

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20527 - L2 Version 2
Chandra X-Ray Center

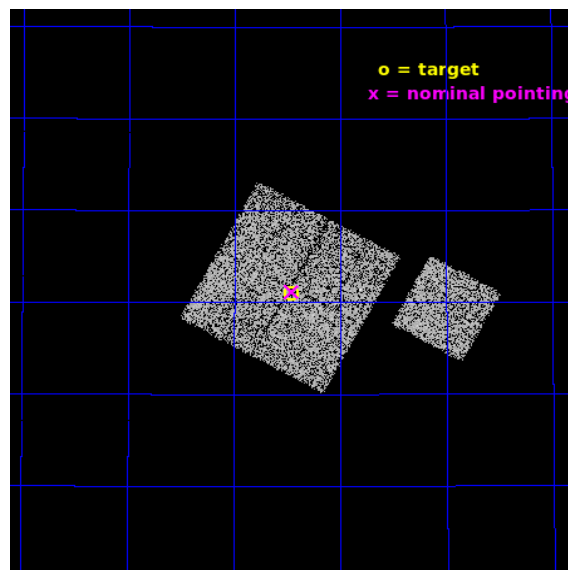
L2 Processing Date : Oct 27 2020

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1 Front

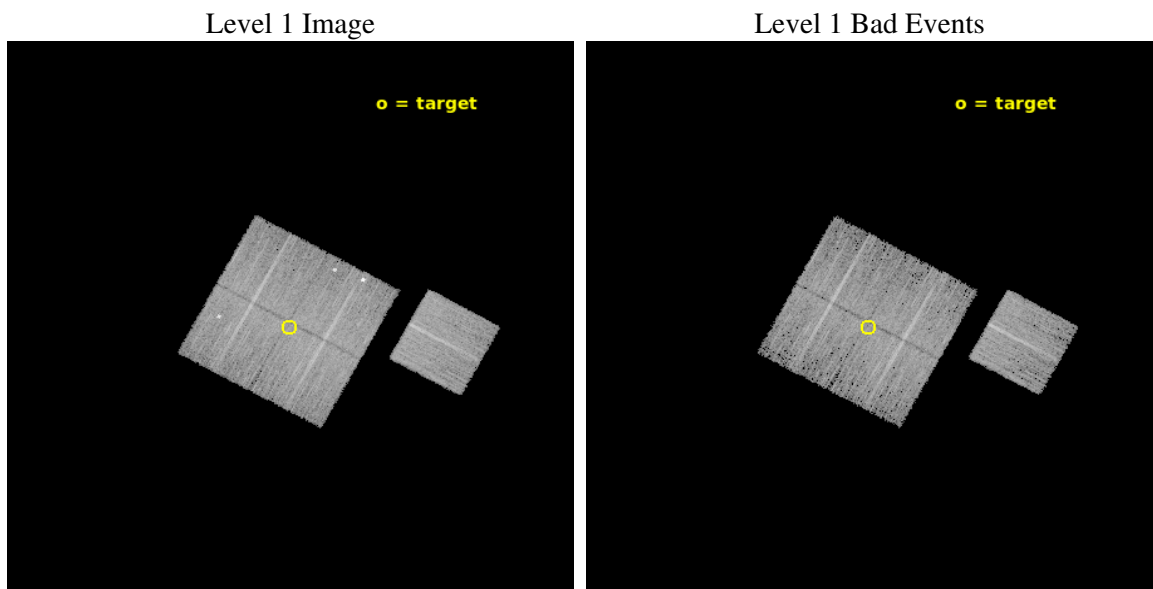
seq_num	801741	Sequence number
obs_id	20527	Observation id
title	Unravelling gas clumping in the outskirts of the Perseus cluster	P
observer	Stephen Walker	Principal investigator
object	Perseus r200 NE	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	51.364167	Observer's specified target RA [deg]
dec_targ	42.349389	Observer's specified target Dec [deg]
ra_nom	51.364078548933	Nominal RA [deg]
dec_nom	42.352863835573	Nominal Dec [deg]
roll_nom	118.71970745407	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7542.3000581264	Sum of GTIs [s]
livetime	7443.7543553065	Livetime [s]
ontime0	7542.2459926605	Sum of GTIs [s]
ontime1	7542.2870326042	Sum of GTIs [s]
ontime2	7542.3000581264	Sum of GTIs [s]
ontime3	7542.3000581264	Sum of GTIs [s]
ontime6	7542.2049525976	Sum of GTIs [s]
l2events	25817	Number of level 2 events



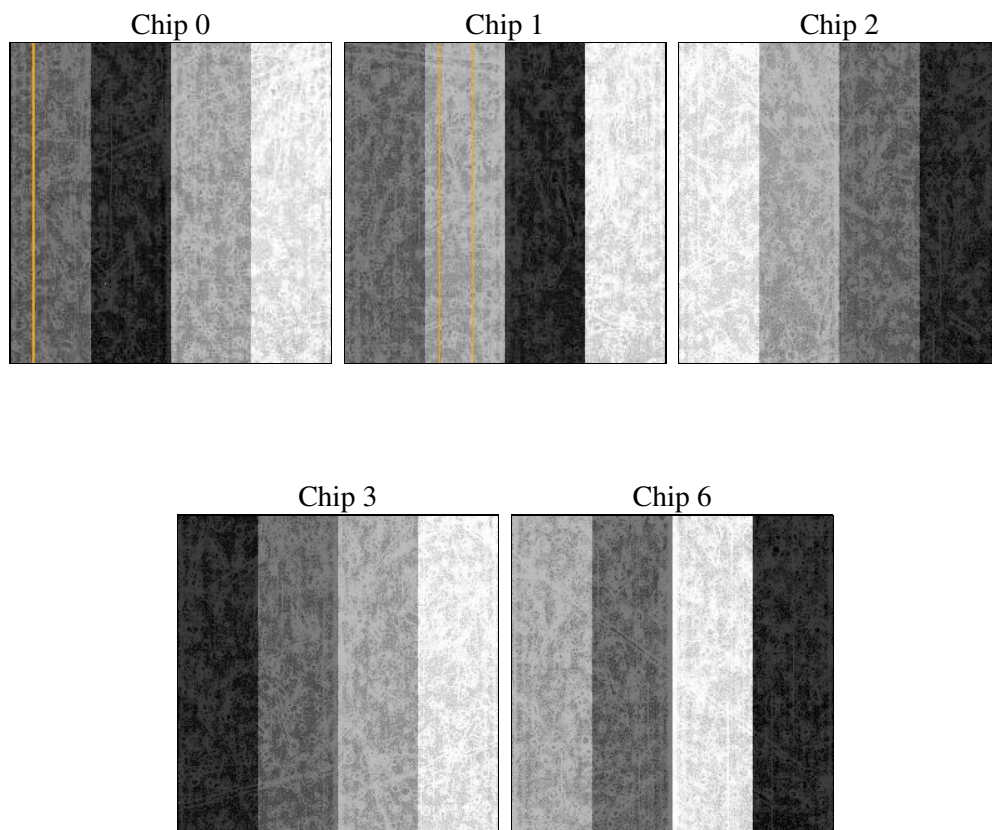
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7653.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	7542.3000581264	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	7542.2459926605	Sum of GTIs [s]
date	2020-10-27T20:25:44	Date and time of file creation	ontime1	7542.2870326042	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	7542.3000581264	Sum of GTIs [s]
			ontime3	7542.3000581264	Sum of GTIs [s]
			ontime6	7542.2049525976	Sum of GTIs [s]
			l1events	277685	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	51637	53556	58946	54865	58681
rejected events	45548	46155	49736	49123	52422
rejected %	88%	86%	84%	89%	89%

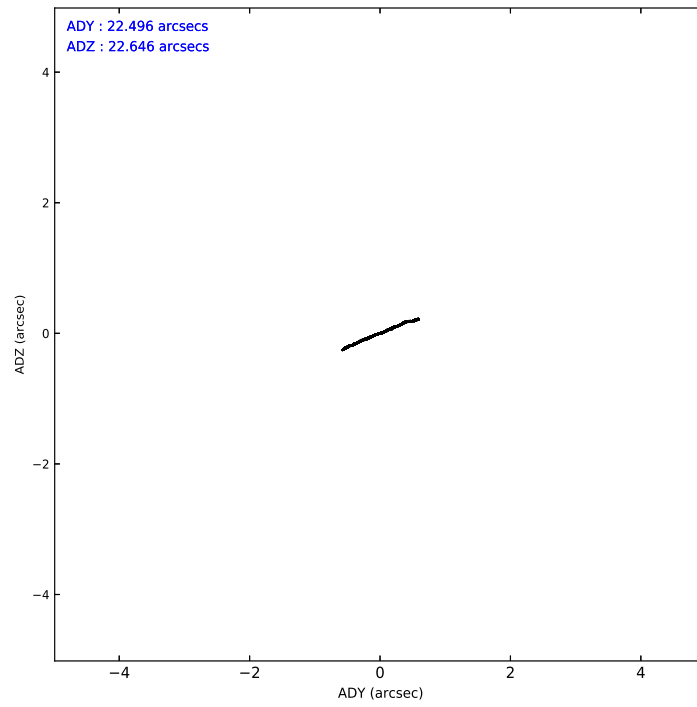
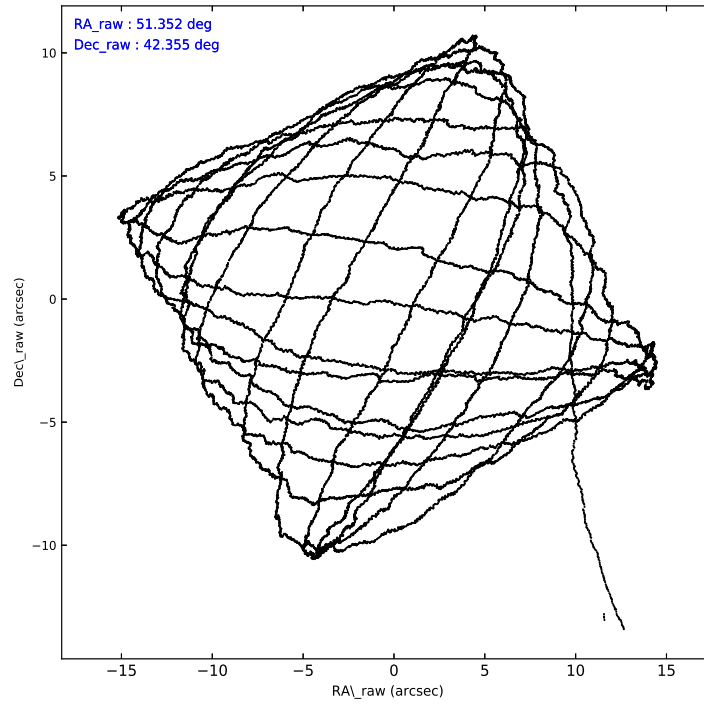
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1939	2828	5438	2042	1872
	3%	5%	9%	3%	3%
grade 1 events	21	29	63	29	27
	0%	0%	0%	0%	0%
grade 2 events	1564	1685	1398	1221	1673
	3%	3%	2%	2%	2%
grade 3 events	630	612	568	576	565
	1%	1%	0%	1%	0%
grade 4 events	556	547	570	606	533
	1%	1%	0%	1%	0%
grade 5 events	2186	2254	2025	2508	2368
	4%	4%	3%	4%	4%
grade 6 events	1403	1736	1243	1302	1627
	2%	3%	2%	2%	2%
grade 7 events	43338	43865	47641	46581	50016
	83%	81%	80%	84%	85%

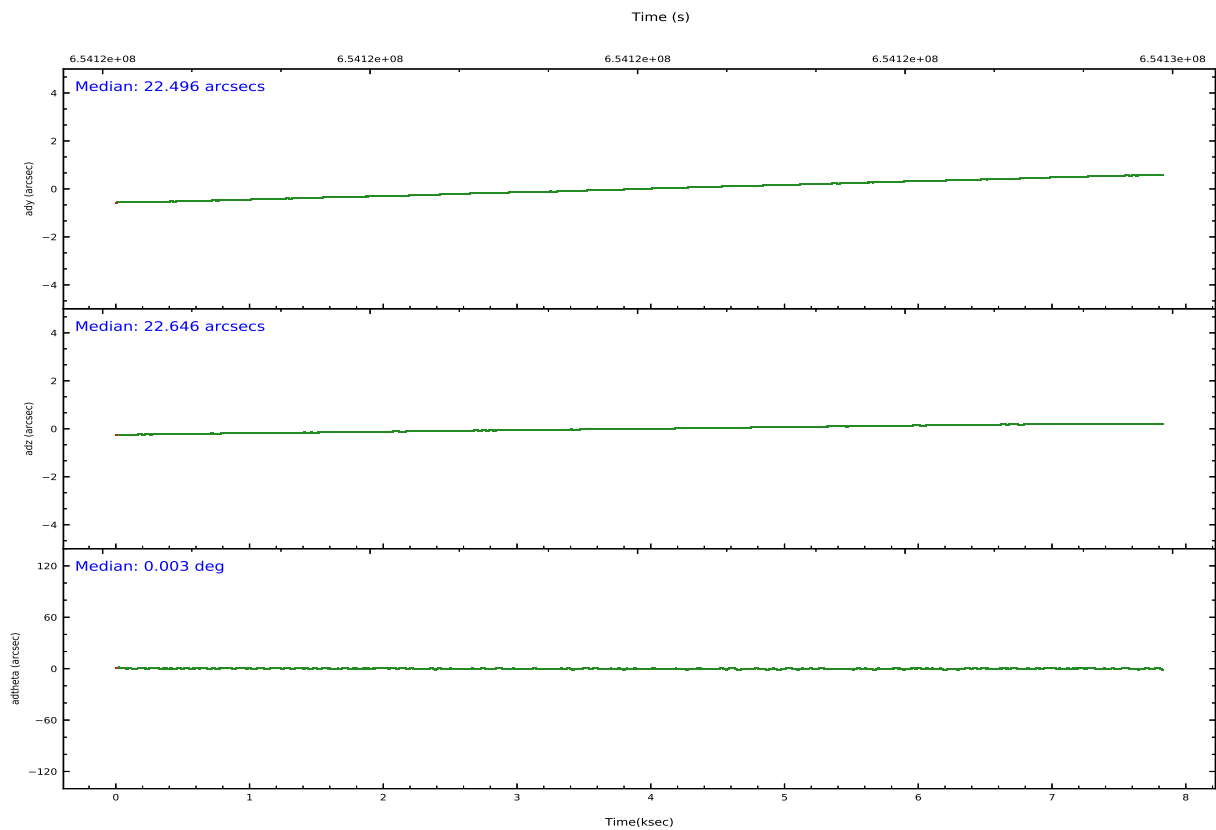
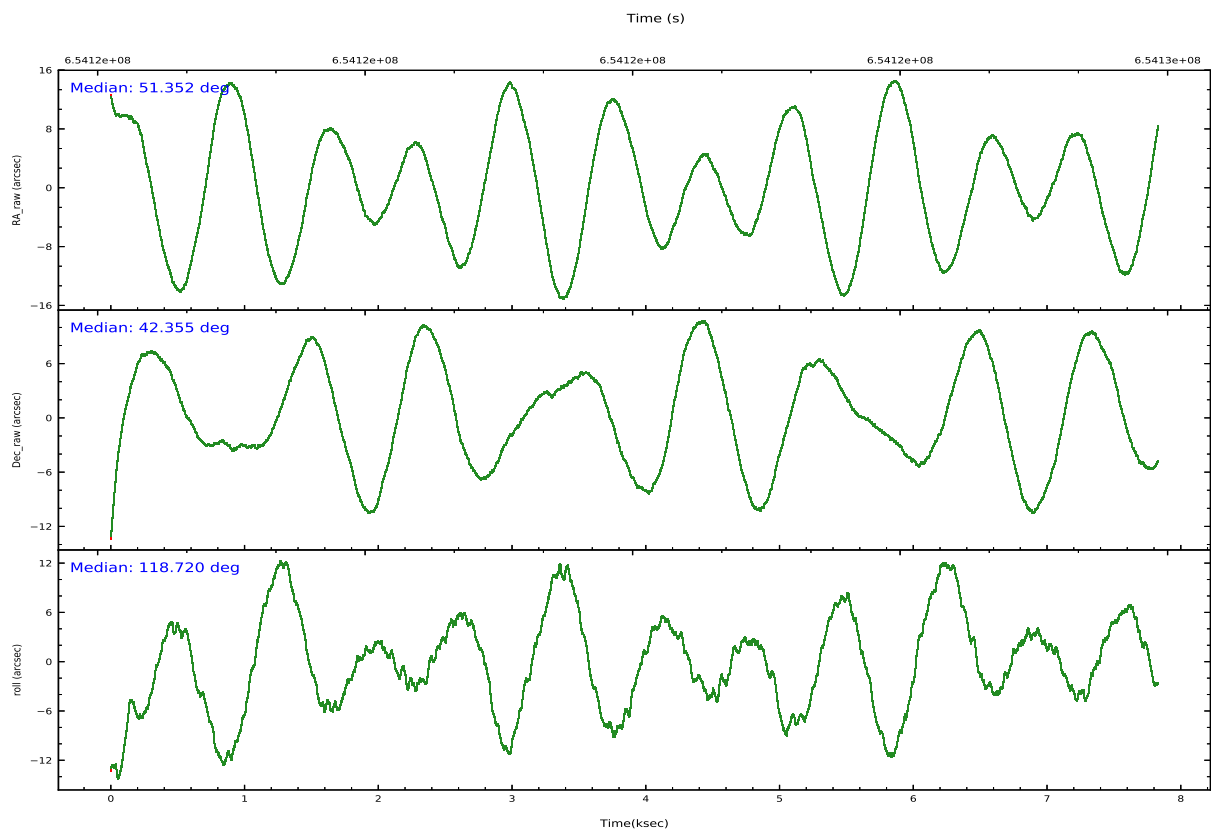
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	51.384150	51.364078548933
[deg] Pointing Dec	42.341173	42.352863835573
[deg] Pointing Roll	118.498765	118.71970745407
[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)	654118276.184000	654117336.3094701
Observation start date	2018-09-23T19:30:07	2018-09-23T19:15:36
[s] Observation end time (MET)	654125929.184000	654126522.87252
Observation end date	2018-09-23T21:37:40	2018-09-23T21:48:42
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



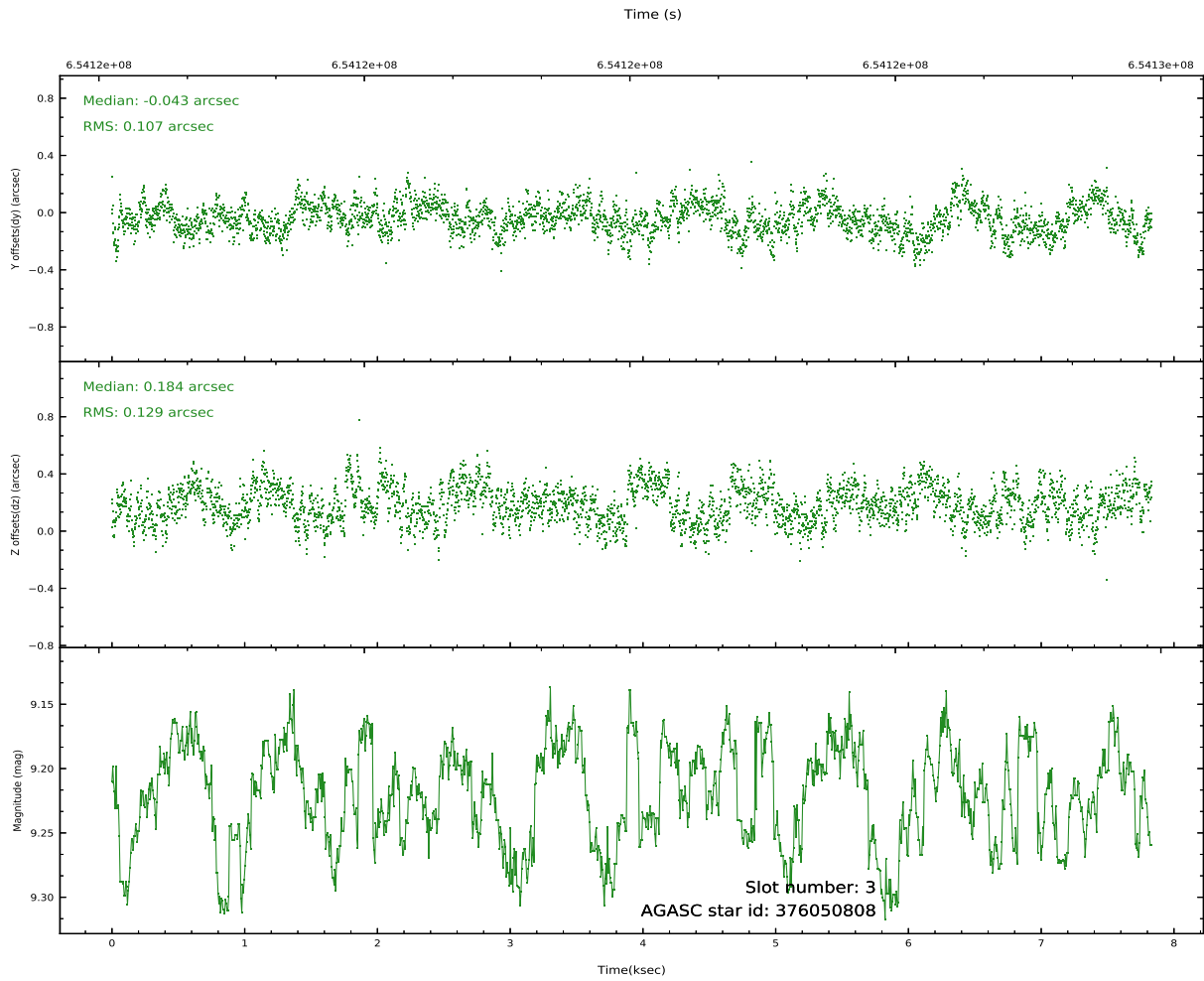
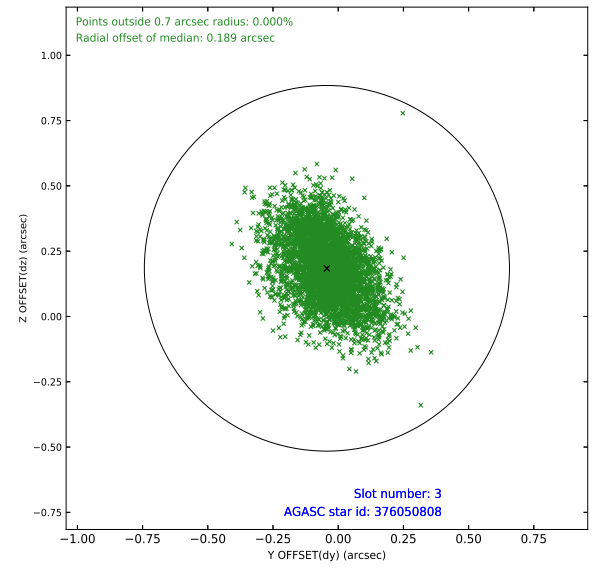
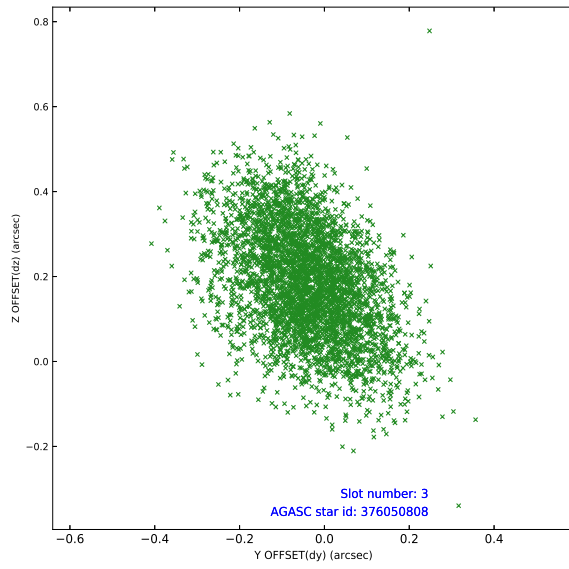


Slot Statistics

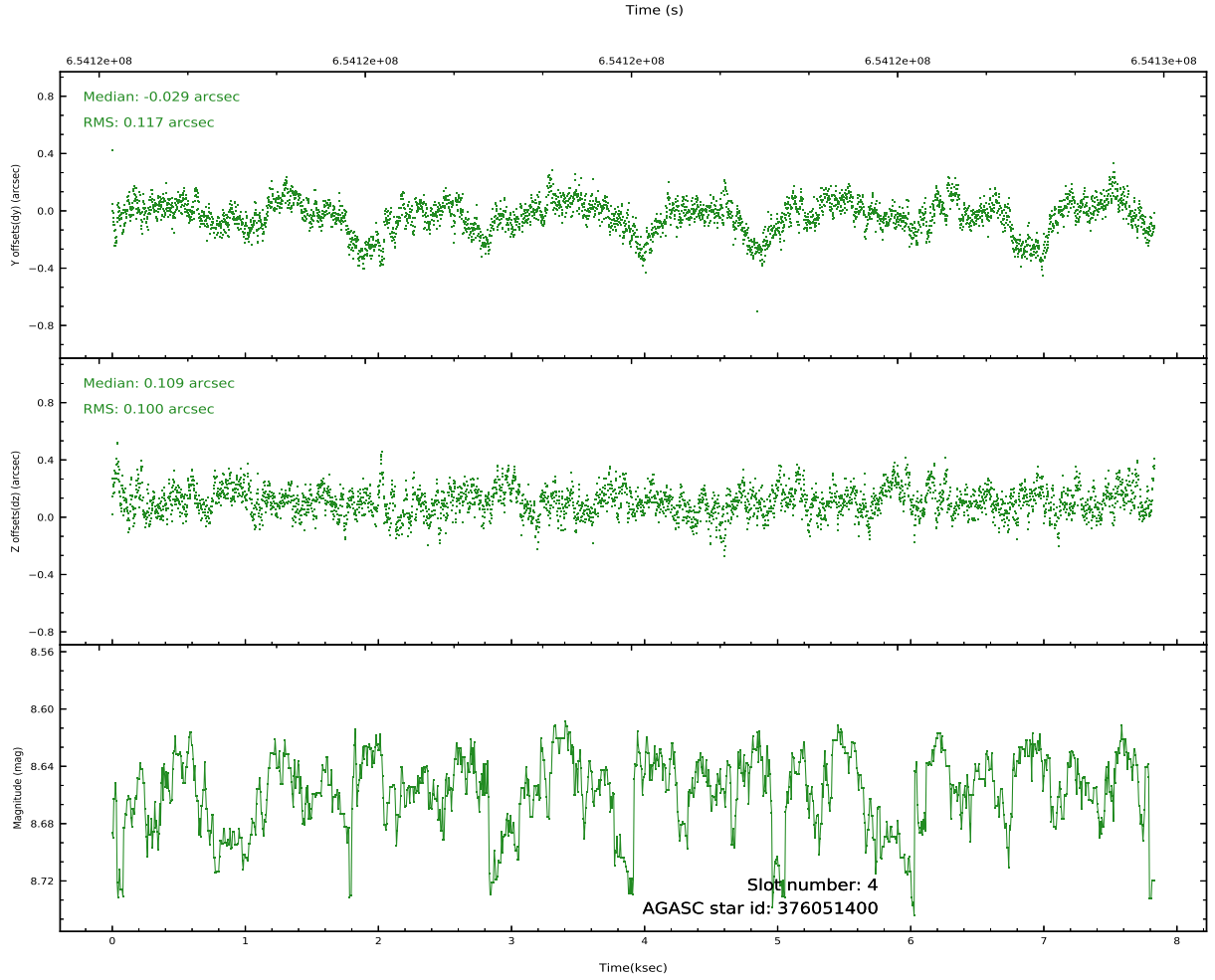
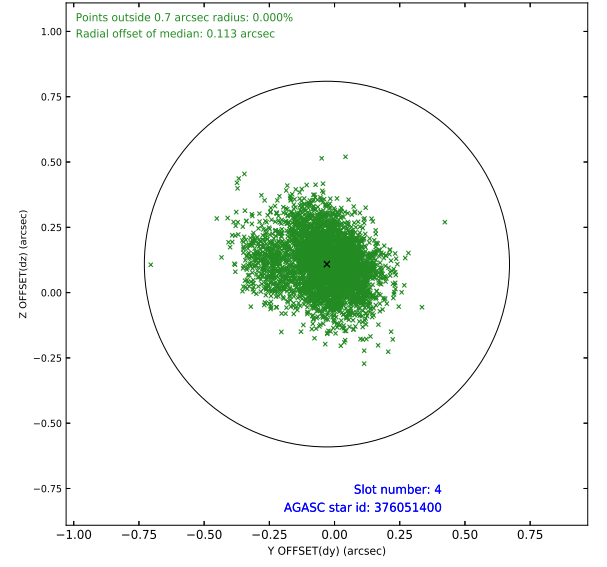
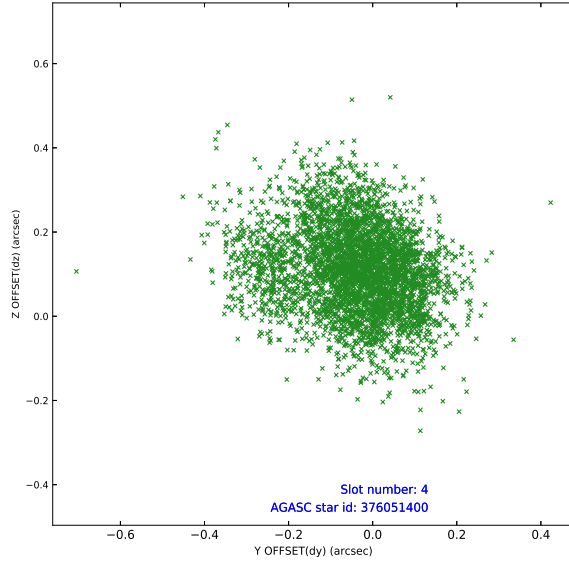
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.30	1911	1.000	0.242	-0.126	0.010	0.017	0.000000	0.000000	916.92	-846
1	FID		ACIS-I-5	7.27	1910	1.000	-0.330	0.214	0.008	0.013	0.000000	0.000000	-1831.21	1051
2	FID		ACIS-I-6	7.31	1911	1.000	-0.003	-0.018	0.011	0.020	0.000000	0.000000	381.64	1695
3	GUIDE	used	376050808	9.22	3816	1.000	-0.043	0.184	0.178	0.292	51.635981	42.512231	223.77	-881
4	GUIDE	used	376051400	8.66	3817	1.000	-0.029	0.109	0.162	0.271	51.516123	42.880874	1542.23	-1232
5	GUIDE	used	376054128	9.19	3817	1.000	0.082	0.118	0.166	0.283	51.521731	42.593277	624.68	-753
6	GUIDE	used	376064600	9.21	3816	1.000	0.024	-0.163	0.189	0.317	50.213209	42.582691	2263.84	2302
7	GUIDE	used	376057824	8.34	3820	1.000	-0.043	-0.248	0.150	0.253	50.665569	41.926280	-387.51	2400

2.4 Star Slots

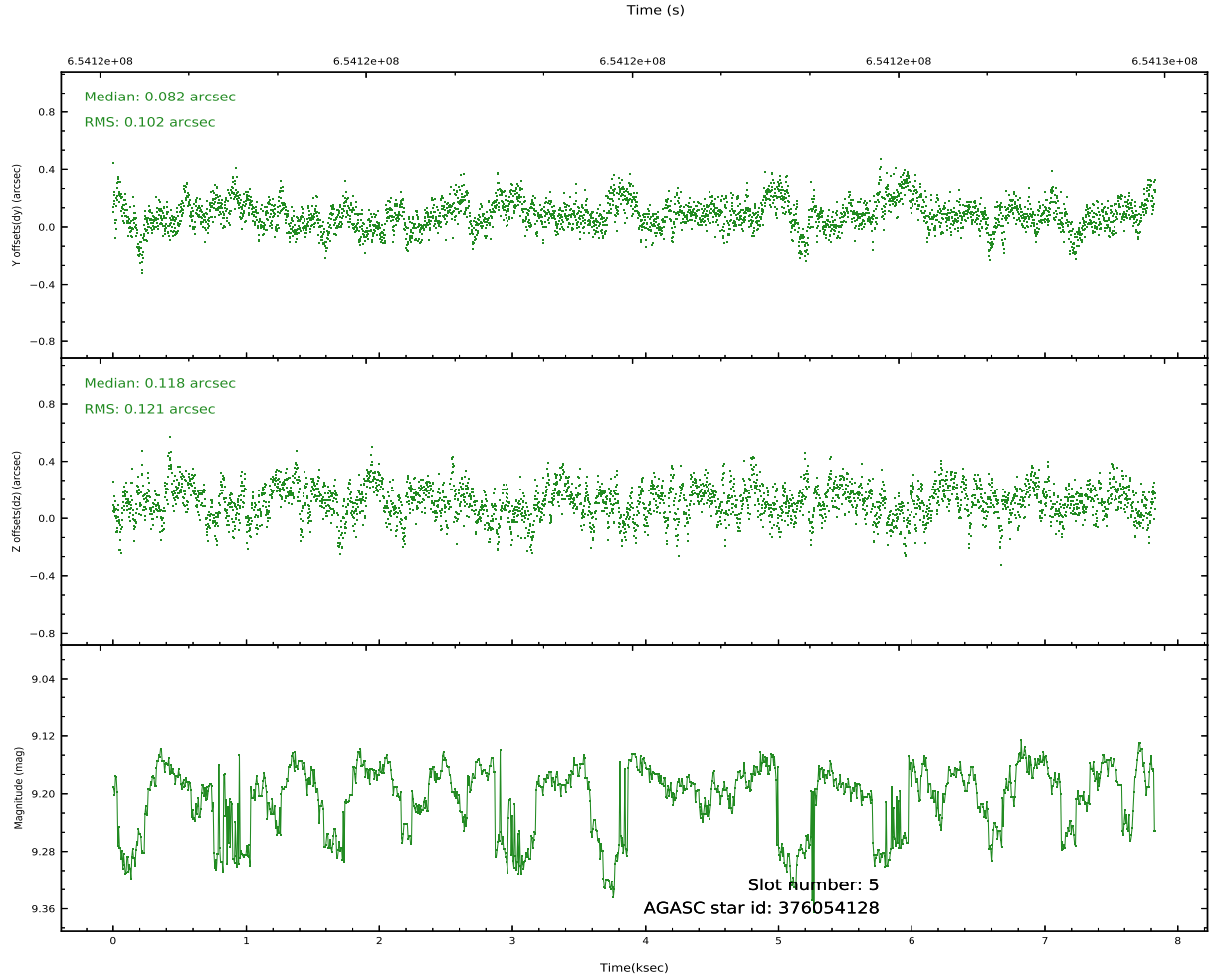
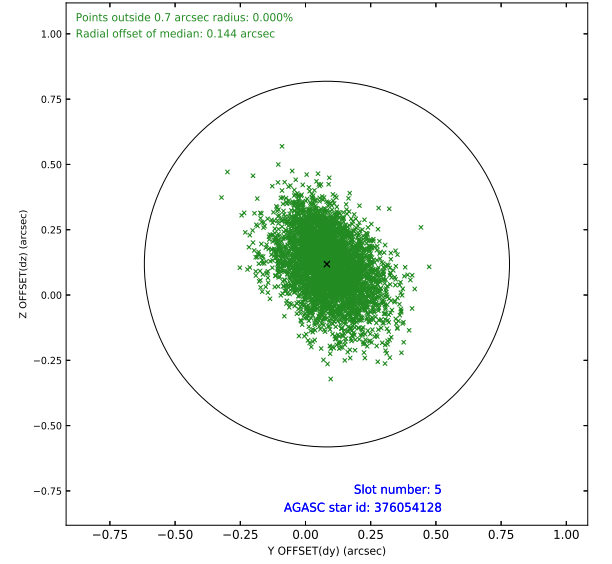
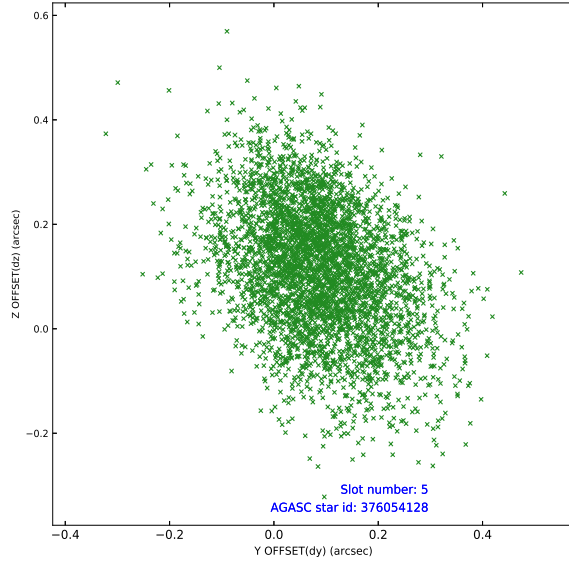
2.4.1 Slot 3



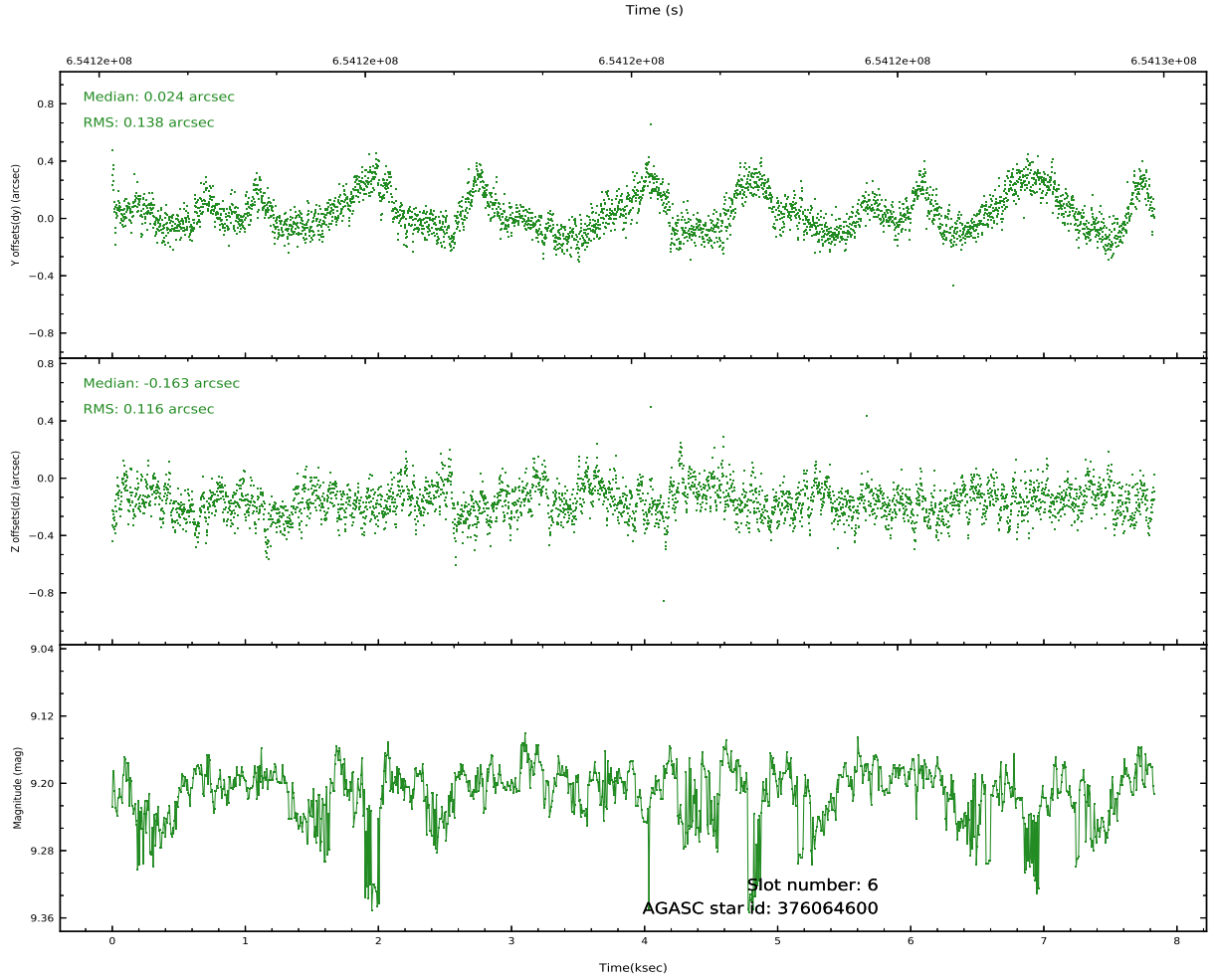
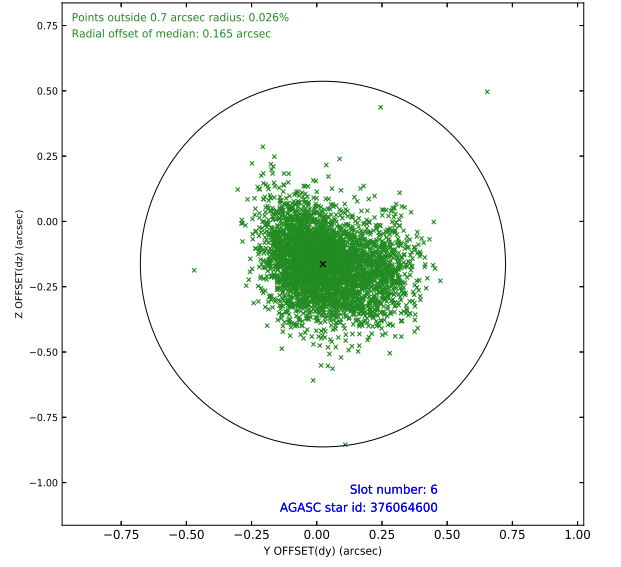
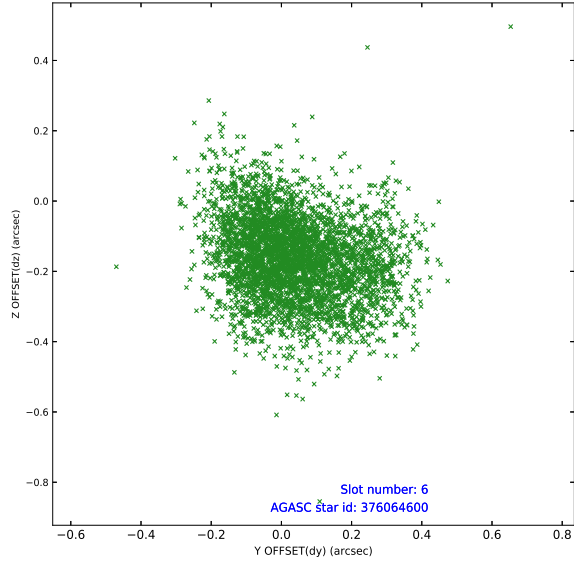
2.4.2 Slot 4



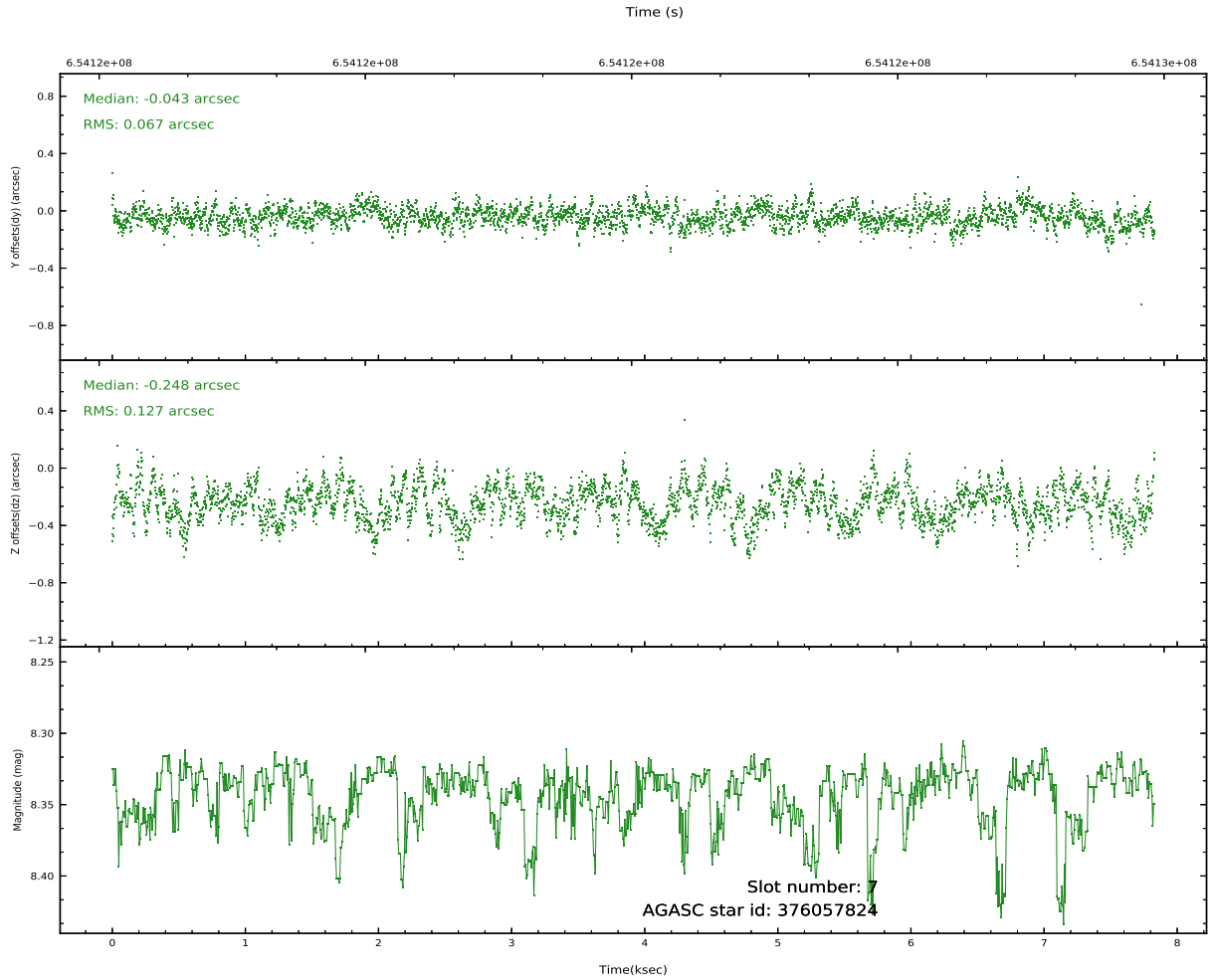
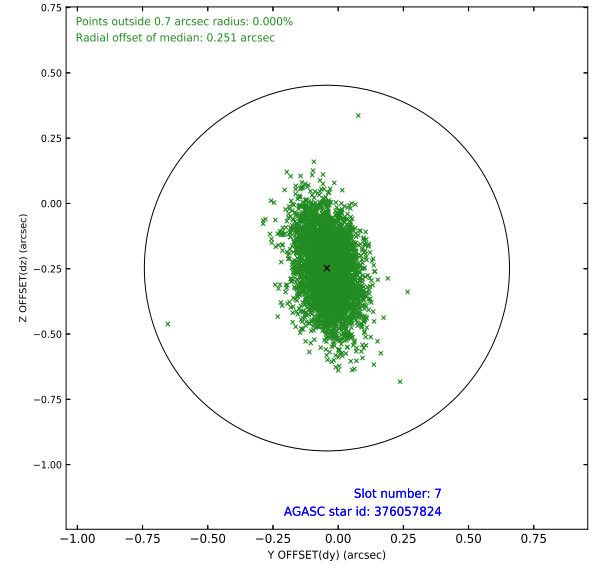
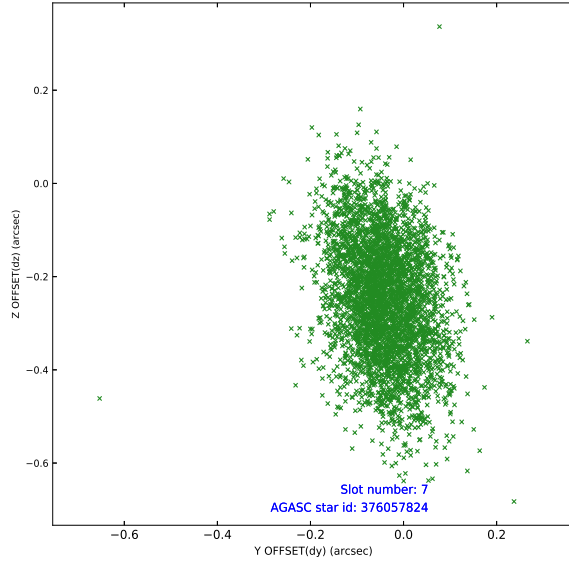
2.4.3 Slot 5



2.4.4 Slot 6

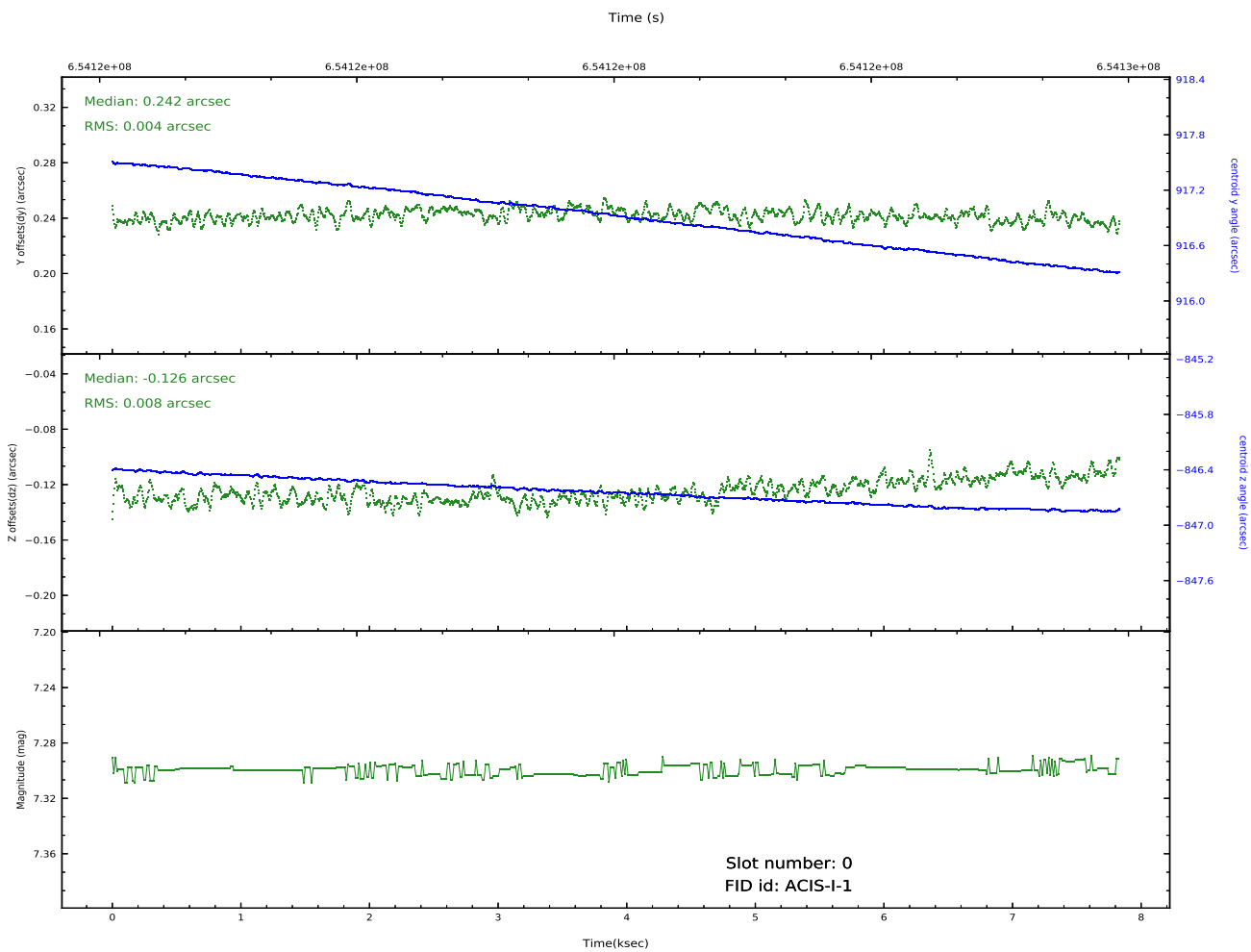
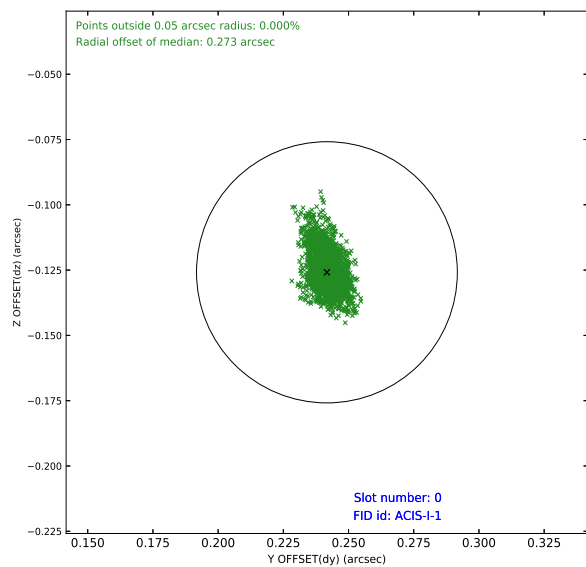
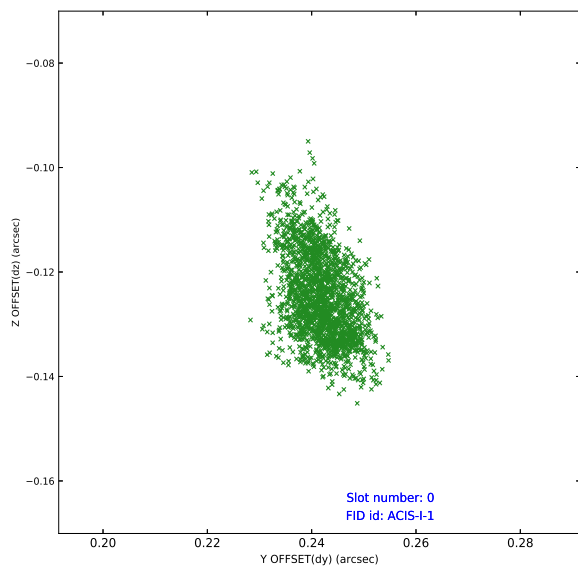


2.4.5 Slot 7

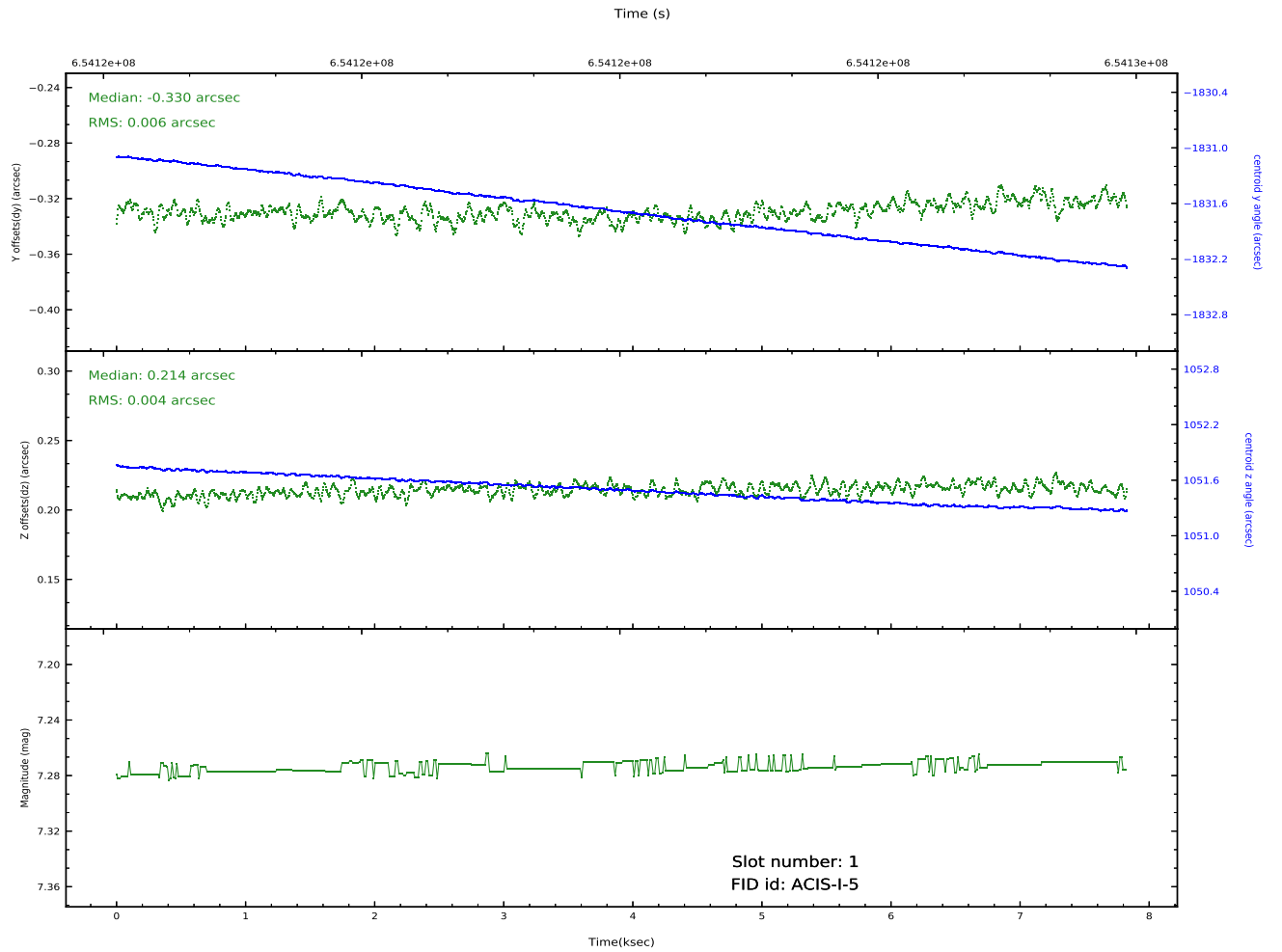
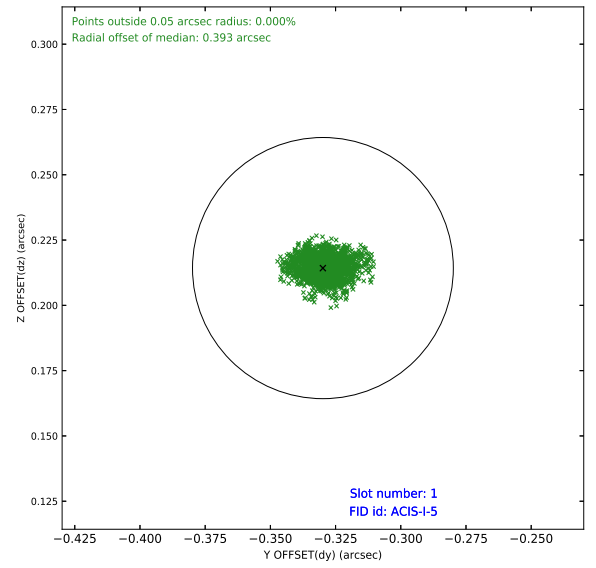
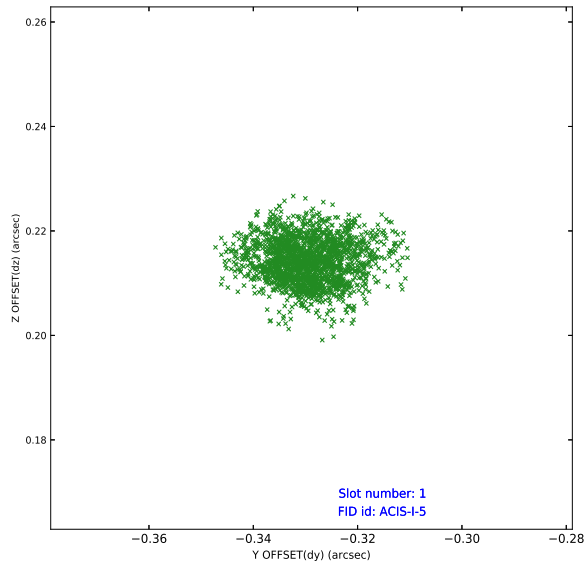


2.5 FID Slots

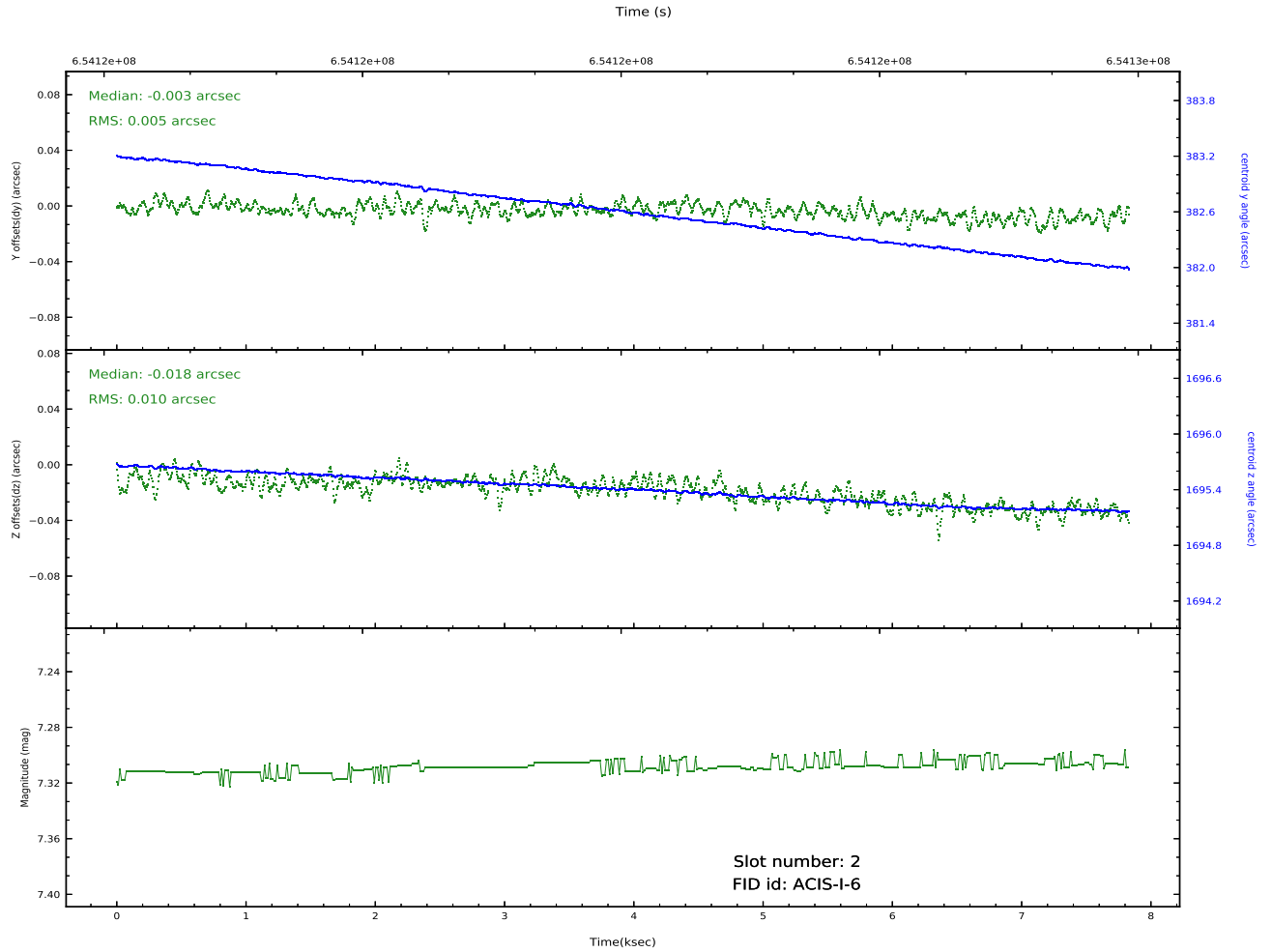
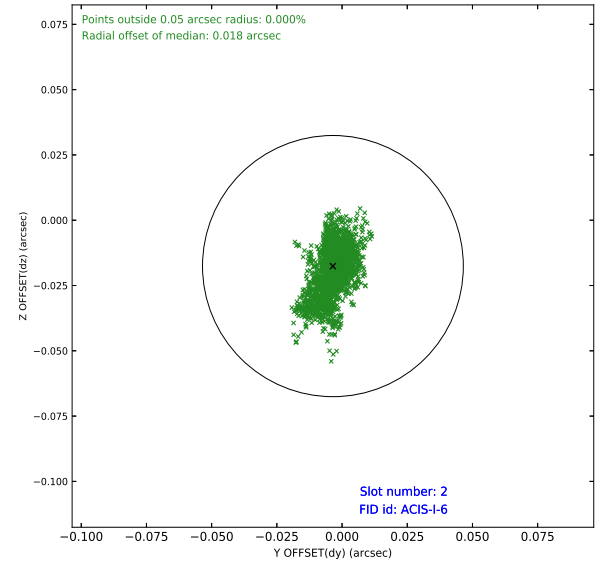
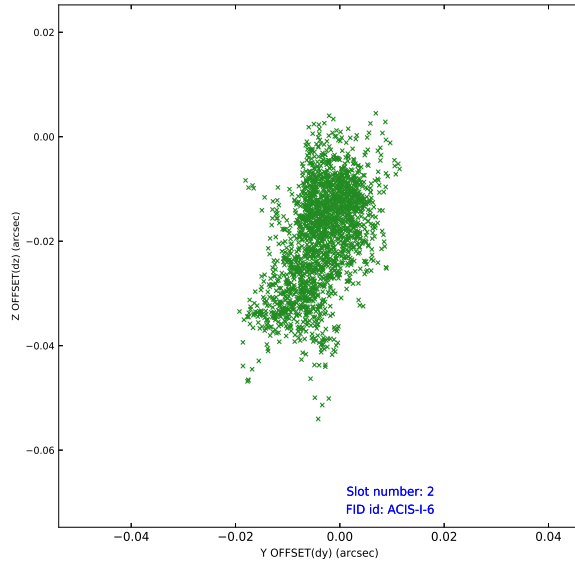
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	7.5423000581264

A.2 Comments