

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20963 - L2 Version 2
Chandra X-Ray Center

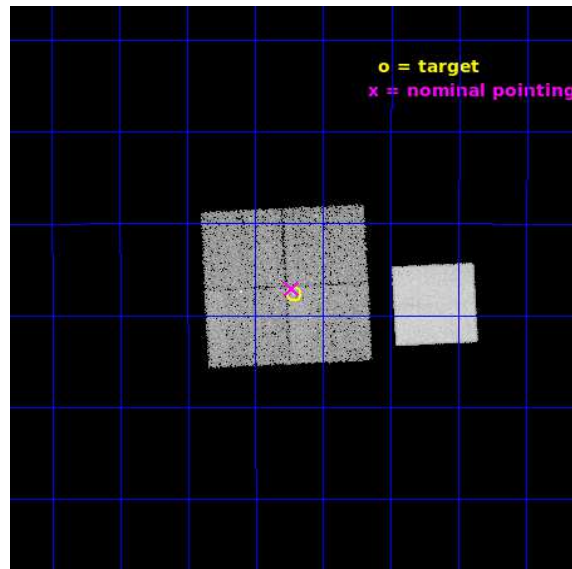
L2 Processing Date : Oct 24 2020

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1 Front

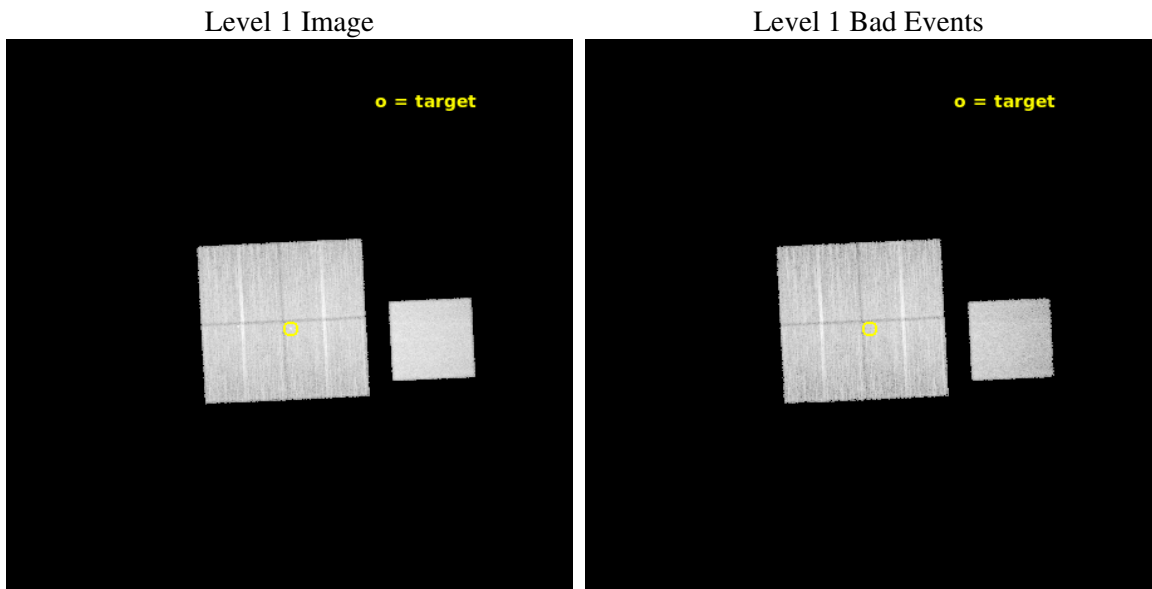
seq_num	503020	Sequence number
obs_id	20963	Observation id
title	The wagging jet and the X-ray plerion of PSR J1809-1917	Proposal t
observer	George Pavlov	Principal investigator
object	PSR J1809-1917	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.429583	Observer's specified target RA [deg]
dec_targ	-19.293917	Observer's specified target Dec [deg]
ra_nom	272.43266259194	Nominal RA [deg]
dec_nom	-19.285201228945	Nominal Dec [deg]
roll_nom	87.197834653777	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16550.900127411	Sum of GTIs [s]
livetime	16334.650432651	Livetime [s]
ontime0	16550.883009195	Sum of GTIs [s]
ontime1	16550.900127411	Sum of GTIs [s]
ontime2	16550.900127411	Sum of GTIs [s]
ontime3	16550.900127411	Sum of GTIs [s]
ontime7	16550.900127411	Sum of GTIs [s]
l2events	122081	Number of level 2 events



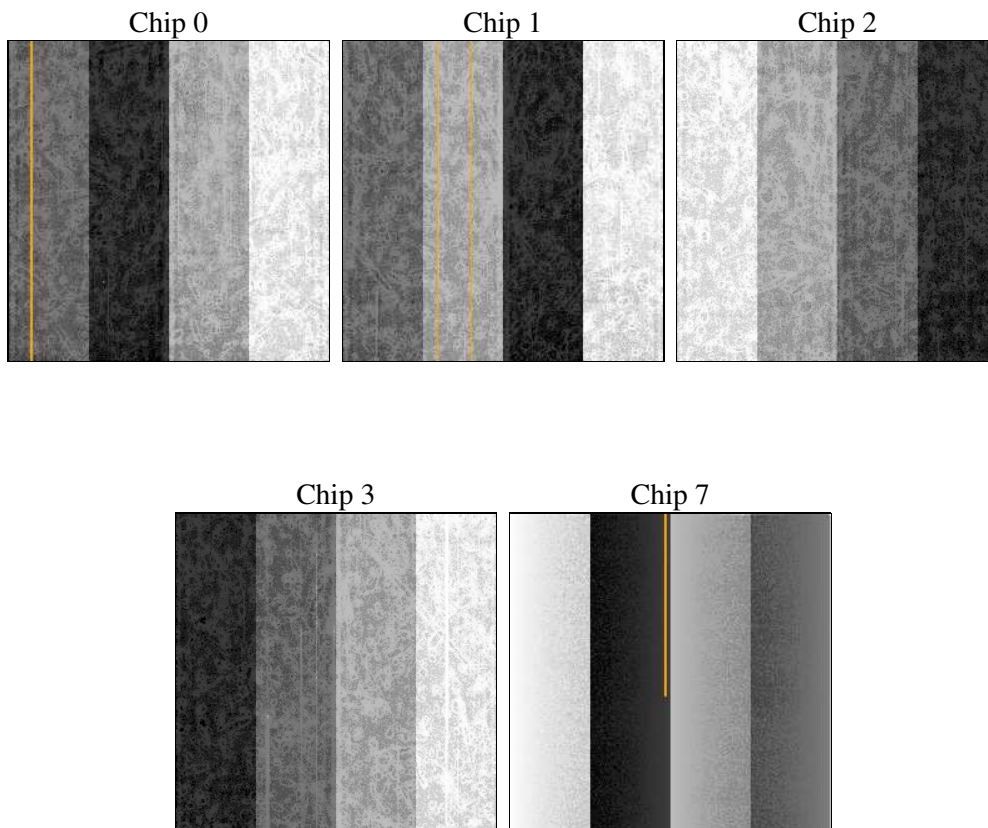
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	16550.900127411	Sum of GTIs [s]
caldbver	4.9.3	 	ontime0	16550.883009195	Sum of GTIs [s]
date	2020-10-24T16:29:59	Date and time of file creation	ontime1	16550.900127411	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	16550.900127411	Sum of GTIs [s]
			ontime3	16550.900127411	Sum of GTIs [s]
			ontime7	16550.900127411	Sum of GTIs [s]
			l1events	638660	Number of level 1 events

2.1.4 Events

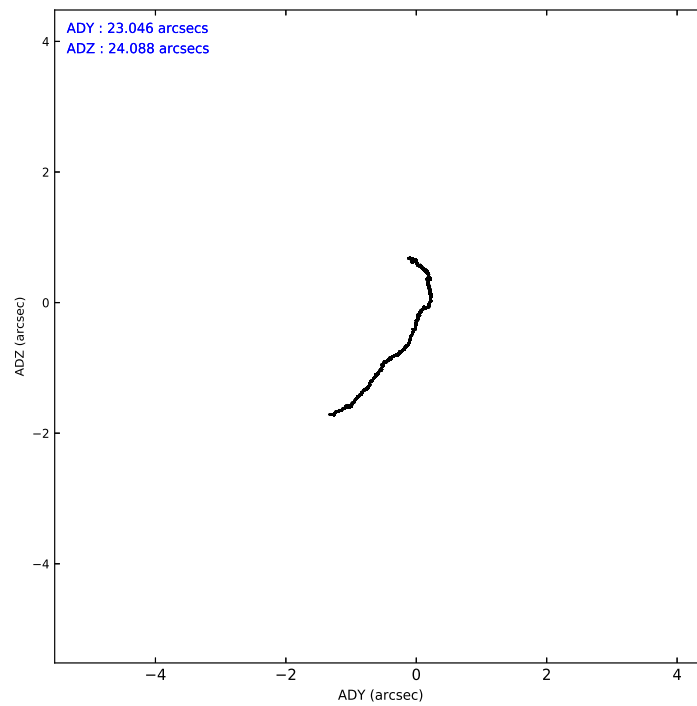
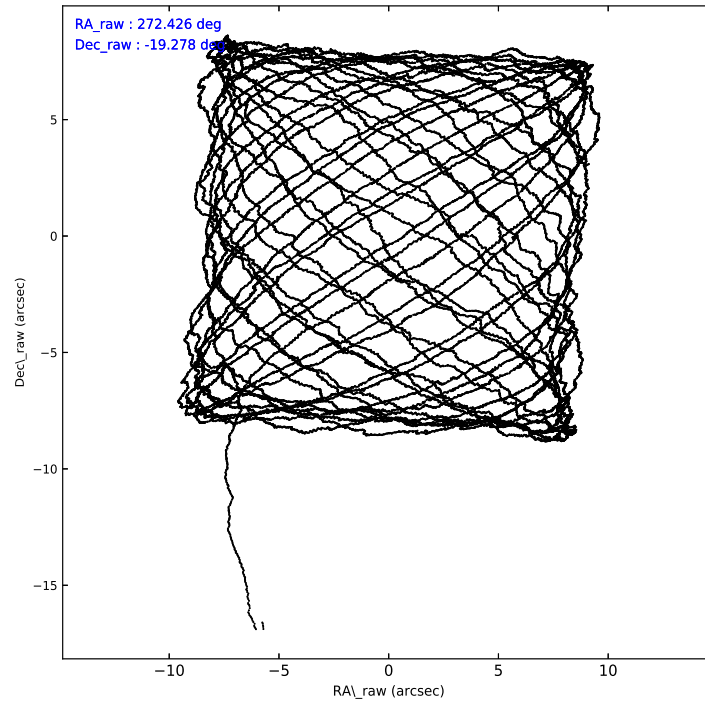
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	116467	117728	123940	121736	158789
rejected events	101398	100091	108906	105507	88089
rejected %	87%	85%	87%	86%	55%

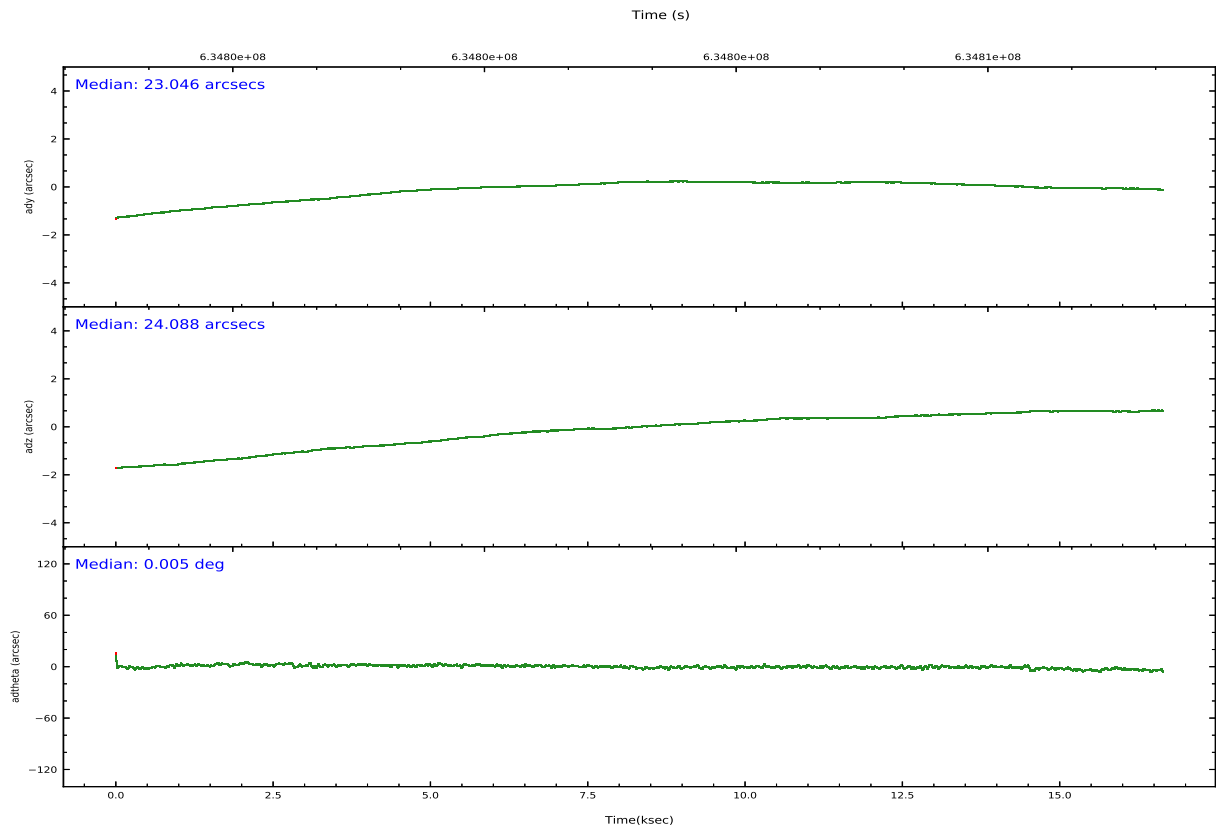
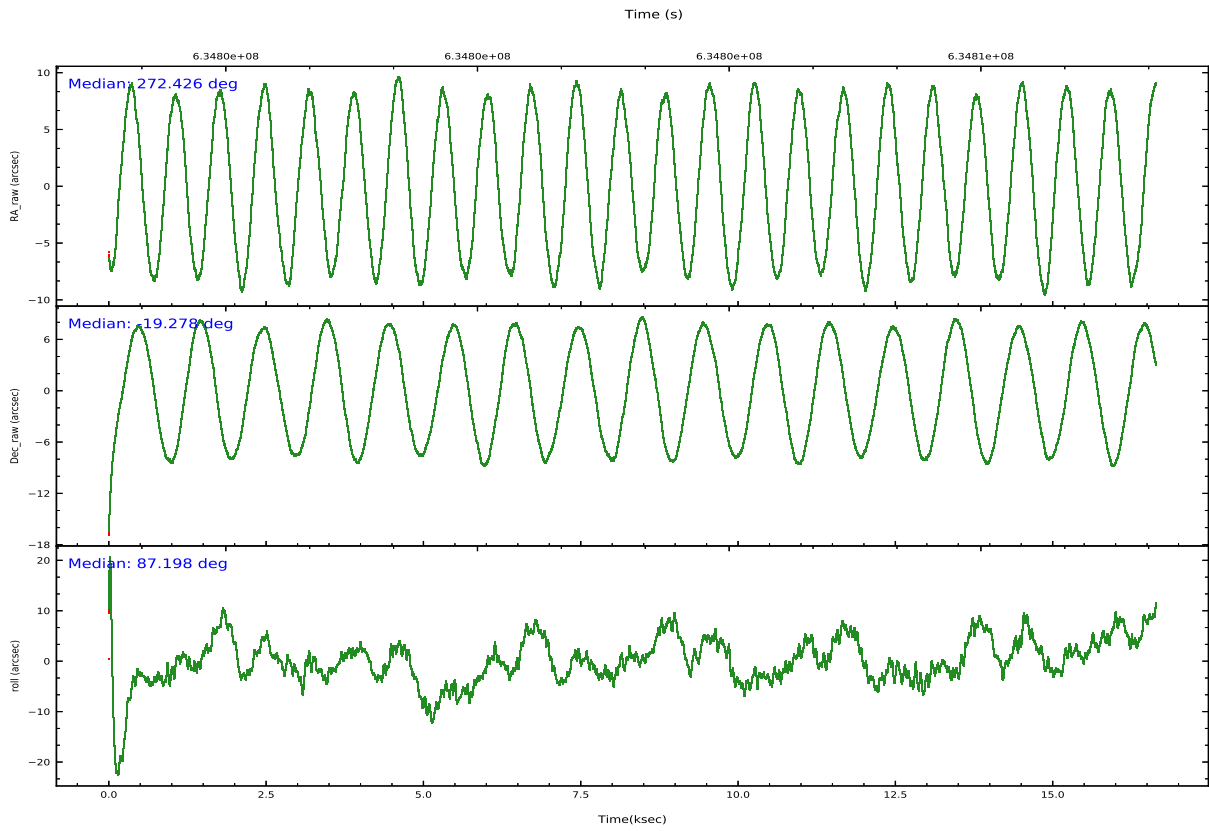
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	5750	6989	5926	7284	6171
	4%	5%	4%	5%	3%
grade 1 events	73	94	77	84	244
	0%	0%	0%	0%	0%
grade 2 events	3659	4145	3701	3198	15183
	3%	3%	2%	2%	9%
grade 3 events	1480	1531	1380	1497	5893
	1%	1%	1%	1%	3%
grade 4 events	1331	1521	1358	1485	5727
	1%	1%	1%	1%	3%
grade 5 events	5353	5351	4902	5900	15957
	4%	4%	3%	4%	10%
grade 6 events	2854	3457	2675	2771	37758
	2%	2%	2%	2%	23%
grade 7 events	95967	94640	103921	99517	71856
	82%	80%	83%	81%	45%

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	272.439167	272.43266259194	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.302826	-19.285201228945	CCD I3 on	Y	Y
[deg] Pointing Roll	87.003162	87.19783465377699	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	-233.007463	-233.0041133108668	CCD S3 on	O1	Y
[mm] SIM translation stage offset	-0.585	-0.5883396920629309	CCD S4 on	N	N
[s] Observation start time (MET)	634794285.184000	634793162.37885	CCD S5 on	N	N
Observation start date	2018-02-12T03:43:36	2018-02-12T03:26:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	634810785.184000	634811851.20495	On-chip summing requested	N	N
Observation end date	2018-02-12T08:18:36	2018-02-12T08:37:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





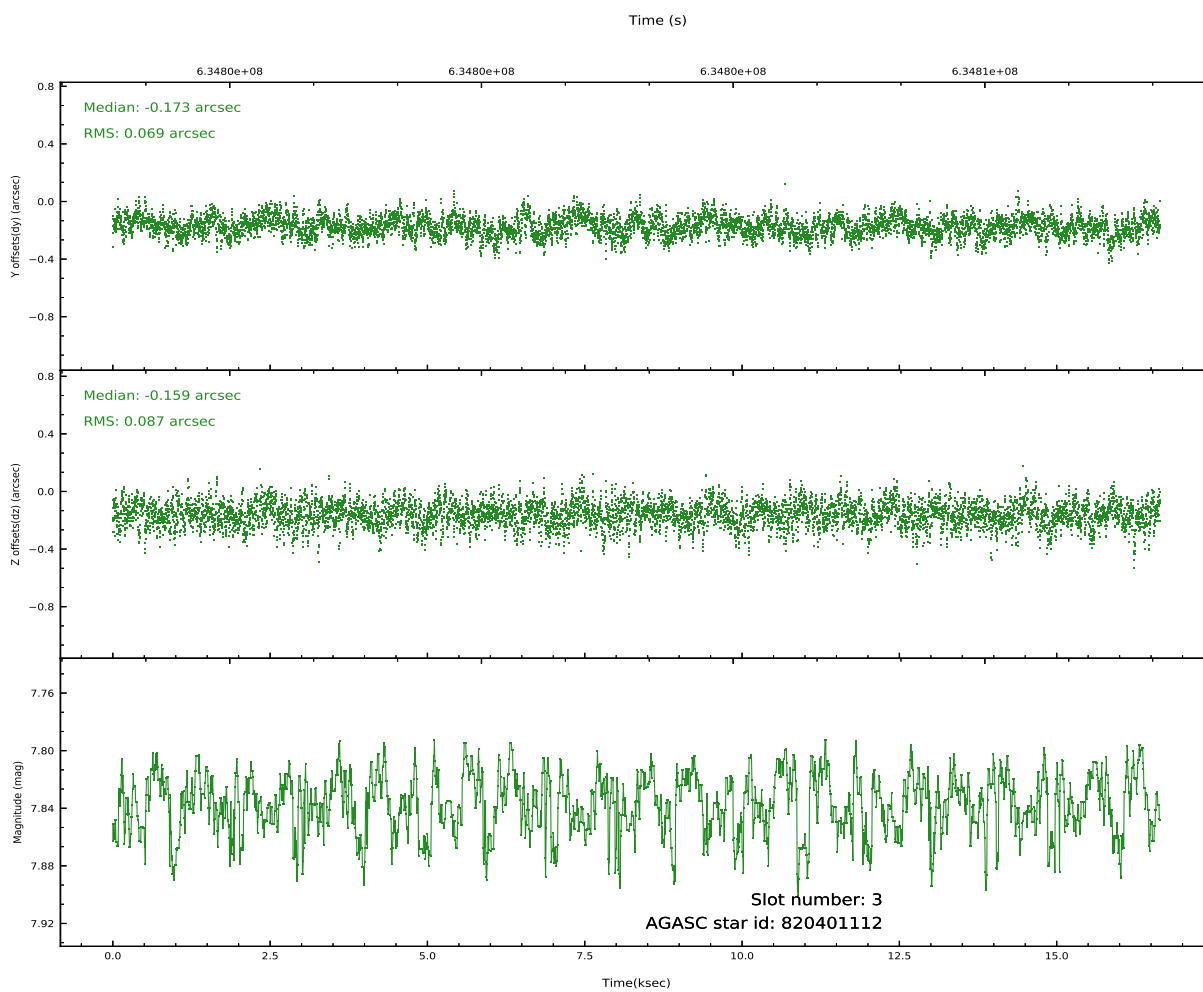
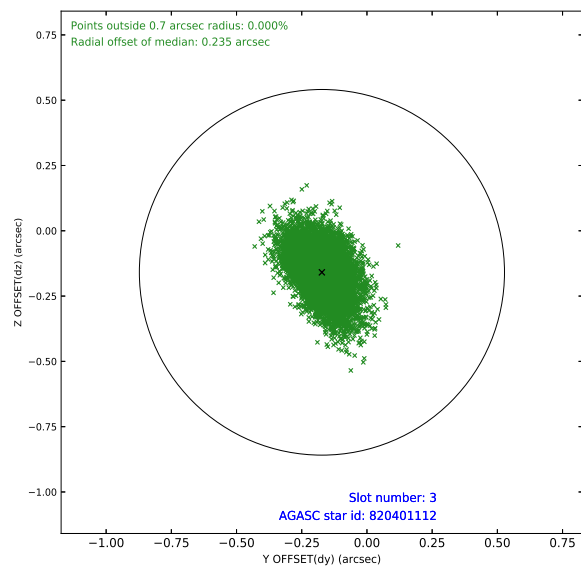
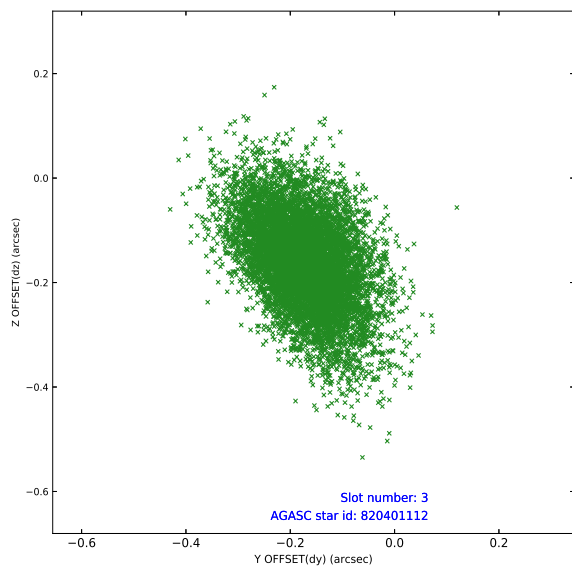
Slot Statistics

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	4060	1.000	0.068	-0.012	0.026	0.052	0.000000	0.000000	916.28	-859
1	FID		ACIS-I-2	7.08	4057	1.000	-0.081	0.067	0.021	0.032	0.000000	0.000000	-777.84	-866
2	FID		ACIS-I-4	7.07	4055	1.000	-0.087	0.008	0.022	0.041	0.000000	0.000000	2136.08	1039
3	GUIDE	used	820401112	7.84	8119	1.000	-0.173	-0.159	0.114	0.197	271.884761	-19.293988	-69.95	1882
4	GUIDE	used	821572840	8.73	8112	1.000	-0.118	-0.137	0.179	0.279	272.287378	-18.702558	2130.47	630
5	GUIDE	used	822088160	6.47	8120	1.000	-0.113	0.242	0.115	0.193	272.729284	-18.869551	1608.85	-904
6	GUIDE	used	822098736	8.46	8118	1.000	0.215	0.004	0.133	0.223	272.269355	-19.875225	-2087.81	466
7	GUIDE	used	822100176	8.58	8113	1.000	0.182	0.053	0.127	0.217	272.112888	-19.868886	-2093.91	996

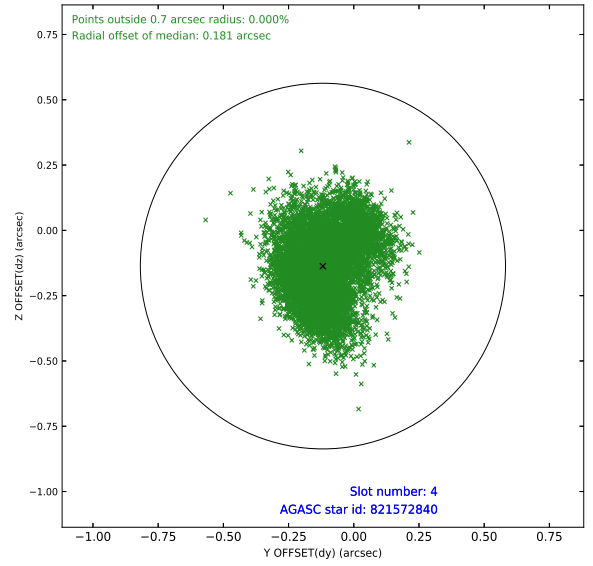
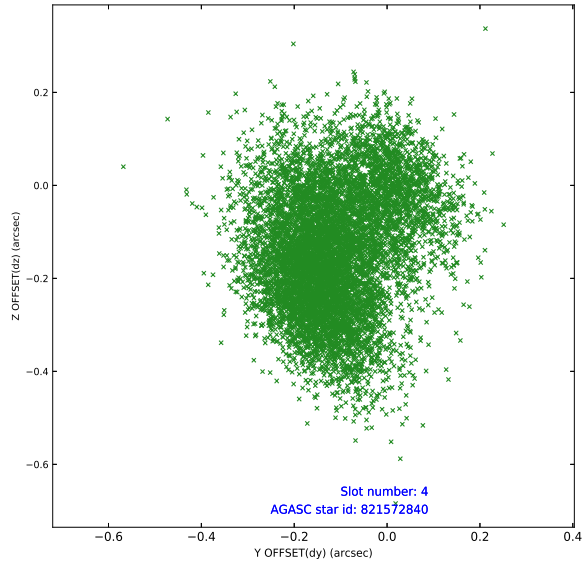
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2.4 Star Slots

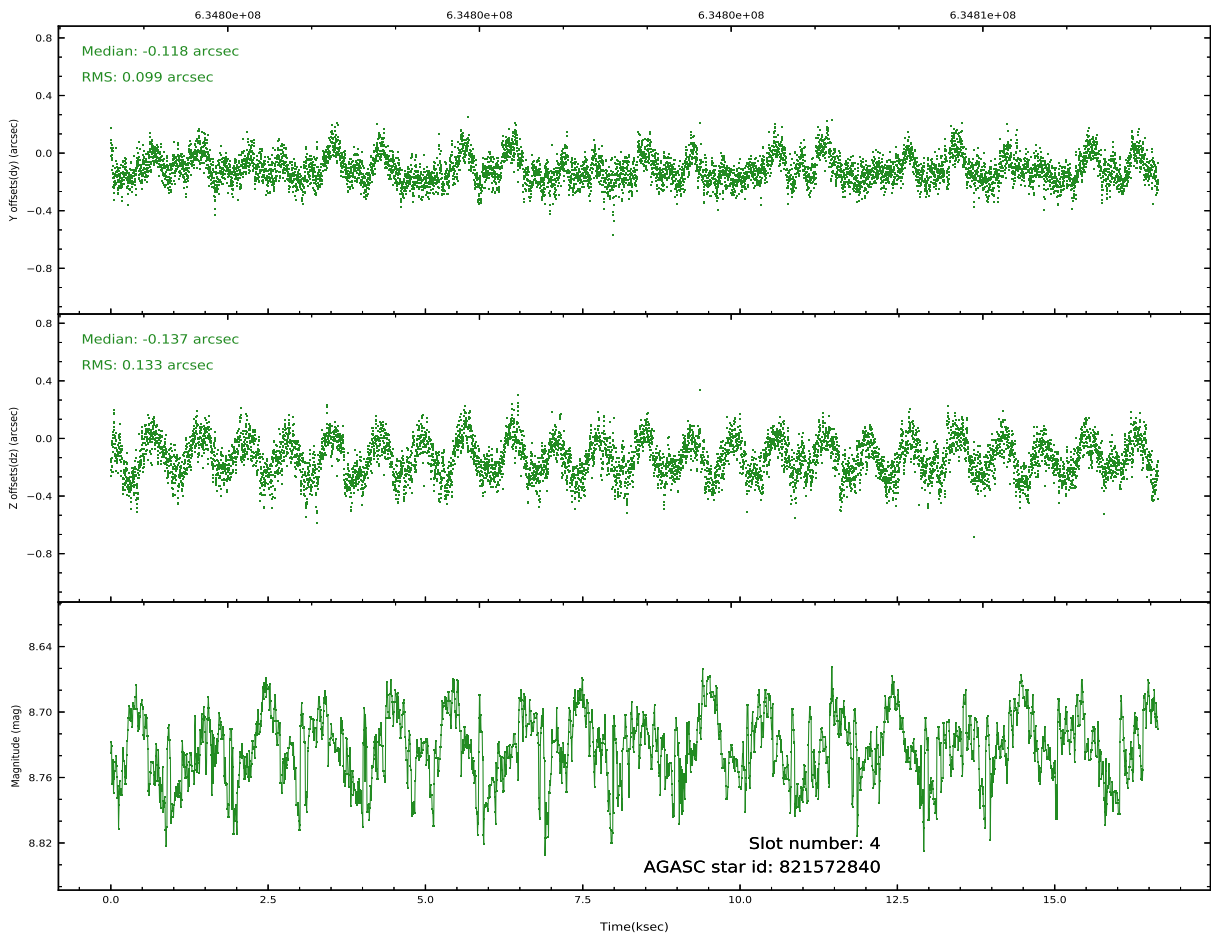
2.4.1 Slot 3



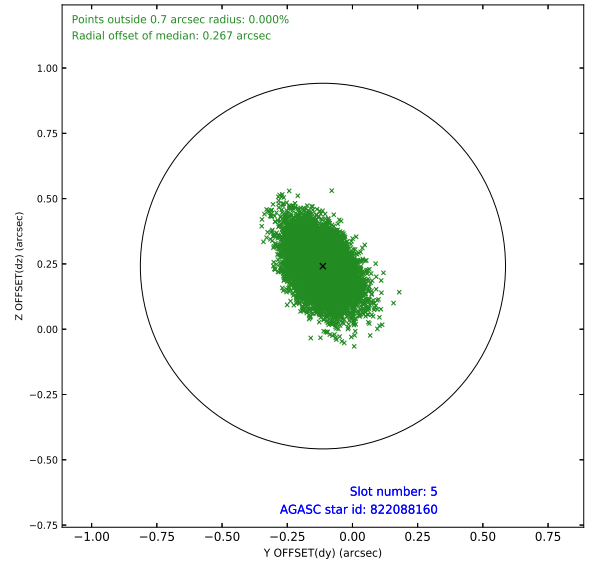
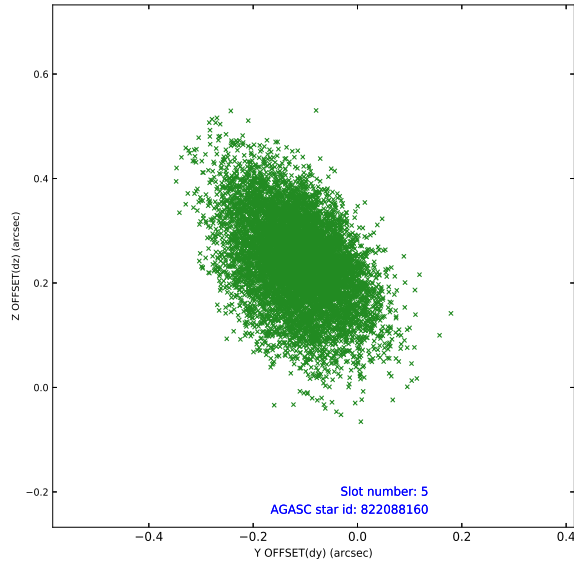
2.4.2 Slot 4



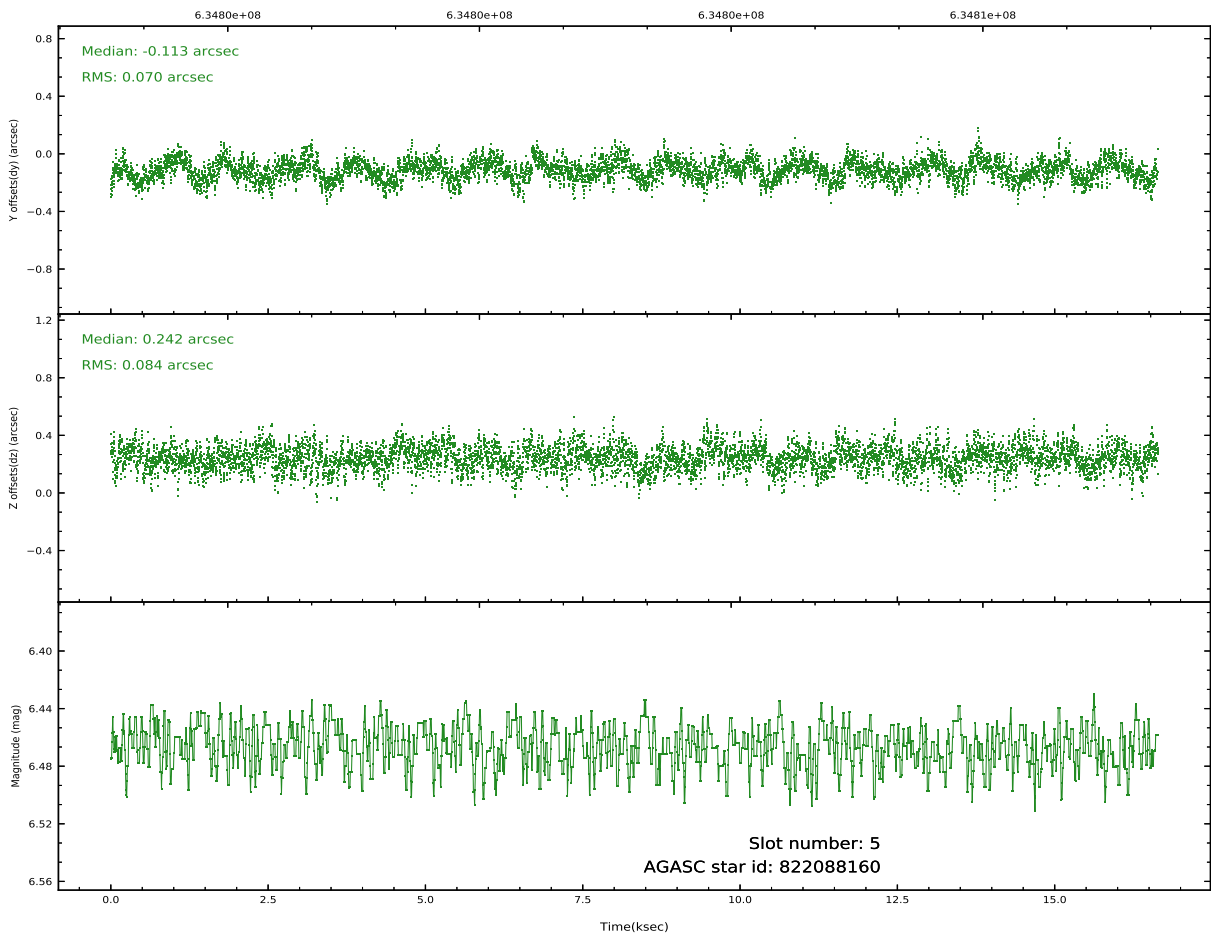
Time (s)



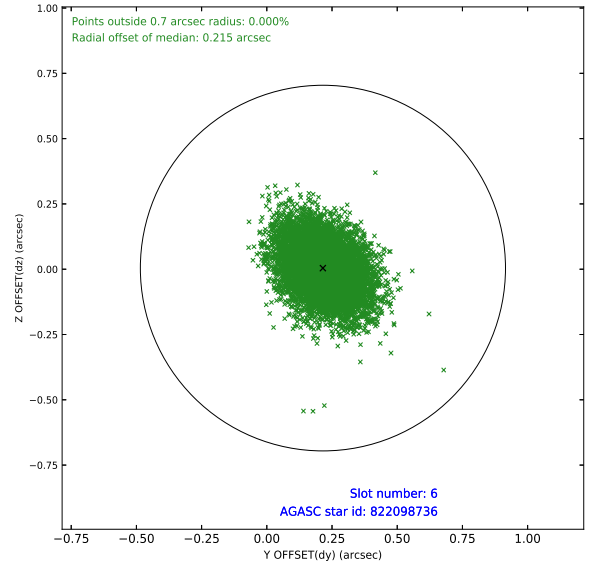
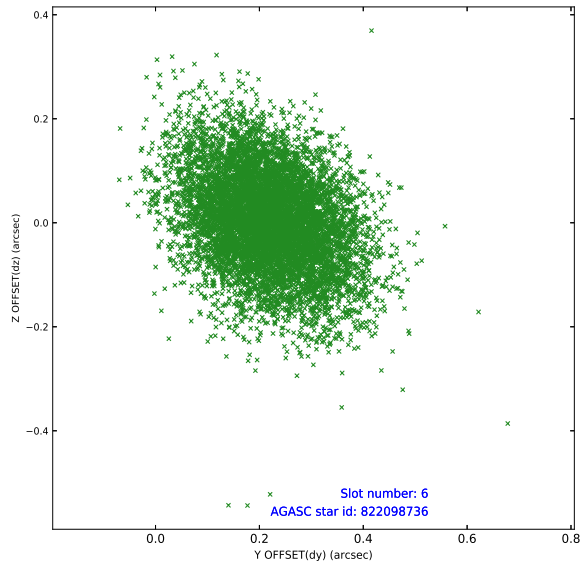
2.4.3 Slot 5



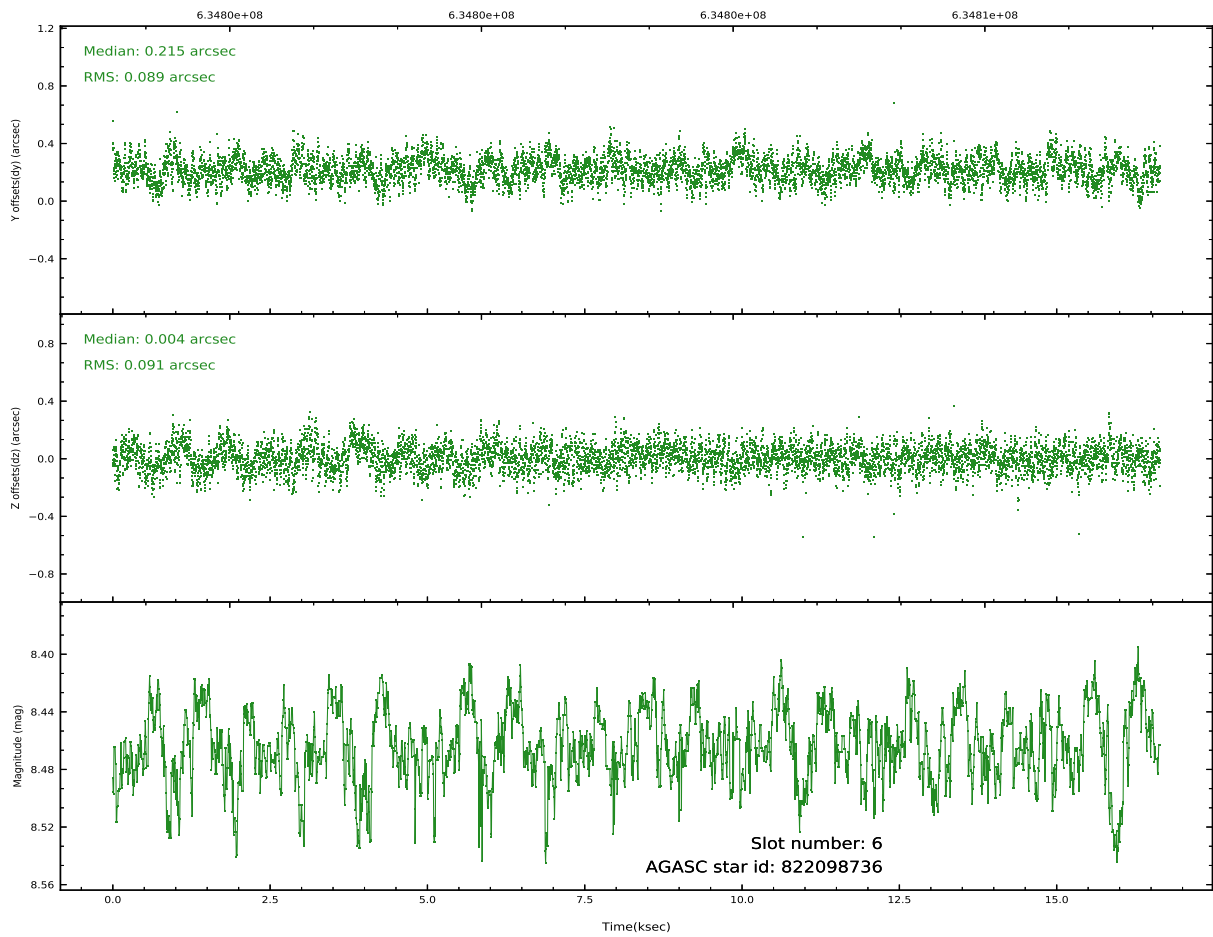
Time (s)



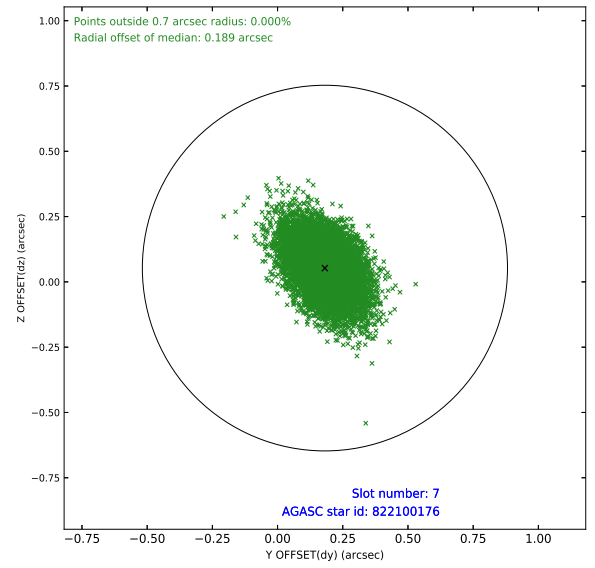
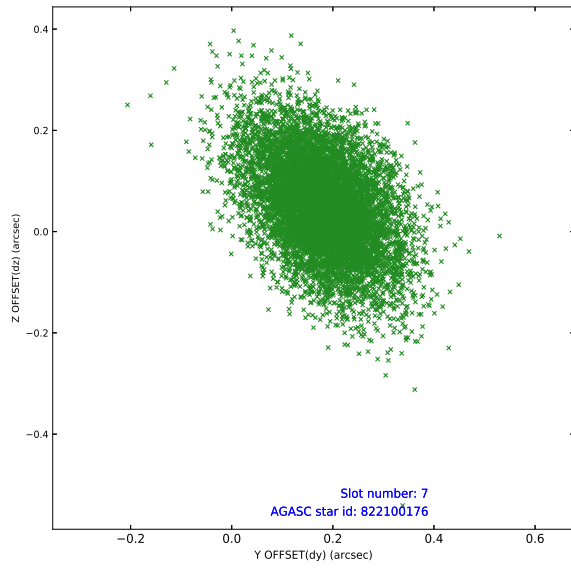
2.4.4 Slot 6



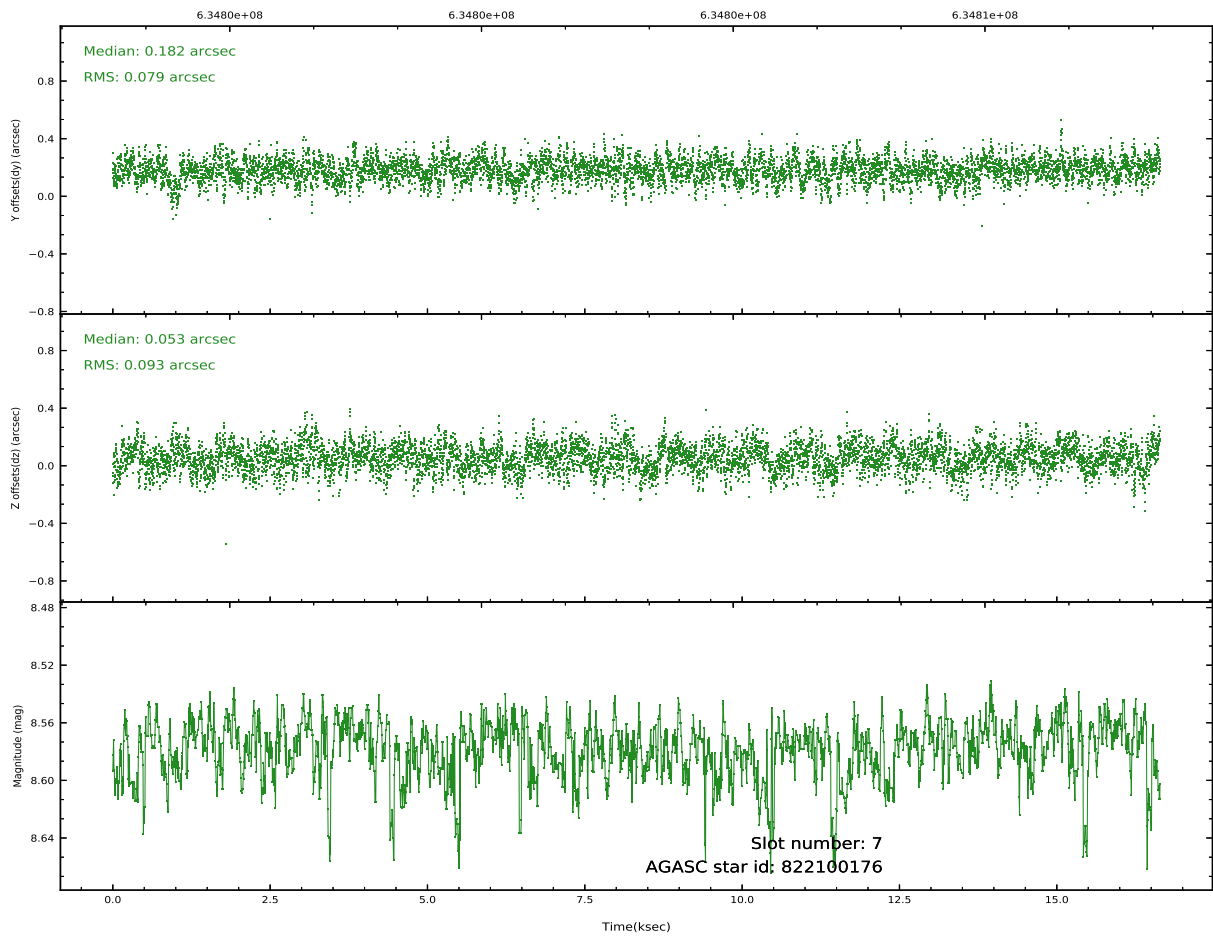
Time (s)



2.4.5 Slot 7

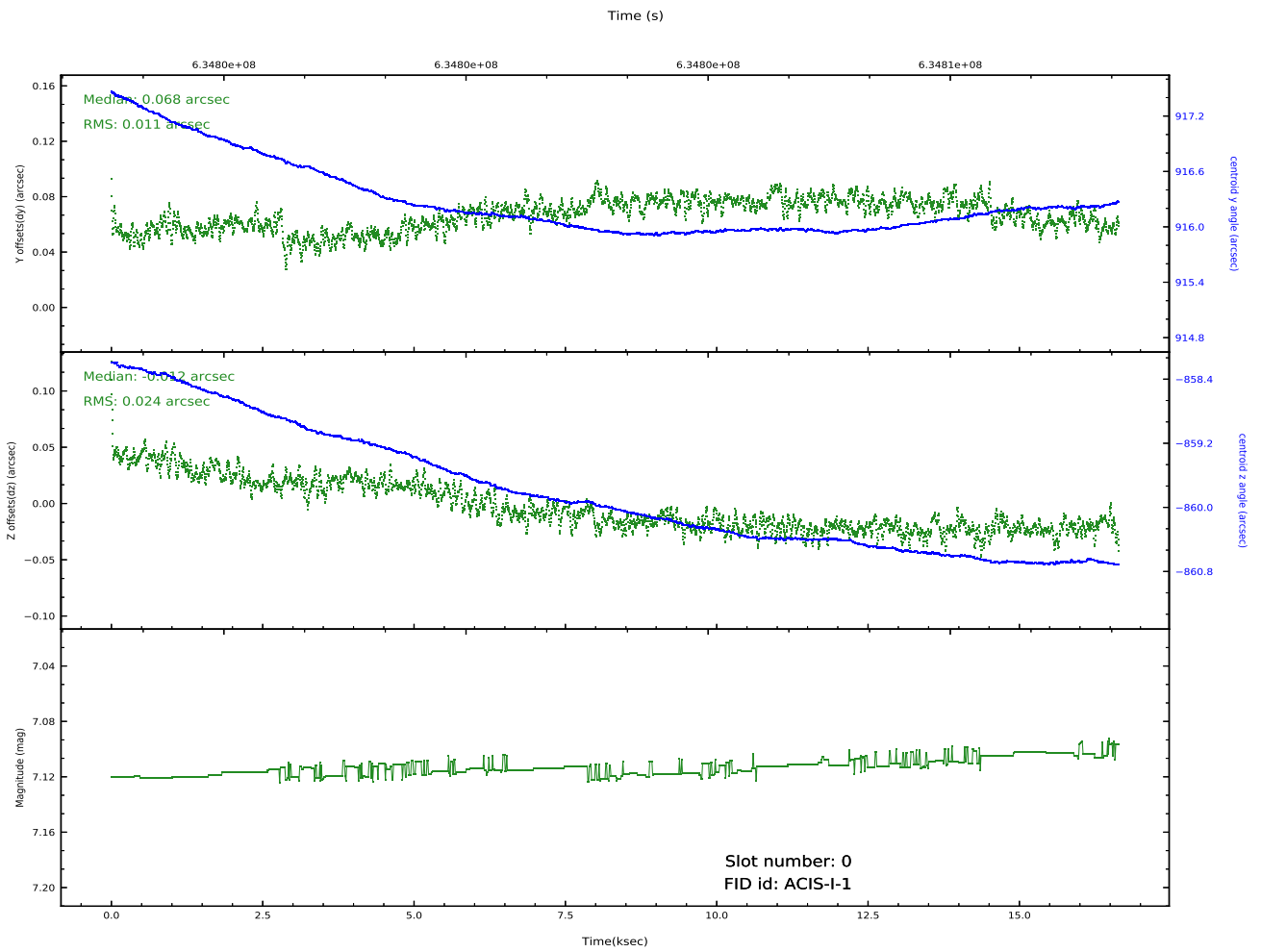
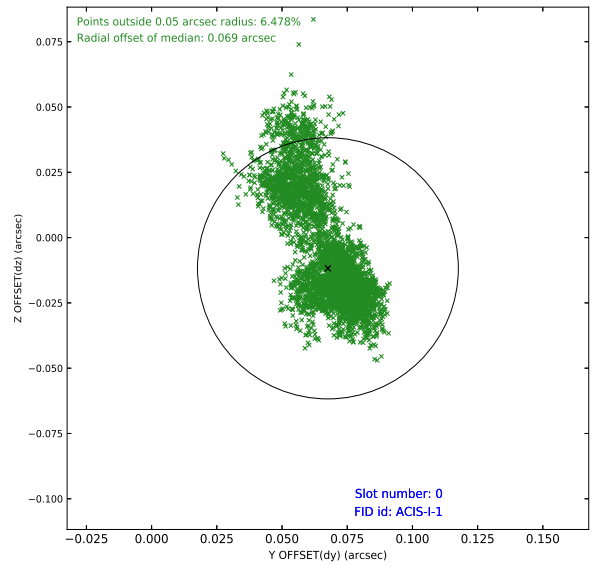
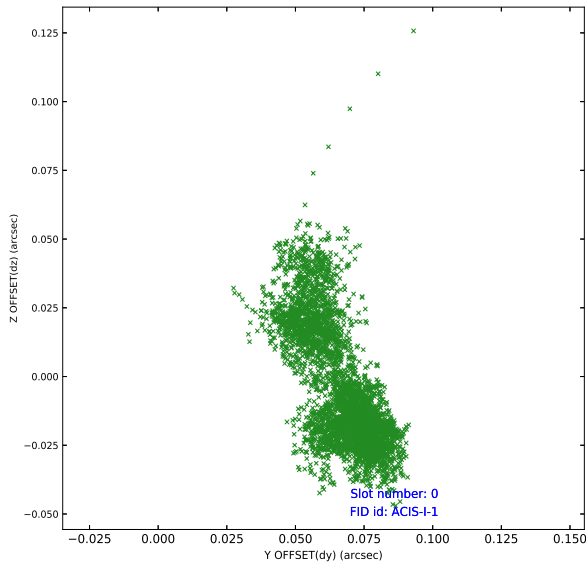


Time (s)

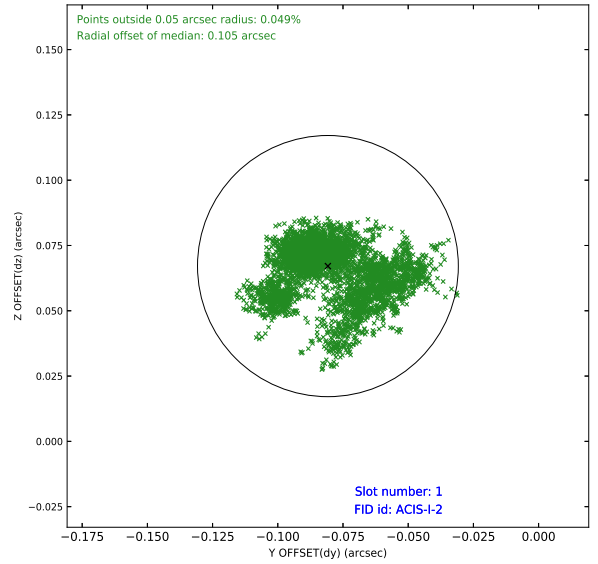
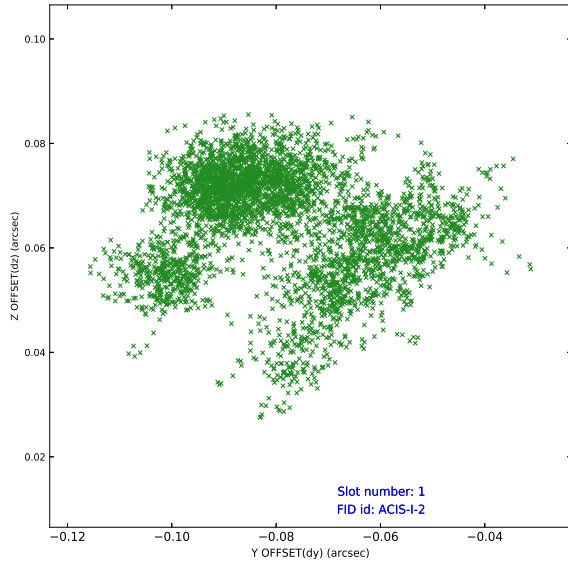


2.5 FID Slots

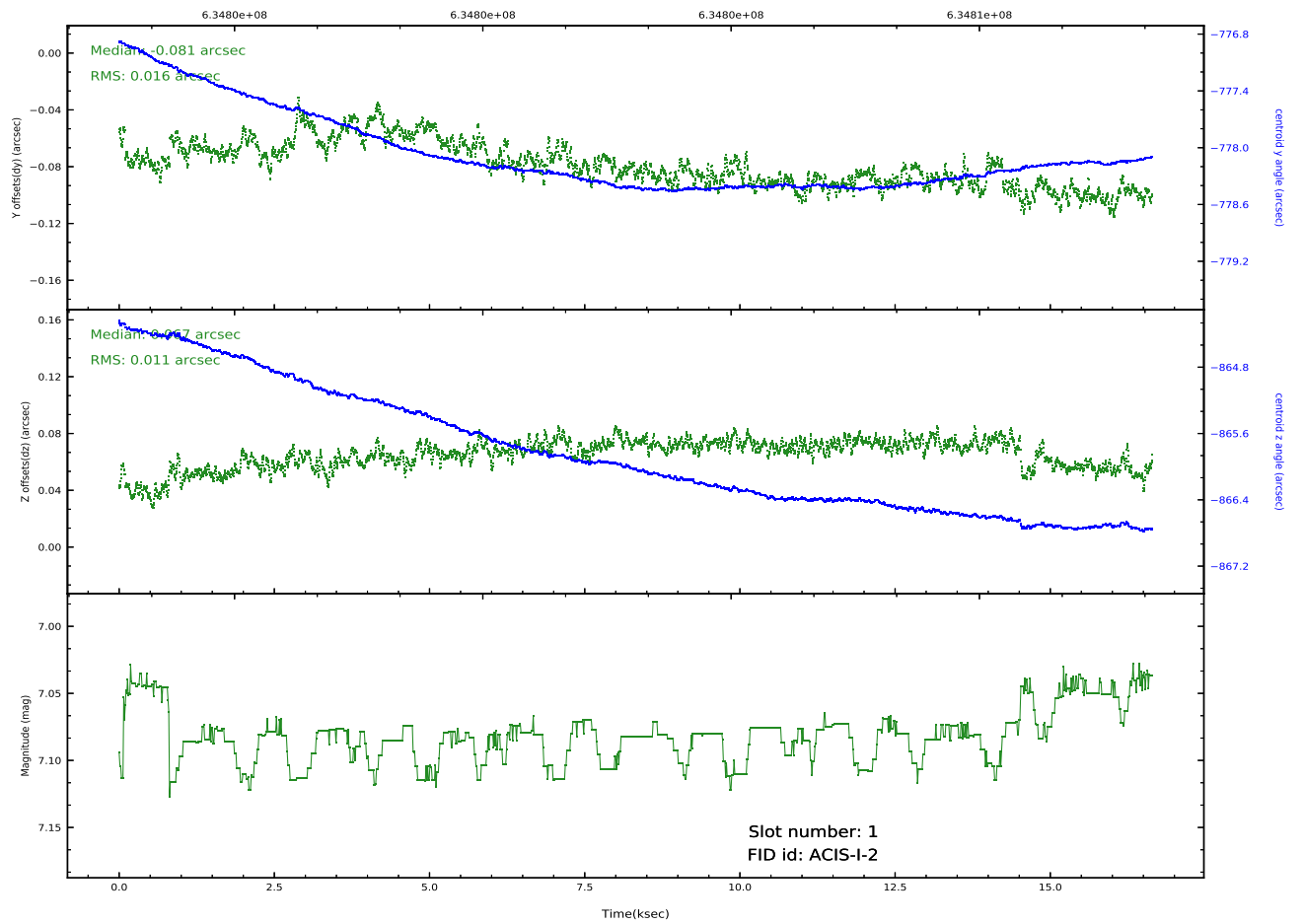
2.5.1 Slot 0



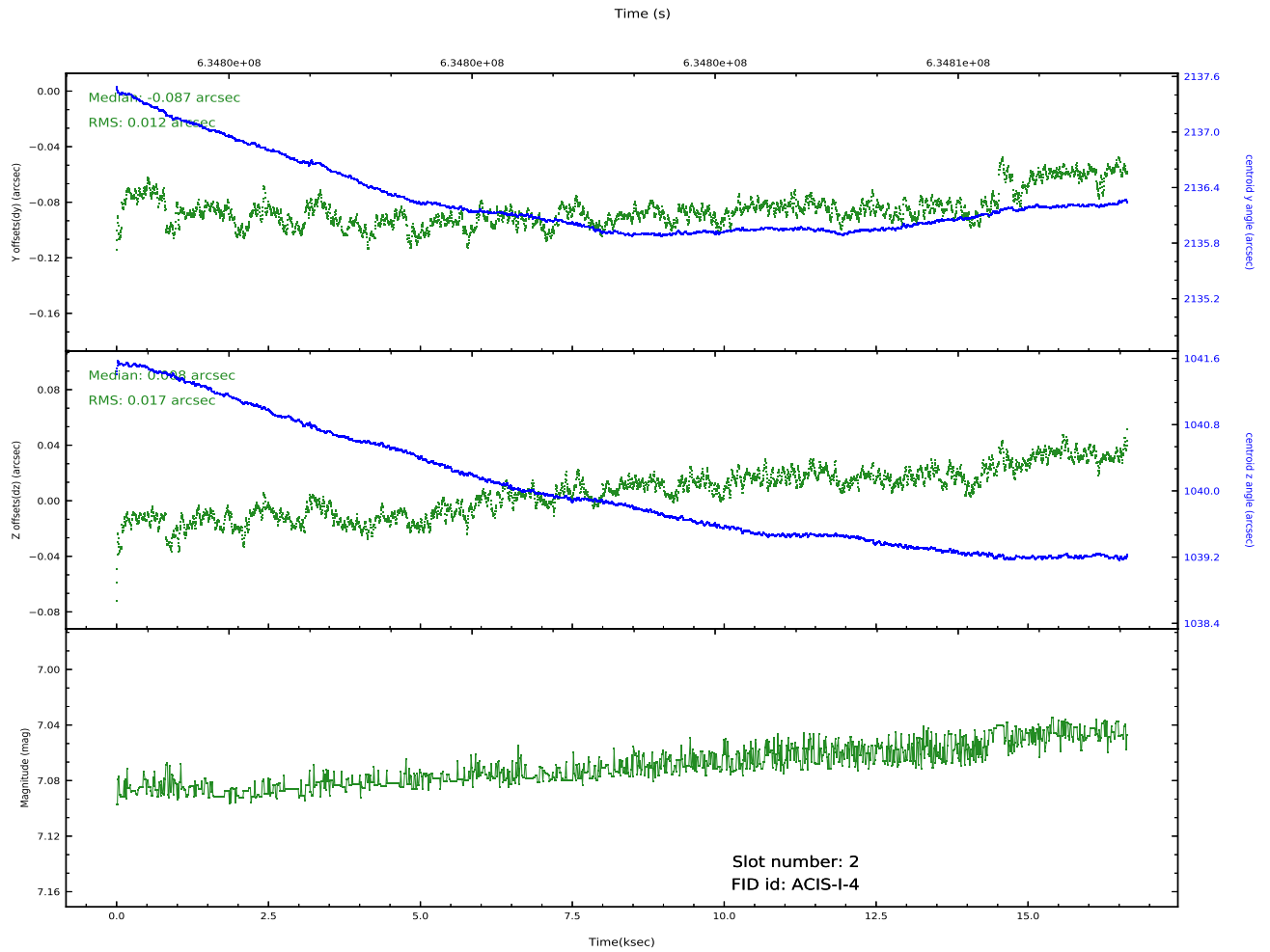
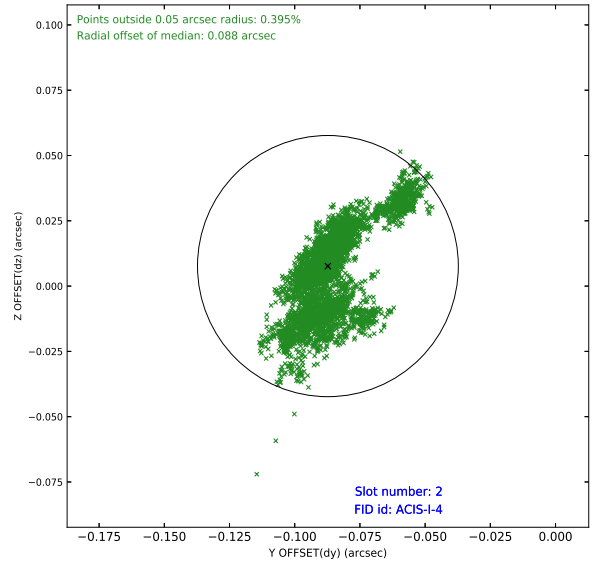
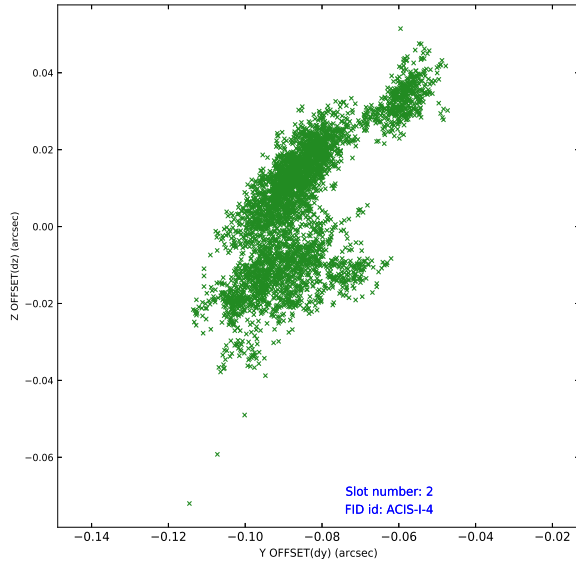
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.550900127411

A.2 Comments