

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4541 - L2 Version 4  
Chandra X-Ray Center

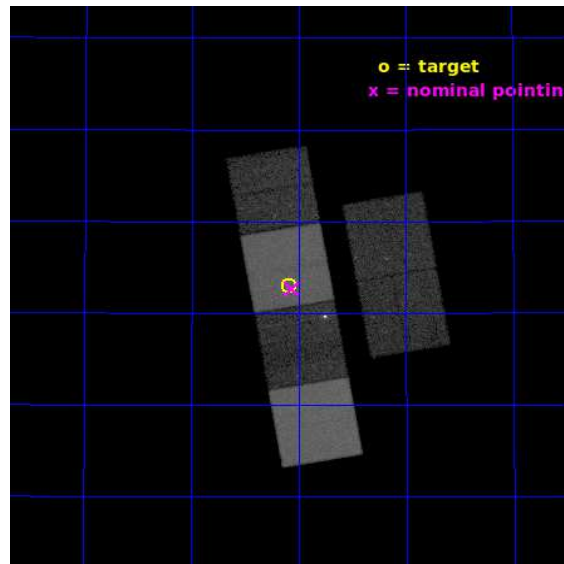
L2 Processing Date : Oct 5 2020

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# 1 Front

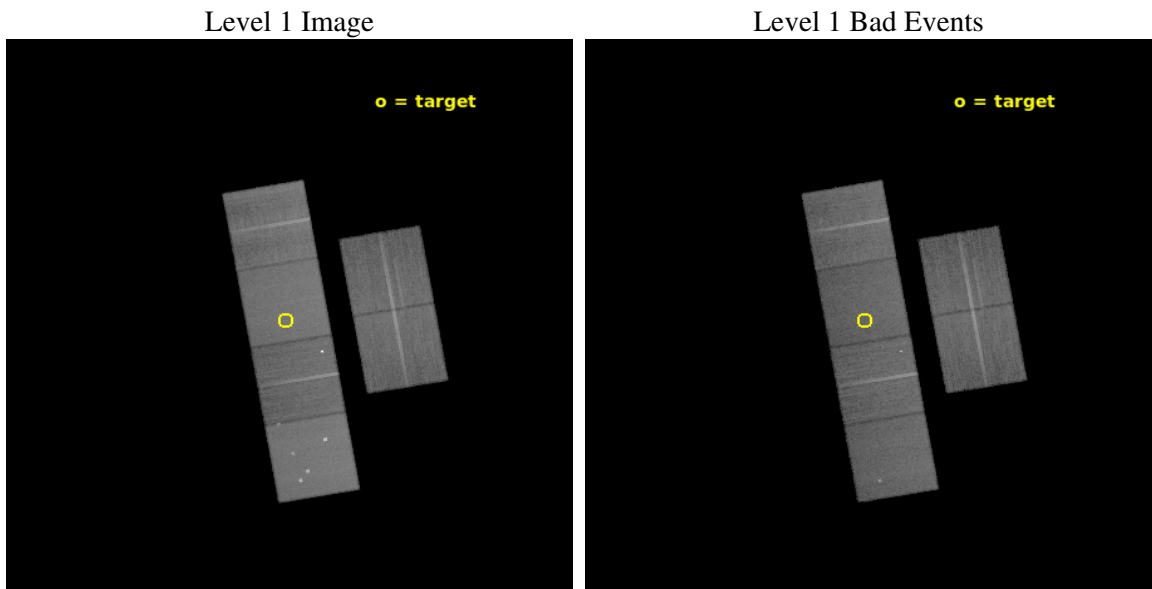
seq_num	300135	Sequence number
obs_id	4541	Observation id
title	Understanding the nature of supersoft X-ray sources	Proposal title
observer	Dr. Jochen Greiner	Principal investigator
object	M 31 North	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.52375	Observer's specified target RA [deg]
dec_targ	41.717778	Observer's specified target Dec [deg]
ra_nom	11.515888209808	Nominal RA [deg]
dec_nom	41.711527214875	Nominal Dec [deg]
roll_nom	260.02239217387	Nominal Roll [deg]
revision	4	Processing version of data
ontime	25955.199903309	Sum of GTIs [s]
livetime	25626.539533789	Livetime [s]
ontime2	25955.199903309	Sum of GTIs [s]
ontime3	25951.958913028	Sum of GTIs [s]
ontime5	25955.199903309	Sum of GTIs [s]
ontime6	25955.199903309	Sum of GTIs [s]
ontime7	25955.199903309	Sum of GTIs [s]
ontime8	25955.199903309	Sum of GTIs [s]
l2events	336712	Number of level 2 events



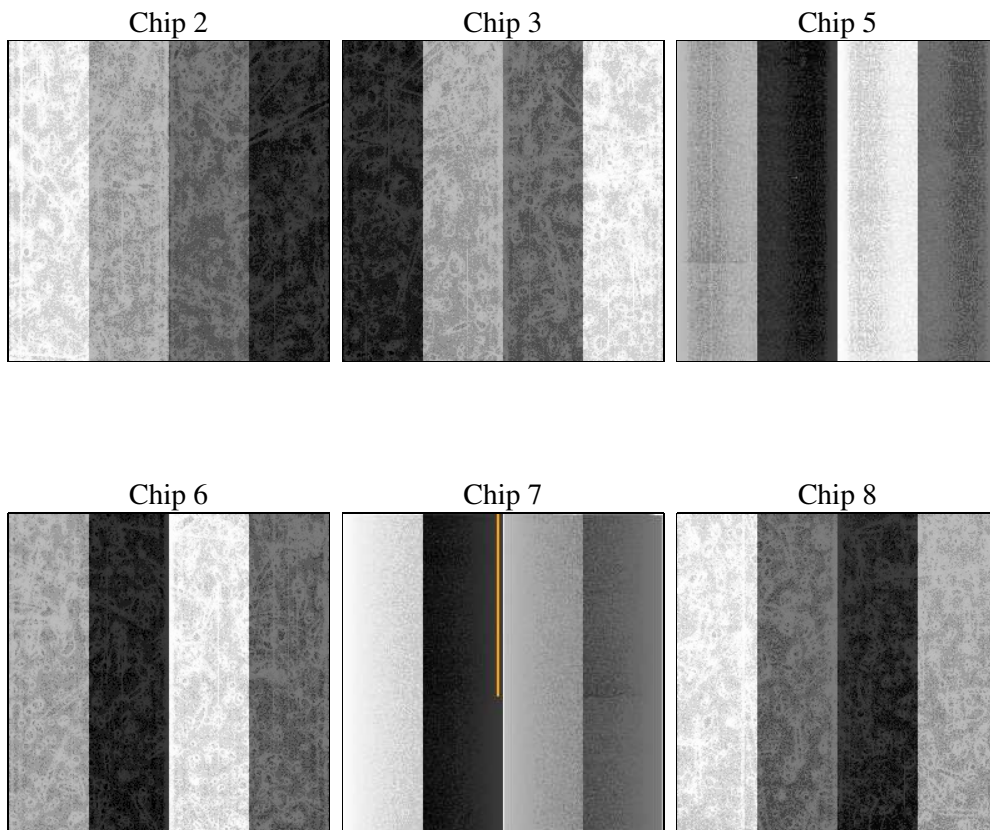
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	25955.199903309	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	25955.199903309	Sum of GTIs [s]
date	2020-10-05T07:15:33	Date and time of file creation	ontime3	25951.958913028	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	25955.199903309	Sum of GTIs [s]
			ontime6	25955.199903309	Sum of GTIs [s]
			ontime7	25955.199903309	Sum of GTIs [s]
			ontime8	25955.199903309	Sum of GTIs [s]
			l1events	1452095	Number of level 1 events

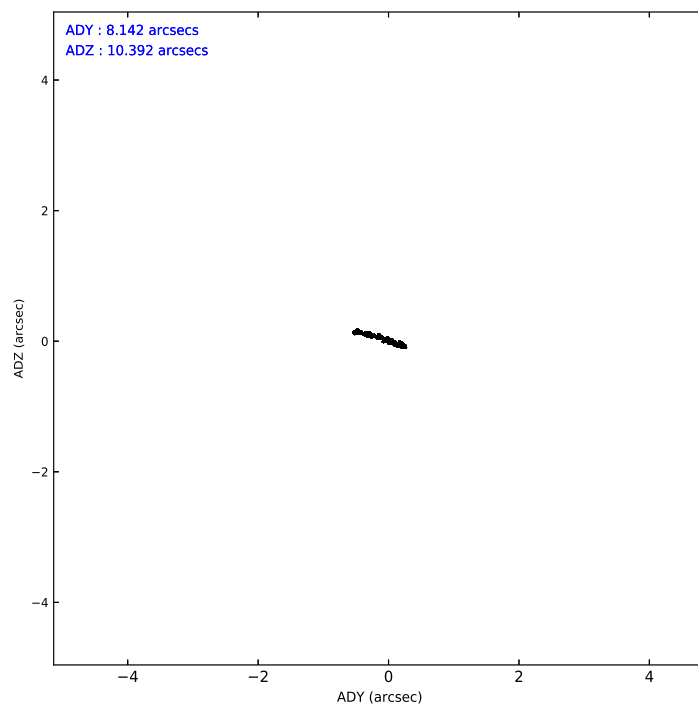
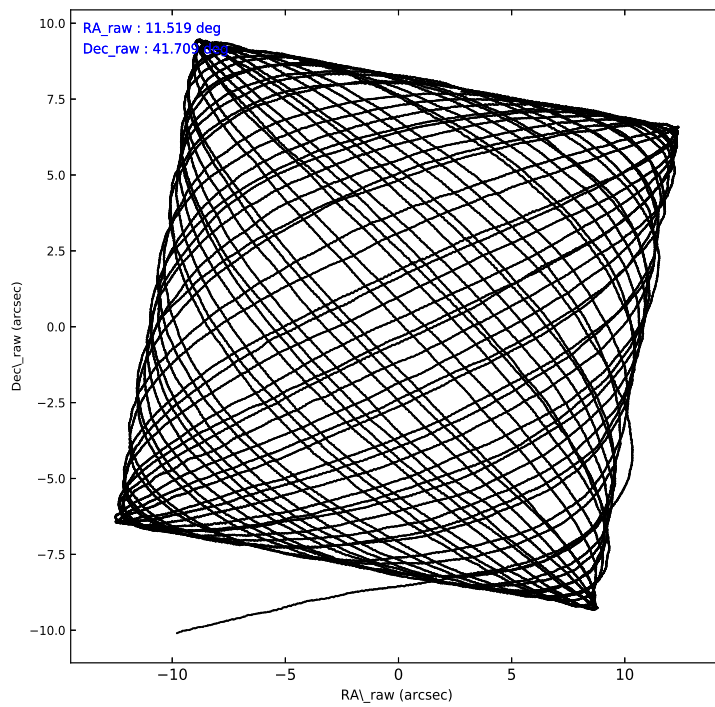
### 2.1.4 Events

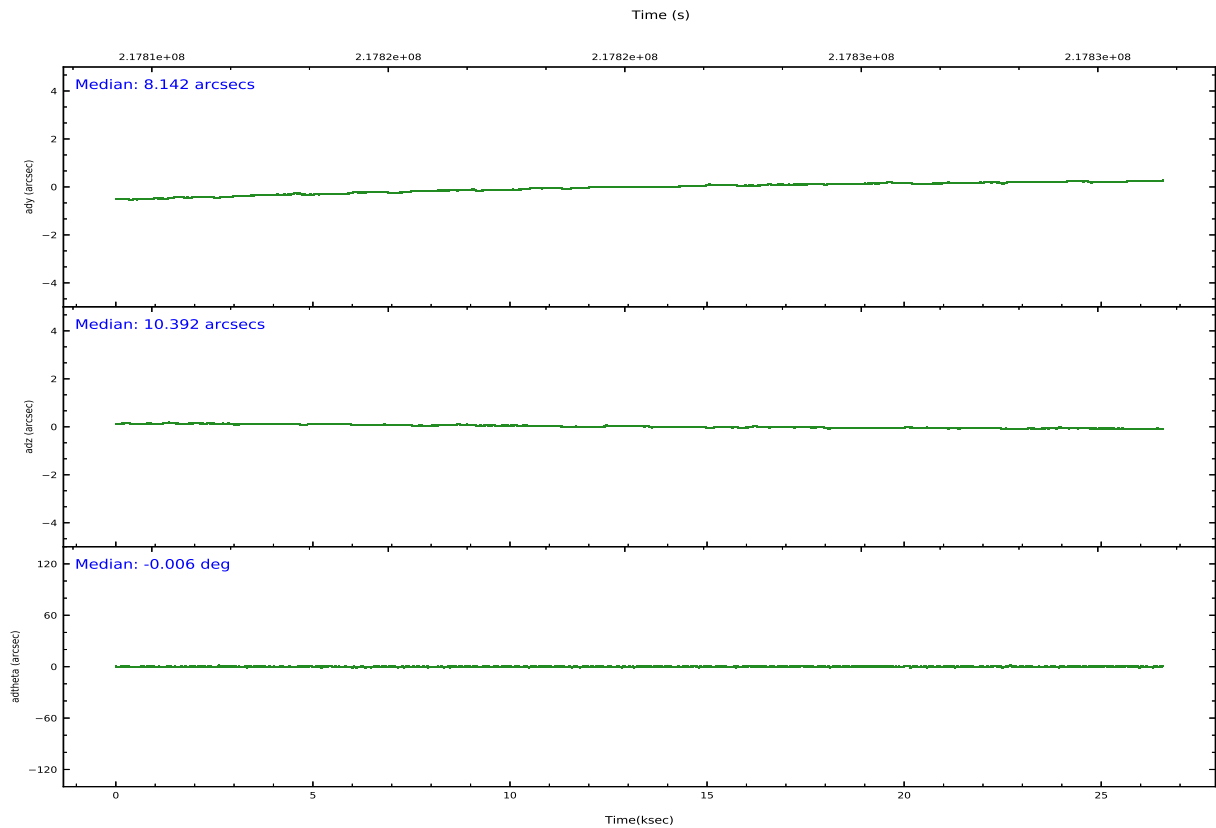
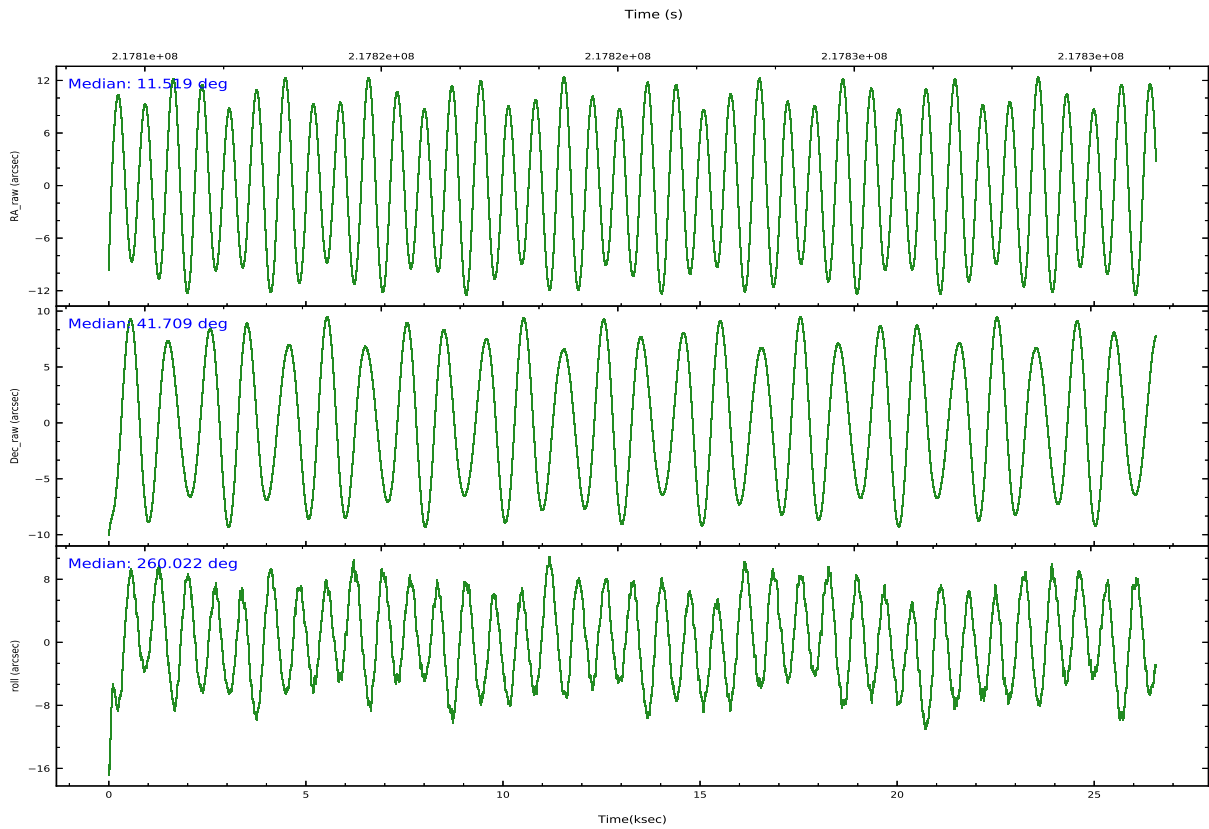
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	205244	191691	309837	222170	270230	252923	grade 0 events	10496	9988	20849	22394	9920	16452
rejected events	181503	168743	164170	181167	158245	199523		5%	5%	6%	10%	3%	6%
rejected %	88%	88%	52%	81%	58%	78%	grade 1 events	121	123	437	1065	245	171
								0%	0%	0%	0%	0%	0%
							grade 2 events	4806	4467	42394	7132	22268	11799
								2%	2%	13%	3%	8%	4%
							grade 3 events	2269	2279	5284	3051	9787	5629
								1%	1%	1%	1%	3%	2%
							grade 4 events	2227	2207	4827	3060	9879	5254
								1%	1%	1%	1%	3%	2%
							grade 5 events	8019	8711	21922	9580	25641	12127
								3%	4%	7%	4%	9%	4%
							grade 6 events	3947	4016	72333	5372	60153	14276
								1%	2%	23%	2%	22%	5%
							grade 7 events	173359	159900	141791	170516	132337	187215
								84%	83%	45%	76%	48%	74%

## 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	11.506348	11.515888209808	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.734153	41.711527214875	Alternating exposures requested	N	N
[deg] Pointing Roll	259.871585	260.02239217387	[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)	217809657.184000	217808500.65925			
Observation start date	2004-11-25T22:39:53	2004-11-25T22:21:40			
[s] Observation end time (MET)	217835657.184000	217836560.54801			
Observation end date	2004-11-26T05:53:13	2004-11-26T06:09:20			
Read mode	TIMED	TIMED			

## 2.3 Aspect





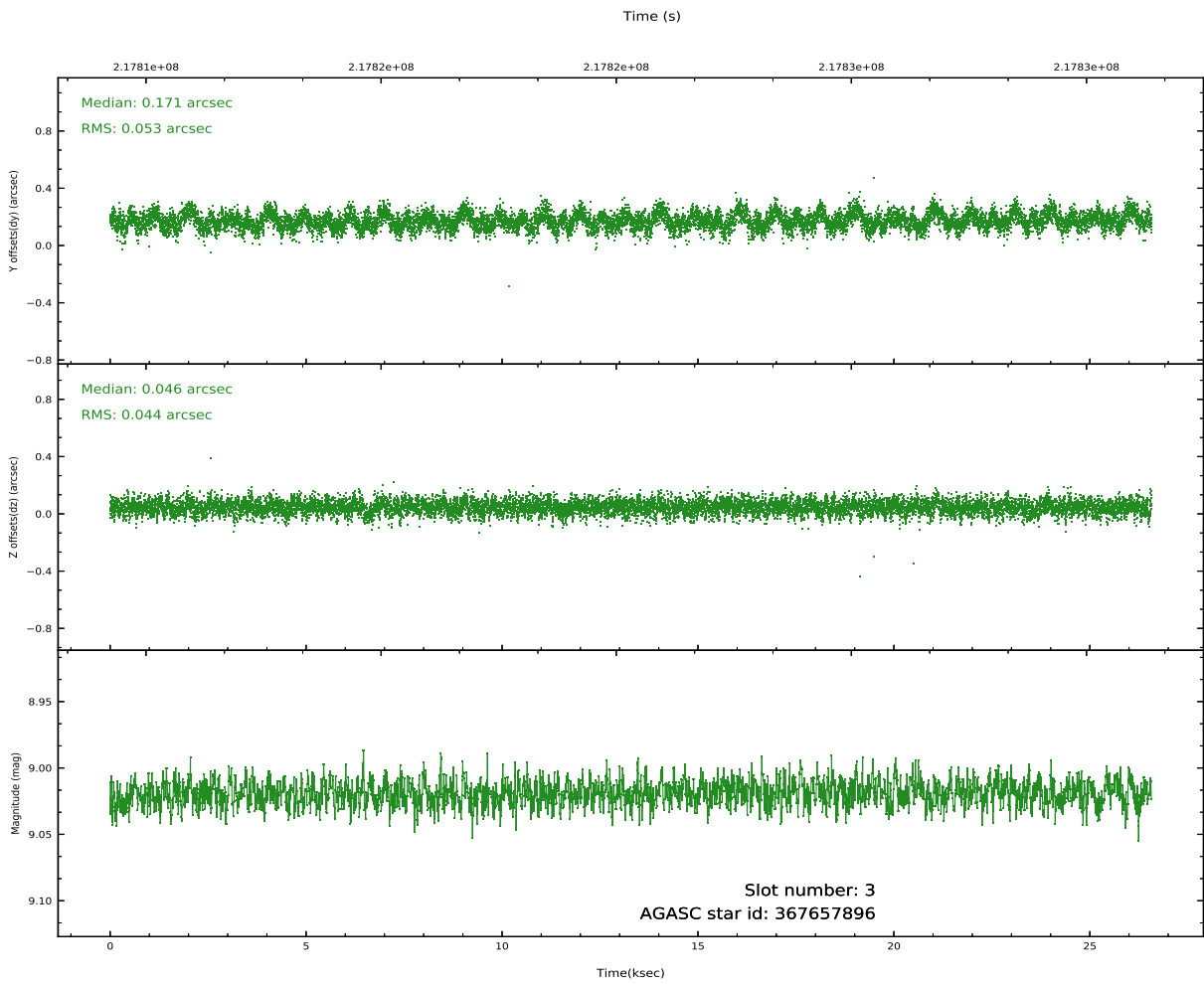
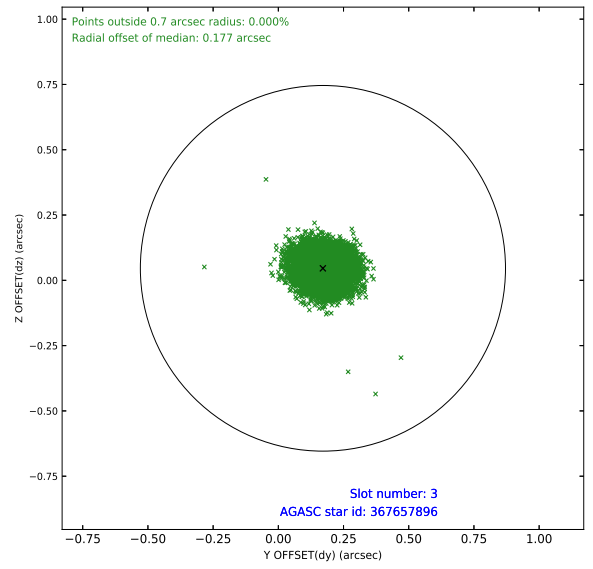
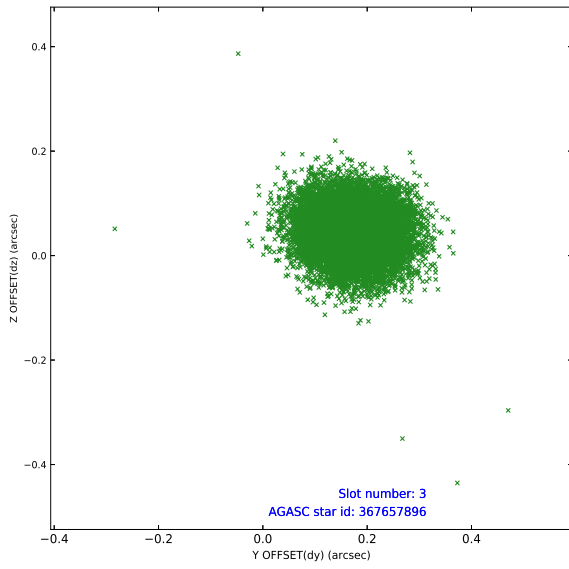
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	6480	1.000	0.058	-0.087	0.008	0.013	0.000000	0.000000	935.25	-1727
1	FID		ACIS-S-5	7.24	6482	1.000	-0.133	0.020	0.015	0.024	0.000000	0.000000	-1813.91	170
2	FID		ACIS-S-6	7.35	6481	1.000	0.053	0.078	0.013	0.020	0.000000	0.000000	400.65	814
3	GUIDE	used	367657896	9.02	12956	1.000	0.171	0.046	0.074	0.119	11.197765	41.313576	1636.15	-555
4	GUIDE	used	367659208	9.28	12956	1.000	-0.073	0.006	0.111	0.173	11.848231	42.124331	-1545.05	651
5	GUIDE	used	367663272	9.28	12954	1.000	-0.080	-0.075	0.106	0.175	10.656279	41.699429	514.17	-2229
6	GUIDE	used	367670520	9.24	12956	1.000	-0.043	-0.017	0.092	0.147	11.265516	42.371946	-2148.21	-1034
7	GUIDE	used	367145056	7.41	12961	1.000	0.024	0.040	0.073	0.110	12.259409	41.132018	1766.14	2390

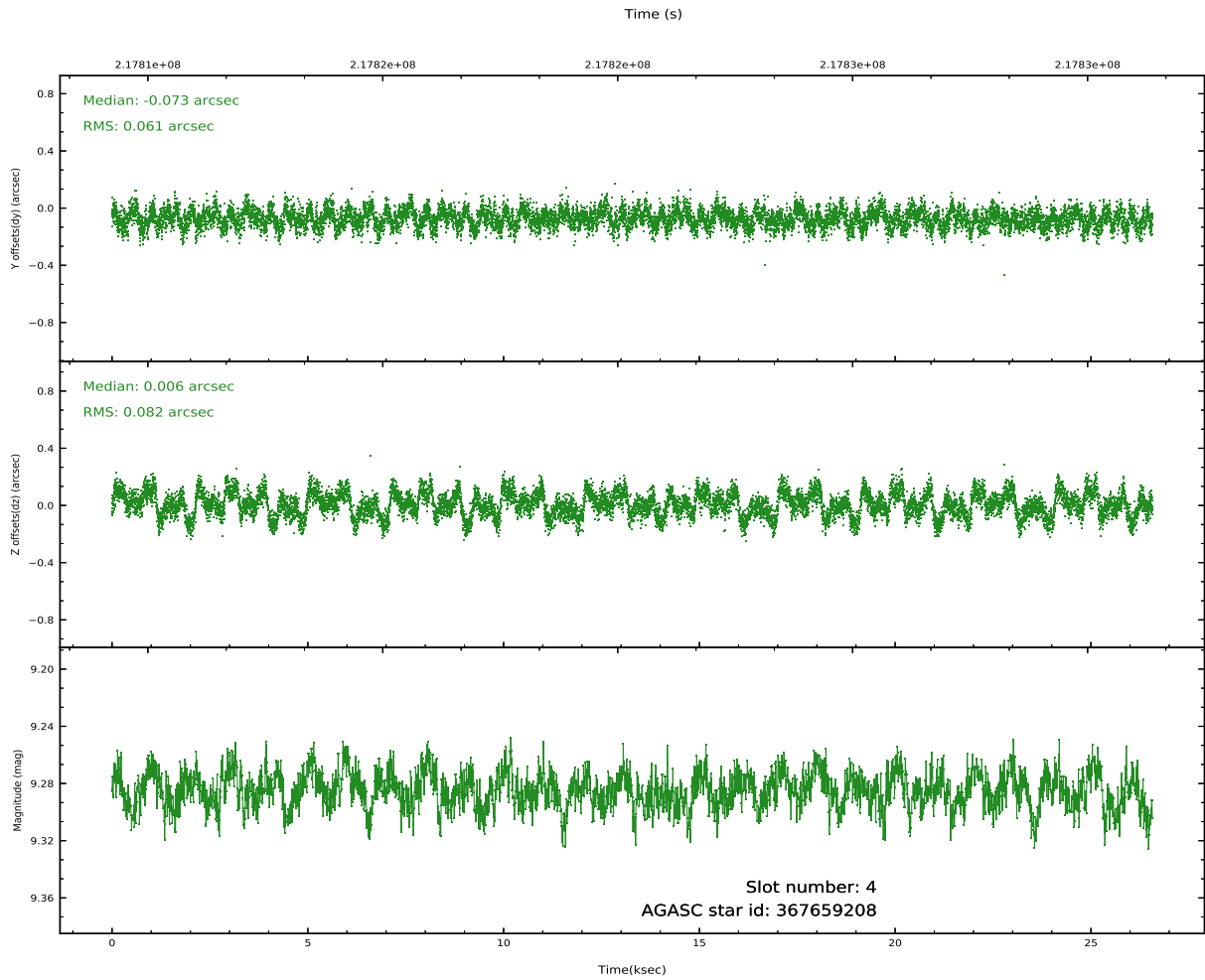
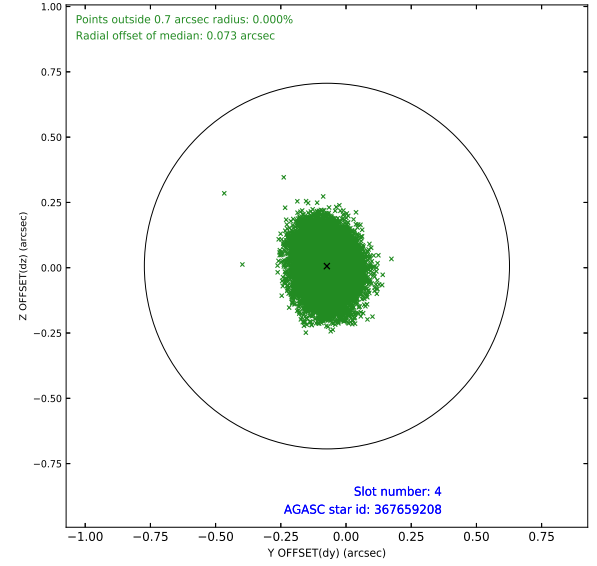
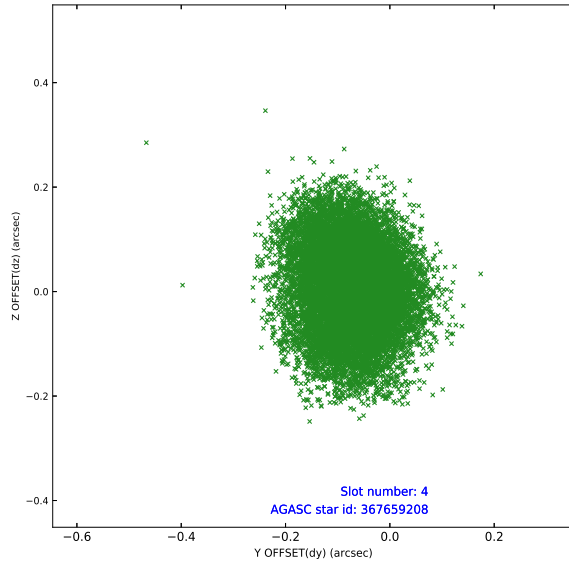
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## 2.4 Star Slots

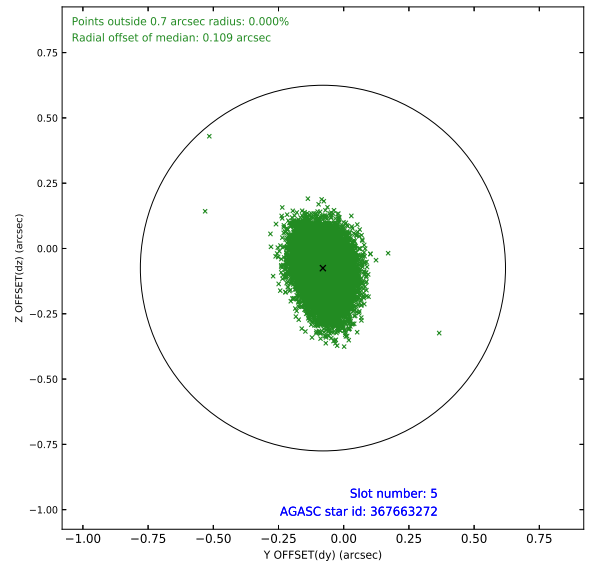
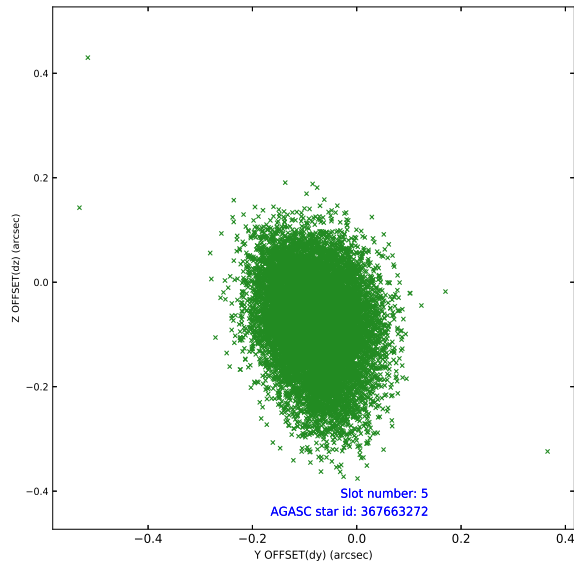
### 2.4.1 Slot 3



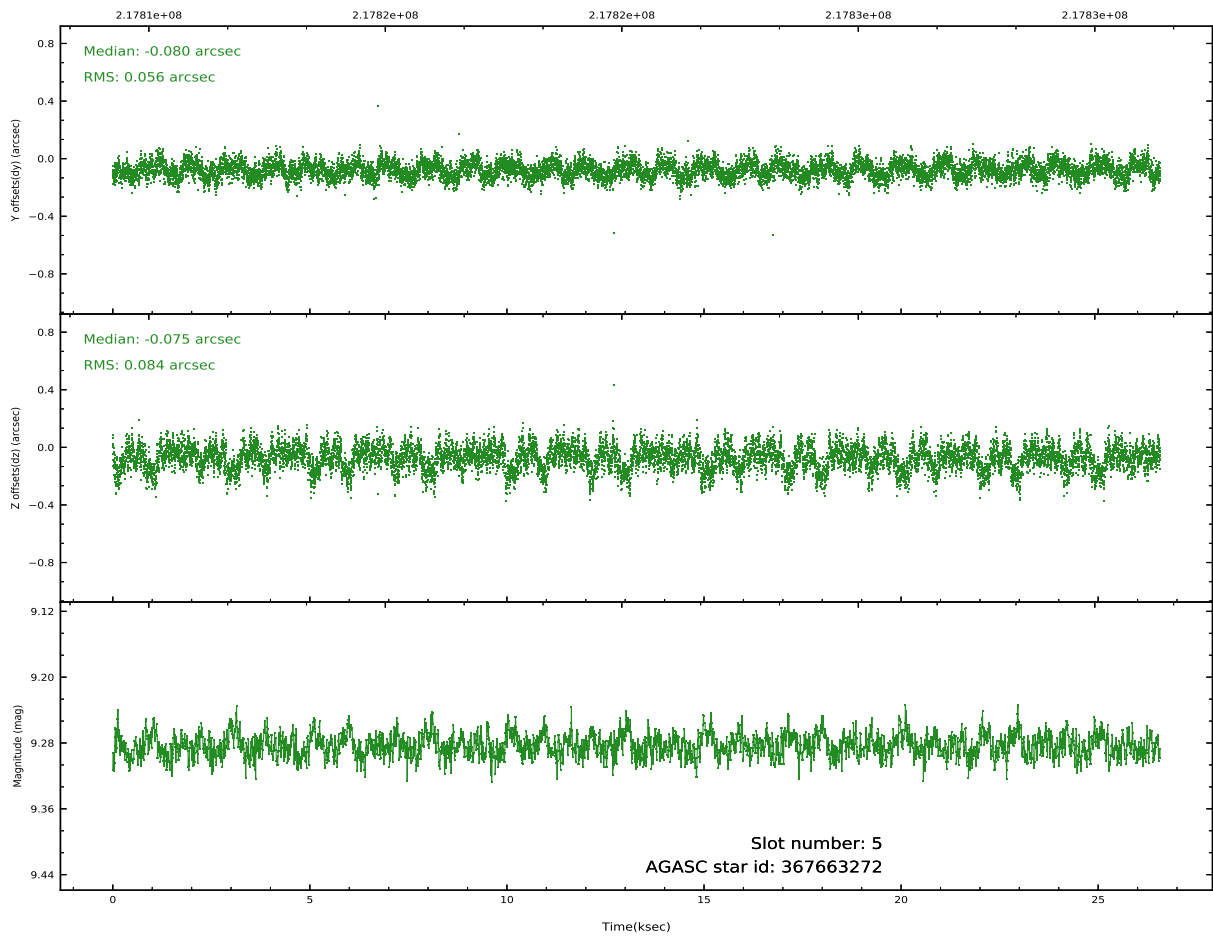
## 2.4.2 Slot 4



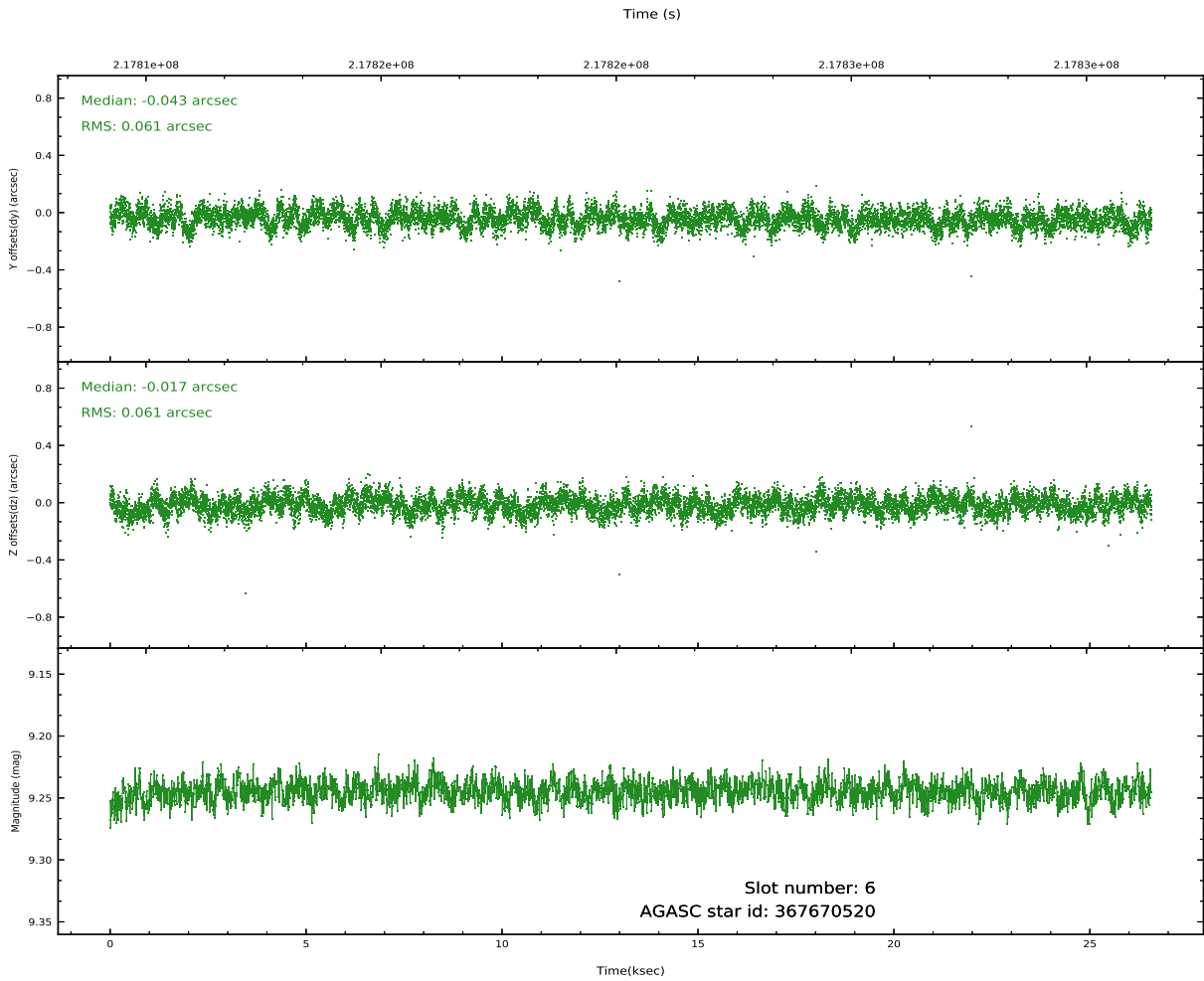
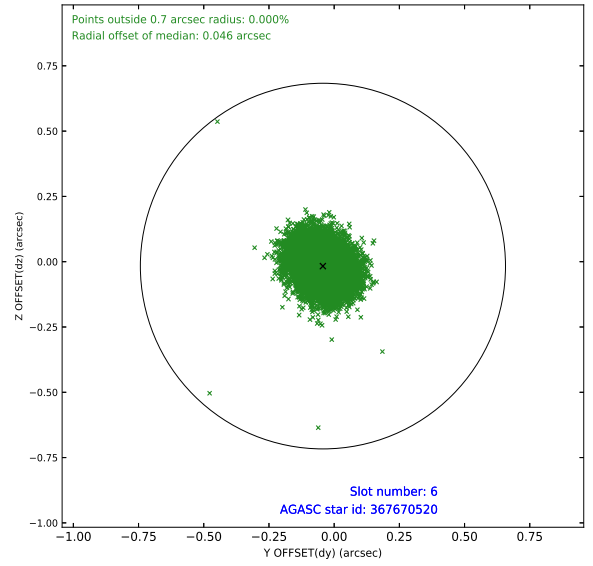
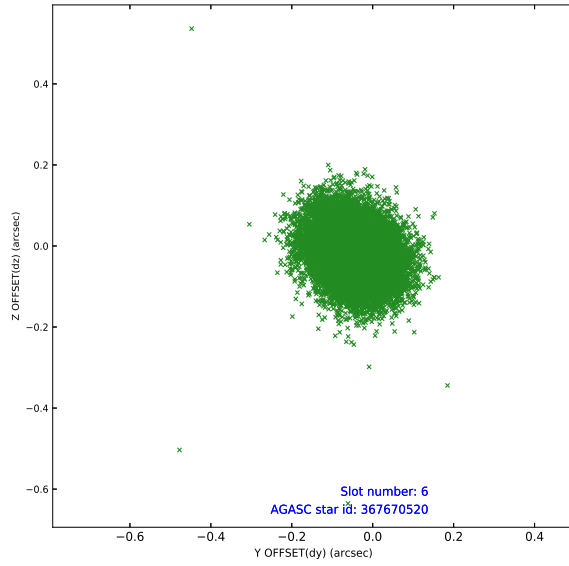
### 2.4.3 Slot 5



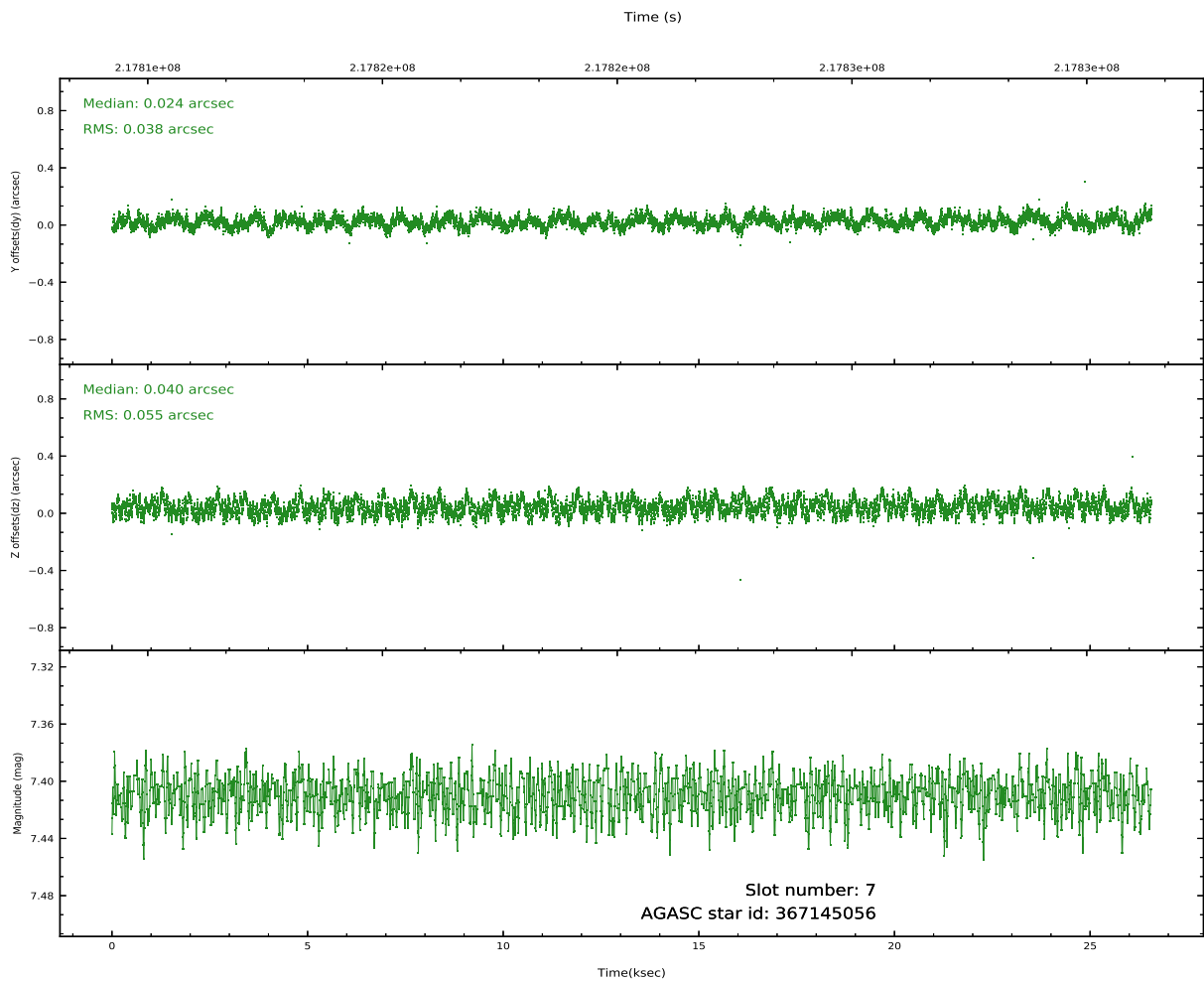
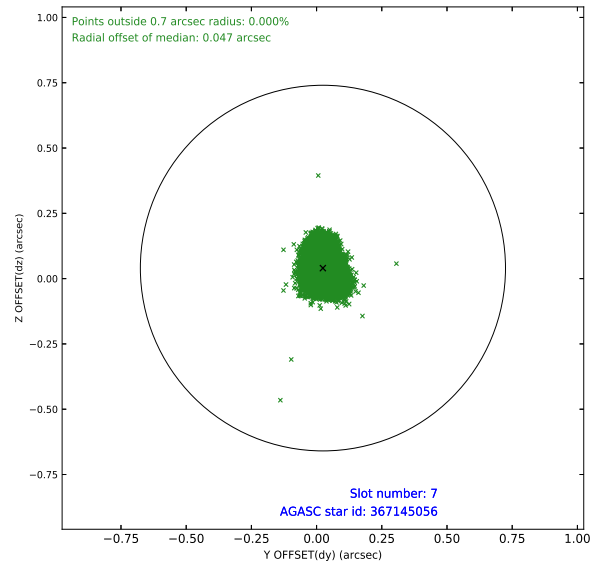
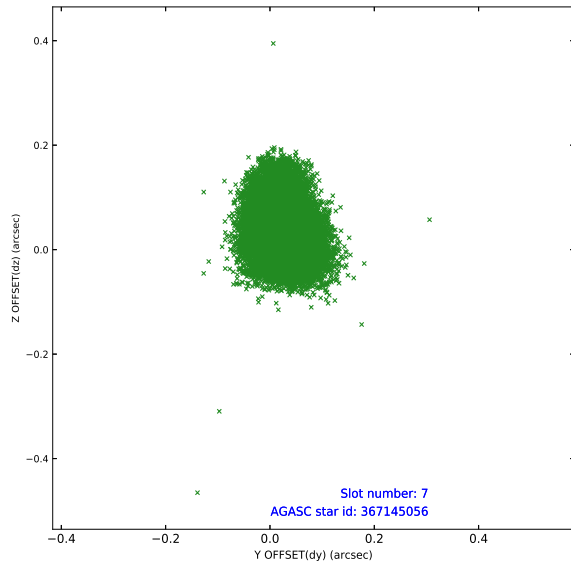
Time (s)



## 2.4.4 Slot 6

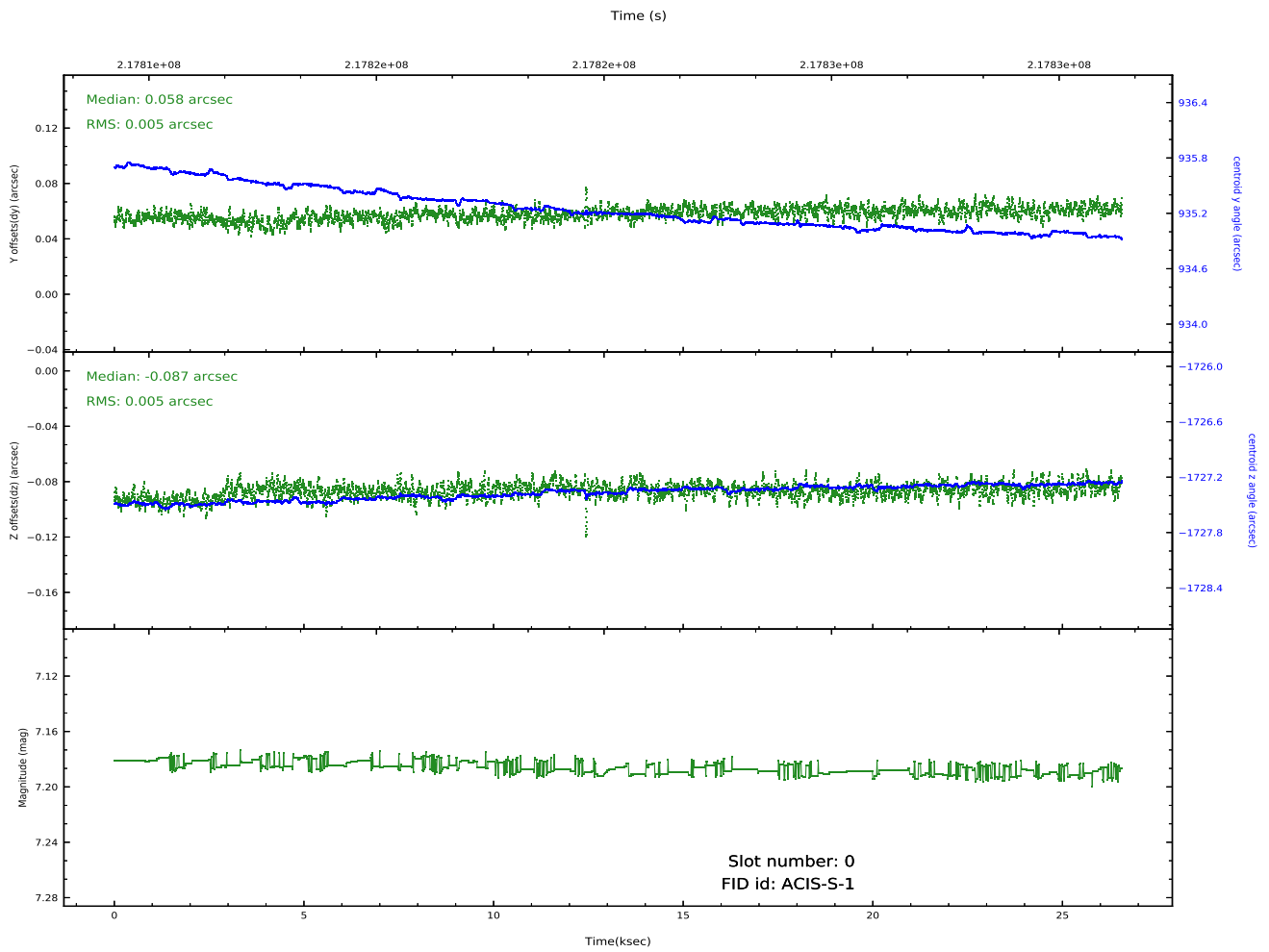
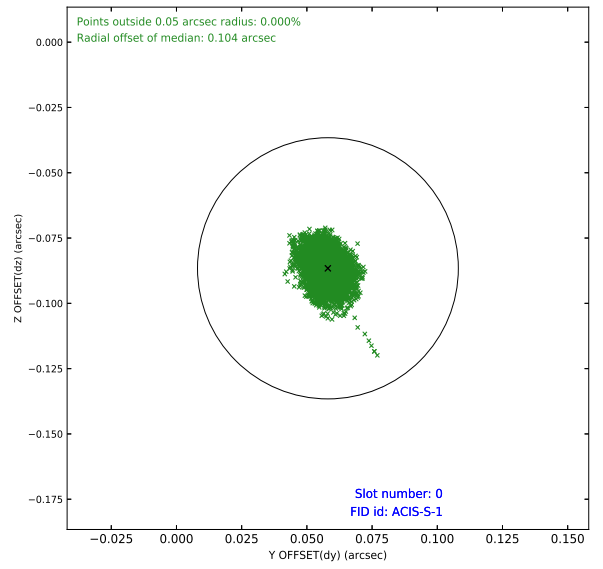
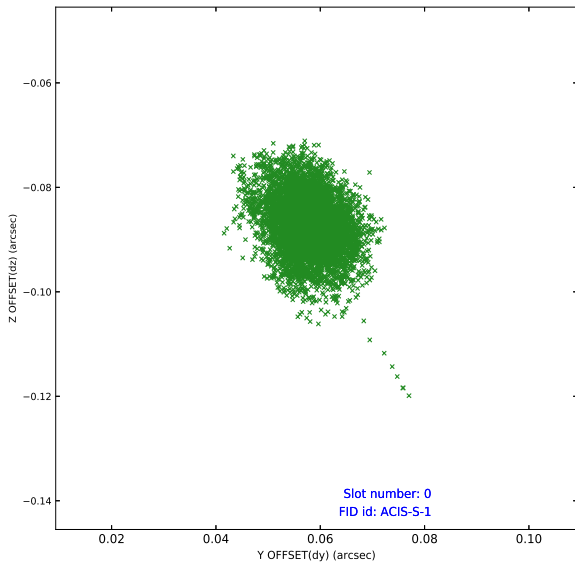


## 2.4.5 Slot 7

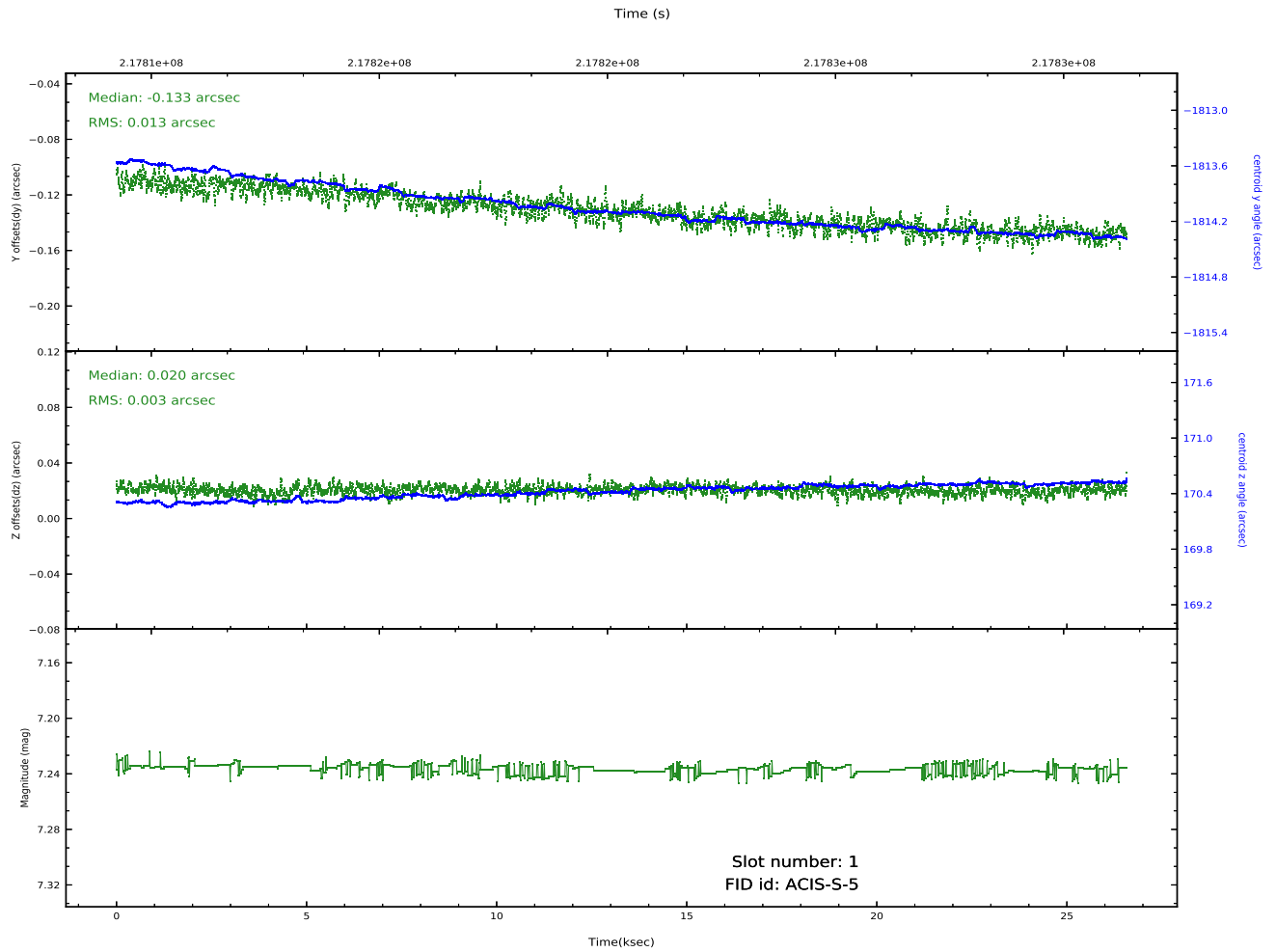
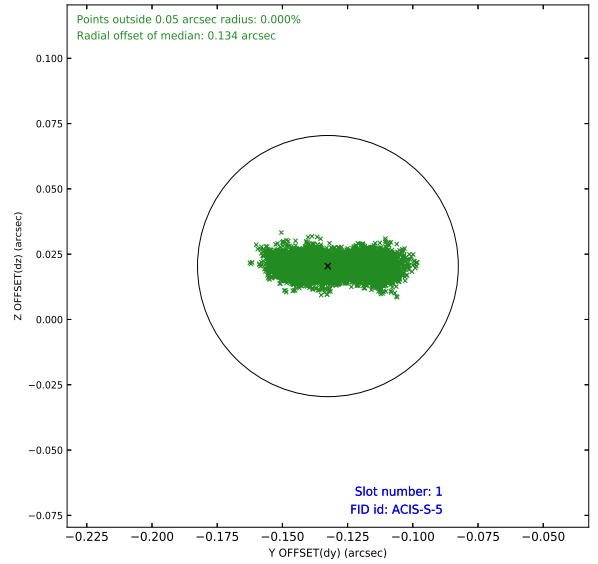
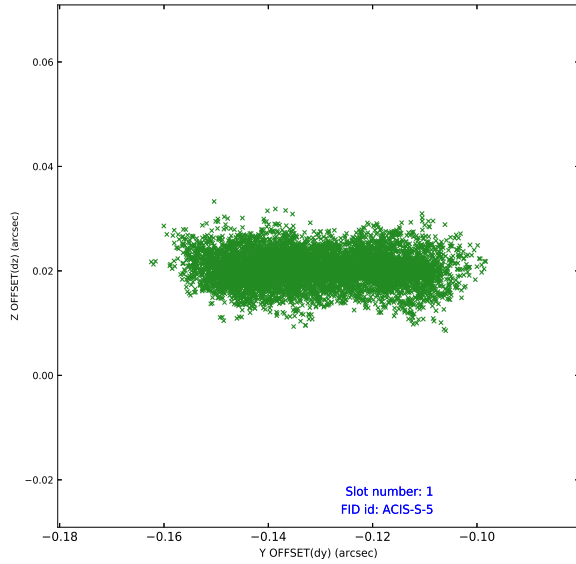


## 2.5 FID Slots

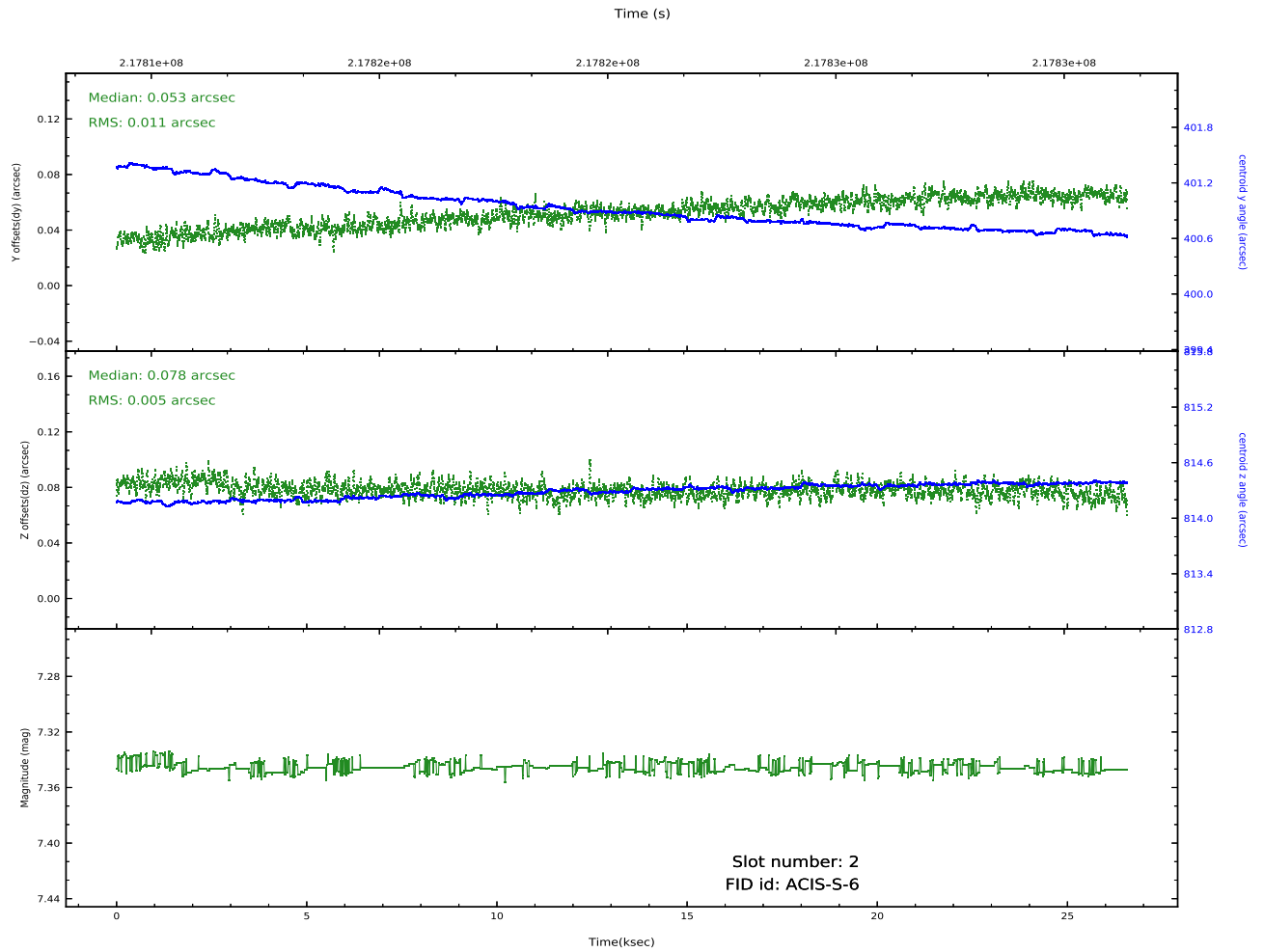
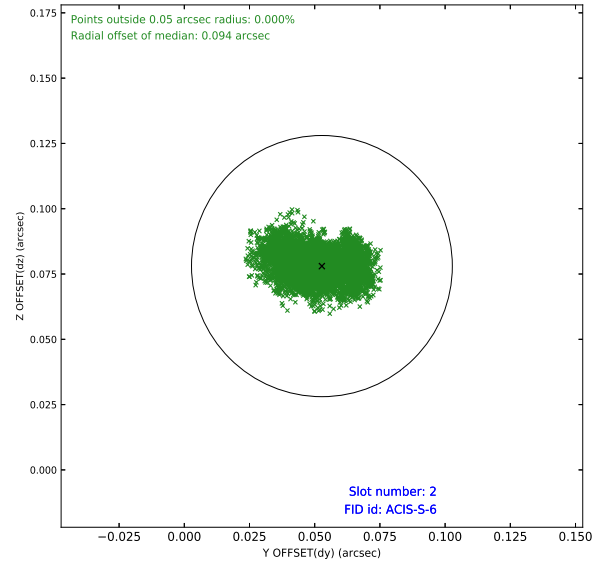
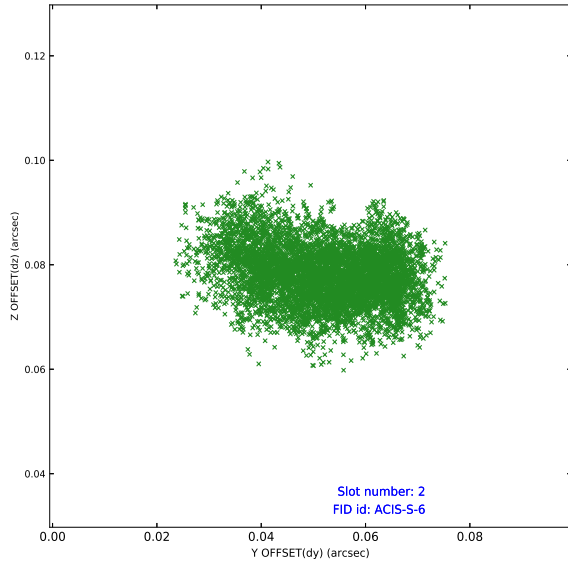
### 2.5.1 Slot 0



## 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)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.95519

## A.2 Comments