

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20512 - L2 Version 2
Chandra X-Ray Center

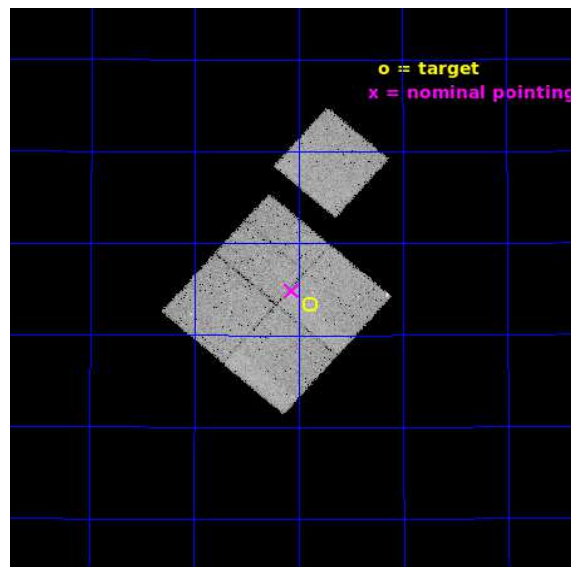
L2 Processing Date : Oct 28 2020

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

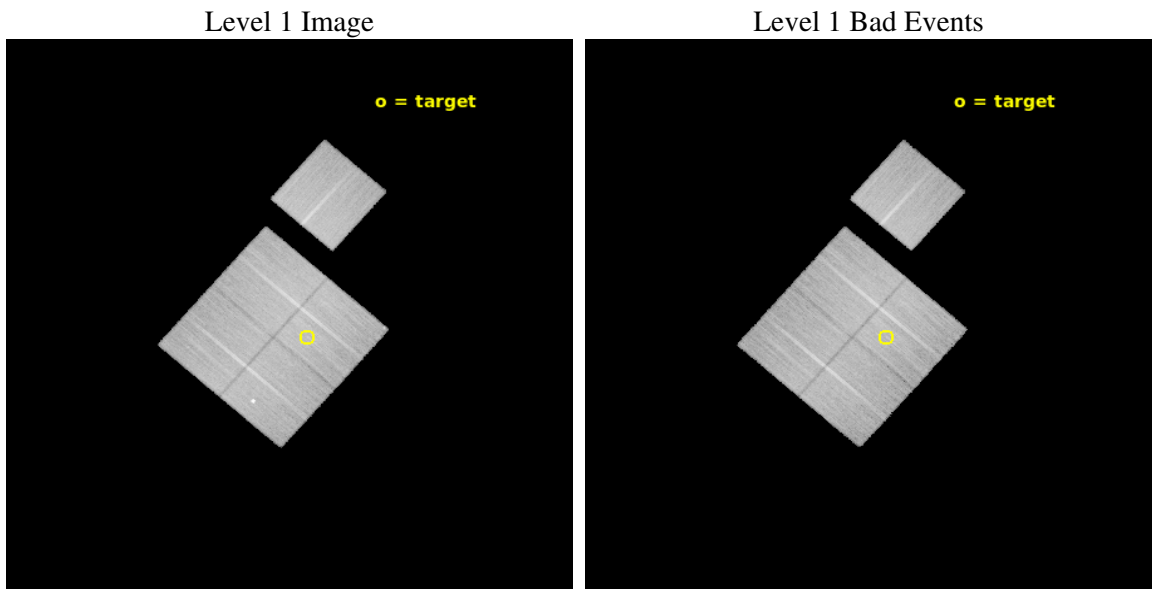
seq_num	801726	Sequence number
obs_id	20512	Observation id
title	Enabling precision cosmology with optically selected galaxy clusters	
observer	Roger Morris	Principal investigator
object	CIG J141754+432317	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.472083	Observer's specified target RA [deg]
dec_targ	43.389611	Observer's specified target Dec [deg]
ra_nom	214.51619679399	Nominal RA [deg]
dec_nom	43.414339363	Nominal Dec [deg]
roll_nom	41.171023588788	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29065.559243441	Sum of GTIs [s]
livetime	28685.796314172	Livetime [s]
ontime0	29068.700223684	Sum of GTIs [s]
ontime1	29065.559223533	Sum of GTIs [s]
ontime2	29068.700223684	Sum of GTIs [s]
ontime3	29065.559243441	Sum of GTIs [s]
ontime6	29062.418283224	Sum of GTIs [s]
l2events	104049	Number of level 2 events



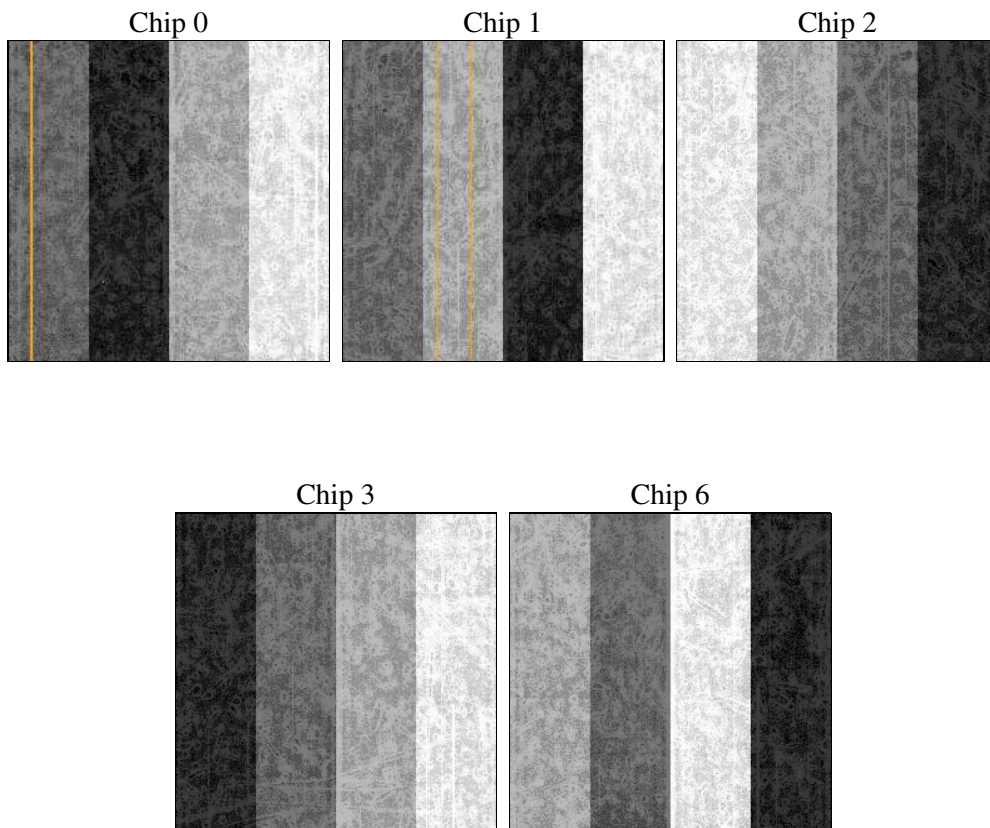
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	29065.559243441	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	29068.700223684	Sum of GTIs [s]
date	2020-10-28T14:32:21	Date and time of file creation	ontime1	29065.559223533	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	29068.700223684	Sum of GTIs [s]
			ontime3	29065.559243441	Sum of GTIs [s]
			ontime6	29062.418283224	Sum of GTIs [s]
			l1events	1042759	Number of level 1 events

2.1.4 Events

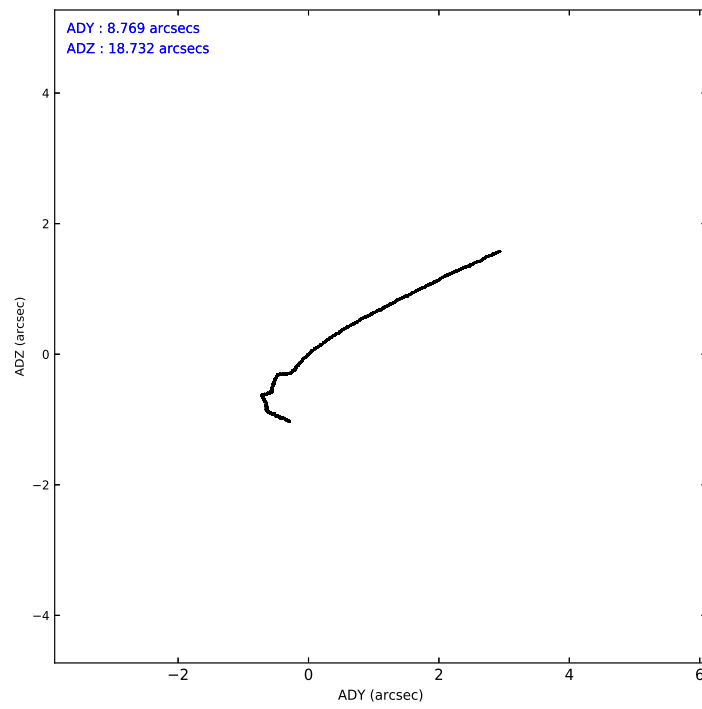
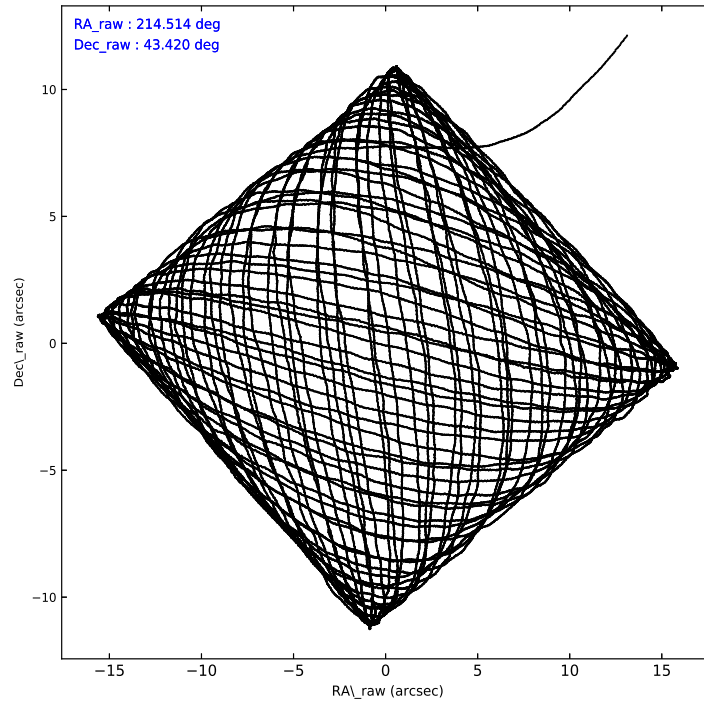
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	194195	201713	220101	213234	213516
rejected events	169683	171871	196196	188705	189194
rejected %	87%	85%	89%	88%	88%

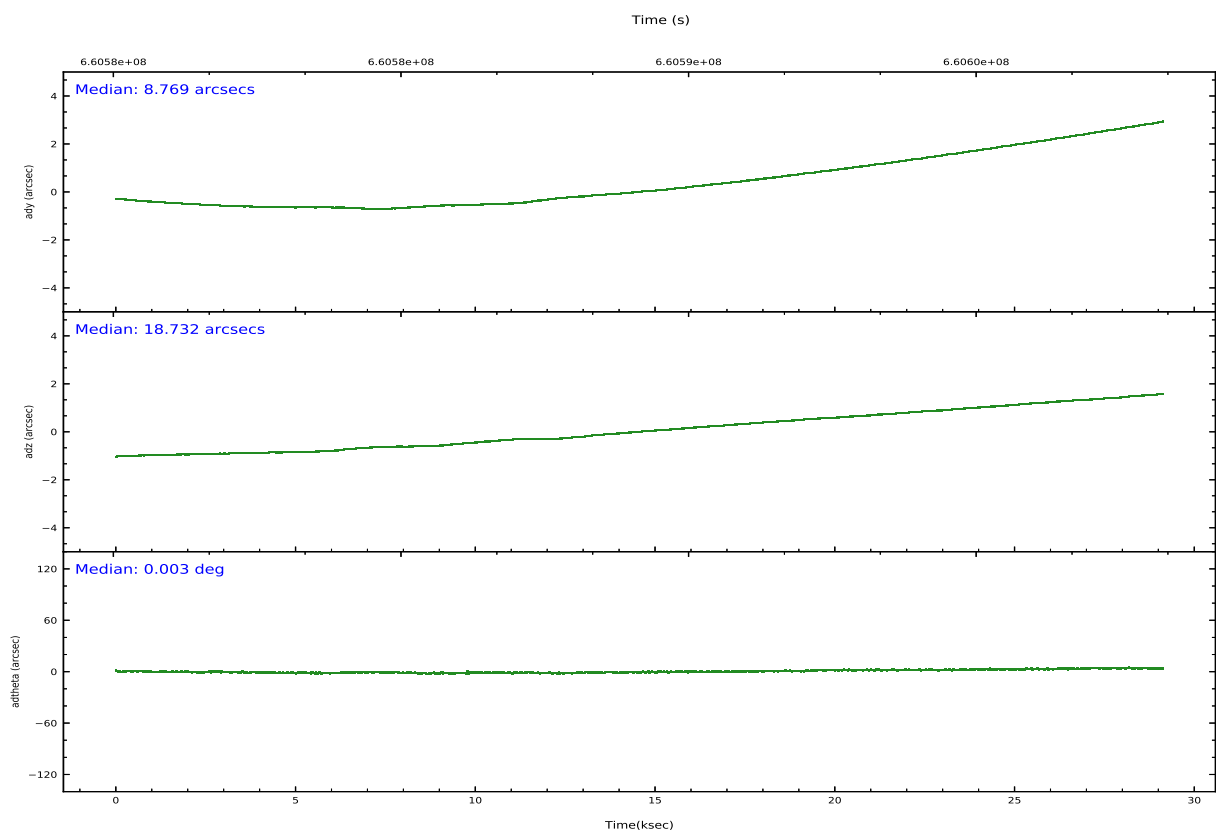
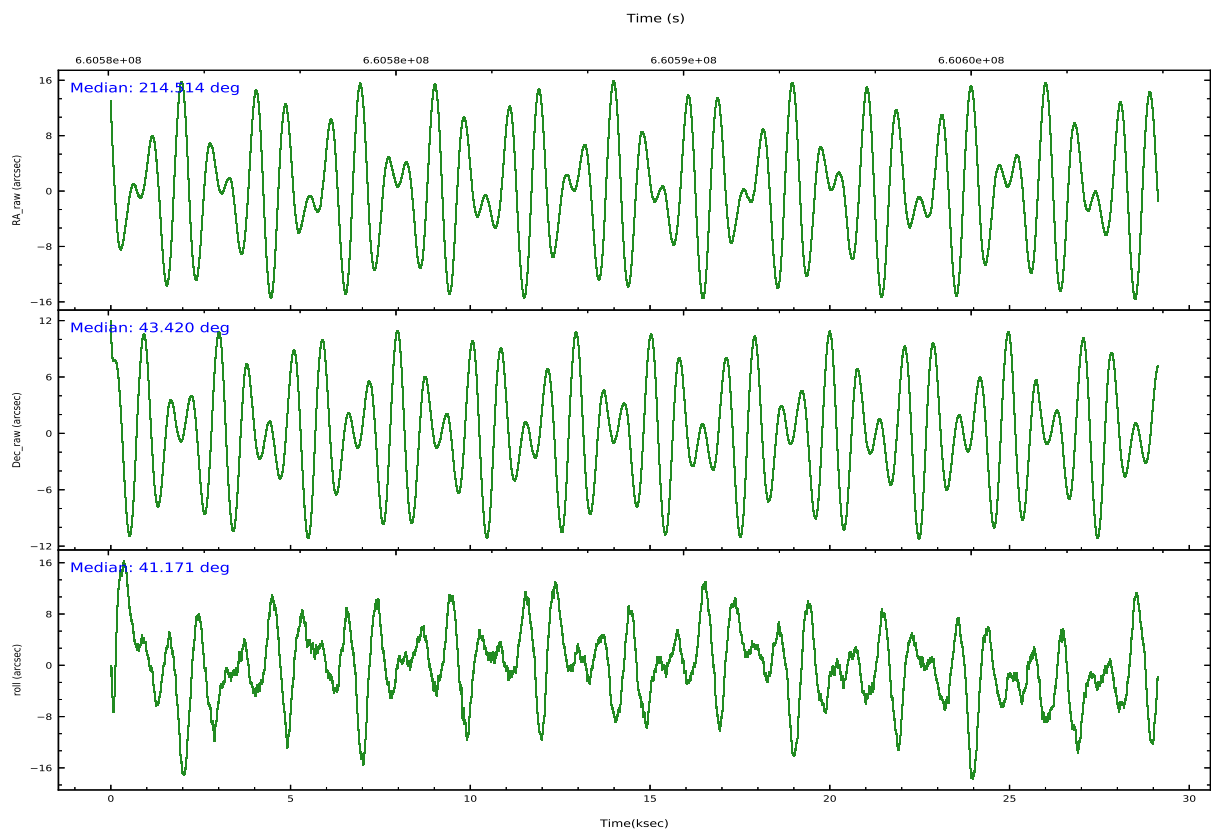
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8337	11666	8436	9785	7901
	4%	5%	3%	4%	3%
grade 1 events	130	131	141	137	102
	0%	0%	0%	0%	0%
grade 2 events	6492	7143	6030	5146	5852
	3%	3%	2%	2%	2%
grade 3 events	2443	2533	2395	2359	2394
	1%	1%	1%	1%	1%
grade 4 events	2264	2530	2375	2448	2353
	1%	1%	1%	1%	1%
grade 5 events	9300	9549	8694	10312	9826
	4%	4%	3%	4%	4%
grade 6 events	4980	5976	4674	4794	5825
	2%	2%	2%	2%	2%
grade 7 events	160249	162185	187356	178253	179263
	82%	80%	85%	83%	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	214.501967	214.51619679399	CCD I2 on	Y	Y
[deg] Pointing Dec	43.394028	43.414339363	CCD I3 on	Y	Y
[deg] Pointing Roll	40.979466	41.171023588788	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)	660576201.184000	660574691.22363	CCD S5 on	N	N
Observation start date	2018-12-07T13:22:12	2018-12-07T12:58:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	660605201.184000	660605824.57549	On-chip summing requested	N	N
Observation end date	2018-12-07T21:25:32	2018-12-07T21:37:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



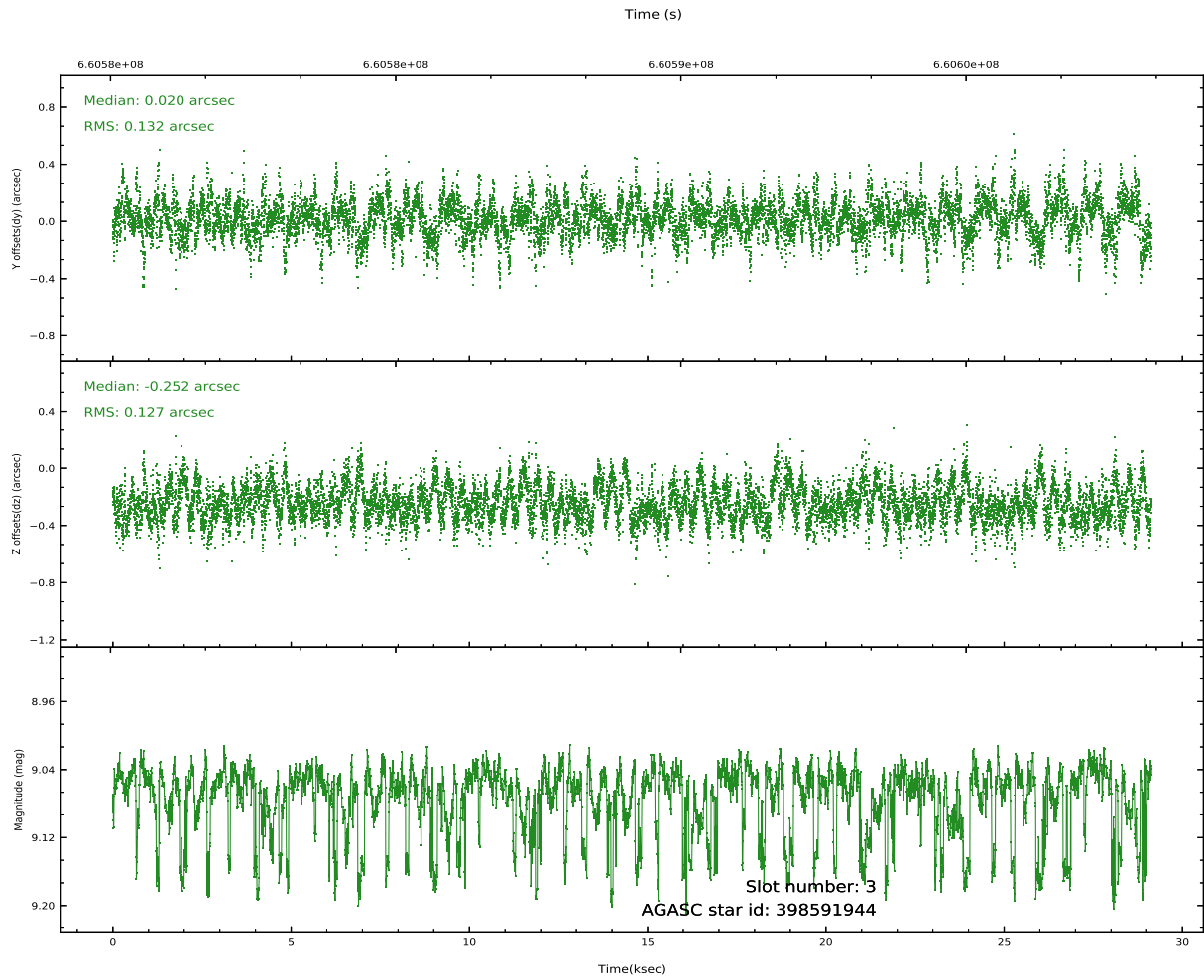
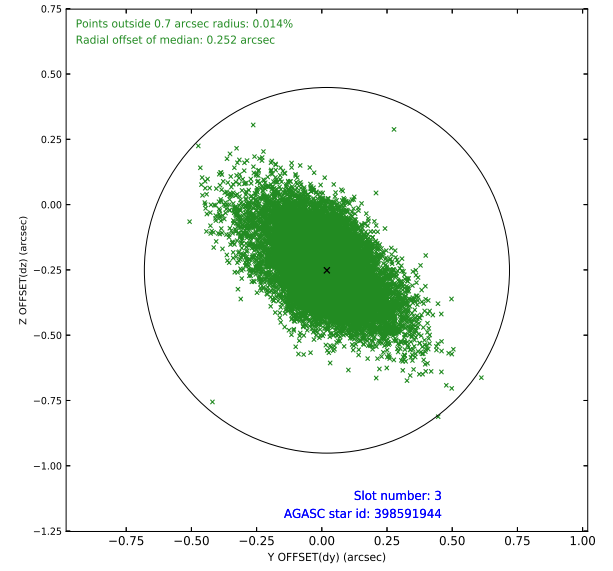
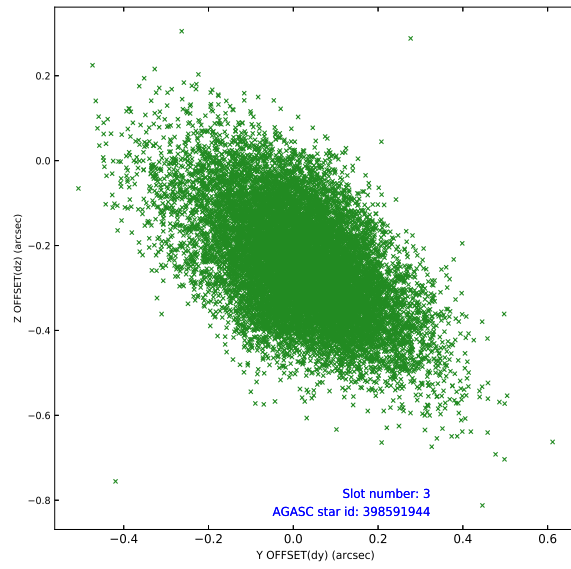


Slot Statistics

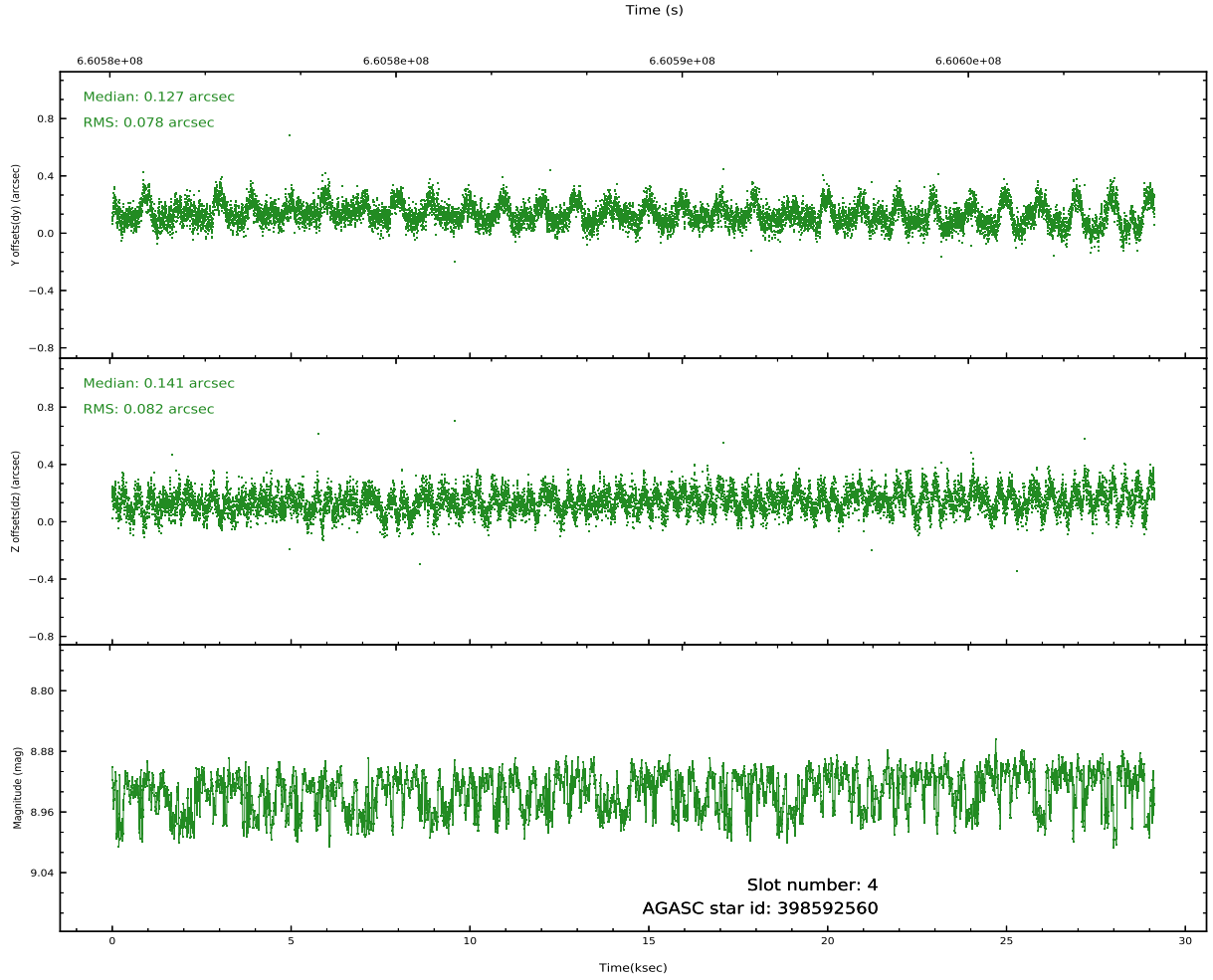
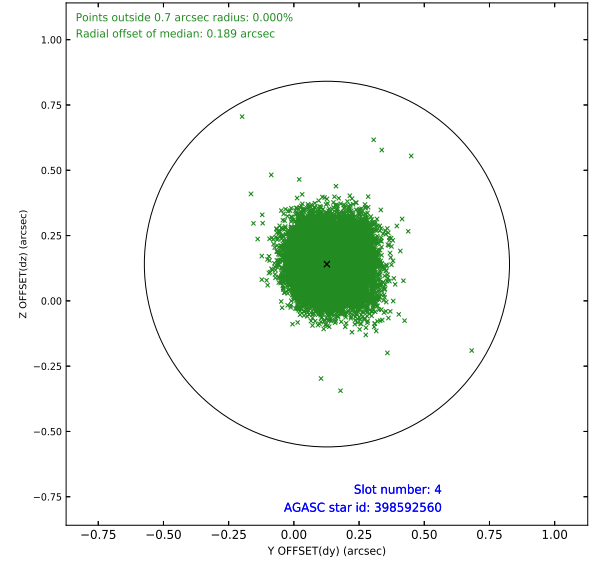
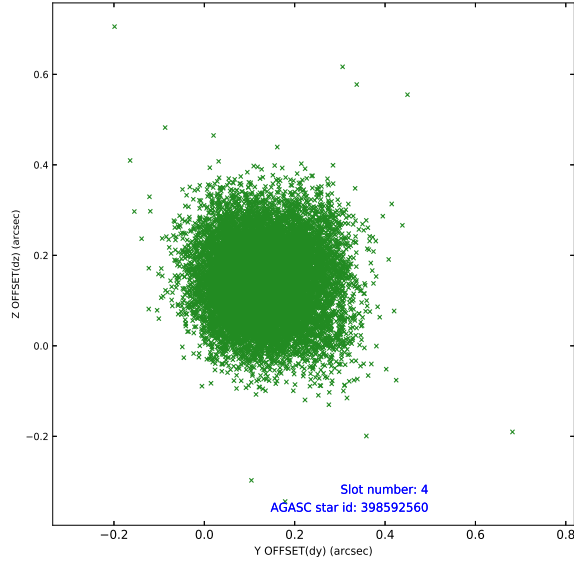
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.09	7106	1.000	0.280	-0.217	0.024	0.081	0.000000	0.000000	930.52	-947
1	FID		ACIS-I-5	7.07	7106	1.000	-0.377	0.223	0.015	0.046	0.000000	0.000000	-1818.04	950
2	FID		ACIS-I-6	7.08	7106	1.000	0.006	0.072	0.027	0.068	0.000000	0.000000	395.91	1594
3	GUIDE	used	398591944	9.06	14186	1.000	0.020	-0.252	0.185	0.337	215.630355	43.283529	1984.25	-2224
4	GUIDE	used	398592560	8.93	14202	1.000	0.127	0.141	0.120	0.195	214.590700	43.125816	-456.37	-880
5	GUIDE	used	398597832	9.53	14192	1.000	-0.132	-0.181	0.175	0.299	213.515231	43.585959	-1479.61	2220
6	GUIDE	used	398591440	7.19	14209	1.000	-0.100	-0.012	0.148	0.260	215.624972	43.210114	1803.17	-2416
7	GUIDE	used	398591880	9.60	14133	1.000	0.096	0.279	0.197	0.328	215.009235	42.817914	-345.74	-2440

2.4 Star Slots

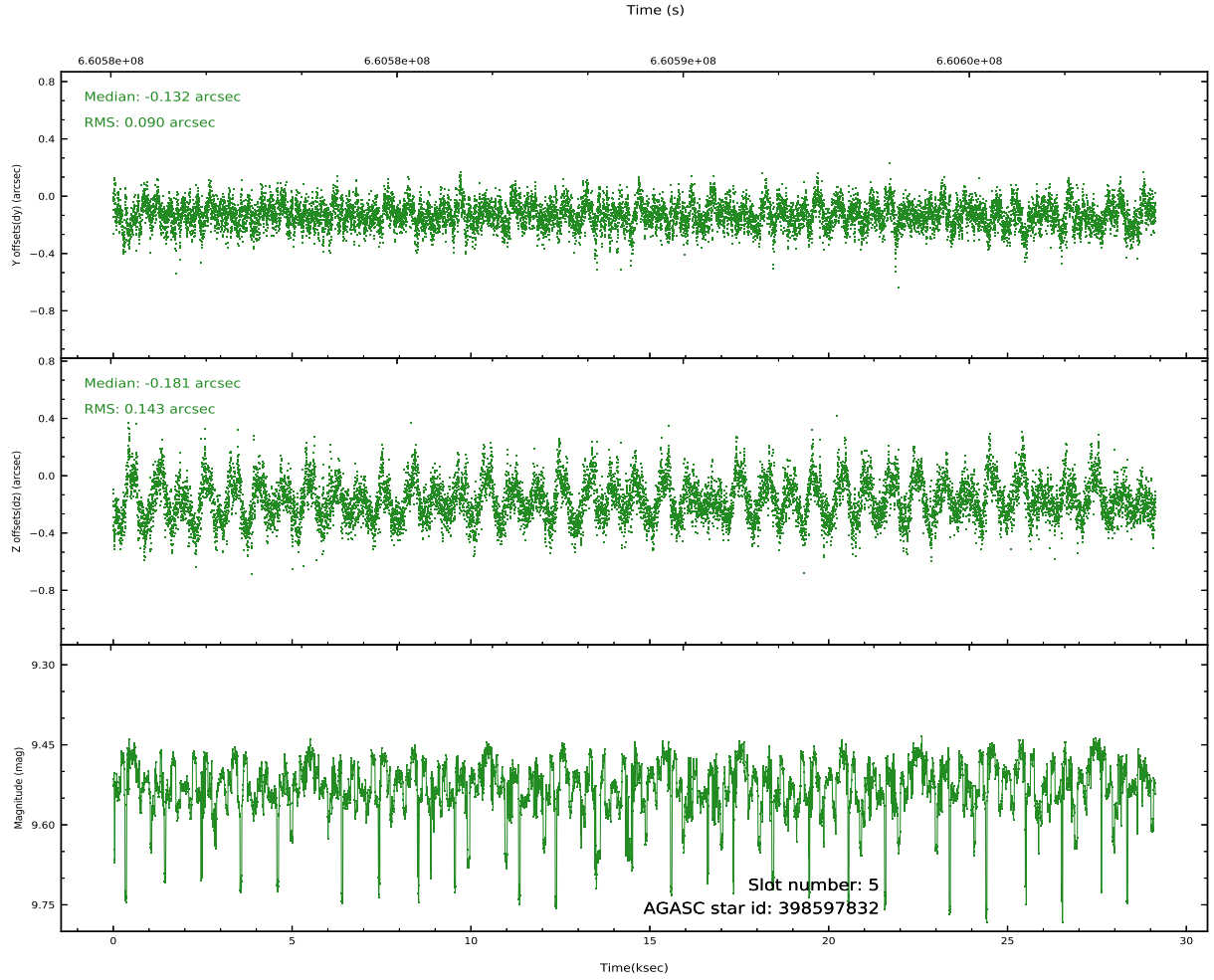
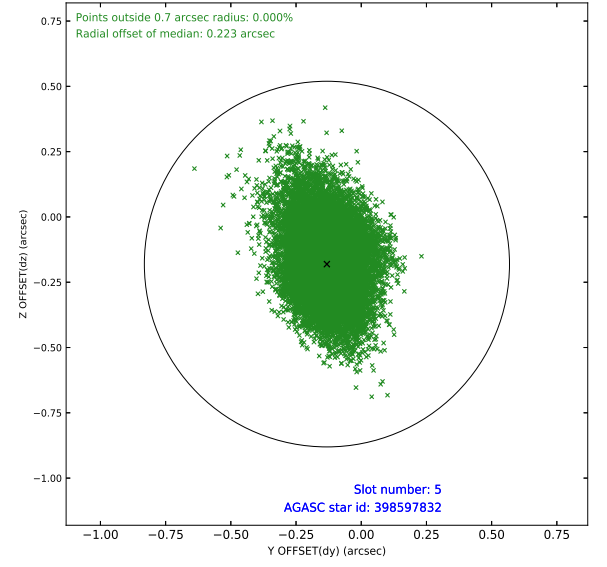
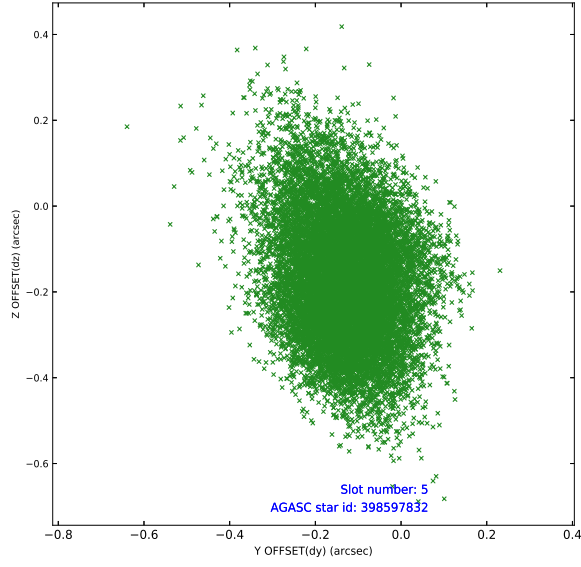
2.4.1 Slot 3



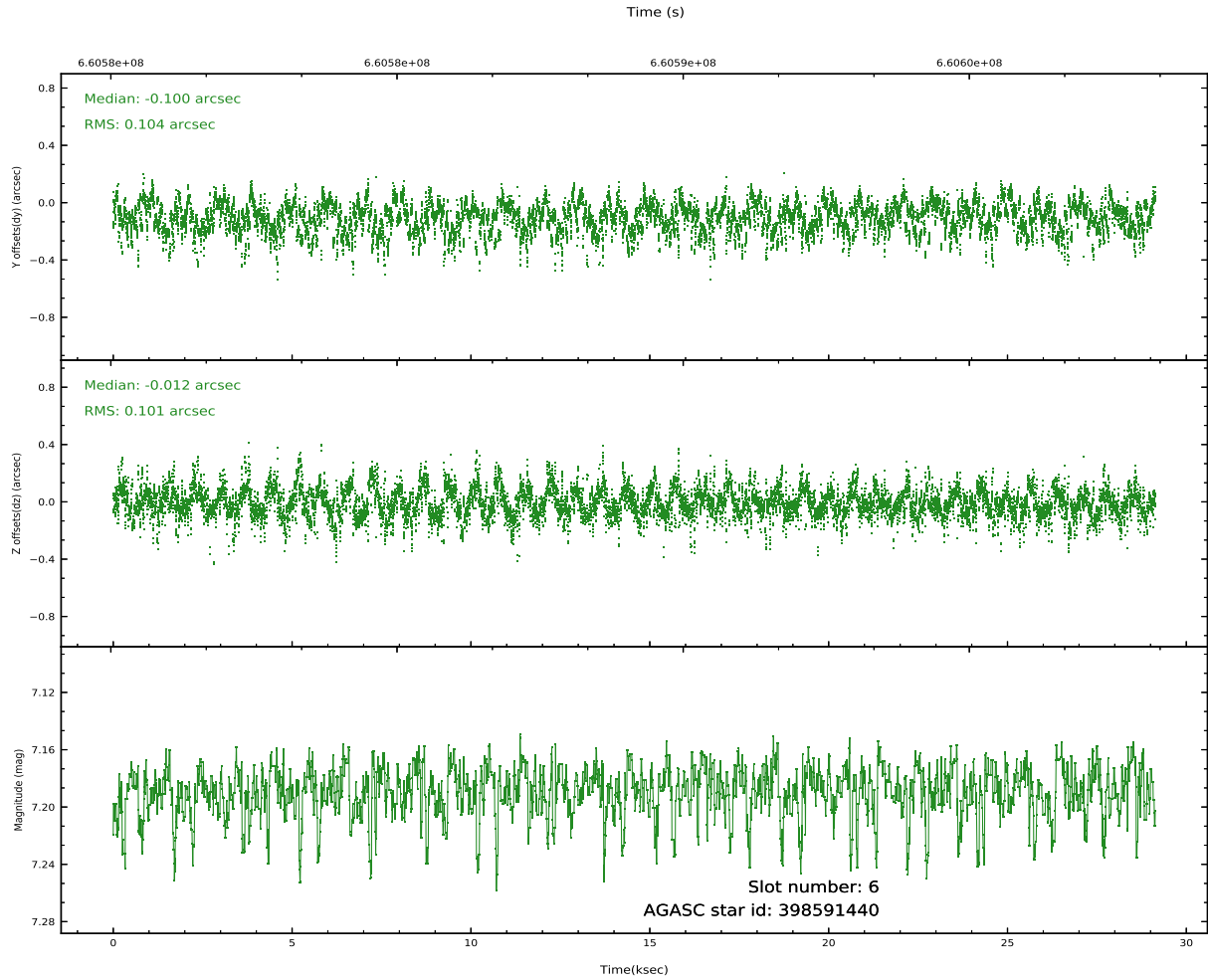
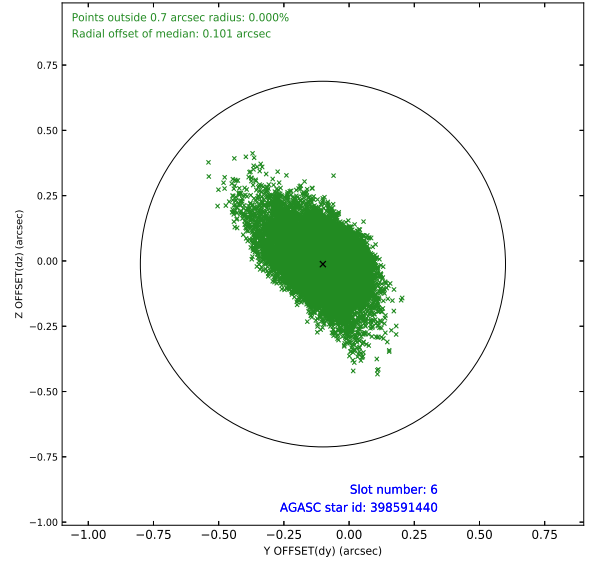
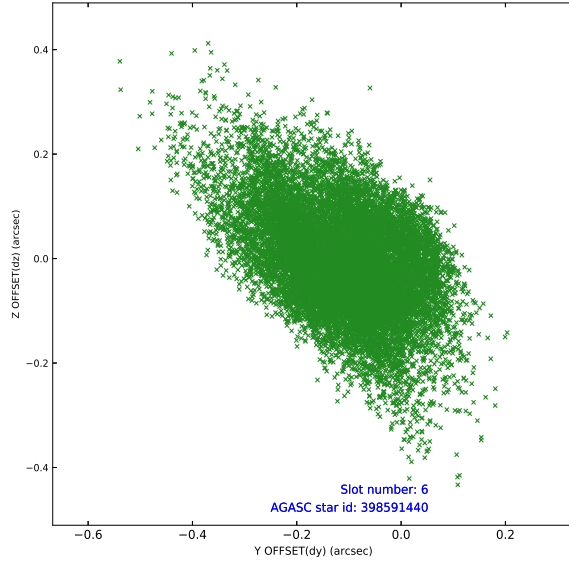
2.4.2 Slot 4



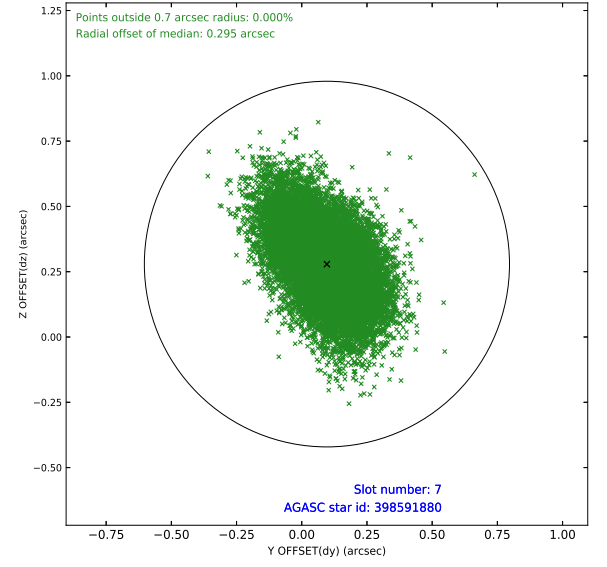
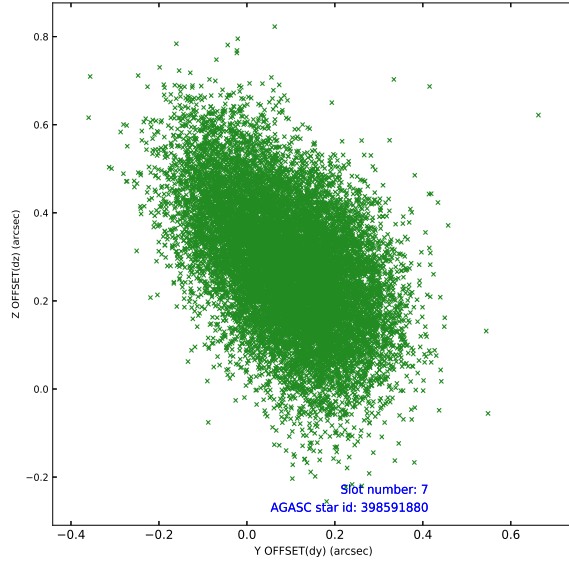
2.4.3 Slot 5



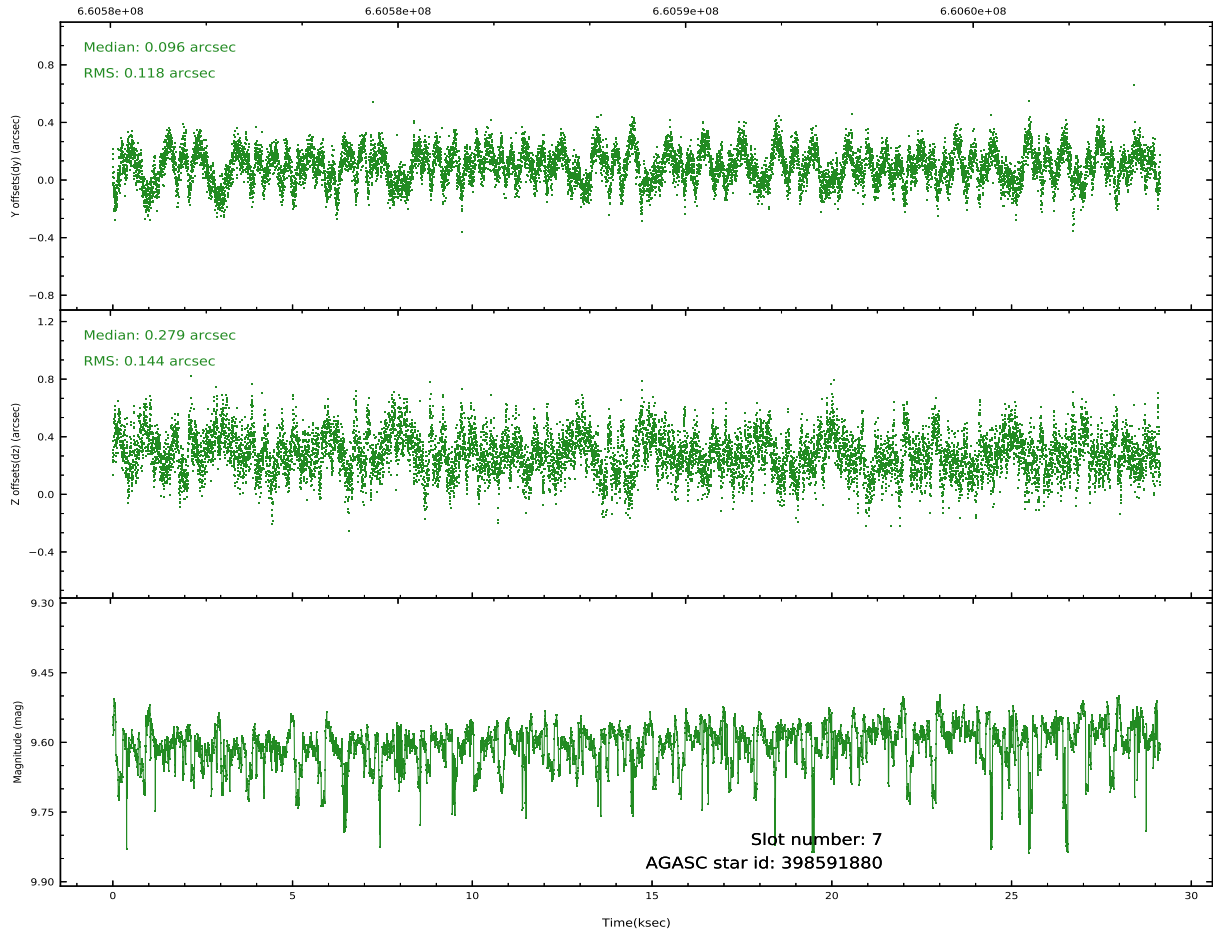
2.4.4 Slot 6



2.4.5 Slot 7

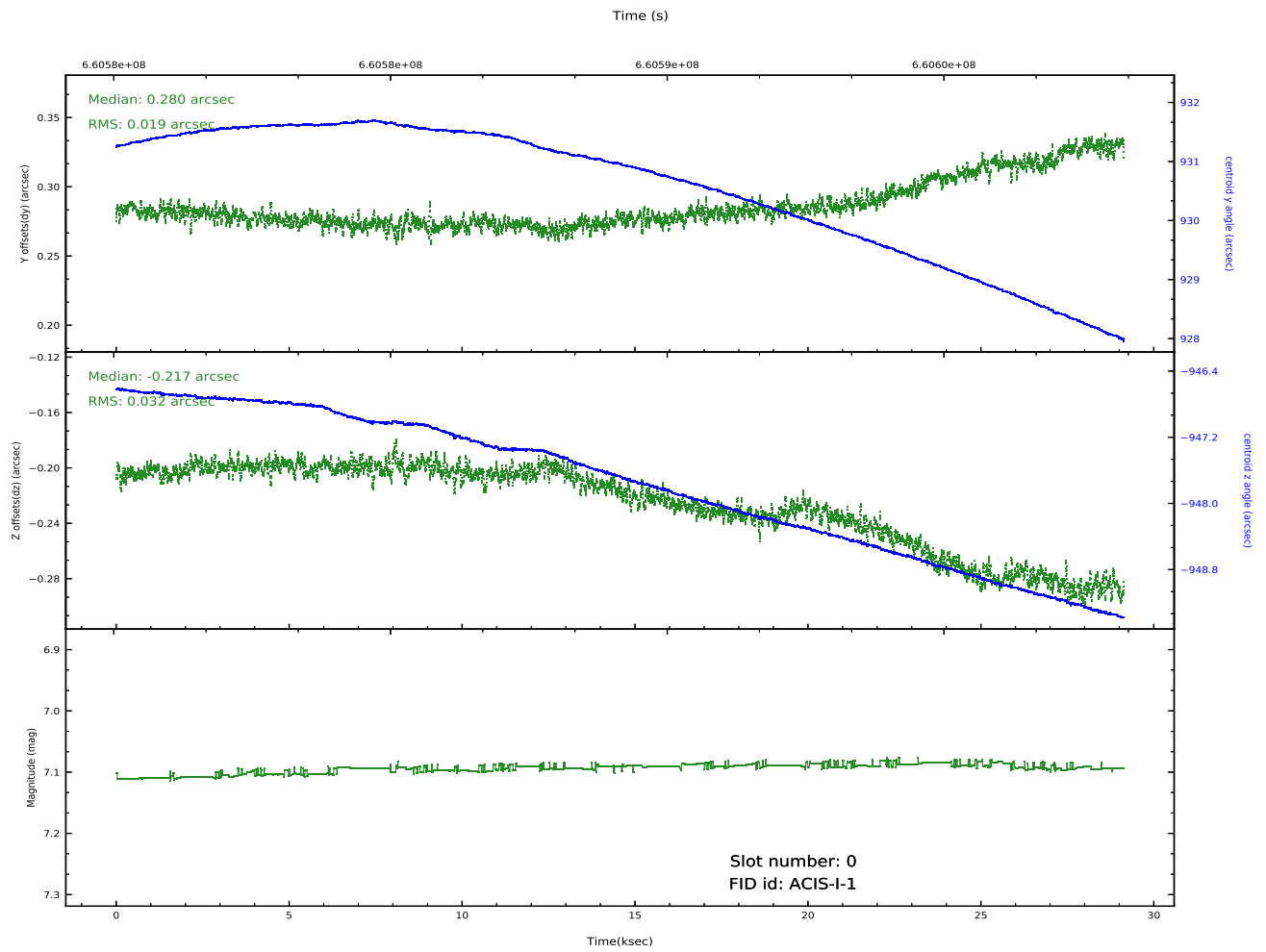
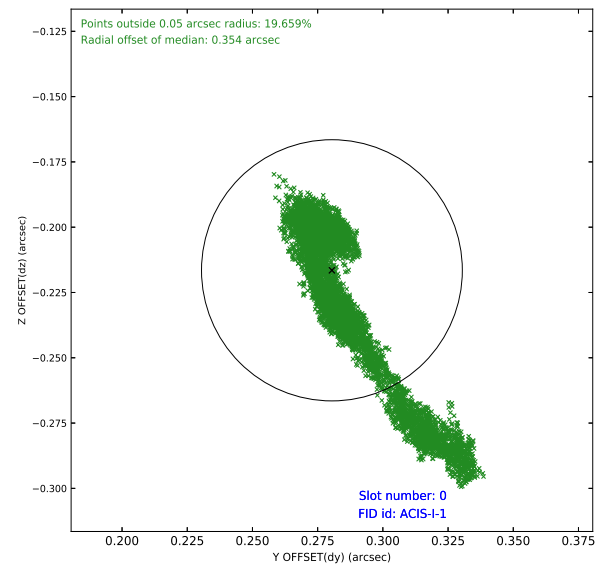
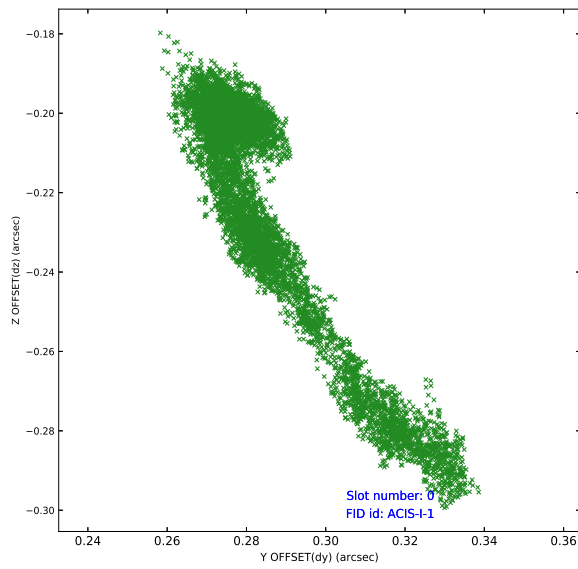


Time (s)

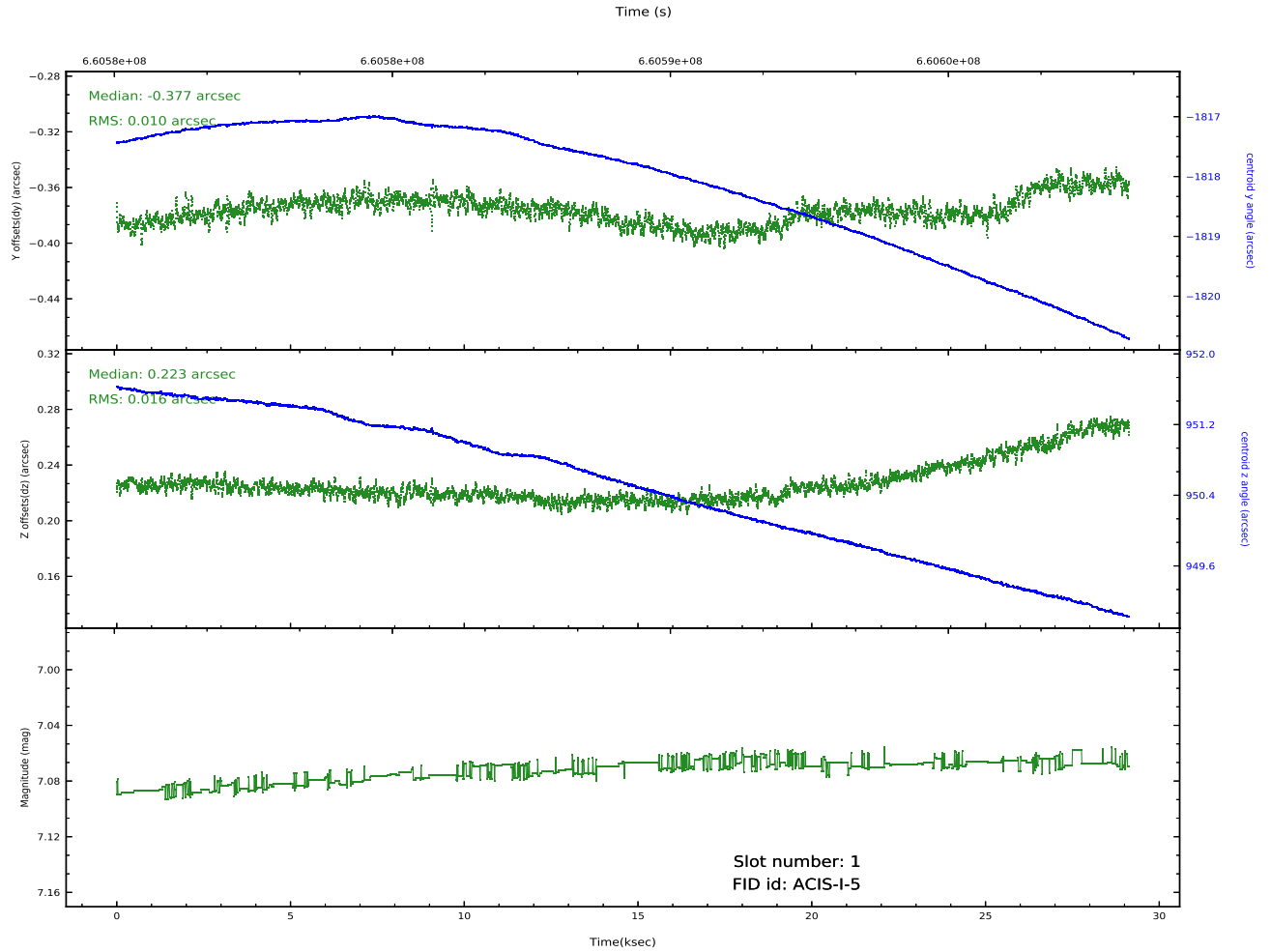
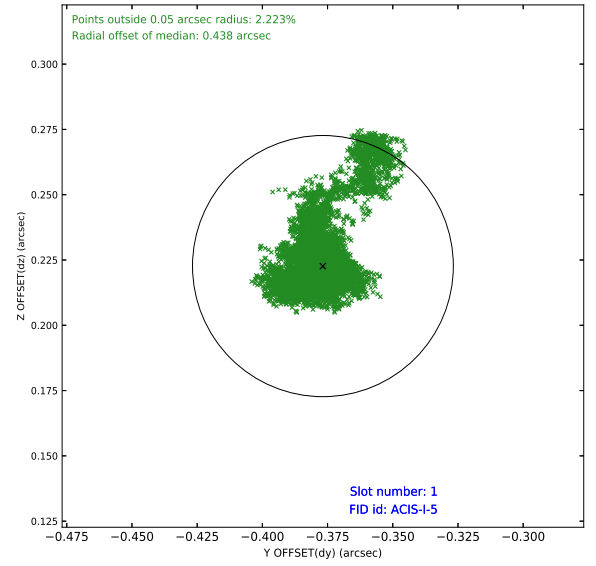
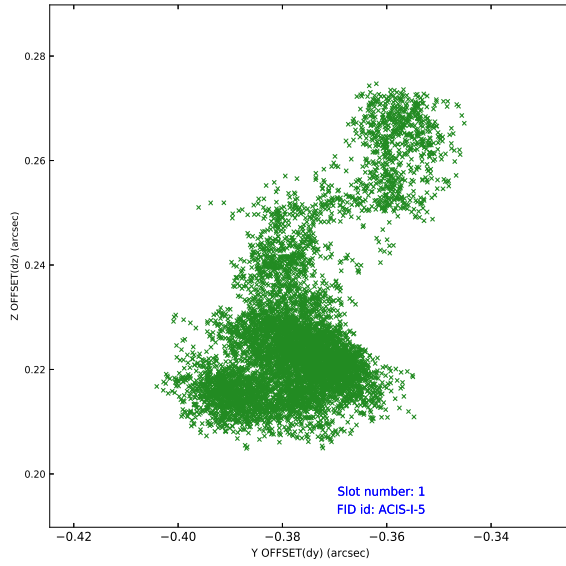


2.5 FID Slots

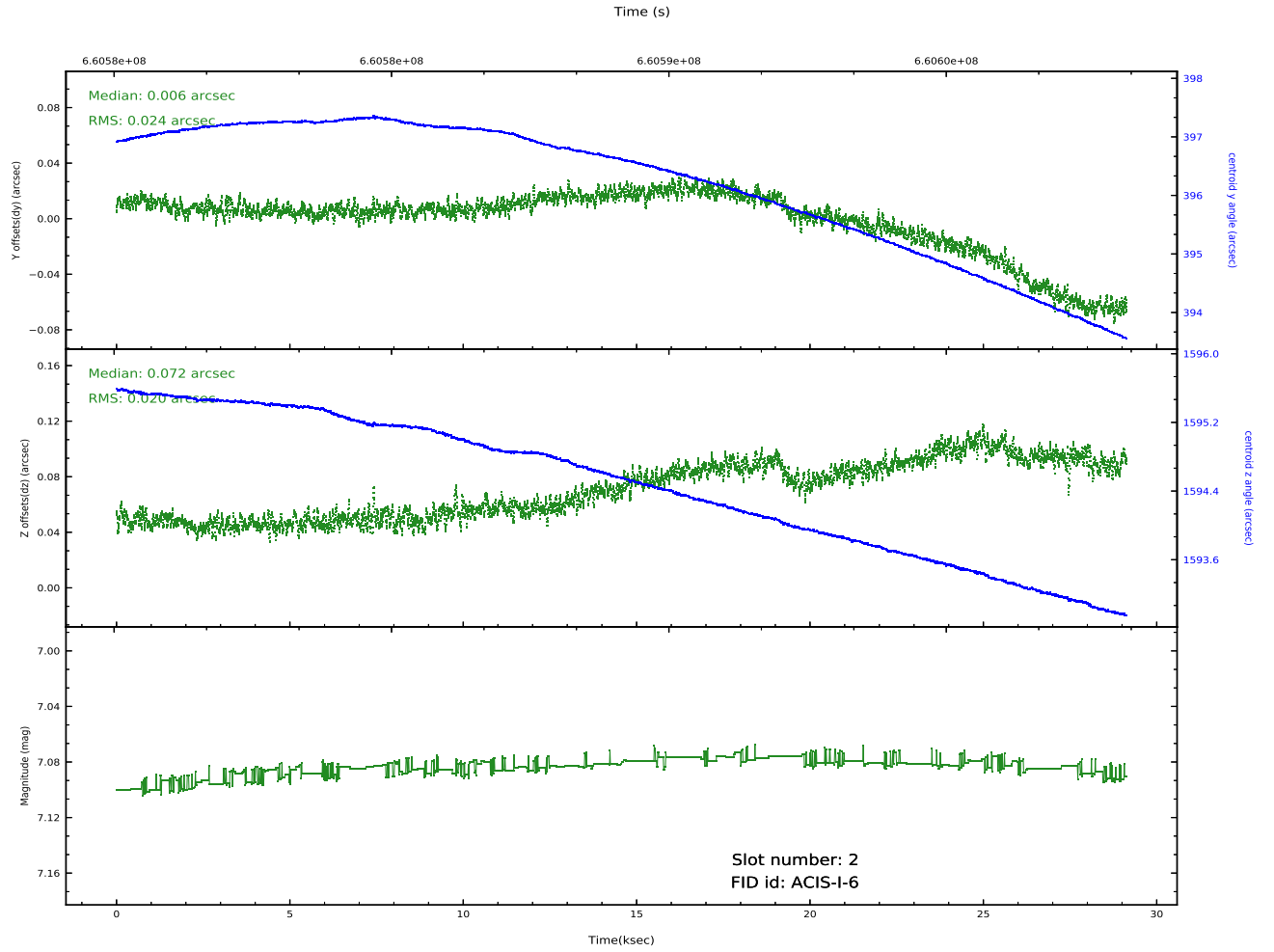
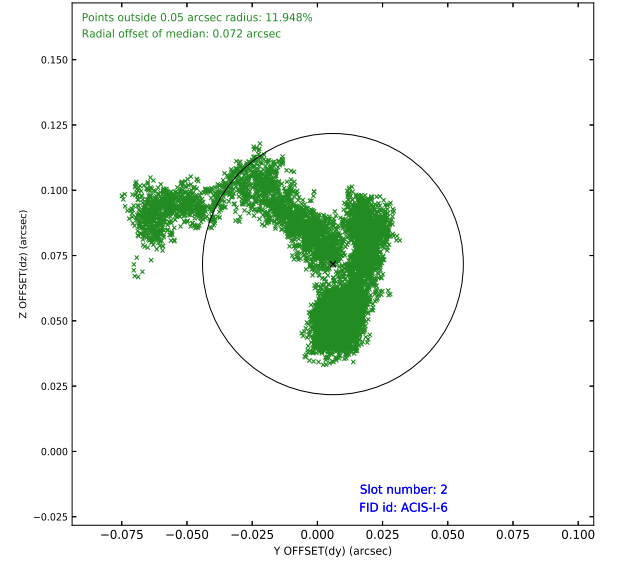
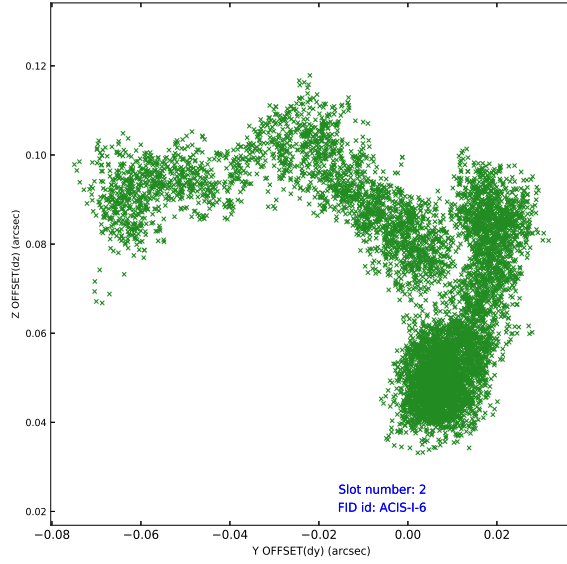
2.5.1 Slot 0



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)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.065559243441

A.2 Comments