

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20330 - L2 Version 2
Chandra X-Ray Center

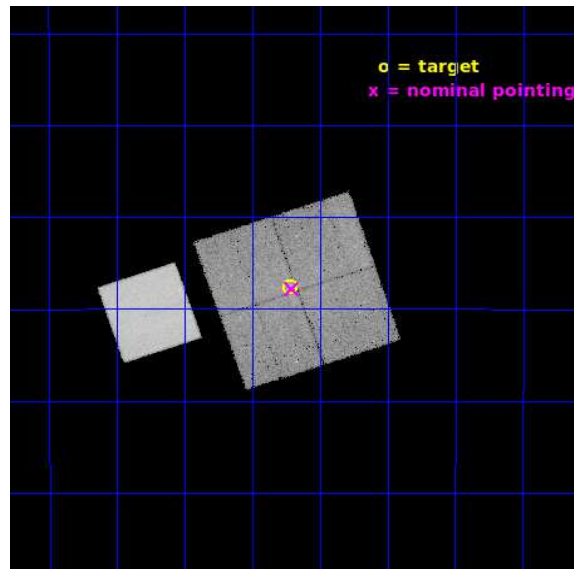
L2 Processing Date : Oct 26 2020

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1 Front

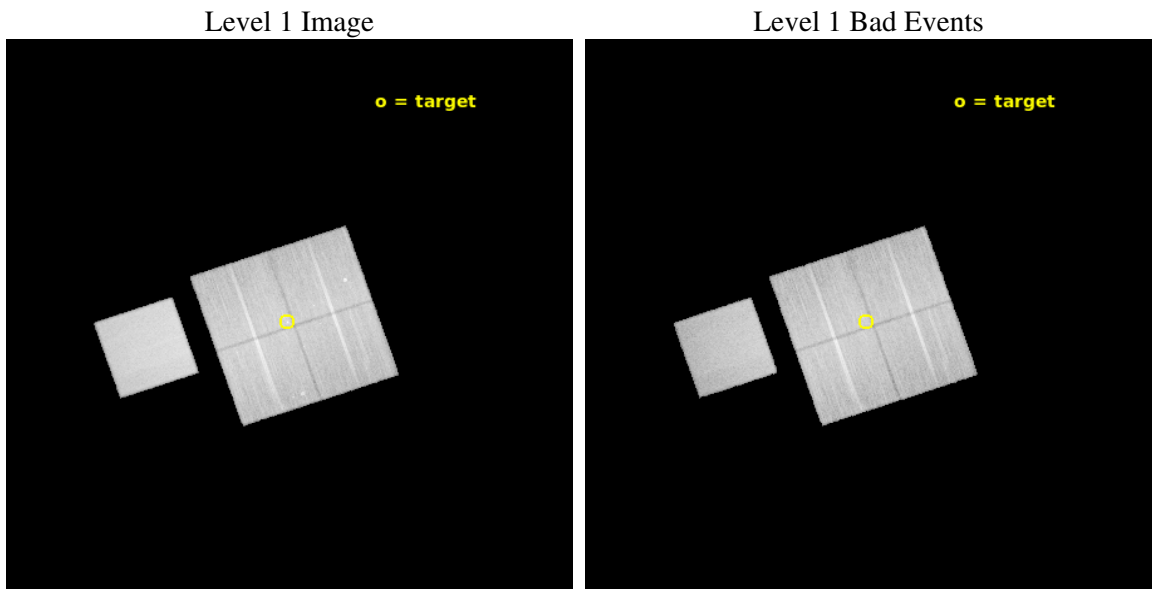
seq_num	503023	Sequence number
obs_id	20330	Observation id
title	The wagging jet and the X-ray plerion of PSR J1809-1917	Proposal t
observer	George Pavlov	Principal investigator
object	PSR J1809-1917	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.429583	Observer's specified target RA [deg]
dec_targ	-19.293917	Observer's specified target Dec [deg]
ra_nom	272.42686314683	Nominal RA [deg]
dec_nom	-19.296590271487	Nominal Dec [deg]
roll_nom	251.19912069458	Nominal Roll [deg]
revision	2	Processing version of data
ontime	33049.018133998	Sum of GTIs [s]
livetime	32617.208381744	Livetime [s]
ontime0	33049.018213868	Sum of GTIs [s]
ontime1	33055.300254345	Sum of GTIs [s]
ontime2	33049.018123388	Sum of GTIs [s]
ontime3	33049.018133998	Sum of GTIs [s]
ontime7	33055.300254345	Sum of GTIs [s]
l2events	243839	Number of level 2 events



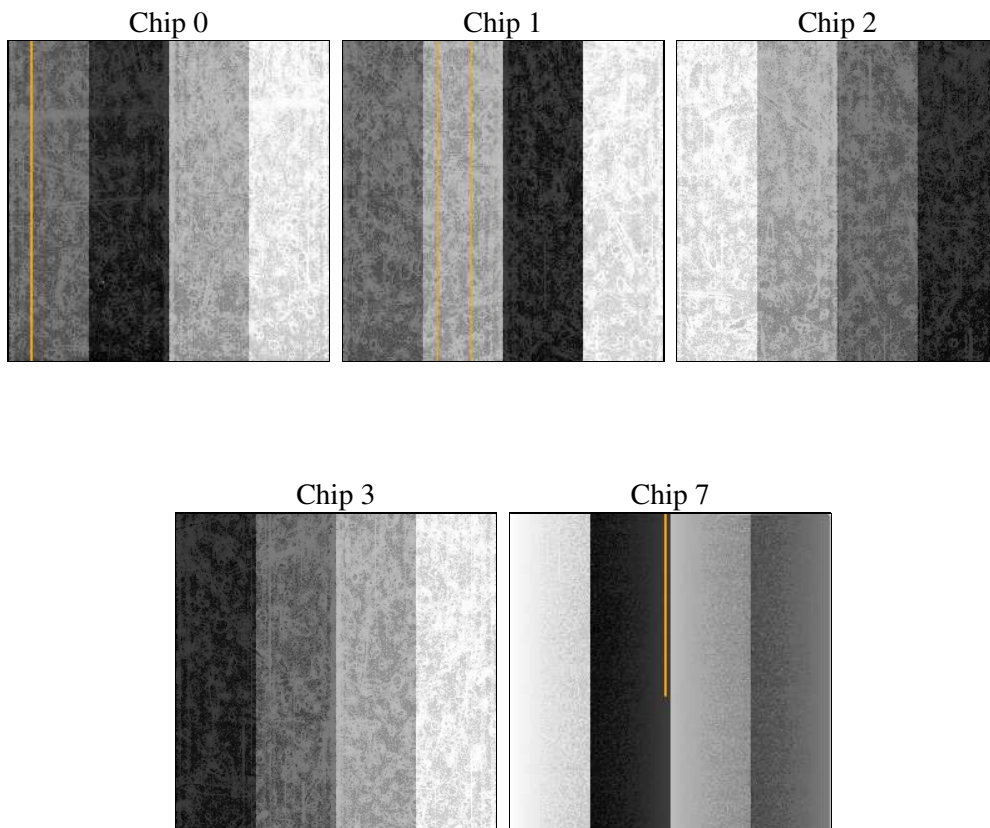
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	33049.018133998	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	33049.018213868	Sum of GTIs [s]
date	2020-10-26T20:07:58	Date and time of file creation	ontime1	33055.300254345	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	33049.018123388	Sum of GTIs [s]
			ontime3	33049.018133998	Sum of GTIs [s]
			ontime7	33055.300254345	Sum of GTIs [s]
			l1events	1283694	Number of level 1 events

2.1.4 Events

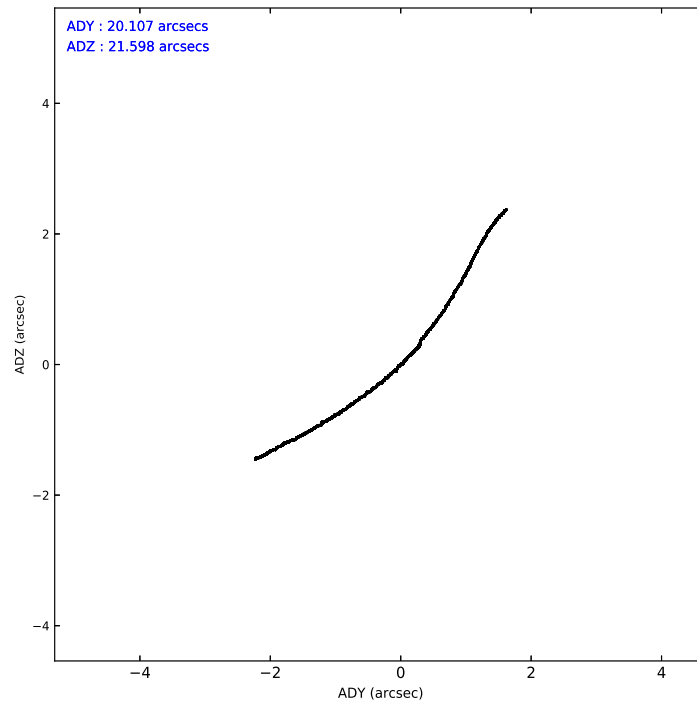
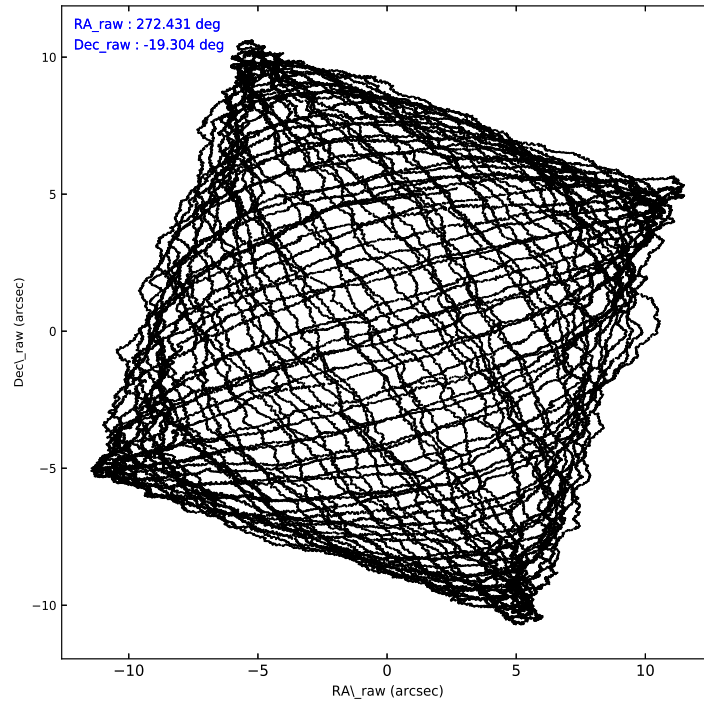
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	224123	235136	253412	244367	326656
rejected events	193204	201596	221244	214583	183948
rejected %	86%	85%	87%	87%	56%

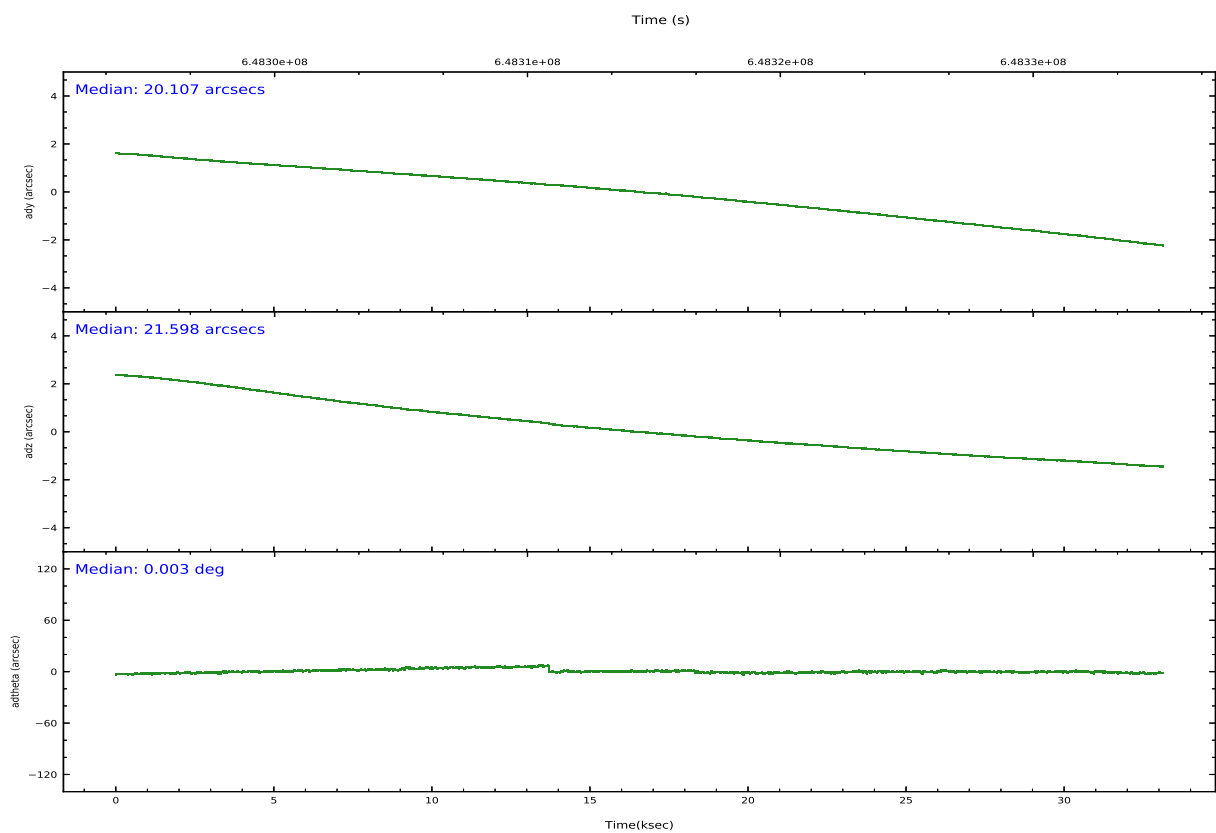
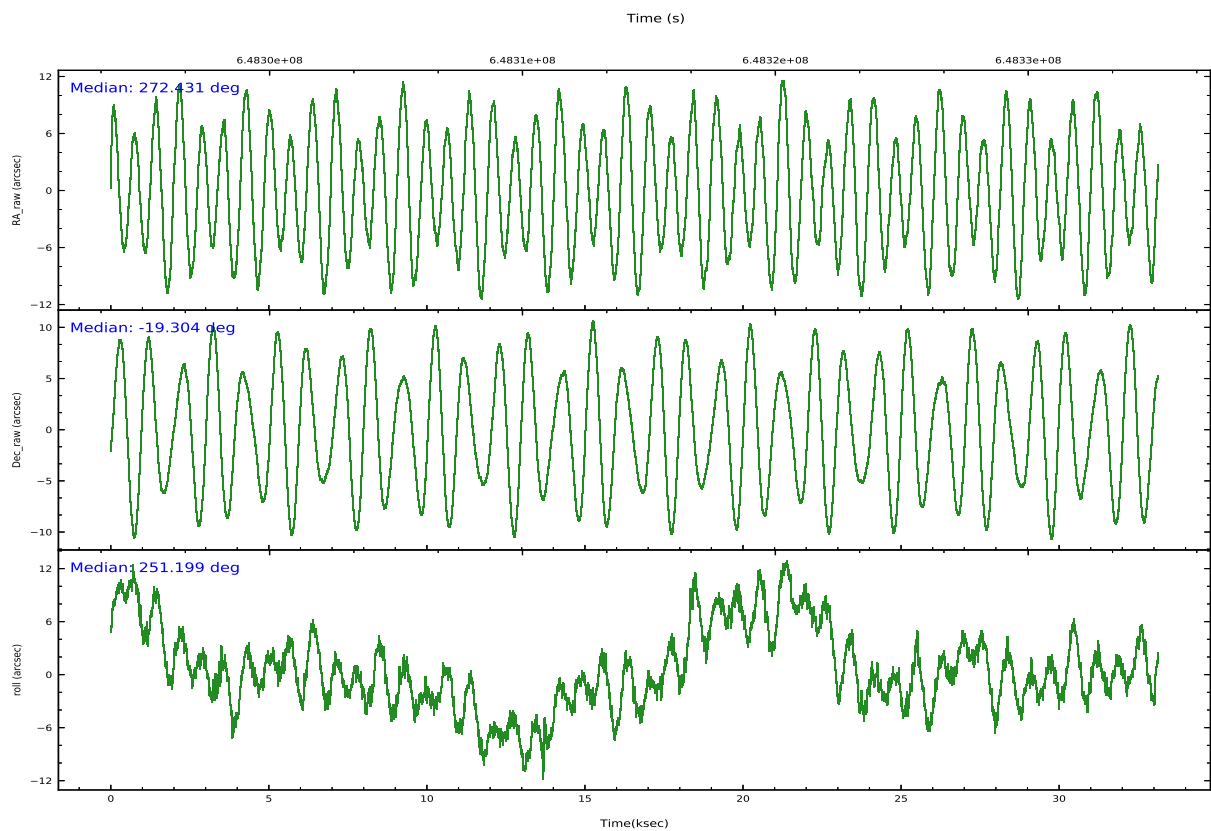
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	11777	13114	13745	11910	12459
	5%	5%	5%	4%	3%
grade 1 events	146	167	177	158	459
	0%	0%	0%	0%	0%
grade 2 events	7283	7678	7244	6273	30377
	3%	3%	2%	2%	9%
grade 3 events	2980	2956	2807	2905	11682
	1%	1%	1%	1%	3%
grade 4 events	2903	2947	2883	2924	11516
	1%	1%	1%	1%	3%
grade 5 events	10626	11178	10236	11992	32033
	4%	4%	4%	4%	9%
grade 6 events	5982	6858	5498	5779	76698
	2%	2%	2%	2%	23%
grade 7 events	182426	190238	210822	202426	151432
	81%	80%	83%	82%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01237	ACIS-01237	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	272.425361	272.42686314683	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.277036	-19.296590271487	CCD I3 on	Y	Y
[deg] Pointing Roll	250.998599	251.19912069458	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	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	648299109.184000	648297813.90158	CCD S5 on	N	N
Observation start date	2018-07-18T11:04:00	2018-07-18T10:43:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	648332109.184000	648333084.66617	On-chip summing requested	N	N
Observation end date	2018-07-18T20:14:00	2018-07-18T20:31:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



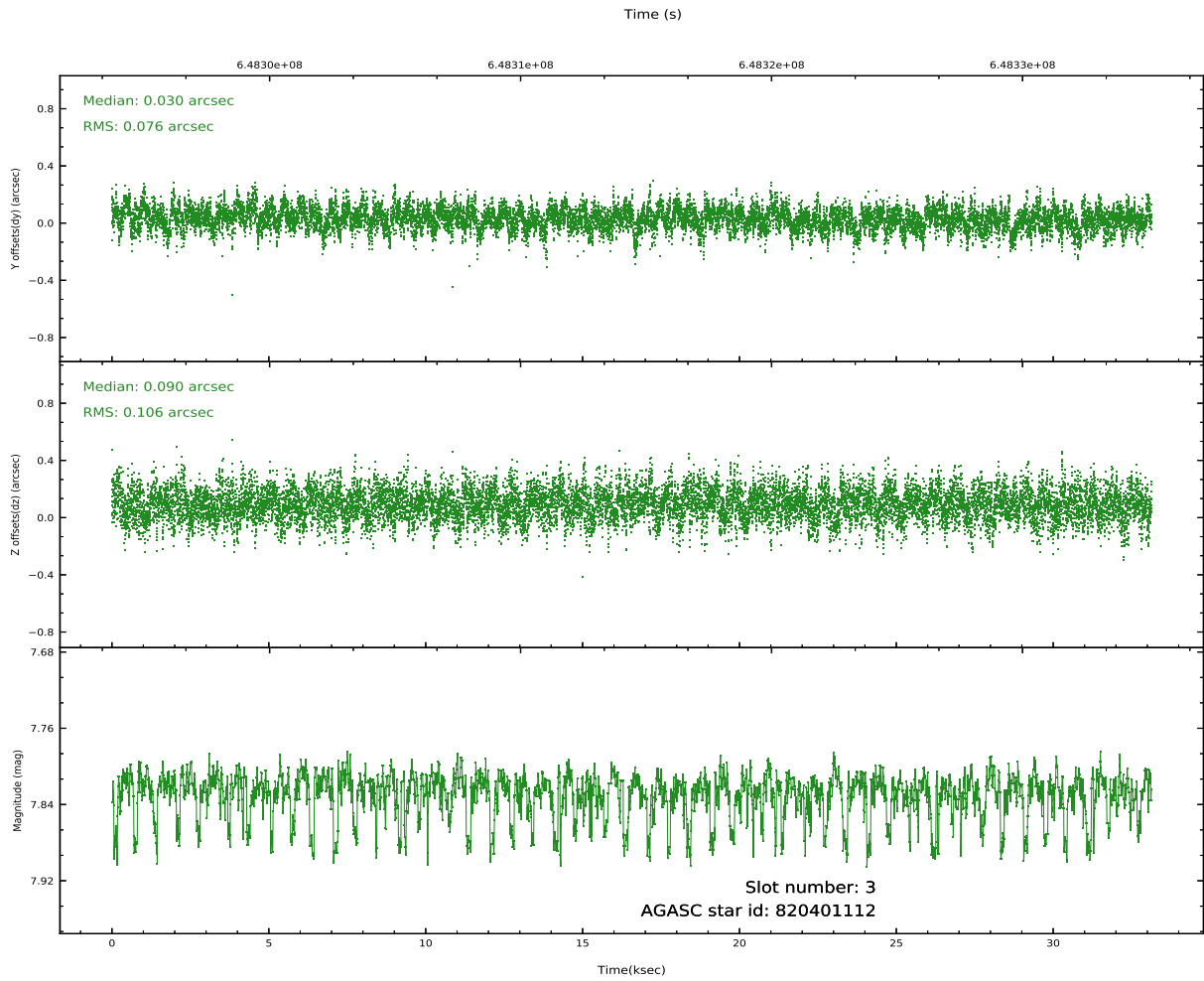
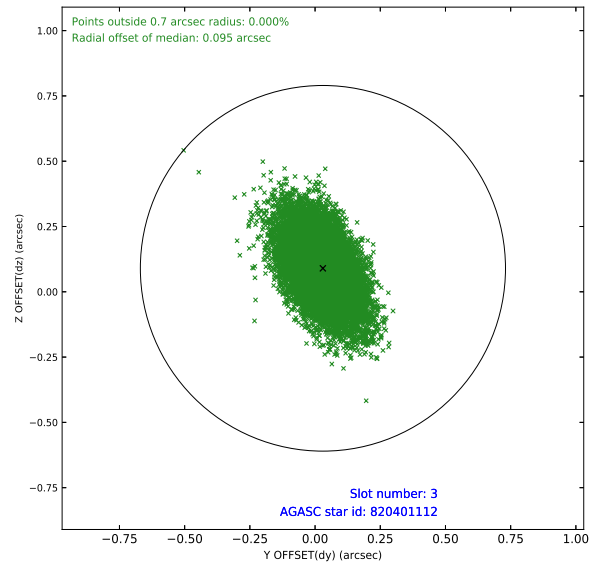
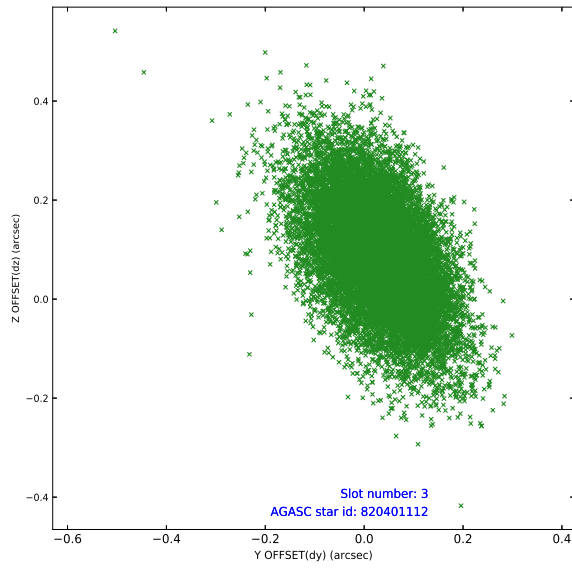


Slot Statistics

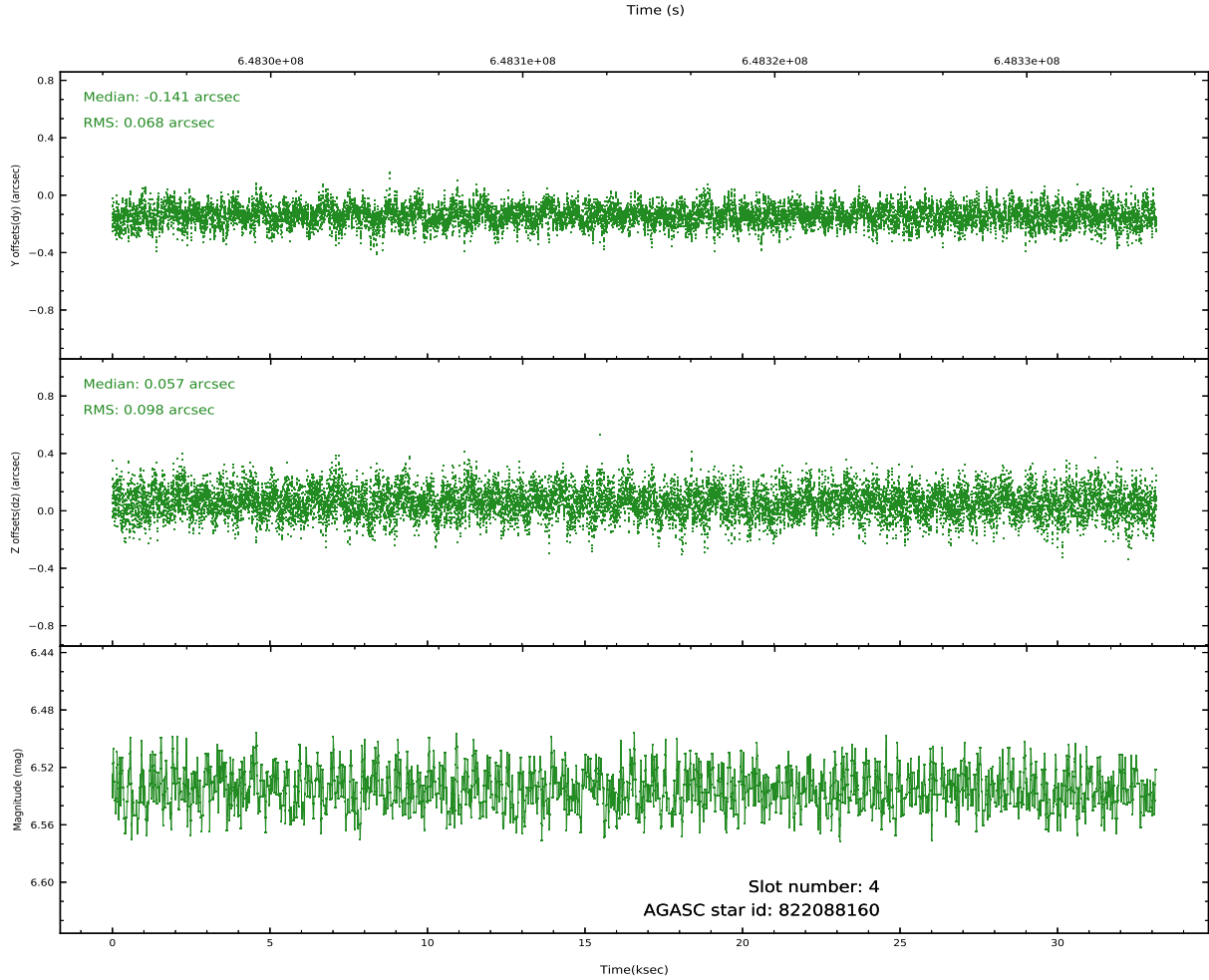
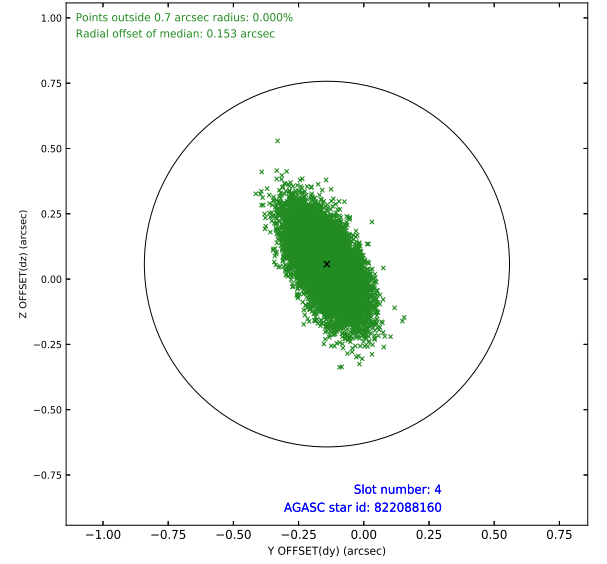
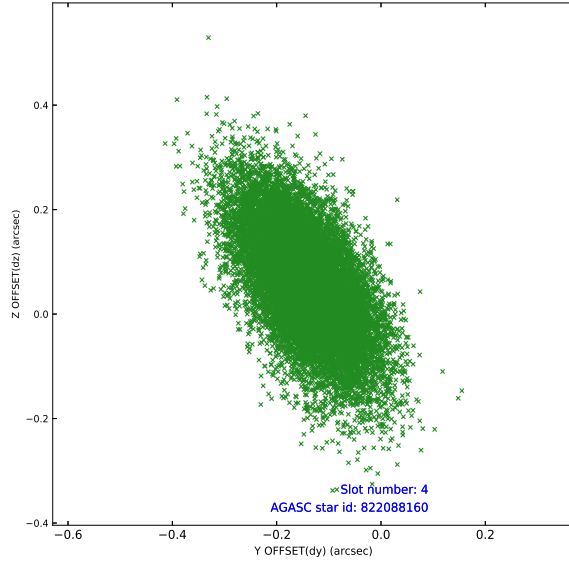
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.14	8082	1.000	0.161	-0.120	0.071	0.101	0.000000	0.000000	919.41	-845
1	FID		ACIS-I-4	7.08	8081	1.000	0.079	0.038	0.065	0.079	0.000000	0.000000	2139.59	1054
2	FID		ACIS-I-5	7.13	8081	1.000	-0.343	0.154	0.025	0.033	0.000000	0.000000	-1828.84	1052
3	GUIDE	used	820401112	7.83	16156	1.000	0.030	0.090	0.135	0.238	271.884761	-19.293988	659.11	-1715
4	GUIDE	used	822088160	6.54	16162	1.000	-0.141	0.057	0.122	0.219	272.729284	-18.869551	-1723.01	501
5	GUIDE	used	822091704	8.06	16160	1.000	0.178	0.126	0.141	0.241	272.220028	-18.943658	-906.15	-1051
6	GUIDE	used	822096760	8.04	16154	1.000	-0.297	-0.023	0.177	0.295	272.830526	-19.438690	103.81	1490
7	GUIDE	used	822098736	8.49	16153	1.000	0.237	-0.249	0.137	0.240	272.269355	-19.875225	2209.09	202

2.4 Star Slots

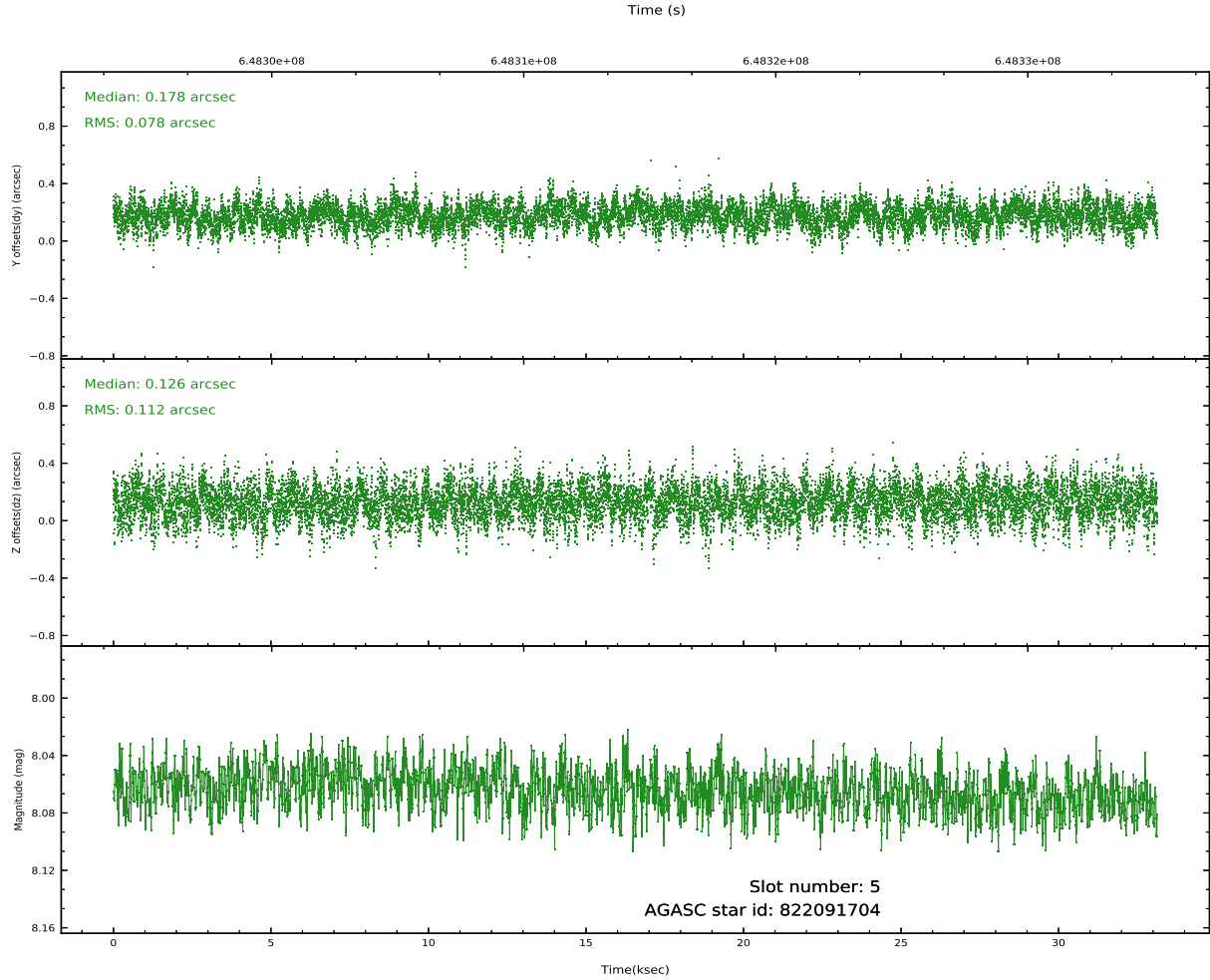
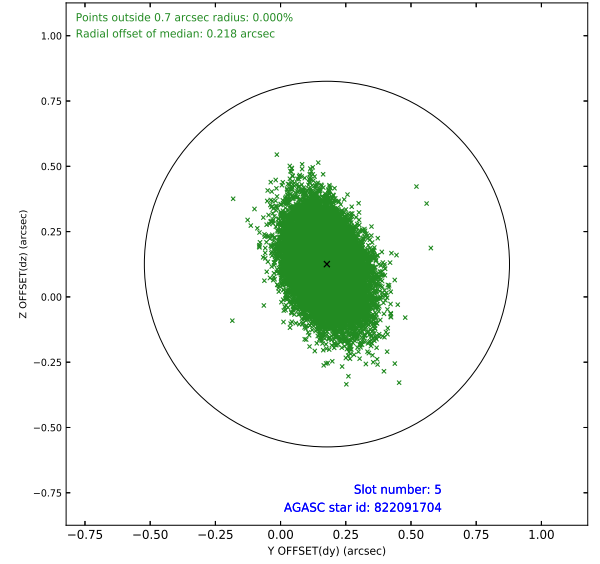
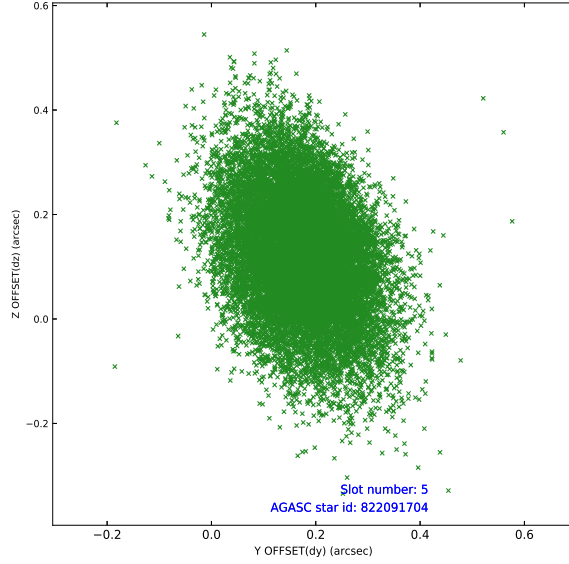
2.4.1 Slot 3



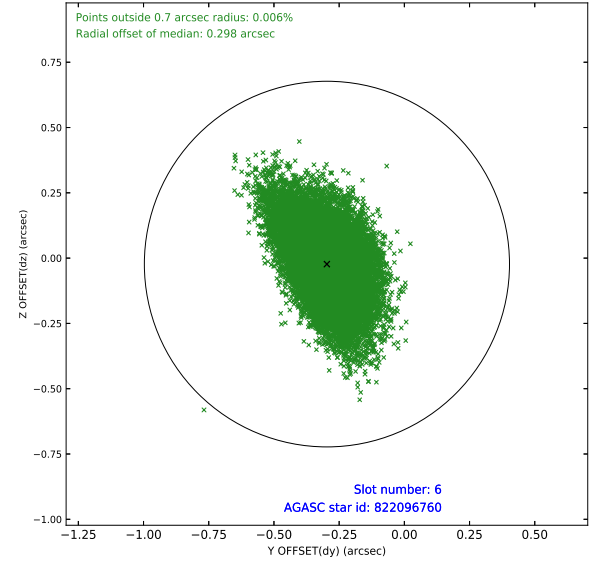
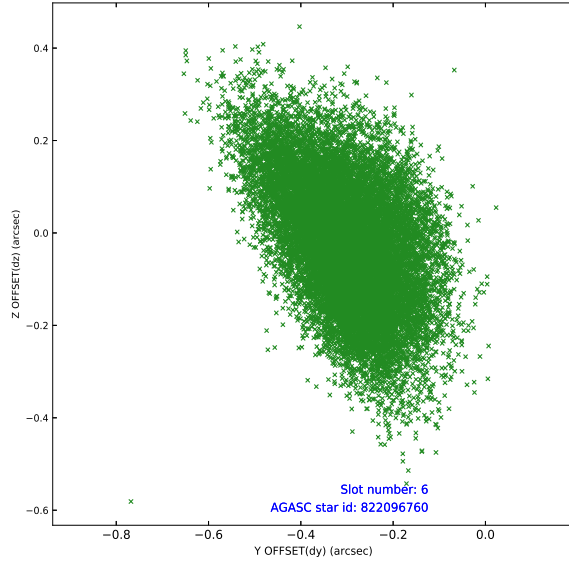
2.4.2 Slot 4



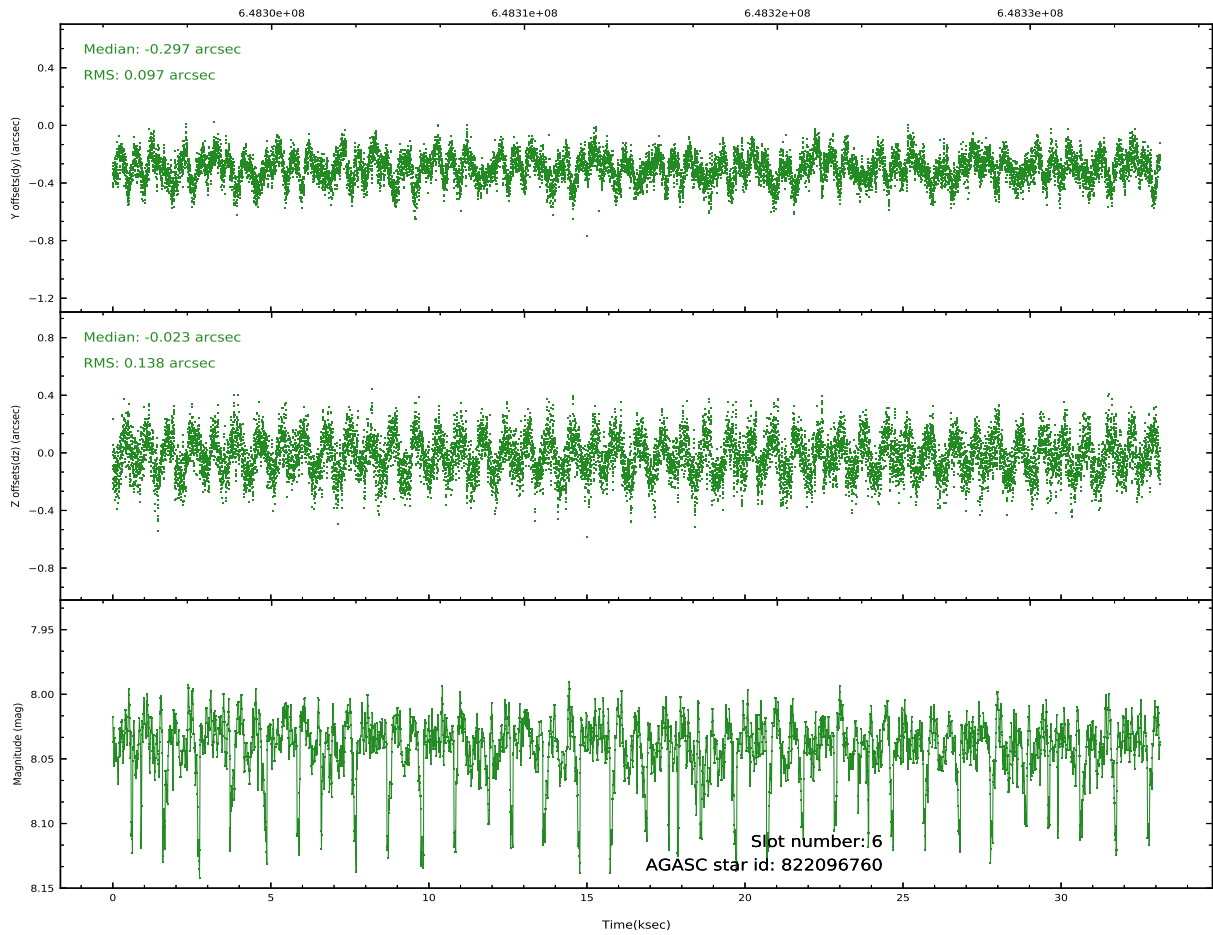
2.4.3 Slot 5



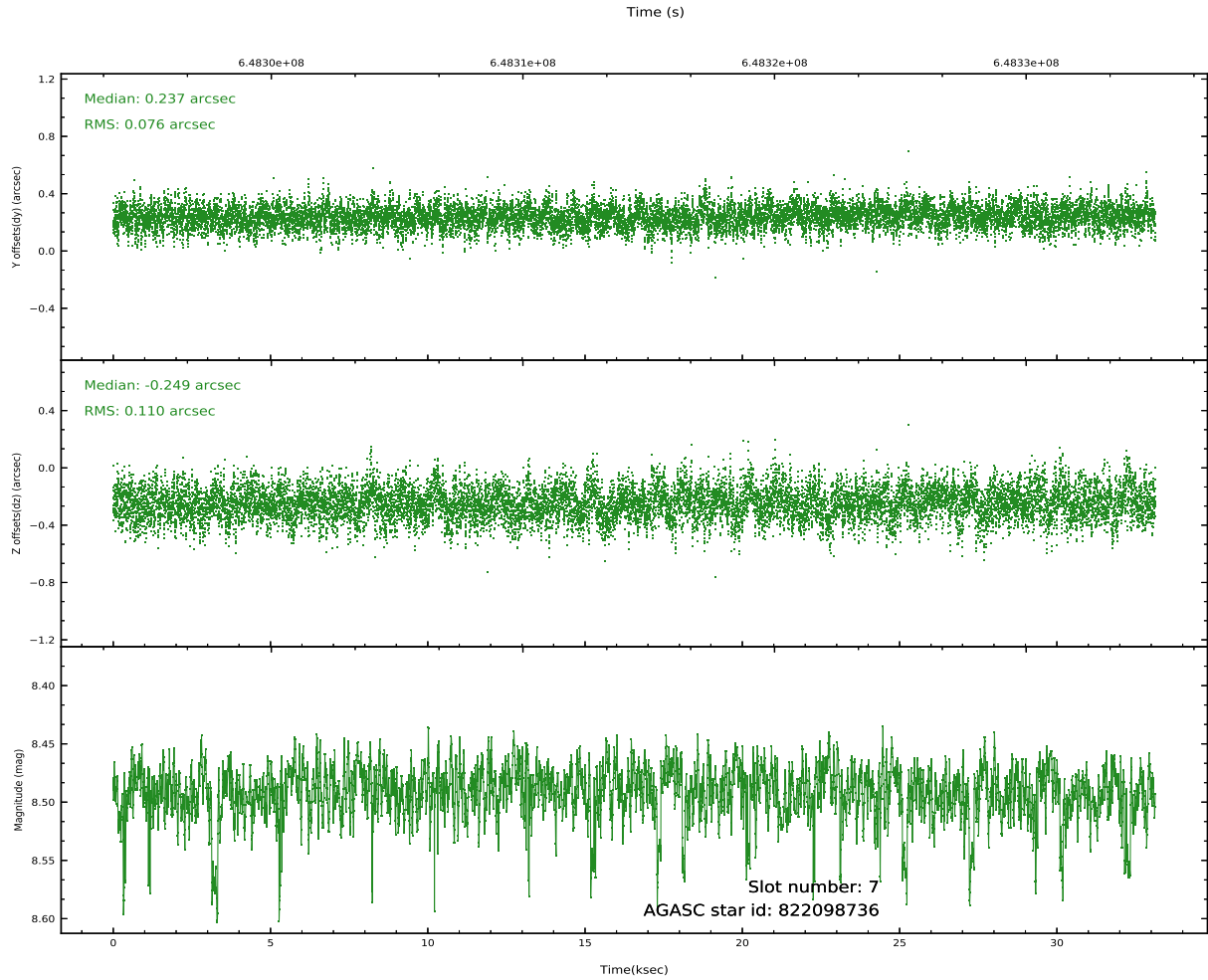
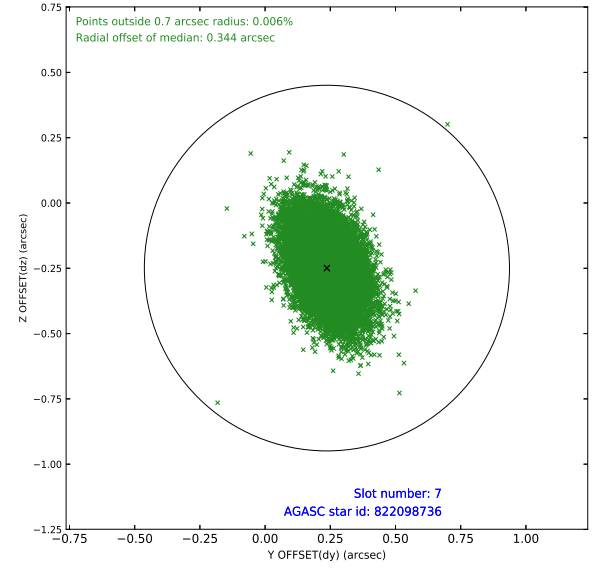
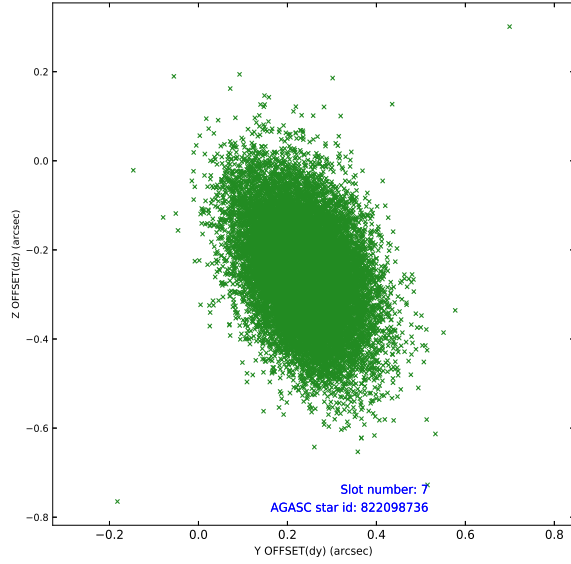
2.4.4 Slot 6



Time (s)

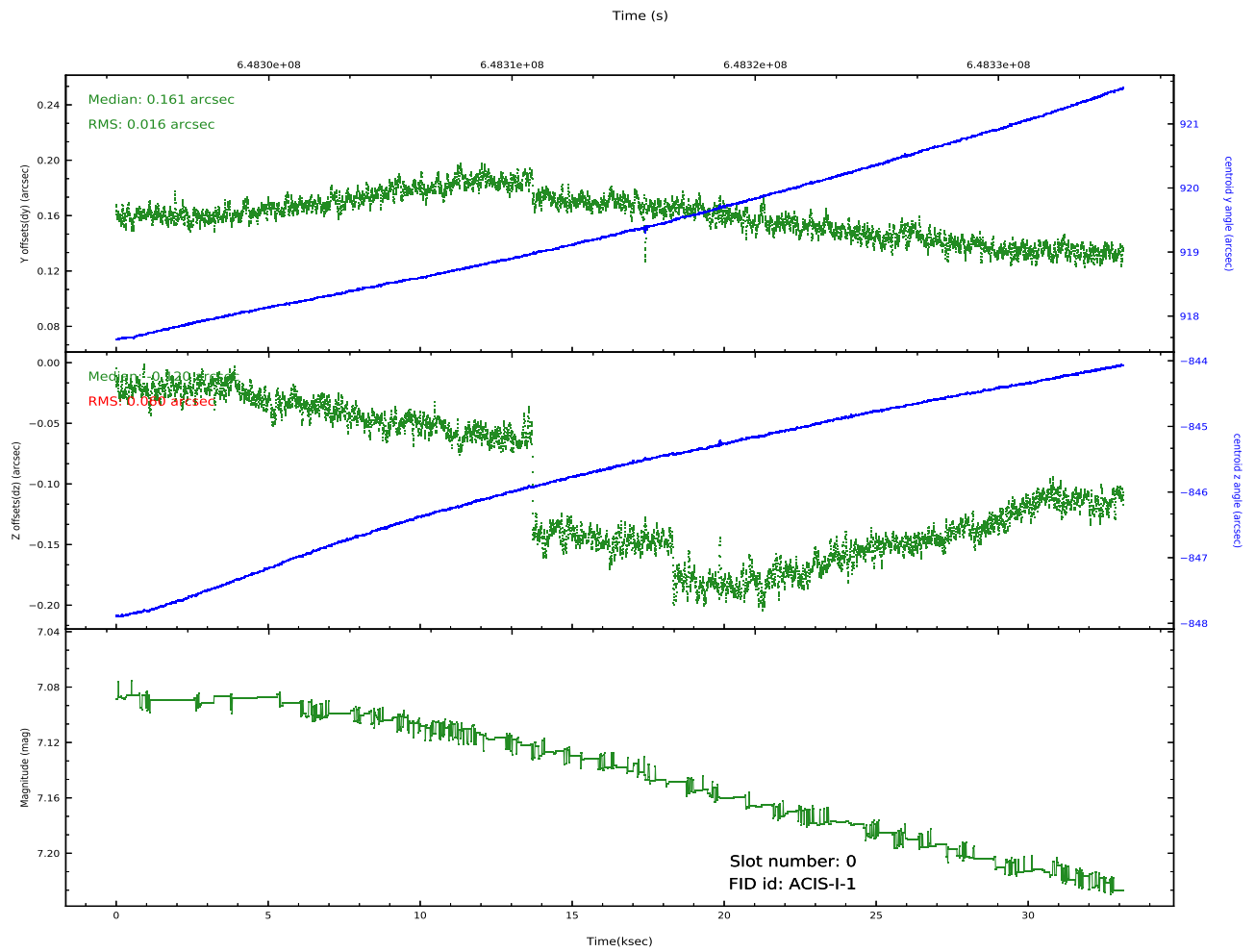
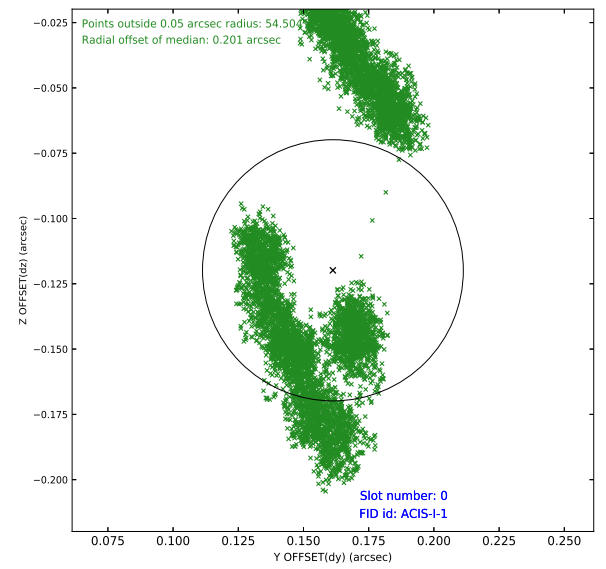
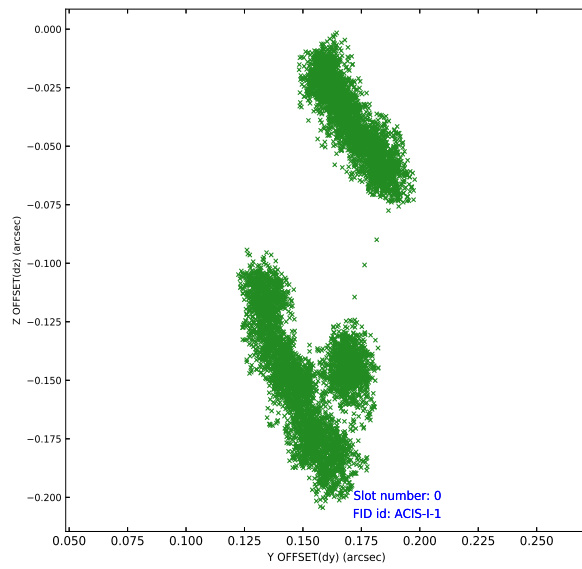


2.4.5 Slot 7

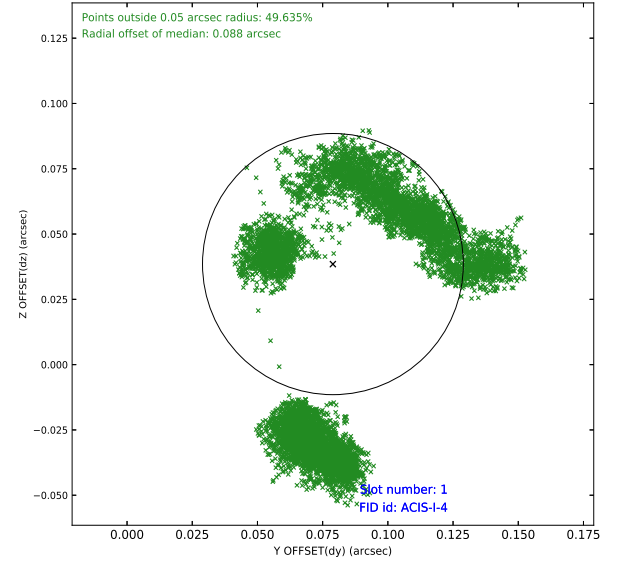
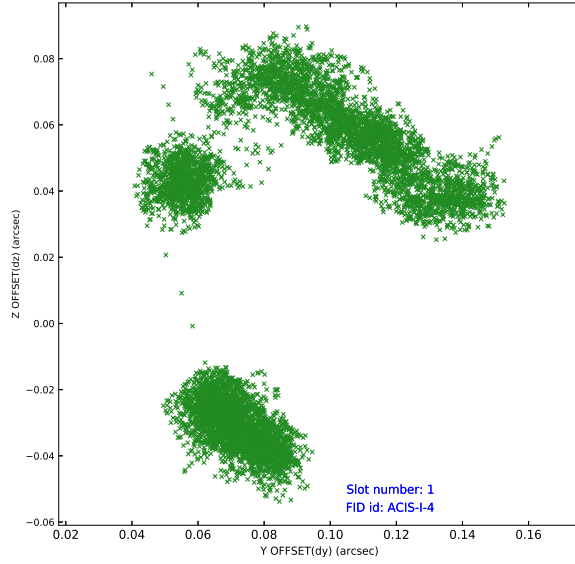


2.5 FID Slots

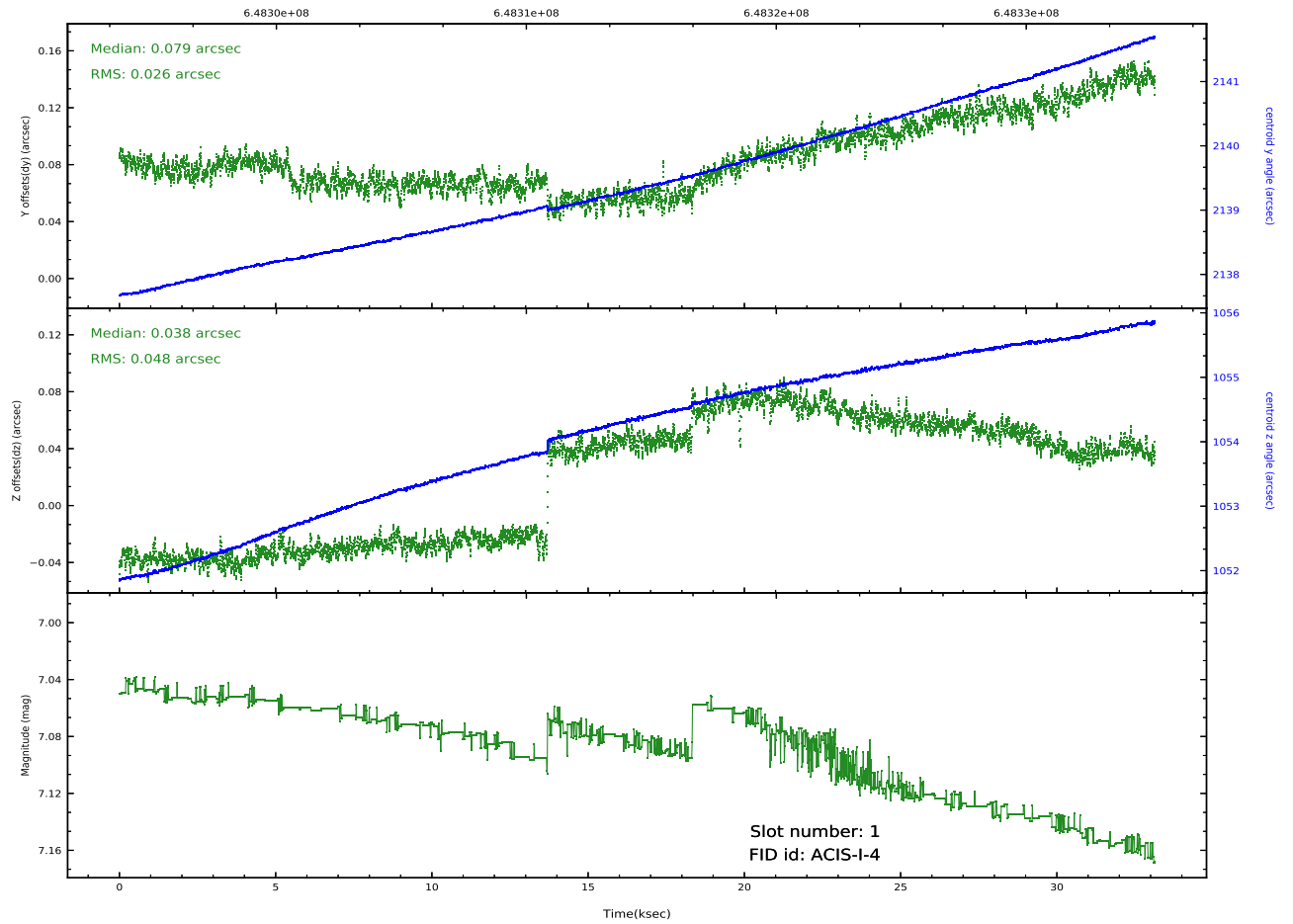
2.5.1 Slot 0



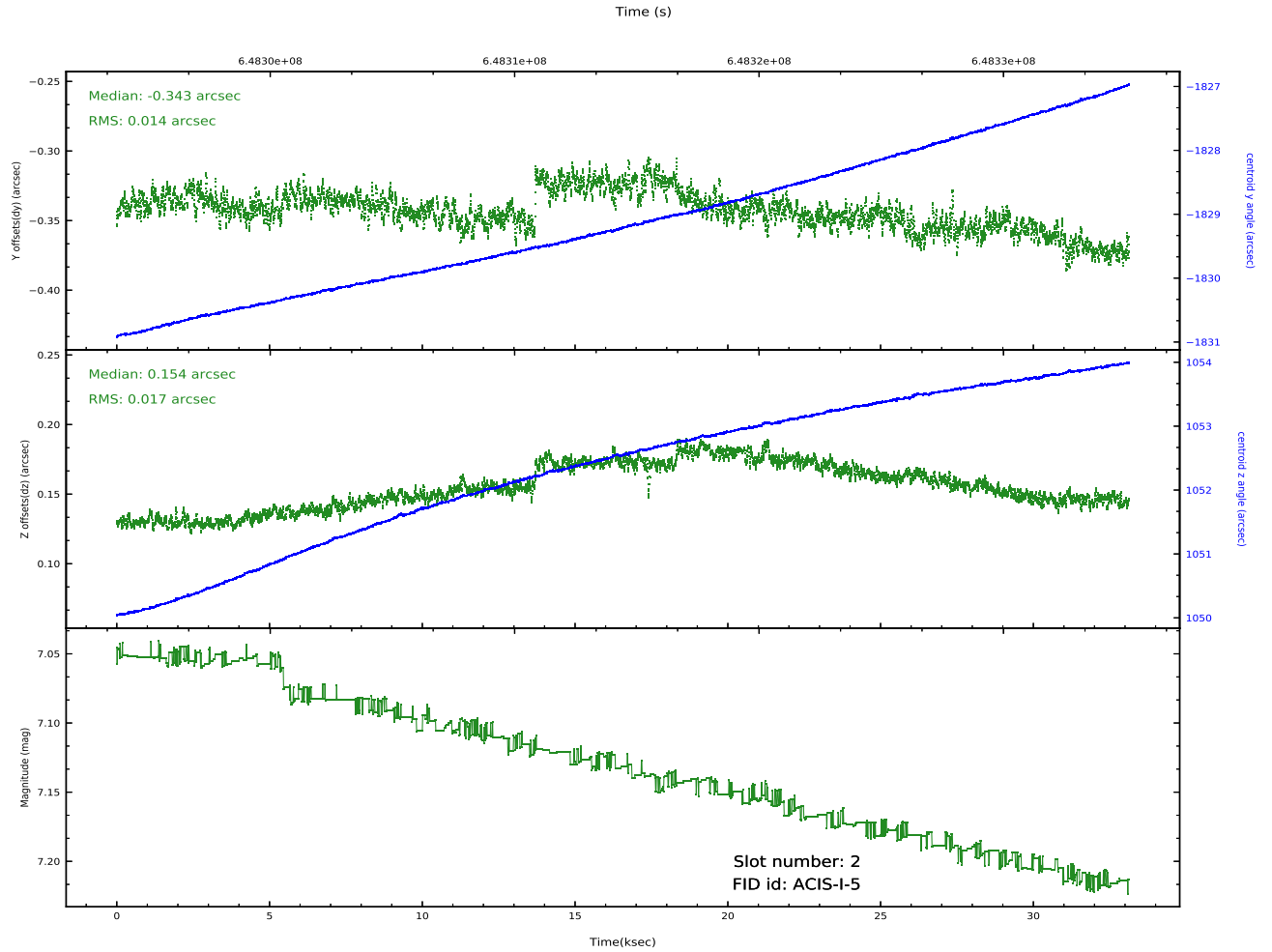
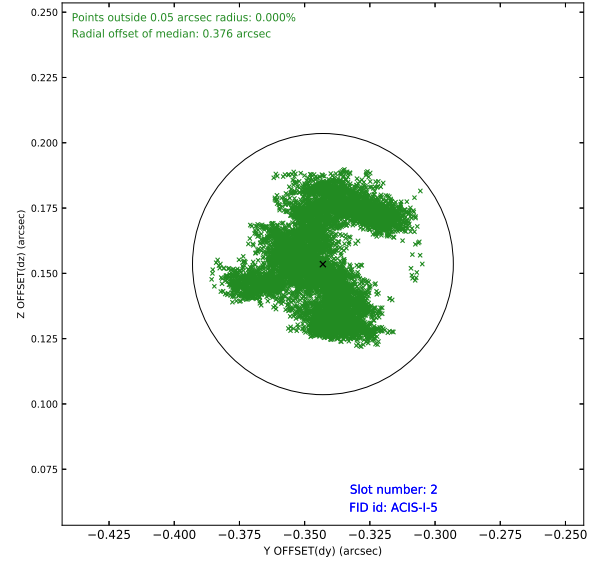
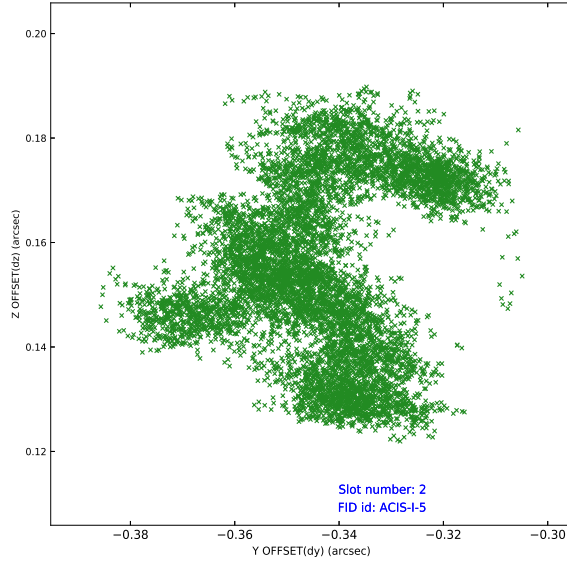
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.049018133759

A.2 Comments

Monitor constraint met.