

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5189 - L2 Version 4  
Chandra X-Ray Center

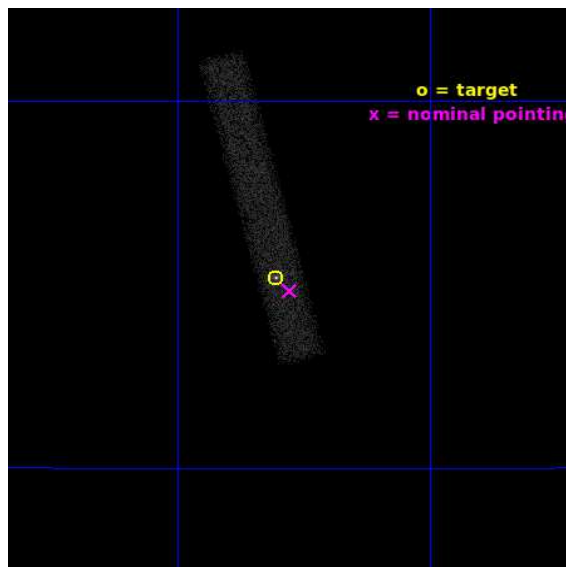
L2 Processing Date : Oct 5 2020

## 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	300142	Sequence number
obs_id	5189	Observation id
title	FS Aur - A new class of cataclysmic variables	Proposal title
observer	Dr Gagik Tovmassian	Principal investigator
object	FS Aur	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	86.951417	Observer's specified target RA [deg]
dec_targ	28.586417	Observer's specified target Dec [deg]
ra_nom	86.944383287243	Nominal RA [deg]
dec_nom	28.580484574112	Nominal Dec [deg]
roll_nom	255.48975848256	Nominal Roll [deg]
revision	4	Processing version of data
ontime	25183.200375229	Sum of GTIs [s]
livetime	22839.833462025	Livetime [s]
ontime7	25183.200375229	Sum of GTIs [s]
l2events	22474	Number of level 2 events

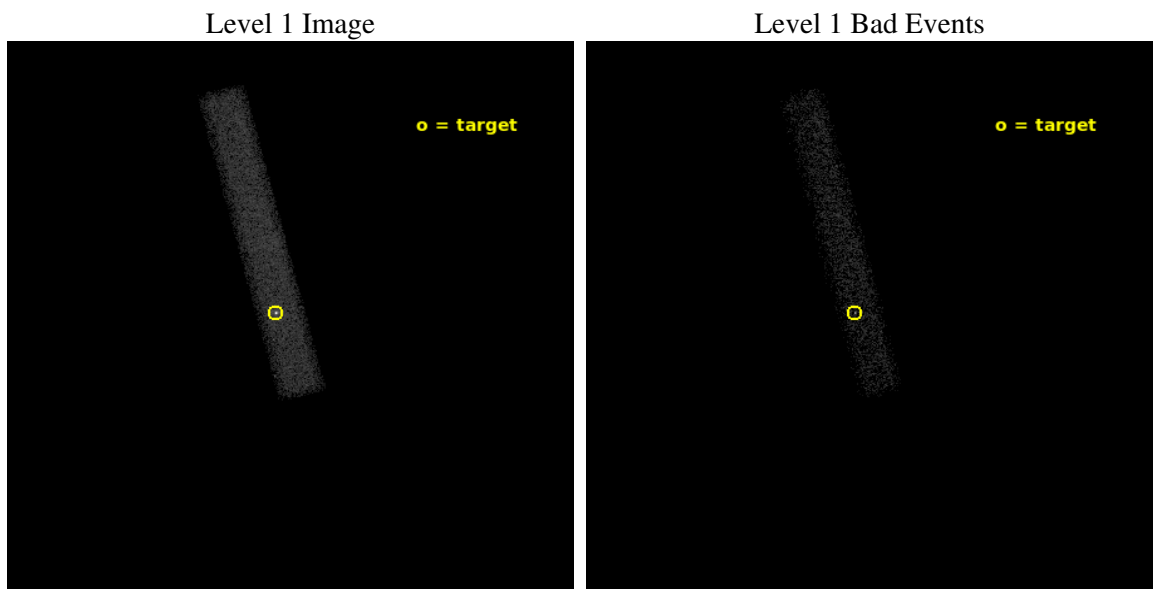




## 2 OBI

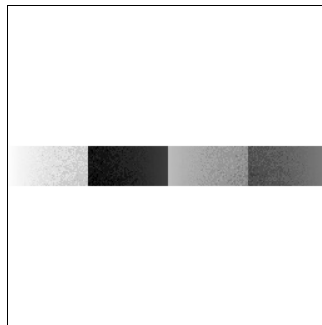
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	25183.200375229	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	25183.200375229	Sum of GTIs [s]
date	2020-10-06T02:43:00	Date and time of file creation	l1events	39995	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

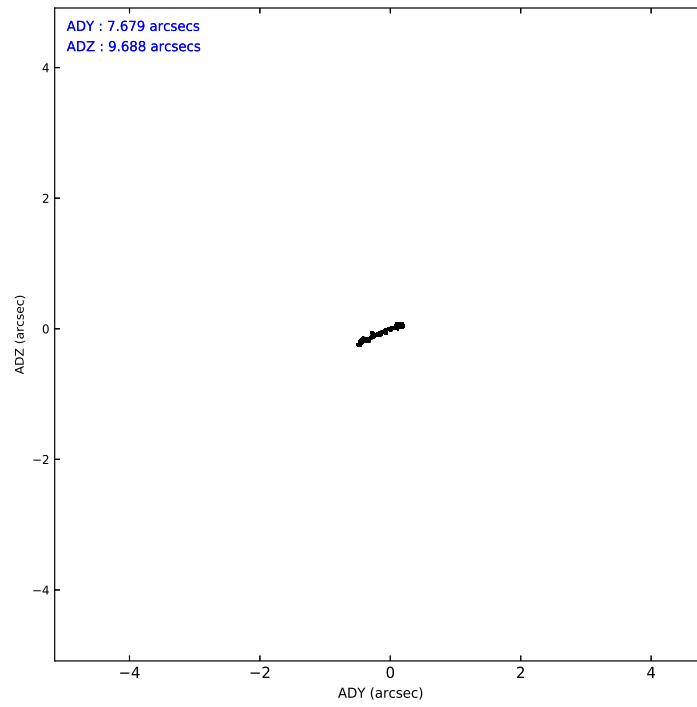
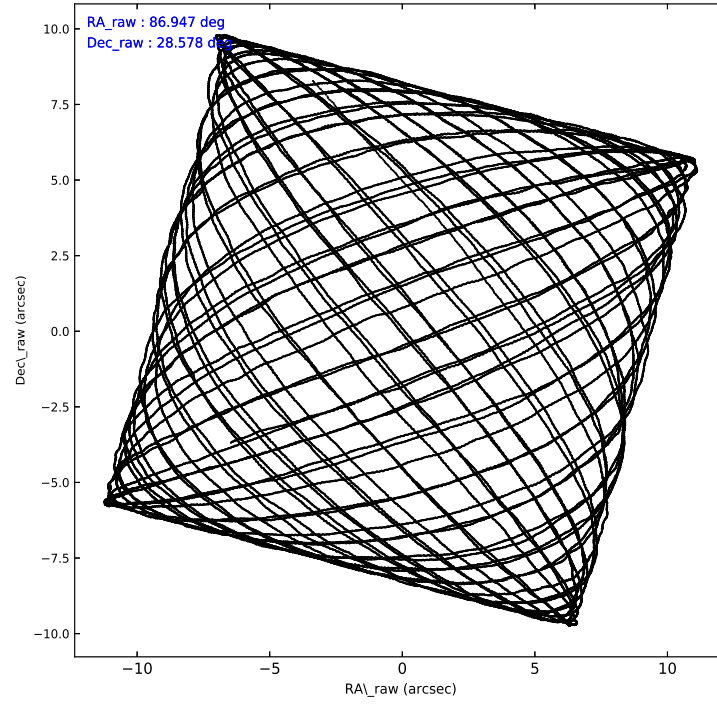
	<b>ccd 7</b>
level 1 events	39995
rejected events	16836
rejected %	42%

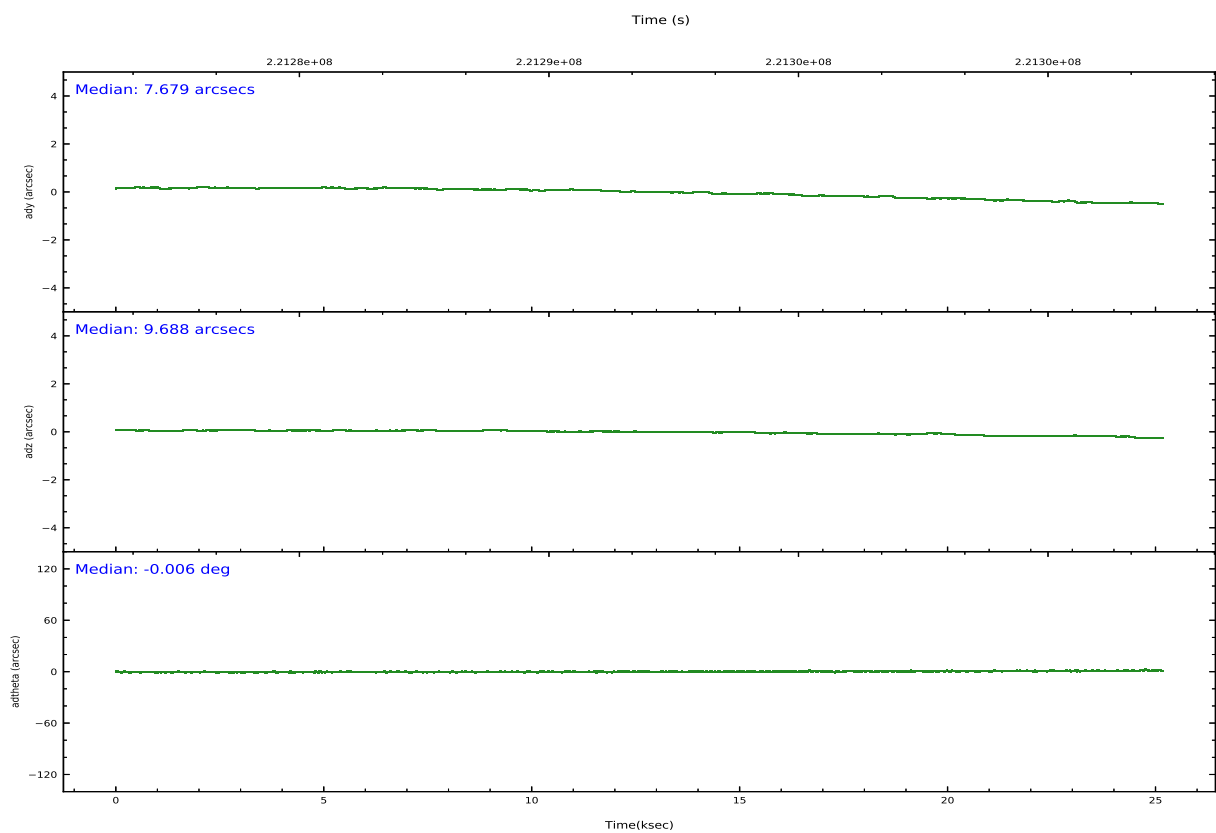
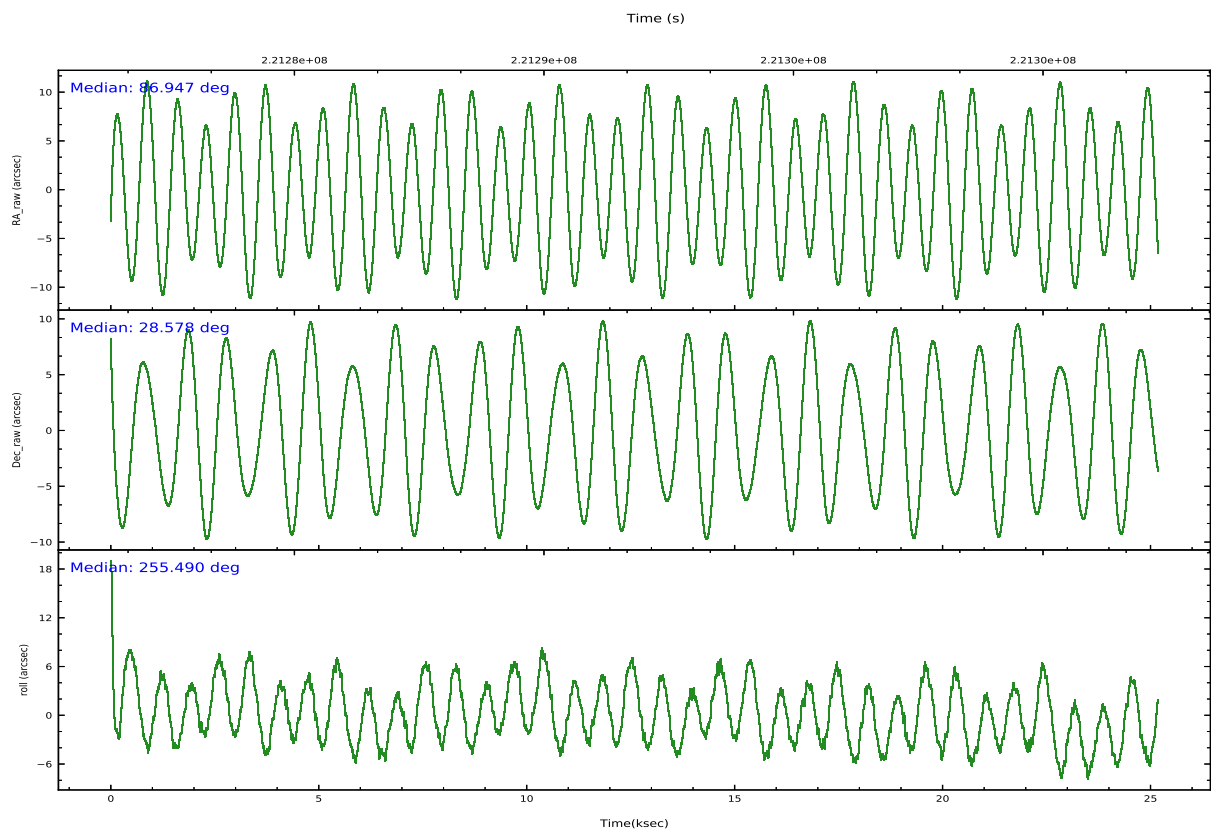
	<b>ccd 7</b>
grade 0 events	4230
	10%
grade 1 events	78
	0%
grade 2 events	5090
	12%
grade 3 events	2955
	7%
grade 4 events	2898
	7%
grade 5 events	3029
	7%
grade 6 events	8102
	20%
grade 7 events	13613
	34%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	86.938151	86.944383287243	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	28.603766	28.580484574112	Subarray start row	449	449
[deg] Pointing Roll	255.334897	255.48975848256	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	221279769.184000	221279076.50297			
Observation start date	2005-01-05T02:35:05	2005-01-05T02:24:36			
[s] Observation end time (MET)	221304769.184000	221305868.97918			
Observation end date	2005-01-05T09:31:45	2005-01-05T09:51:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect



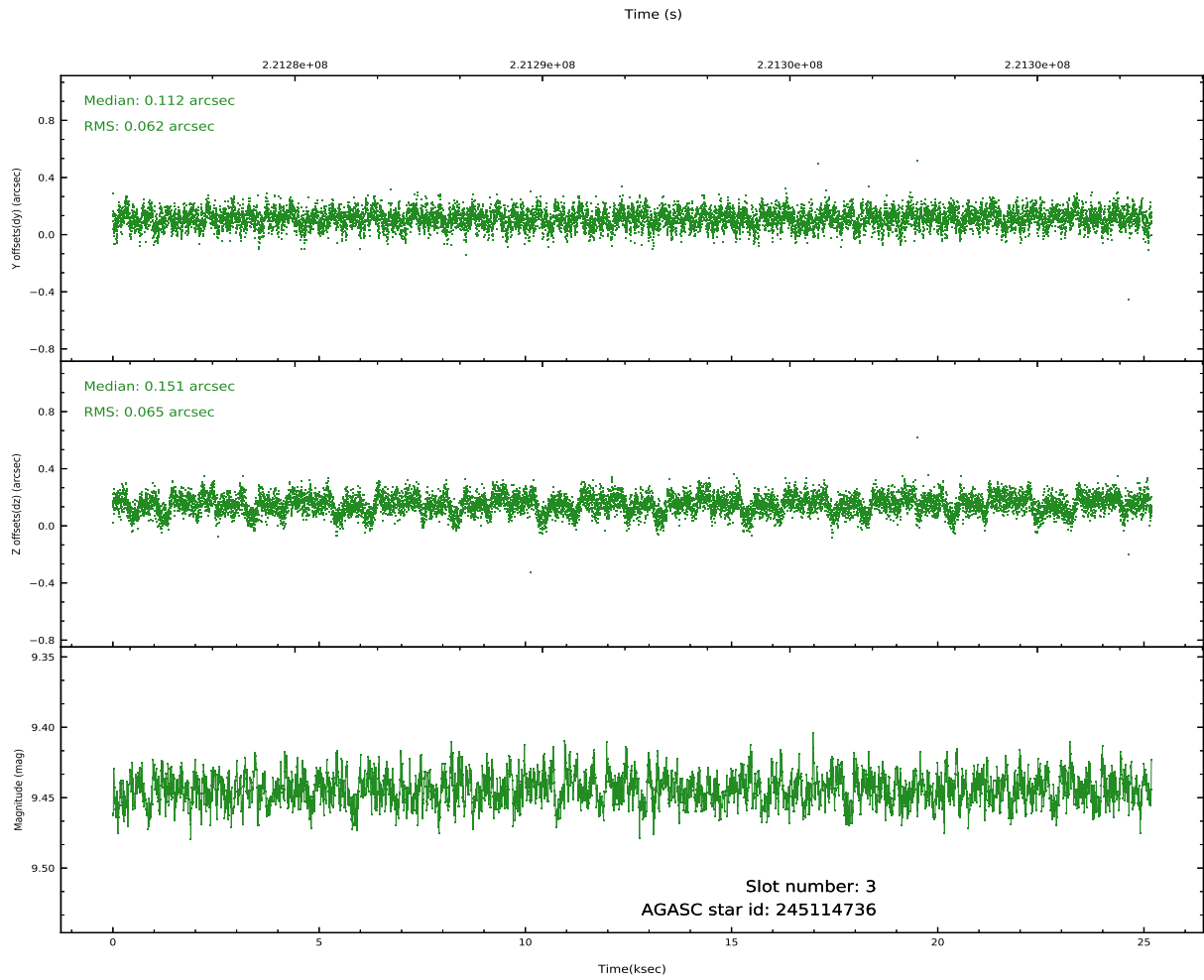
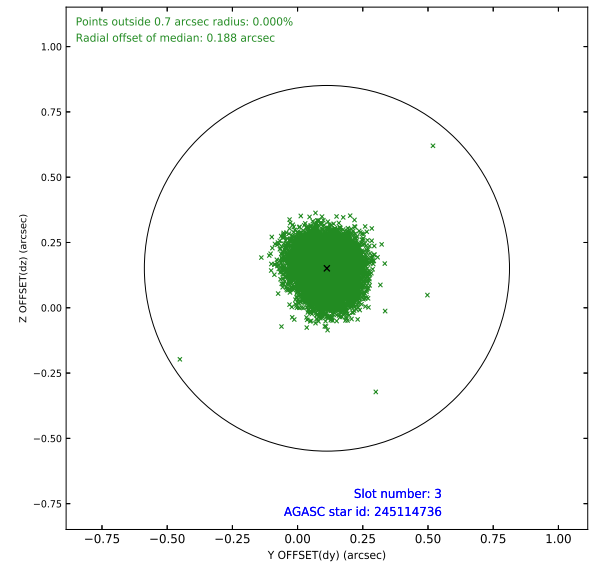
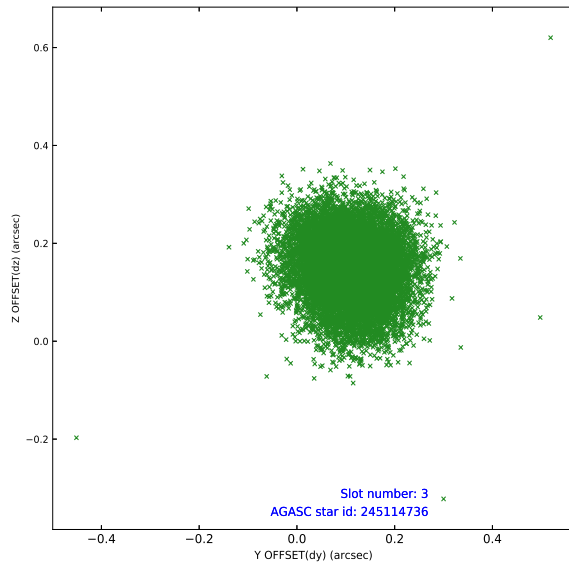


Slot Statistics

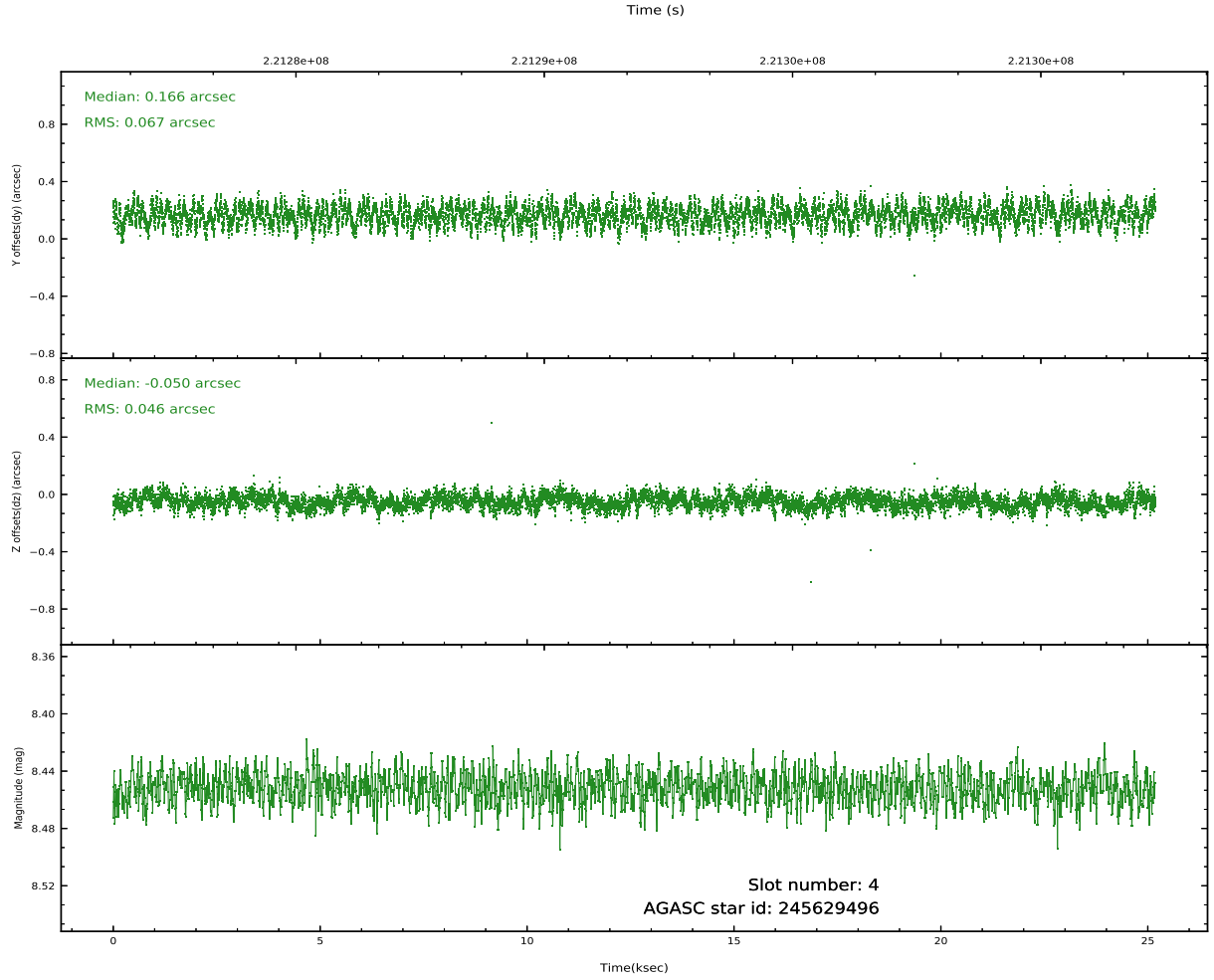
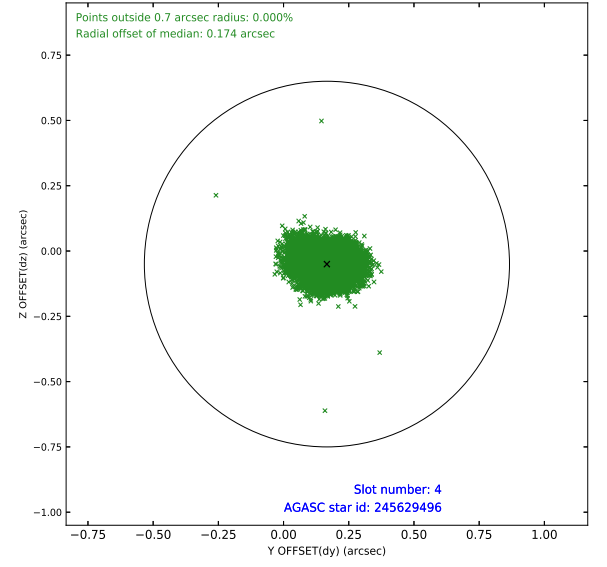
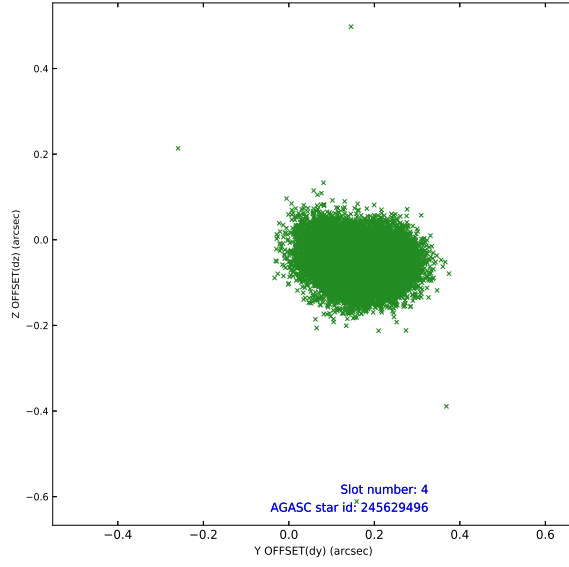
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	6143	1.000	-0.070	-0.070	0.009	0.015	0.000000	0.000000	-760.40	-1730
1	FID		ACIS-S-4	7.20	6142	1.000	0.161	0.053	0.007	0.012	0.000000	0.000000	2152.98	177
2	FID		ACIS-S-5	7.23	6143	1.000	-0.121	0.027	0.009	0.014	0.000000	0.000000	-1813.21	171
3	GUIDE	used	245114736	9.44	12277	1.000	0.112	0.151	0.095	0.153	87.359066	27.978928	1835.37	1864
4	GUIDE	used	245629496	8.45	12283	1.000	0.166	-0.050	0.087	0.135	86.245893	28.194524	1975.95	-1753
5	GUIDE	used	245630128	7.43	12285	1.000	-0.240	-0.086	0.063	0.108	86.382366	29.298520	-1981.59	-2322
6	GUIDE	used	245632760	9.01	12215	1.000	0.040	0.044	0.091	0.142	87.257604	28.347720	634.24	1212
7	GUIDE	used	245636176	8.44	12280	1.000	-0.075	-0.055	0.066	0.107	87.223532	29.136111	-2082.04	382

## 2.4 Star Slots

### 2.4.1 Slot 3

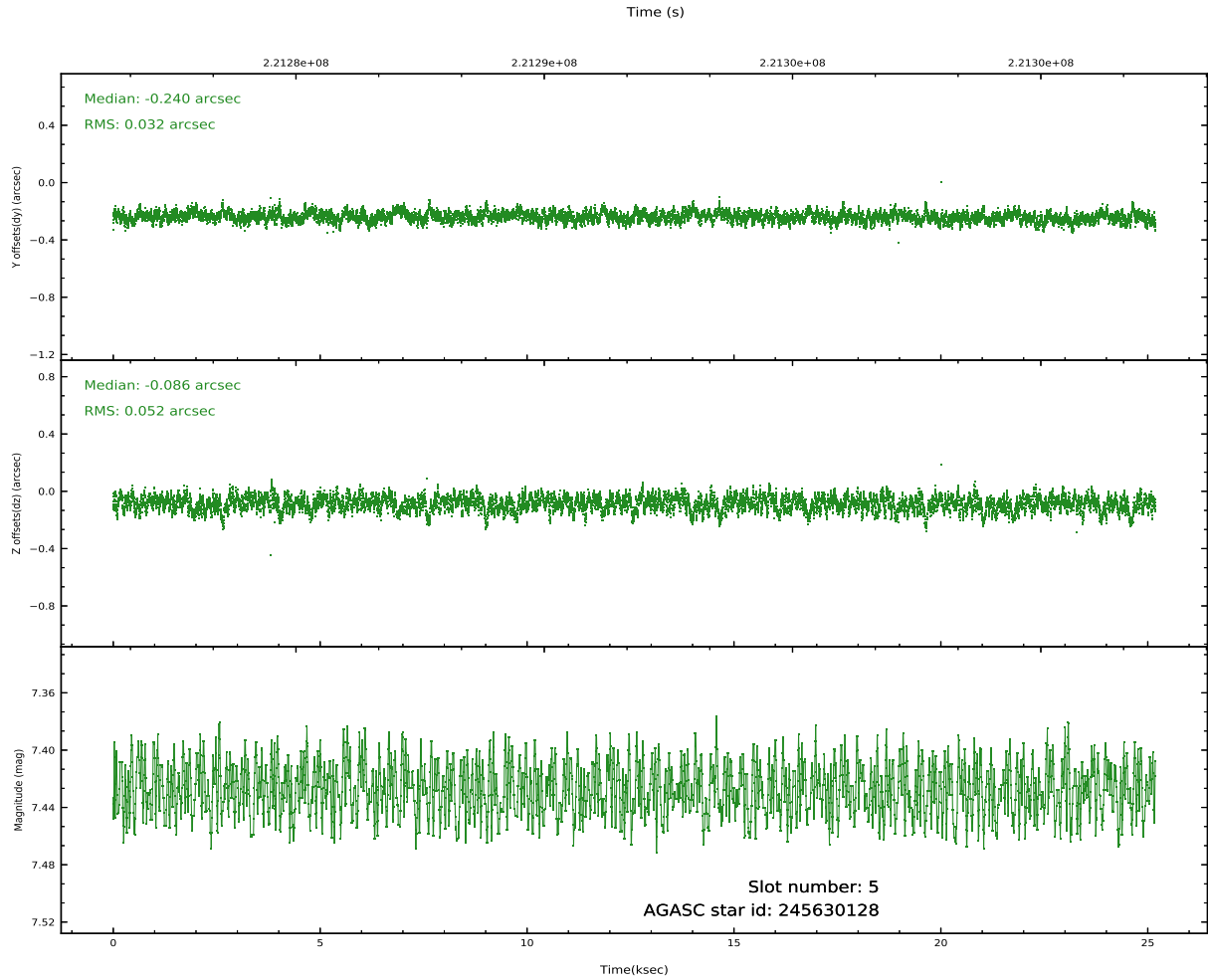
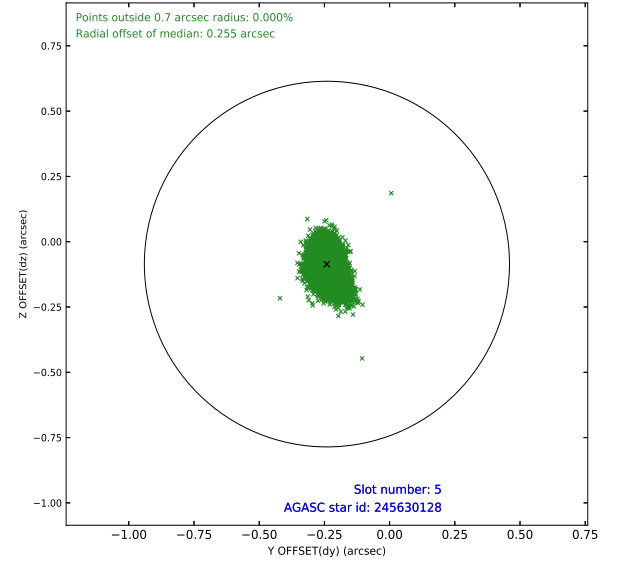
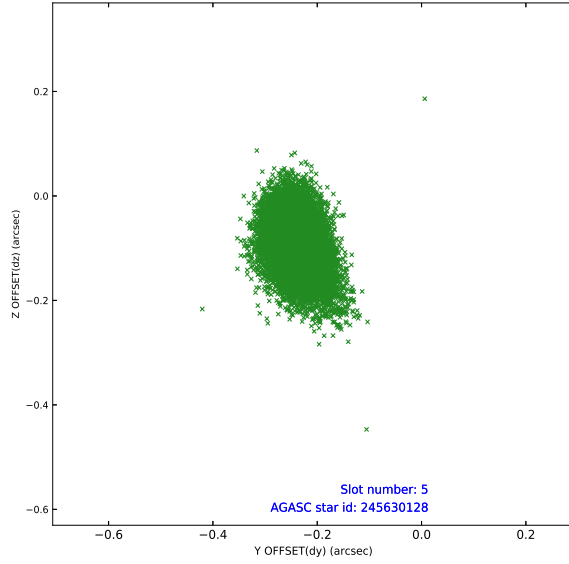


## 2.4.2 Slot 4

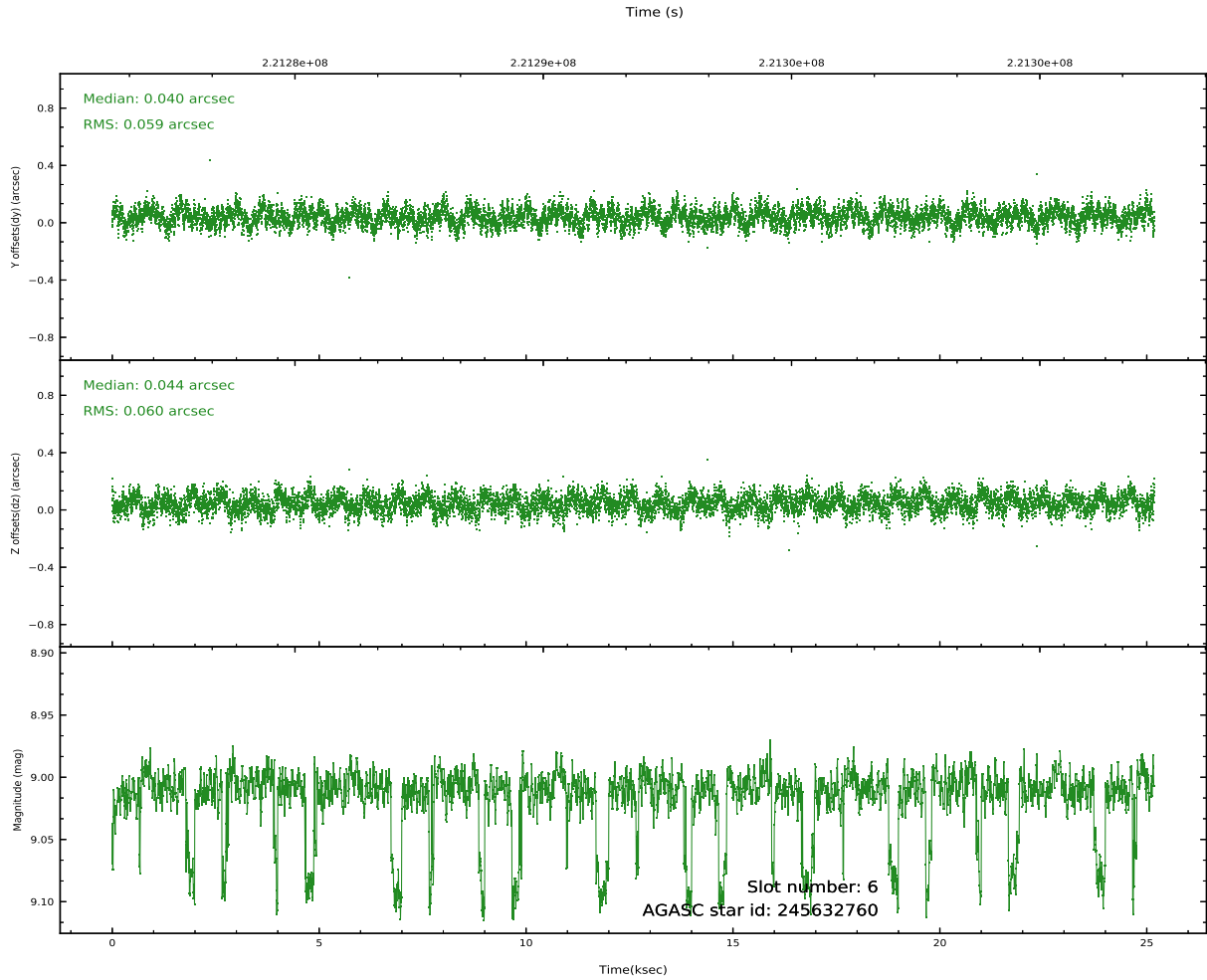
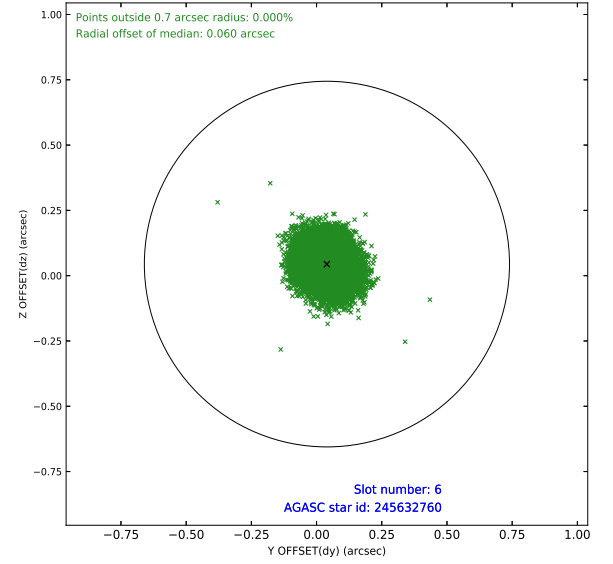
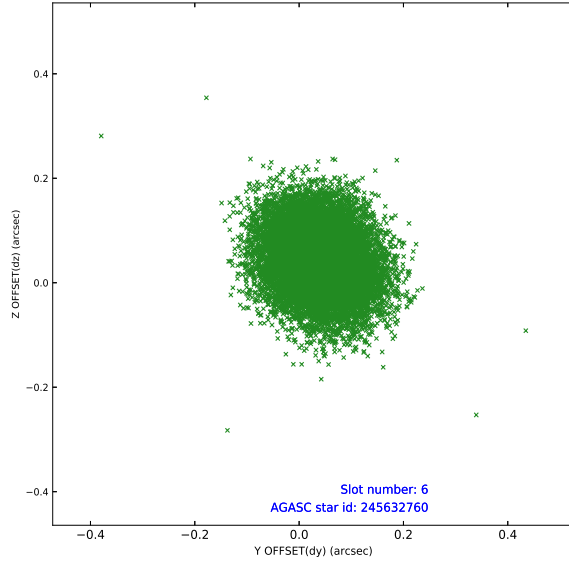




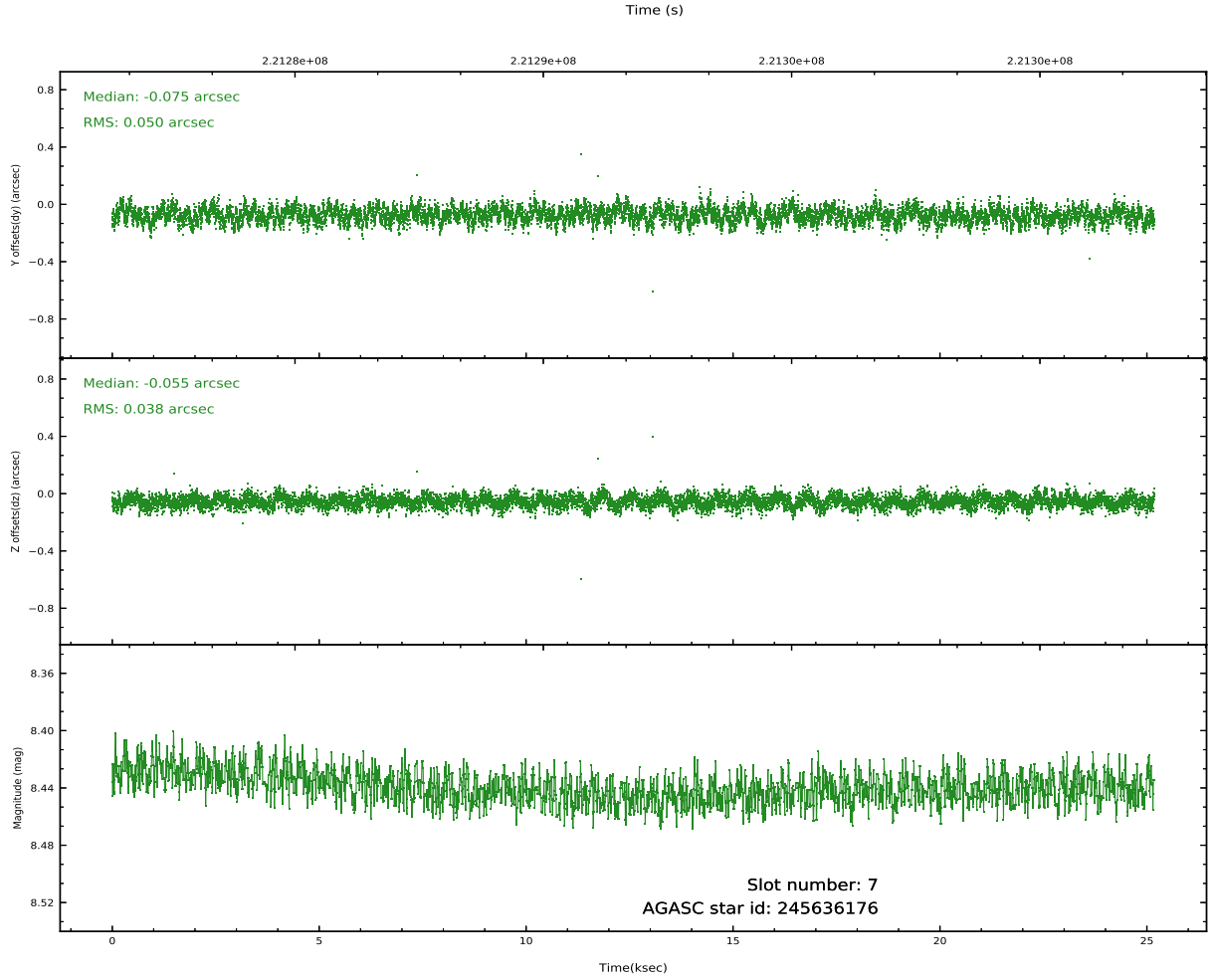
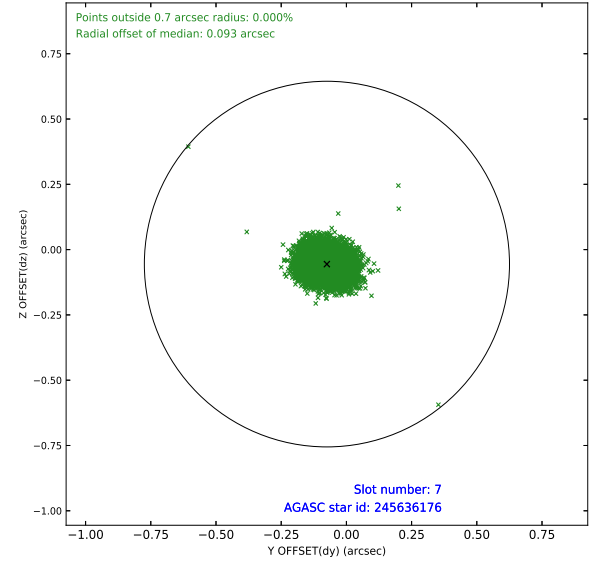
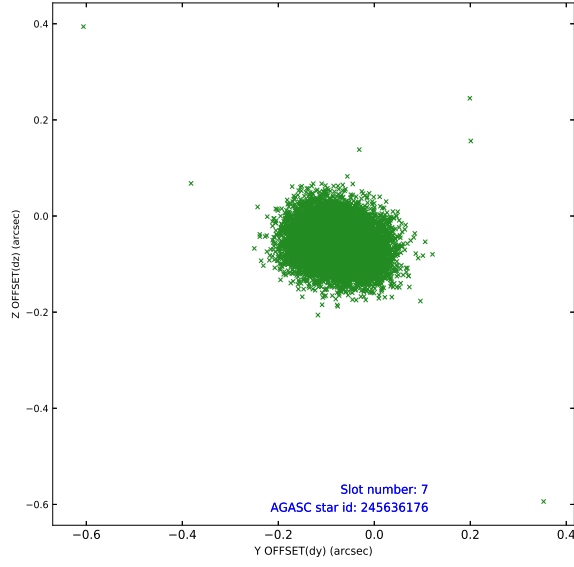
### 2.4.3 Slot 5



## 2.4.4 Slot 6

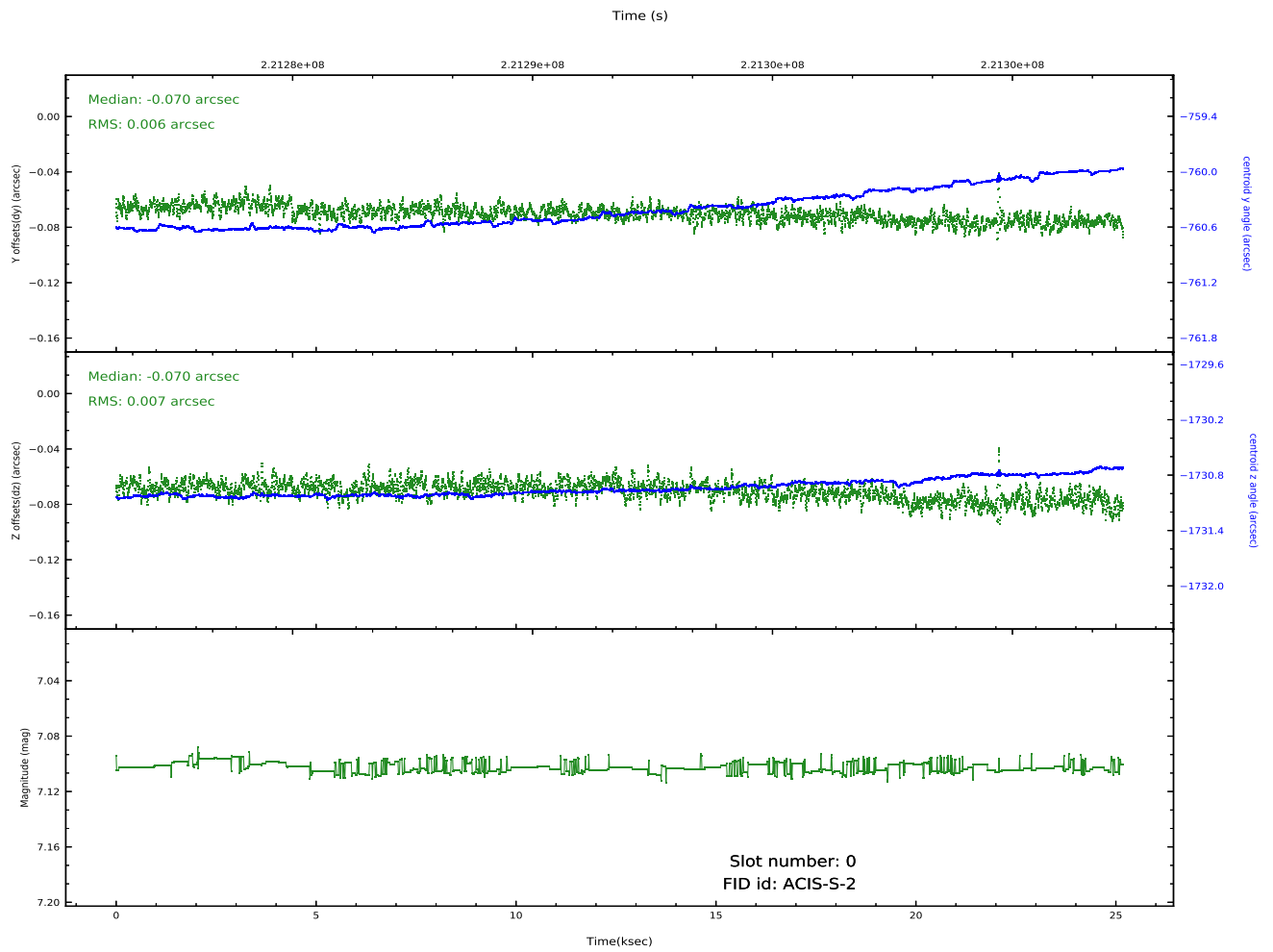
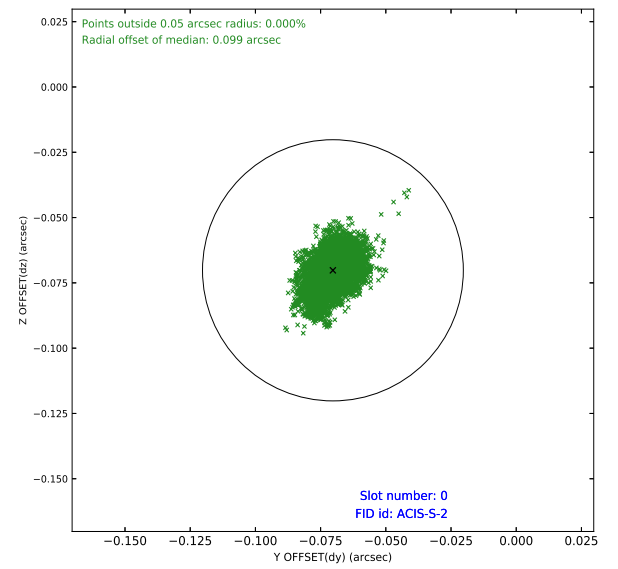
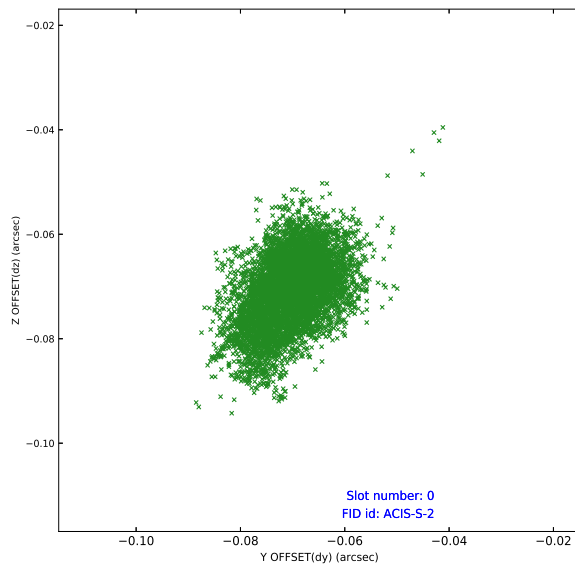


## 2.4.5 Slot 7

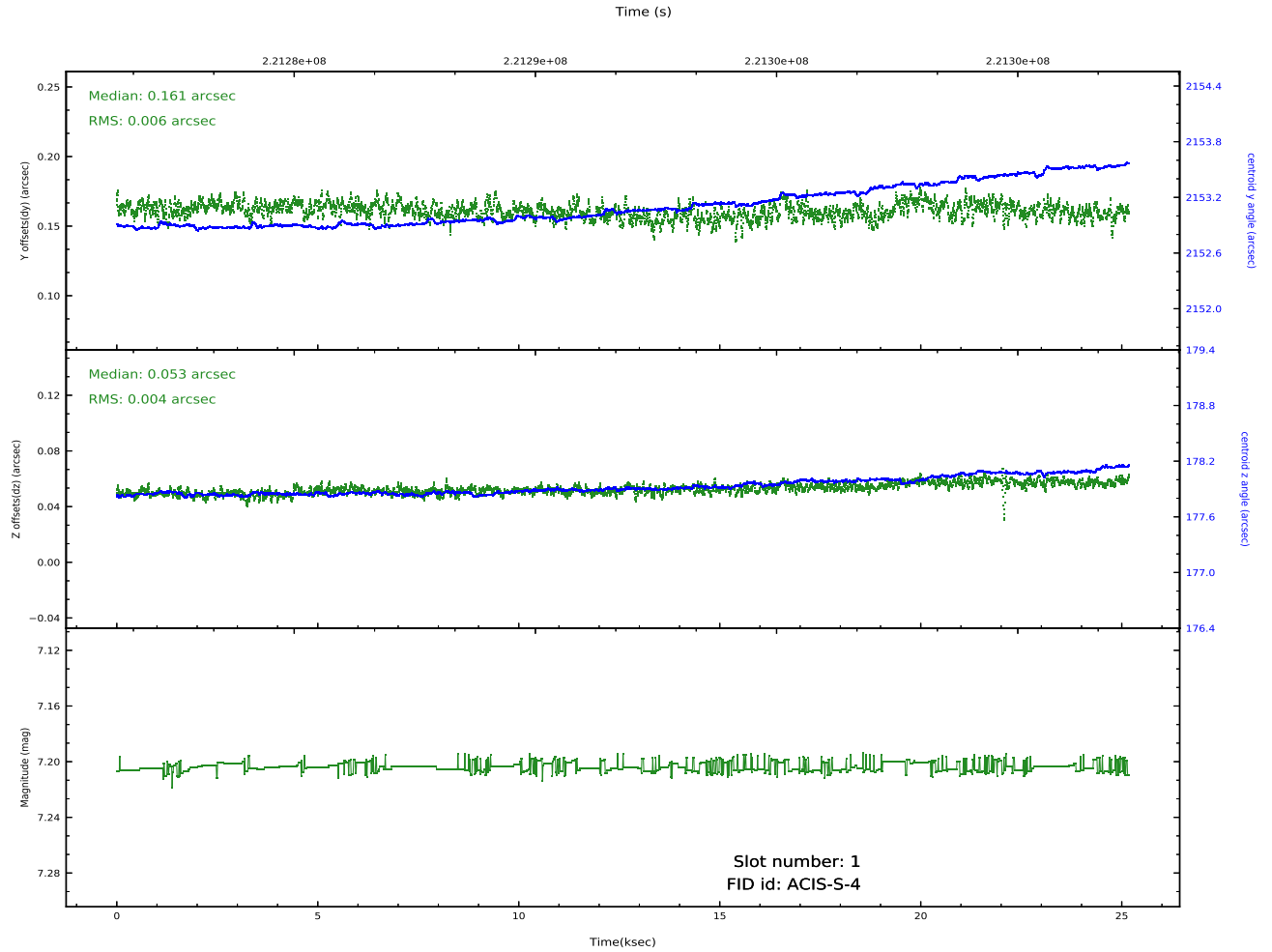
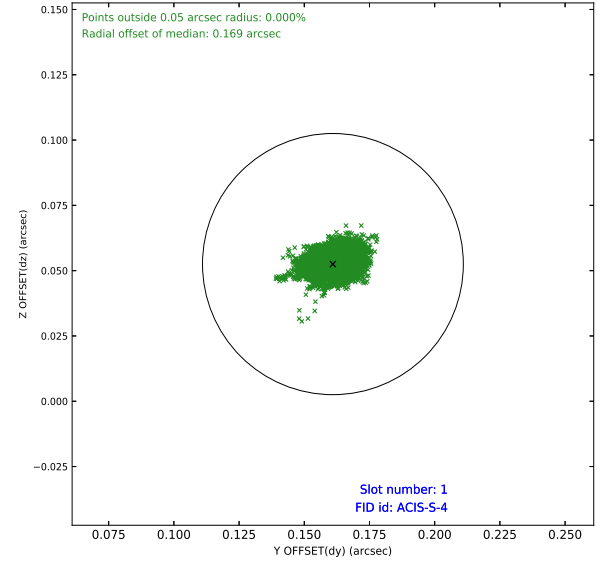
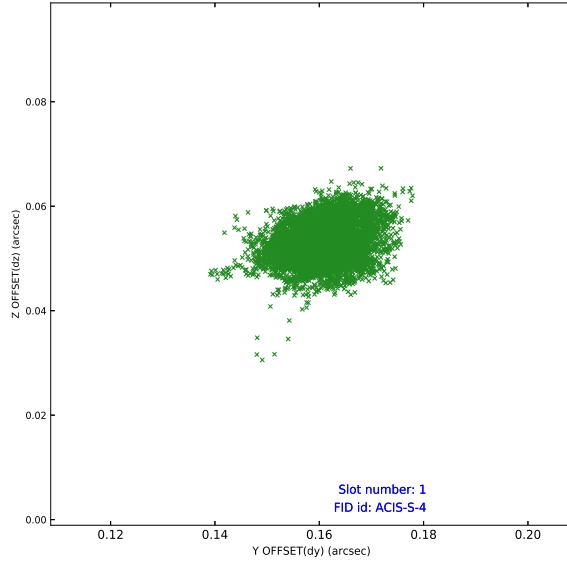


## 2.5 FID Slots

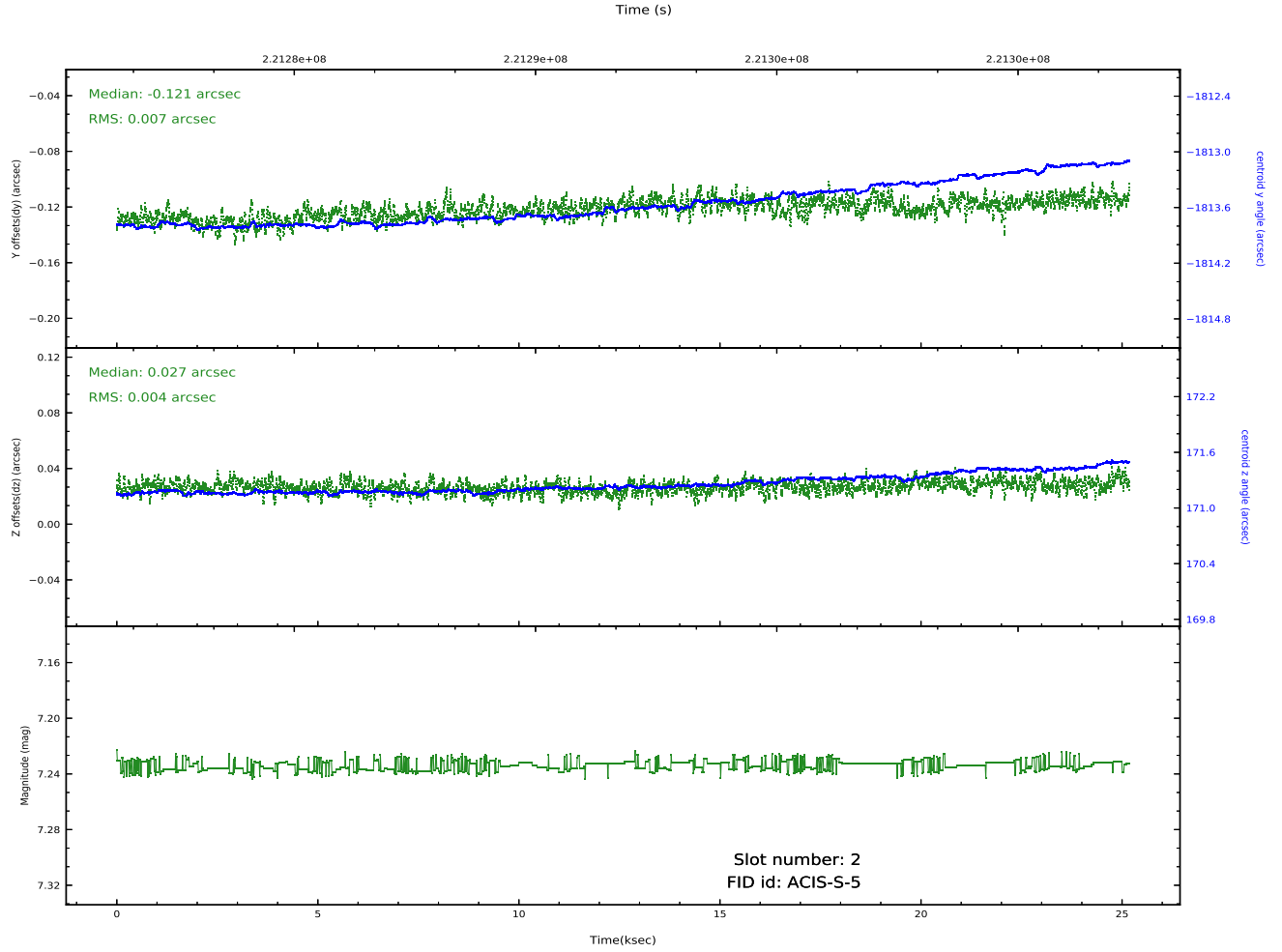
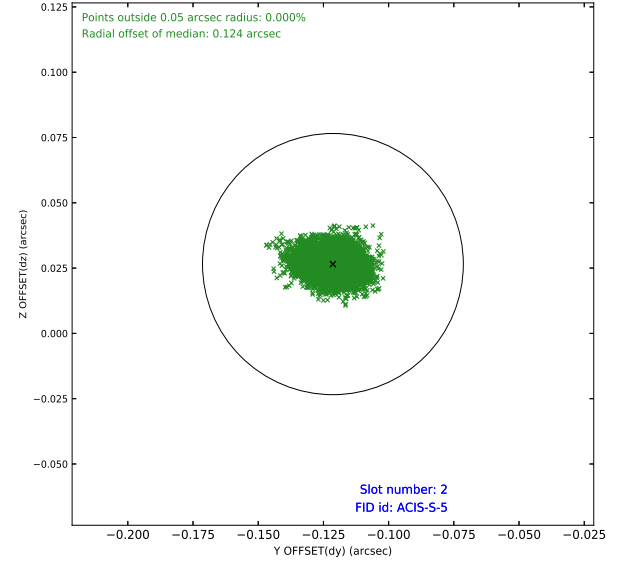
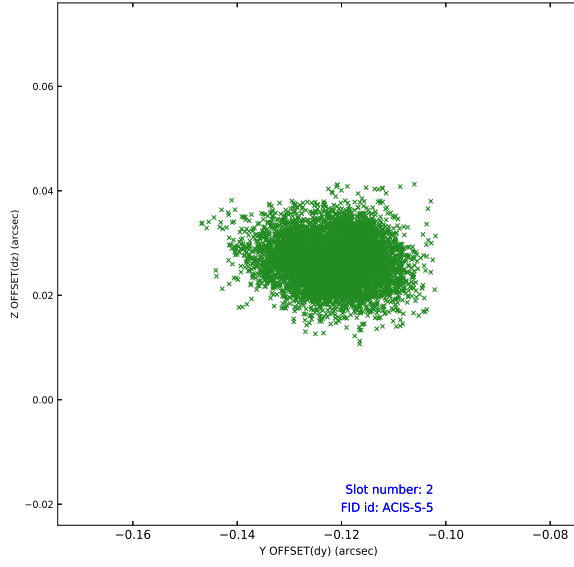
### 2.5.1 Slot 0



## 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)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.1832

### A.2 Comments