

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5684 - L2 Version 4  
Chandra X-Ray Center

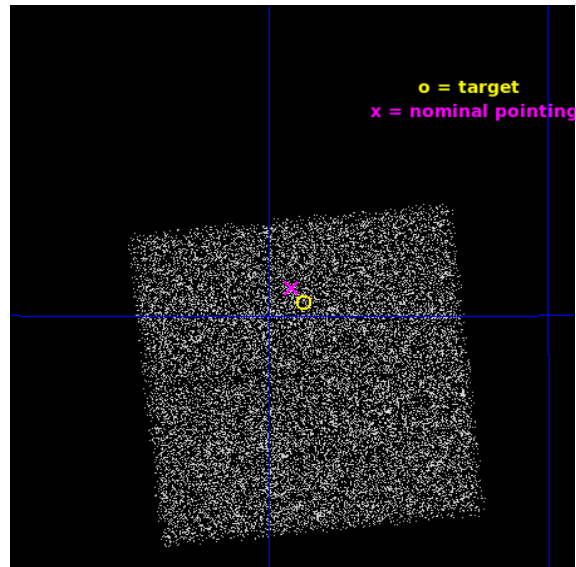
L2 Processing Date : Oct 6 2020

## 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

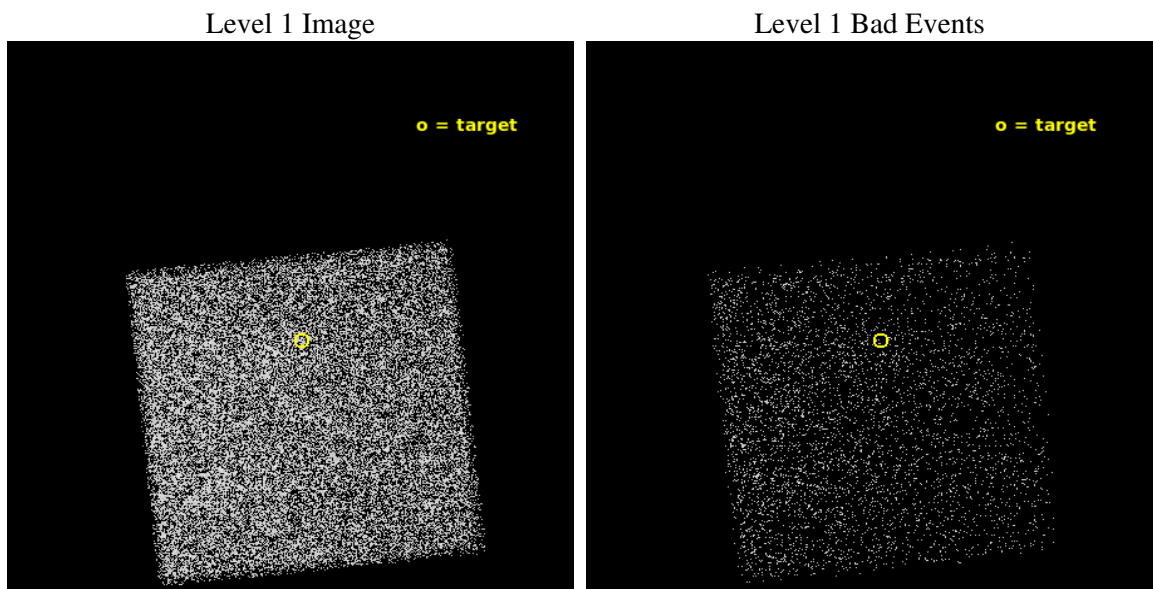
seq_num	701107	Sequence number
obs_id	5684	Observation id
title	Bringing in the Last SHEEP	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	AX J1228.4+1300	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.109167	Observer's specified target RA [deg]
dec_targ	13.006111	Observer's specified target Dec [deg]
ra_nom	187.11444152813	Nominal RA [deg]
dec_nom	13.012614226188	Nominal Dec [deg]
roll_nom	84.108950131127	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5084.2531699538	Sum of GTIs [s]
livetime	5019.8732949462	Livetime [s]
ontime7	5084.2531699538	Sum of GTIs [s]
l2events	21676	Number of level 2 events



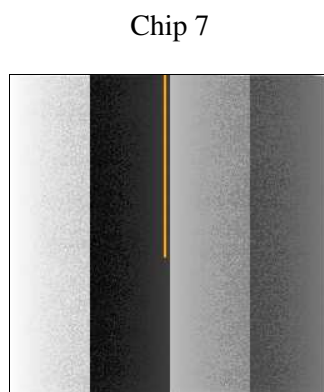
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	5084.2531699538	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	5084.2531699538	Sum of GTIs [s]
date	2020-10-06T16:48:04	Date and time of file creation	l1events	50208	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	50208
rejected events	27931
rejected %	55%

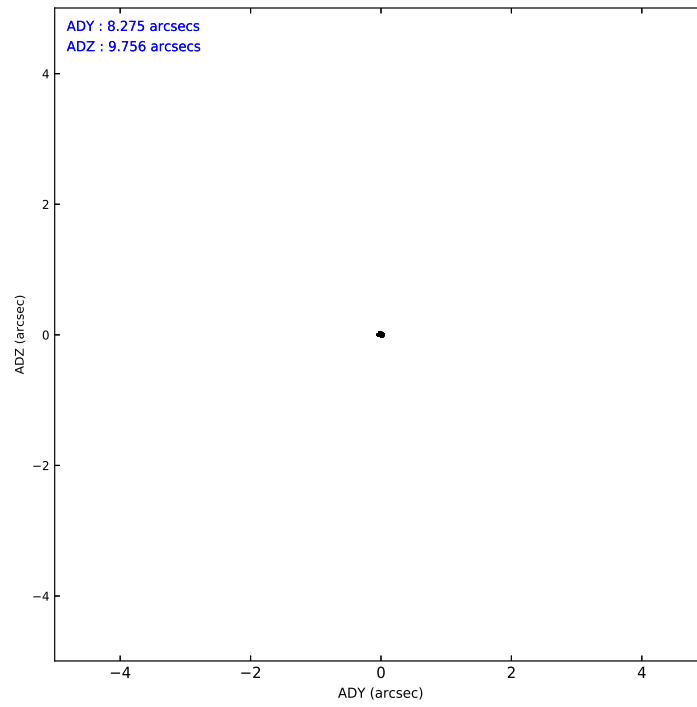
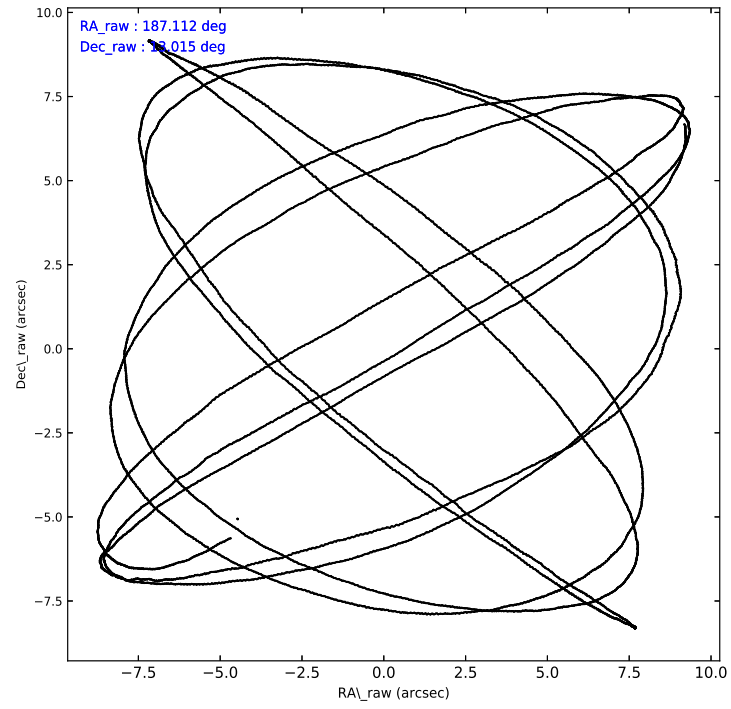
	<b>ccd 7</b>
grade 0 events	2470
	4%
grade 1 events	56
	0%
grade 2 events	4555
	9%
grade 3 events	1999
	3%
grade 4 events	2001
	3%
grade 5 events	4668
	9%
grade 6 events	11267
	22%
grade 7 events	23192
	46%

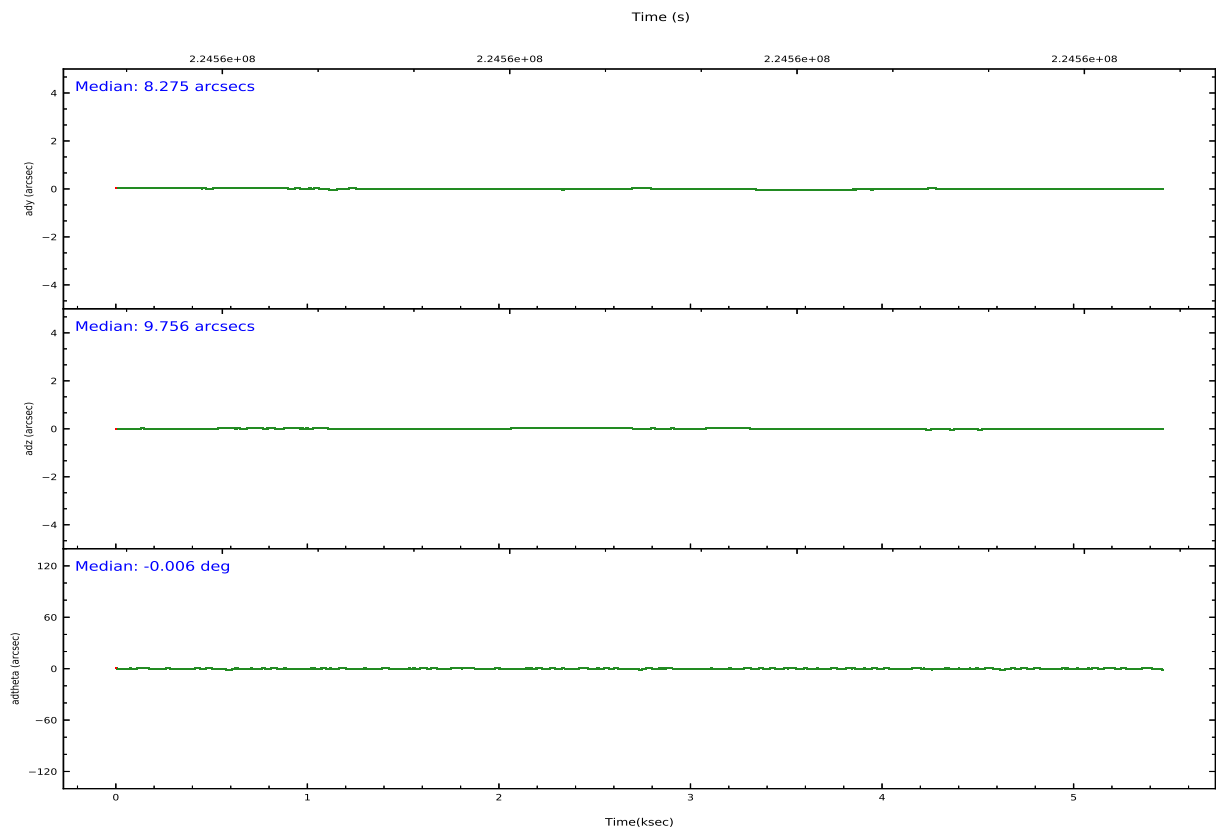
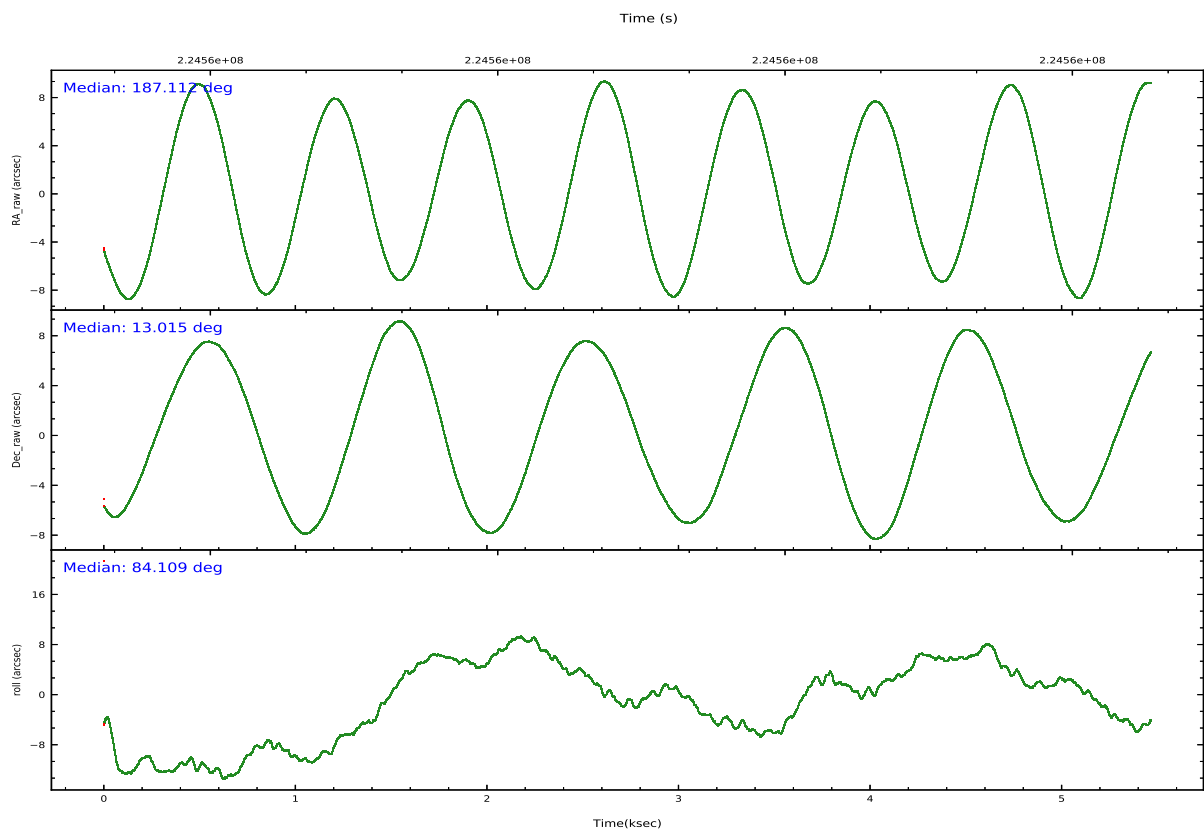


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-7	ACIS-7	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	187.123655	187.11444152813	Subarray requested	NONE	NONE
[deg] Pointing Dec	12.990704	13.012614226188	Alternating exposures requested	N	N
[deg] Pointing Roll	83.949883	84.108950131127	[s] Primary exposure time	0.000000	3.2
[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)	224555411.184000	224554570.75087			
Observation start date	2005-02-12T00:29:07	2005-02-12T00:16:10			
[s] Observation end time (MET)	224560411.184000	224561067.20117			
Observation end date	2005-02-12T01:52:27	2005-02-12T02:04:27			
Read mode	TIMED	TIMED			

## 2.3 Aspect



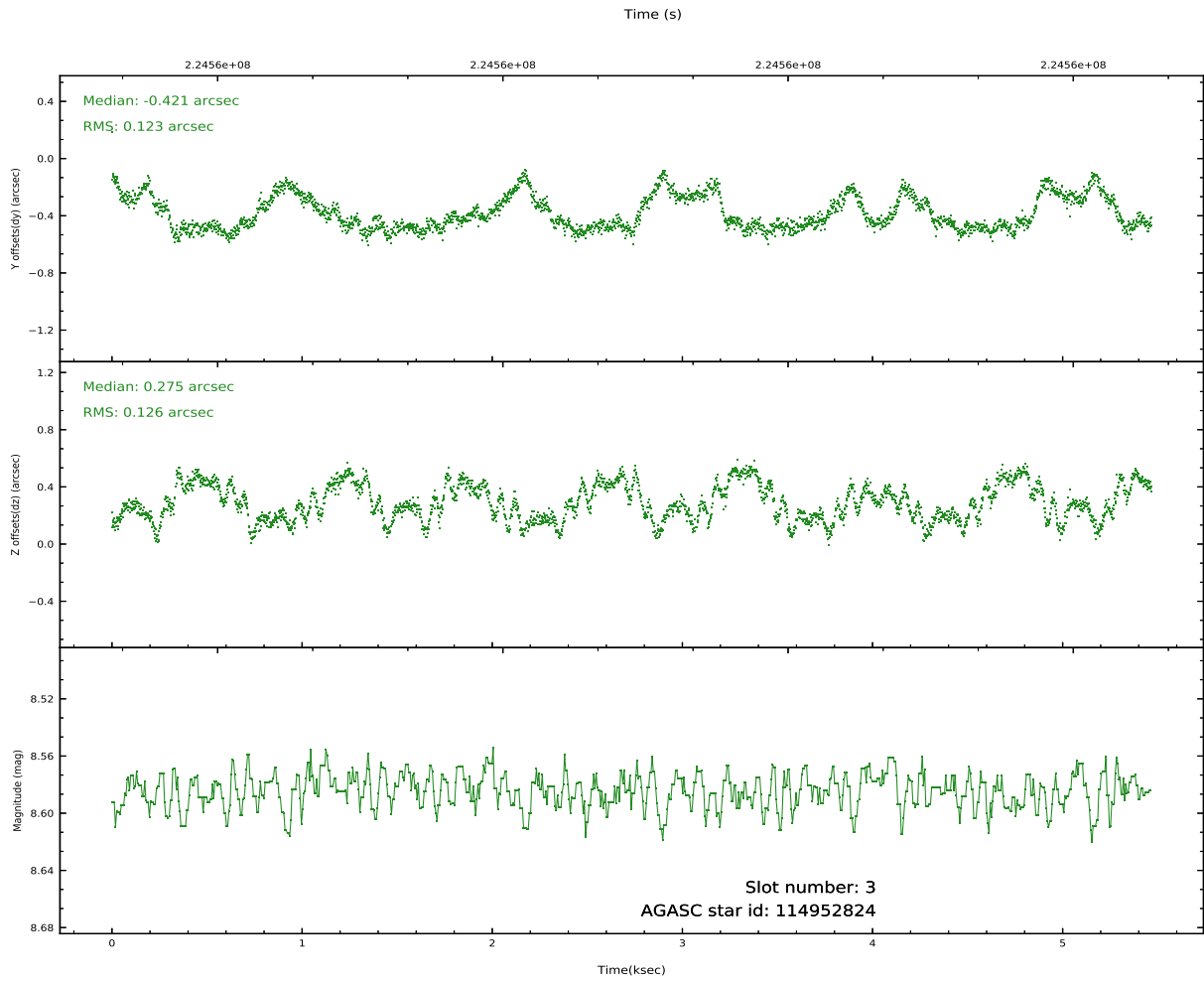
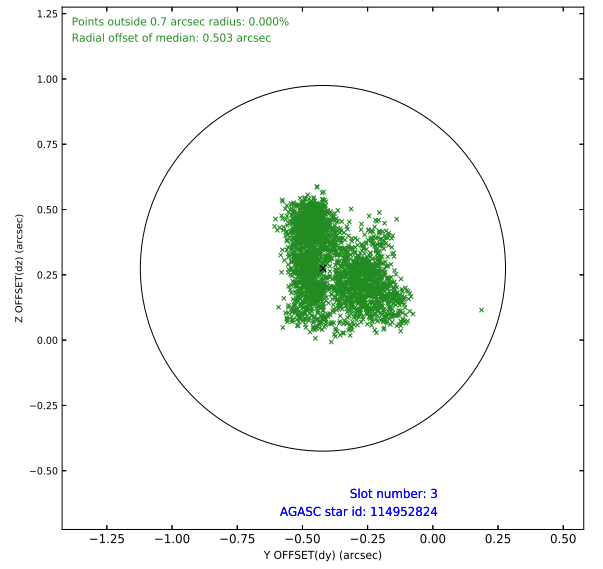
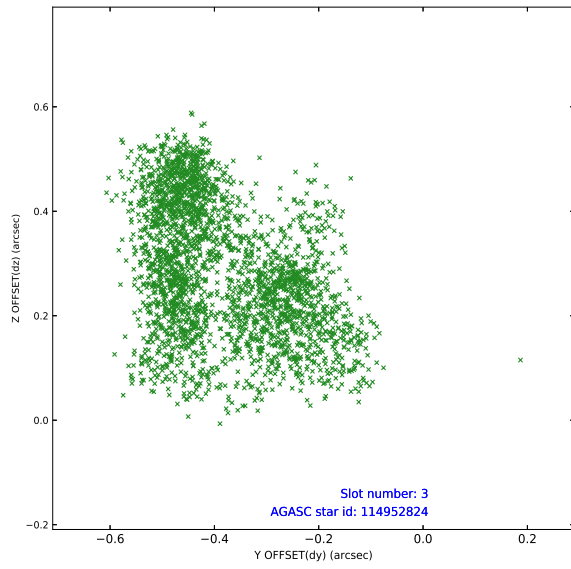


Slot Statistics

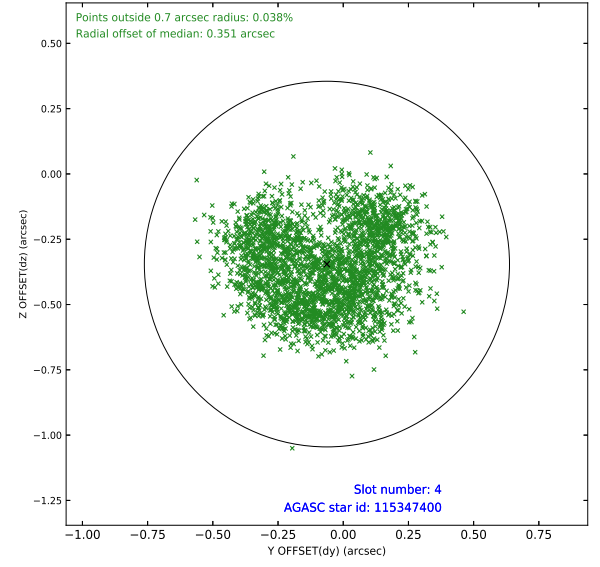
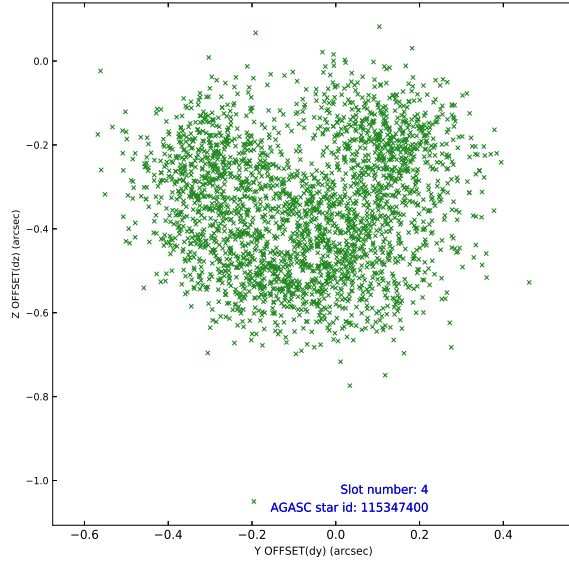
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.11	1334	1.000	-0.072	-0.076	0.007	0.011	0.000000	0.000000	-761.06	-1731
1	FID		ACIS-S-4	7.21	1334	1.000	0.192	0.055	0.005	0.009	0.000000	0.000000	2151.90	176
2	FID		ACIS-S-5	7.24	1334	1.000	-0.152	0.030	0.007	0.011	0.000000	0.000000	-1812.65	171
3	GUIDE	used	114952824	8.58	2668	1.000	-0.421	0.275	0.194	0.282	187.703904	12.486727	-1586.58	-2219
4	GUIDE	used	115347400	10.20	2662	1.000	-0.063	-0.345	0.271	0.378	186.994146	13.445598	1580.56	622
5	GUIDE	used	115347480	9.35	2662	1.000	-0.313	-0.181	0.128	0.193	186.668576	13.310410	978.68	1707
6	GUIDE	used	115348424	9.51	2667	1.000	-0.134	0.009	0.126	0.229	187.199498	13.087929	376.90	-227
7	GUIDE	used	115348632	10.58	2657	1.000	0.926	0.247	0.165	0.272	187.536861	13.233195	1023.37	-1347

## 2.4 Star Slots

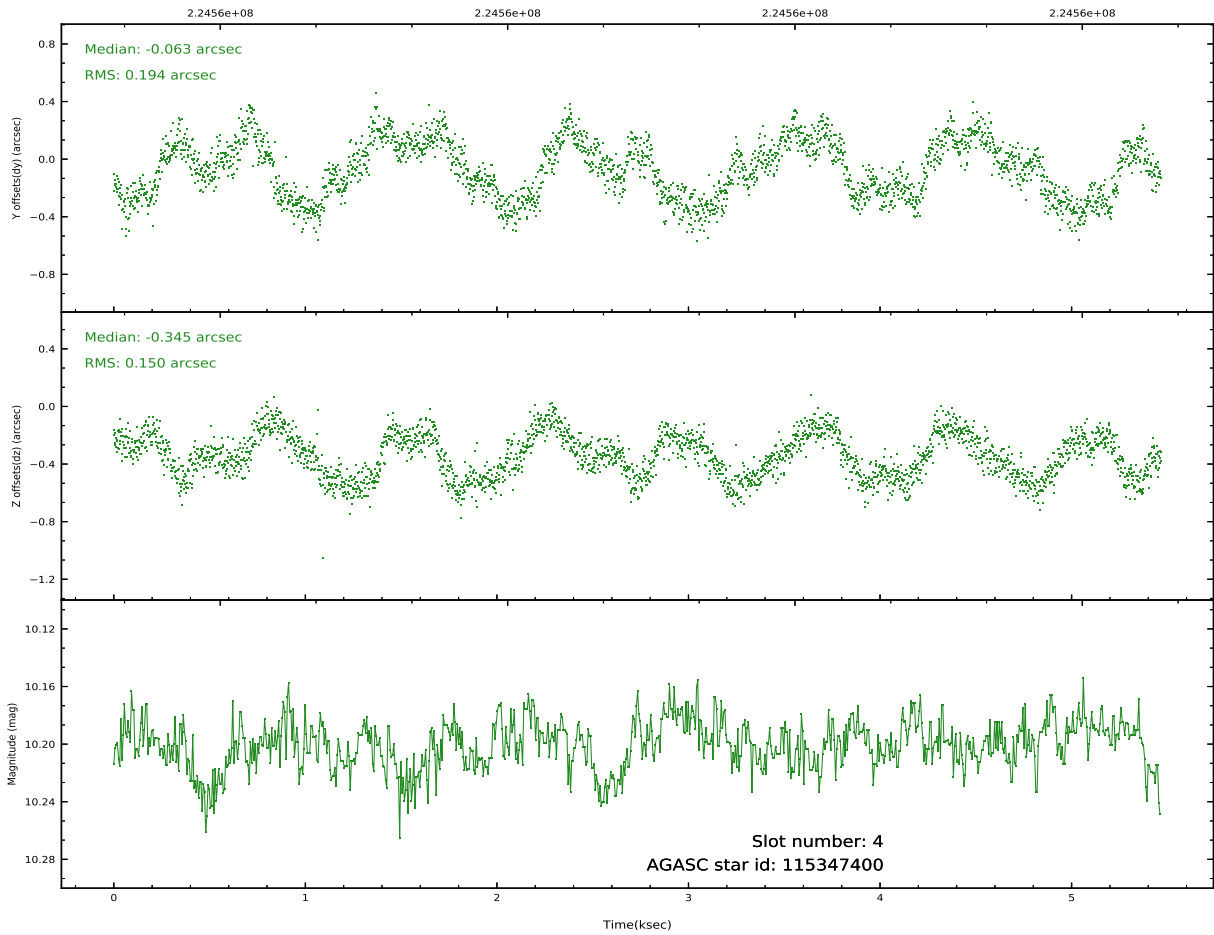
### 2.4.1 Slot 3



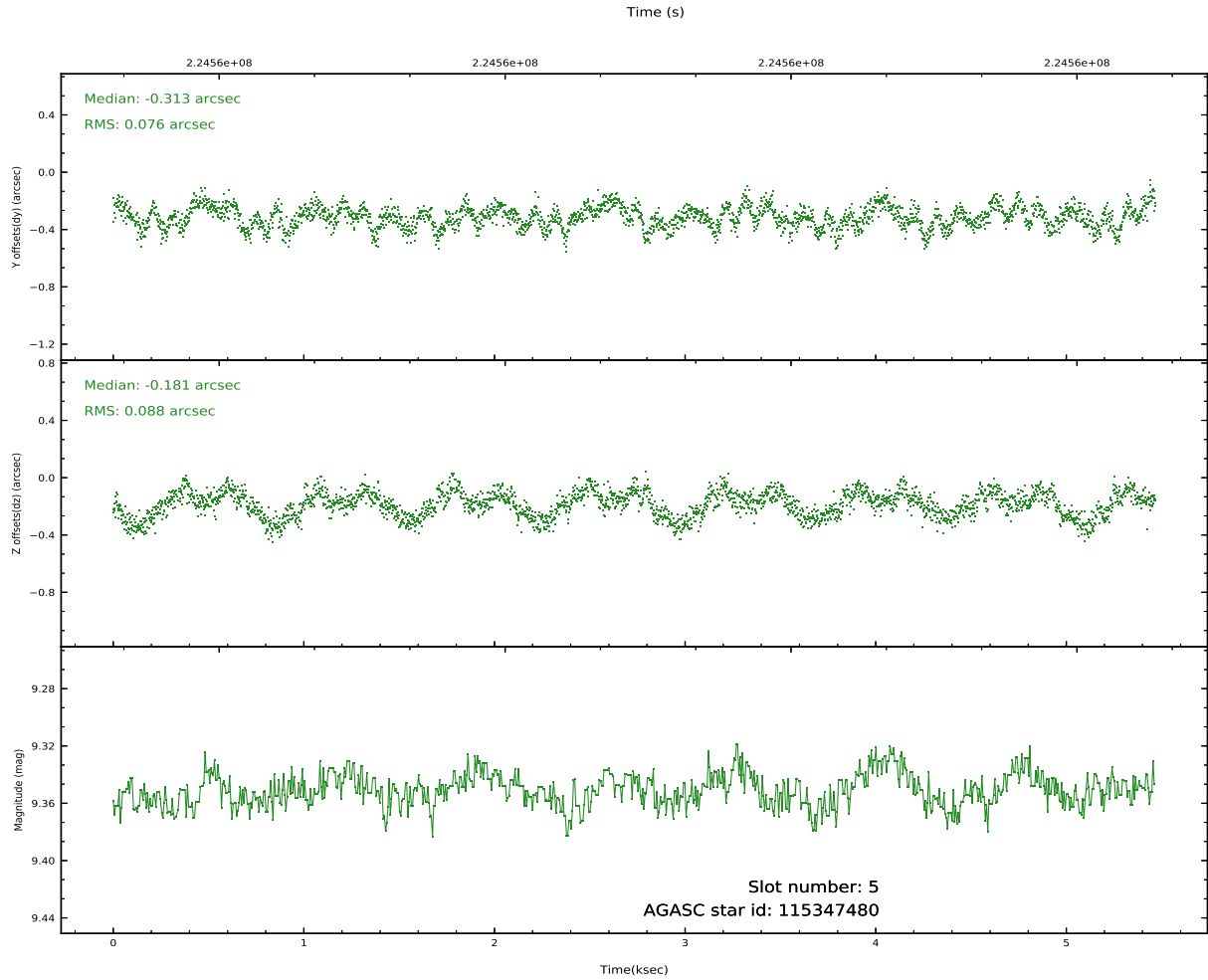
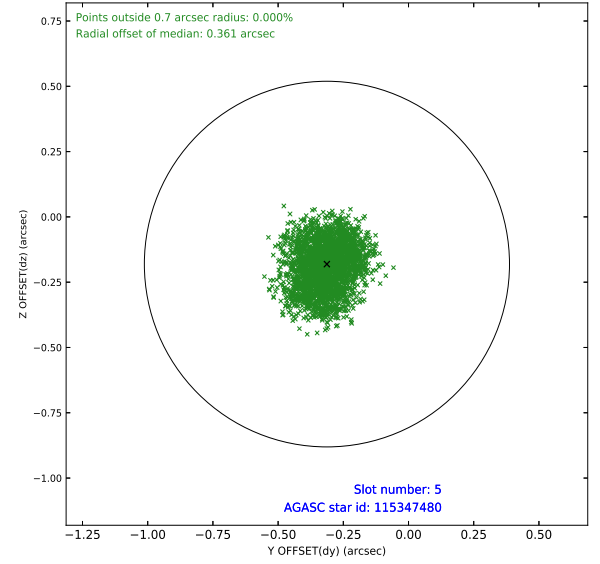
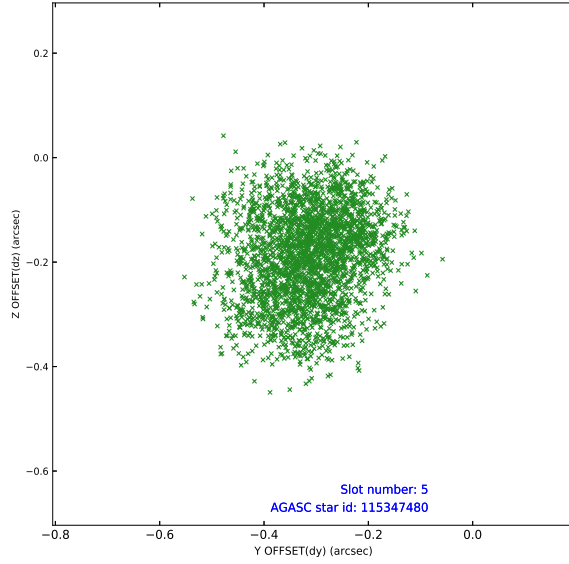
## 2.4.2 Slot 4



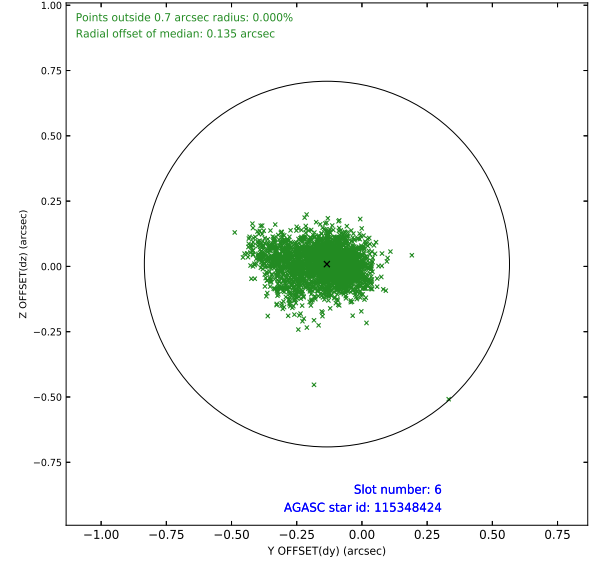
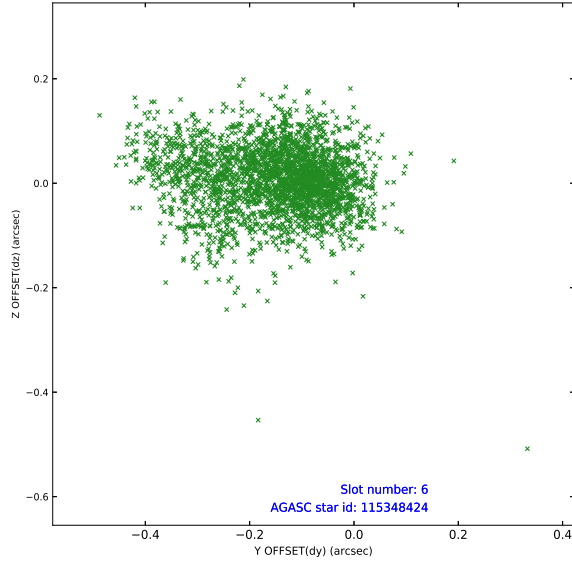
Time (s)



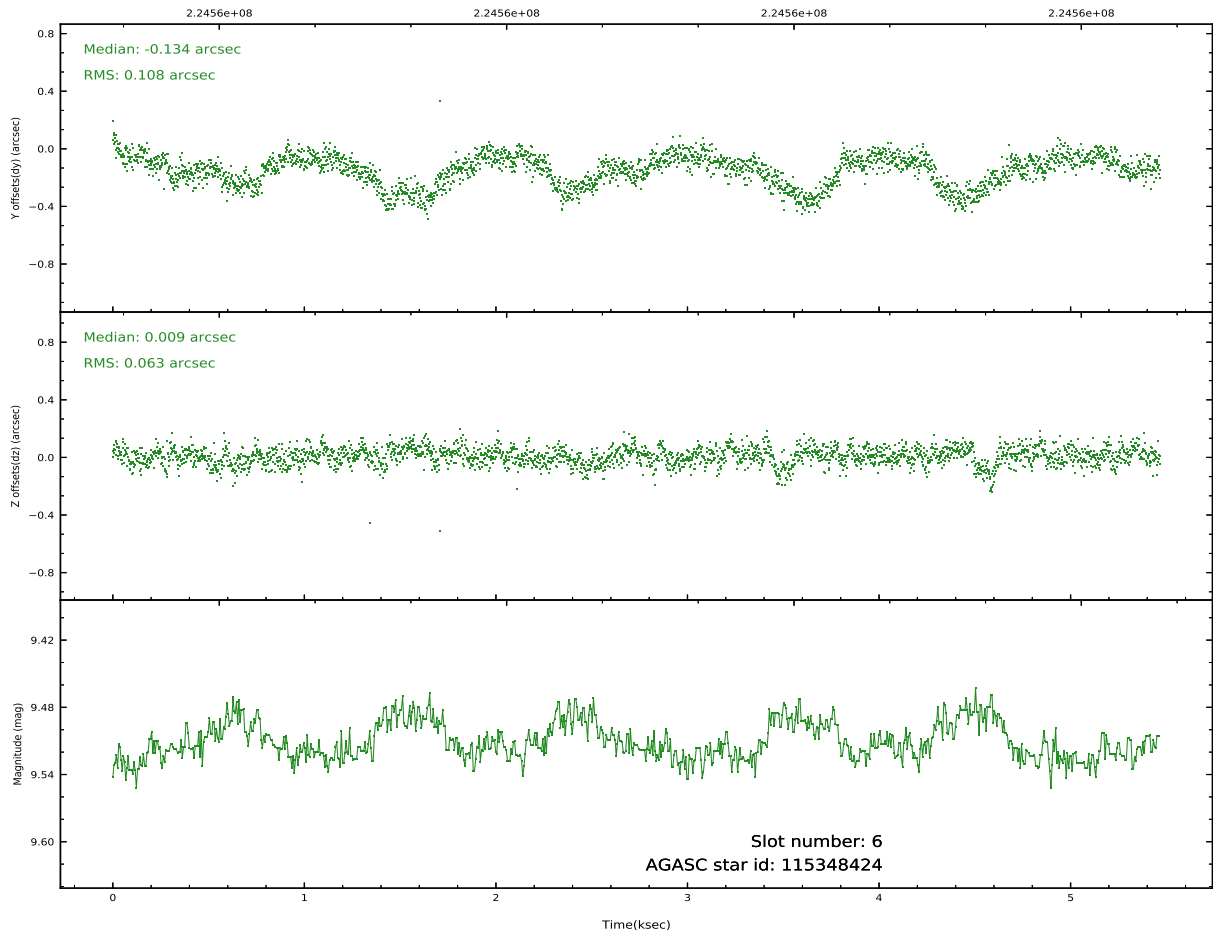
### 2.4.3 Slot 5



## 2.4.4 Slot 6

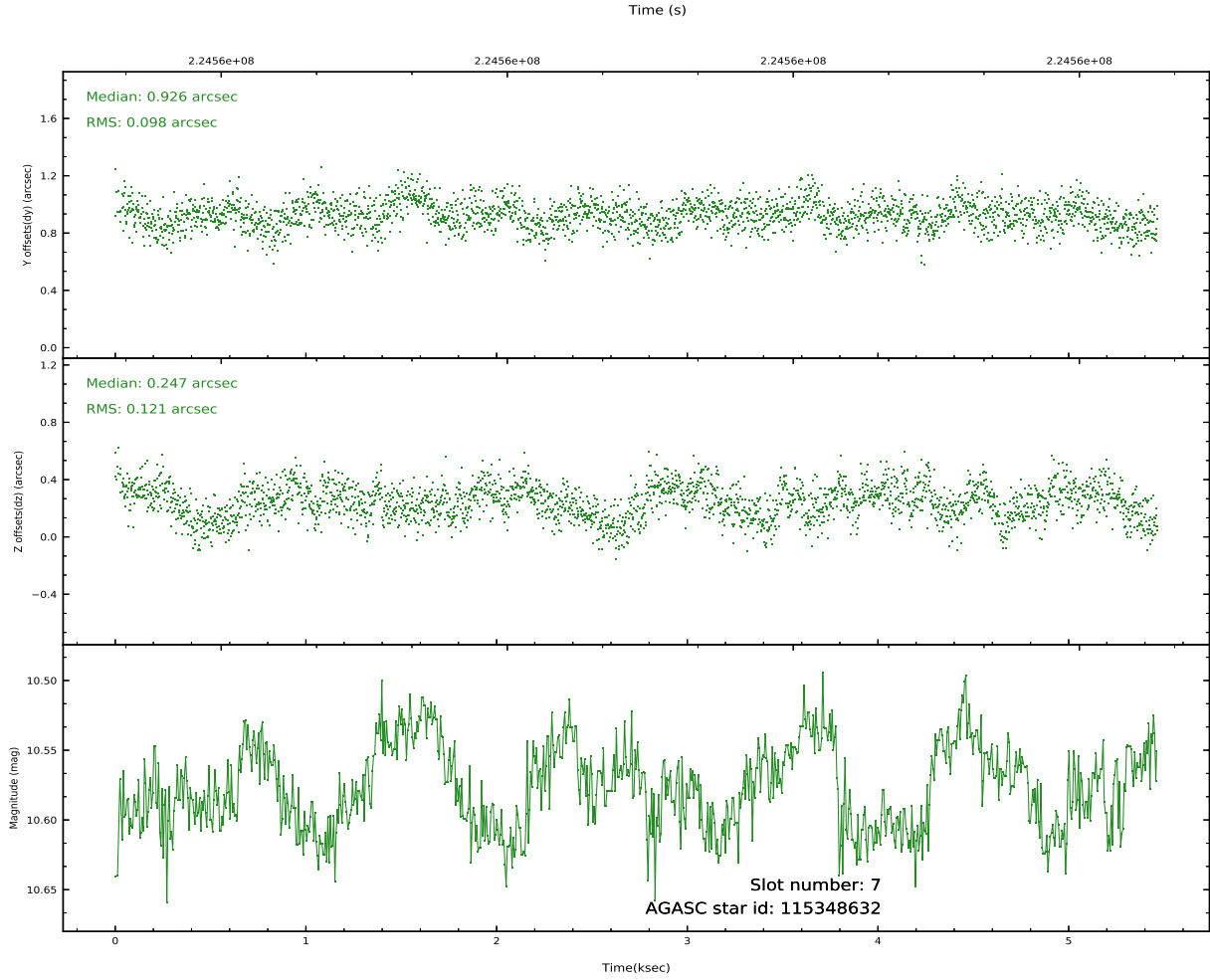
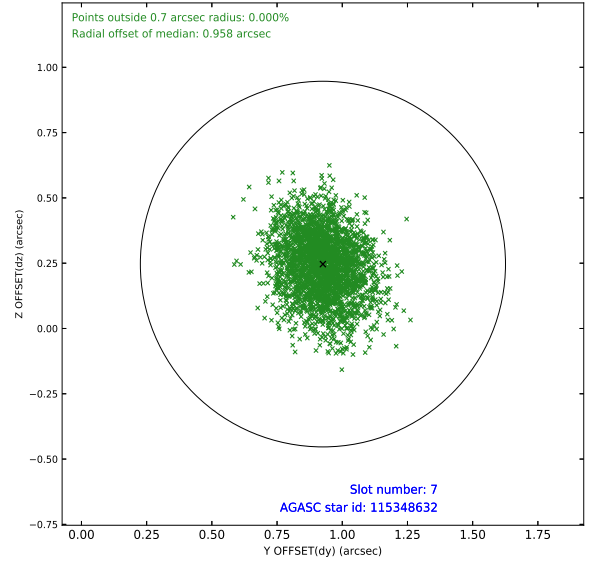
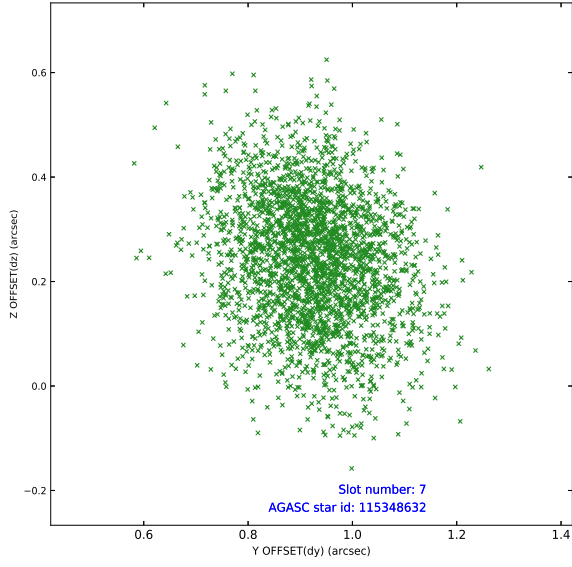


Time (s)



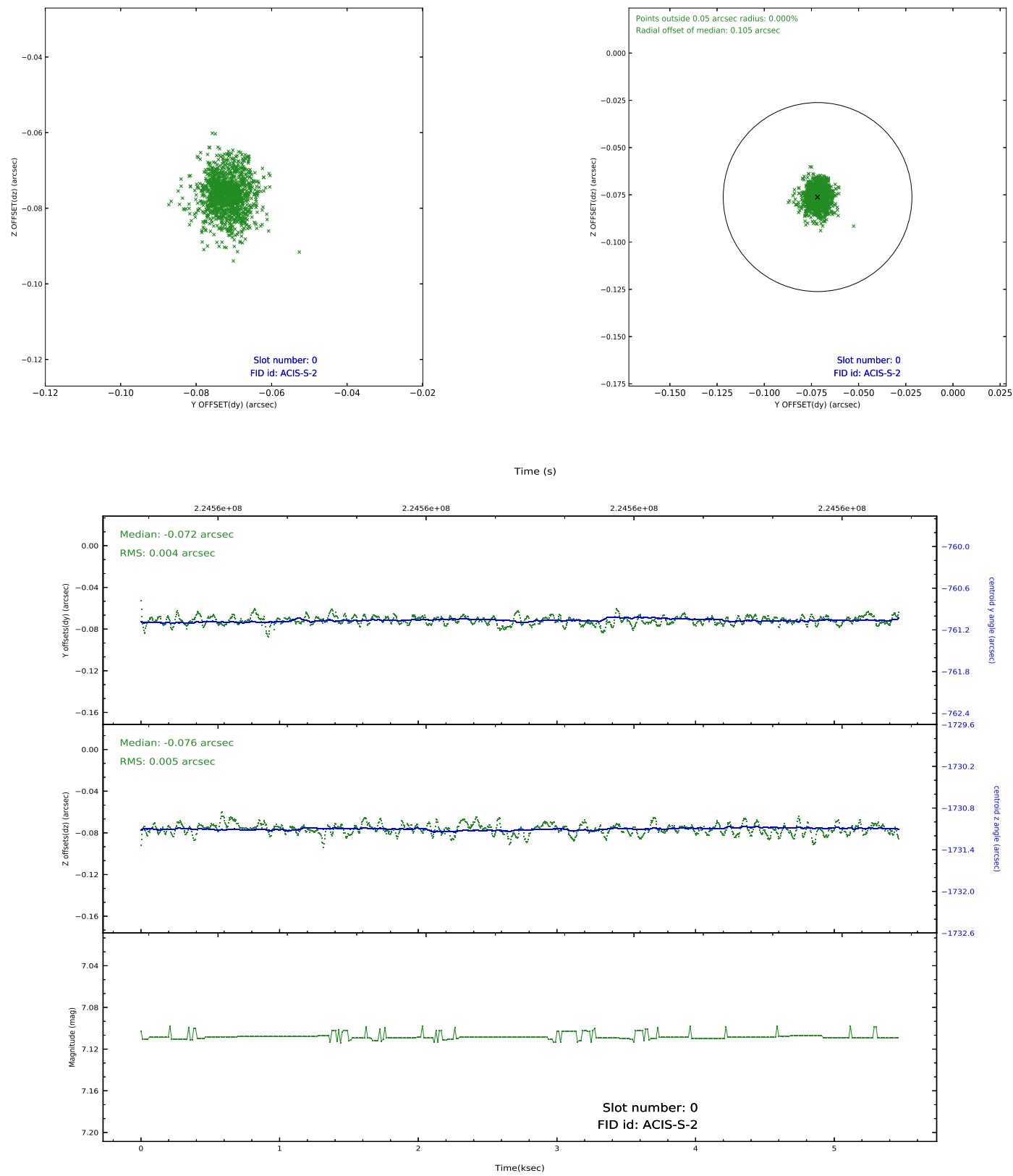


## 2.4.5 Slot 7

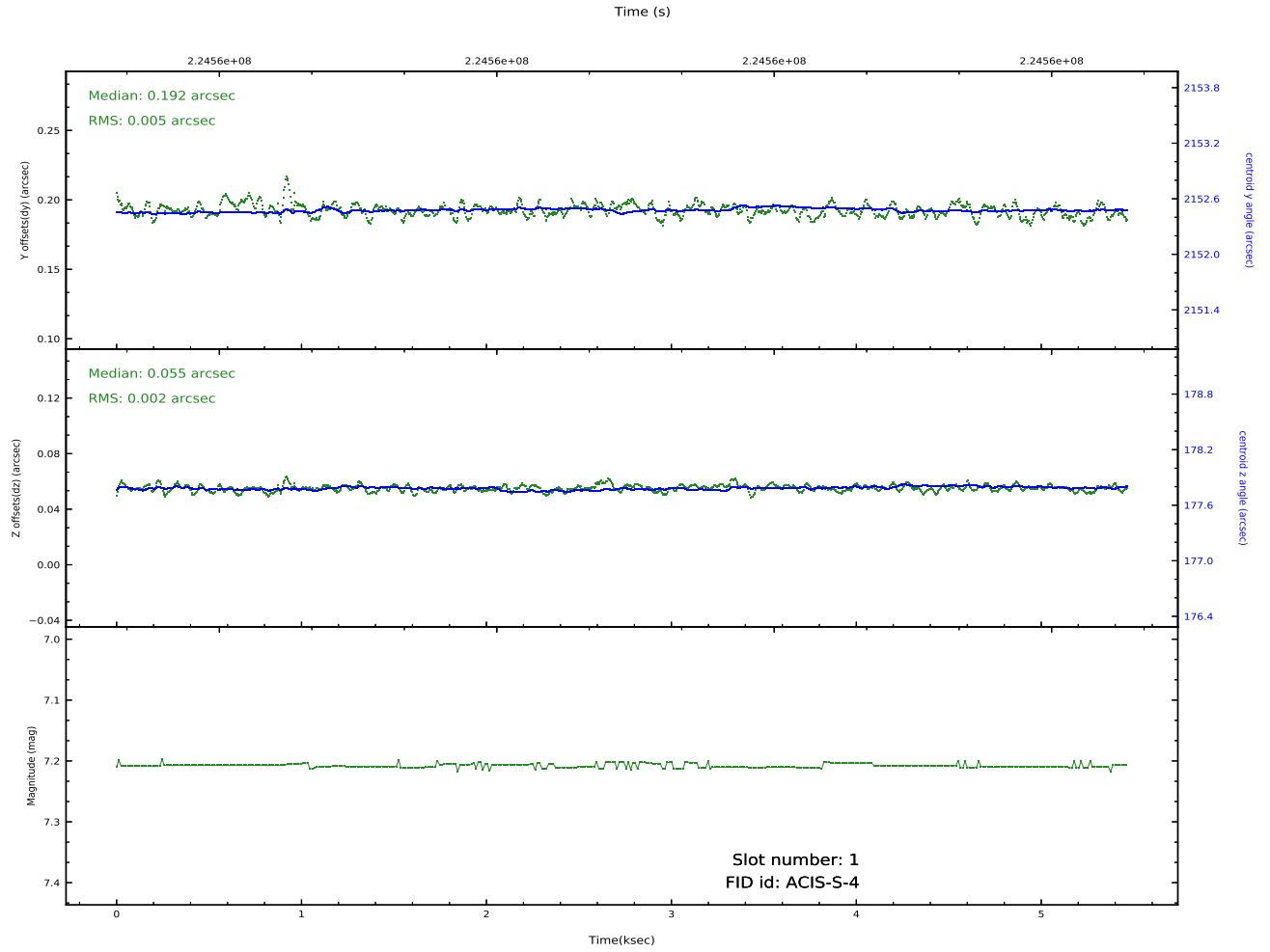
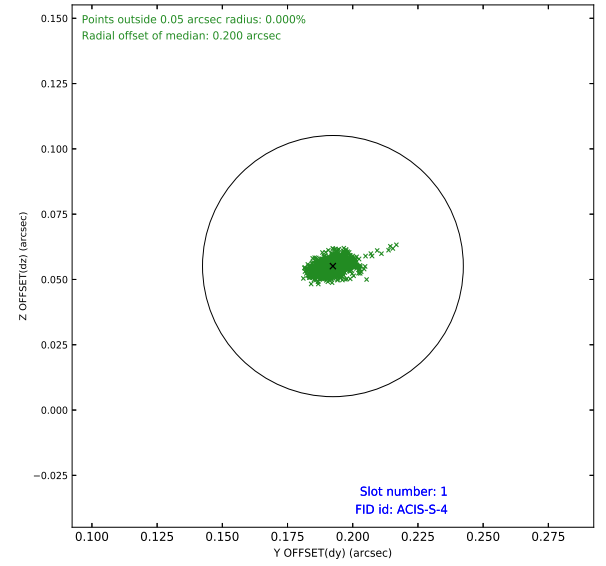
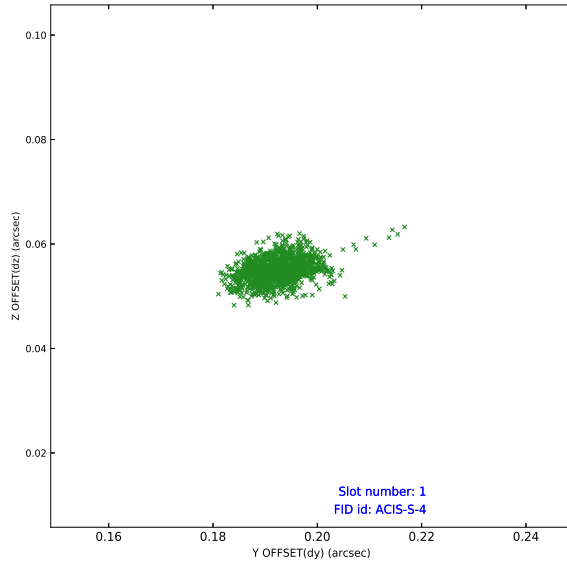


# 2.5 FID Slots

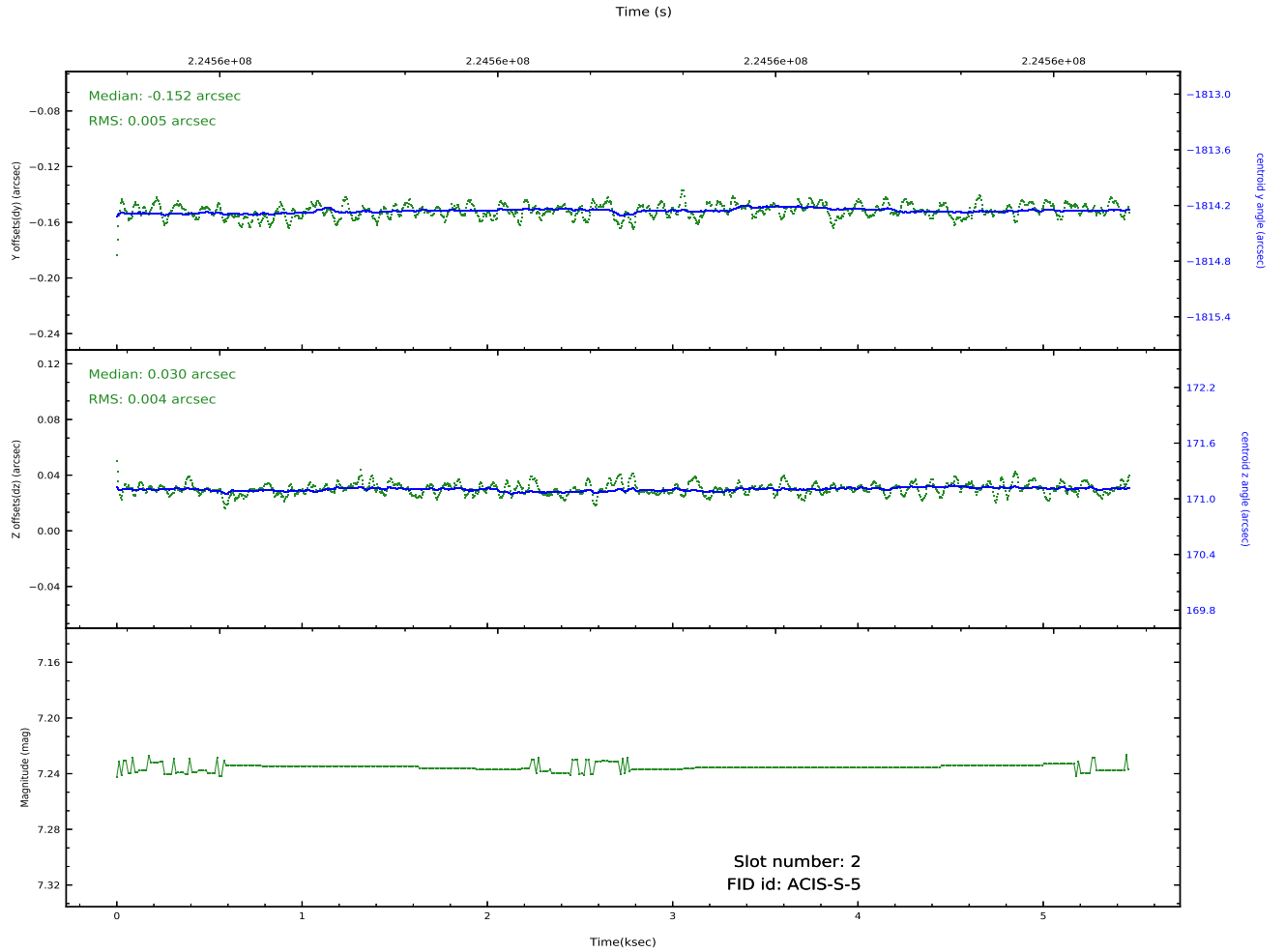
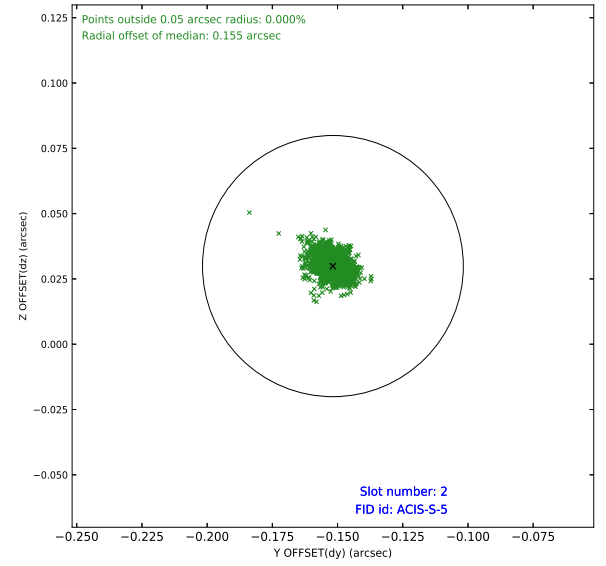
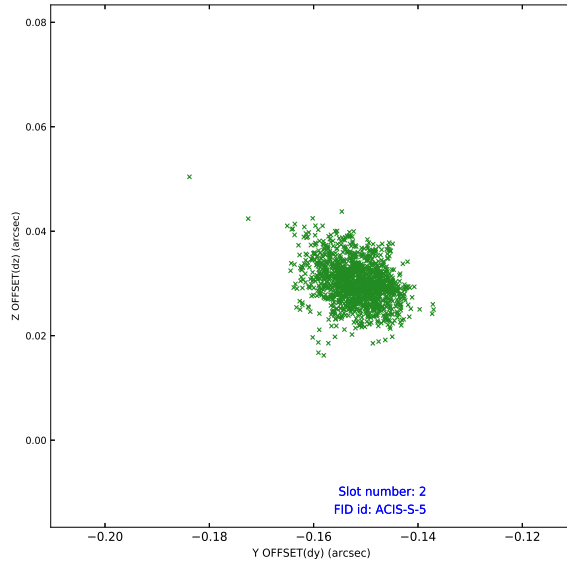
## 2.5.1 Slot 0



## 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)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.084799

## A.2 Comments

Joint Proposal: NOAO