

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20516 - L2 Version 2
Chandra X-Ray Center

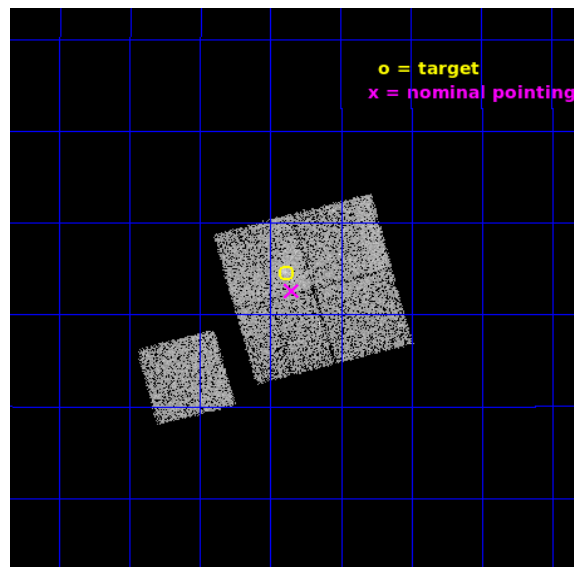
L2 Processing Date : Oct 26 2020

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

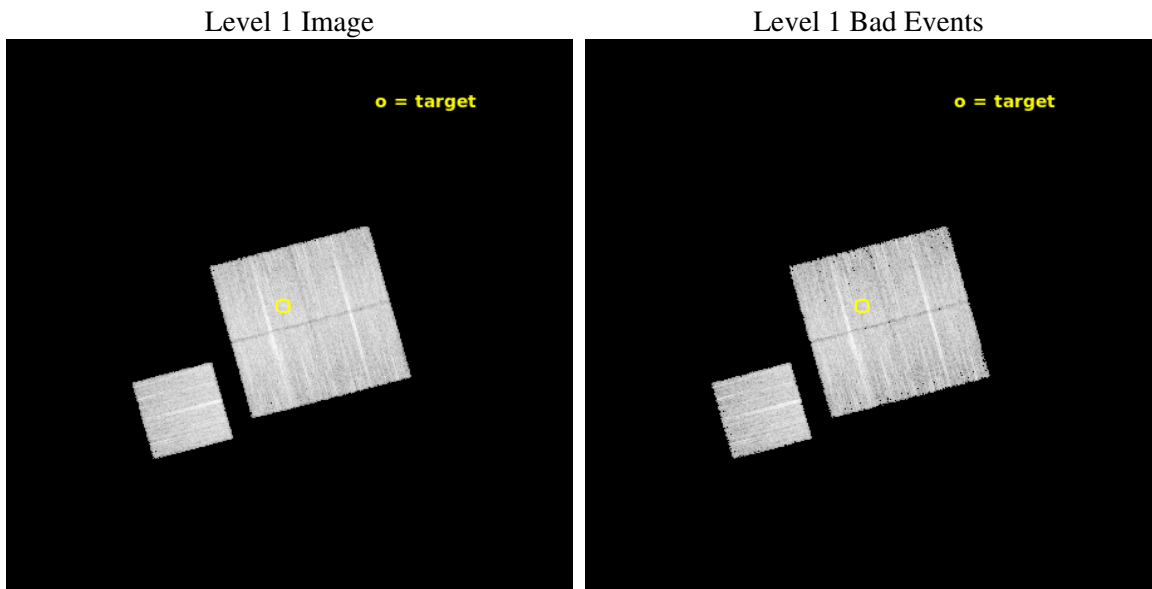
seq_num	801730	Sequence number
obs_id	20516	Observation id
title	Enabling precision cosmology with optically selected galaxy clusters	
observer	Roger Morris	Principal investigator
object	CIG J114853+111438	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.2225	Observer's specified target RA [deg]
dec_targ	11.241611	Observer's specified target Dec [deg]
ra_nom	177.21201024709	Nominal RA [deg]
dec_nom	11.210288030364	Nominal Dec [deg]
roll_nom	254.84592984426	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9892.1000761986	Sum of GTIs [s]
livetime	9762.8525062449	Livetime [s]
ontime0	9892.1000761986	Sum of GTIs [s]
ontime1	9888.9591159821	Sum of GTIs [s]
ontime2	9892.1000761986	Sum of GTIs [s]
ontime3	9892.1000761986	Sum of GTIs [s]
ontime6	9888.9190894365	Sum of GTIs [s]
l2events	36758	Number of level 2 events



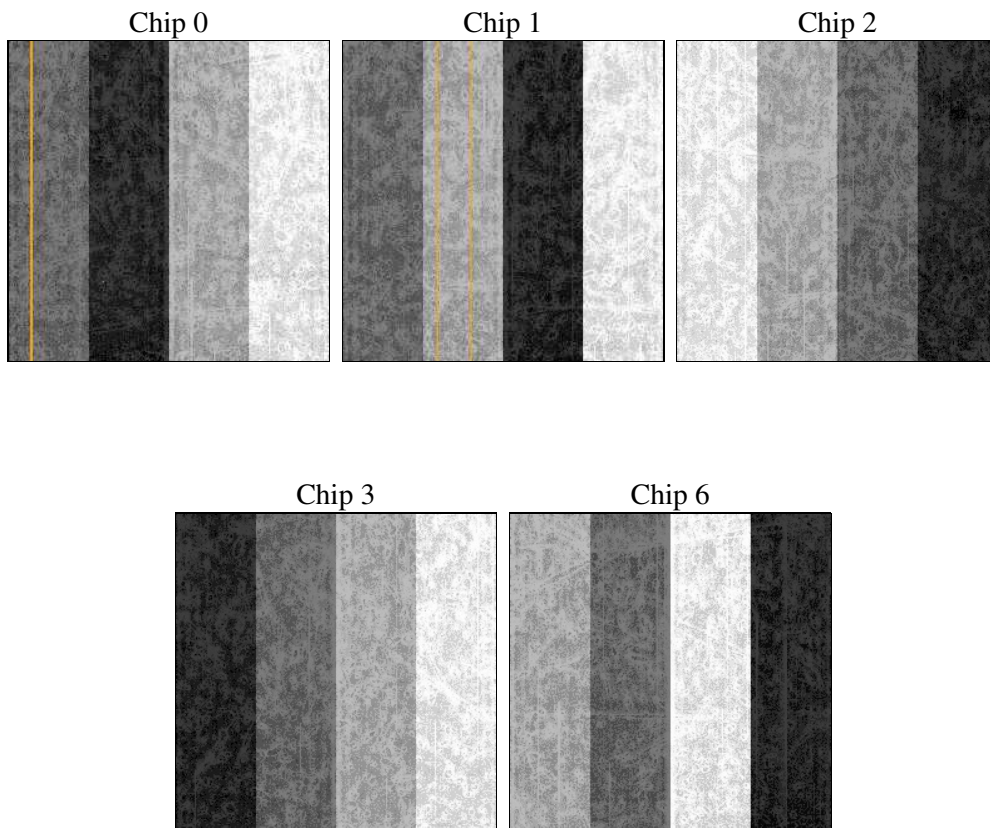
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	9892.1000761986	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	9892.1000761986	Sum of GTIs [s]
date	2020-10-26T21:30:46	Date and time of file creation	ontime1	9888.9591159821	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9892.1000761986	Sum of GTIs [s]
			ontime3	9892.1000761986	Sum of GTIs [s]
			ontime6	9888.9190894365	Sum of GTIs [s]
			l1events	362156	Number of level 1 events

2.1.4 Events

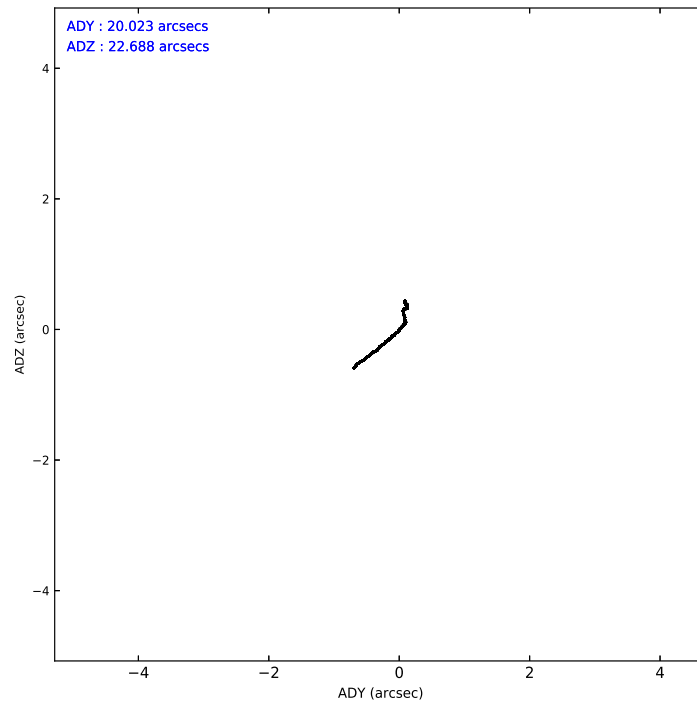
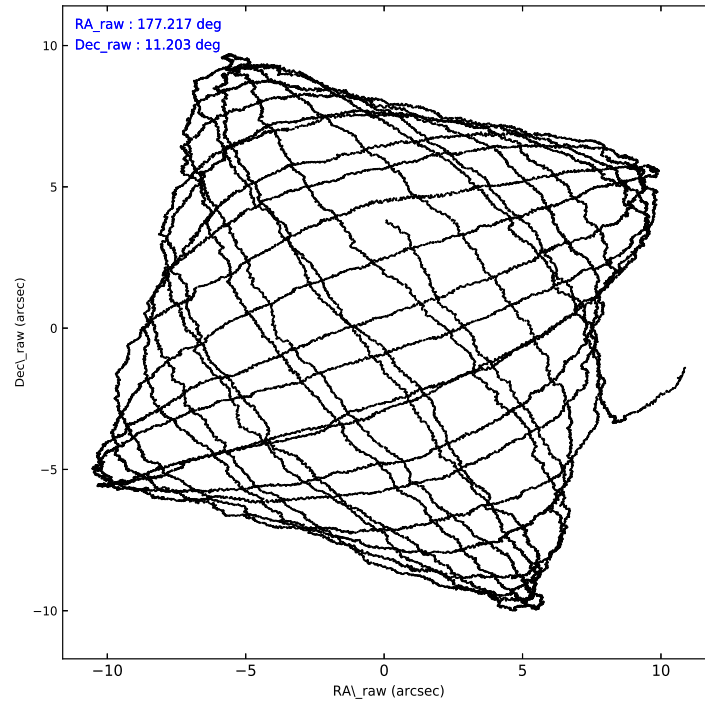
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	67852	71346	76753	73644	72561
rejected events	59390	61697	68270	64704	64224
rejected %	87%	86%	88%	87%	88%

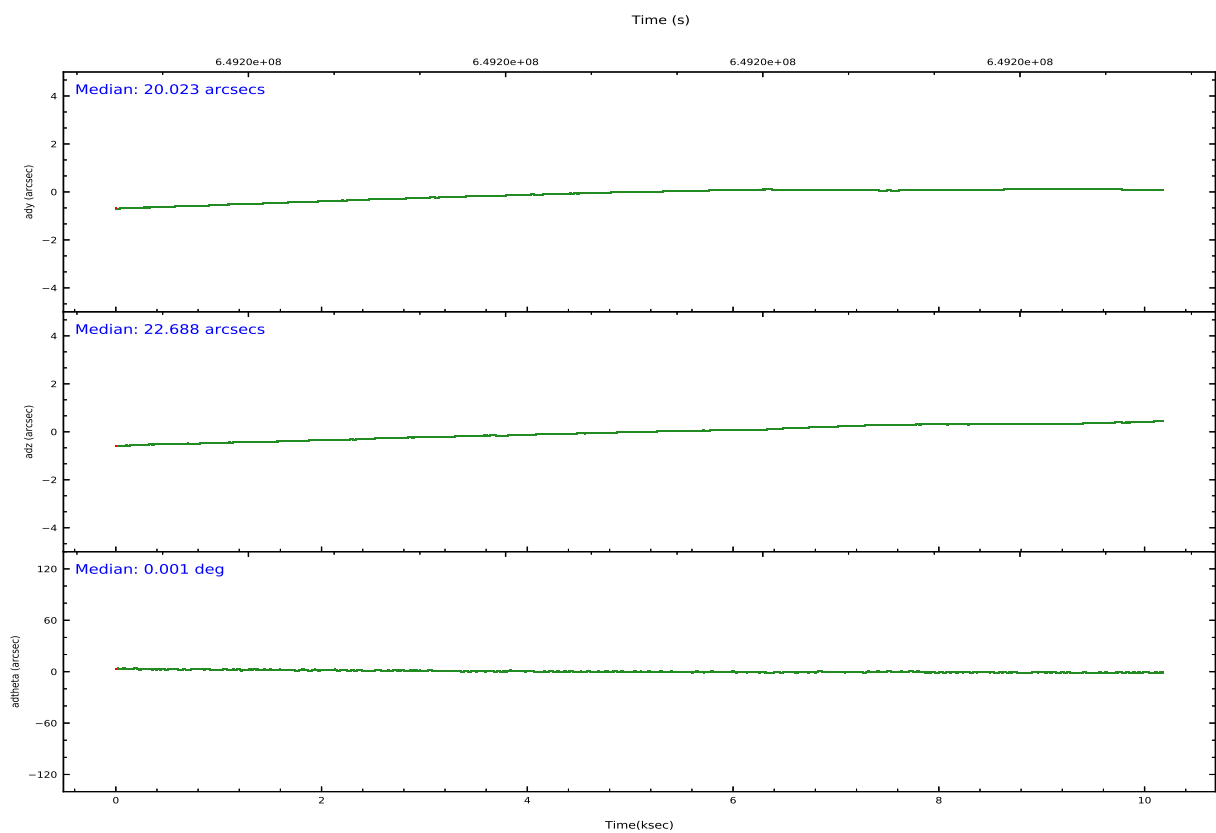
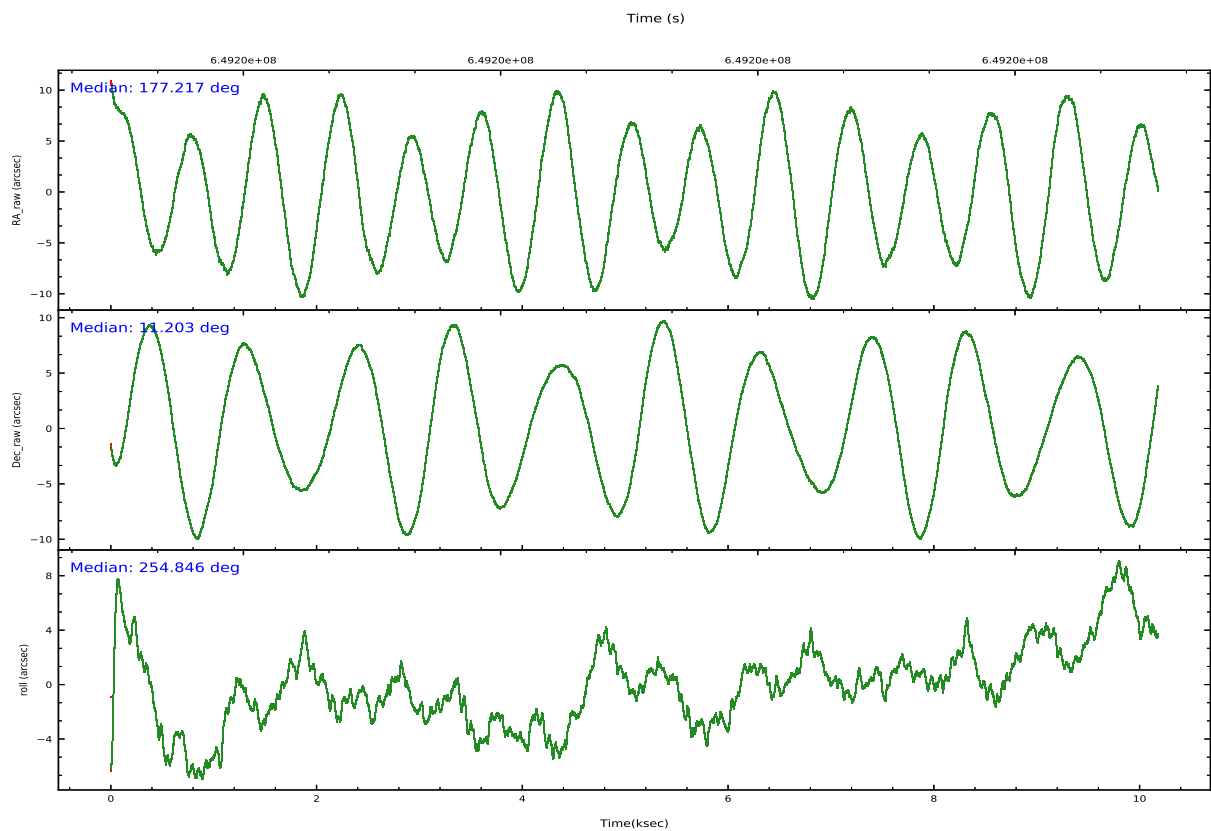
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2800	3335	3013	3671	2767
	4%	4%	3%	4%	3%
grade 1 events	35	38	40	35	30
	0%	0%	0%	0%	0%
grade 2 events	2273	2468	2143	1867	1930
	3%	3%	2%	2%	2%
grade 3 events	839	910	821	862	898
	1%	1%	1%	1%	1%
grade 4 events	780	858	838	848	818
	1%	1%	1%	1%	1%
grade 5 events	3244	3384	2957	3663	3316
	4%	4%	3%	4%	4%
grade 6 events	1773	2086	1672	1704	1929
	2%	2%	2%	2%	2%
grade 7 events	56108	58267	65269	60994	60873
	82%	81%	85%	82%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	177.209549	177.21201024709	CCD I2 on	Y	Y
[deg] Pointing Dec	11.229709	11.210288030364	CCD I3 on	Y	Y
[deg] Pointing Roll	254.641595	254.84592984426	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-228.472463	-228.4783457680588	CCD S3 on	N	N
[mm] SIM translation stage offset	-5.12	-5.114107234870914	CCD S4 on	N	N
[s] Observation start time (MET)	649193893.184000	649193110.96714	CCD S5 on	N	N
Observation start date	2018-07-28T19:37:04	2018-07-28T19:25:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	649203893.184000	649204728.31783	On-chip summing requested	N	N
Observation end date	2018-07-28T22:23:44	2018-07-28T22:38:48	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



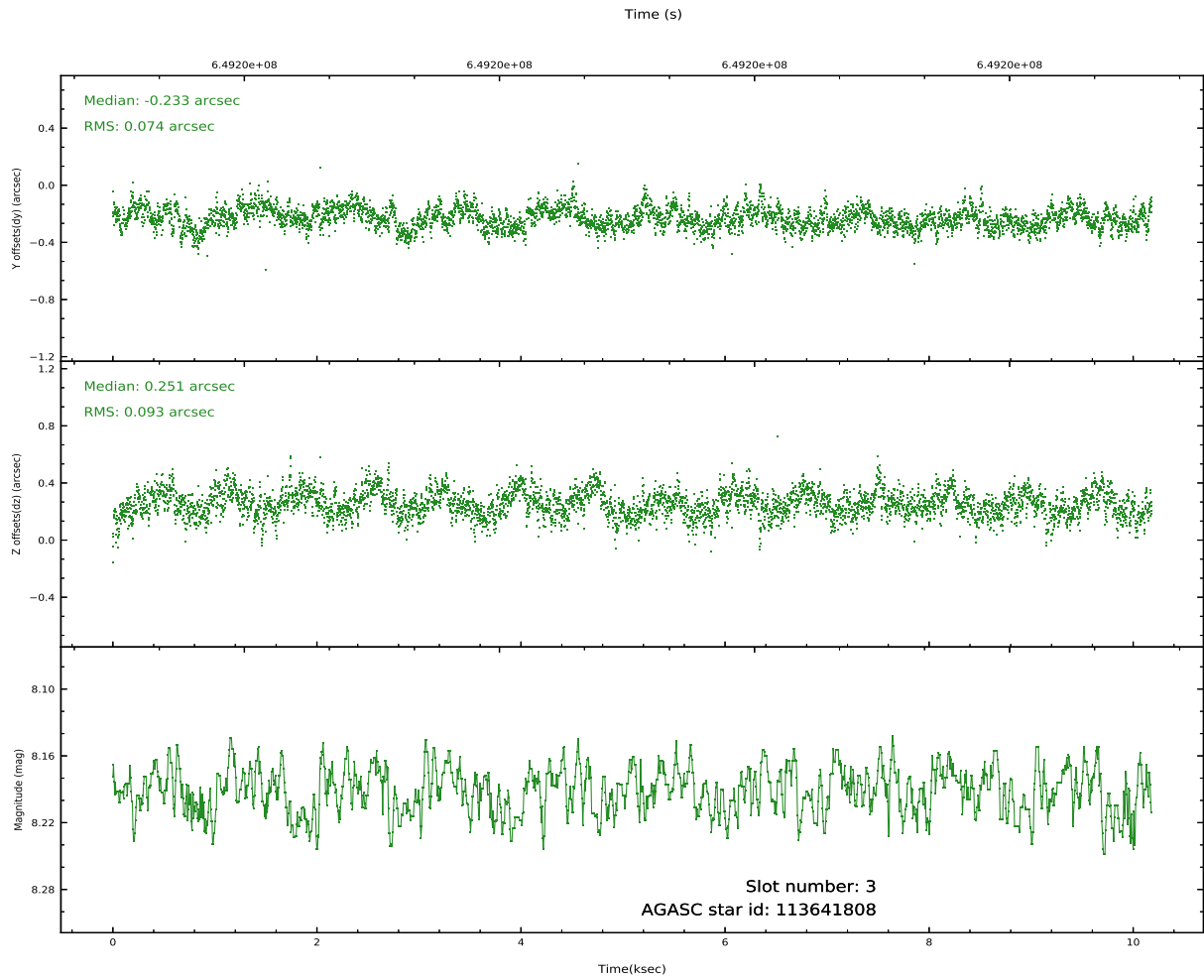
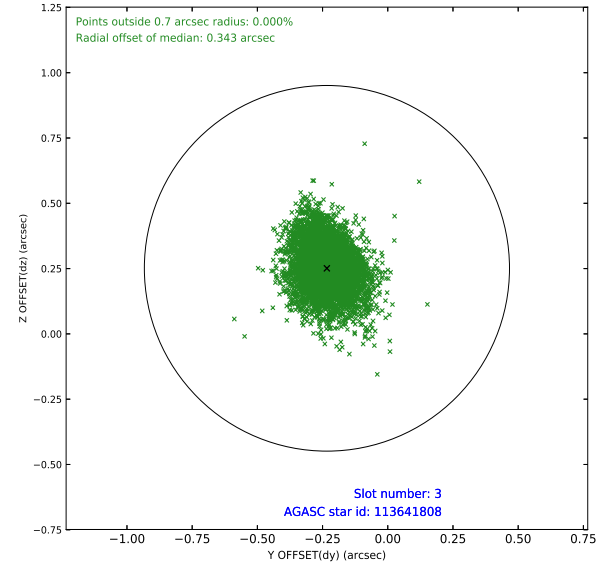
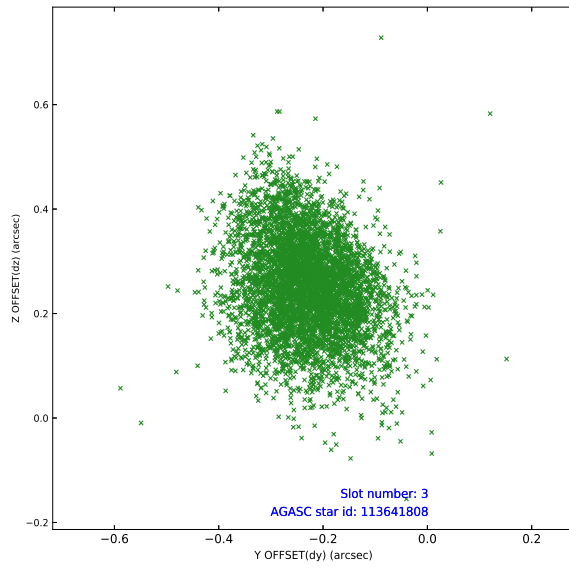


Slot Statistics

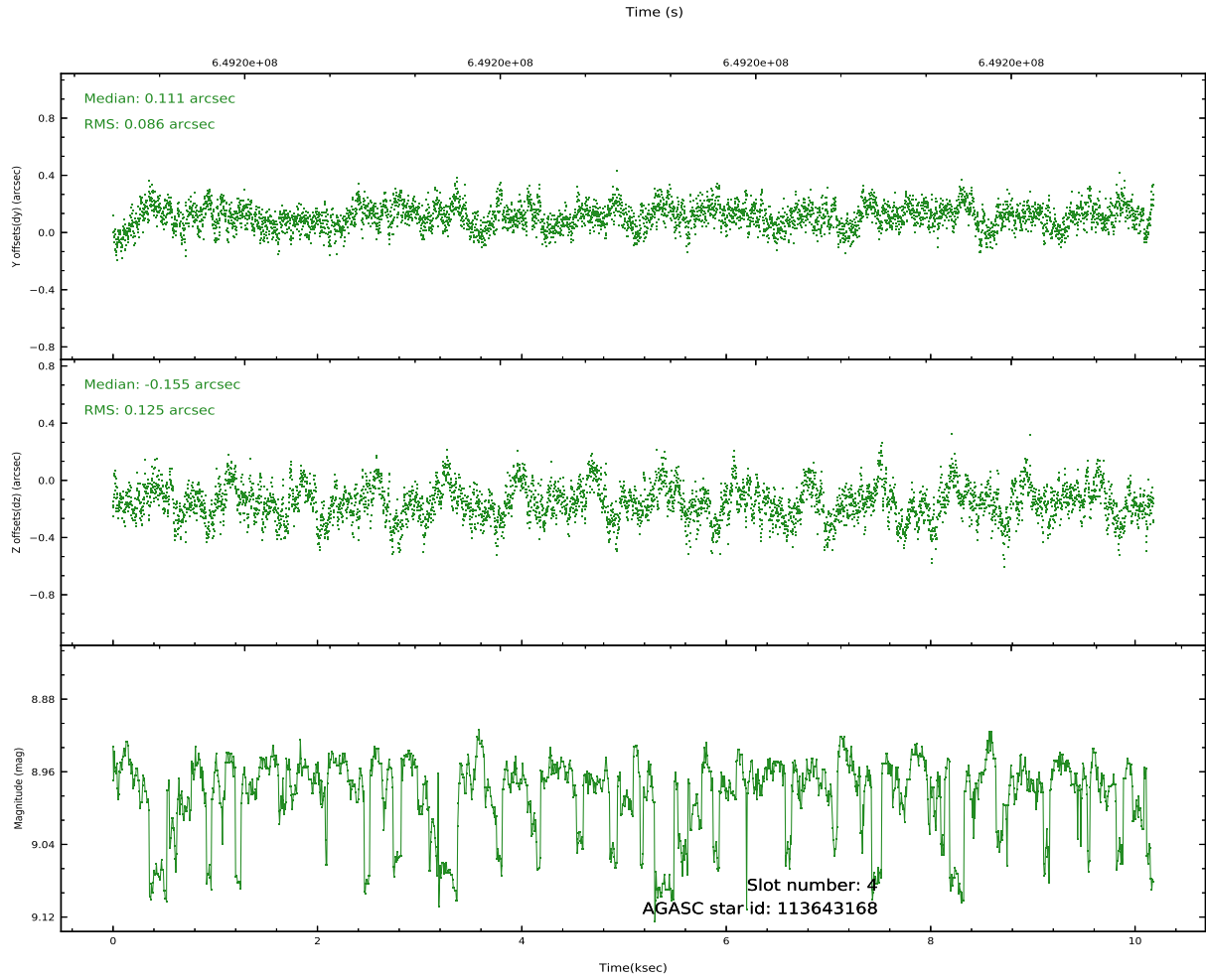
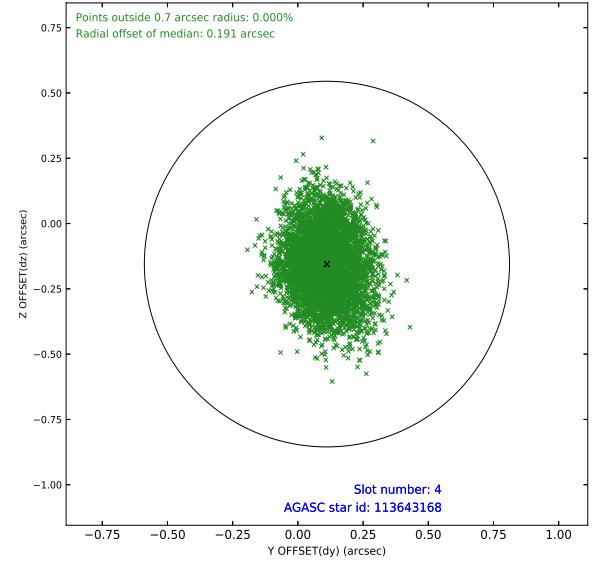
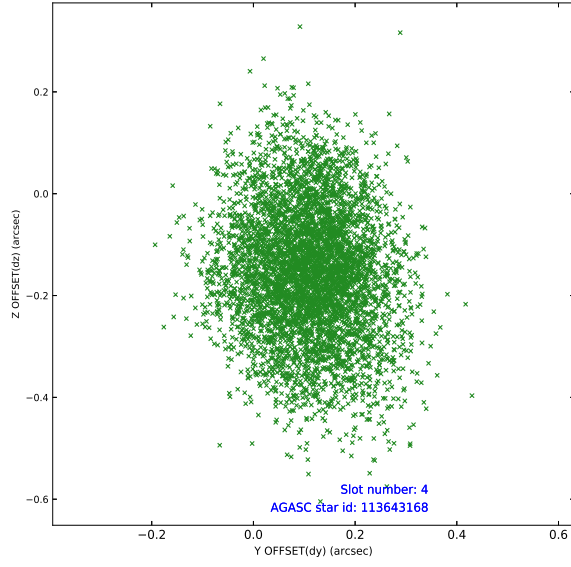
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.03	2484	1.000	0.274	-0.173	0.011	0.019	0.000000	0.000000	919.54	-951
1	FID		ACIS-I-5	7.03	2484	1.000	-0.375	0.227	0.010	0.015	0.000000	0.000000	-1828.82	946
2	FID		ACIS-I-6	7.03	2484	1.000	0.009	0.018	0.008	0.013	0.000000	0.000000	384.40	1590
3	GUIDE	used	113641808	8.19	4967	1.000	-0.233	0.251	0.124	0.205	177.281973	11.876544	-2312.90	-370
4	GUIDE	used	113643168	8.97	4959	1.000	0.111	-0.155	0.163	0.262	177.215906	10.683894	1888.95	541
5	GUIDE	used	113643352	9.76	4959	1.000	0.412	-0.022	0.204	0.313	176.944154	11.610096	-1071.90	-1265
6	GUIDE	used	113644632	9.44	4958	1.000	-0.368	-0.115	0.182	0.303	177.528107	11.033553	382.28	1271
7	GUIDE	used	113647160	8.35	4964	1.000	0.073	0.038	0.138	0.219	176.907540	11.708325	-1378.62	-1484

2.4 Star Slots

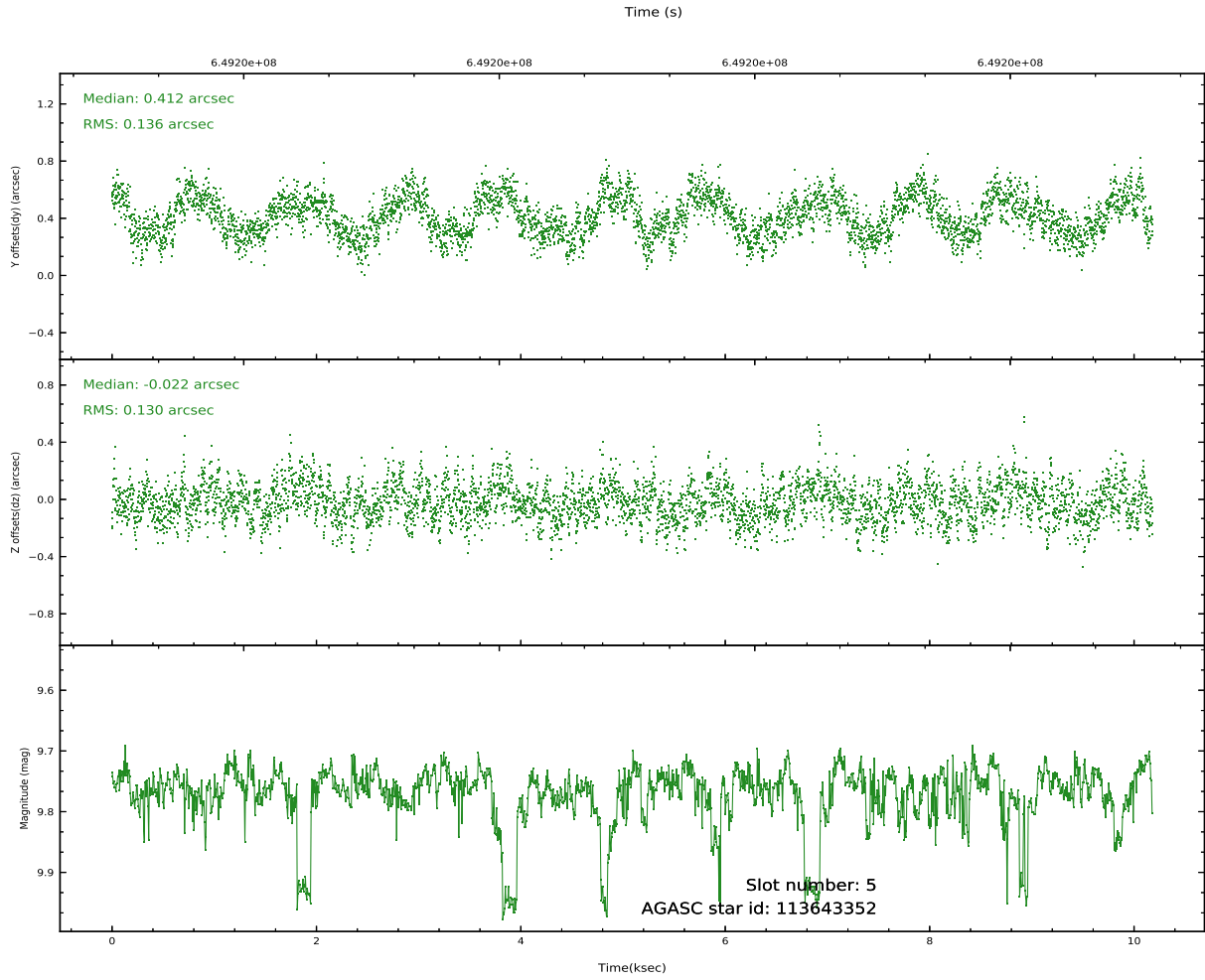
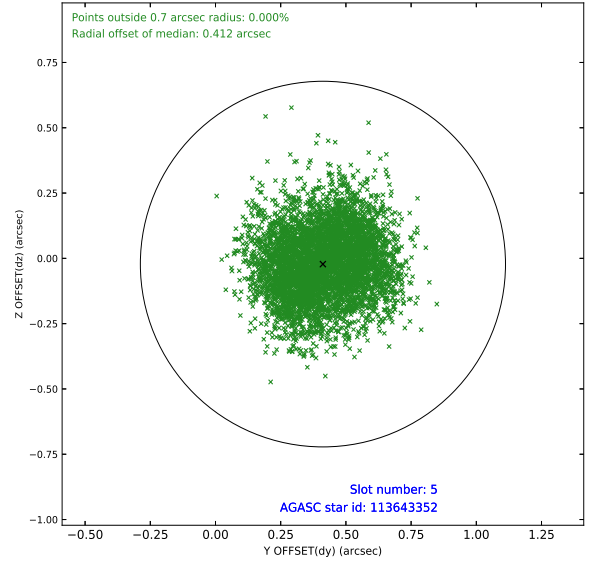
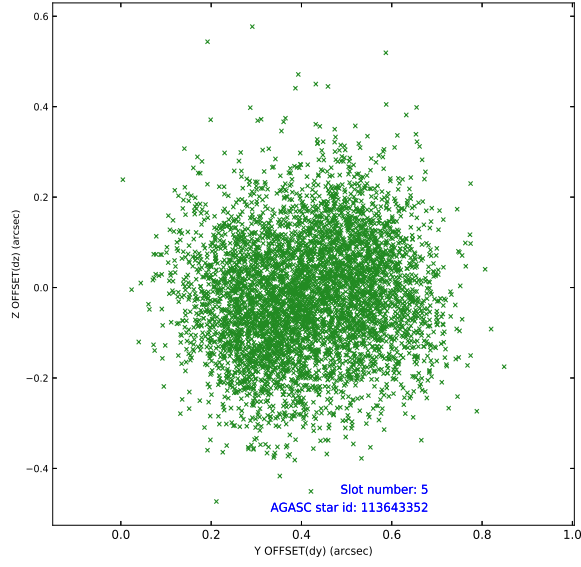
2.4.1 Slot 3



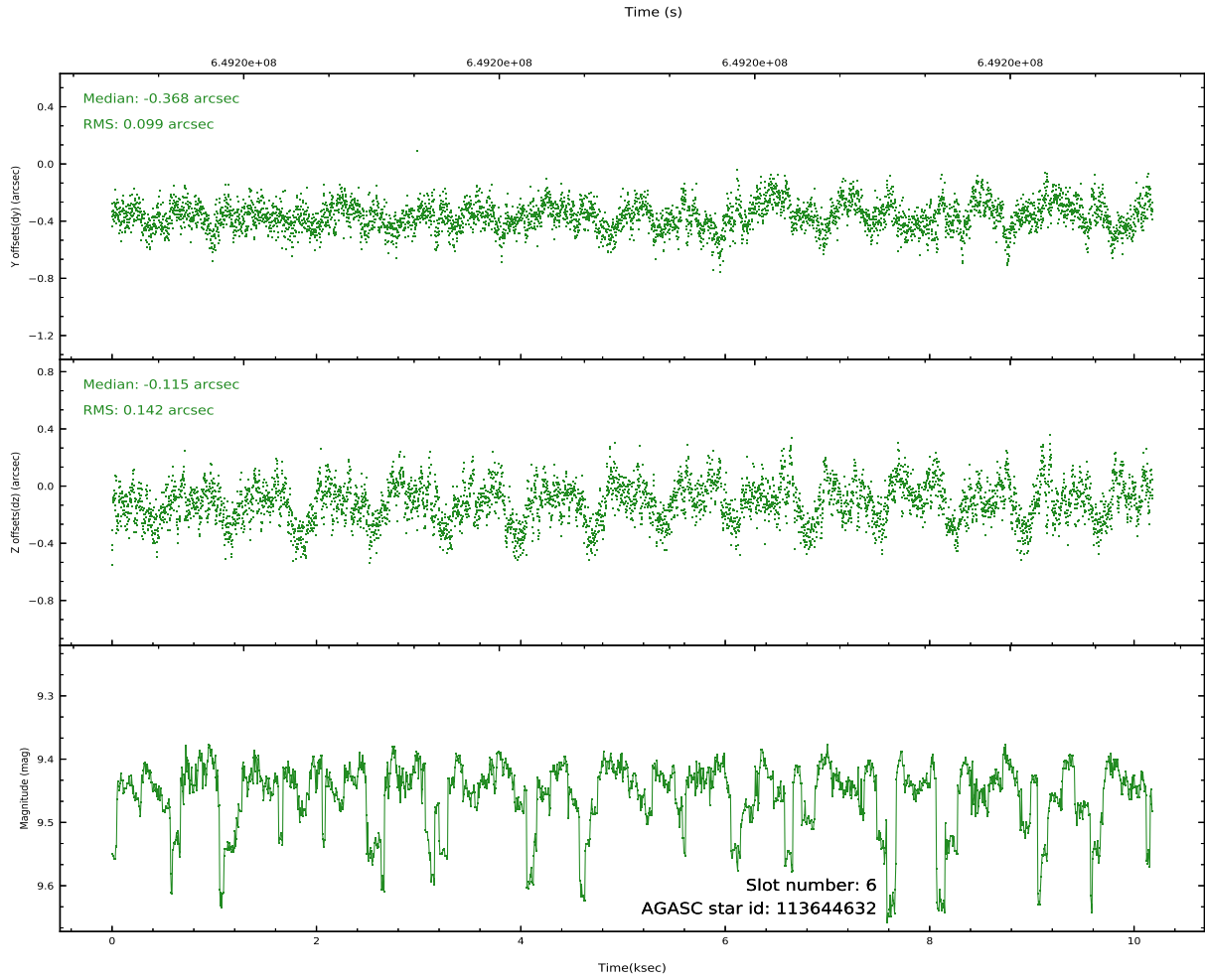
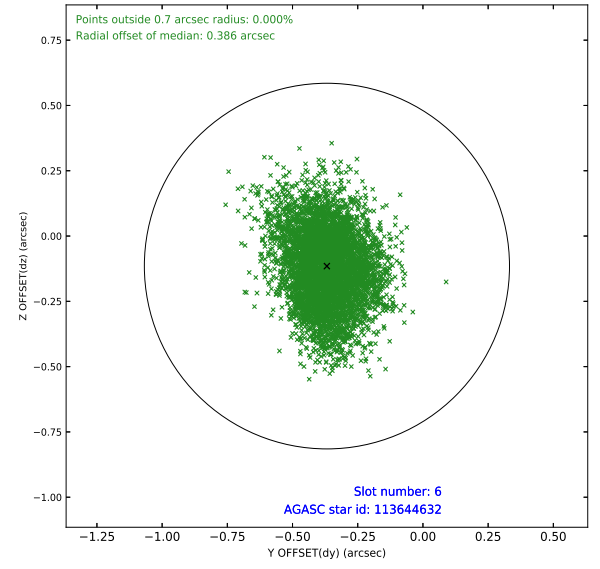
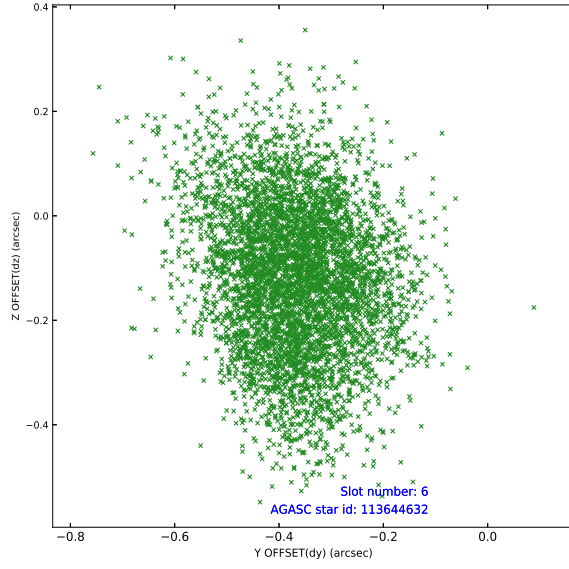
2.4.2 Slot 4



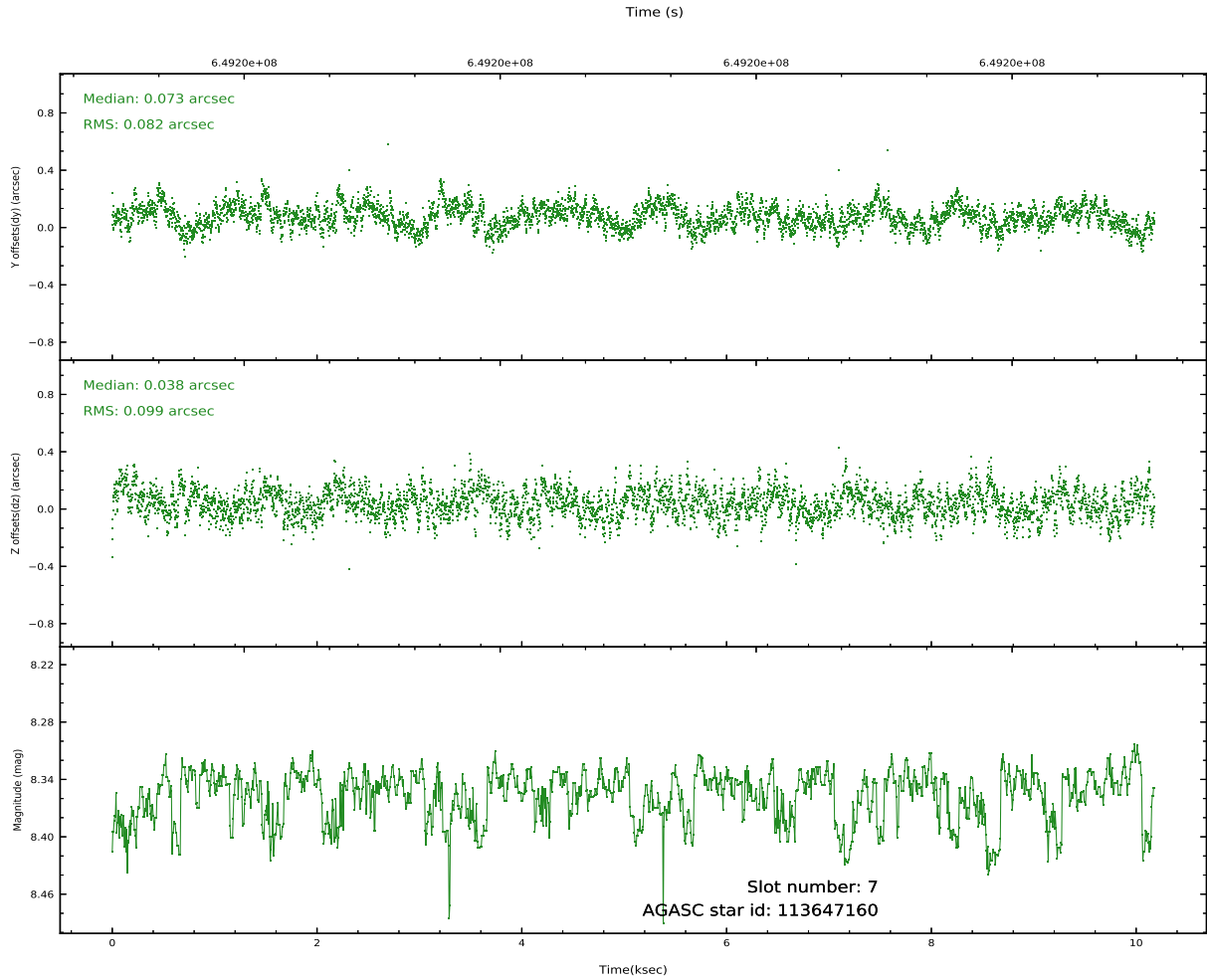
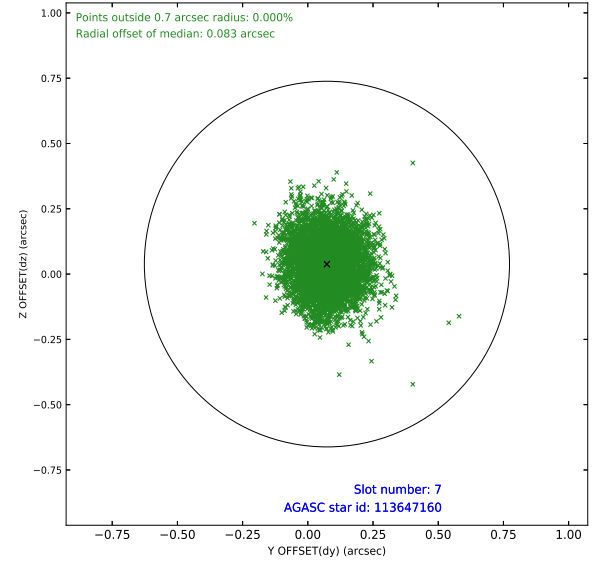
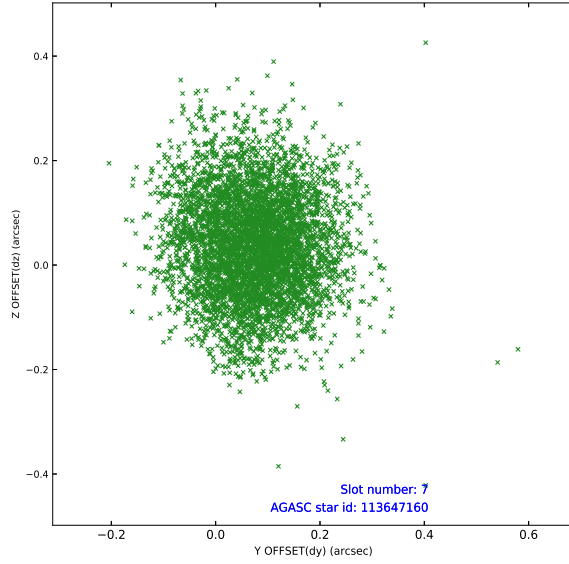
2.4.3 Slot 5



2.4.4 Slot 6

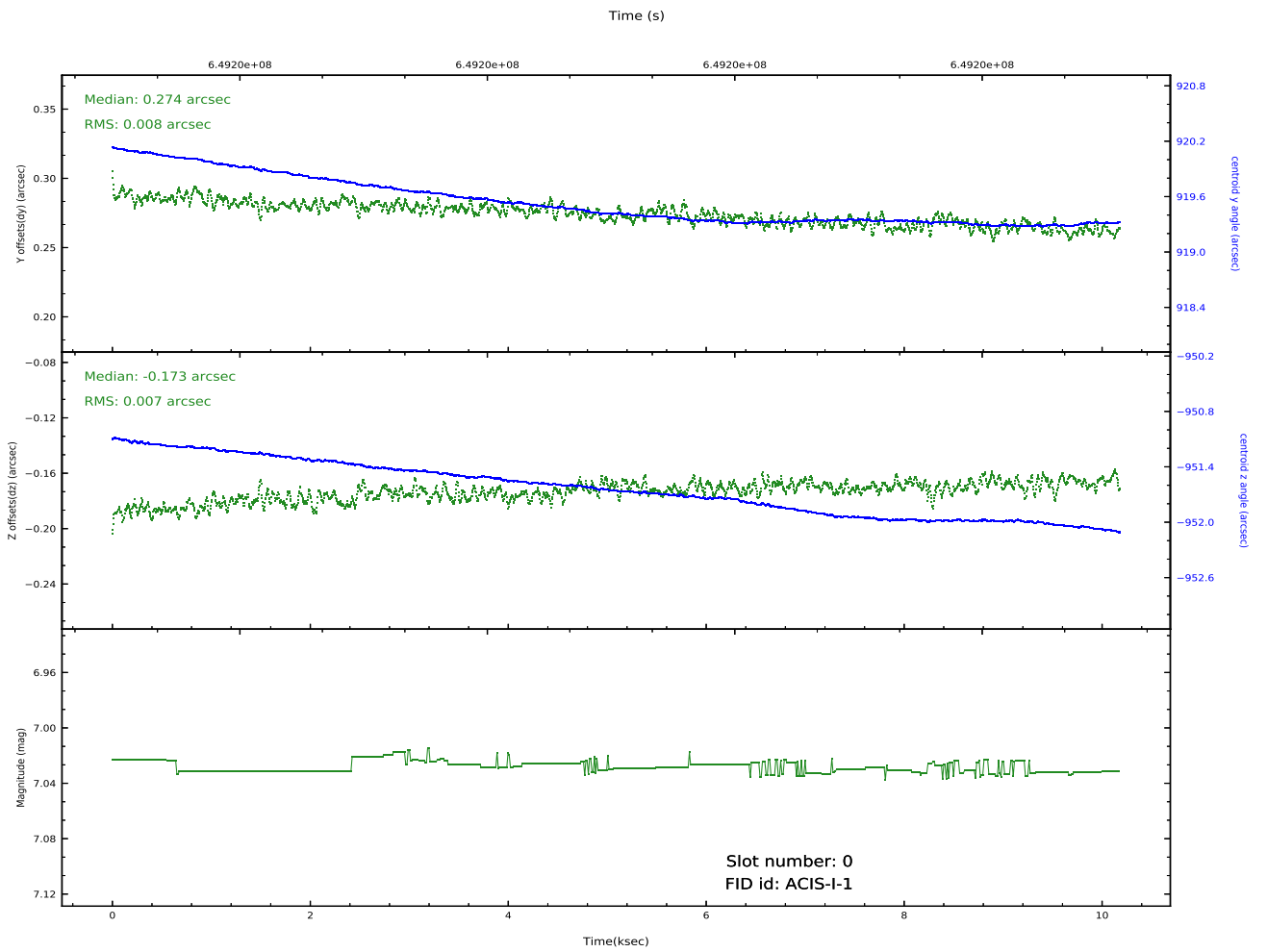
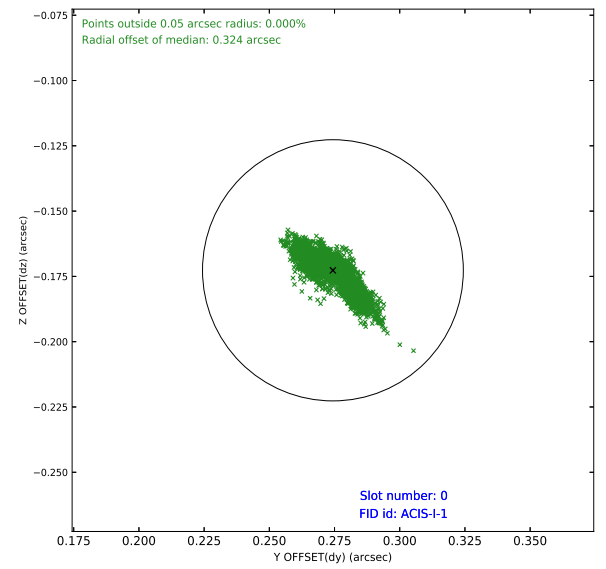
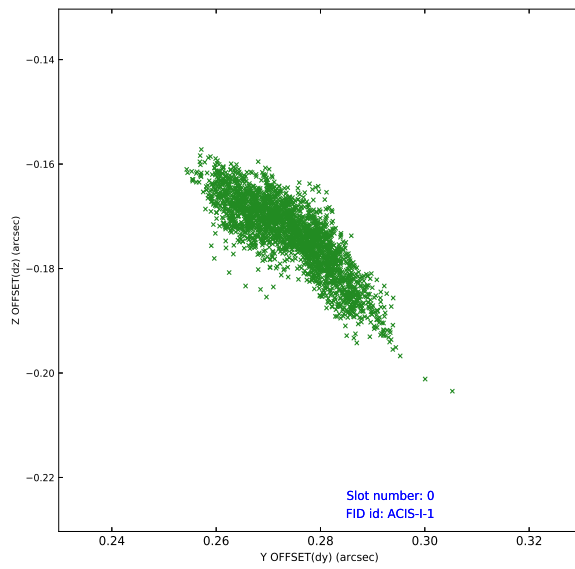


2.4.5 Slot 7

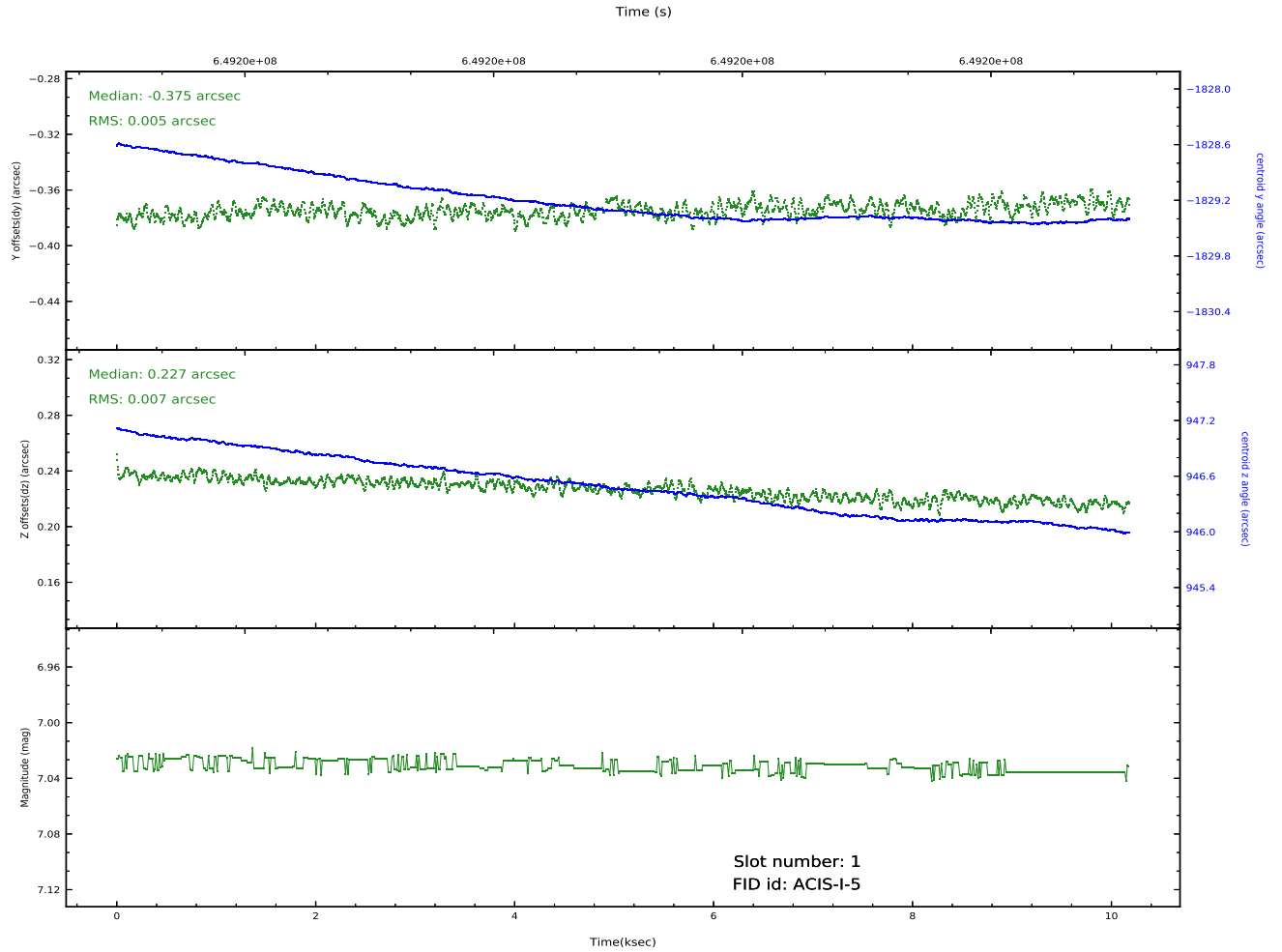
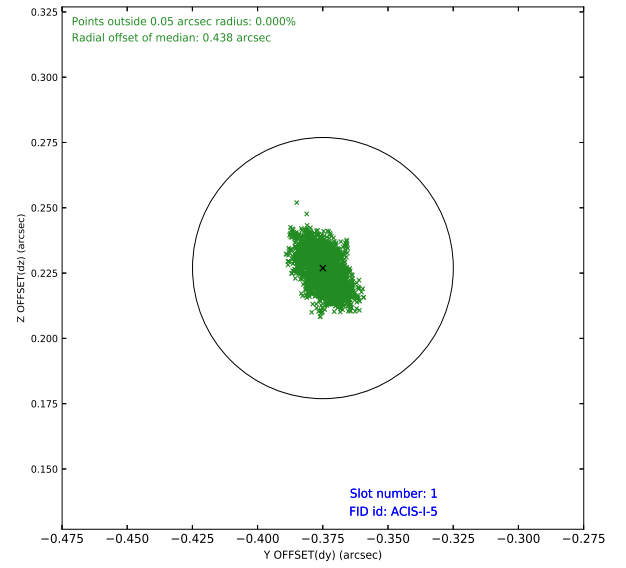
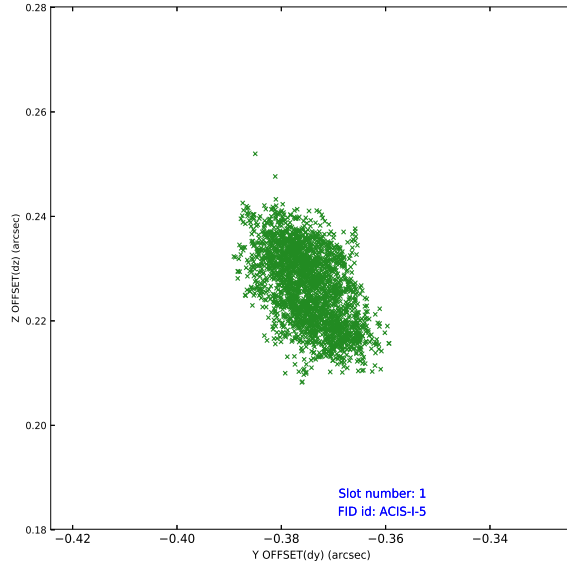


2.5 FID Slots

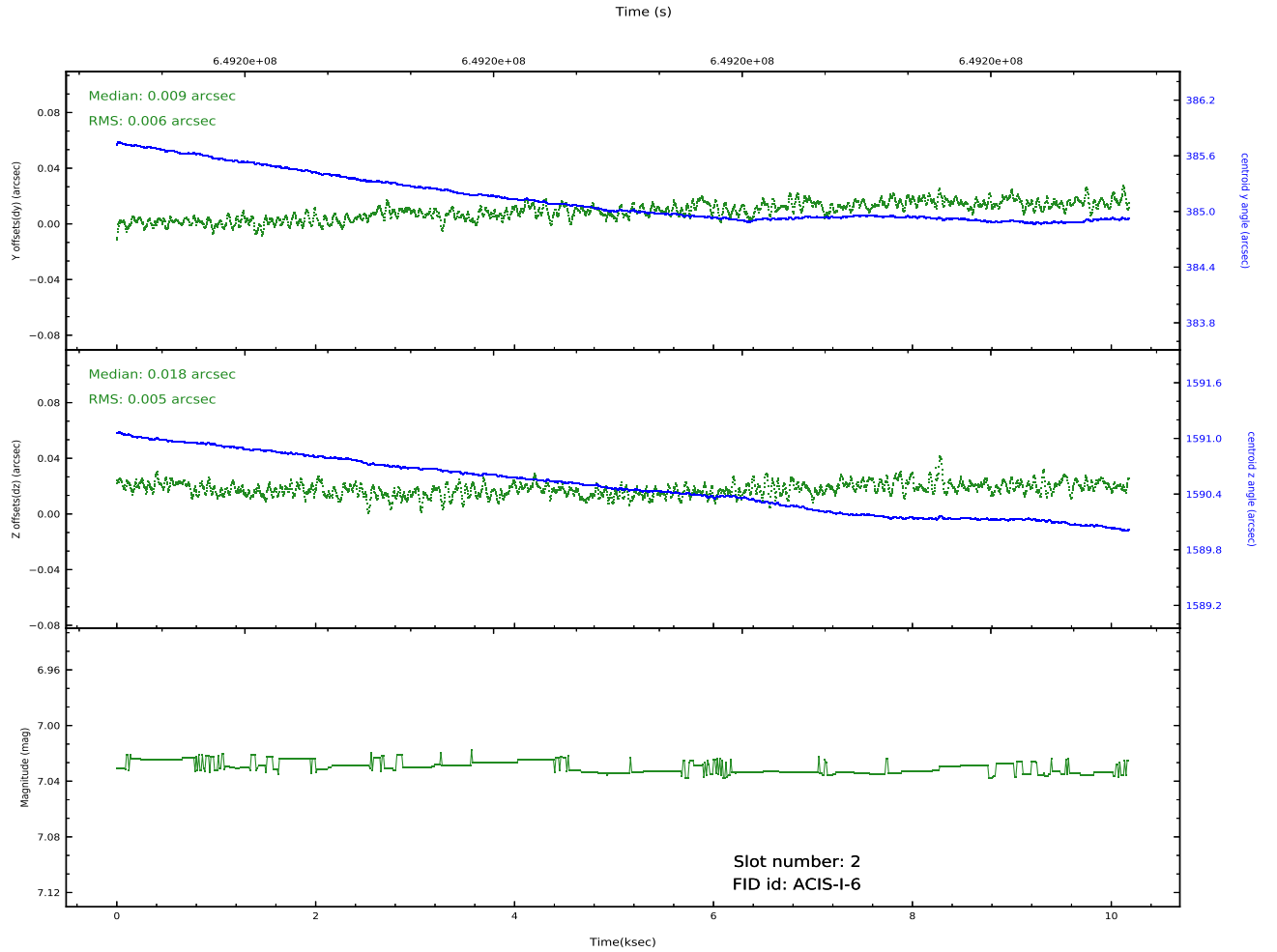
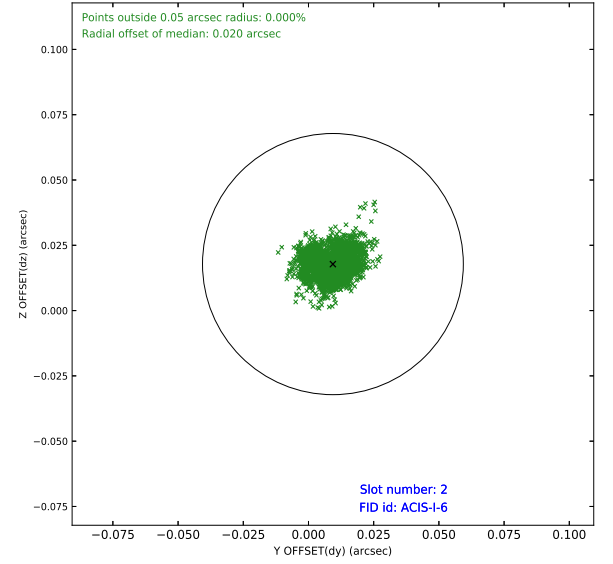
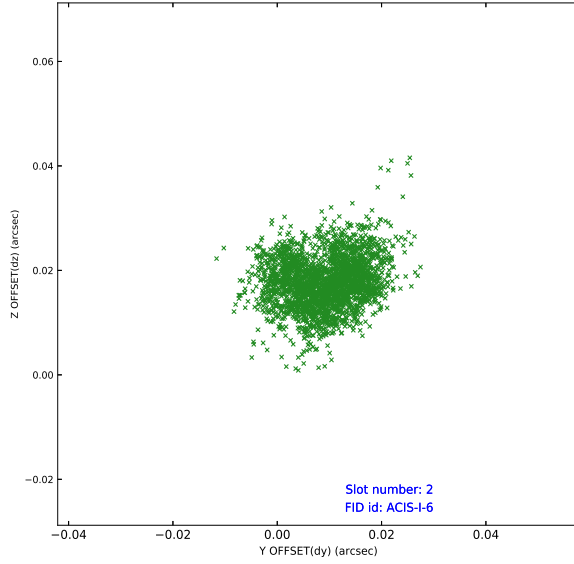
2.5.1 Slot 0



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)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.8921000761986

A.2 Comments