

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4567 - L2 Version 4  
Chandra X-Ray Center

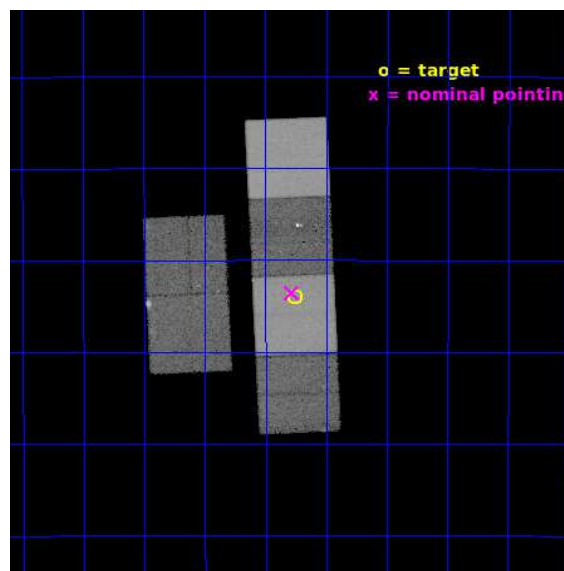
L2 Processing Date : Sep 24 2020

## 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

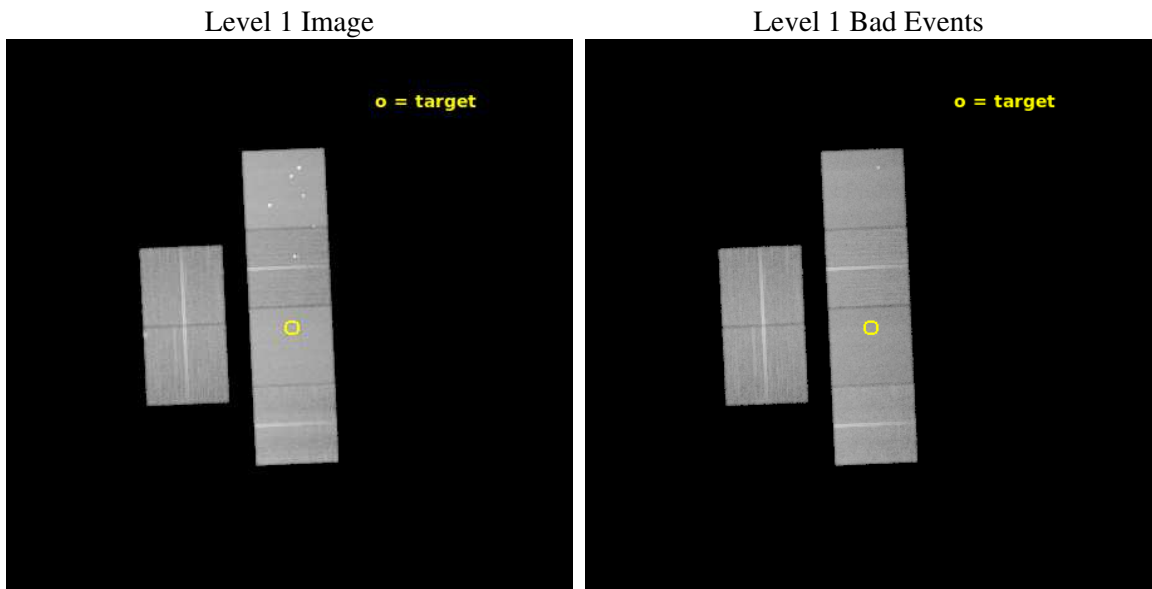
seq_num	400350	Sequence number
obs_id	4567	Observation id
title	X-Ray Jets in Microquasars	Proposal title
observer	St phane Corbel	Principal investigator
object	H1743-322	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.565	Observer's specified target RA [deg]
dec_targ	-32.2333	Observer's specified target Dec [deg]
ra_nom	266.57068516548	Nominal RA [deg]
dec_nom	-32.225802287782	Nominal Dec [deg]
roll_nom	87.457132349642	Nominal Roll [deg]
revision	4	Processing version of data
ontime	40550.399848938	Sum of GTIs [s]
livetime	40036.926269531	Livetime [s]
ontime2	40547.158878654	Sum of GTIs [s]
ontime3	40540.676898271	Sum of GTIs [s]
ontime5	40550.399848938	Sum of GTIs [s]
ontime6	40550.399848938	Sum of GTIs [s]
ontime7	40550.399848938	Sum of GTIs [s]
ontime8	40550.399848938	Sum of GTIs [s]
l2events	460211	Number of level 2 events



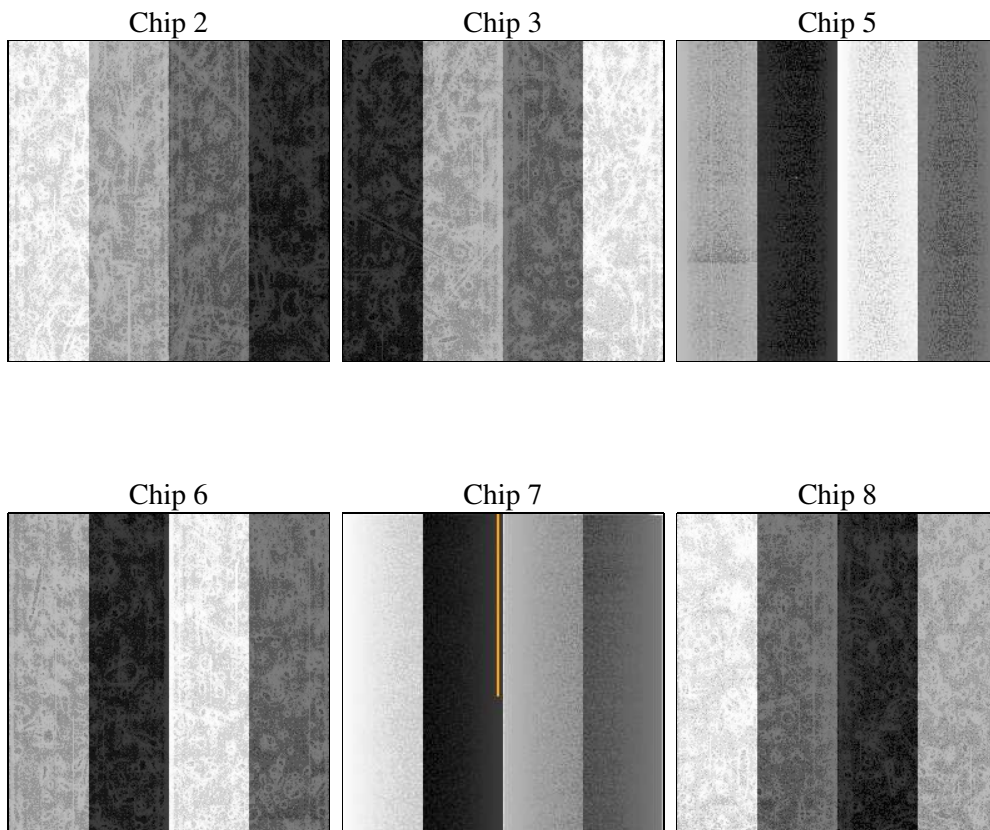
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40400.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	40550.399848938	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	40547.158878654	Sum of GTIs [s]
date	2020-09-24T12:44:54	Date and time of file creation	ontime3	40540.676898271	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	40550.399848938	Sum of GTIs [s]
			ontime6	40550.399848938	Sum of GTIs [s]
			ontime7	40550.399848938	Sum of GTIs [s]
			ontime8	40550.399848938	Sum of GTIs [s]
			l1events	2008922	Number of level 1 events

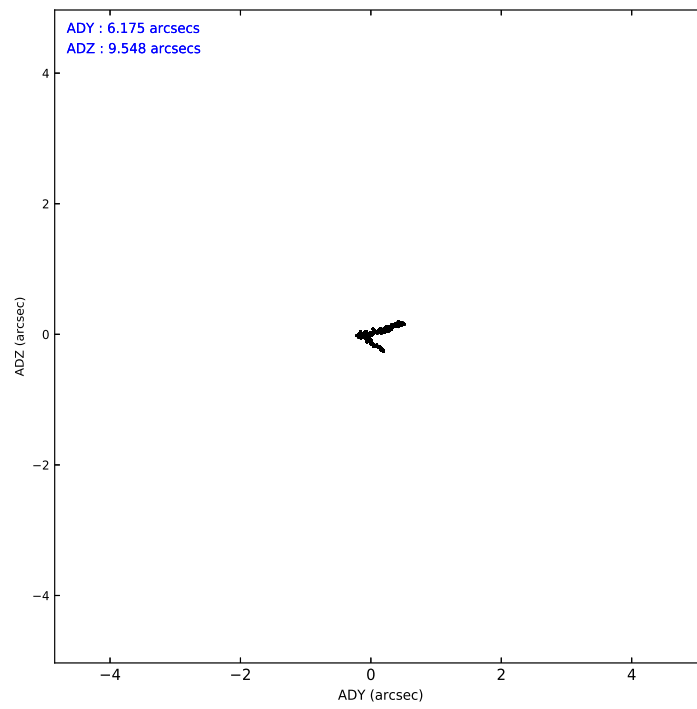
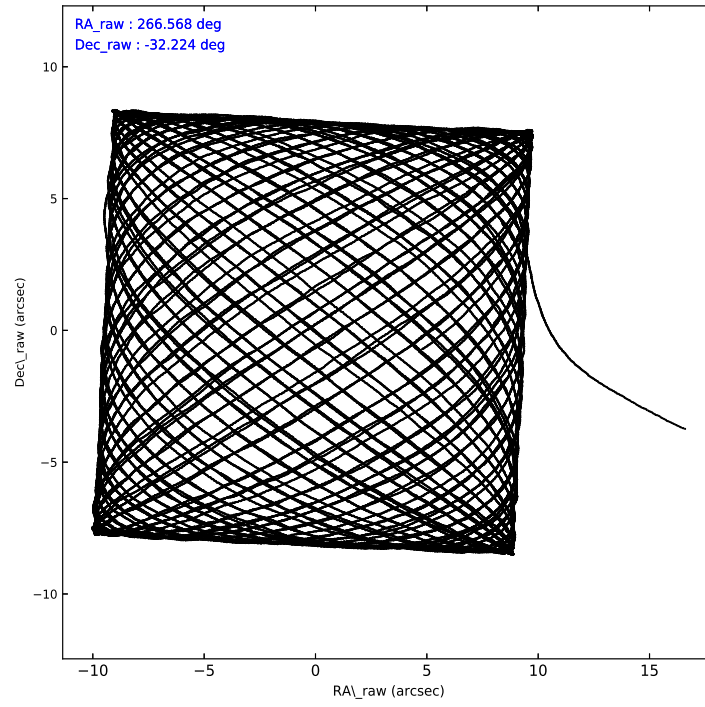
### 2.1.4 Events

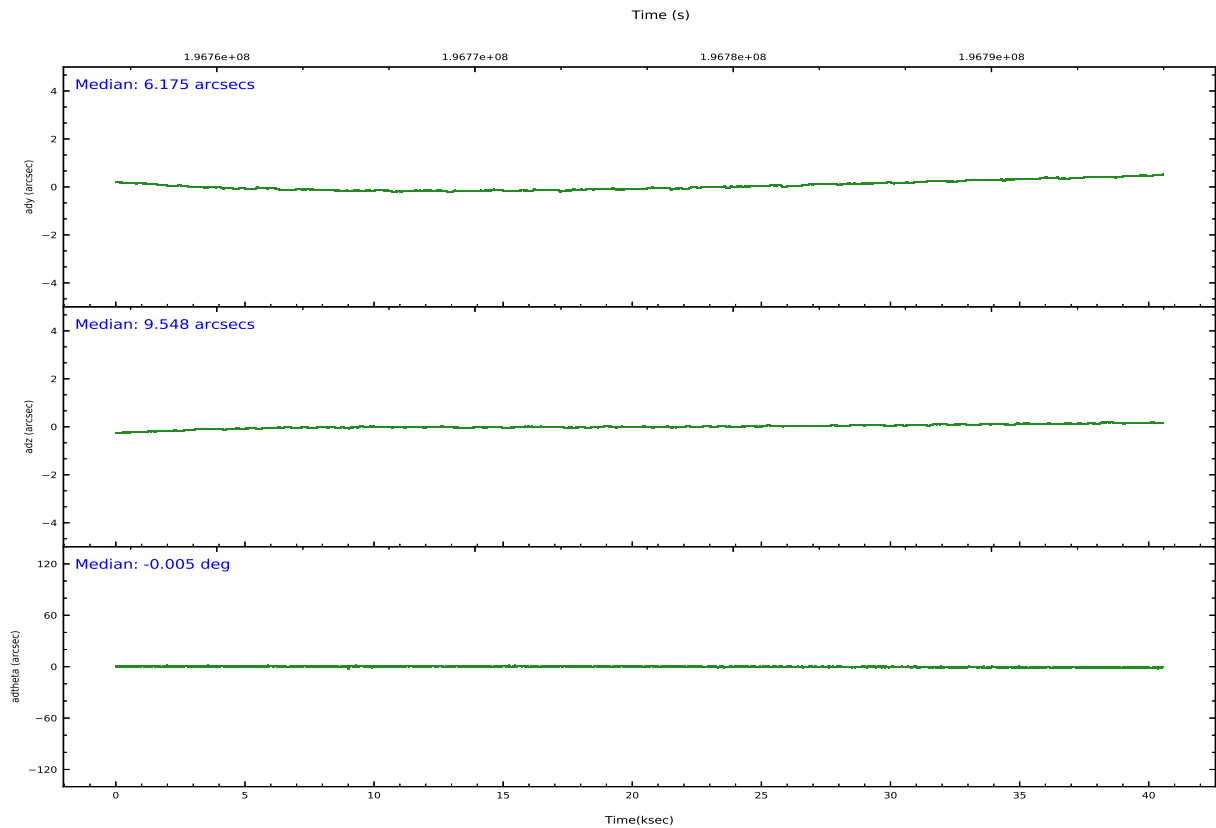
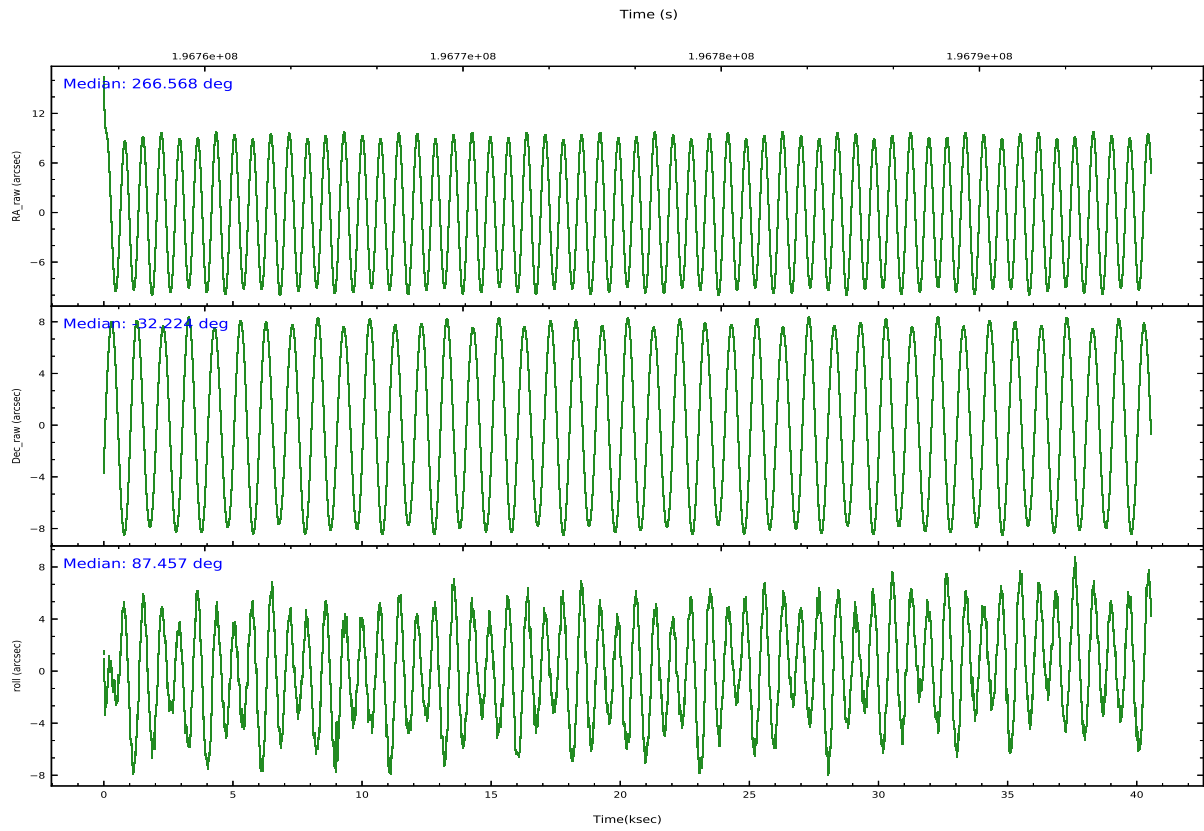
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	281248	276741	426852	287869	380924	355288	grade 0 events	16048	16942	27838	19431	14213	25591
rejected events	246143	240983	226869	247307	223619	277550		5%	6%	6%	6%	3%	7%
rejected %	87%	87%	53%	85%	58%	78%	grade 1 events	177	169	1232	245	390	225
								0%	0%	0%	0%	0%	0%
							grade 2 events	6957	6529	57214	7546	31479	16695
								2%	2%	13%	2%	8%	4%
							grade 3 events	3246	3275	7632	3459	14023	8087
								1%	1%	1%	1%	3%	2%
							grade 4 events	3214	3319	7239	3310	13859	7611
								1%	1%	1%	1%	3%	2%
							grade 5 events	11220	12290	30164	12889	36324	16735
								3%	4%	7%	4%	9%	4%
							grade 6 events	5651	5707	100101	6827	83767	19764
								2%	2%	23%	2%	21%	5%
							grade 7 events	234735	228510	195432	234162	186869	260580
								83%	82%	45%	81%	49%	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	266.582731	266.57068516548	Subarray requested	NONE	NONE
[deg] Pointing Dec	-32.247862	-32.225802287782	Alternating exposures requested	N	N
[deg] Pointing Roll	87.309466	87.457132349642	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	195955264.184000	195955264.184000			
[s] Window stop time (MET)	197078464.184000	197078464.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	196756249.184000	196755189.34889			
Observation start date	2004-03-27T06:29:45	2004-03-27T06:13:09			
[s] Observation end time (MET)	196796649.184000	196797309.16324			
Observation end date	2004-03-27T17:43:05	2004-03-27T17:55:09			
Read mode	TIMED	TIMED			

## 2.3 Aspect





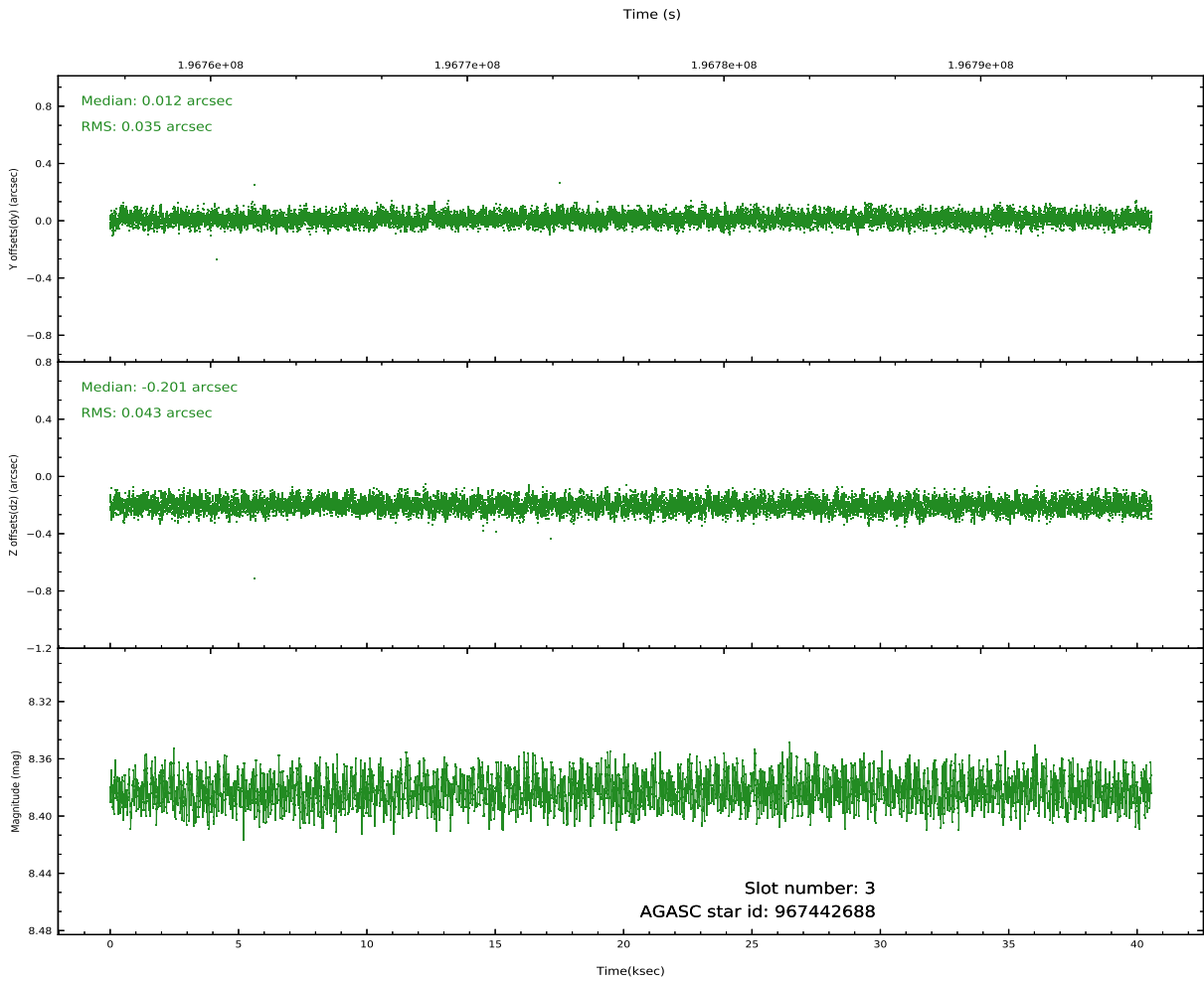
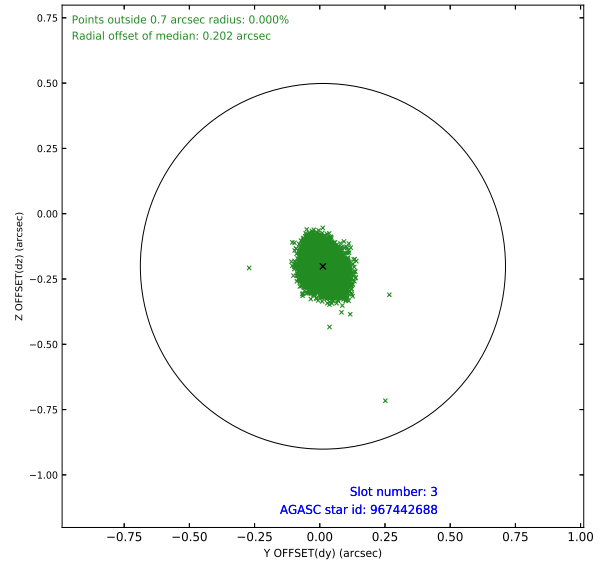
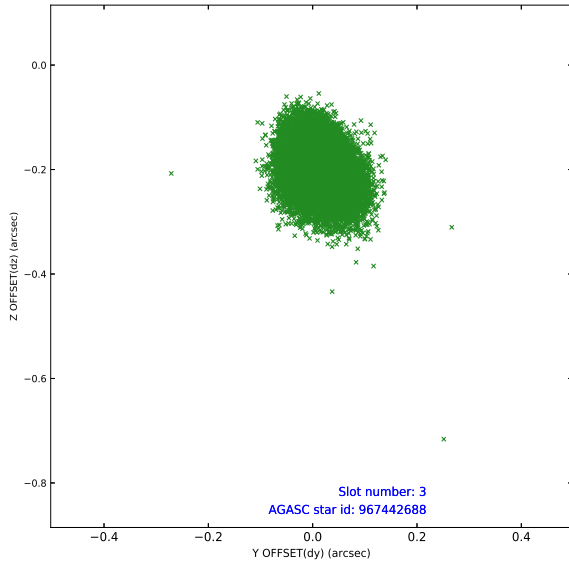
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	9891	1.000	-0.086	-0.070	0.008	0.013	0.000000	0.000000	-759.00	-1730
1	FID		ACIS-S-4	7.20	9891	1.000	0.148	0.060	0.008	0.014	0.000000	0.000000	2154.46	177
2	FID		ACIS-S-5	7.23	9891	1.000	-0.092	0.018	0.007	0.012	0.000000	0.000000	-1811.88	171
3	GUIDE	used	967442688	8.38	19778	1.000	0.012	-0.201	0.058	0.095	266.096113	-32.373763	-525.53	1456
4	GUIDE	used	967450832	9.10	19732	1.000	-0.112	-0.172	0.084	0.135	266.078096	-31.879979	1246.85	1603
5	GUIDE	used	967446352	7.75	19779	1.000	0.092	-0.030	0.062	0.097	267.069988	-32.671157	-1455.93	-1546
6	GUIDE	used	967447616	9.30	19770	1.000	0.123	0.233	0.090	0.143	267.260141	-32.889782	-2218.36	-2154
7	GUIDE	used	967451816	9.26	19777	1.000	-0.114	0.171	0.084	0.137	267.266669	-31.901374	1337.49	-2029

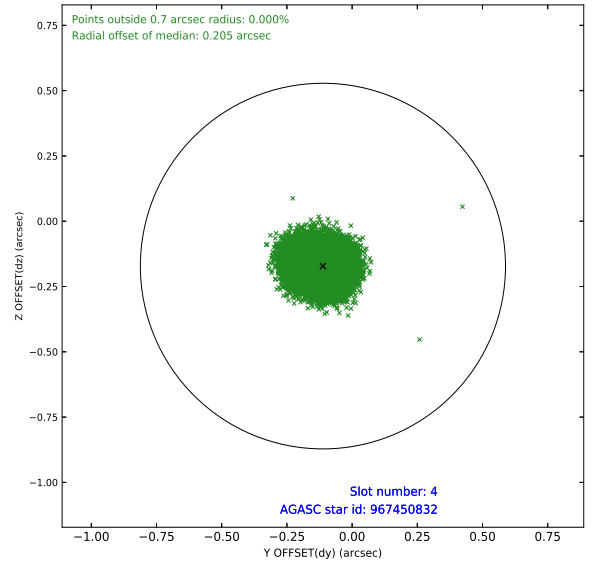
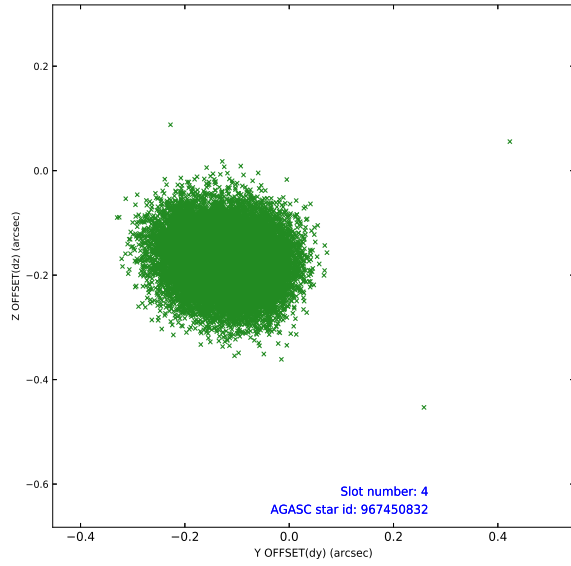
∞

## 2.4 Star Slots

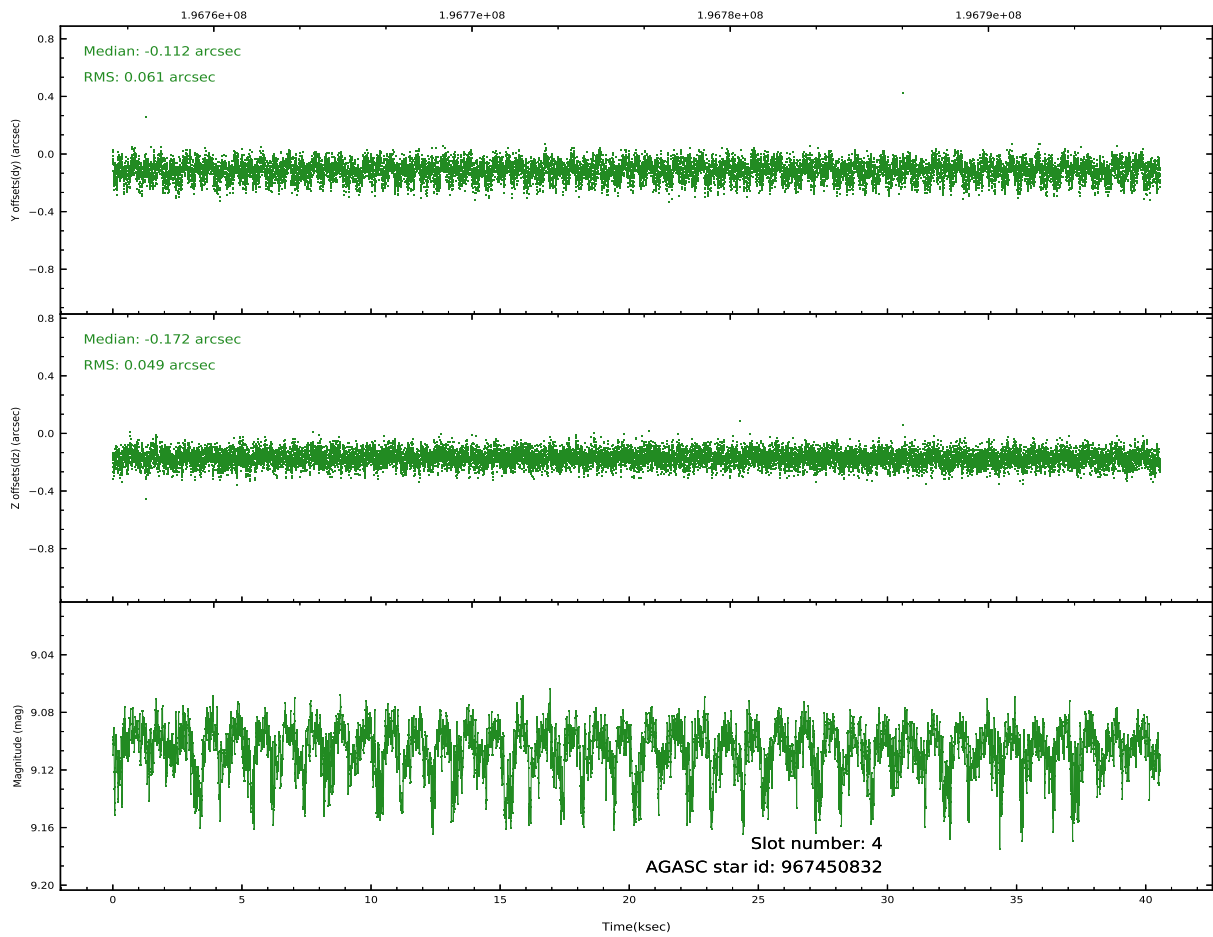
### 2.4.1 Slot 3



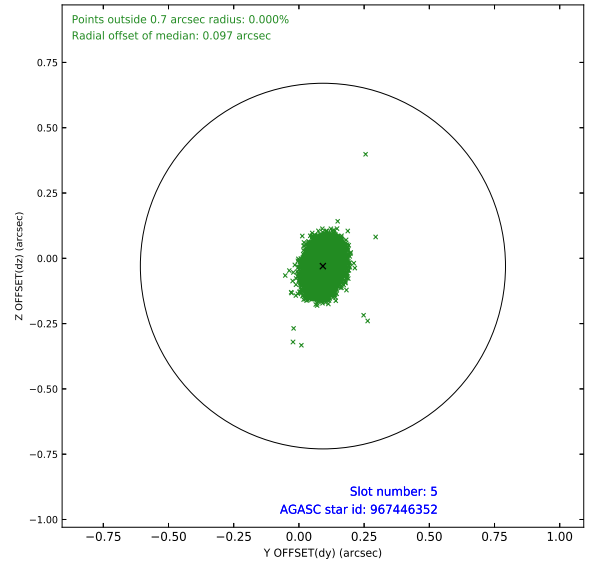
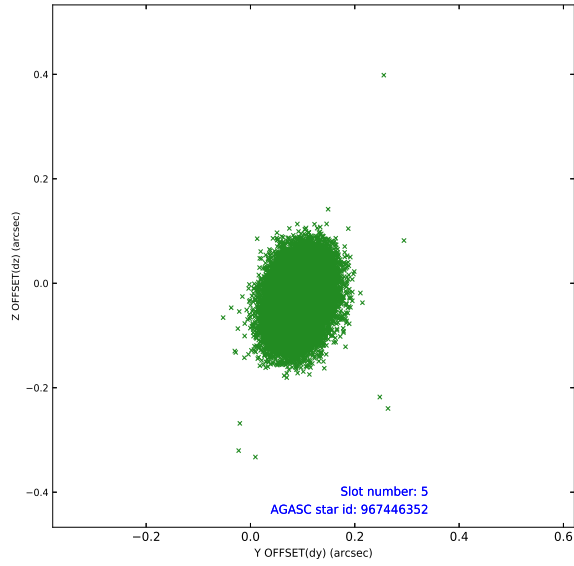
## 2.4.2 Slot 4



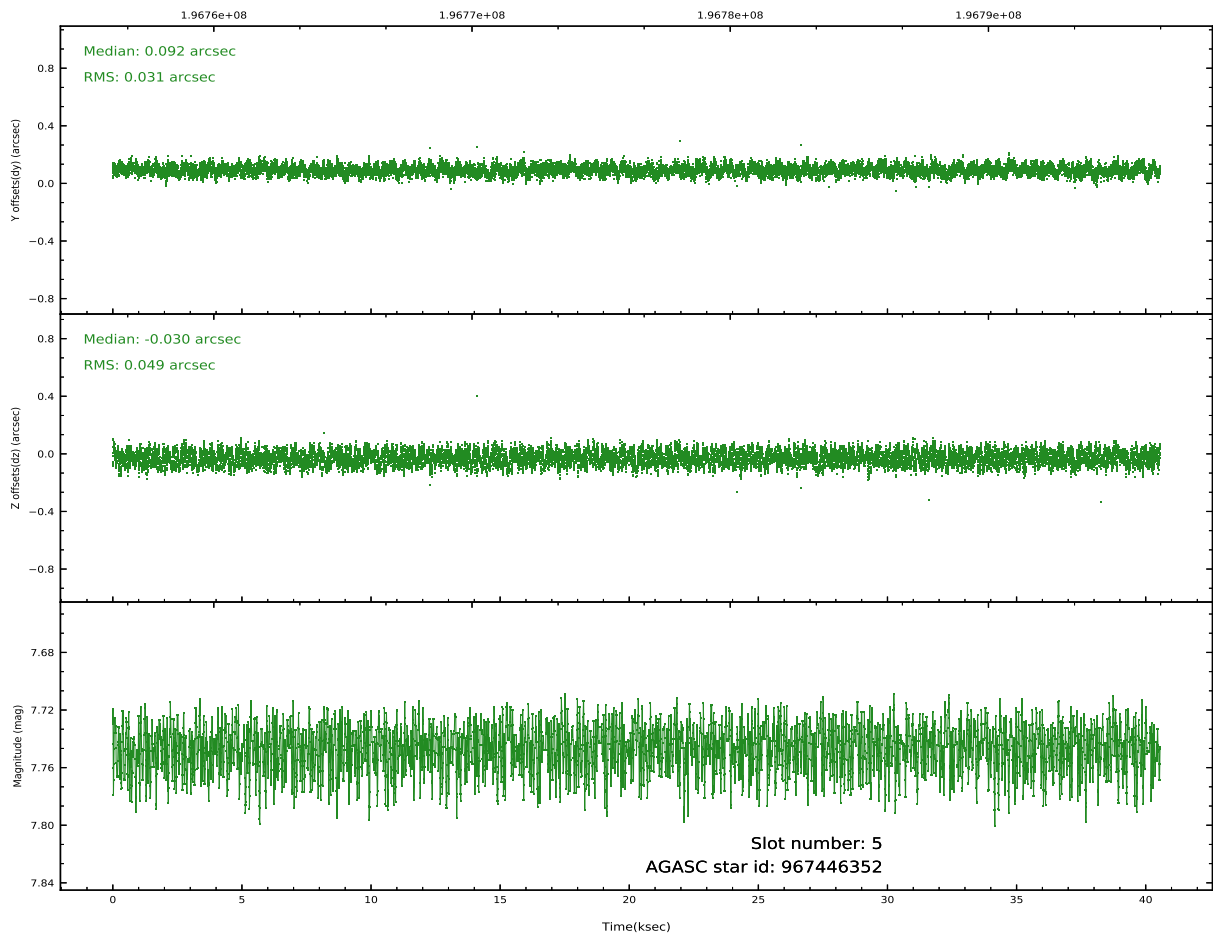
Time (s)



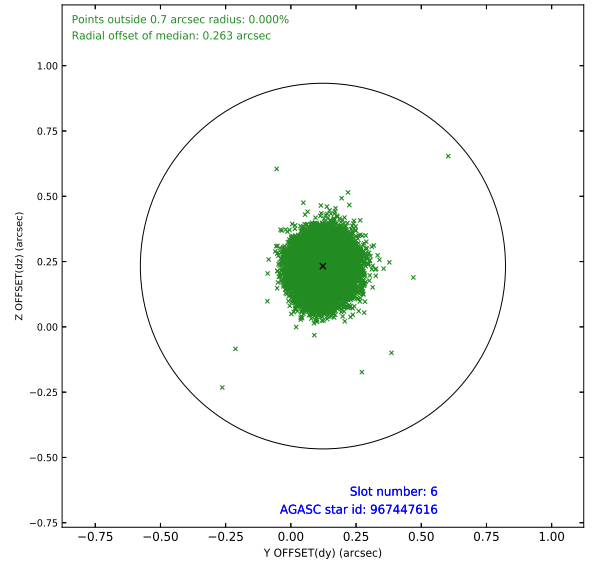
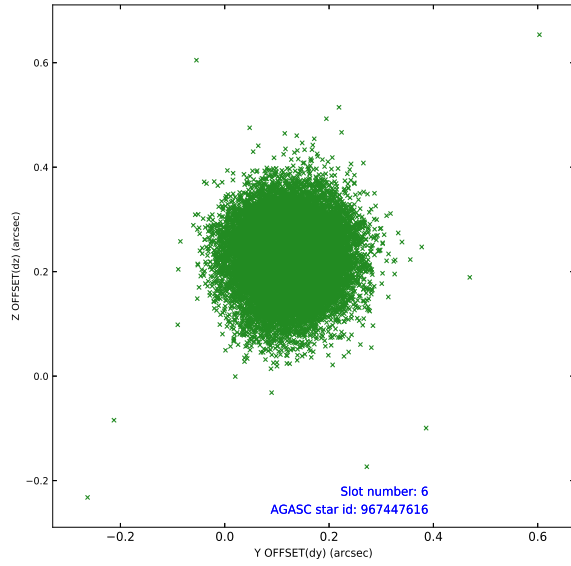
### 2.4.3 Slot 5



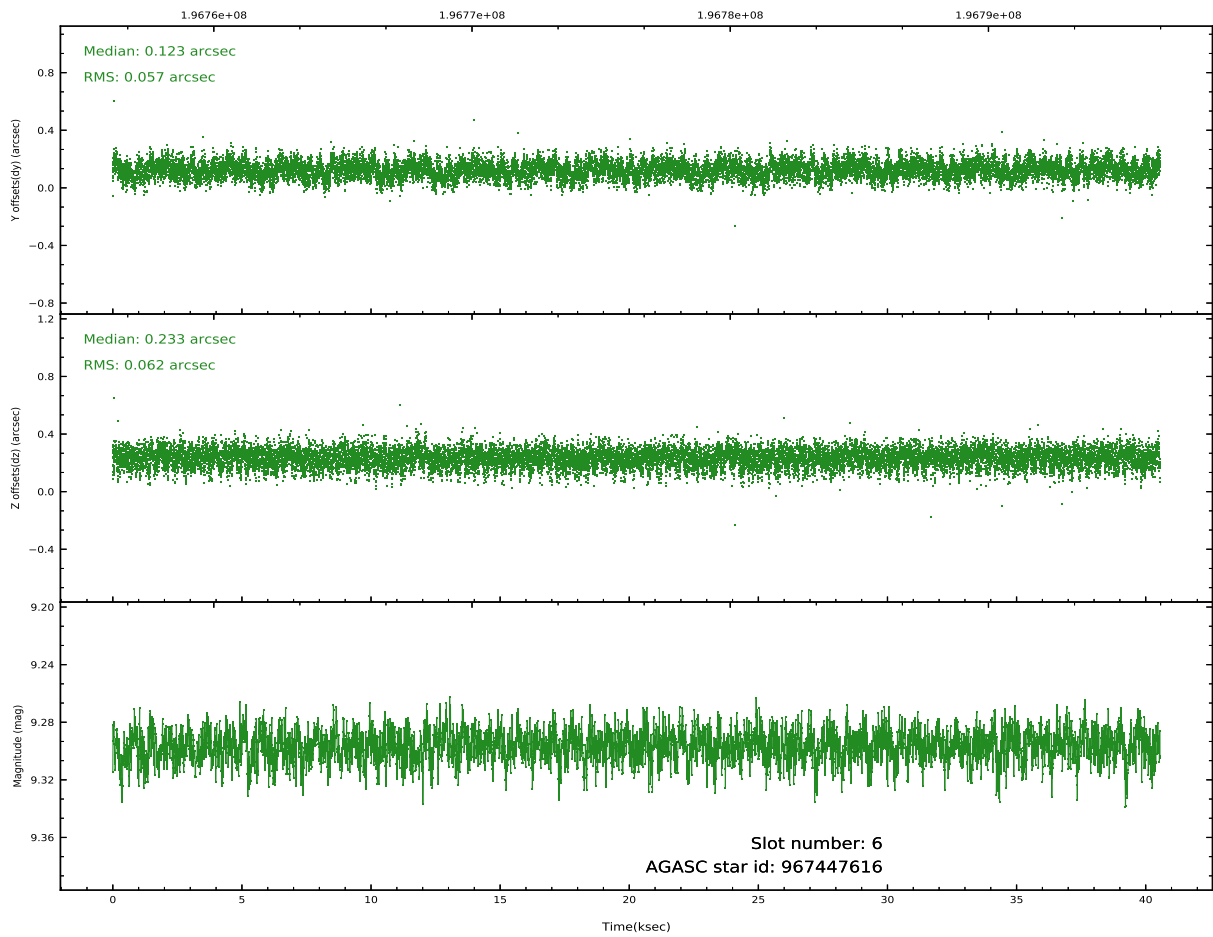
Time (s)



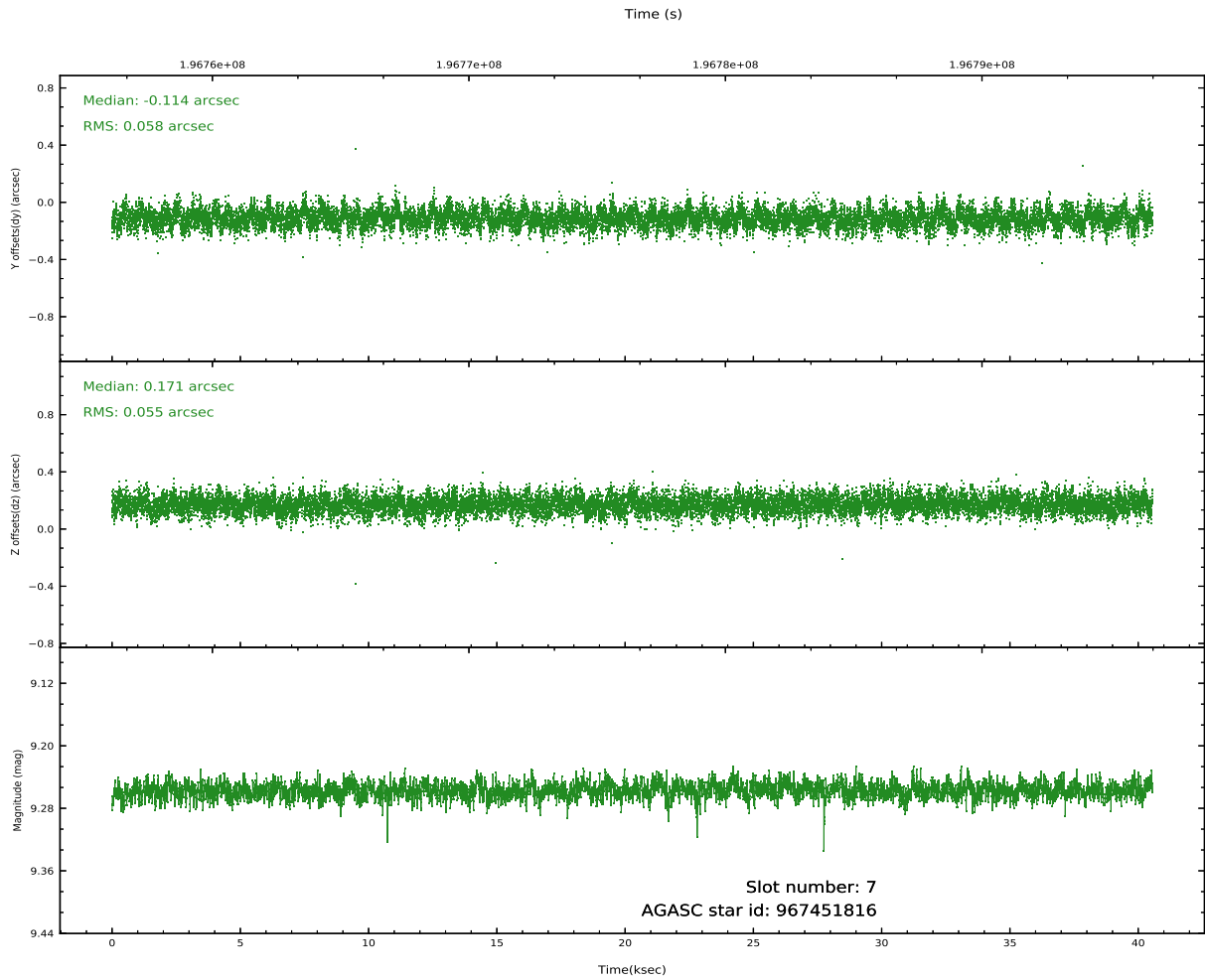
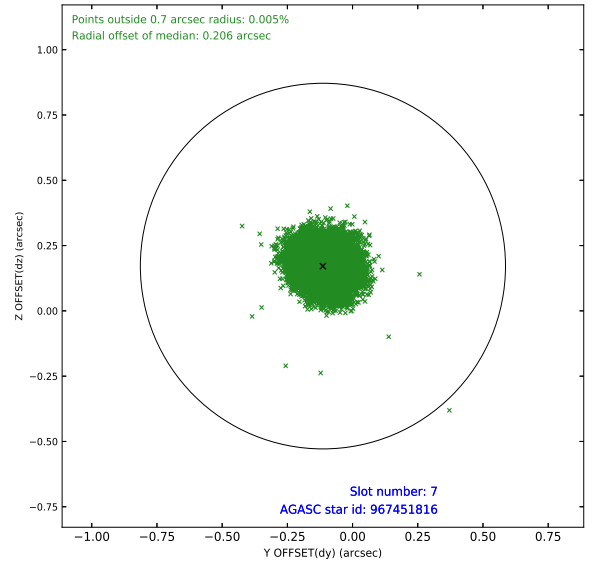
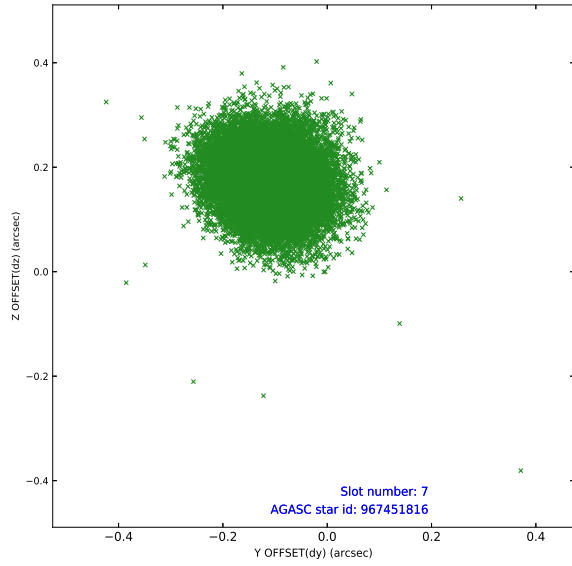
## 2.4.4 Slot 6



Time (s)

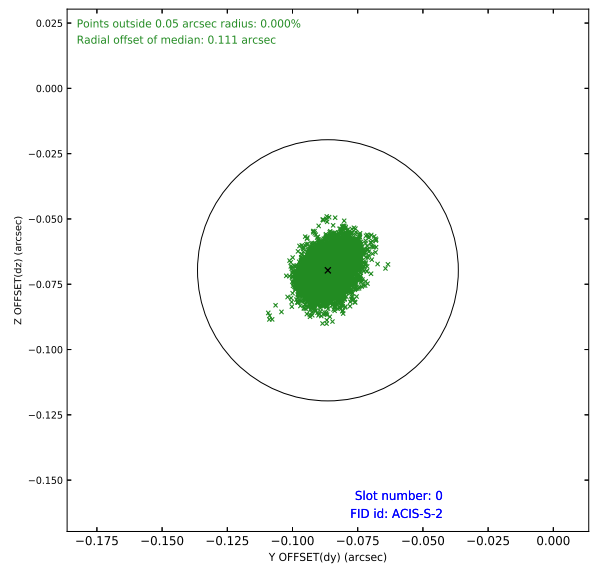
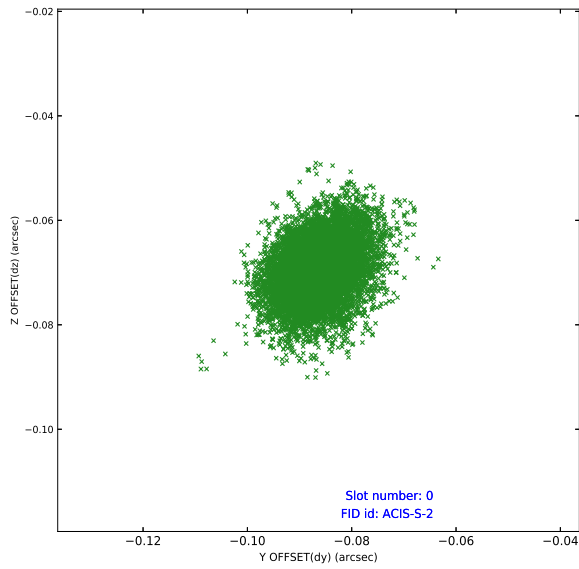


## 2.4.5 Slot 7

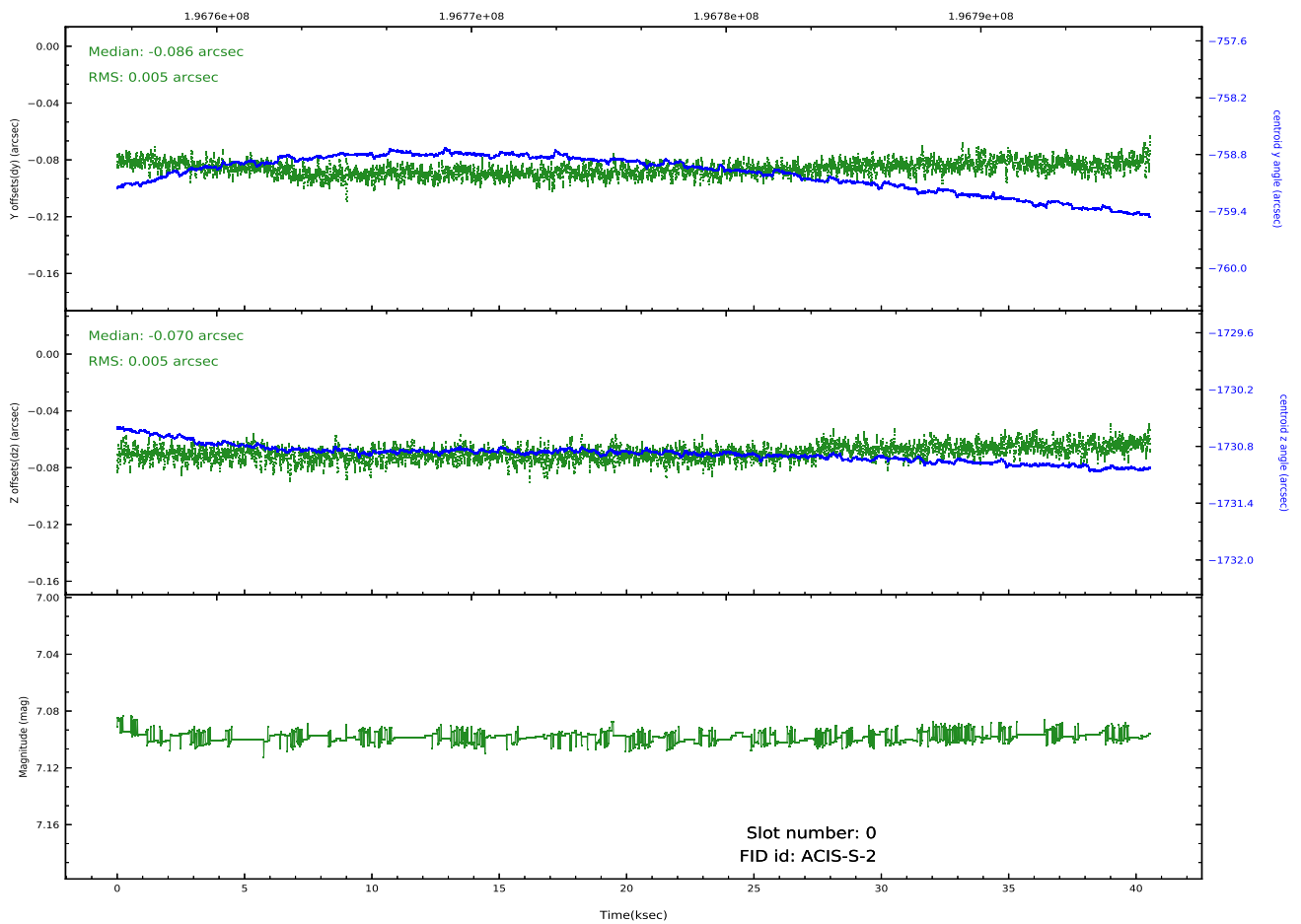


## 2.5 FID Slots

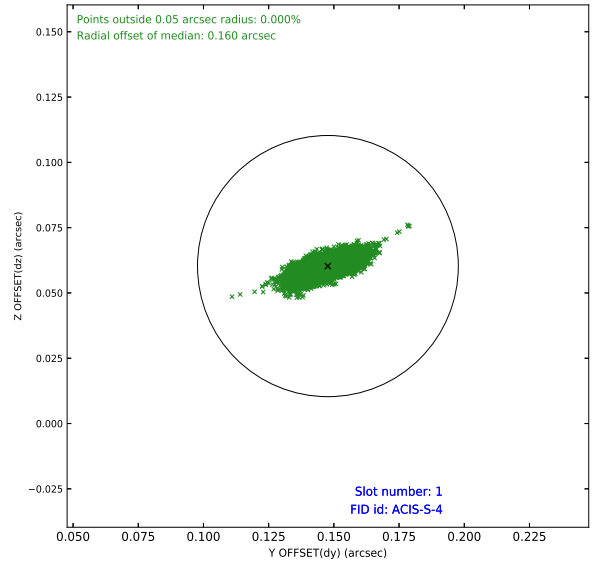
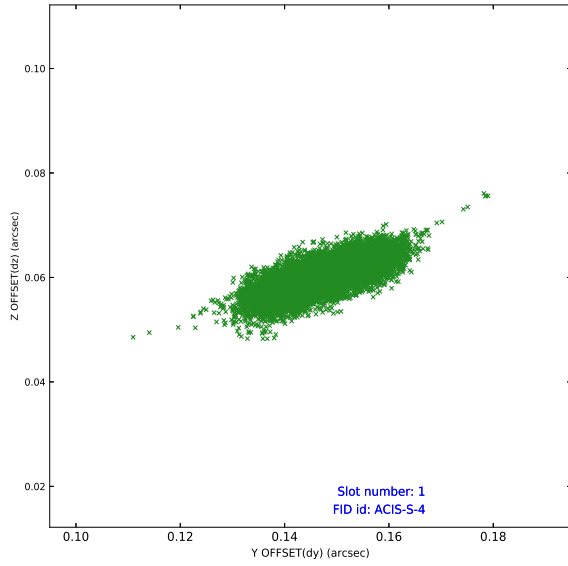
### 2.5.1 Slot 0



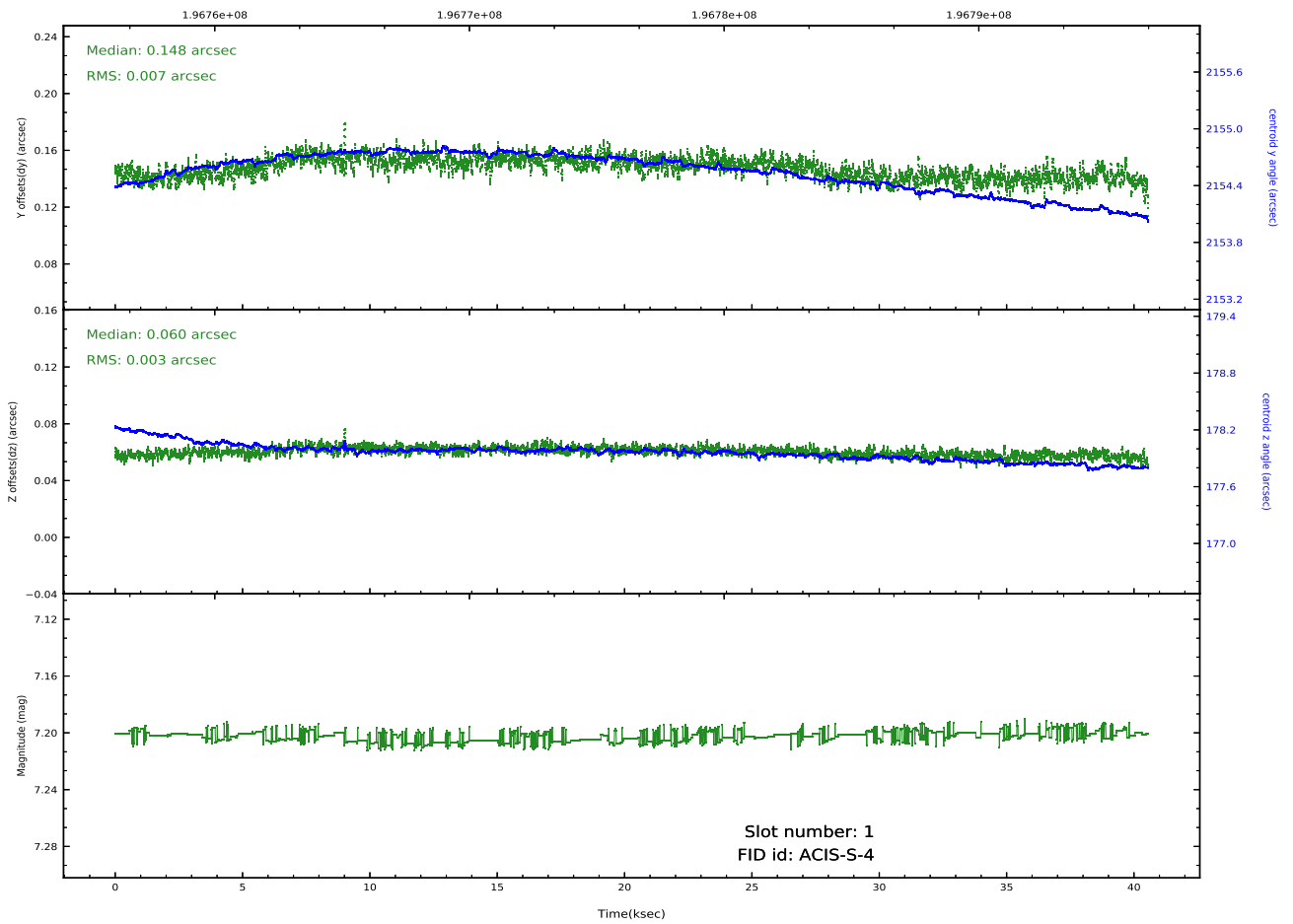
Time (s)



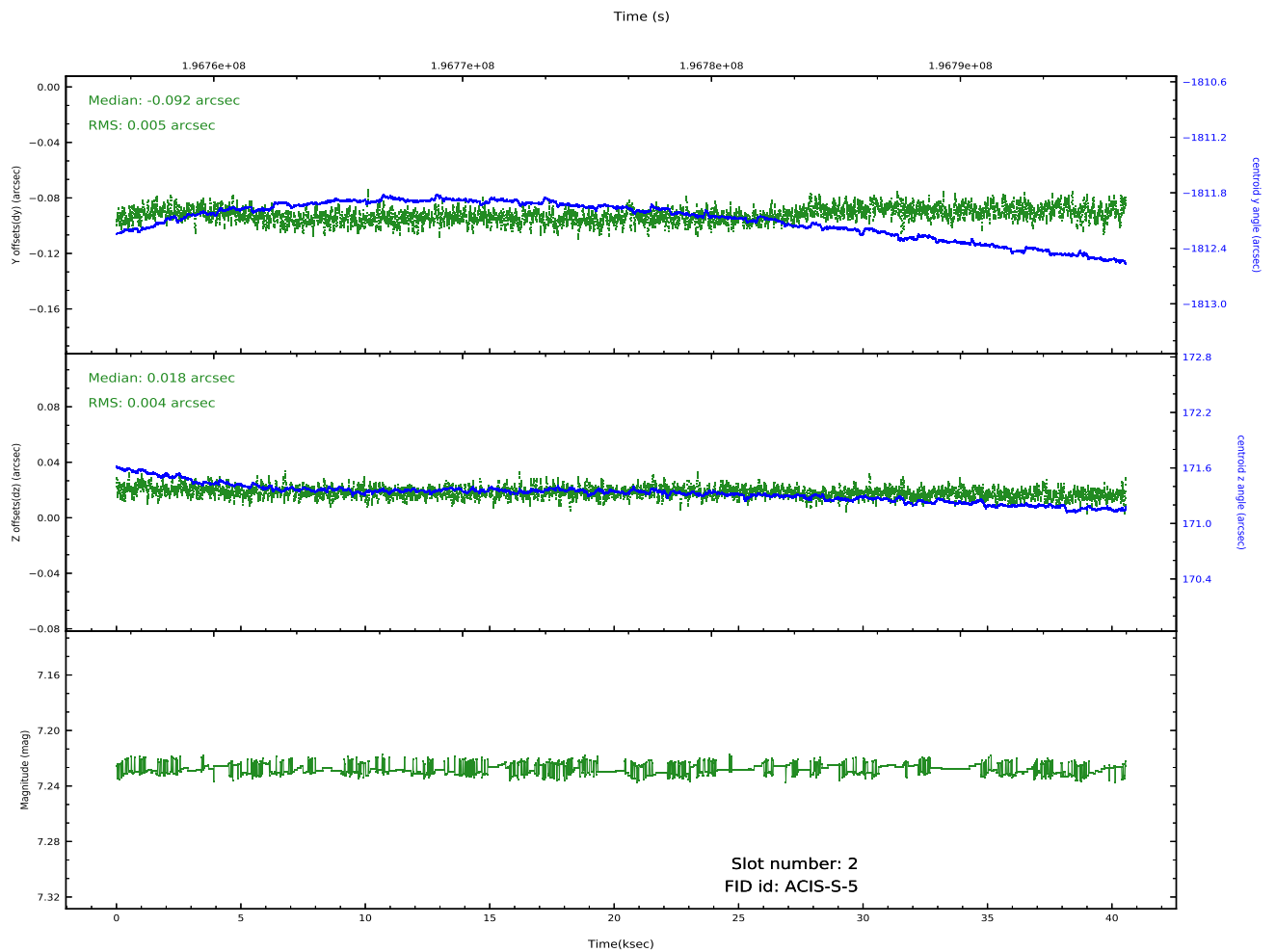
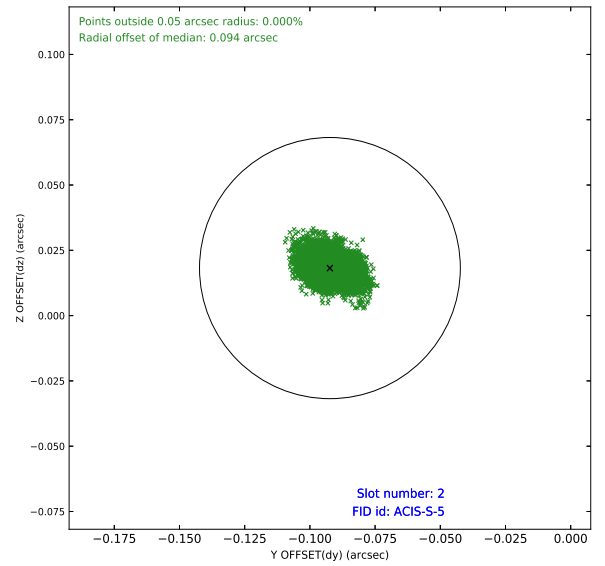
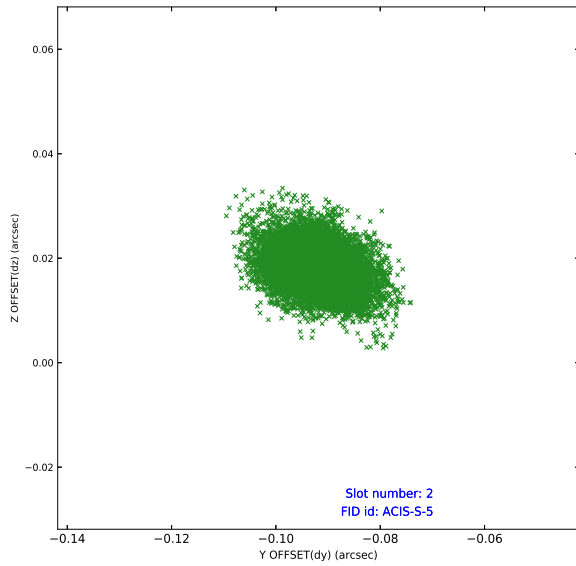
## 2.5.2 Slot 1



Time (s)



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.55

## A.2 Comments

Window constraint met.