

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20269 - L2 Version 2
Chandra X-Ray Center

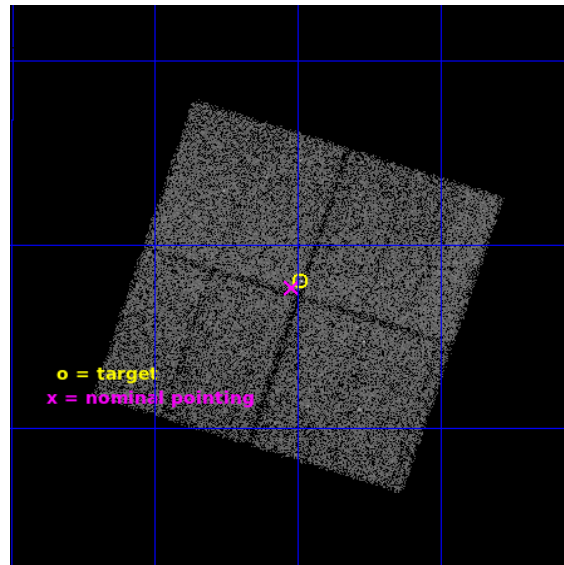
L2 Processing Date : Oct 24 2020

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1 Front

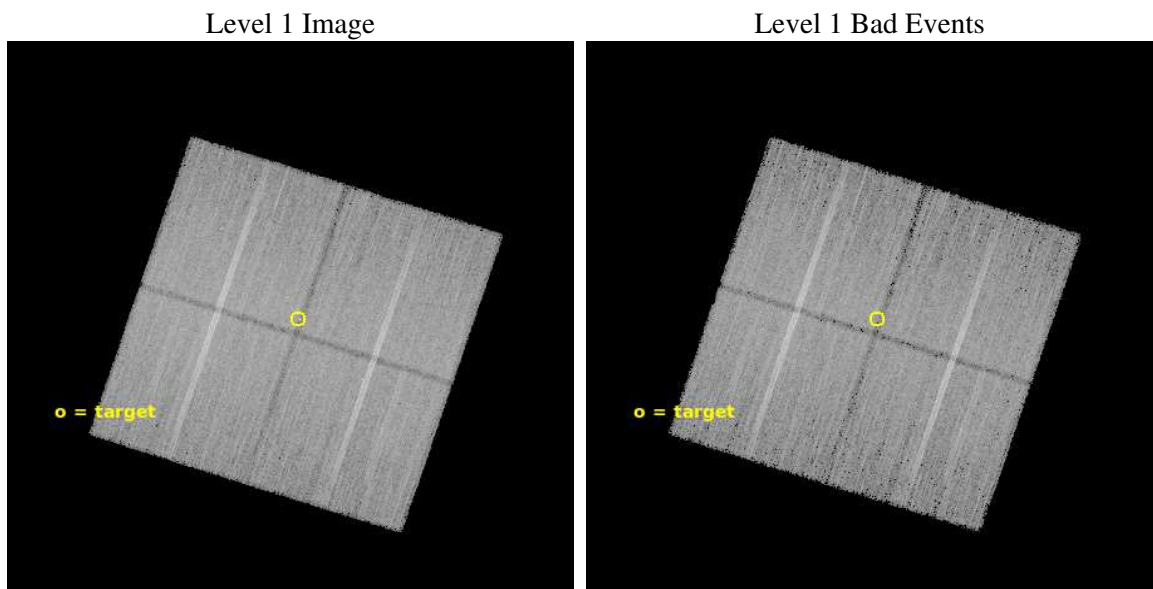
seq_num	401995	Sequence number
obs_id	20269	Observation id
title	X-RAY IMAGING OF THE HIGH-MASS GAMMA-RAY BINARY HESS J0632+057	Pro
observer	Oleg Kargaltsev	Principal investigator
object	HESS J0632+057	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.2475	Observer's specified target RA [deg]
dec_targ	5.799972	Observer's specified target Dec [deg]
ra_nom	98.254838078464	Nominal RA [deg]
dec_nom	5.7940713058793	Nominal Dec [deg]
roll_nom	288.19701835122	Nominal Roll [deg]
revision	2	Processing version of data
ontime	34078.300262213	Sum of GTIs [s]
livetime	33633.042181207	Livetime [s]
ontime0	34075.15920198	Sum of GTIs [s]
ontime1	34075.159192085	Sum of GTIs [s]
ontime2	34072.018091559	Sum of GTIs [s]
ontime3	34078.300262213	Sum of GTIs [s]
l2events	91053	Number of level 2 events



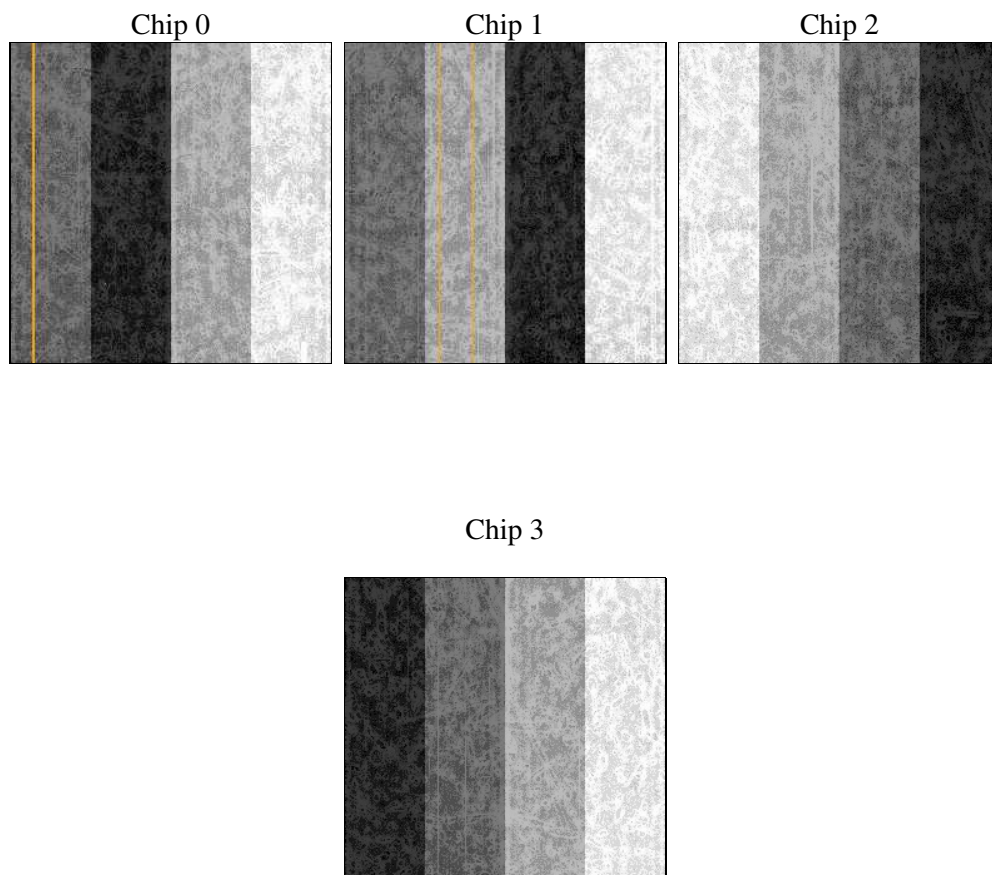
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	34078.300262213	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	34075.15920198	Sum of GTIs [s]
date	2020-10-24T14:53:12	Date and time of file creation	ontime1	34075.159192085	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	34072.018091559	Sum of GTIs [s]
			ontime3	34078.300262213	Sum of GTIs [s]
			l1events	978471	Number of level 1 events

2.1.4 Events

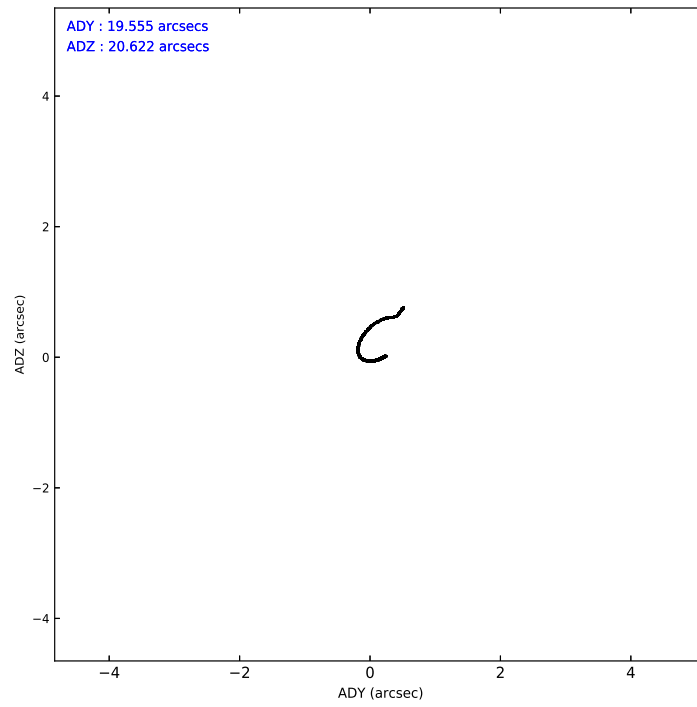
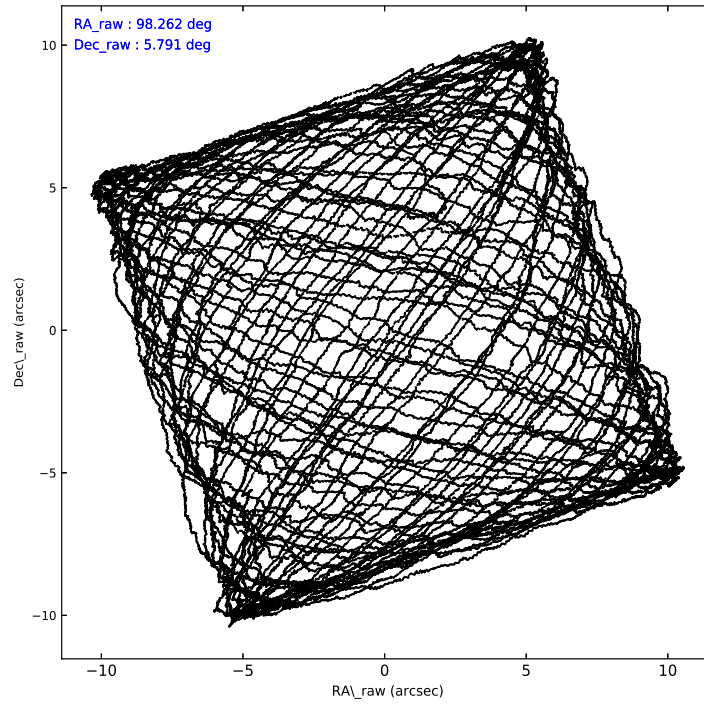
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	233378	239359	256564	249170
rejected events	205858	210259	230435	222837
rejected %	88%	87%	89%	89%

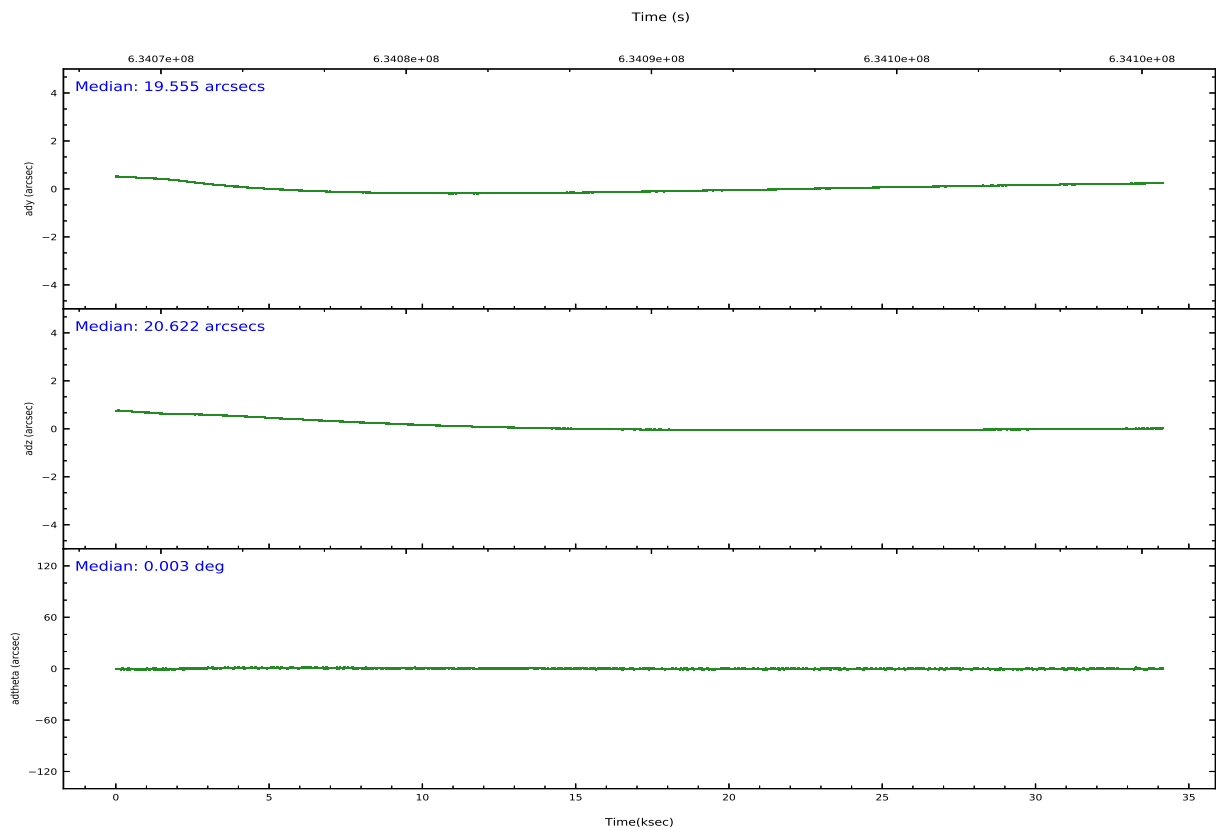
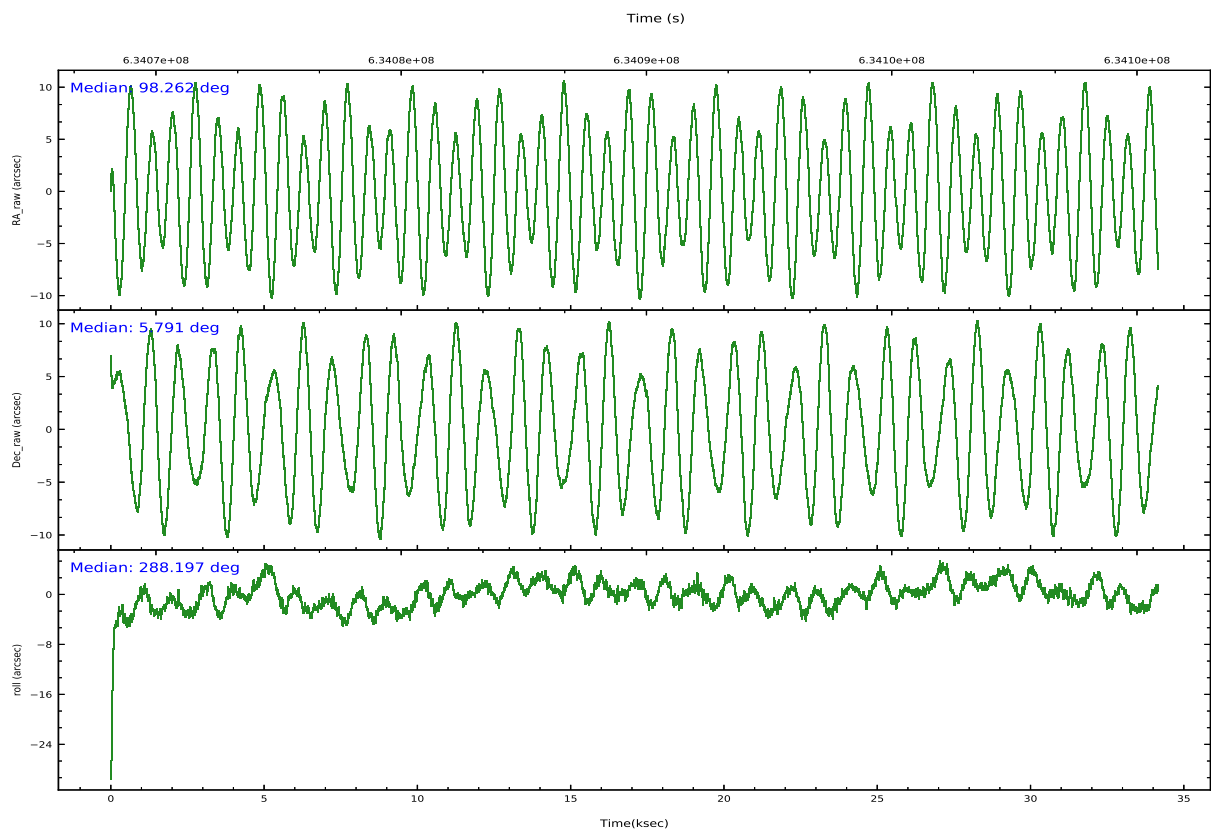
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9337	9237	9213	9399
	4%	3%	3%	3%
grade 1 events	128	126	144	165
	0%	0%	0%	0%
grade 2 events	6868	7410	6348	5702
	2%	3%	2%	2%
grade 3 events	2816	2824	2678	2775
	1%	1%	1%	1%
grade 4 events	2608	2593	2660	2772
	1%	1%	1%	1%
grade 5 events	10557	10770	9838	11724
	4%	4%	3%	4%
grade 6 events	5891	7036	5232	5688
	2%	2%	2%	2%
grade 7 events	195173	199363	220451	210945
	83%	83%	85%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-0123	ACIS-0123	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	98.241533	98.254838078464	CCD I2 on	Y	Y
[deg] Pointing Dec	5.808818	5.7940713058793	CCD I3 on	Y	Y
[deg] Pointing Roll	288.000597	288.19701835122	CCD S0 on	N	N
[s] Window start time (MET)	633960069.184000	633960069.184000	CCD S1 on	N	N
[s] Window stop time (MET)	635601669.184000	635601669.184000	CCD S2 on	O1	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S3 on	O2	N
[mm] SIM defocus	0	0.001439871863259334	CCD S4 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S5 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	Number of optional ACIS chips dropped	2	2
[s] Observation start time (MET)	634070691.184000	634069497.47374	On-chip summing requested	N	N
Observation start date	2018-02-03T18:43:42	2018-02-03T18:24:57	Subarray requested	NONE	NONE
[s] Observation end time (MET)	634104691.184000	634105668.18837	Alternating exposures requested	N	N
Observation end date	2018-02-04T04:10:22	2018-02-04T04:27:48	[s] Primary exposure time	0.000000	3.1
Read mode	TIMED	TIMED			

2.3 Aspect



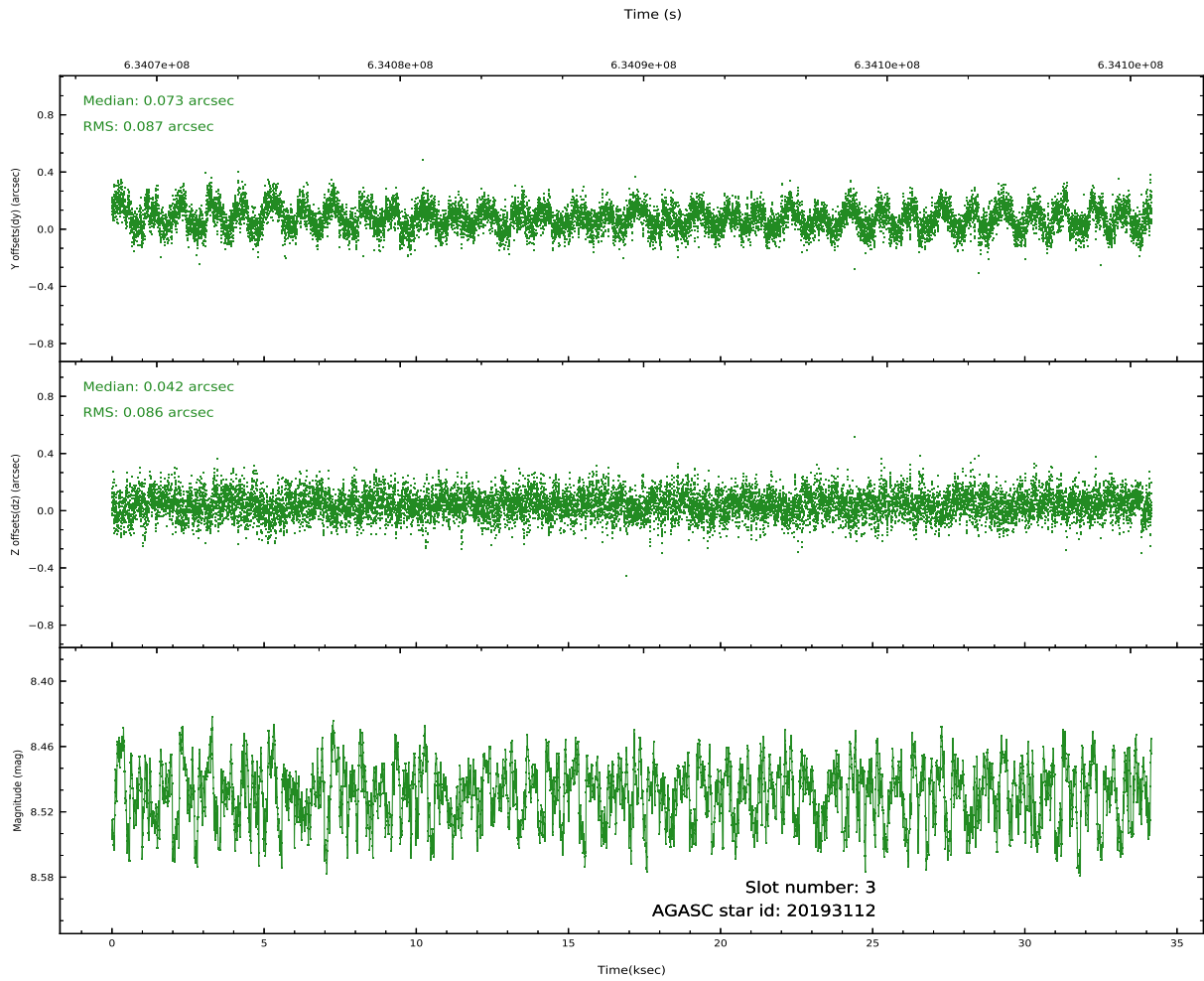
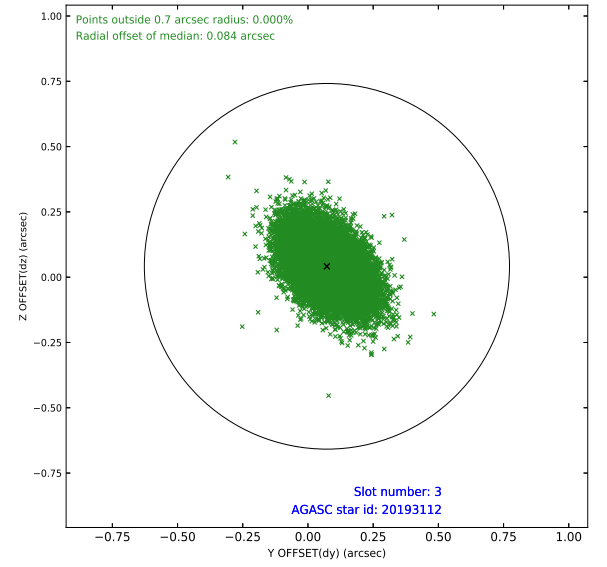
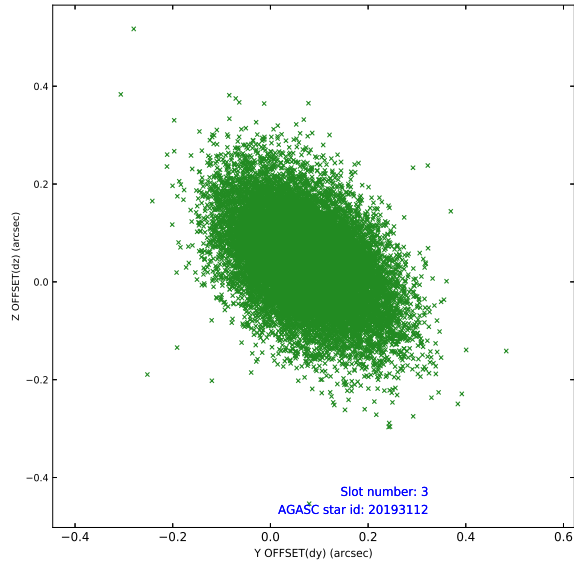


Slot Statistics

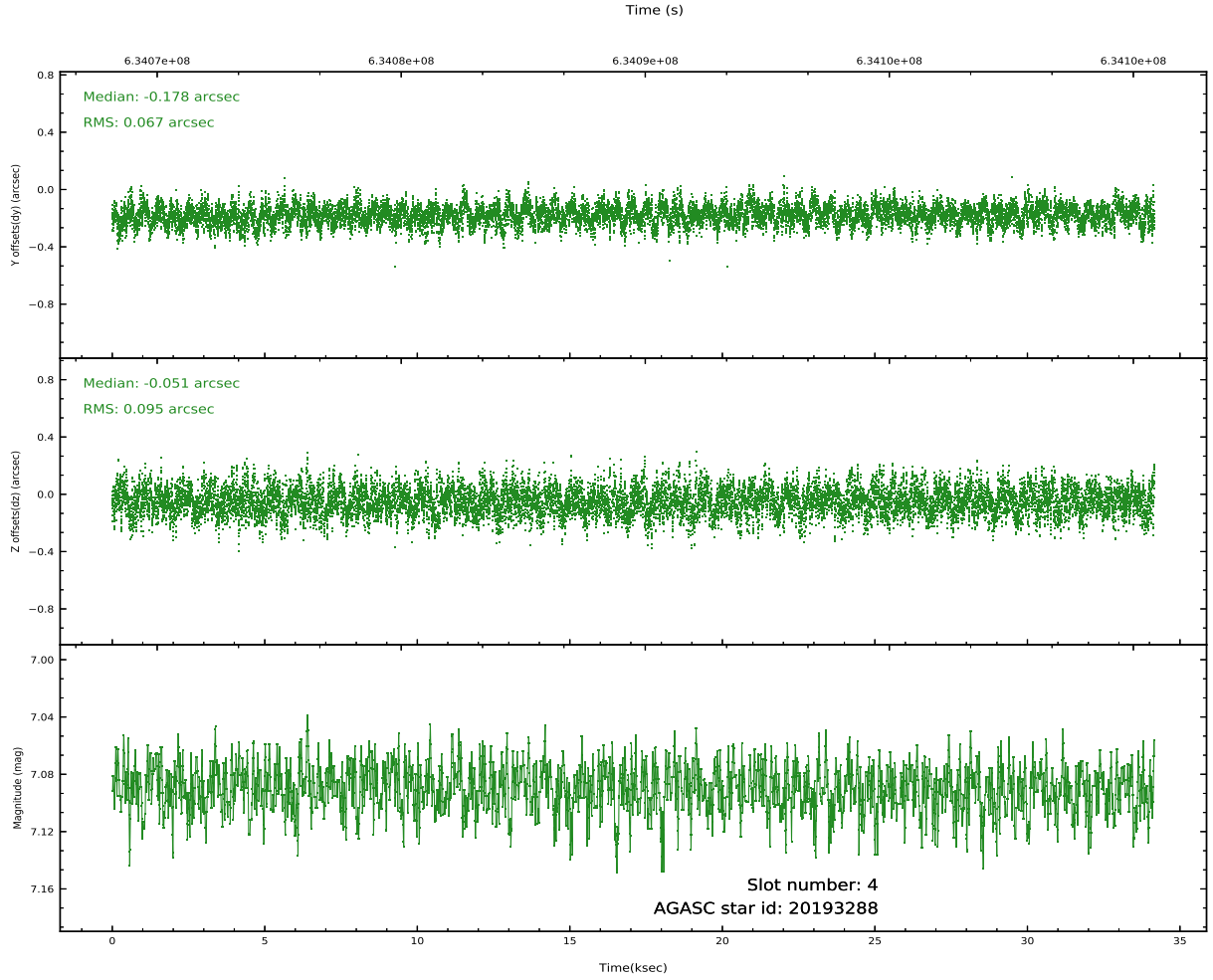
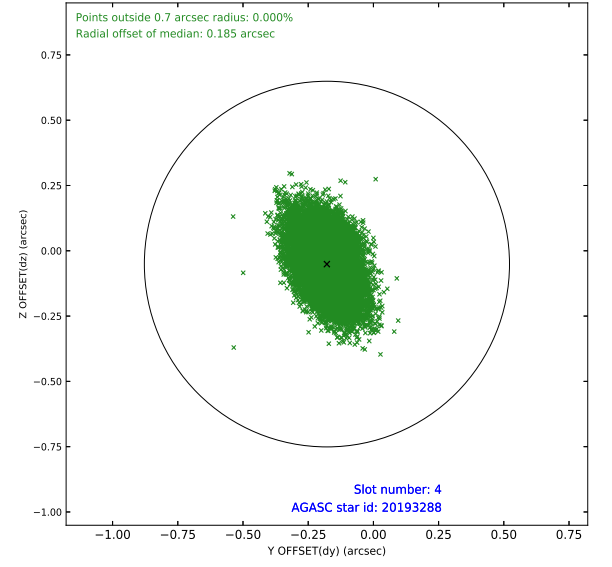
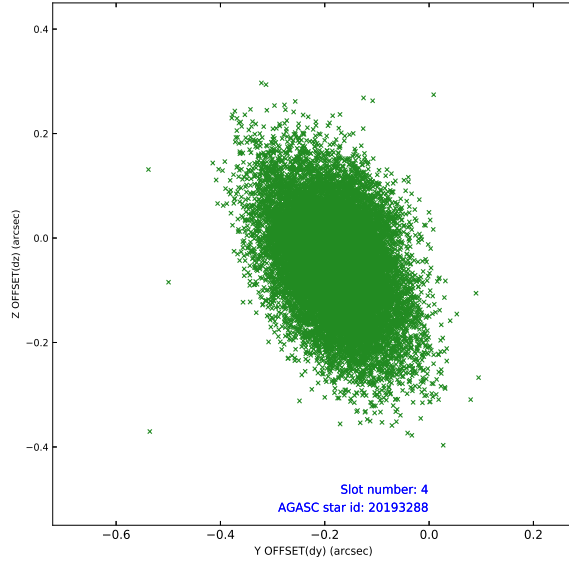
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	8332	1.000	0.203	-0.151	0.008	0.015	0.000000	0.000000	919.88	-844
1	FID		ACIS-I-5	7.17	8332	1.000	-0.302	0.171	0.008	0.014	0.000000	0.000000	-1828.55	1053
2	FID		ACIS-I-6	7.19	8331	1.000	0.008	0.050	0.009	0.017	0.000000	0.000000	385.39	1697
3	GUIDE	used	20193112	8.50	16653	1.000	0.073	0.042	0.128	0.216	98.537870	5.430651	1623.69	589
4	GUIDE	used	20193288	7.09	16663	1.000	-0.178	-0.051	0.120	0.207	98.869961	5.512572	1709.24	1812
5	GUIDE	used	20193464	7.21	16664	1.000	-0.134	-0.007	0.111	0.201	98.229775	5.396674	1398.83	-498
6	GUIDE	used	20727600	6.72	16661	1.000	-0.078	0.223	0.122	0.221	97.637242	5.866998	-868.32	-1992
7	GUIDE	used	20192040	8.29	16581	1.000	0.314	-0.200	0.161	0.281	97.909981	5.026773	2310.89	-2000

2.4 Star Slots

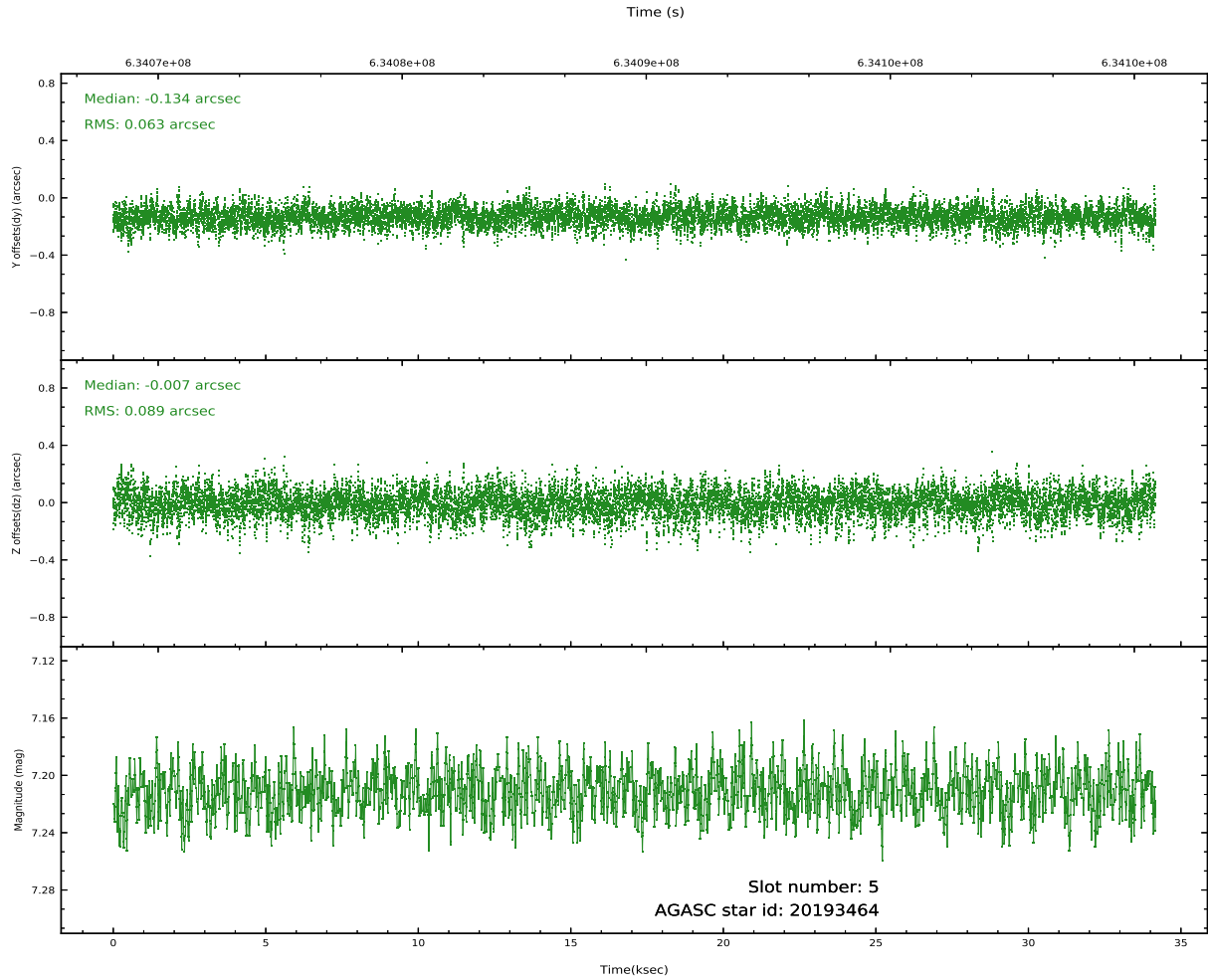
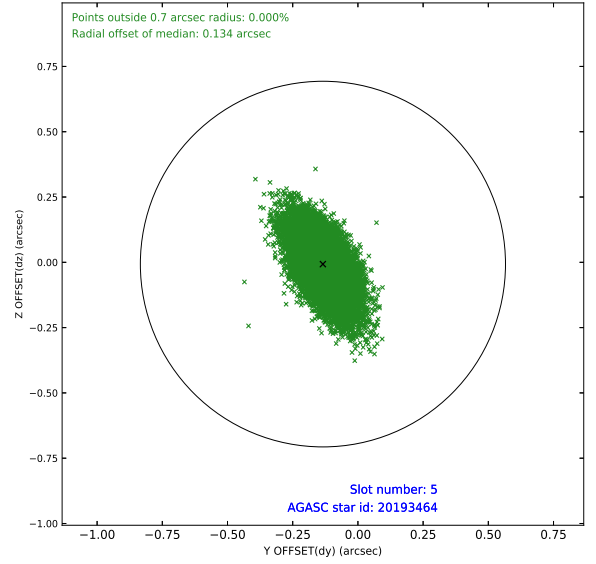
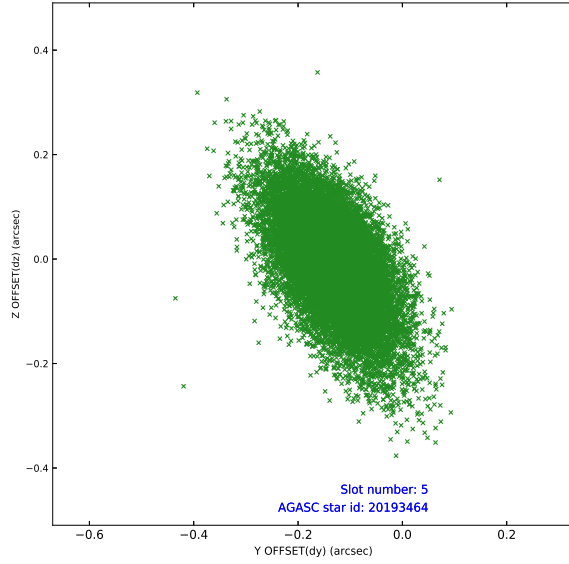
2.4.1 Slot 3



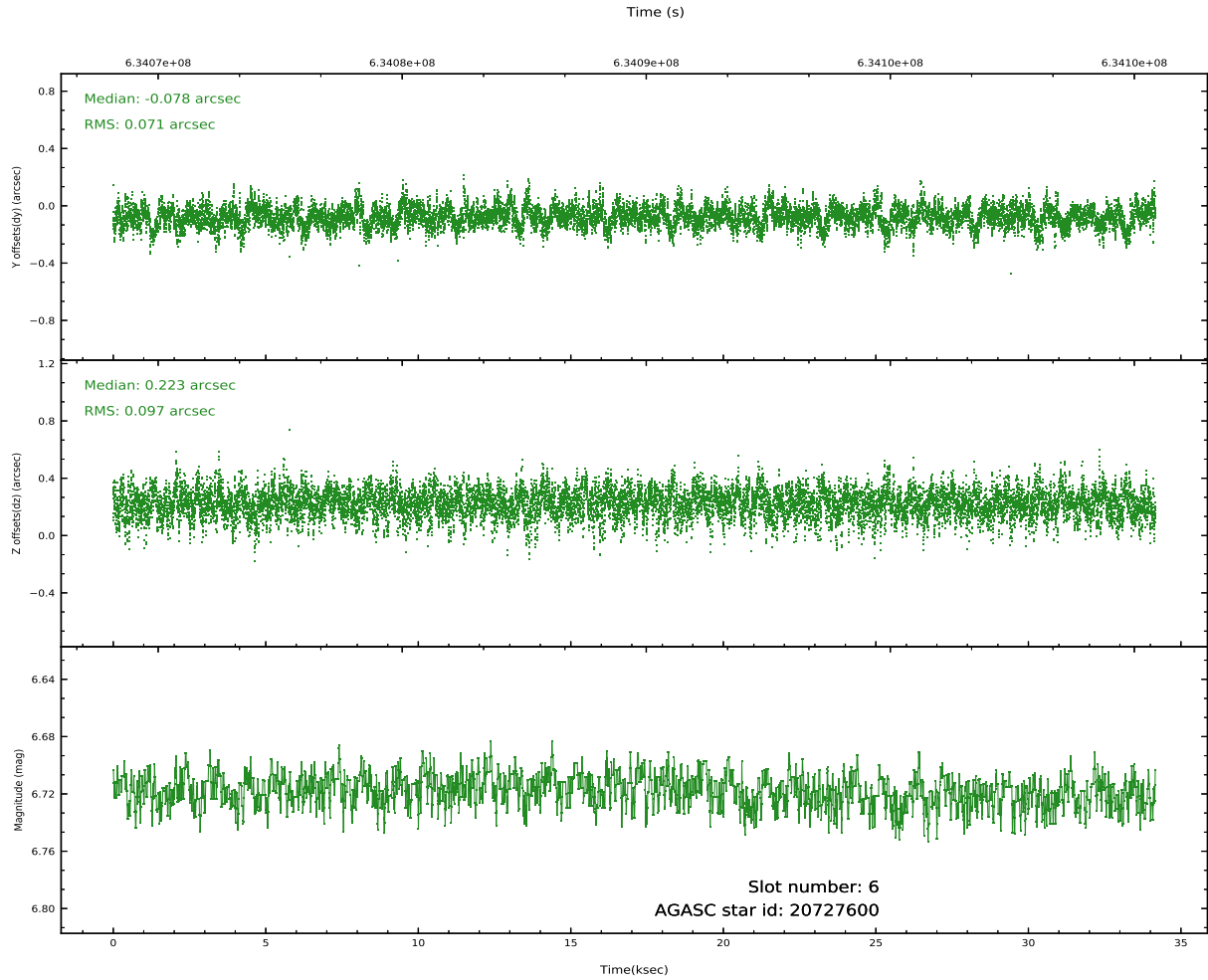
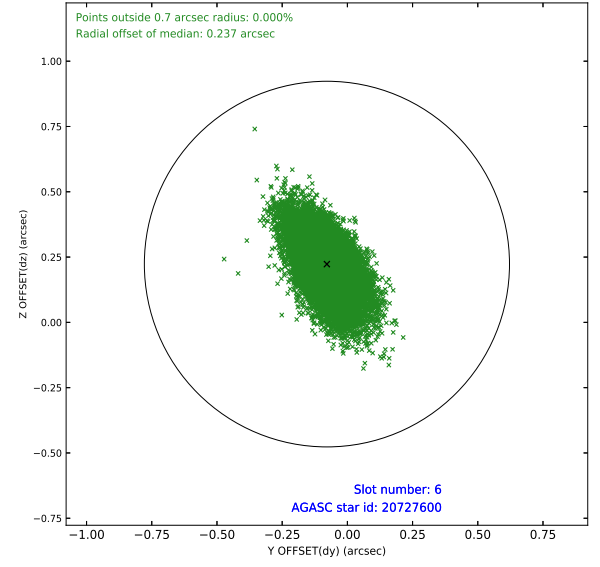
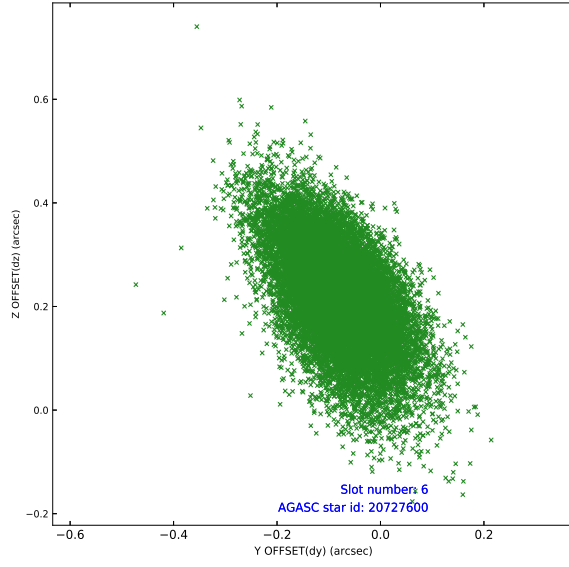
2.4.2 Slot 4



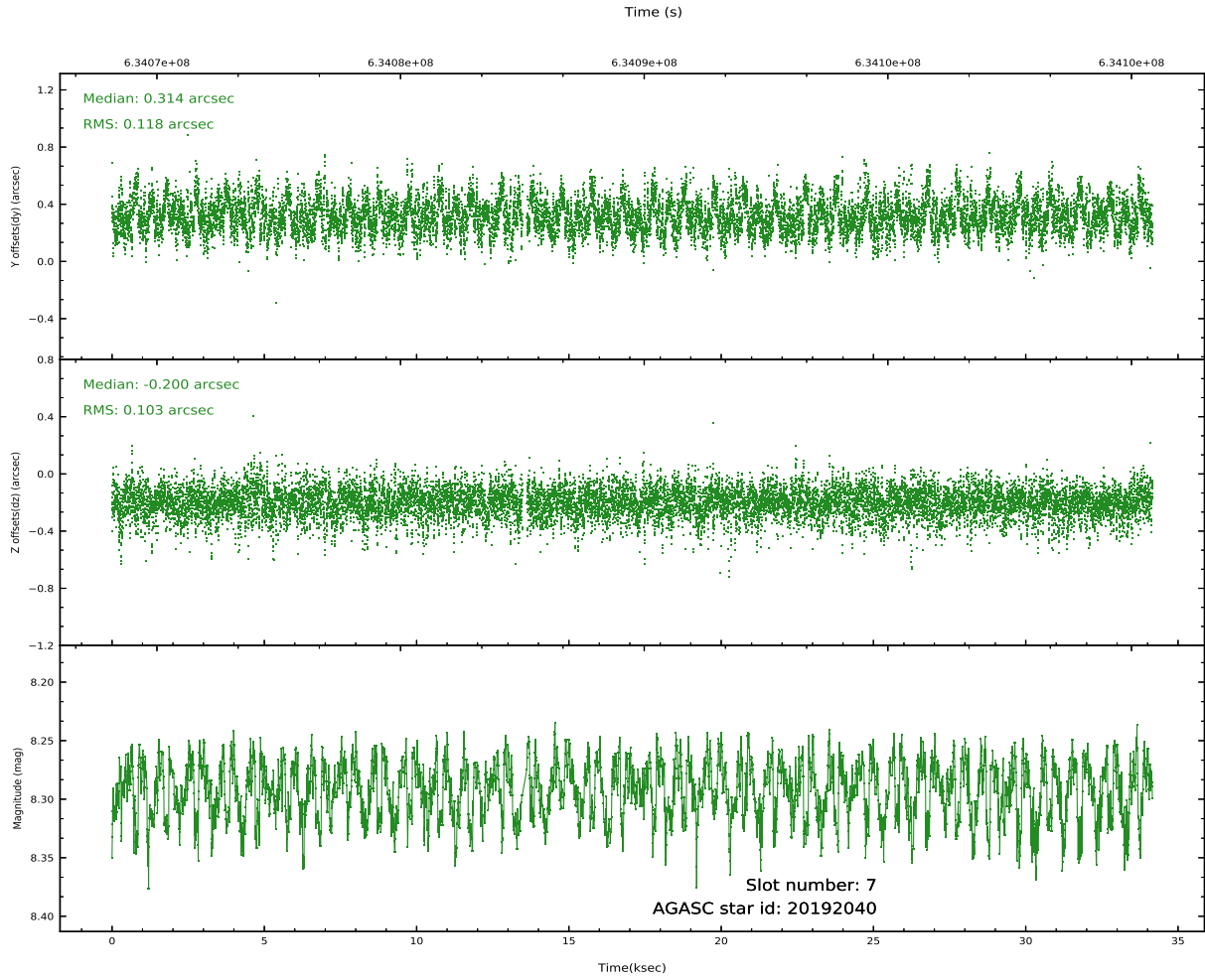
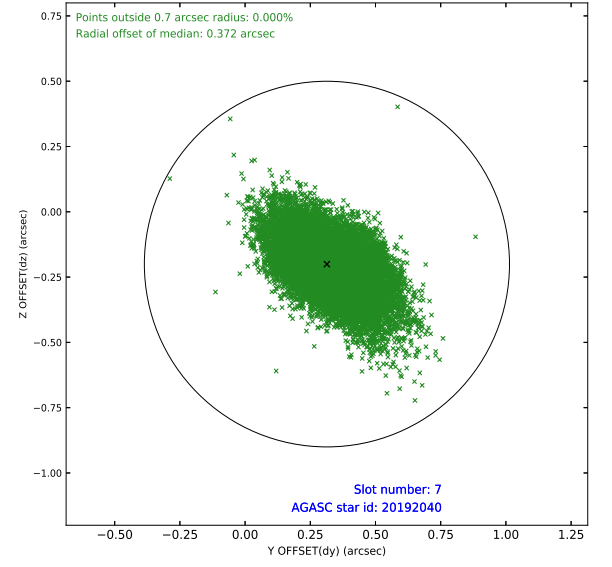
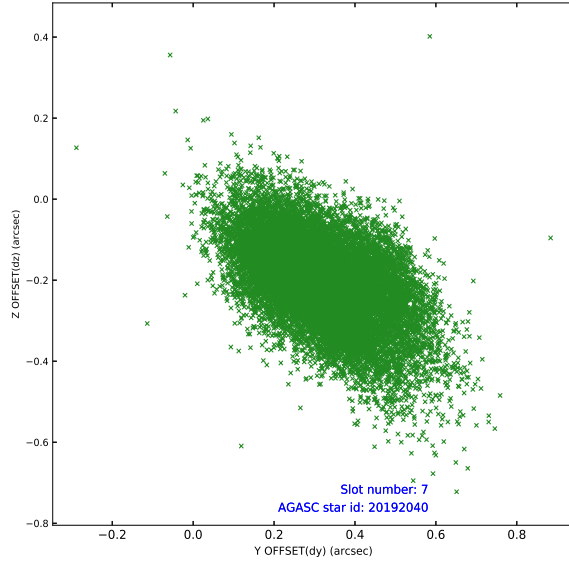
2.4.3 Slot 5



2.4.4 Slot 6

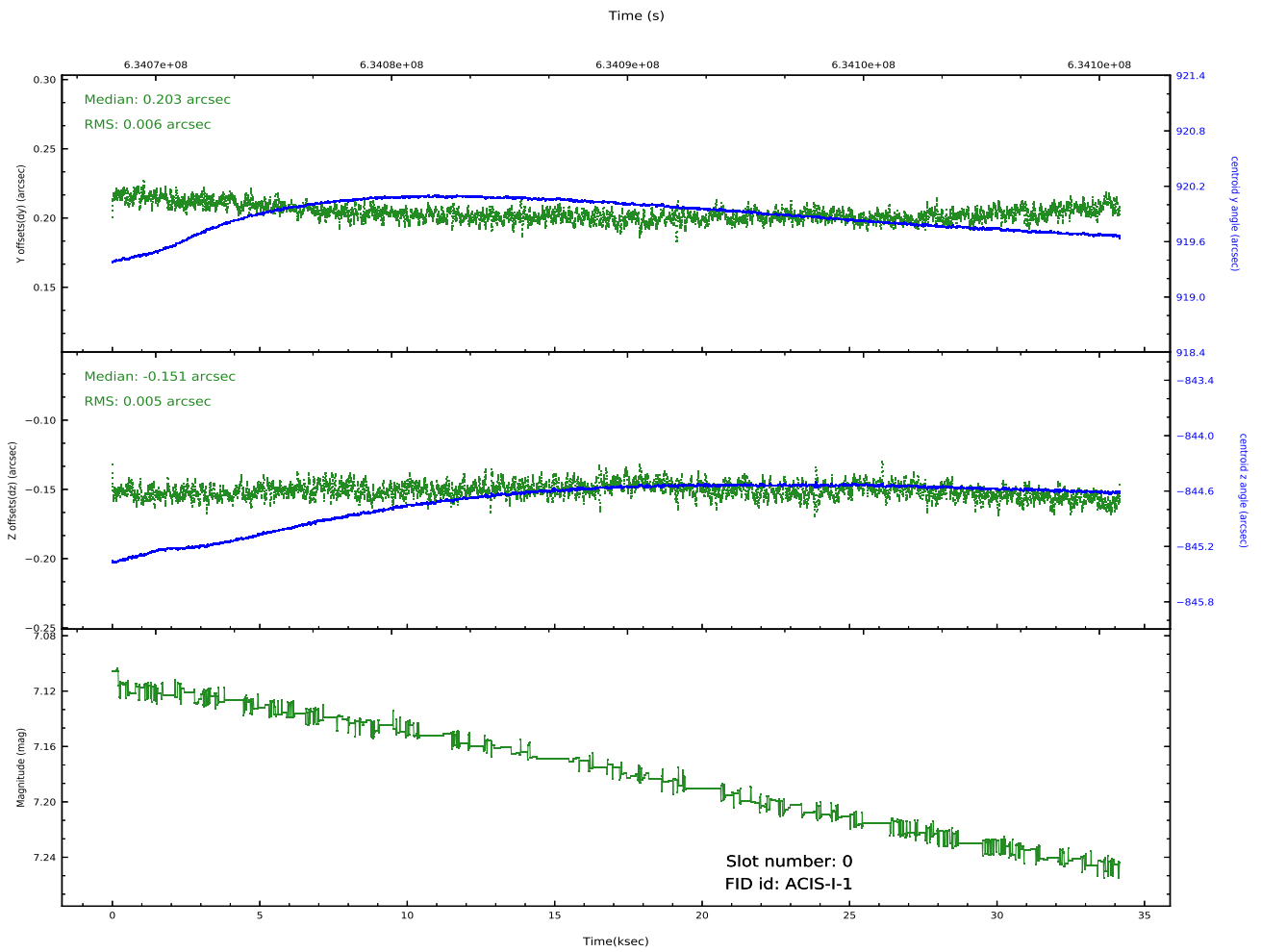
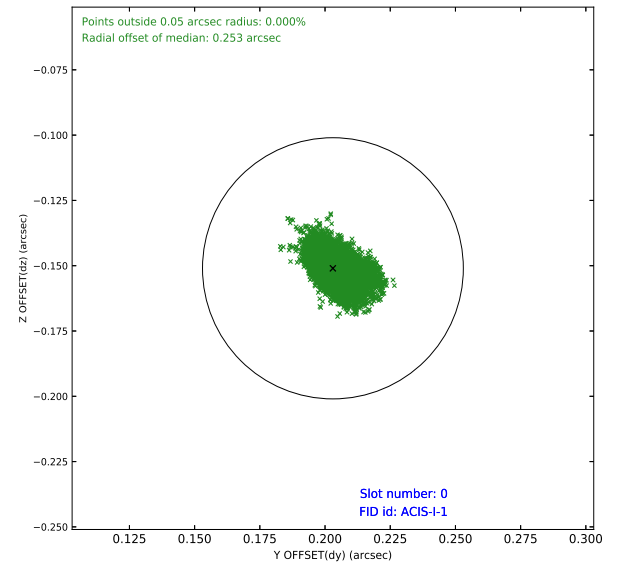
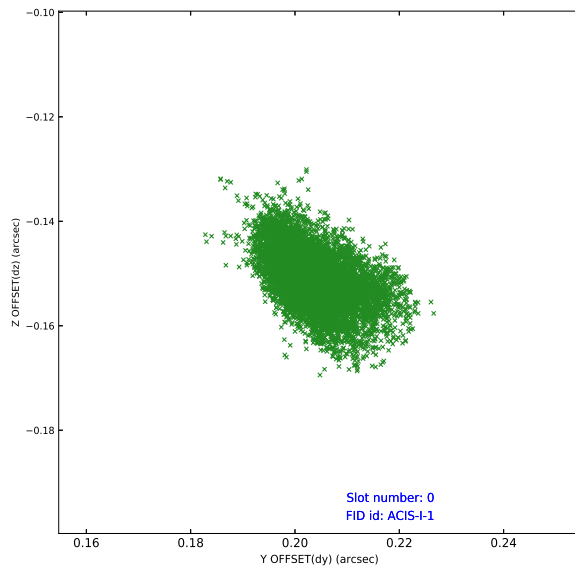


2.4.5 Slot 7

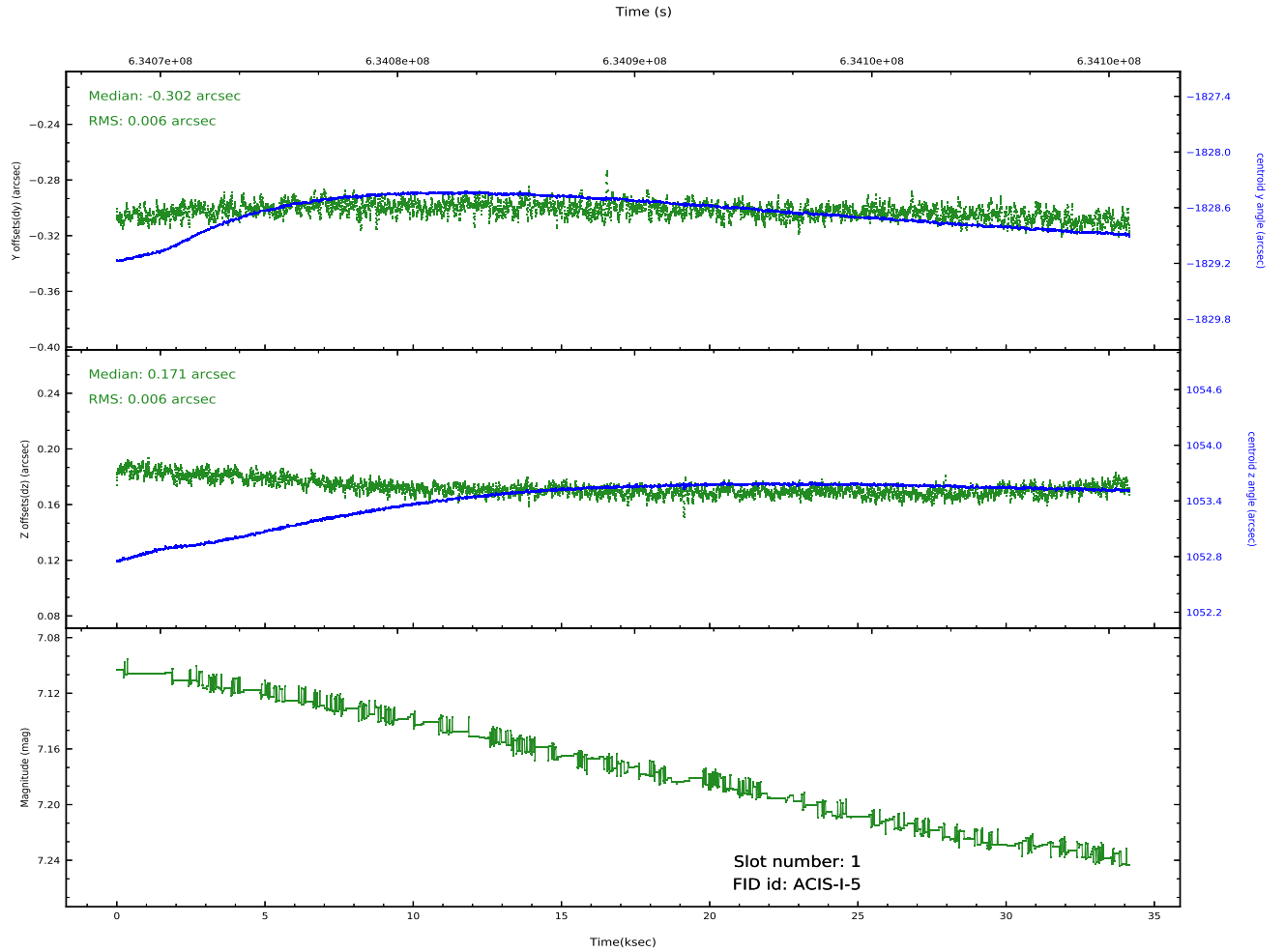
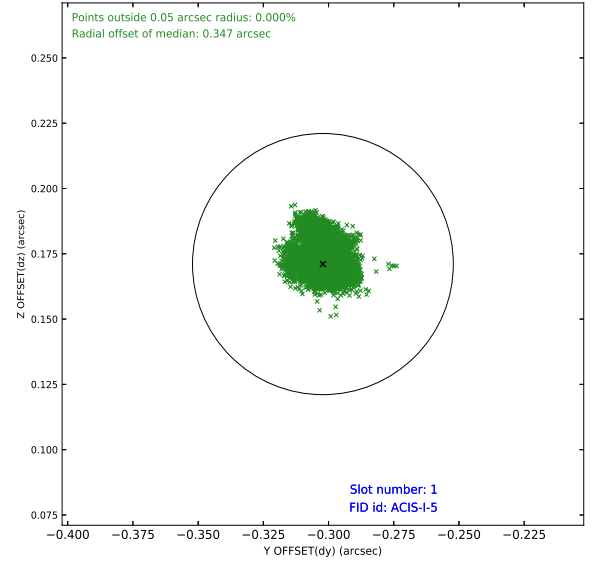
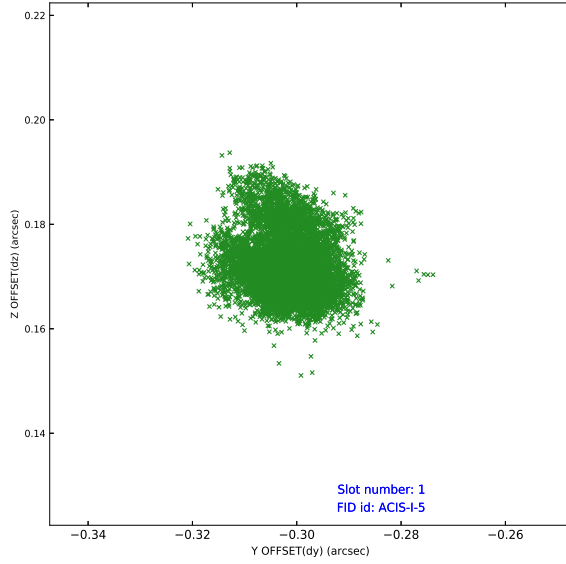


2.5 FID Slots

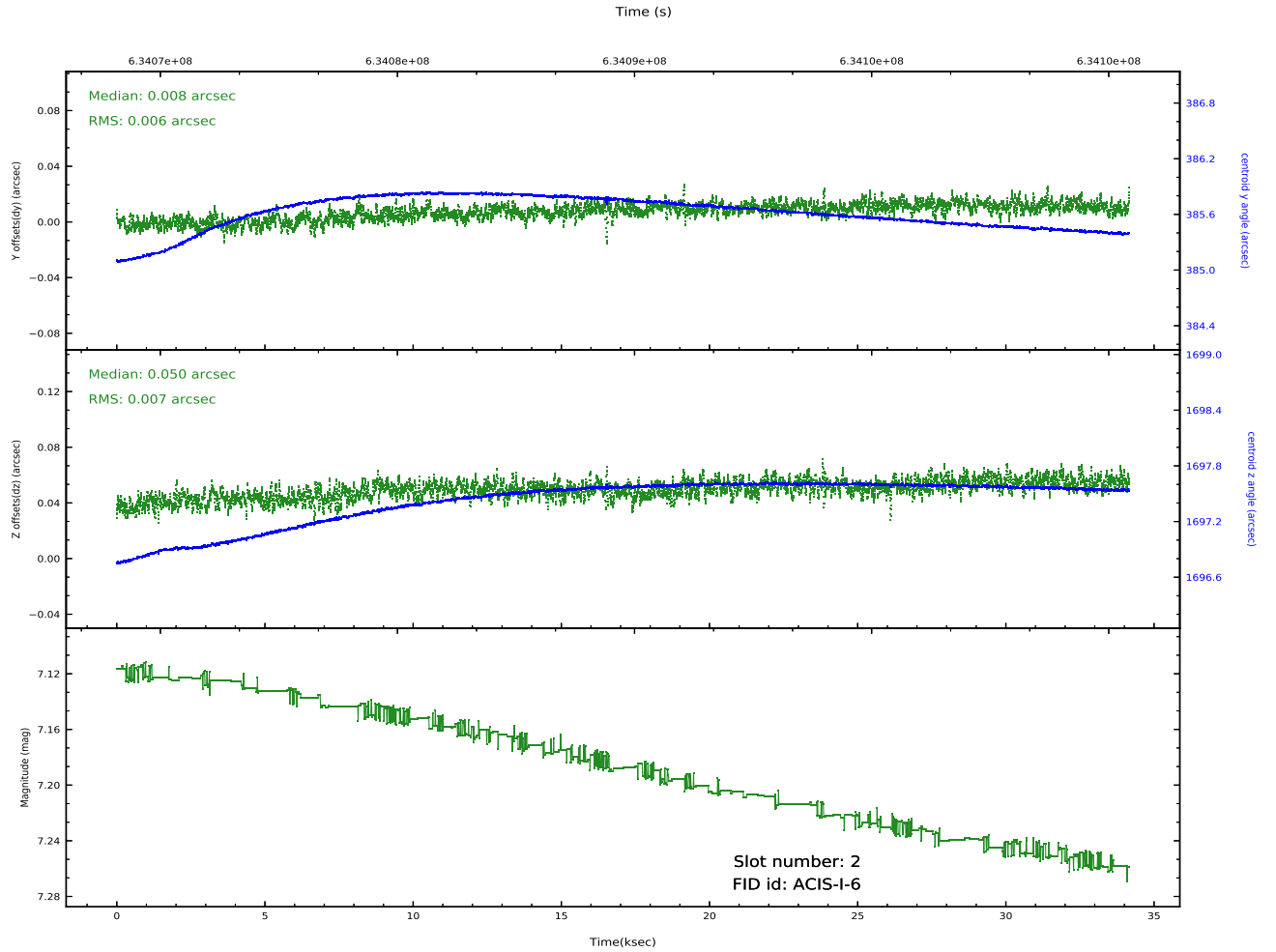
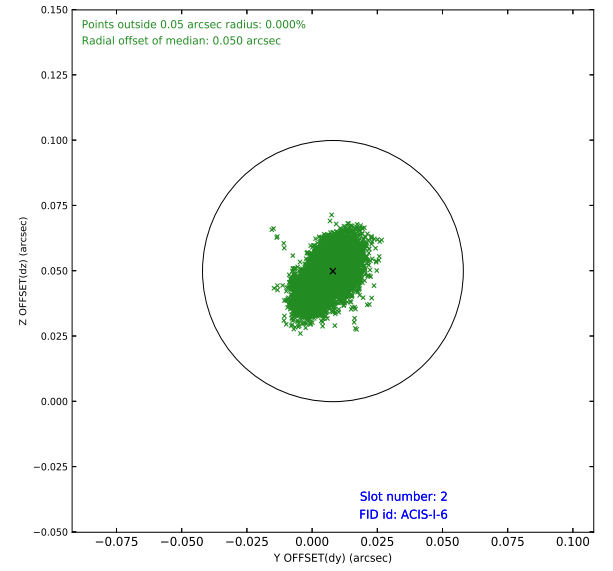
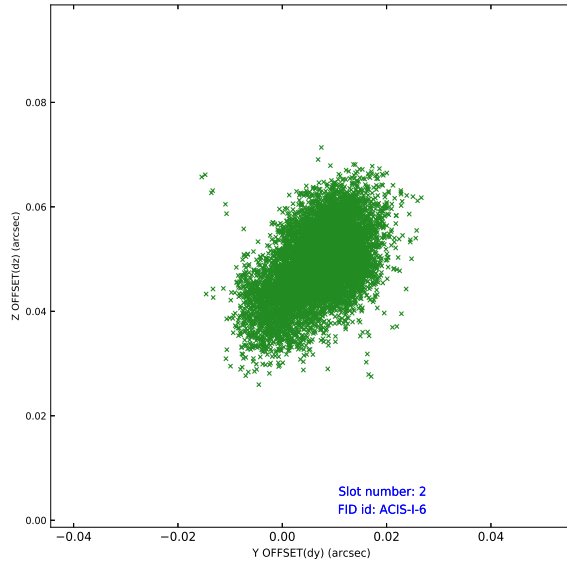
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.075159192085

A.2 Comments

Window constraint was met.

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Two optional chips were dropped.

===

Target is very close to the CCD chip edge. The source was dithered into the chip gap, so fluxes vs time may not be accurate. The light curve may appear variable.