

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21089 - L2 Version 2
Chandra X-Ray Center

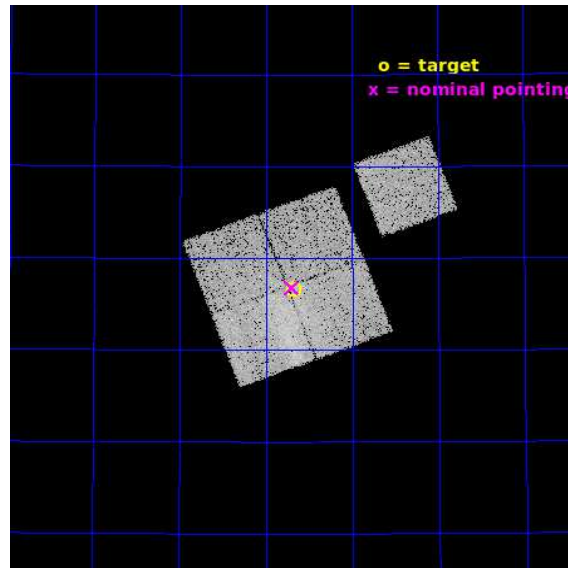
L2 Processing Date : Oct 25 2020

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1 Front

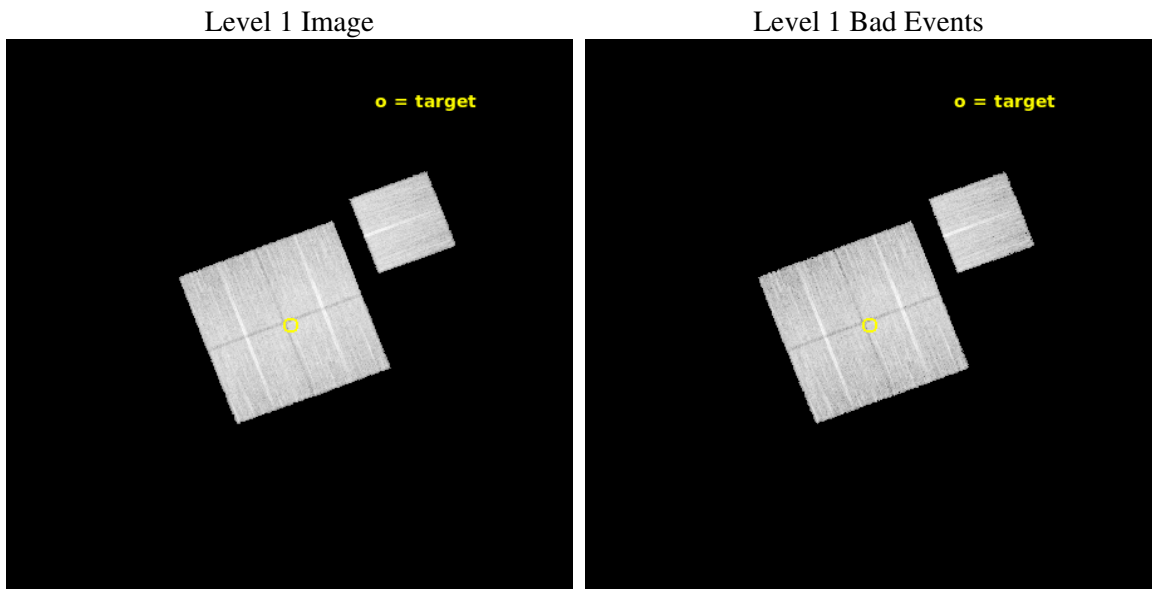
seq_num	801784	Sequence number
obs_id	21089	Observation id
title	A POSSIBLE FIRST DETECTION OF INVERSE COMPTON EMISSION FROM A GALAXY CLUSTER	Proposal title
observer	Maxim Markevitch	Principal investigator
object	CIZA J2242.8+5301	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	340.67	Observer's specified target RA [deg]
dec_targ	53.11	Observer's specified target Dec [deg]
ra_nom	340.67487408799	Nominal RA [deg]
dec_nom	53.113254710447	Nominal Dec [deg]
roll_nom	69.198790309435	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15337.630565882	Sum of GTIs [s]
livetime	15137.233131139	Livetime [s]
ontime0	15334.366485715	Sum of GTIs [s]
ontime1	15337.548485875	Sum of GTIs [s]
ontime2	15334.448565722	Sum of GTIs [s]
ontime3	15337.630565882	Sum of GTIs [s]
ontime6	15337.466405869	Sum of GTIs [s]
l2events	62798	Number of level 2 events



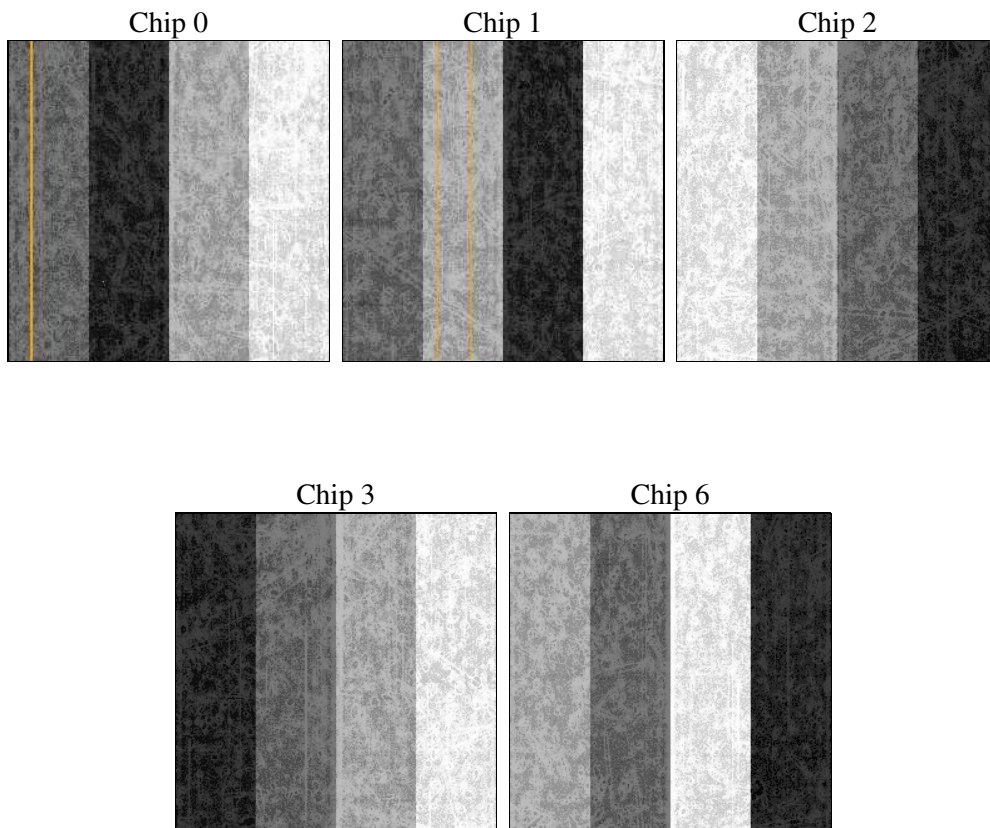
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15270.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	15337.630565882	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	15334.366485715	Sum of GTIs [s]
date	2020-10-25T21:11:18	Date and time of file creation	ontime1	15337.548485875	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15334.448565722	Sum of GTIs [s]
			ontime3	15337.630565882	Sum of GTIs [s]
			ontime6	15337.466405869	Sum of GTIs [s]
			l1events	551948	Number of level 1 events

2.1.4 Events

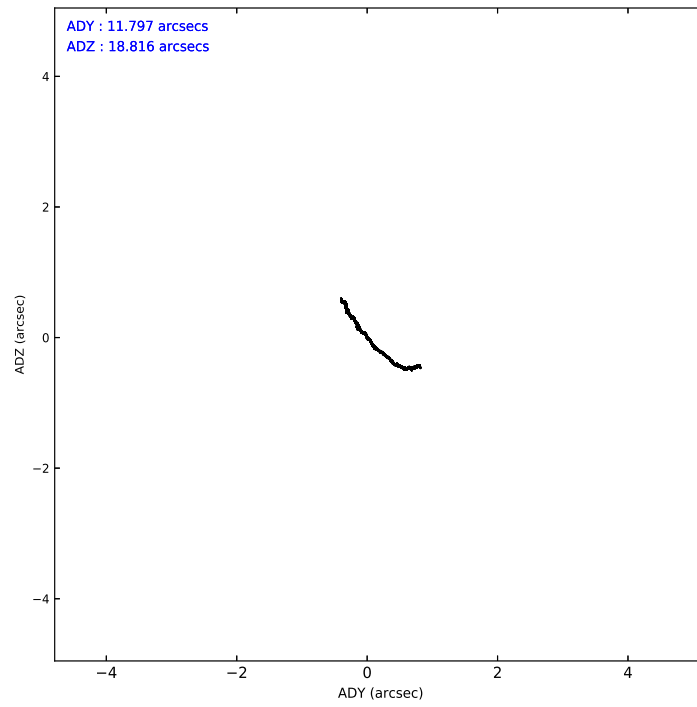
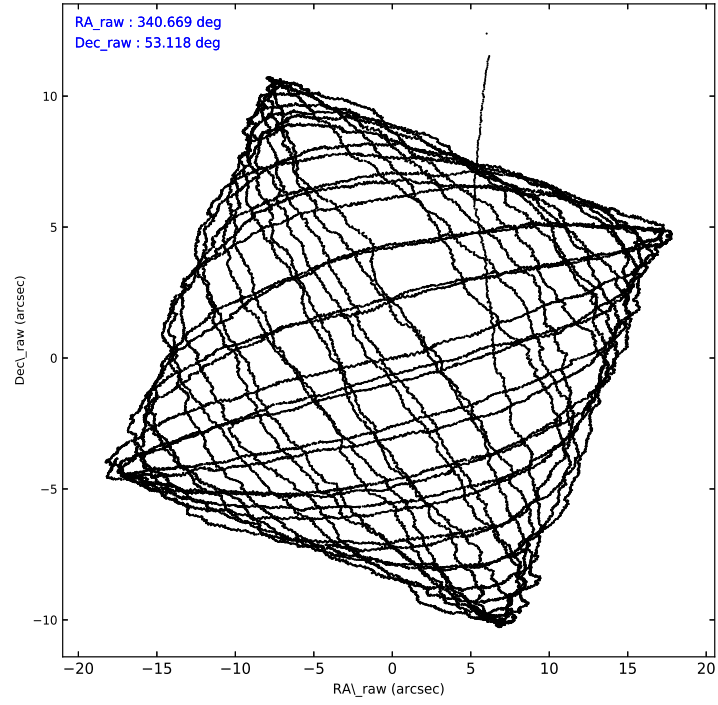
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	101509	111193	115536	112641	111069
rejected events	88030	90812	102441	98264	98389
rejected %	86%	81%	88%	87%	88%

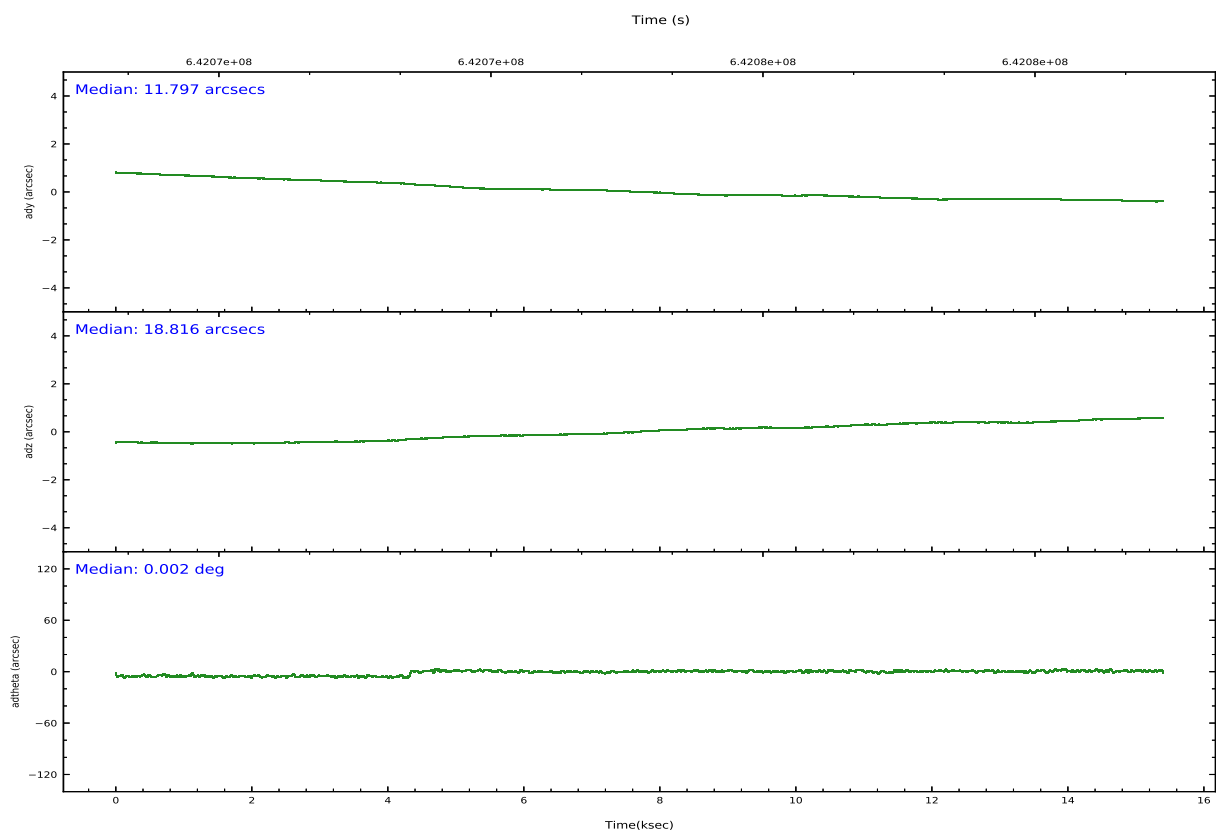
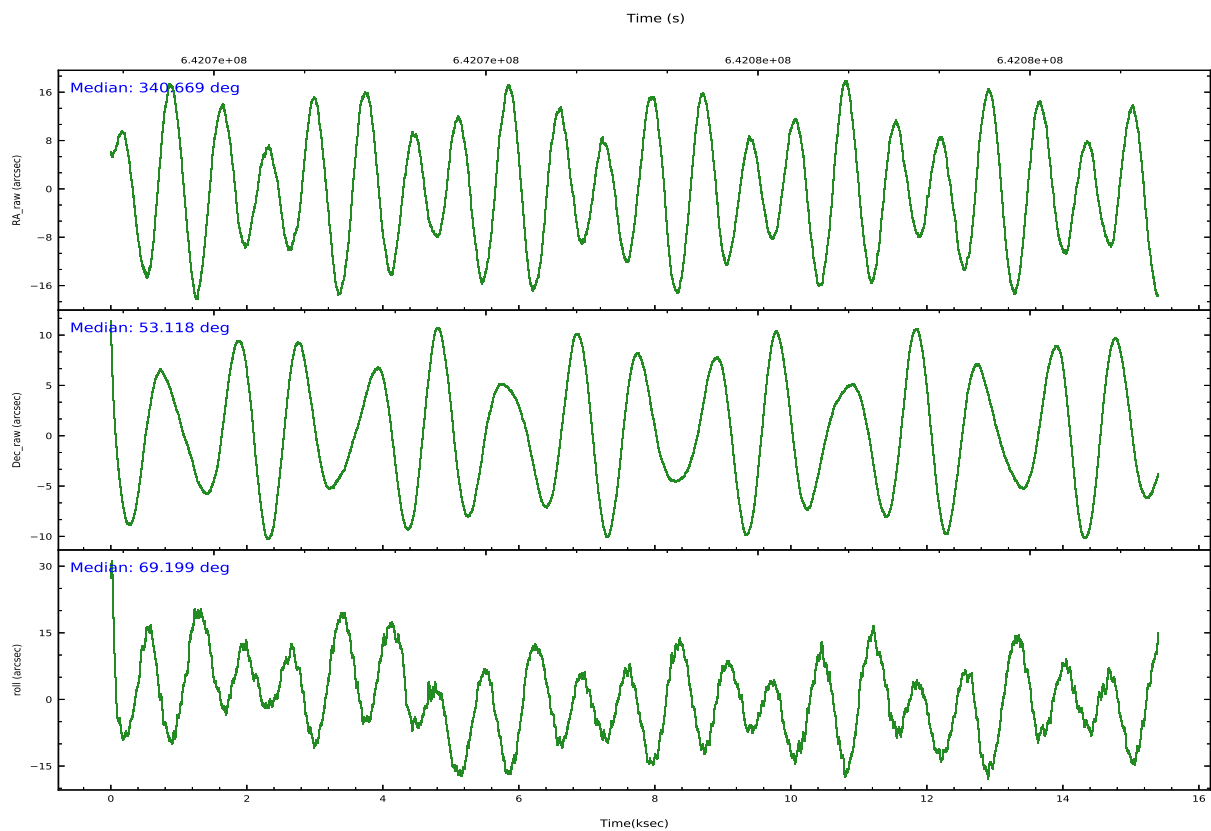
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4774	9613	4675	6094	4320
	4%	8%	4%	5%	3%
grade 1 events	56	89	59	91	61
	0%	0%	0%	0%	0%
grade 2 events	3401	4356	3333	2947	2983
	3%	3%	2%	2%	2%
grade 3 events	1289	1507	1286	1386	1202
	1%	1%	1%	1%	1%
grade 4 events	1246	1585	1294	1327	1238
	1%	1%	1%	1%	1%
grade 5 events	5047	5290	4722	5415	5174
	4%	4%	4%	4%	4%
grade 6 events	2771	3325	2513	2628	2947
	2%	2%	2%	2%	2%
grade 7 events	82925	85428	97654	92753	93144
	81%	76%	84%	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	340.675929	340.67487408799	CCD I2 on	Y	Y
[deg] Pointing Dec	53.091206	53.113254710447	CCD I3 on	Y	Y
[deg] Pointing Roll	68.995257	69.198790309435	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	642066615.184000	642065327.68285	CCD S5 on	N	N
Observation start date	2018-05-07T07:49:06	2018-05-07T07:28:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	642081885.184000	642082906.43389	On-chip summing requested	N	N
Observation end date	2018-05-07T12:03:36	2018-05-07T12:21:46	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



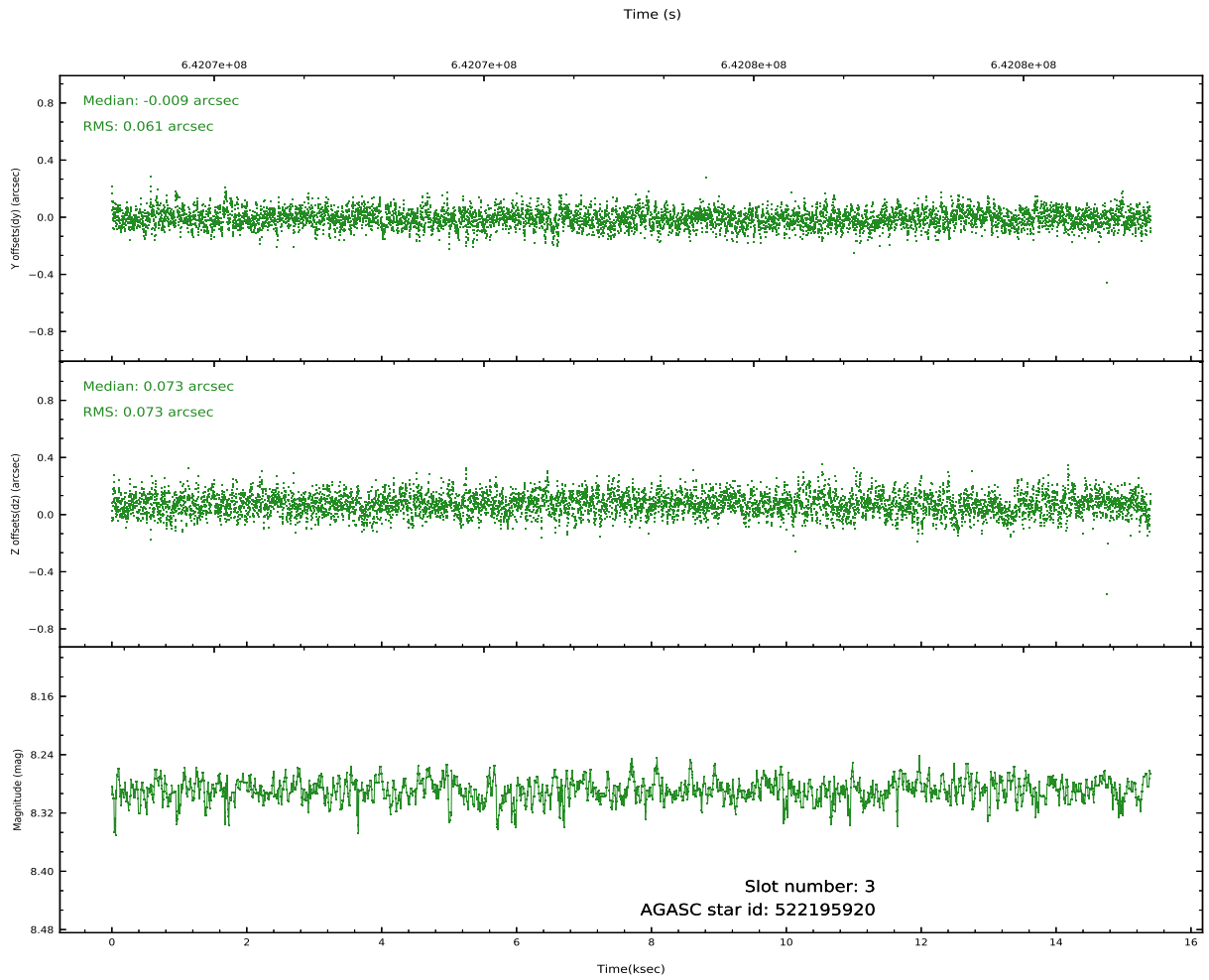
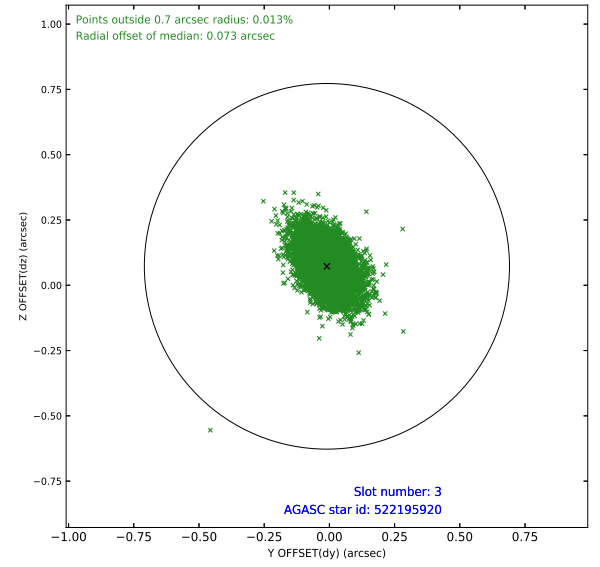
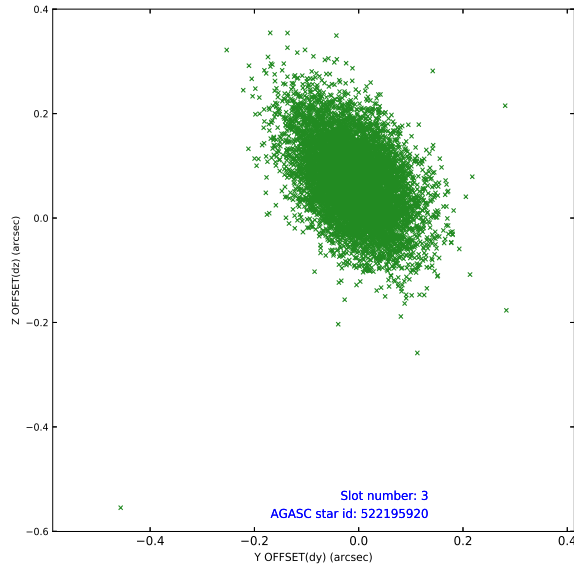


Slot Statistics

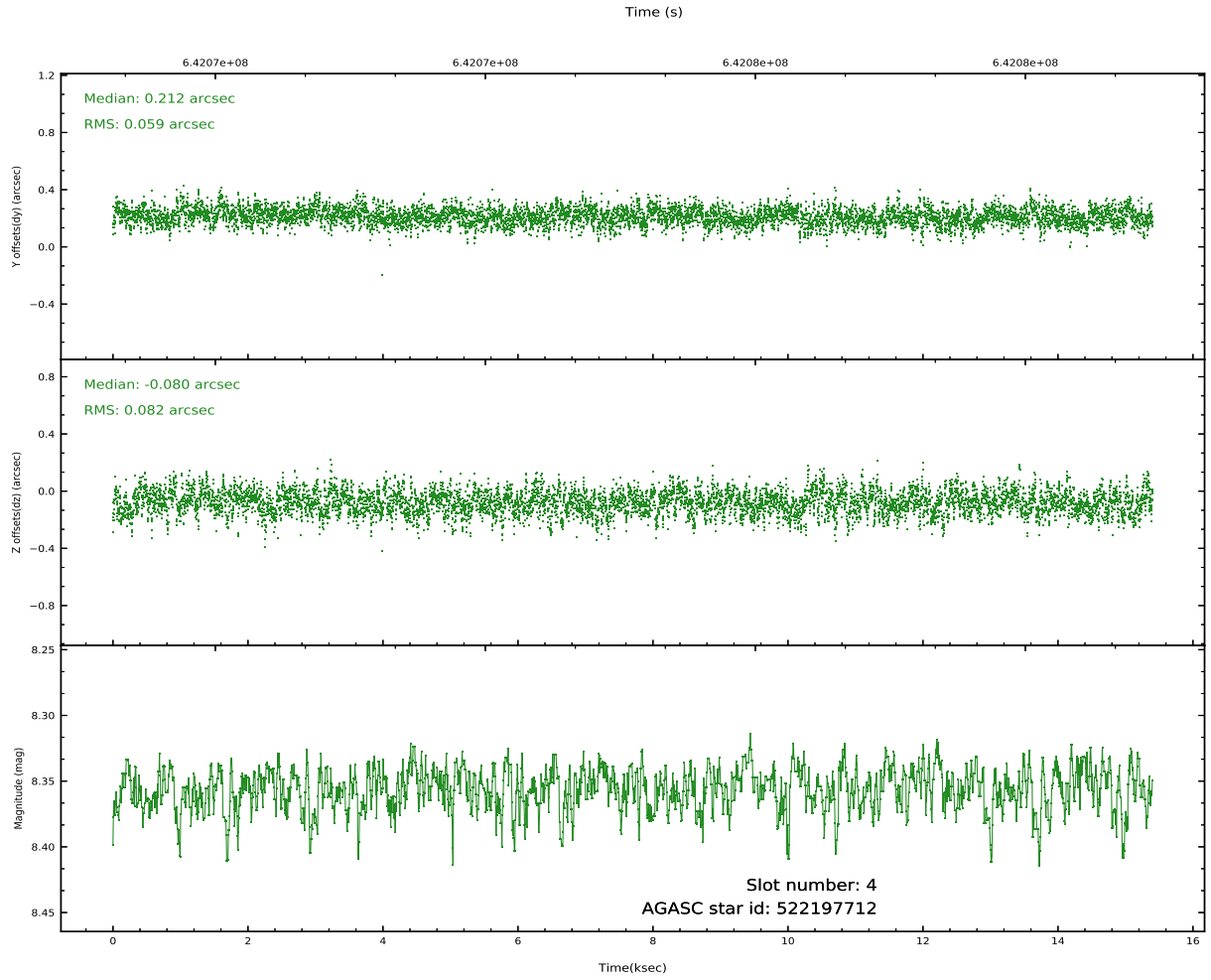
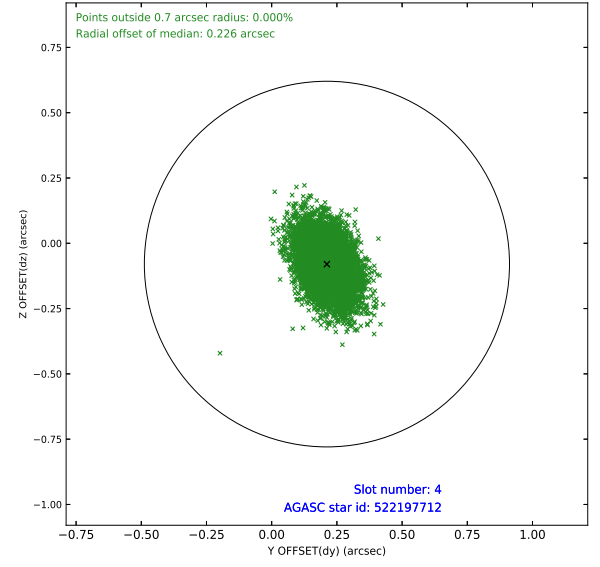
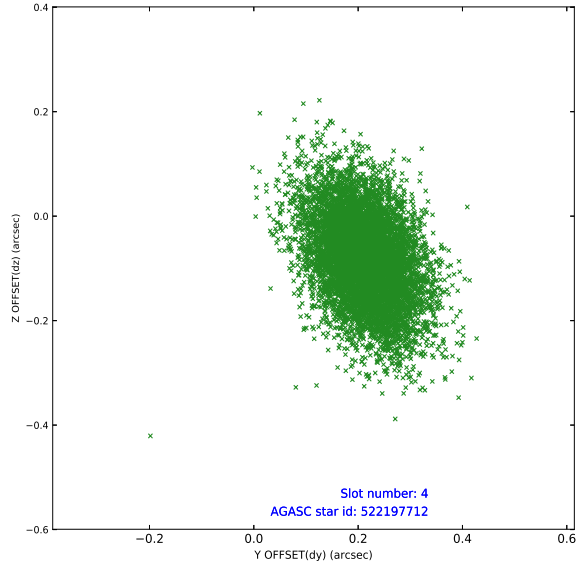
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.05	3757	1.000	0.021	-0.001	0.020	0.053	0.000000	0.000000	927.63	-842
1	FID		ACIS-I-2	6.96	3757	1.000	-0.096	0.024	0.016	0.025	0.000000	0.000000	-766.42	-849
2	FID		ACIS-I-4	7.03	3756	1.000	-0.025	0.042	0.028	0.071	0.000000	0.000000	2147.48	1057
3	GUIDE	used	522195920	8.29	7511	1.000	-0.009	0.073	0.098	0.170	340.534111	52.561582	-1890.54	-393
4	GUIDE	used	522197712	8.36	7510	1.000	0.212	-0.080	0.105	0.179	341.160967	52.624062	-1186.17	-1591
5	GUIDE	used	522204136	7.19	7514	1.000	-0.138	0.093	0.105	0.184	341.384669	53.374616	1505.38	-1052
6	GUIDE	used	522200440	8.88	7440	1.000	0.012	-0.086	0.129	0.213	340.183364	53.917345	2405.46	2041
7	GUIDE	used	522202320	6.92	7513	1.000	-0.075	0.002	0.098	0.171	341.199728	53.302639	1118.81	-776

2.4 Star Slots

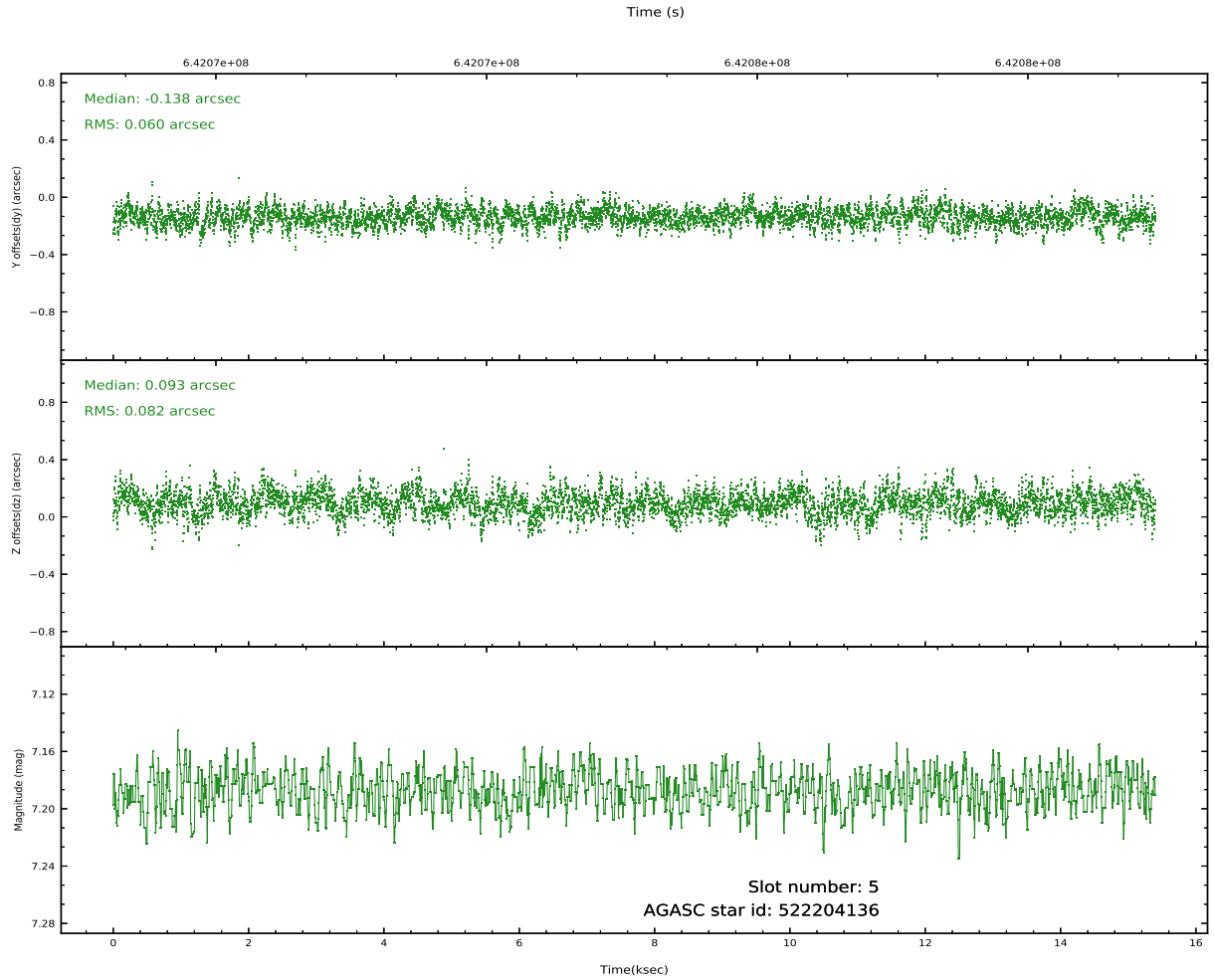
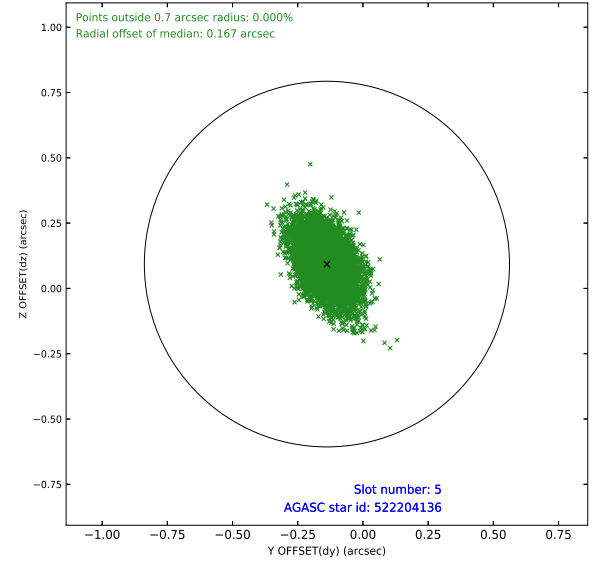
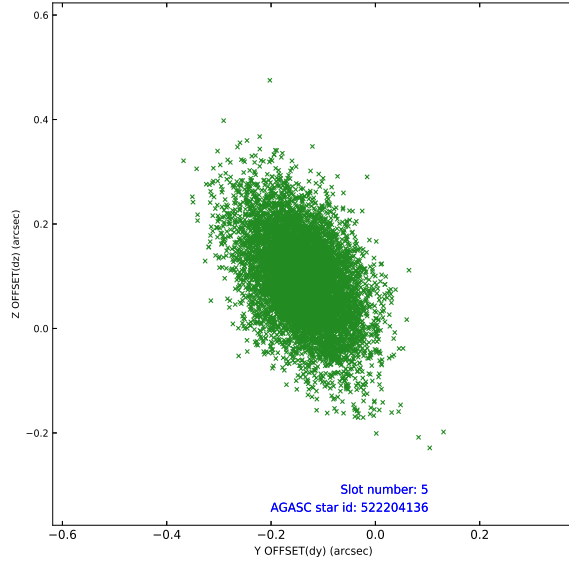
2.4.1 Slot 3



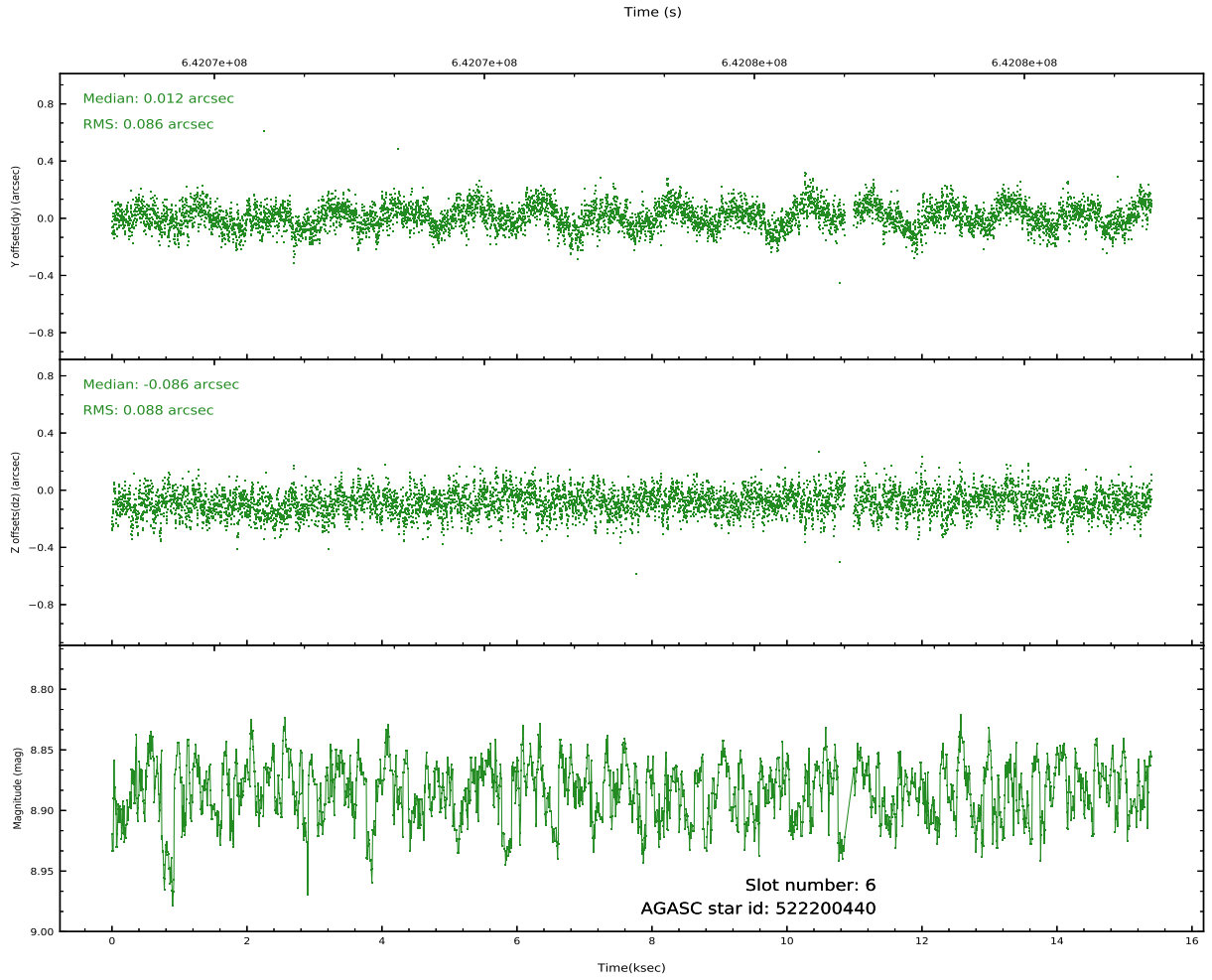
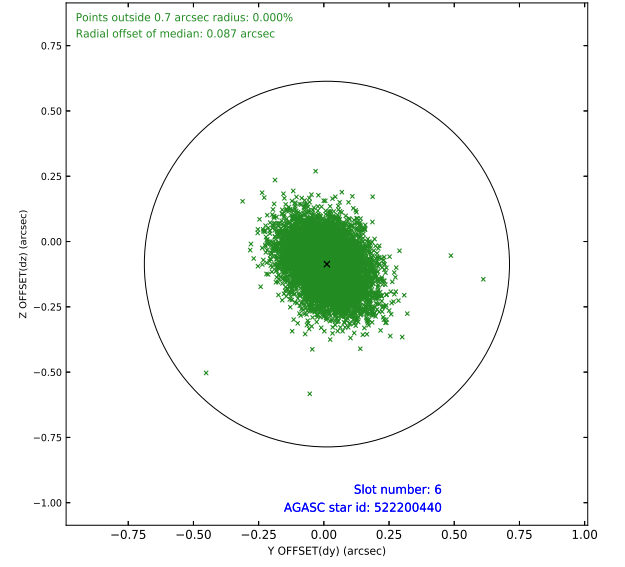
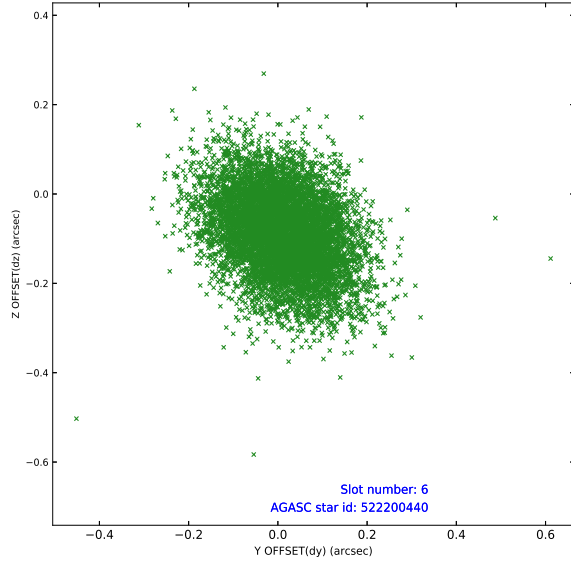
2.4.2 Slot 4



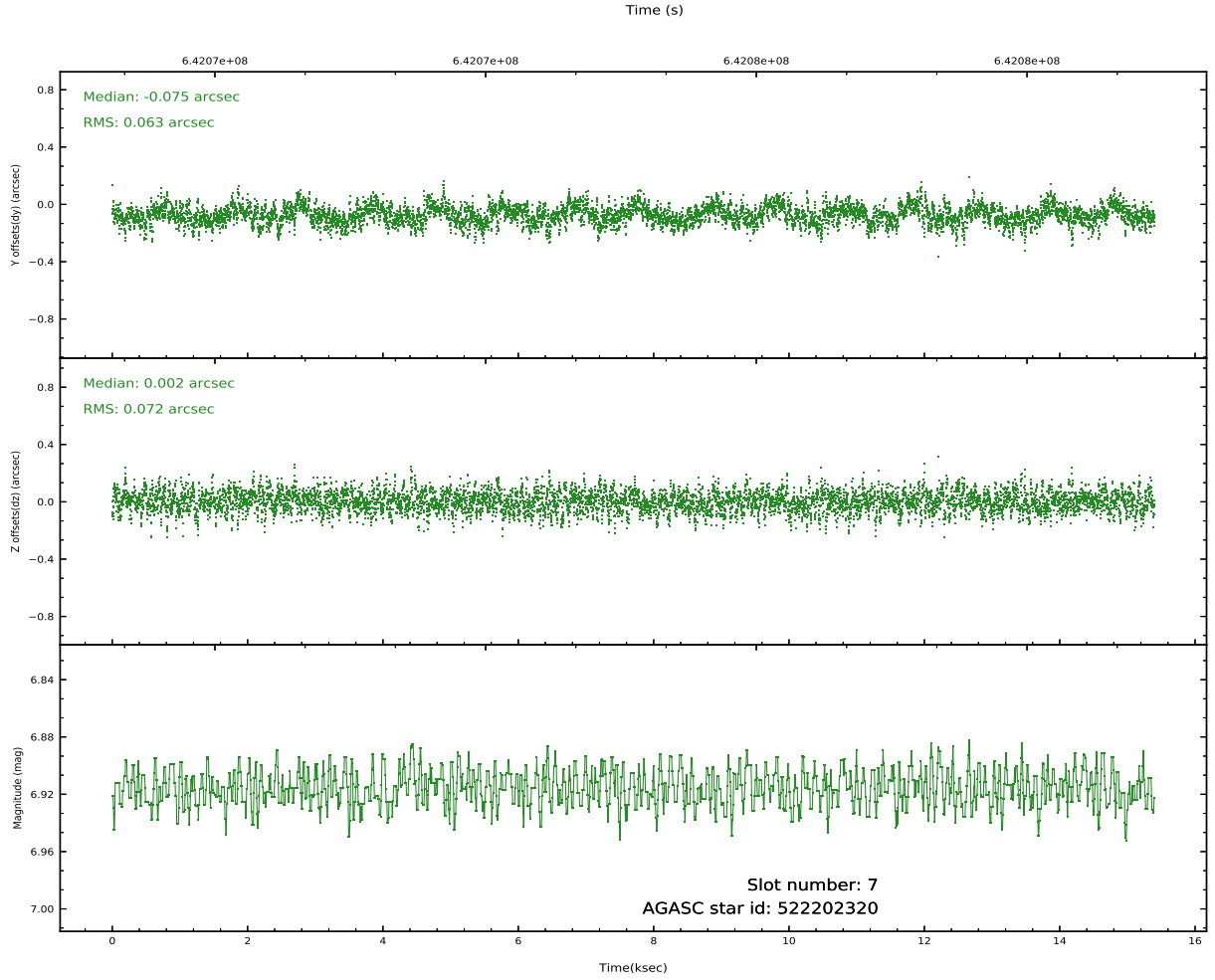
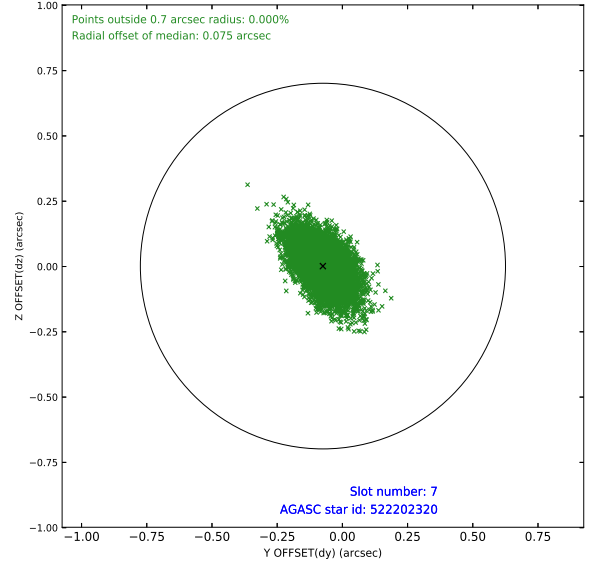
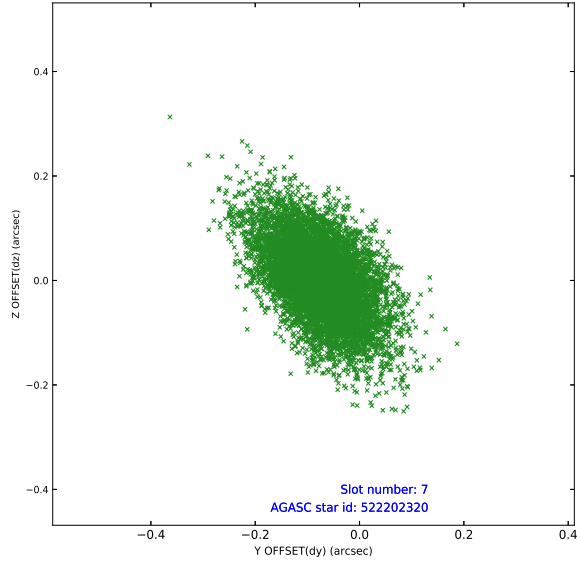
2.4.3 Slot 5



2.4.4 Slot 6

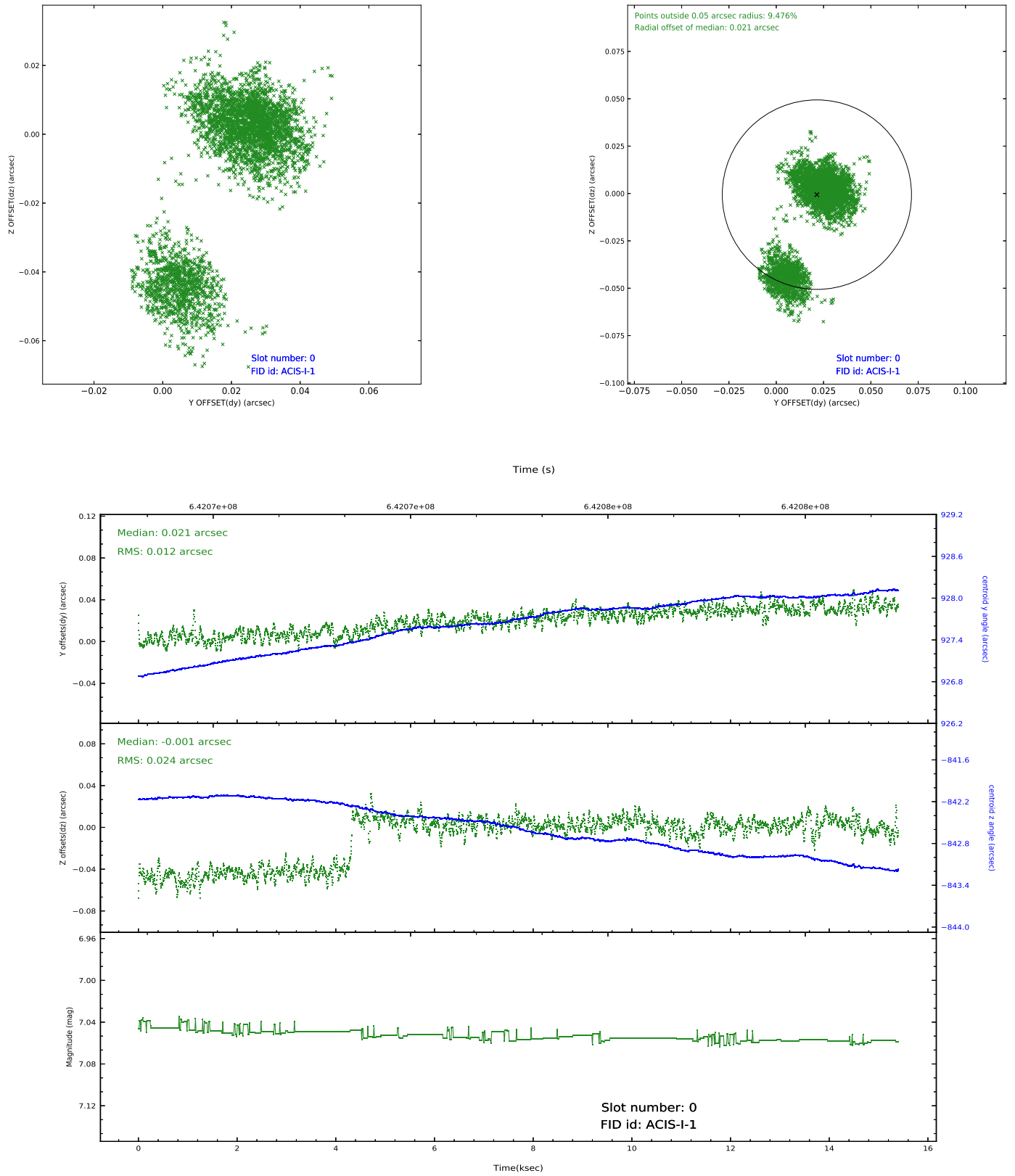


2.4.5 Slot 7

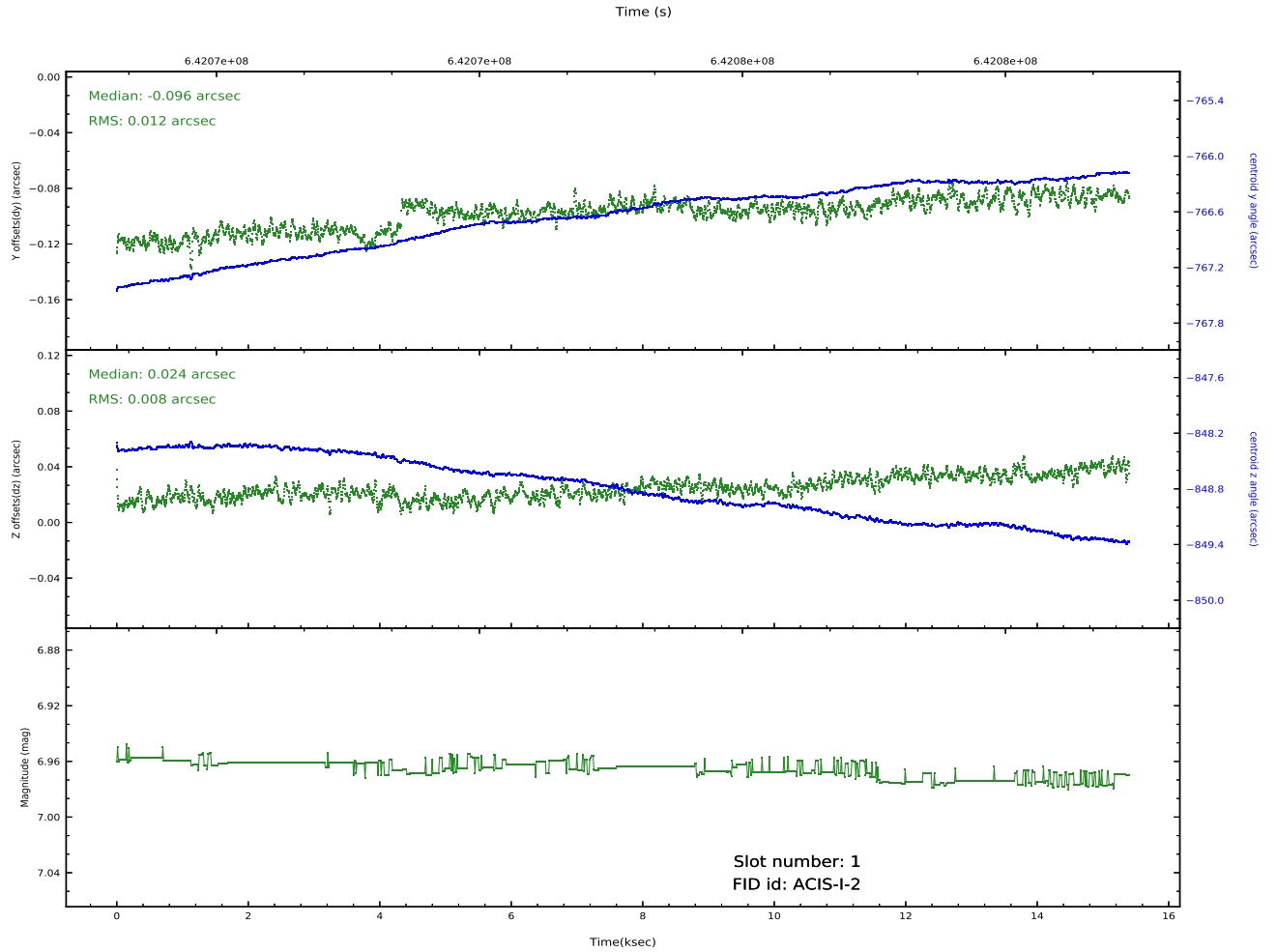
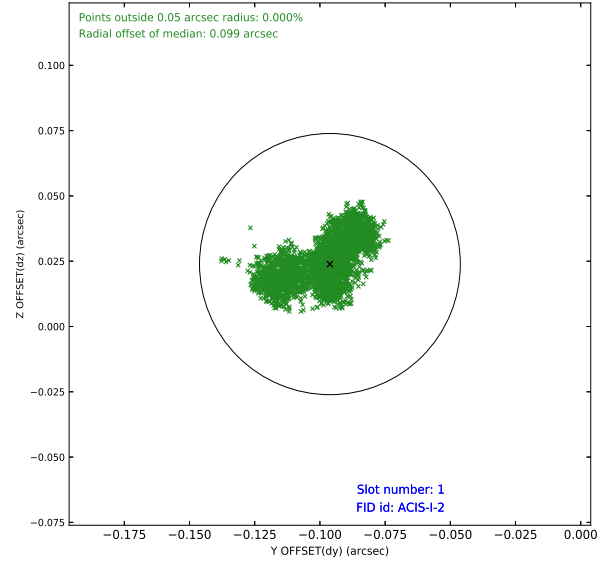
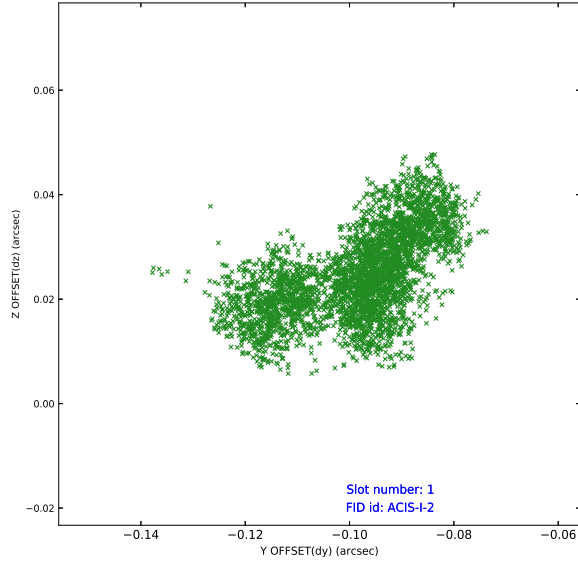


2.5 FID Slots

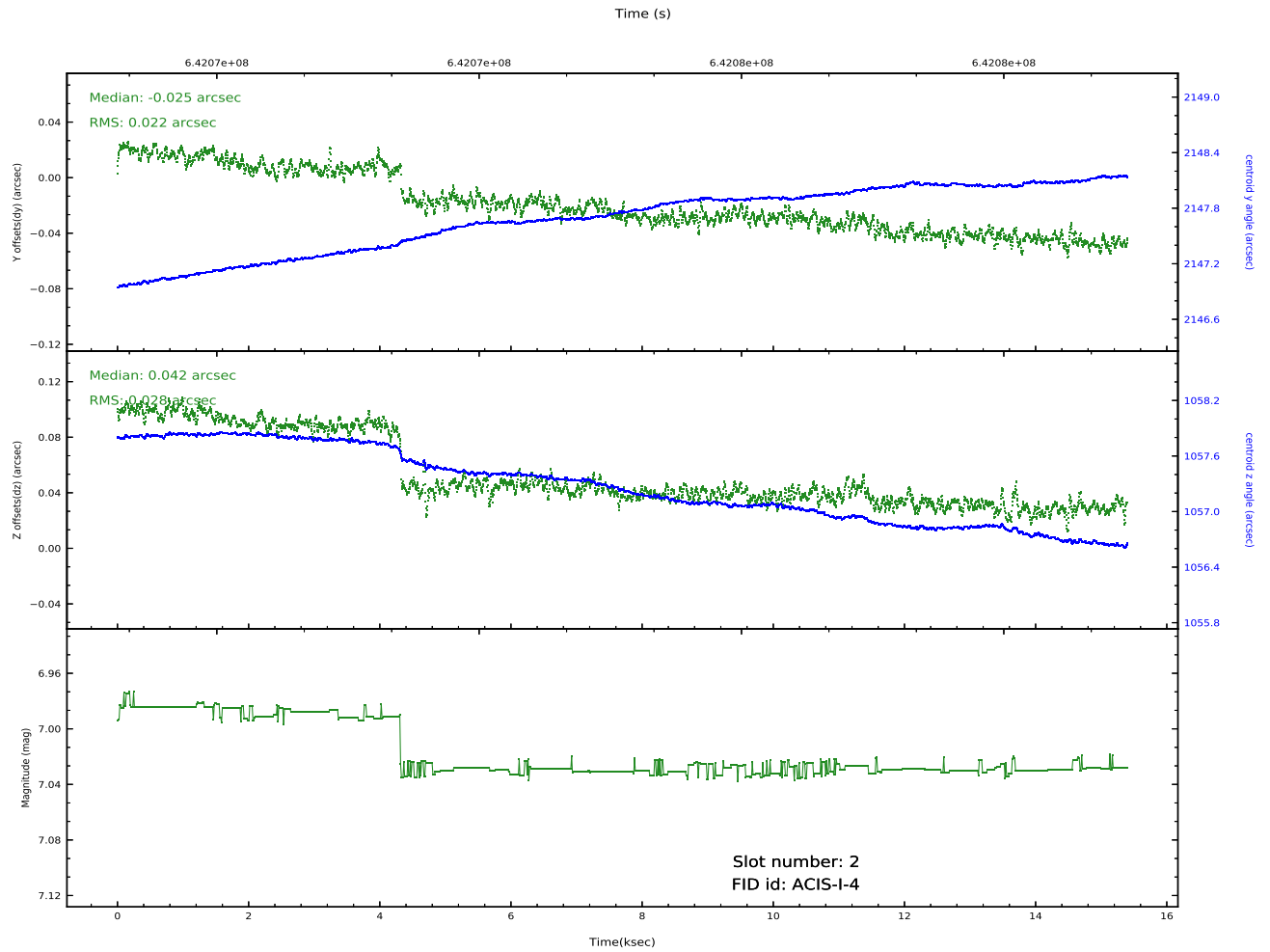
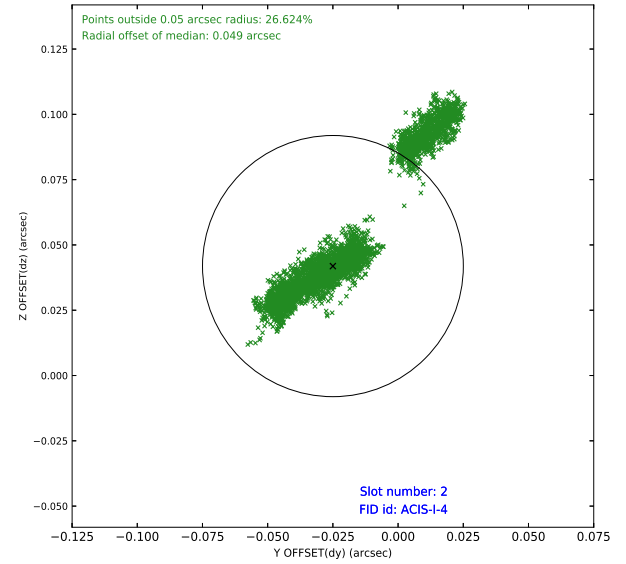
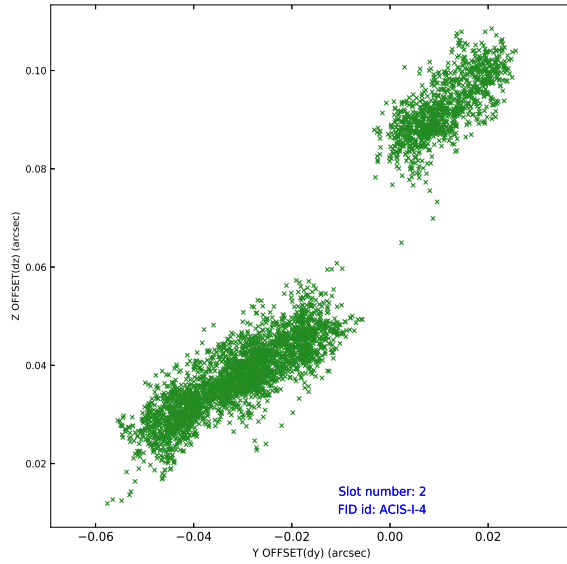
2.5.1 Slot 0



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)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.337630564809

A.2 Comments