

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6154 - L2 Version 4  
Chandra X-Ray Center

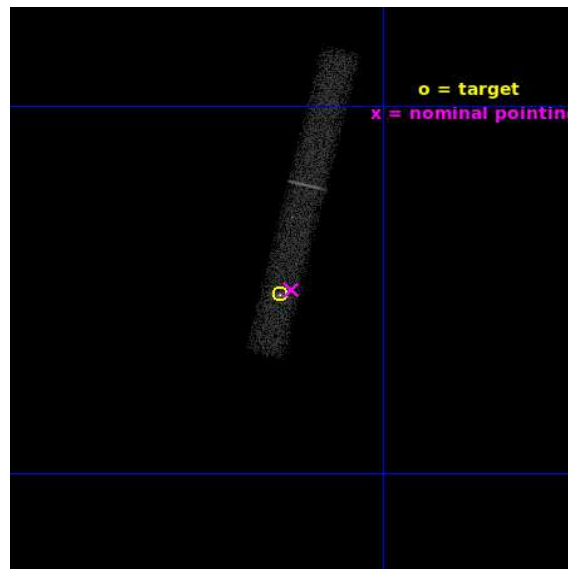
L2 Processing Date : Oct 6 2020

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# 1 Front

seq_num	590415	Sequence number
obs_id	6154	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	69.308166590615	Nominal RA [deg]
dec_nom	-47.250222661275	Nominal Dec [deg]
roll_nom	283.41106174671	Nominal Roll [deg]
revision	4	Processing version of data
ontime	25187.600375295	Sum of GTIs [s]
livetime	22843.824029834	Livetime [s]
ontime7	25187.600375295	Sum of GTIs [s]
l2events	17689	Number of level 2 events

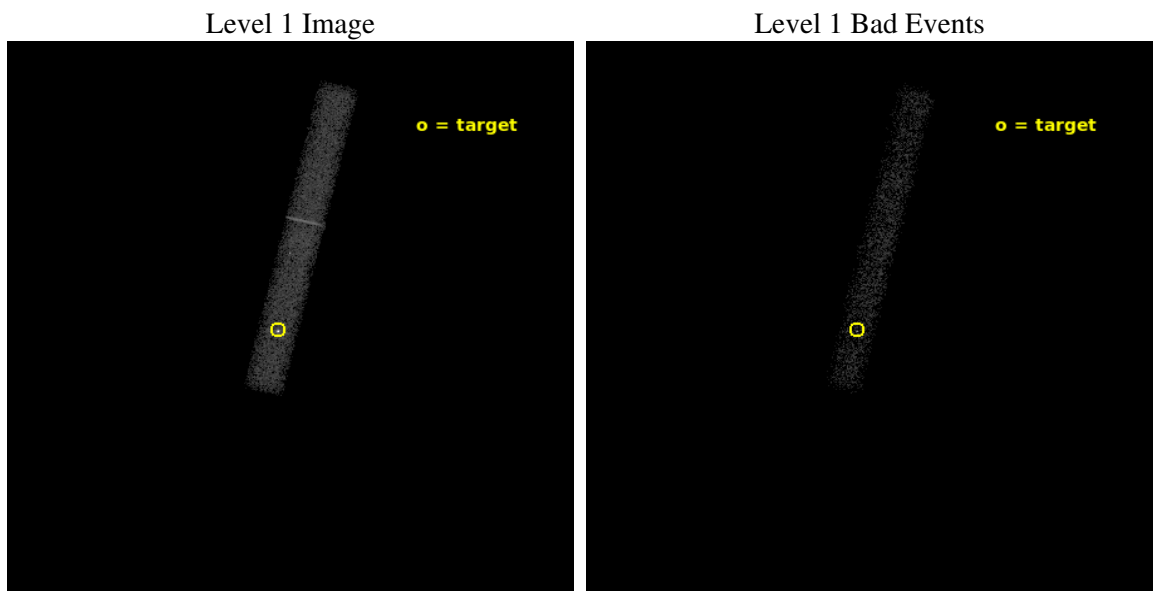




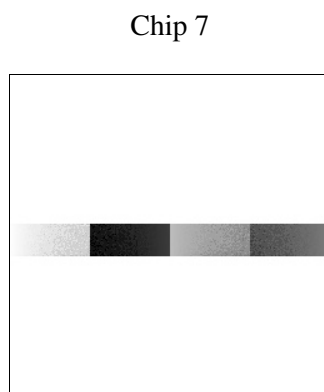
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	25187.600375295	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	25187.600375295	Sum of GTIs [s]
date	2020-10-06T21:32:35	Date and time of file creation	l1events	31025	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

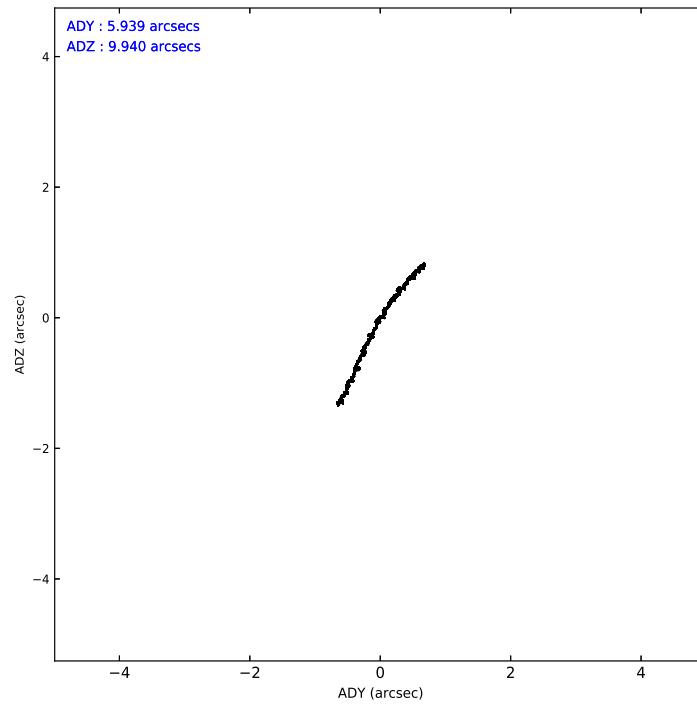
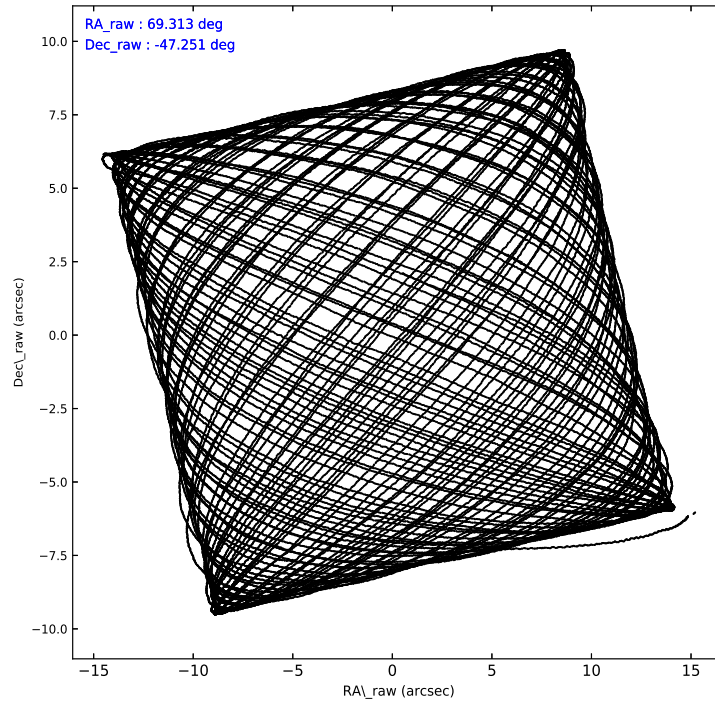
	<b>ccd 7</b>
level 1 events	31025
rejected events	12872
rejected %	41%

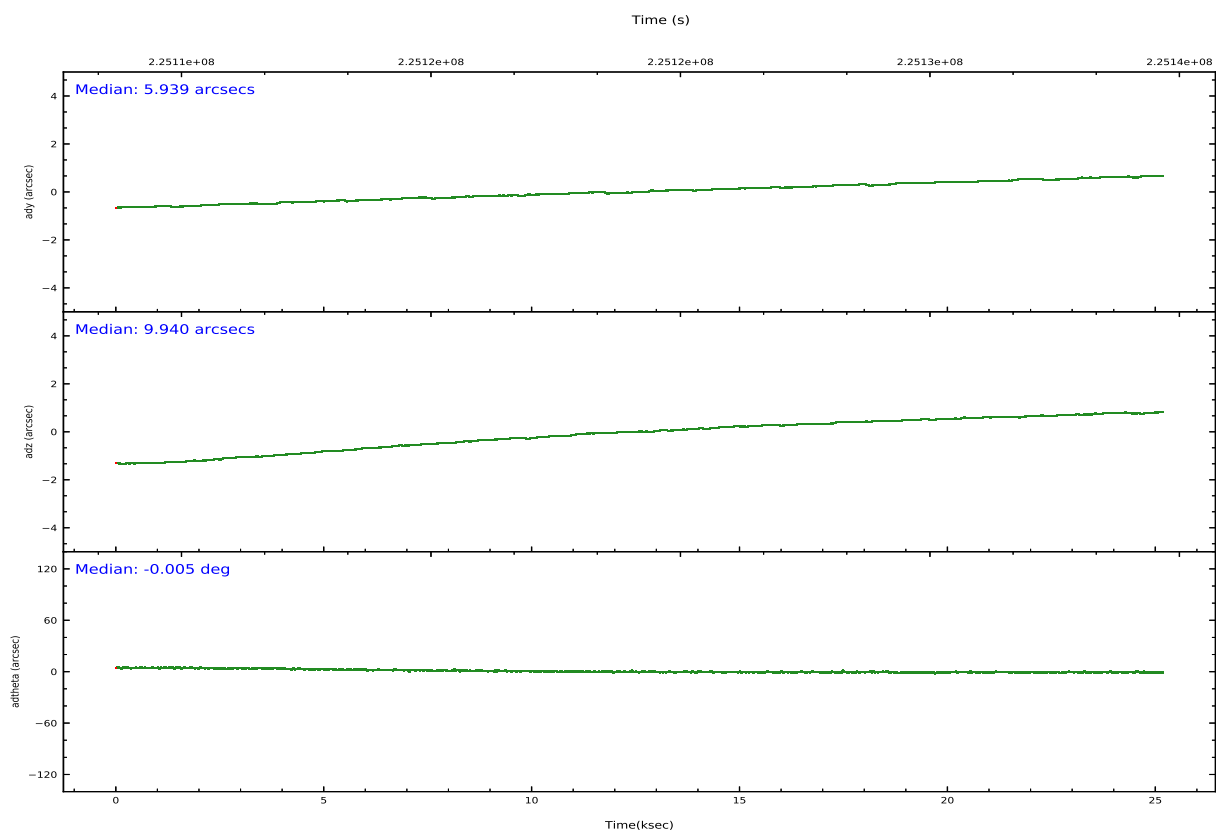
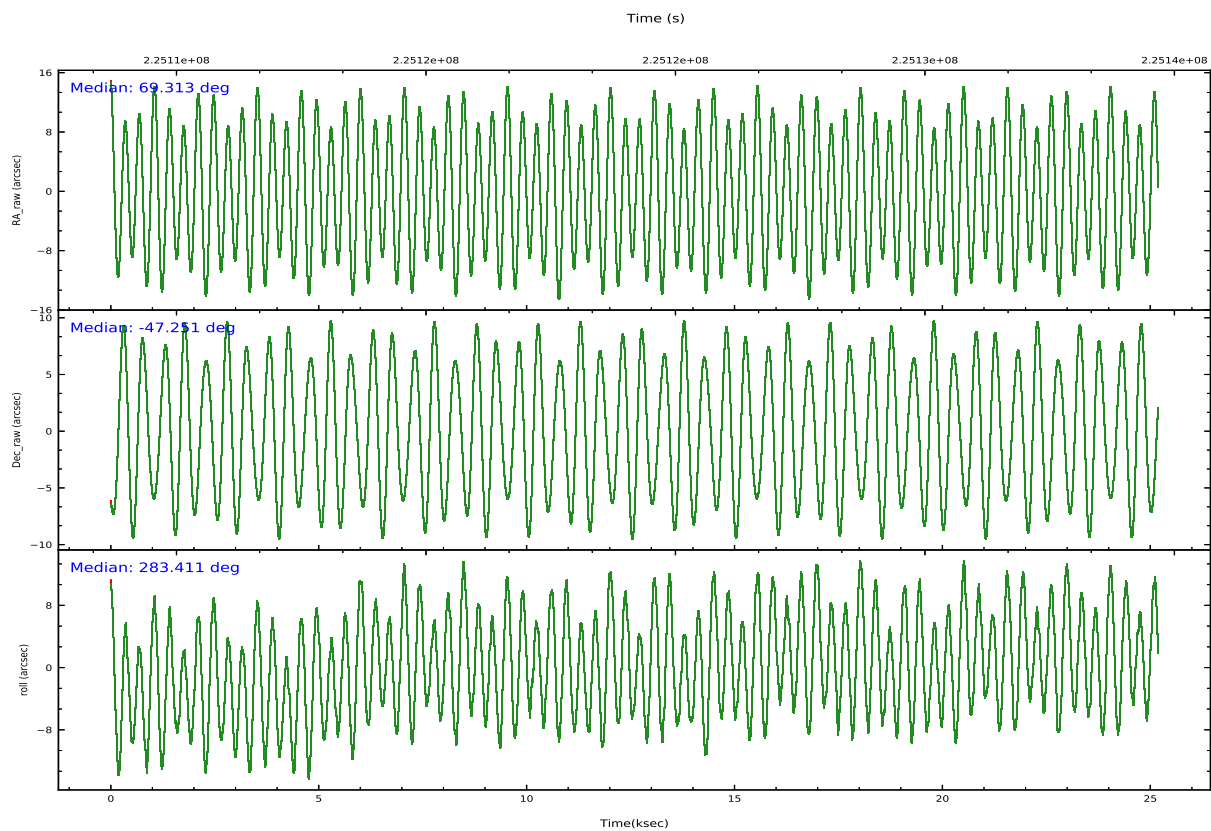
	<b>ccd 7</b>
grade 0 events	3996
	12%
grade 1 events	38
	0%
grade 2 events	3876
	12%
grade 3 events	2165
	6%
grade 4 events	2158
	6%
grade 5 events	2389
	7%
grade 6 events	6126
	19%
grade 7 events	10277
	33%

## 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	69.284984	69.308166590615	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-47.231753	-47.250222661275	Subarray start row	447	447
[deg] Pointing Roll	283.234870	283.41106174671	Subarray row count	101	101
[s] Window start time (MET)	218246464.184000	218246464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	226022404.184000	226022404.184000	[s] Primary exposure time	0.000000	0.4
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	225110609.184000	225109775.351			
Observation start date	2005-02-18T10:42:25	2005-02-18T10:29:35			
[s] Observation end time (MET)	225135609.184000	225136409.9772			
Observation end date	2005-02-18T17:39:05	2005-02-18T17:53:29			
Read mode	TIMED	TIMED			

## 2.3 Aspect



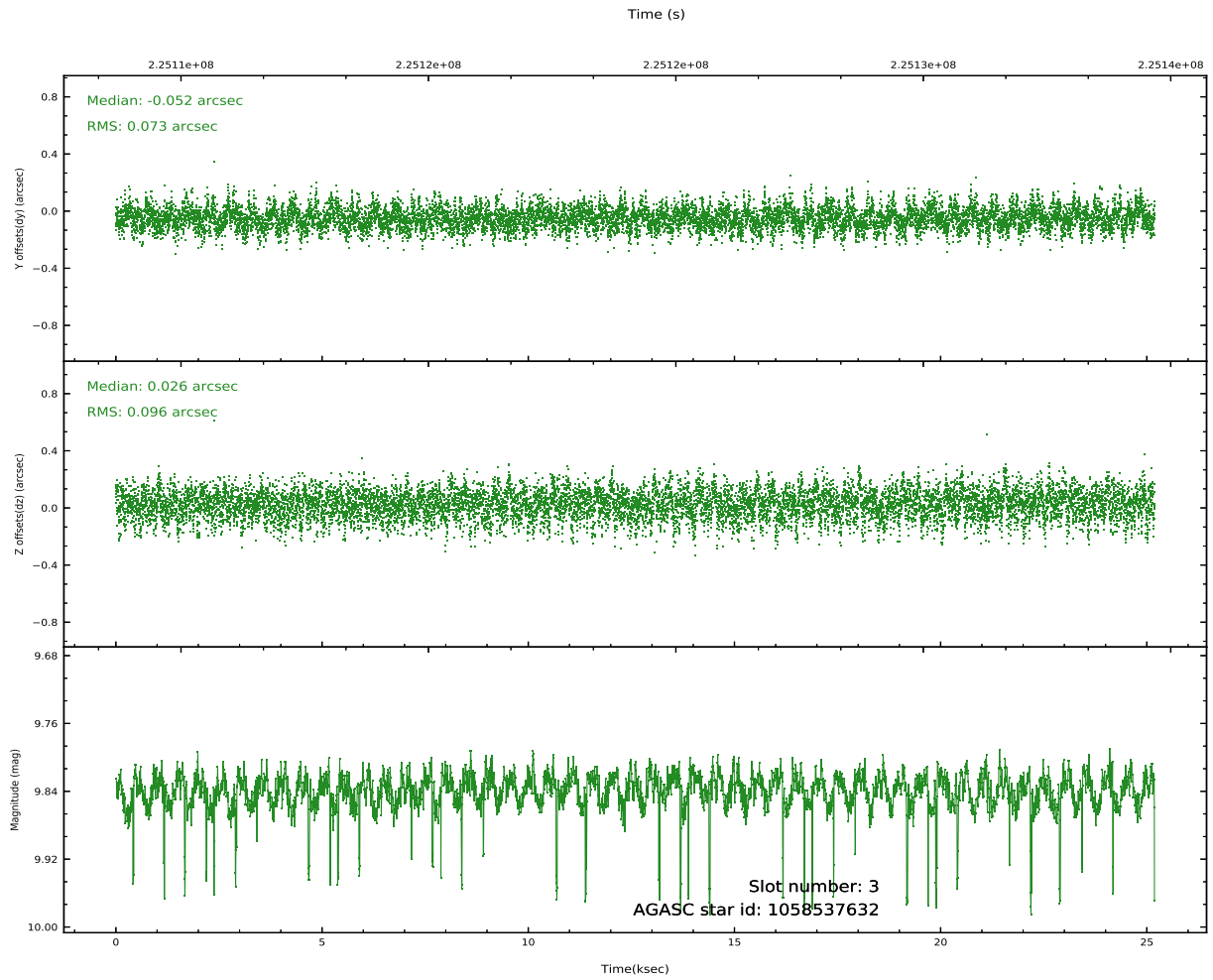
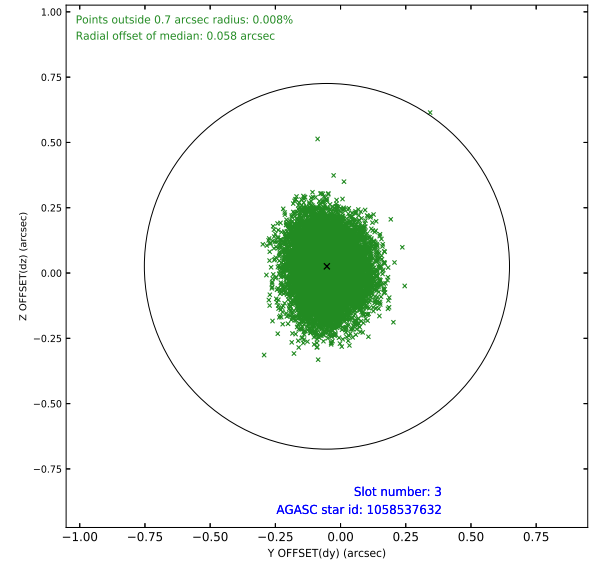
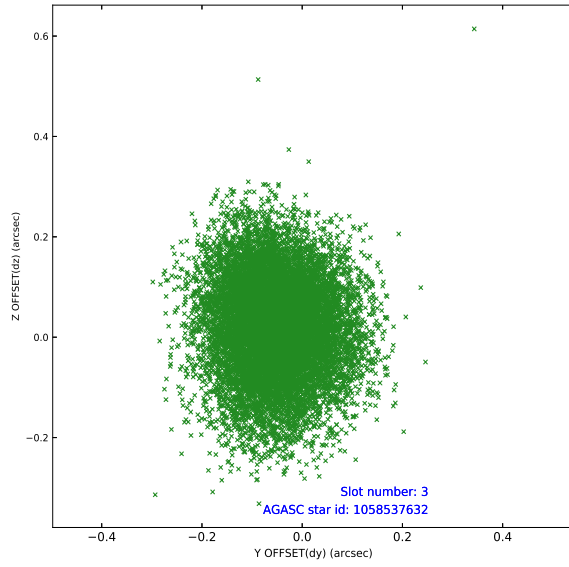


Slot Statistics

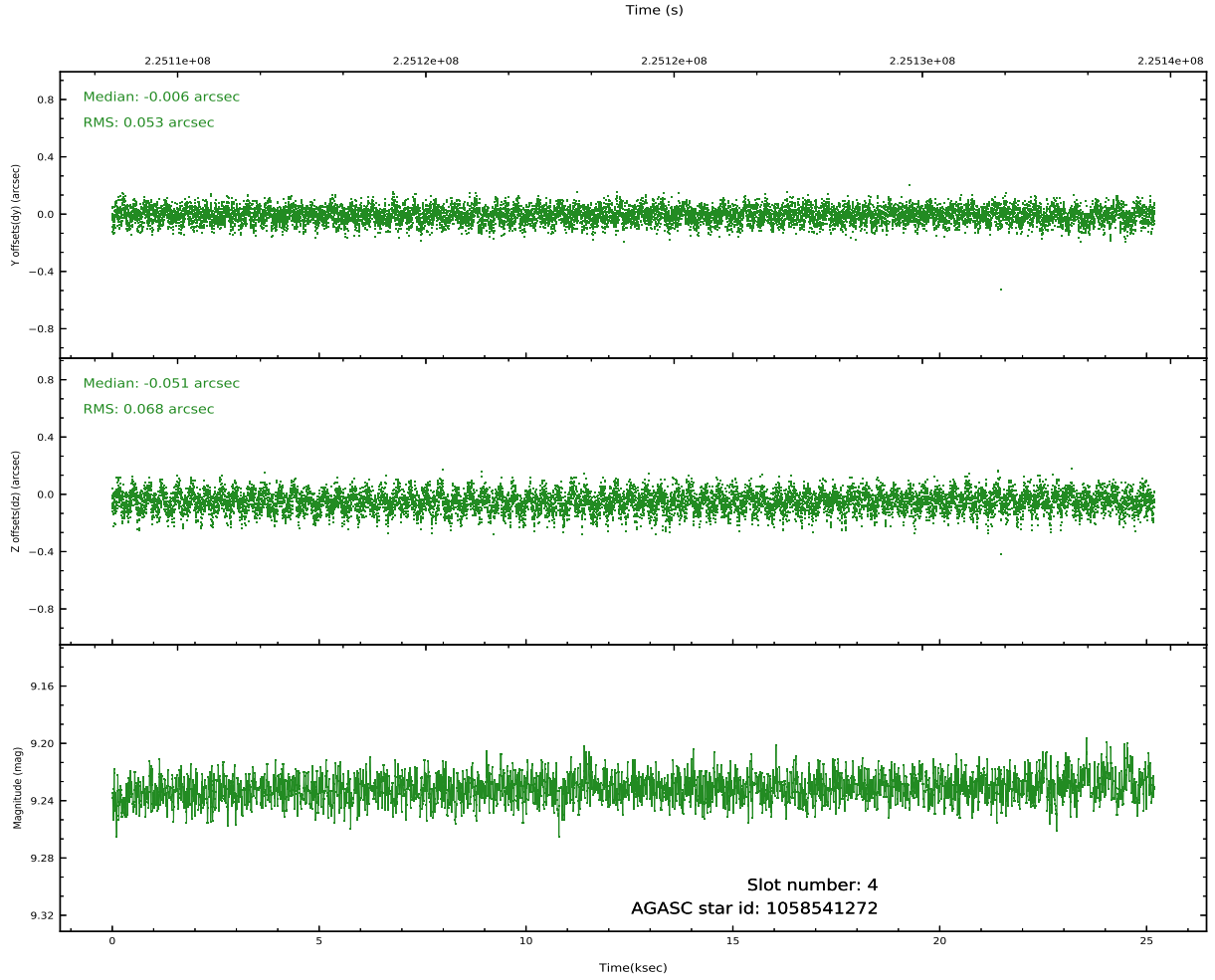
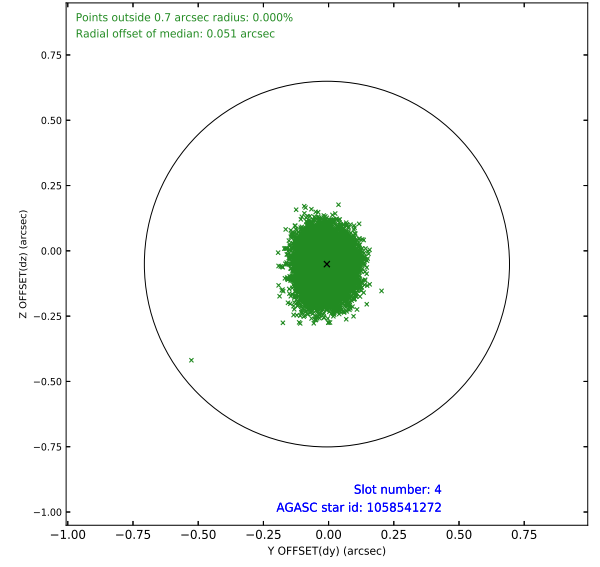
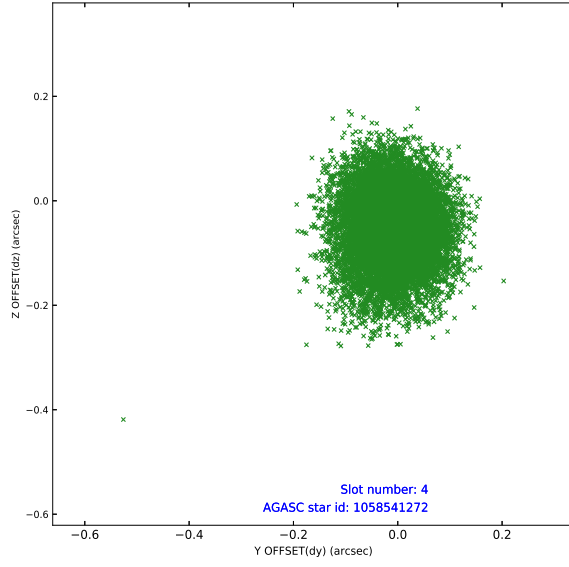
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	6144	1.000	0.032	-0.046	0.024	0.040	0.000000	0.000000	937.39	-1726
1	FID		ACIS-S-5	7.23	6144	1.000	-0.111	0.005	0.021	0.037	0.000000	0.000000	-1811.68	170
2	FID		ACIS-S-6	7.35	6144	1.000	0.062	0.060	0.035	0.045	0.000000	0.000000	402.86	814
3	GUIDE	used	1058537632	9.84	12184	1.000	-0.052	0.026	0.128	0.210	68.291617	-47.025396	-1265.67	-2206
4	GUIDE	used	1058541272	9.23	12279	1.000	-0.006	-0.051	0.092	0.149	68.392275	-46.921735	-1576.28	-1884
5	GUIDE	used	1058542336	9.61	12283	1.000	-0.043	-0.016	0.111	0.180	69.740954	-46.597293	-1961.98	1620
6	GUIDE	used	1058544032	8.99	12211	1.000	0.018	0.022	0.085	0.132	69.576631	-47.141596	-150.98	769
7	GUIDE	used	1058931064	9.48	12235	1.000	0.078	0.022	0.114	0.180	69.760694	-47.722390	1986.94	716

## 2.4 Star Slots

### 2.4.1 Slot 3

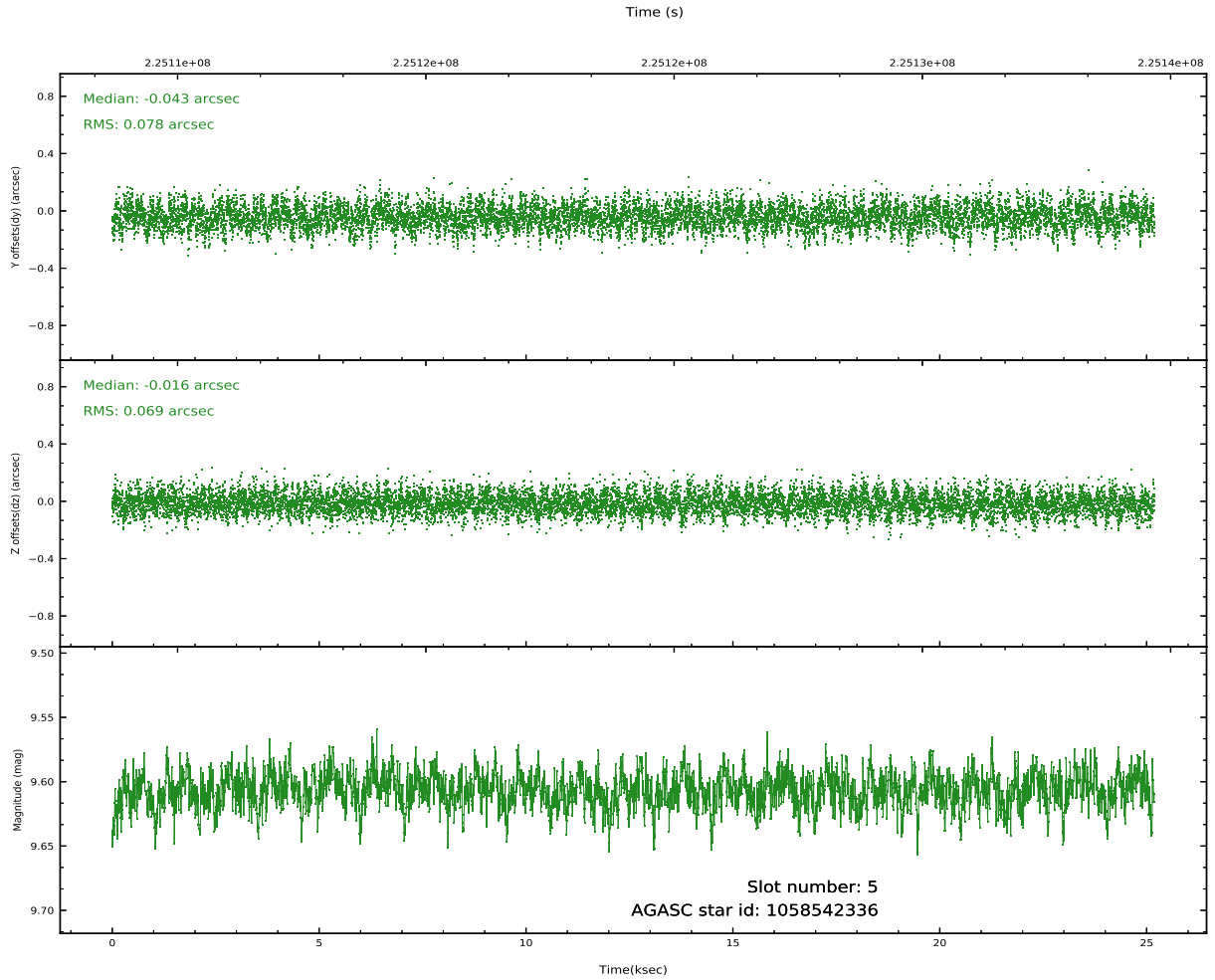
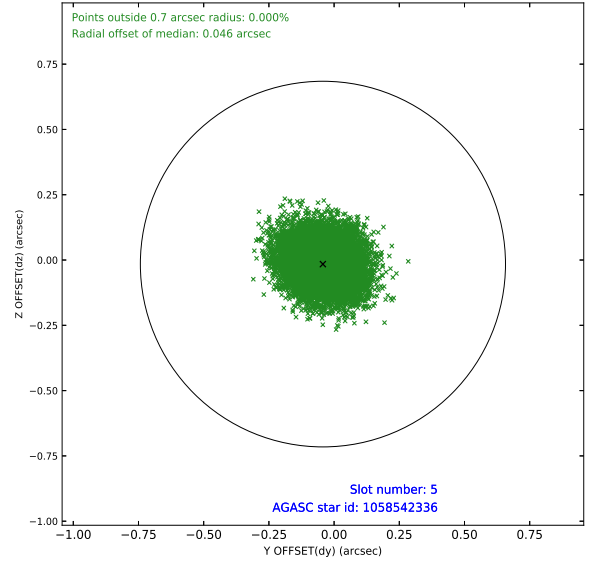
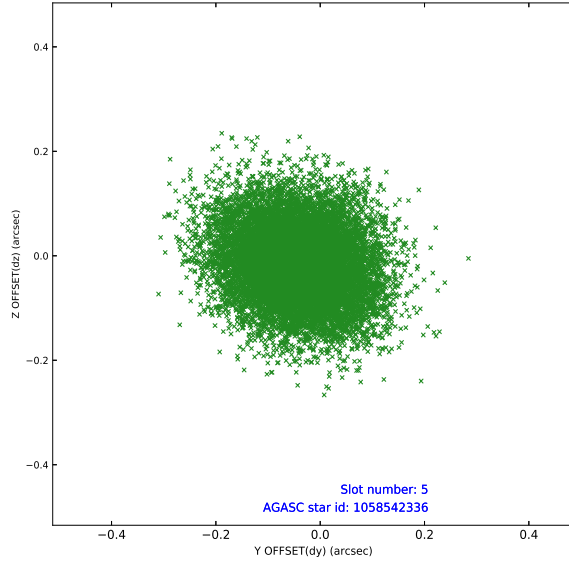


## 2.4.2 Slot 4

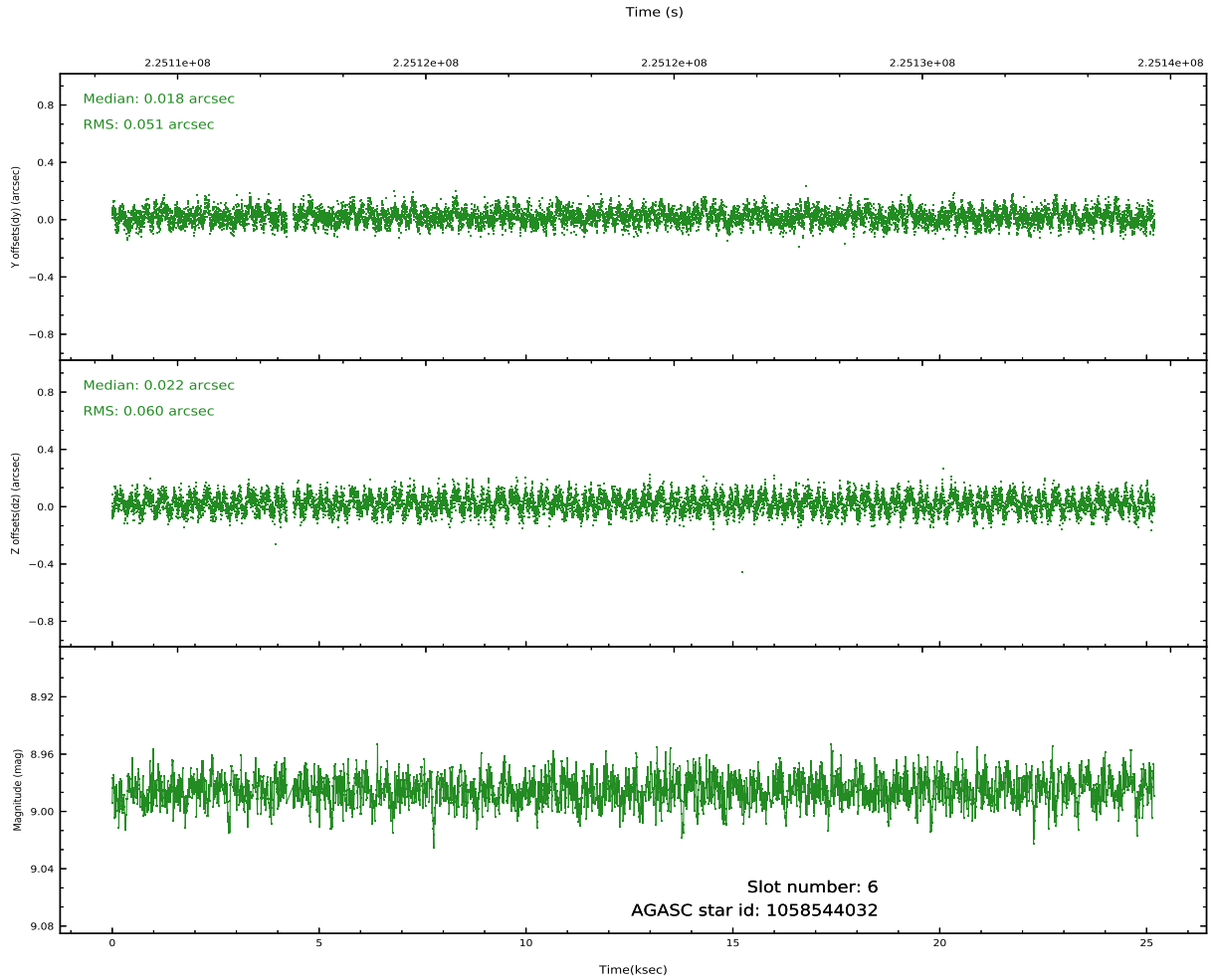
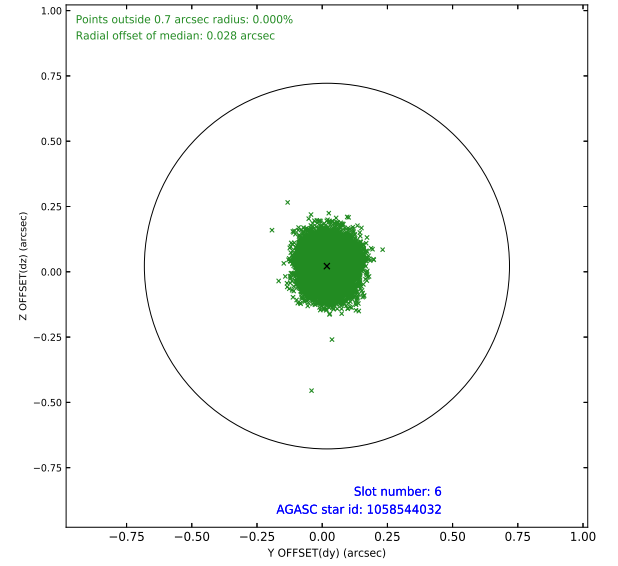
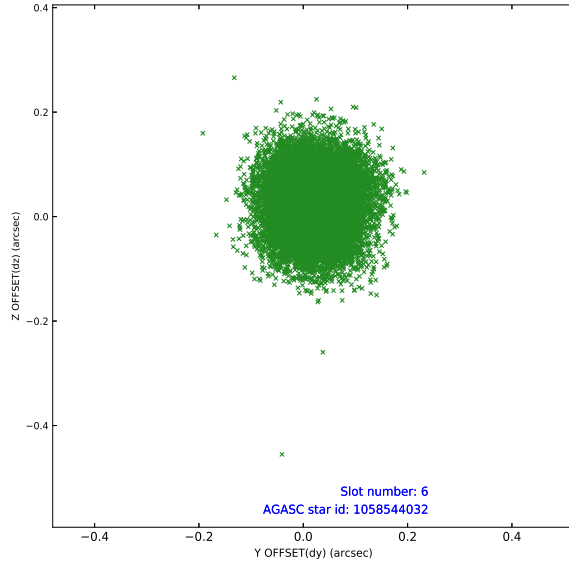




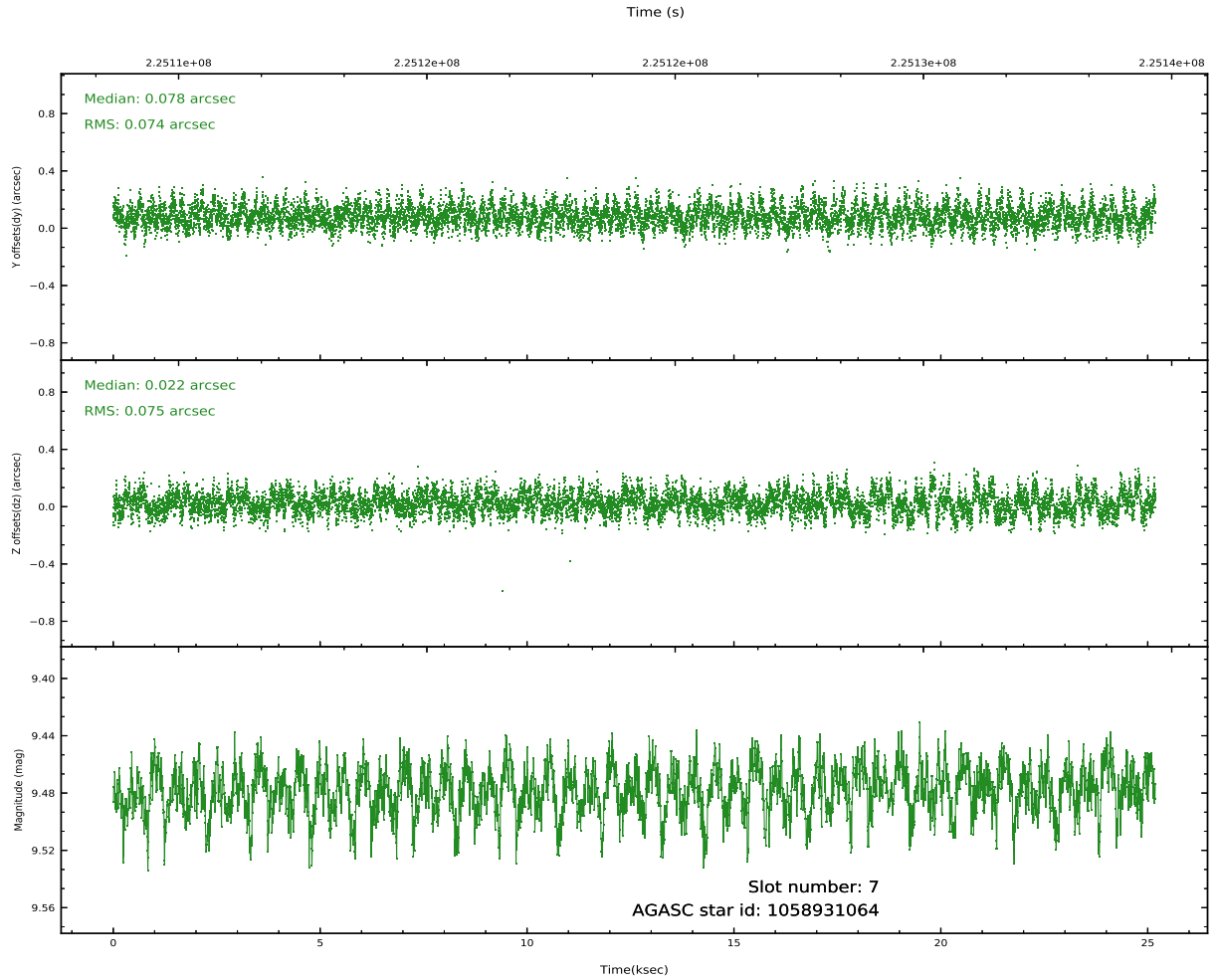
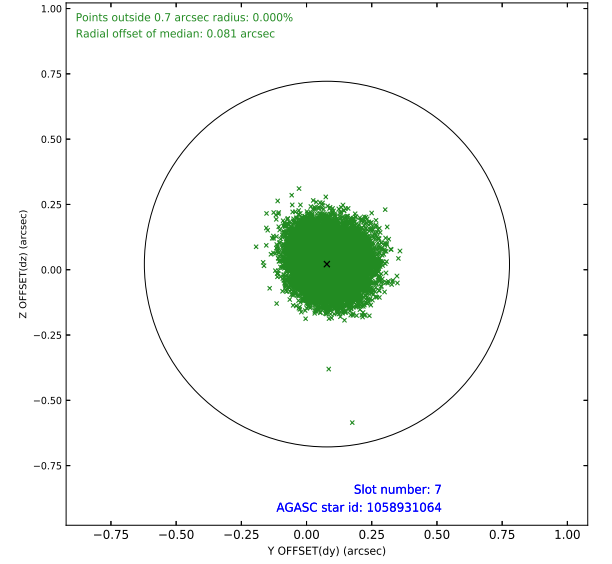
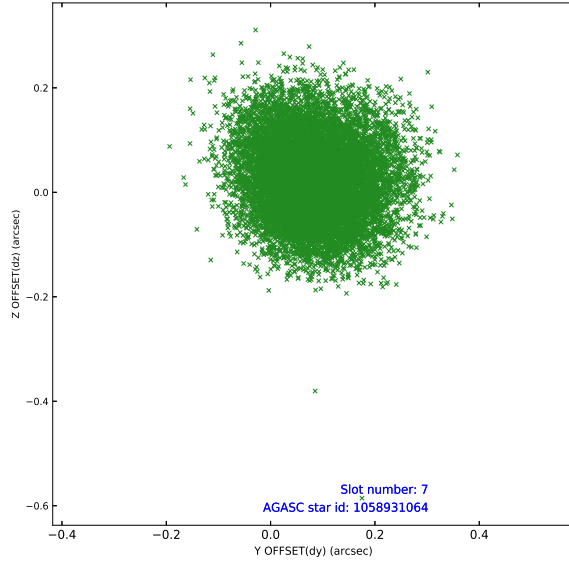
### 2.4.3 Slot 5



## 2.4.4 Slot 6

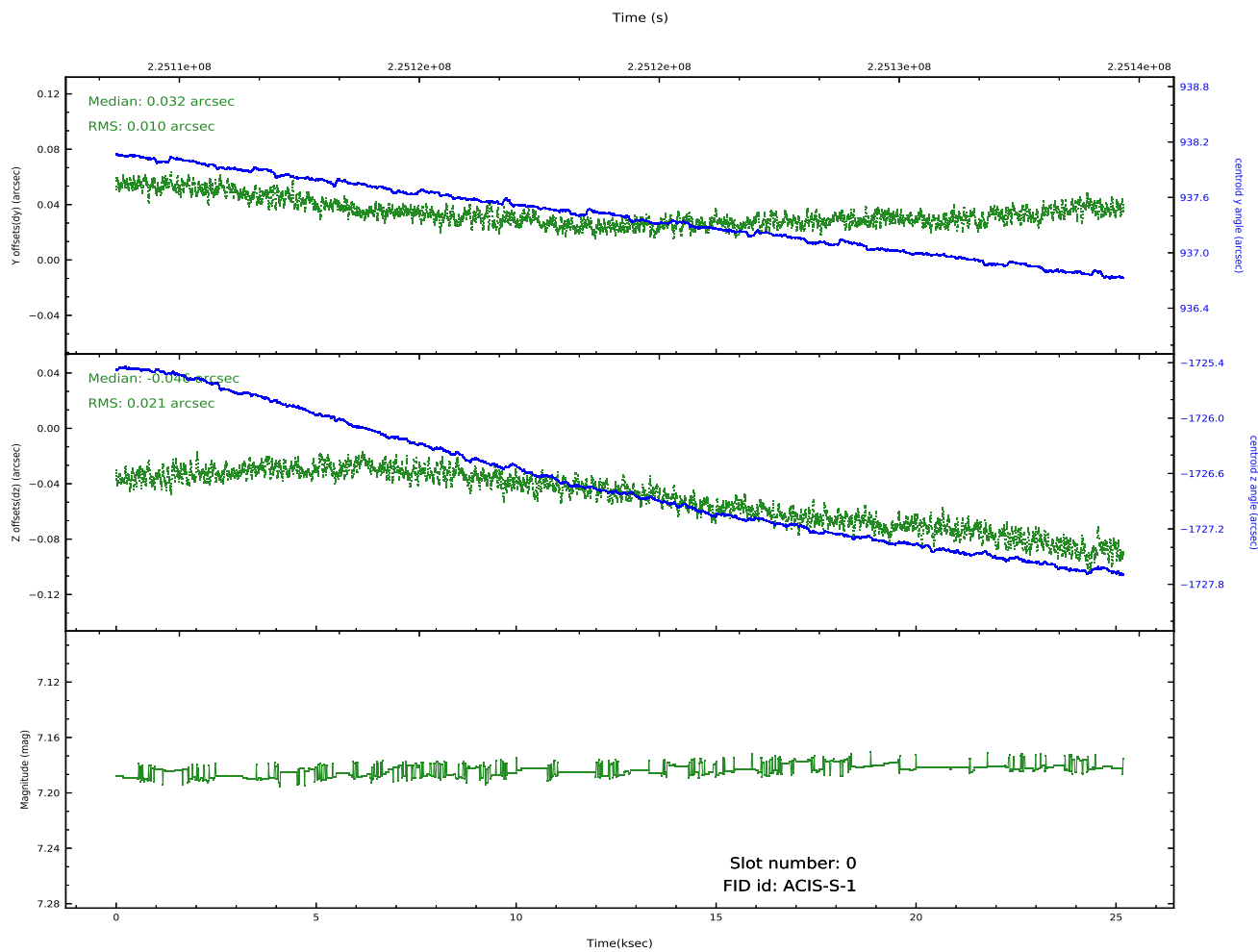
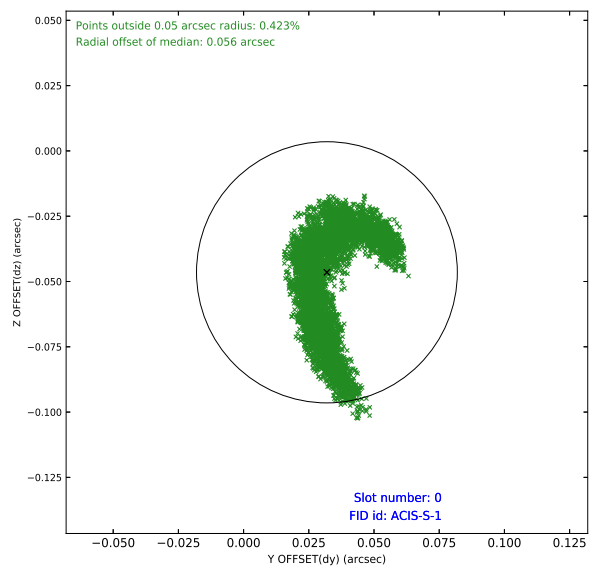
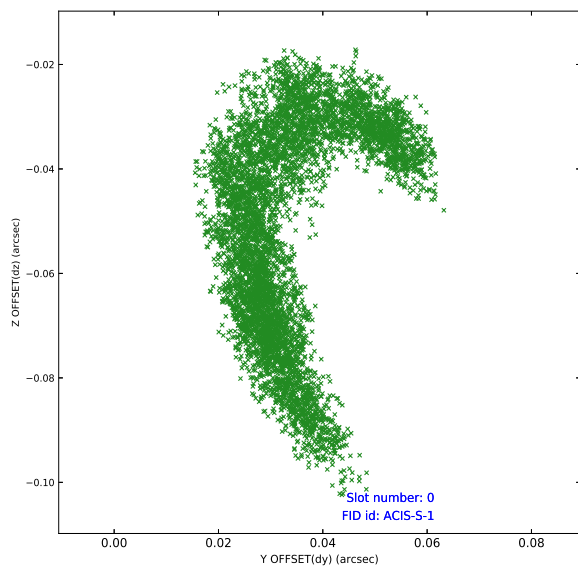


## 2.4.5 Slot 7

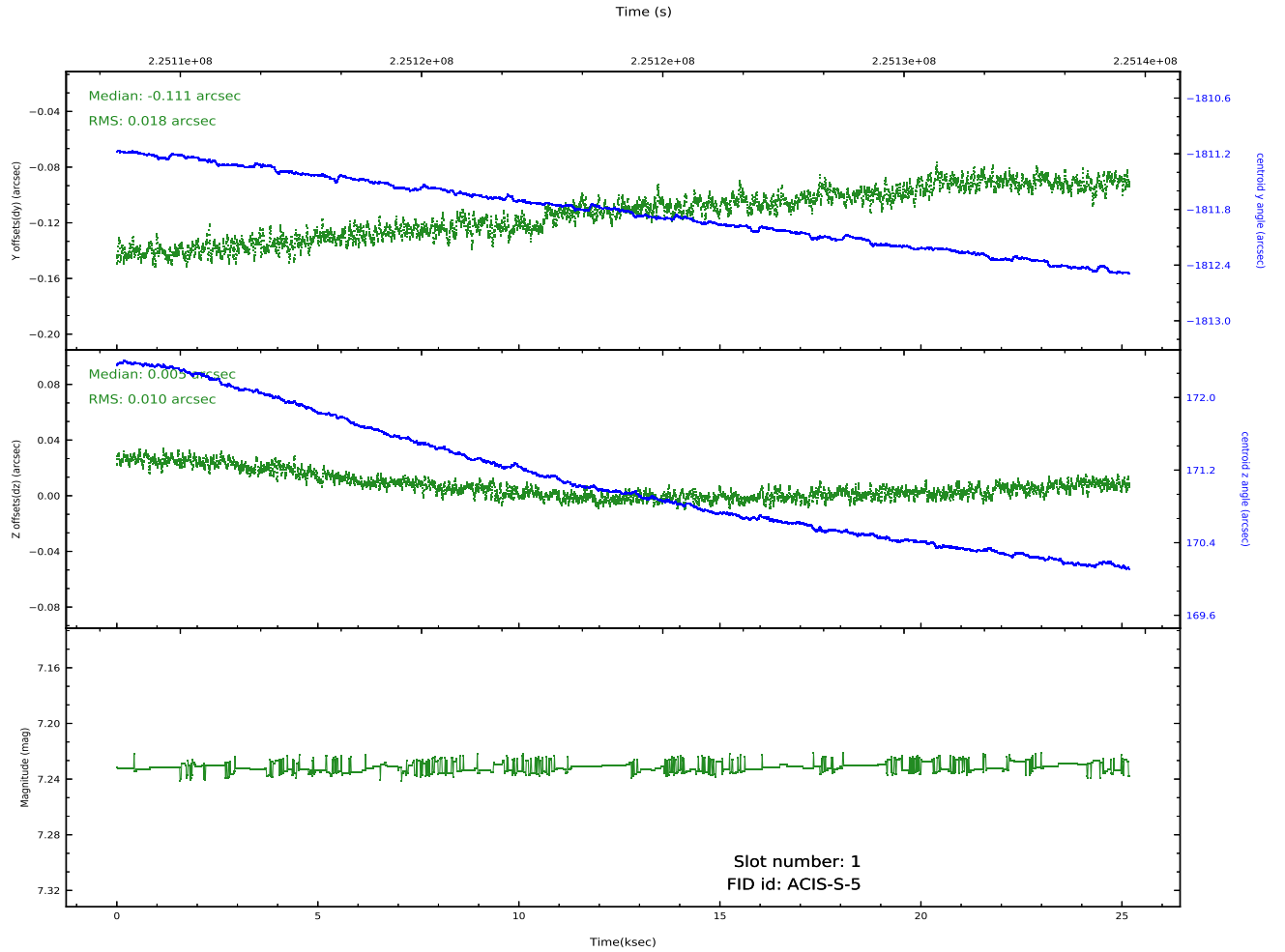
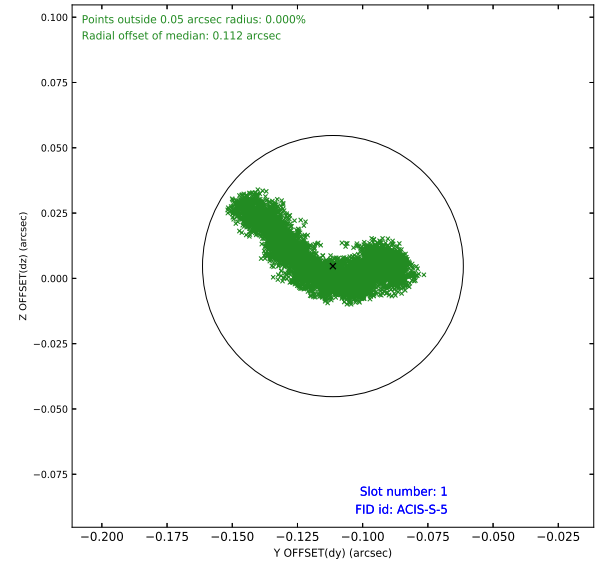
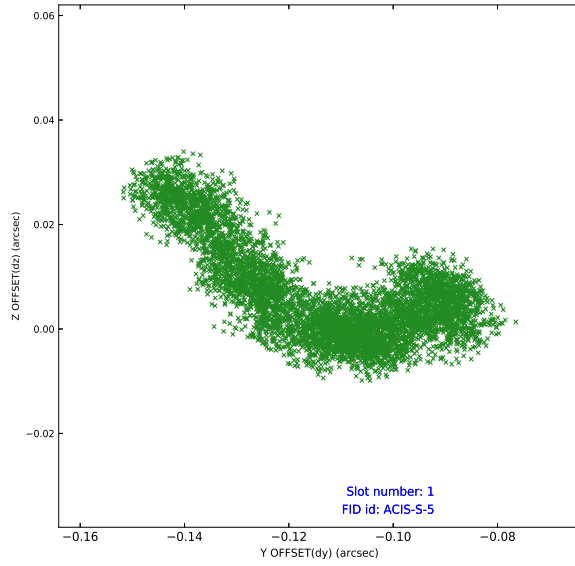


## 2.5 FID Slots

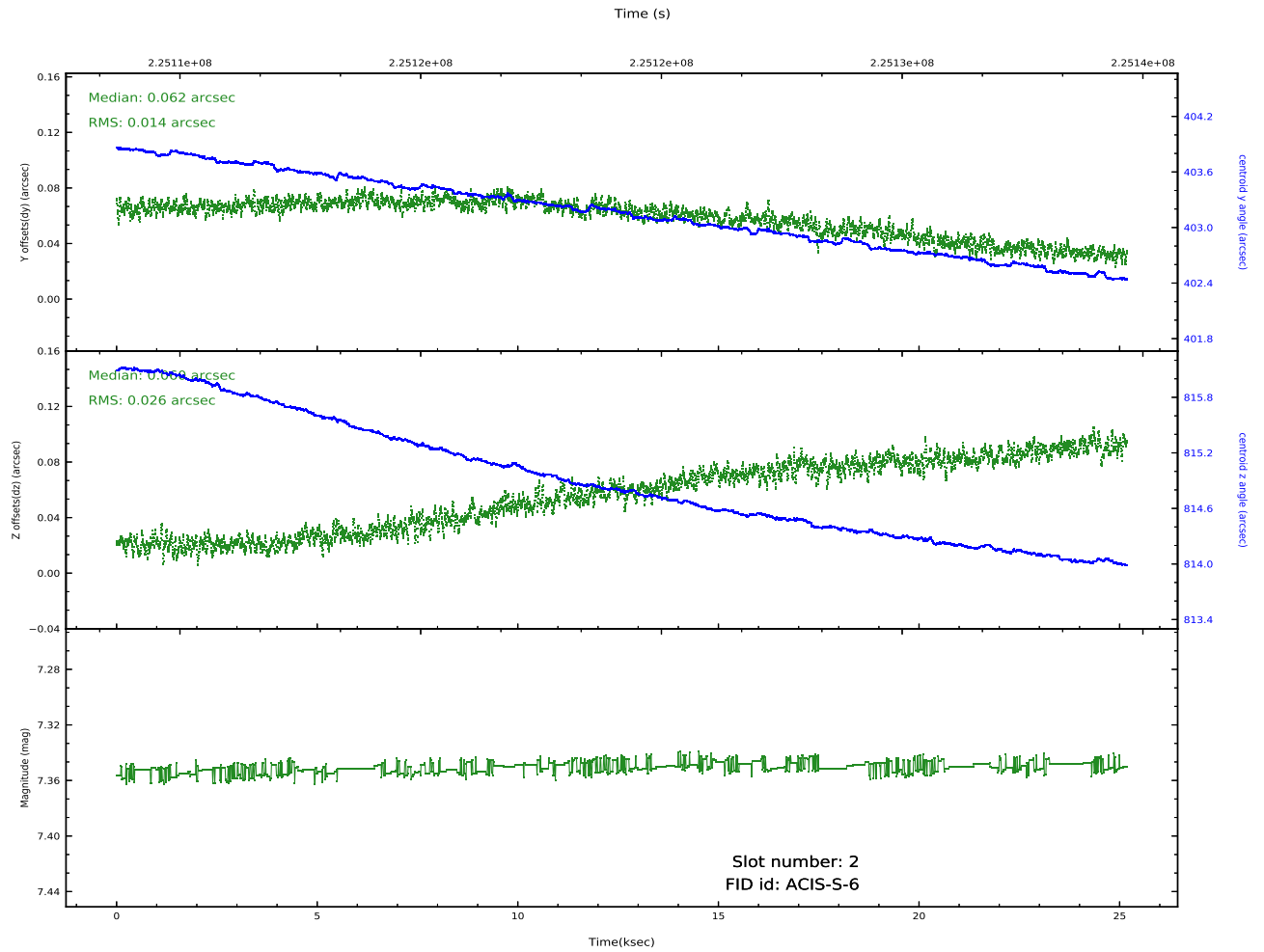
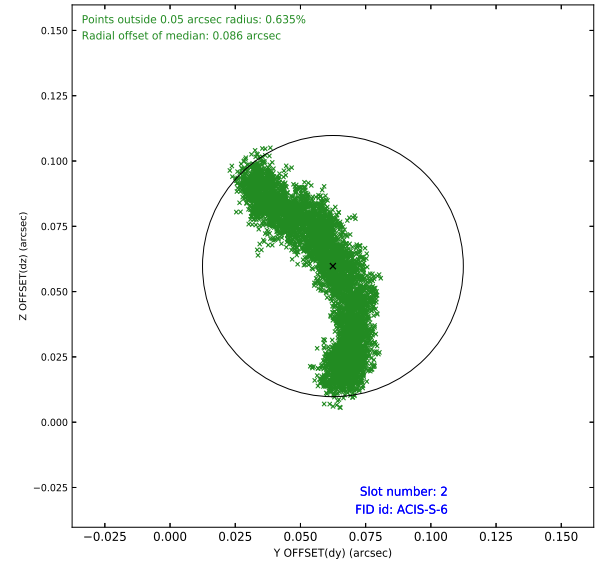
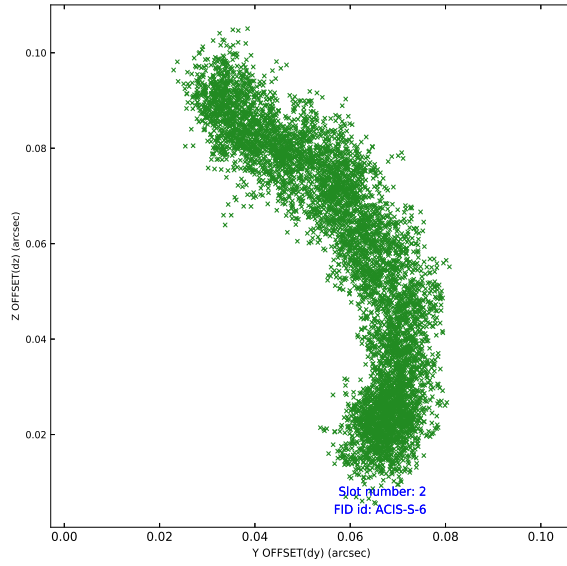
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.1876

### A.2 Comments

Window constraint was met.