

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6043 - L2 Version 4
Chandra X-Ray Center

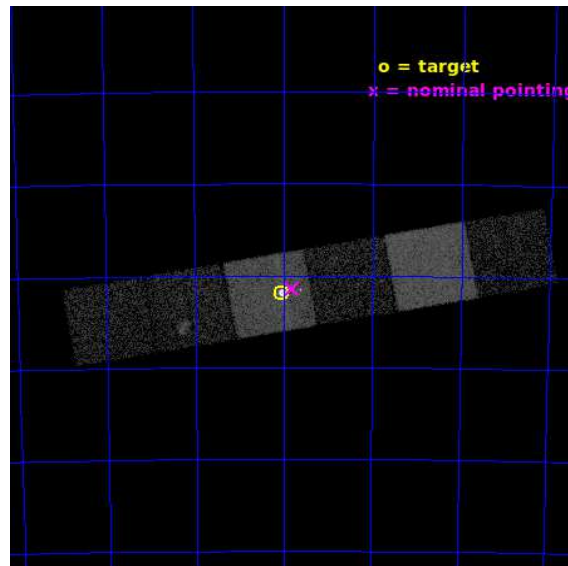
L2 Processing Date : Oct 7 2020

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

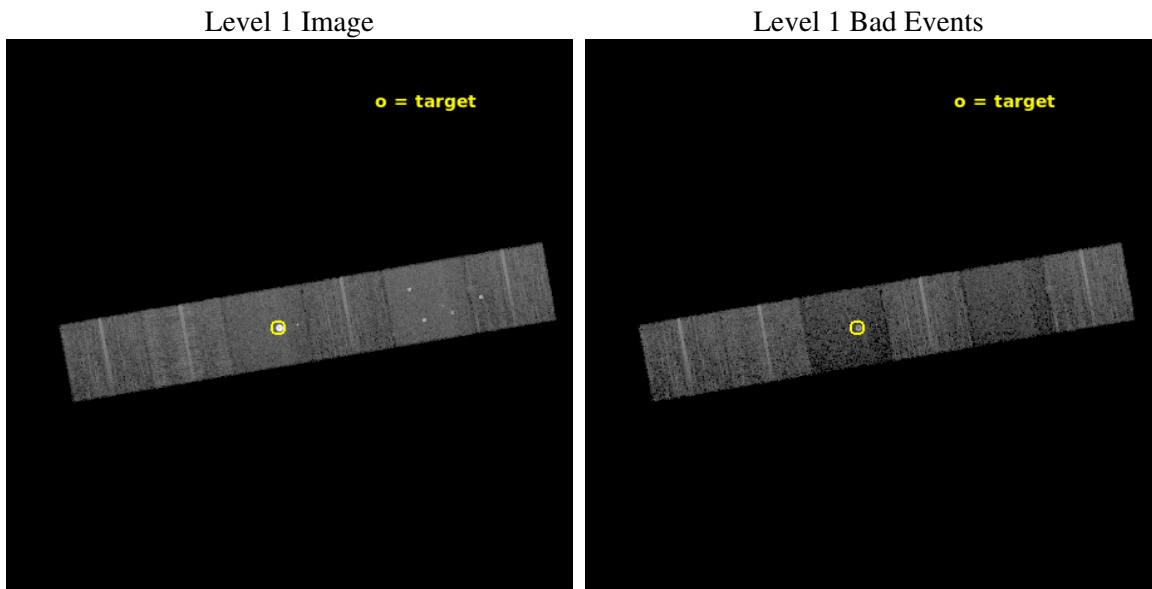
seq_num	590370	Sequence number
obs_id	6043	Observation id
title	AO6B ACIS-S Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.953187727272	Nominal RA [deg]
dec_nom	-72.024122353796	Nominal Dec [deg]
roll_nom	169.86675674275	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7951.9999703765	Sum of GTIs [s]
livetime	7851.3069586321	Livetime [s]
ontime4	7951.9999703765	Sum of GTIs [s]
ontime5	7951.9999703765	Sum of GTIs [s]
ontime6	7951.9999703765	Sum of GTIs [s]
ontime7	7951.9999703765	Sum of GTIs [s]
ontime8	7951.9999703765	Sum of GTIs [s]
ontime9	7951.9999703765	Sum of GTIs [s]
l2events	123312	Number of level 2 events



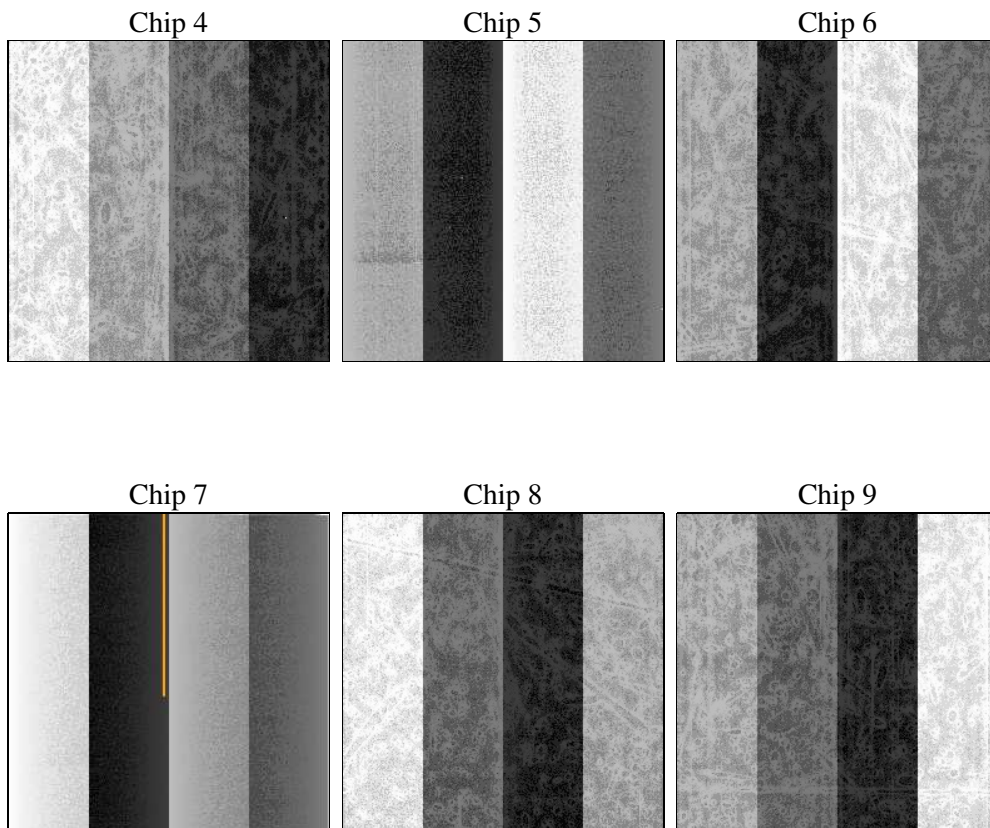
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	7951.9999703765	Sum of GTIs [s]
caldsver	4.9.2	 	ontime4	7951.9999703765	Sum of GTIs [s]
date	2020-10-07T23:30:58	Date and time of file creation	ontime5	7951.9999703765	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	7951.9999703765	Sum of GTIs [s]
			ontime7	7951.9999703765	Sum of GTIs [s]
			ontime8	7951.9999703765	Sum of GTIs [s]
			ontime9	7951.9999703765	Sum of GTIs [s]
			l1events	375924	Number of level 1 events

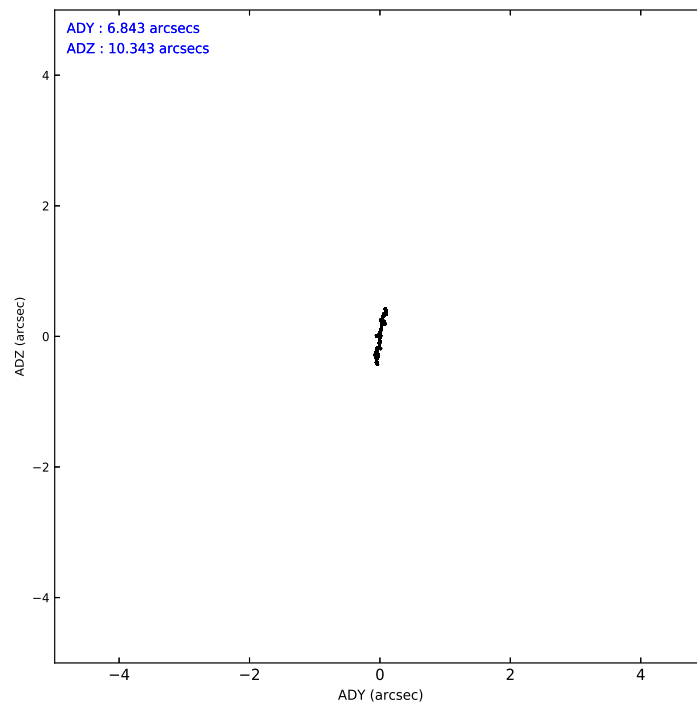
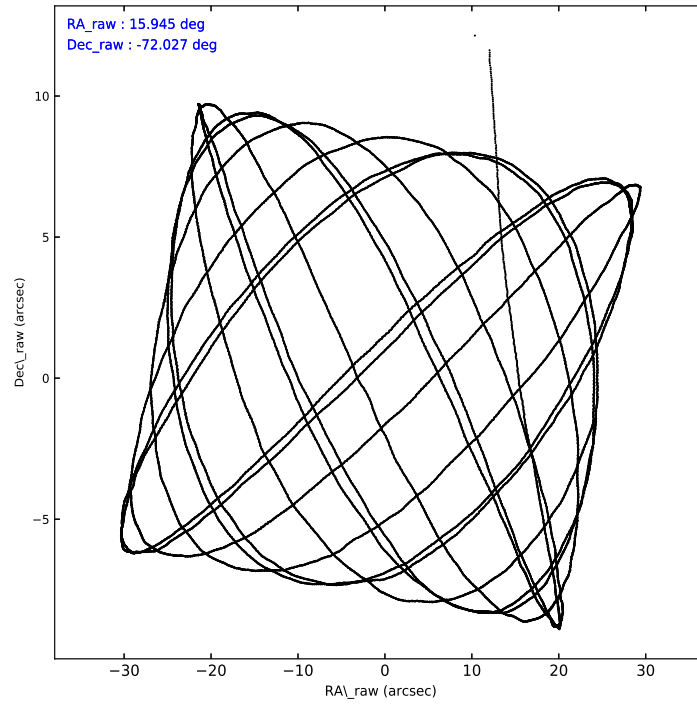
2.1.4 Events

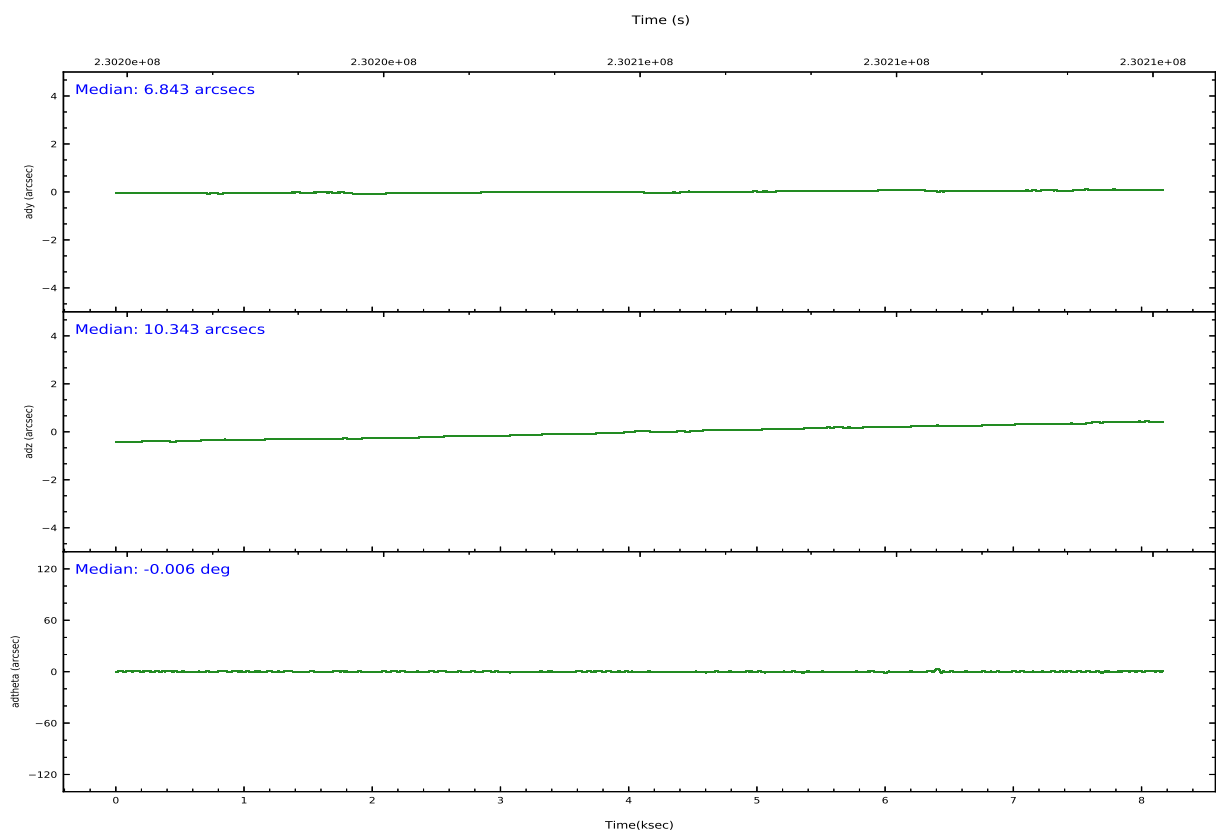
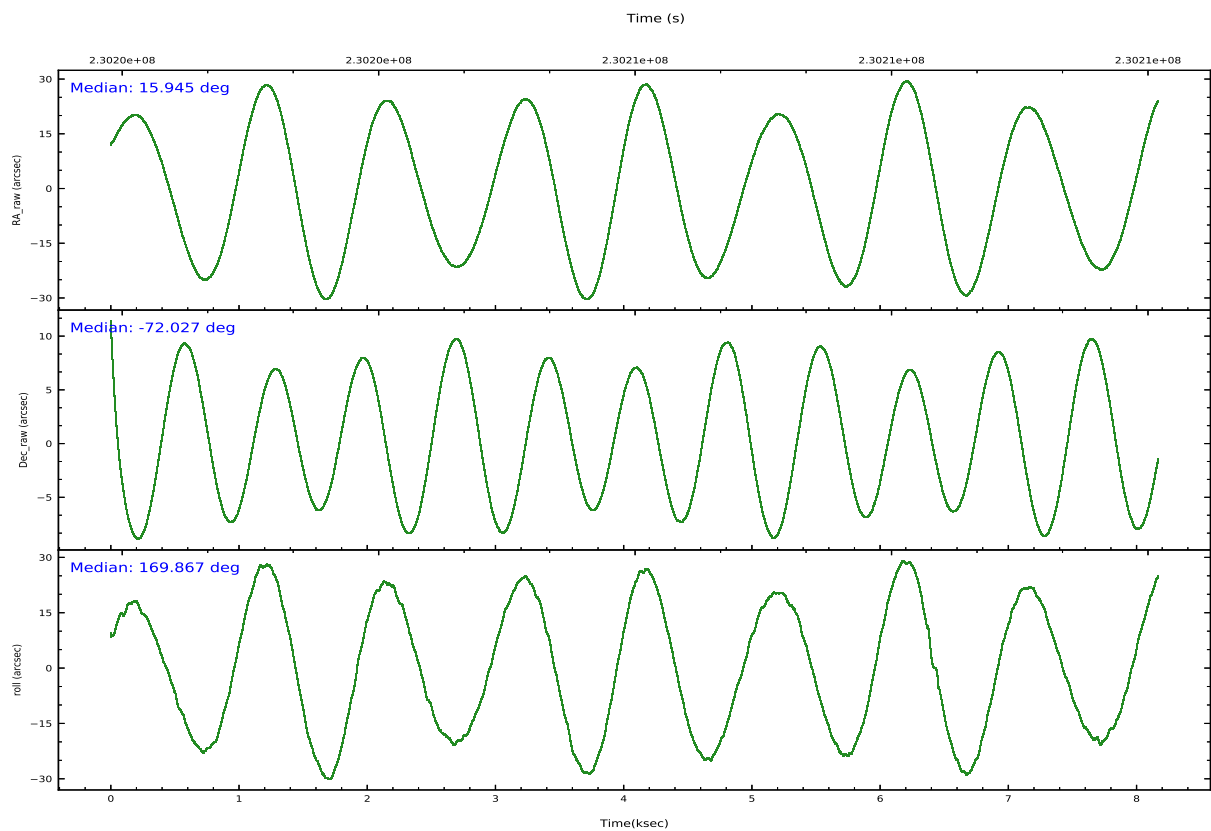
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	57579	60881	49620	102560	59516	45768	grade 0 events	3351	5598	2035	22512	4394	1630
rejected events	51160	27647	44441	24718	45096	40988		5%	9%	4%	21%	7%	3%
rejected %	88%	45%	89%	24%	75%	89%	grade 1 events	53	87	26	415	41	24
								0%	0%	0%	0%	0%	0%
							grade 2 events	1198	9284	1125	19484	3202	1048
								2%	15%	2%	18%	5%	2%
							grade 3 events	581	1478	539	8635	1633	566
								1%	2%	1%	8%	2%	1%
							grade 4 events	542	1365	536	8731	1458	563
								0%	2%	1%	8%	2%	1%
							grade 5 events	1643	4790	1618	5873	2519	1829
								2%	7%	3%	5%	4%	3%
							grade 6 events	749	15523	948	18511	3738	976
								1%	25%	1%	18%	6%	2%
							grade 7 events	49462	22756	42793	18399	42531	39132
								85%	37%	86%	17%	71%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	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	16.027507	15.953187727272	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.017093	-72.024122353796	Alternating exposures requested	N	N
[deg] Pointing Roll	169.791063	169.86675674275	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	228700864.184000	228700864.184000			
[s] Window stop time (MET)	231206464.184000	231206464.184000			
[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)	230202079.184000	230201060.76944			
Observation start date	2005-04-18T09:00:15	2005-04-18T08:44:20			
[s] Observation end time (MET)	230210079.184000	230210809.54489			
Observation end date	2005-04-18T11:13:35	2005-04-18T11:26:49			
Read mode	TIMED	TIMED			

2.3 Aspect



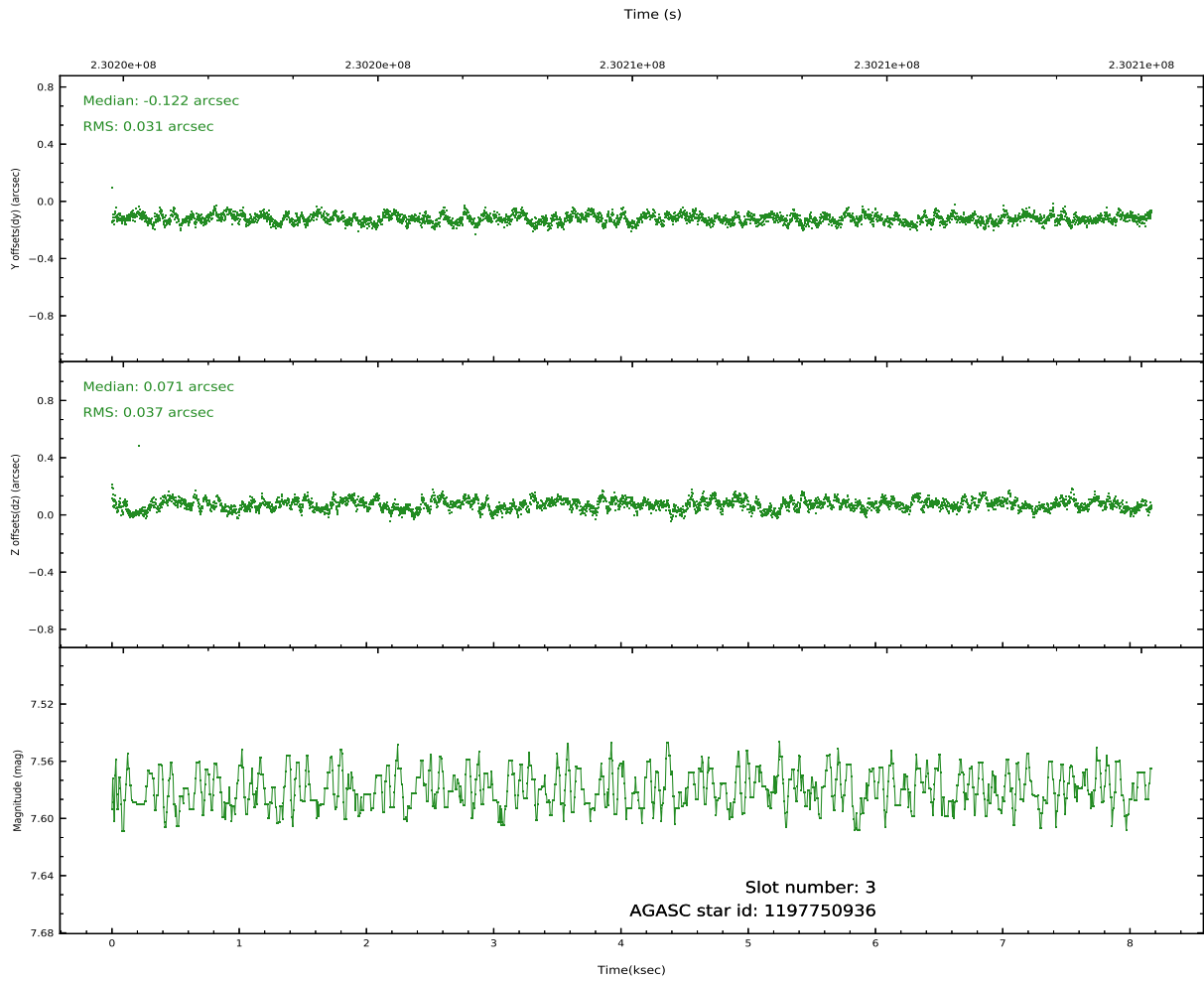
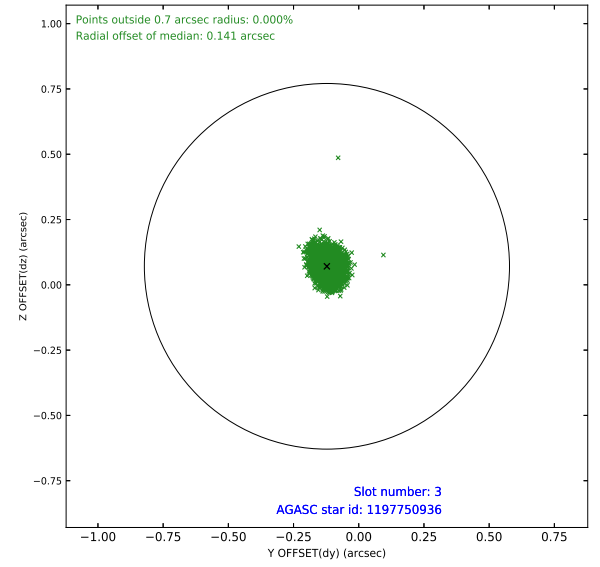
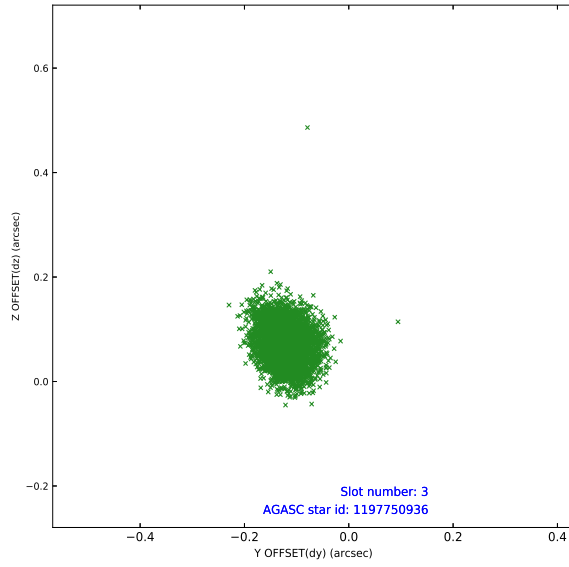


Slot Statistics

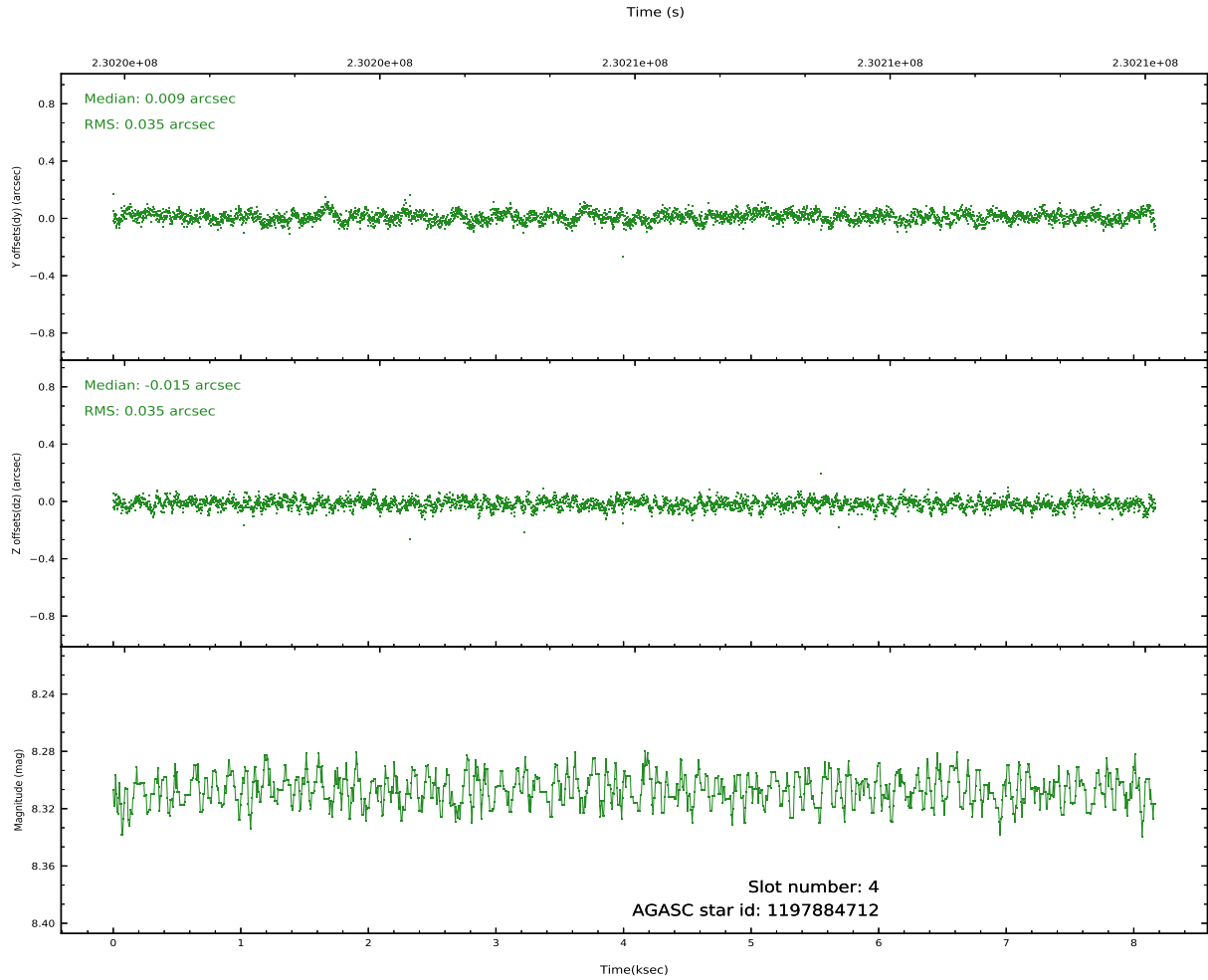
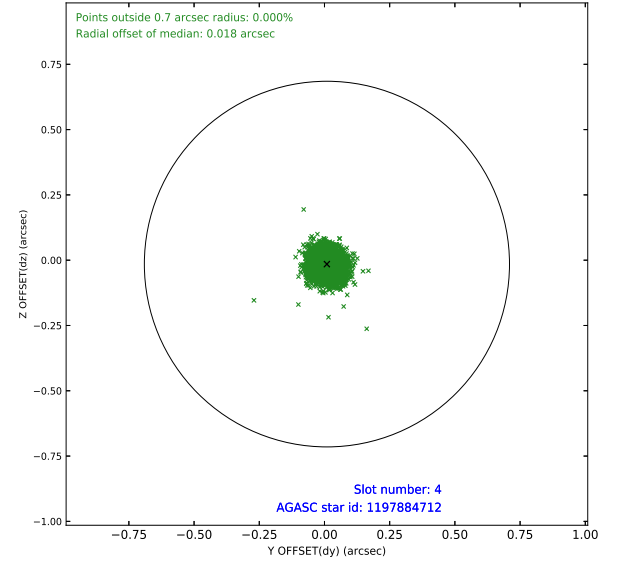
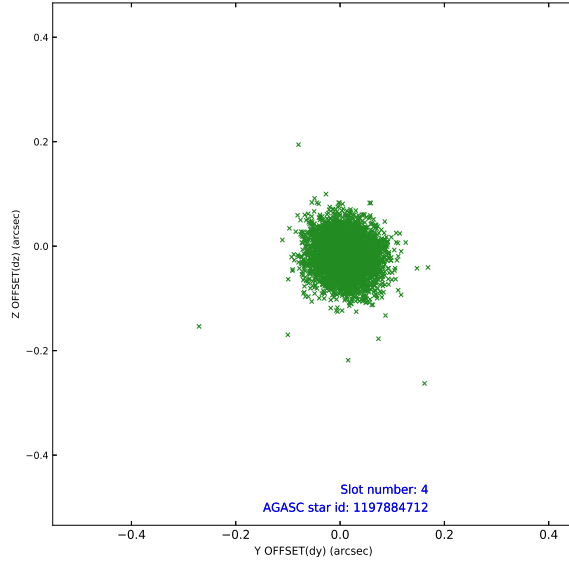
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1993	1.000	-0.093	-0.060	0.008	0.014	0.000000	0.000000	-759.62	-1731
1	FID		ACIS-S-4	7.20	1993	1.000	0.158	0.061	0.007	0.013	0.000000	0.000000	2153.53	176
2	FID		ACIS-S-5	7.23	1993	1.000	-0.096	0.008	0.008	0.014	0.000000	0.000000	-1811.65	170
3	GUIDE	used	1197750936	7.58	3986	1.000	-0.122	0.071	0.052	0.082	15.387940	-71.549550	1015.19	-1522
4	GUIDE	used	1197884712	8.31	3985	1.000	0.009	-0.015	0.053	0.084	16.087398	-72.252690	-214.53	822
5	GUIDE	used	1197885104	9.35	3984	1.000	0.111	-0.009	0.088	0.145	17.845067	-72.189368	-2084.15	285
6	GUIDE	used	1197885328	7.23	3986	1.000	-0.012	0.058	0.054	0.083	16.283090	-71.733943	-103.76	-1053
7	GUIDE	used	1198283128	7.78	3985	1.000	0.015	-0.108	0.044	0.072	17.272580	-72.642428	-1717.42	1991

2.4 Star Slots

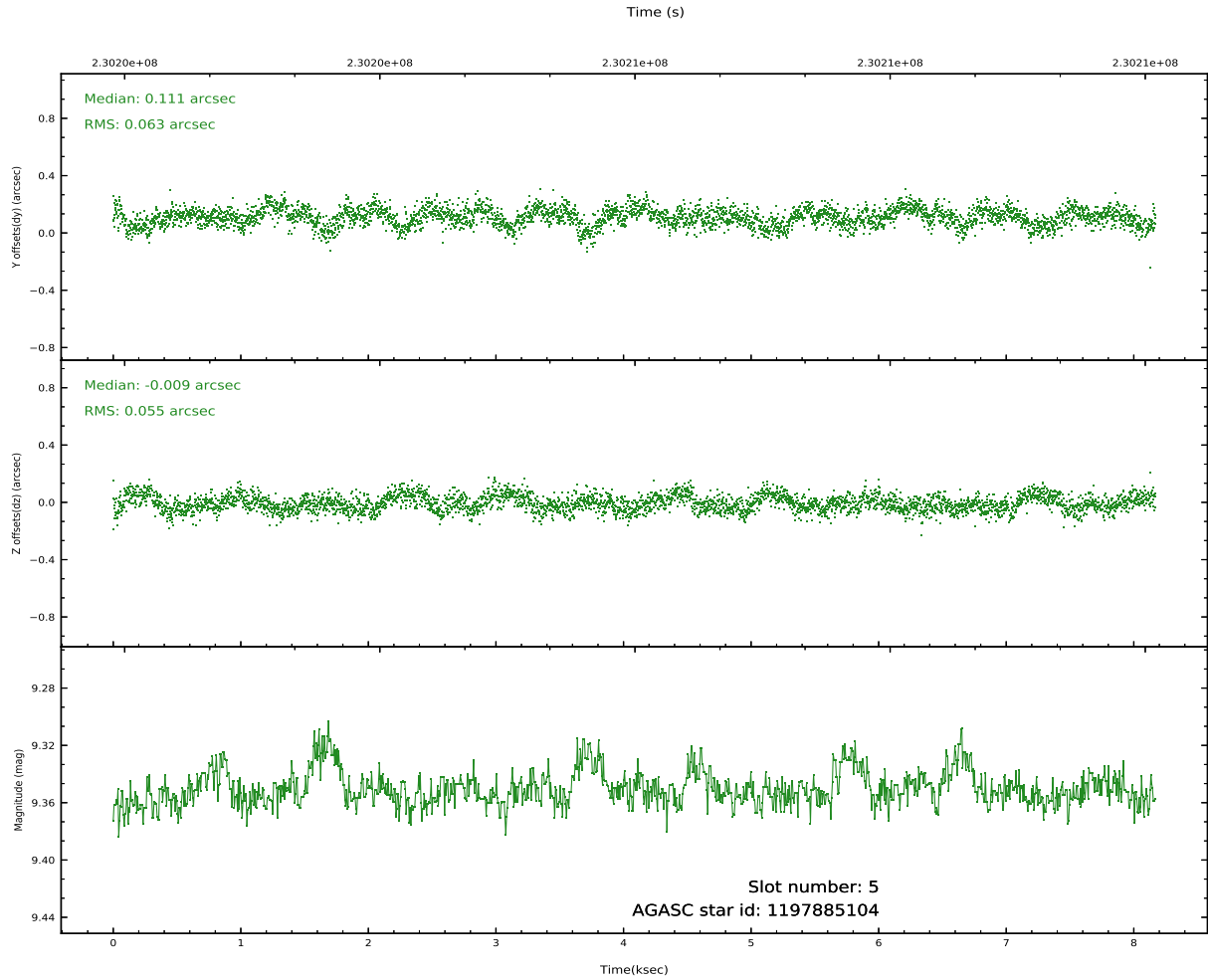
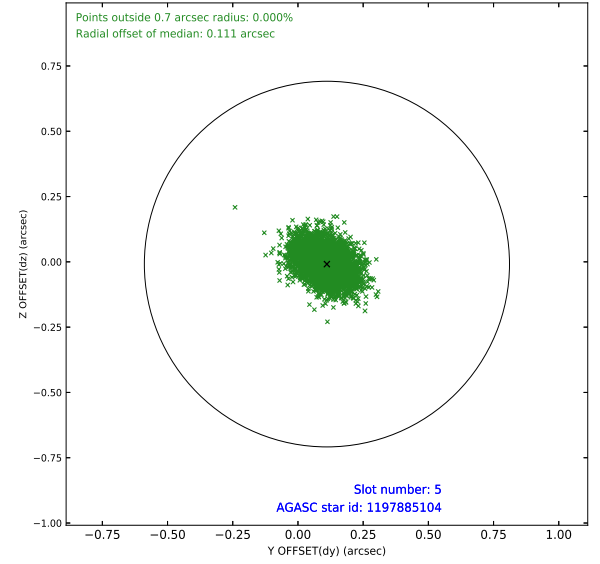
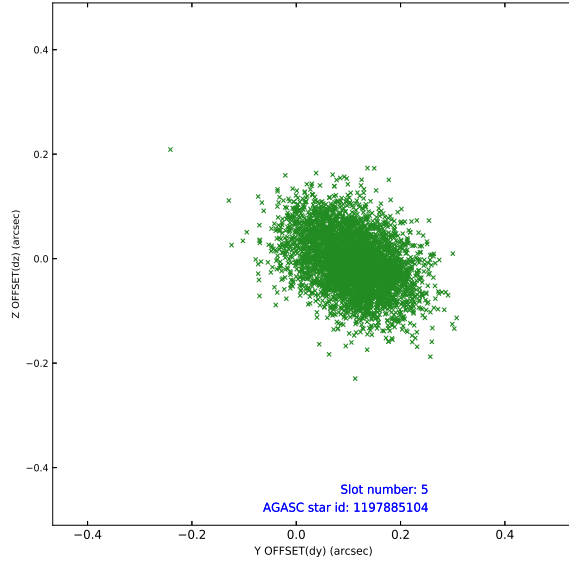
2.4.1 Slot 3



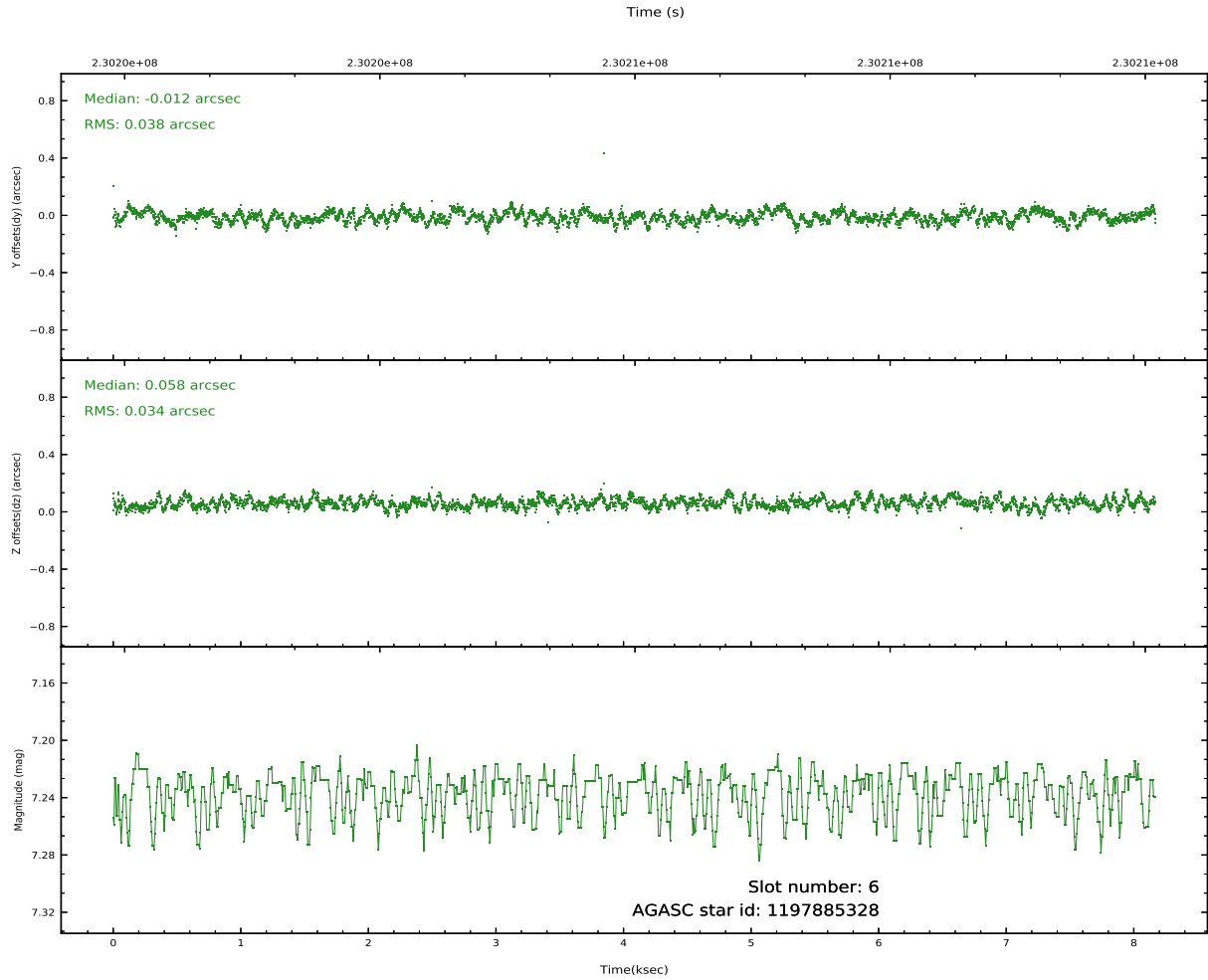
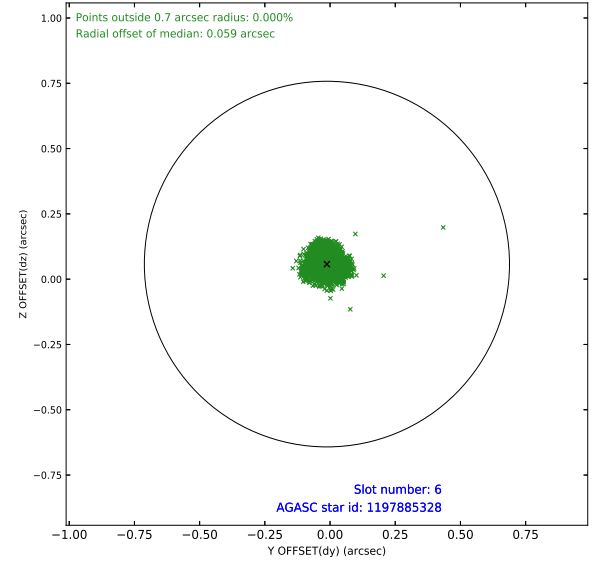
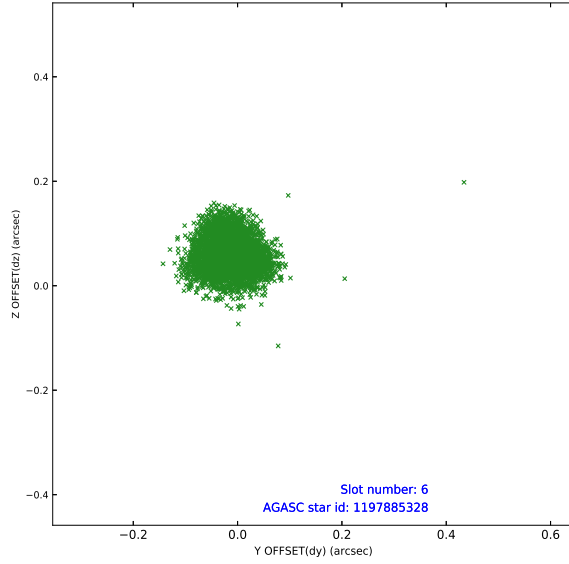
2.4.2 Slot 4



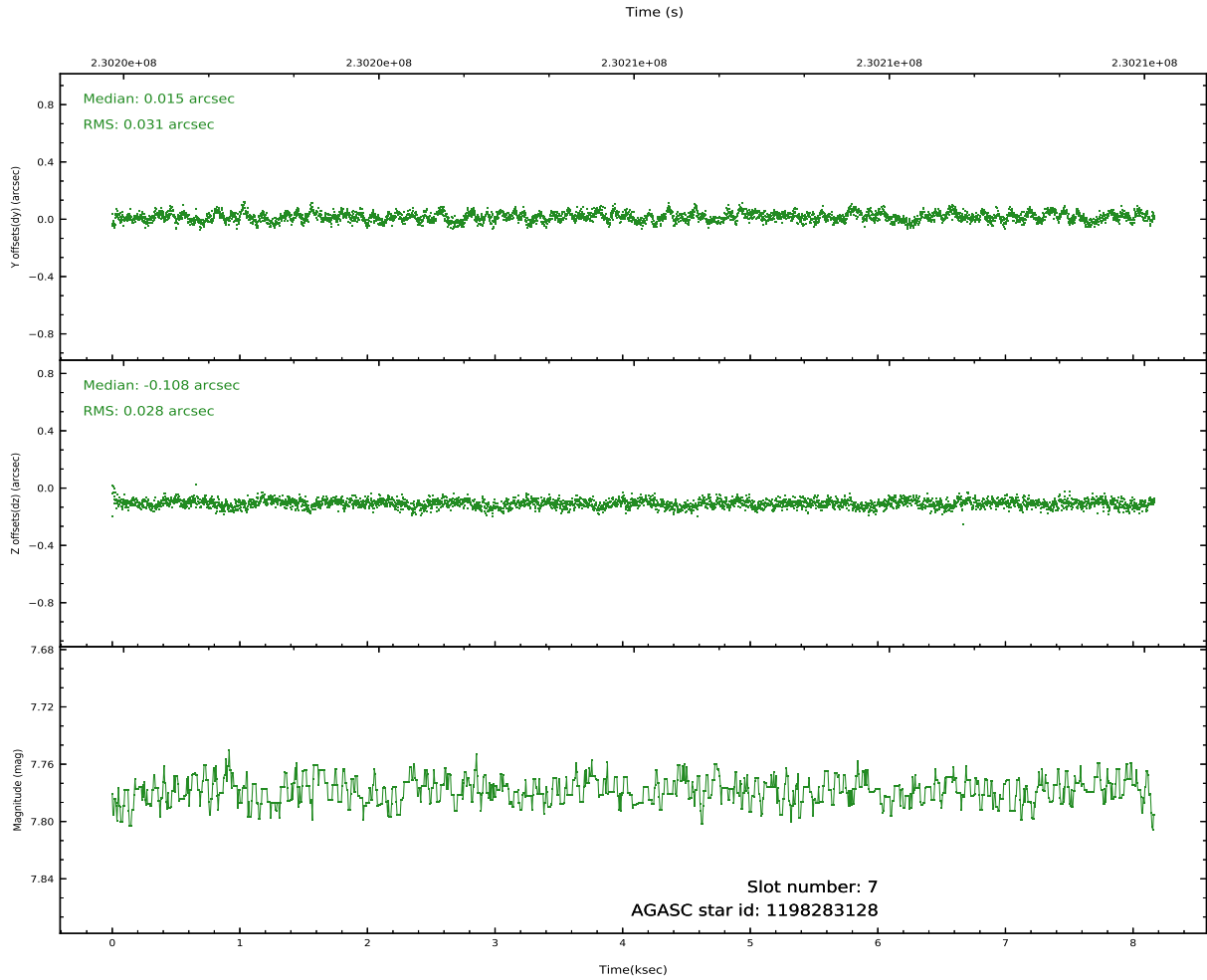
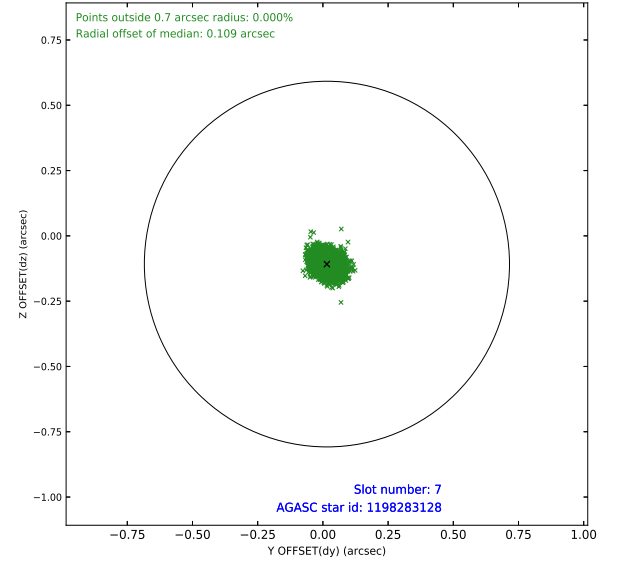
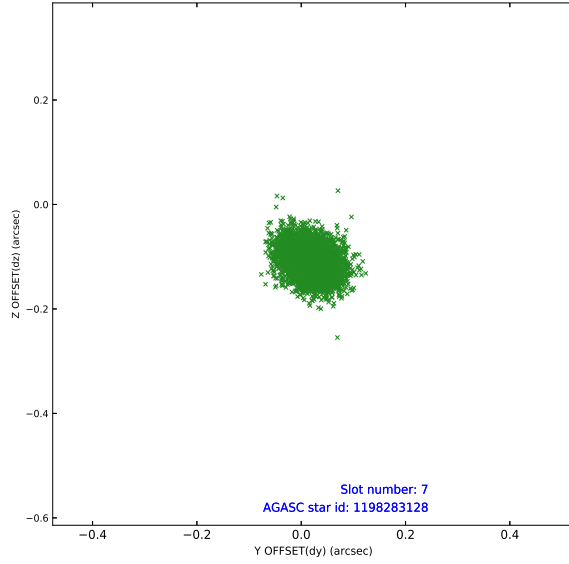
2.4.3 Slot 5



2.4.4 Slot 6

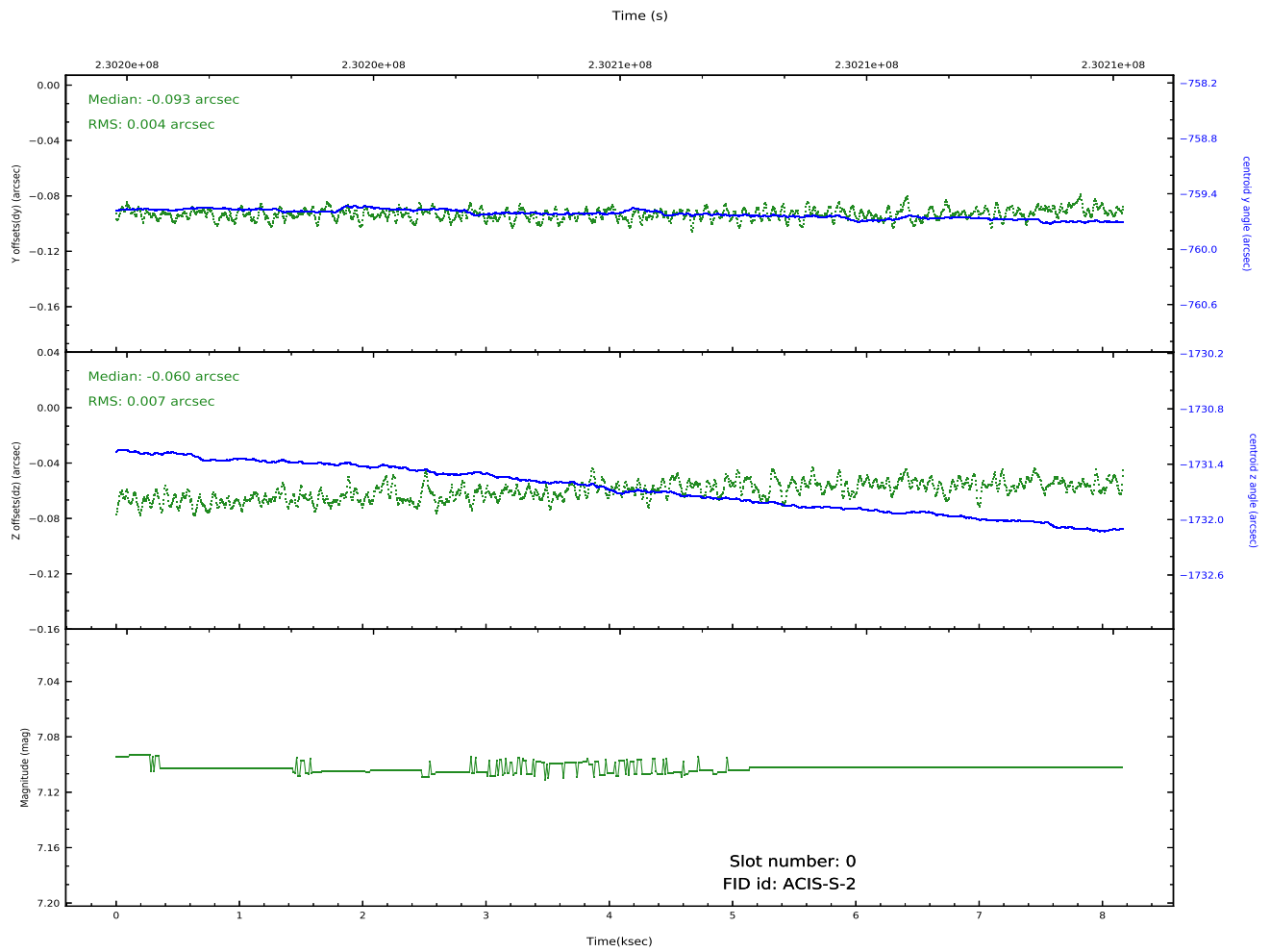
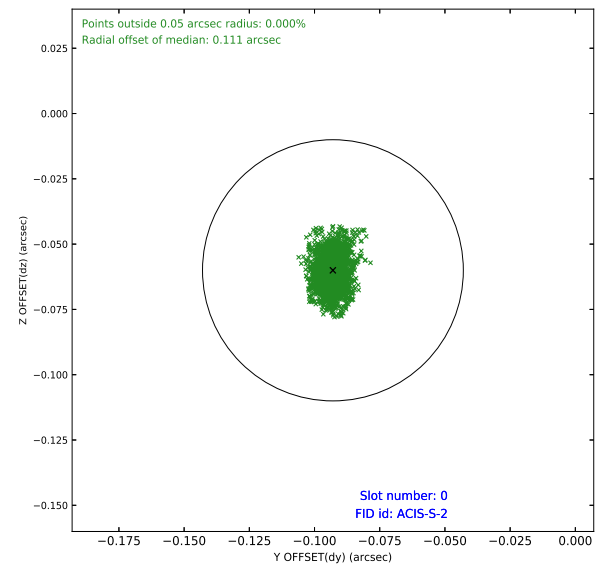
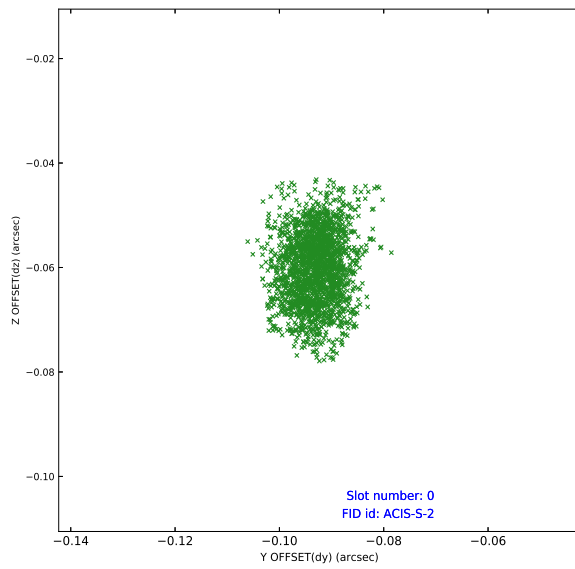


2.4.5 Slot 7

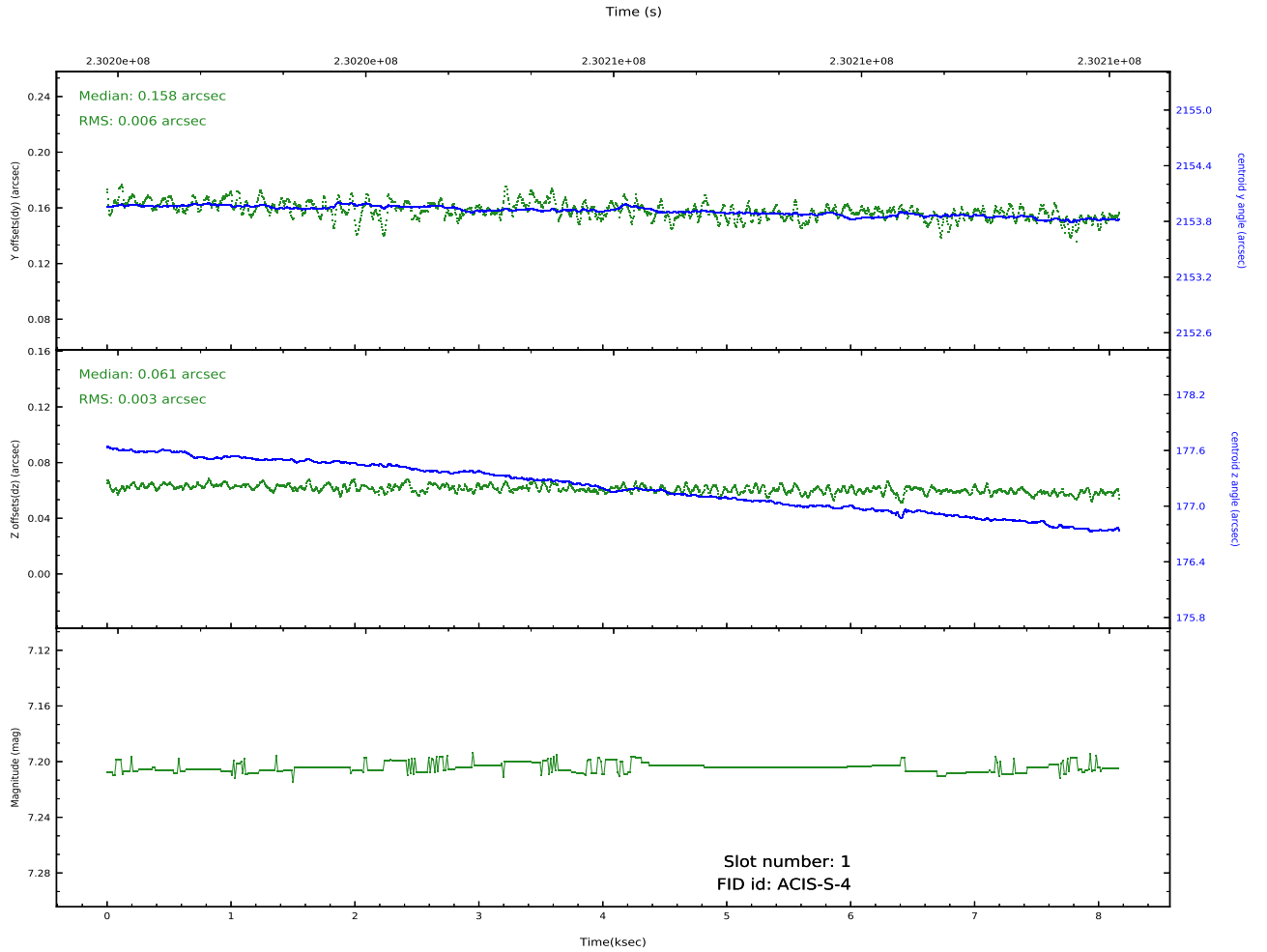
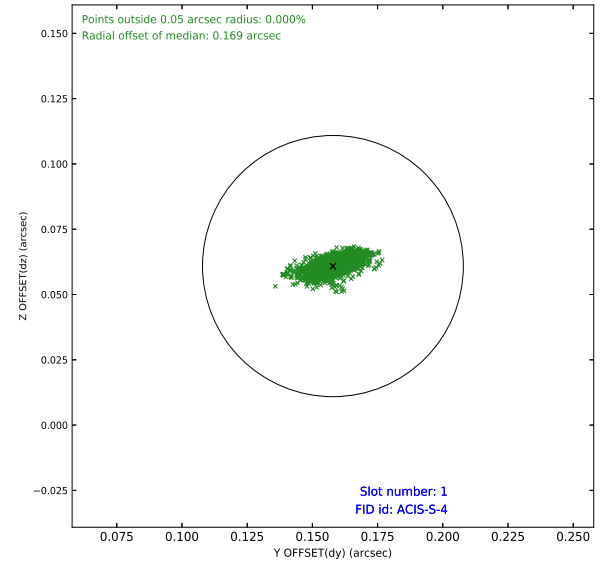
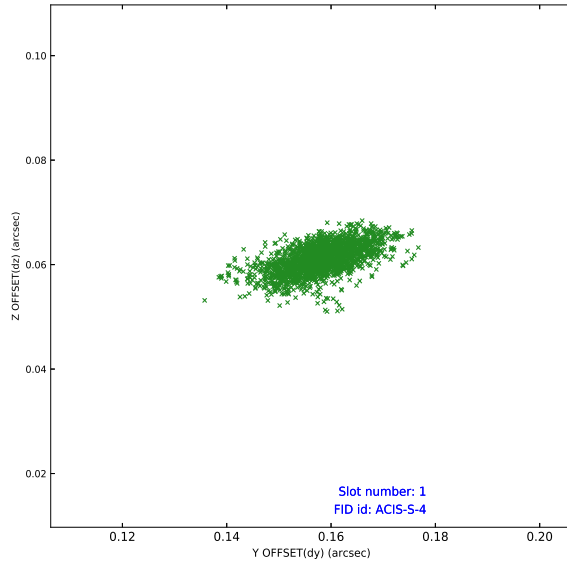


2.5 FID Slots

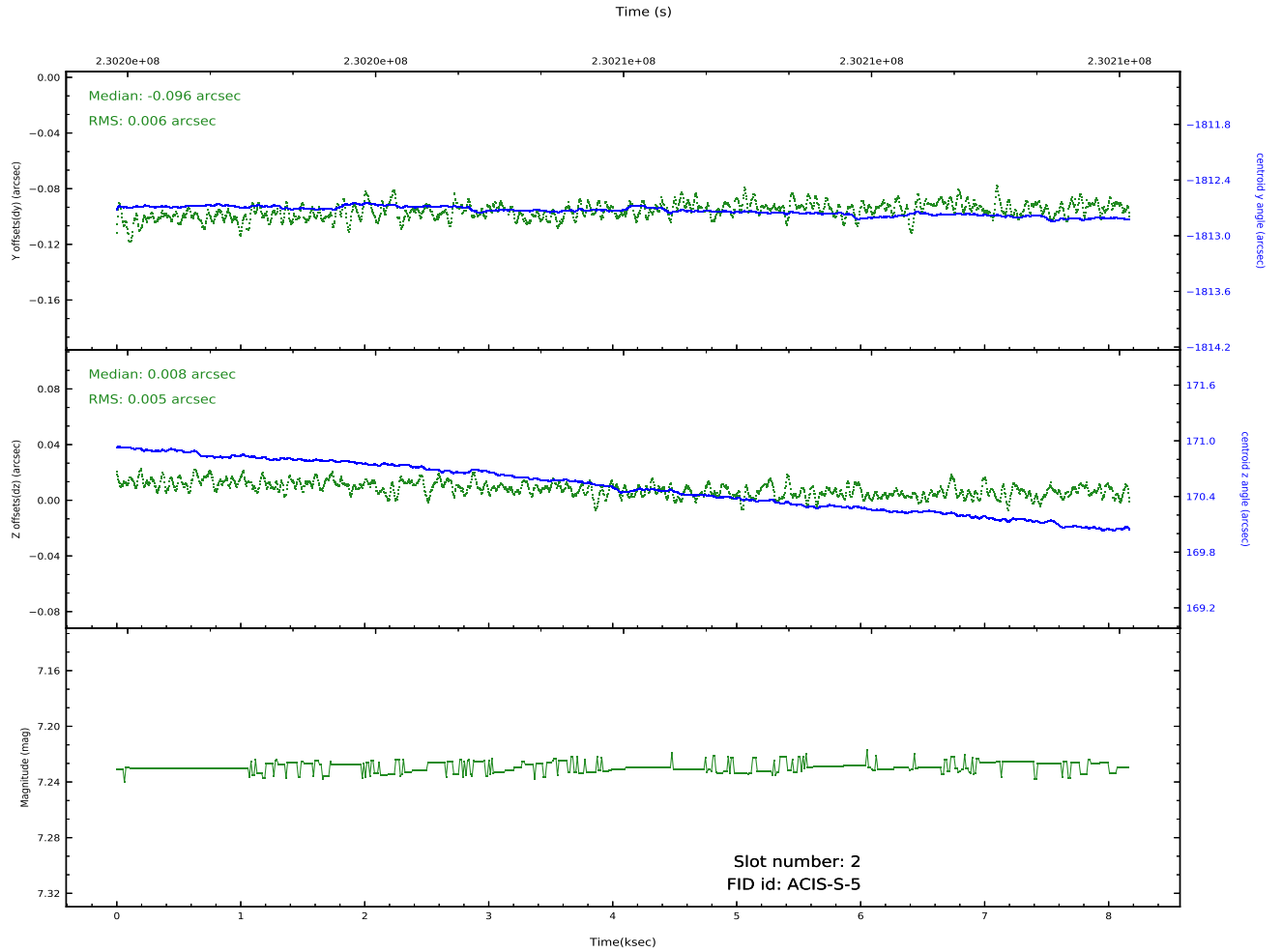
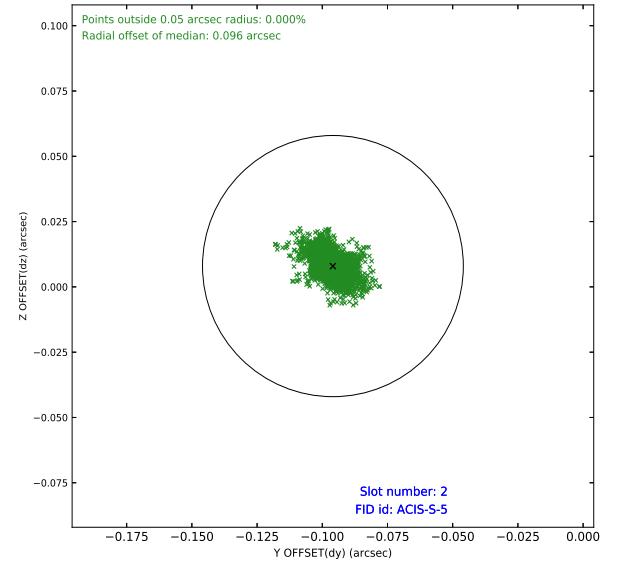
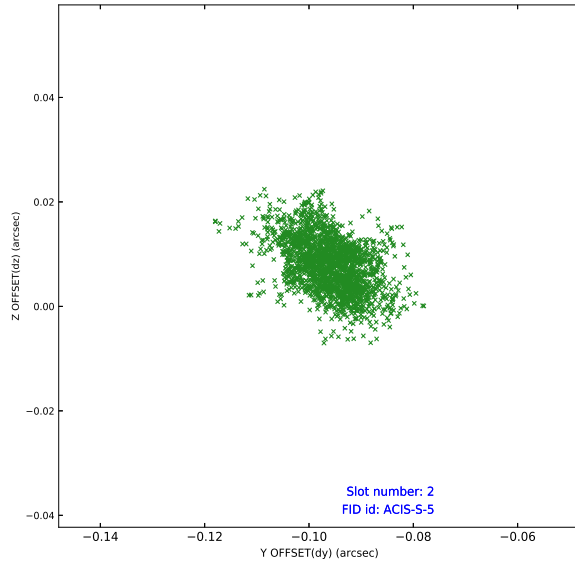
2.5.1 Slot 0



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)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.951999

A.2 Comments

Window constraint met.