

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5426 - L2 Version 4  
Chandra X-Ray Center

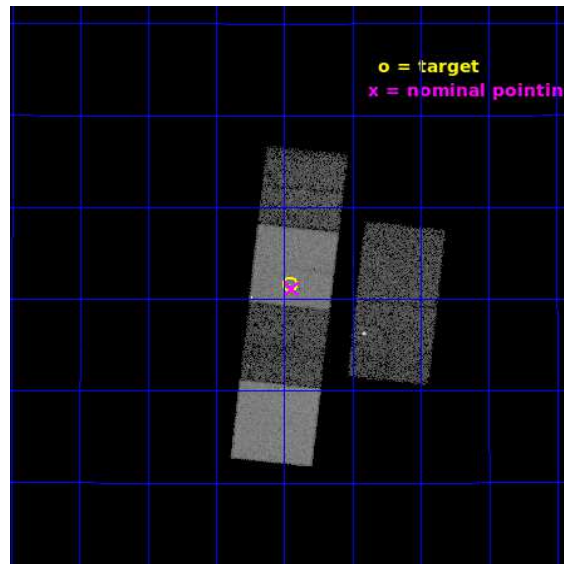
L2 Processing Date : Oct 7 2020

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# 1 Front

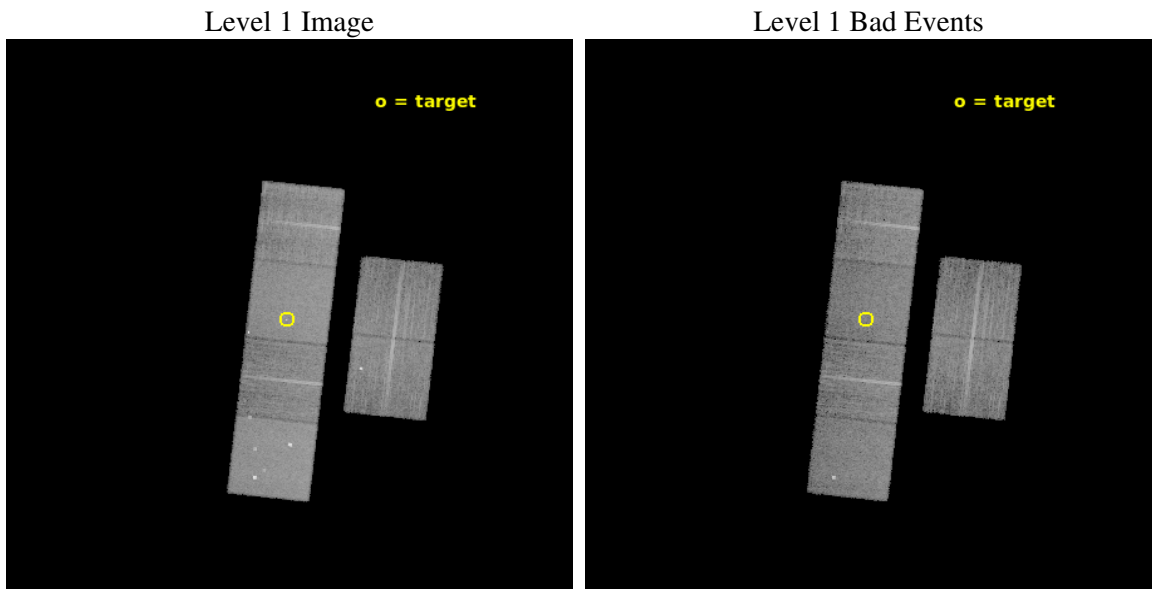
seq_num	200359	Sequence number
obs_id	5426	Observation id
title	How Do T Tauri Stars Generate X-rays?	Proposal title
observer	Professor David Weintraub	Principal investigator
object	V710 Tau	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	67.990417	Observer's specified target RA [deg]
dec_targ	18.36025	Observer's specified target Dec [deg]
ra_nom	67.985966427303	Nominal RA [deg]
dec_nom	18.352329706961	Nominal Dec [deg]
roll_nom	276.29284276173	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10956.592972219	Sum of GTIs [s]
livetime	10817.853994737	Livetime [s]
ontime2	10956.634012222	Sum of GTIs [s]
ontime3	10956.469852209	Sum of GTIs [s]
ontime5	10956.551932216	Sum of GTIs [s]
ontime6	10956.510892212	Sum of GTIs [s]
ontime7	10956.592972219	Sum of GTIs [s]
ontime8	10956.428812236	Sum of GTIs [s]
l2events	133926	Number of level 2 events



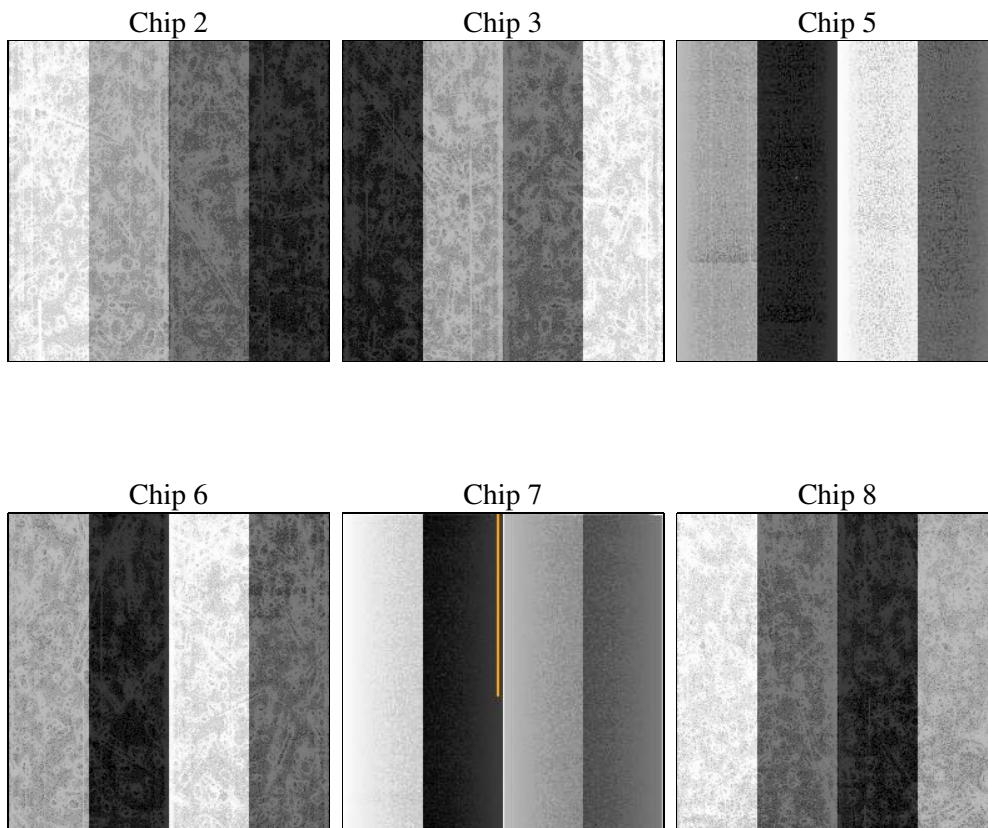
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10956.592972219	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	10956.634012222	Sum of GTIs [s]
date	2020-10-07T16:20:07	Date and time of file creation	ontime3	10956.469852209	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	10956.551932216	Sum of GTIs [s]
			ontime6	10956.510892212	Sum of GTIs [s]
			ontime7	10956.592972219	Sum of GTIs [s]
			ontime8	10956.428812236	Sum of GTIs [s]
			l1events	591131	Number of level 1 events

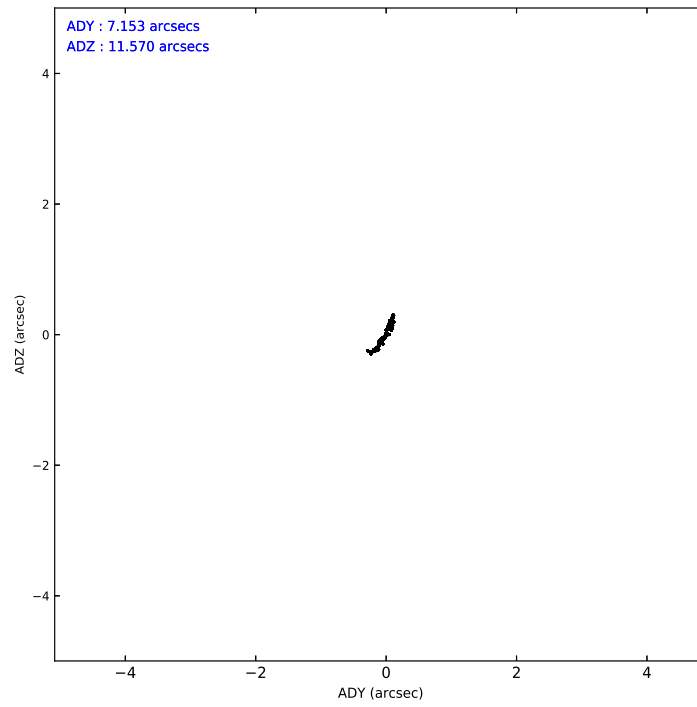
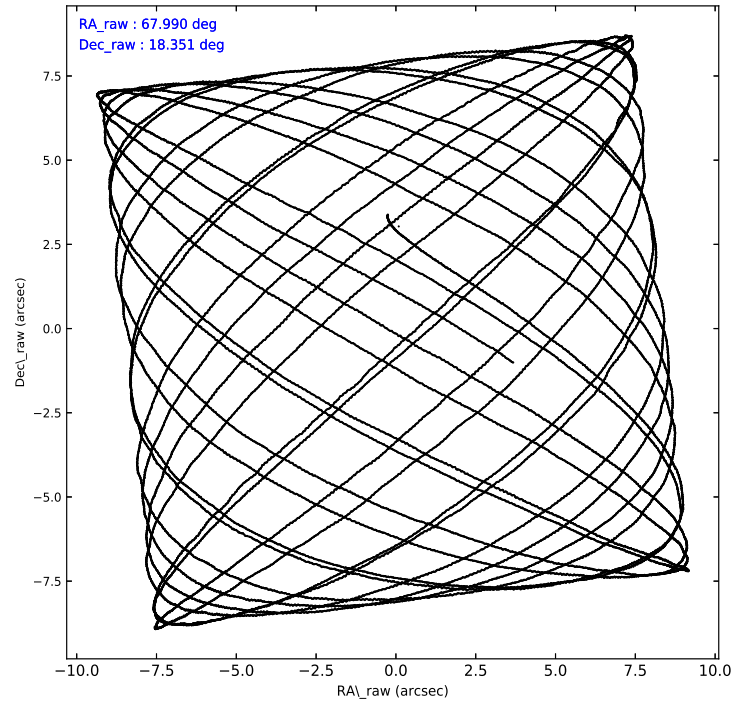
### 2.1.4 Events

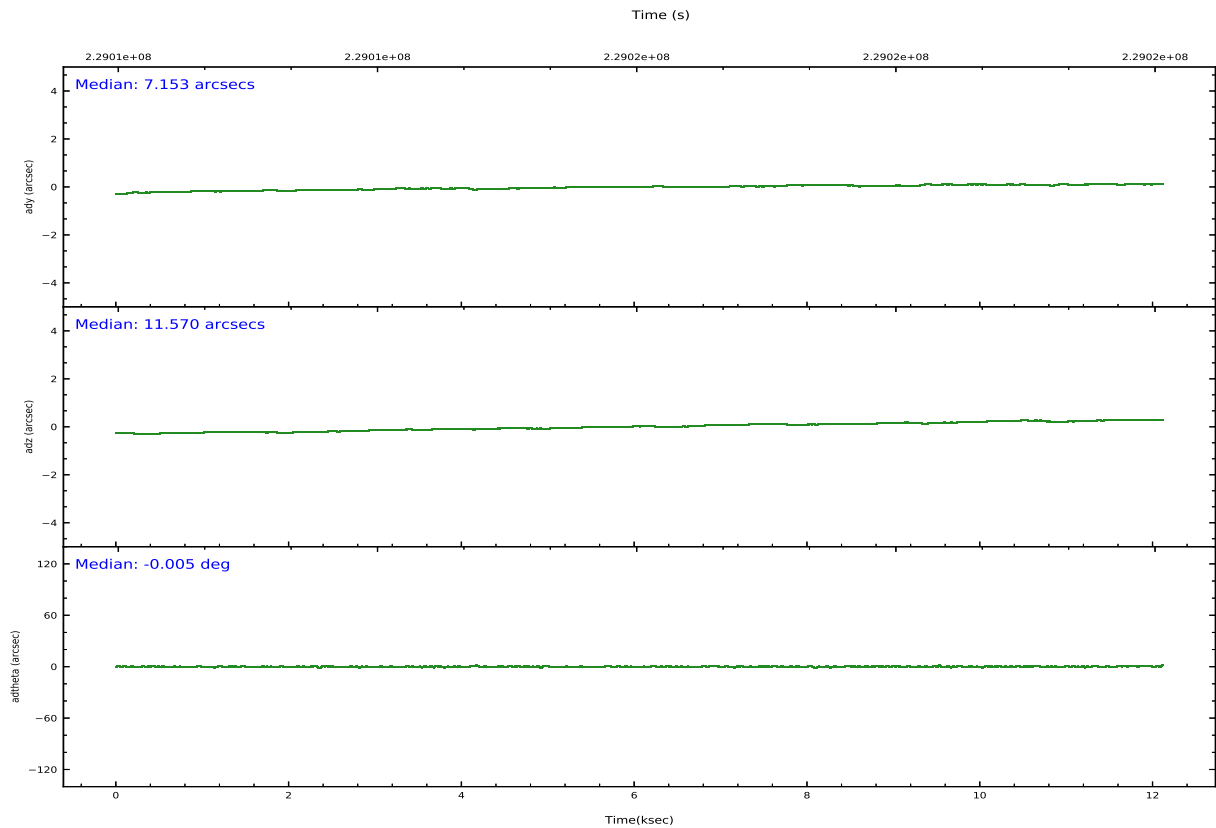
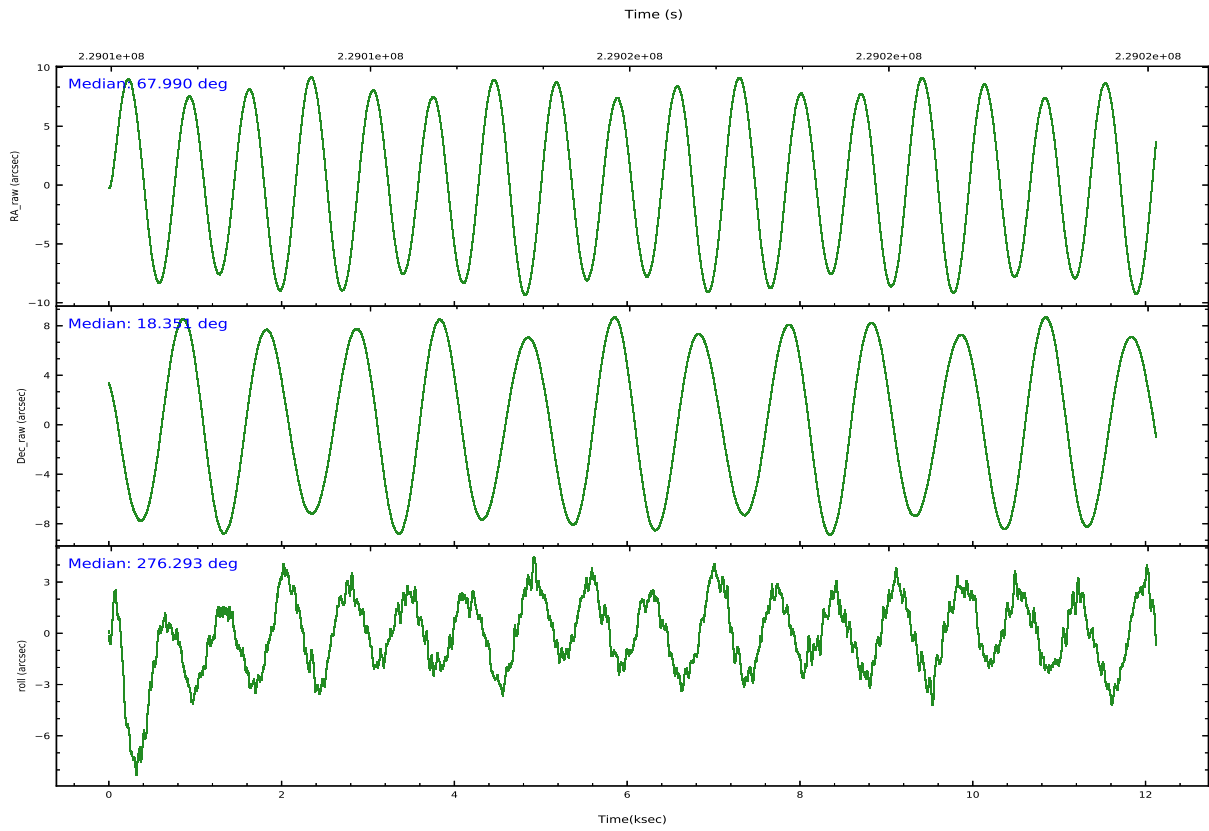
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	84908	79698	128020	81823	112861	103821	grade 0 events	5673	3916	7692	3829	4423	7052
rejected events	73437	70317	68244	72255	65598	80458		6%	4%	6%	4%	3%	6%
rejected %	86%	88%	53%	88%	58%	77%	grade 1 events	87	47	169	35	119	79
								0%	0%	0%	0%	0%	0%
							grade 2 events	2117	1849	17976	1969	9526	5111
								2%	2%	14%	2%	8%	4%
							grade 3 events	999	967	2197	911	4205	2637
								1%	1%	1%	1%	3%	2%
							grade 4 events	994	952	2025	935	4247	2365
								1%	1%	1%	1%	3%	2%
							grade 5 events	3265	3606	9324	3814	10722	4927
								3%	4%	7%	4%	9%	4%
							grade 6 events	1690	1698	29911	1926	24875	6202
								1%	2%	23%	2%	22%	5%
							grade 7 events	70083	66663	58726	68404	54744	75448
								82%	83%	45%	83%	48%	72%

## 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	67.972445	67.985966427303	Subarray requested	NONE	NONE
[deg] Pointing Dec	18.372328	18.352329706961	Alternating exposures requested	N	N
[deg] Pointing Roll	276.139819	276.29284276173	[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)	229010094.184000	229008516.77775			
Observation start date	2005-04-04T13:53:50	2005-04-04T13:28:36			
[s] Observation end time (MET)	229021094.184000	229021816.15335			
Observation end date	2005-04-04T16:57:10	2005-04-04T17:10:16			
Read mode	TIMED	TIMED			

## 2.3 Aspect





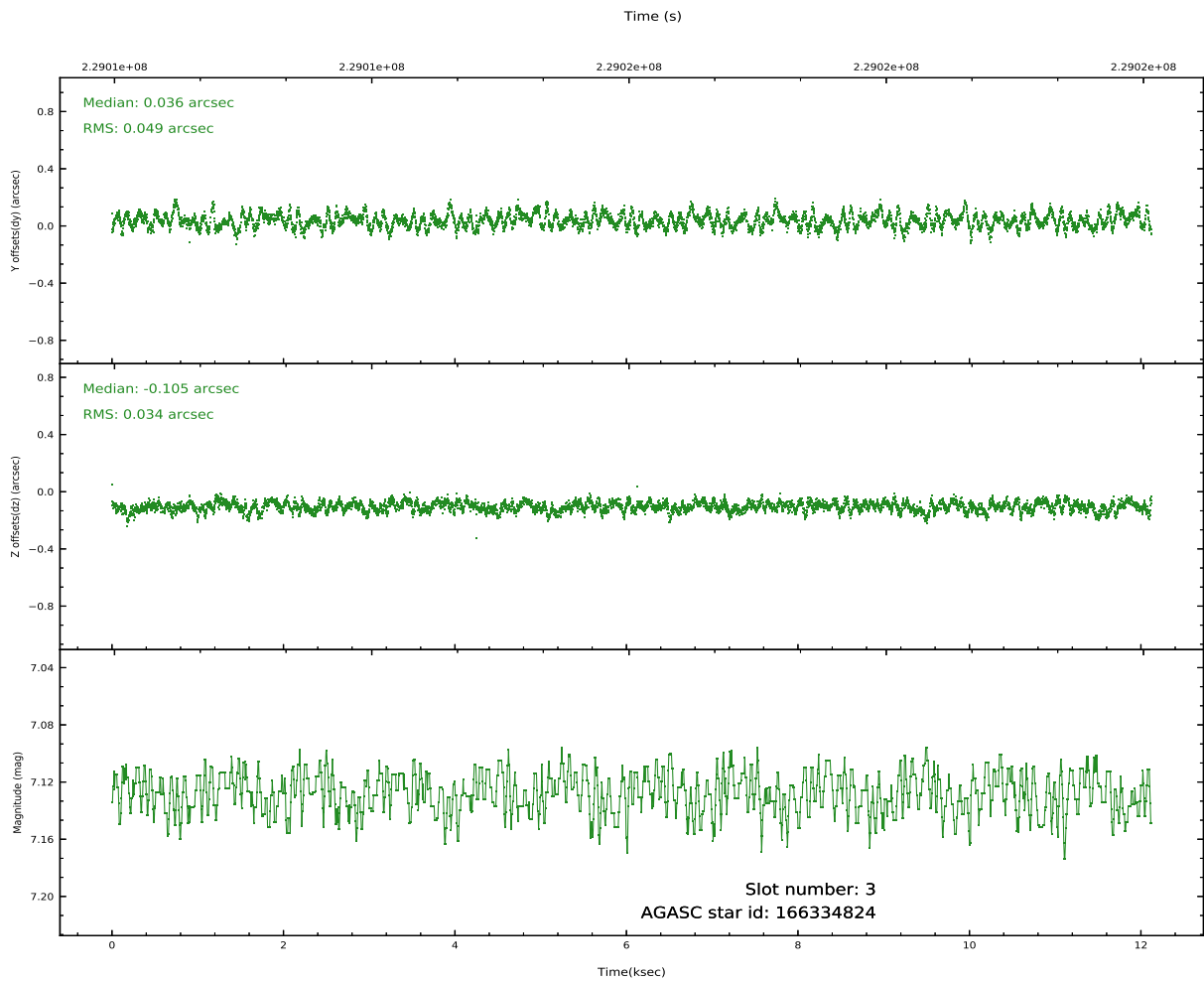
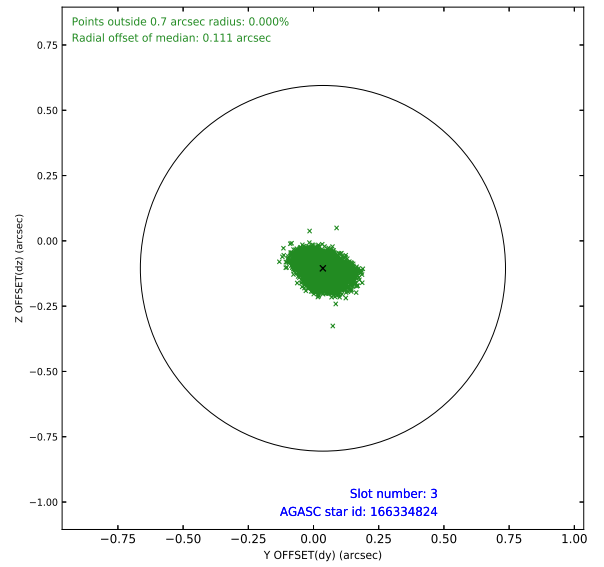
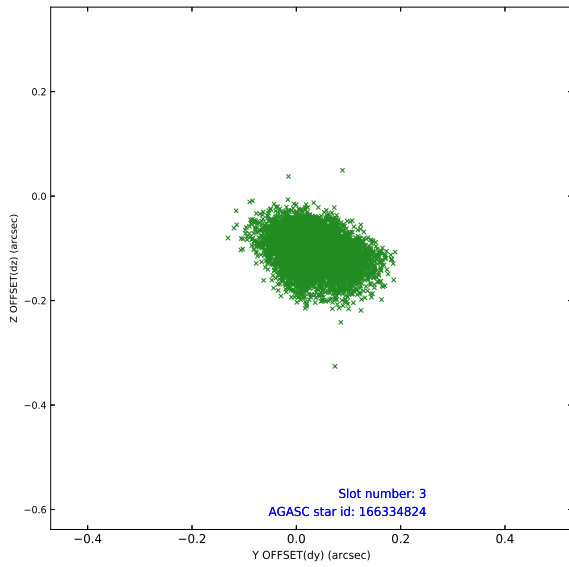
### Slot Statistics

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	2957	1.000	-0.094	-0.080	0.006	0.011	0.000000	0.000000	-759.95	-1732
1	FID		ACIS-S-4	7.20	2957	1.000	0.094	0.038	0.006	0.010	0.000000	0.000000	2153.30	175
2	FID		ACIS-S-6	7.34	2957	1.000	-0.027	0.049	0.007	0.012	0.000000	0.000000	402.59	813
3	GUIDE	used	166334824	7.13	5915	1.000	0.036	-0.105	0.062	0.103	67.376458	17.863163	1601.55	-2225
4	GUIDE	used	166338584	9.40	5910	1.000	0.169	0.036	0.092	0.148	67.904616	17.709782	2347.59	-485
5	GUIDE	used	166468240	9.07	5912	1.000	0.146	-0.042	0.068	0.114	68.167699	17.861525	1900.49	468
6	GUIDE	used	166995216	7.94	5913	1.000	-0.228	0.071	0.049	0.077	68.200288	18.935370	-1932.43	988
7	GUIDE	used	166996584	9.13	5905	1.000	-0.124	0.039	0.066	0.107	68.020035	18.861675	-1734.37	349

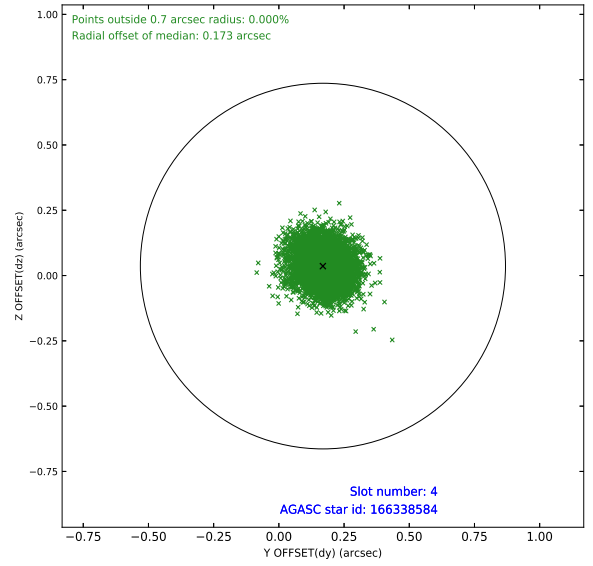
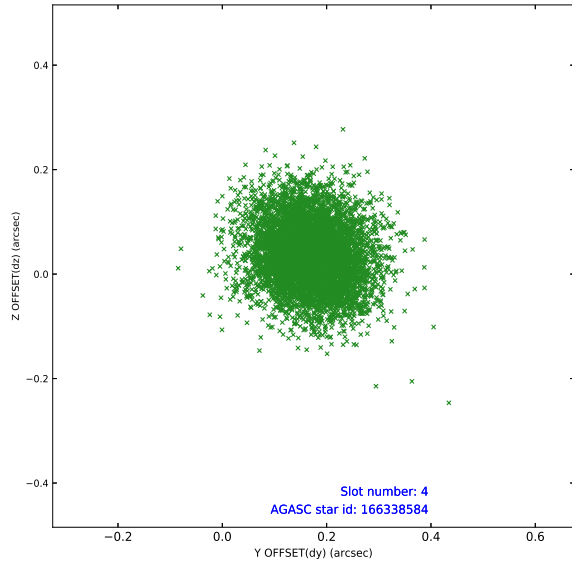
∞

## 2.4 Star Slots

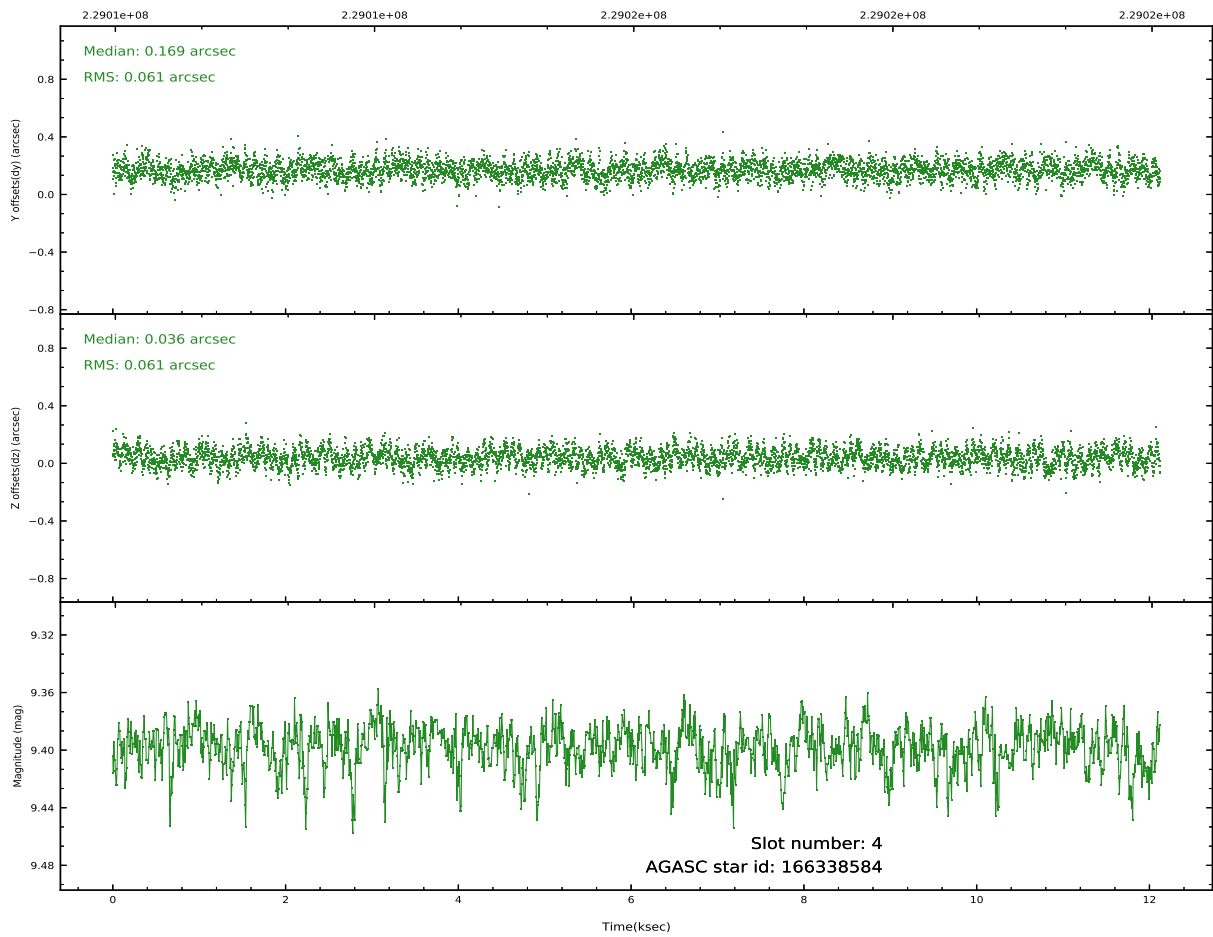
### 2.4.1 Slot 3



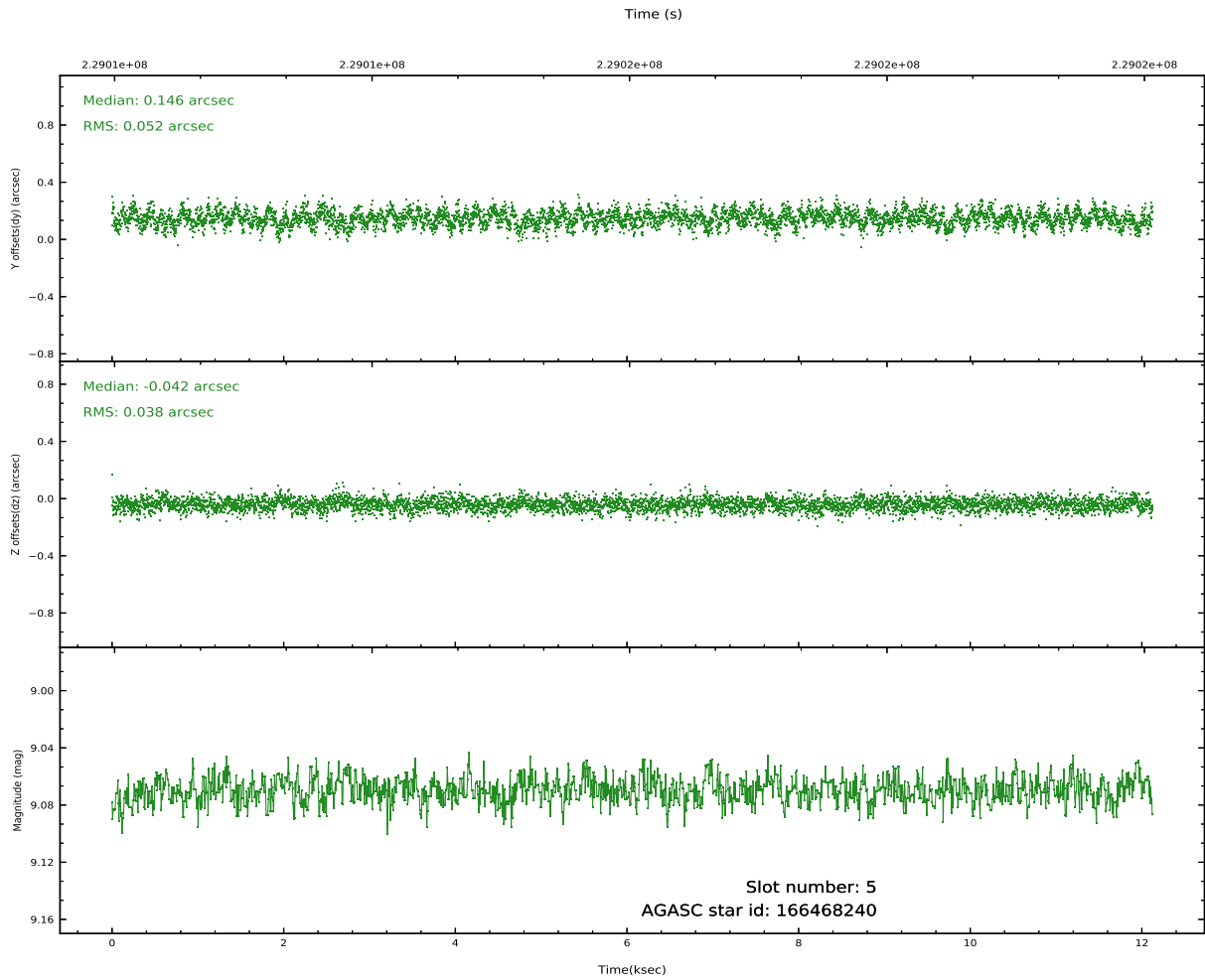
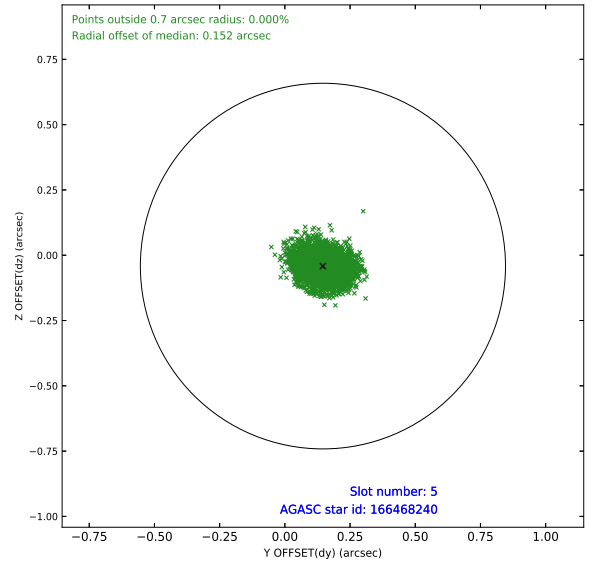
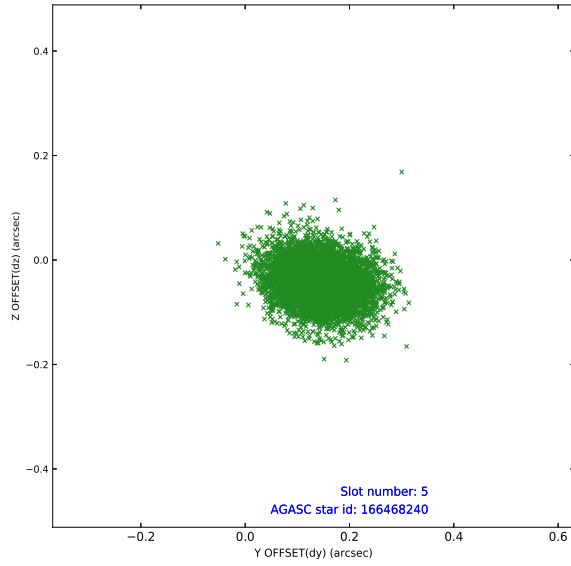
## 2.4.2 Slot 4



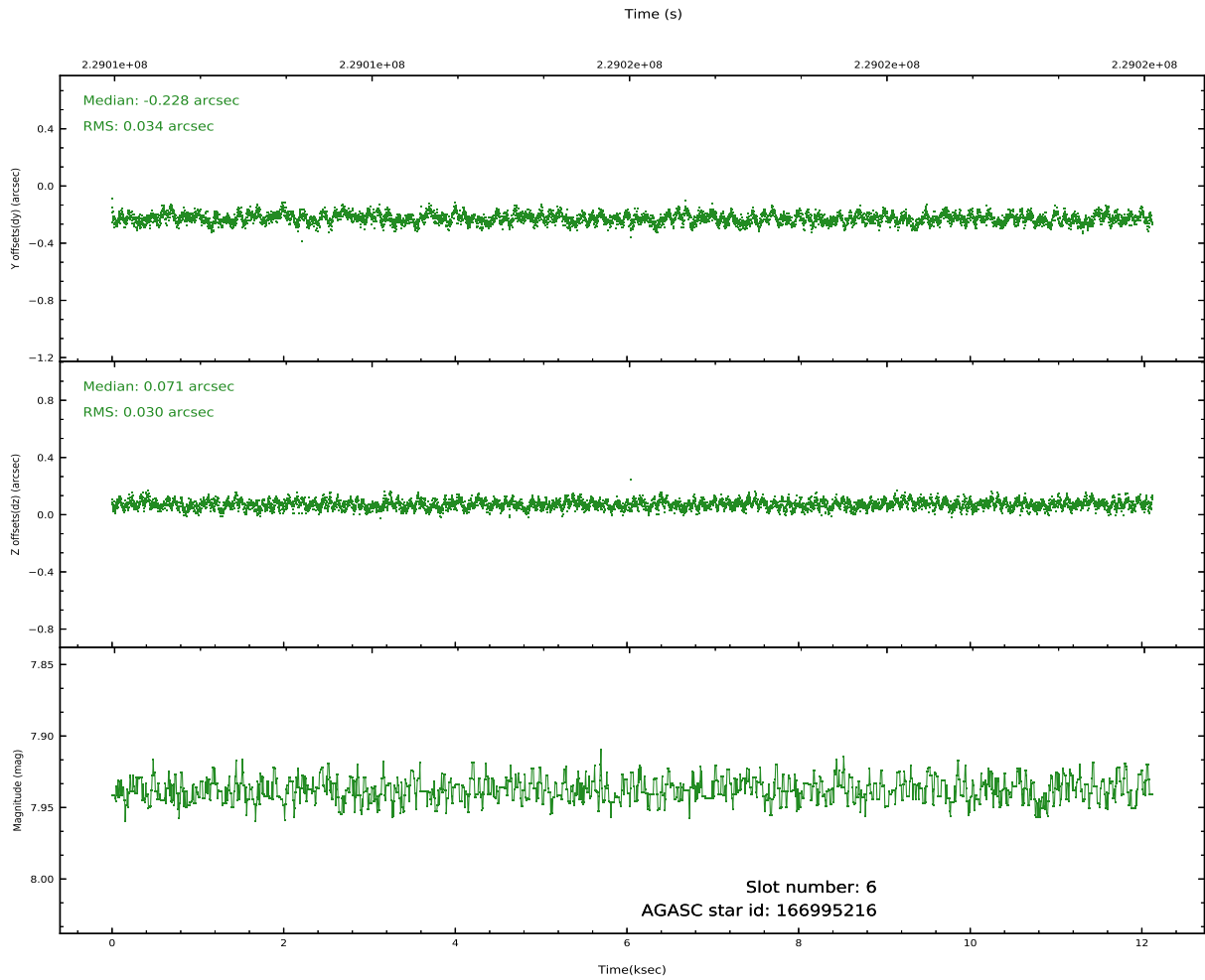
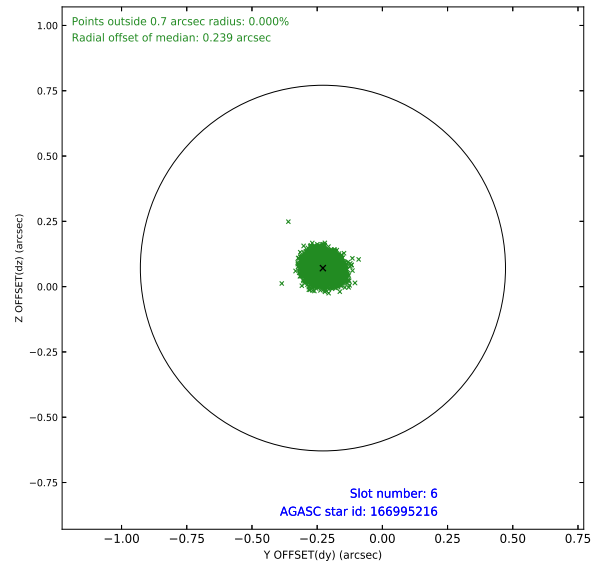
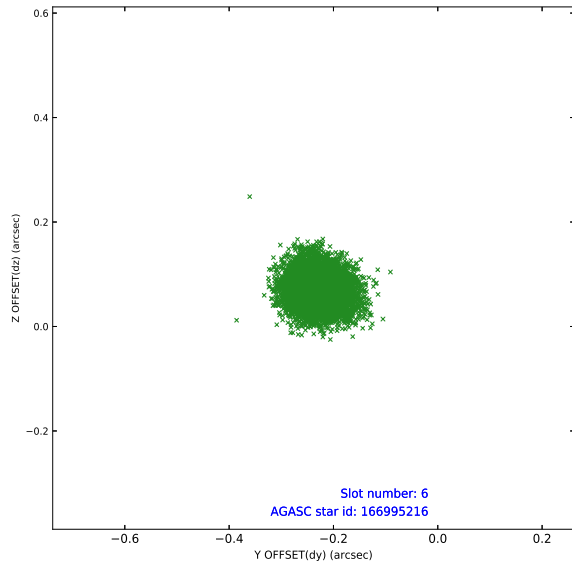
Time (s)



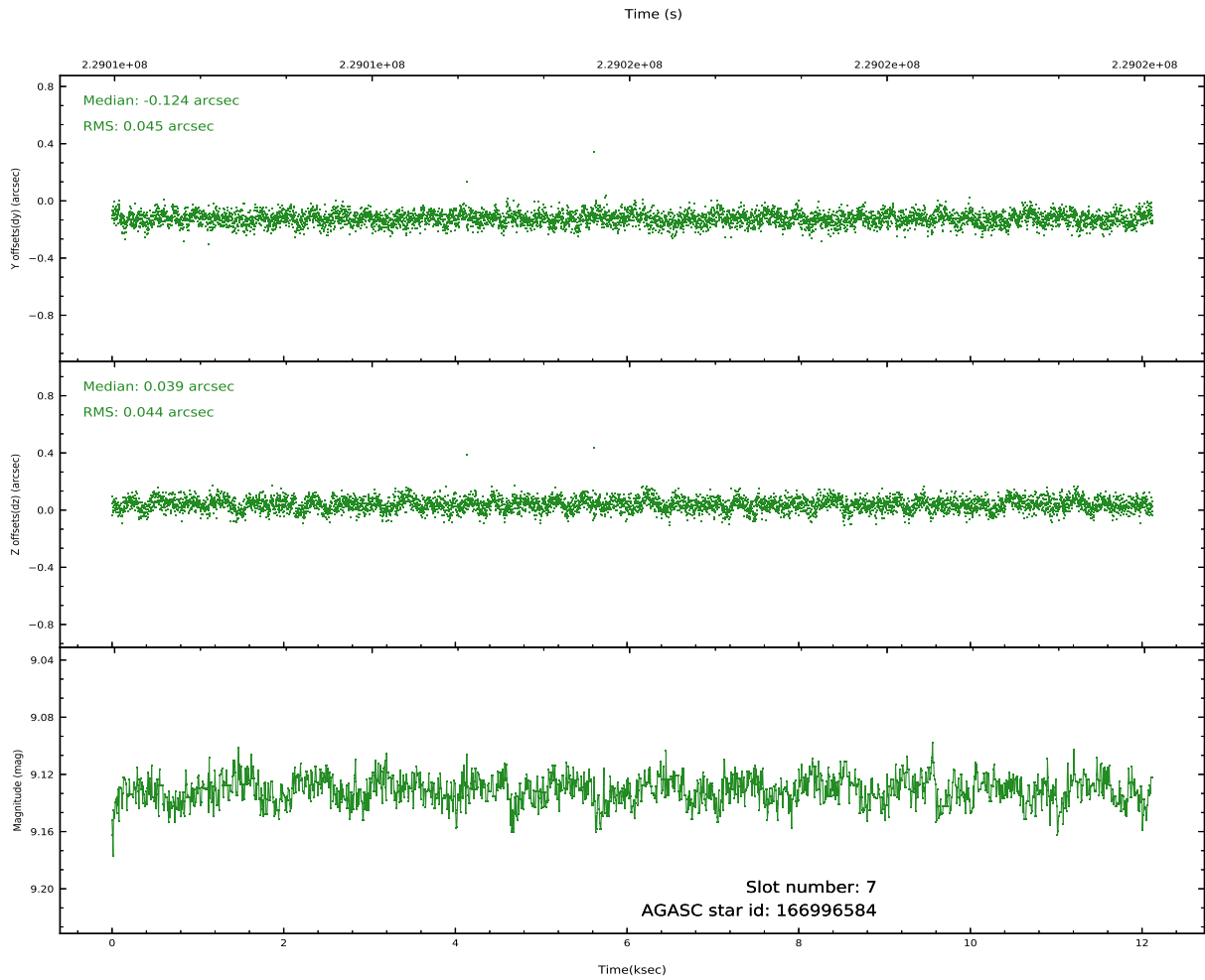
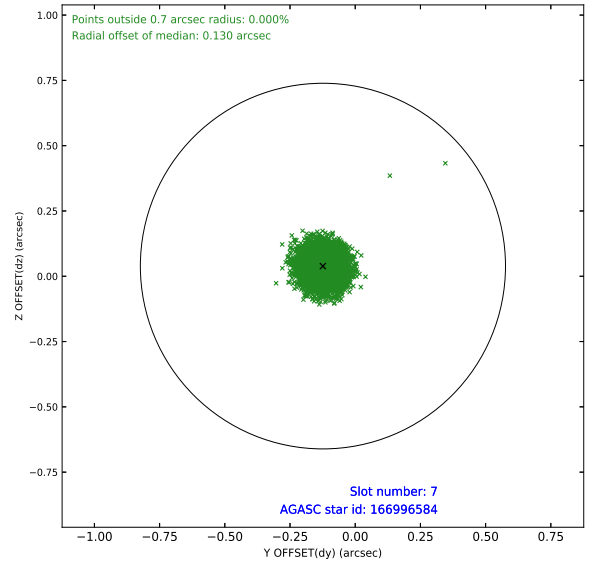
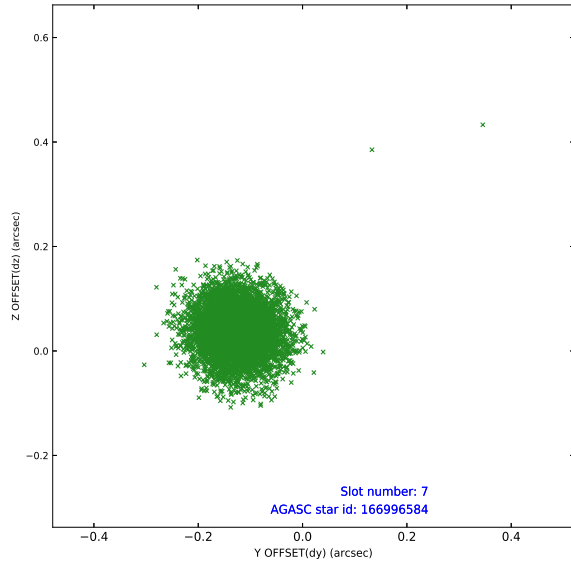
### 2.4.3 Slot 5



## 2.4.4 Slot 6

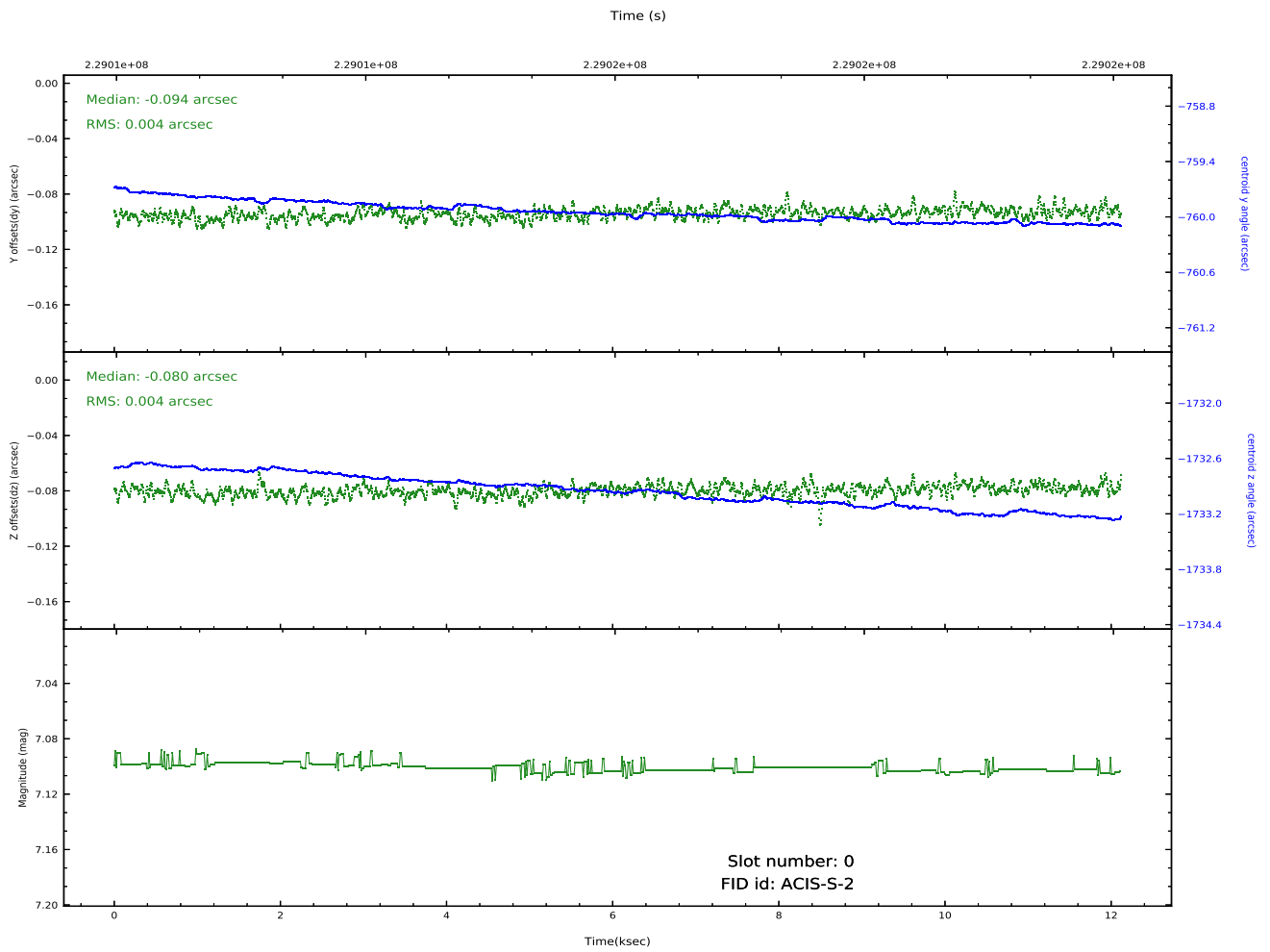
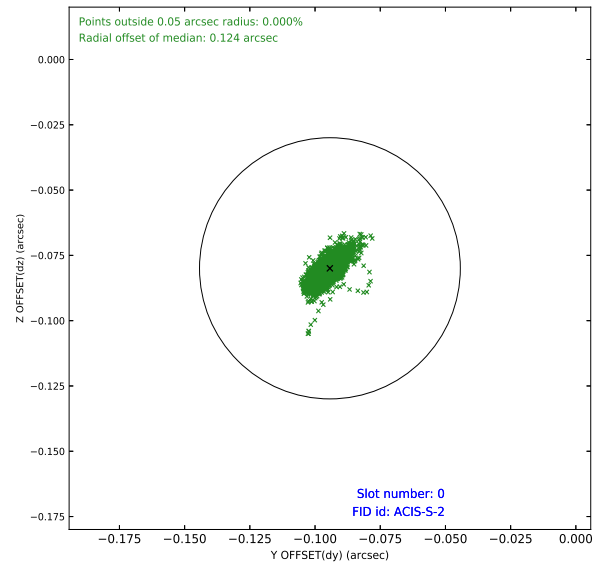
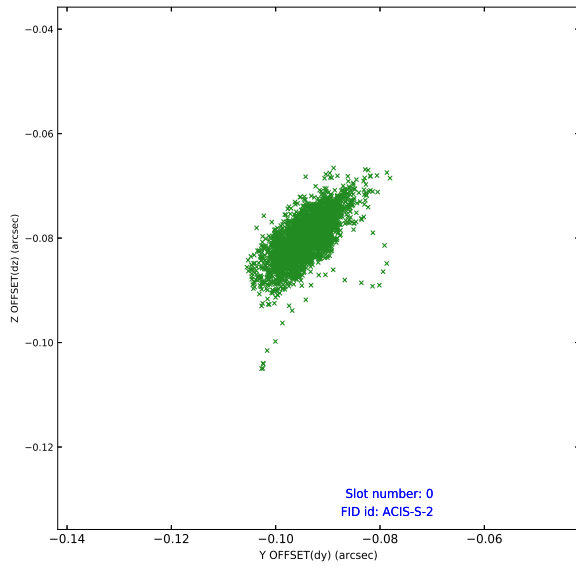


## 2.4.5 Slot 7

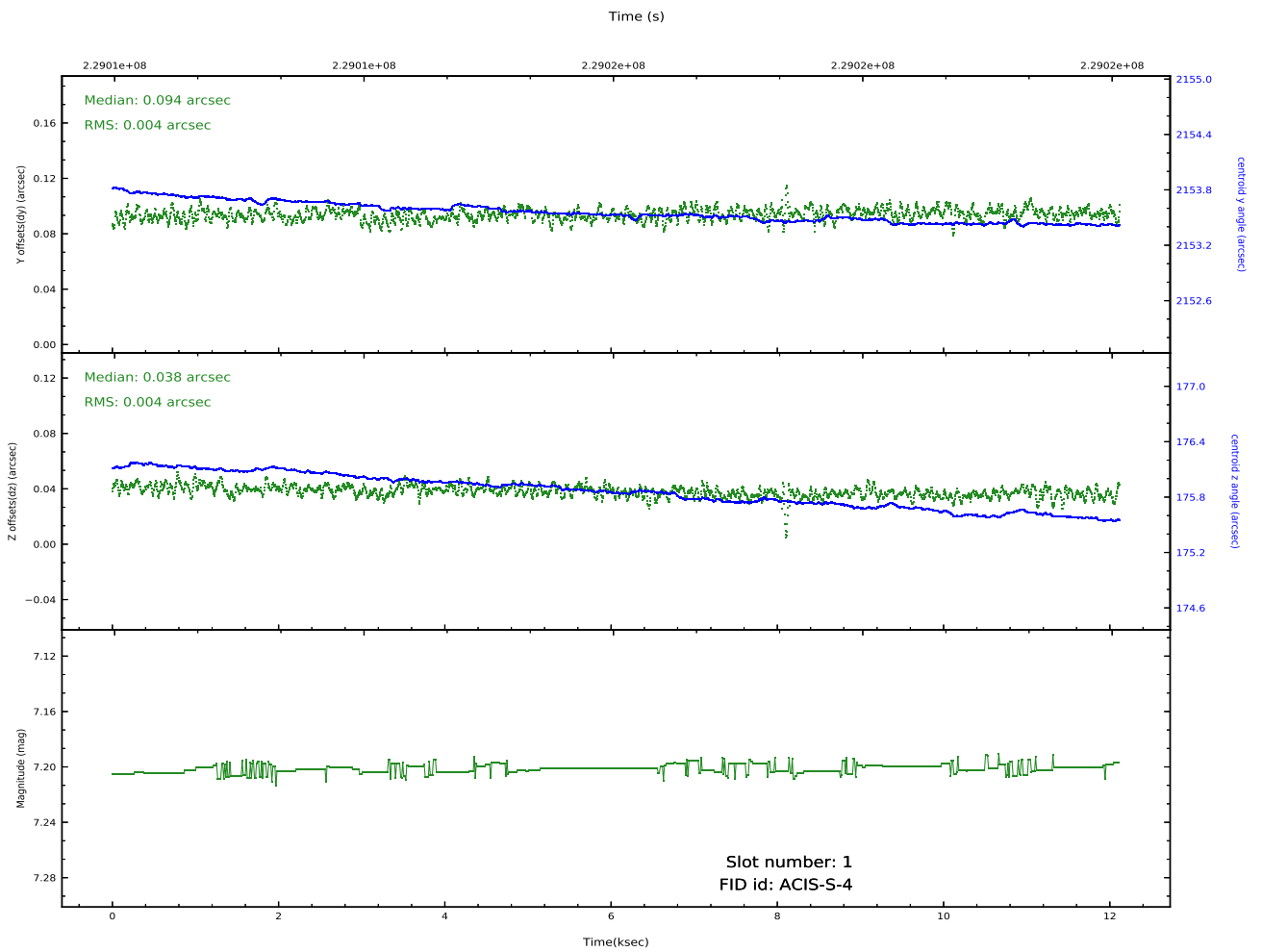
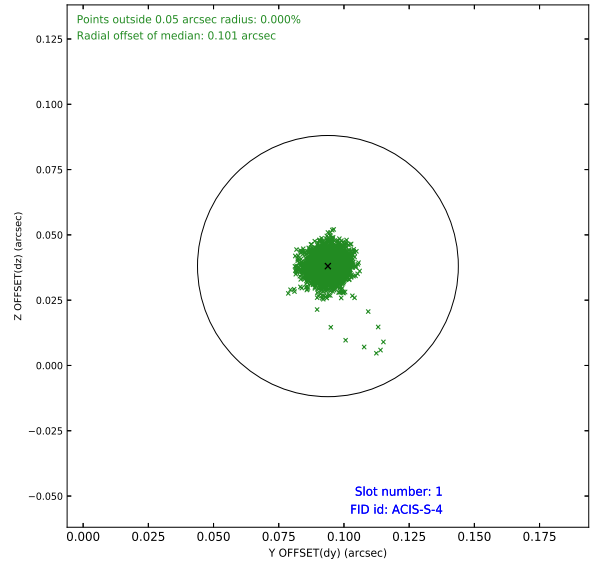
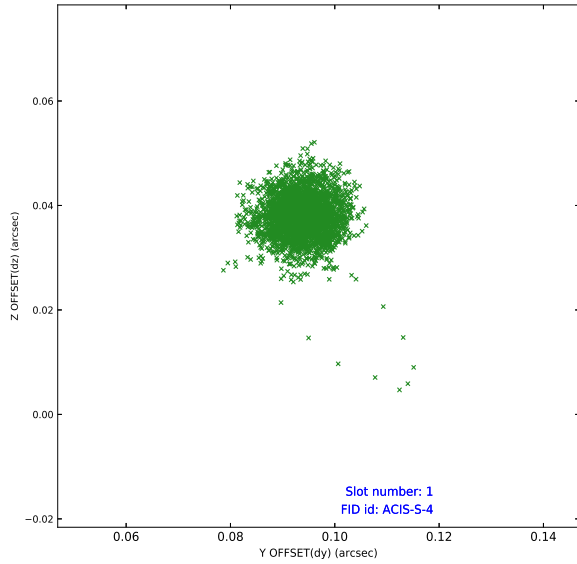


## 2.5 FID Slots

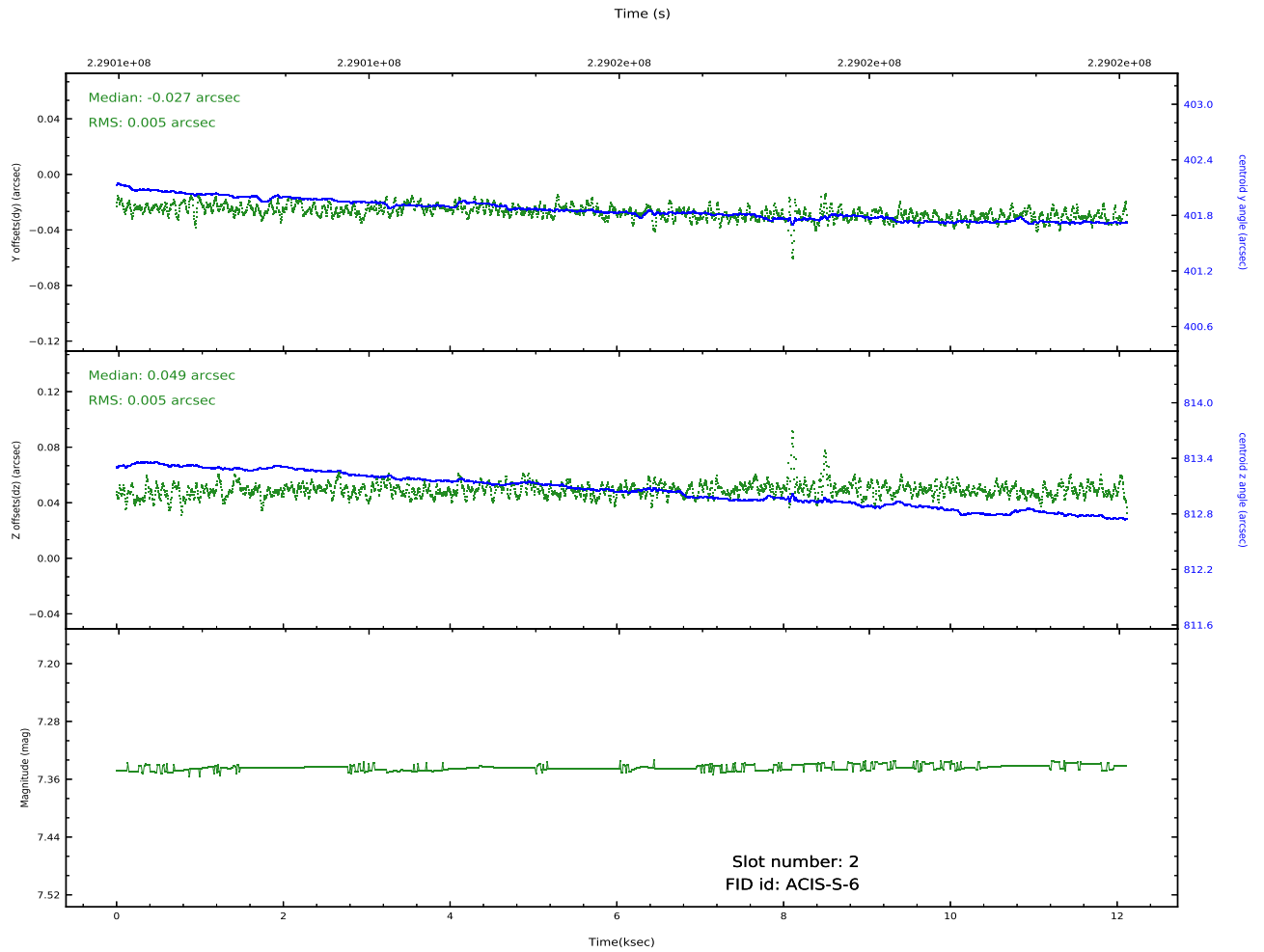
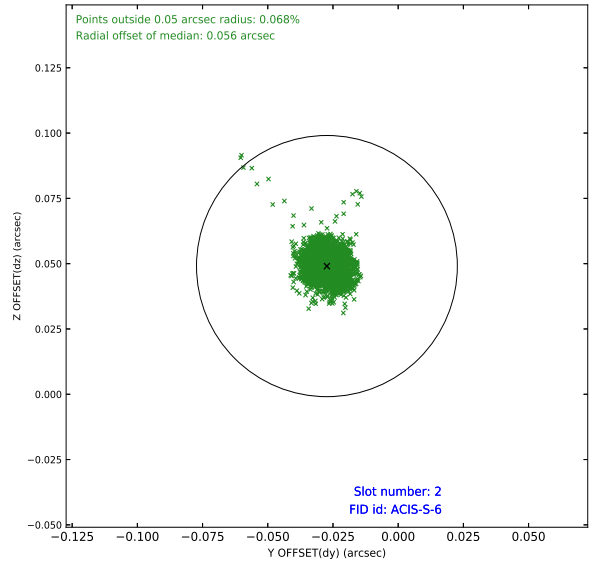
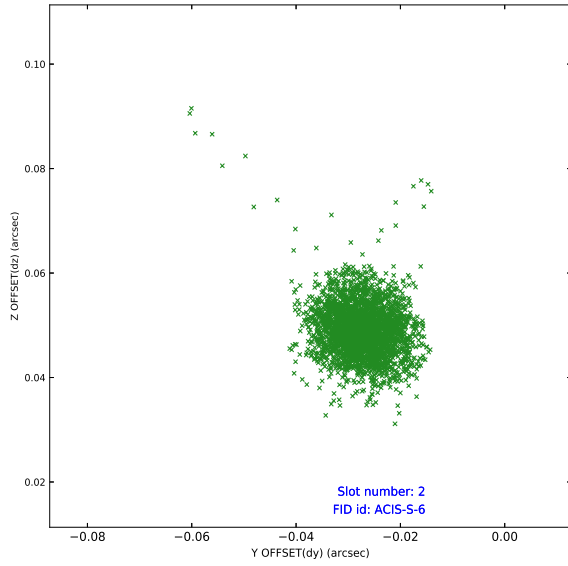
### 2.5.1 Slot 0



## 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	10.95679

## A.2 Comments

Monitor constraint met.