

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20962 - L2 Version 2
Chandra X-Ray Center

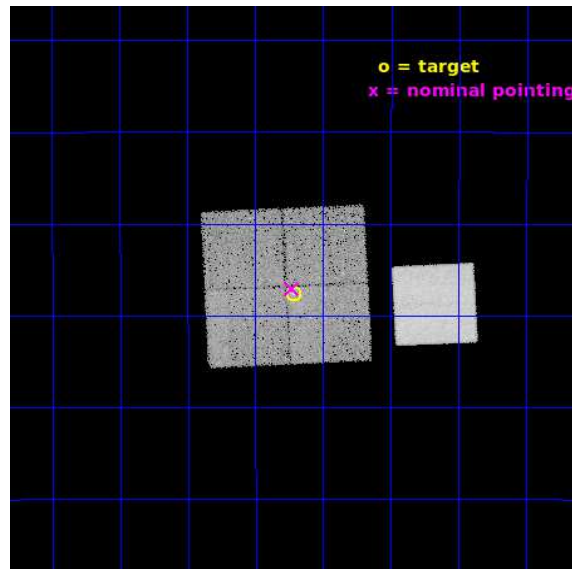
L2 Processing Date : Oct 24 2020

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1 Front

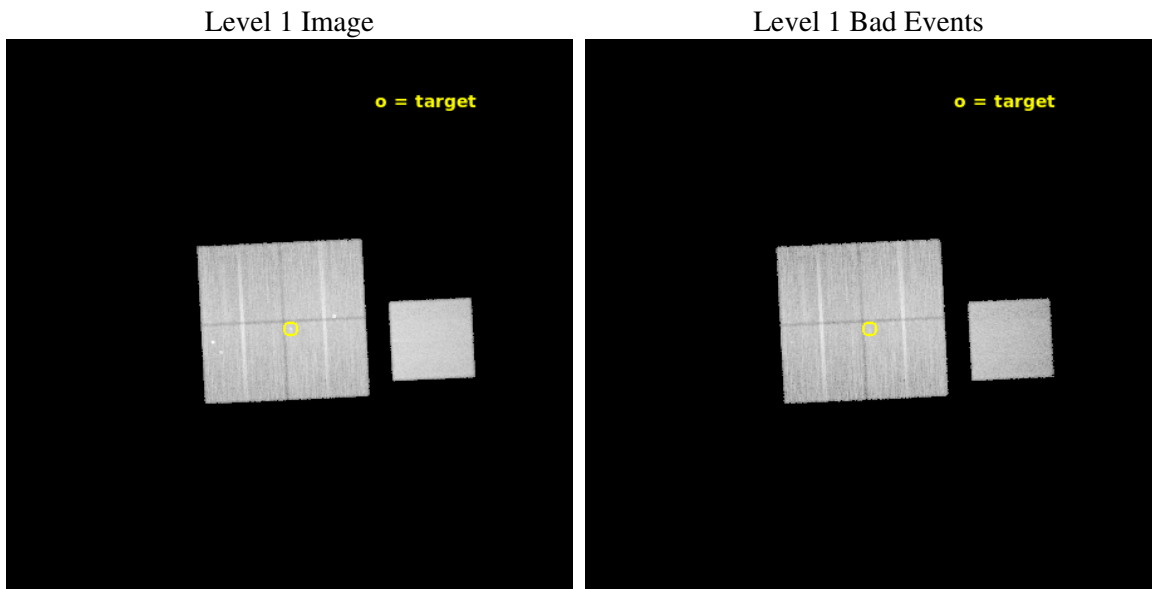
seq_num	503020	Sequence number
obs_id	20962	Observation id
title	The wagging jet and the X-ray plerion of PSR J1809-1917	Proposal t
observer	George Pavlov	Principal investigator
object	PSR J1809-1917	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.429583	Observer's specified target RA [deg]
dec_targ	-19.293917	Observer's specified target Dec [deg]
ra_nom	272.43268801545	Nominal RA [deg]
dec_nom	-19.284675036485	Nominal Dec [deg]
roll_nom	87.205174051956	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21203.860724807	Sum of GTIs [s]
livetime	20926.816674382	Livetime [s]
ontime0	21200.596644402	Sum of GTIs [s]
ontime1	21203.7786448	Sum of GTIs [s]
ontime2	21203.819684744	Sum of GTIs [s]
ontime3	21203.860724807	Sum of GTIs [s]
ontime7	21203.90176475	Sum of GTIs [s]
l2events	151855	Number of level 2 events



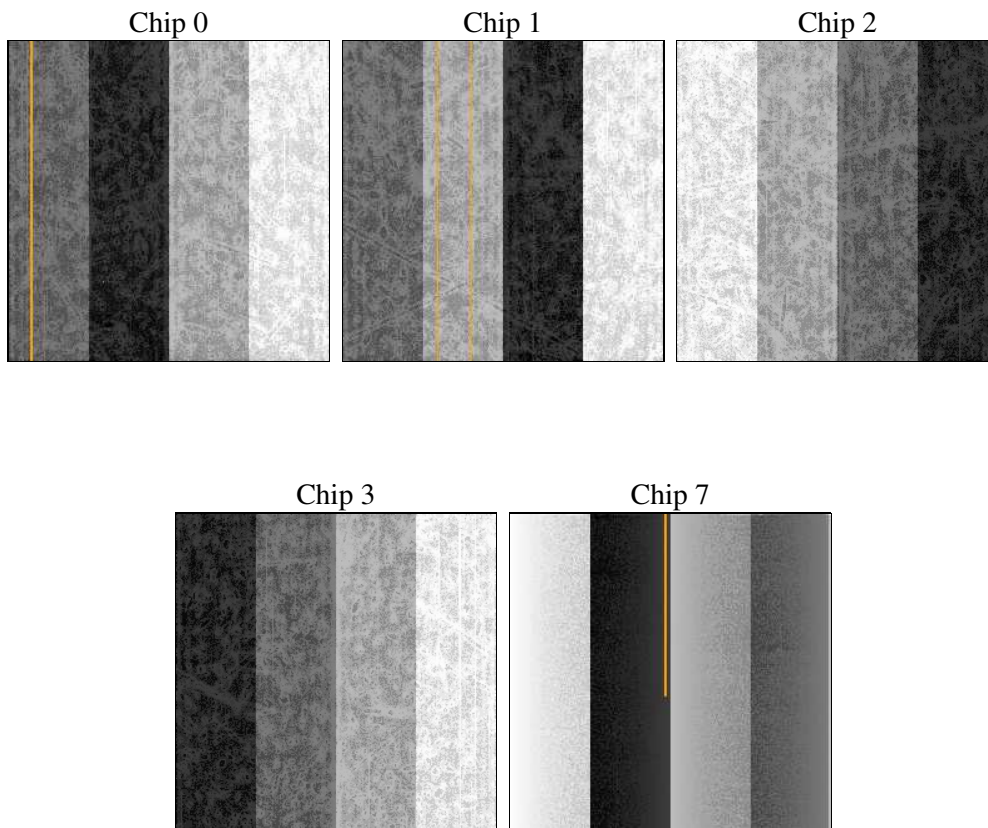
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21150.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	21203.860724807	Sum of GTIs [s]
caldbver	4.9.3	 	ontime0	21200.596644402	Sum of GTIs [s]
date	2020-10-24T15:51:59	Date and time of file creation	ontime1	21203.7786448	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	21203.819684744	Sum of GTIs [s]
			ontime3	21203.860724807	Sum of GTIs [s]
			ontime7	21203.90176475	Sum of GTIs [s]
			l1events	823293	Number of level 1 events

2.1.4 Events

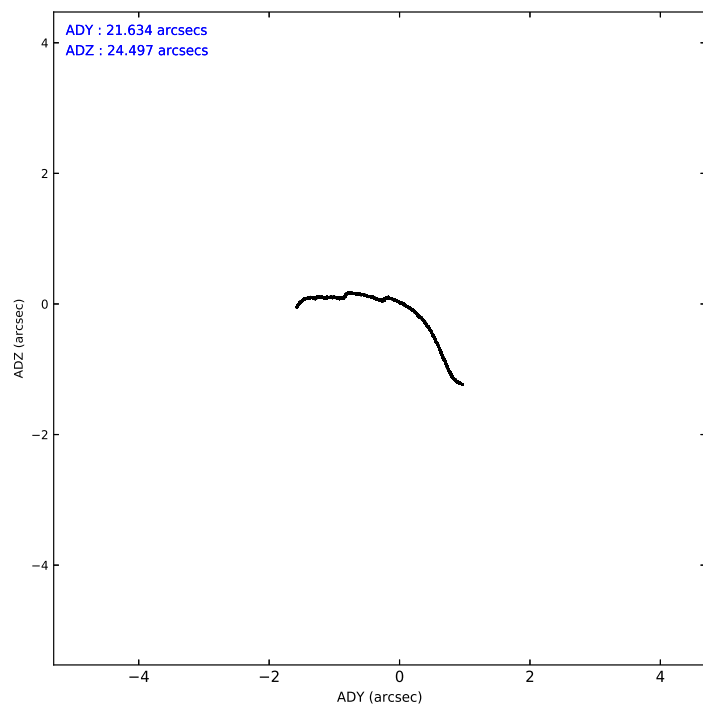
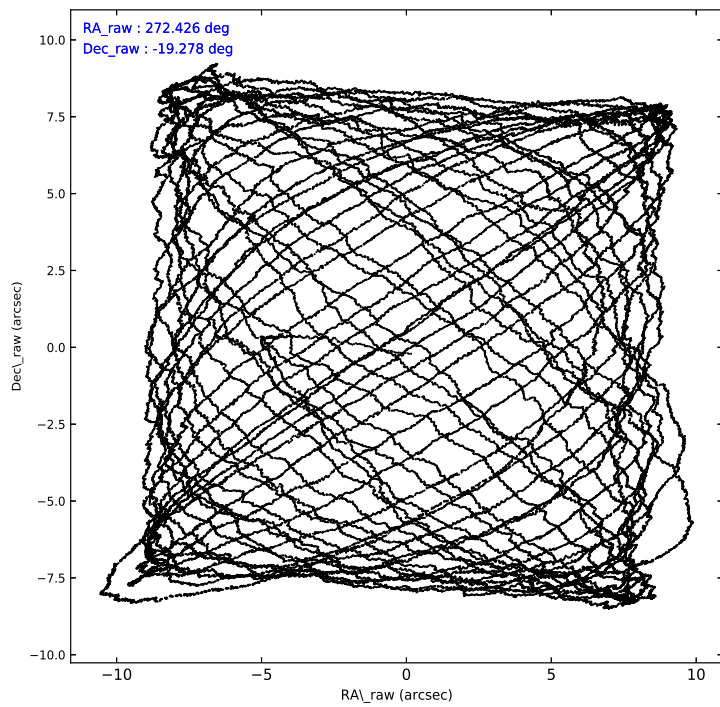
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	142997	151624	164978	161879	201815
rejected events	124294	128472	145416	142188	113640
rejected %	86%	84%	88%	87%	56%

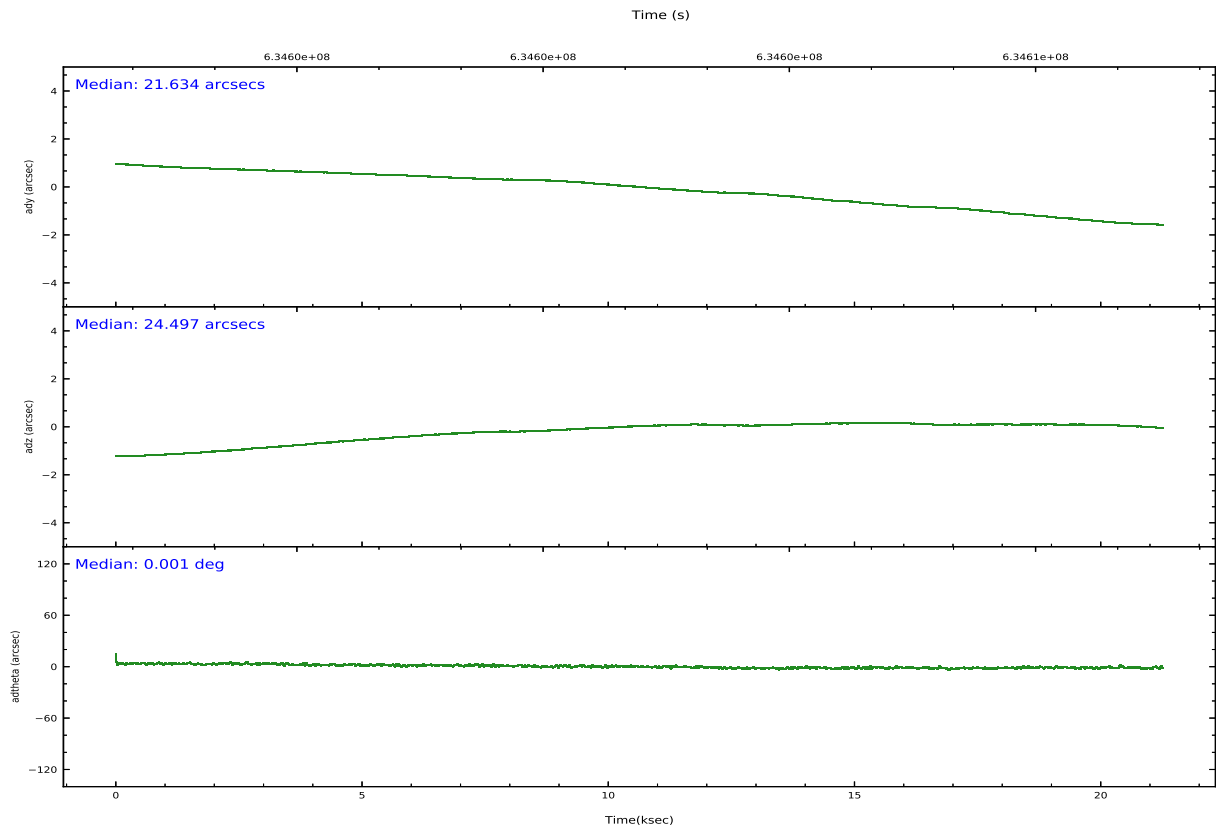
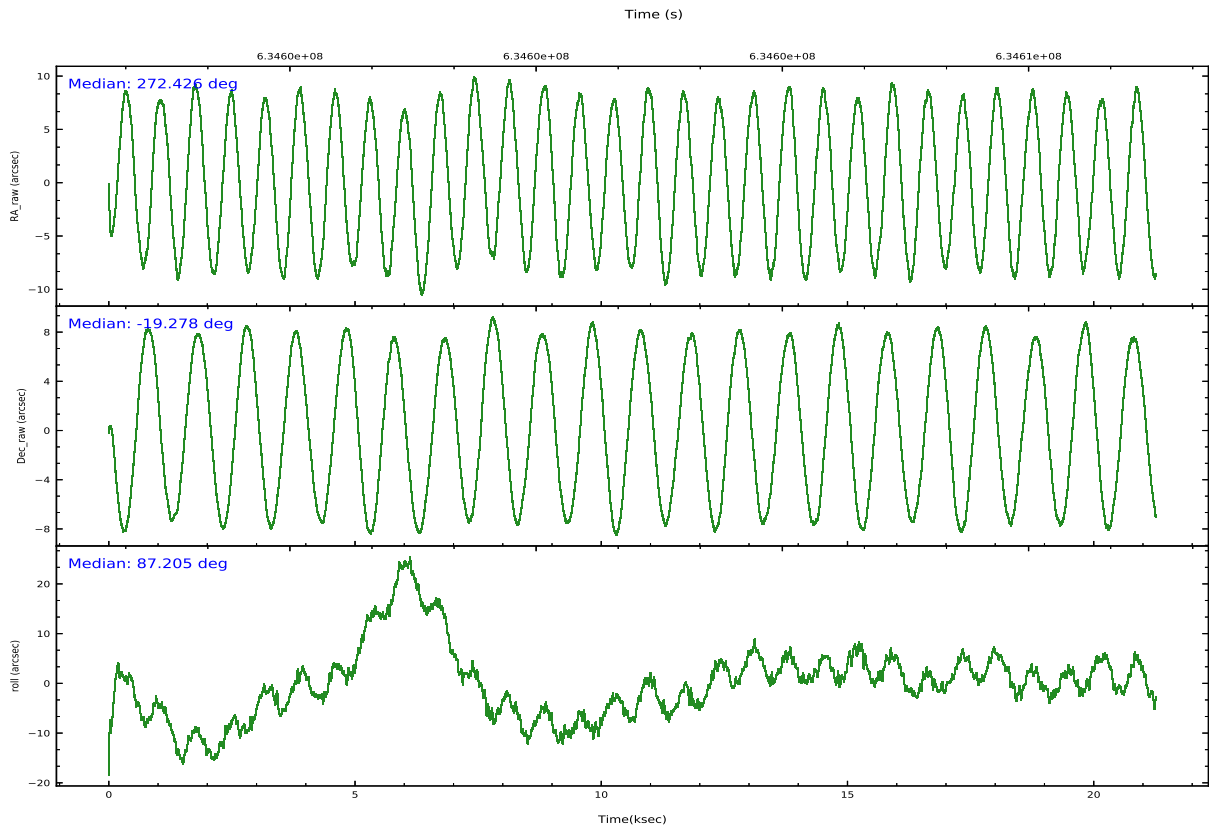
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	7068	9668	8261	8481	7652
	4%	6%	5%	5%	3%
grade 1 events	88	123	167	85	296
	0%	0%	0%	0%	0%
grade 2 events	4472	5445	4401	3939	18433
	3%	3%	2%	2%	9%
grade 3 events	1798	1822	1730	1831	7064
	1%	1%	1%	1%	3%
grade 4 events	1782	1813	1817	1815	7178
	1%	1%	1%	1%	3%
grade 5 events	6473	6778	5871	7400	19876
	4%	4%	3%	4%	9%
grade 6 events	3589	4408	3354	3629	47868
	2%	2%	2%	2%	23%
grade 7 events	117727	121567	139377	134699	93448
	82%	80%	84%	83%	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	272.439104	272.43268801545	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.302666	-19.284675036485	CCD I3 on	Y	Y
[deg] Pointing Roll	87.003142	87.20517405195601	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)	634591440.184000	634590132.41689	CCD S5 on	N	N
Observation start date	2018-02-09T19:22:51	2018-02-09T19:02:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	634612590.184000	634613655.65578	On-chip summing requested	N	N
Observation end date	2018-02-10T01:15:21	2018-02-10T01:34:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



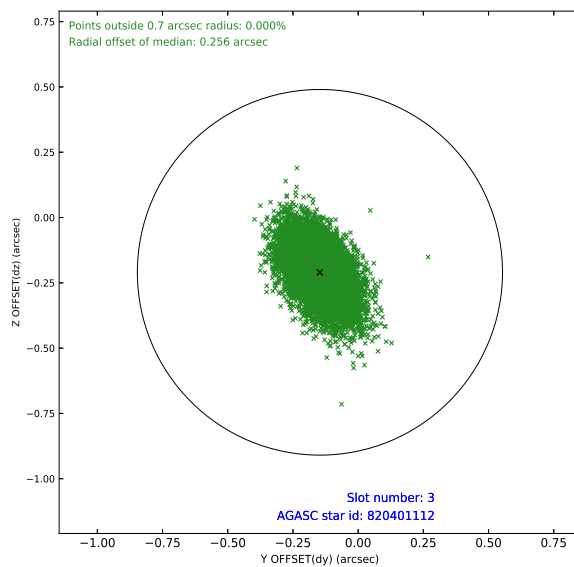
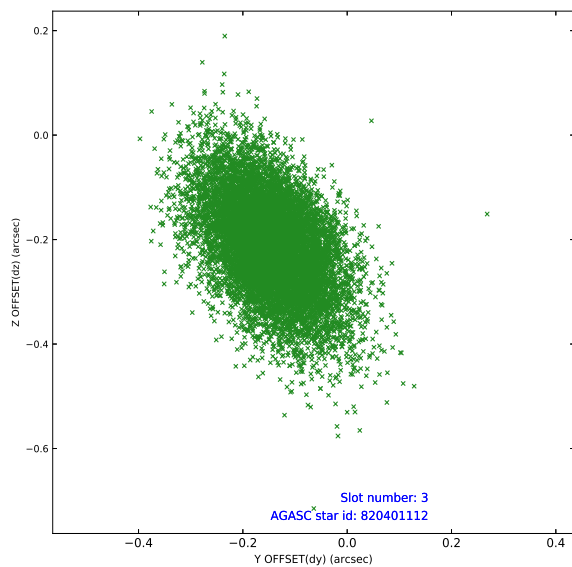


Slot Statistics

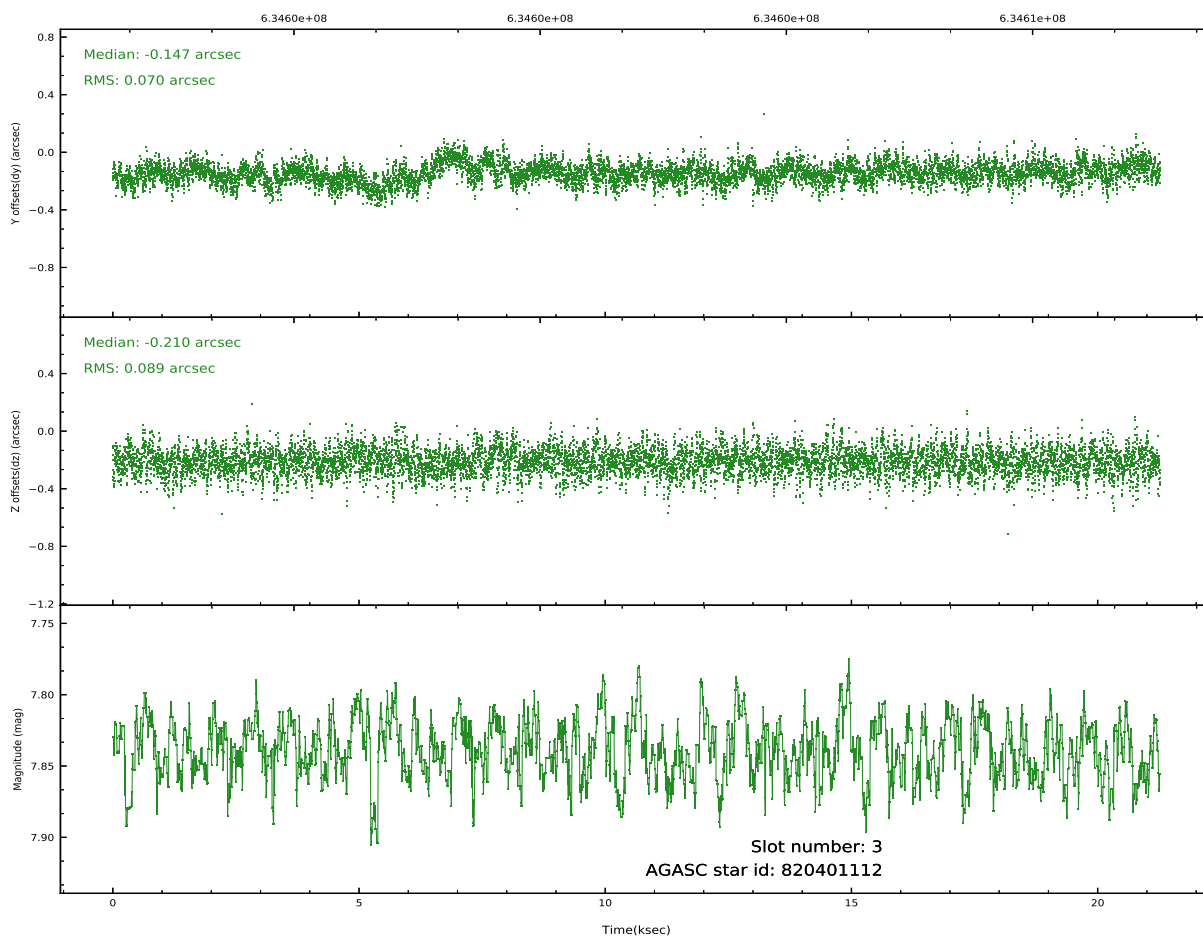
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.20	5187	1.000	0.015	-0.009	0.014	0.027	0.000000	0.000000	917.74	-860
1	FID		ACIS-I-4	7.13	5187	1.000	-0.005	-0.045	0.024	0.038	0.000000	0.000000	2137.91	1039
2	FID		ACIS-I-6	7.21	5188	1.000	-0.106	0.118	0.031	0.043	0.000000	0.000000	383.86	1682
3	GUIDE	used	820401112	7.84	10374	1.000	-0.147	-0.210	0.116	0.205	271.884761	-19.293988	-70.26	1882
4	GUIDE	used	822088160	6.46	10376	1.000	-0.147	0.187	0.109	0.198	272.729284	-18.869551	1608.04	-905
5	GUIDE	used	822091704	8.08	10374	1.000	-0.111	-0.060	0.128	0.226	272.220028	-18.943658	1251.44	812
6	GUIDE	used	822098736	8.46	10373	1.000	0.203	0.008	0.137	0.238	272.269355	-19.875225	-2088.32	466
7	GUIDE	used	822100176	8.58	10369	1.000	0.200	0.080	0.127	0.226	272.112888	-19.868886	-2094.22	996

2.4 Star Slots

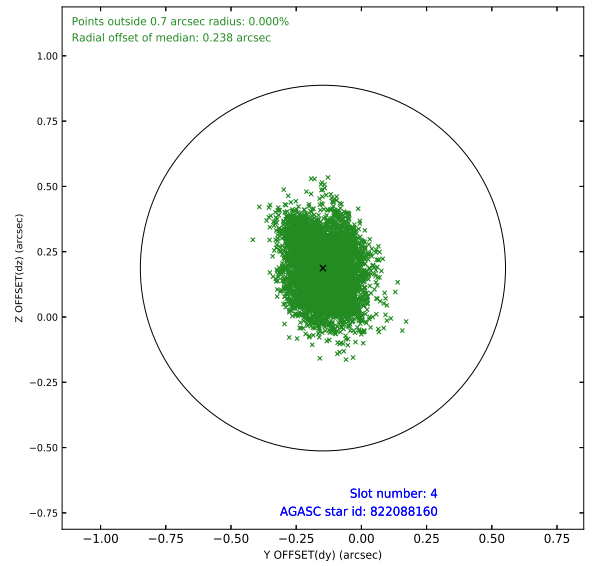
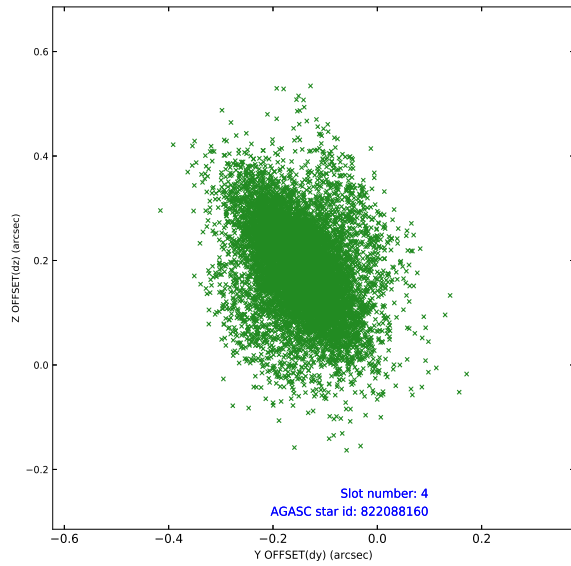
2.4.1 Slot 3



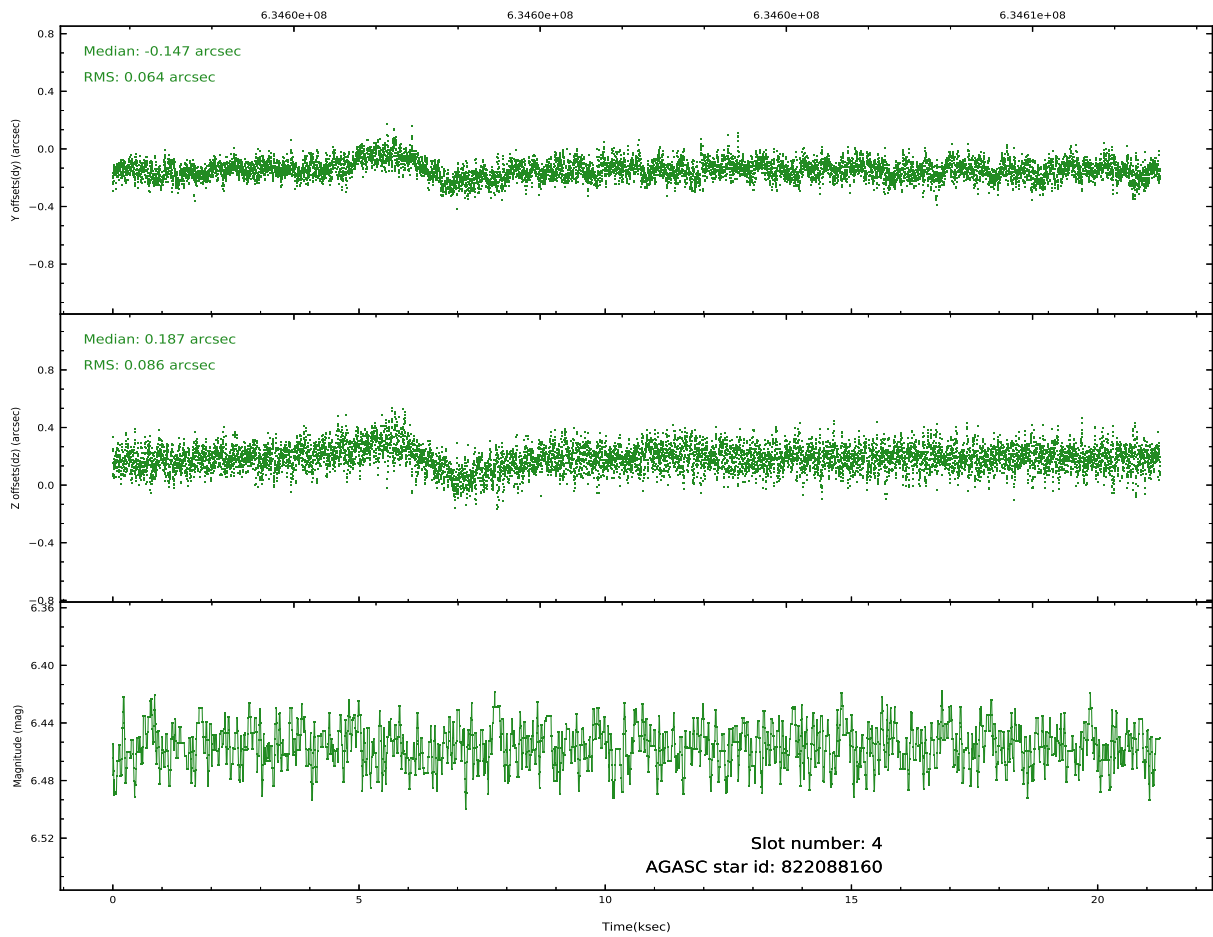
Time (s)



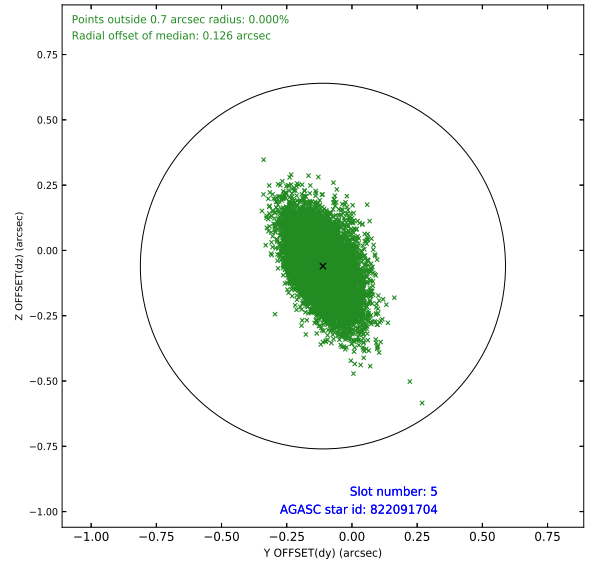
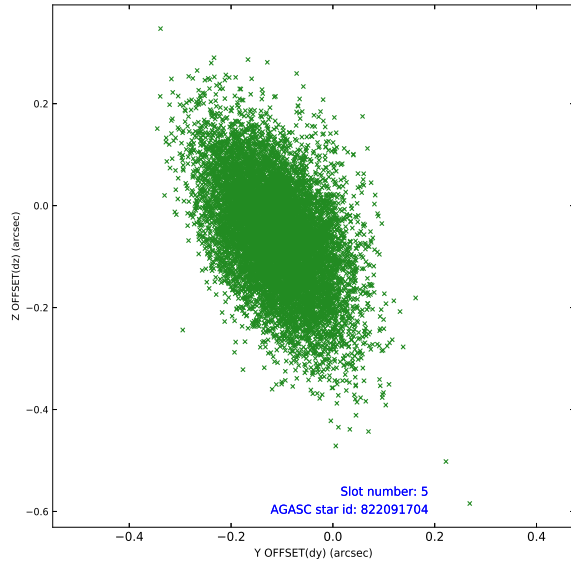
2.4.2 Slot 4



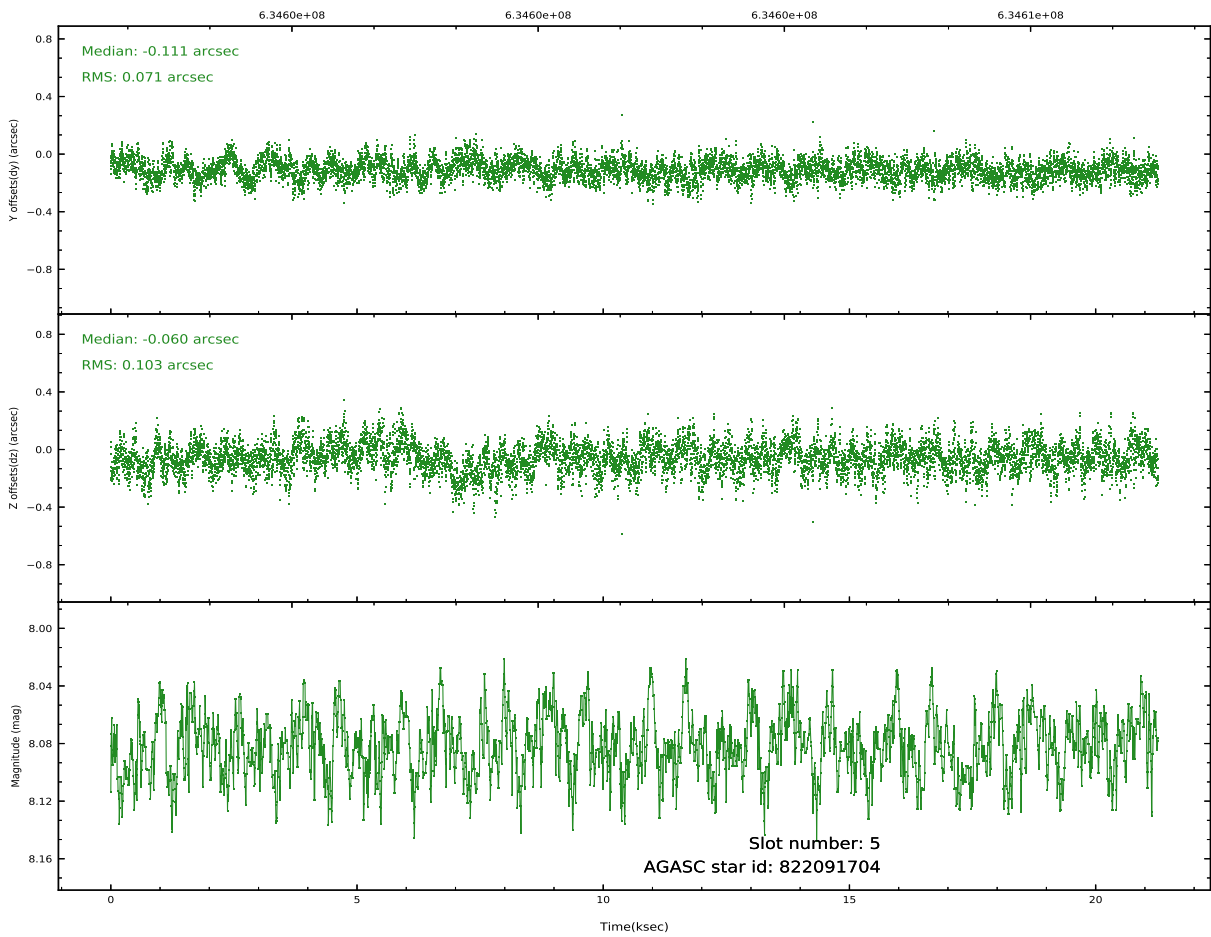
Time (s)



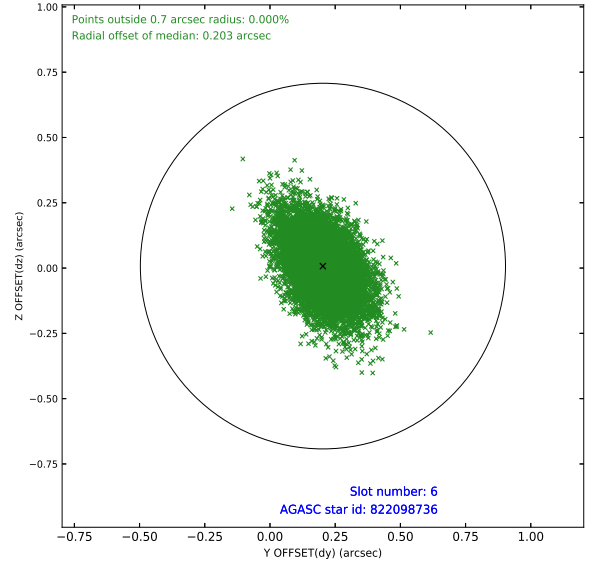
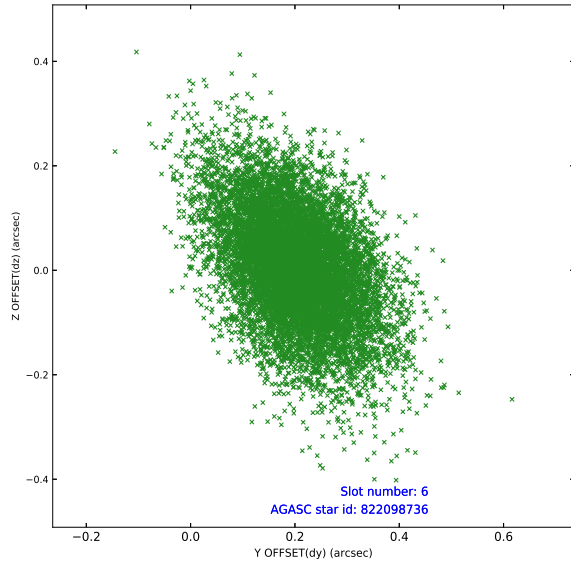
2.4.3 Slot 5



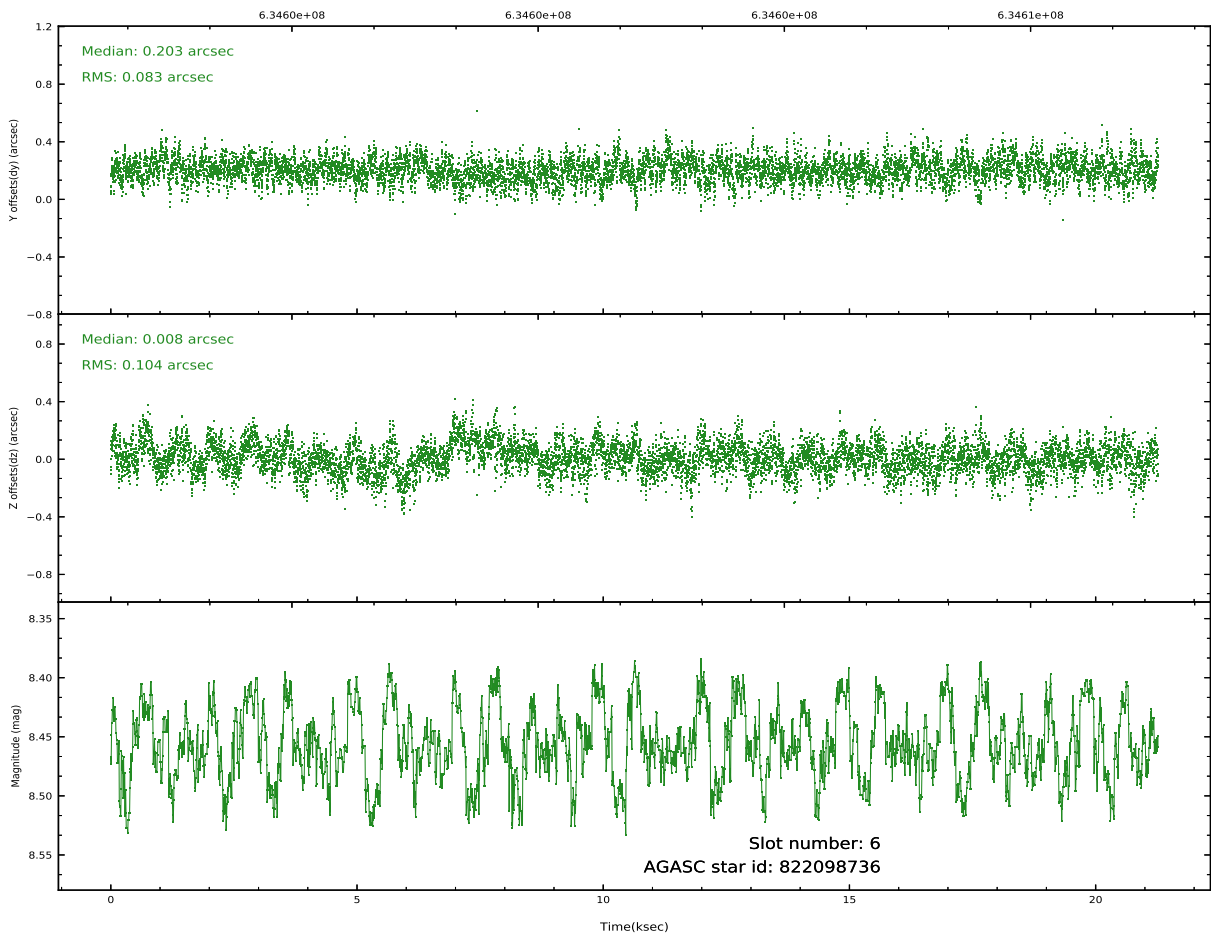
Time (s)



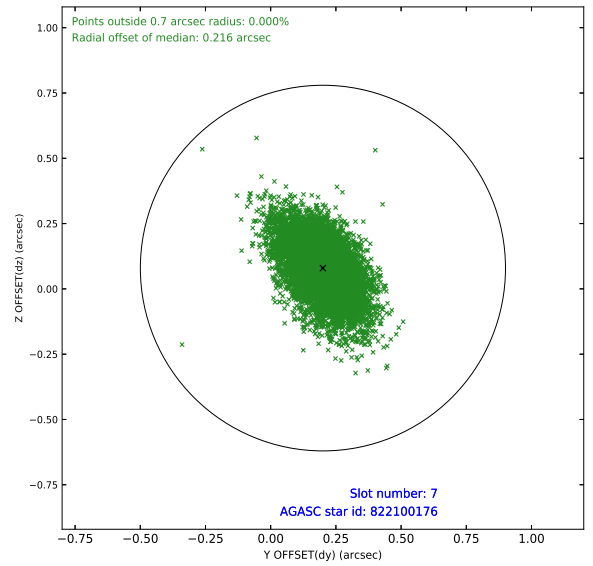
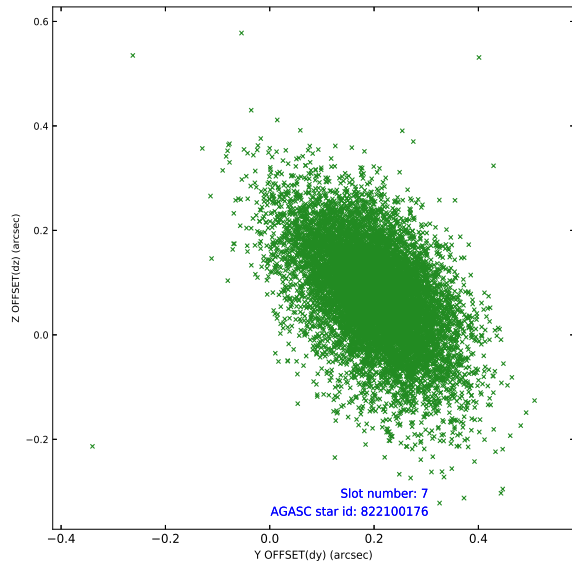
2.4.4 Slot 6



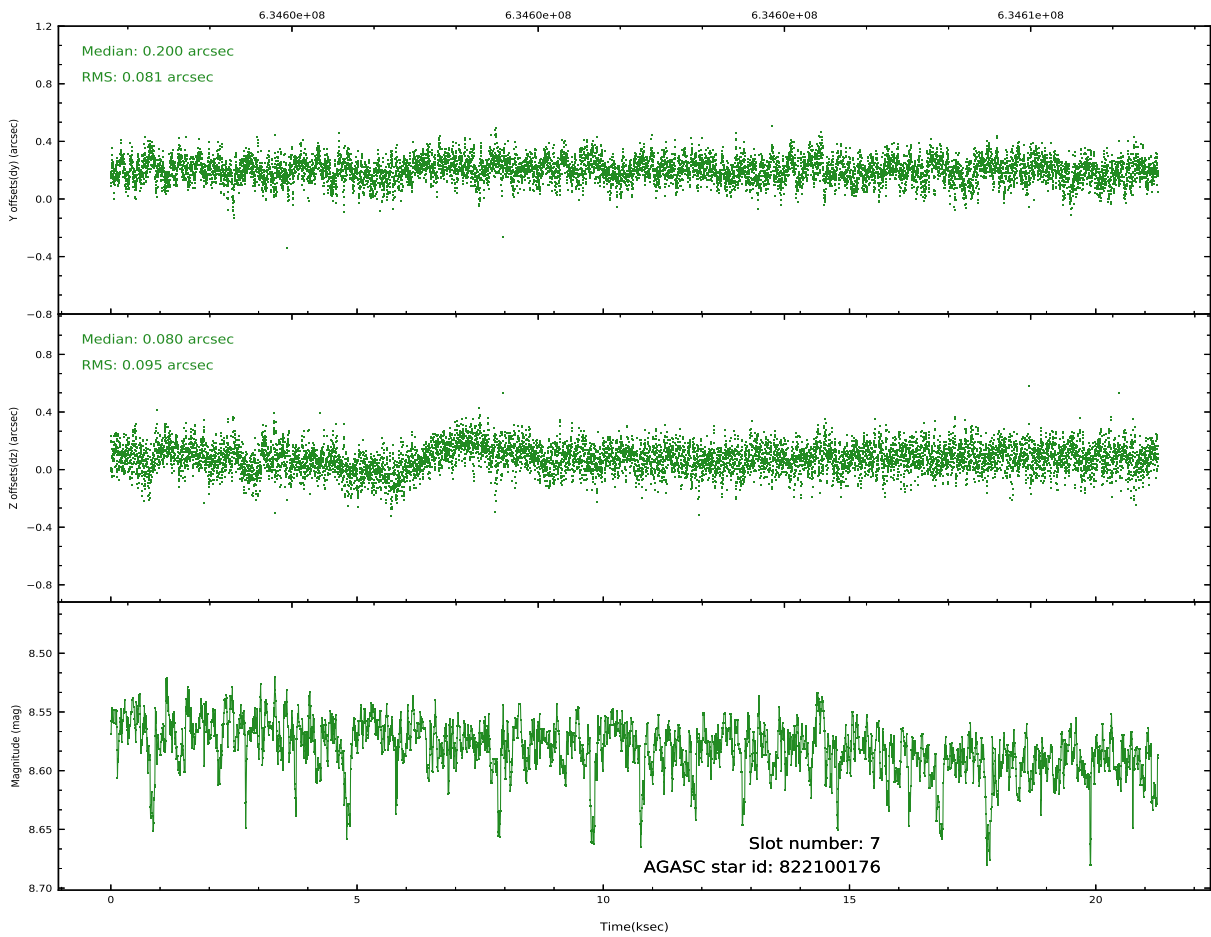
Time (s)



2.4.5 Slot 7

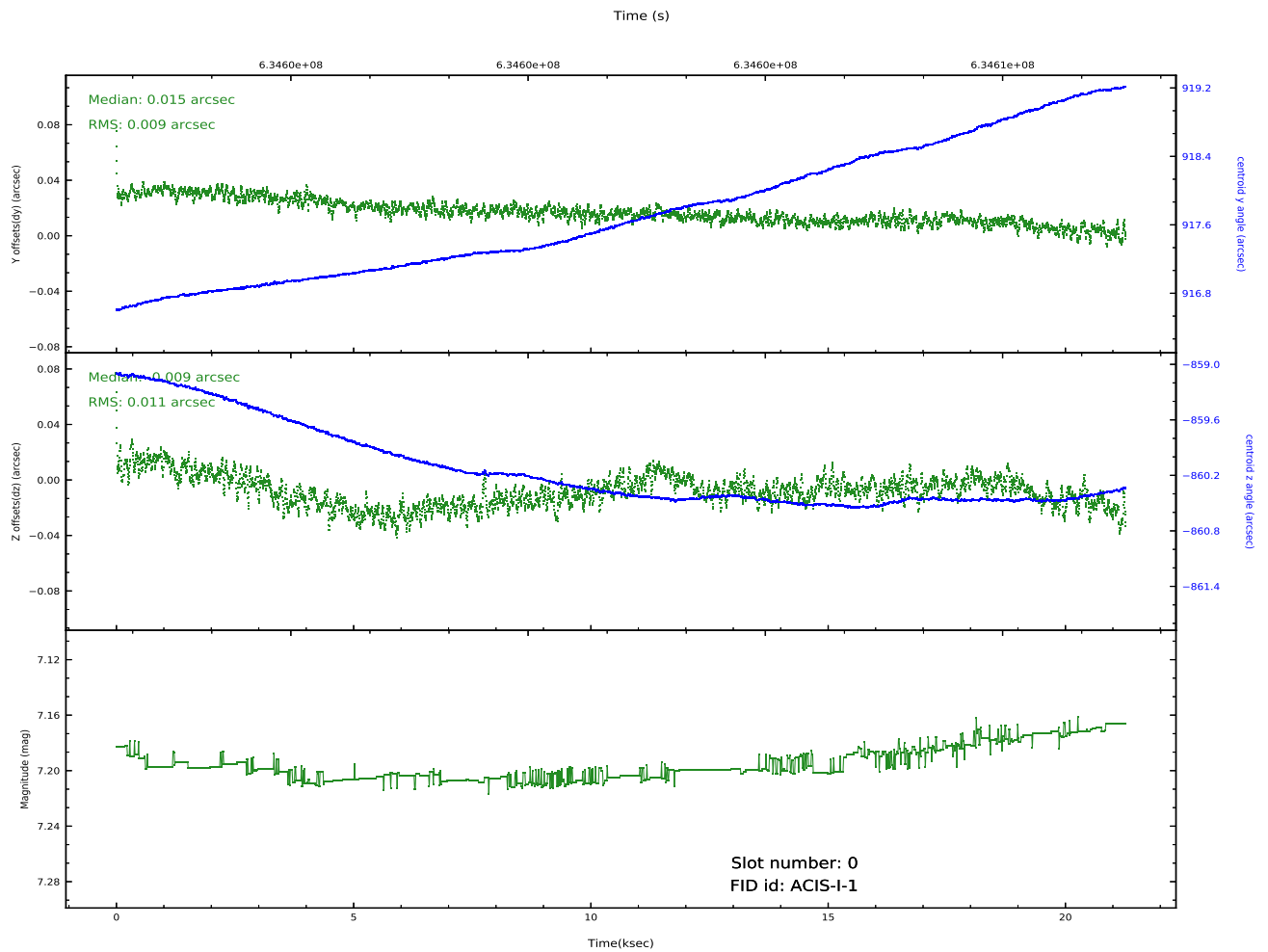
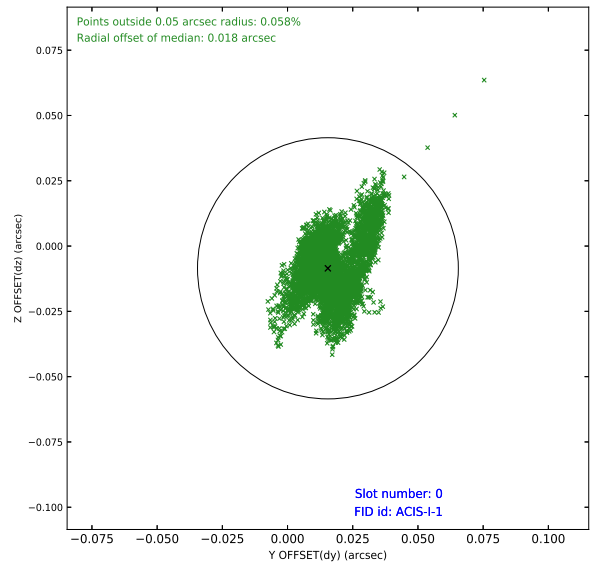
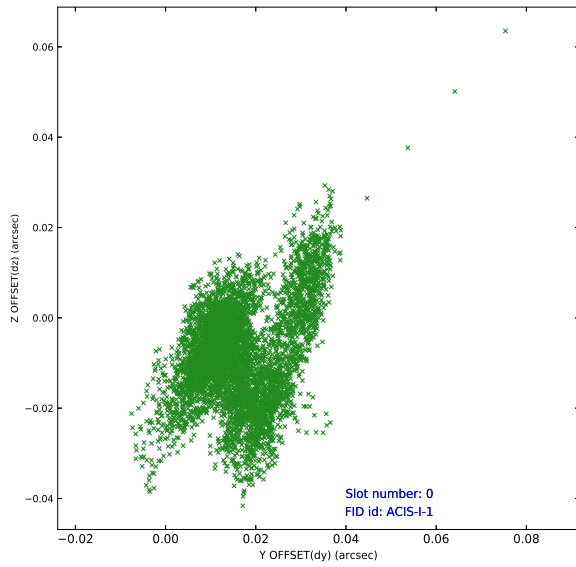


Time (s)

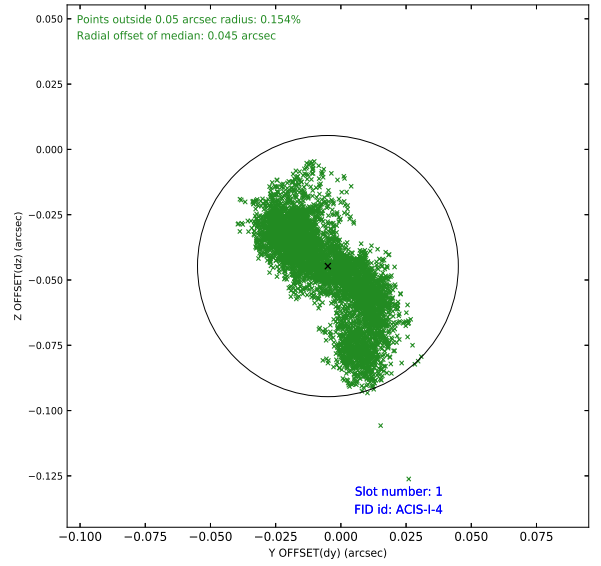
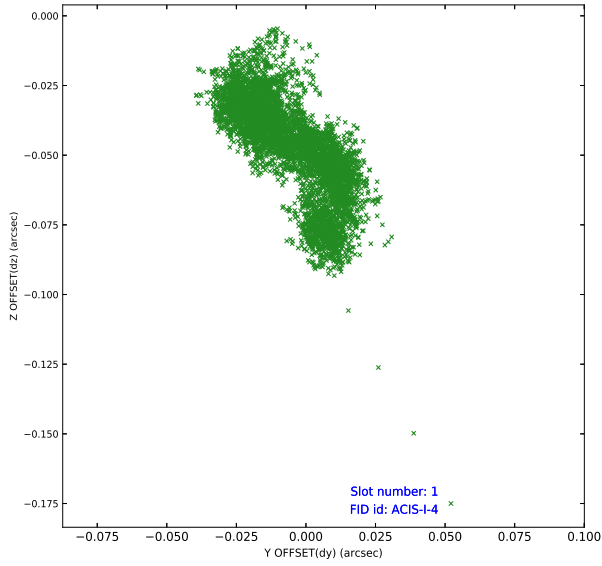


2.5 FID Slots

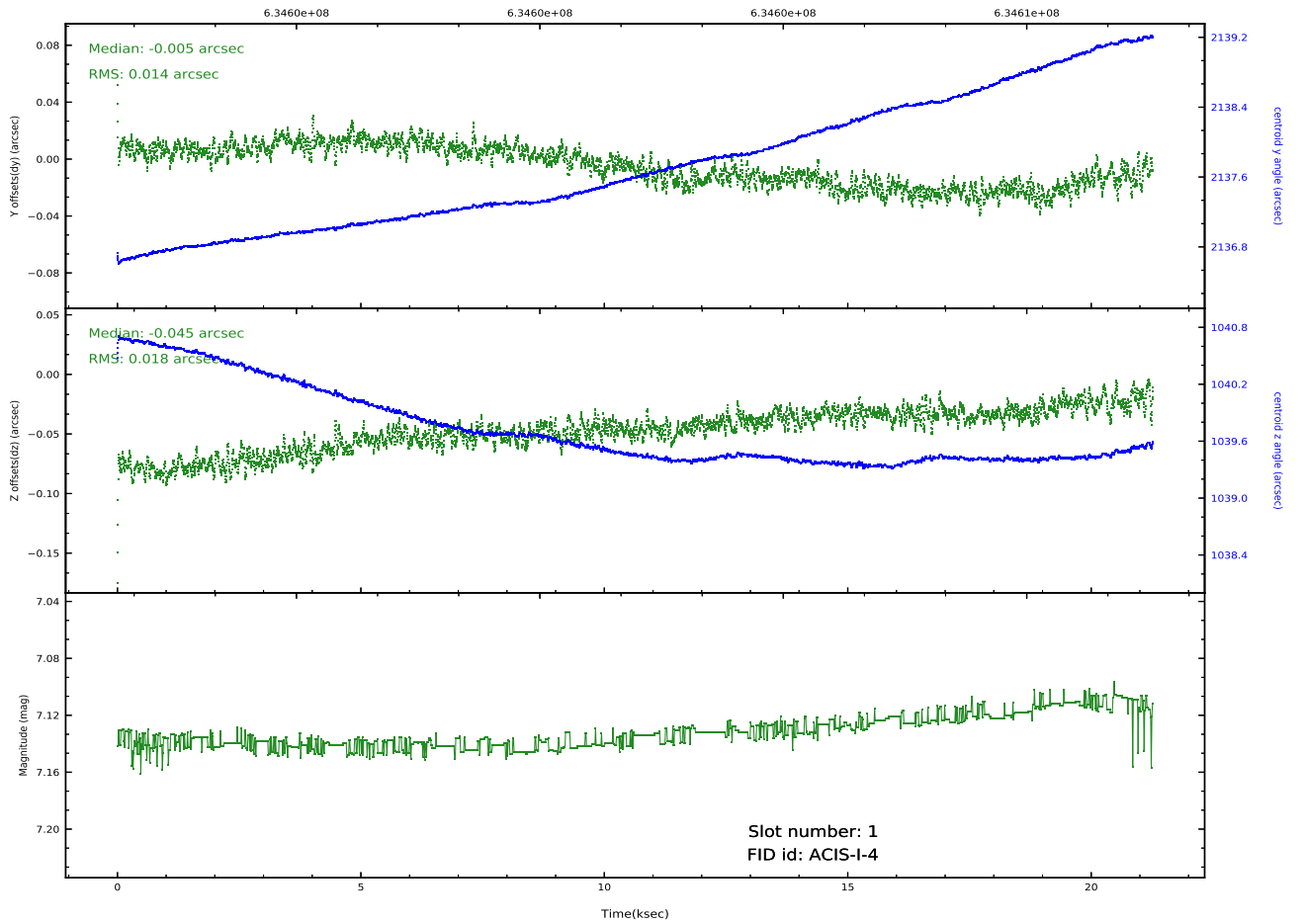
2.5.1 Slot 0



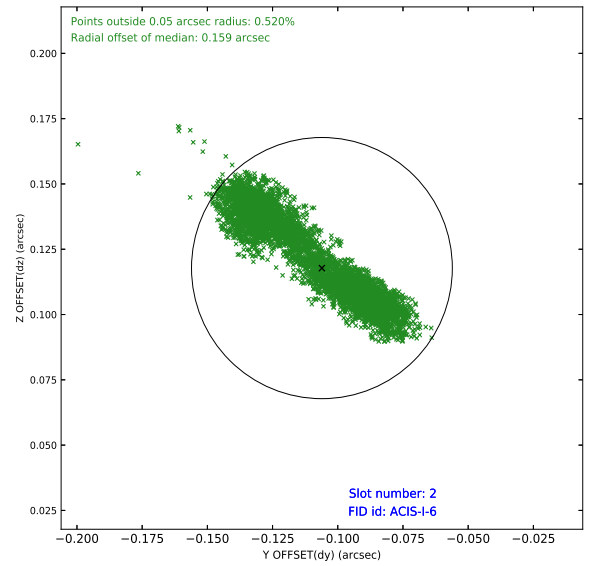
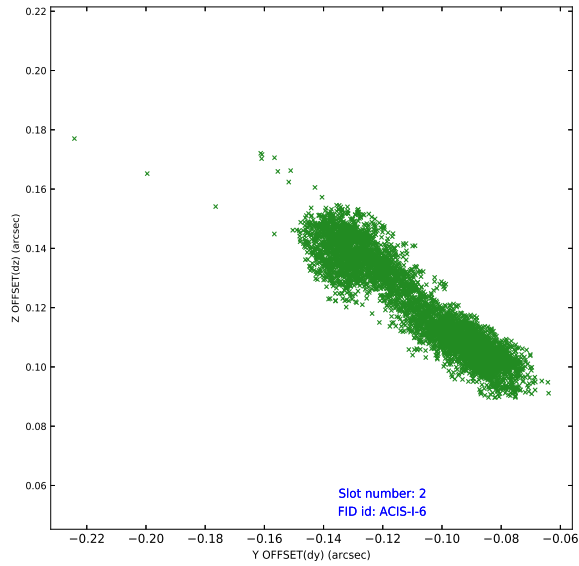
2.5.2 Slot 1



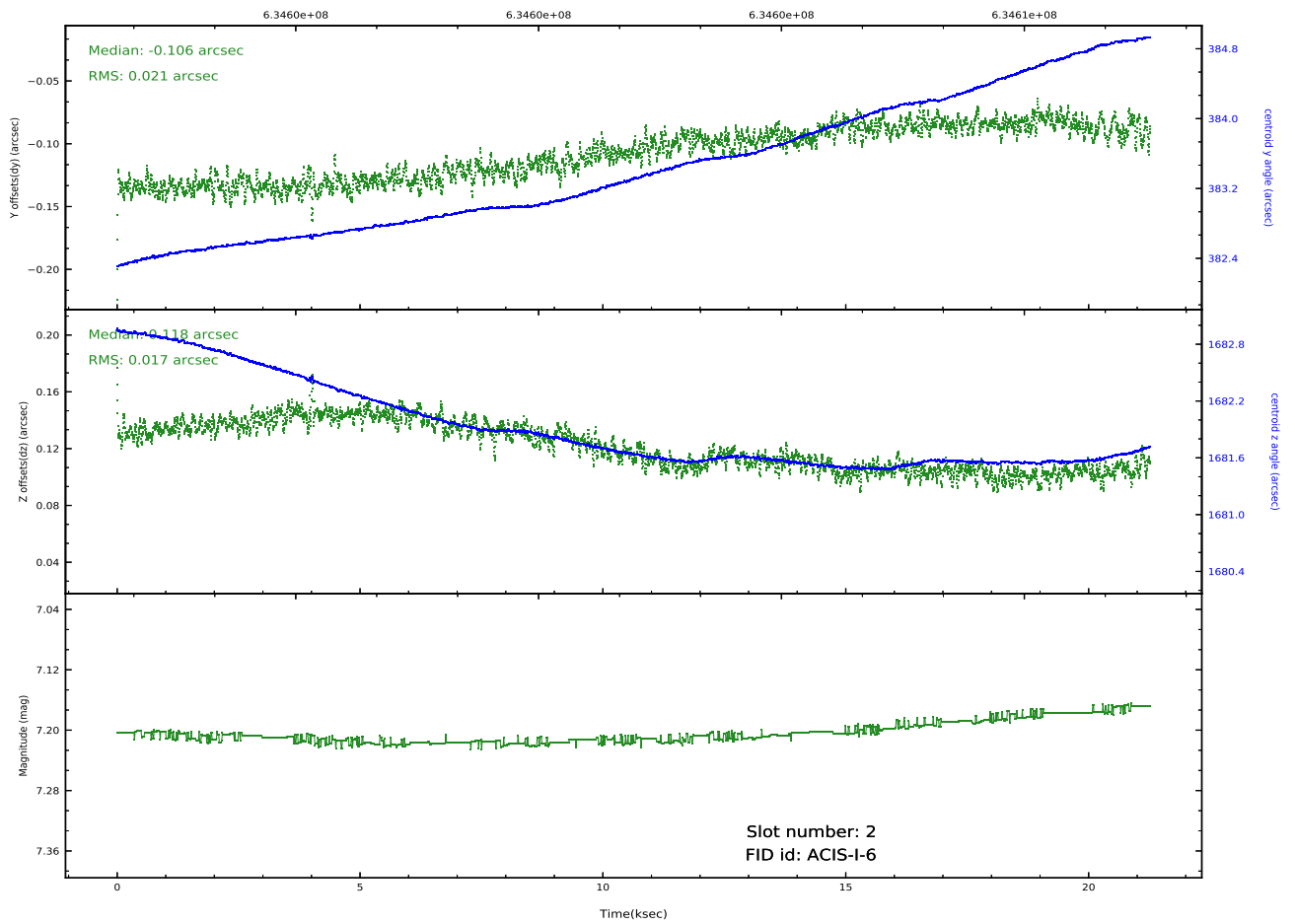
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.203860725403

A.2 Comments