

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 24655 - L2 Version 1  
Chandra X-Ray Center

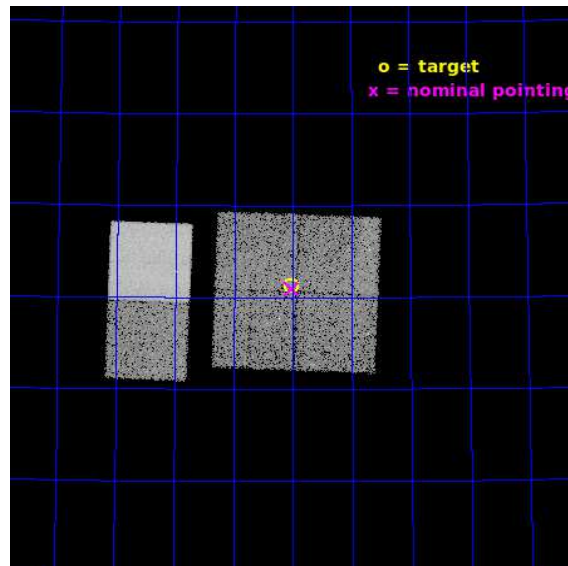
L2 Processing Date : Sep 22 2020

## 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

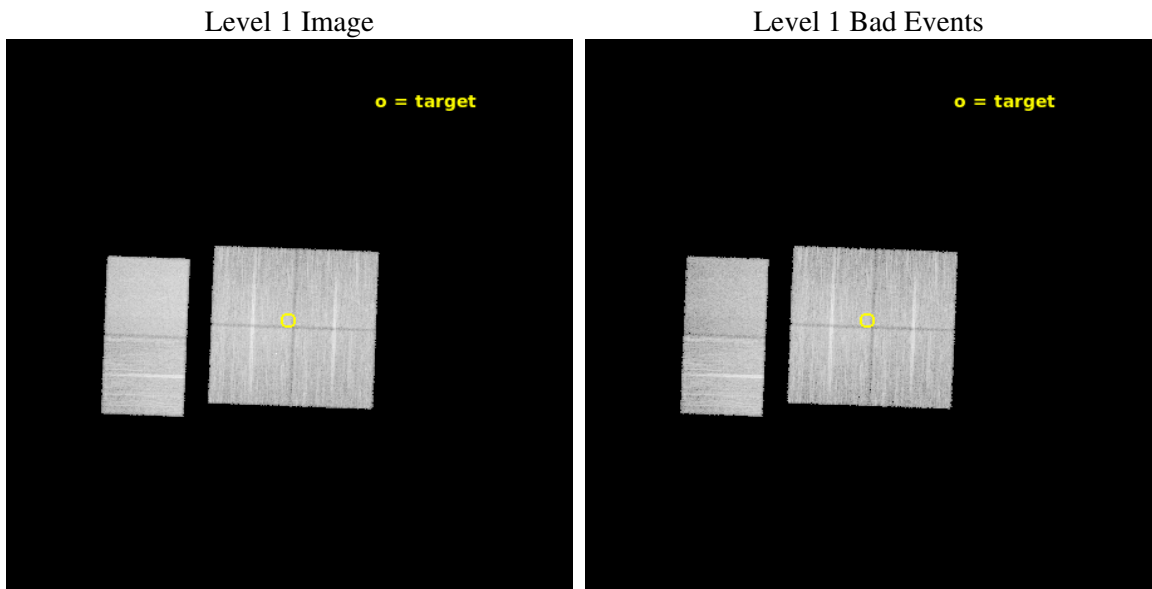
seq_num	901417	Sequence number
obs_id	24655	Observation id
title	Coordinated Ultra-Deep X-ray Monitoring of the JWST-NEP Time Domain Field	Proposal title
observer	Walter Maksym	Principal investigator
object	JWST-DTDF-8	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	260.755833	Observer's specified target RA [deg]
dec_targ	65.854417	Observer's specified target Dec [deg]
ra_nom	260.75428118932	Nominal RA [deg]
dec_nom	65.849383069671	Nominal Dec [deg]
roll_nom	272.18706260977	Nominal Roll [deg]
revision	1	Processing version of data
ontime	13952.000207901	Sum of GTIs [s]
livetime	13775.331580383	Livetime [s]
ontime0	13952.000207901	Sum of GTIs [s]
ontime1	13952.000207901	Sum of GTIs [s]
ontime2	13948.759216905	Sum of GTIs [s]
ontime3	13952.000207901	Sum of GTIs [s]
ontime6	13945.518096805	Sum of GTIs [s]
ontime7	13952.000207901	Sum of GTIs [s]
l2events	110403	Number of level 2 events



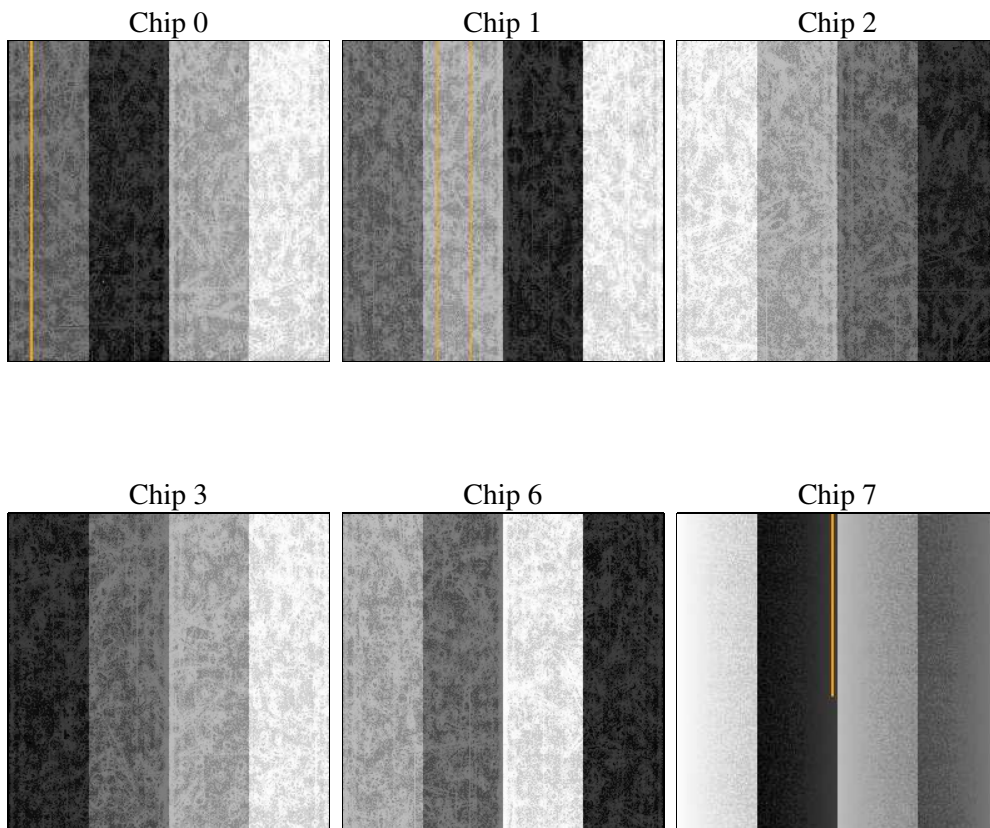
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	13952.000207901	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	13952.000207901	Sum of GTIs [s]
date	2020-09-22T04:40:36	Date and time of file creation	ontime1	13952.000207901	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	13948.759216905	Sum of GTIs [s]
			ontime3	13952.000207901	Sum of GTIs [s]
			ontime6	13945.518096805	Sum of GTIs [s]
			ontime7	13952.000207901	Sum of GTIs [s]
			l1events	686600	Number of level 1 events

### 2.1.4 Events

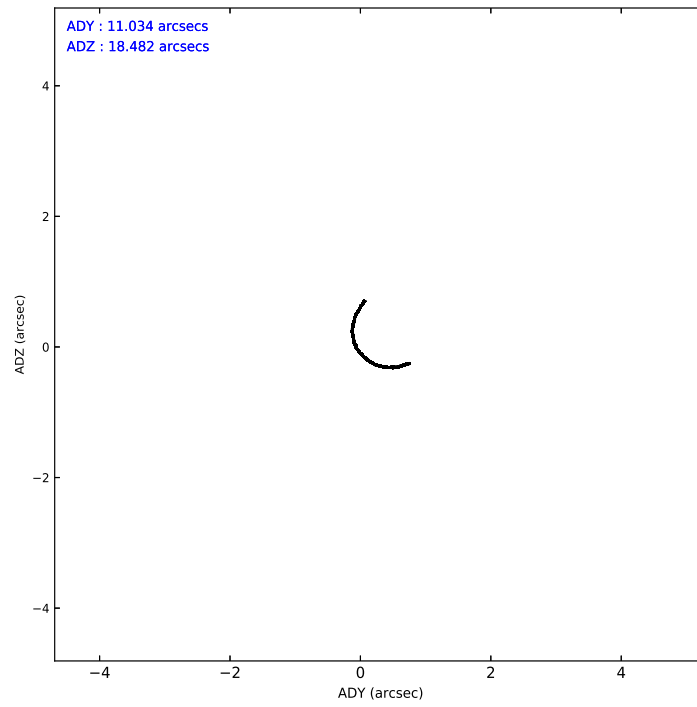
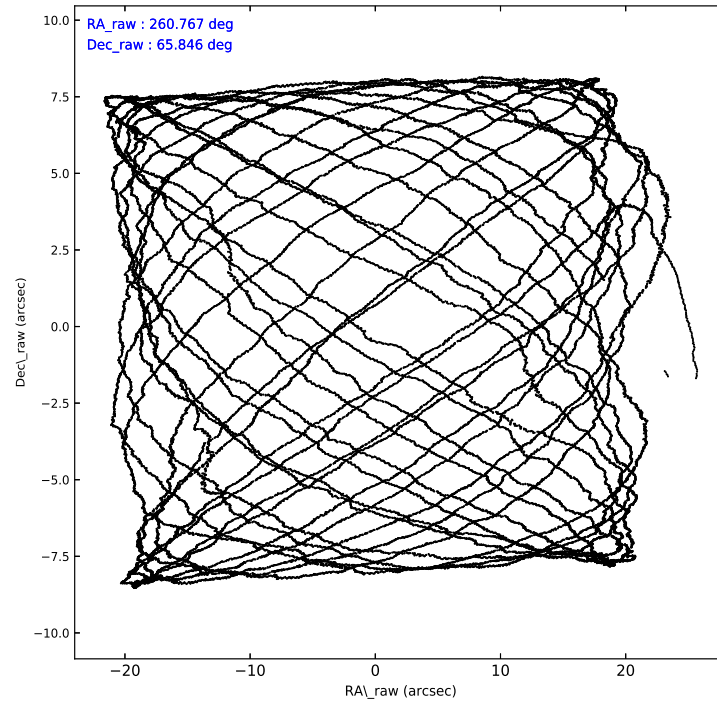
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	99487	104878	111878	111656	115482	143219	grade 0 events	3726	4007	4063	3748	3593	4886
rejected events	87896	91795	100409	100332	102834	82094		3%	3%	3%	3%	3%	3%
rejected %	88%	87%	89%	89%	89%	57%	grade 1 events	61	54	63	68	51	236
								0%	0%	0%	0%	0%	0%
							grade 2 events	3038	3734	2834	2560	3541	13162
								3%	3%	2%	2%	3%	9%
							grade 3 events	1136	1064	1095	1158	1072	4484
								1%	1%	0%	1%	0%	3%
							grade 4 events	1042	1023	1091	1202	1046	4354
								1%	0%	0%	1%	0%	3%
							grade 5 events	4375	4498	4345	5119	4794	13610
								4%	4%	3%	4%	4%	9%
							grade 6 events	2653	3259	2388	2657	3398	34262
								2%	3%	2%	2%	2%	23%
							grade 7 events	83456	87239	95999	95144	97987	68225
								83%	83%	85%	85%	84%	47%

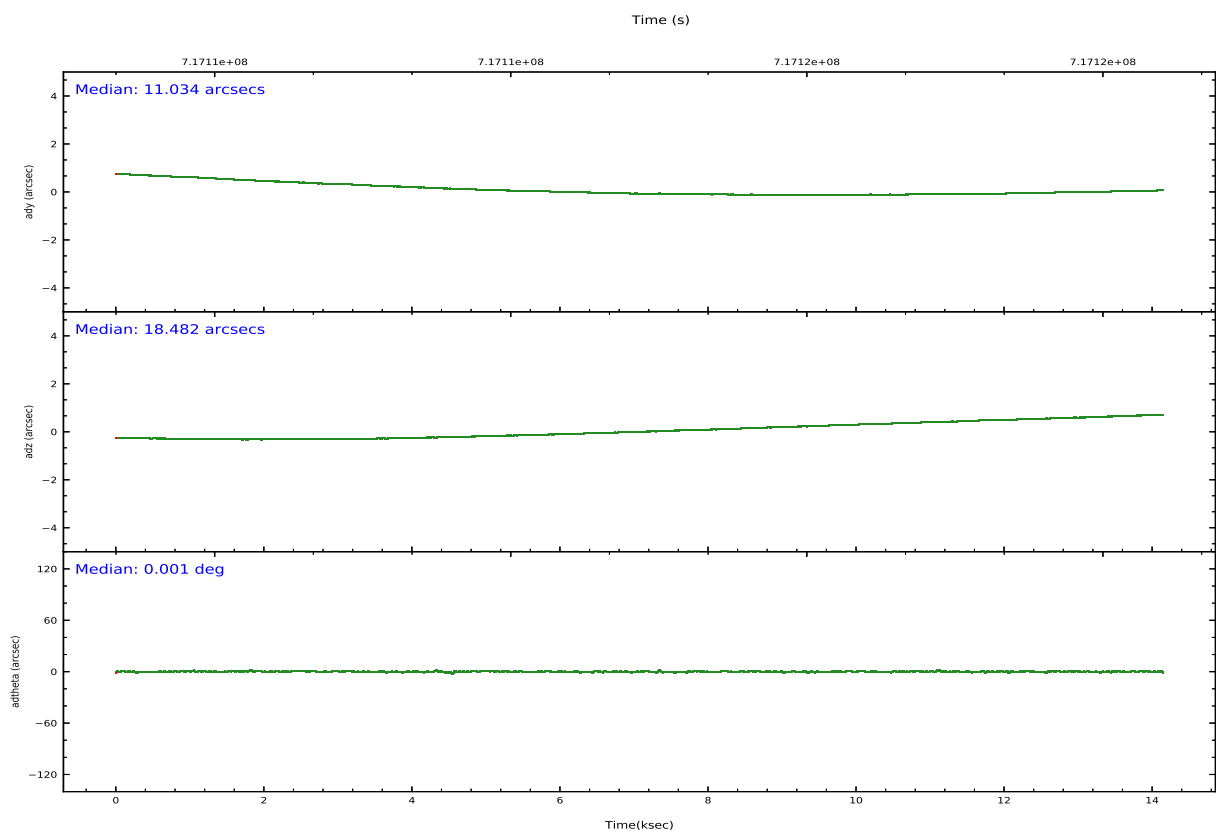
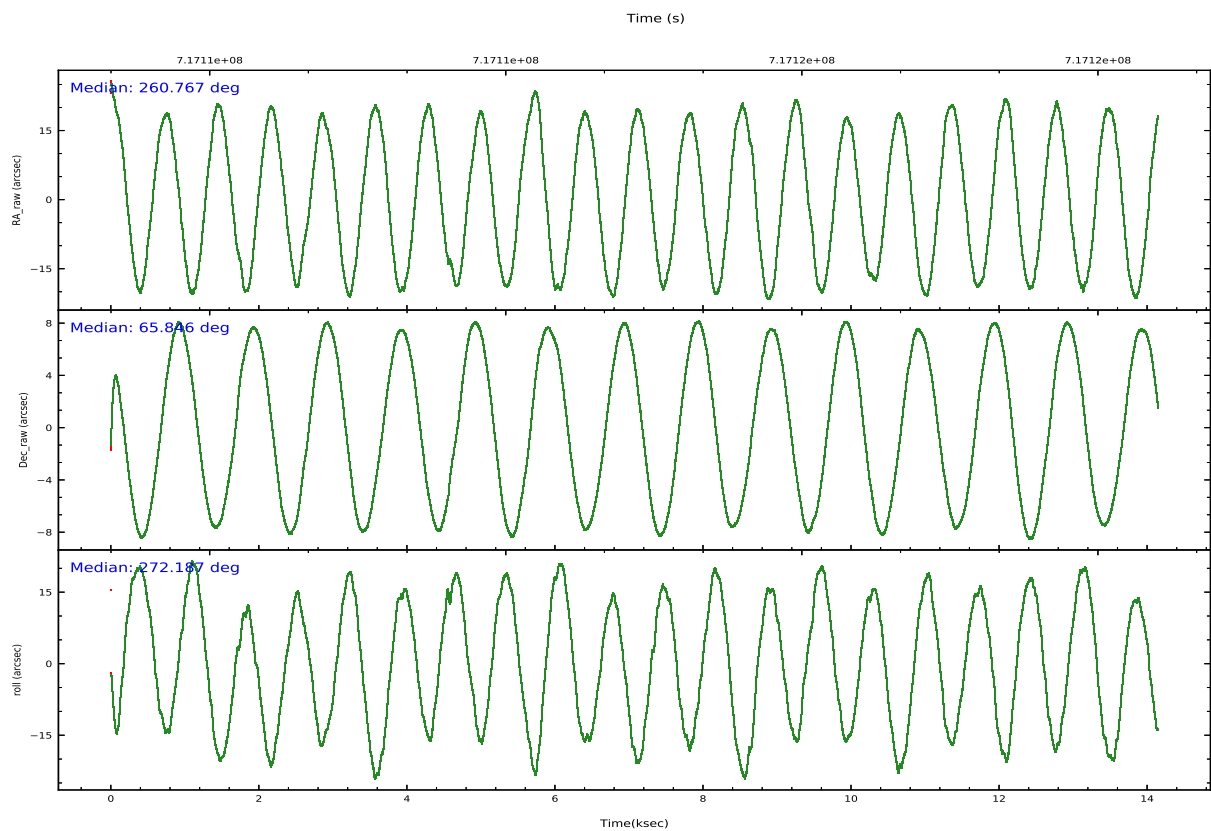
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	260.731067	260.75428118932
[deg] Pointing Dec	65.869797	65.84938306967101
[deg] Pointing Roll	272.022605	272.18706260977
[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)	717106814.184000	717105684.0314699
Observation start date	2020-09-21T20:19:05	2020-09-21T20:01:24
[s] Observation end time (MET)	717120814.184000	717121318.86993
Observation end date	2020-09-22T00:12:25	2020-09-22T00:21:58
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	O2	Y
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



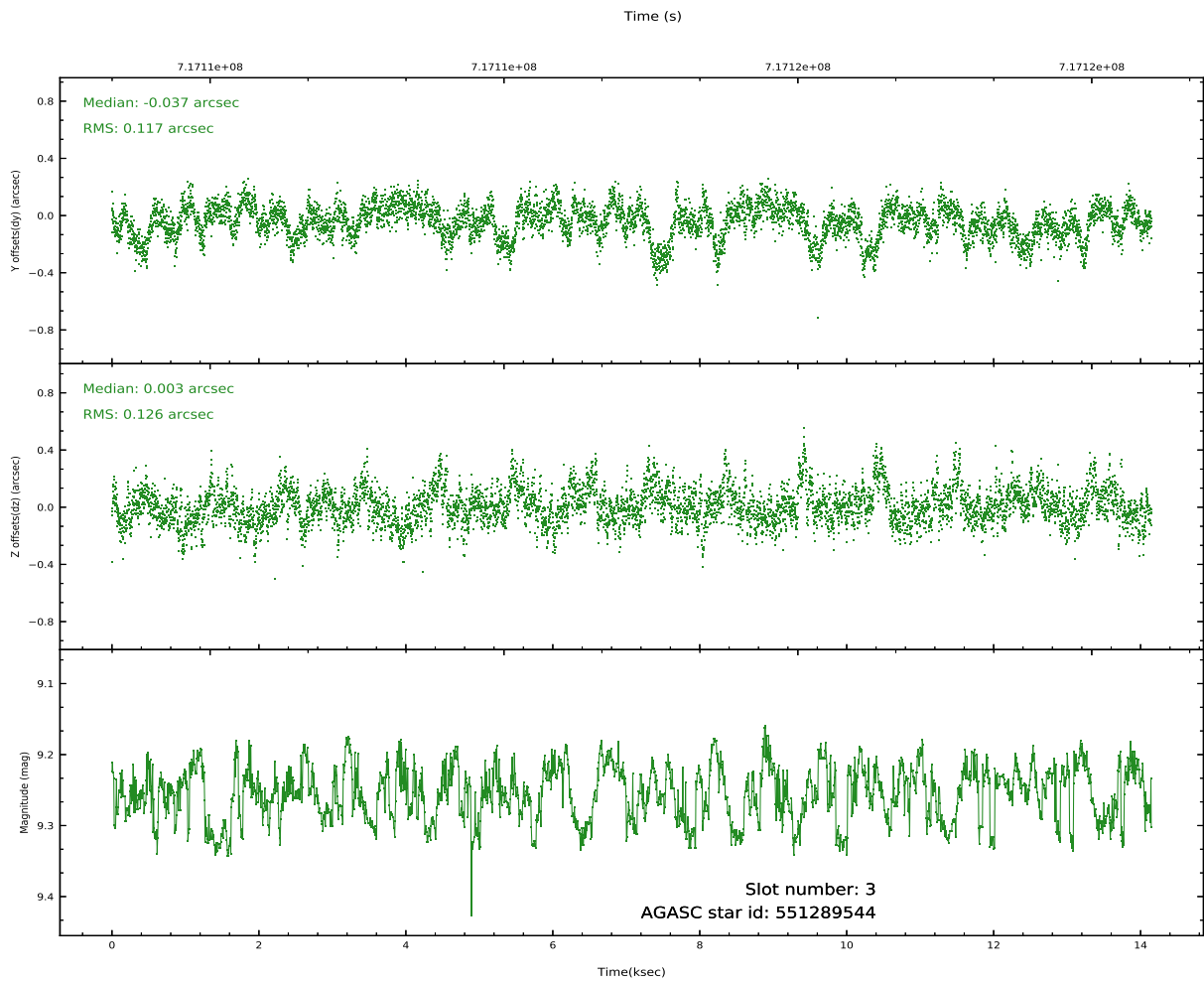
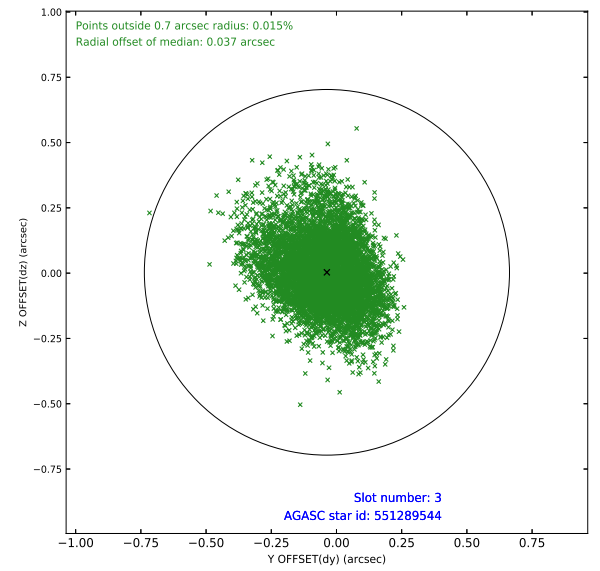
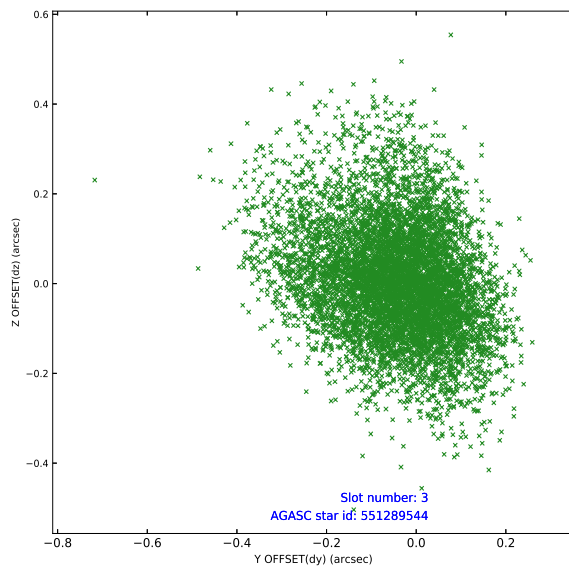


Slot Statistics

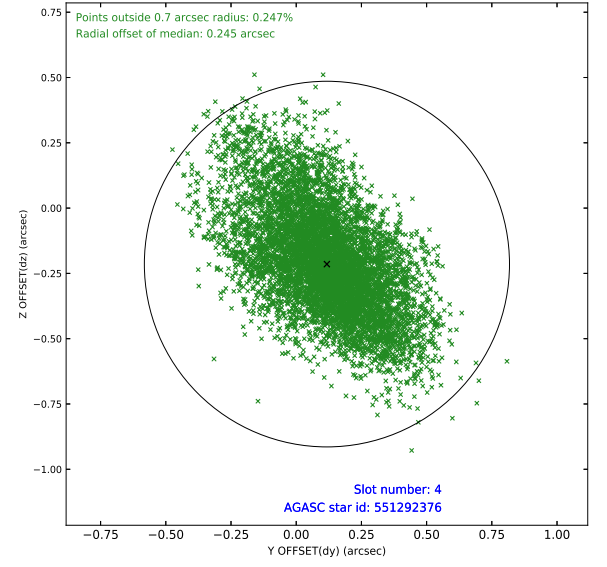
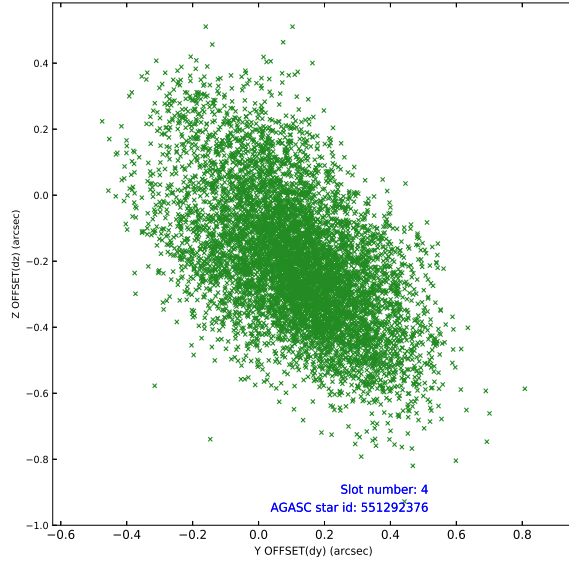
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-3	7.47	3452	1.000	0.134	0.117	0.009	0.015	0.000000	0.000000	45.92	-975
1	FID		ACIS-I-5	7.25	3452	1.000	-0.295	0.132	0.009	0.015	0.000000	0.000000	-1820.01	1055
2	FID		ACIS-I-6	7.25	3452	1.000	0.070	-0.180	0.011	0.021	0.000000	0.000000	393.75	1699
3	GUIDE	used	551289544	9.25	6890	1.000	-0.037	0.003	0.179	0.306	261.089724	65.487644	1392.03	486
4	GUIDE	used	551292376	9.26	6890	1.000	0.118	-0.214	0.281	0.498	259.292350	65.313144	1902.14	-2231
5	GUIDE	used	551422208	8.59	6900	1.000	0.014	-0.170	0.170	0.285	261.600178	65.236311	2316.15	1229
6	GUIDE	used	551814208	7.91	6903	1.000	0.073	0.160	0.155	0.257	260.175311	65.639944	794.26	-853
7	GUIDE	used	551952296	8.72	6900	1.000	-0.163	0.211	0.141	0.232	261.999680	65.847021	128.36	1864

## 2.4 Star Slots

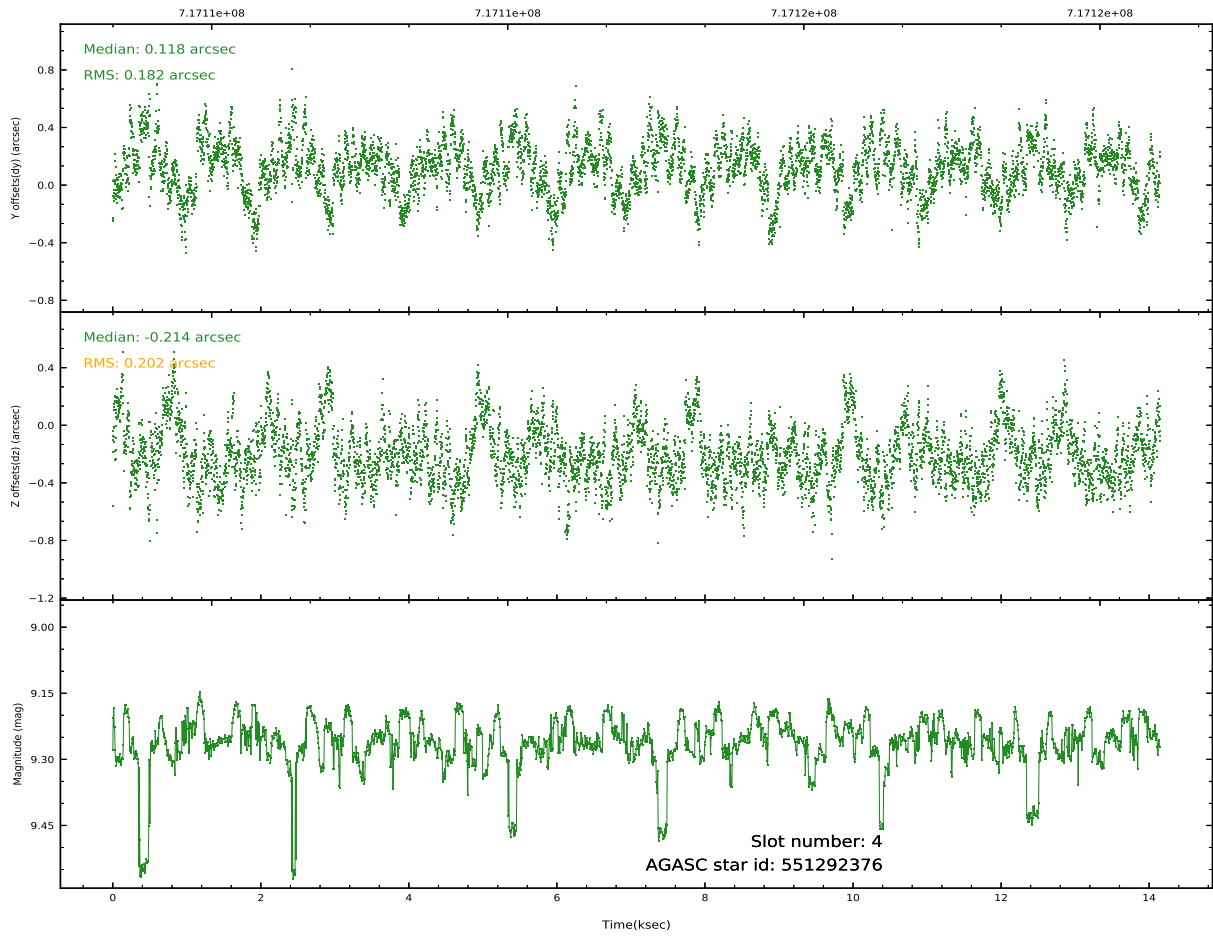
### 2.4.1 Slot 3



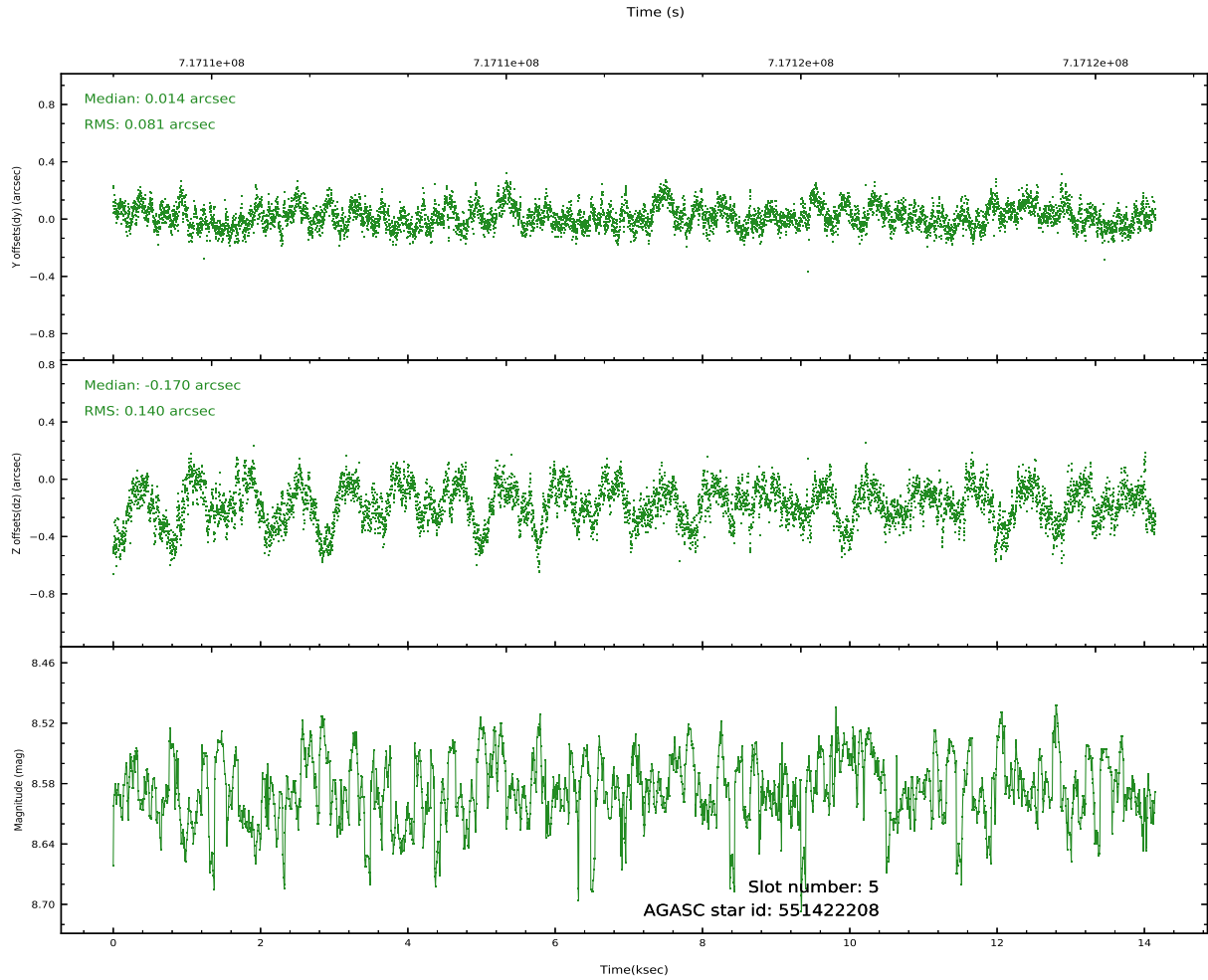
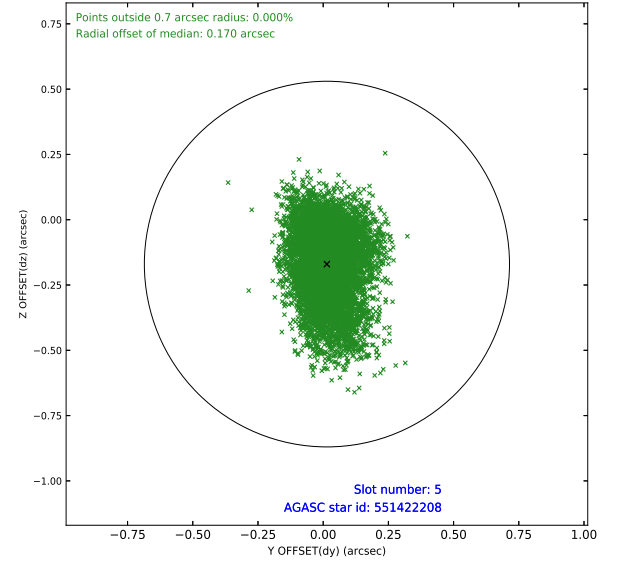
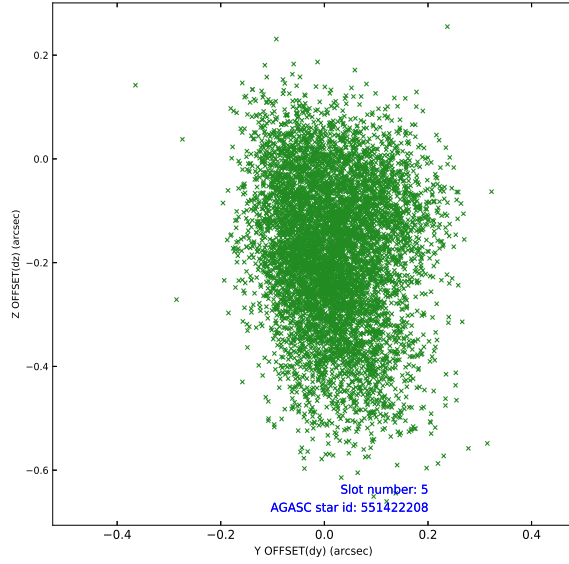
## 2.4.2 Slot 4



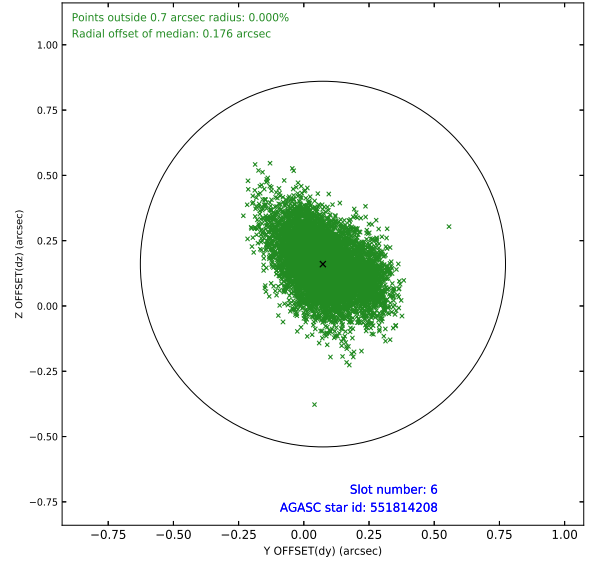
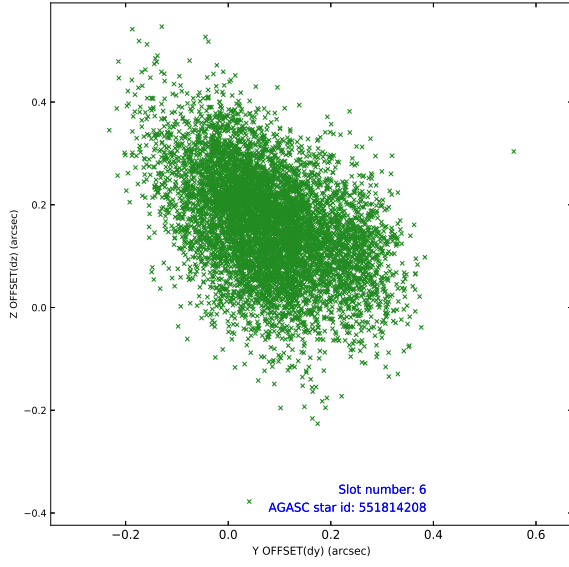
Time (s)



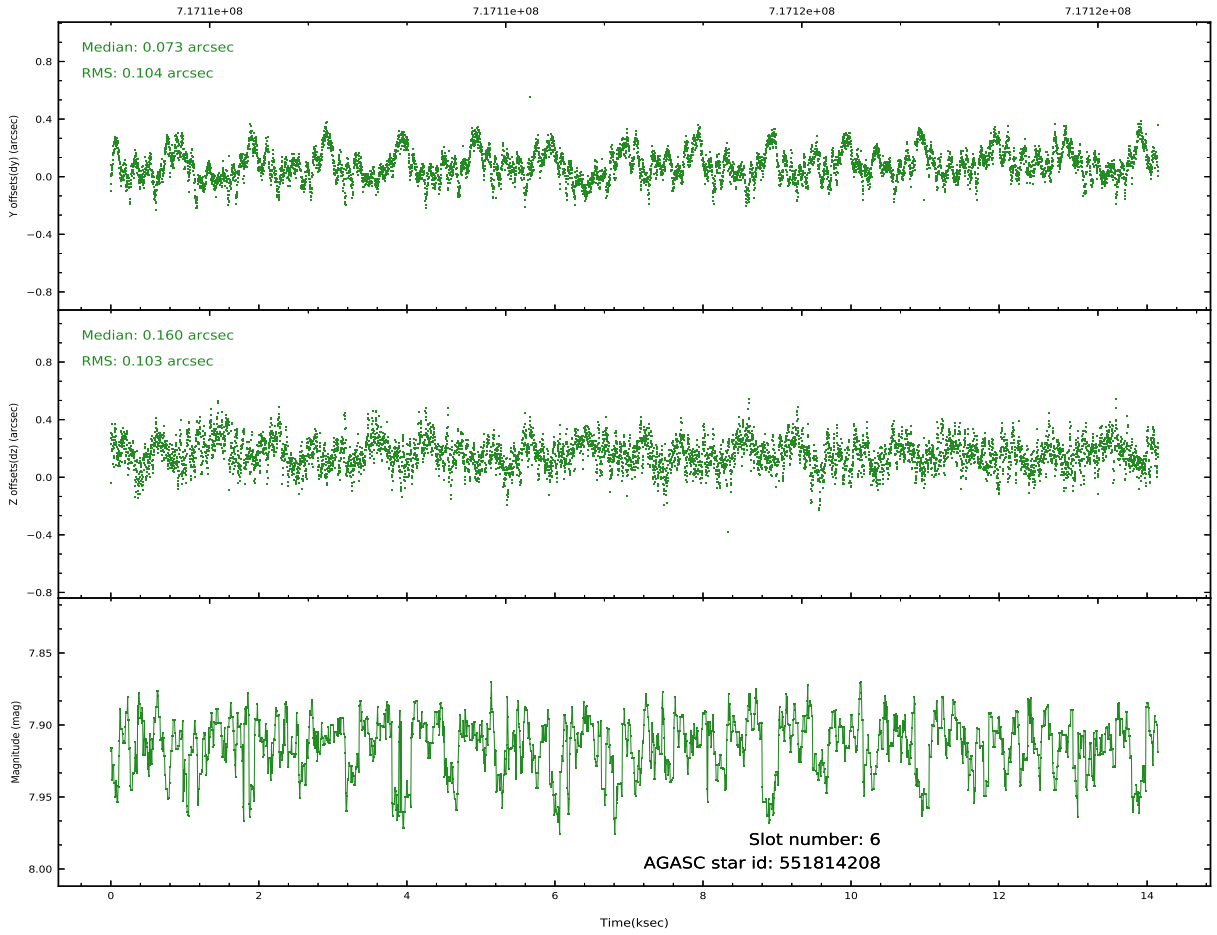
### 2.4.3 Slot 5



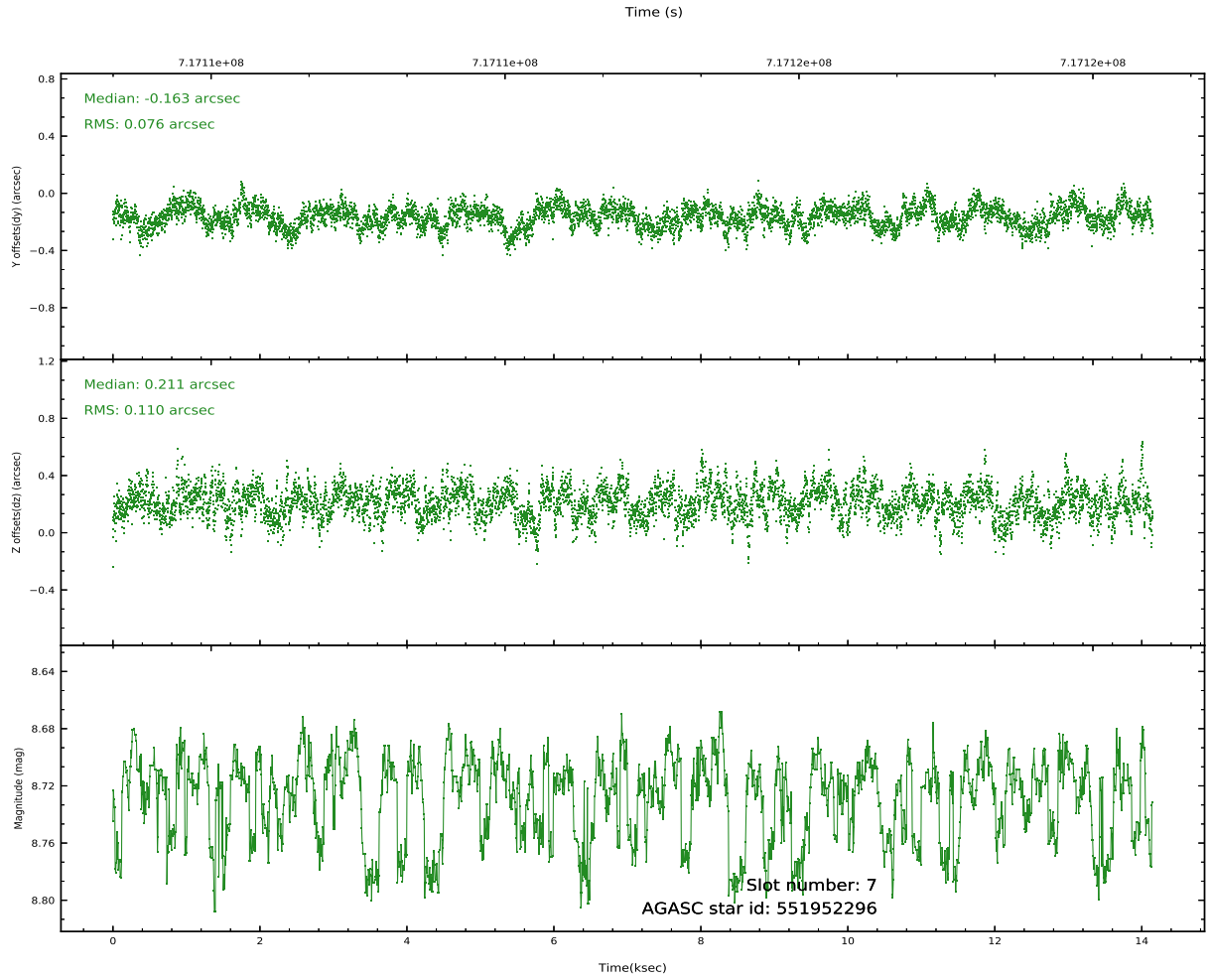
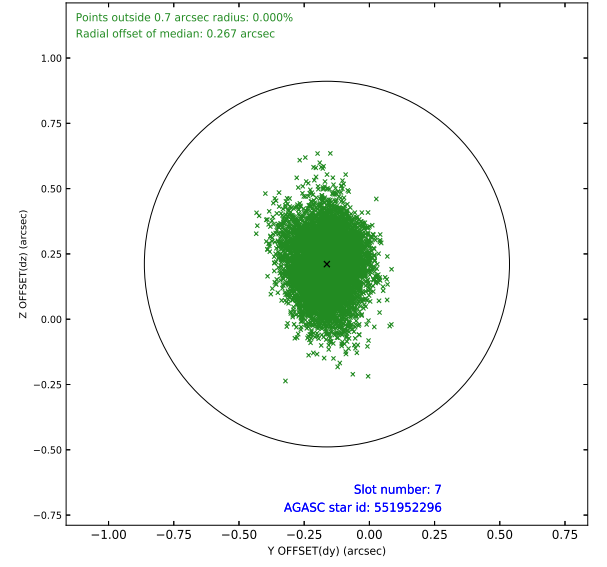
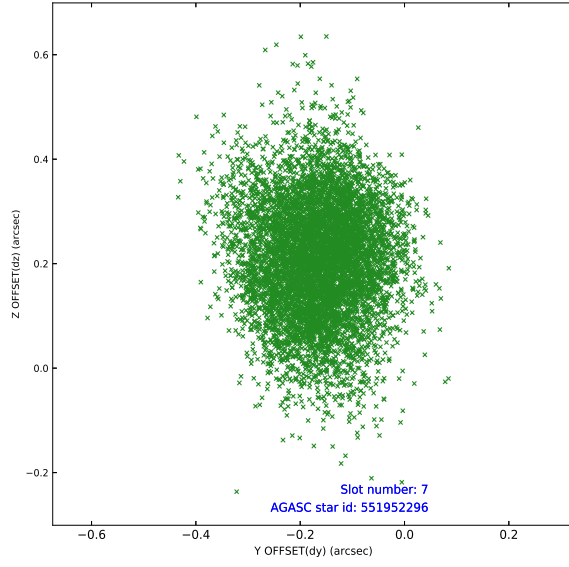
## 2.4.4 Slot 6



Time (s)

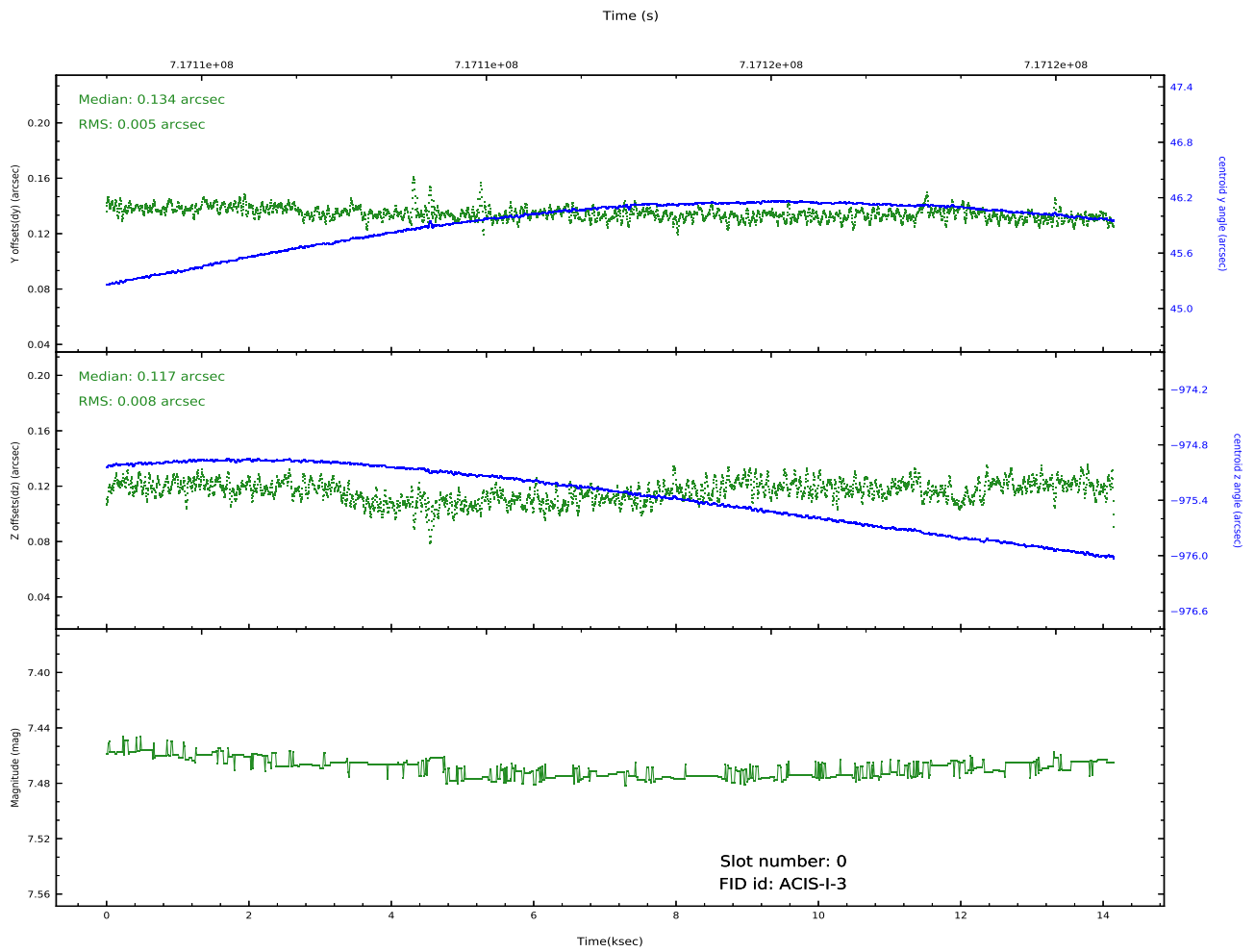
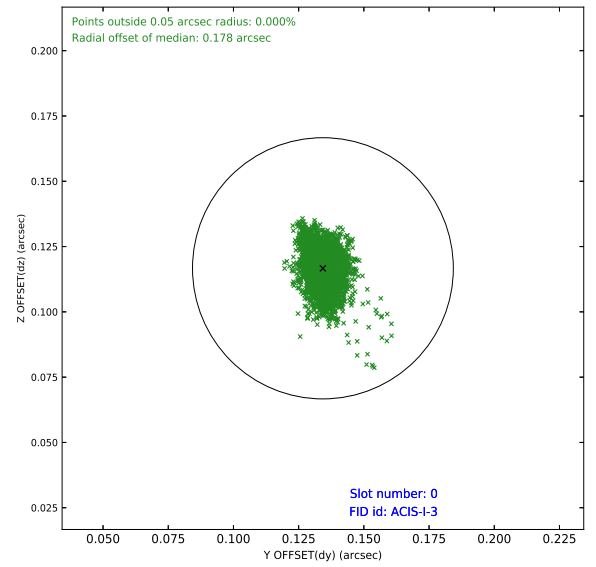
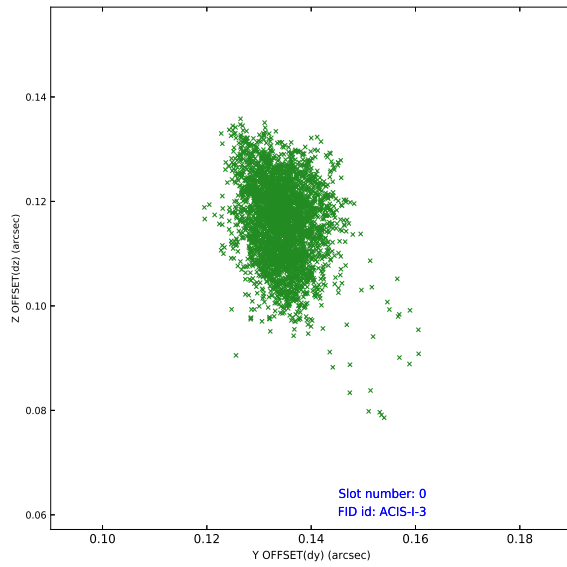


## 2.4.5 Slot 7

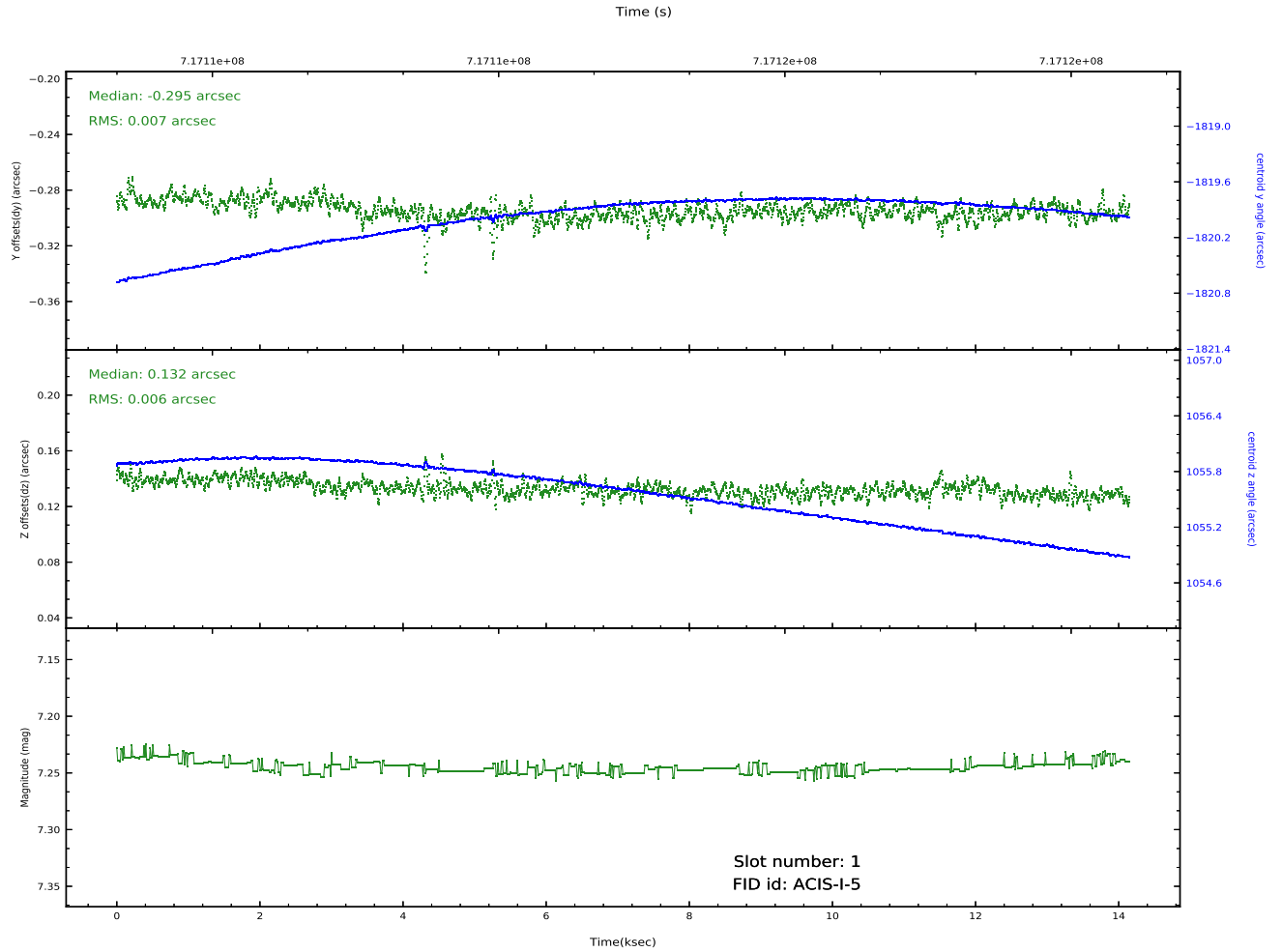
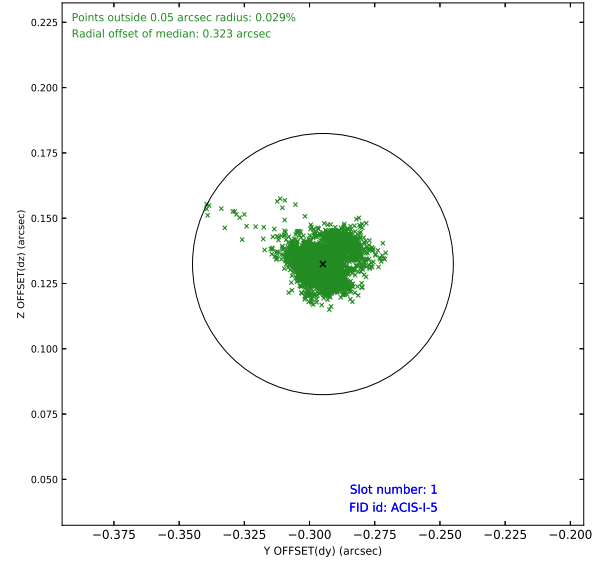
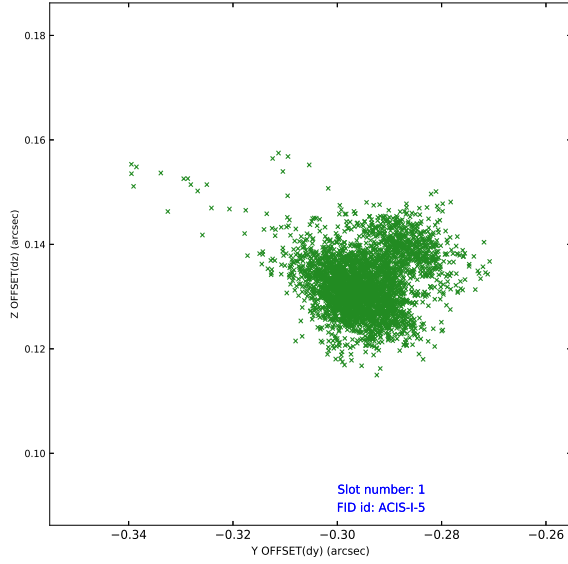


## 2.5 FID Slots

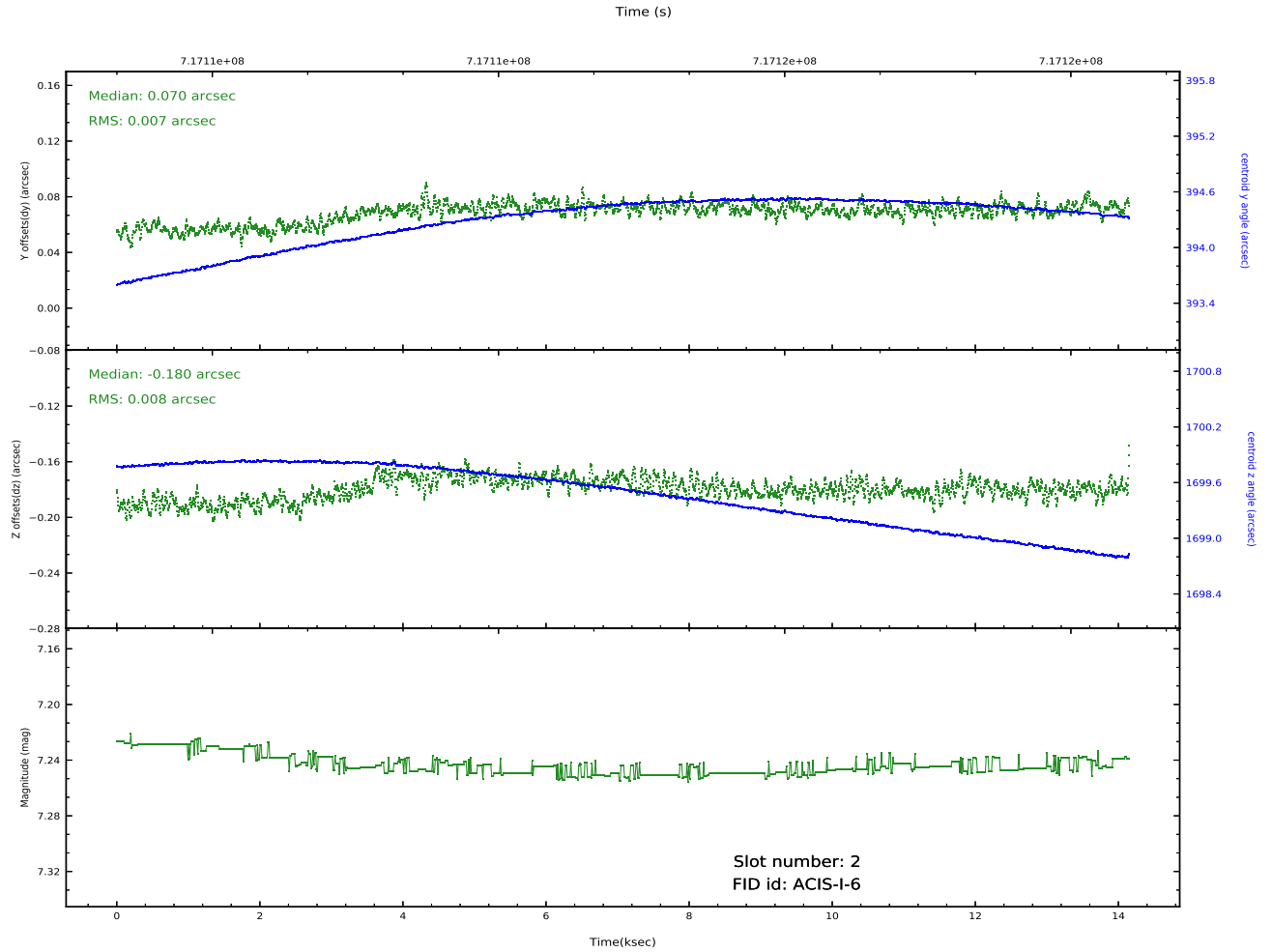
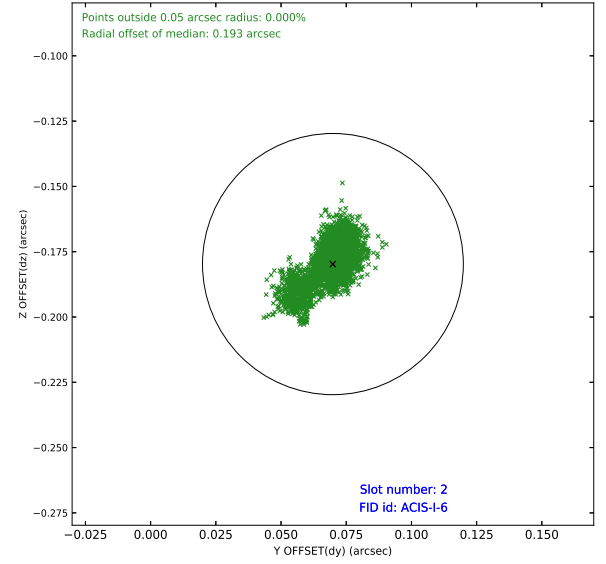
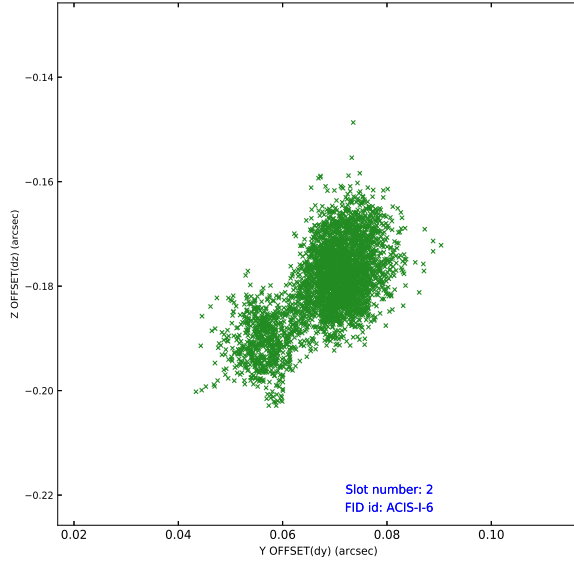
### 2.5.1 Slot 0



## 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)	2020.09.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.952000207901

### A.2 Comments