

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5377 - L2 Version 4  
Chandra X-Ray Center

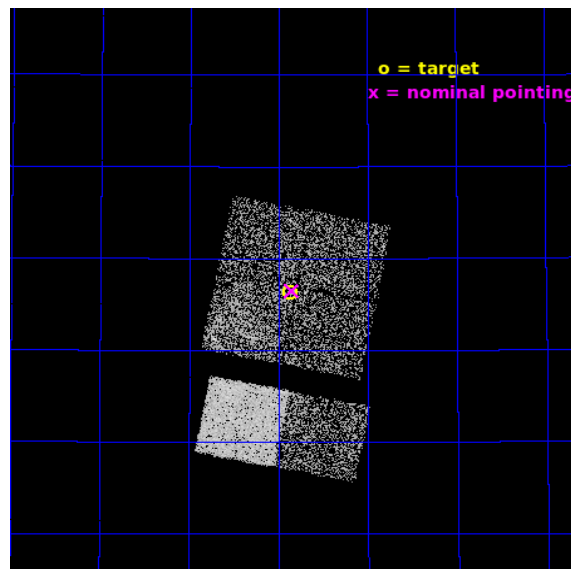
L2 Processing Date : Oct 6 2020

## 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

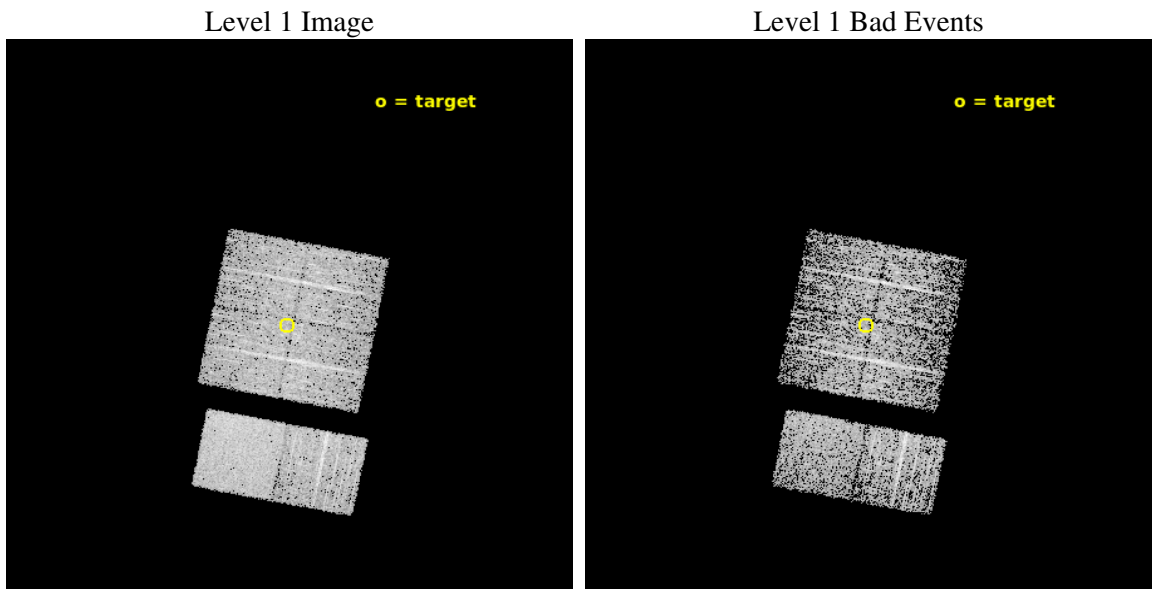
seq_num	200312	Sequence number
obs_id	5377	Observation id
title	Search for beta Pic analogs	Proposal title
observer	Gordon Garmire	Principal investigator
object	f UMa	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	137.218333	Observer's specified target RA [deg]
dec_targ	51.604722	Observer's specified target Dec [deg]
ra_nom	137.21273229812	Nominal RA [deg]
dec_nom	51.608392461813	Nominal Dec [deg]
roll_nom	191.0409921168	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2959.9999889731	Sum of GTIs [s]
livetime	2922.5186868147	Livetime [s]
ontime0	2959.9999889731	Sum of GTIs [s]
ontime1	2959.9999889731	Sum of GTIs [s]
ontime2	2959.9999889731	Sum of GTIs [s]
ontime3	2959.9999889731	Sum of GTIs [s]
ontime6	2959.9999889731	Sum of GTIs [s]
ontime7	2959.9999889731	Sum of GTIs [s]
l2events	23011	Number of level 2 events



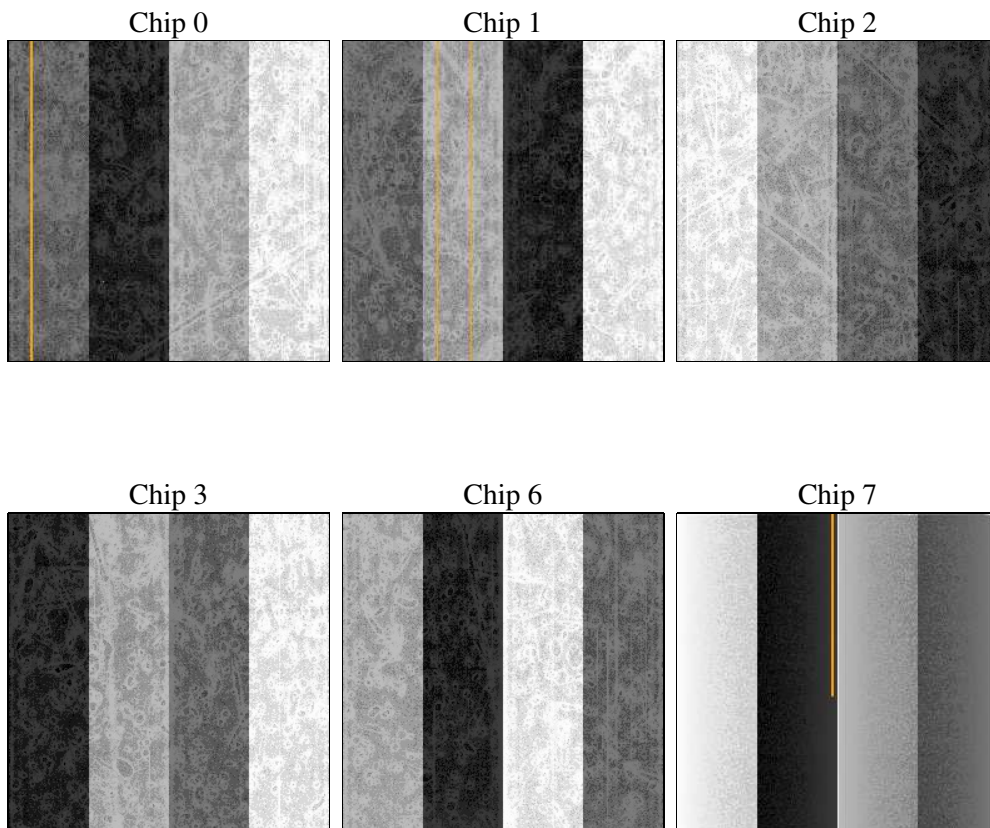
## 2 OBI

### 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	2959.9999889731	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	2959.9999889731	Sum of GTIs [s]
date	2020-10-06T16:04:08	Date and time of file creation	ontime1	2959.9999889731	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	2959.9999889731	Sum of GTIs [s]
			ontime3	2959.9999889731	Sum of GTIs [s]
			ontime6	2959.9999889731	Sum of GTIs [s]
			ontime7	2959.9999889731	Sum of GTIs [s]
			l1events	130689	Number of level 1 events

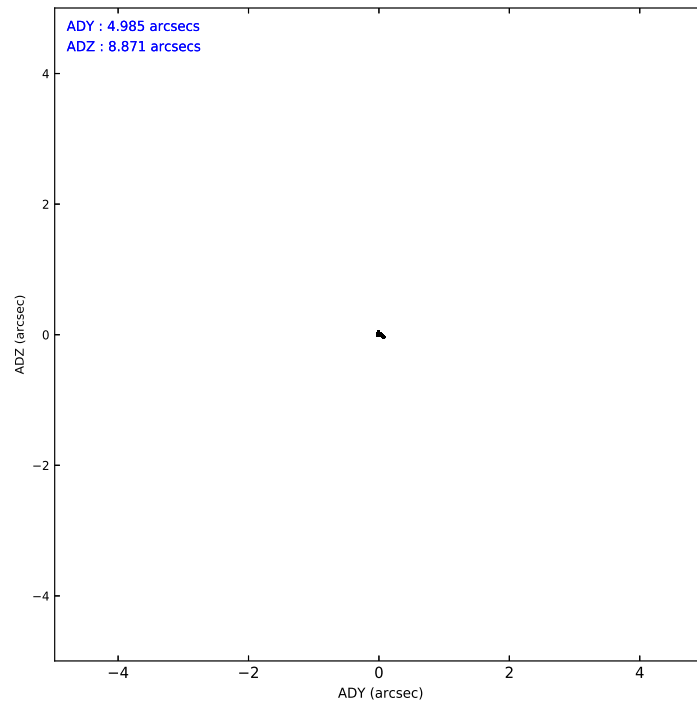
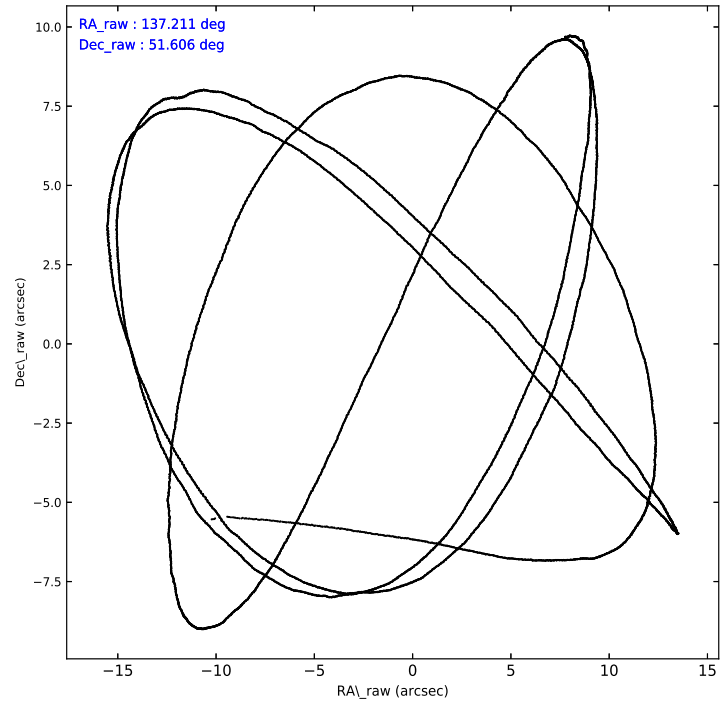
### 2.1.4 Events

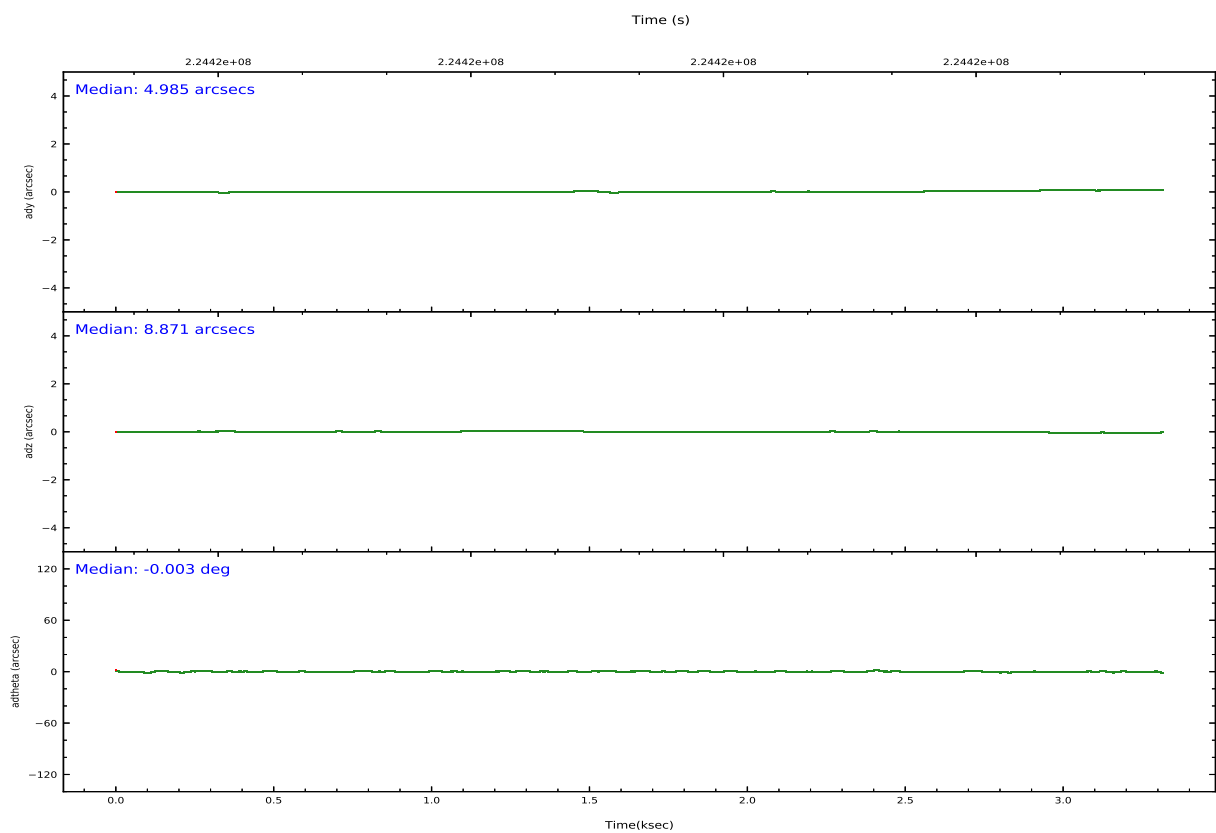
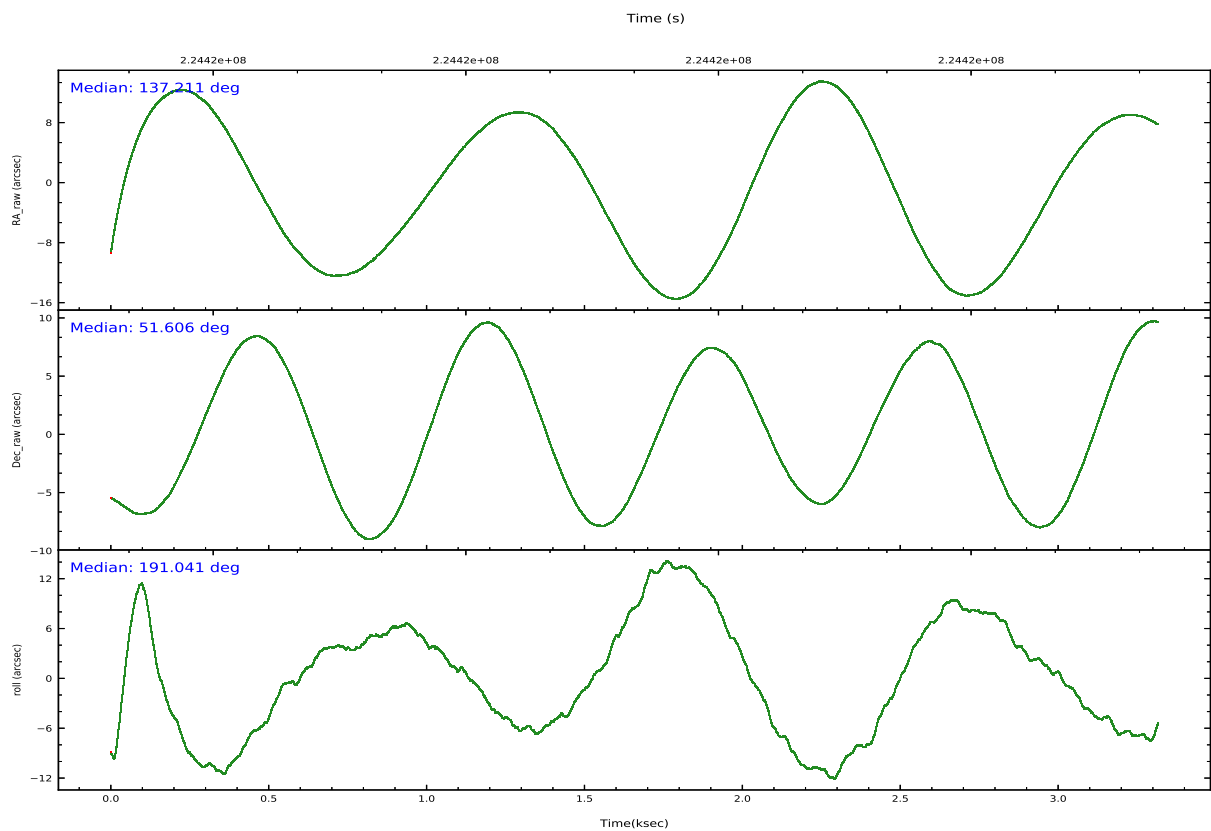
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	19619	18870	20621	20178	22485	28916	grade 0 events	1065	1002	1152	1782	997	1025
rejected events	17133	16374	18047	16926	19949	17163		5%	5%	5%	8%	4%	3%
rejected %	87%	86%	87%	83%	88%	59%	grade 1 events	12	10	12	21	11	25
								0%	0%	0%	0%	0%	0%
							grade 2 events	498	508	549	552	556	2410
								2%	2%	2%	2%	2%	8%
							grade 3 events	245	242	237	269	229	1032
								1%	1%	1%	1%	1%	3%
							grade 4 events	249	261	228	220	240	1013
								1%	1%	1%	1%	1%	3%
							grade 5 events	867	958	849	939	1009	2897
								4%	5%	4%	4%	4%	10%
							grade 6 events	432	486	414	434	518	6308
								2%	2%	2%	2%	2%	21%
							grade 7 events	16251	15403	17180	15961	18925	14206
								82%	81%	83%	79%	84%	49%

## 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	137.244179	137.21273229812	Subarray requested	NONE	NONE
[deg] Pointing Dec	51.623735	51.608392461813	Alternating exposures requested	N	N
[deg] Pointing Roll	190.804512	191.0409921168	[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)	224415192.184000	224414021.71952			
Observation start date	2005-02-10T09:32:08	2005-02-10T09:13:41			
[s] Observation end time (MET)	224418192.184000	224419081.63225			
Observation end date	2005-02-10T10:22:08	2005-02-10T10:38:01			
Read mode	TIMED	TIMED			

## 2.3 Aspect





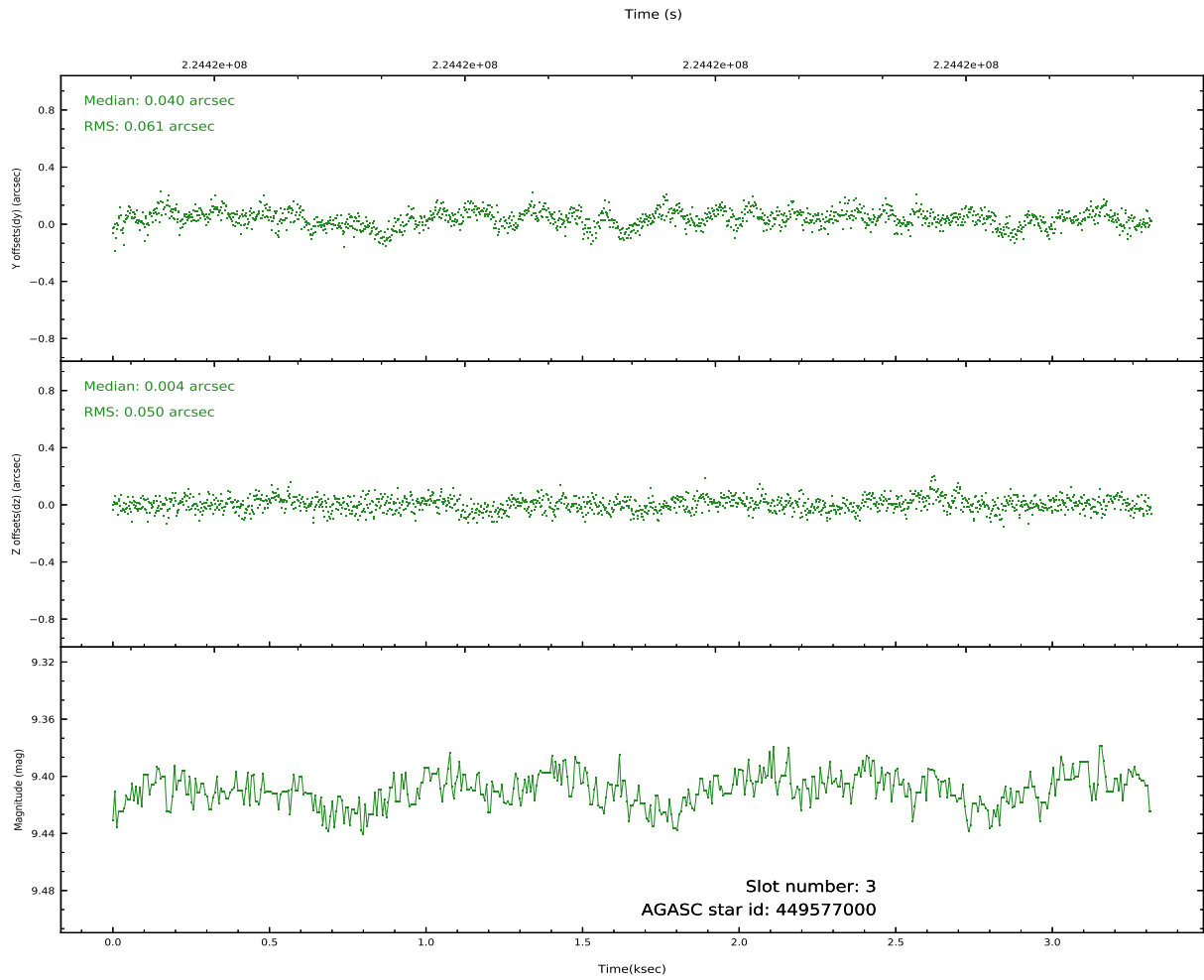
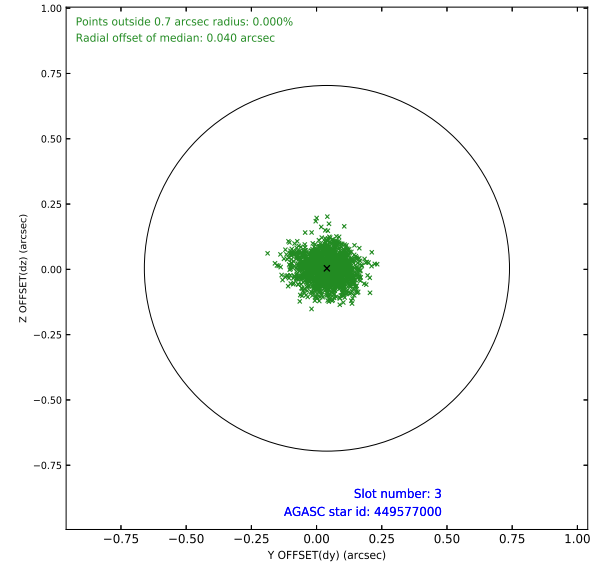
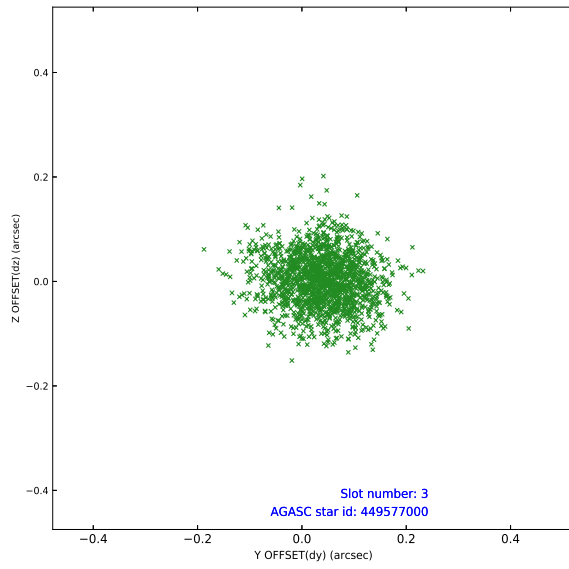
Slot Statistics

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	810	1.000	-0.010	0.015	0.008	0.012	0.000000	0.000000	934.74	-832
1	FID		ACIS-I-4	7.19	810	1.000	0.153	0.018	0.007	0.011	0.000000	0.000000	2155.99	1066
2	FID		ACIS-I-5	7.22	810	1.000	-0.241	0.038	0.006	0.012	0.000000	0.000000	-1811.05	1066
3	GUIDE	used	449577000	9.41	1618	1.000	0.040	0.004	0.083	0.139	137.786748	51.305874	-985.19	1348
4	GUIDE	used	449579152	8.77	1619	1.000	-0.023	-0.029	0.064	0.100	137.519862	51.431286	-478.14	796
5	GUIDE	used	449580392	9.26	1617	1.000	0.027	0.055	0.092	0.152	136.586076	50.962265	1911.17	2053
6	GUIDE	used	449580944	9.53	1619	1.000	-0.018	-0.031	0.121	0.188	136.730333	51.335063	1331.06	801
7	GUIDE	used	449584768	7.12	1618	1.000	-0.021	0.001	0.061	0.090	136.806399	51.629931	957.64	-207

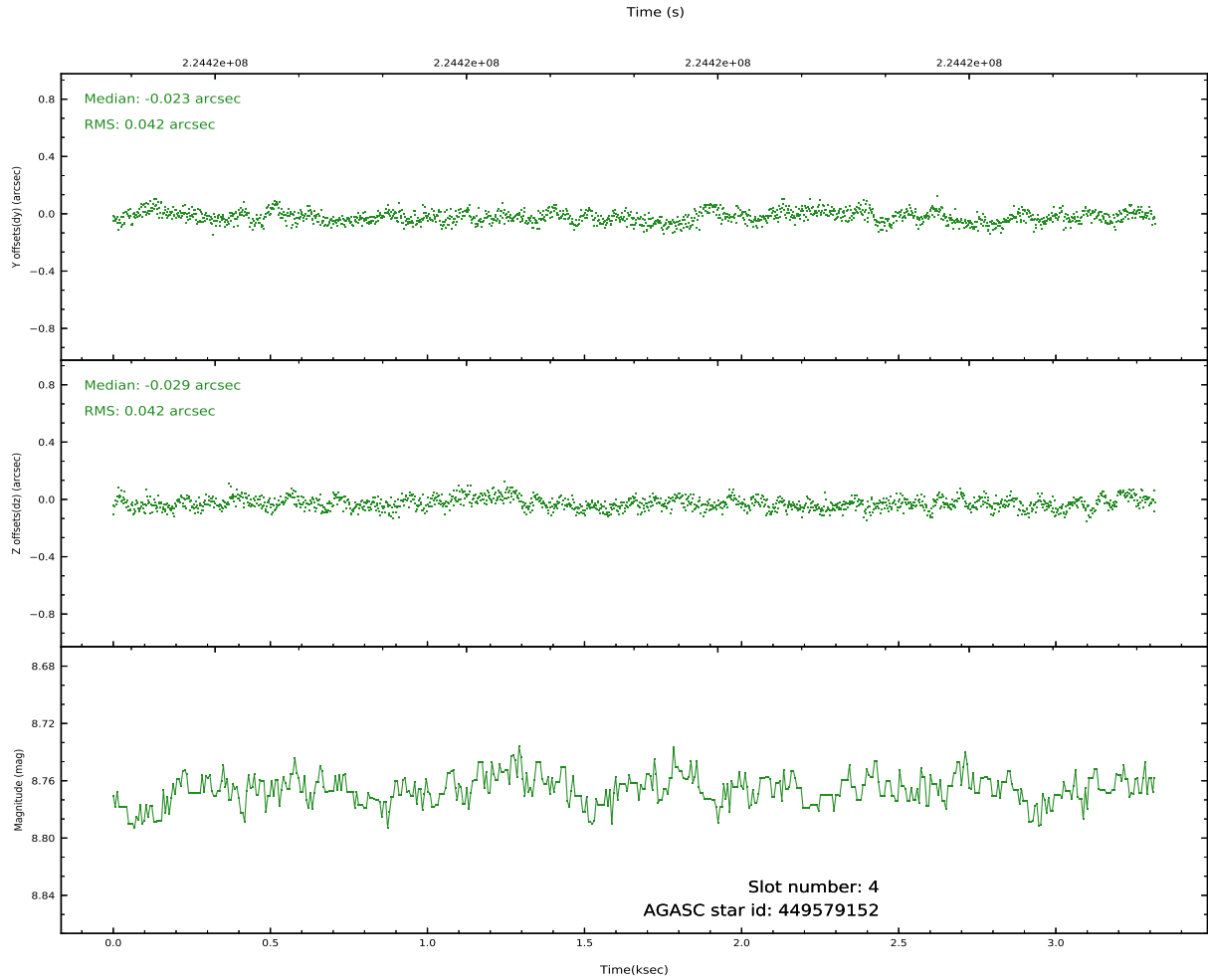
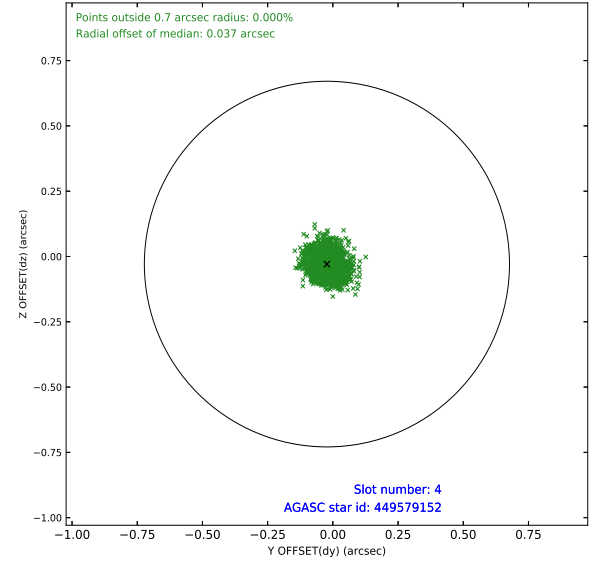
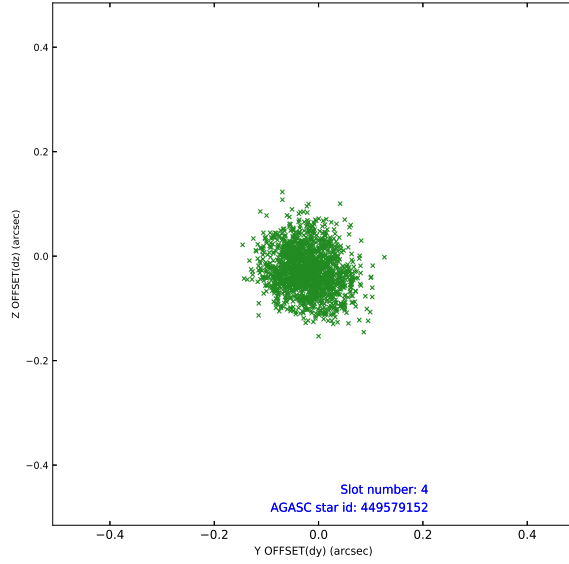


## 2.4 Star Slots

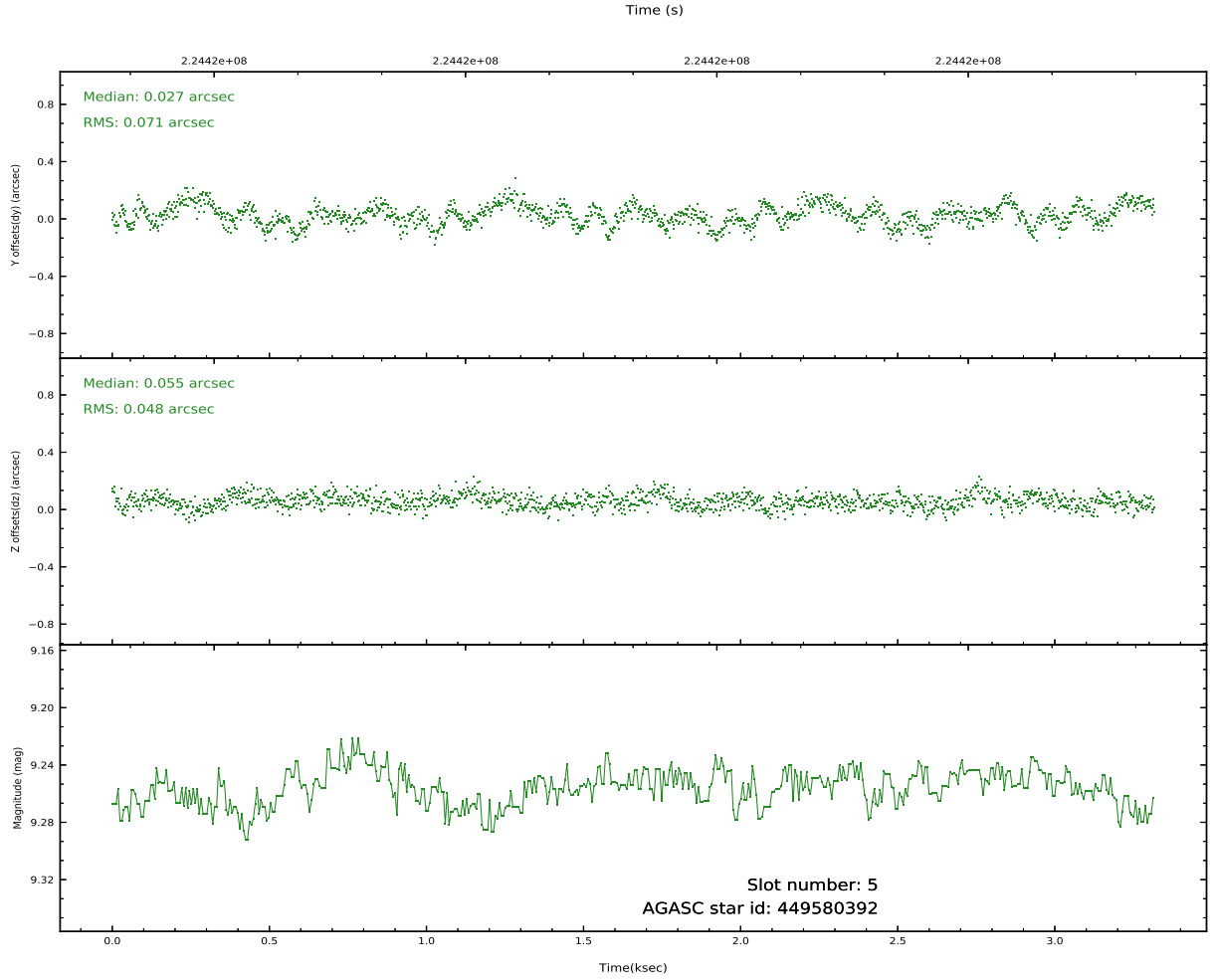
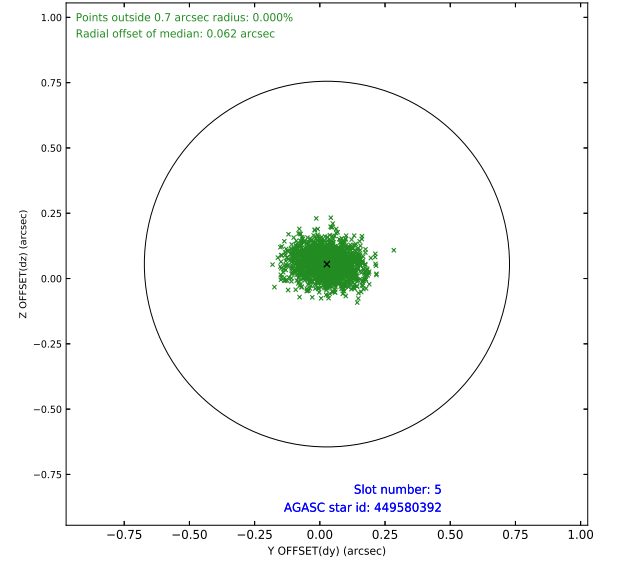
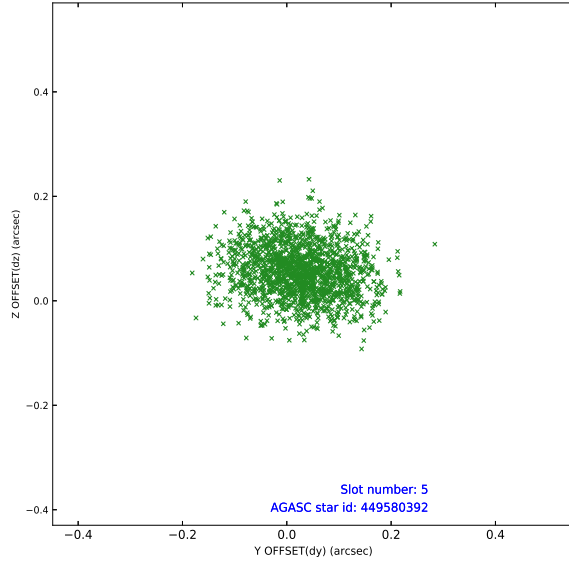
### 2.4.1 Slot 3



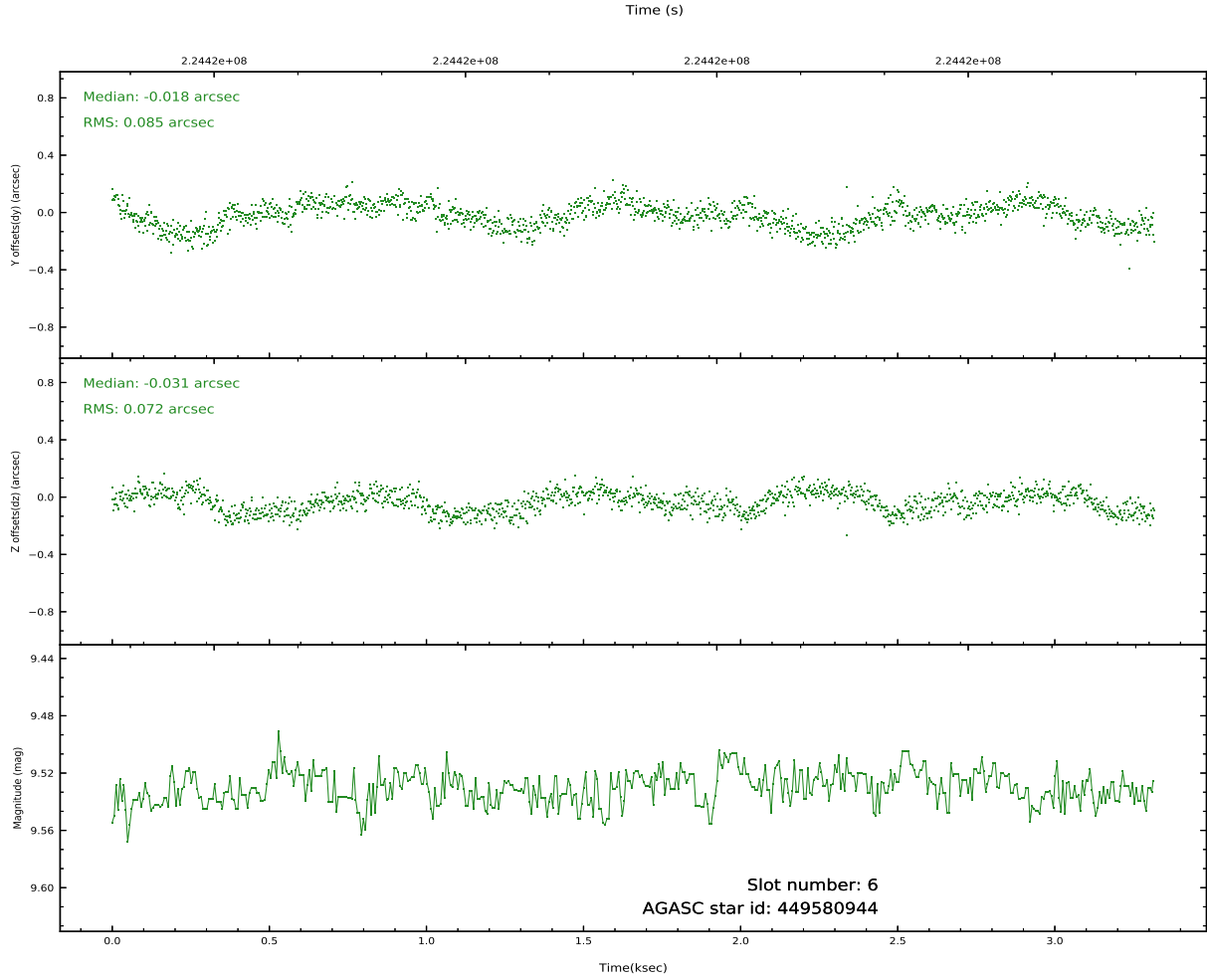
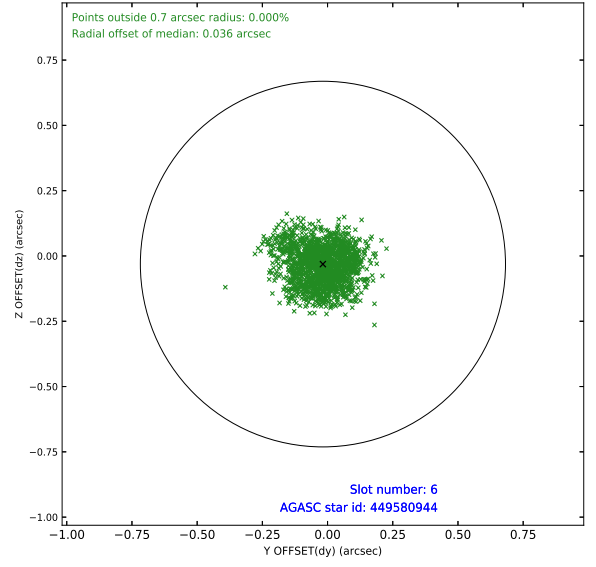
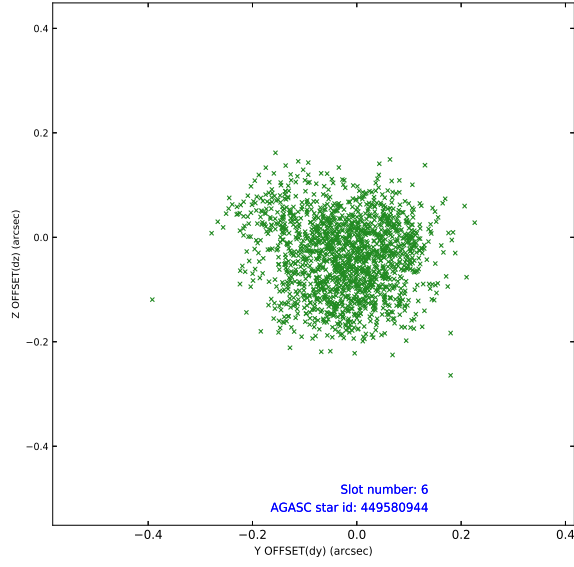
## 2.4.2 Slot 4



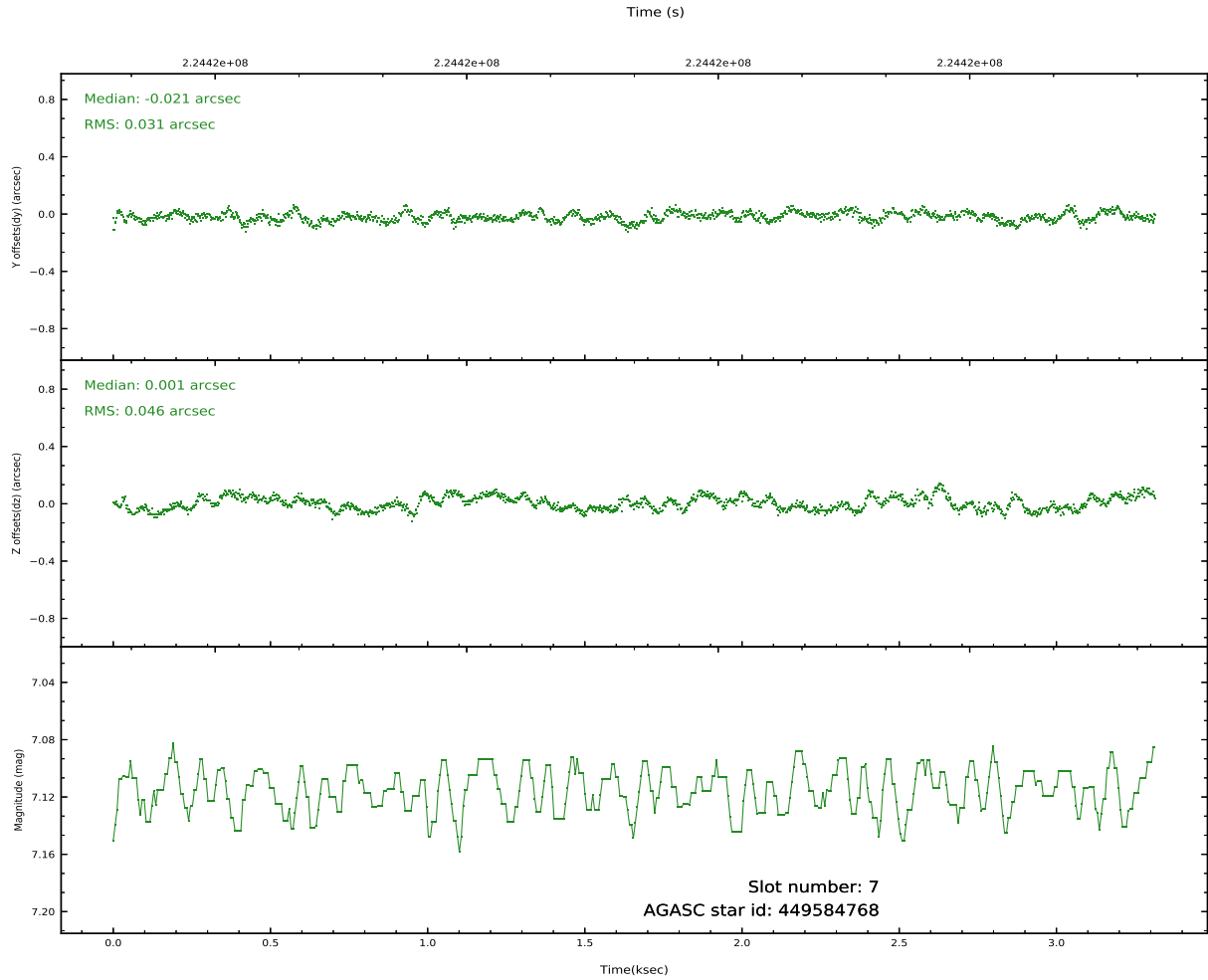
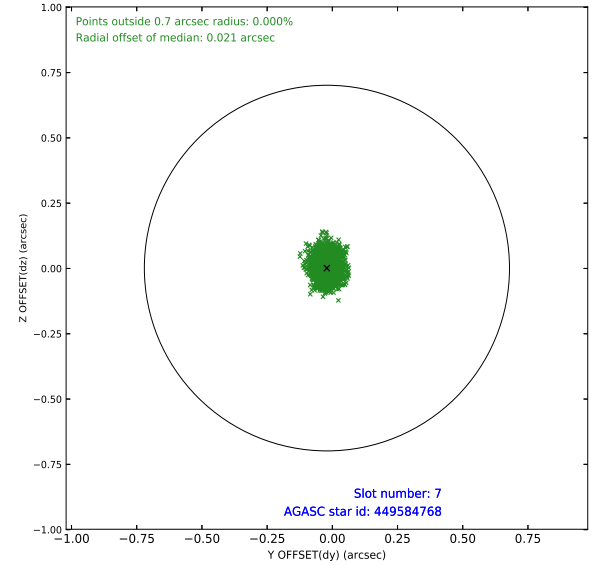
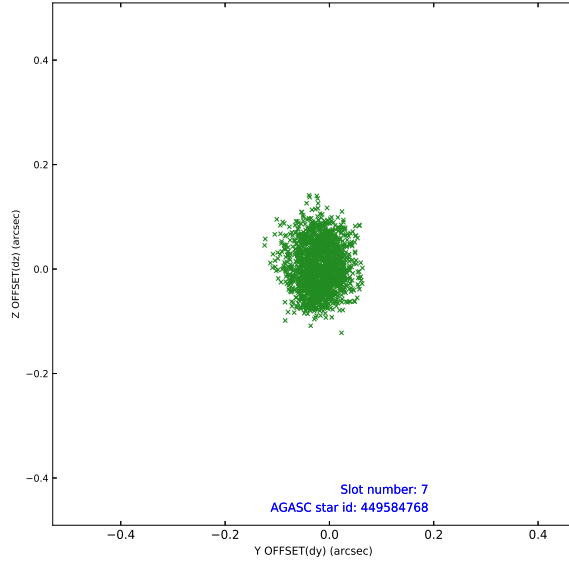
### 2.4.3 Slot 5



## 2.4.4 Slot 6

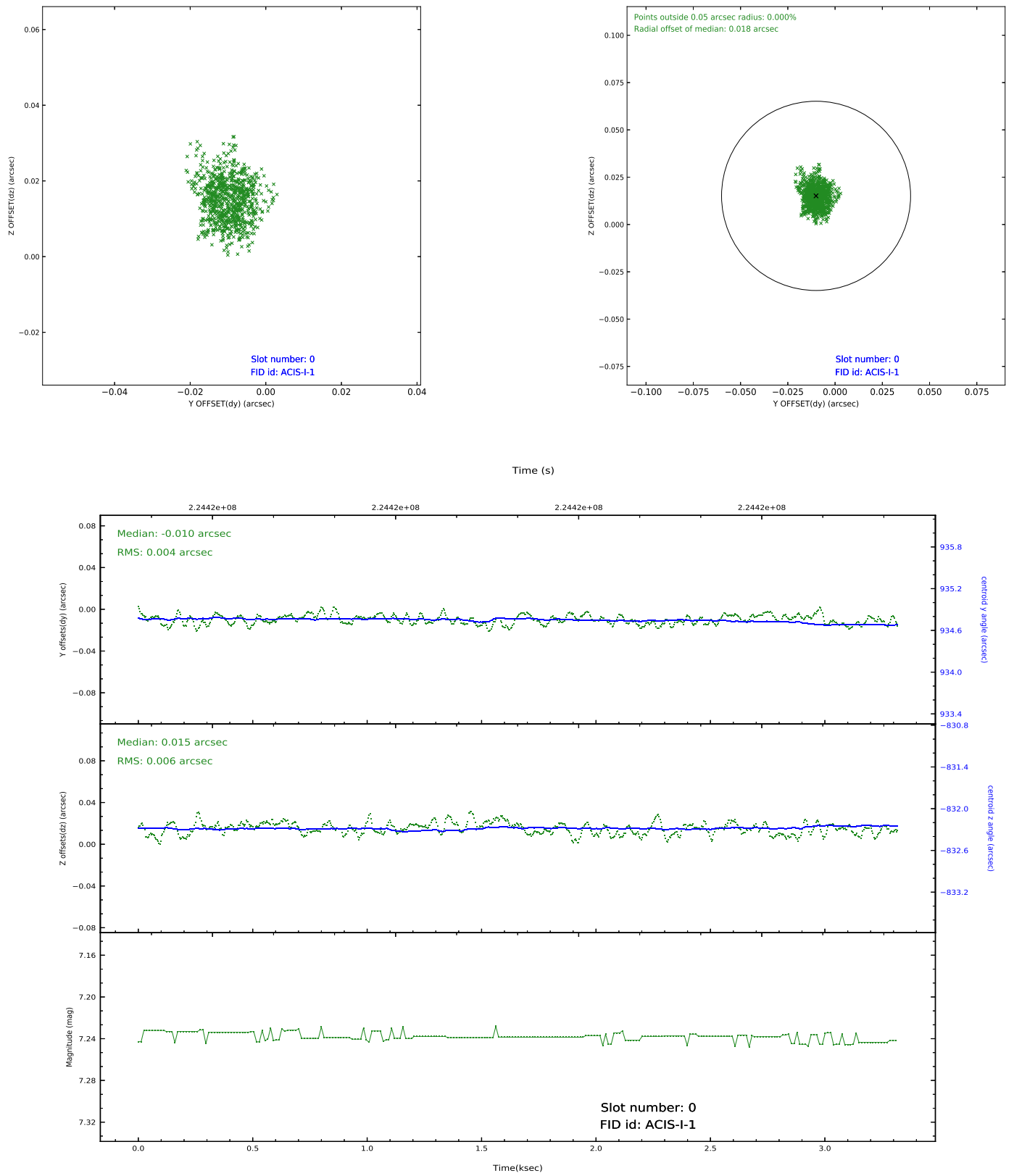


## 2.4.5 Slot 7

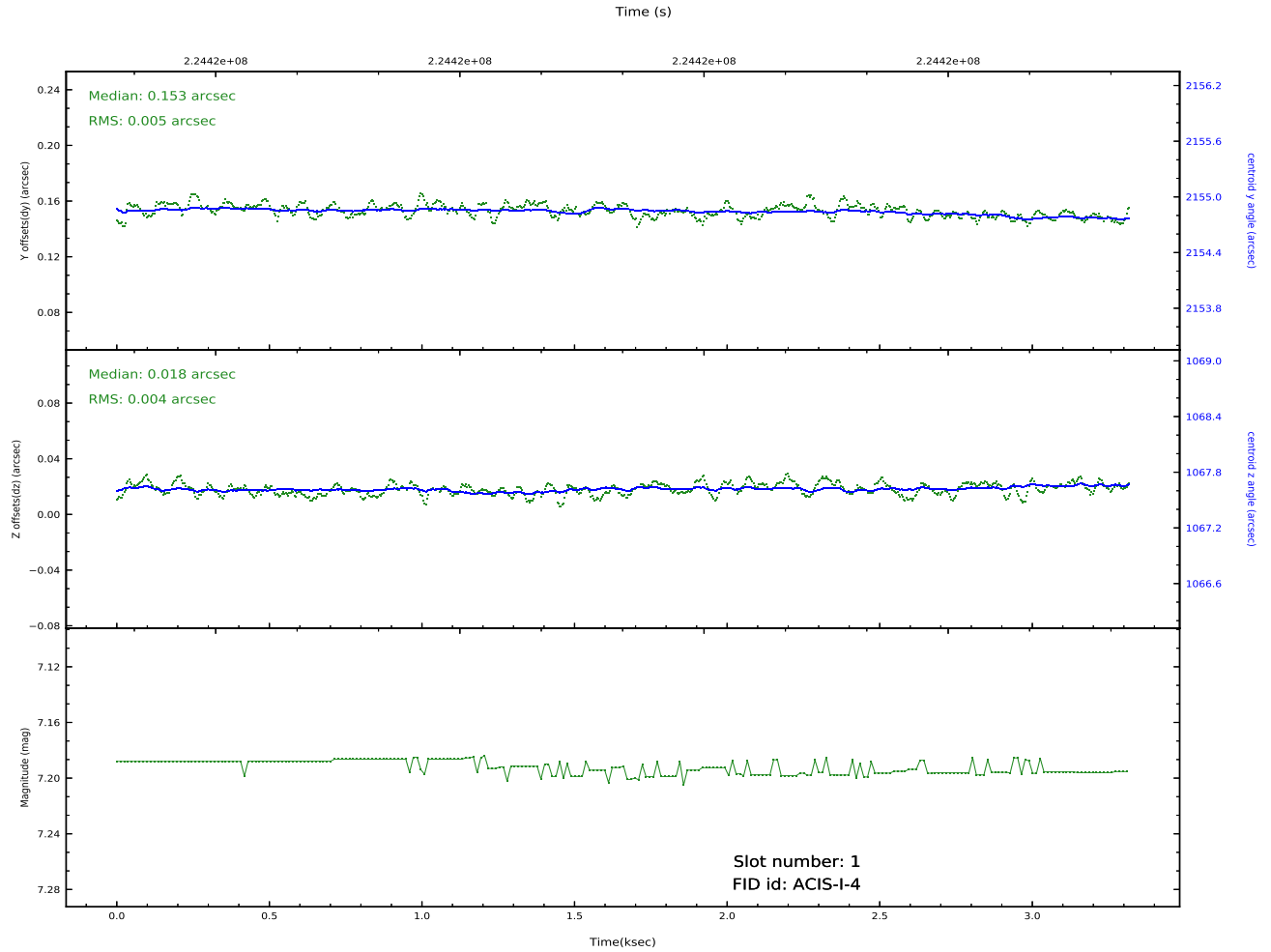
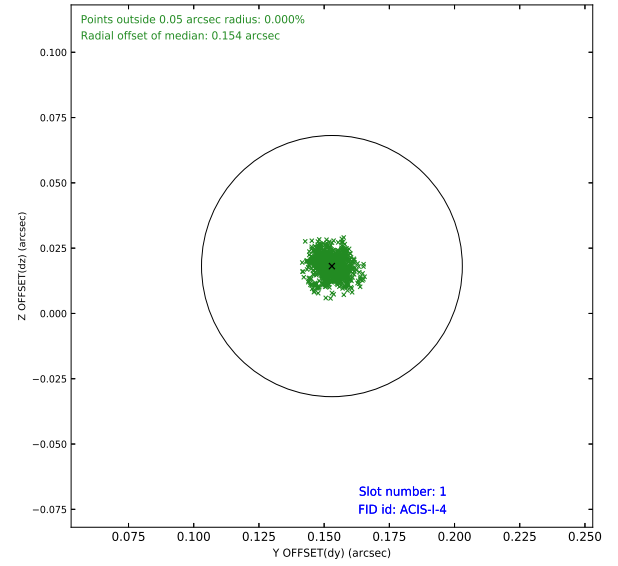
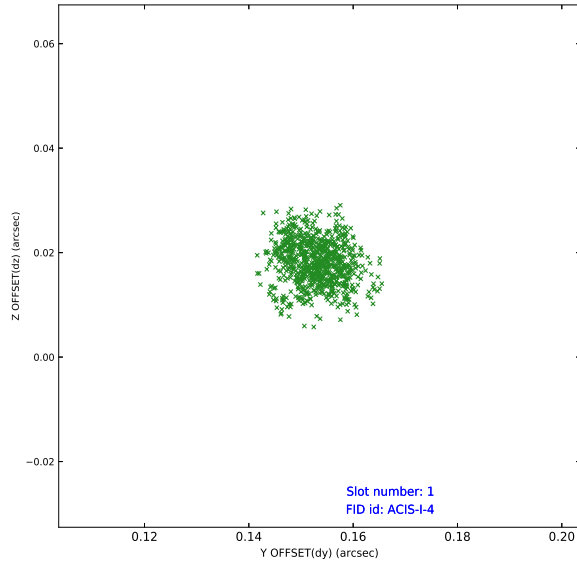


## 2.5 FID Slots

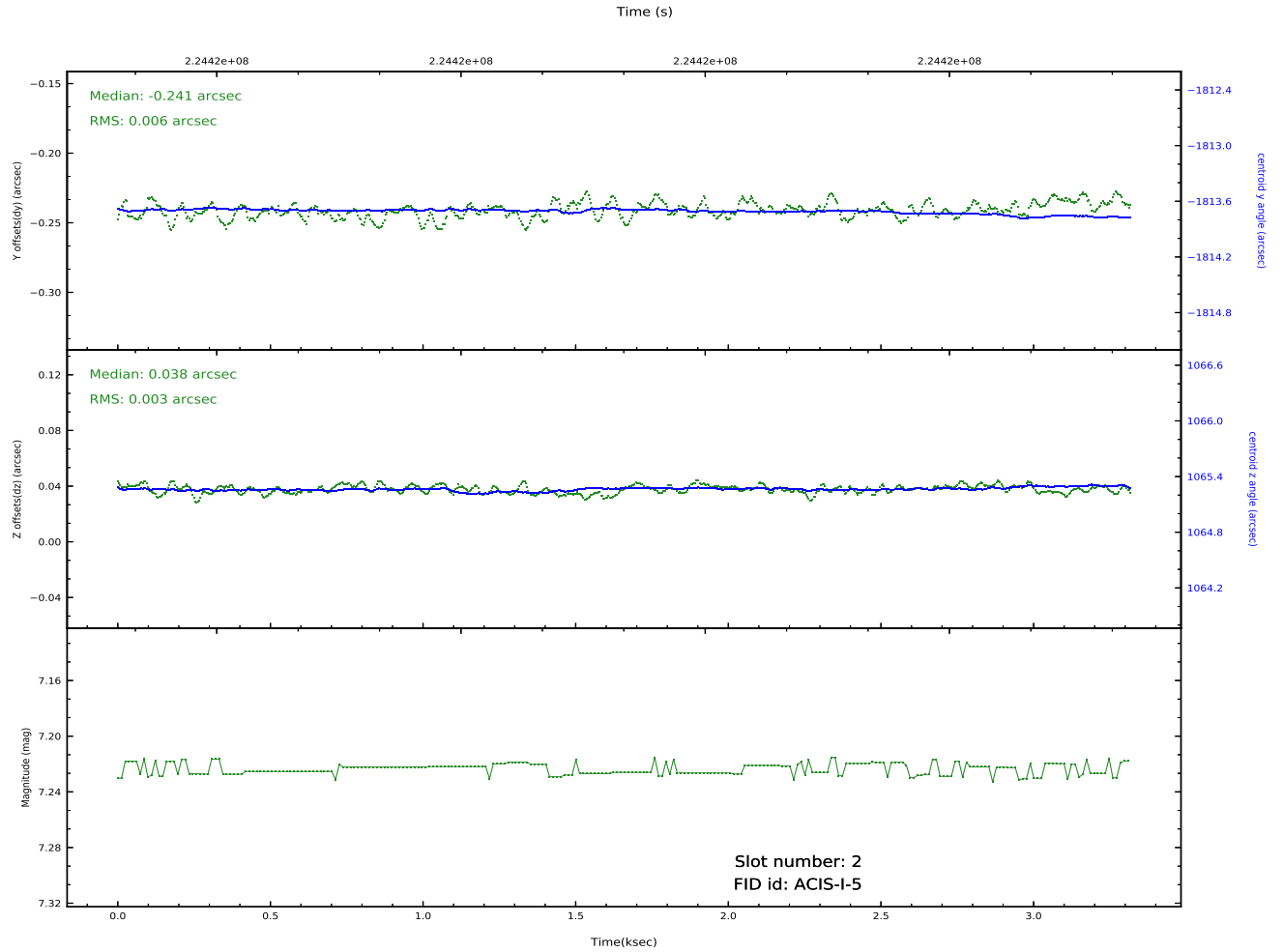
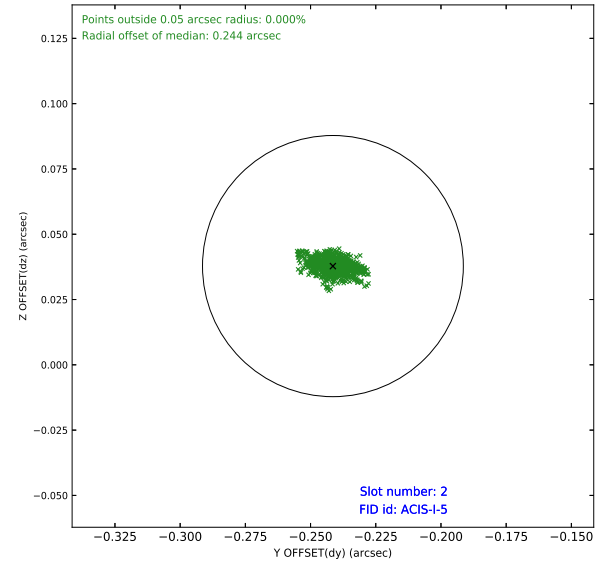
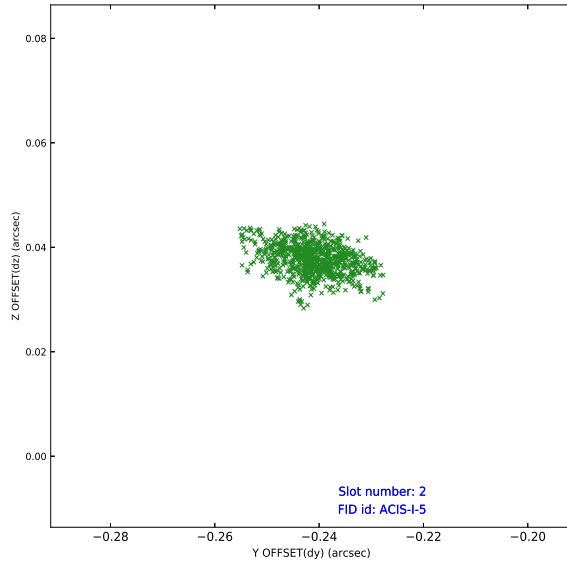
### 2.5.1 Slot 0



## 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)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.959999

### A.2 Comments