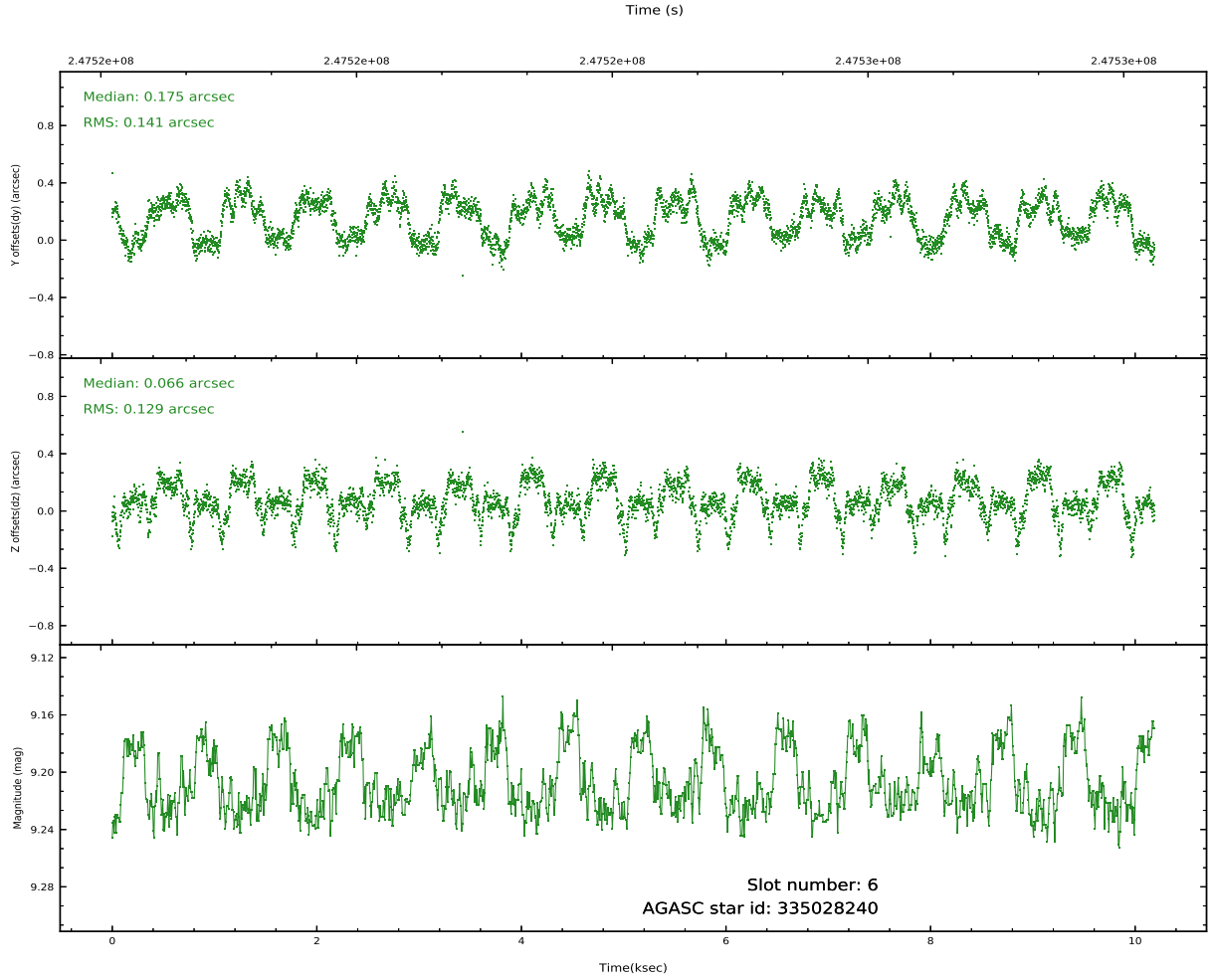
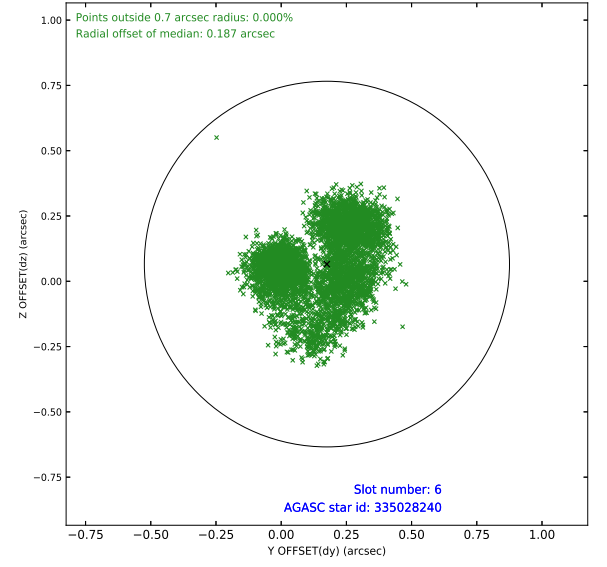
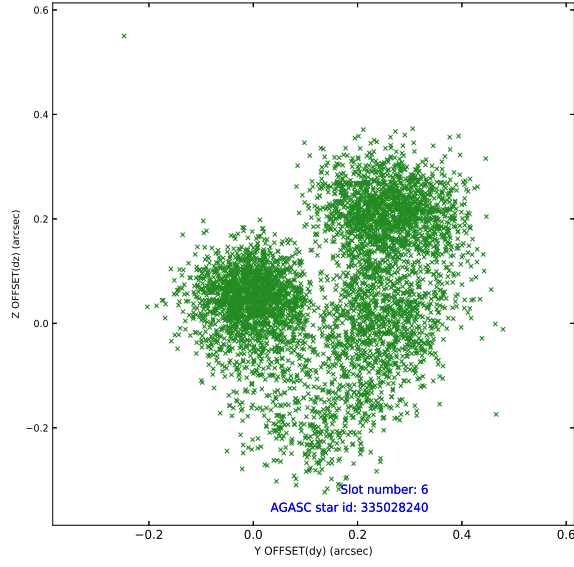
## 2.4.2 Slot 4



### 2.4.3 Slot 5

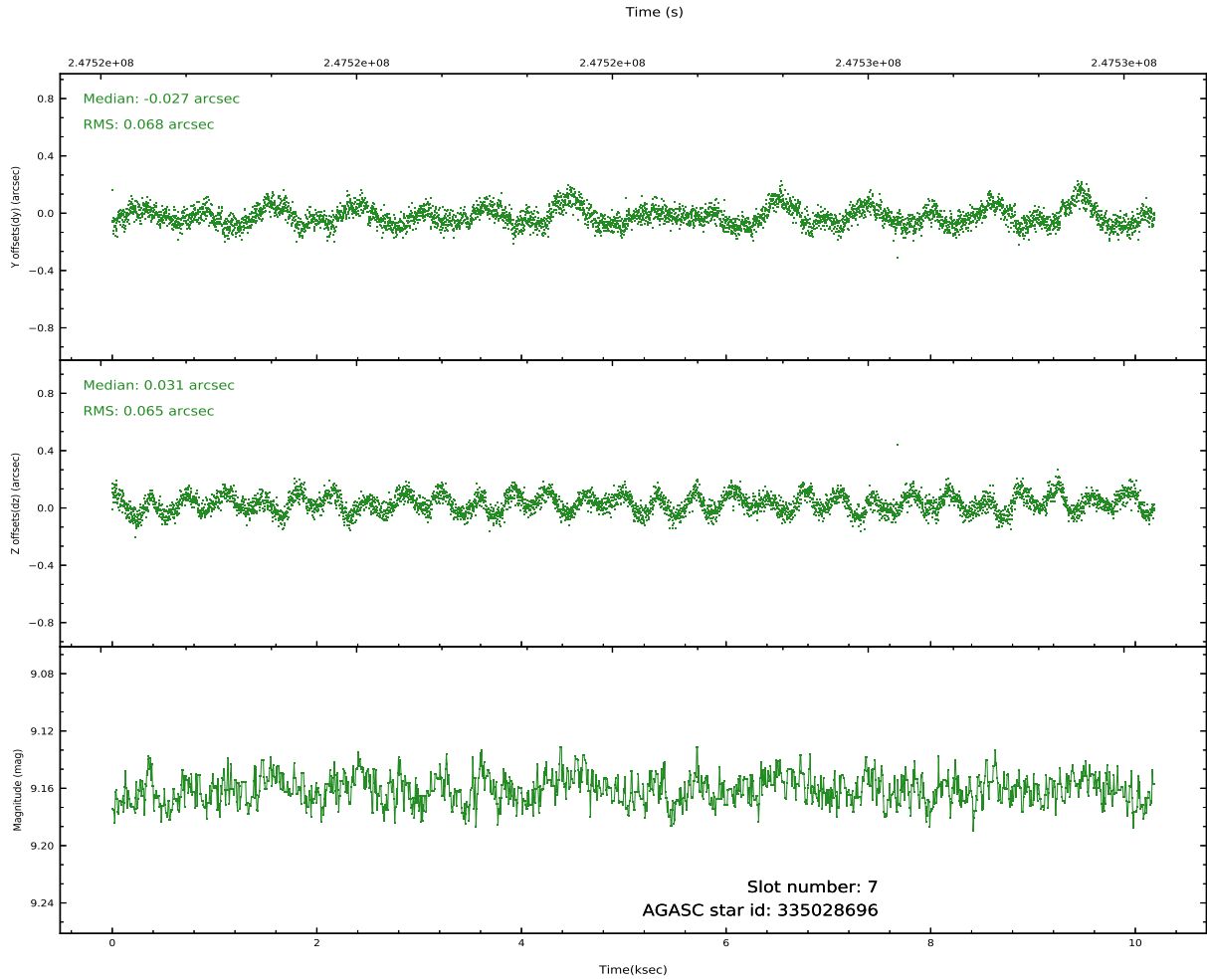
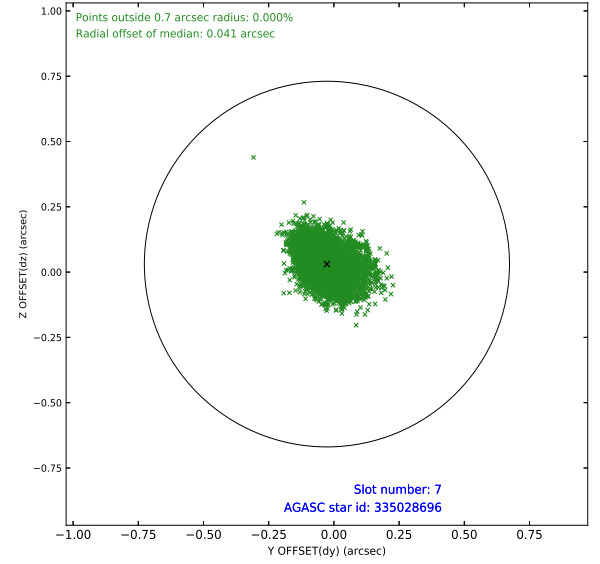
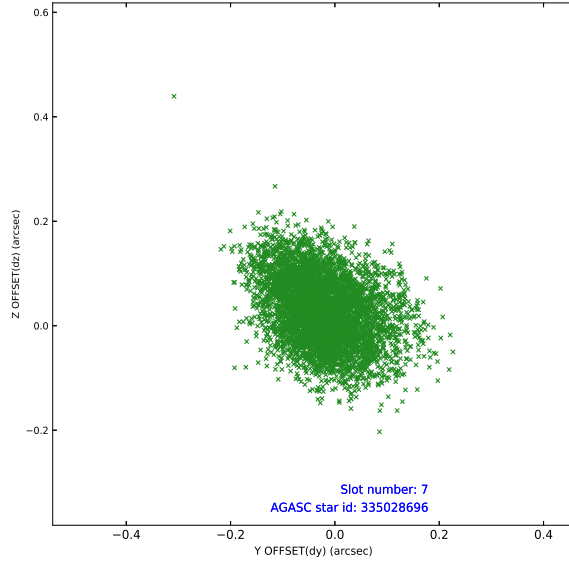


## 2.4.4 Slot 6



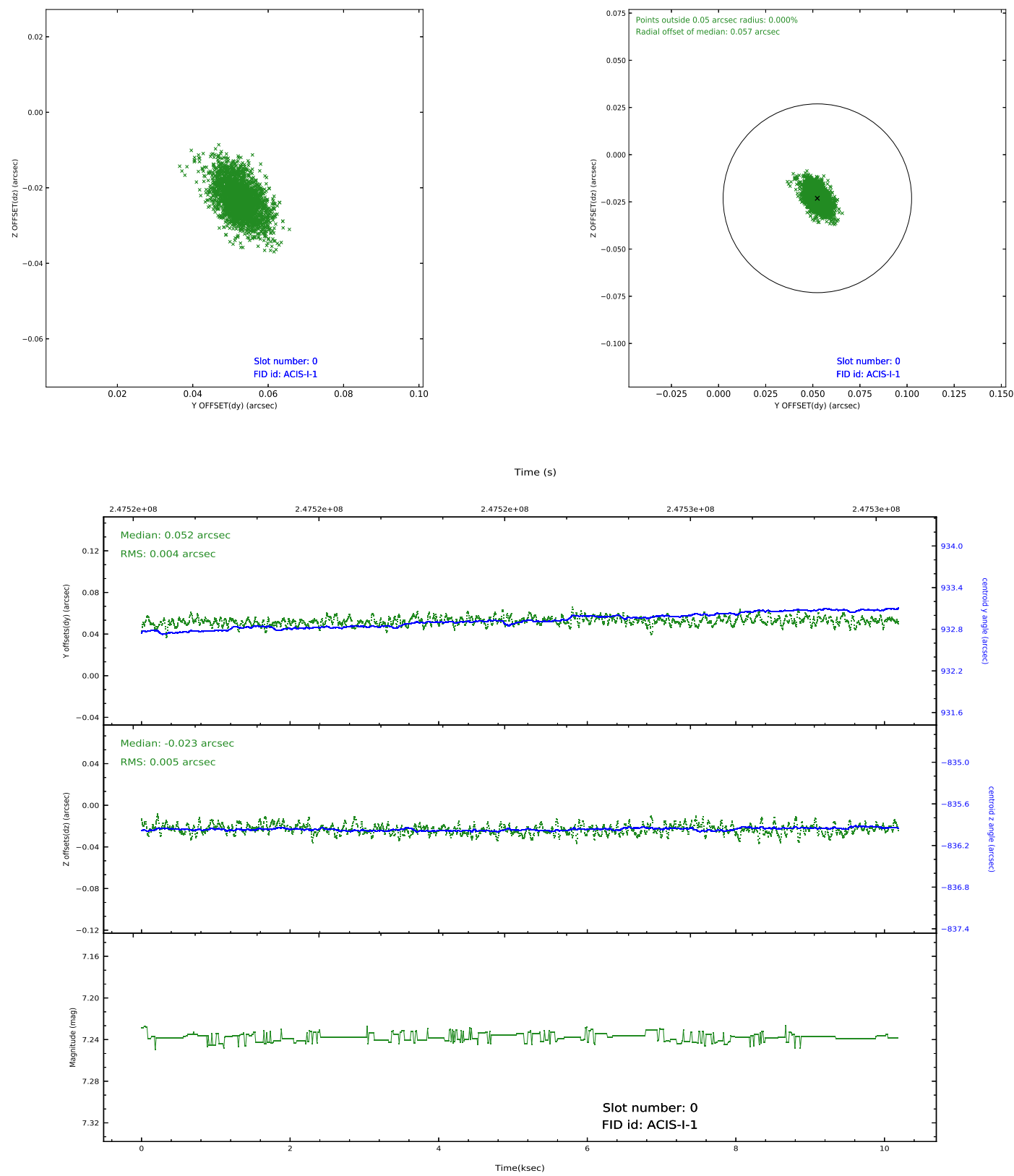


## 2.4.5 Slot 7

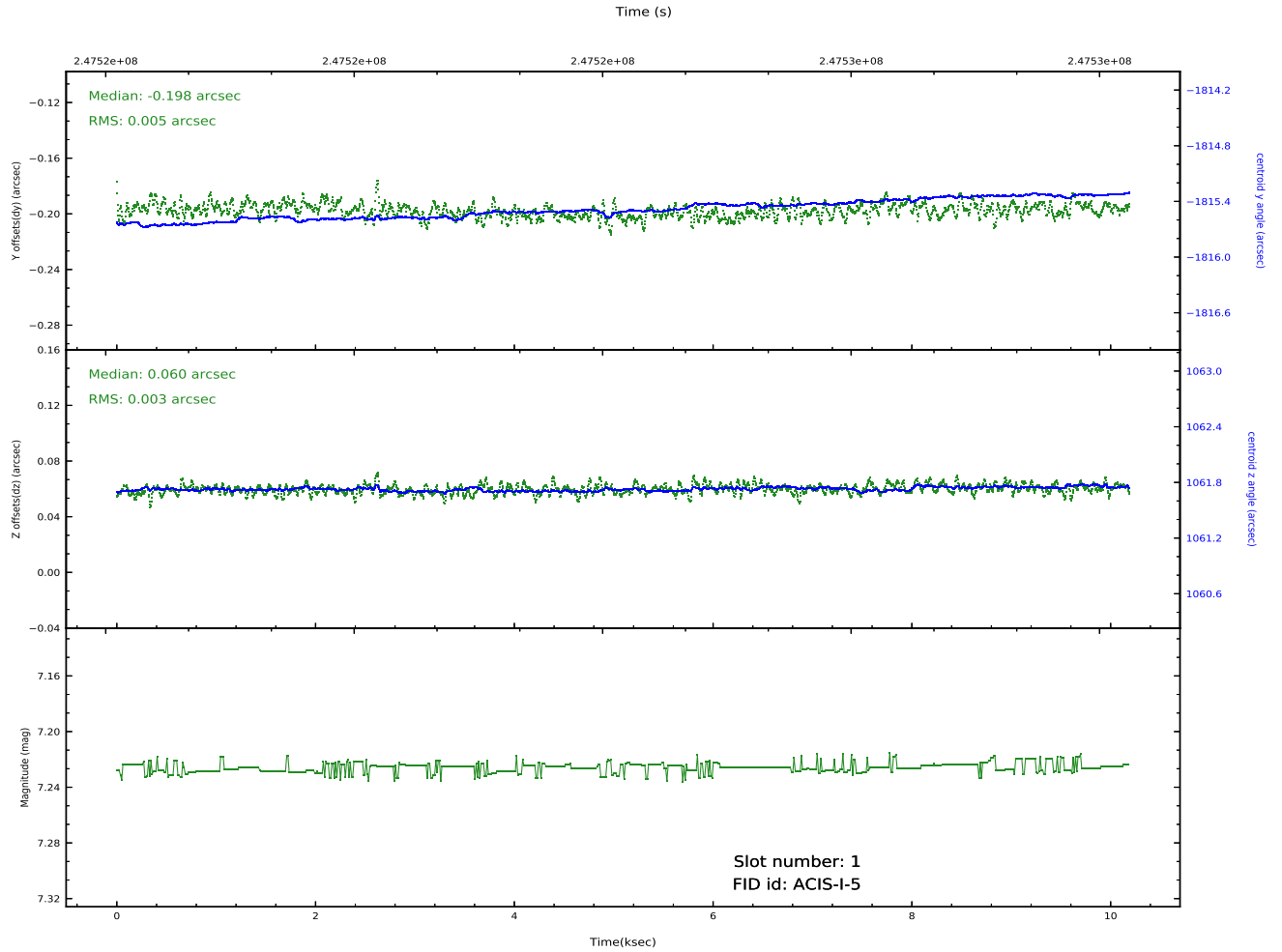
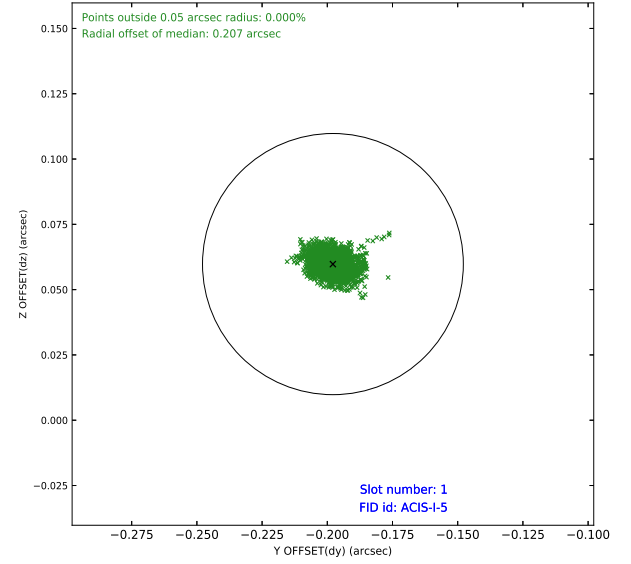
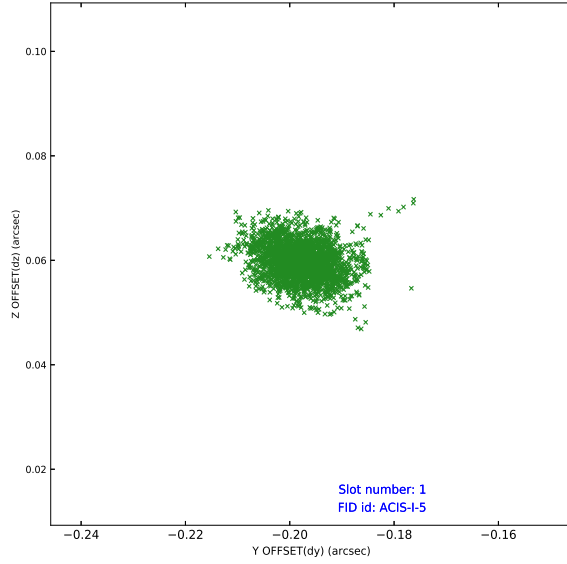


# 2.5 FID Slots

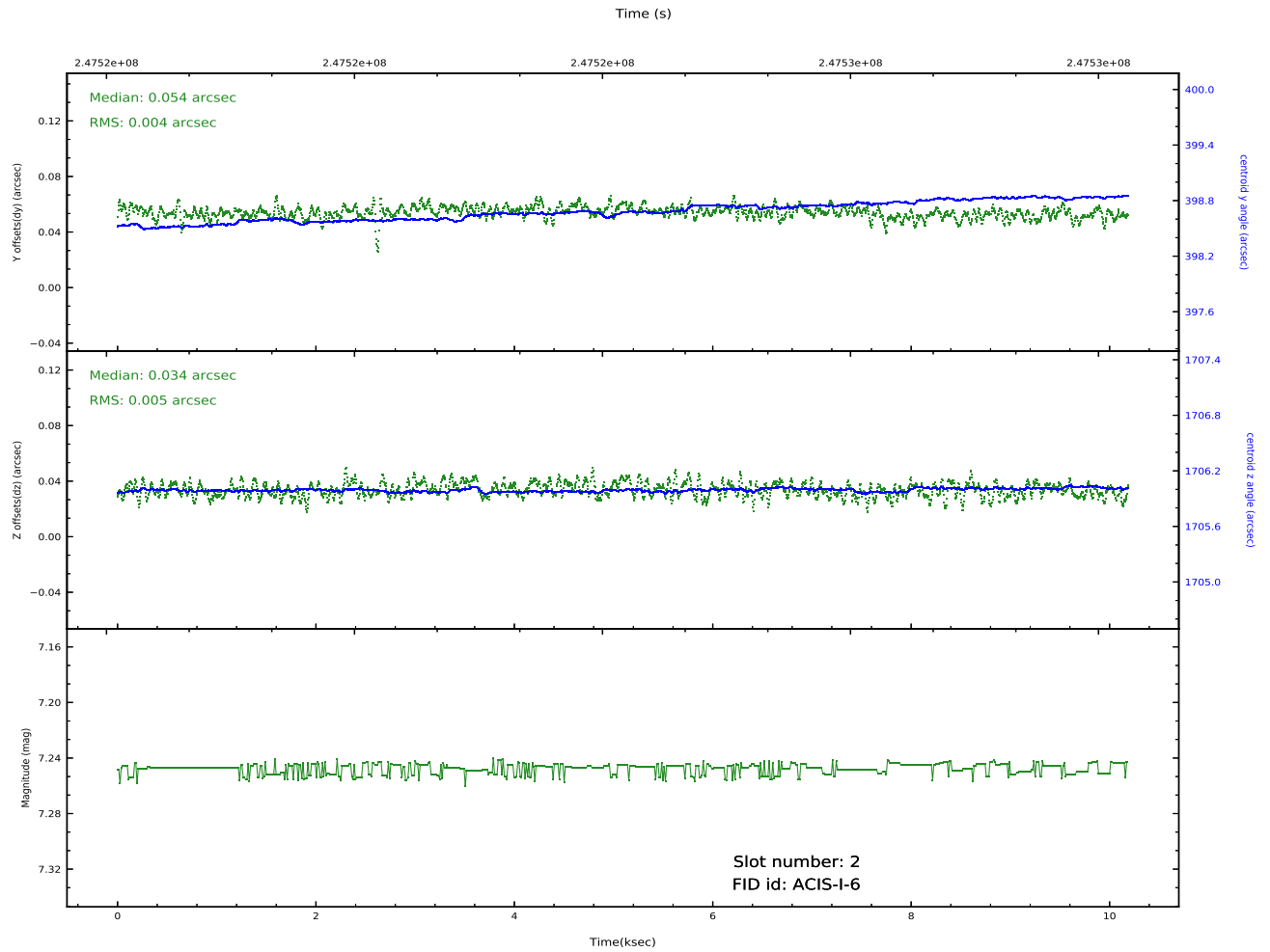
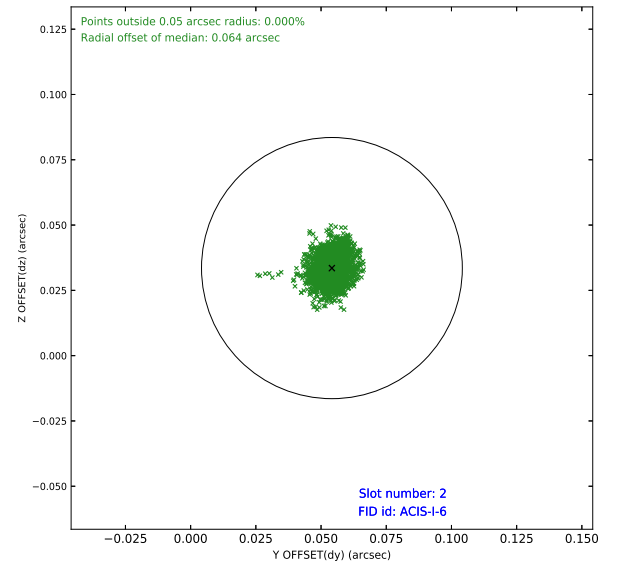
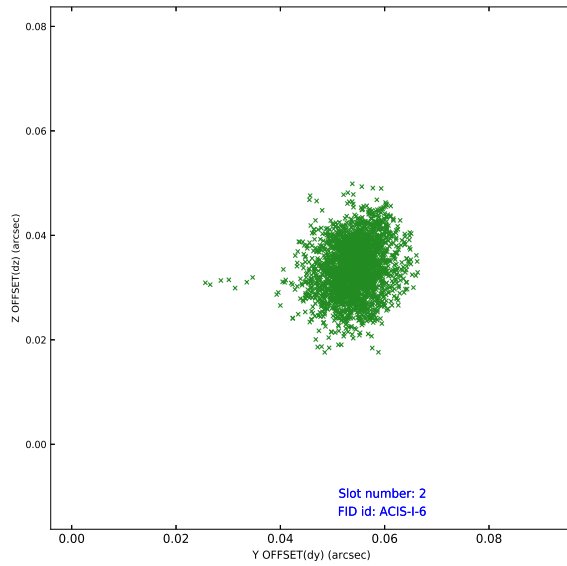
## 2.5.1 Slot 0



## 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)	2020.10.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.771199

### A.2 Comments