

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5130 - L2 Version 4
Chandra X-Ray Center

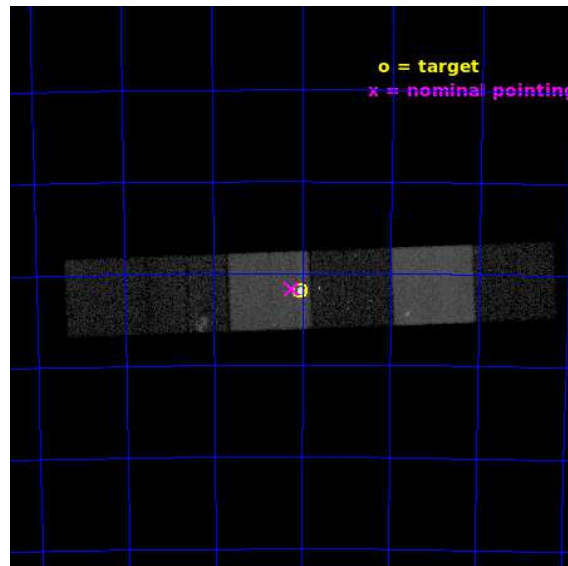
L2 Processing Date : Sep 24 2020

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1 Front

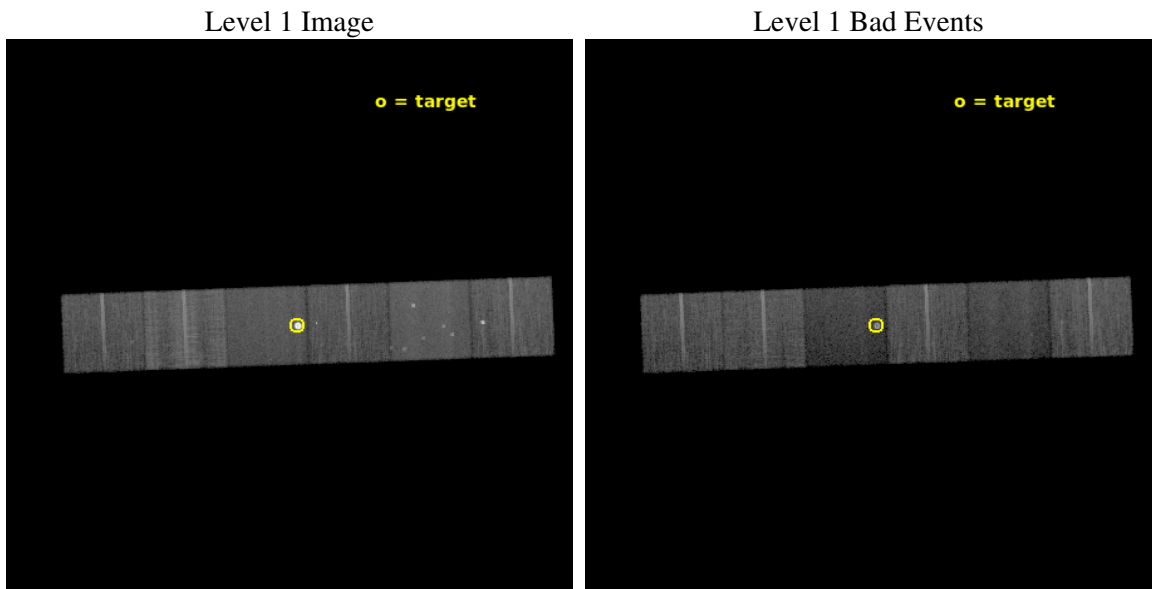
seq_num	590328	Sequence number
obs_id	5130	Observation id
title	AO5B ACIS-S Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.057376806	Nominal RA [deg]
dec_nom	-72.028025025888	Nominal Dec [deg]
roll_nom	177.78037734532	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19660.799926758	Sum of GTIs [s]
livetime	19411.843039773	Livetime [s]
ontime4	19657.558936566	Sum of GTIs [s]
ontime5	19660.799926758	Sum of GTIs [s]
ontime6	19660.799926758	Sum of GTIs [s]
ontime7	19660.799926758	Sum of GTIs [s]
ontime8	19657.558956474	Sum of GTIs [s]
ontime9	19660.799926758	Sum of GTIs [s]
l2events	299002	Number of level 2 events



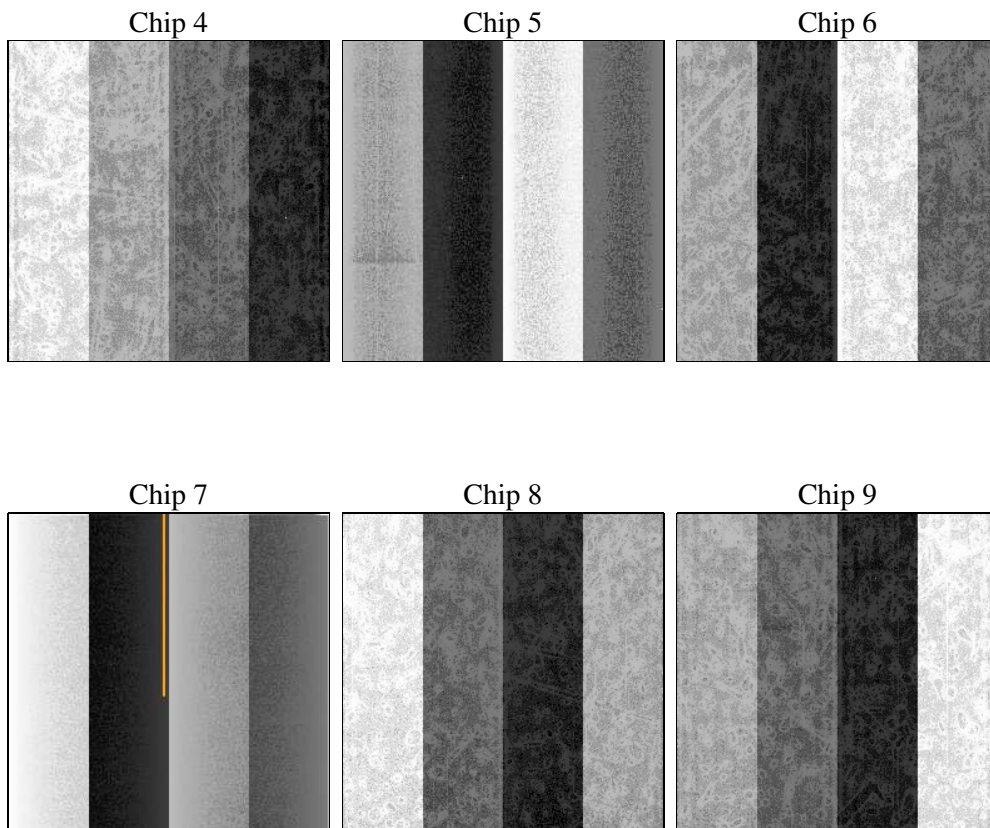
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19600.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	19660.799926758	Sum of GTIs [s]
caldsver	4.9.2	 	ontime4	19657.558936566	Sum of GTIs [s]
date	2020-09-25T01:26:46	Date and time of file creation	ontime5	19660.799926758	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	19660.799926758	Sum of GTIs [s]
			ontime7	19660.799926758	Sum of GTIs [s]
			ontime8	19657.558956474	Sum of GTIs [s]
			ontime9	19660.799926758	Sum of GTIs [s]
			l1events	904902	Number of level 1 events

2.1.4 Events

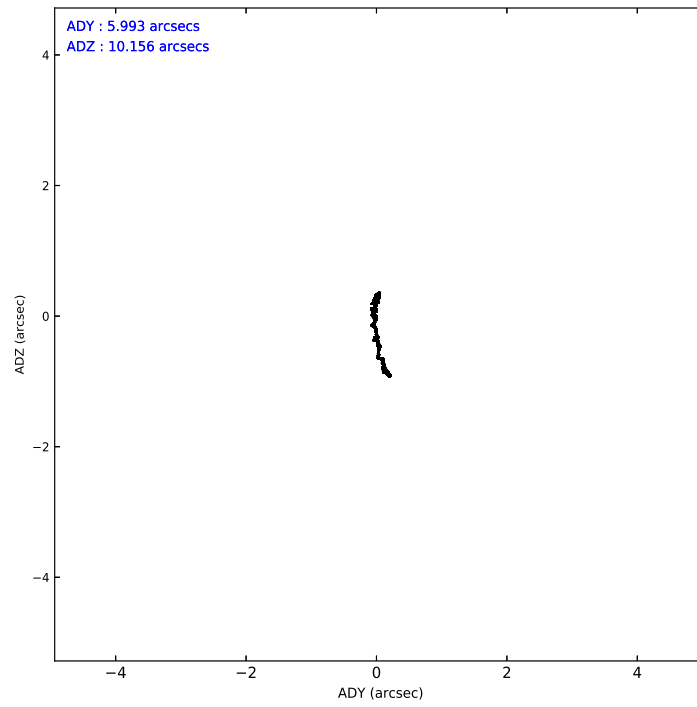
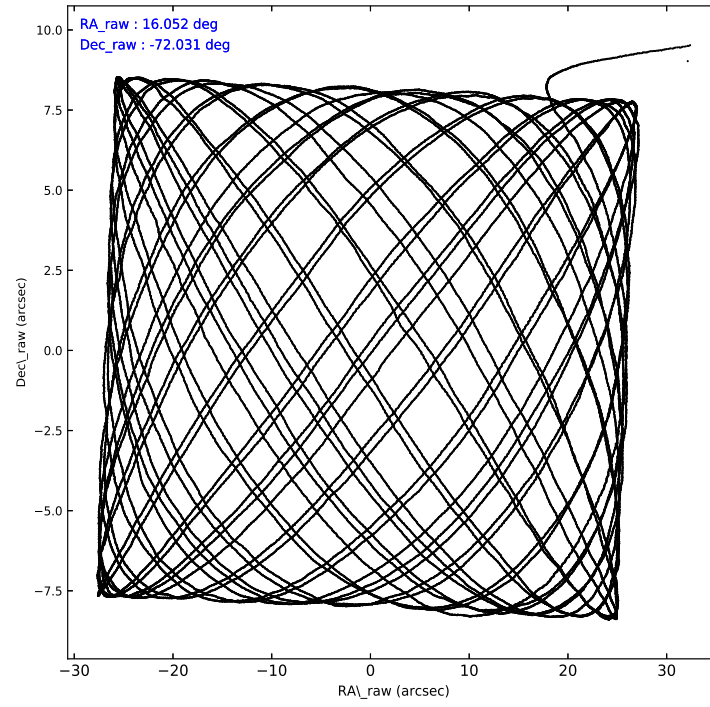
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	136877	138637	113247	245936	162554	107651	grade 0 events	11318	9945	6379	47282	19685	4749
rejected events	118088	64184	99362	56199	106982	95725		8%	7%	5%	19%	12%	4%
rejected %	86%	46%	87%	22%	65%	88%	grade 1 events	153	271	54	863	176	61
								0%	0%	0%	0%	0%	0%
							grade 2 events	2951	21392	2696	50168	8595	2411
								2%	15%	2%	20%	5%	2%
							grade 3 events	1350	3815	1312	22173	8716	1305
								0%	2%	1%	9%	5%	1%
							grade 4 events	1294	3724	1285	21567	7937	1306
								0%	2%	1%	8%	4%	1%
							grade 5 events	3581	11046	3677	13629	5521	3994
								2%	7%	3%	5%	3%	3%
							grade 6 events	1881	35584	2216	48578	10642	2156
								1%	25%	1%	19%	6%	2%
							grade 7 events	114349	52860	95628	41676	101282	91669
								83%	38%	84%	16%	62%	85%

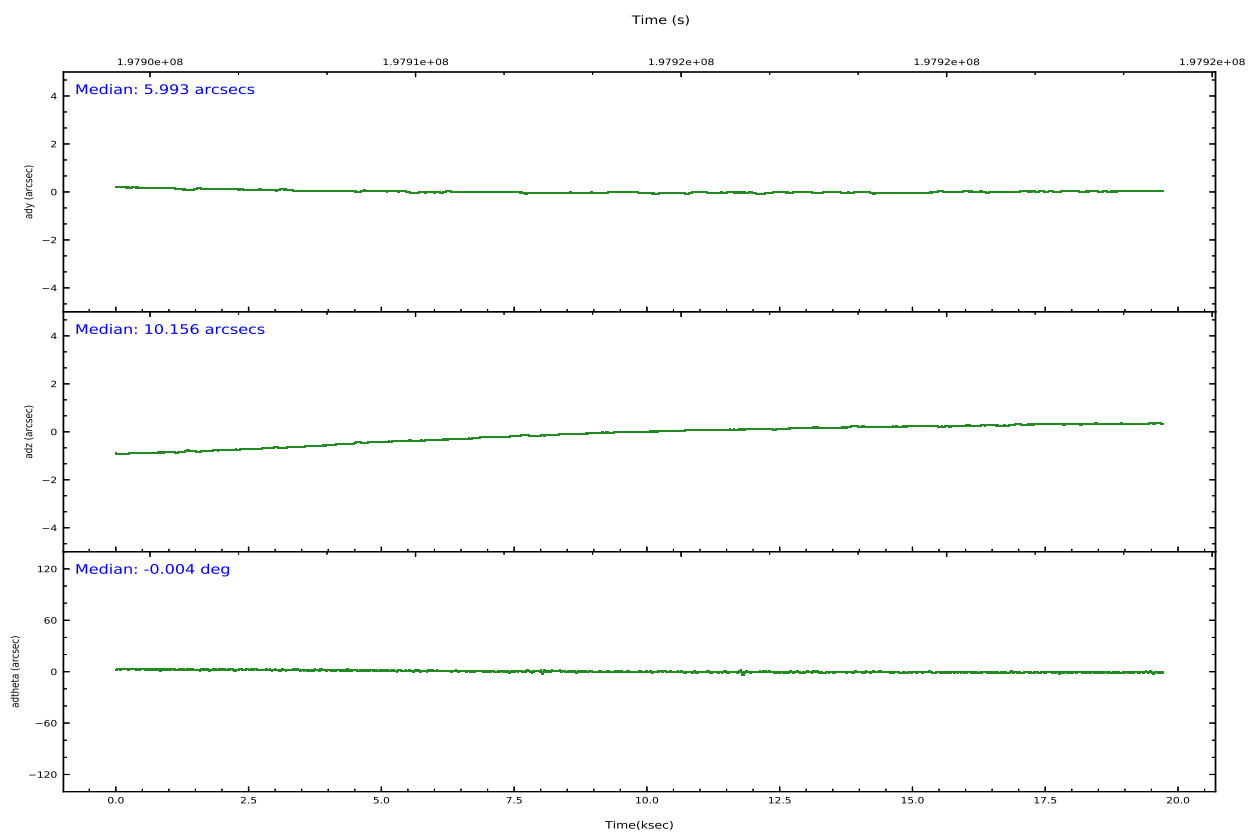
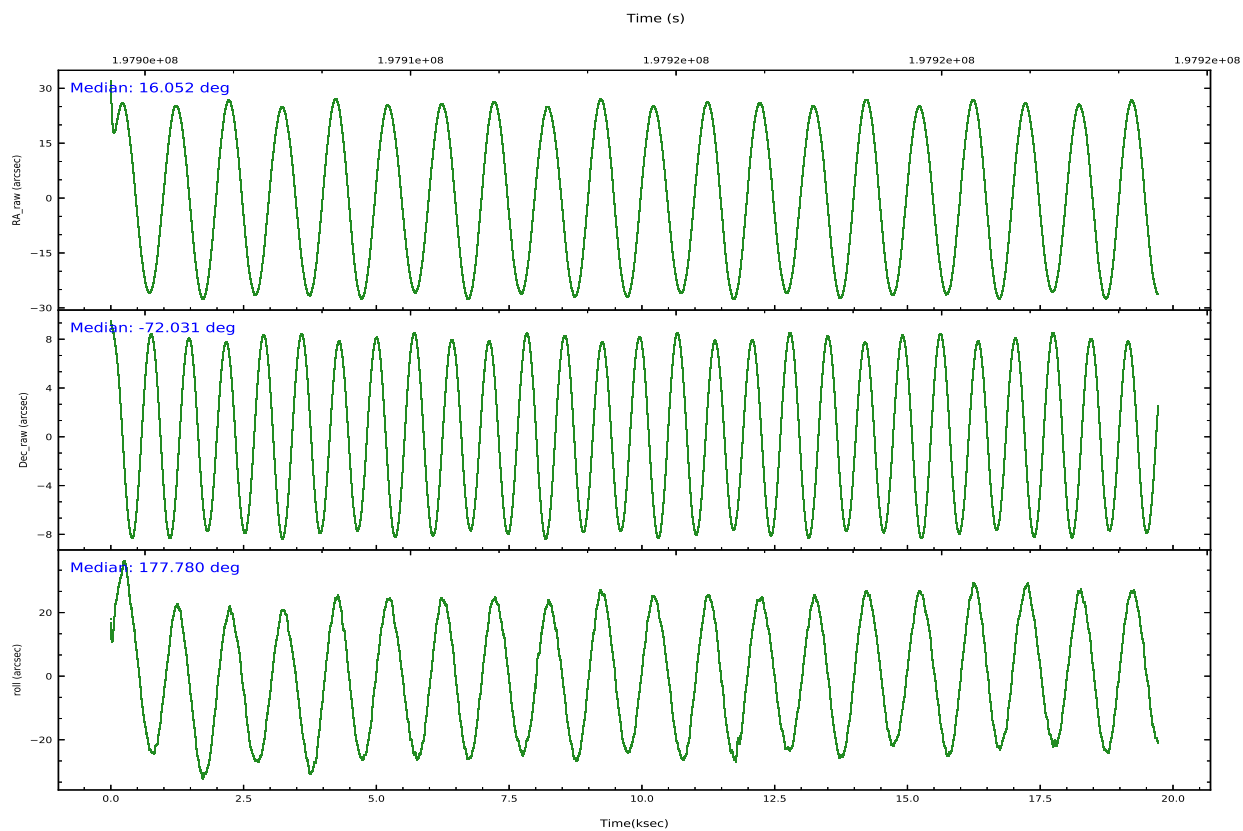
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	16.128627	16.057376806
[deg] Pointing Dec	-72.017860	-72.028025025888
[deg] Pointing Roll	177.702582	177.78037734532
[s] Window start time (MET)	197164864.184000	197164864.184000
[s] Window stop time (MET)	199670464.184000	199670464.184000
[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)	197904477.184000	197903337.51184
Observation start date	2004-04-09T13:26:53	2004-04-09T13:08:57
[s] Observation end time (MET)	197924077.184000	197924211.12526
Observation end date	2004-04-09T18:53:33	2004-04-09T18:56:51
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



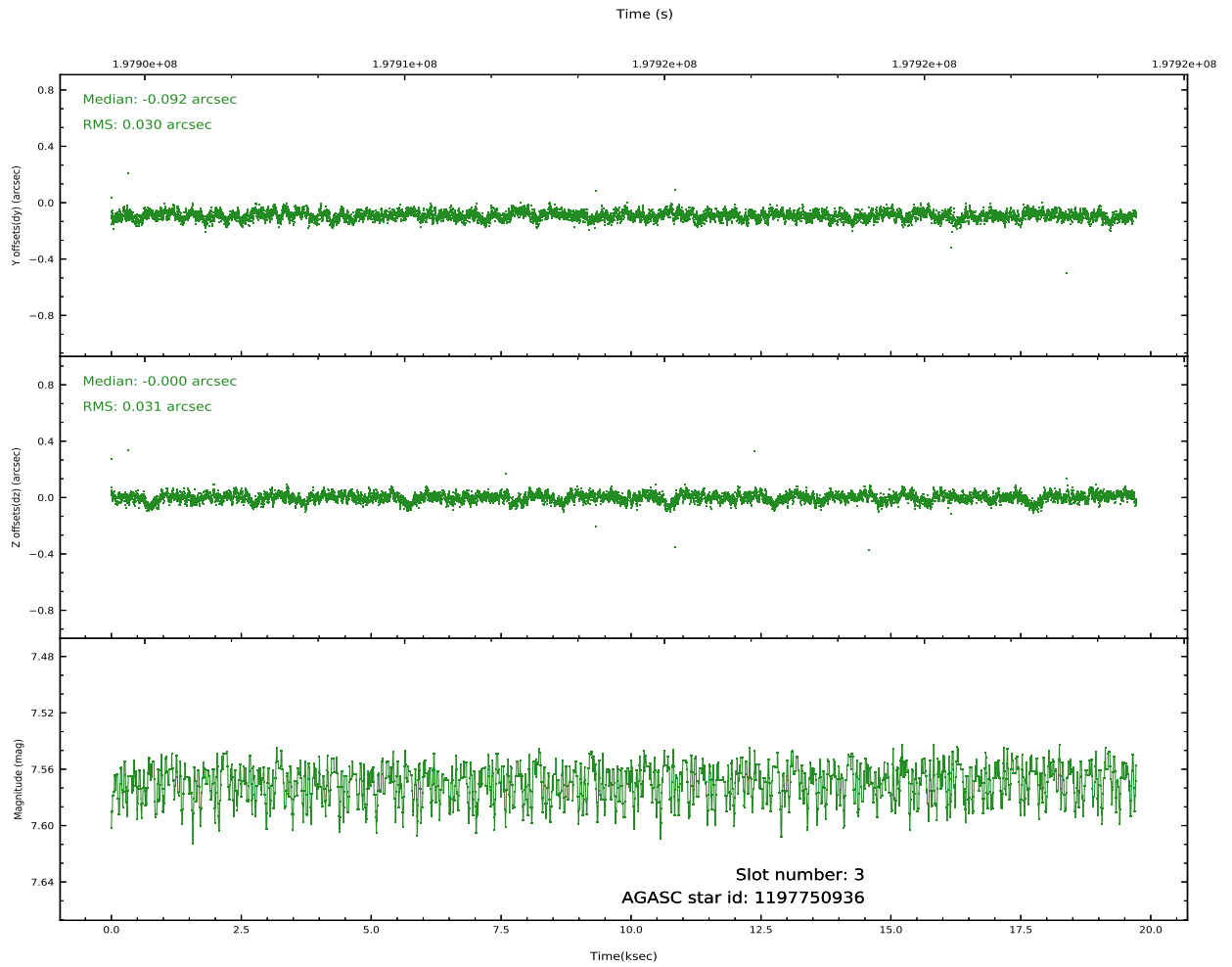
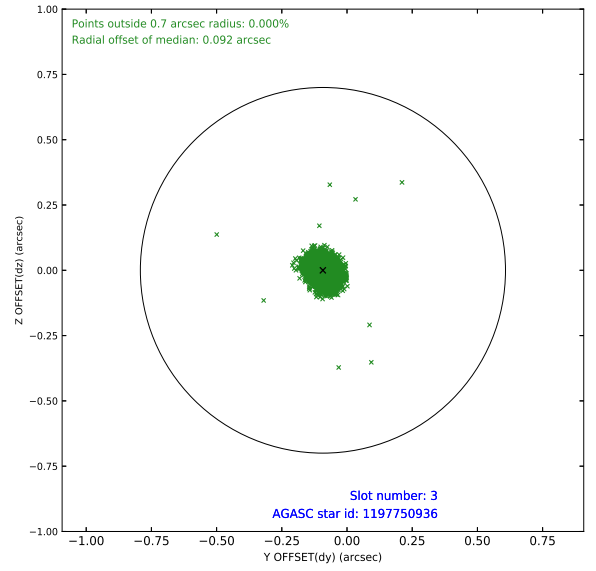
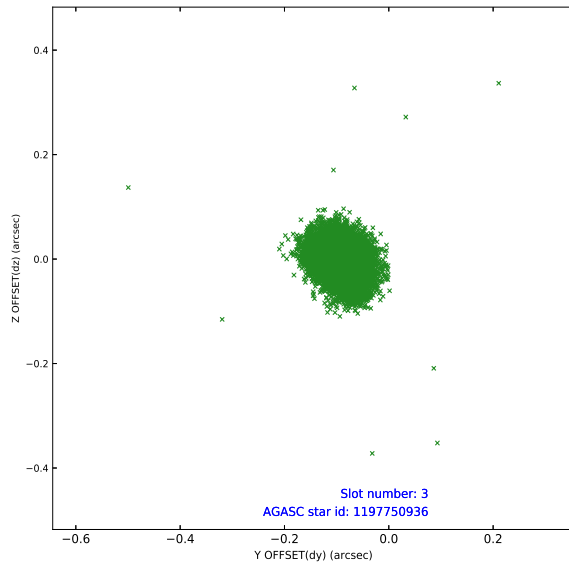


Slot Statistics

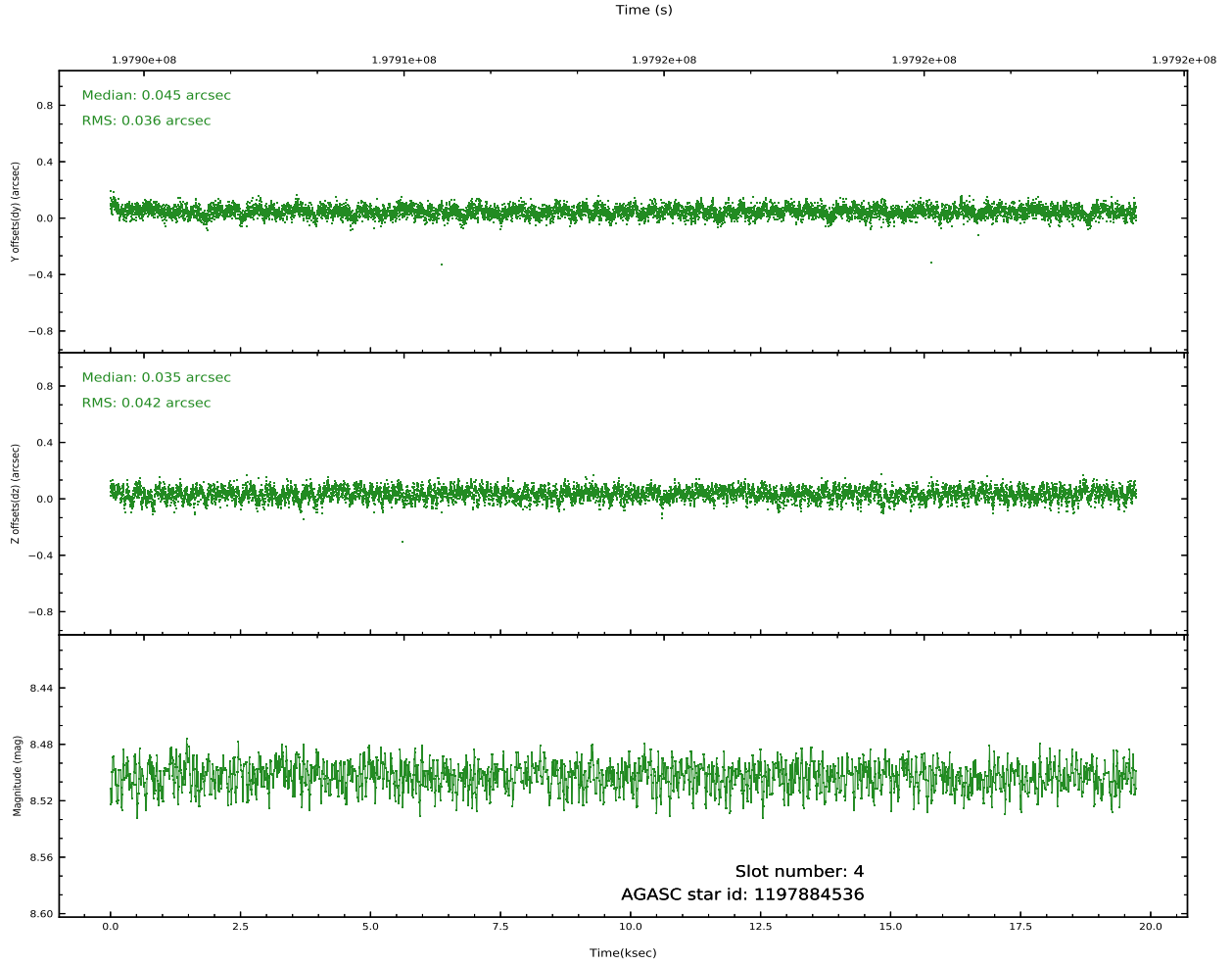
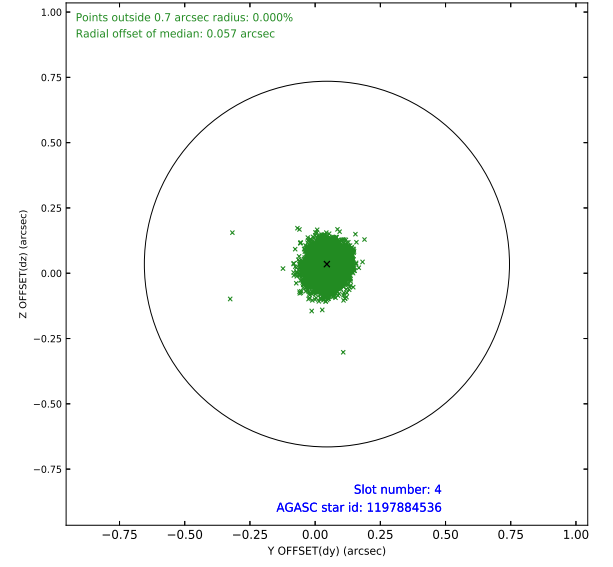
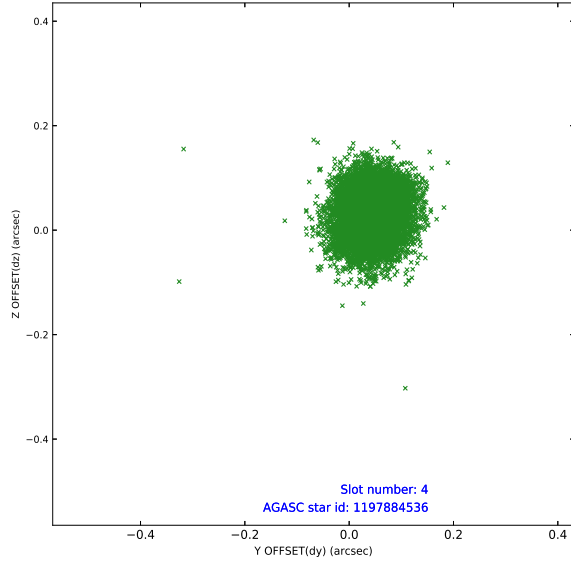
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	4810	1.000	-0.042	-0.062	0.010	0.020	0.000000	0.000000	-758.76	-1731
1	FID		ACIS-S-5	7.23	4810	1.000	-0.068	-0.017	0.012	0.024	0.000000	0.000000	-1812.00	170
2	FID		ACIS-S-6	7.35	4810	1.000	0.082	0.086	0.009	0.022	0.000000	0.000000	402.75	814
3	GUIDE	used	1197750936	7.57	9621	1.000	-0.092	-0.000	0.045	0.073	15.387940	-71.549550	911.12	-1644
4	GUIDE	used	1197884536	8.50	9620	1.000	0.045	0.035	0.059	0.095	17.160729	-71.835289	-1130.74	-693
5	GUIDE	used	1197885104	9.36	9614	1.000	0.113	-0.019	0.080	0.132	17.845067	-72.189368	-1913.66	568
6	GUIDE	used	1197885328	7.23	9621	1.000	0.021	-0.015	0.057	0.089	16.283090	-71.733943	-133.23	-1027
7	GUIDE	used	1198190968	9.99	9612	1.000	-0.086	-0.004	0.128	0.210	15.749622	-72.545972	332.63	1917

2.4 Star Slots

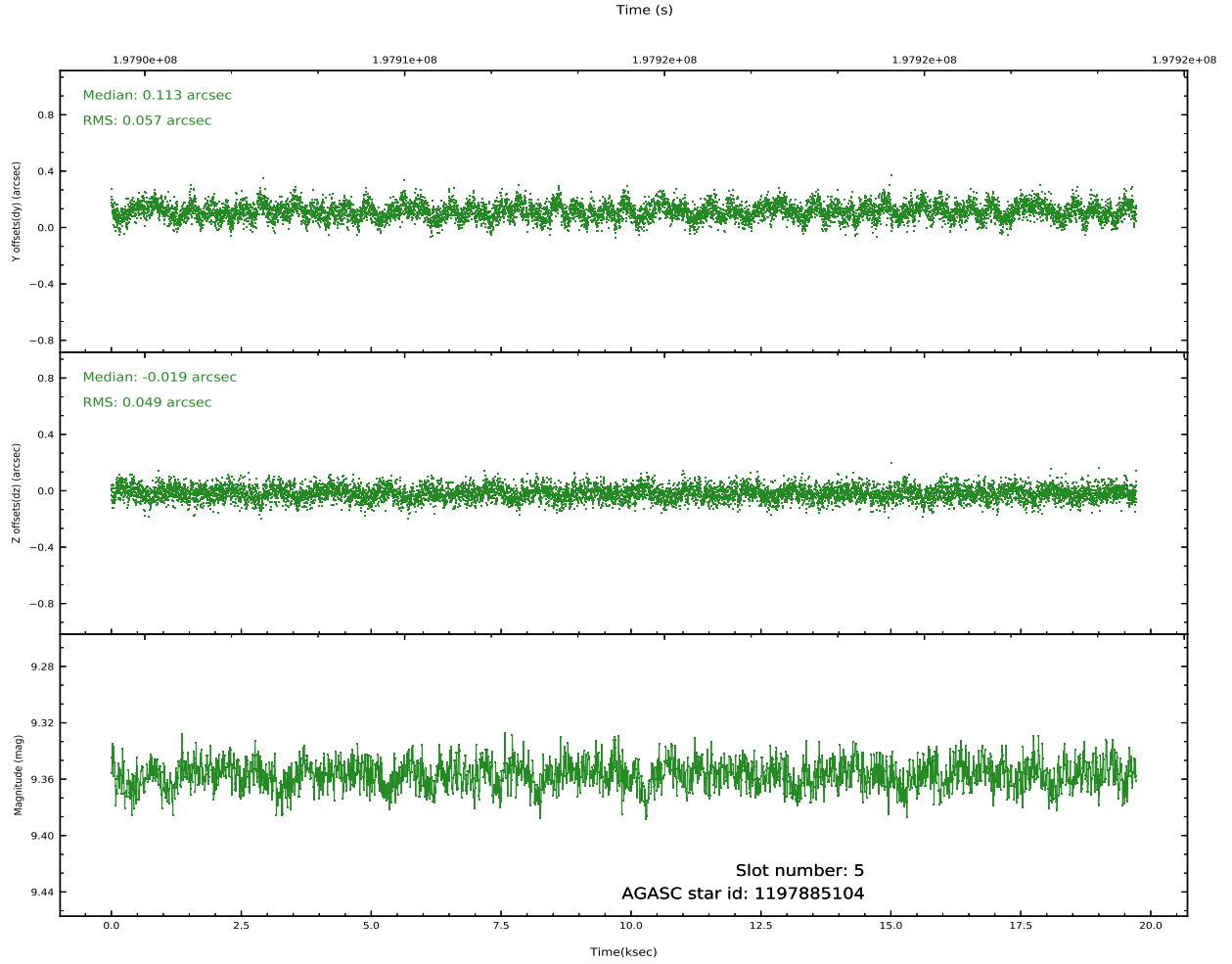
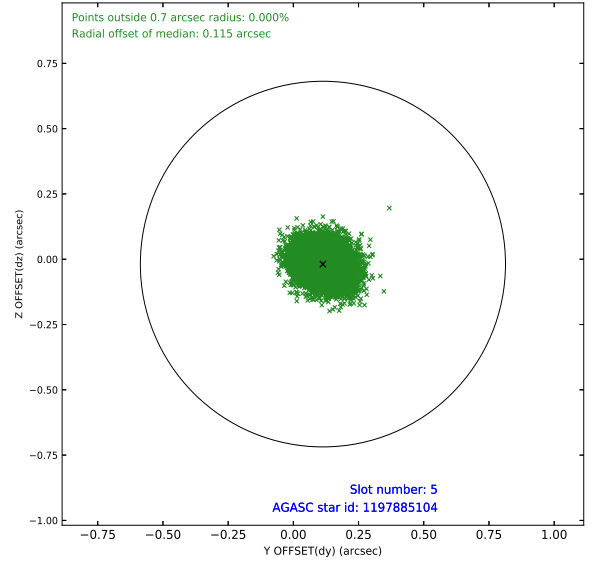
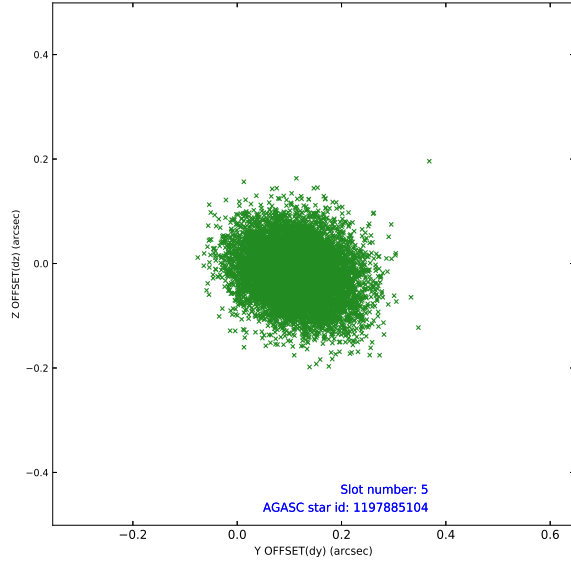
2.4.1 Slot 3



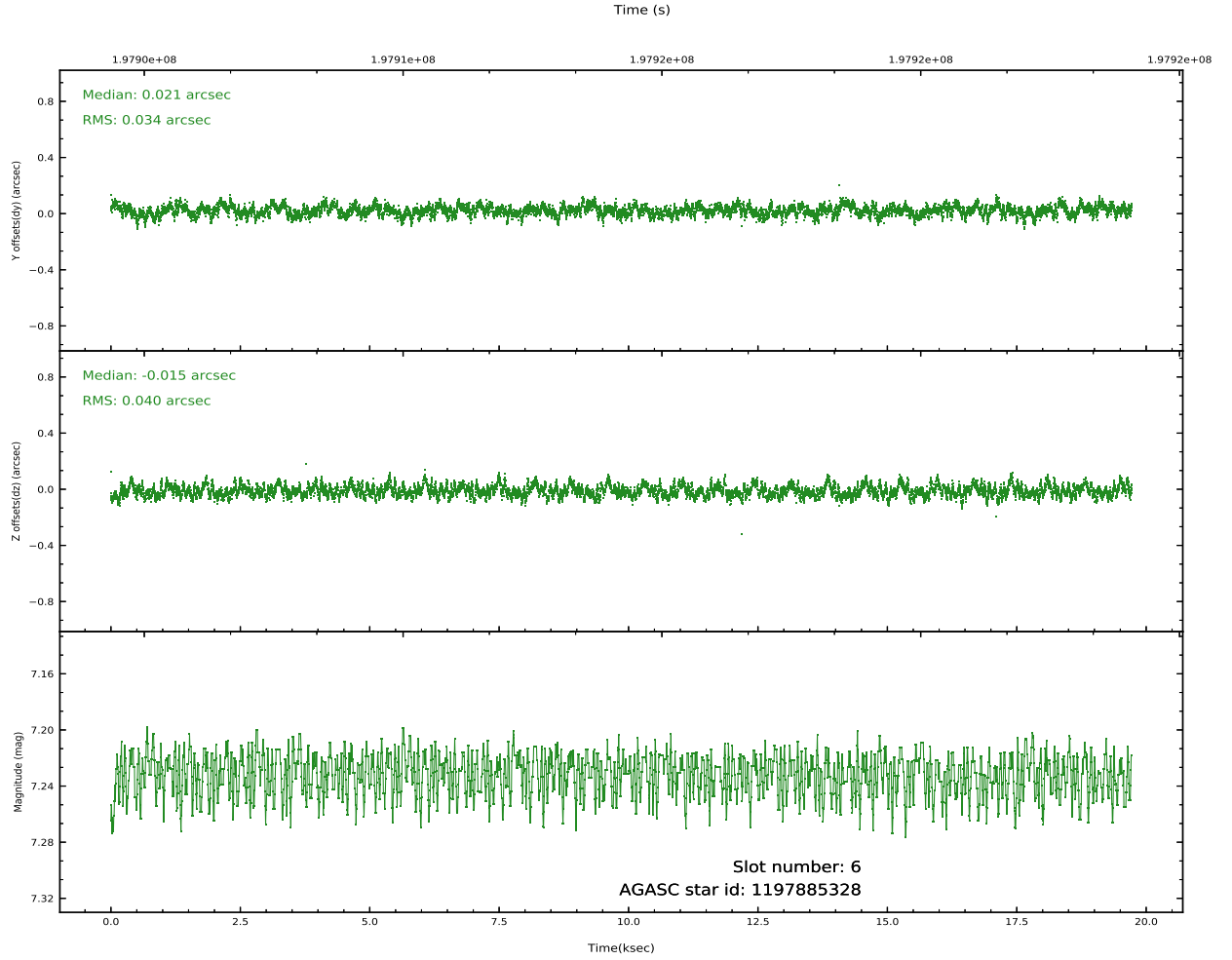
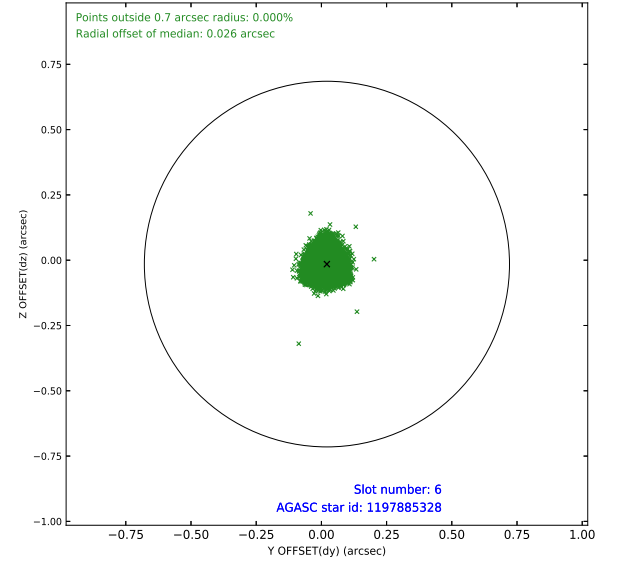
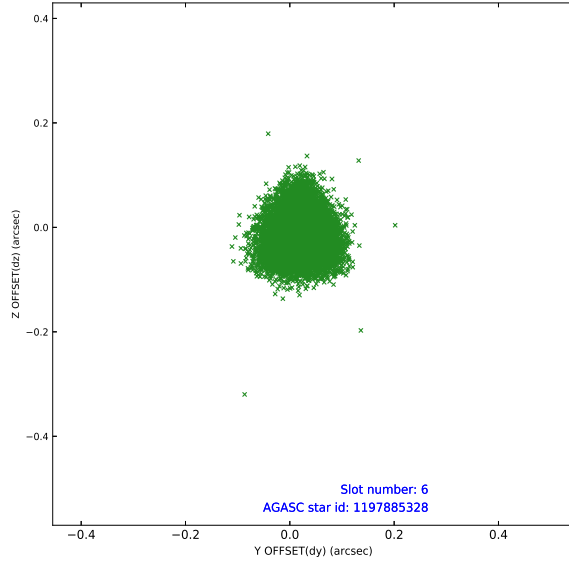
2.4.2 Slot 4



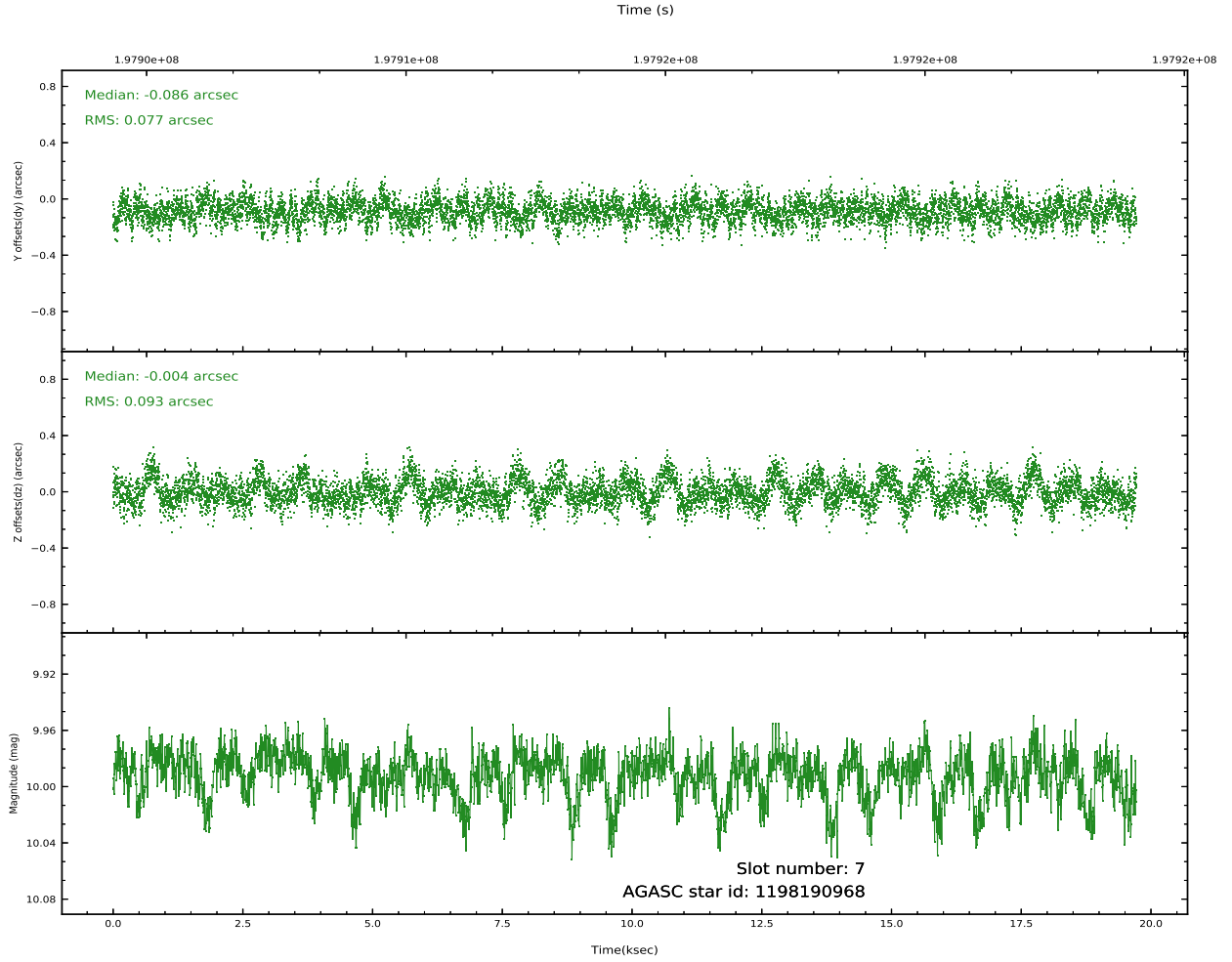
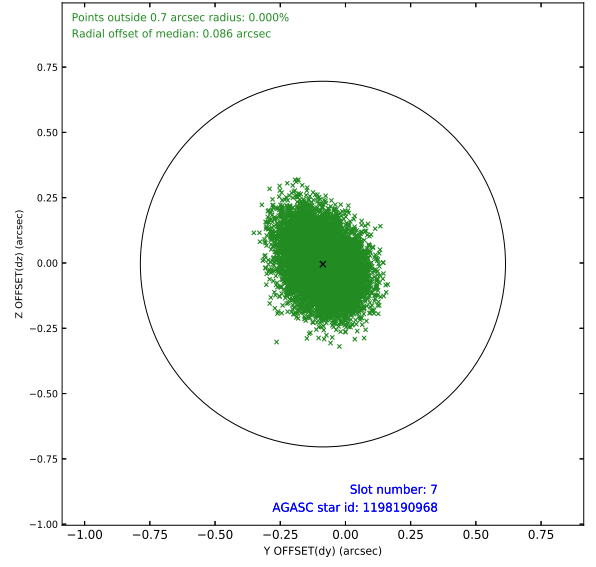
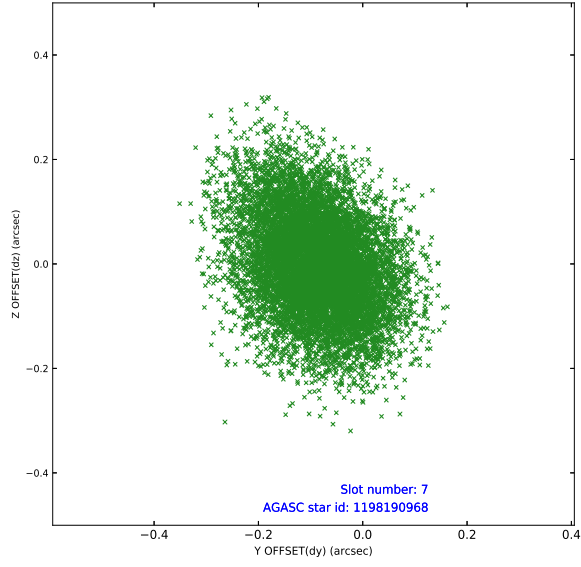
2.4.3 Slot 5



2.4.4 Slot 6

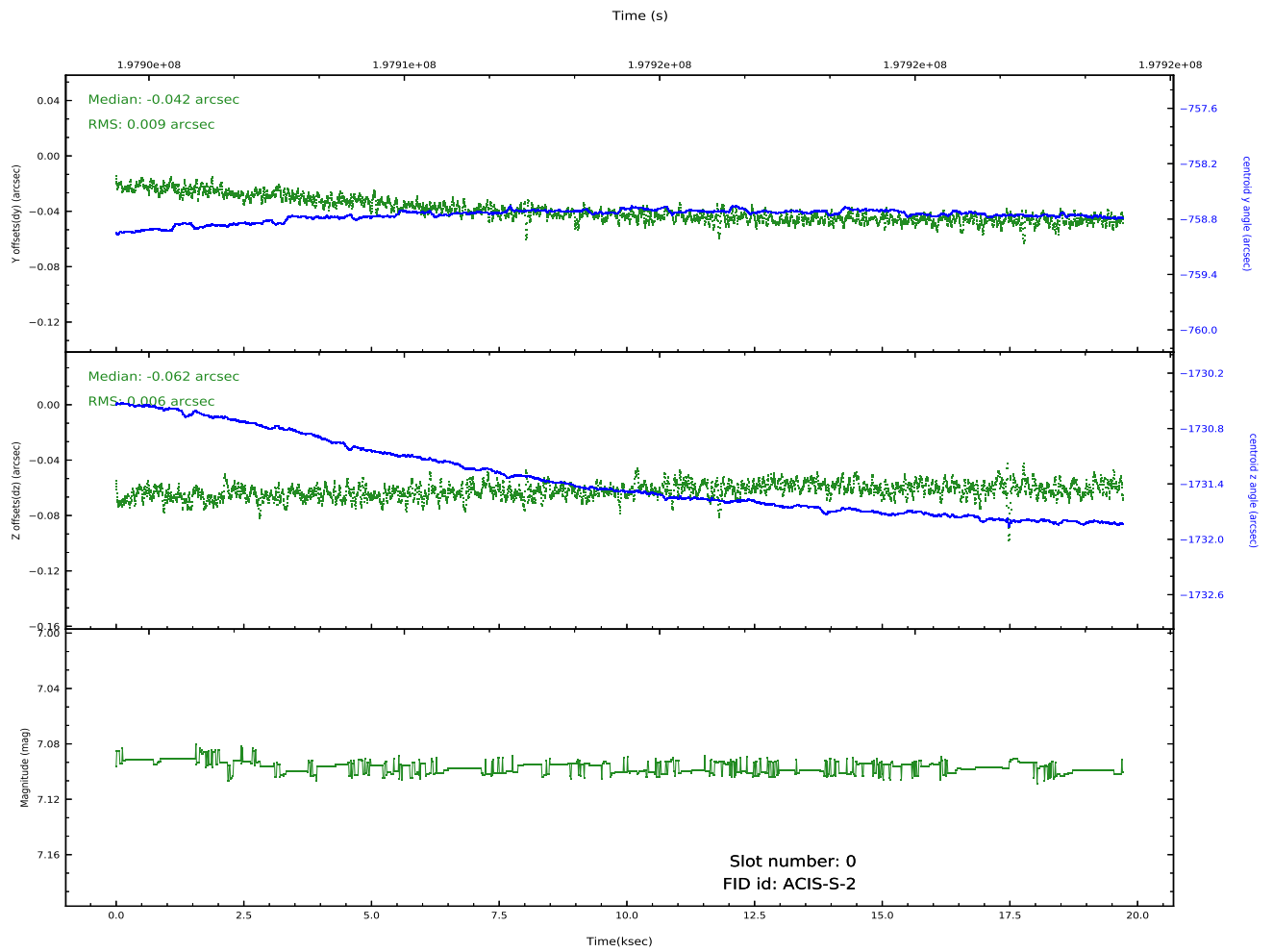
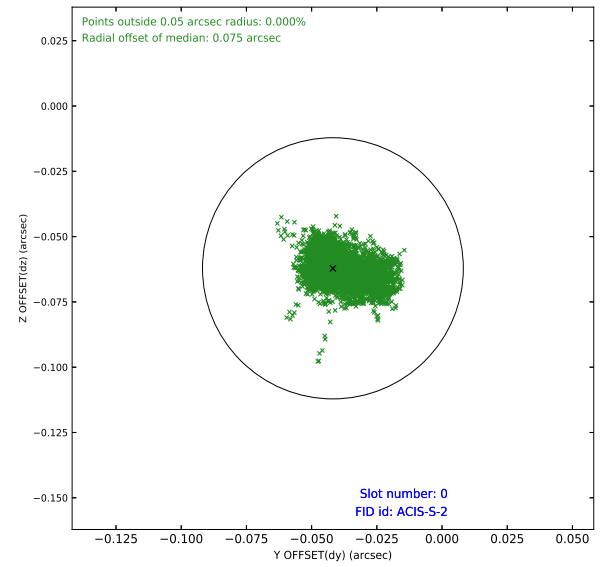
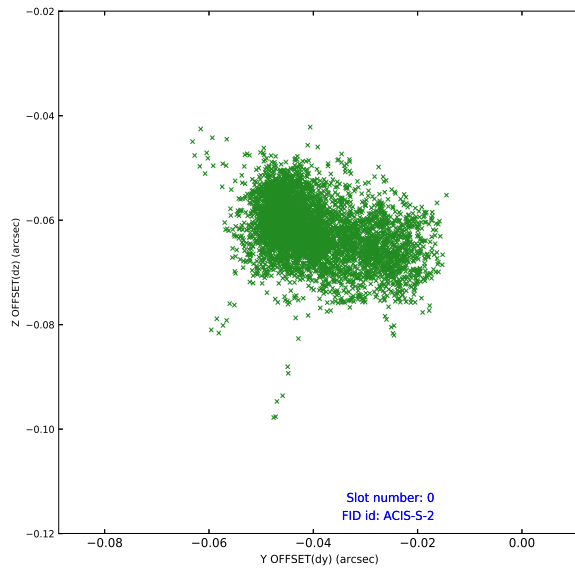


2.4.5 Slot 7

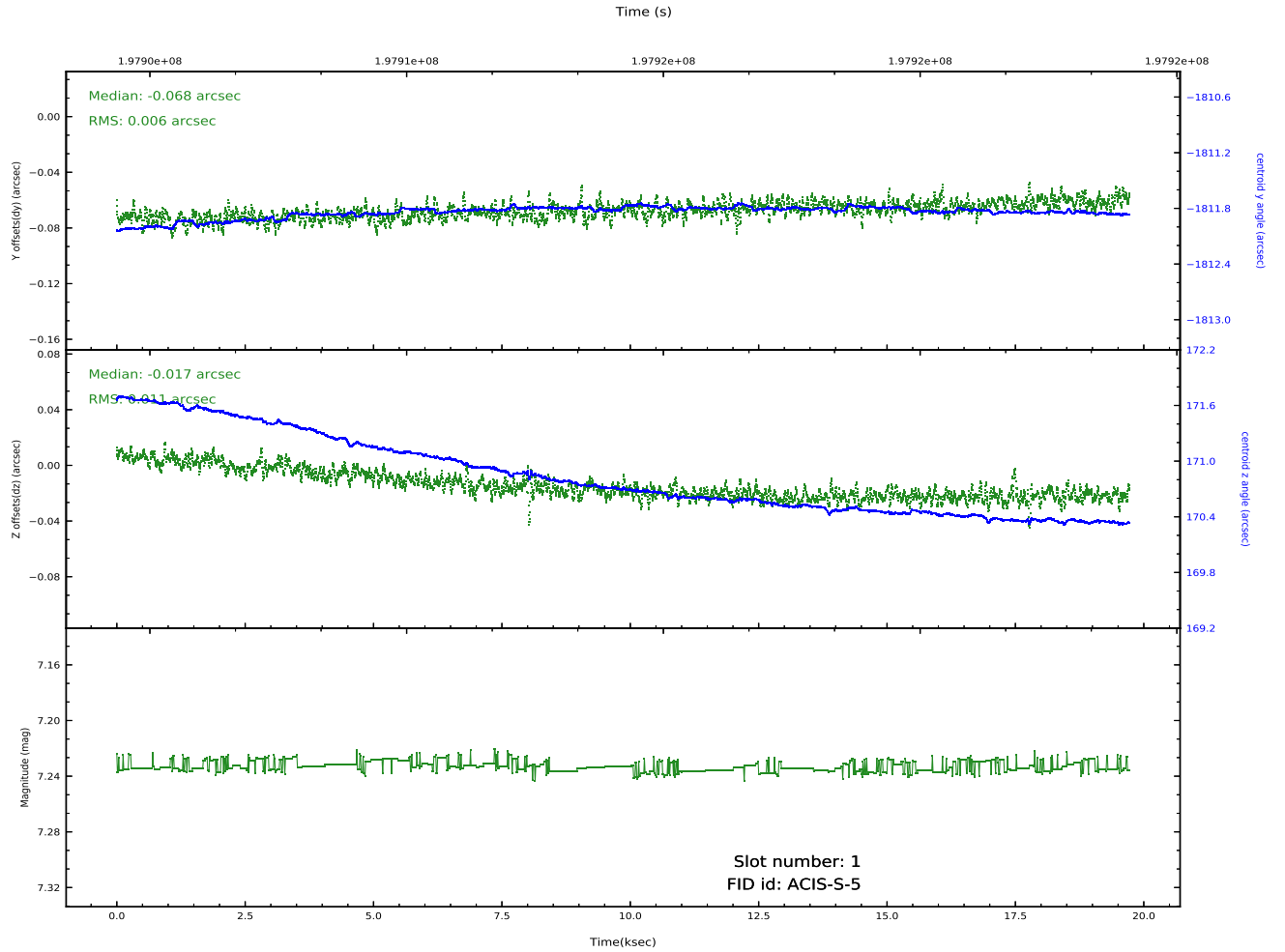
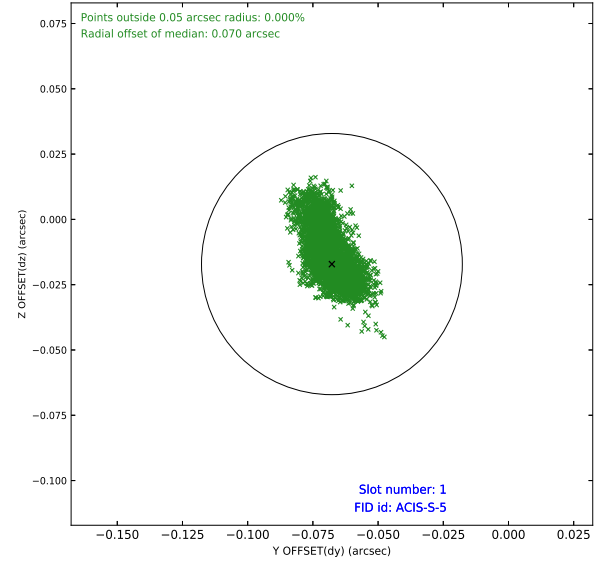
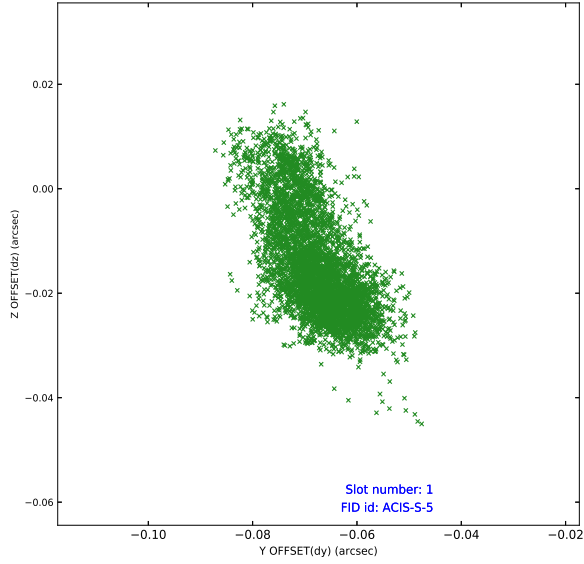


2.5 FID Slots

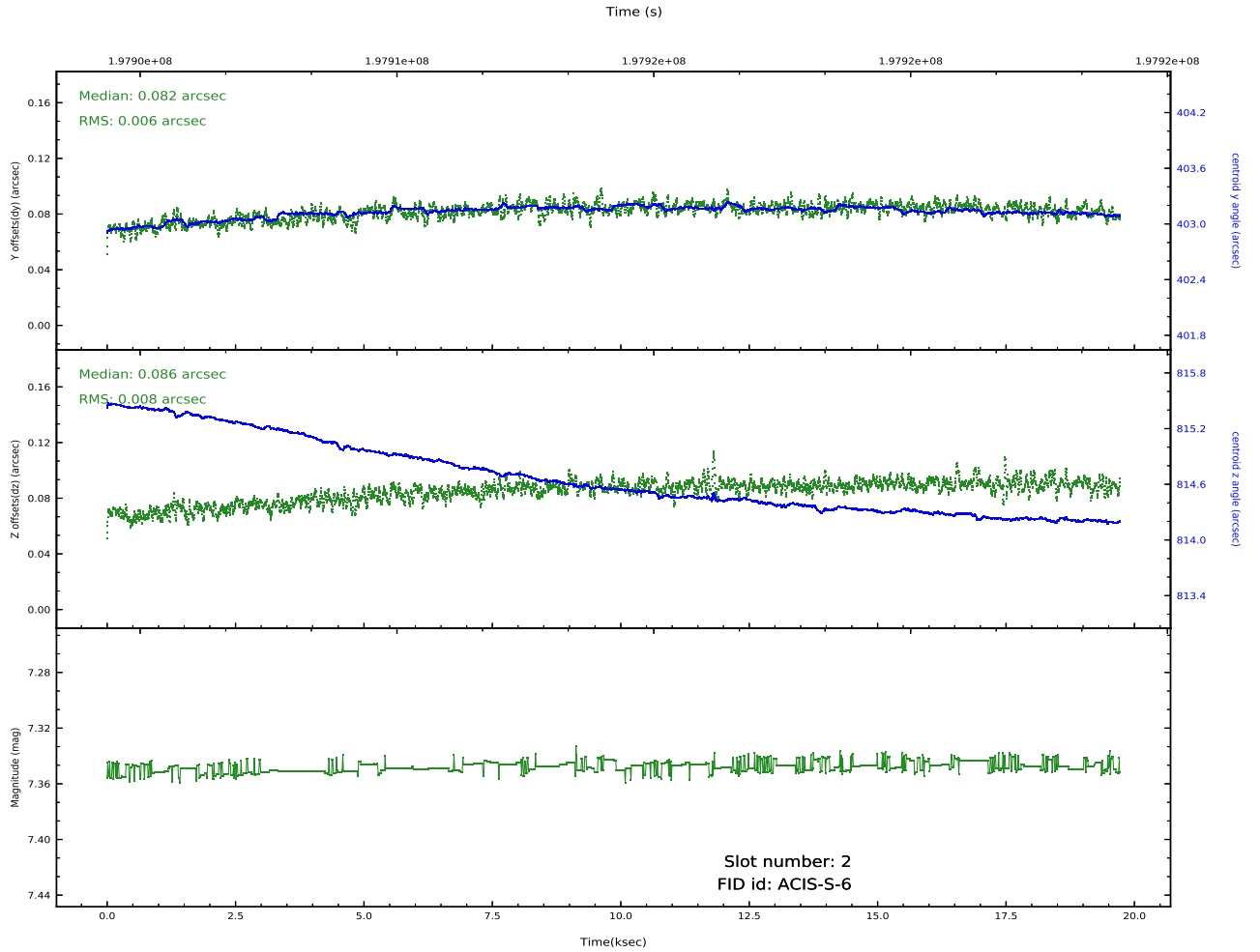
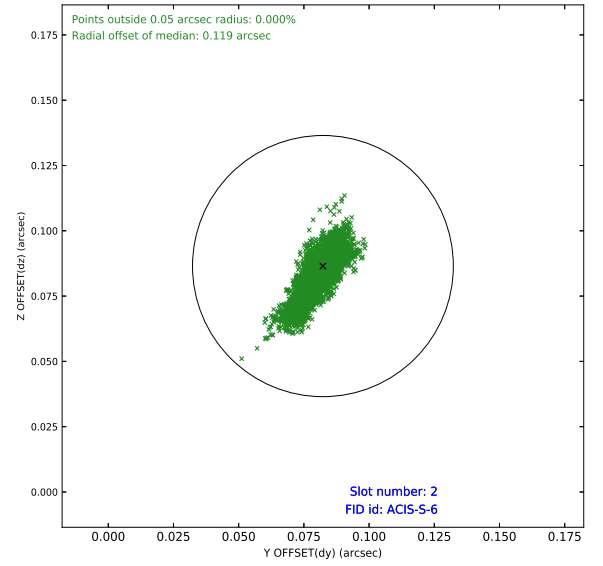
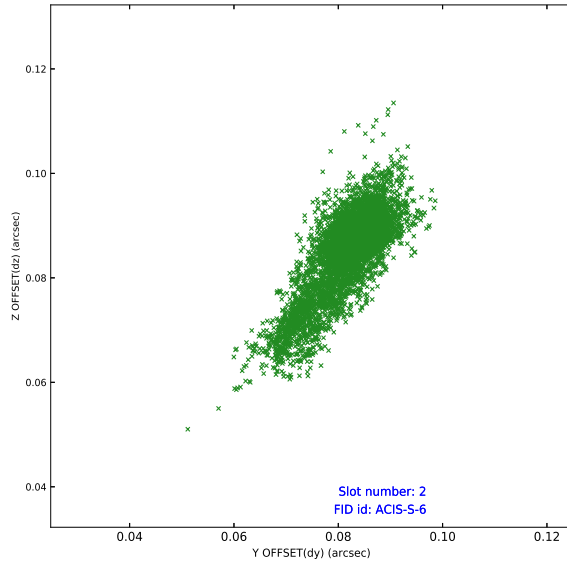
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.09.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.663

A.2 Comments

Window constraint met.