

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6156 - L2 Version 4  
Chandra X-Ray Center

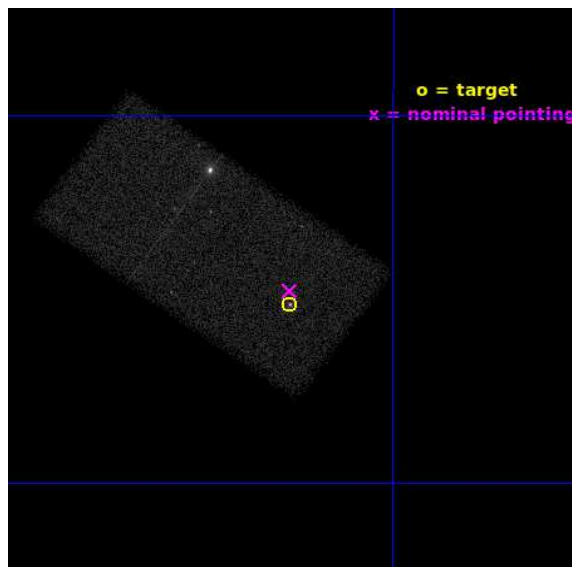
L2 Processing Date : Oct 7 2020

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# 1 Front

seq_num	590417	Sequence number
obs_id	6156	Observation id
title	Calibrating Pile-up in ACIS Imaging Data with PSRJ0437-4715	Propos
observer	CXC Calibration	Principal investigator
object	PSR J0437-4715	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	69.315833	Observer's specified target RA [deg]
dec_targ	-47.252333	Observer's specified target Dec [deg]
ra_nom	69.3159088556	Nominal RA [deg]
dec_nom	-47.24628011793	Nominal Dec [deg]
roll_nom	215.53903903016	Nominal Roll [deg]
revision	4	Processing version of data
ontime	25183.5	Sum of GTIs [s]
livetime	24512.828998598	Livetime [s]
ontime7	25183.5	Sum of GTIs [s]
l2events	85906	Number of level 2 events

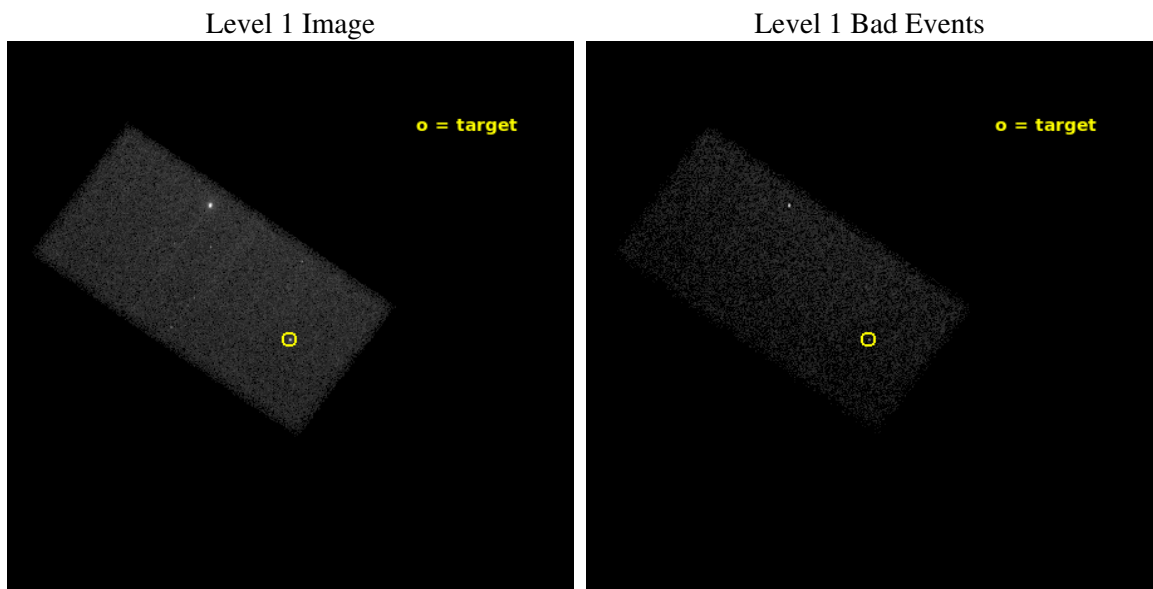




## 2 OBI

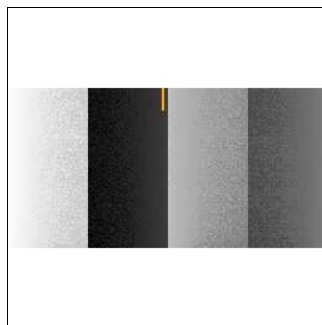
### 2.1 OBI

#### 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	25183.5	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	25183.5	Sum of GTIs [s]
date	2020-10-08T00:40:34	Date and time of file creation	l1events	166616	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	166616
rejected events	79127
rejected %	47%

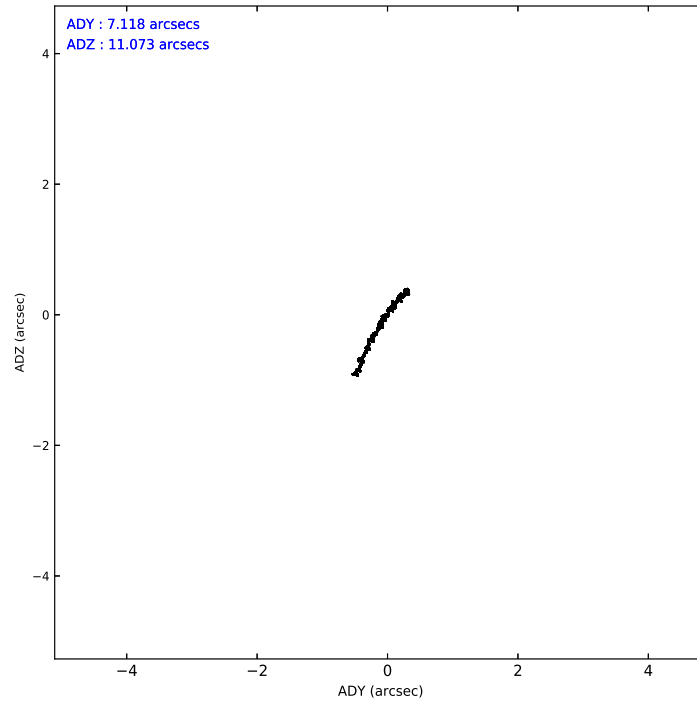
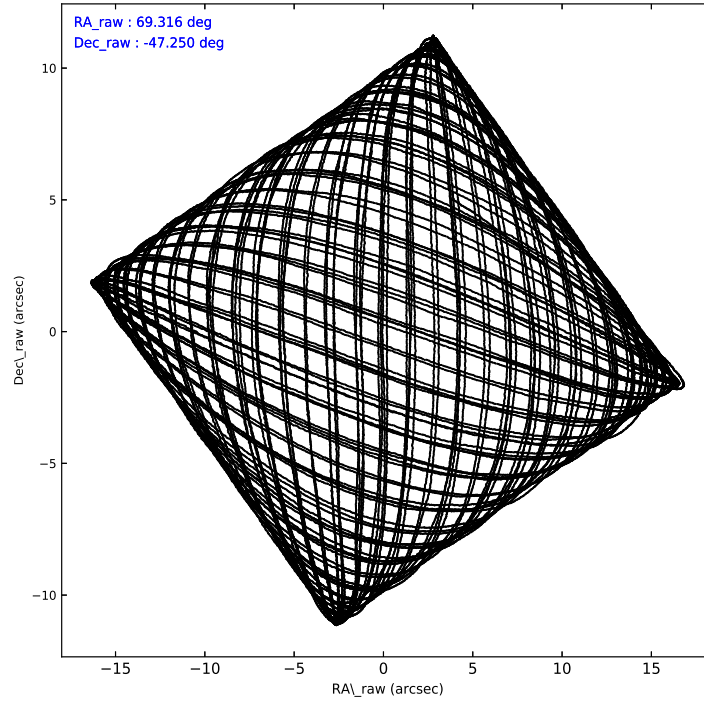
	<b>ccd 7</b>
grade 0 events	17876
	10%
grade 1 events	1000
	0%
grade 2 events	18319
	10%
grade 3 events	8793
	5%
grade 4 events	8510
	5%
grade 5 events	14543
	8%
grade 6 events	34026
	20%
grade 7 events	63549
	38%

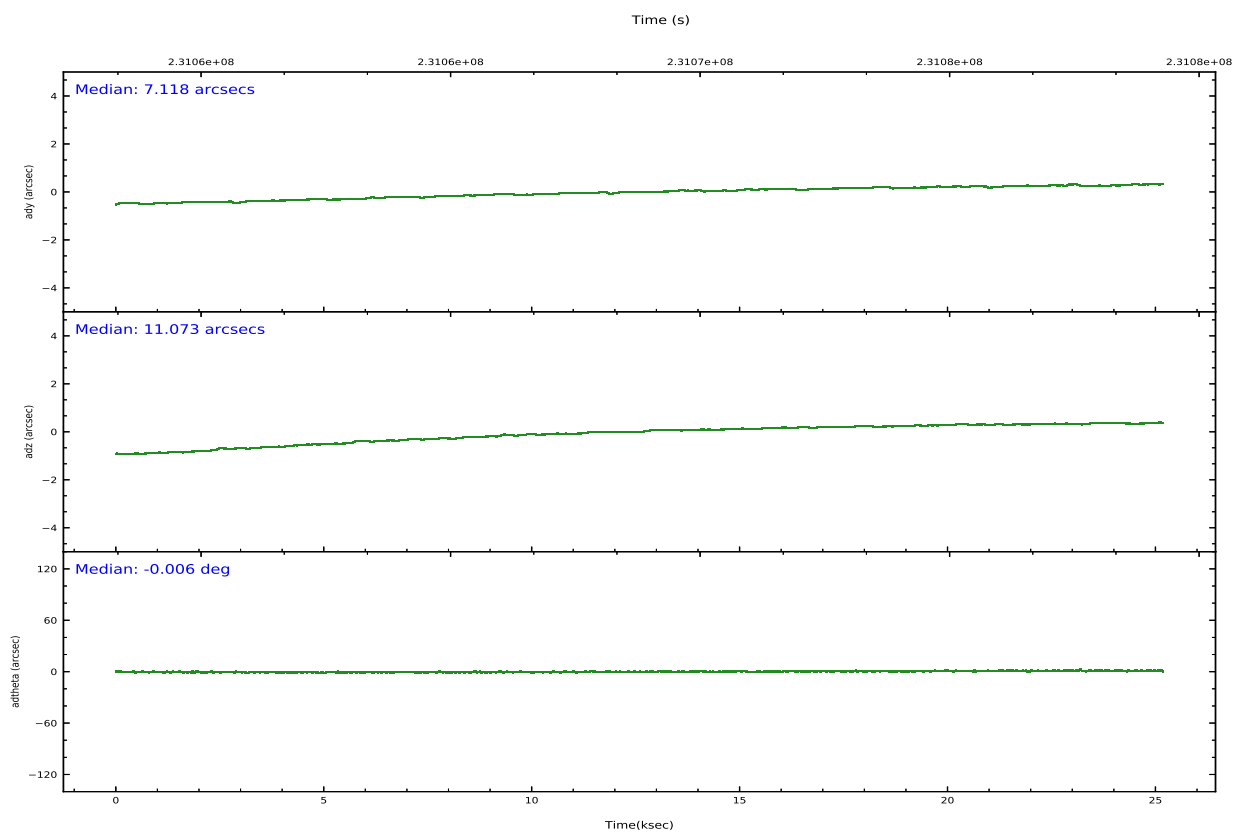
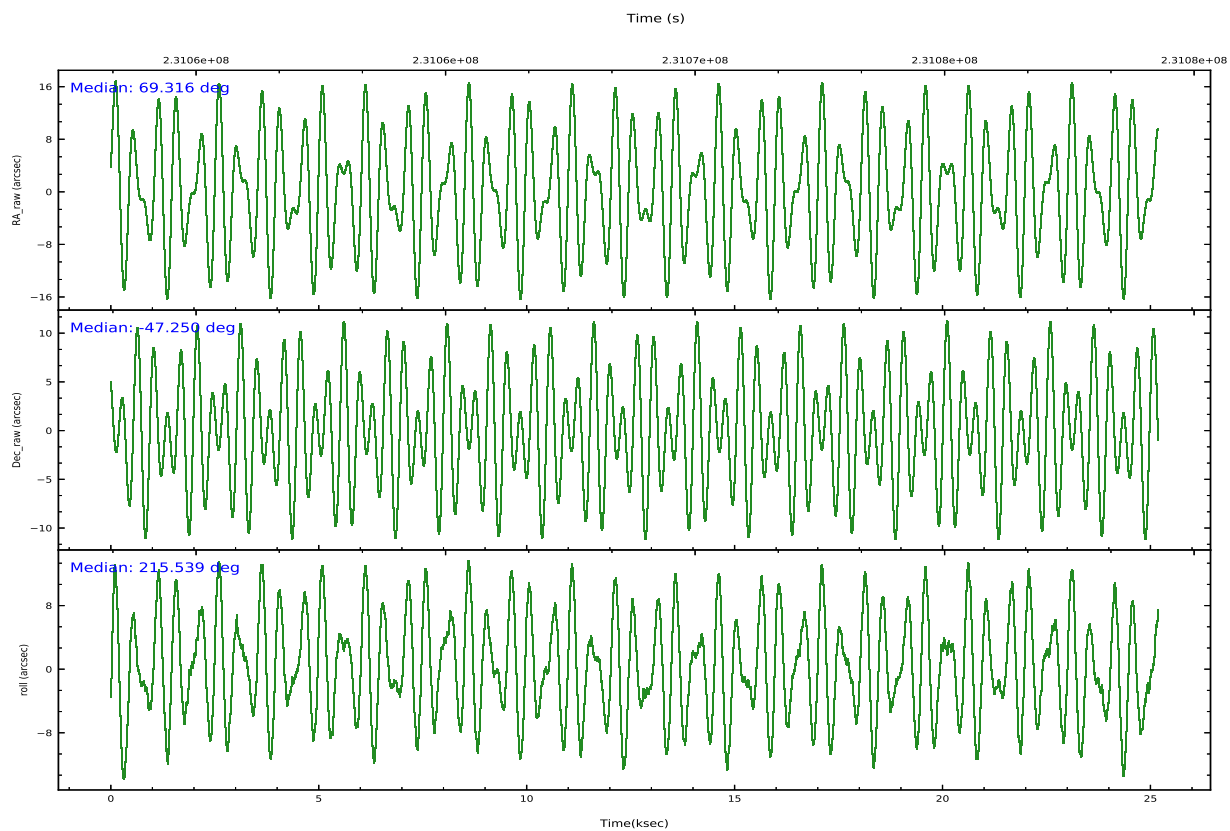
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	69.332299	69.3159088556
[deg] Pointing Dec	-47.225183	-47.24628011793
[deg] Pointing Roll	215.396338	215.53903903016
[s] Window start time (MET)	218246464.184000	218246464.184000
[s] Window stop time (MET)	231292804.184000	231292804.184000
[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)	231056134.184000	231055416.7583
Observation start date	2005-04-28T06:14:30	2005-04-28T06:03:36
[s] Observation end time (MET)	231081134.184000	231081930.94701
Observation end date	2005-04-28T13:11:10	2005-04-28T13:25:30
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/2
Subarray start row	257	257
Subarray row count	512	512
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	1.5

## 2.3 Aspect



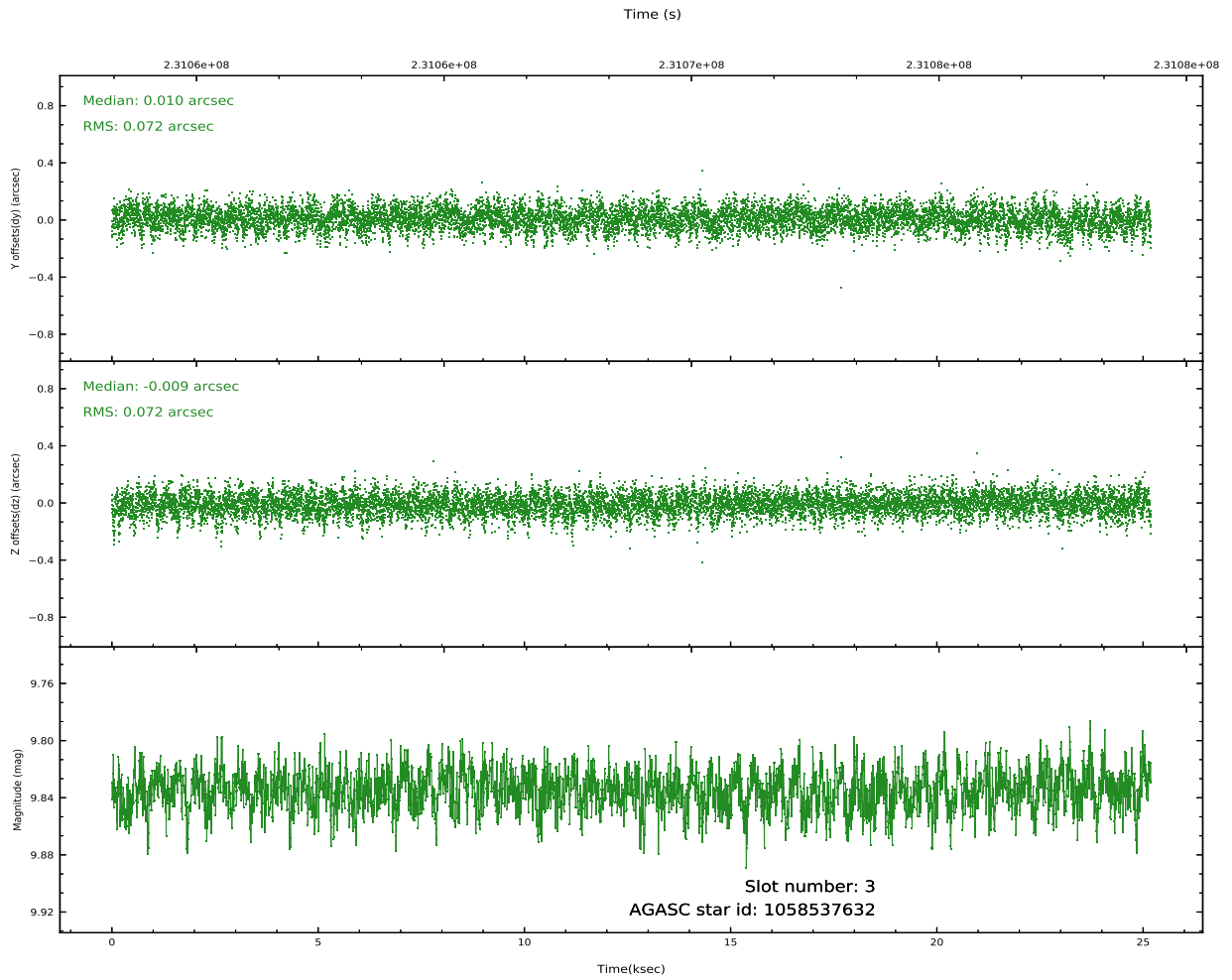
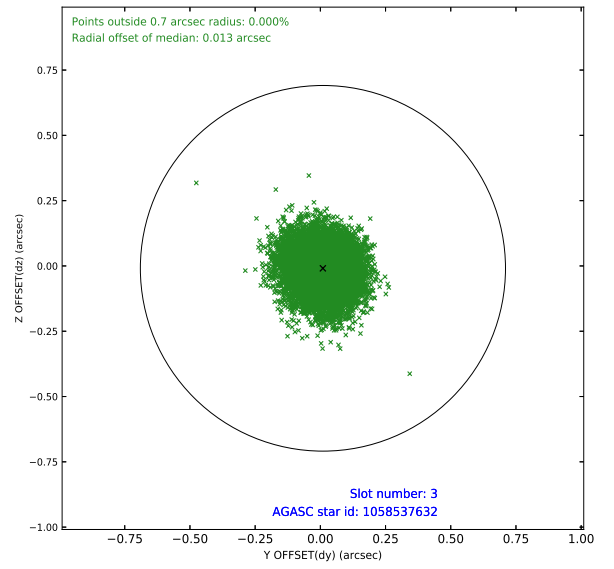
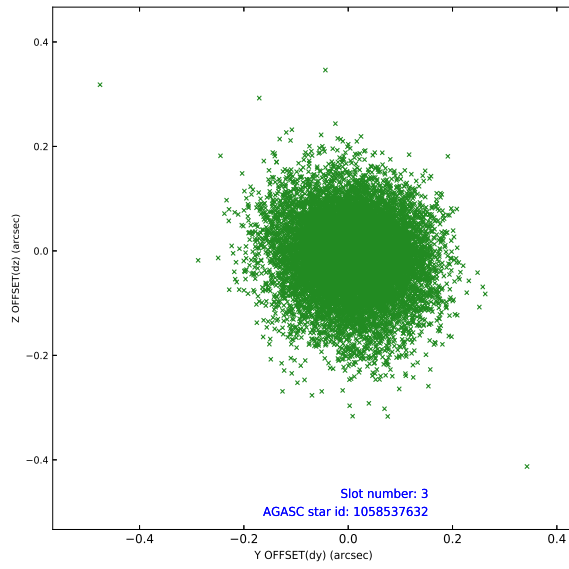


Slot Statistics

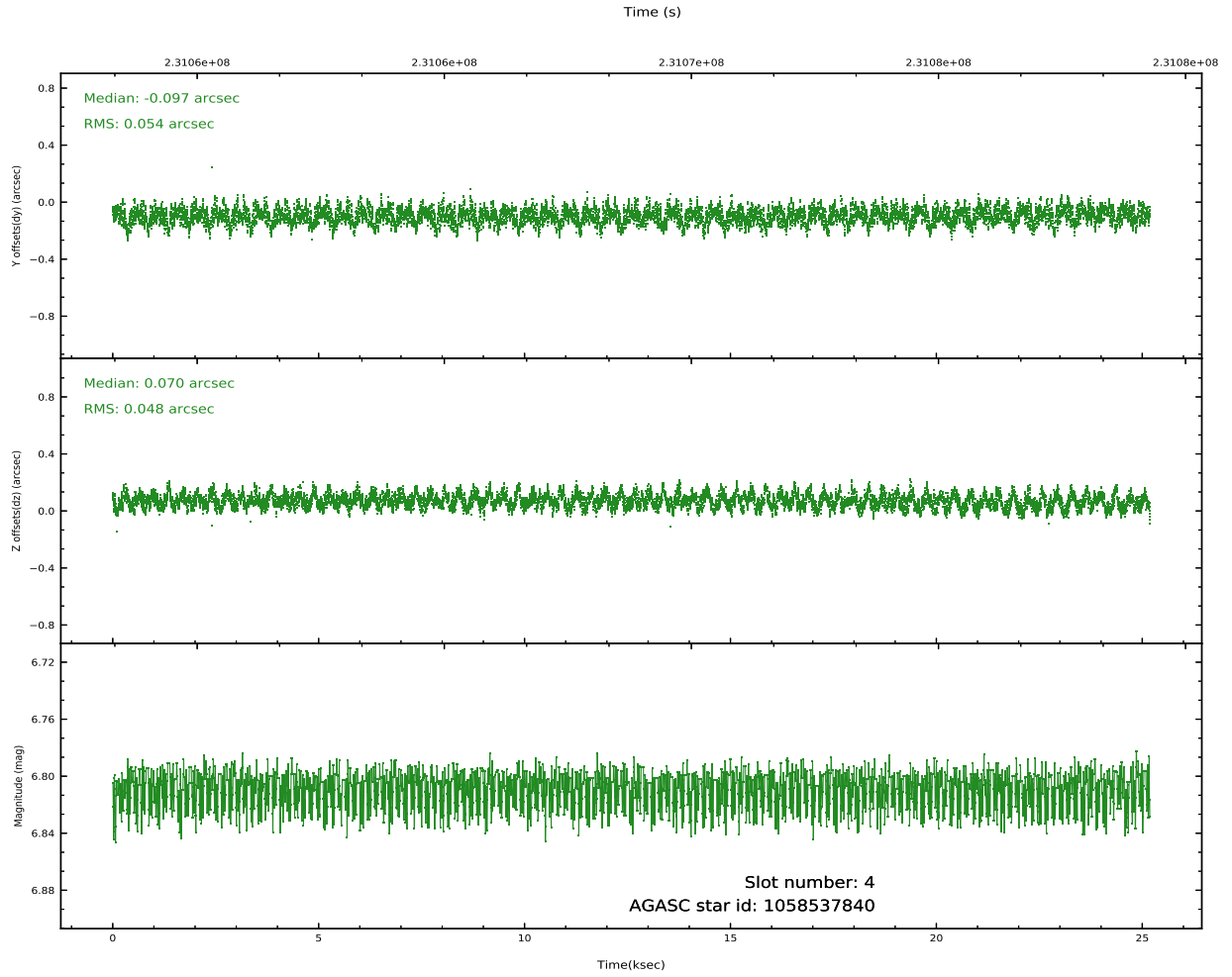
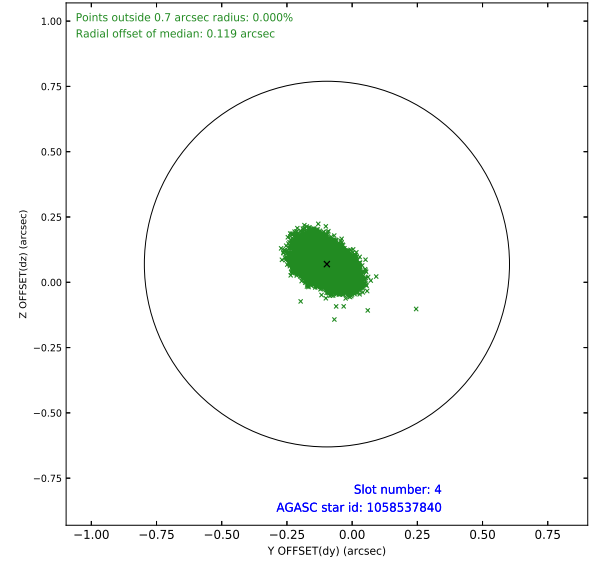
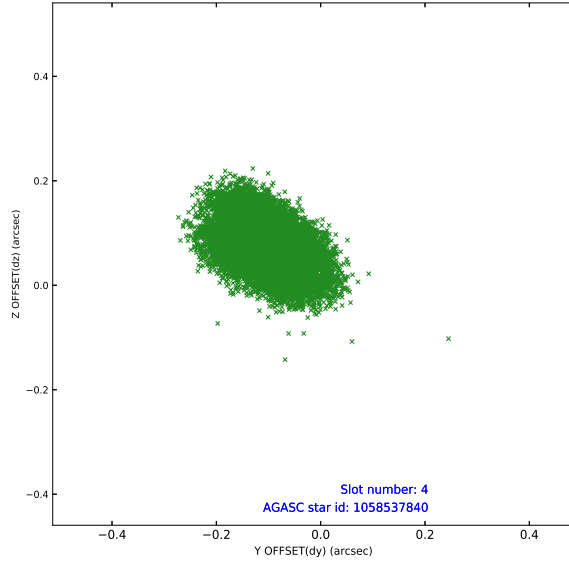
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	6142	1.000	-0.078	-0.055	0.014	0.020	0.000000	0.000000	-759.85	-1732
1	FID		ACIS-S-4	7.20	6143	1.000	0.145	0.052	0.010	0.016	0.000000	0.000000	2153.53	176
2	FID		ACIS-S-5	7.23	6143	1.000	-0.098	0.011	0.010	0.016	0.000000	0.000000	-1812.63	169
3	GUIDE	used	1058537632	9.83	12275	1.000	0.010	-0.009	0.108	0.178	68.291617	-47.025396	1675.62	-2051
4	GUIDE	used	1058537840	6.81	12286	1.000	-0.097	0.070	0.077	0.125	70.442463	-47.259783	-2128.17	1688
5	GUIDE	used	1058541272	9.23	12281	1.000	-0.047	0.009	0.110	0.174	68.392275	-46.921735	1259.79	-2217
6	GUIDE	used	1058542336	9.60	12277	1.000	0.078	0.038	0.113	0.179	69.740954	-46.597293	-2131.25	-1254
7	GUIDE	used	1058544032	8.99	12278	1.000	0.061	-0.106	0.073	0.117	69.576631	-47.141596	-661.28	102

## 2.4 Star Slots

### 2.4.1 Slot 3

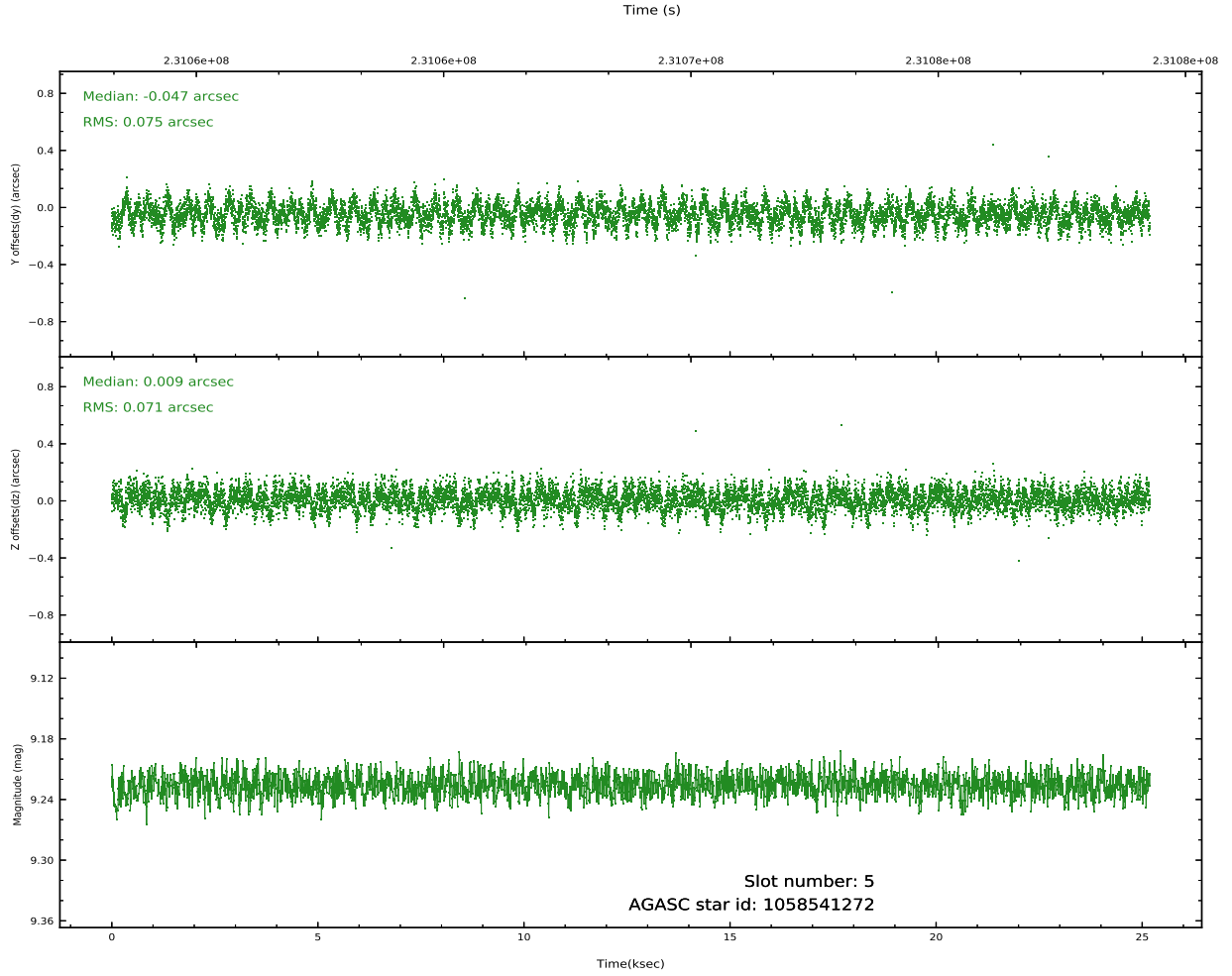
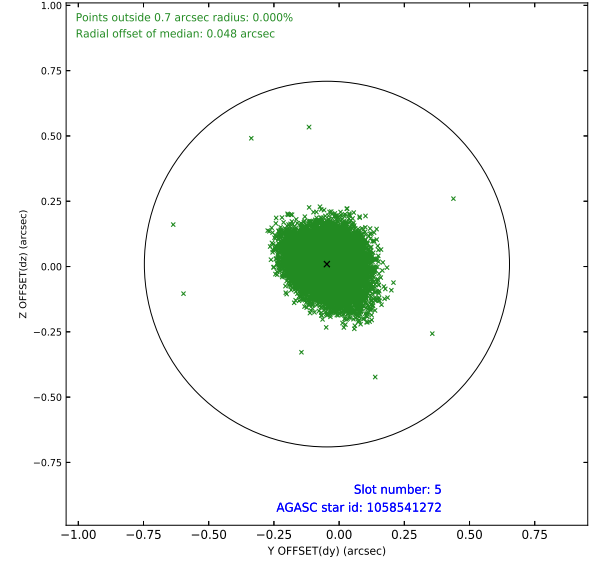
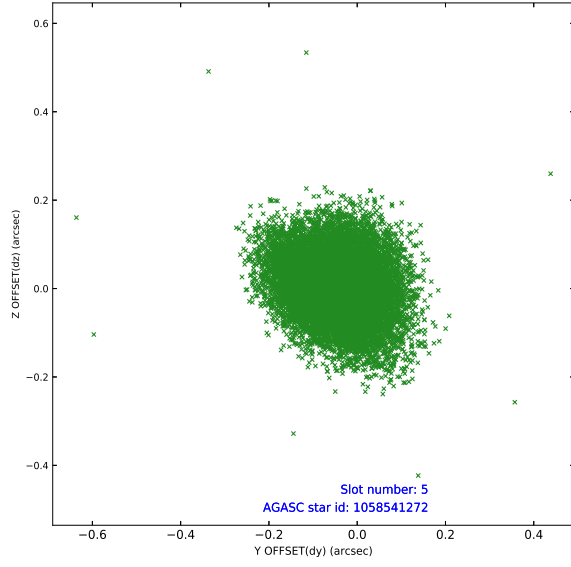


## 2.4.2 Slot 4

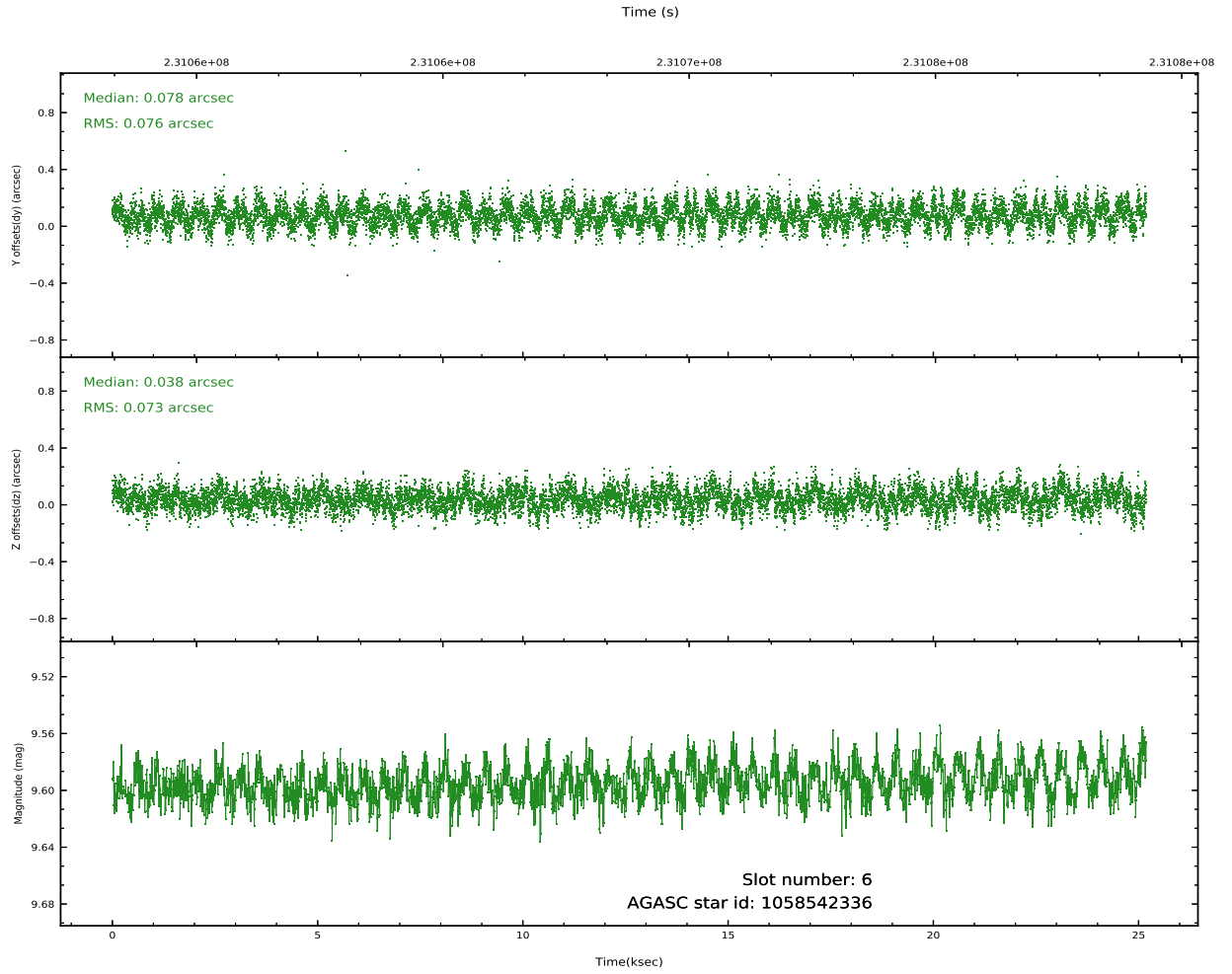
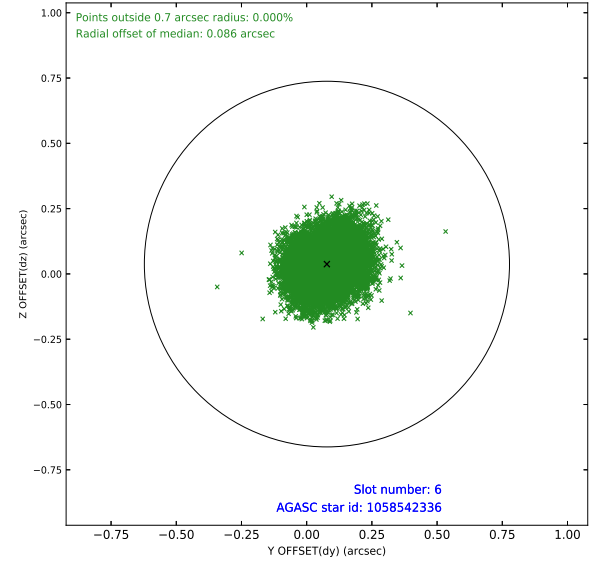
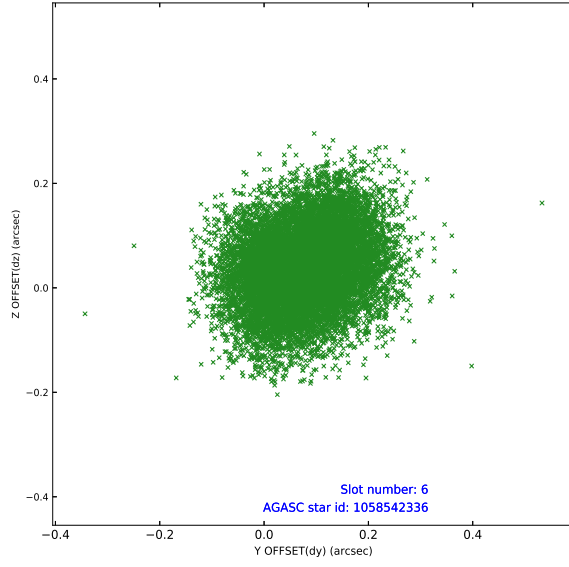




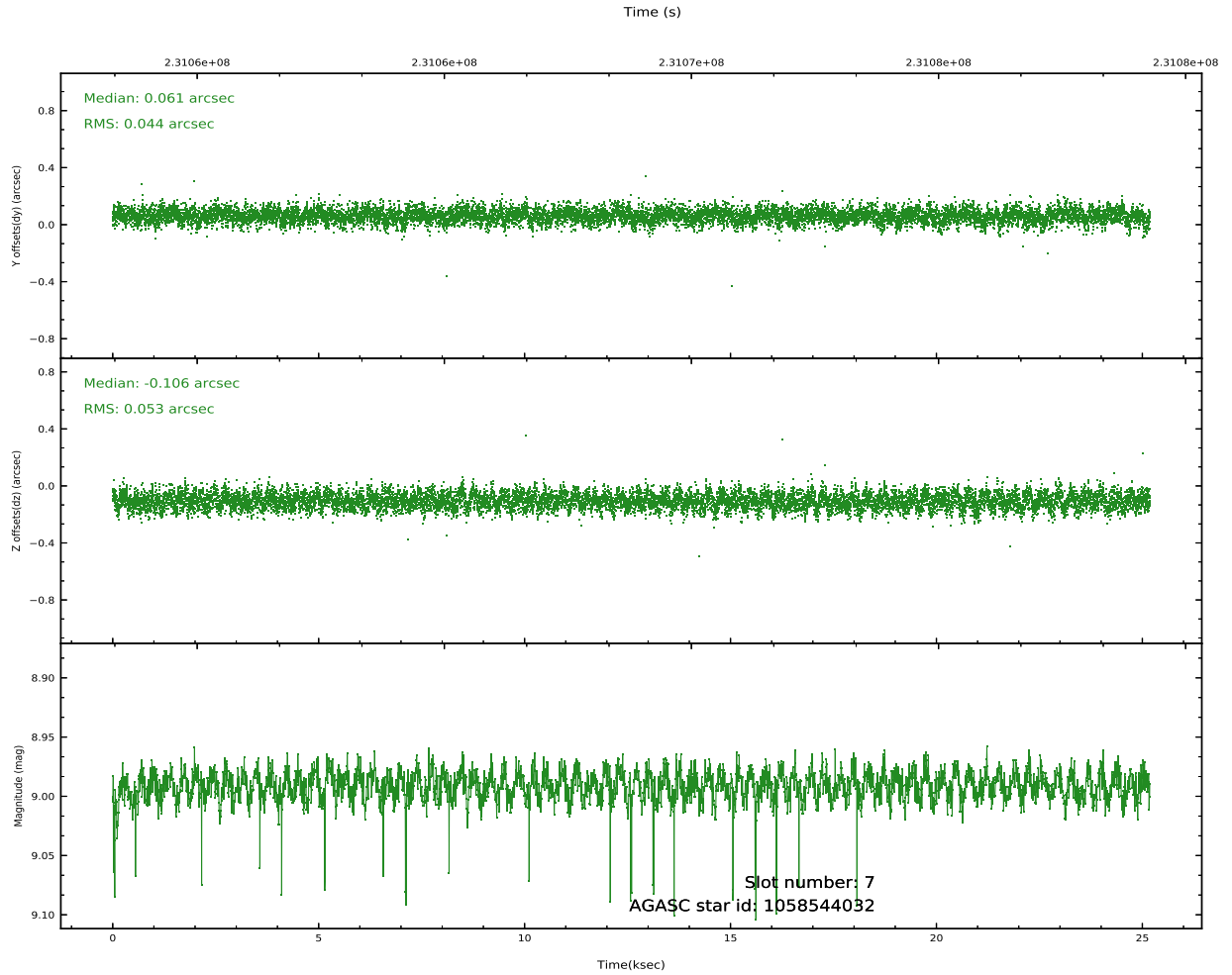
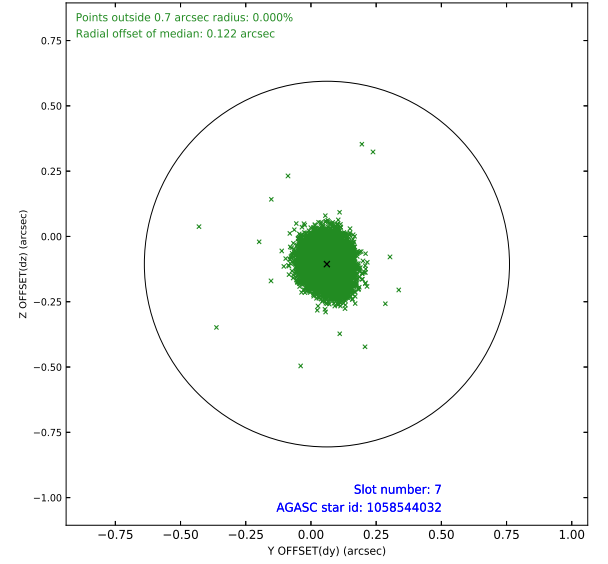
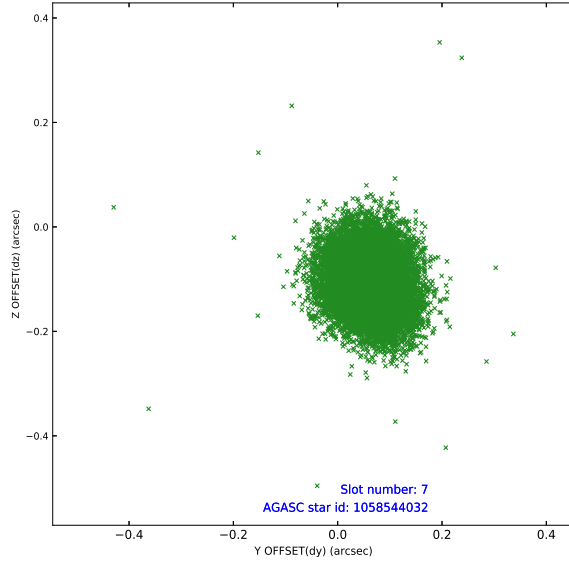
### 2.4.3 Slot 5



## 2.4.4 Slot 6

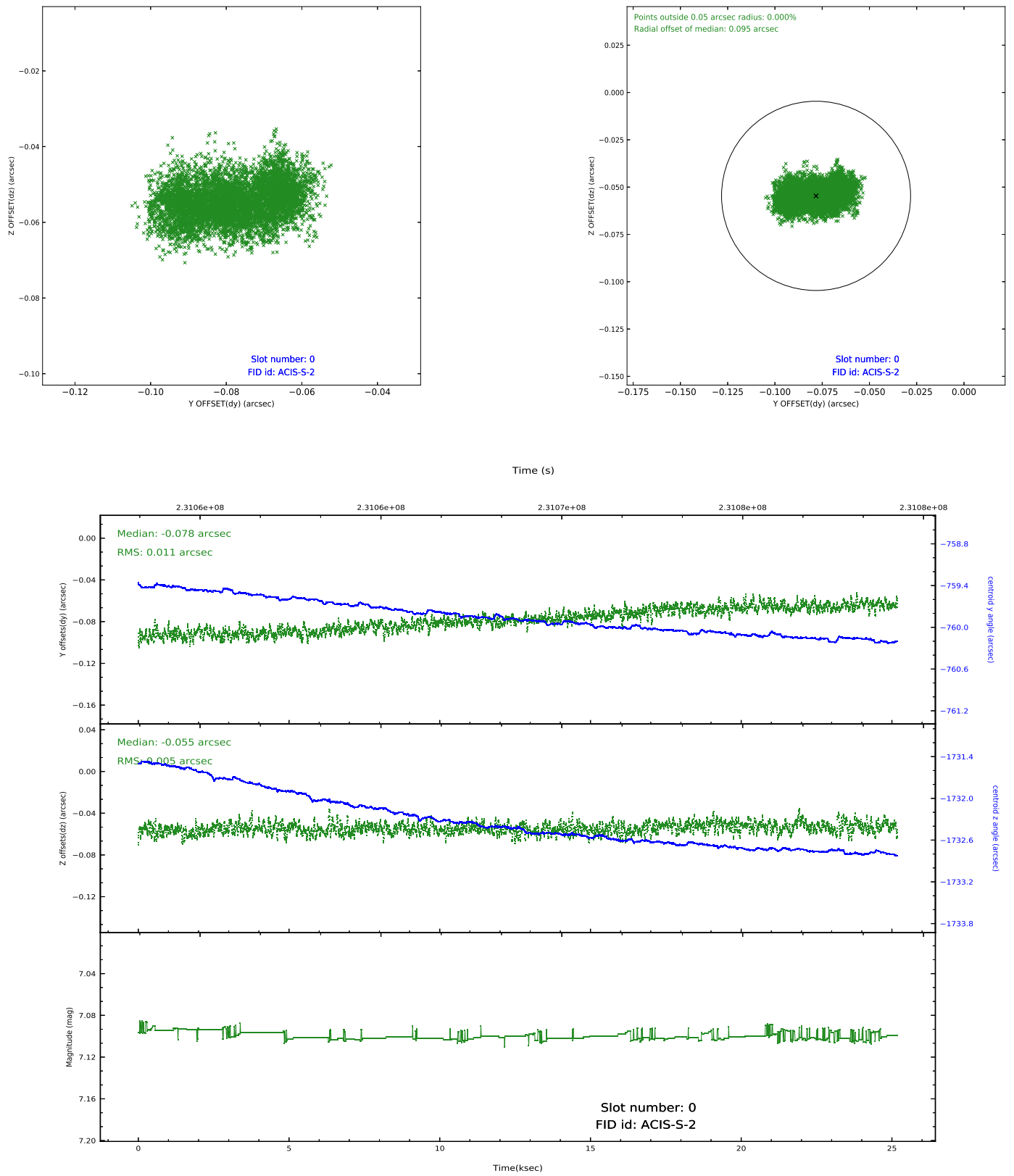


## 2.4.5 Slot 7

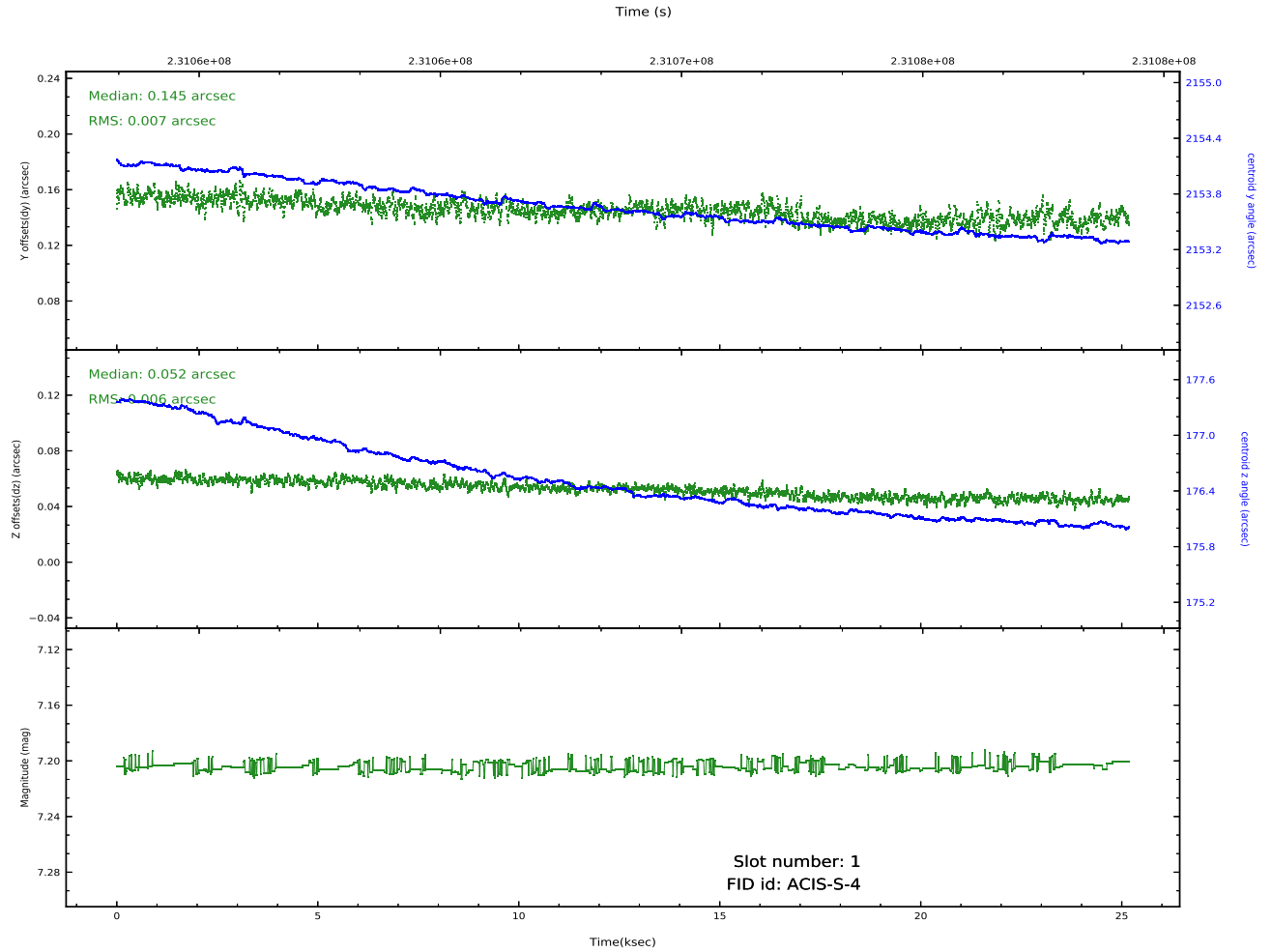
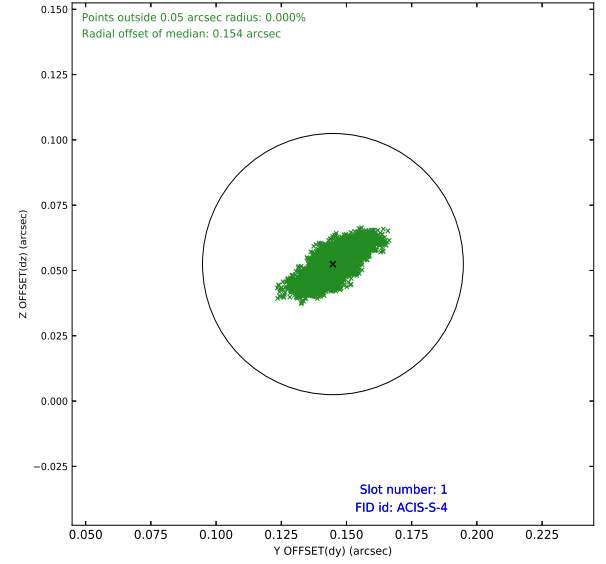
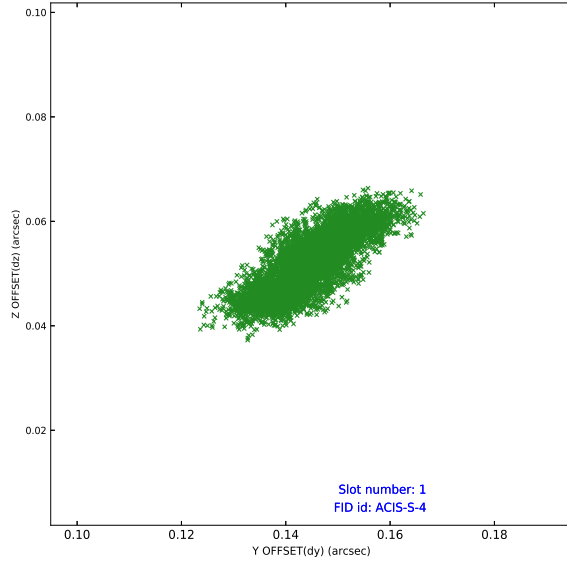


## 2.5 FID Slots

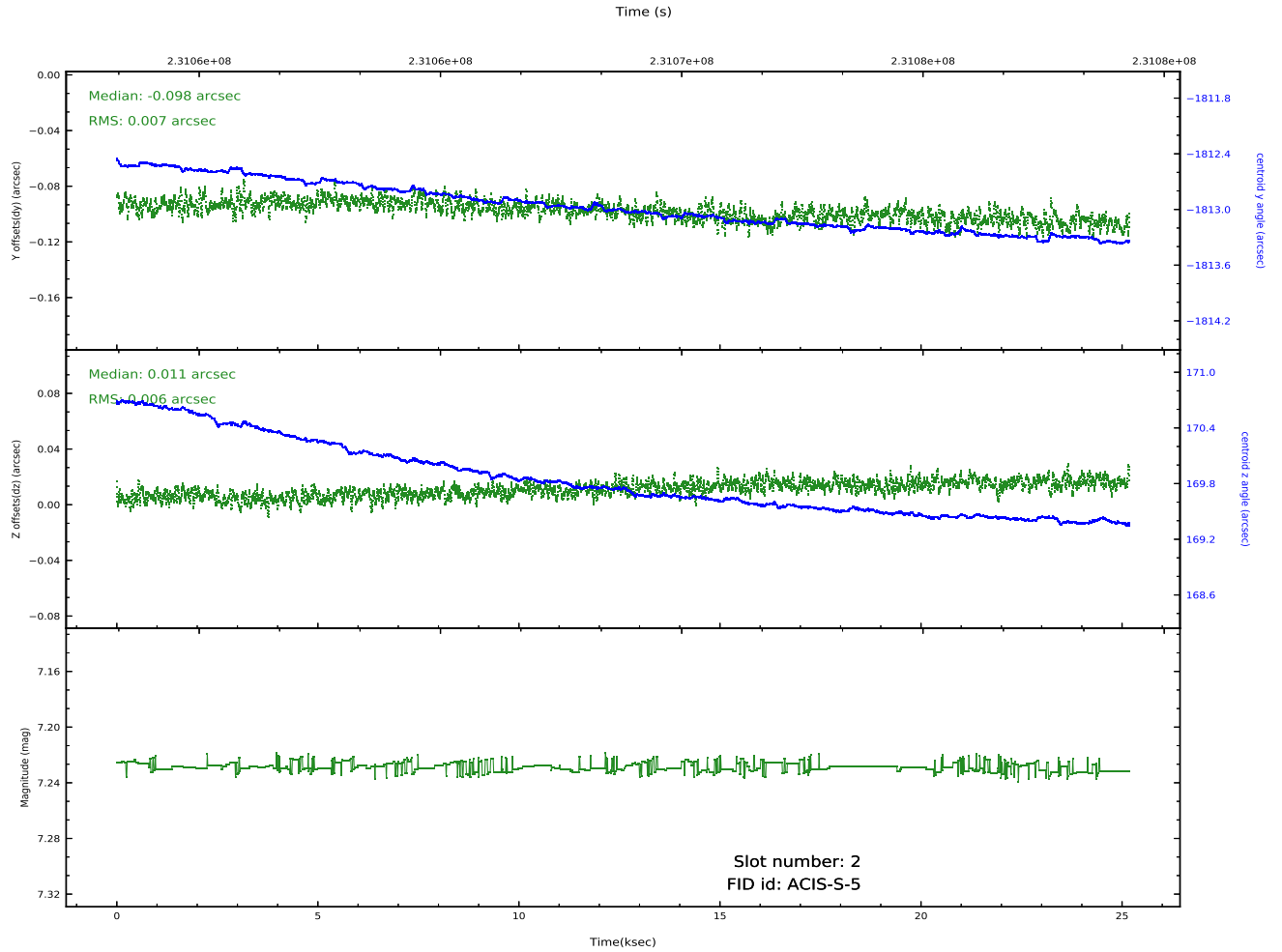
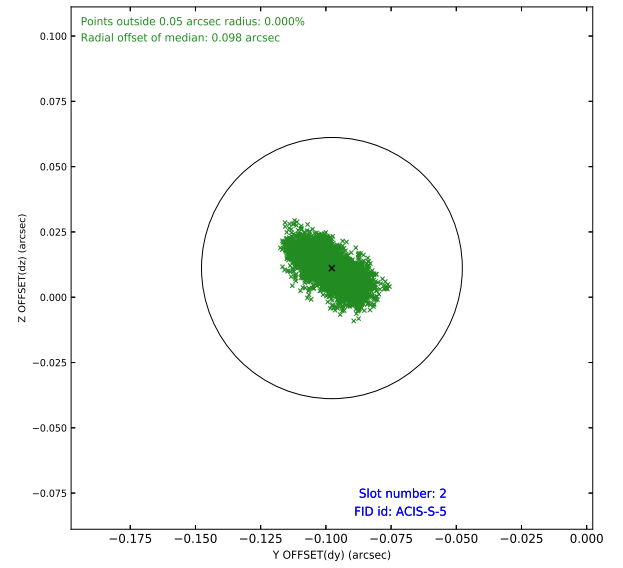
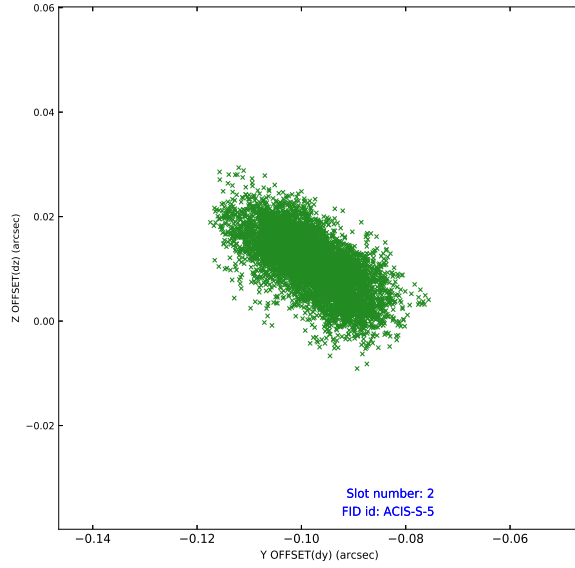
### 2.5.1 Slot 0



## 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)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.1835

### A.2 Comments

Window constraint satisfied.