

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6116 - L2 Version 4
Chandra X-Ray Center

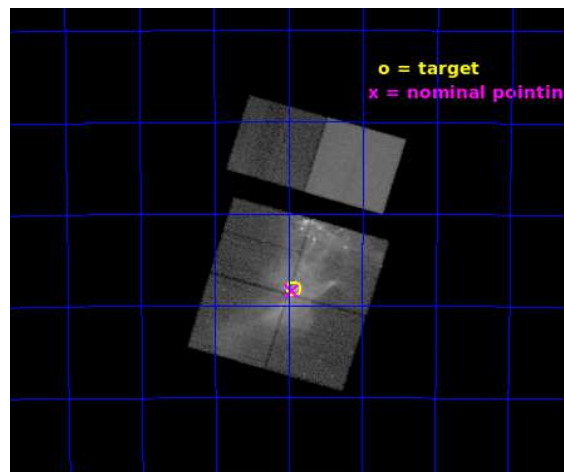
L2 Processing Date : Oct 7 2020

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1 Front

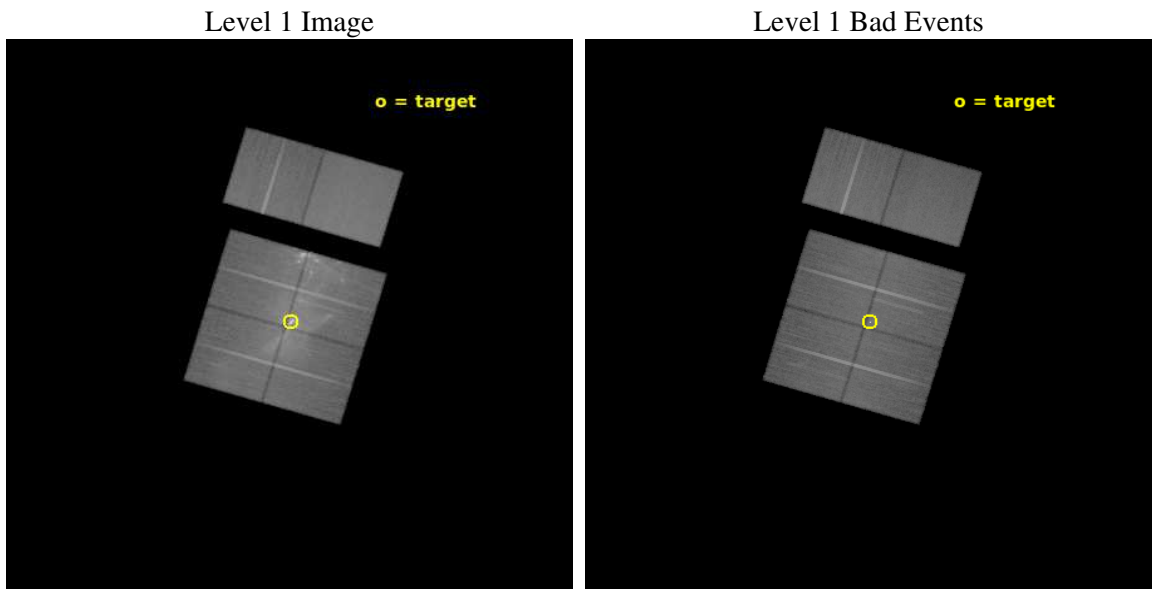
seq_num	500528	Sequence number
obs_id	6116	Observation id
title	The Structure and Composition of Pulsar Winds and their Nebulae	Pr
observer	Patrick Slane	Principal investigator
object	PSR B1509-58	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.481667	Observer's specified target RA [deg]
dec_targ	-59.135806	Observer's specified target Dec [deg]
ra_nom	228.48830489718	Nominal RA [deg]
dec_nom	-59.139578377183	Nominal Dec [deg]
roll_nom	16.560535139396	Nominal Roll [deg]
revision	4	Processing version of data
ontime	47647.917901605	Sum of GTIs [s]
livetime	47044.571275004	Livetime [s]
ontime0	47651.158832192	Sum of GTIs [s]
ontime1	47654.399822474	Sum of GTIs [s]
ontime2	47647.917841911	Sum of GTIs [s]
ontime3	47647.917901605	Sum of GTIs [s]
ontime6	47647.917831987	Sum of GTIs [s]
ontime7	47654.399822474	Sum of GTIs [s]
l2events	842020	Number of level 2 events



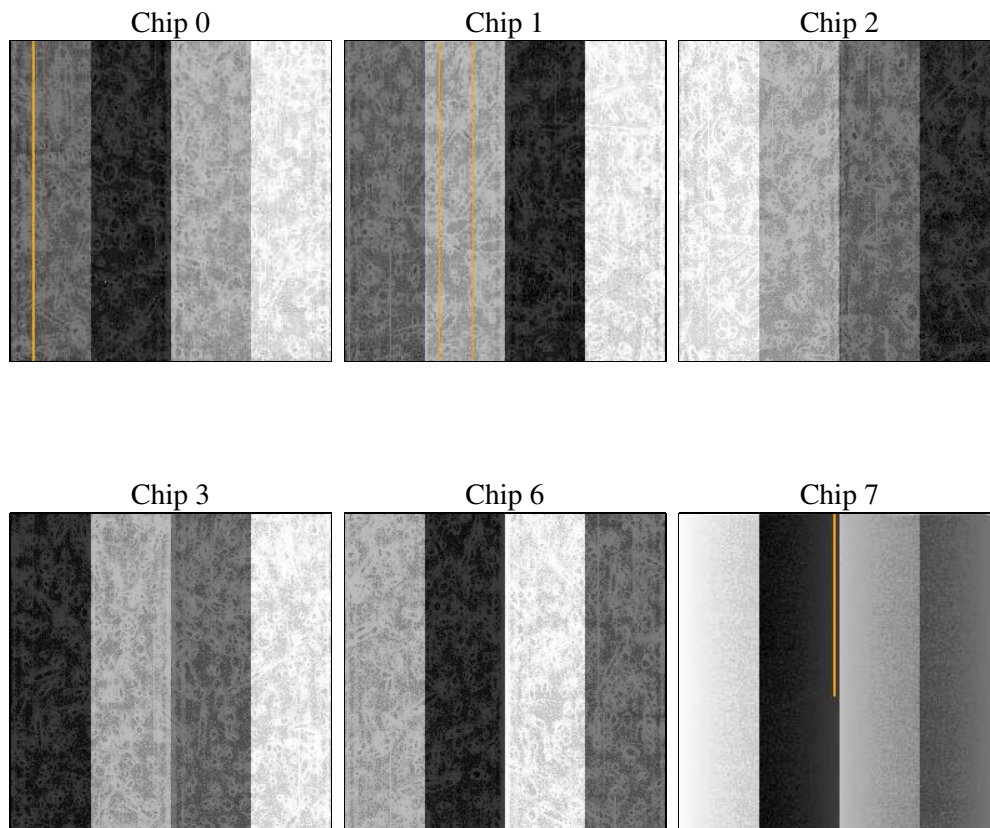
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	47500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	47647.917901605	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	47651.158832192	Sum of GTIs [s]
date	2020-10-08T01:12:04	Date and time of file creation	ontime1	47654.399822474	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	47647.917841911	Sum of GTIs [s]
			ontime3	47647.917901605	Sum of GTIs [s]
			ontime6	47647.917831987	Sum of GTIs [s]
			ontime7	47654.399822474	Sum of GTIs [s]
			l1events	2824553	Number of level 1 events

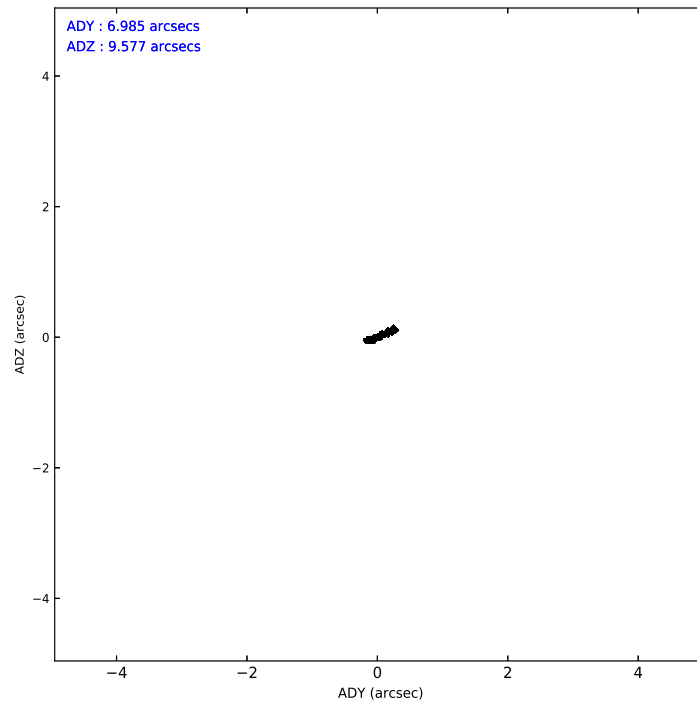
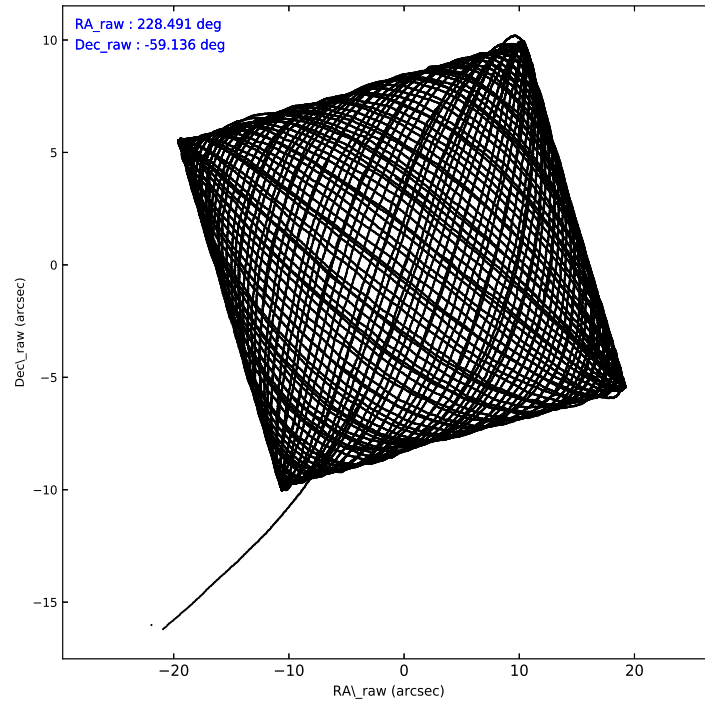
2.1.4 Events

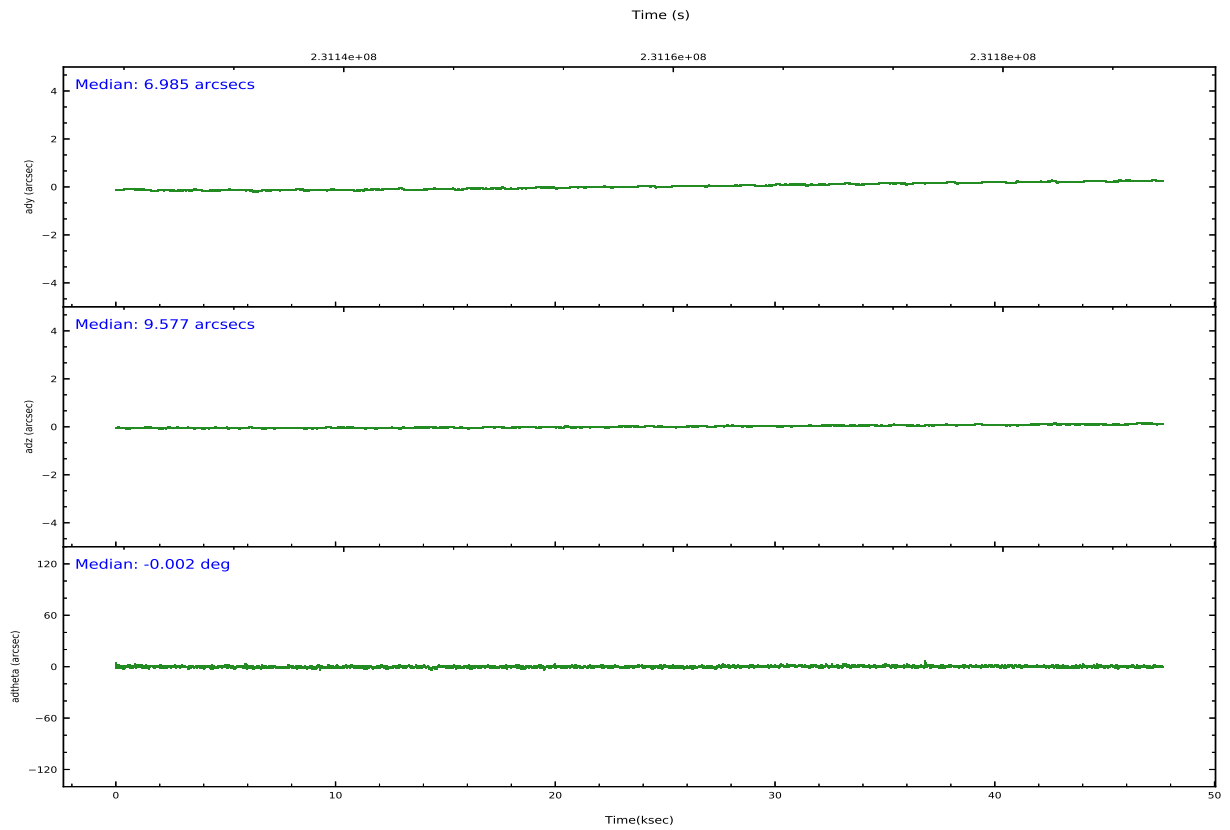
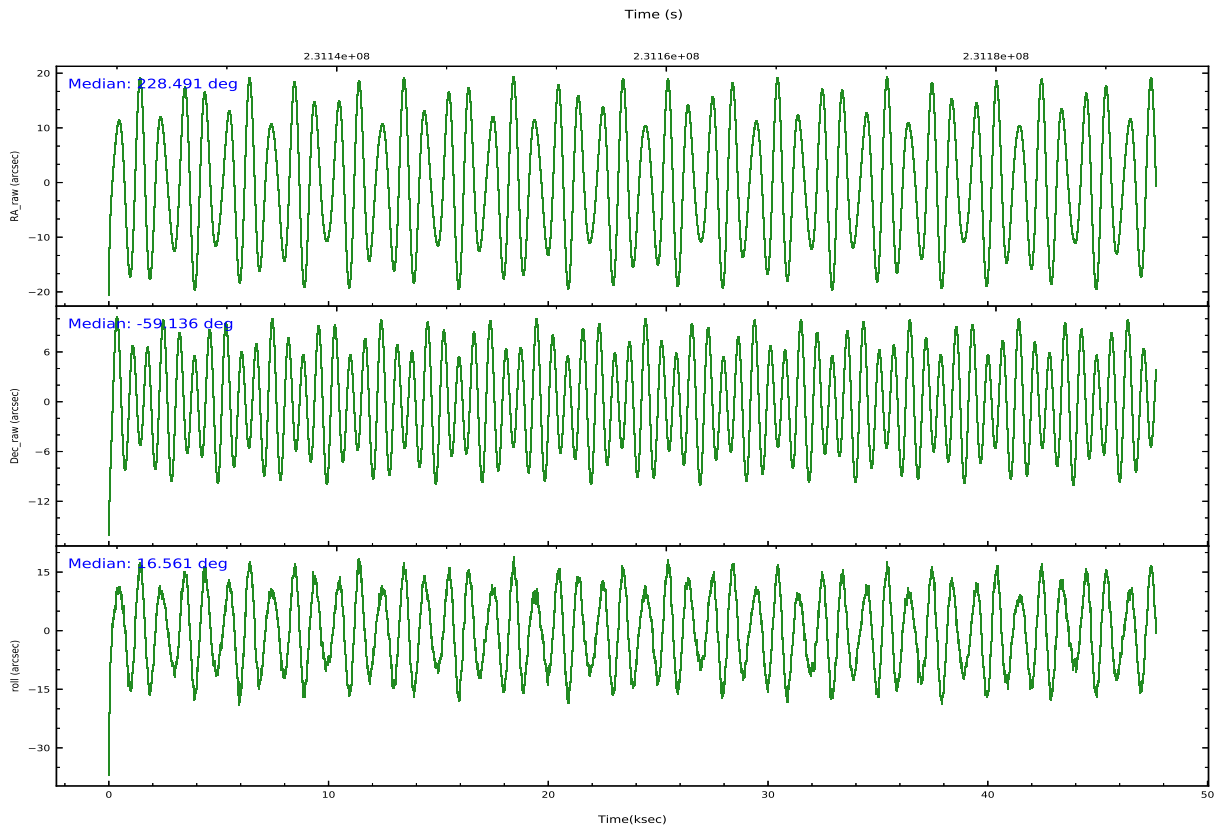
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	421509	415405	470863	603750	399089	513937	grade 0 events	81443	68096	101561	189690	21605	19844
rejected events	297556	304678	327860	341554	349904	302709		19%	16%	21%	31%	5%	3%
rejected %	70%	73%	69%	56%	87%	58%	grade 1 events	554	454	835	2821	231	510
								0%	0%	0%	0%	0%	0%
							grade 2 events	18727	18139	18800	32753	10224	43231
								4%	4%	3%	5%	2%	8%
							grade 3 events	7222	6986	7154	12256	4495	18960
								1%	1%	1%	2%	1%	3%
							grade 4 events	7036	6876	7200	12252	4297	18657
								1%	1%	1%	2%	1%	3%
							grade 5 events	15274	16178	15144	20107	17878	48553
								3%	3%	3%	3%	4%	9%
							grade 6 events	10693	11566	9759	16561	9370	114145
								2%	2%	2%	2%	2%	22%
							grade 7 events	280560	287110	310410	317310	330989	250037
								66%	69%	65%	52%	82%	48%

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	228.454083	228.48830489718	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.156270	-59.139578377183	Alternating exposures requested	N	N
[deg] Pointing Roll	16.325590	16.560535139396	[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)	231134789.184000	231133318.29935			
Observation start date	2005-04-29T04:05:25	2005-04-29T03:41:58			
[s] Observation end time (MET)	231182289.184000	231182719.2016			
Observation end date	2005-04-29T17:17:05	2005-04-29T17:25:19			
Read mode	TIMED	TIMED			

2.3 Aspect



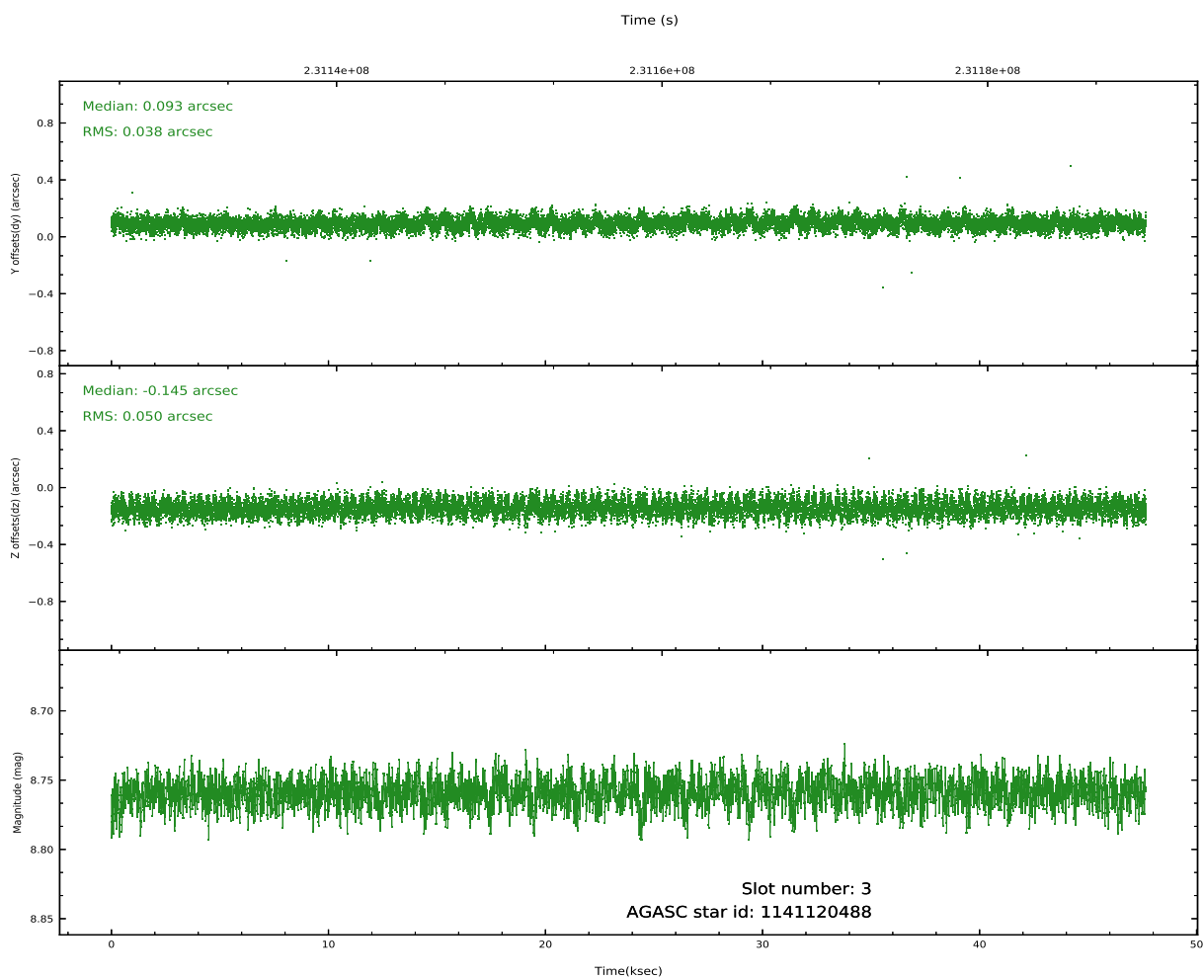
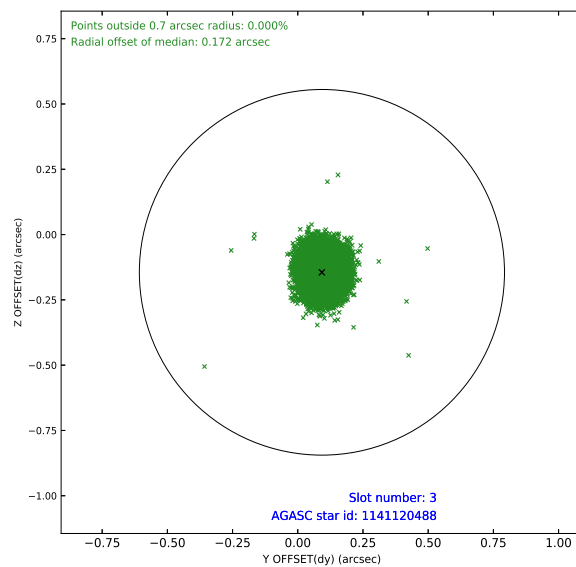
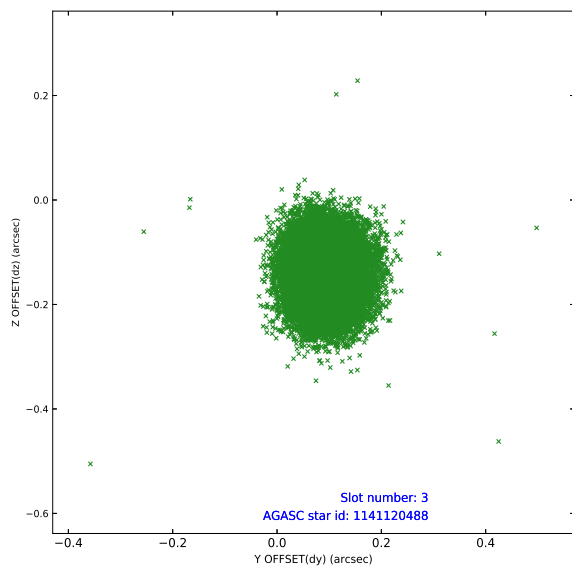


Slot Statistics

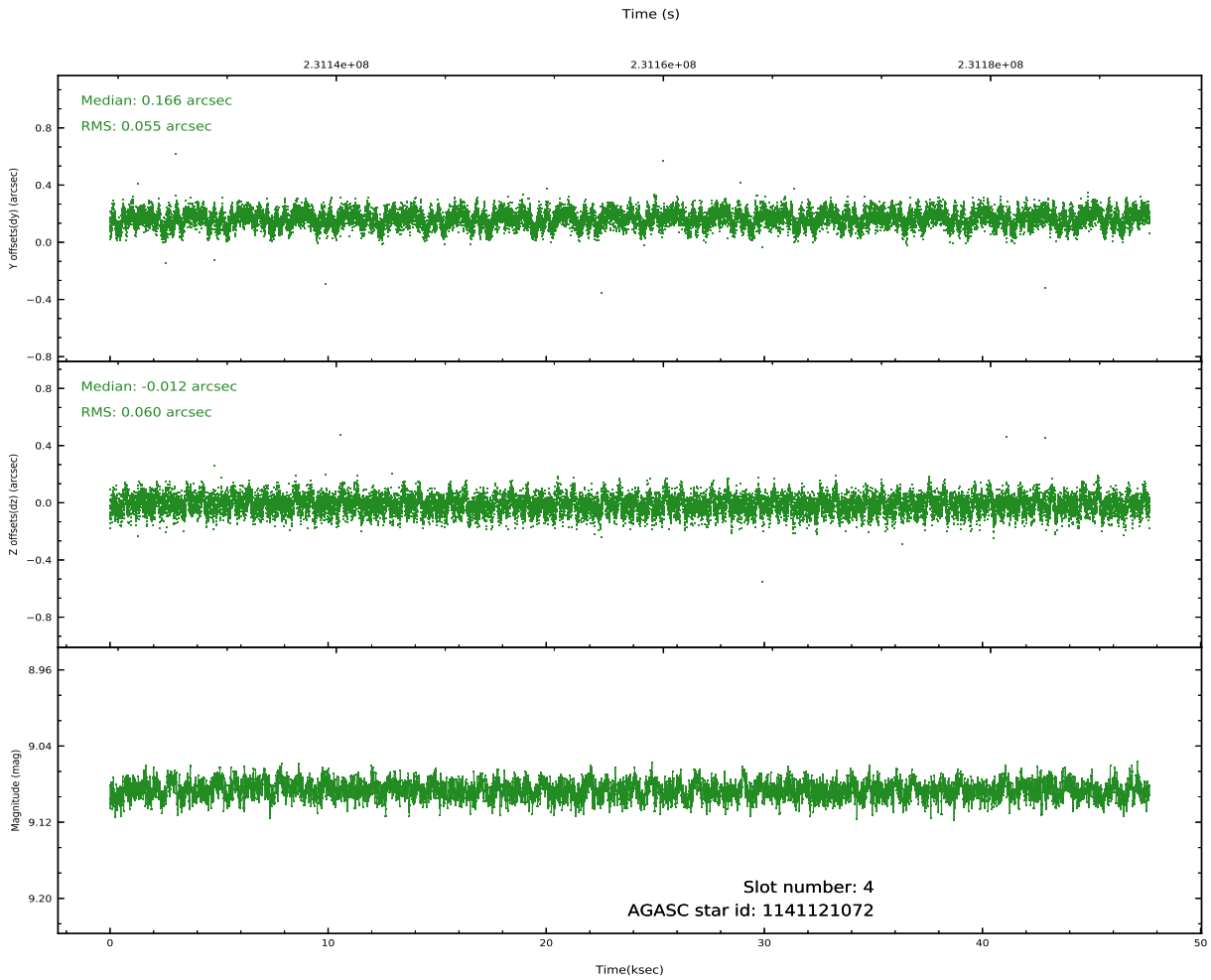
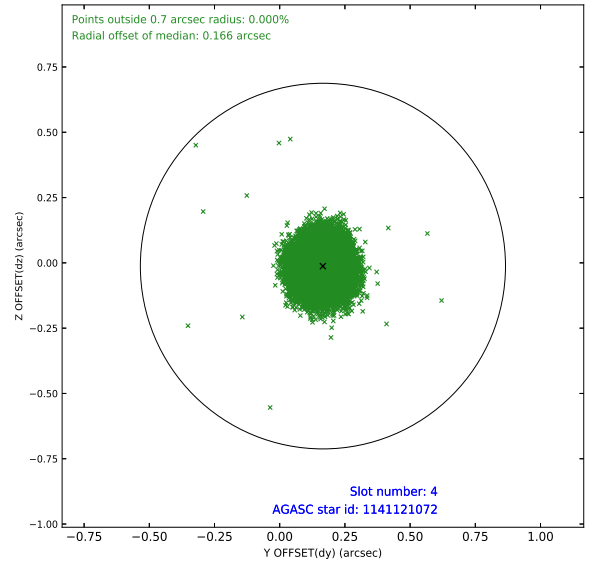
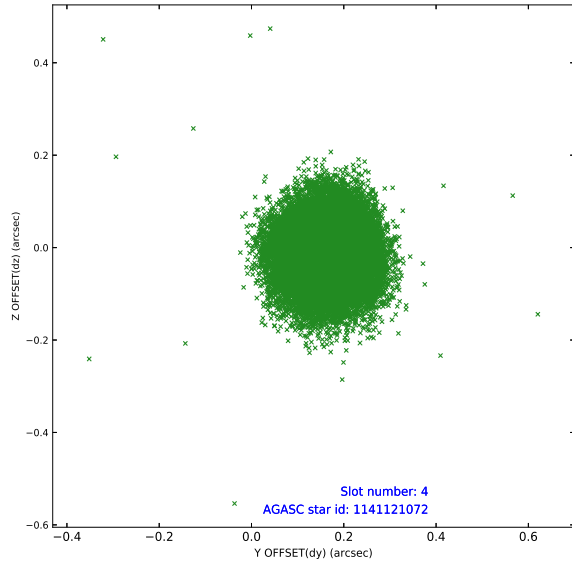
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.25	11625	1.000	-0.077	0.076	0.009	0.016	0.000000	0.000000	932.60	-832
1	FID		ACIS-I-2	7.14	11624	1.000	-0.146	-0.105	0.007	0.012	0.000000	0.000000	-761.57	-839
2	FID		ACIS-I-4	7.18	11624	1.000	0.124	0.096	0.007	0.013	0.000000	0.000000	2152.70	1066
3	GUIDE	used	1141120488	8.76	23235	1.000	0.093	-0.145	0.067	0.108	228.236450	-59.504731	-733.79	-1092
4	GUIDE	used	1141121072	9.09	23232	1.000	0.166	-0.012	0.087	0.138	227.898628	-59.420815	-1244.87	-632
5	GUIDE	used	1141116216	8.61	23241	1.000	-0.094	0.175	0.060	0.096	229.040455	-59.767767	400.31	-2415
6	GUIDE	used	1141114888	6.99	23250	1.000	-0.073	-0.090	0.061	0.094	229.339260	-58.368001	2398.49	2243
7	GUIDE	used	1141119088	8.15	23248	1.000	-0.089	0.070	0.061	0.099	229.638476	-59.667928	1543.97	-2390

2.4 Star Slots

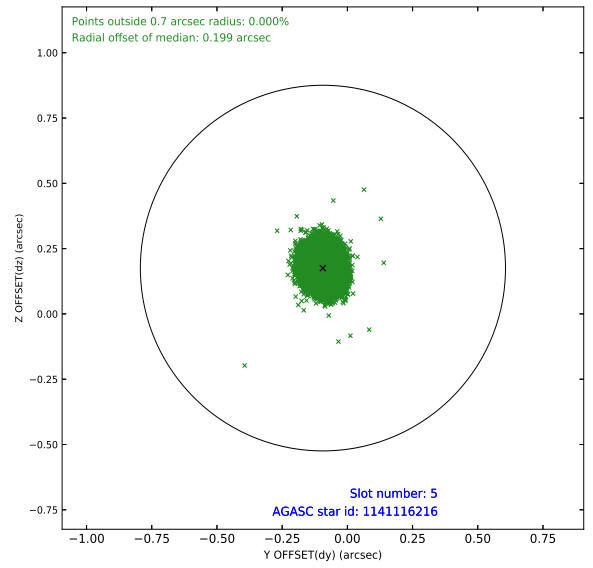
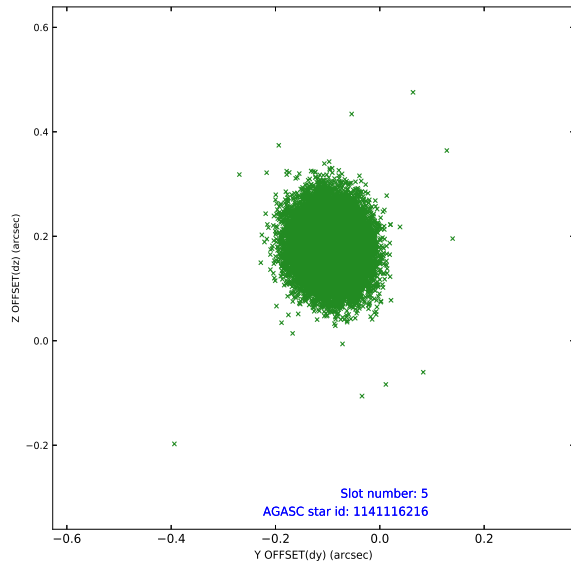
2.4.1 Slot 3



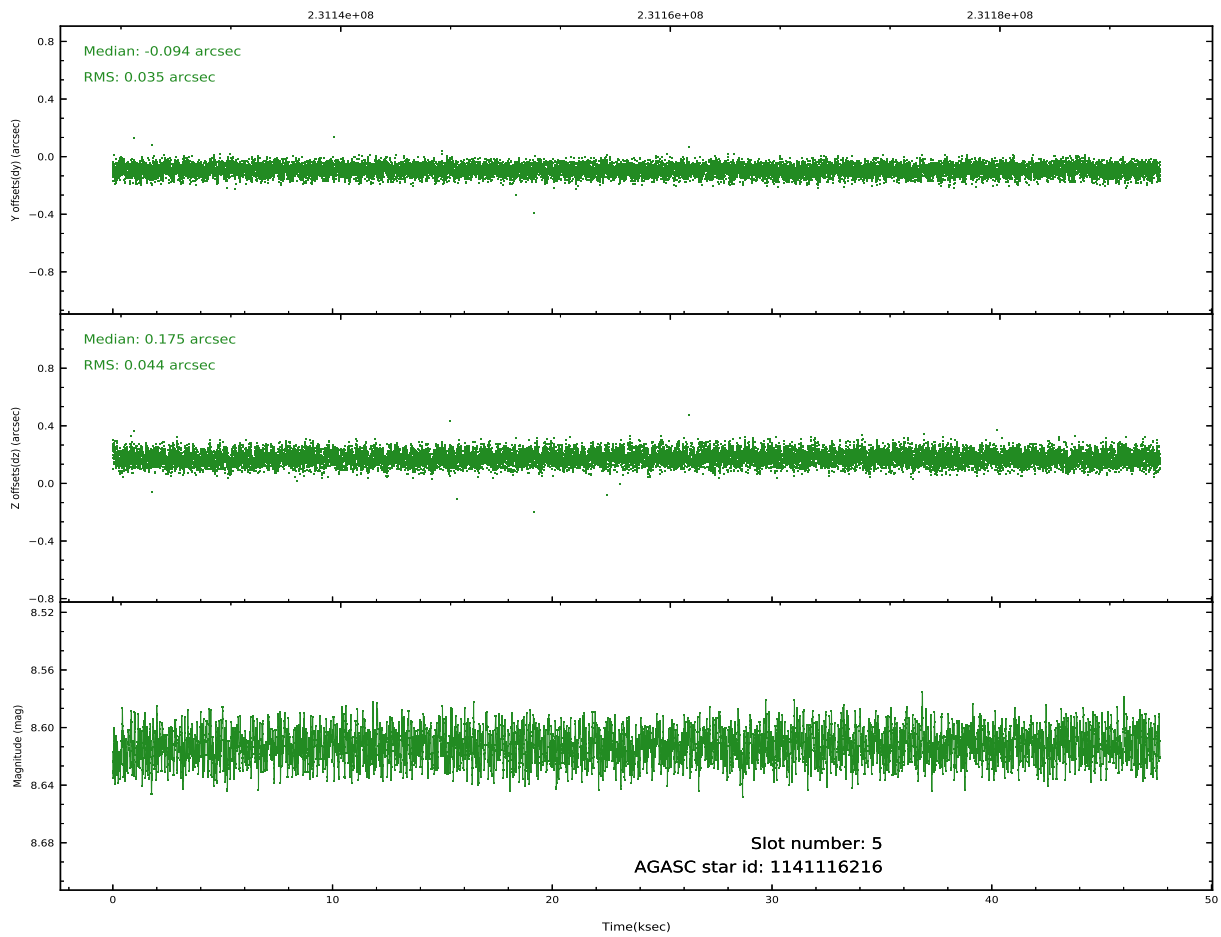
2.4.2 Slot 4



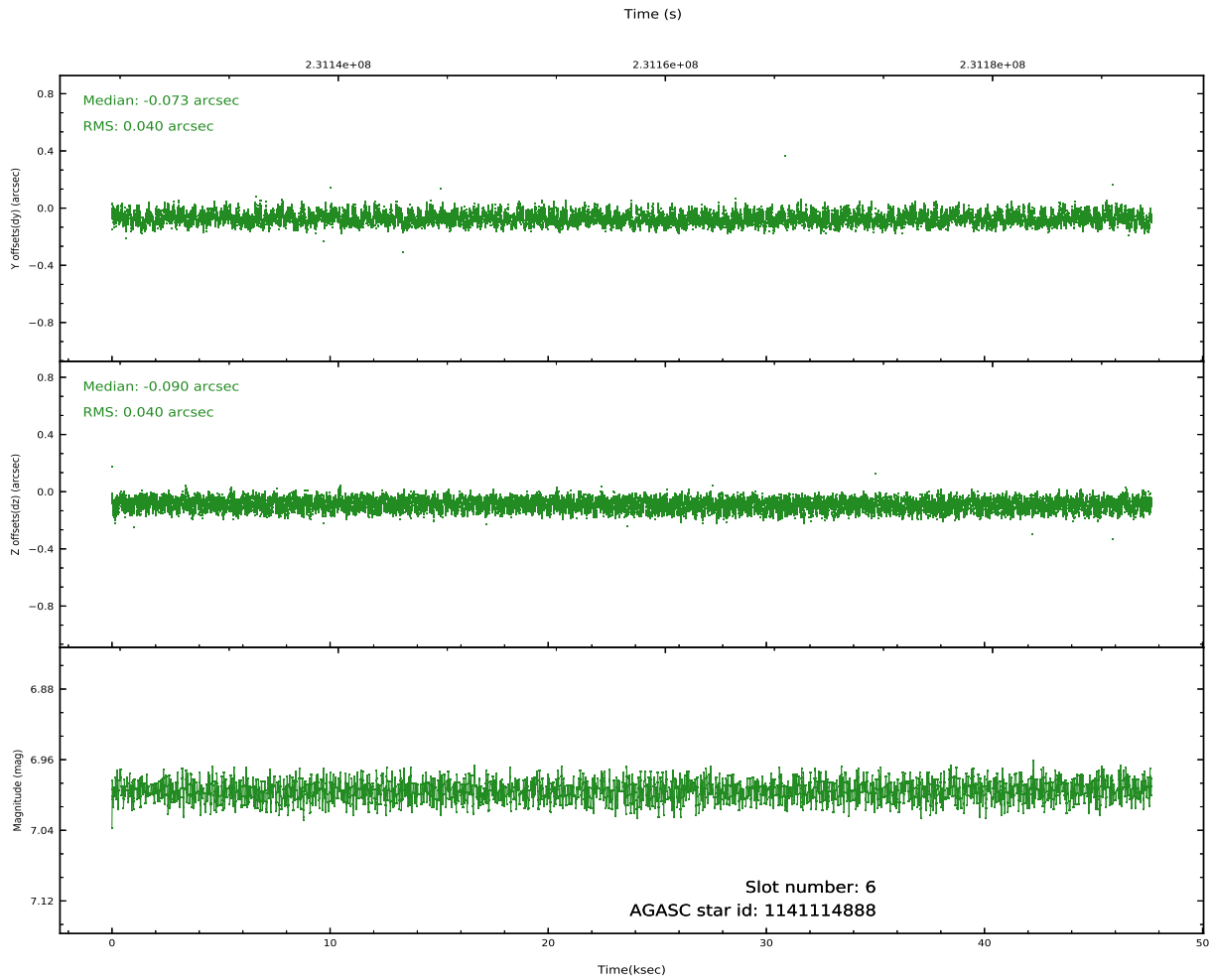
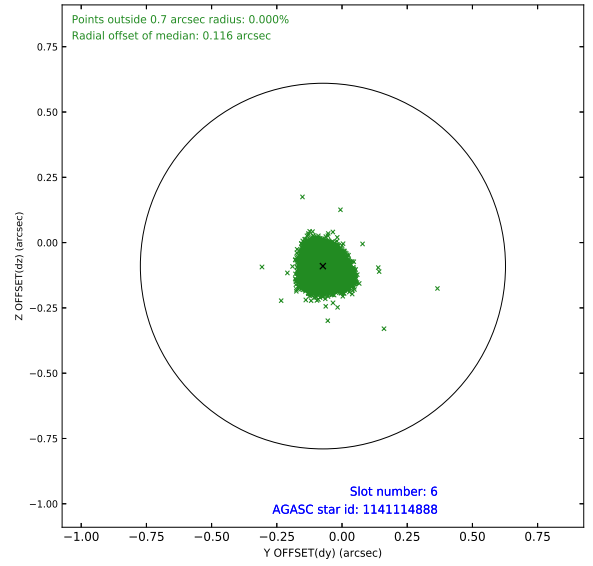
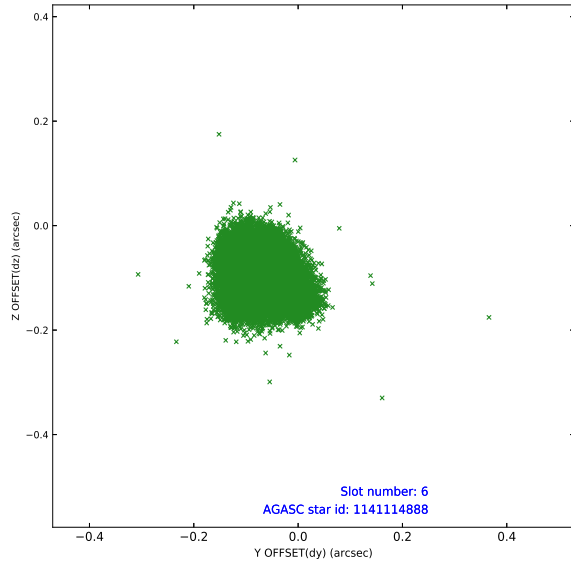
2.4.3 Slot 5



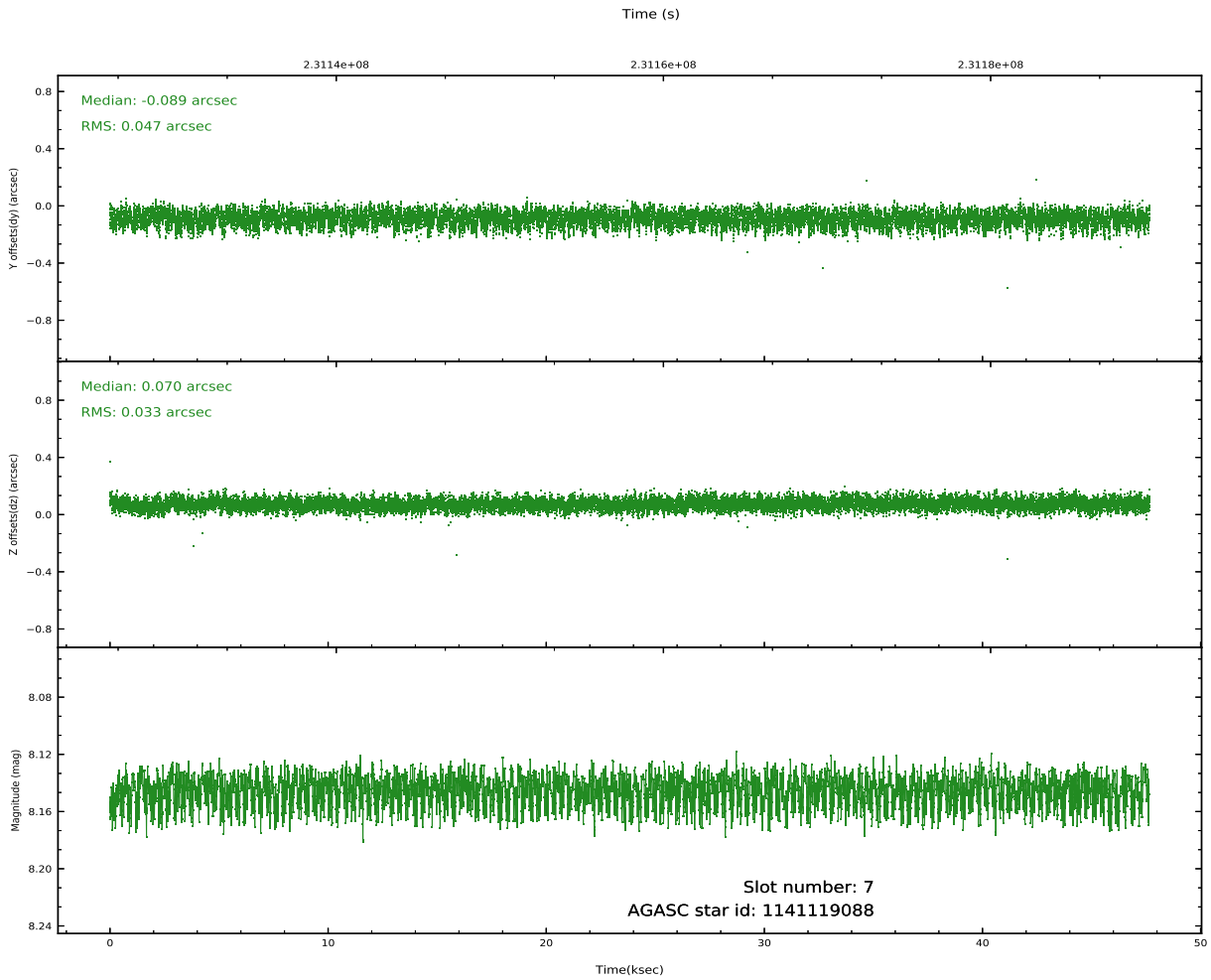
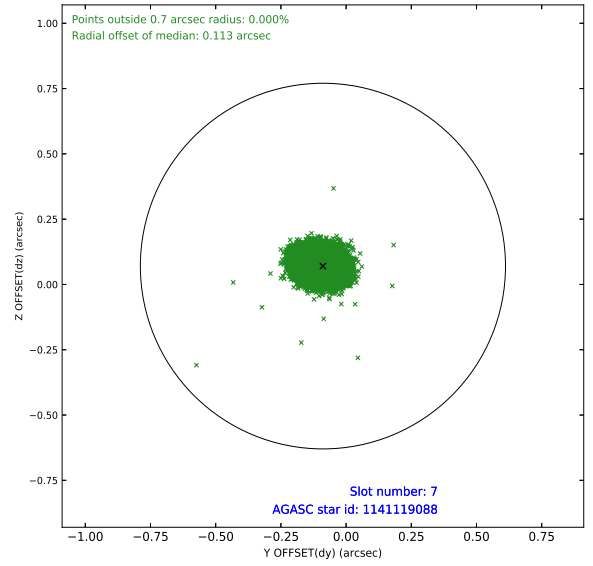
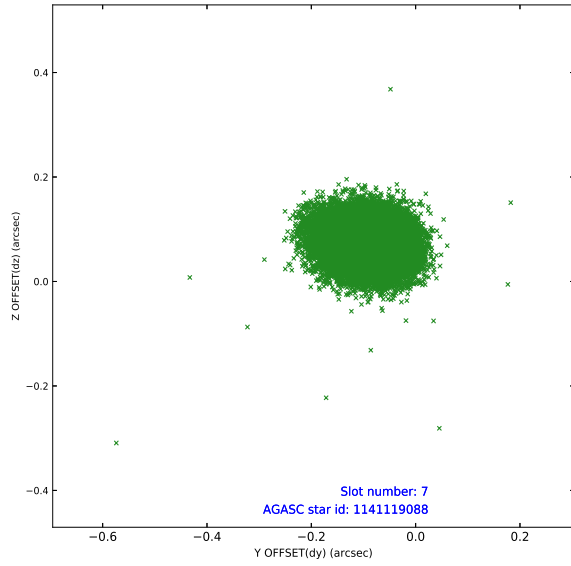
Time (s)



2.4.4 Slot 6

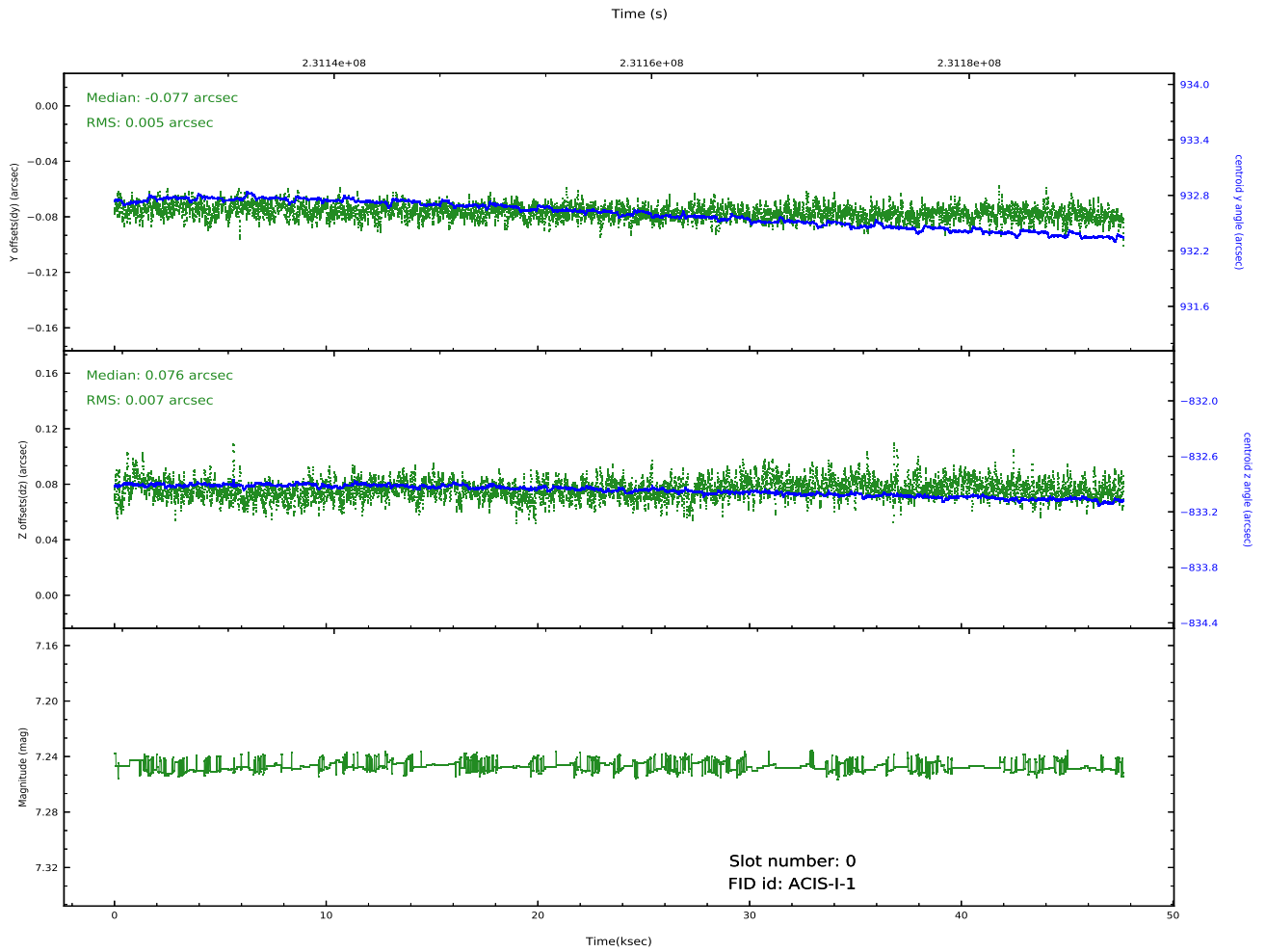
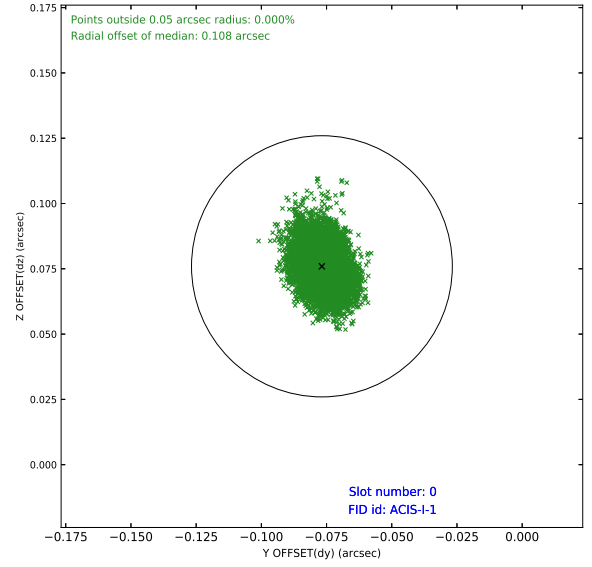
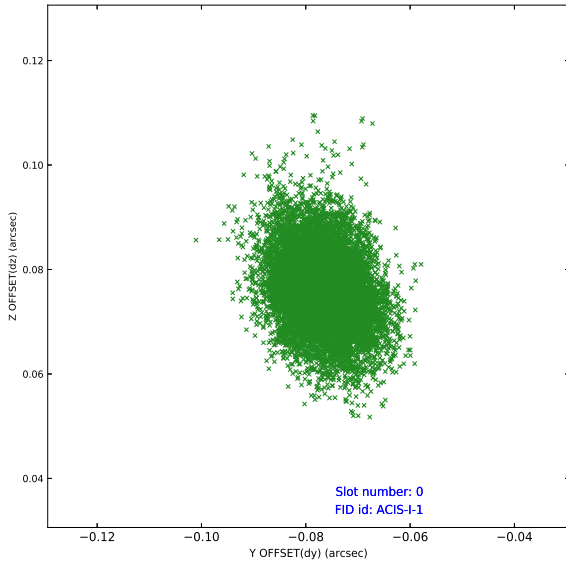


2.4.5 Slot 7

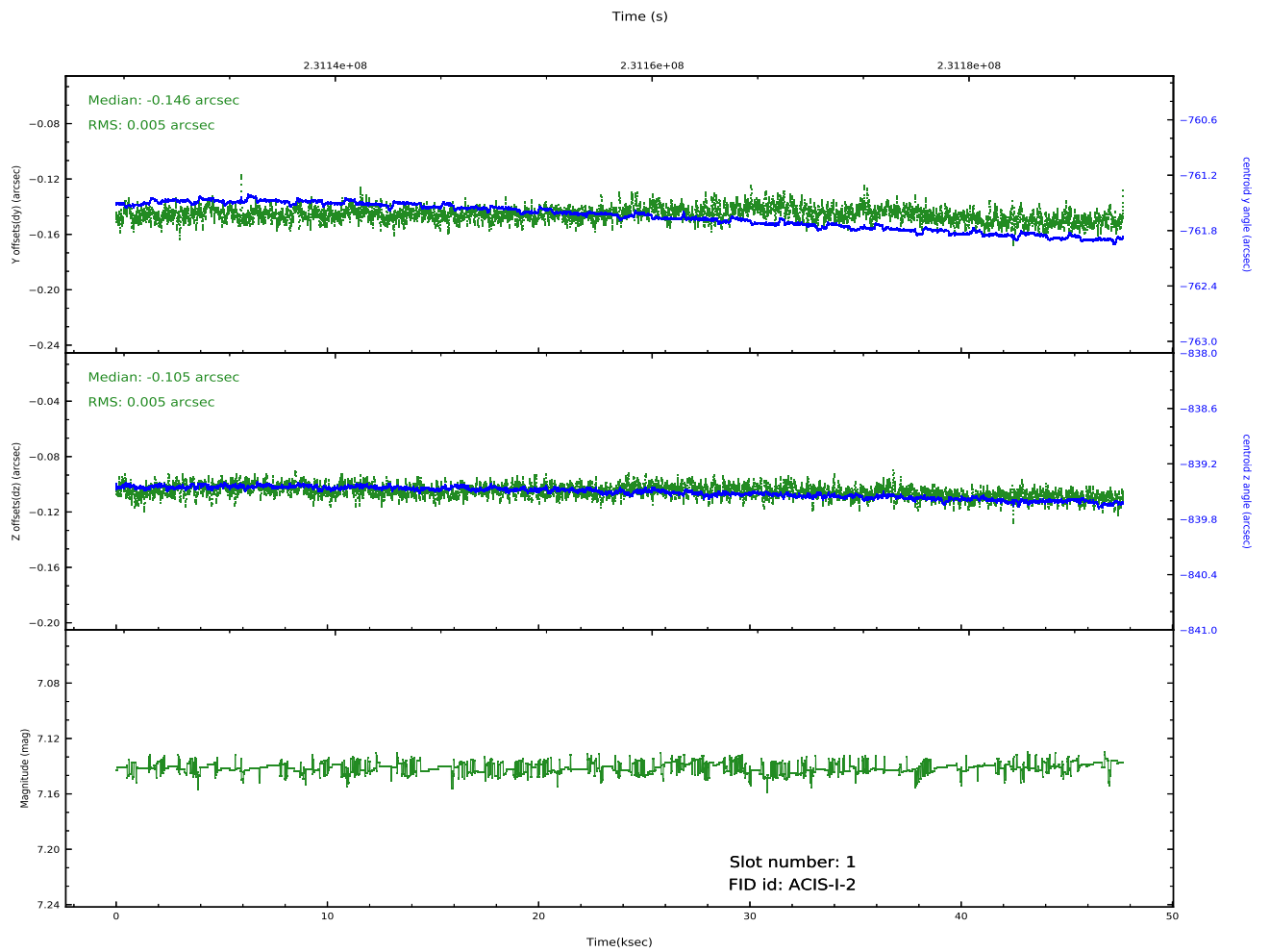
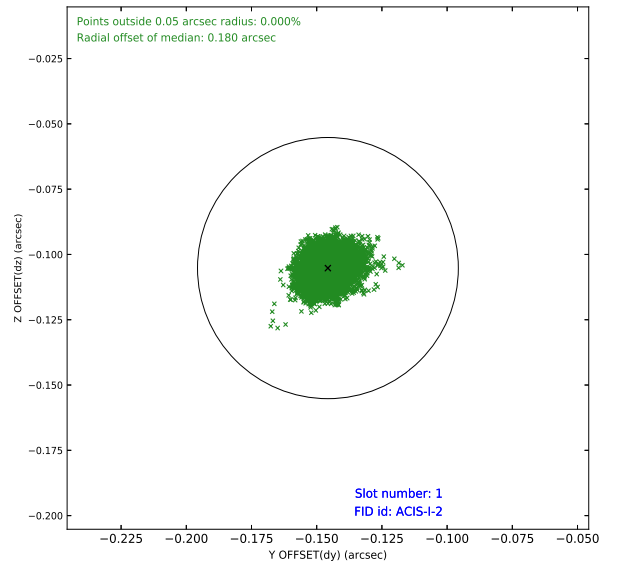
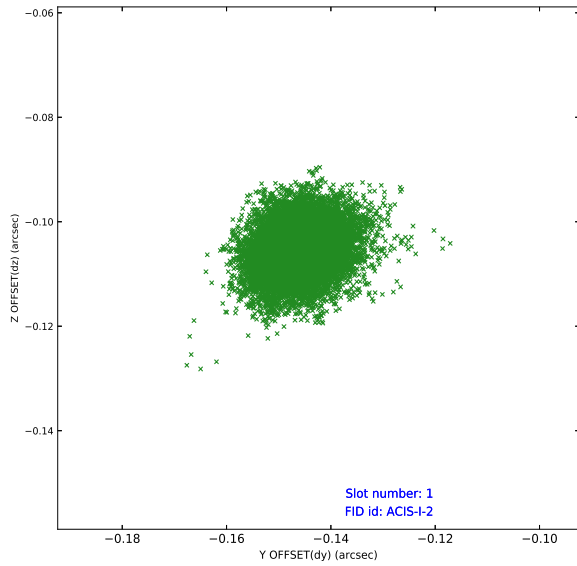


2.5 FID Slots

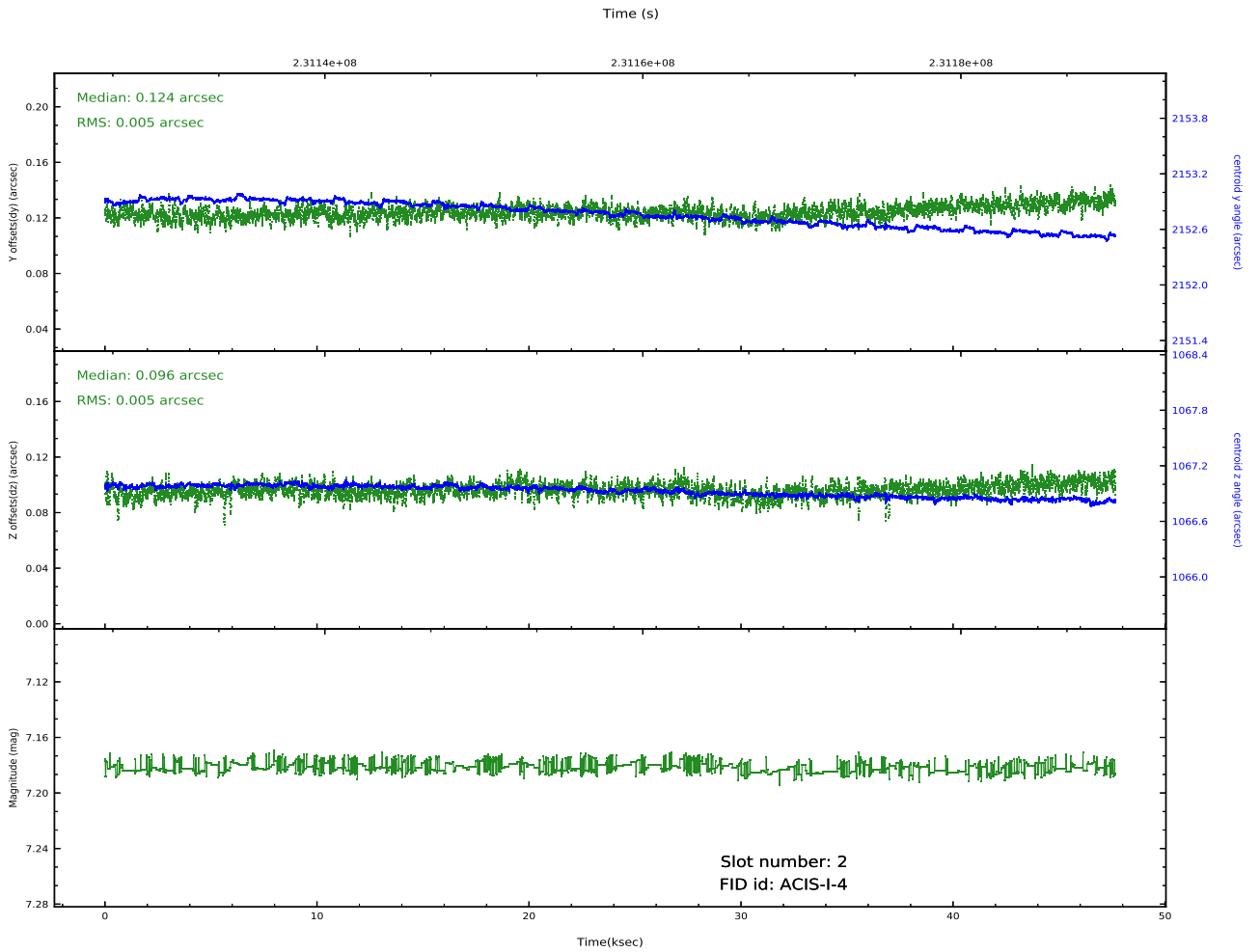
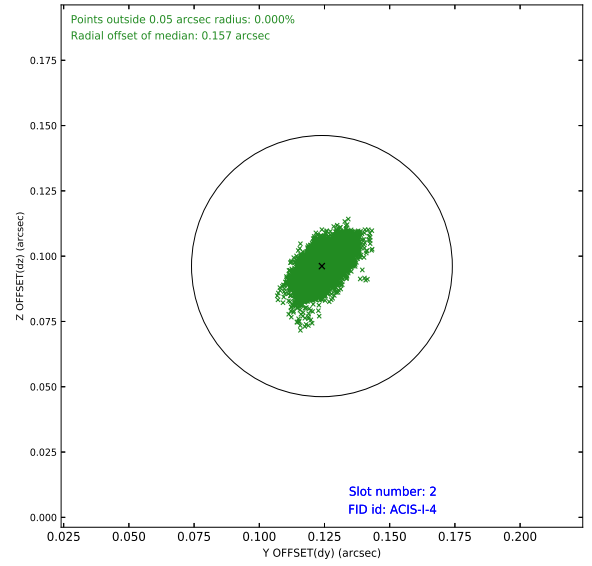
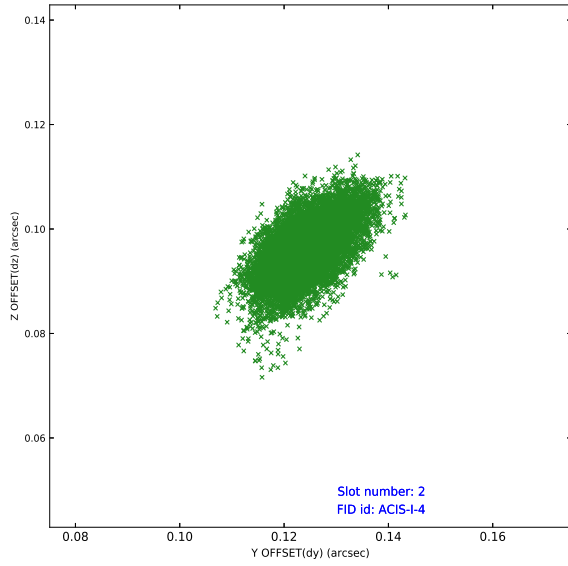
2.5.1 Slot 0



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)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.64791

A.2 Comments