

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5535 - L2 Version 4
Chandra X-Ray Center

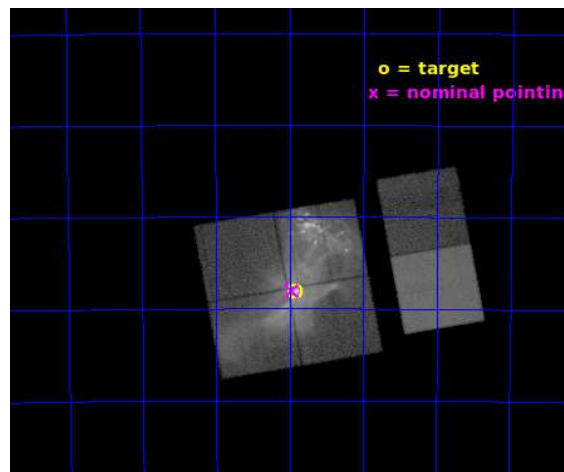
L2 Processing Date : Oct 6 2020

Contents

1	Front	2
2	OBI	3
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
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

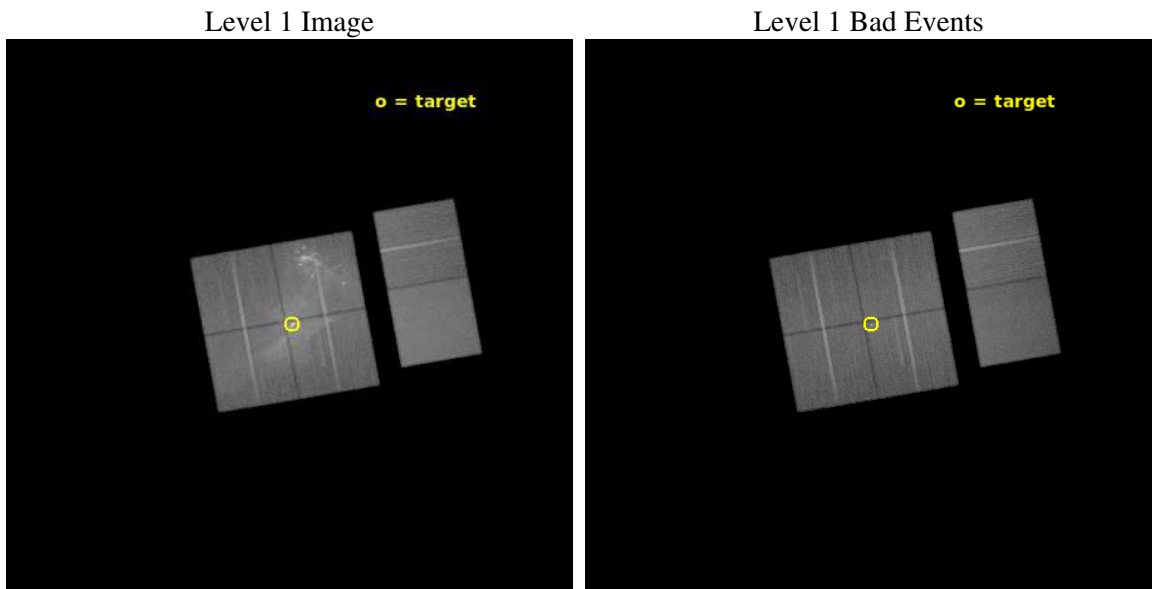
seq_num	500528	Sequence number
obs_id	5535	Observation id
title	The Structure and Composition of Pulsar Winds and their Nebulae	Pr
observer	Patrick Slane	Principal investigator
object	PSR B1509-58	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.481667	Observer's specified target RA [deg]
dec_targ	-59.135806	Observer's specified target Dec [deg]
ra_nom	228.49184185946	Nominal RA [deg]
dec_nom	-59.133956237708	Nominal Dec [deg]
roll_nom	79.919738092804	Nominal Roll [deg]
revision	4	Processing version of data
ontime	43132.758879036	Sum of GTIs [s]
livetime	42586.58591468	Livetime [s]
ontime0	43129.51792866	Sum of GTIs [s]
ontime1	43135.999839306	Sum of GTIs [s]
ontime2	43132.758868992	Sum of GTIs [s]
ontime3	43132.758879036	Sum of GTIs [s]
ontime6	43132.758898944	Sum of GTIs [s]
ontime7	43132.758869022	Sum of GTIs [s]
l2events	792494	Number of level 2 events



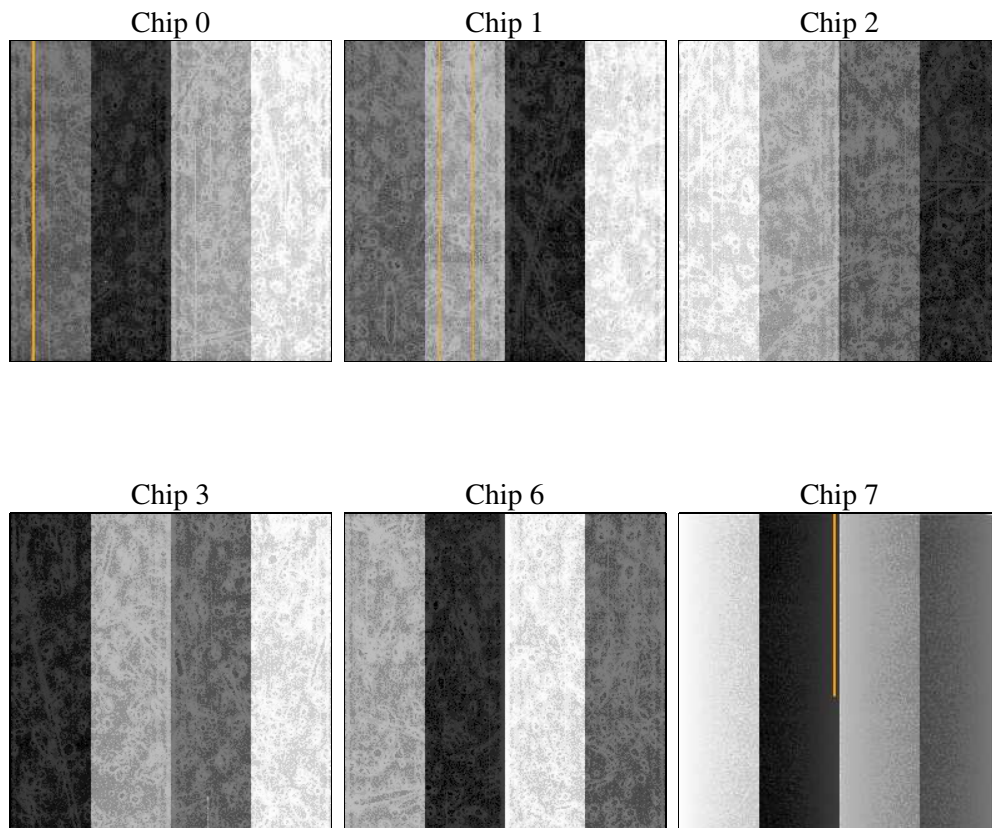
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	43132.758879036	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	43129.51792866	Sum of GTIs [s]
date	2020-10-06T15:20:09	Date and time of file creation	ontime1	43135.999839306	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	43132.758868992	Sum of GTIs [s]
			ontime3	43132.758879036	Sum of GTIs [s]
			ontime6	43132.758898944	Sum of GTIs [s]
			ontime7	43132.758869022	Sum of GTIs [s]
			l1events	2426364	Number of level 1 events

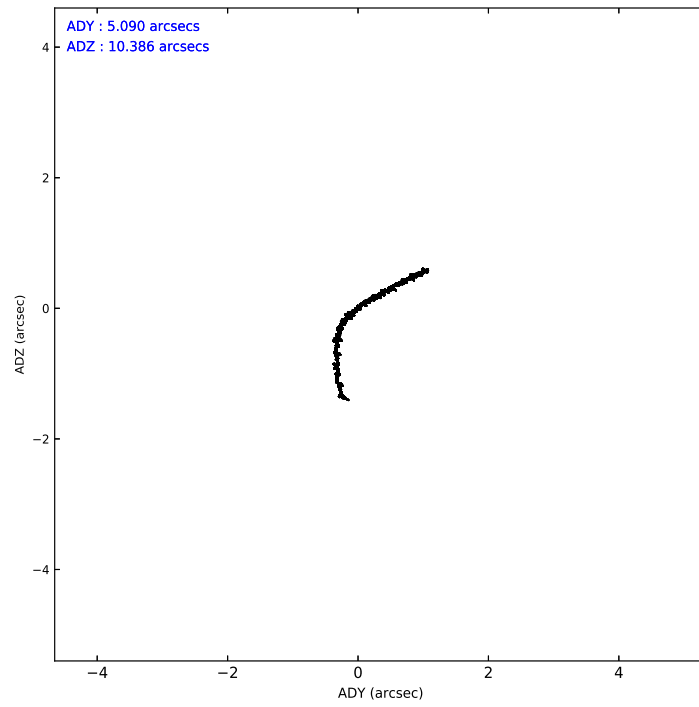
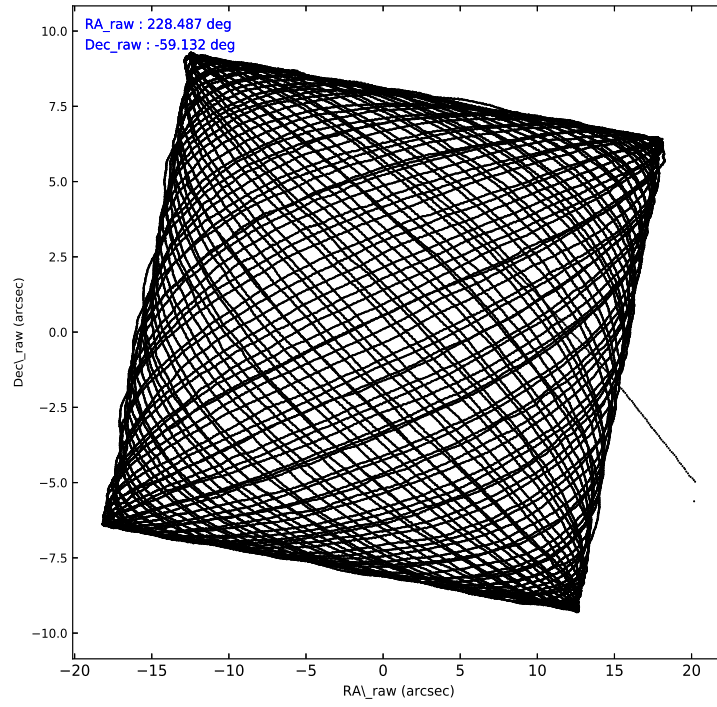
2.1.4 Events

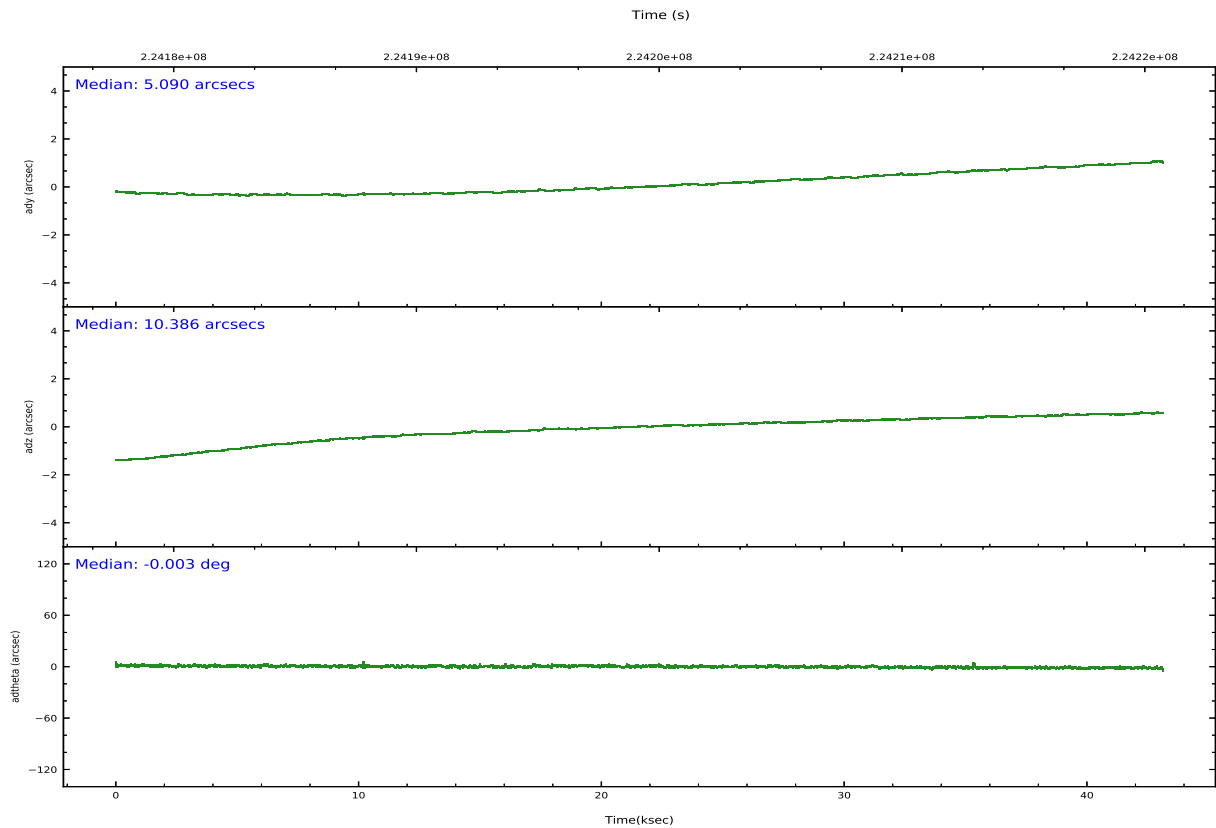
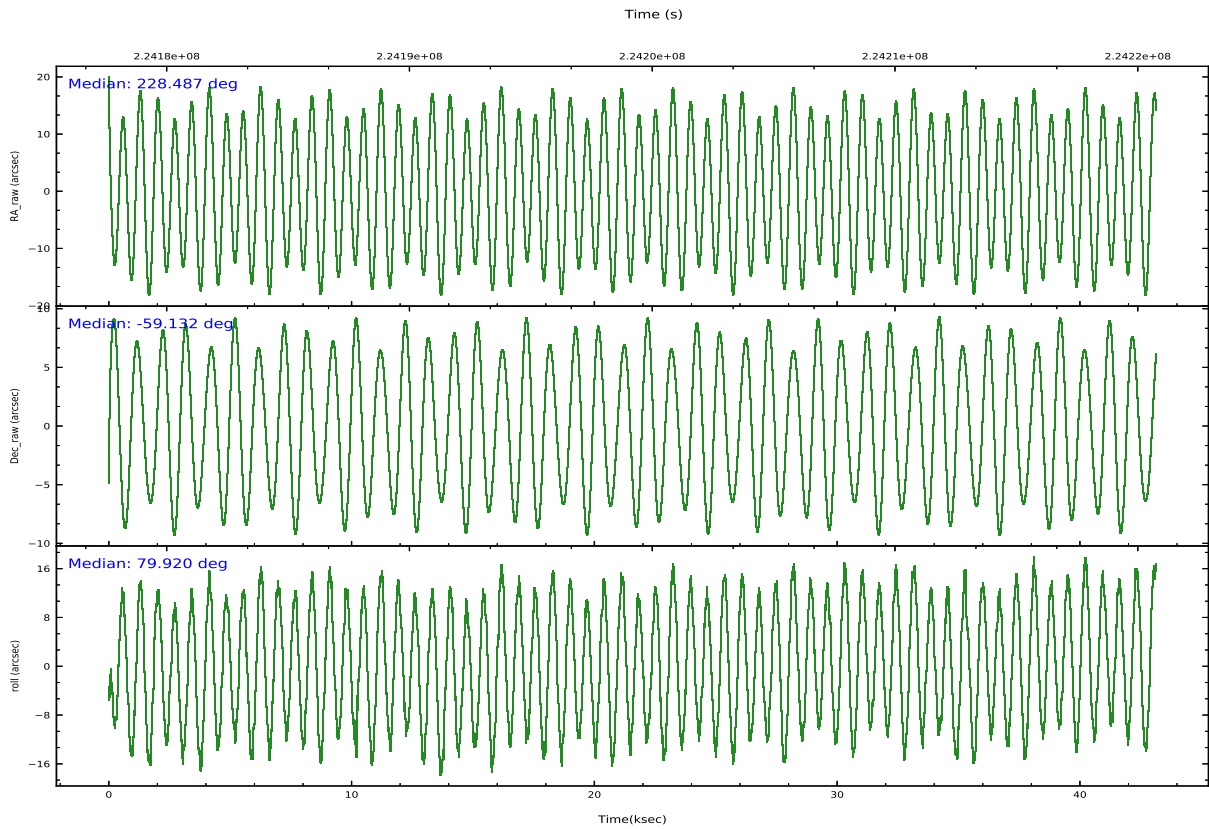
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	317230	385310	522199	428783	332748	440094	grade 0 events	41765	93459	190667	104494	22280	17912
rejected events	247592	245445	272234	274028	285999	251126		13%	24%	36%	24%	6%	4%
rejected %	78%	63%	52%	63%	85%	57%	grade 1 events	284	474	1056	2138	191	447
								0%	0%	0%	0%	0%	0%
							grade 2 events	11538	20651	28930	21123	9036	37771
								3%	5%	5%	4%	2%	8%
							grade 3 events	4642	7494	10091	8535	3969	17065
								1%	1%	1%	1%	1%	3%
							grade 4 events	4588	7501	10240	8411	3787	16683
								1%	1%	1%	1%	1%	3%
							grade 5 events	12941	13793	12925	16660	15164	40807
								4%	3%	2%	3%	4%	9%
							grade 6 events	7608	11541	11207	12893	7960	100666
								2%	2%	2%	3%	2%	22%
							grade 7 events	233864	230397	257083	254529	270361	208743
								73%	59%	49%	59%	81%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	228.505001	228.49184185946	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.157616	-59.133956237708	Alternating exposures requested	N	N
[deg] Pointing Roll	79.727684	79.919738092804	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	224177757.184000	224176571.23378			
Observation start date	2005-02-07T15:34:53	2005-02-07T15:16:11			
[s] Observation end time (MET)	224220757.184000	224221659.96082			
Observation end date	2005-02-08T03:31:33	2005-02-08T03:47:39			
Read mode	TIMED	TIMED			

2.3 Aspect



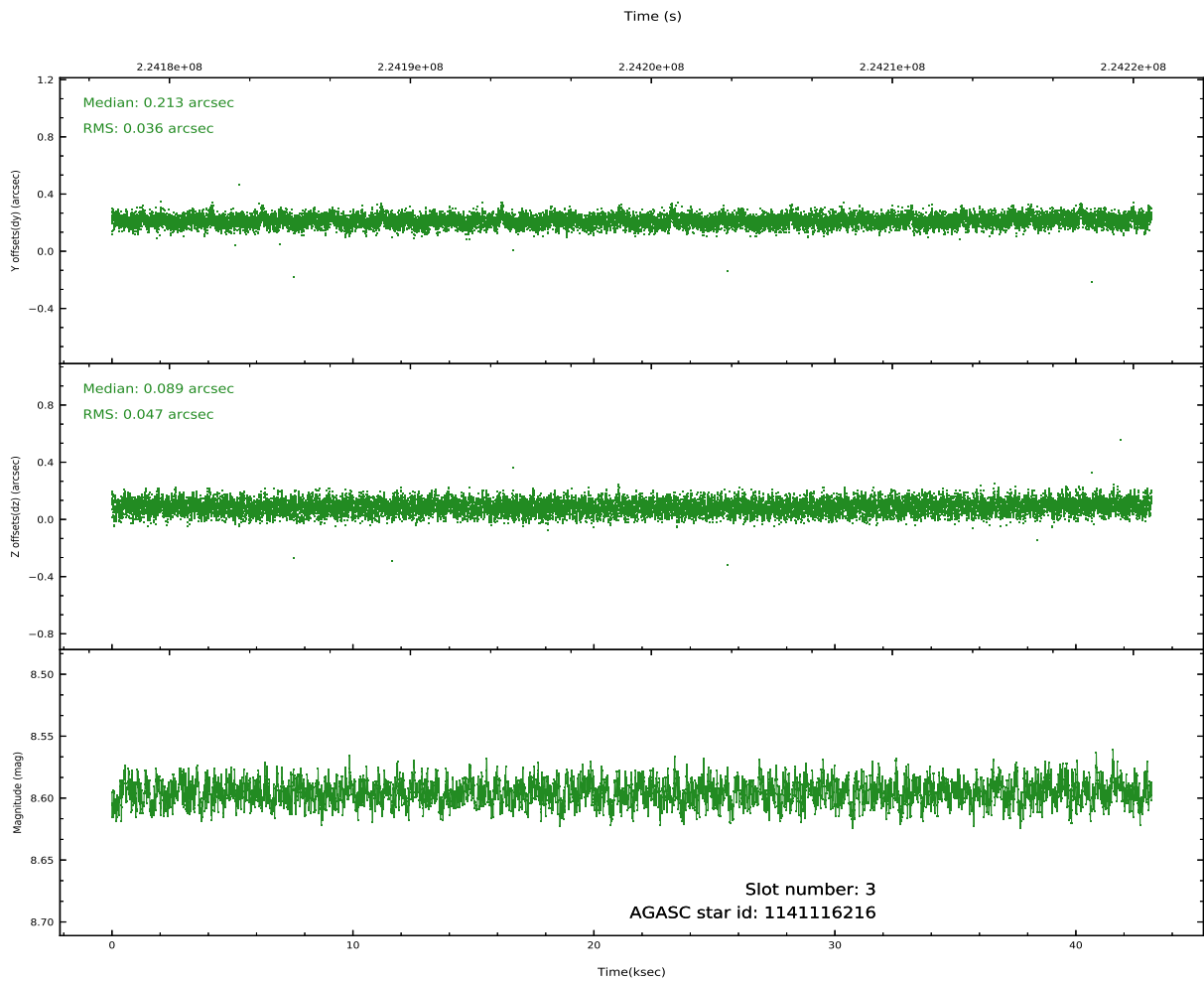
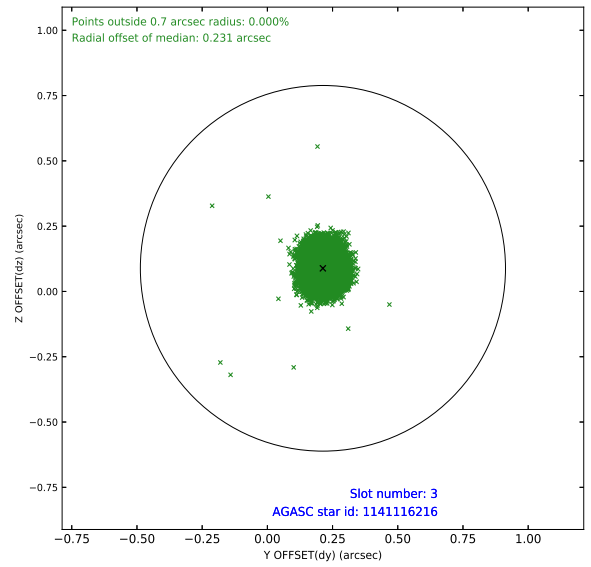
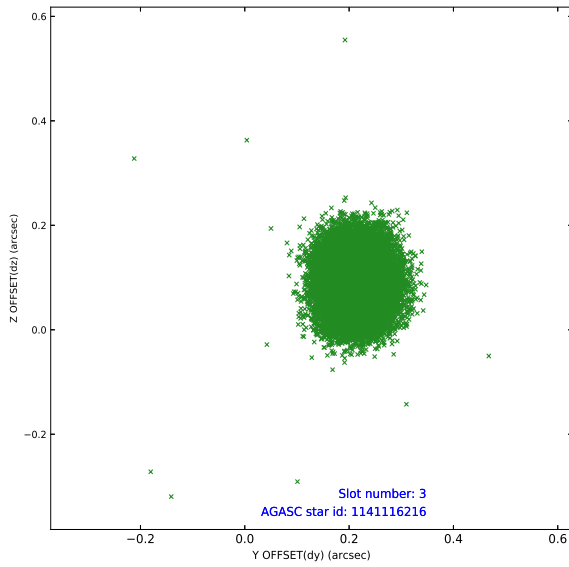


Slot Statistics

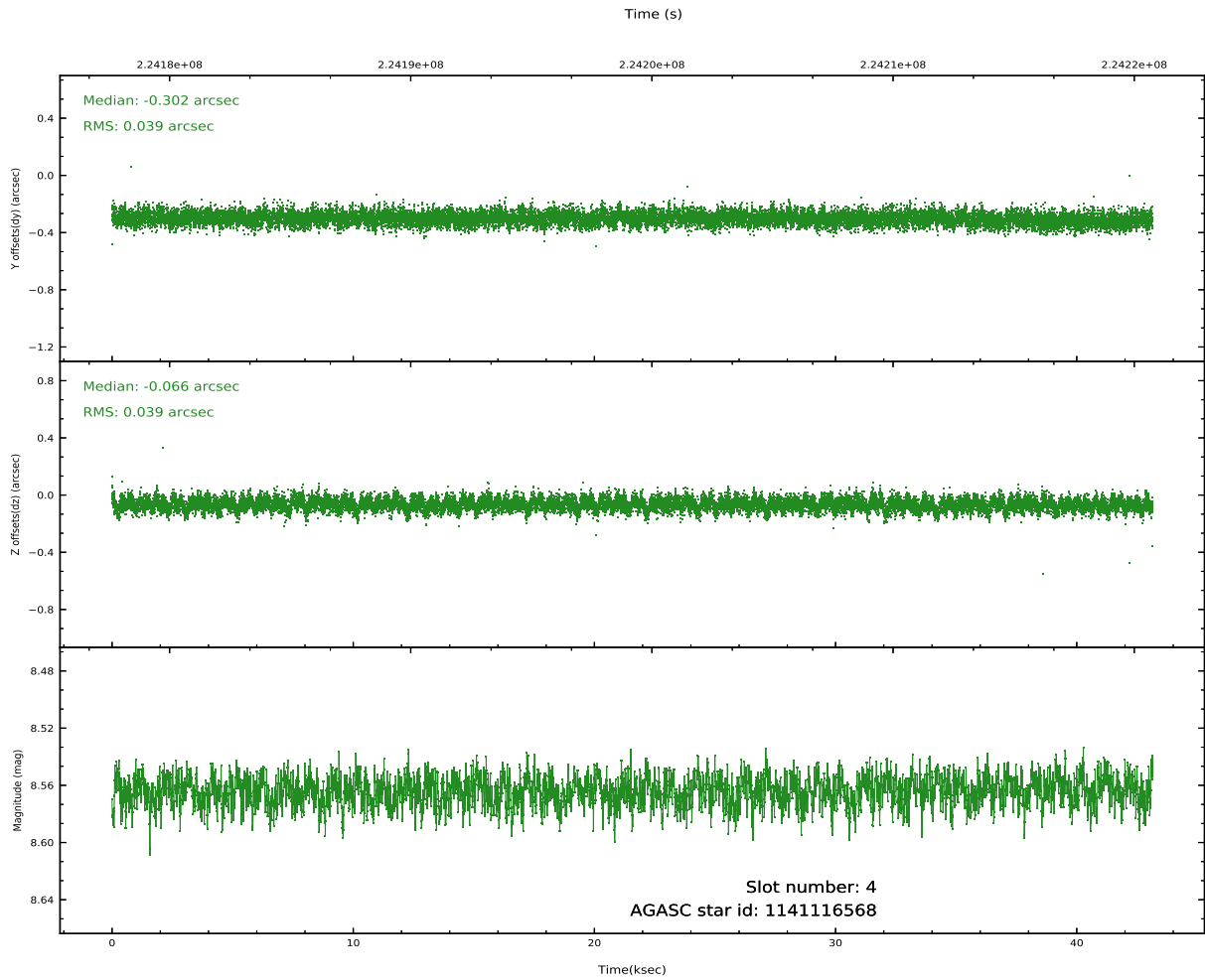
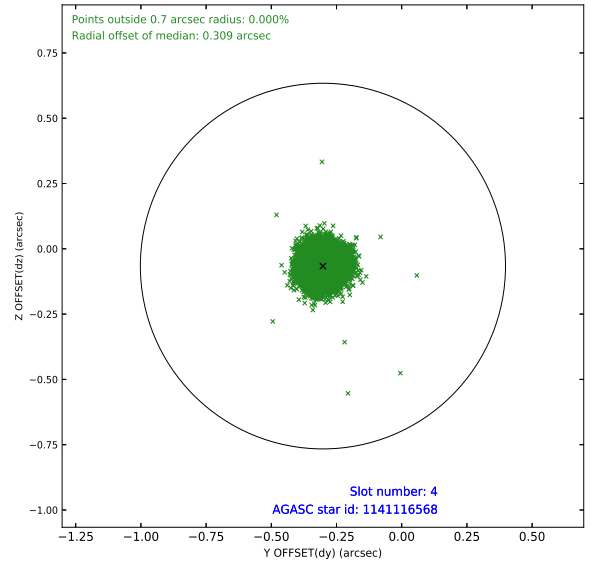
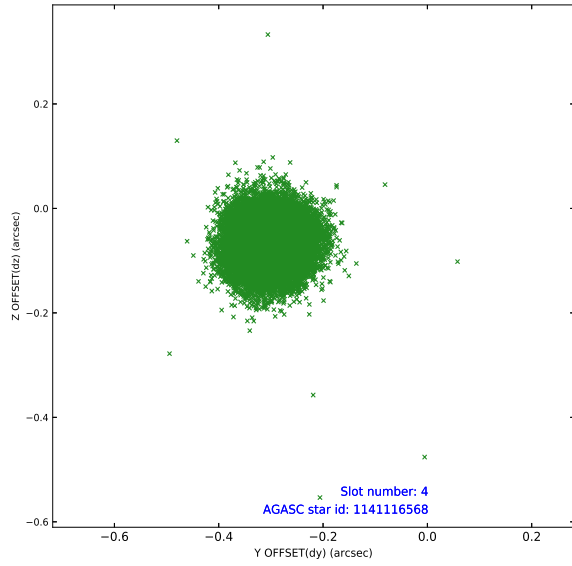
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.14	10521	1.000	-0.181	-0.123	0.010	0.017	0.000000	0.000000	-759.84	-840
1	FID		ACIS-I-4	7.18	10518	1.000	0.058	0.106	0.015	0.030	0.000000	0.000000	2154.44	1066
2	FID		ACIS-I-6	7.25	10520	1.000	0.023	0.080	0.016	0.031	0.000000	0.000000	400.42	1708
3	GUIDE	used	1141116216	8.60	21038	1.000	0.213	0.089	0.063	0.100	229.040455	-59.767767	-1991.66	-1347
4	GUIDE	used	1141116568	8.56	21035	1.000	-0.302	-0.066	0.058	0.095	228.578452	-58.520066	2282.81	273
5	GUIDE	used	1141120488	8.76	21037	1.000	0.005	-0.185	0.061	0.099	228.236450	-59.504731	-1317.75	259
6	GUIDE	used	1141121072	9.08	21029	1.000	0.070	-0.052	0.071	0.121	227.898628	-59.420815	-1135.35	923
7	GUIDE	used	1141119088	8.12	21039	1.000	0.014	0.220	0.066	0.109	229.638476	-59.667928	-1457.15	-2357

2.4 Star Slots

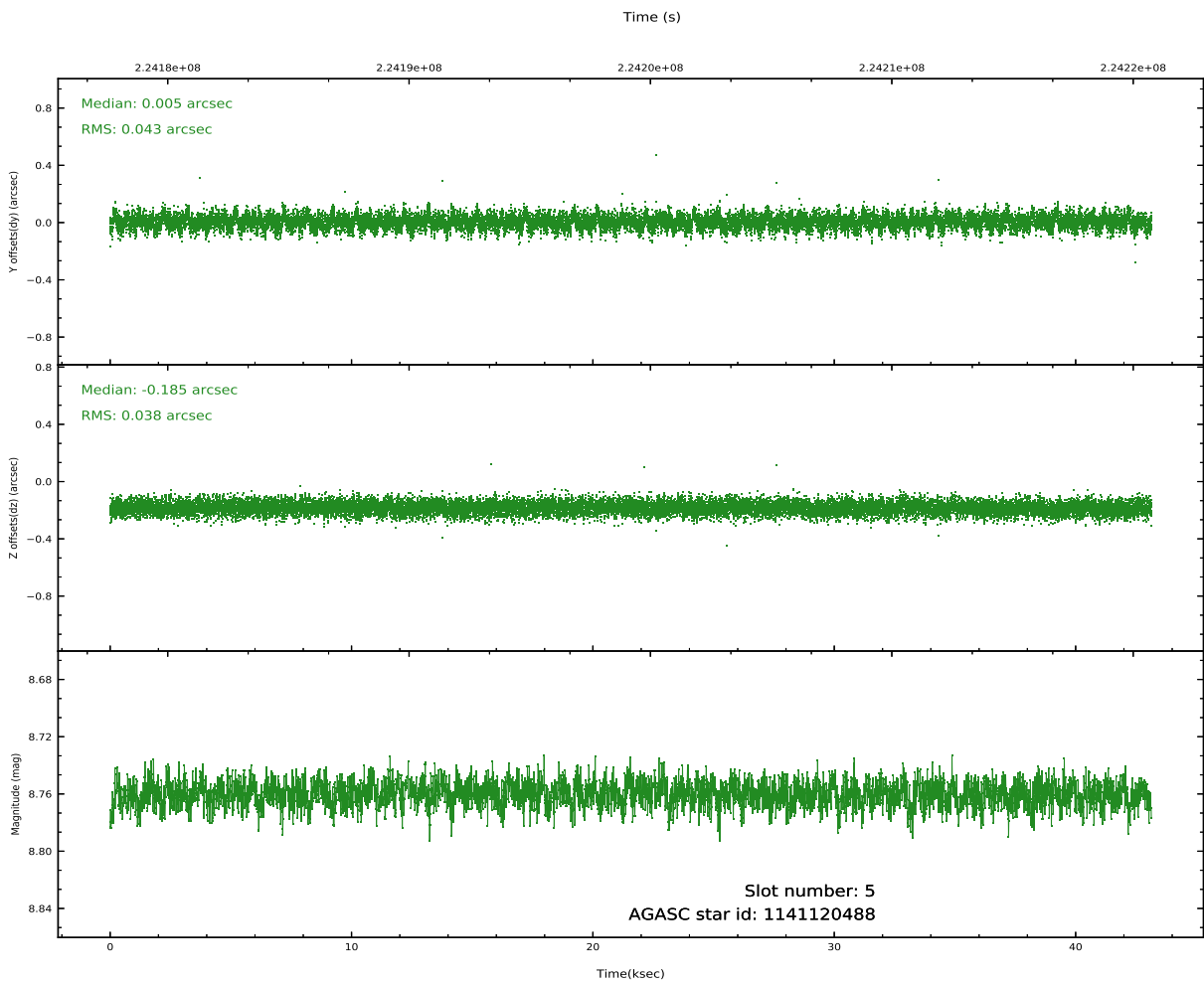
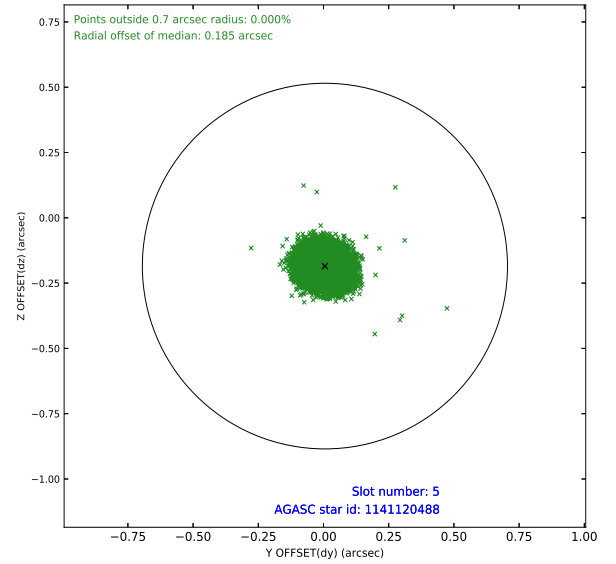
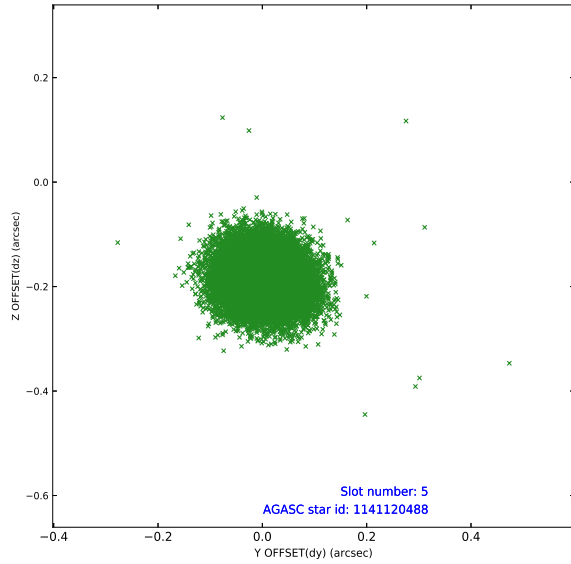
2.4.1 Slot 3



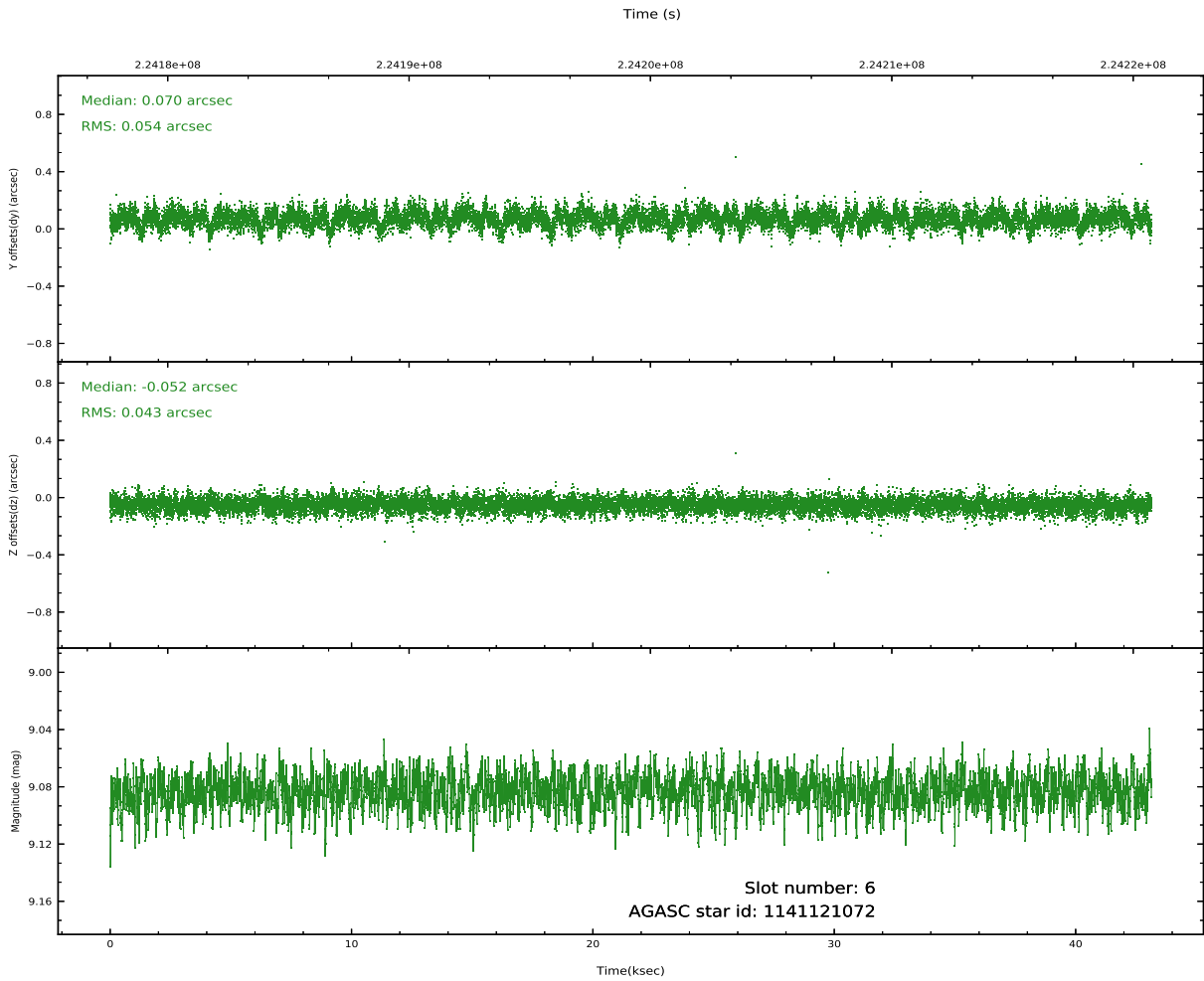
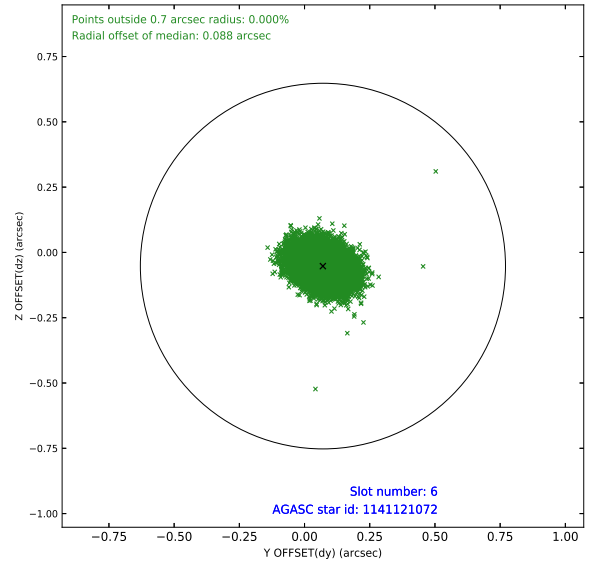
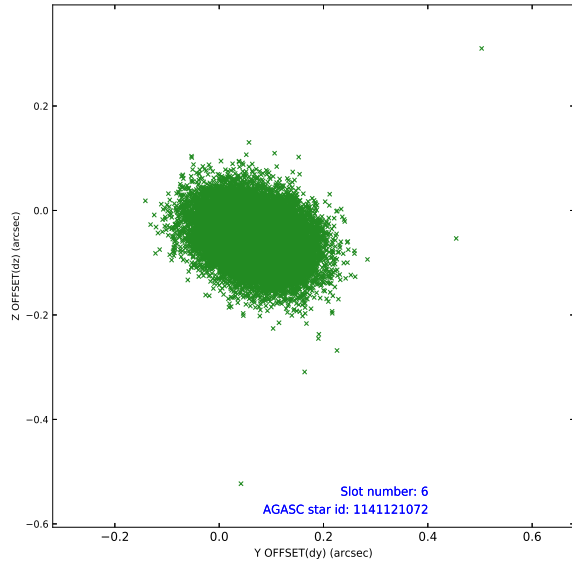
2.4.2 Slot 4



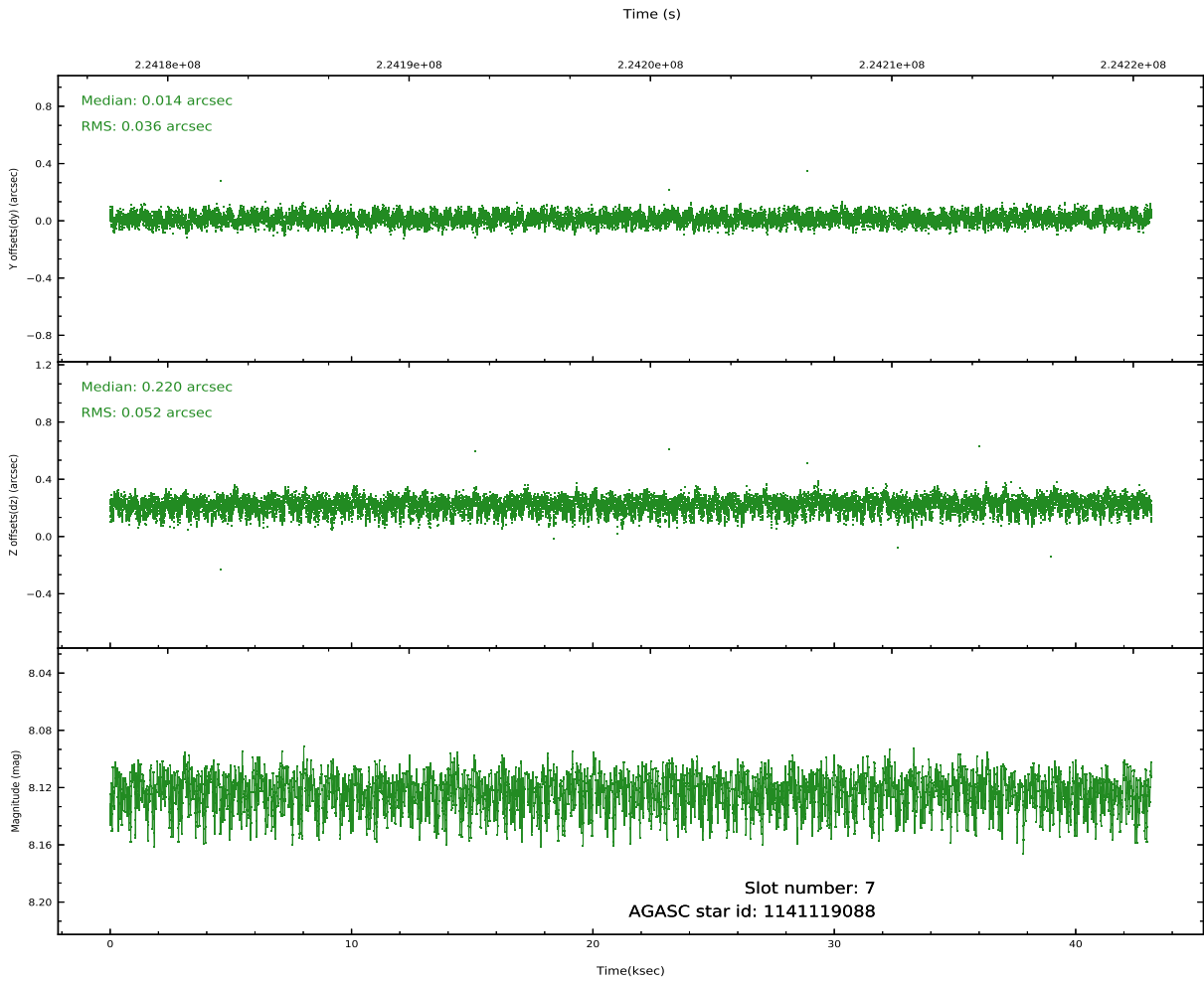
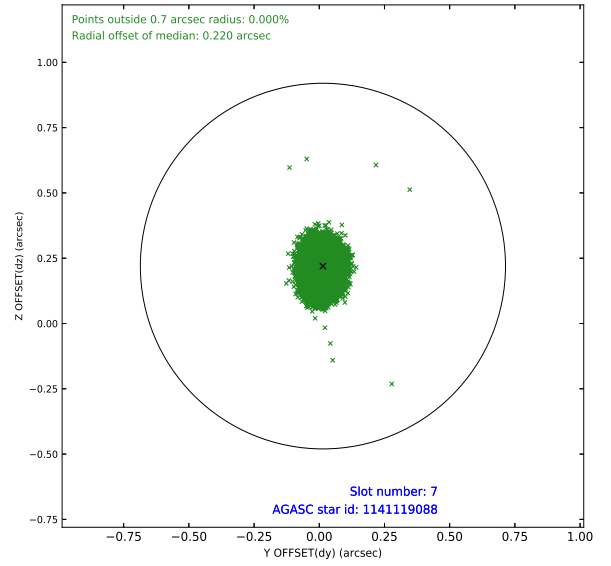
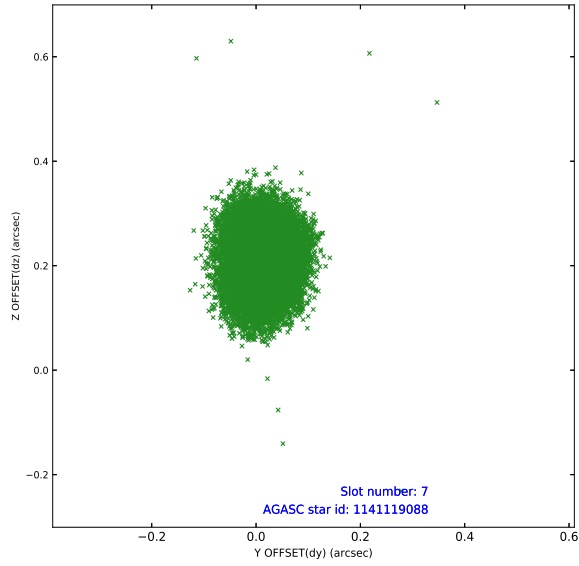
2.4.3 Slot 5



2.4.4 Slot 6

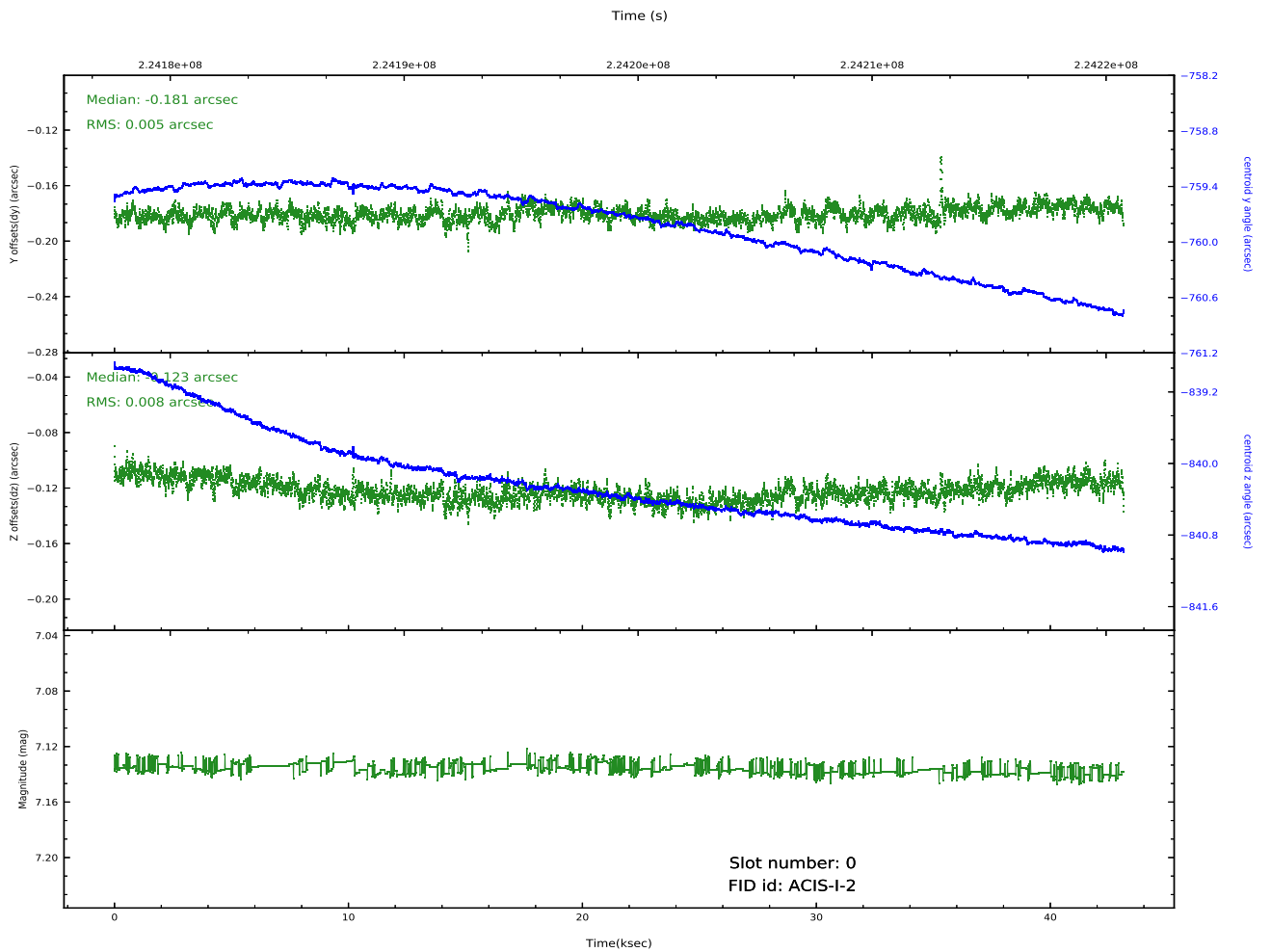
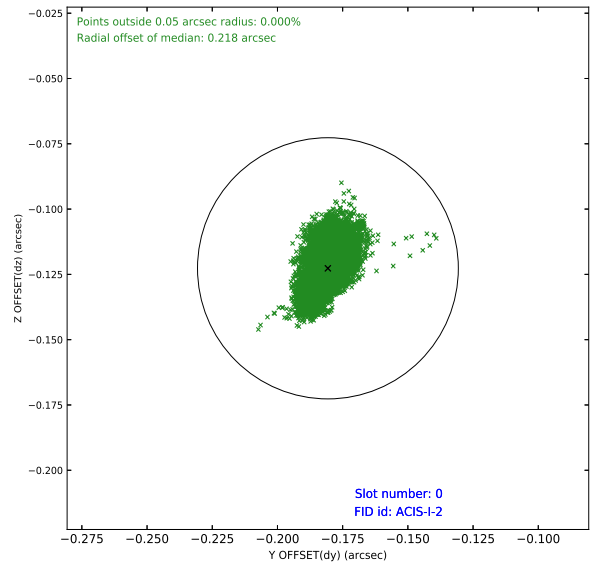
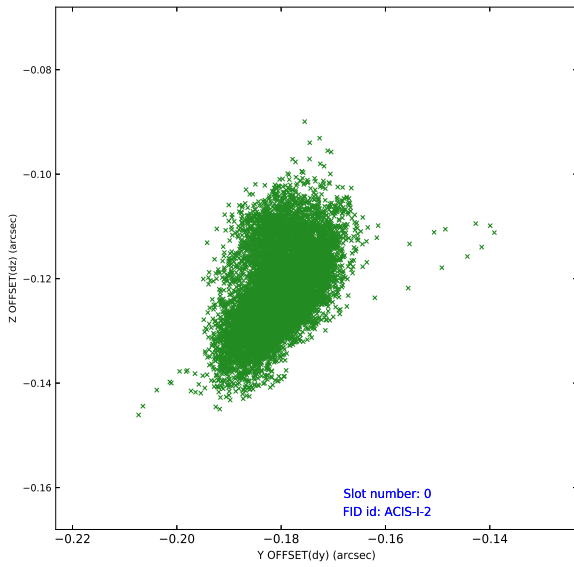


2.4.5 Slot 7

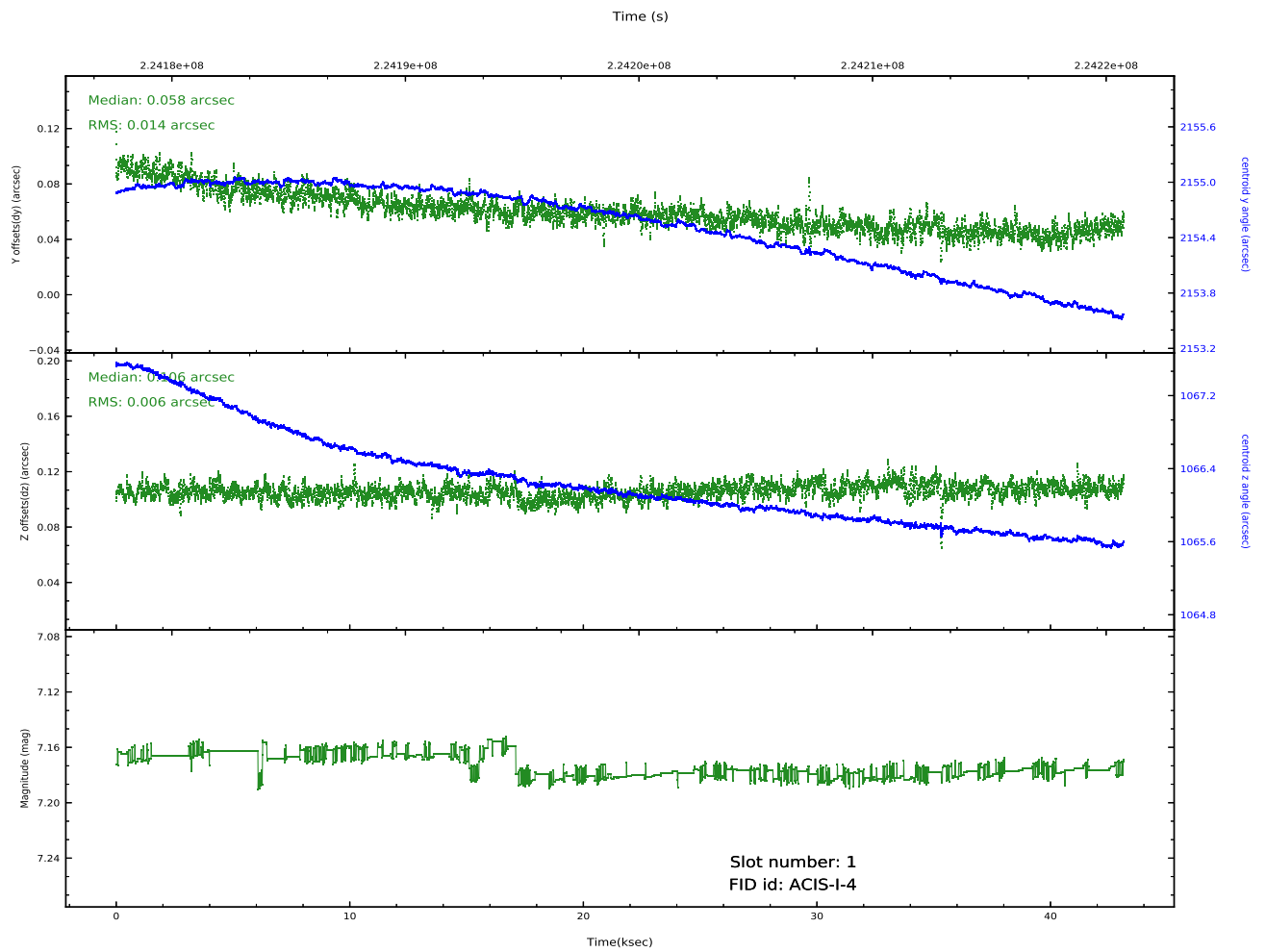
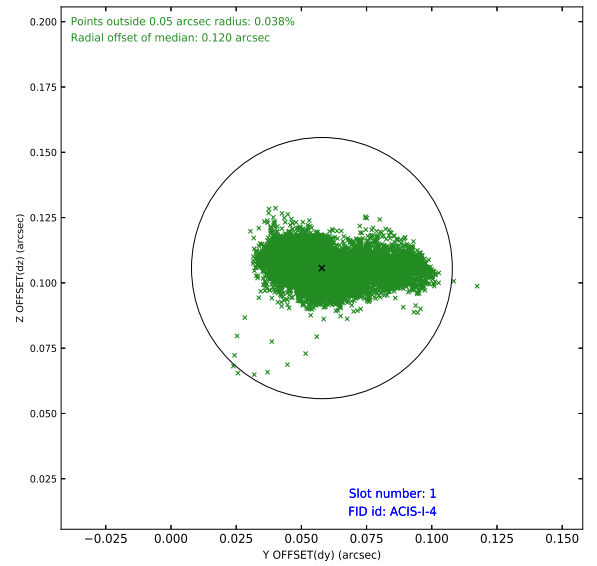
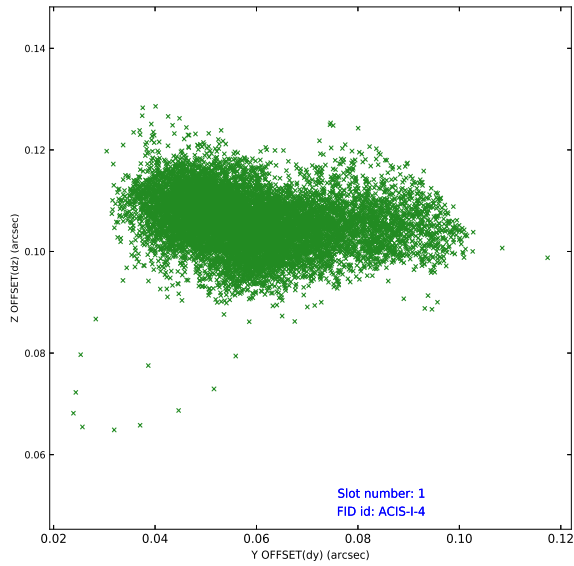


2.5 FID Slots

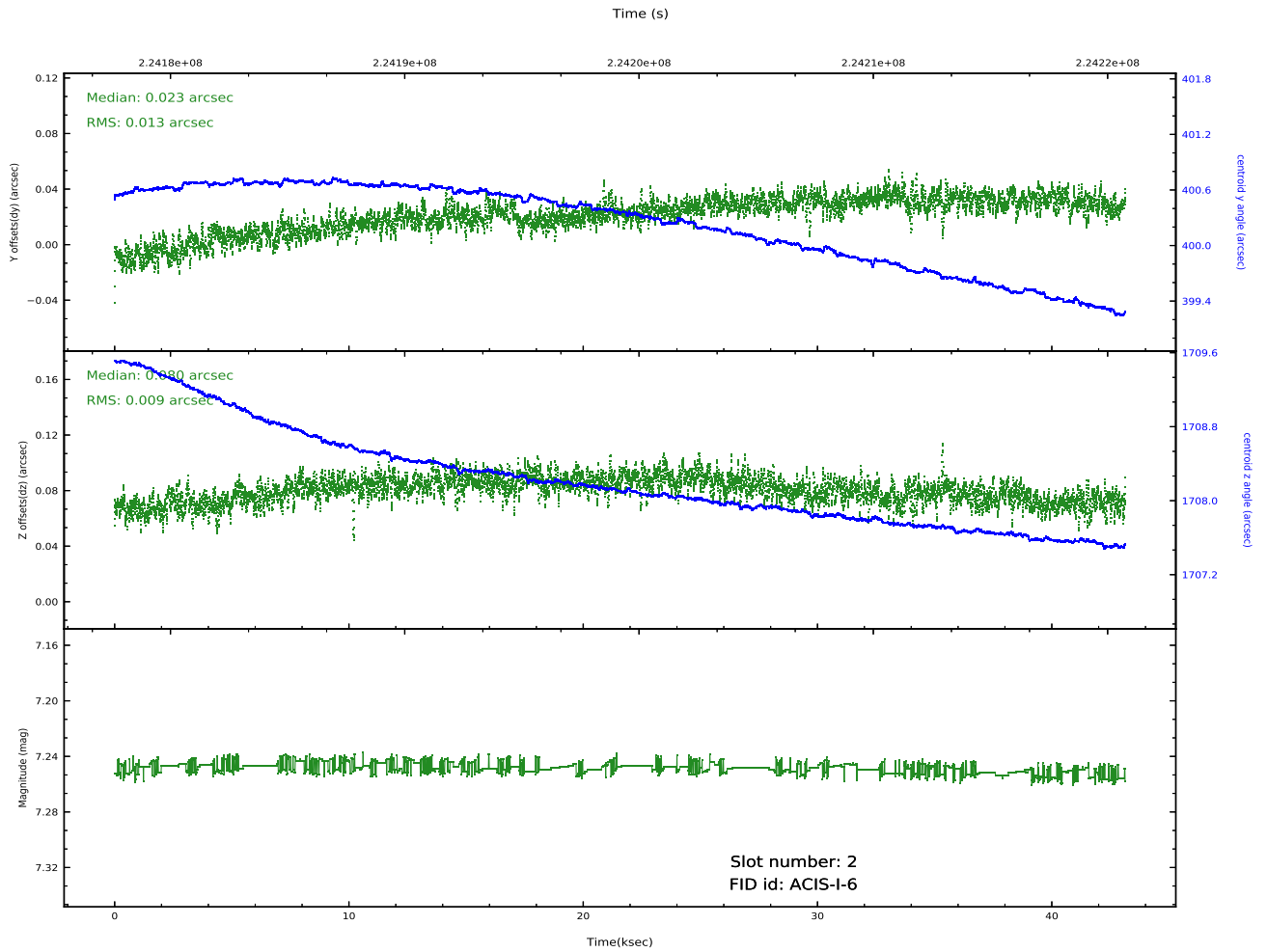
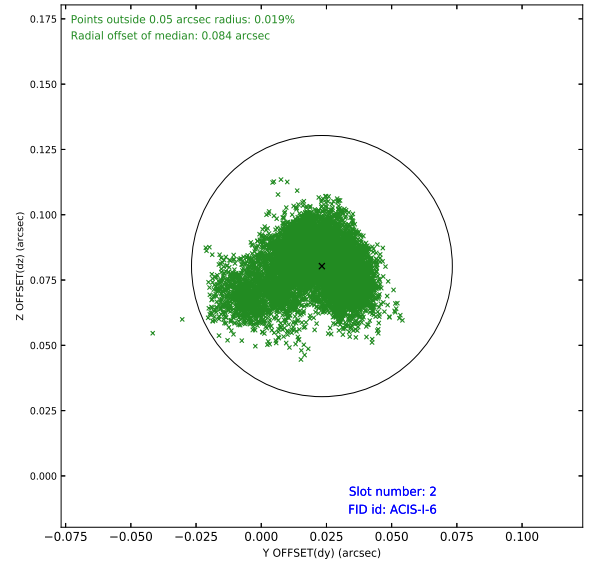
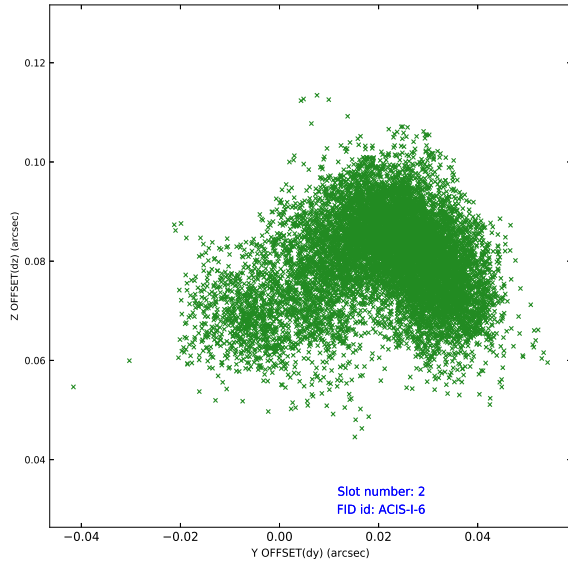
2.5.1 Slot 0



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	43.13275

A.2 Comments