

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4996 - L2 Version 5
Chandra X-Ray Center

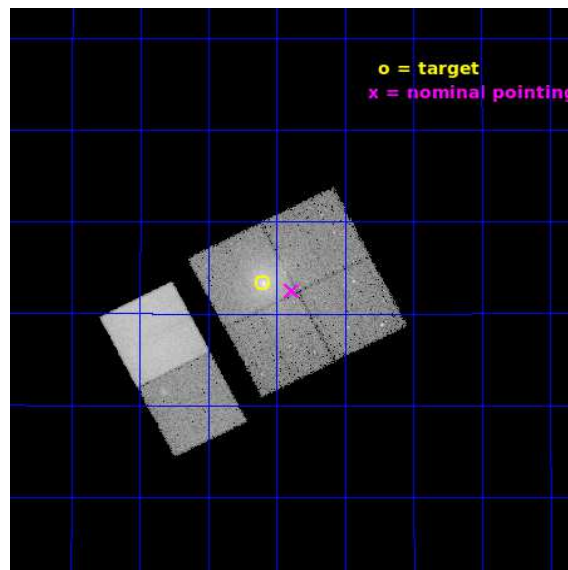
L2 Processing Date : Sep 27 2020

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1 Front

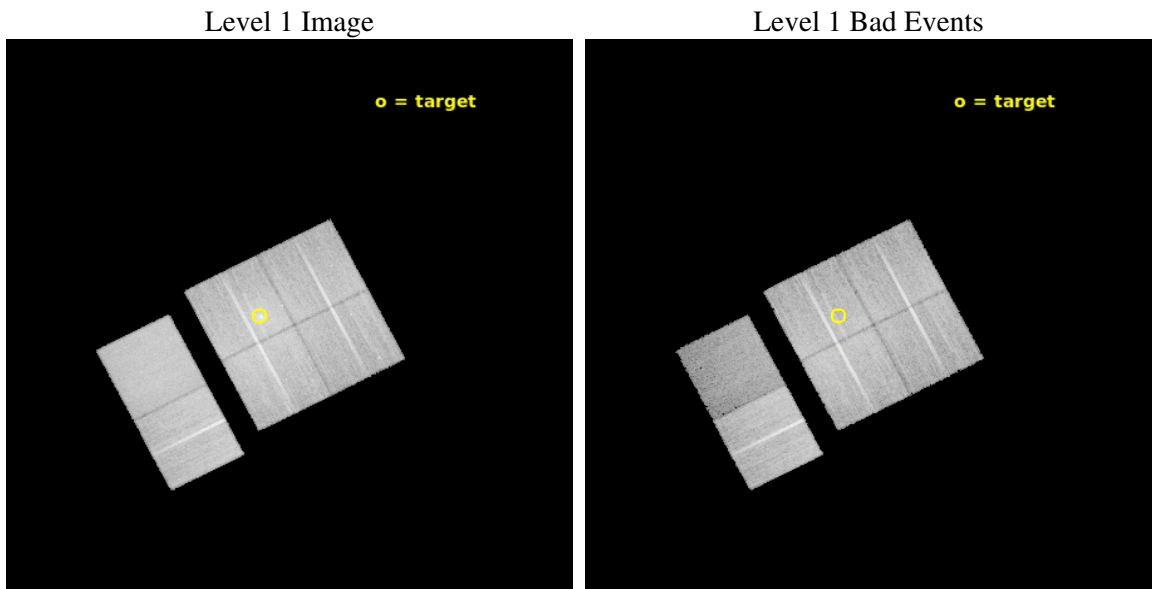
seq_num	800439	Sequence number
obs_id	4996	Observation id
title	A Comparison of X-Ray and Optical Properties of Low Redshift Rich Clusters, A2151	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	A2151	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	241.15	Observer's specified target RA [deg]
dec_targ	17.723056	Observer's specified target Dec [deg]
ra_nom	241.09716425562	Nominal RA [deg]
dec_nom	17.708450081999	Nominal Dec [deg]
roll_nom	242.78855171163	Nominal Roll [deg]
revision	5	Processing version of data
ontime	22049.704177678	Sum of GTIs [s]
livetime	21770.497546642	Livetime [s]
ontime0	22046.340087414	Sum of GTIs [s]
ontime1	22046.381137401	Sum of GTIs [s]
ontime2	22046.422167391	Sum of GTIs [s]
ontime3	22049.704177678	Sum of GTIs [s]
ontime6	22049.786257684	Sum of GTIs [s]
ontime7	22049.745217681	Sum of GTIs [s]
l2events	237739	Number of level 2 events



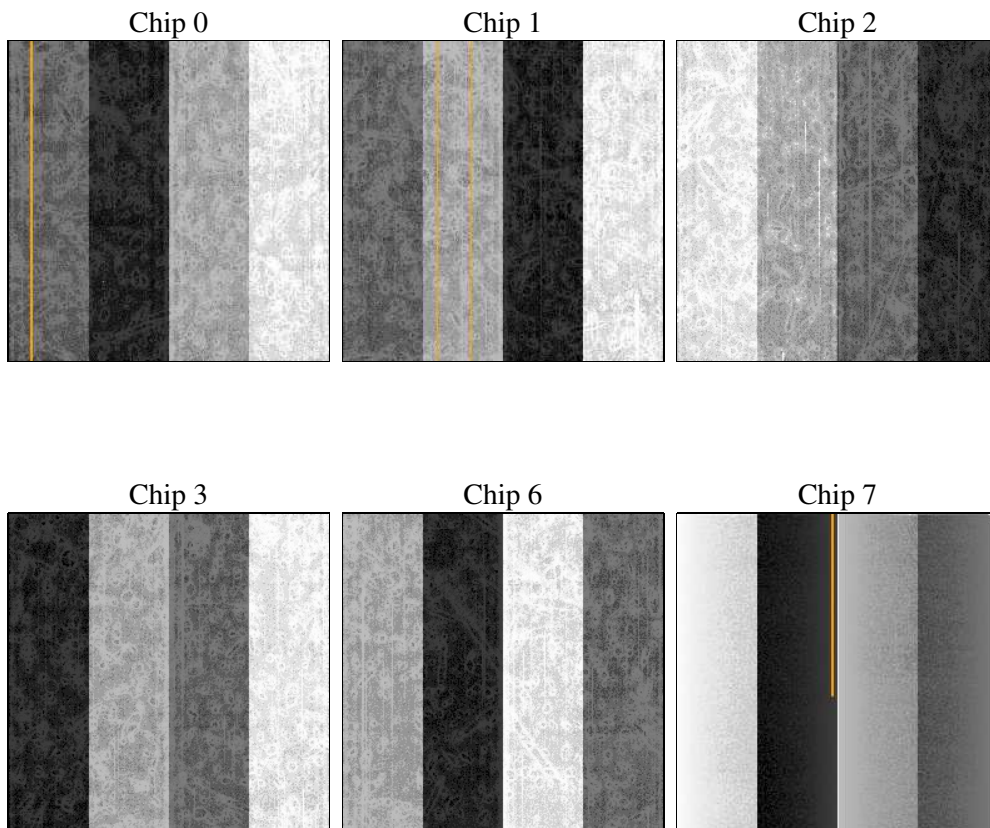
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24805.863000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	22049.704177678	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	22046.340087414	Sum of GTIs [s]
date	2020-09-27T13:25:03	Date and time of file creation	ontime1	22046.381137401	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	22046.422167391	Sum of GTIs [s]
			ontime3	22049.704177678	Sum of GTIs [s]
			ontime6	22049.786257684	Sum of GTIs [s]
			ontime7	22049.745217681	Sum of GTIs [s]
			l1events	972434	Number of level 1 events

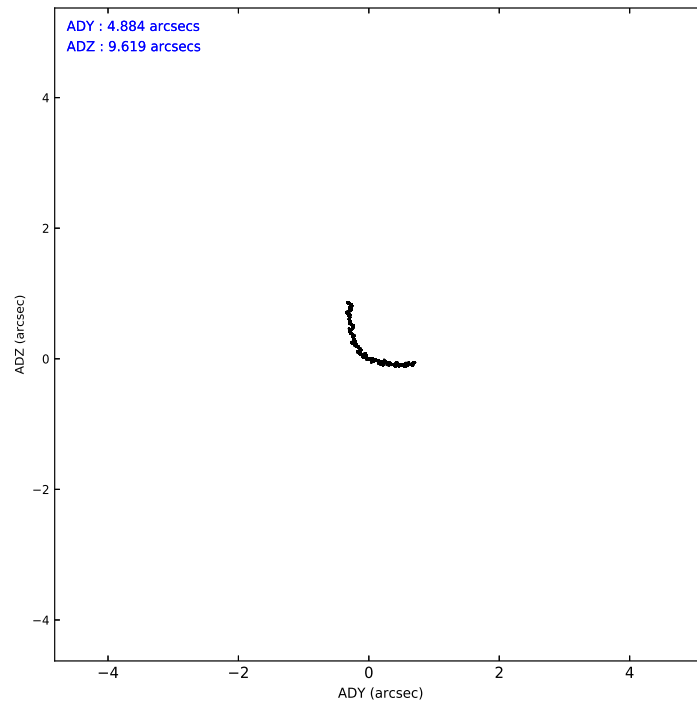
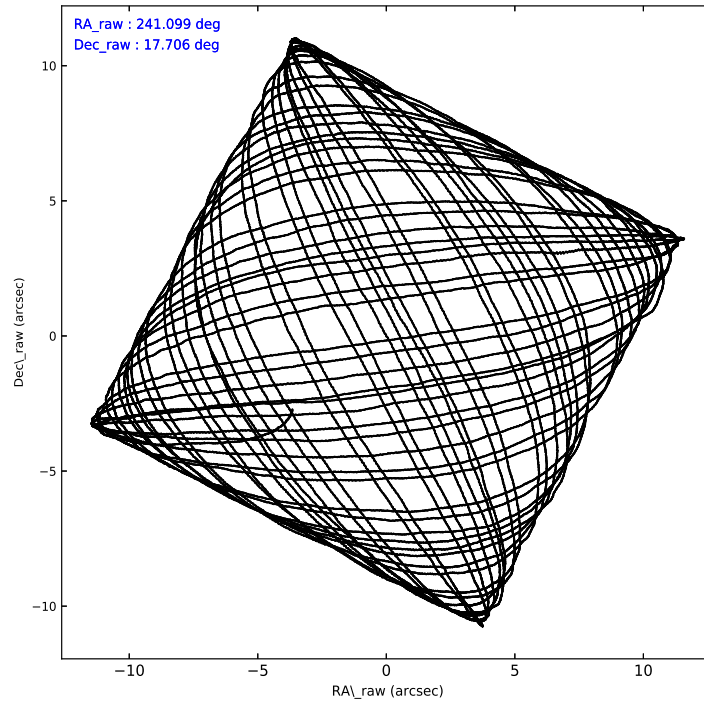
2.1.4 Events

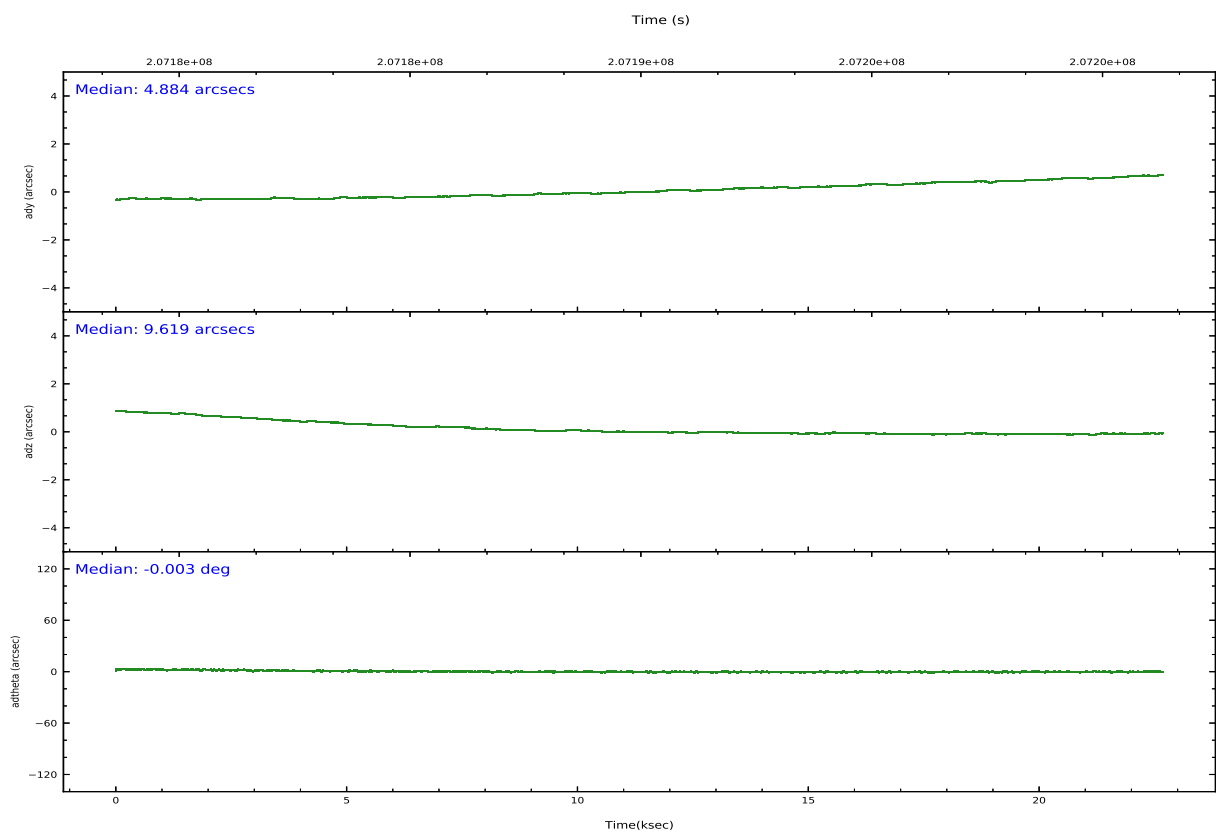
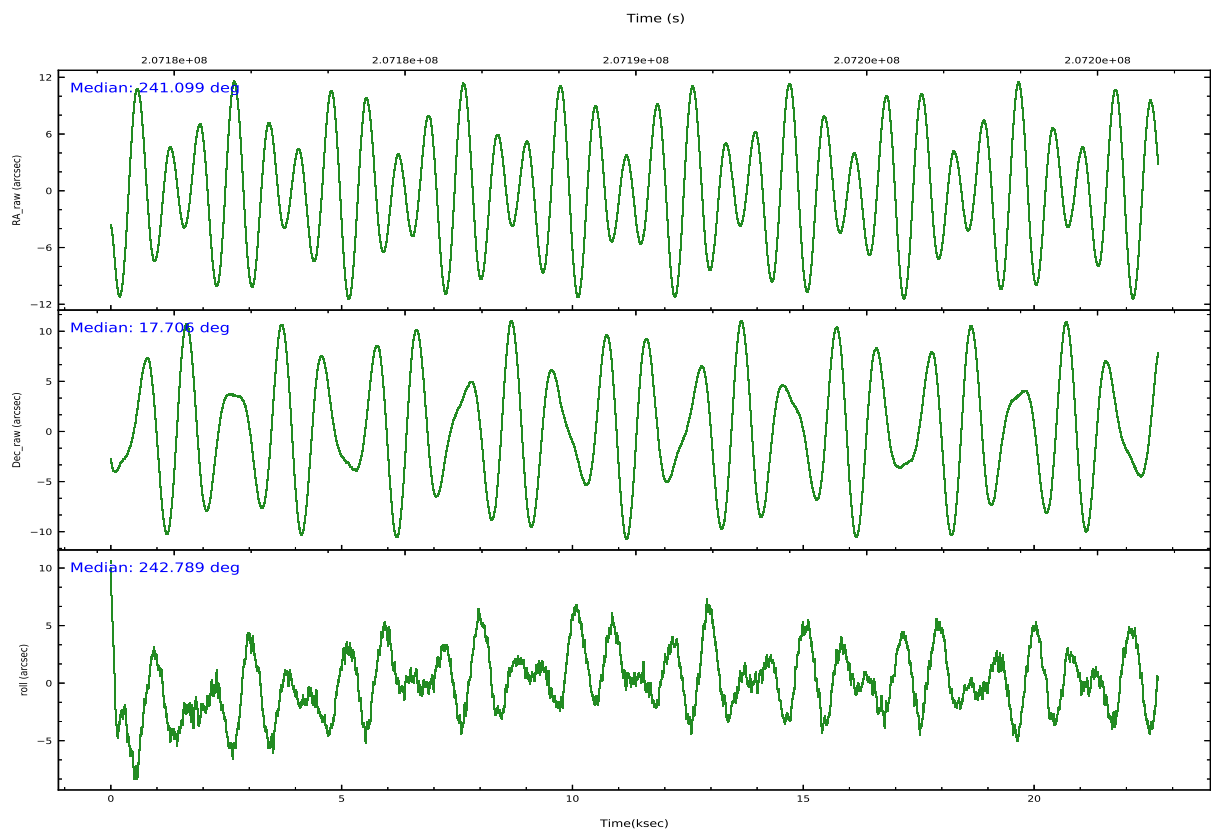
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	136367	142639	171467	177835	173452	170674	grade 0 events	13036	13760	15707	31987	15743	12717
rejected events	111373	117206	142709	132341	144817	58582		9%	9%	9%	17%	9%	7%
rejected %	81%	82%	83%	74%	83%	34%	grade 1 events	104	85	145	210	107	141
								0%	0%	0%	0%	0%	0%
							grade 2 events	5506	4642	6282	5867	5657	23071
								4%	3%	3%	3%	3%	13%
							grade 3 events	1767	1895	1653	2249	1811	9976
								1%	1%	0%	1%	1%	5%
							grade 4 events	1634	1815	2017	2229	1809	9840
								1%	1%	1%	1%	1%	5%
							grade 5 events	3418	3740	3354	4027	4089	12671
								2%	2%	1%	2%	2%	7%
							grade 6 events	3085	3348	3135	3223	3651	56654
								2%	2%	1%	1%	2%	33%
							grade 7 events	107817	113354	139174	128043	140585	45604
								79%	79%	81%	72%	81%	26%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	241.097571	241.09716425562	Subarray requested	NONE	NONE
[deg] Pointing Dec	17.733194	17.708450081999	Alternating exposures requested	N	N
[deg] Pointing Roll	242.587592	242.78855171163	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	207179207.184000	207178049.3969			
Observation start date	2004-07-25T21:45:43	2004-07-25T21:27:29			
[s] Observation end time (MET)	207204013.184000	207201313.82294			
Observation end date	2004-07-26T04:39:09	2004-07-26T03:55:13			
Read mode	TIMED	TIMED			

2.3 Aspect



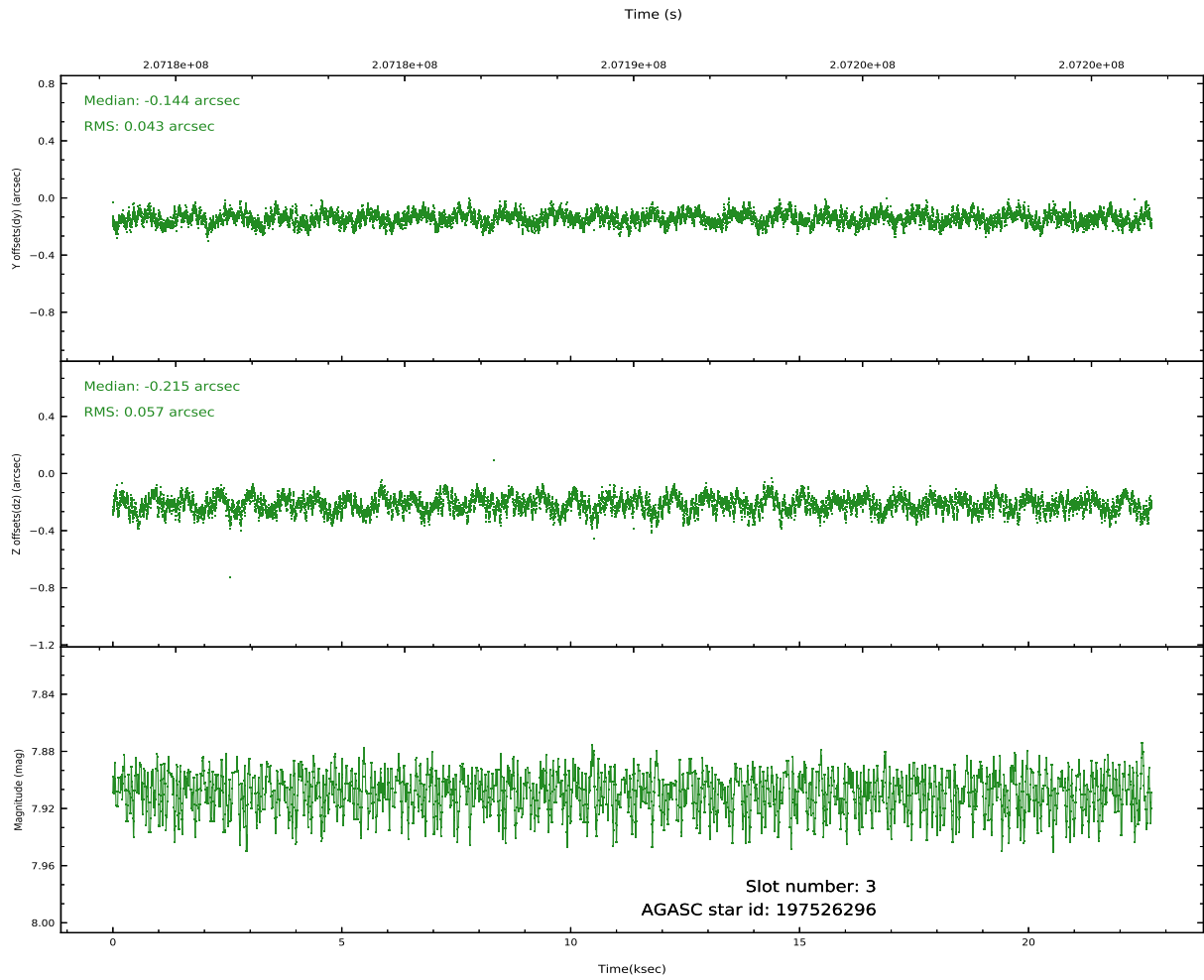
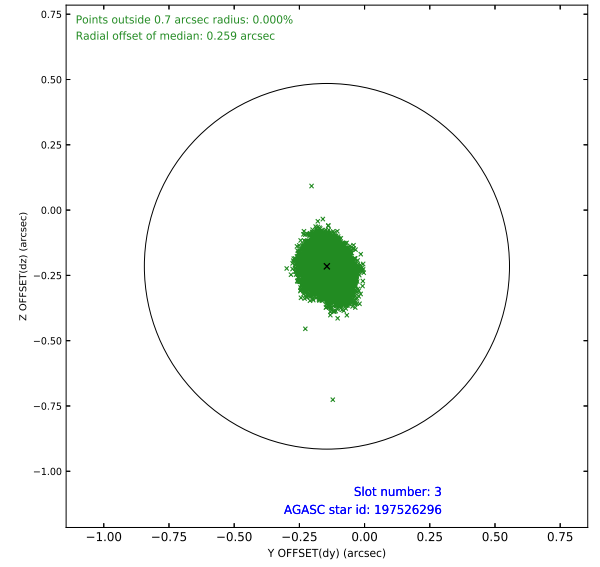
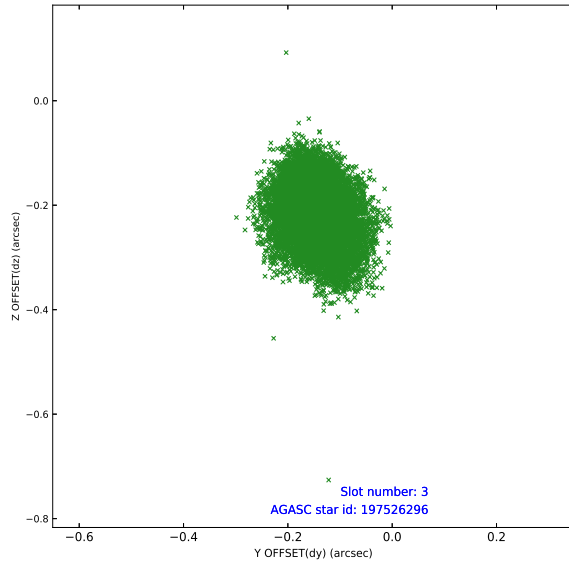


Slot Statistics

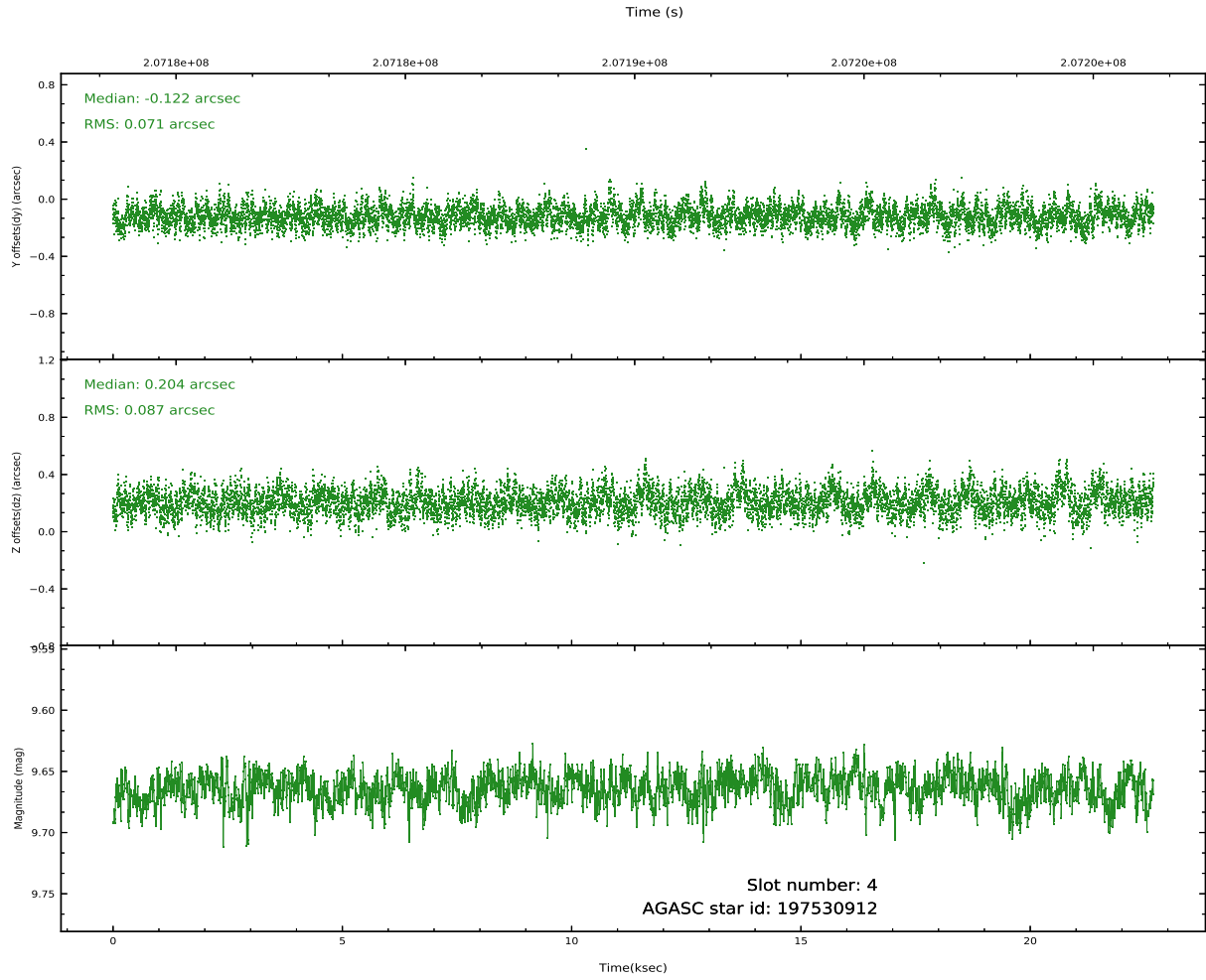
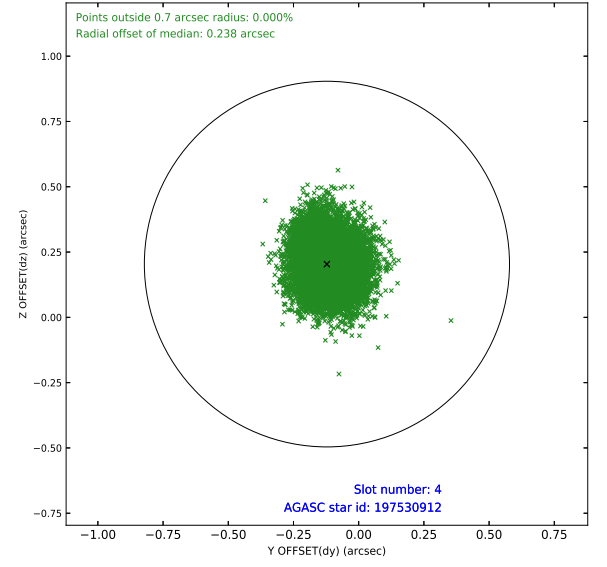
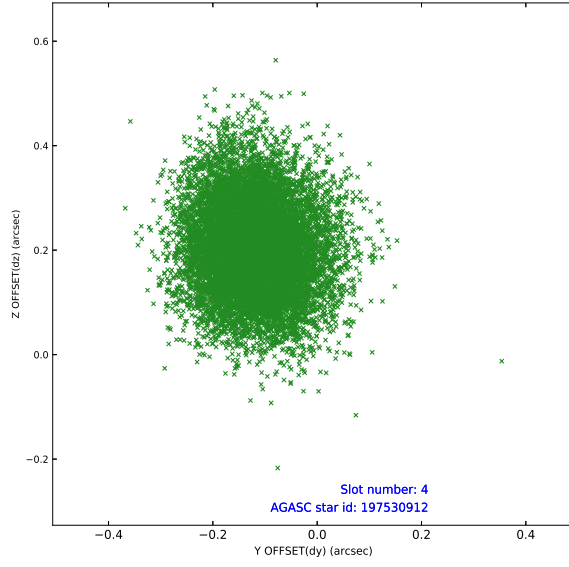
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	5534	1.000	0.015	0.013	0.014	0.040	0.000000	0.000000	934.81	-833
1	FID		ACIS-I-5	7.23	5531	1.000	-0.198	0.026	0.010	0.018	0.000000	0.000000	-1813.45	1064
2	FID		ACIS-I-6	7.25	5534	1.000	0.090	0.032	0.011	0.026	0.000000	0.000000	400.24	1708
3	GUIDE	used	197526296	7.91	11067	1.000	-0.144	-0.215	0.076	0.120	240.655589	18.114009	-521.88	-1974
4	GUIDE	used	197530912	9.66	11060	1.000	-0.122	0.204	0.119	0.192	241.559759	17.403488	320.91	1955
5	GUIDE	used	197530968	9.67	10994	1.000	-0.028	0.183	0.114	0.188	241.553279	17.328552	570.47	2060
6	GUIDE	used	197531712	9.26	11060	1.000	0.124	-0.230	0.104	0.169	240.314426	17.436774	2181.61	-1898
7	GUIDE	used	197532936	9.75	11056	1.000	0.163	0.060	0.139	0.213	241.049650	17.100636	2097.94	902

2.4 Star Slots

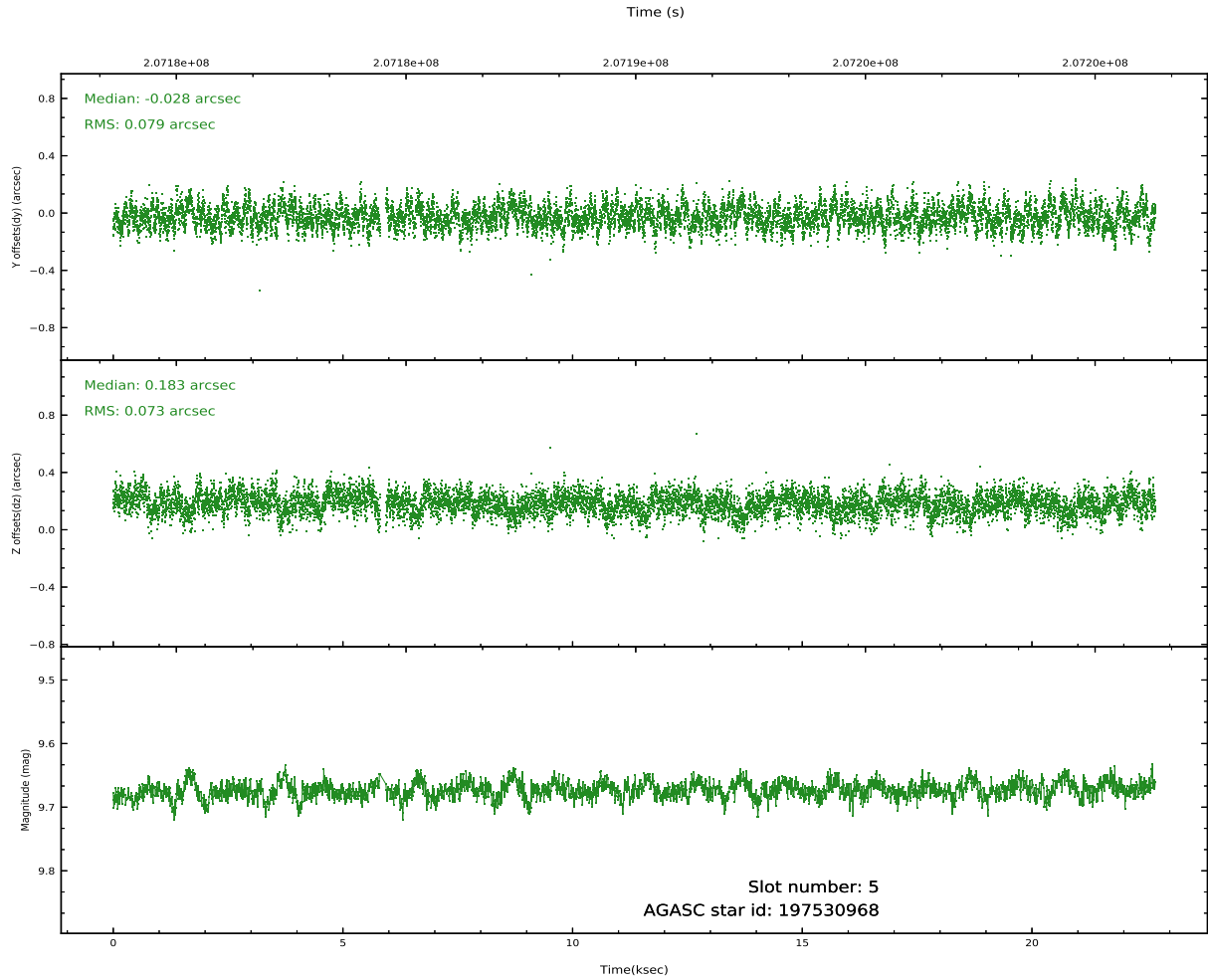
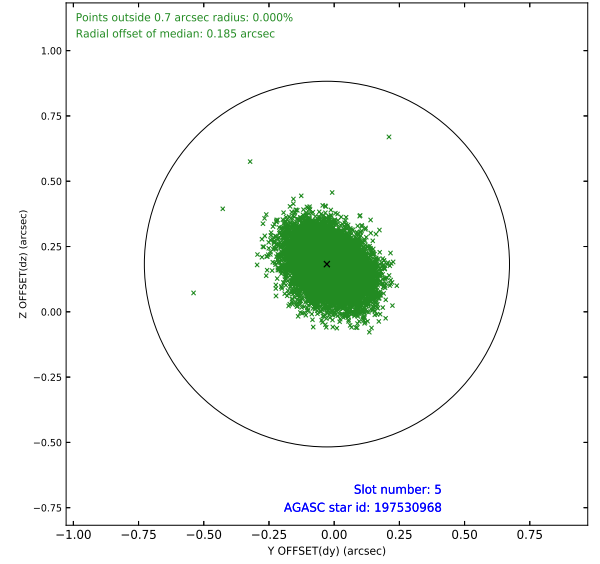
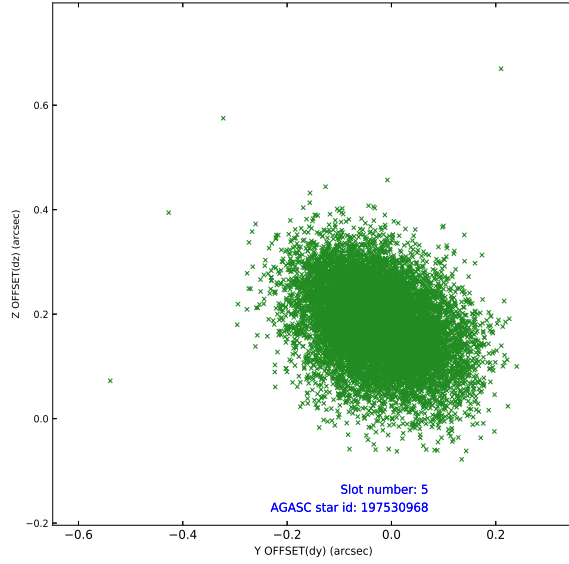
2.4.1 Slot 3



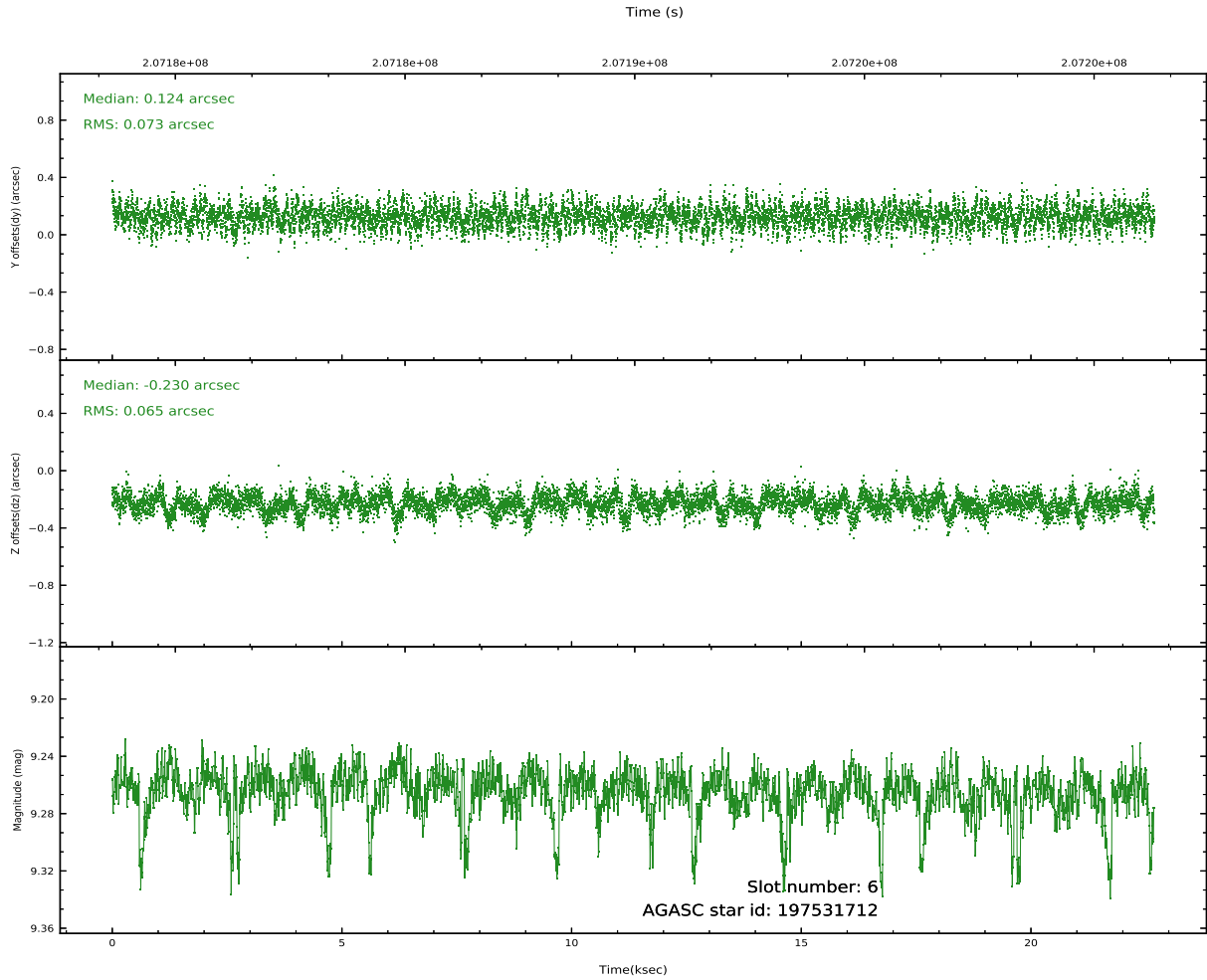
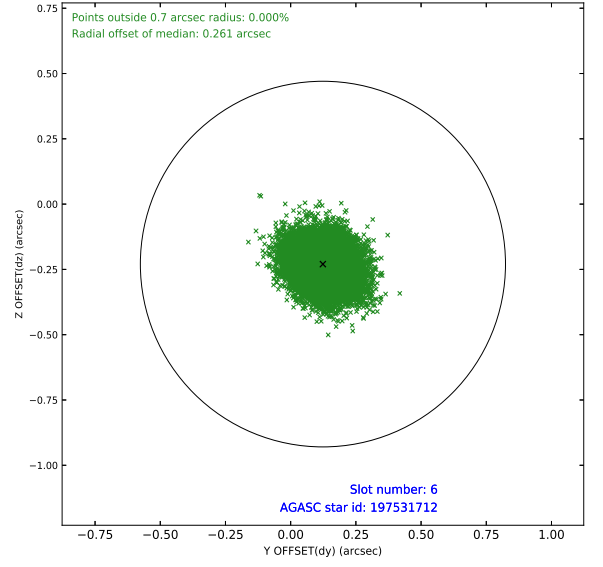
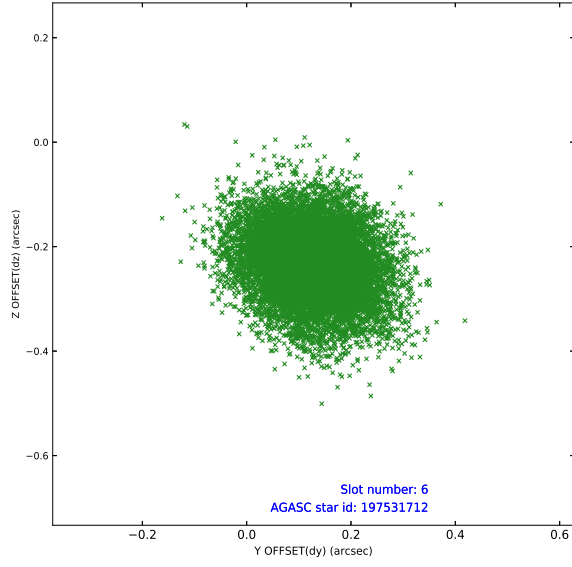
2.4.2 Slot 4



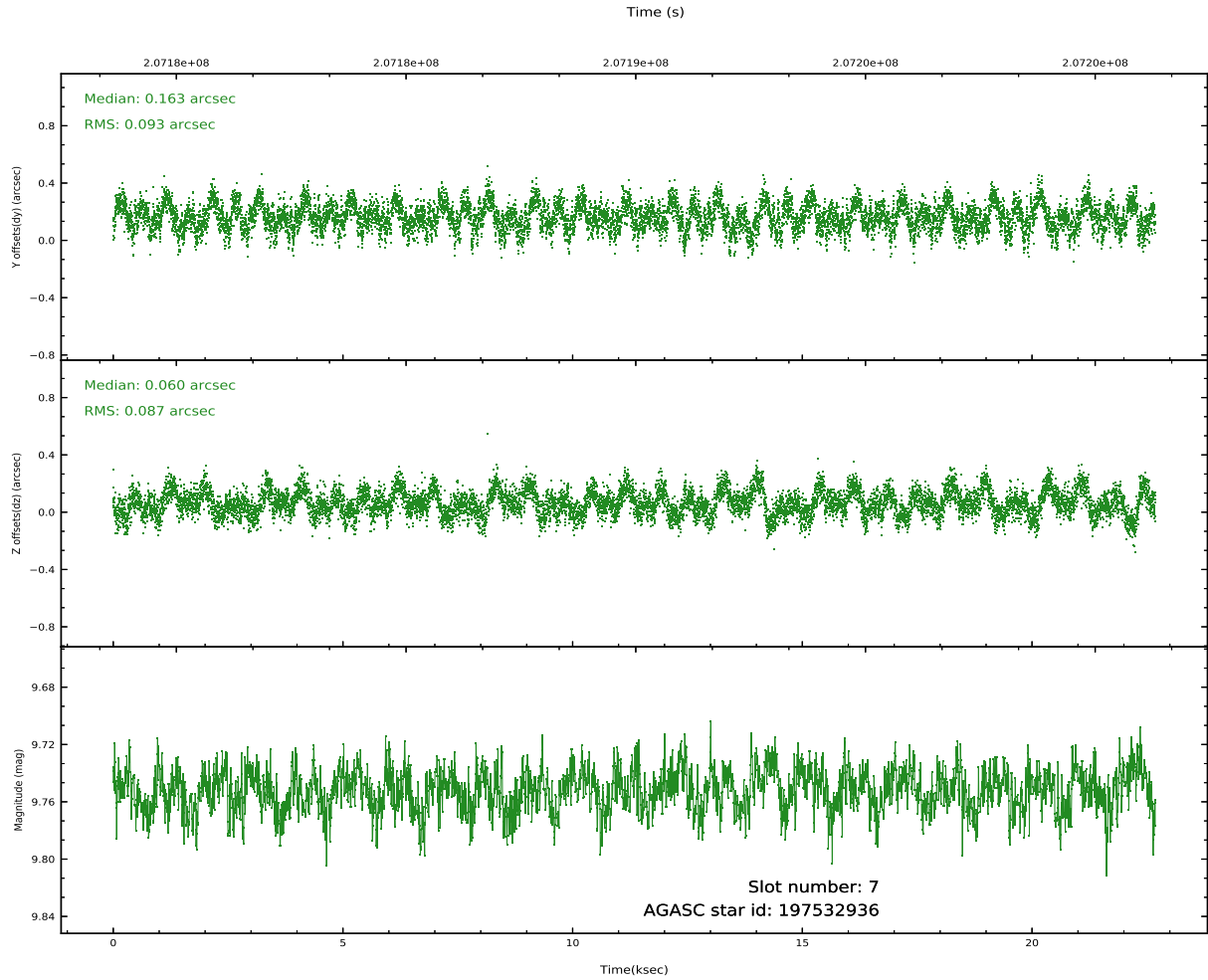
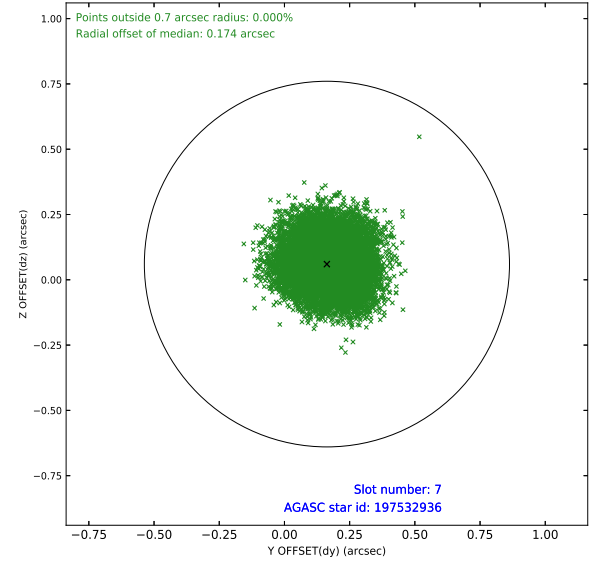
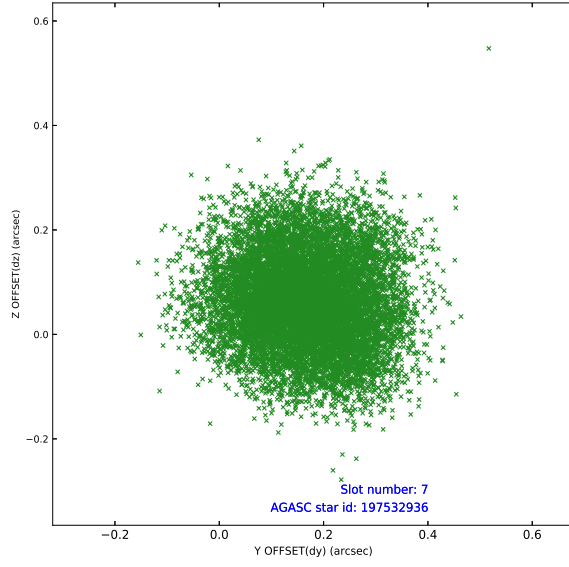
2.4.3 Slot 5



2.4.4 Slot 6

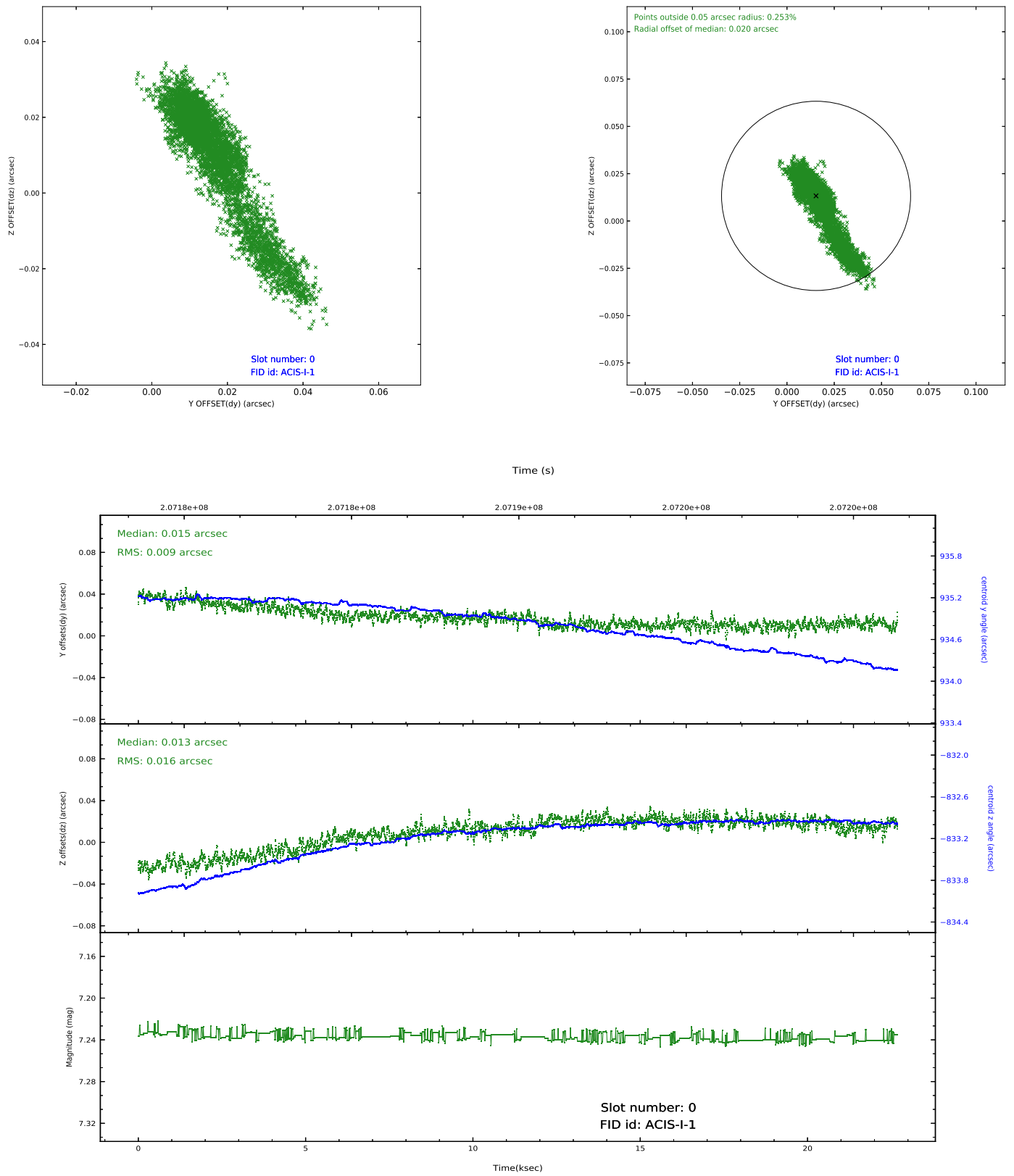


2.4.5 Slot 7

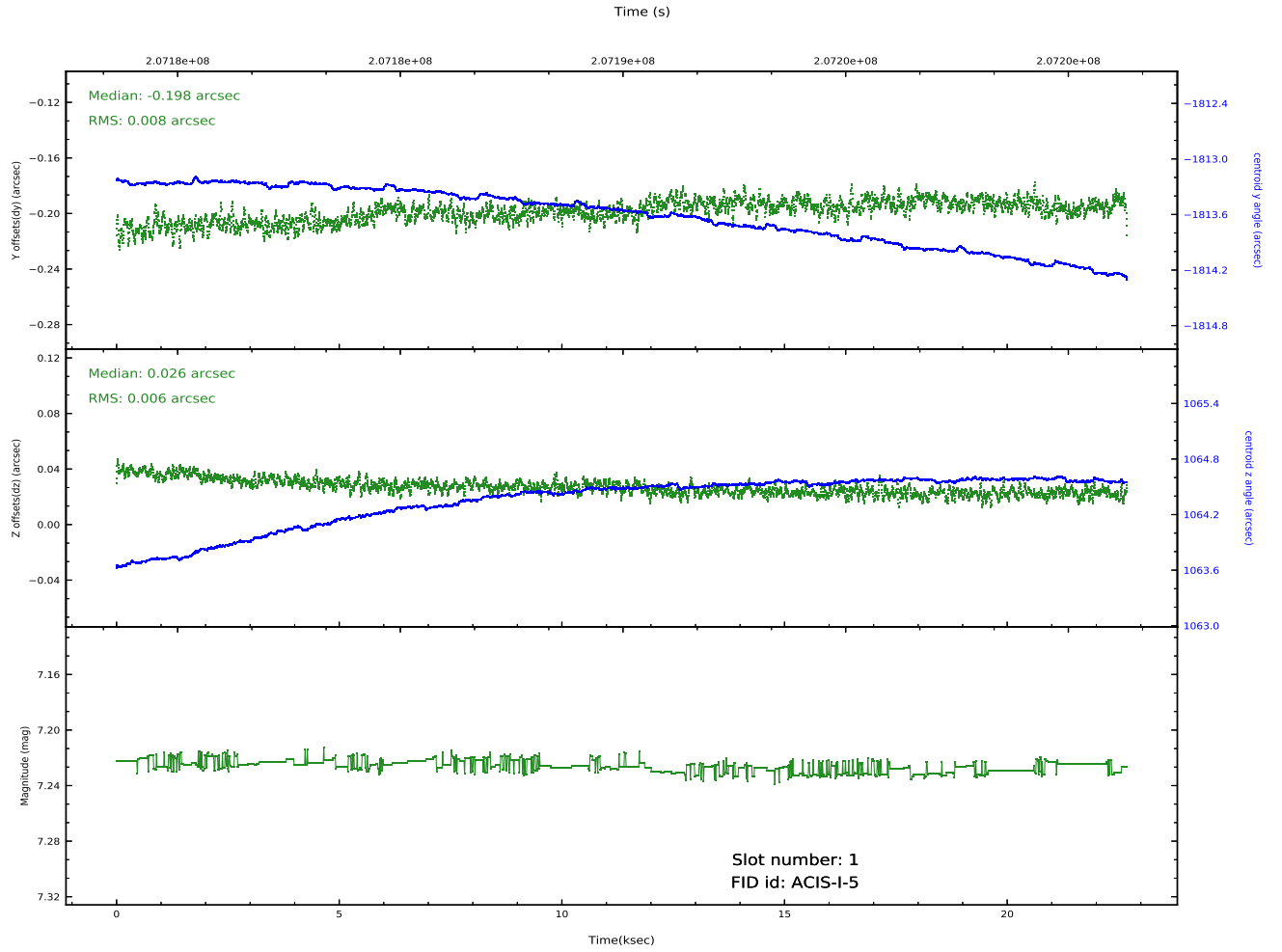
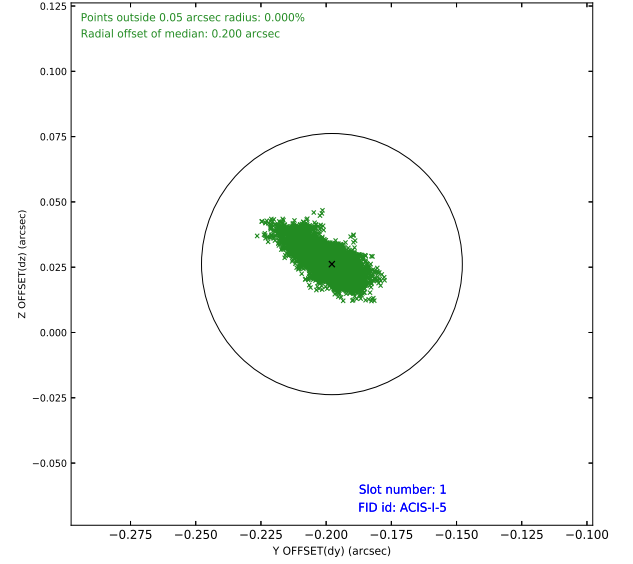
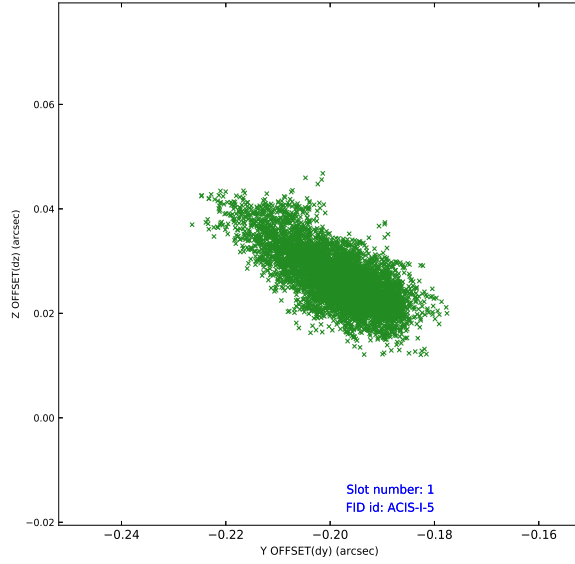


2.5 FID Slots

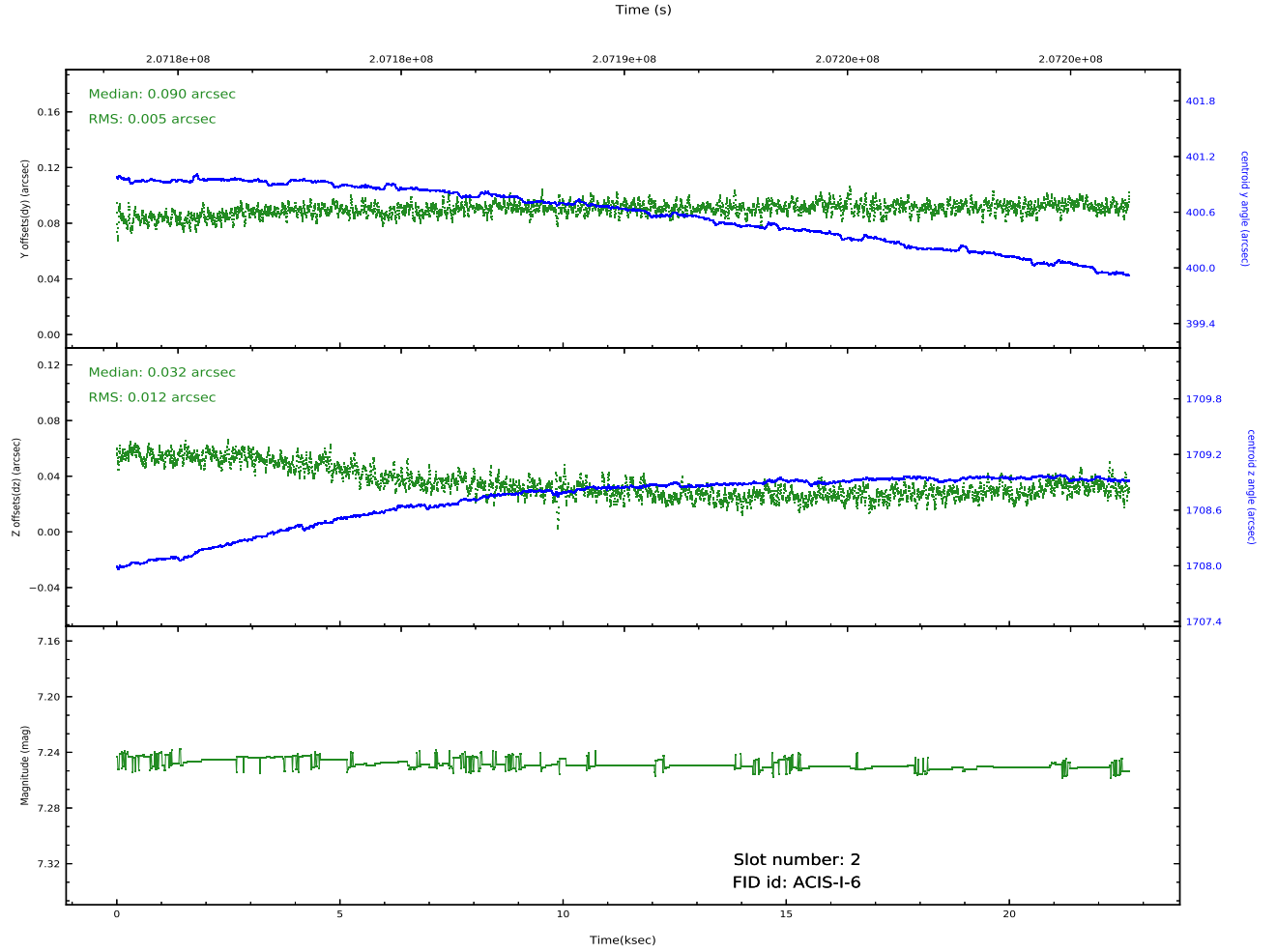
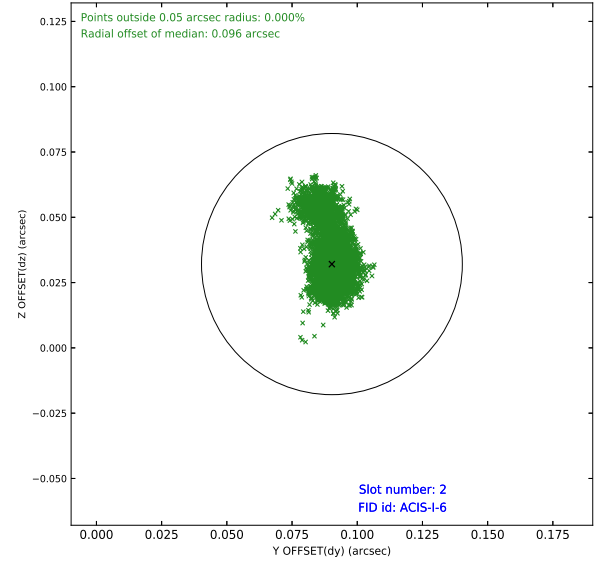
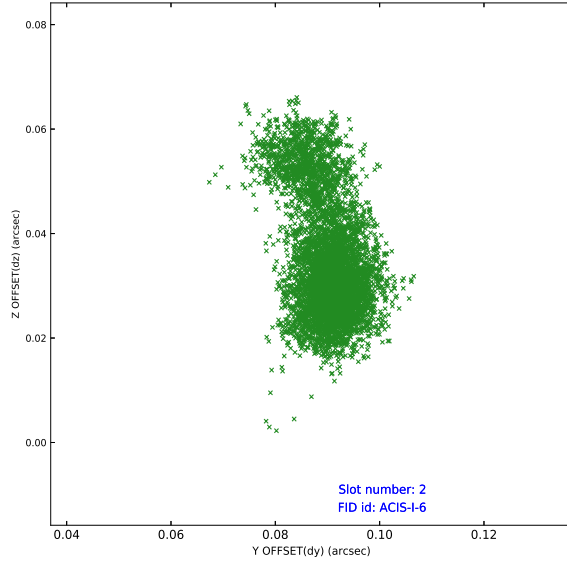
2.5.1 Slot 0



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)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.118

A.2 Comments

Charge time for this observation remains at previous value of 22.118 ksec, although with the current processing the charge time would have been 22.049 ksec.

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This observation was interrupted by safing of the science instruments due to high solar radiation environment. The observation was interrupted at 2004:208:04:06:28 UT.