

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5717 - L2 Version 5
Chandra X-Ray Center

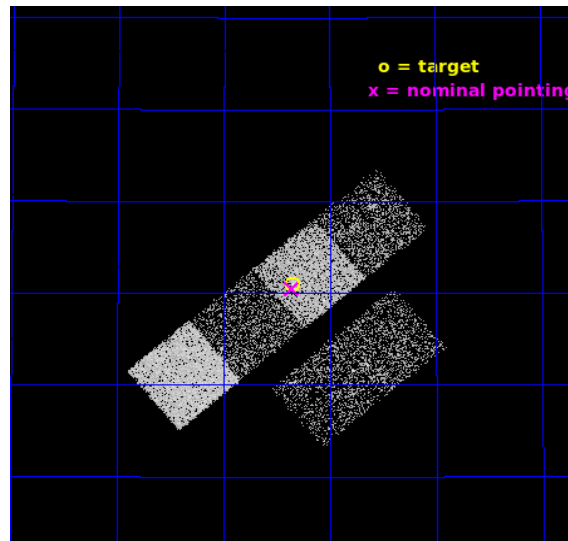
L2 Processing Date : Oct 10 2020

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1 Front

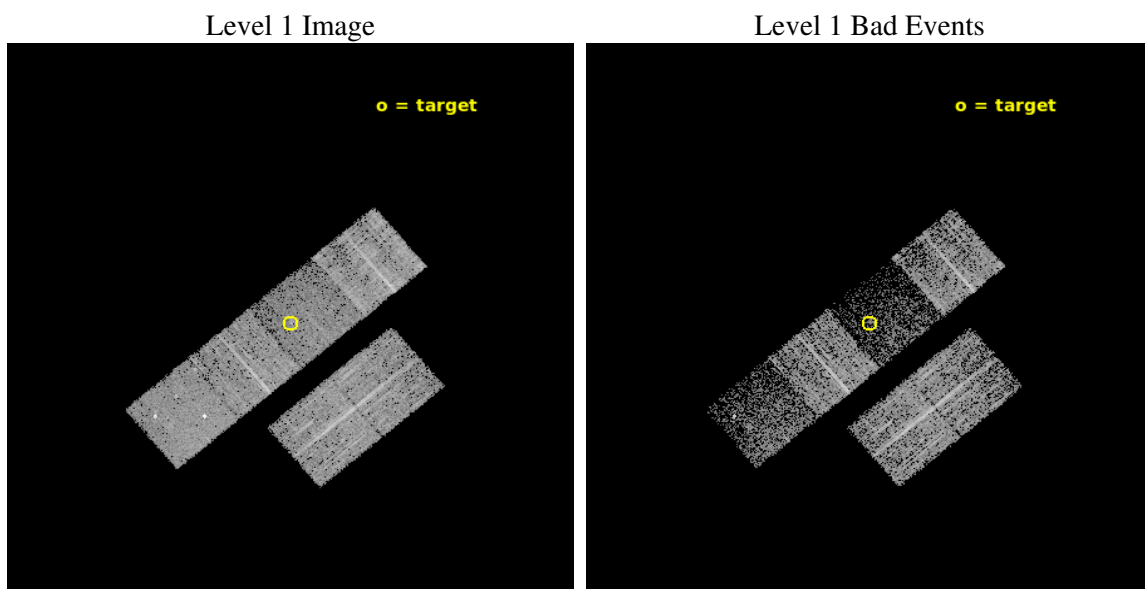
seq_num	701139	Sequence number
obs_id	5717	Observation id
title	What kind of Jets does Nature make? X-ray characterization of the FIRST Flat Spectrum Sample	Proposal title
observer	Dr. Giovanni Fossati	Principal investigator
object	2MASX J14492067+4221013	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	222.33625	Observer's specified target RA [deg]
dec_targ	42.350389	Observer's specified target Dec [deg]
ra_nom	222.33929108809	Nominal RA [deg]
dec_nom	42.341603043921	Nominal Dec [deg]
roll_nom	319.72005853517	Nominal Roll [deg]
revision	5	Processing version of data
ontime	4358.3999837637	Sum of GTIs [s]
livetime	4303.2112988559	Livetime [s]
ontime2	4358.3999837637	Sum of GTIs [s]
ontime3	4355.1590434015	Sum of GTIs [s]
ontime5	4358.3999837637	Sum of GTIs [s]
ontime6	4358.3999837637	Sum of GTIs [s]
ontime7	4358.3999837637	Sum of GTIs [s]
ontime8	4358.3999837637	Sum of GTIs [s]
l2events	25111	Number of level 2 events



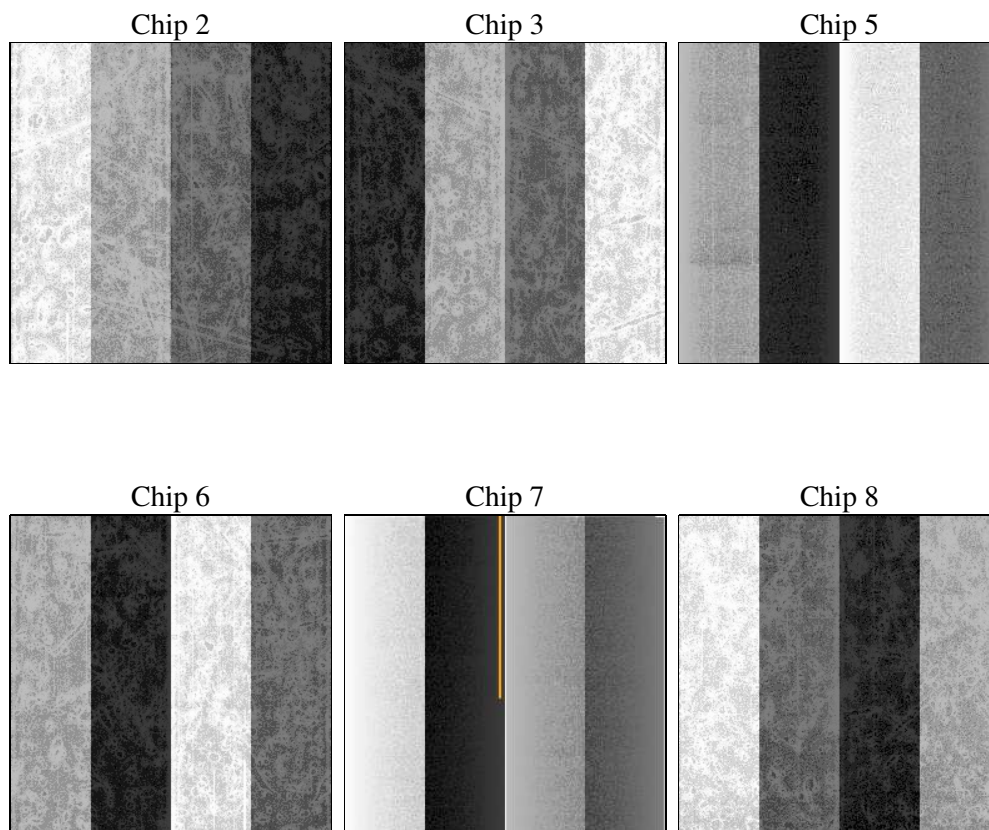
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4400.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	4358.3999837637	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	4358.3999837637	Sum of GTIs [s]
date	2020-10-11T01:01:51	Date and time of file creation	ontime3	4355.1590434015	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	4358.3999837637	Sum of GTIs [s]
			ontime6	4358.3999837637	Sum of GTIs [s]
			ontime7	4358.3999837637	Sum of GTIs [s]
			ontime8	4358.3999837637	Sum of GTIs [s]
			l1events	132509	Number of level 1 events

2.1.4 Events

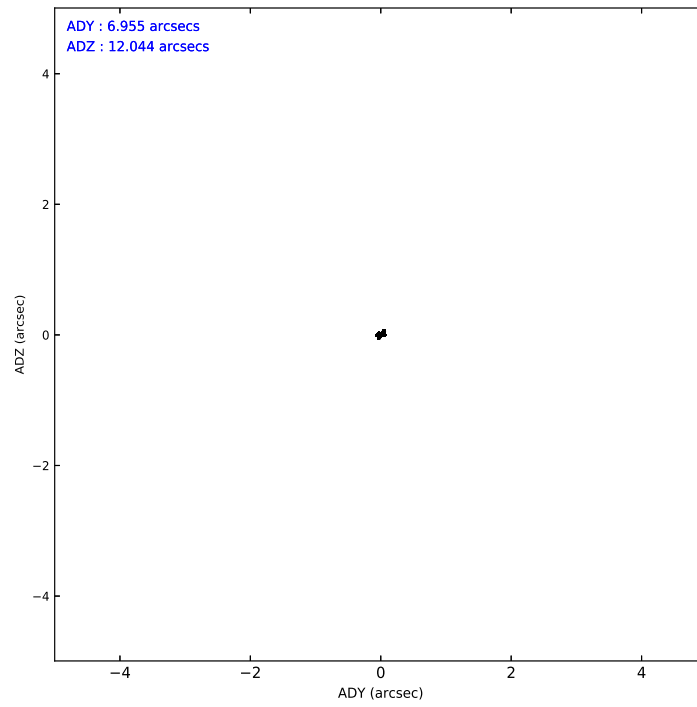
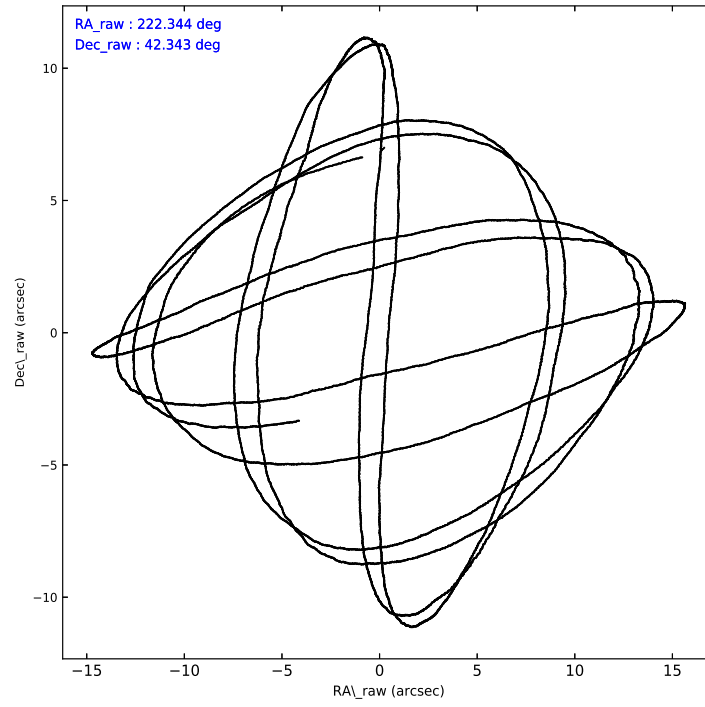
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	25191	22153	21884	22549	13565	27167
rejected events	23277	20303	8560	20476	5914	20247
rejected %	92%	91%	39%	90%	43%	74%

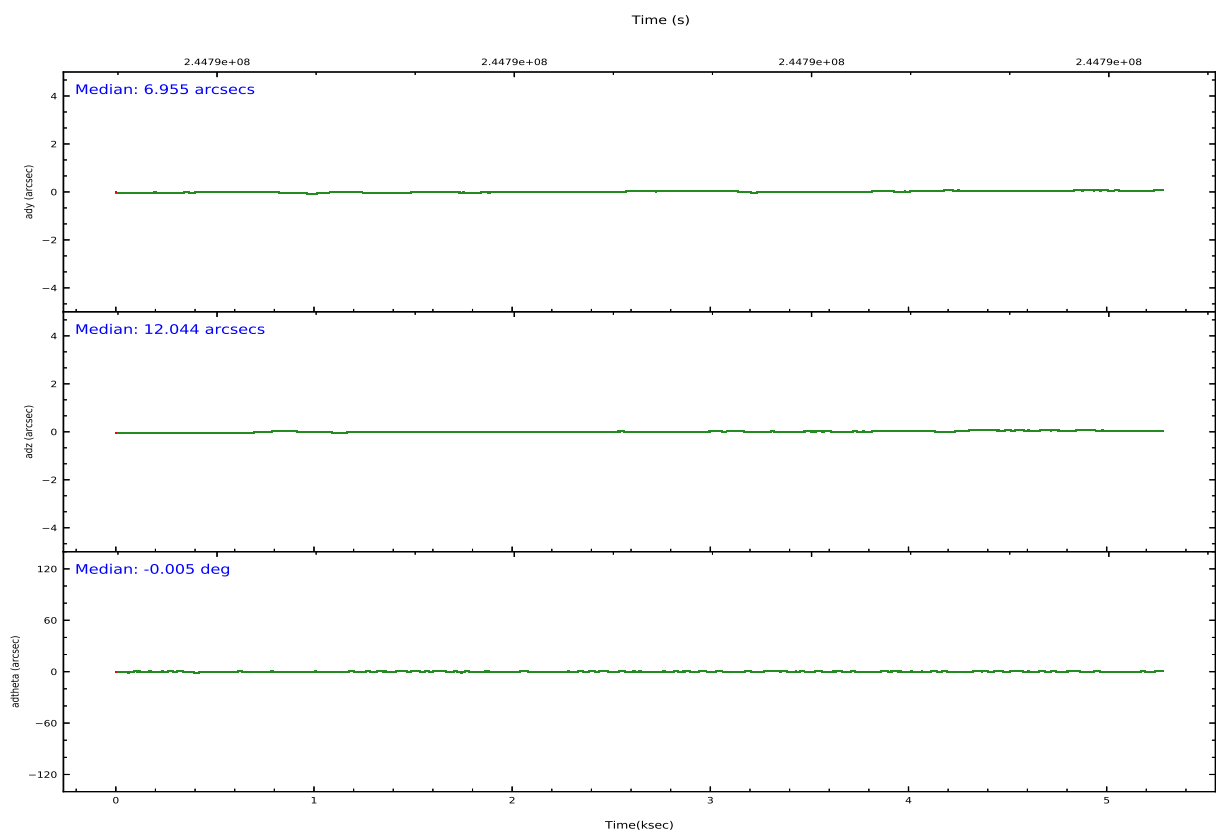
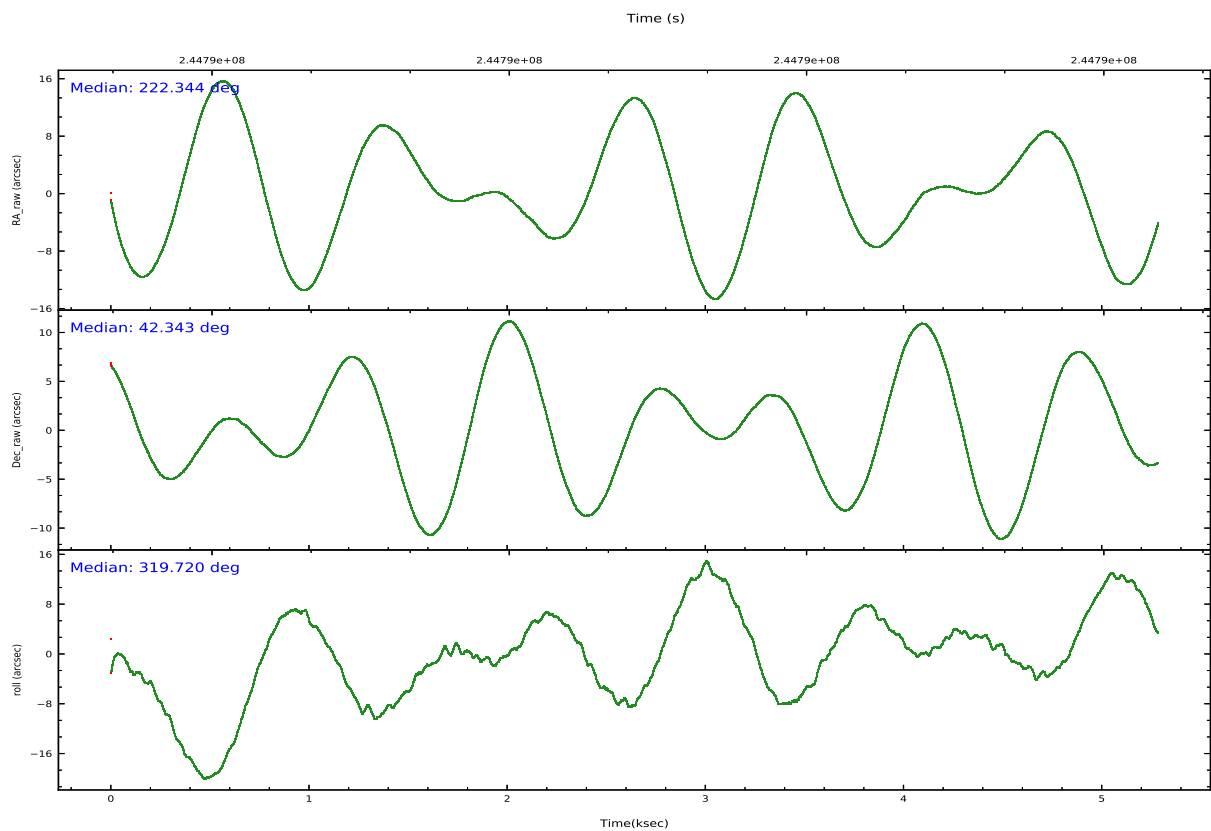
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	750	751	2588	832	964	2007
	2%	3%	11%	3%	7%	7%
grade 1 events	17	9	42	14	28	26
	0%	0%	0%	0%	0%	0%
grade 2 events	448	380	3942	455	1808	1596
	1%	1%	18%	2%	13%	5%
grade 3 events	188	225	748	241	804	753
	0%	1%	3%	1%	5%	2%
grade 4 events	228	212	702	201	836	756
	0%	0%	3%	0%	6%	2%
grade 5 events	365	487	1796	476	1507	812
	1%	2%	8%	2%	11%	2%
grade 6 events	302	289	5370	347	3255	1825
	1%	1%	24%	1%	23%	6%
grade 7 events	22893	19800	6696	19983	4363	19392
	90%	89%	30%	88%	32%	71%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	222.308255	222.33929108809	Subarray requested	NONE	NONE
[deg] Pointing Dec	42.347437	42.341603043921	Alternating exposures requested	N	N
[deg] Pointing Roll	319.584068	319.72005853517	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	244787874.184000	244786564.92412			
Observation start date	2005-10-04T04:36:50	2005-10-04T04:16:04			
[s] Observation end time (MET)	244792274.184000	244793211.02443			
Observation end date	2005-10-04T05:50:10	2005-10-04T06:06:51			
Read mode	TIMED	TIMED			

2.3 Aspect



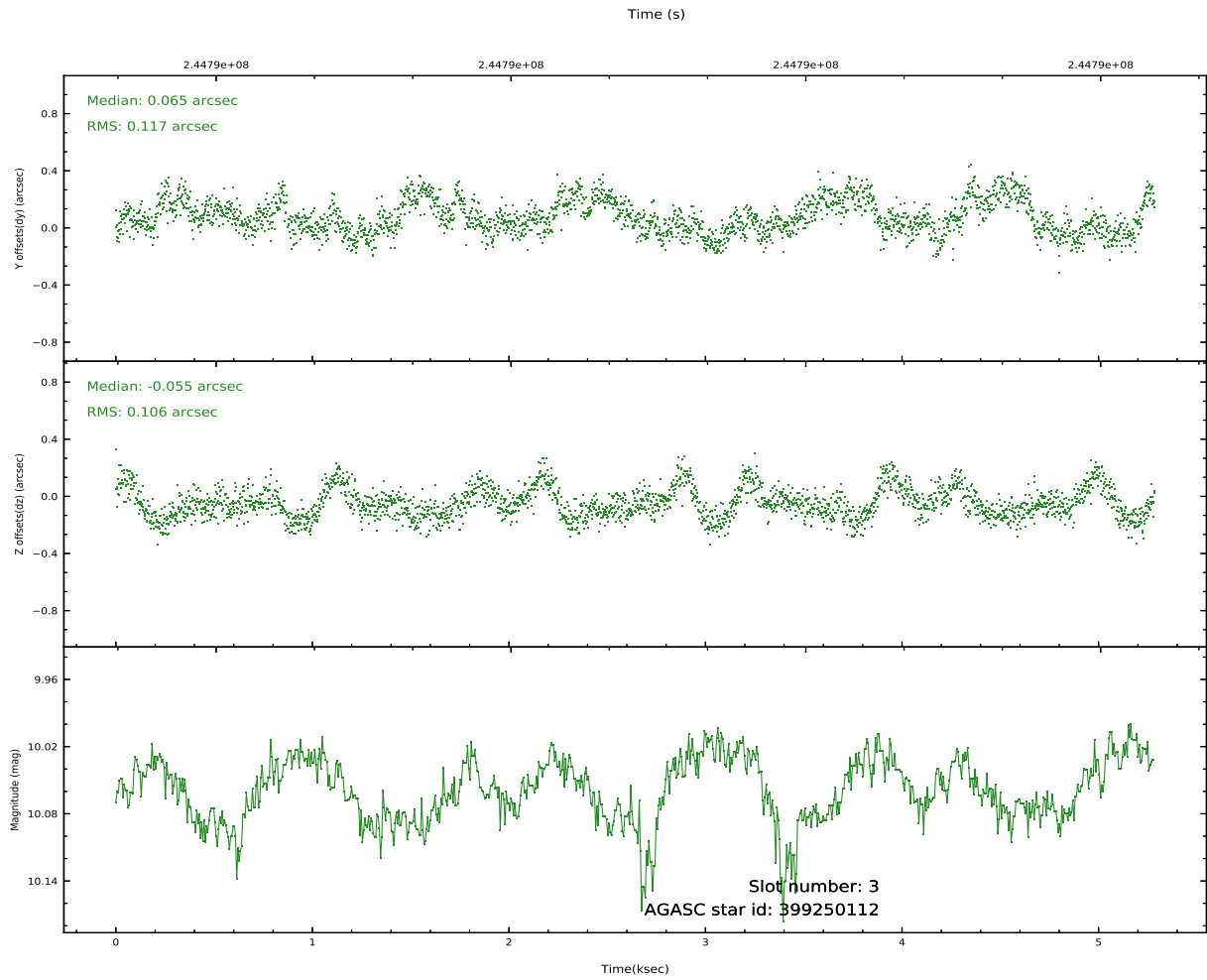
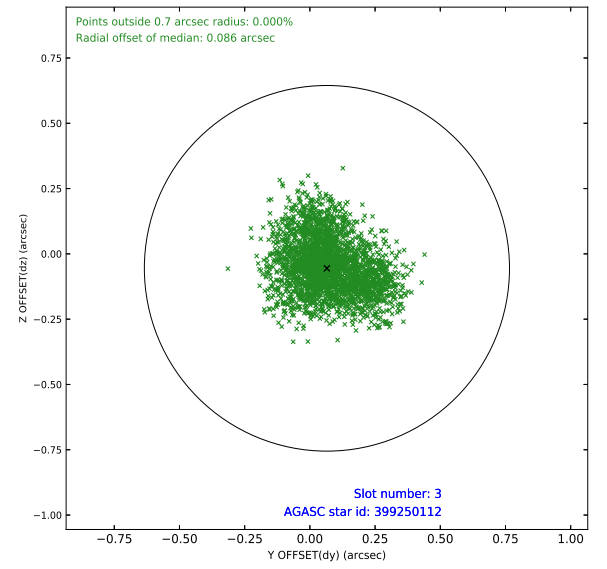
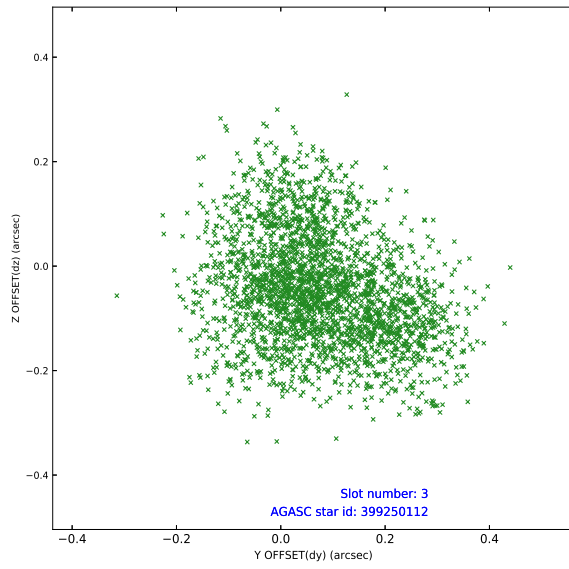


Slot Statistics

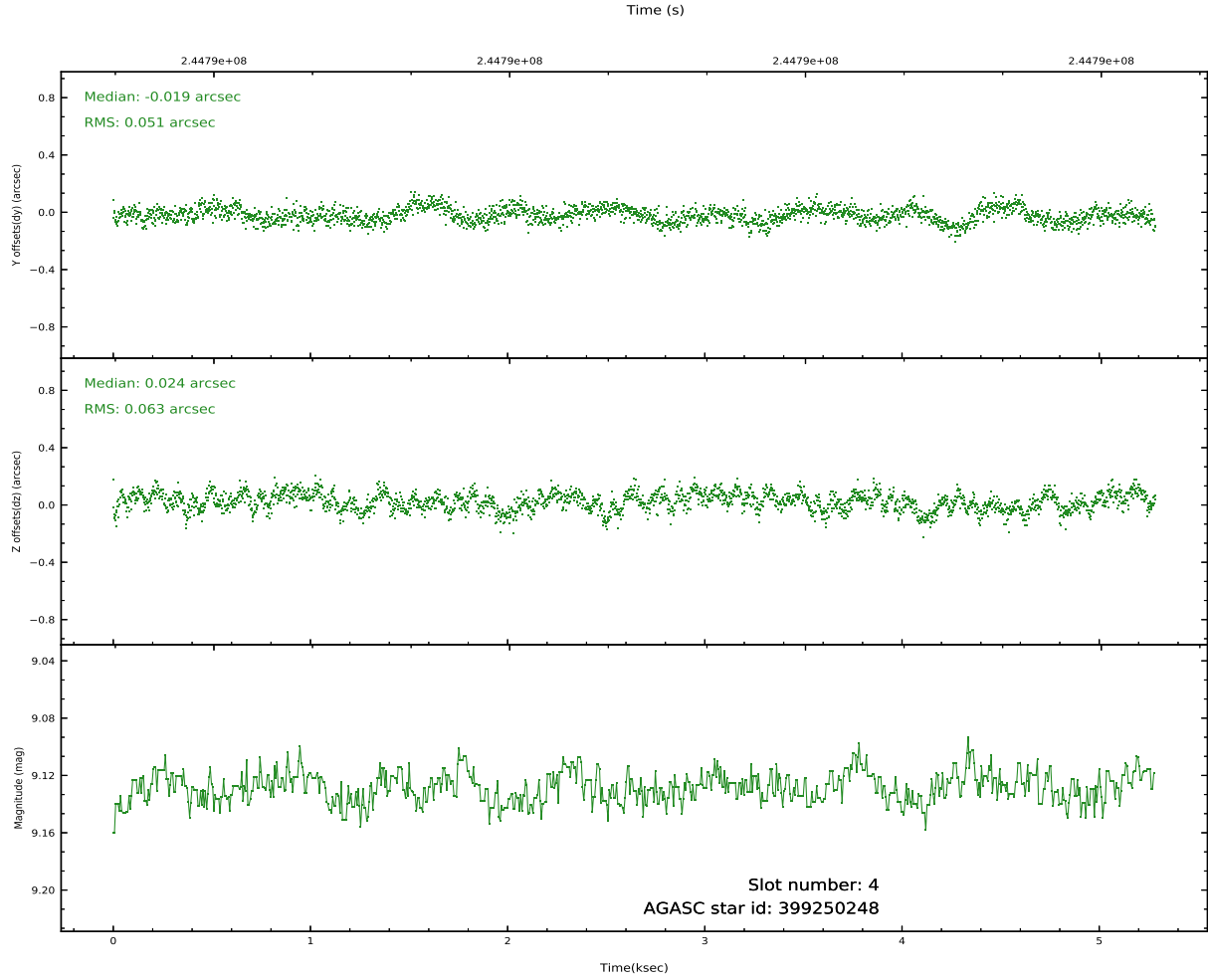
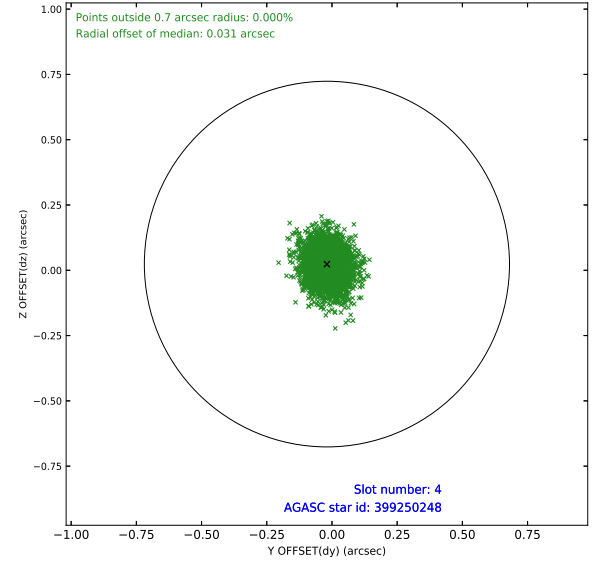
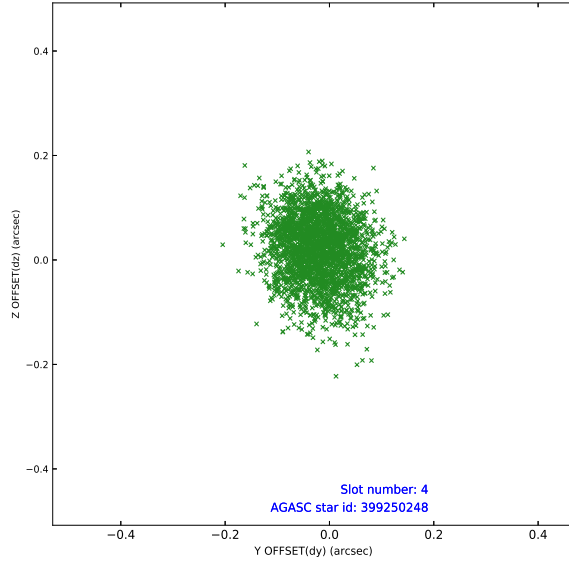
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1290	1.000	-0.060	-0.066	0.007	0.011	0.000000	0.000000	-759.75	-1733
1	FID		ACIS-S-4	7.20	1290	1.000	0.131	0.046	0.006	0.010	0.000000	0.000000	2153.18	174
2	FID		ACIS-S-5	7.23	1290	1.000	-0.103	0.029	0.007	0.011	0.000000	0.000000	-1811.19	168
3	GUIDE	used	399250112	10.06	2574	1.000	0.065	-0.055	0.174	0.266	222.847540	42.109720	1649.15	286
4	GUIDE	used	399250248	9.13	2579	1.000	-0.019	0.024	0.087	0.139	221.786043	42.350895	-1067.45	-887
5	GUIDE	used	399252704	10.41	2578	1.000	0.014	0.046	0.213	0.328	223.327254	42.388987	1955.37	1882
6	GUIDE	used	399640208	9.60	2577	1.000	-0.048	-0.017	0.098	0.158	222.120800	42.799736	-1431.89	920
7	GUIDE	used	399642384	9.69	2577	1.000	-0.037	0.004	0.095	0.152	222.533684	42.728698	-436.73	1432

2.4 Star Slots

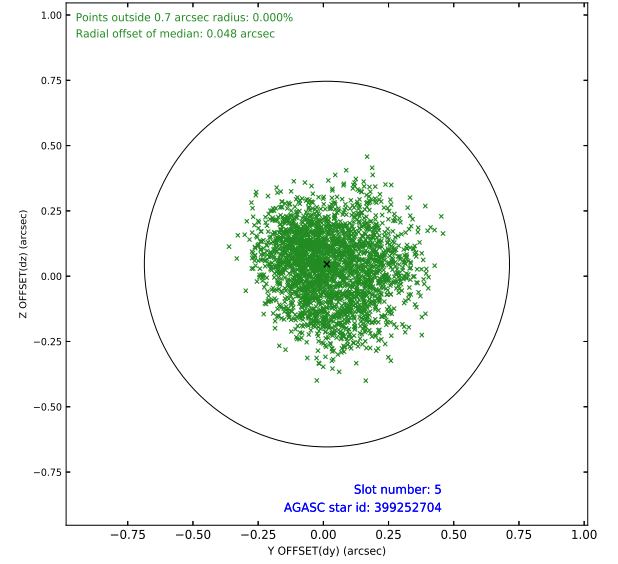
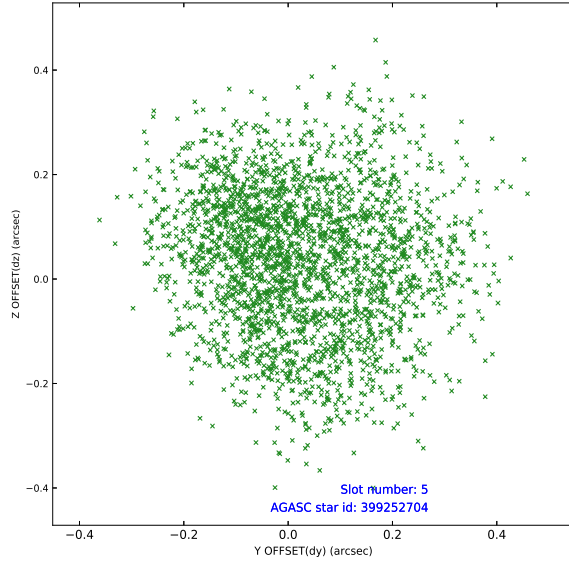
2.4.1 Slot 3



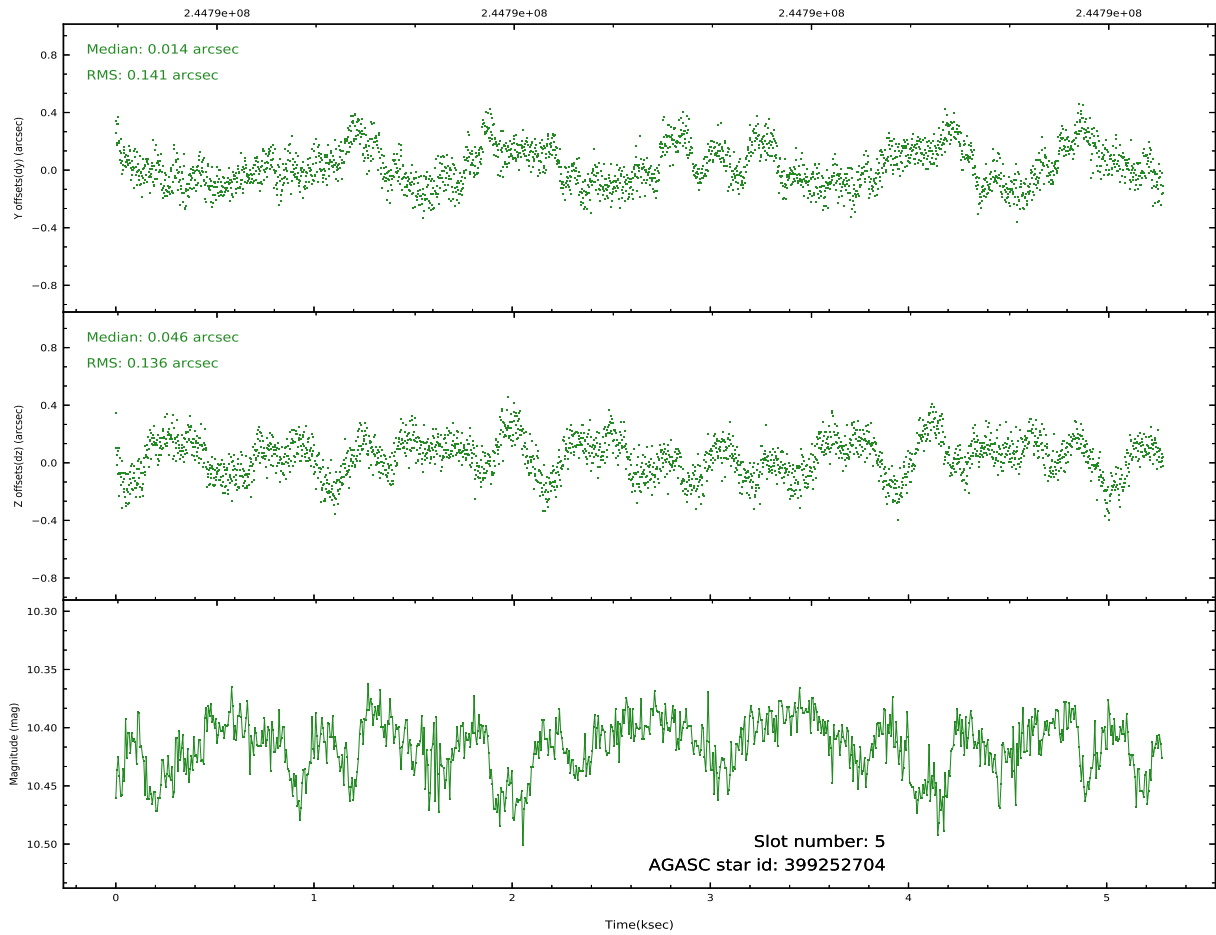
2.4.2 Slot 4



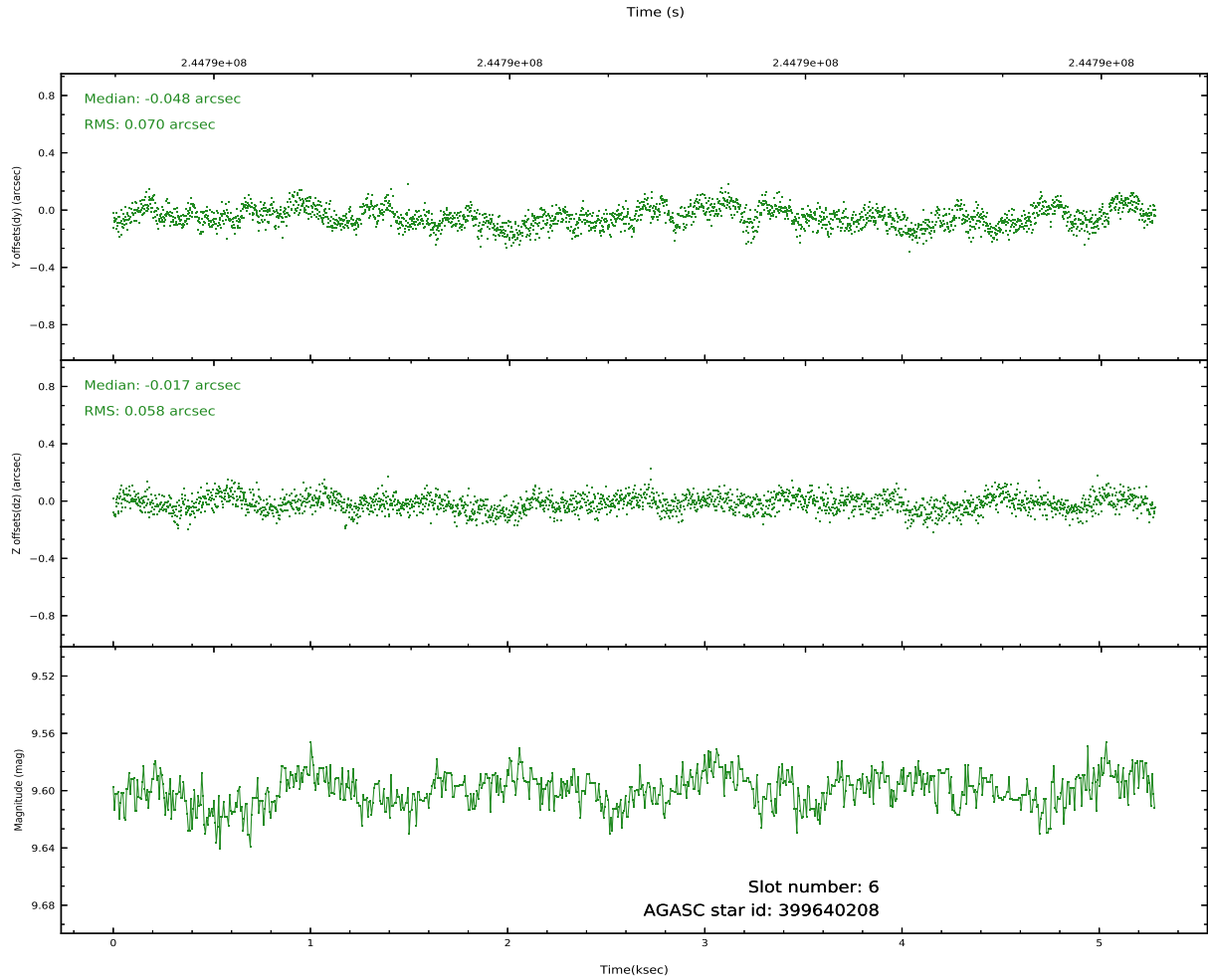
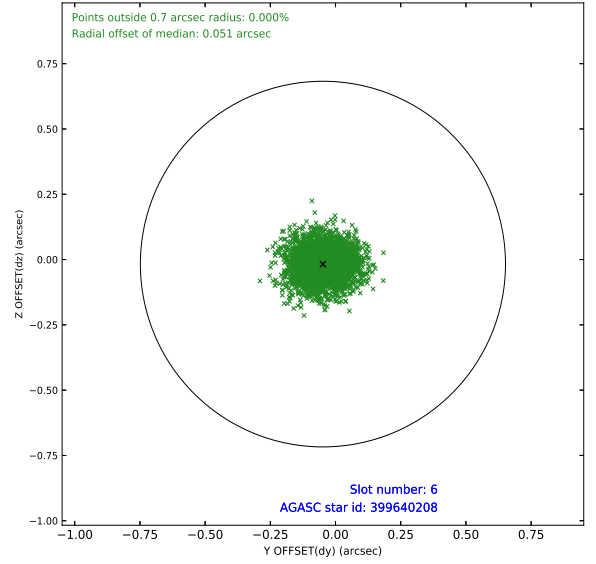
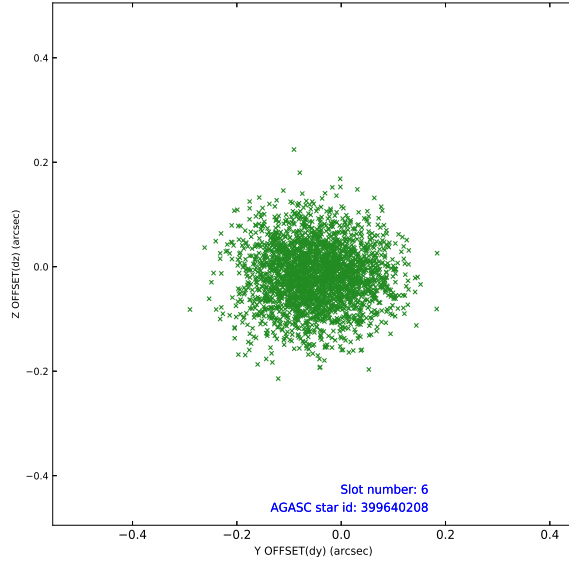
2.4.3 Slot 5



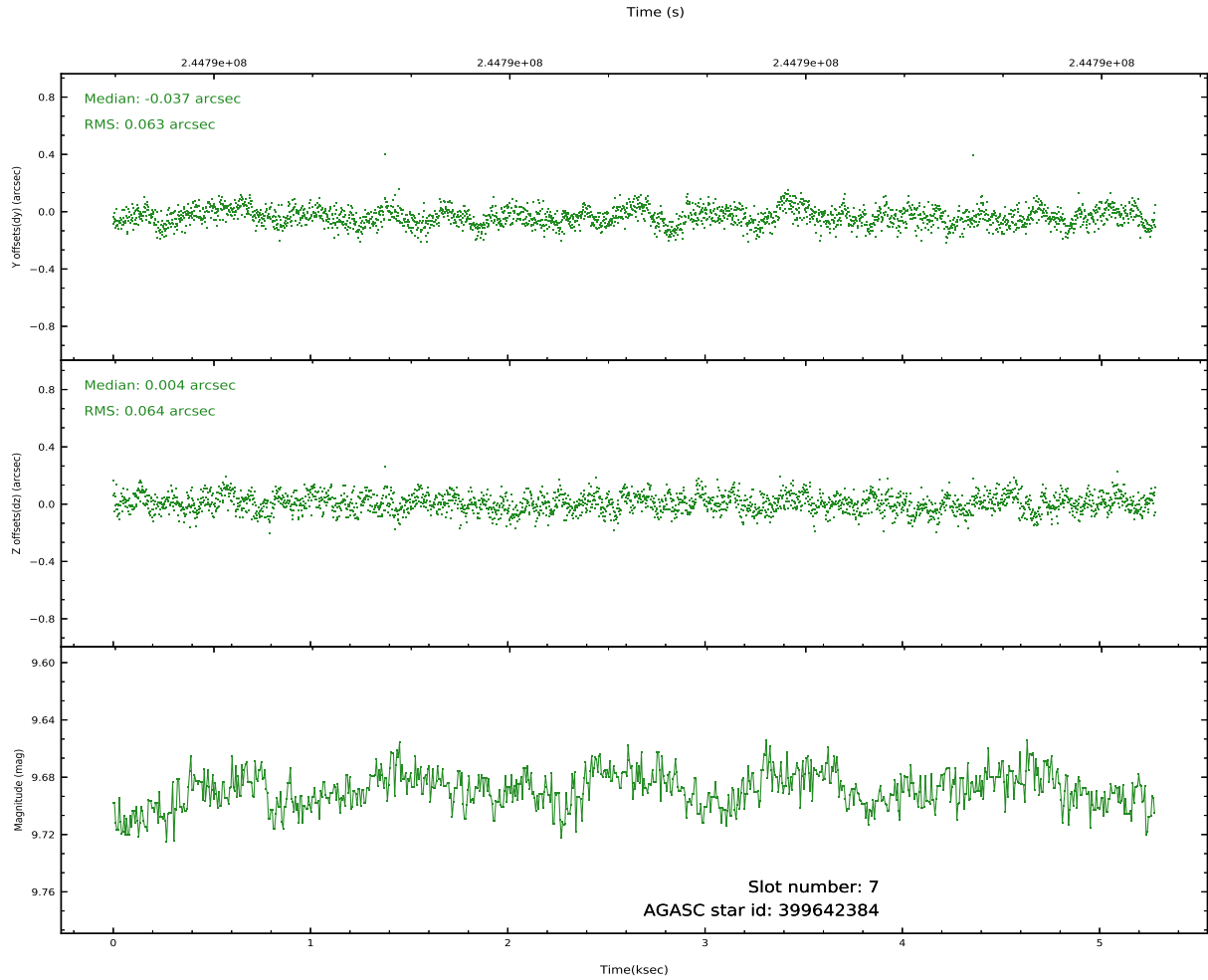
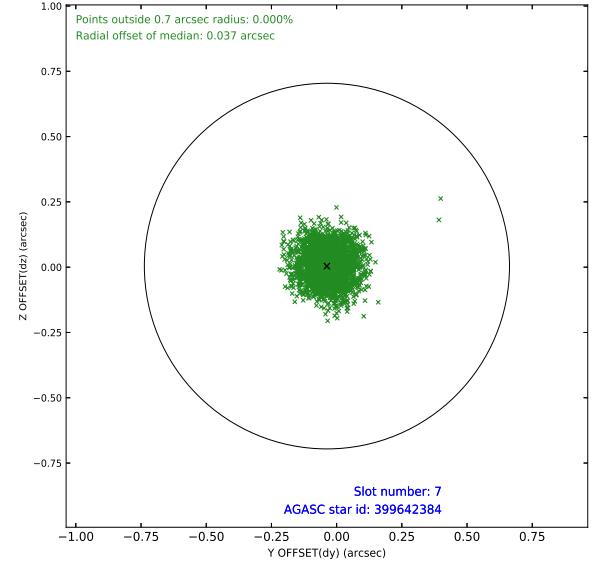
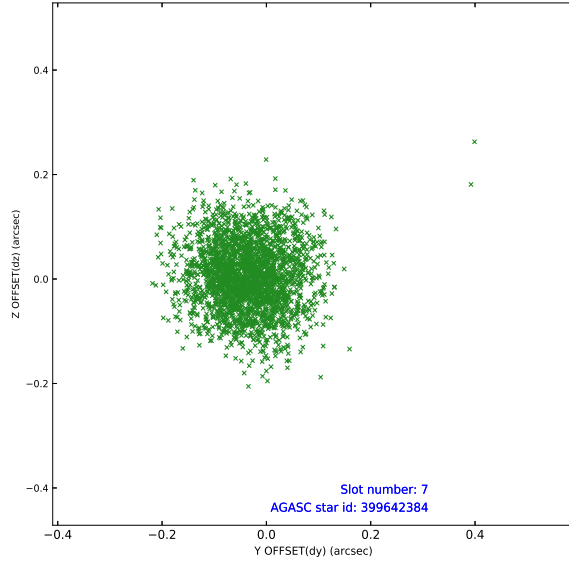
Time (s)



2.4.4 Slot 6

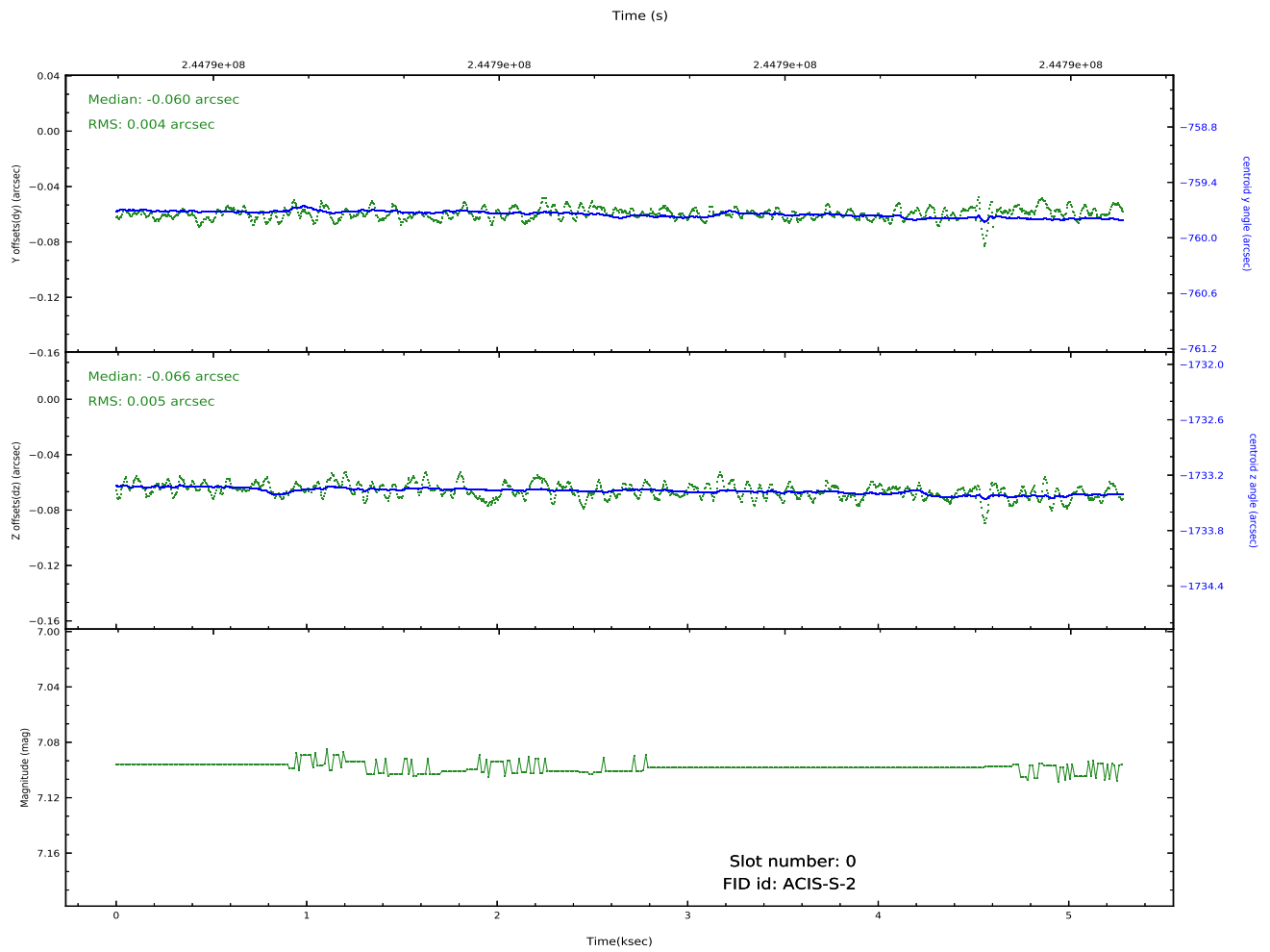
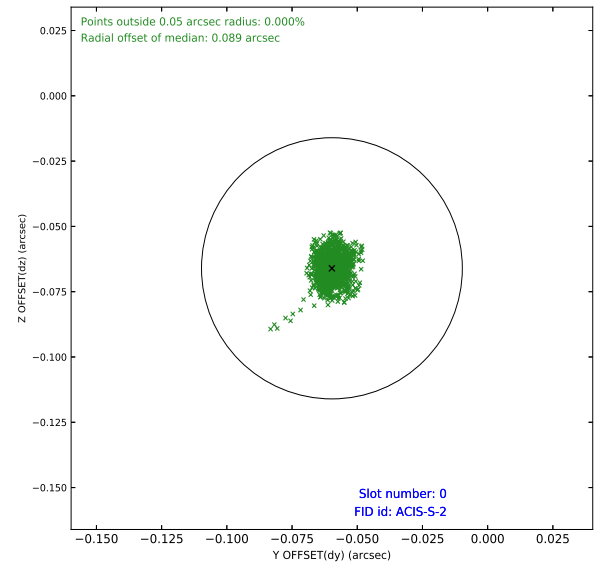
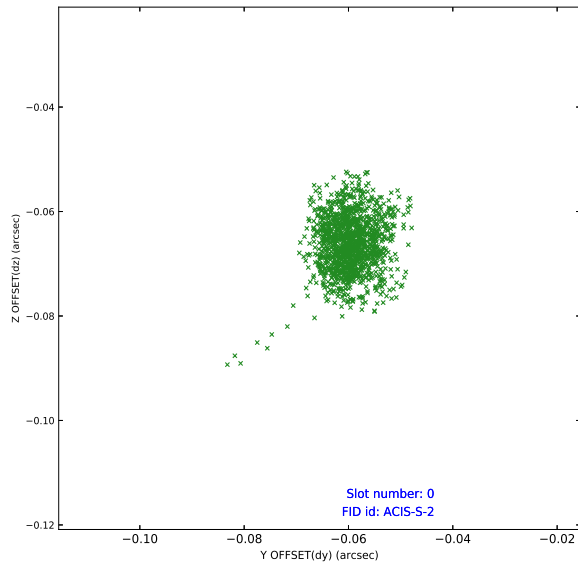


2.4.5 Slot 7

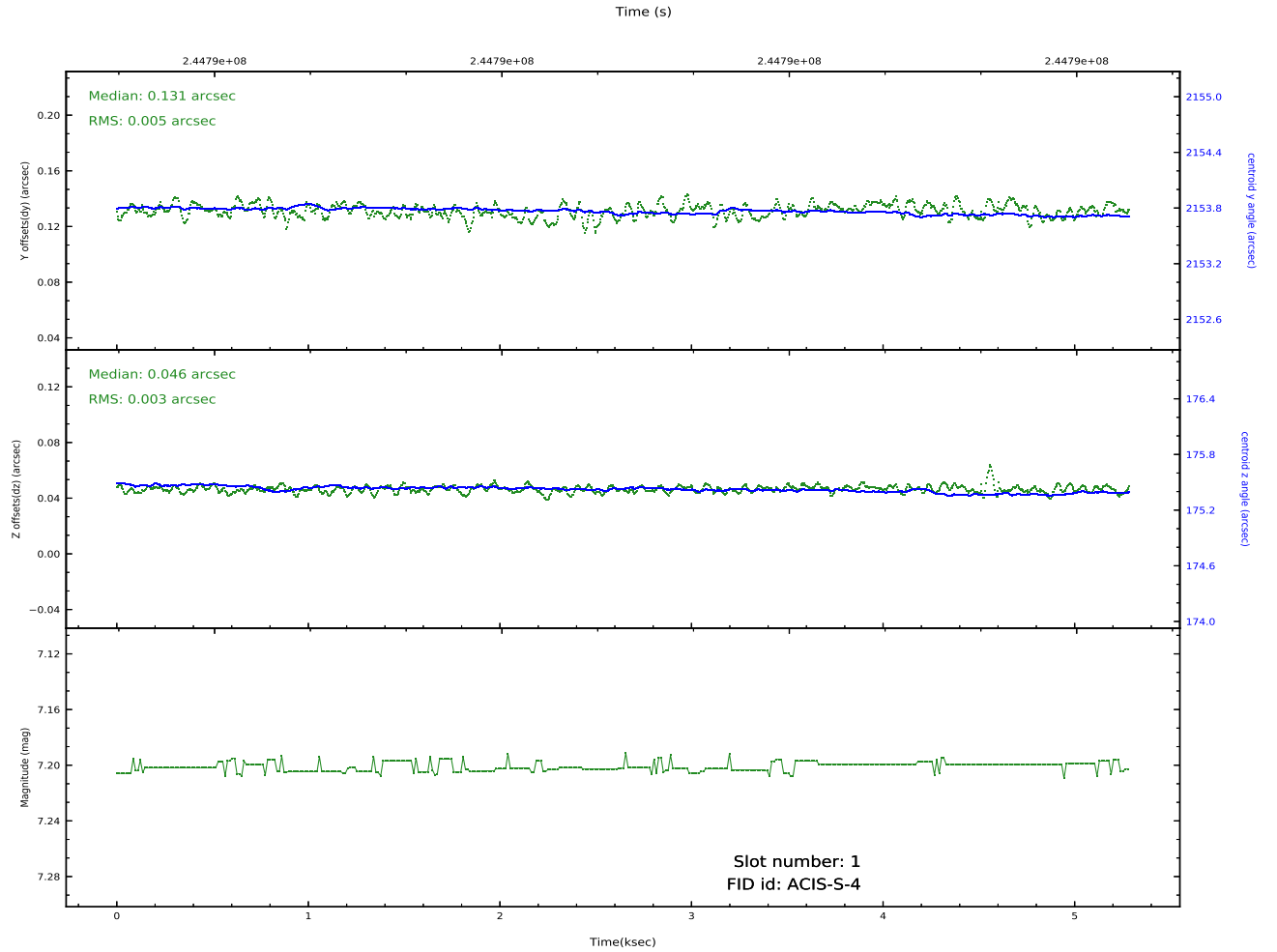
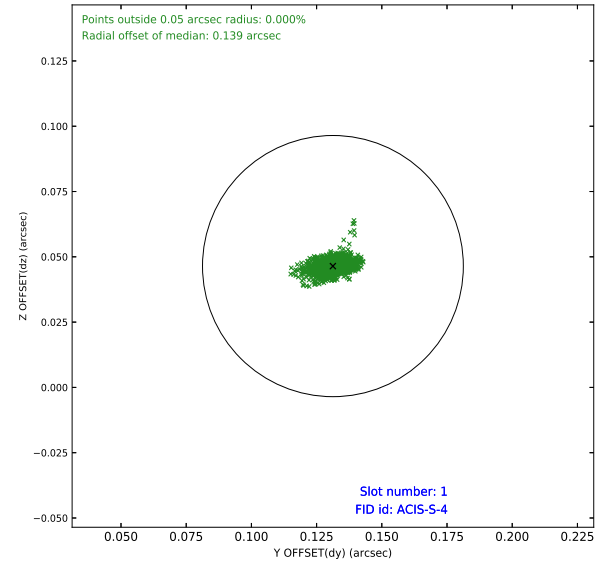
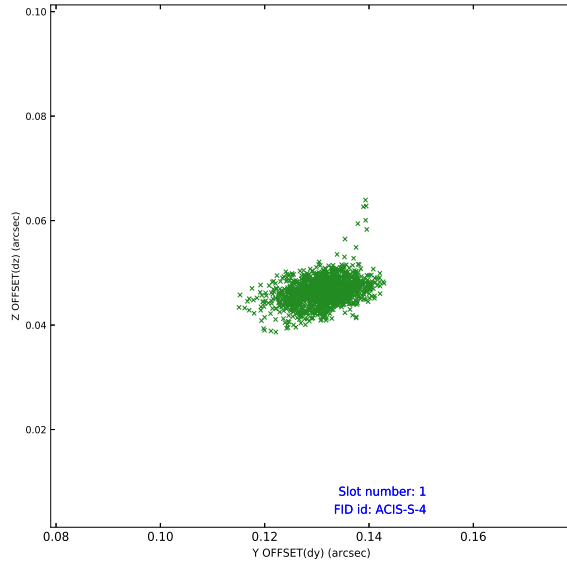


2.5 FID Slots

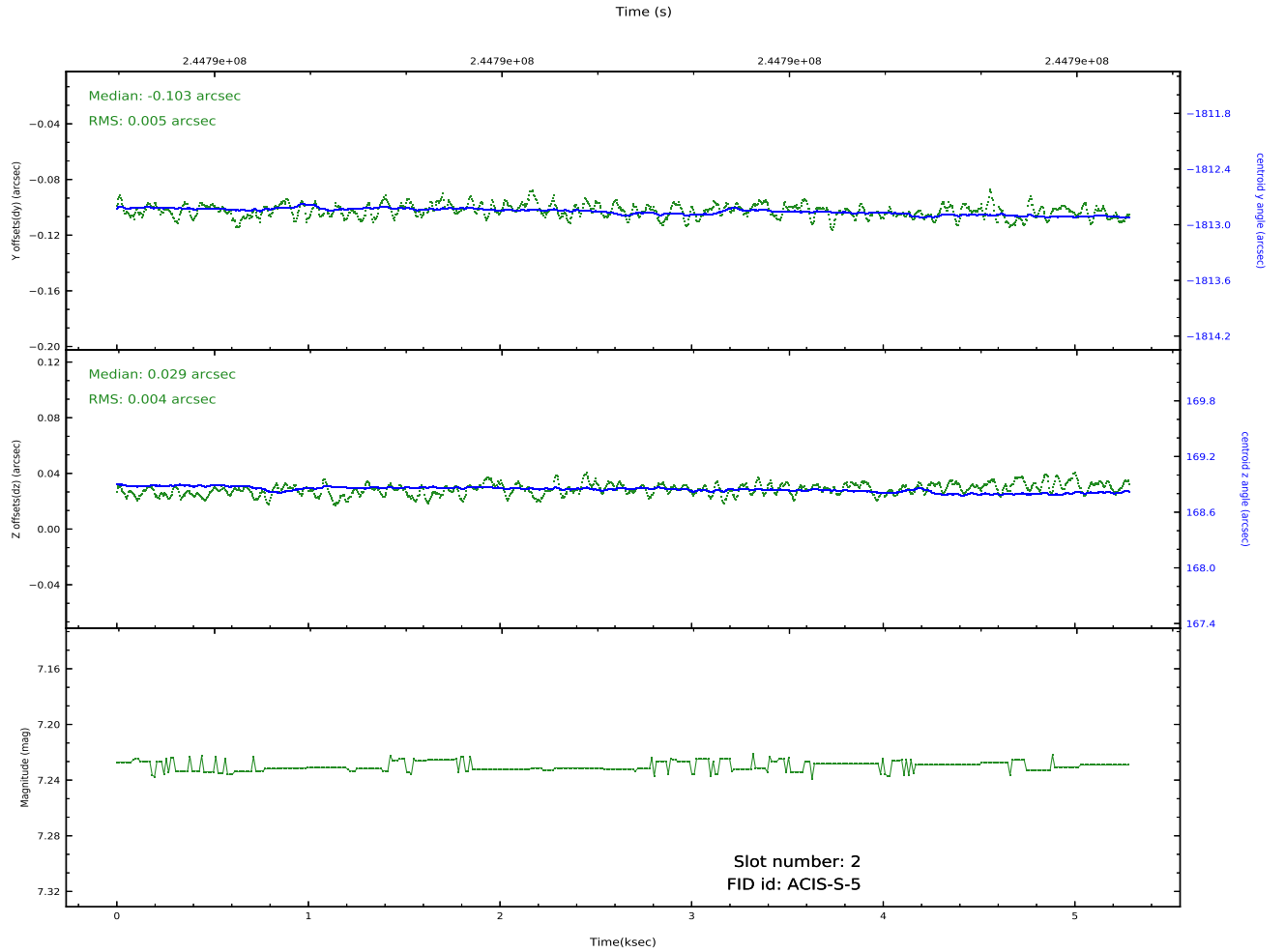
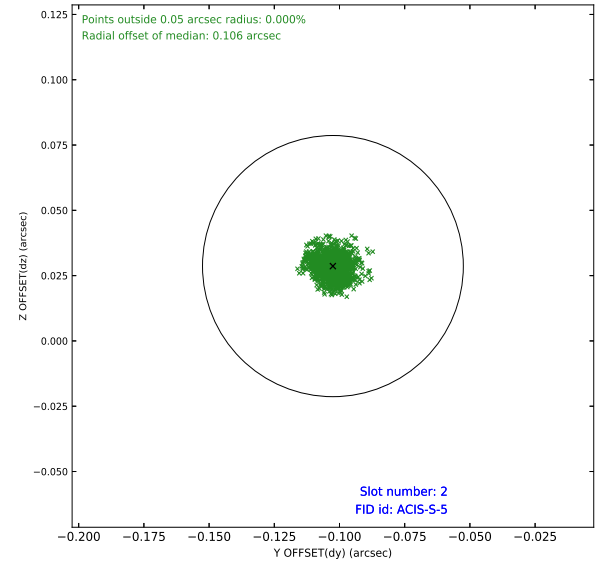
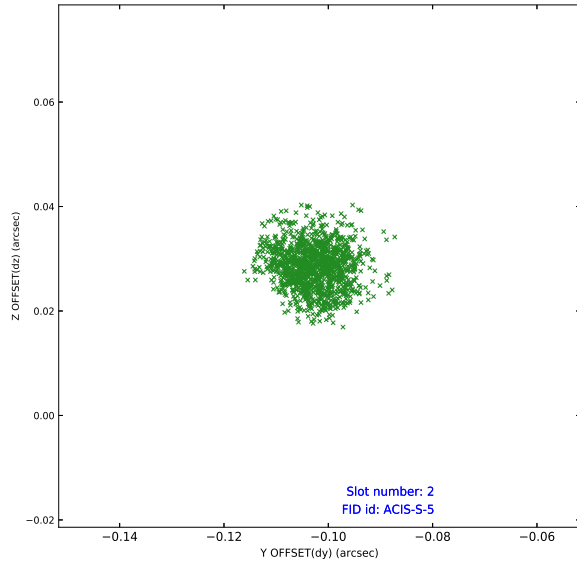
2.5.1 Slot 0



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)	2020.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.358399

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.