

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20357 - L2 Version 2
Chandra X-Ray Center

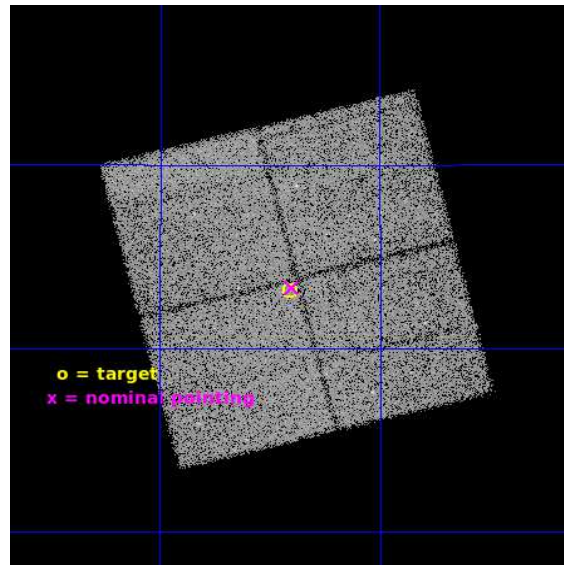
L2 Processing Date : Oct 30 2020

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1 Front

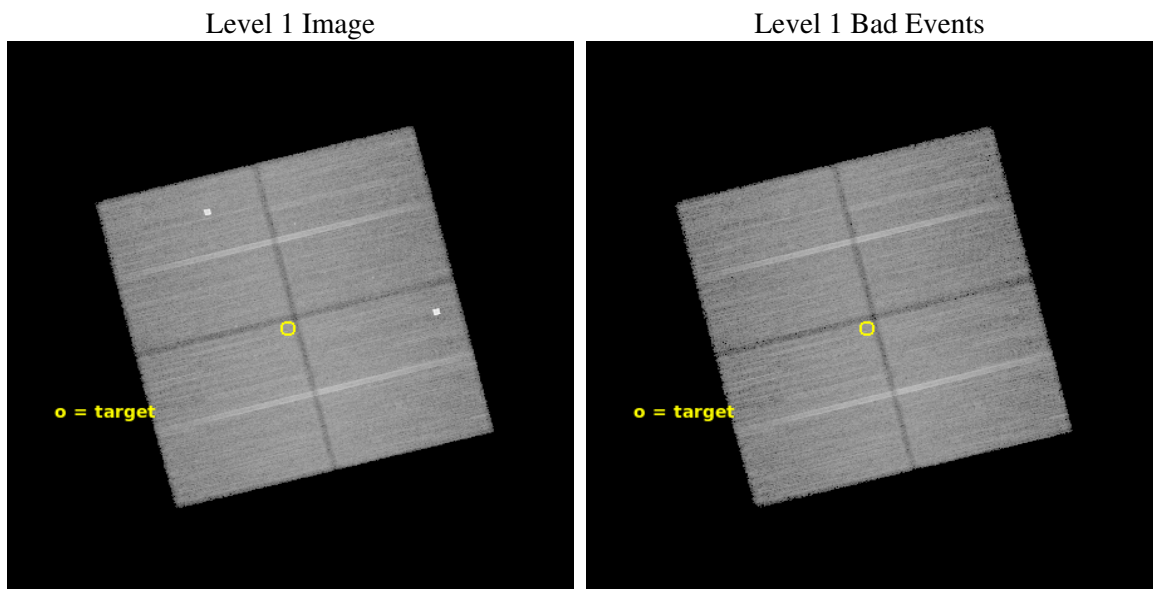
seq_num	901400	Sequence number
obs_id	20357	Observation id
title	A Deep Chandra Survey of The Most Overdense Protocluster at z=2.3 associated with a Giant, Ultraluminous Lya Nebula	Proposal title
observer	Zheng Cai	Principal investigator
object	MAMMOTH-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	220.352083	Observer's specified target RA [deg]
dec_targ	40.052667	Observer's specified target Dec [deg]
ra_nom	220.34998146538	Nominal RA [deg]
dec_nom	40.055191363576	Nominal Dec [deg]
roll_nom	165.83316834599	Nominal Roll [deg]
revision	2	Processing version of data
ontime	45076.454543948	Sum of GTIs [s]
livetime	44487.497480528	Livetime [s]
ontime0	45076.331424117	Sum of GTIs [s]
ontime1	45073.231413603	Sum of GTIs [s]
ontime2	45079.55457437	Sum of GTIs [s]
ontime3	45076.454543948	Sum of GTIs [s]
l2events	126869	Number of level 2 events



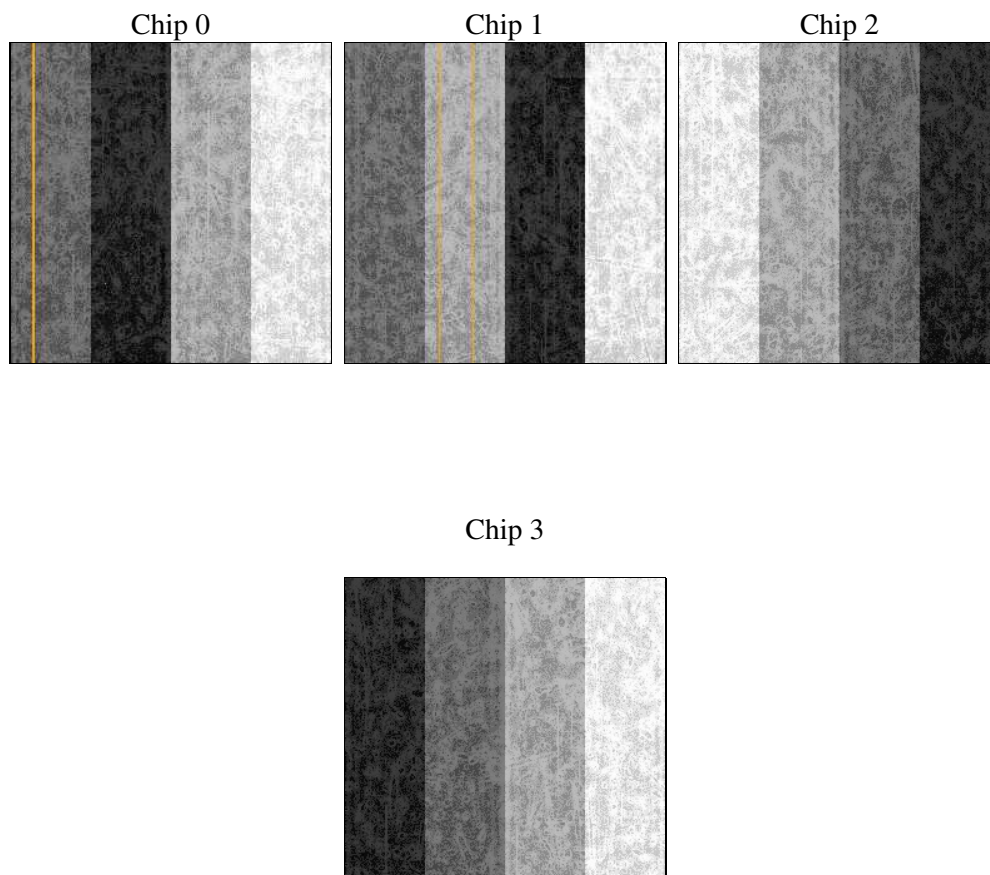
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	45076.454543948	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	45076.331424117	Sum of GTIs [s]
date	2020-10-30T11:14:15	Date and time of file creation	ontime1	45073.231413603	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	45079.55457437	Sum of GTIs [s]
			ontime3	45076.454543948	Sum of GTIs [s]
			l1events	1398917	Number of level 1 events

2.1.4 Events

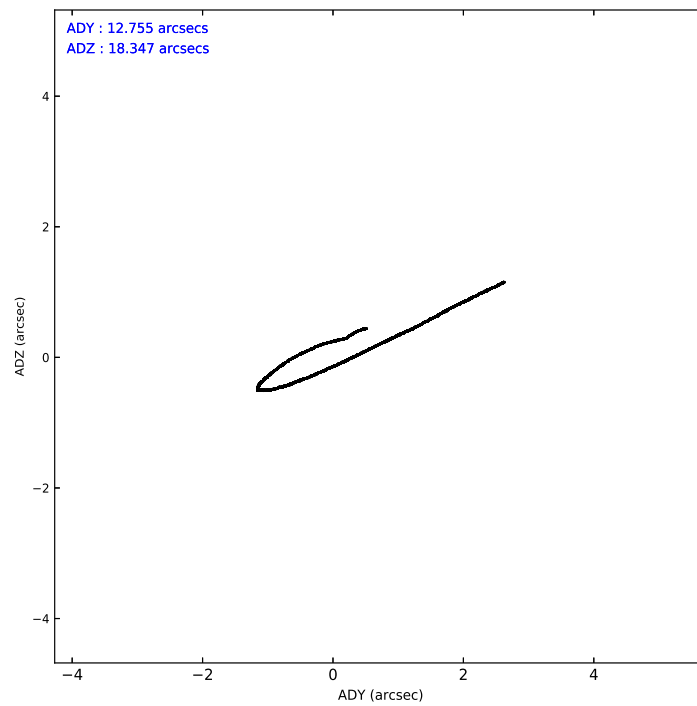
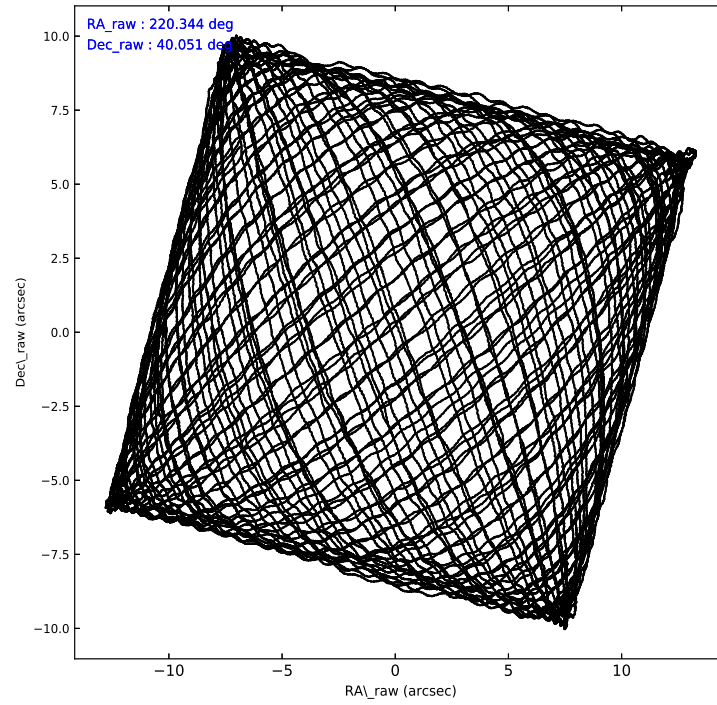
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	322832	340129	378641	357315
rejected events	284934	289713	329410	321534
rejected %	88%	85%	86%	89%

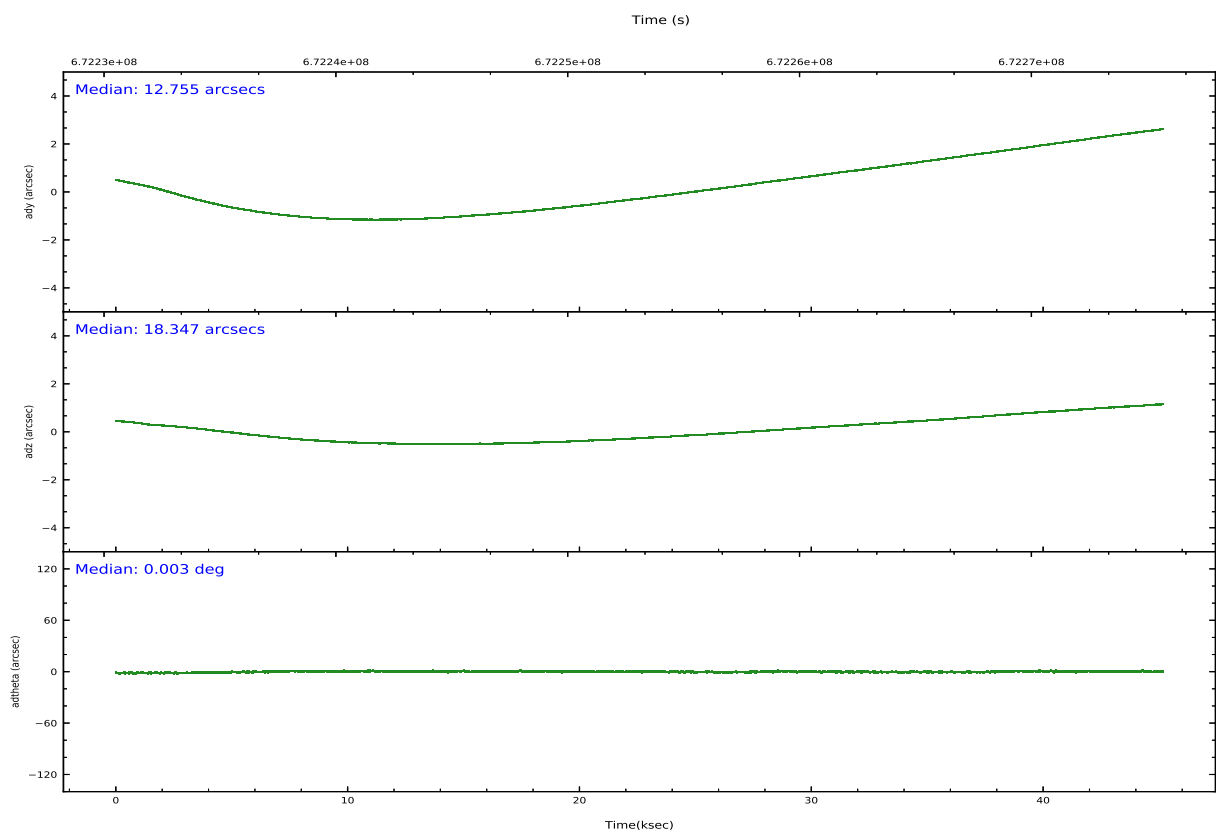
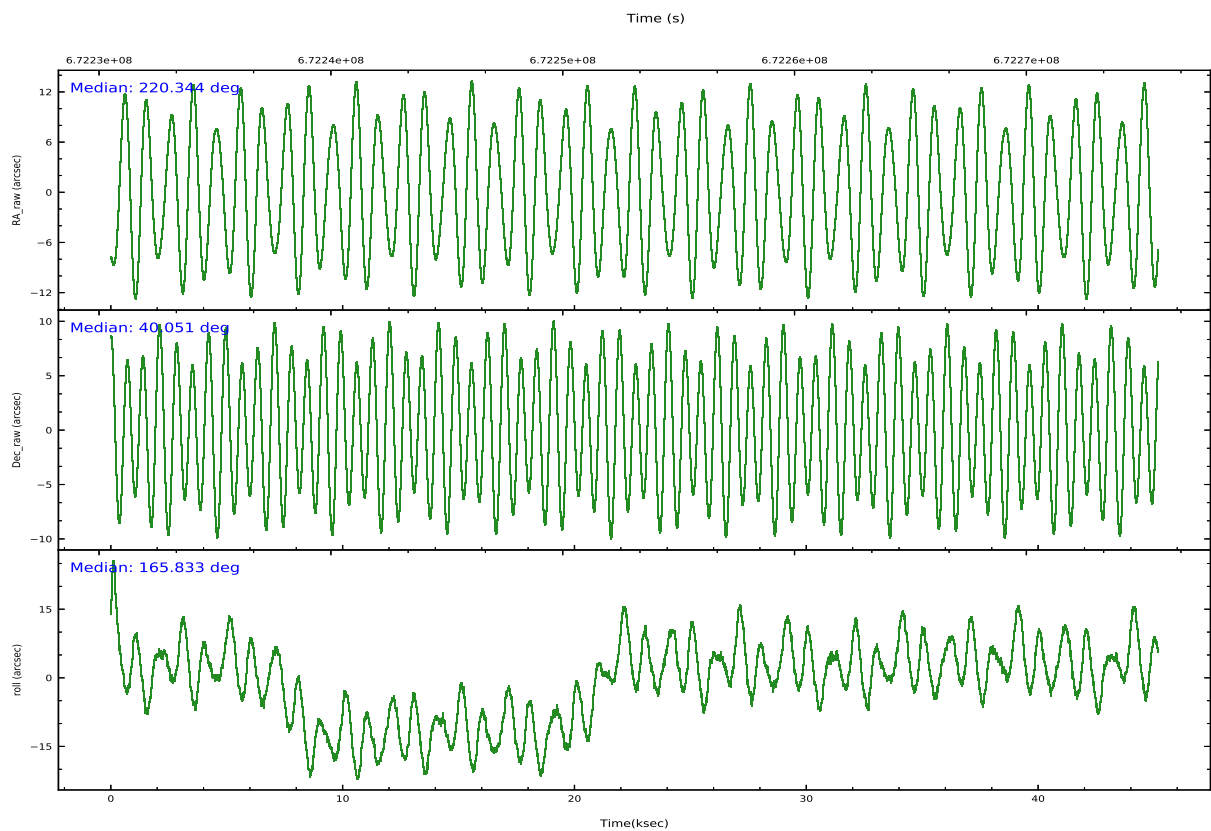
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	12364	21678	25483	12186
	3%	6%	6%	3%
grade 1 events	165	221	270	199
	0%	0%	0%	0%
grade 2 events	9840	11518	8720	7971
	3%	3%	2%	2%
grade 3 events	3780	3605	3809	3718
	1%	1%	1%	1%
grade 4 events	3535	3488	3724	3747
	1%	1%	0%	1%
grade 5 events	14168	14434	13638	16197
	4%	4%	3%	4%
grade 6 events	8381	10128	7497	8163
	2%	2%	1%	2%
grade 7 events	270599	275057	315500	305134
	83%	80%	83%	85%

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	220.378204	220.34998146538	CCD I2 on	Y	Y
[deg] Pointing Dec	40.058617	40.055191363576	CCD I3 on	Y	Y
[deg] Pointing Roll	165.606800	165.83316834599	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	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	672230683.184000	672229847.50752	CCD S5 on	N	N
Observation start date	2019-04-21T10:43:34	2019-04-21T10:30:47	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	672275683.184000	672276616.21032	On-chip summing requested	N	N
Observation end date	2019-04-21T23:13:34	2019-04-21T23:30:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



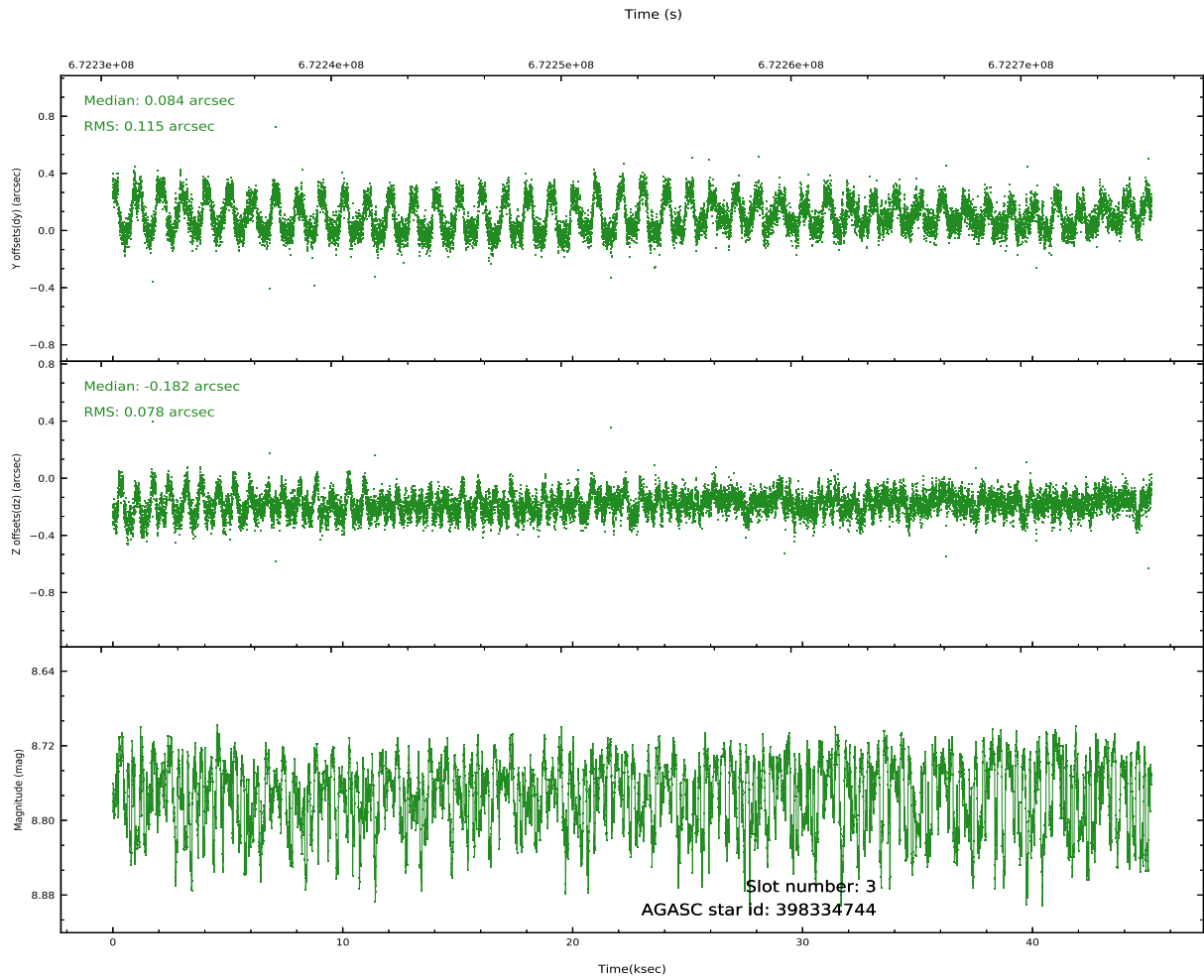
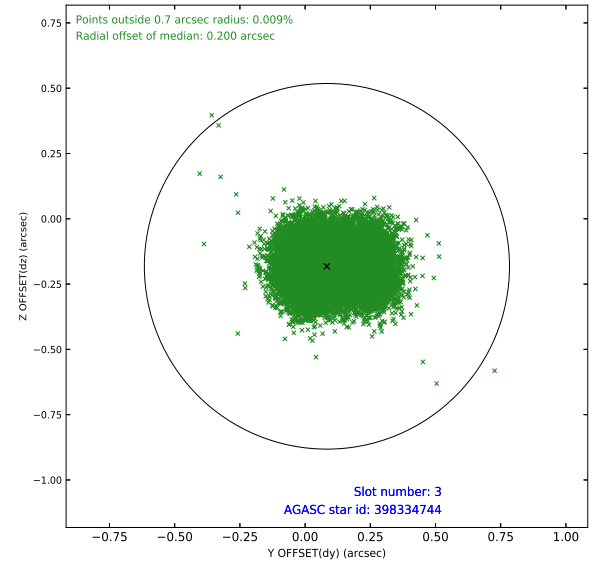
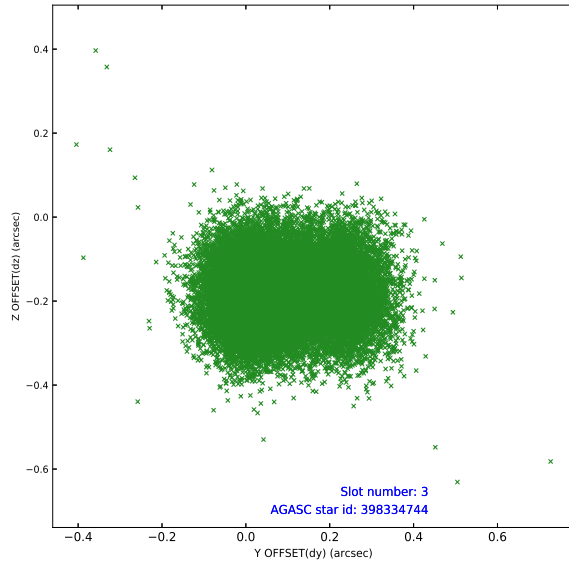


Slot Statistics

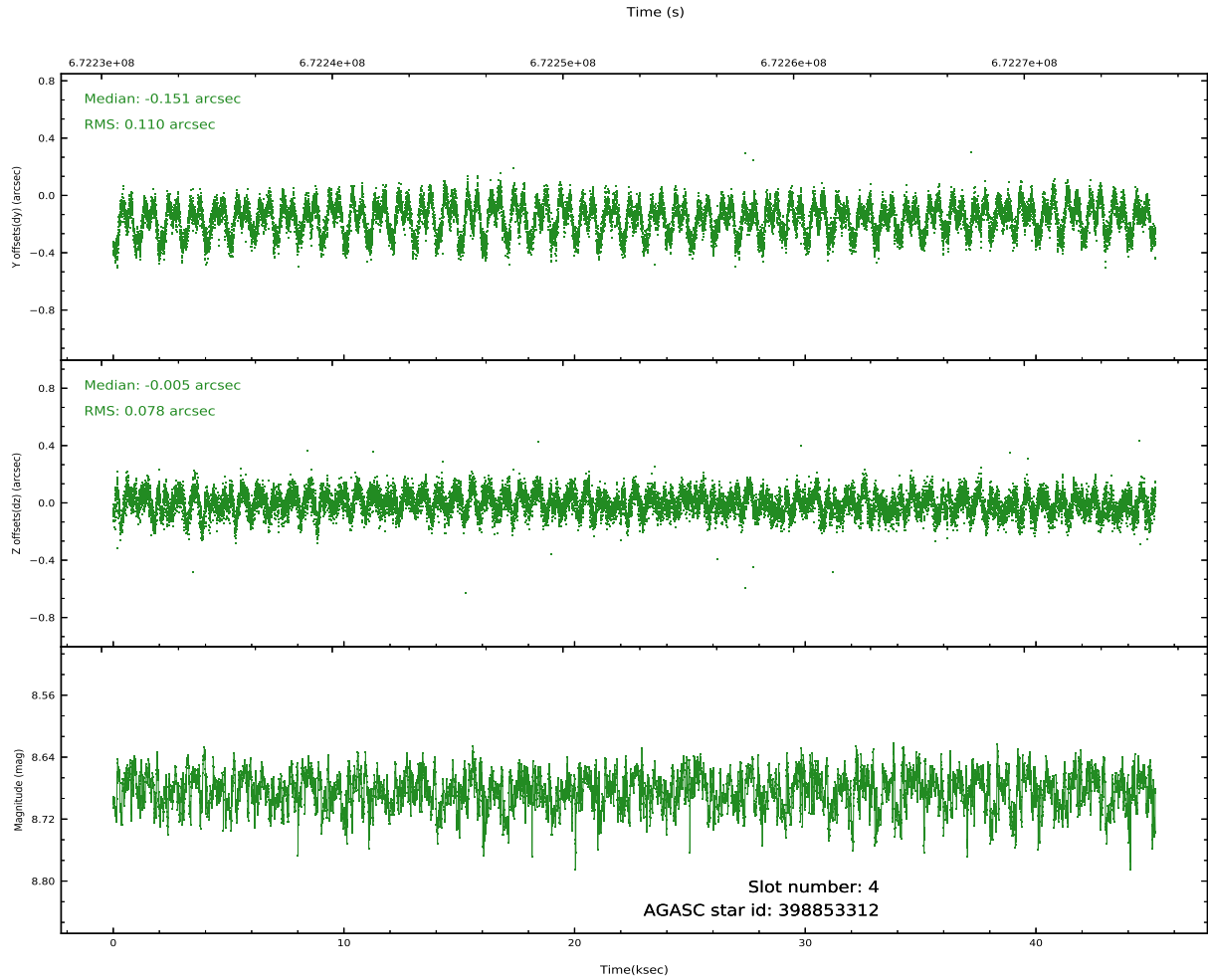
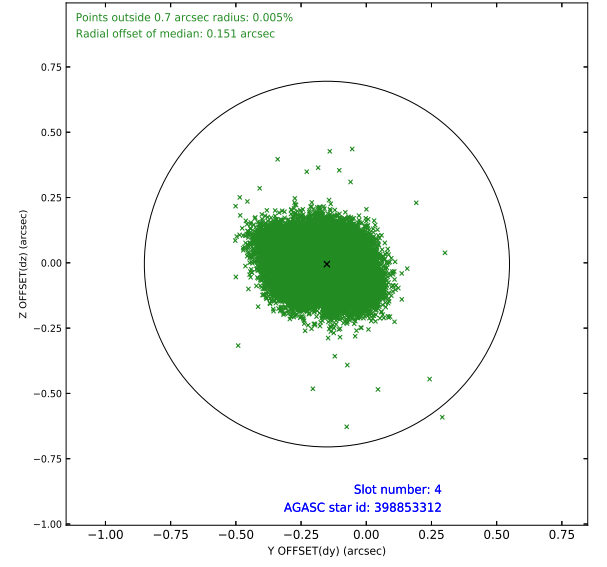
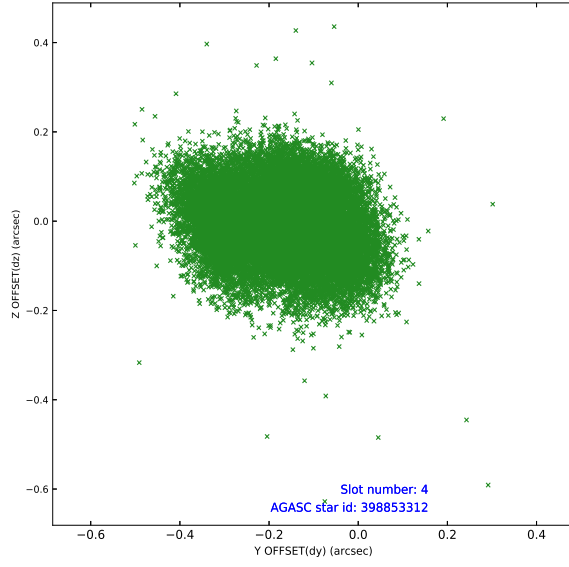
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.21	11018	1.000	0.244	-0.141	0.010	0.022	0.000000	0.000000	926.69	-842
1	FID		ACIS-I-5	7.23	11018	1.000	-0.327	0.214	0.010	0.024	0.000000	0.000000	-1821.82	1055
2	FID		ACIS-I-6	7.22	11018	1.000	-0.009	-0.002	0.010	0.018	0.000000	0.000000	392.22	1699
3	GUIDE	used	398334744	8.77	22023	1.000	0.084	-0.182	0.151	0.230	219.519887	40.021003	2261.40	708
4	GUIDE	used	398853312	8.68	22014	1.000	-0.151	-0.005	0.148	0.225	220.158614	39.892403	440.78	729
5	GUIDE	used	398854912	8.03	22029	1.000	-0.151	-0.021	0.104	0.171	220.552651	39.408032	-1051.54	2146
6	GUIDE	used	399249520	8.82	22019	1.000	0.205	0.144	0.141	0.223	220.748531	40.115913	-933.87	-455
7	GUIDE	used	399249784	6.95	22037	1.000	0.016	0.069	0.075	0.132	220.303883	40.563735	648.87	-1710

2.4 Star Slots

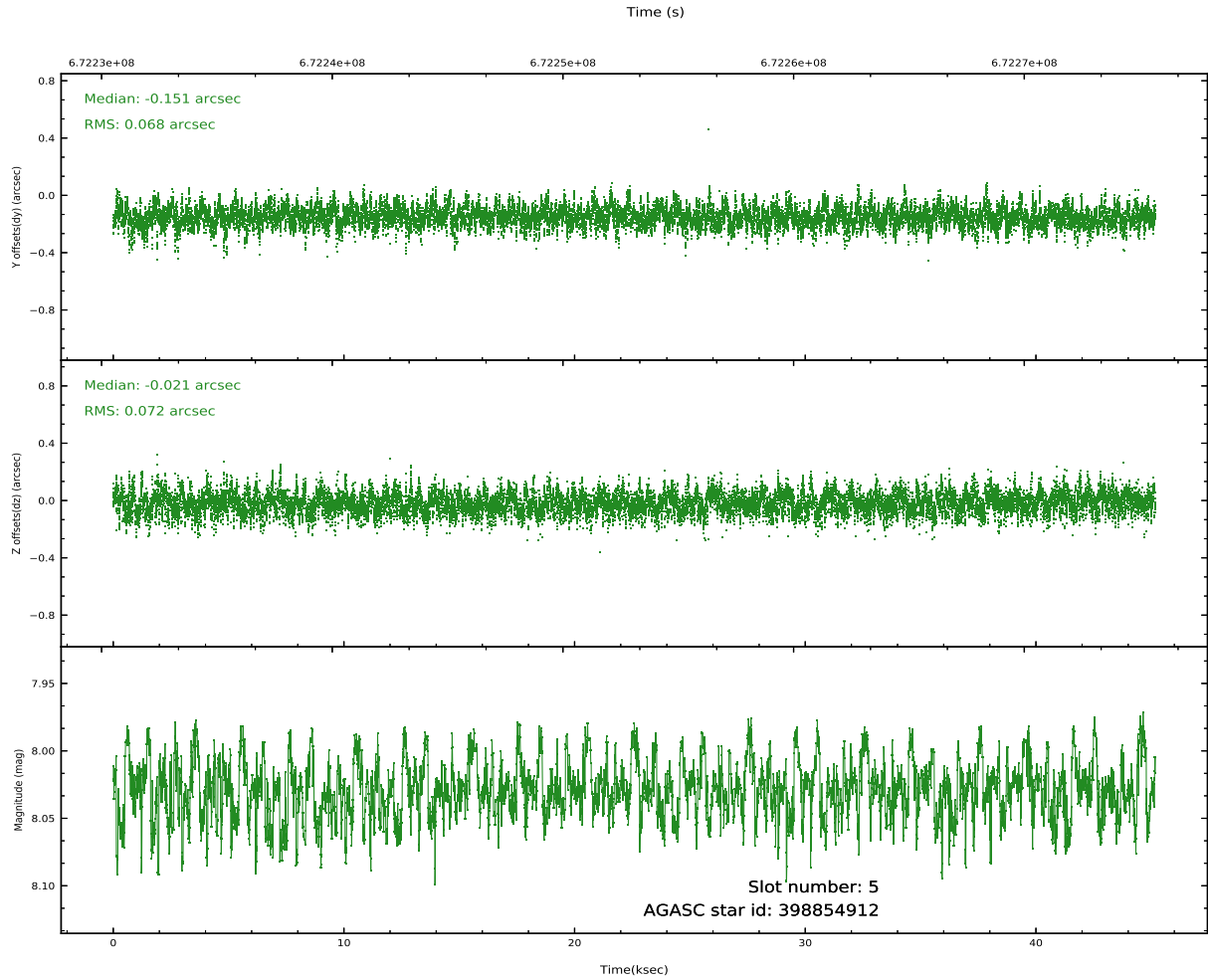
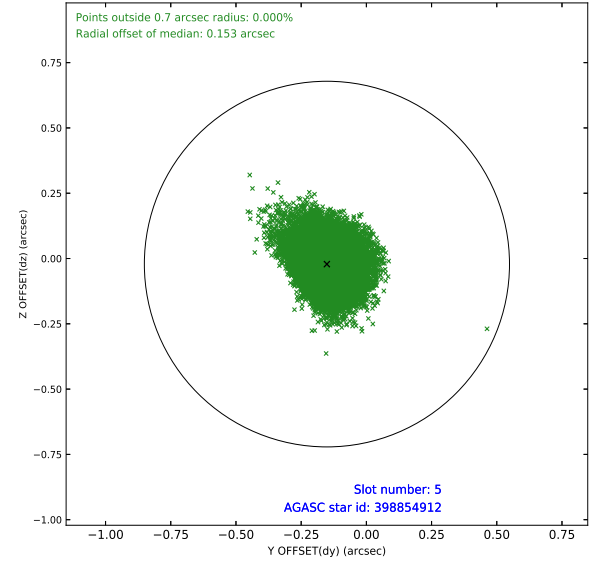
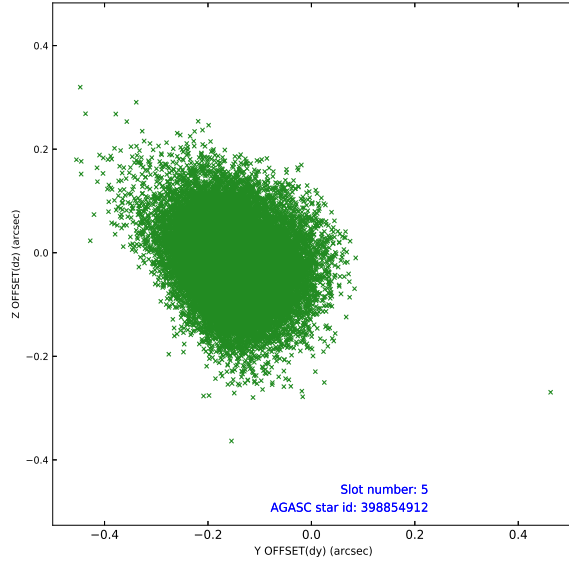
2.4.1 Slot 3



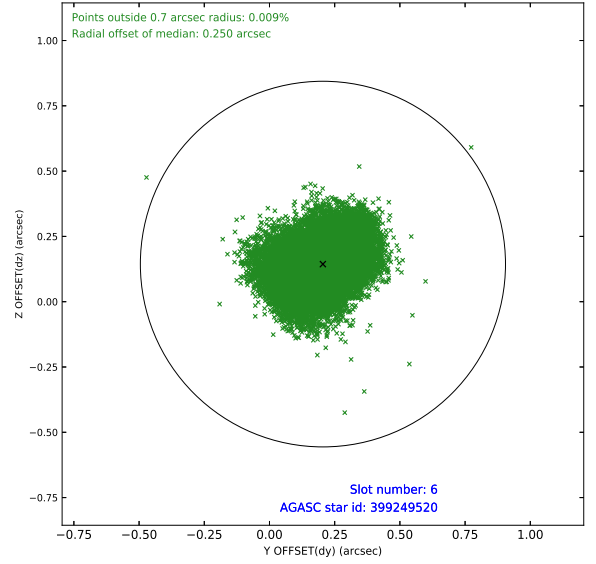
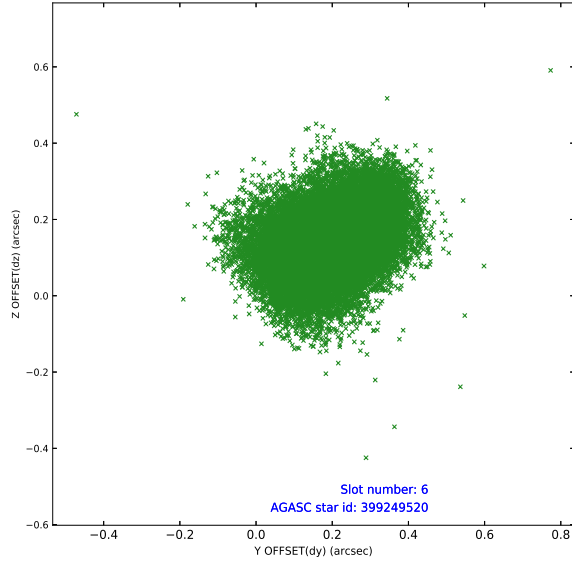
2.4.2 Slot 4



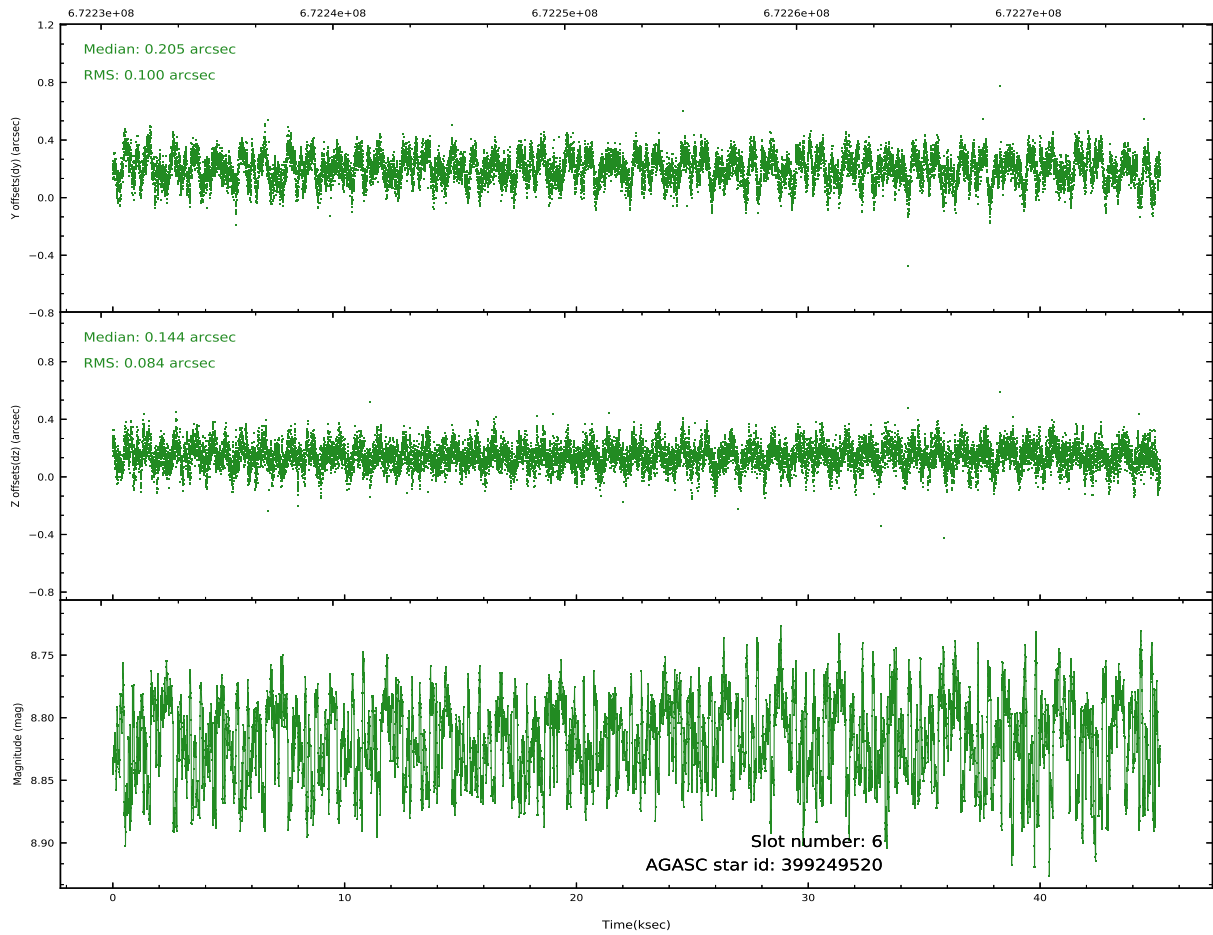
2.4.3 Slot 5



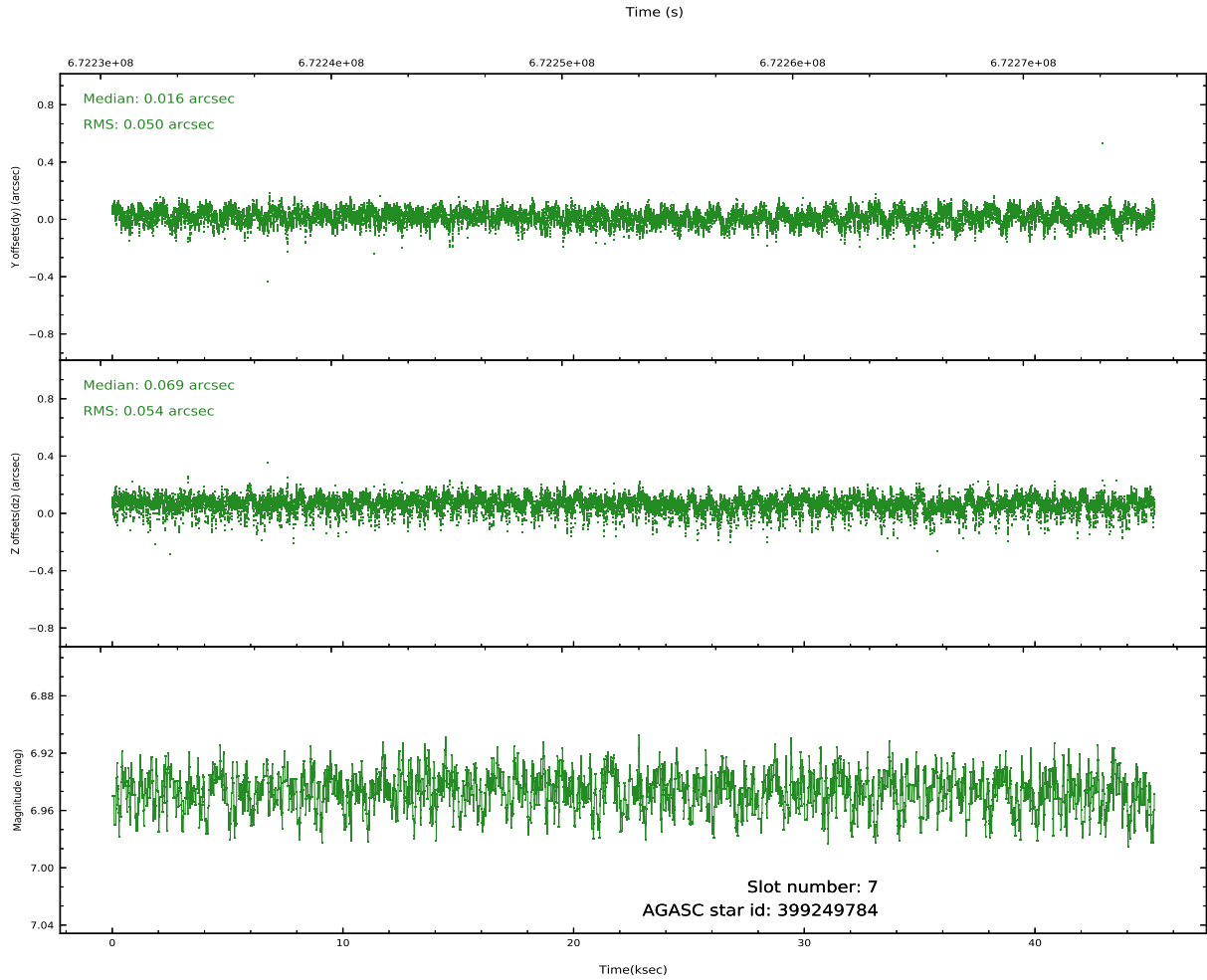
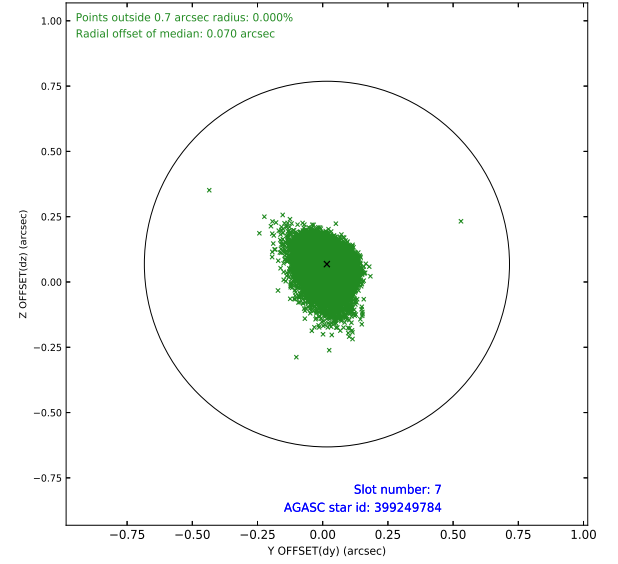
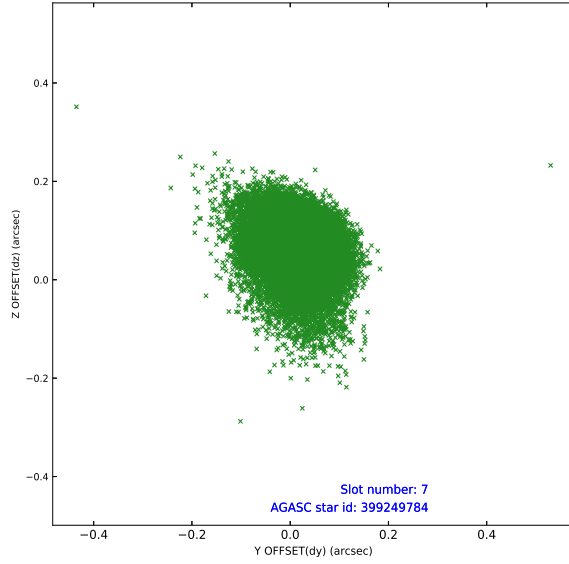
2.4.4 Slot 6



Time (s)

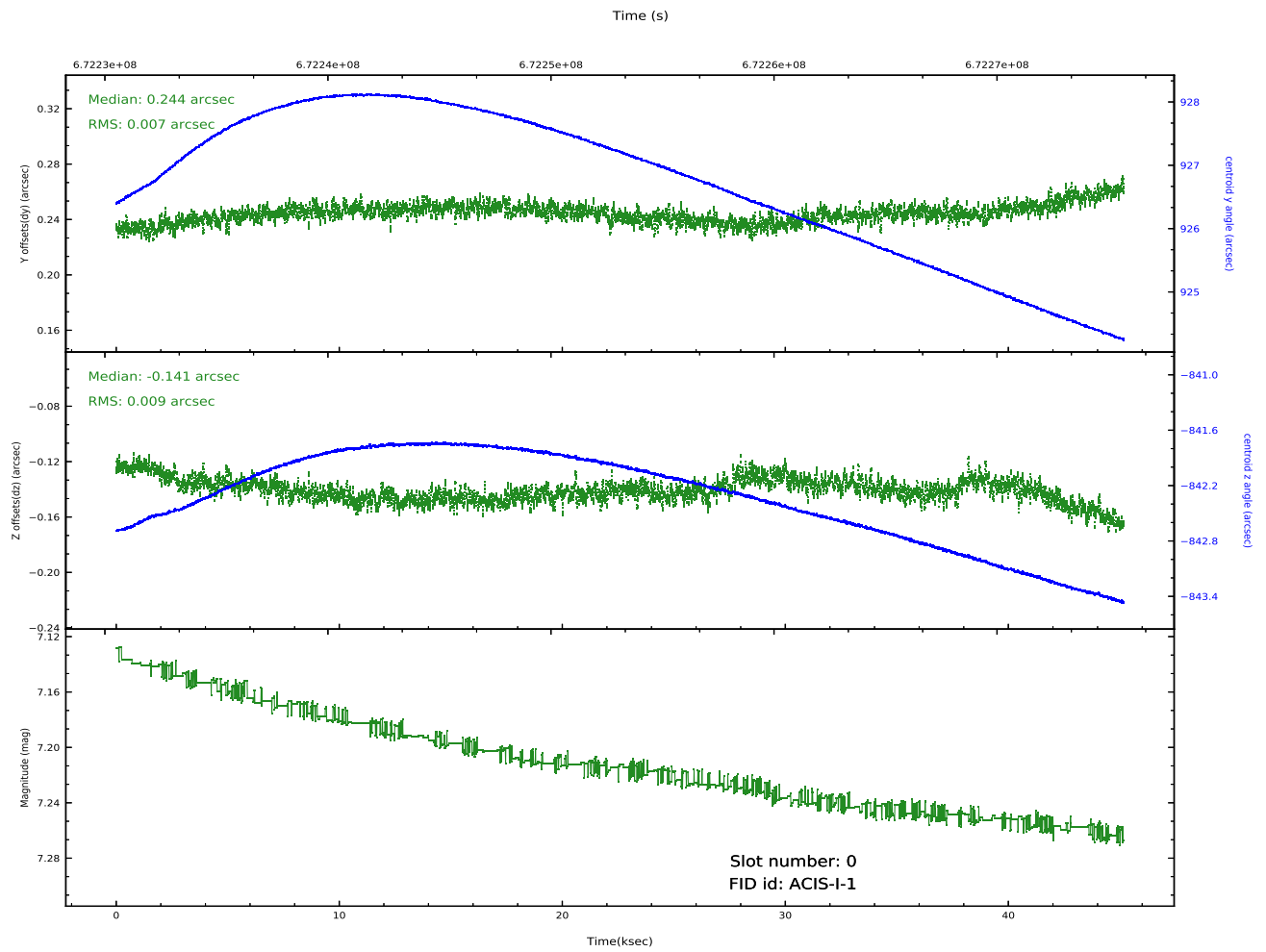
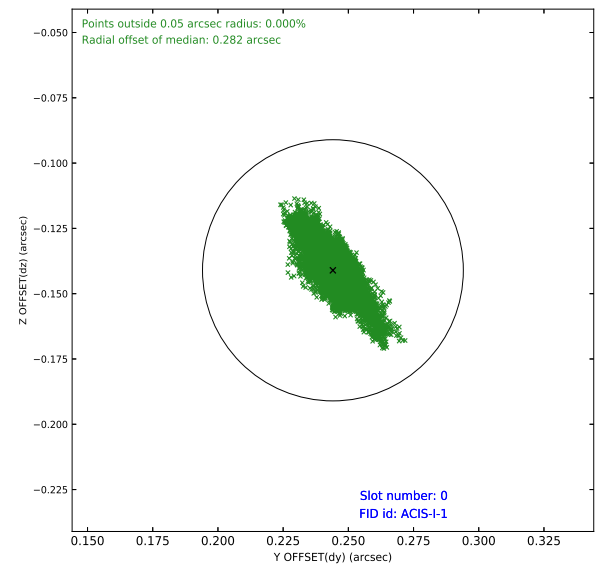
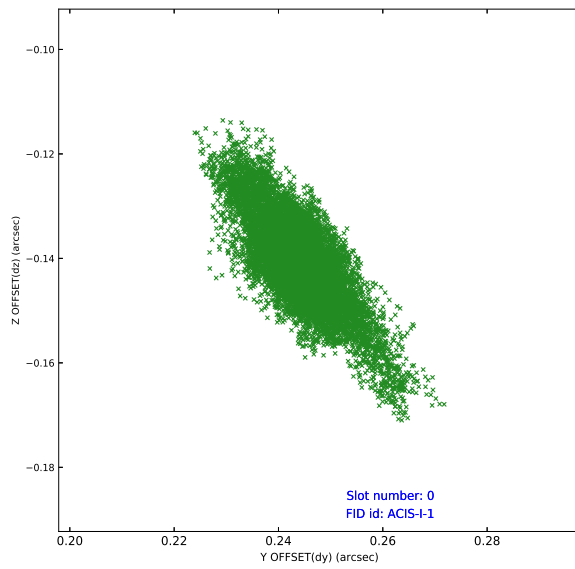


2.4.5 Slot 7

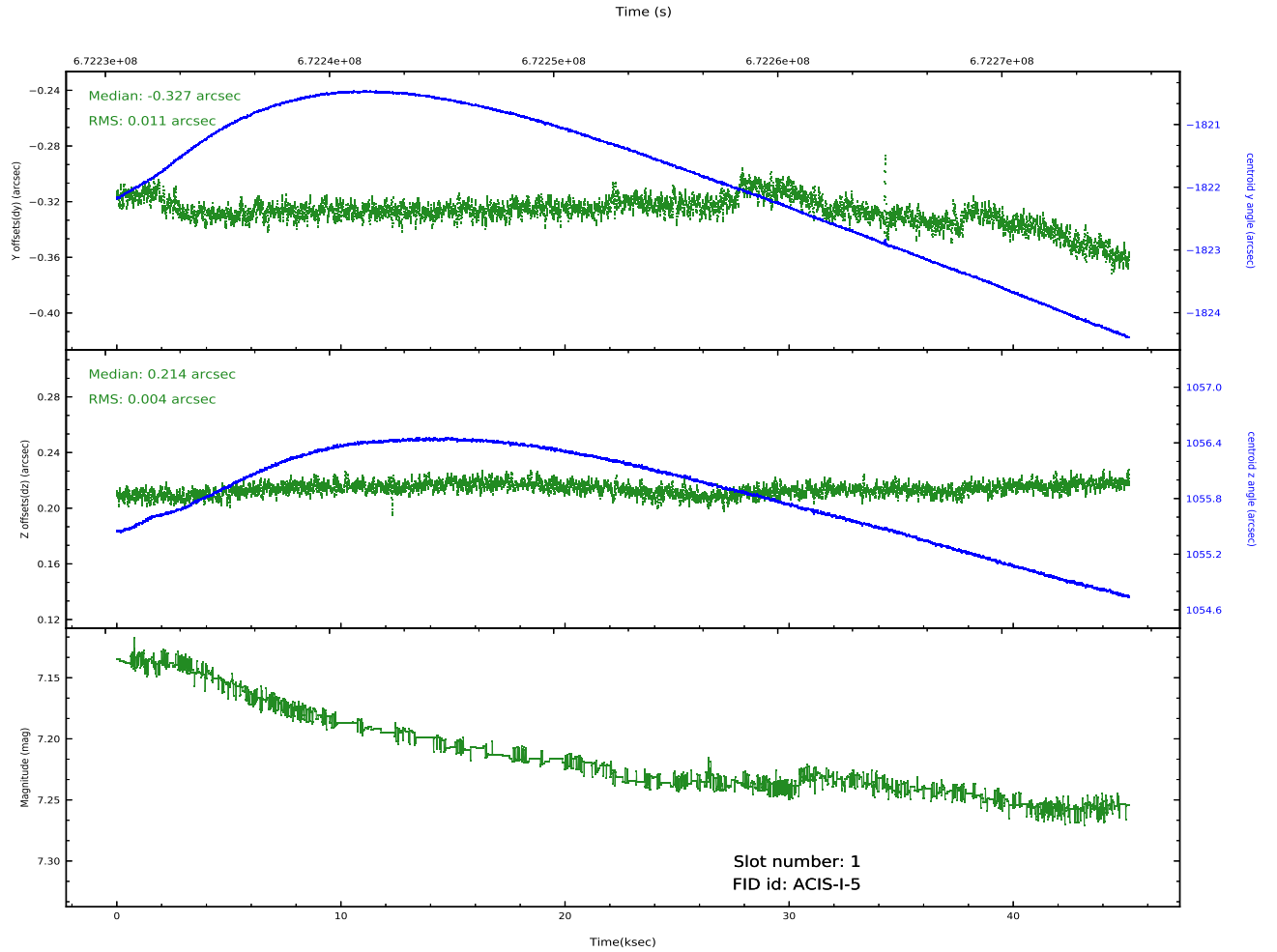
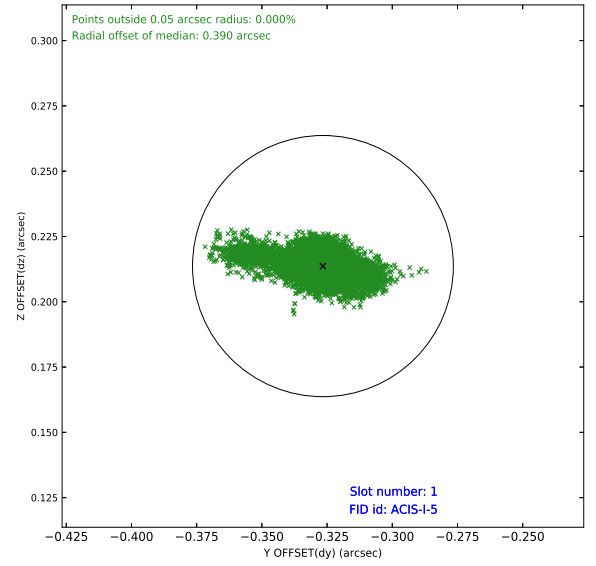
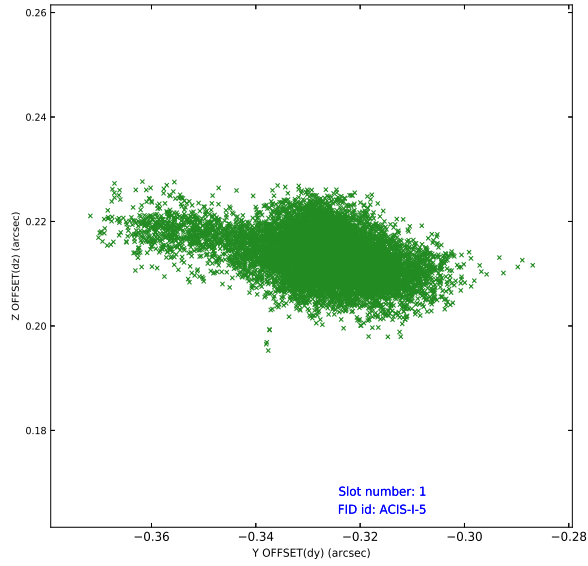


2.5 FID Slots

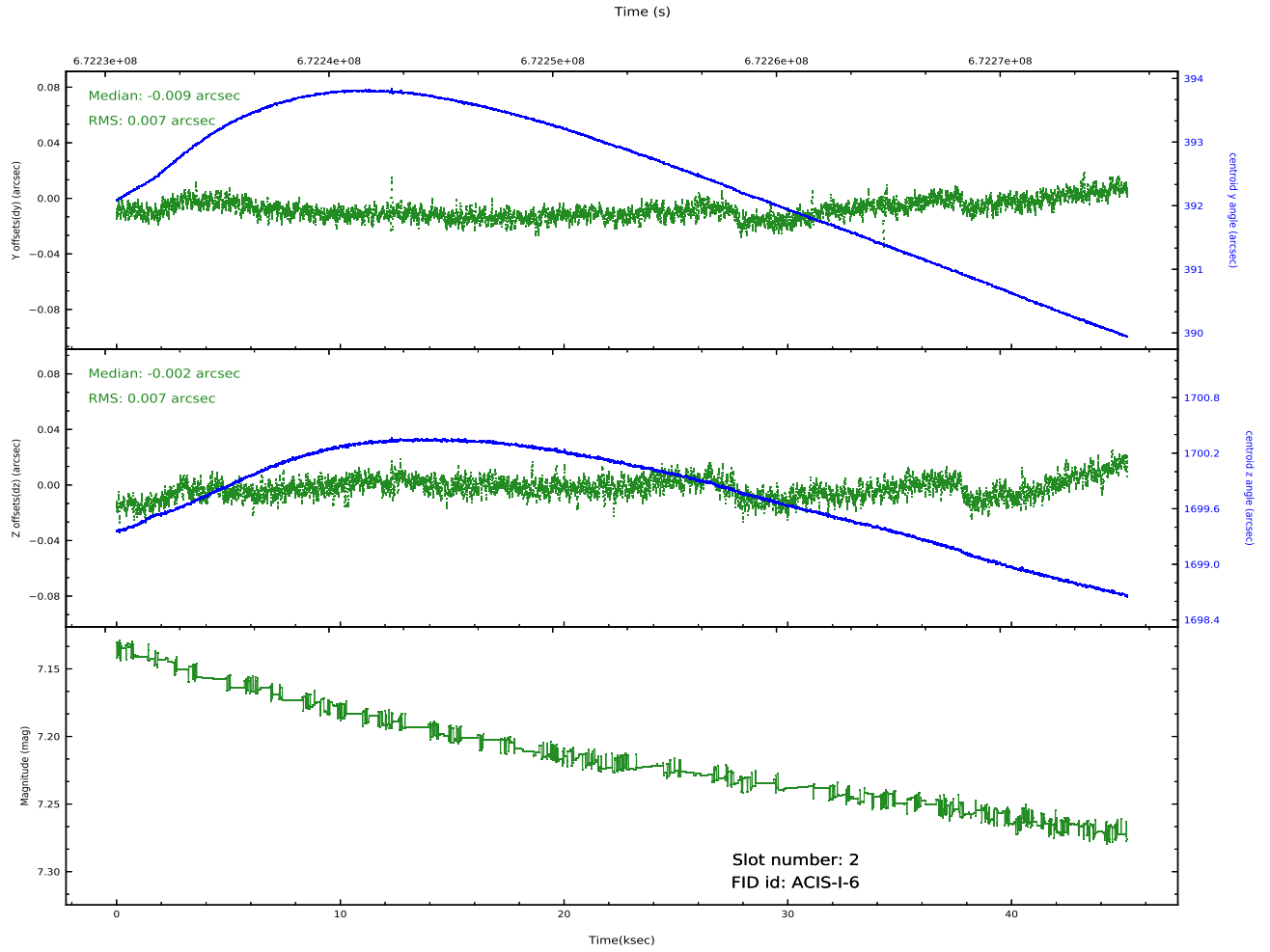
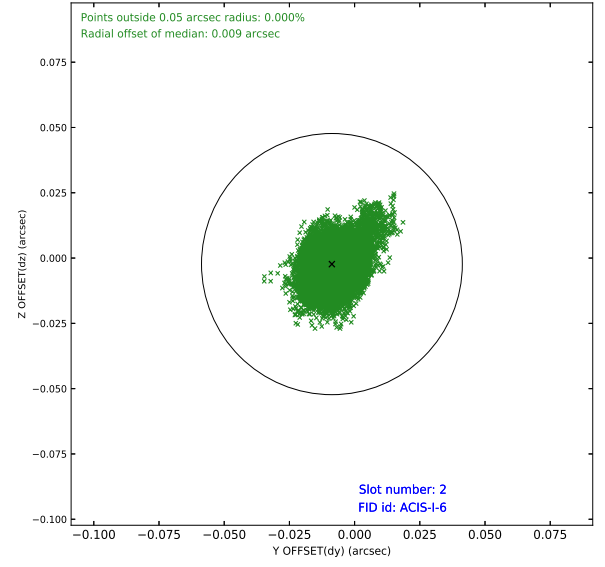
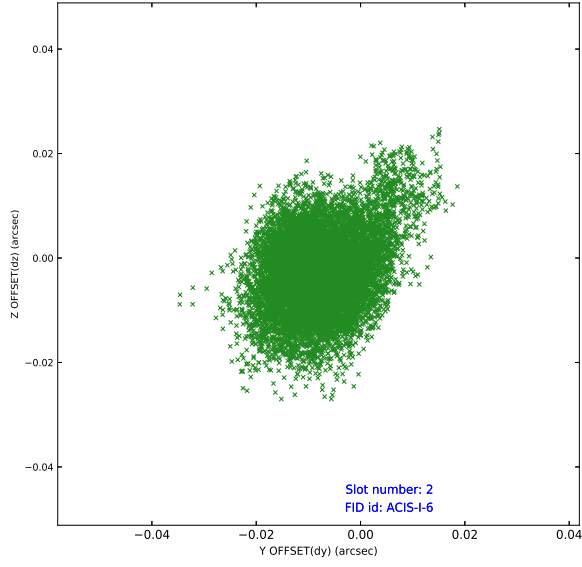
2.5.1 Slot 0



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	45.076454550147

A.2 Comments

Optional chips S2 and S3 not included.