

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20332 - L2 Version 2
Chandra X-Ray Center

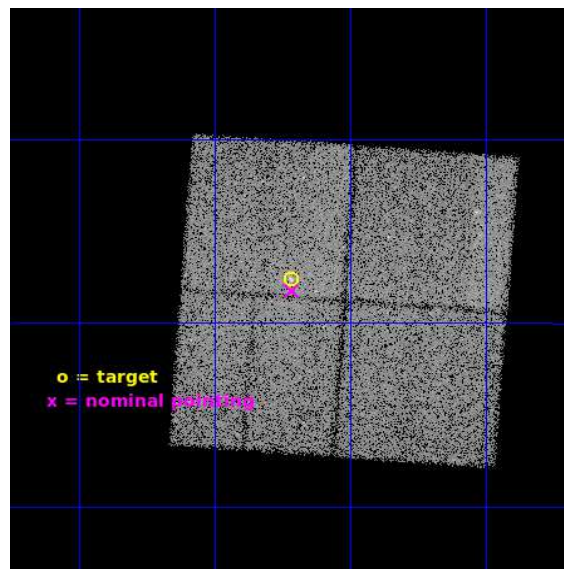
L2 Processing Date : Oct 27 2020

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1 Front

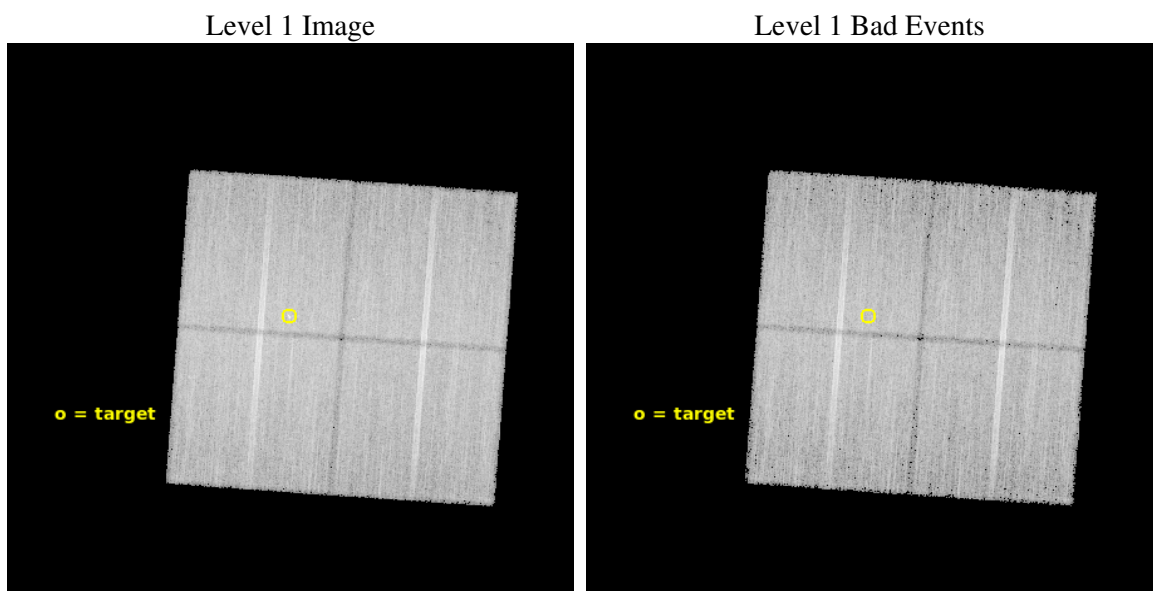
seq_num	503025	Sequence number
obs_id	20332	Observation id
title	The wagging jet and the X-ray plerion of PSR J1809-1917	Proposal t
observer	George Pavlov	Principal investigator
object	PSR J1809-1917	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.429583	Observer's specified target RA [deg]
dec_targ	-19.293917	Observer's specified target Dec [deg]
ra_nom	272.42877044003	Nominal RA [deg]
dec_nom	-19.303925573805	Nominal Dec [deg]
roll_nom	274.20346938431	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38073.576043606	Sum of GTIs [s]
livetime	37576.116743237	Livetime [s]
ontime0	38079.734844208	Sum of GTIs [s]
ontime1	38076.634943724	Sum of GTIs [s]
ontime2	38073.53497386	Sum of GTIs [s]
ontime3	38073.576043606	Sum of GTIs [s]
l2events	126874	Number of level 2 events



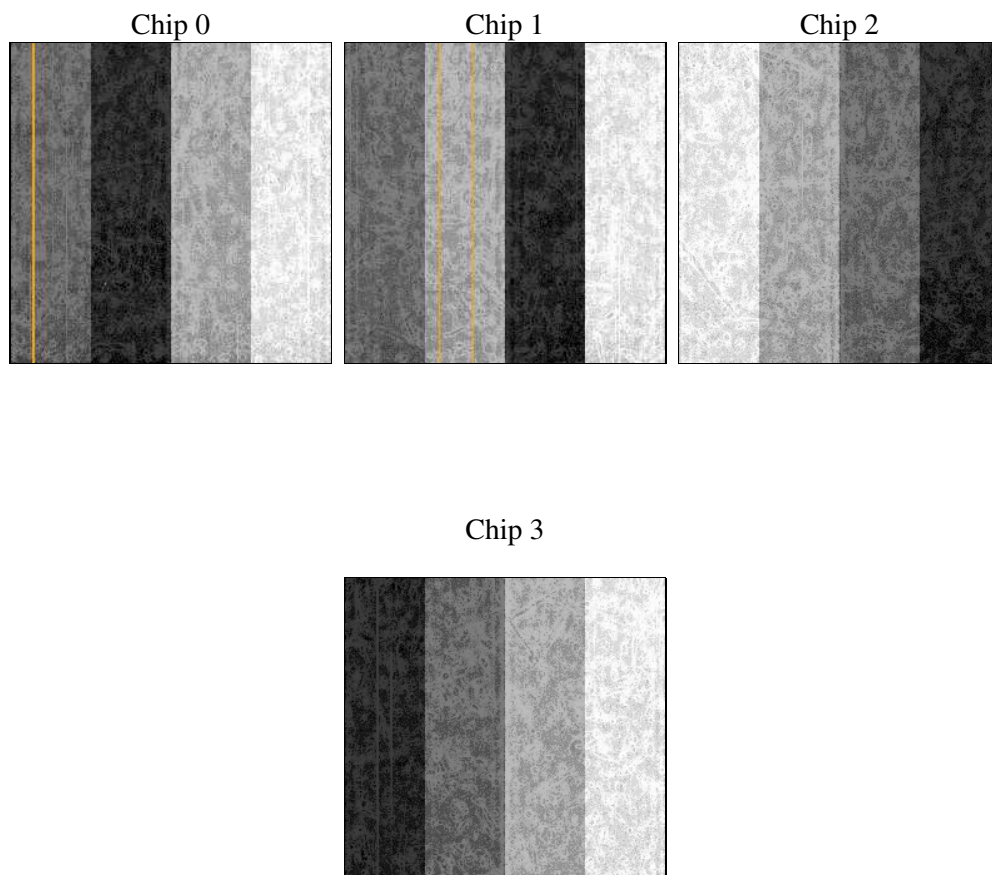
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	38073.576043606	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	38079.734844208	Sum of GTIs [s]
date	2020-10-28T03:11:58	Date and time of file creation	ontime1	38076.634943724	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	38073.53497386	Sum of GTIs [s]
			ontime3	38073.576043606	Sum of GTIs [s]
			l1events	1127803	Number of level 1 events

2.1.4 Events

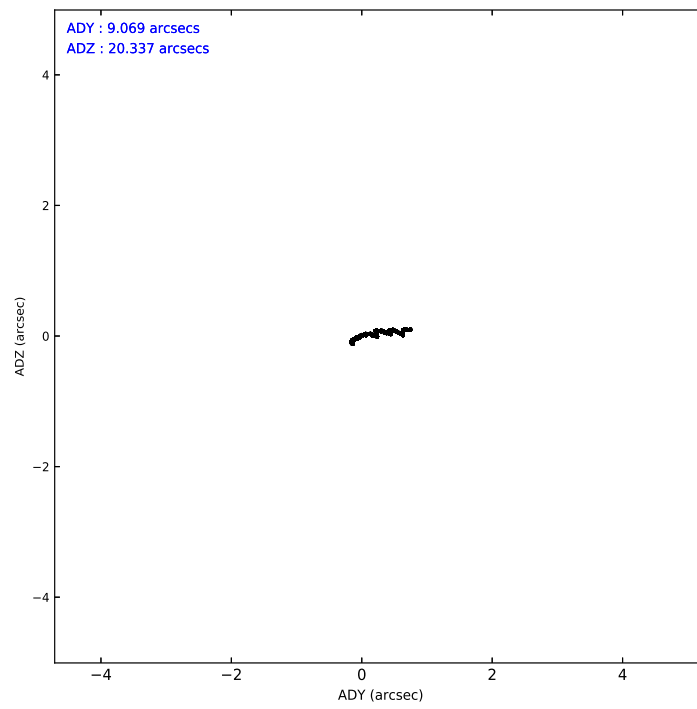
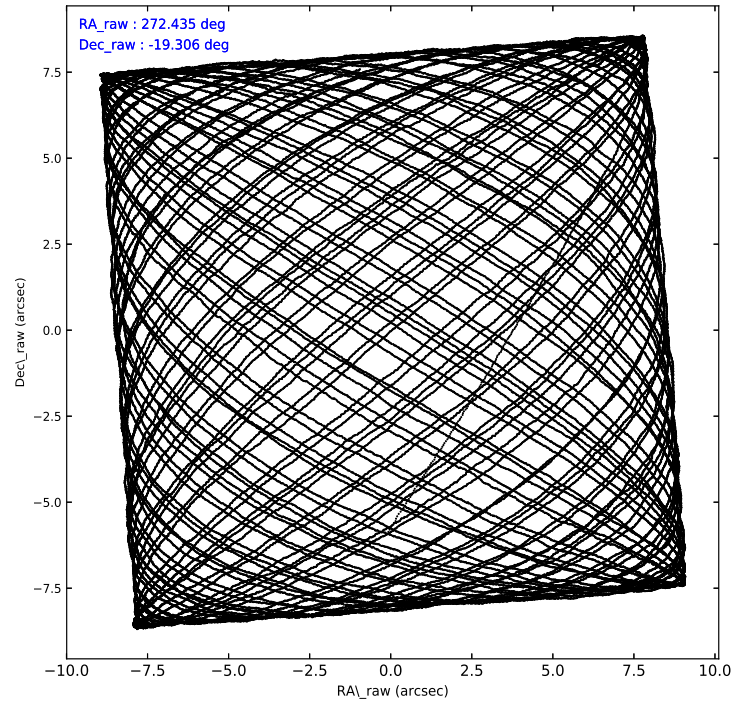
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	265281	278174	296429	287919
rejected events	229536	238902	258002	250813
rejected %	86%	85%	87%	87%

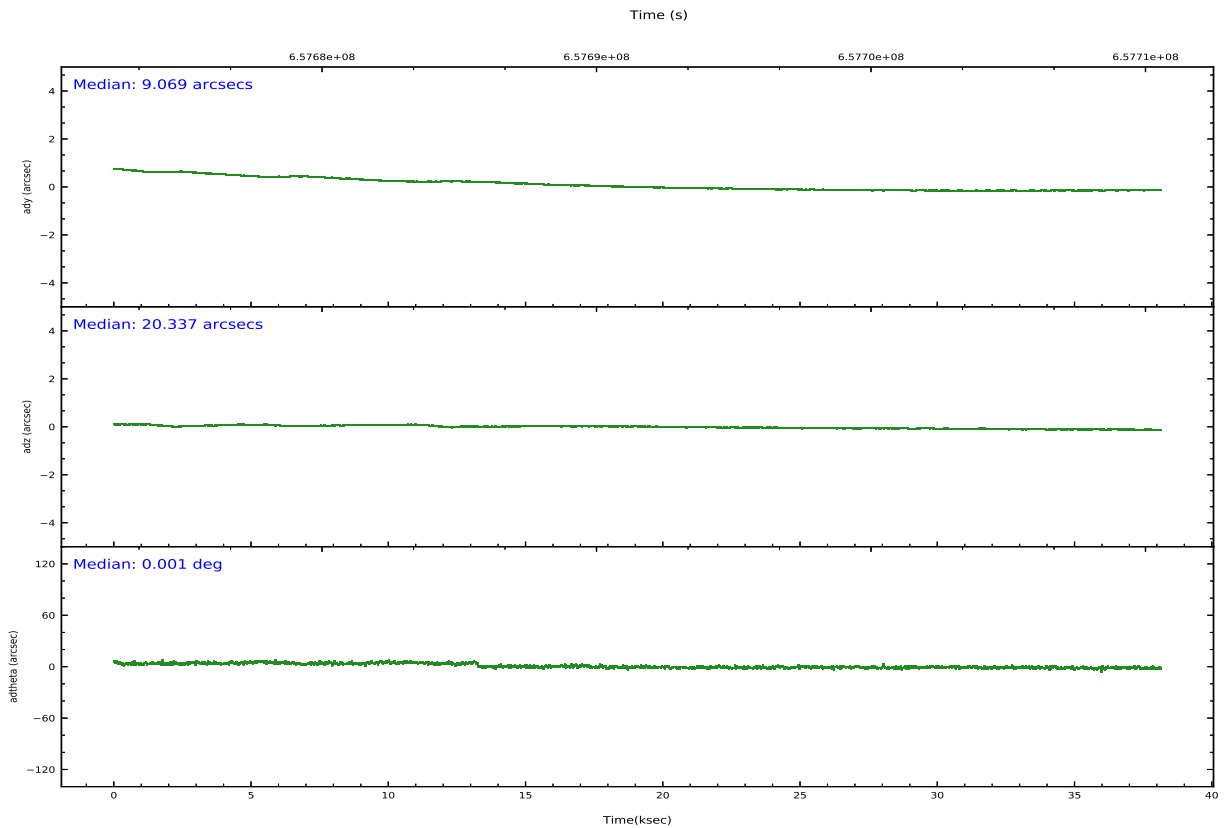
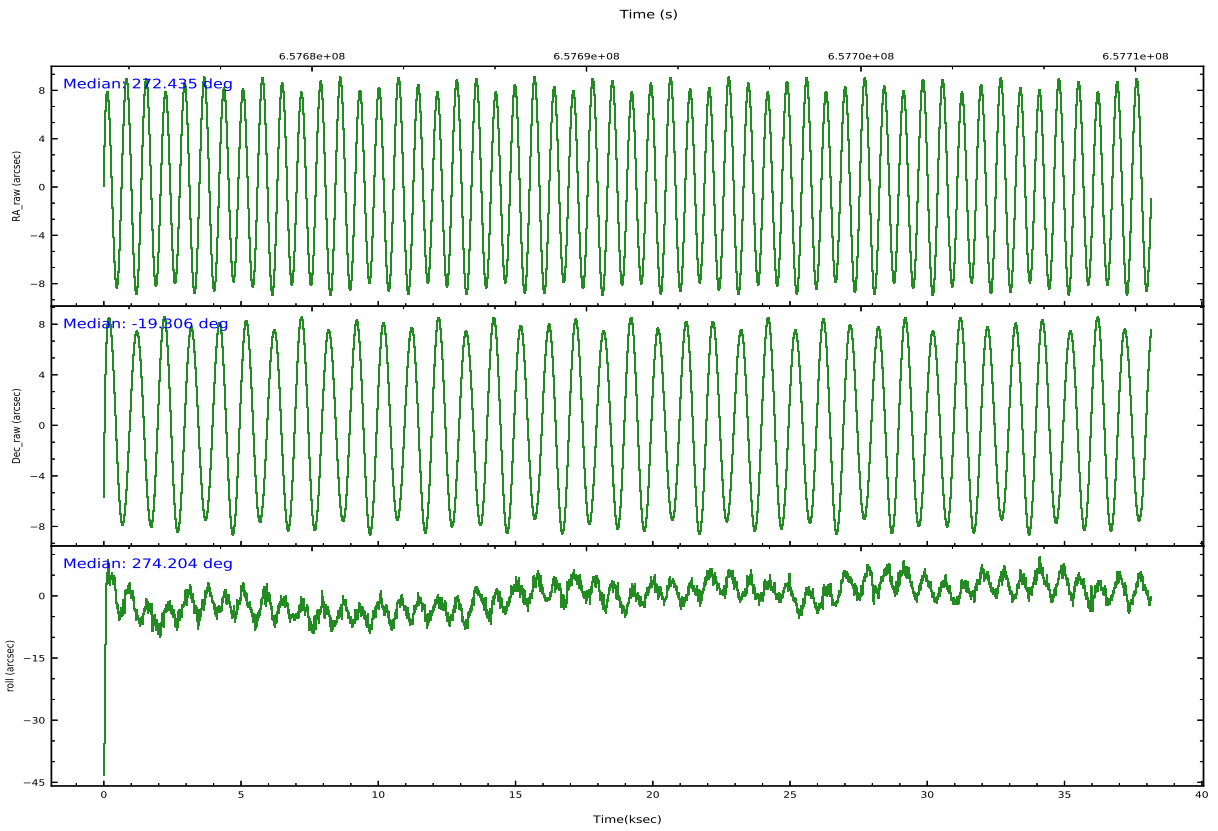
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	13309	14458	15873	15875
	5%	5%	5%	5%
grade 1 events	206	195	198	178
	0%	0%	0%	0%
grade 2 events	8789	9743	9037	7471
	3%	3%	3%	2%
grade 3 events	3517	3589	3323	3514
	1%	1%	1%	1%
grade 4 events	3221	3489	3511	3480
	1%	1%	1%	1%
grade 5 events	12702	13084	12179	14290
	4%	4%	4%	4%
grade 6 events	6918	7998	6686	6771
	2%	2%	2%	2%
grade 7 events	216619	225618	245622	236340
	81%	81%	82%	82%

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	272.418625	272.42877044003	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.283407	-19.303925573805	CCD I3 on	Y	Y
[deg] Pointing Roll	273.996374	274.20346938431	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	-226.864963	-226.8691839750604	CCD S3 on	O1	N
[mm] SIM translation stage offset	-6.7275	-6.723269027869321	CCD S4 on	N	N
[s] Observation start time (MET)	657672570.184000	657671773.68822	CCD S5 on	N	N
Observation start date	2018-11-03T22:48:21	2018-11-03T22:36:13	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	657710570.184000	657711174.69057	On-chip summing requested	N	N
Observation end date	2018-11-04T09:21:41	2018-11-04T09:32:54	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





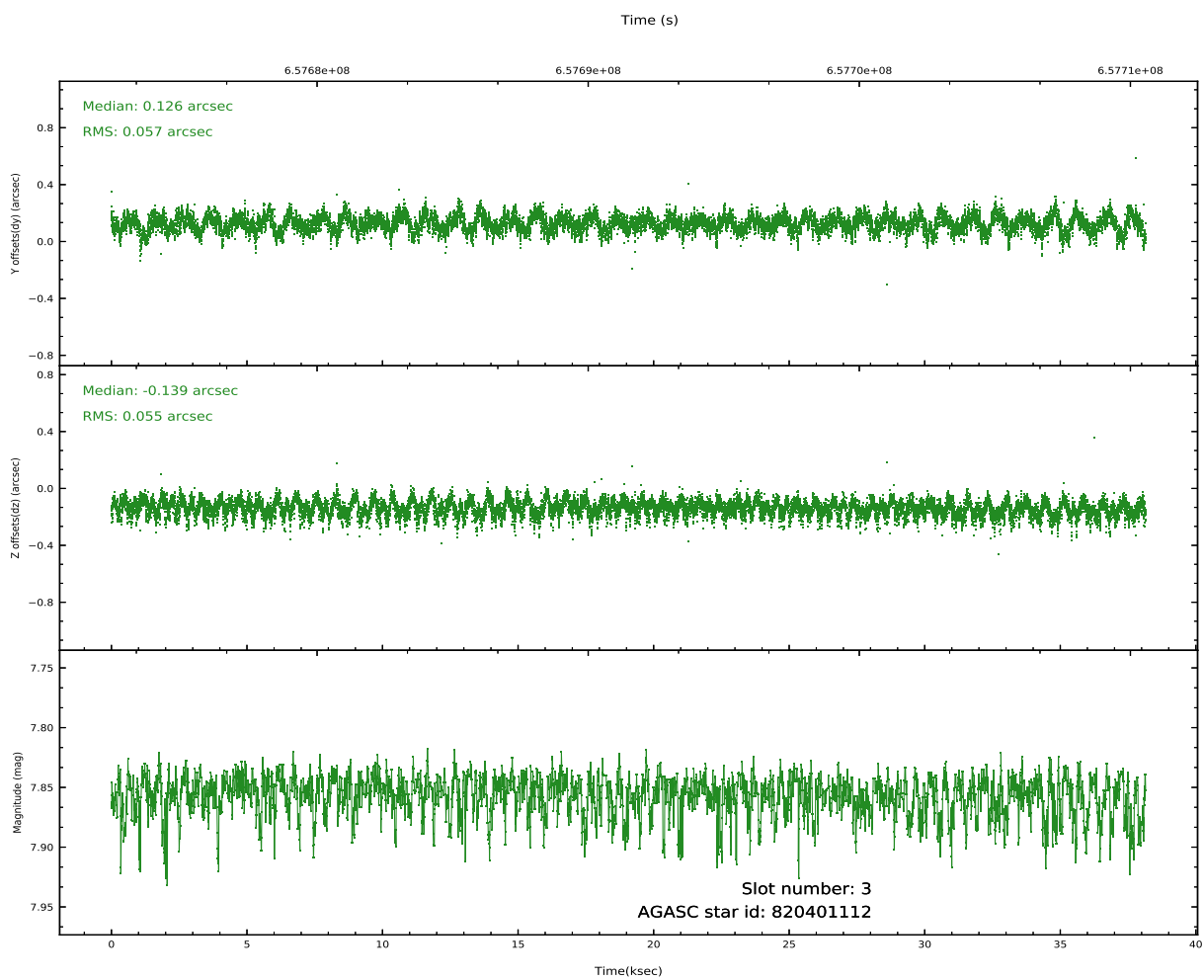
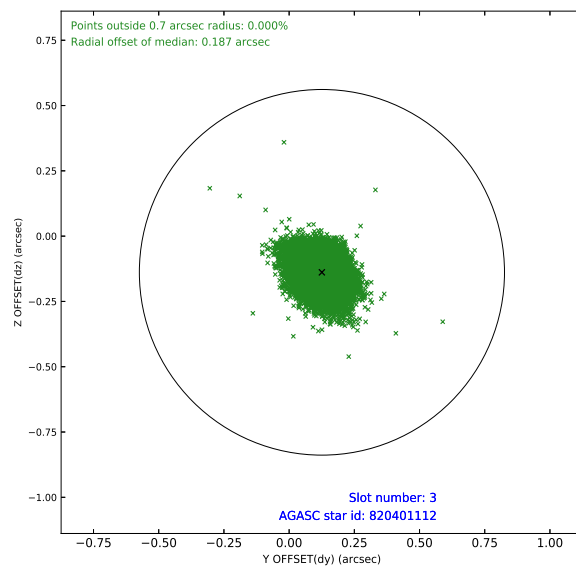
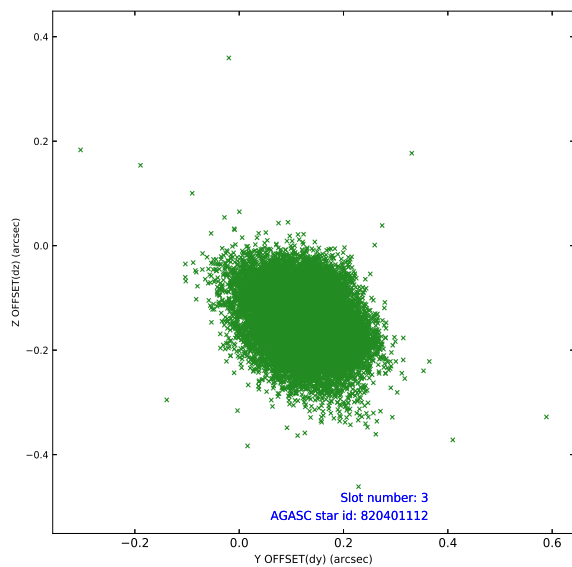
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.11	9307	1.000	0.113	-0.095	0.017	0.028	0.000000	0.000000	930.38	-982
1	FID		ACIS-I-2	7.05	9307	1.000	-0.151	0.086	0.018	0.026	0.000000	0.000000	-764.31	-987
2	FID		ACIS-I-4	7.07	9306	1.000	-0.058	0.078	0.026	0.045	0.000000	0.000000	2149.79	918
3	GUIDE	used	820401112	7.85	18608	1.000	0.126	-0.139	0.083	0.136	271.884761	-19.293988	-85.04	-1812
4	GUIDE	used	822091704	8.08	18601	1.000	-0.143	0.089	0.106	0.171	272.220028	-18.943658	-1266.66	-589
5	GUIDE	used	822096760	8.02	18609	1.000	-0.154	-0.067	0.084	0.139	272.830526	-19.438690	656.69	1356
6	GUIDE	used	822098736	8.50	18605	1.000	0.415	-0.193	0.172	0.255	272.269355	-19.875225	2091.32	-652
7	GUIDE	used	821559528	9.08	18573	1.000	-0.262	0.310	0.145	0.254	272.980625	-18.673858	-2052.15	2065

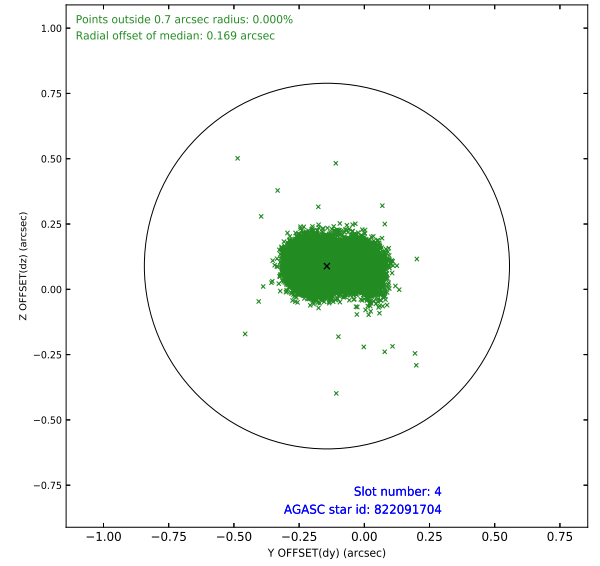
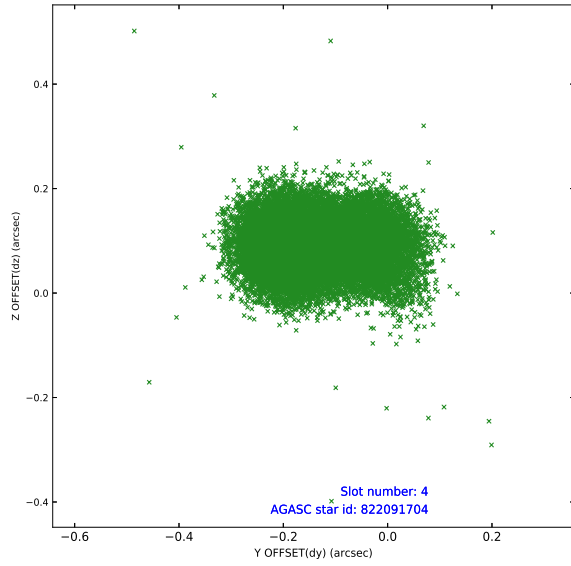
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2.4 Star Slots

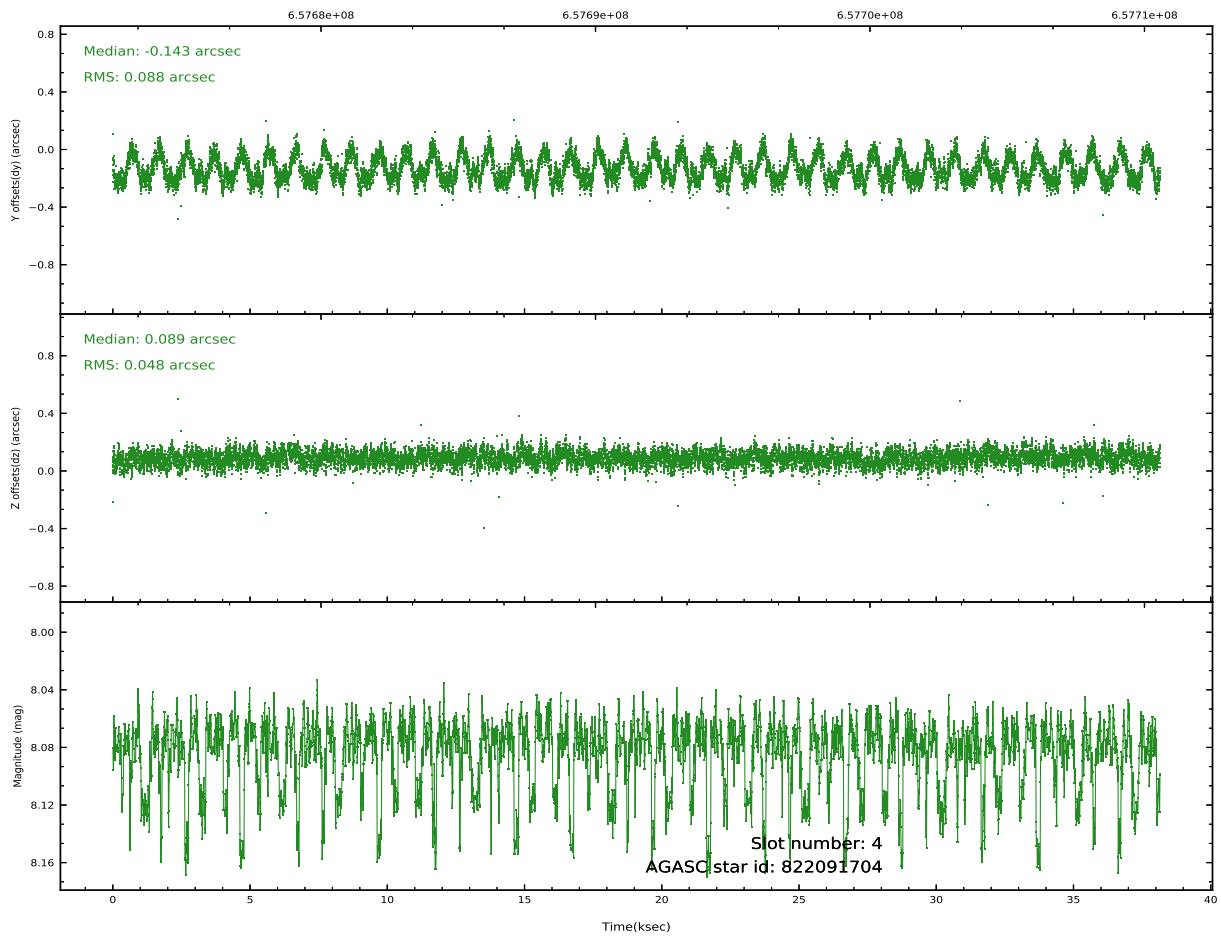
2.4.1 Slot 3



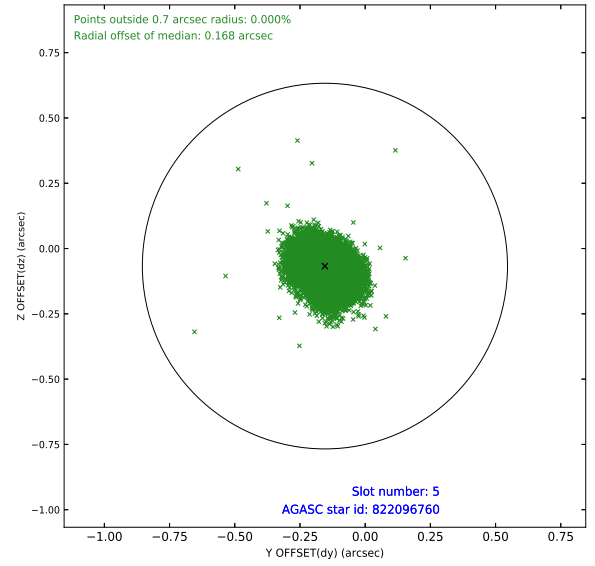
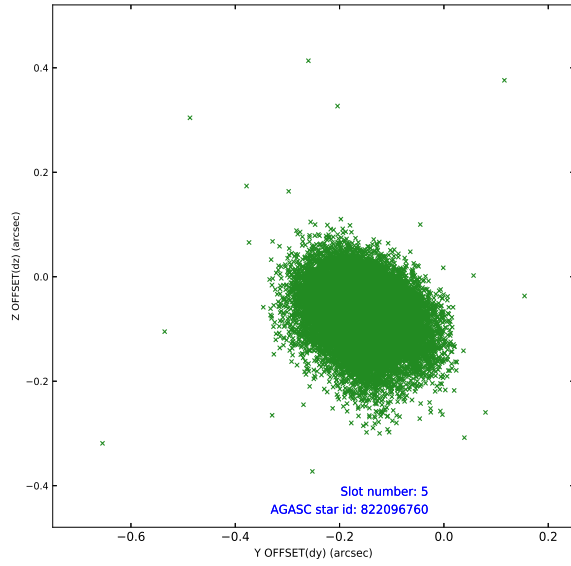
2.4.2 Slot 4



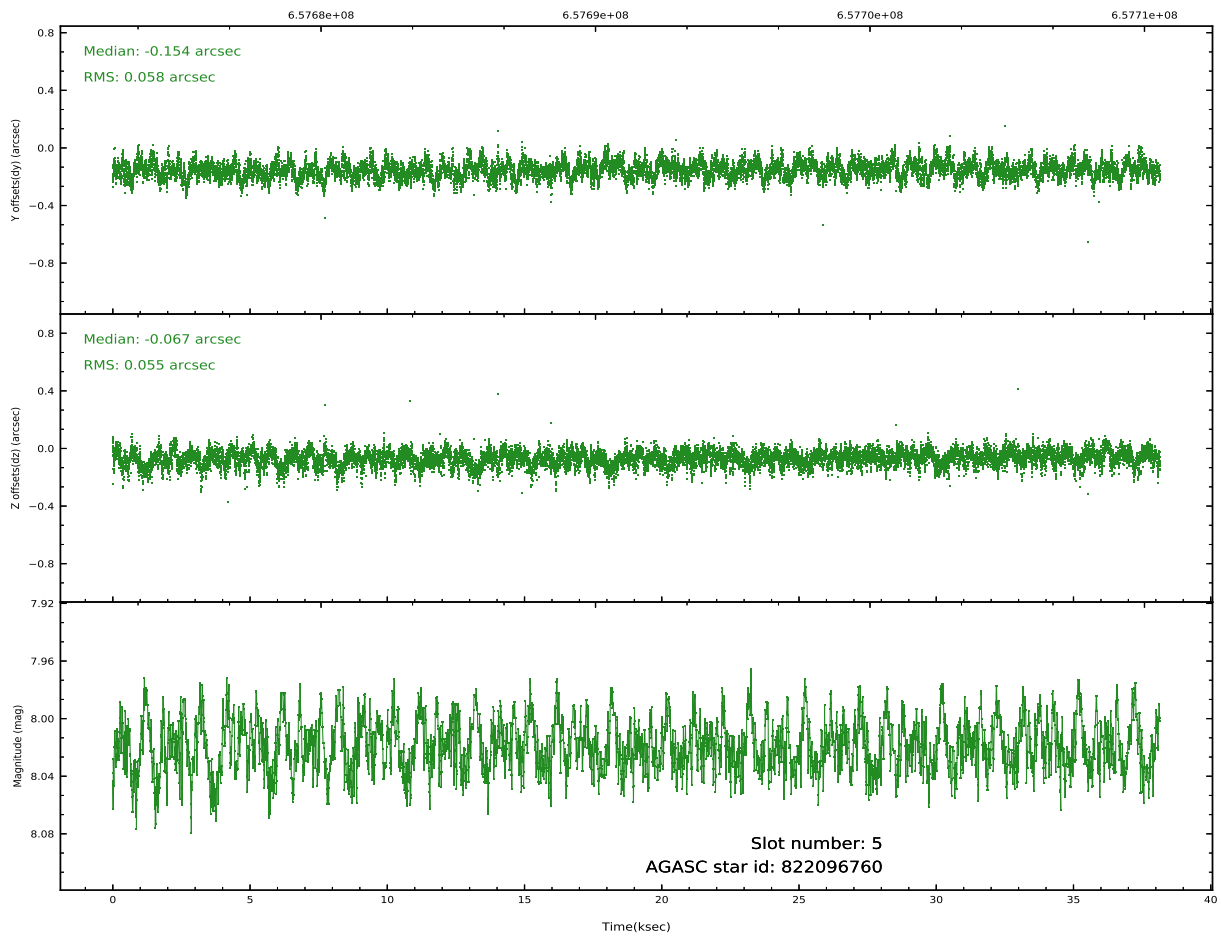
Time (s)



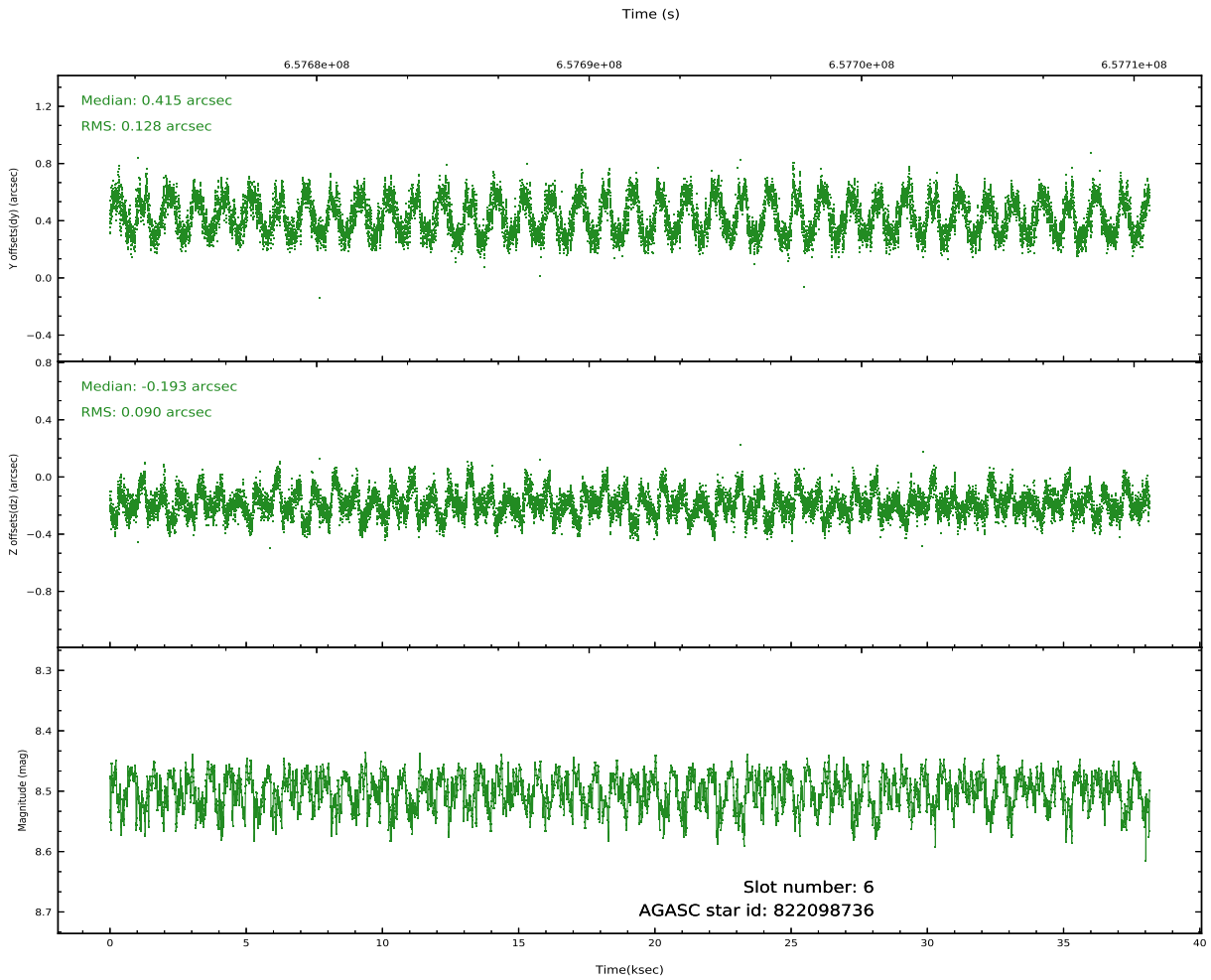
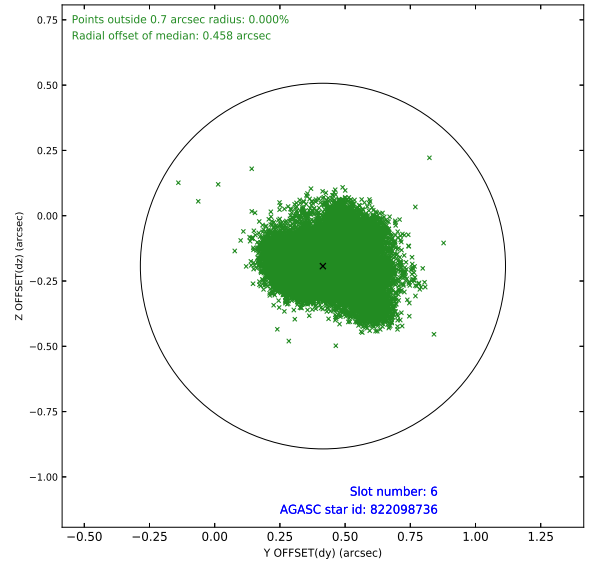
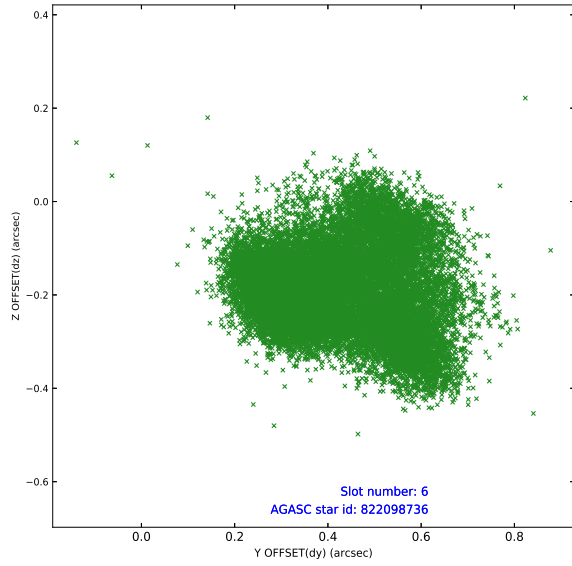
2.4.3 Slot 5



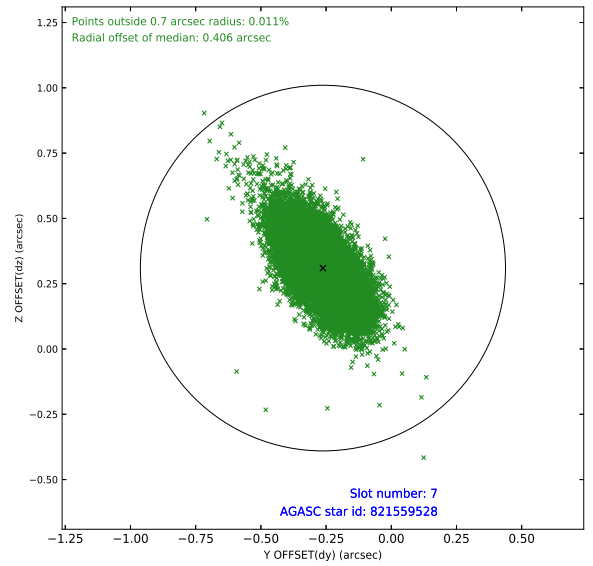
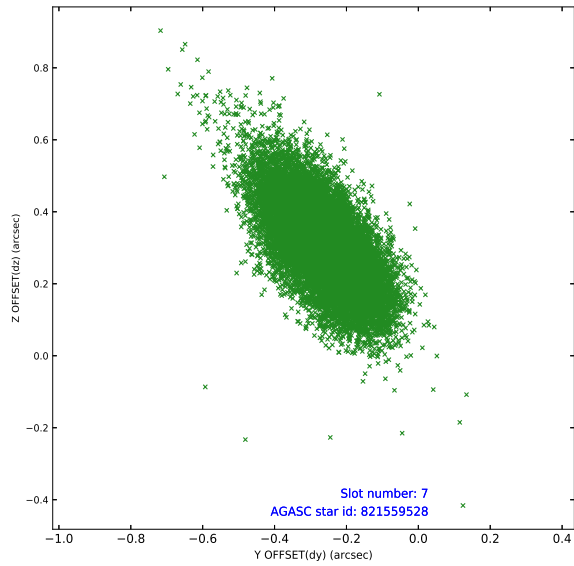
Time (s)



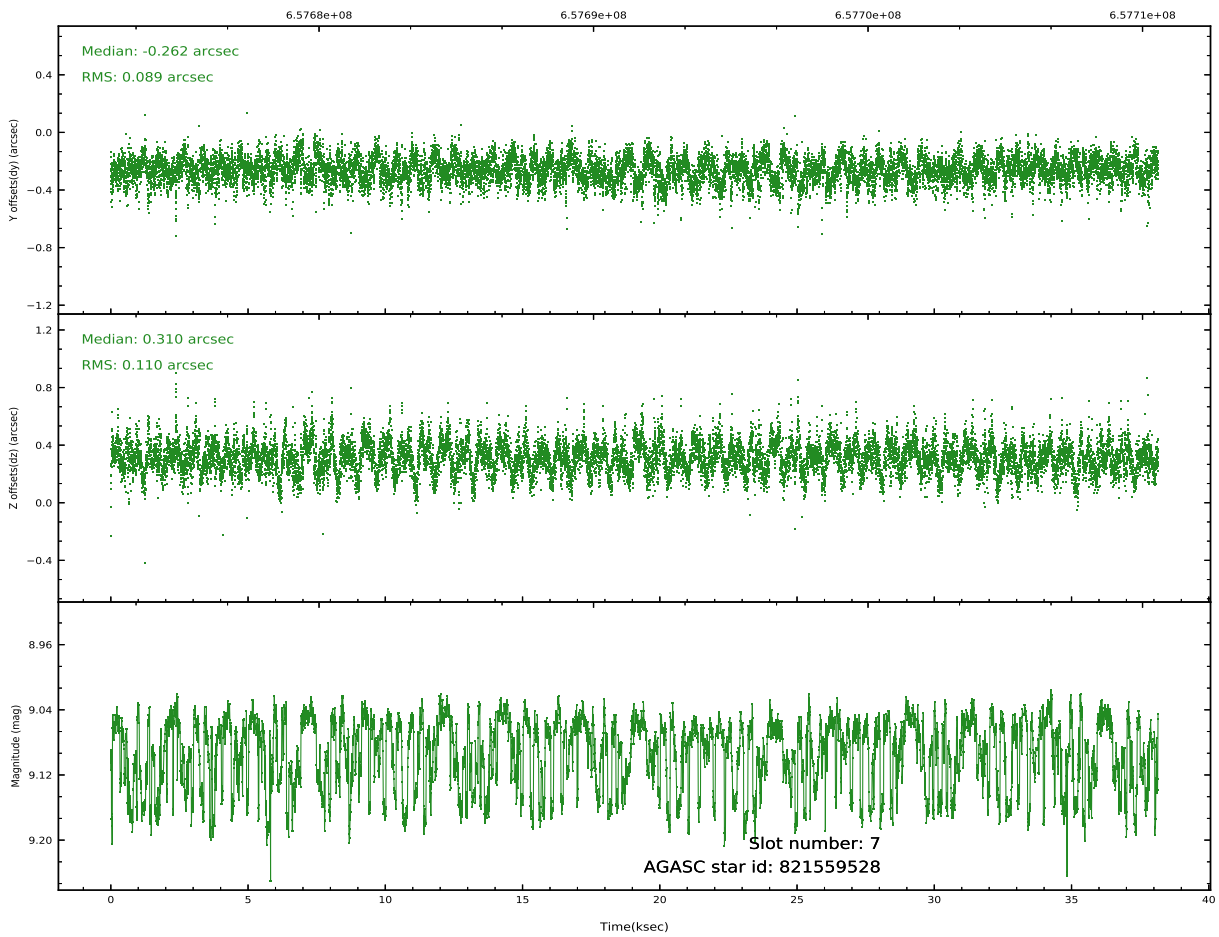
2.4.4 Slot 6



2.4.5 Slot 7

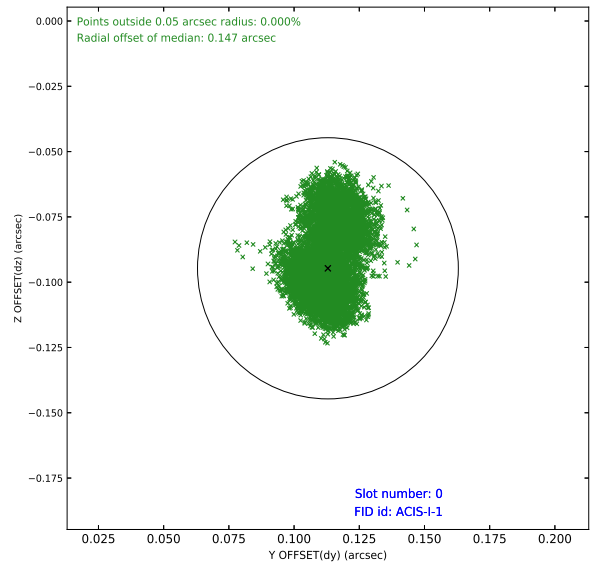
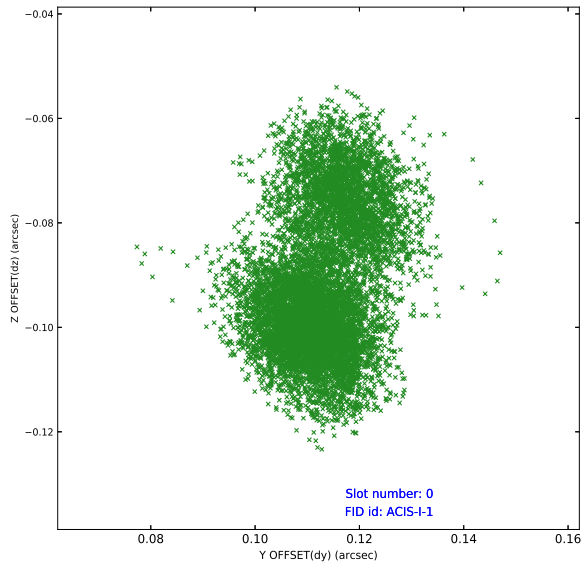


Time (s)

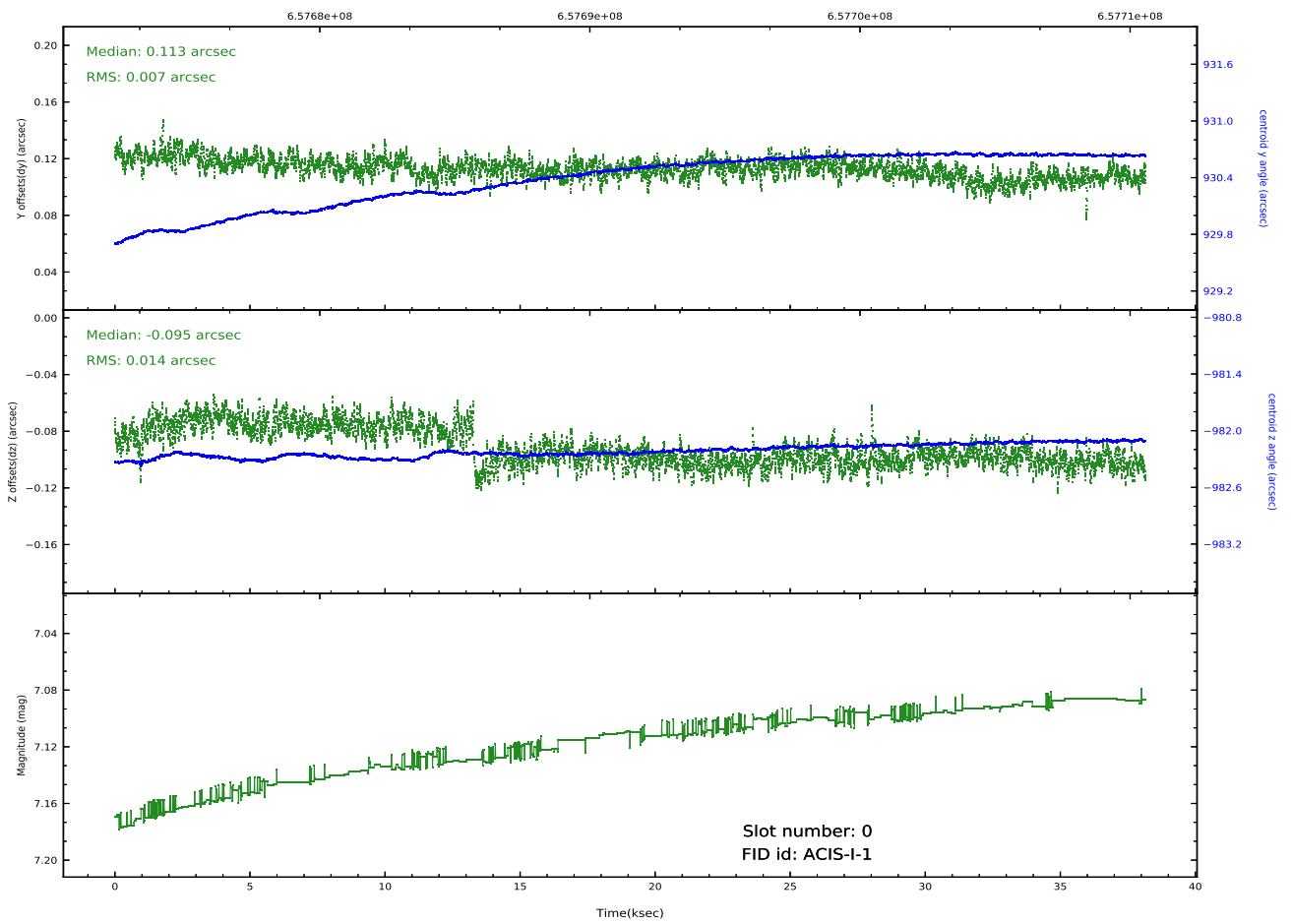


2.5 FID Slots

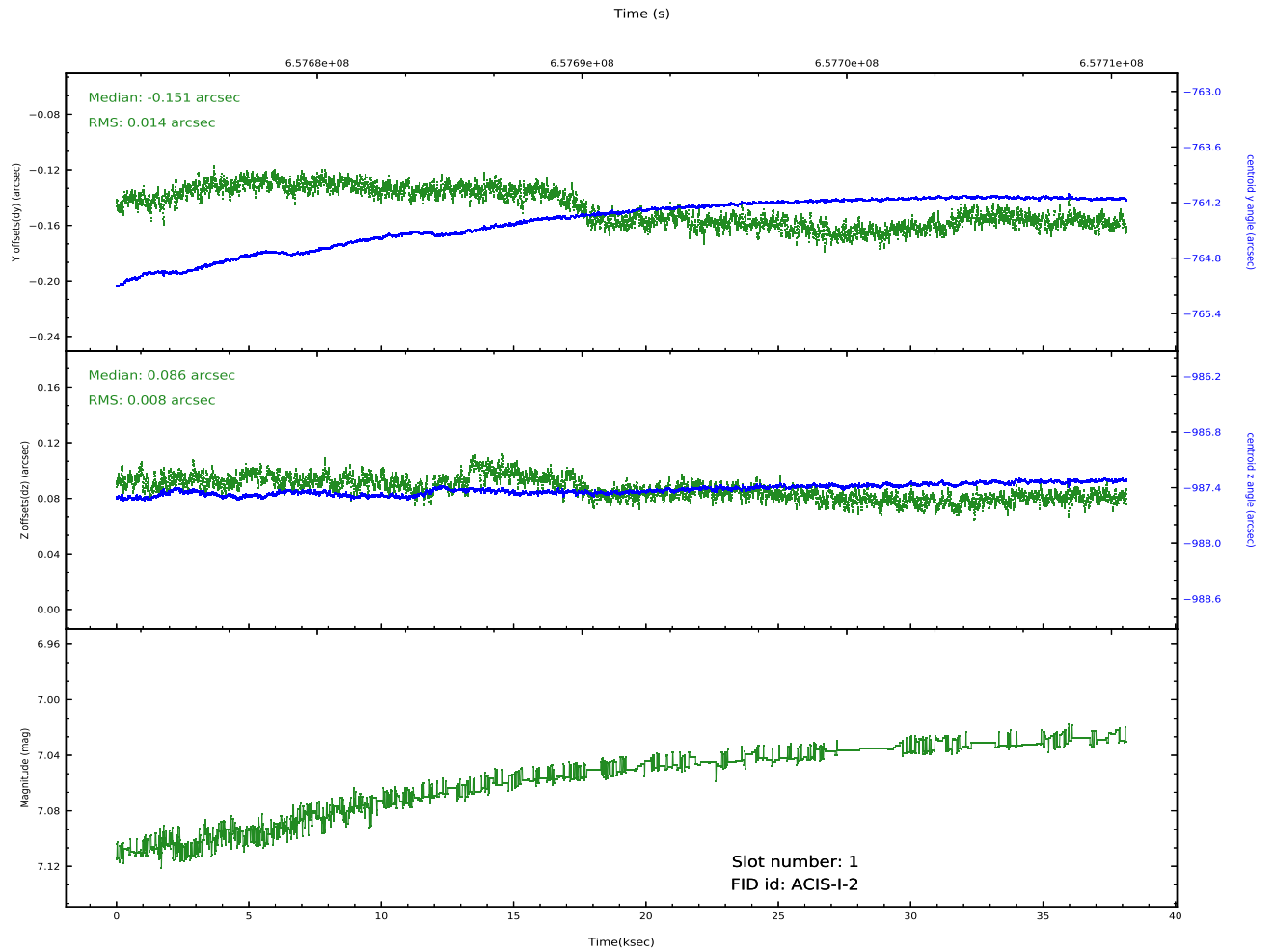
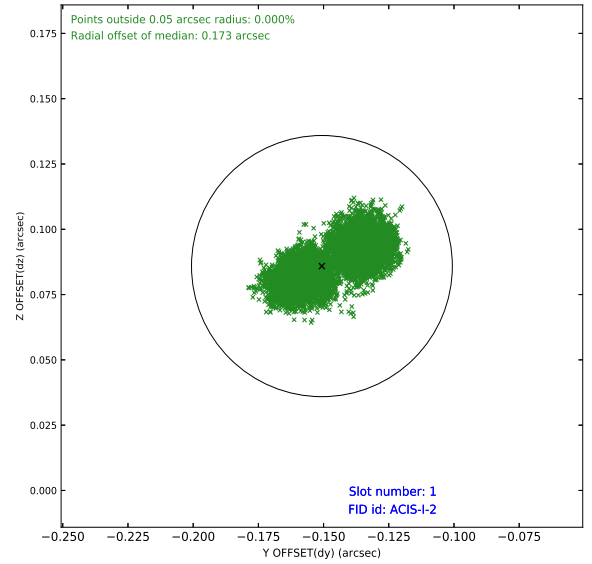
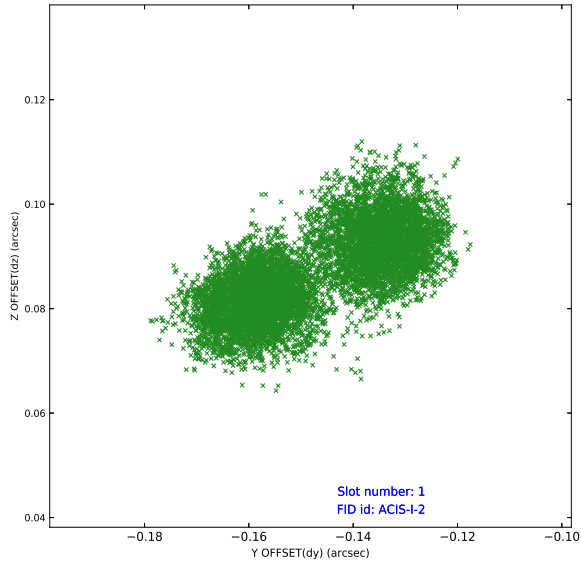
2.5.1 Slot 0



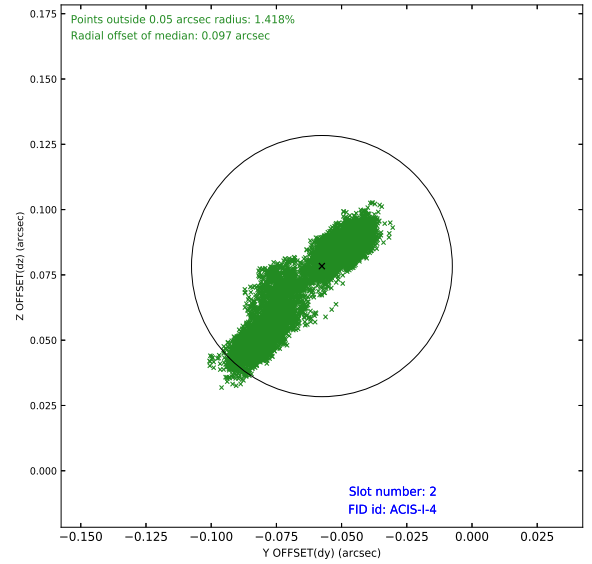
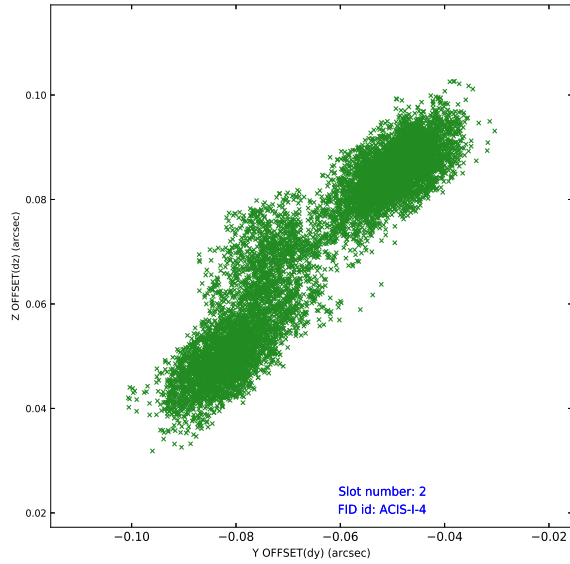
Time (s)



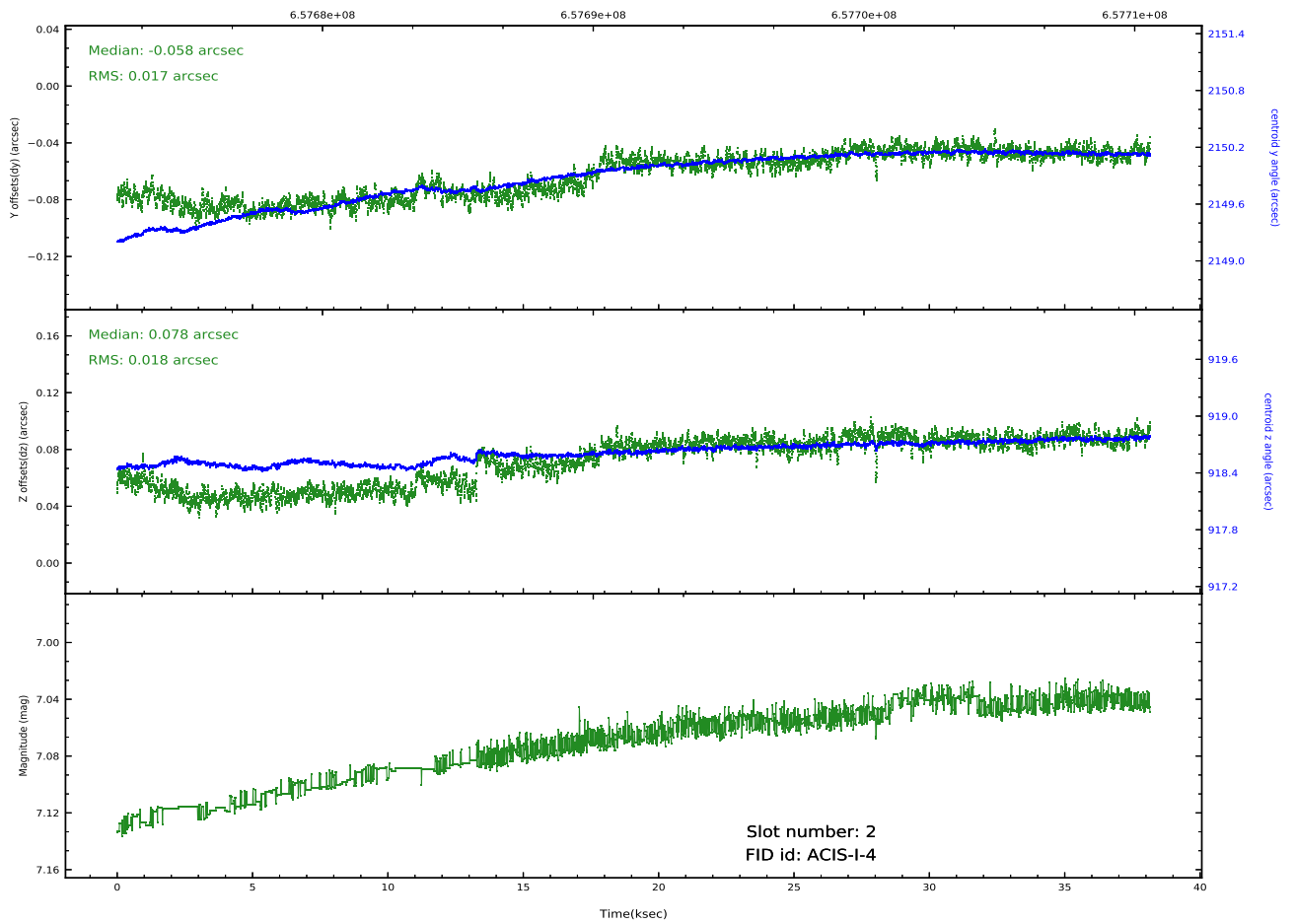
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.073576042771

A.2 Comments

One optional chip was dropped.