

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20143 - L2 Version 2
Chandra X-Ray Center

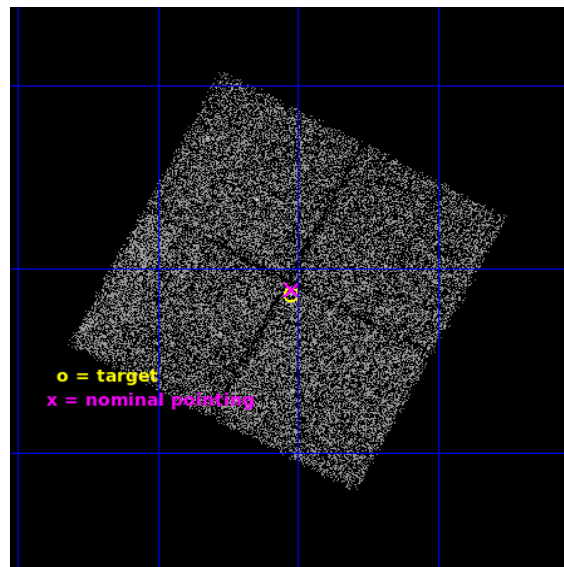
L2 Processing Date : Oct 26 2020

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1 Front

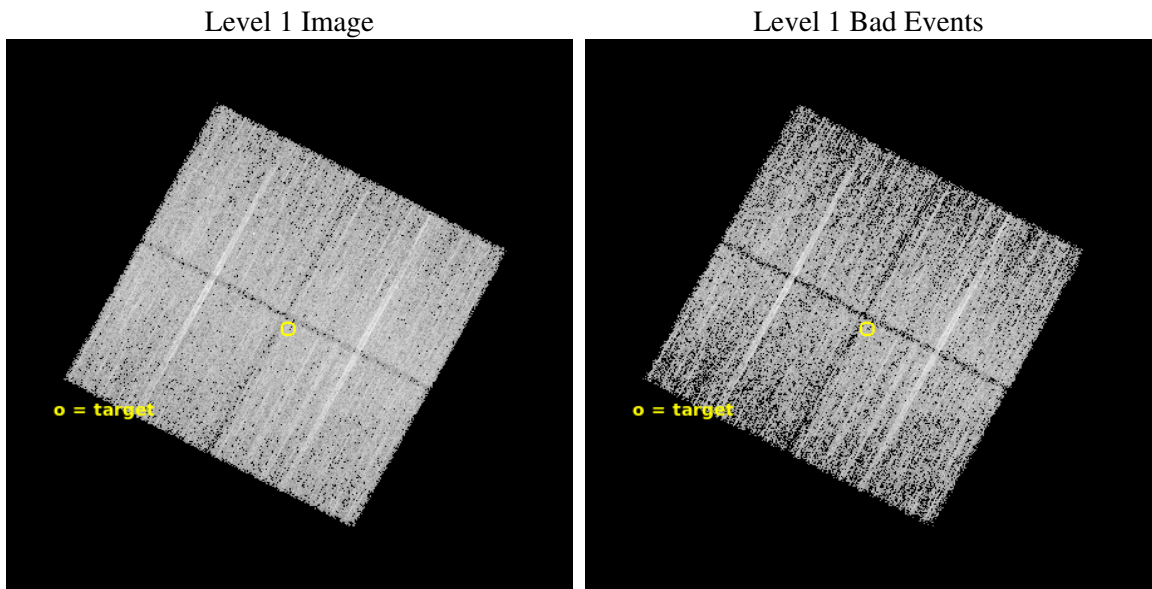
seq_num	201165	Sequence number
obs_id	20143	Observation id
title	LONG-OVERDUE X-RAY OBSERVATIONS OF THE EXTRAORDINARY MASSIVE ECLIPSING BINARY RY SCUTI	Proposal title
observer	Jon Mauerhan	Principal investigator
object	RY Sct	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	276.380833	Observer's specified target RA [deg]
dec_targ	-12.690028	Observer's specified target Dec [deg]
ra_nom	276.38024943565	Nominal RA [deg]
dec_nom	-12.68572055843	Nominal Dec [deg]
roll_nom	118.05799182369	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12079.28779459	Sum of GTIs [s]
livetime	11921.463006911	Livetime [s]
ontime0	12079.16467464	Sum of GTIs [s]
ontime1	12072.923644304	Sum of GTIs [s]
ontime2	12076.105724454	Sum of GTIs [s]
ontime3	12079.28779459	Sum of GTIs [s]
l2events	36973	Number of level 2 events



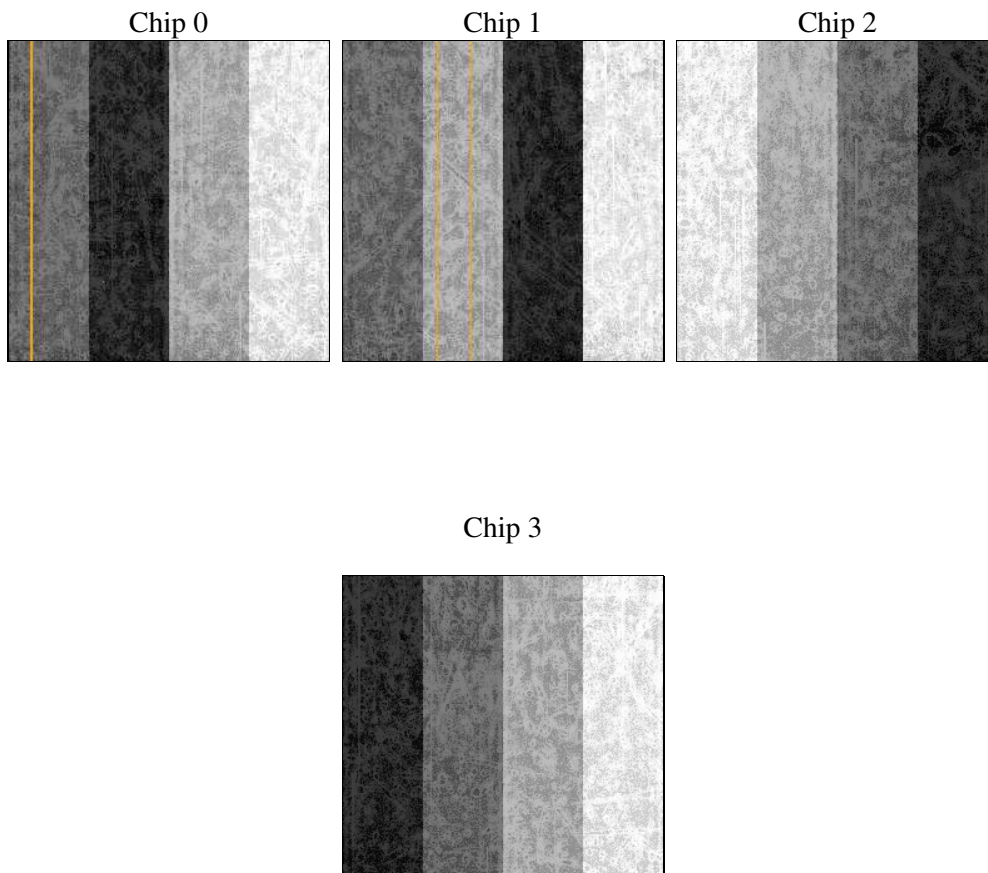
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	12079.28779459	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	12079.16467464	Sum of GTIs [s]
date	2020-10-26T06:50:40	Date and time of file creation	ontime1	12072.923644304	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	12076.105724454	Sum of GTIs [s]
			ontime3	12079.28779459	Sum of GTIs [s]
			l1events	344665	Number of level 1 events

2.1.4 Events

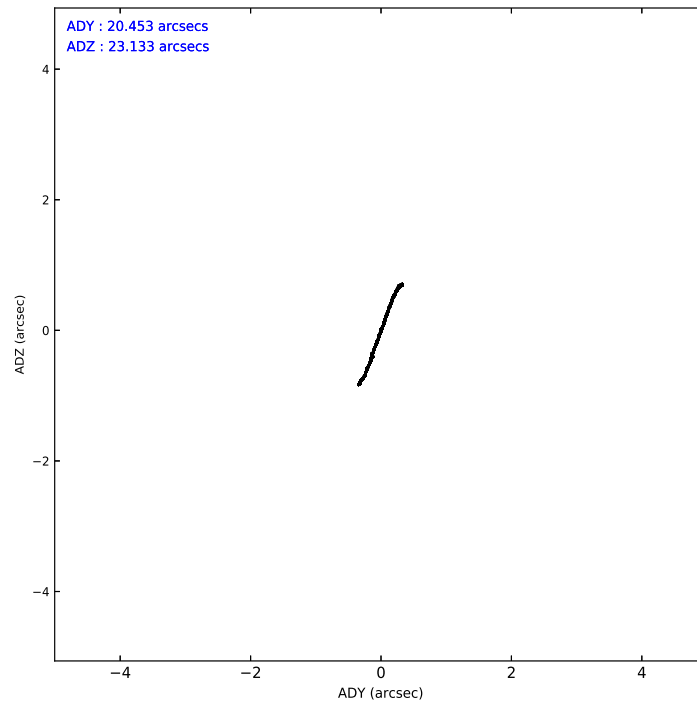
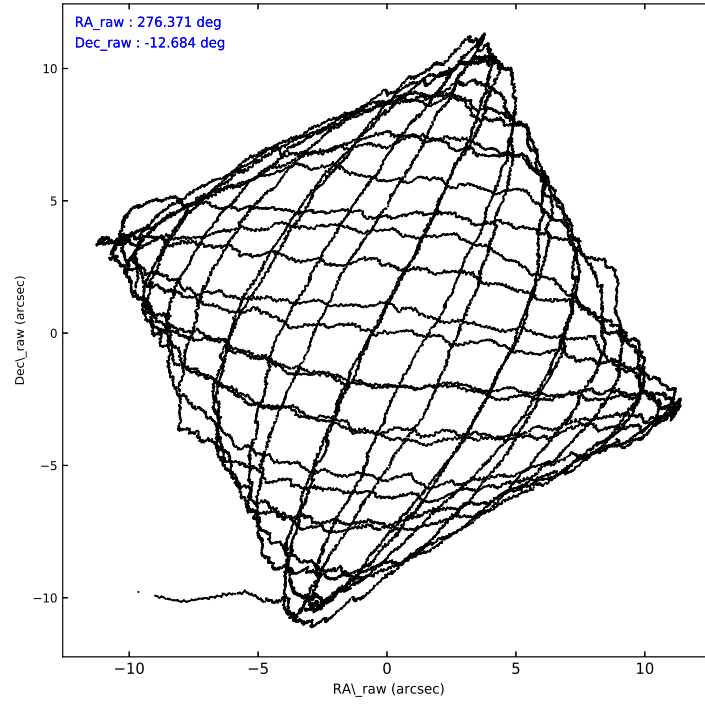
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	81170	81455	93932	88108
rejected events	70278	69492	83195	77641
rejected %	86%	85%	88%	88%

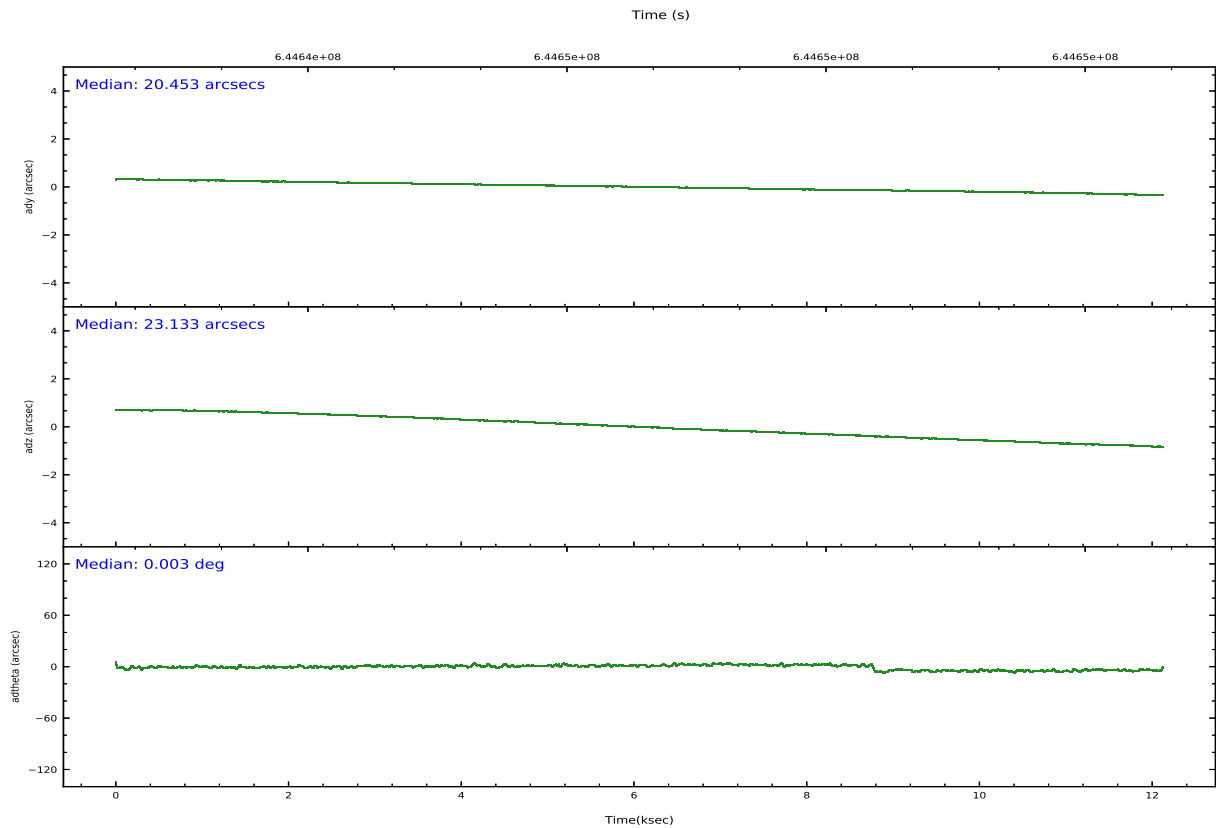
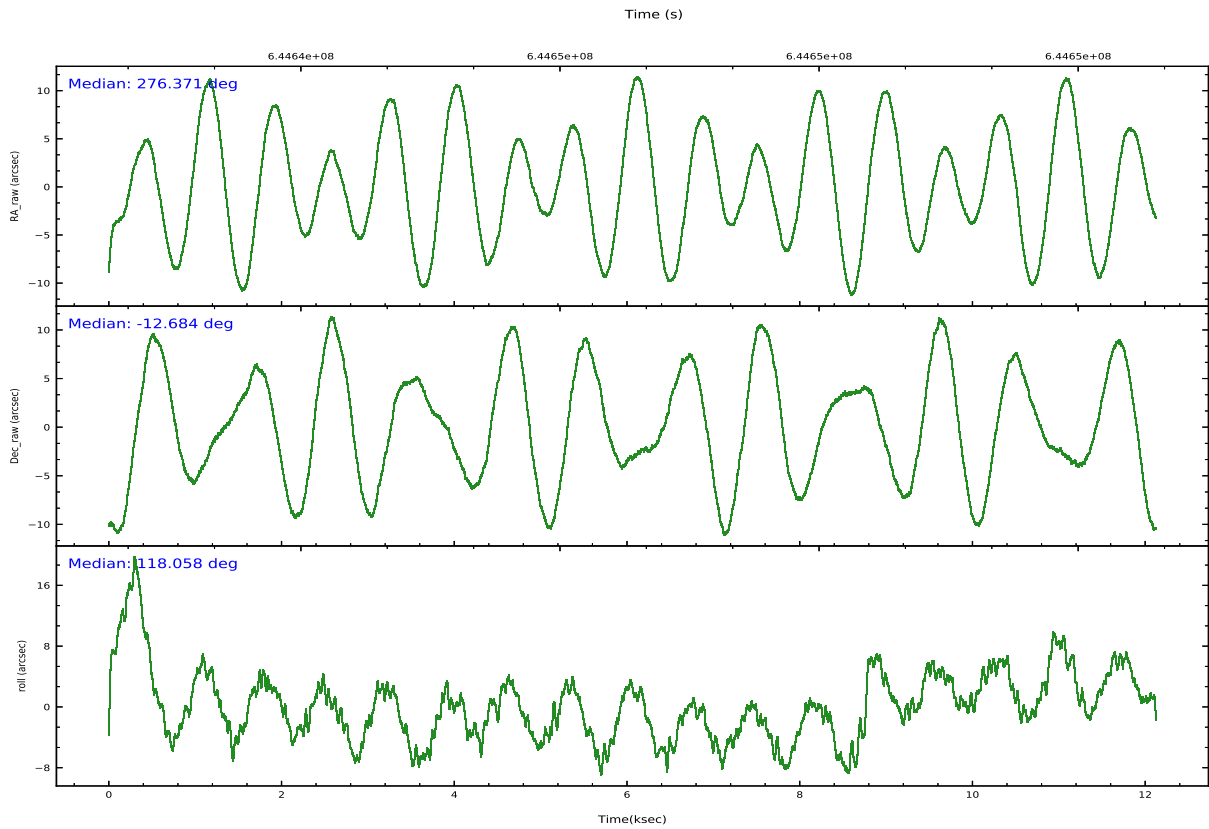
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4054	4499	4017	4055
	4%	5%	4%	4%
grade 1 events	42	52	61	47
	0%	0%	0%	0%
grade 2 events	2609	2910	2704	2307
	3%	3%	2%	2%
grade 3 events	1057	1067	942	1005
	1%	1%	1%	1%
grade 4 events	1009	1048	1036	1028
	1%	1%	1%	1%
grade 5 events	3723	3981	3603	4305
	4%	4%	3%	4%
grade 6 events	2171	2449	2043	2073
	2%	3%	2%	2%
grade 7 events	66505	65449	79526	73288
	81%	80%	84%	83%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	276.395488	276.38024943565	Subarray requested	NONE	NONE
[deg] Pointing Dec	-12.698107	-12.68572055843	Alternating exposures requested	N	N
[deg] Pointing Roll	117.858493	118.05799182369	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	644641903.184000	644640602.41009			
Observation start date	2018-06-06T03:10:34	2018-06-06T02:50:02			
[s] Observation end time (MET)	644653903.184000	644655267.08595			
Observation end date	2018-06-06T06:30:34	2018-06-06T06:54:27			
Read mode	TIMED	TIMED			

2.3 Aspect



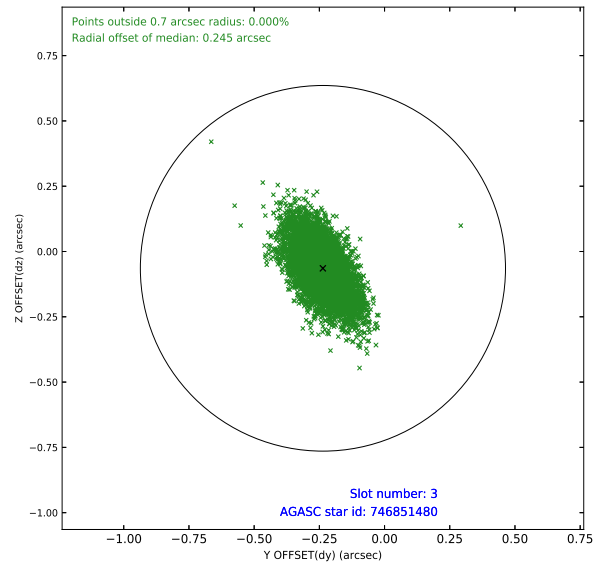
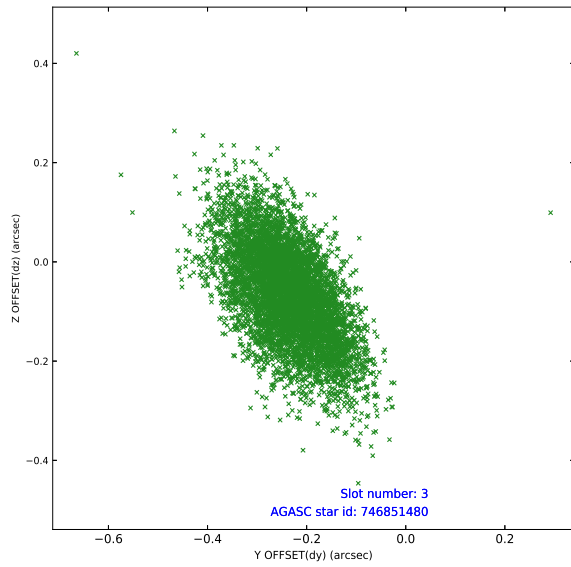


Slot Statistics

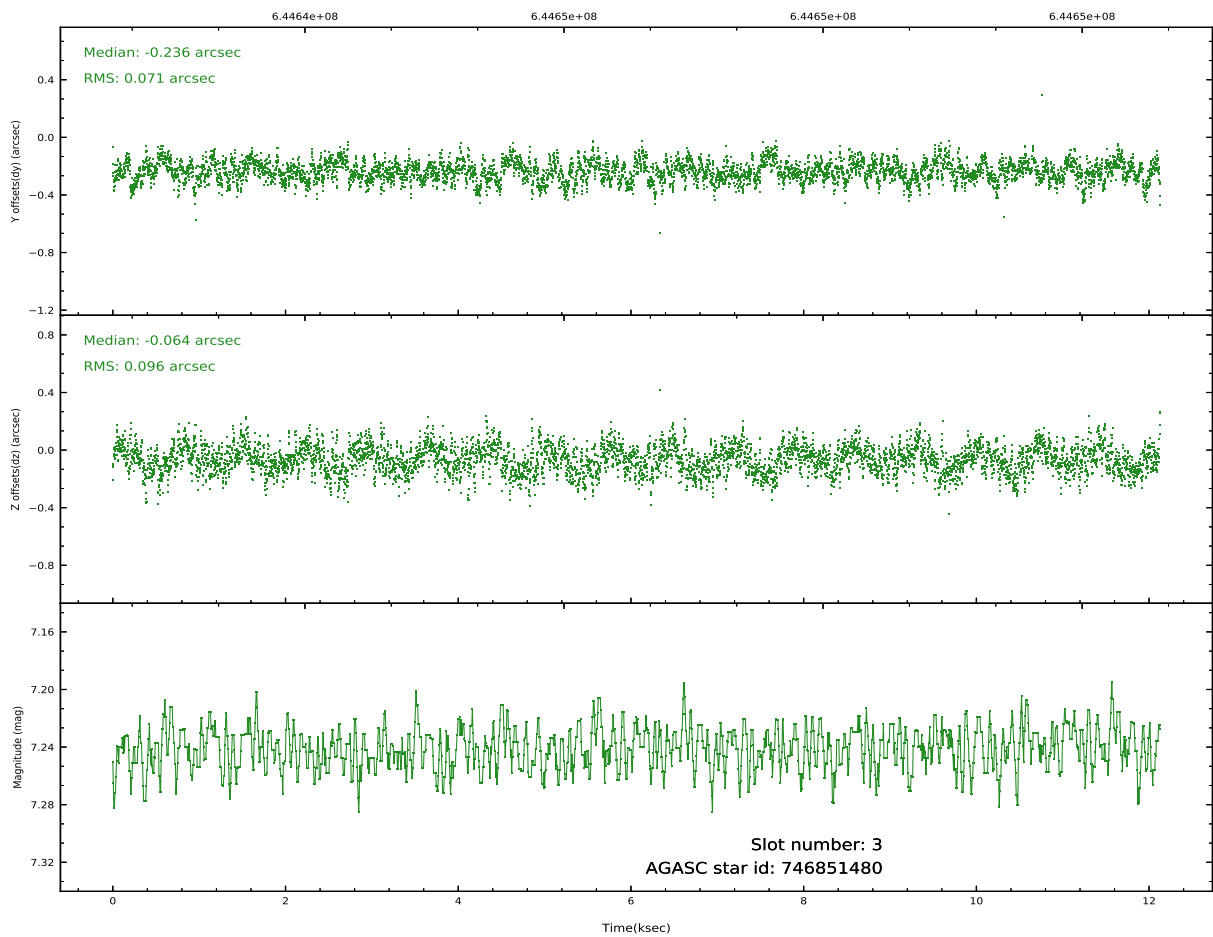
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.10	2958	1.000	0.011	-0.000	0.017	0.083	0.000000	0.000000	918.79	-847
1	FID		ACIS-I-2	7.00	2959	1.000	-0.042	0.055	0.017	0.034	0.000000	0.000000	-775.13	-853
2	FID		ACIS-I-4	7.06	2958	1.000	-0.068	0.014	0.018	0.074	0.000000	0.000000	2138.56	1052
3	GUIDE	used	746851480	7.24	5917	1.000	-0.236	-0.064	0.123	0.214	275.998802	-12.584966	1010.60	1042
4	GUIDE	used	746854952	8.46	5914	1.000	0.250	0.137	0.140	0.232	276.590453	-12.990635	-1250.05	-112
5	GUIDE	used	746872264	7.39	5917	1.000	-0.187	-0.092	0.132	0.227	276.174051	-12.475071	1073.29	313
6	GUIDE	used	746890536	8.07	5912	1.000	-0.033	-0.062	0.110	0.195	276.045818	-12.231642	2059.35	303
7	GUIDE	used	746890840	7.94	5913	1.000	0.207	0.085	0.114	0.199	276.049030	-12.214006	2110.61	263

2.4 Star Slots

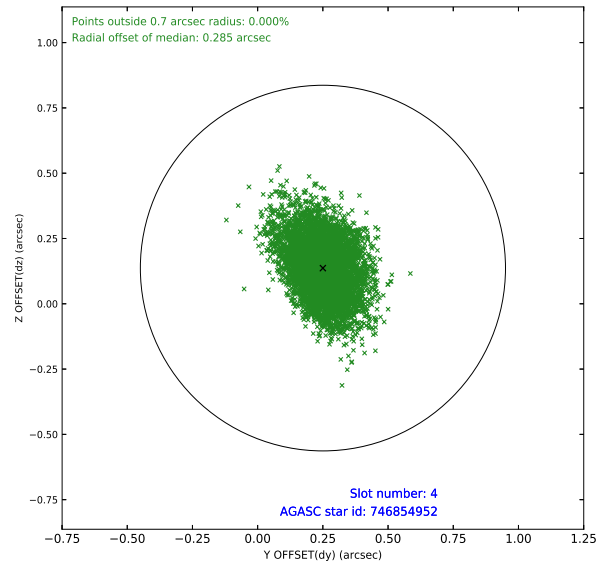
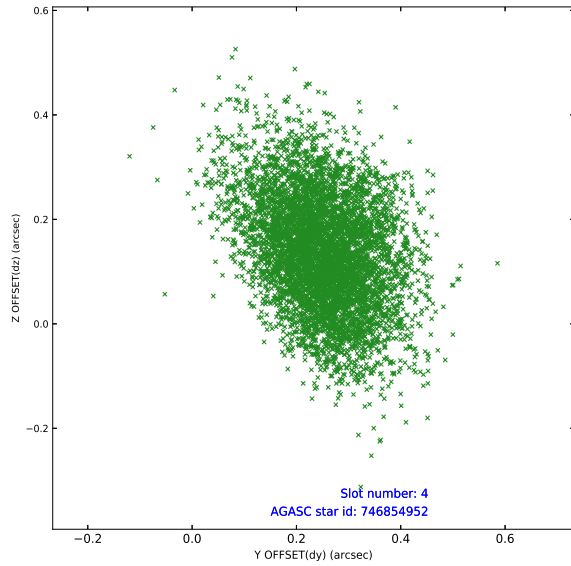
2.4.1 Slot 3



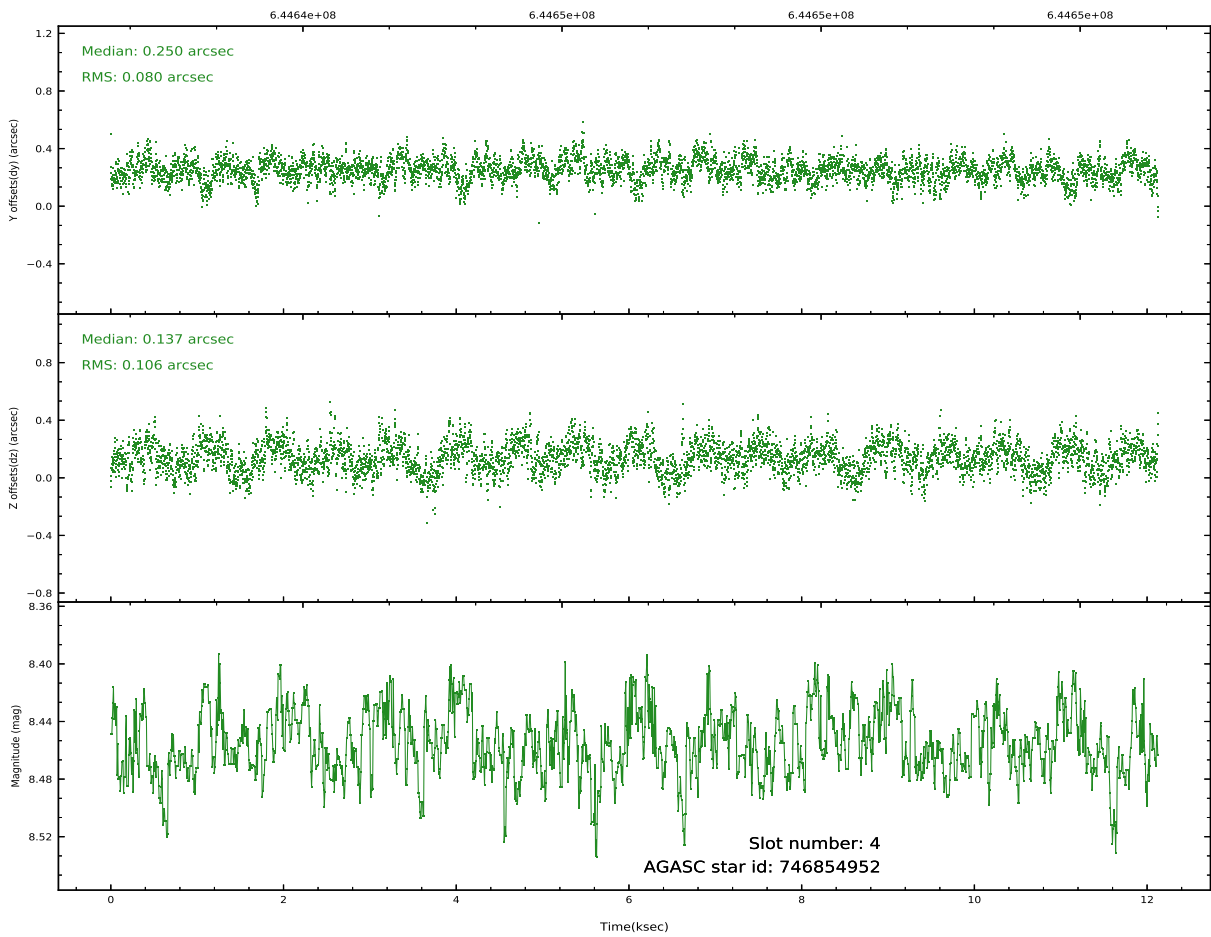
Time (s)



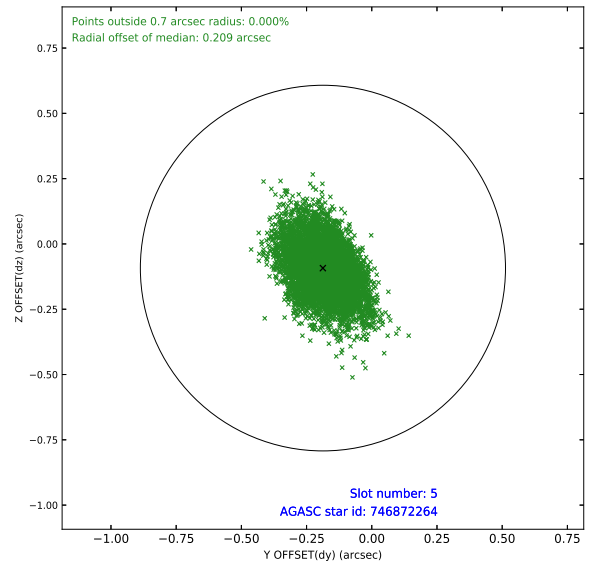
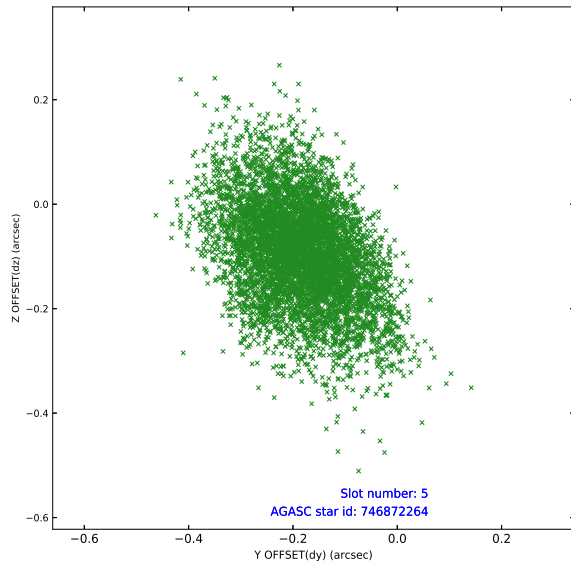
2.4.2 Slot 4



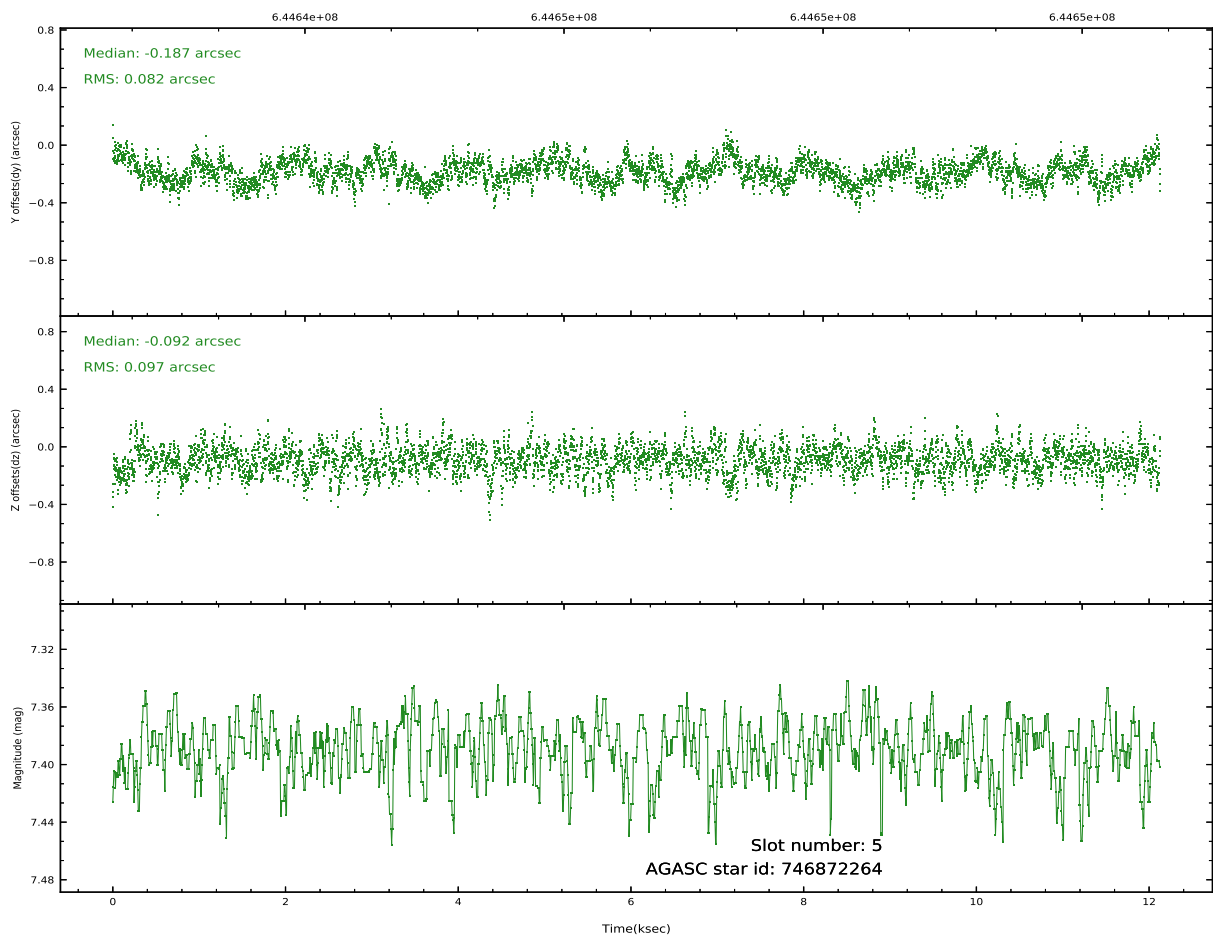
Time (s)



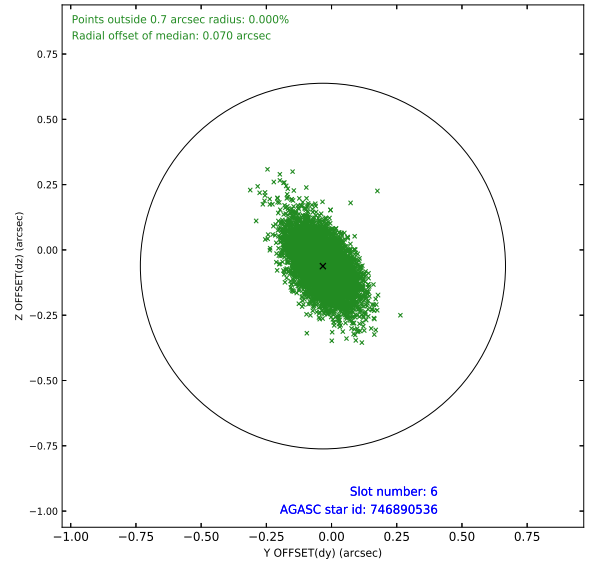
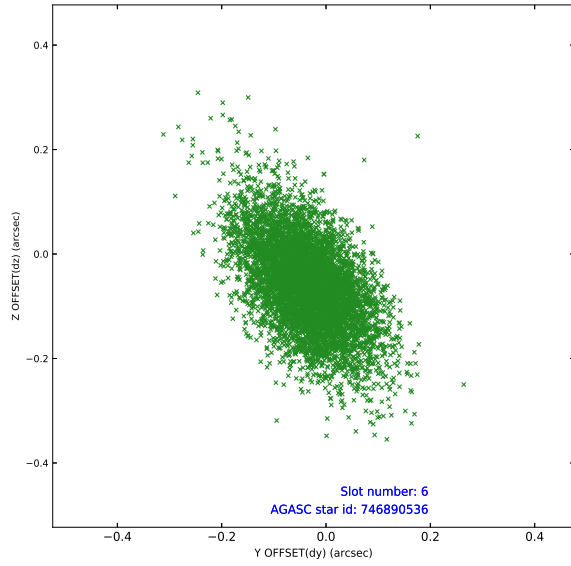
2.4.3 Slot 5



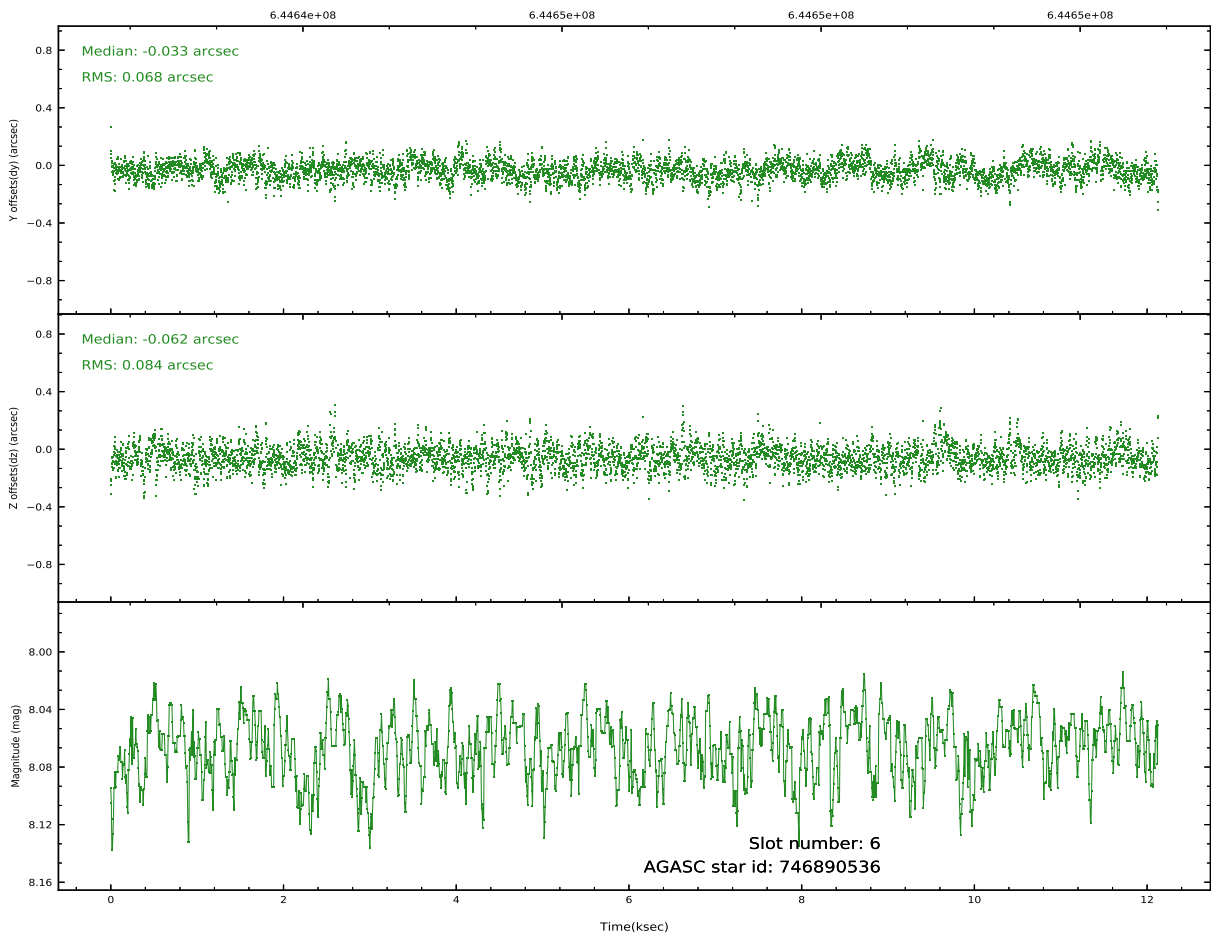
Time (s)



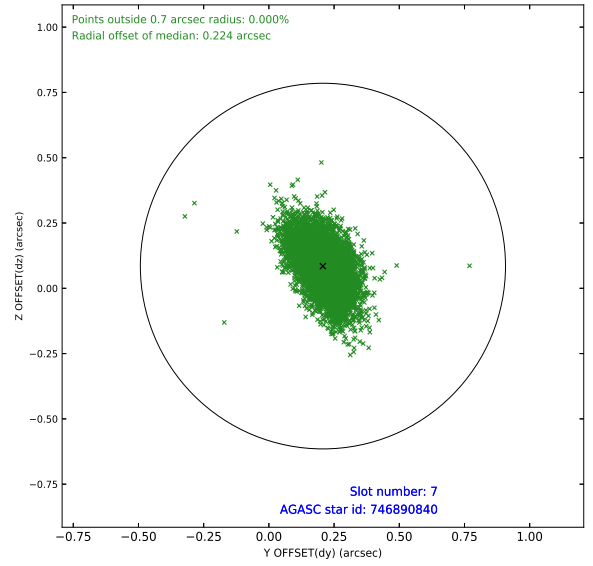
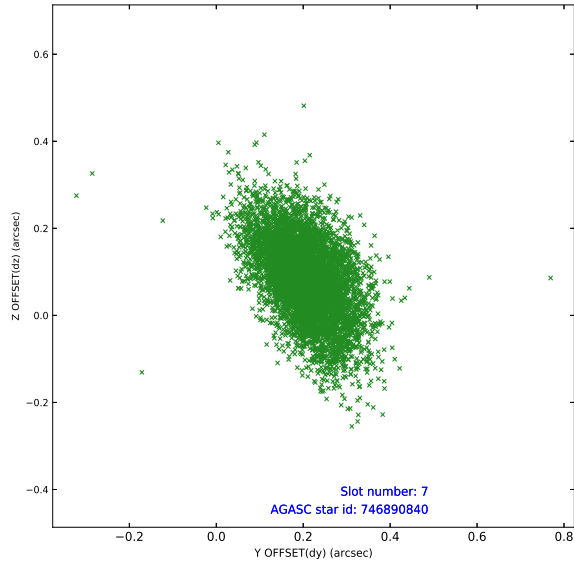
2.4.4 Slot 6



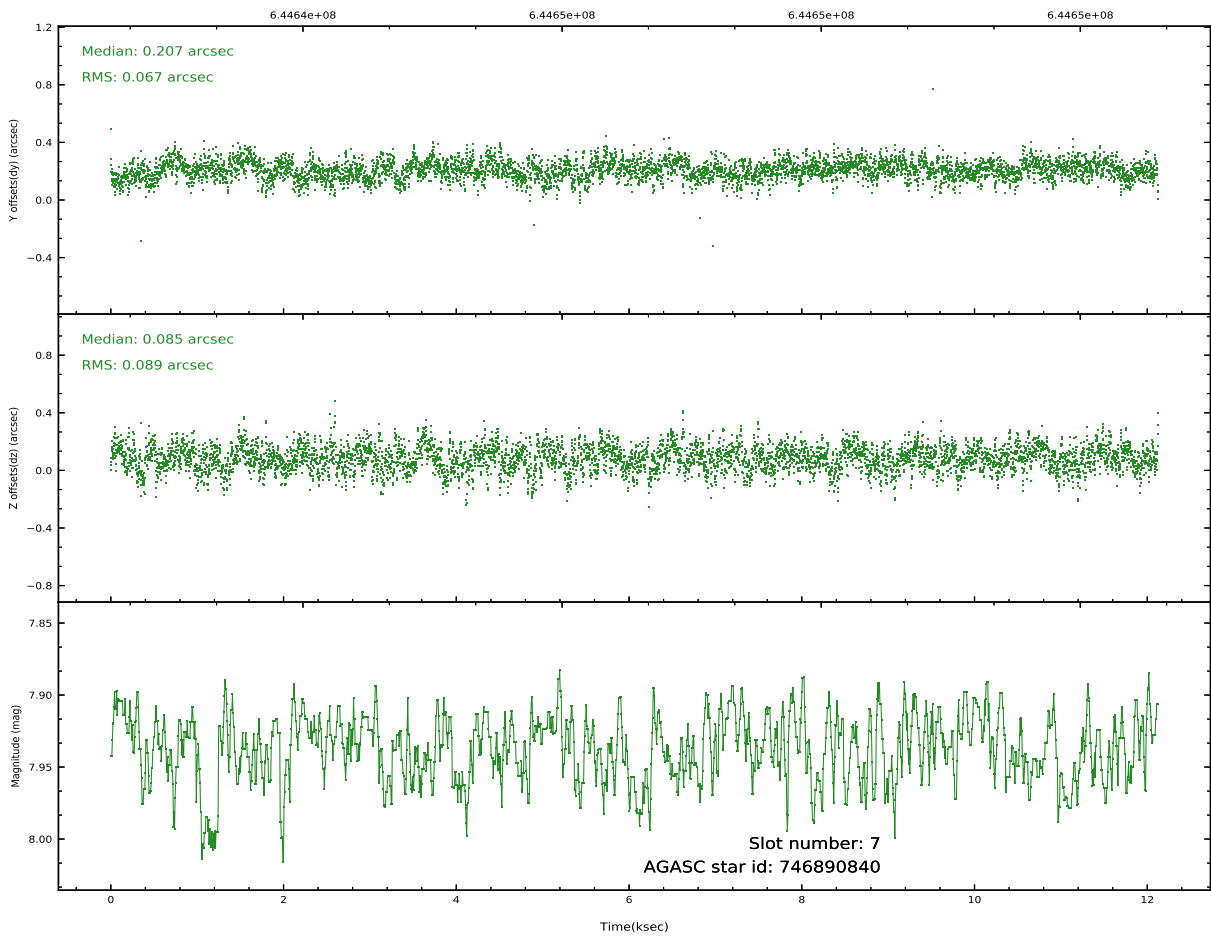
Time (s)



2.4.5 Slot 7

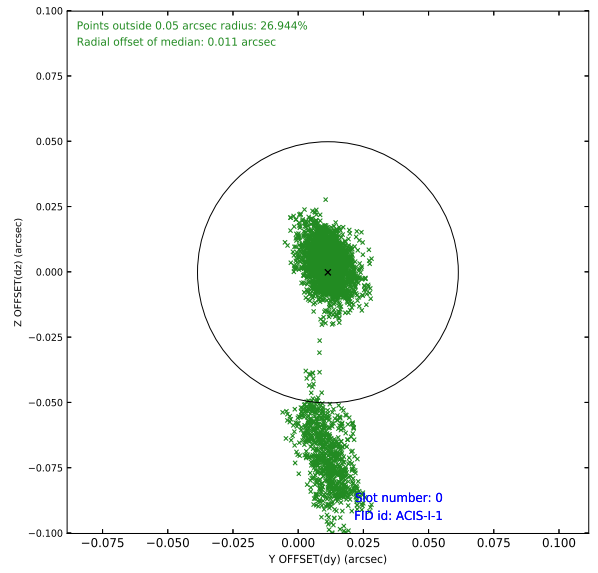
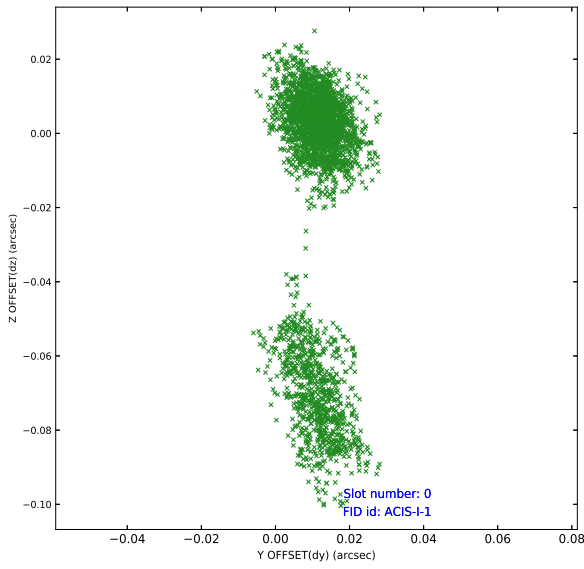


Time (s)

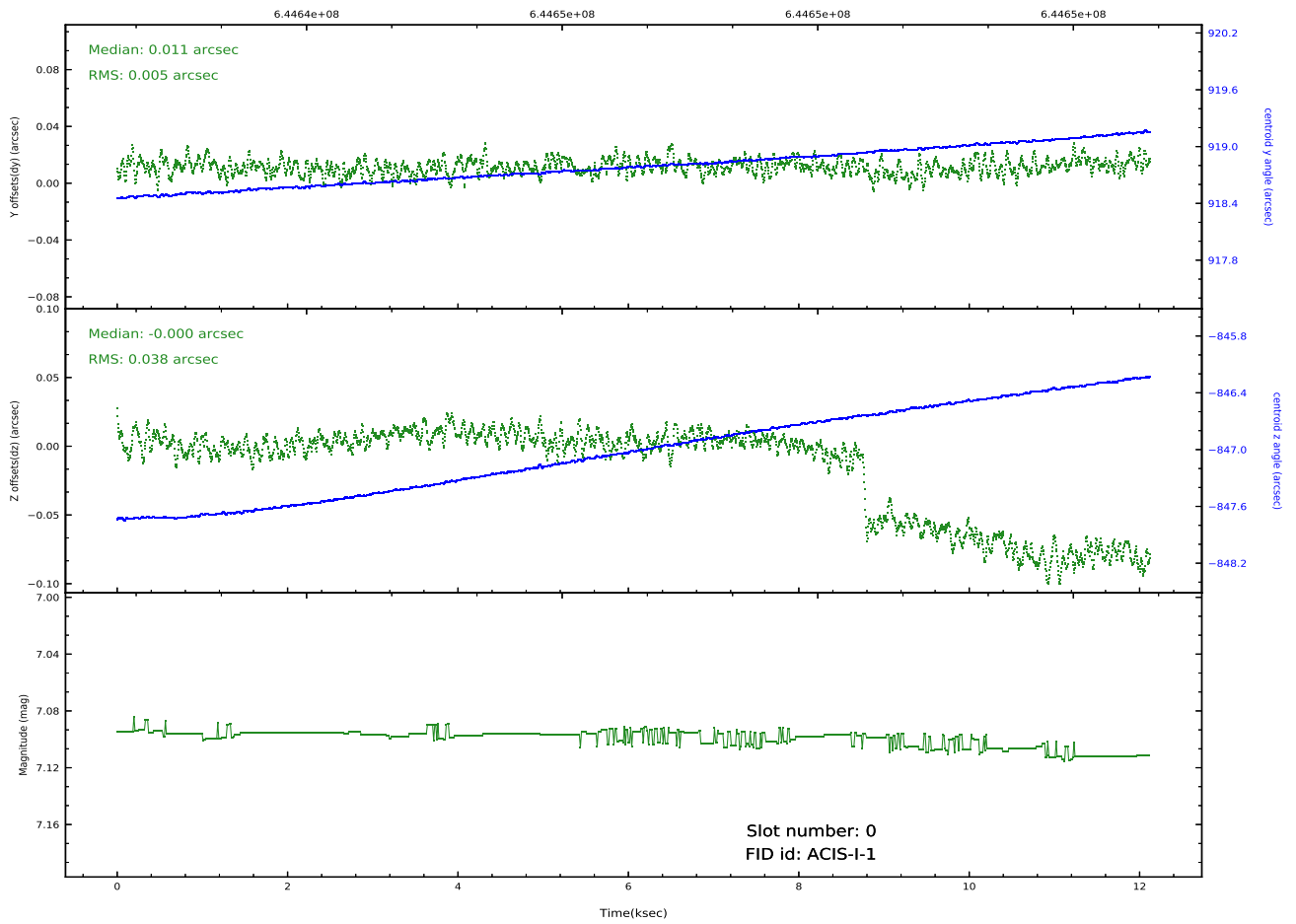


2.5 FID Slots

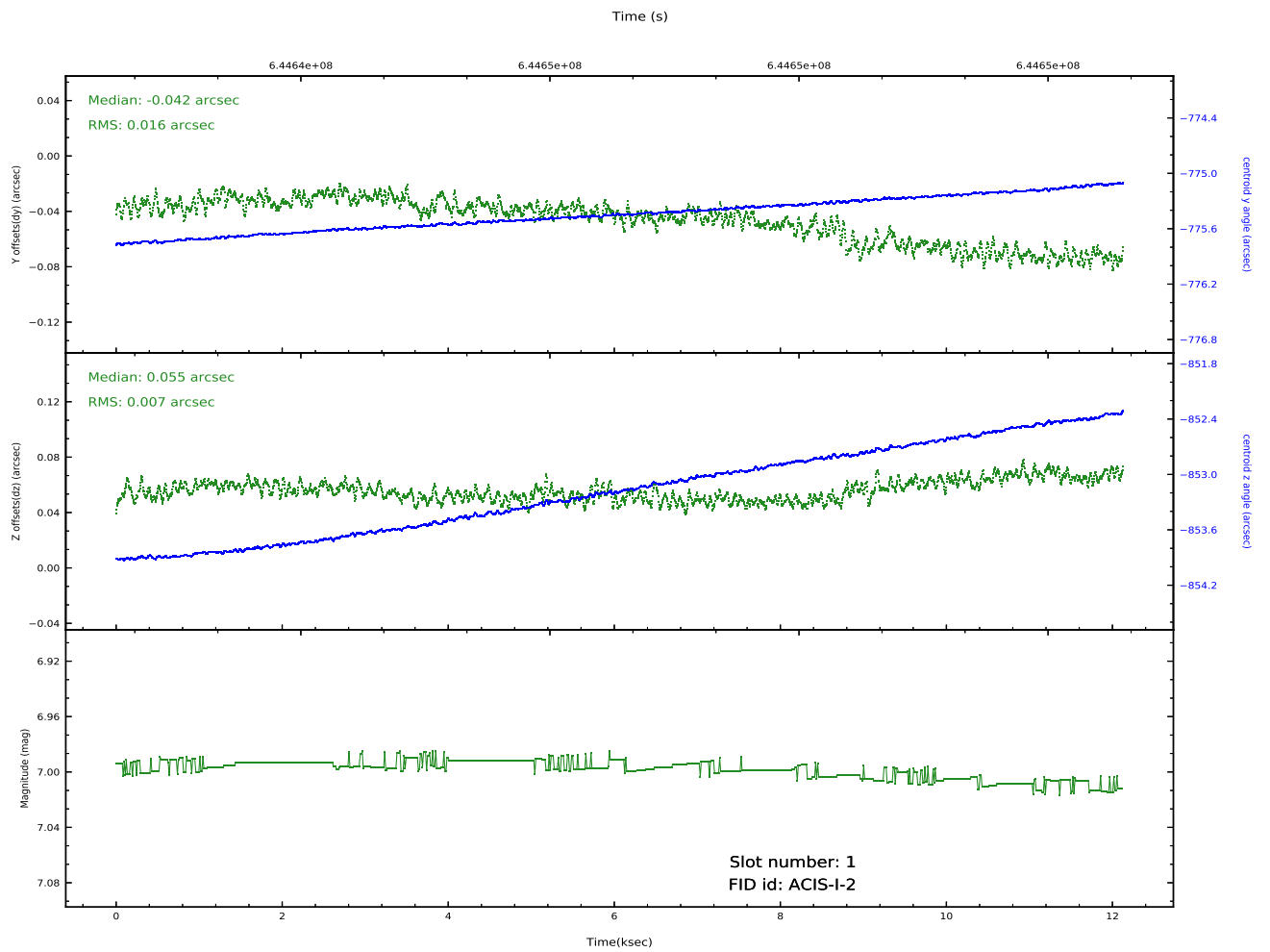
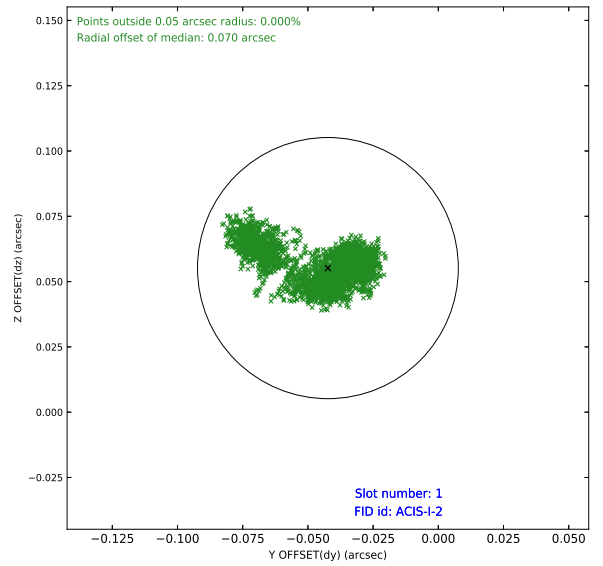
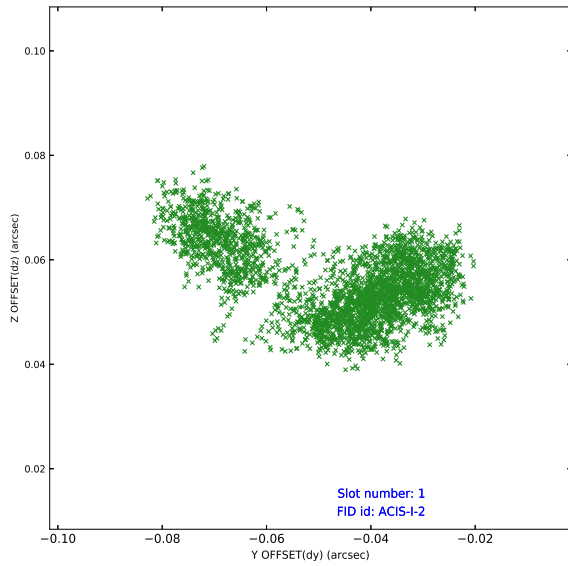
2.5.1 Slot 0



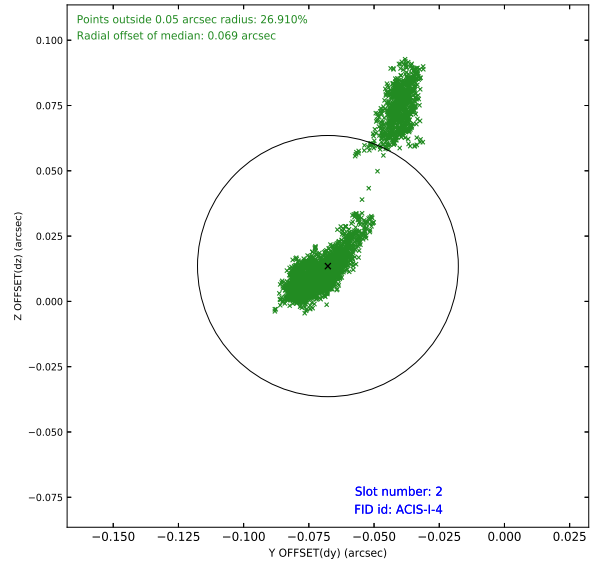
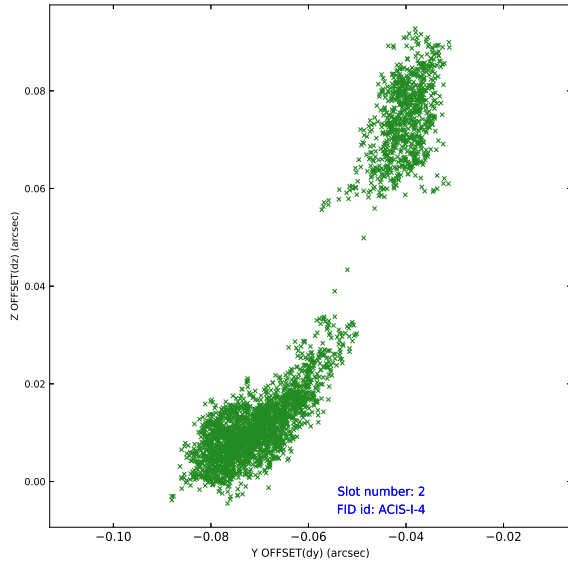
Time (s)



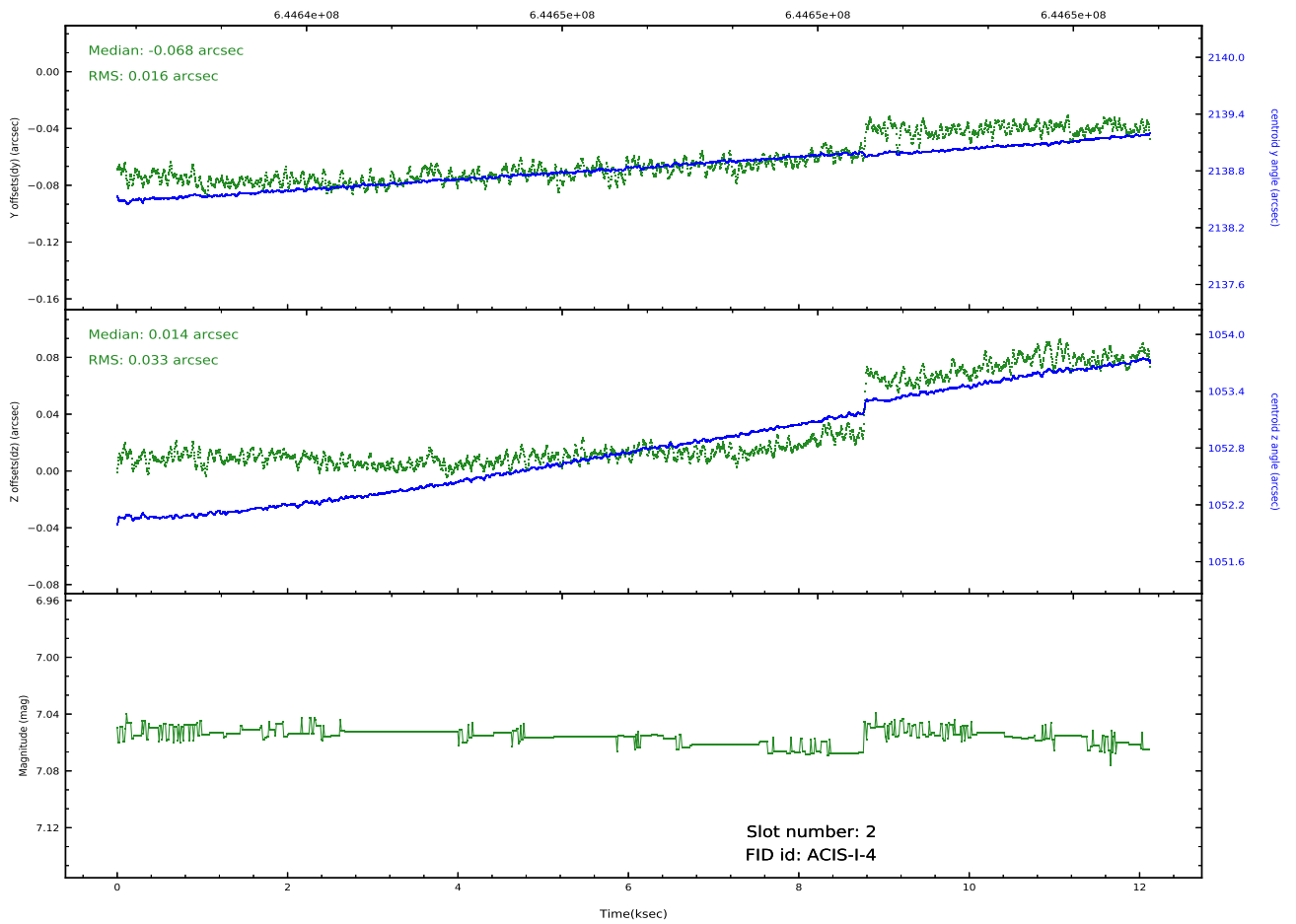
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.079287770987

A.2 Comments