

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20641 - L2 Version 2
Chandra X-Ray Center

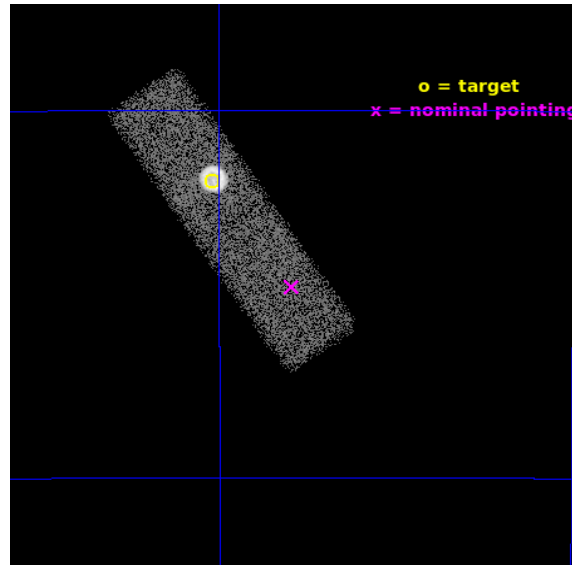
L2 Processing Date : Oct 24 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

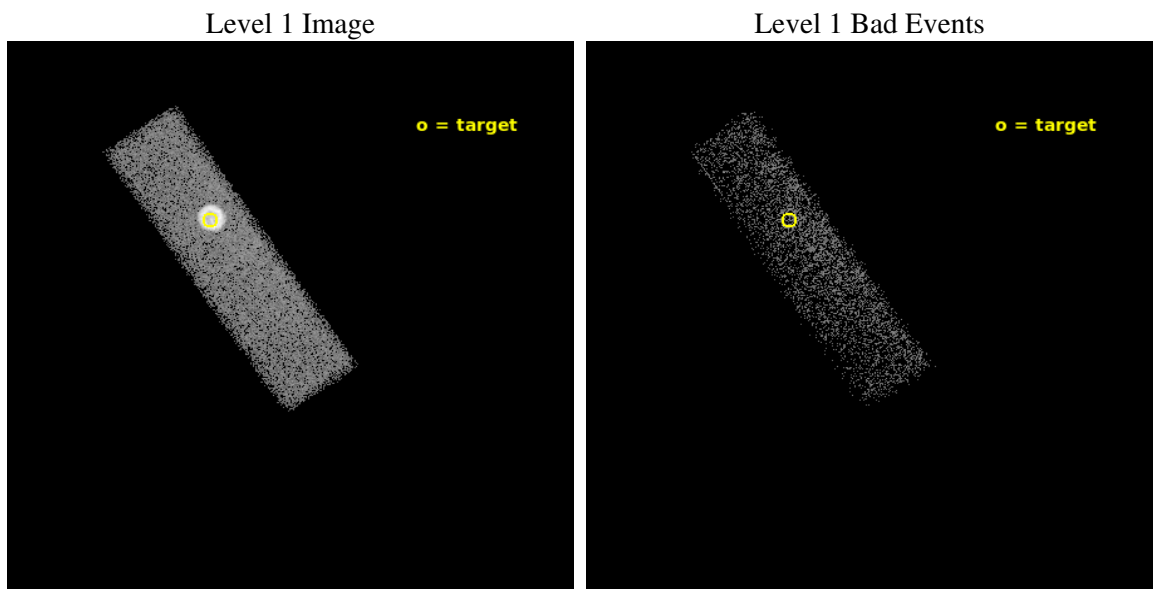
seq_num	590559	Sequence number
obs_id	20641	Observation id
title	AO-19 Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.896884537687	Nominal RA [deg]
dec_nom	-72.080165496103	Nominal Dec [deg]
roll_nom	236.04843032825	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20063.742167592	Sum of GTIs [s]
livetime	19084.697201172	Livetime [s]
ontime7	20063.742167592	Sum of GTIs [s]
l2events	46333	Number of level 2 events



2 OBI

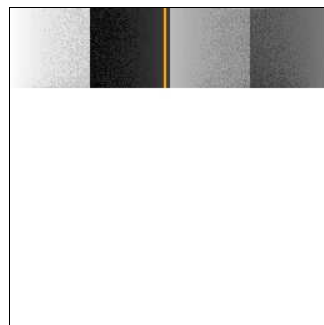
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	20063.742167592	Sum of GTIs [s]
caldsver	4.9.3	 	ontime7	20063.742167592	Sum of GTIs [s]
date	2020-10-24T15:40:11	Date and time of file creation	l1events	67120	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

	ccd 7
level 1 events	67120
rejected events	19943
rejected %	29%

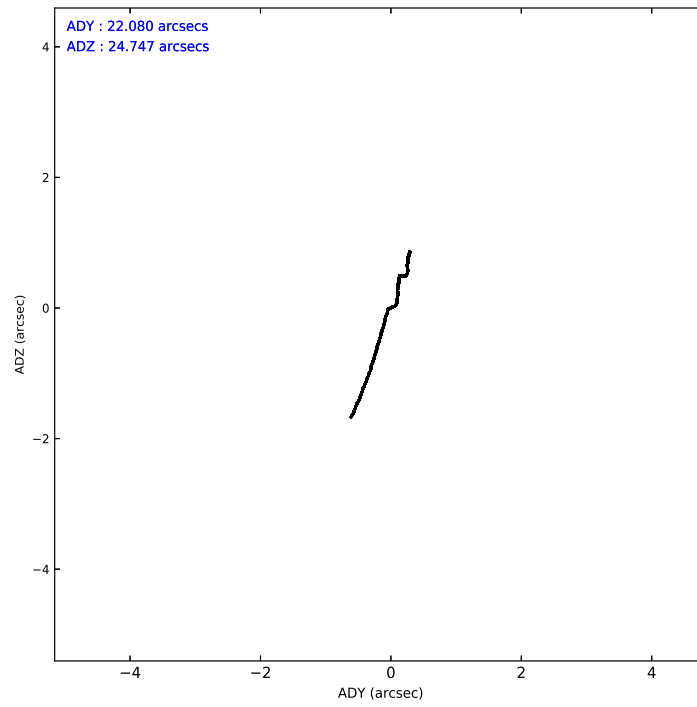
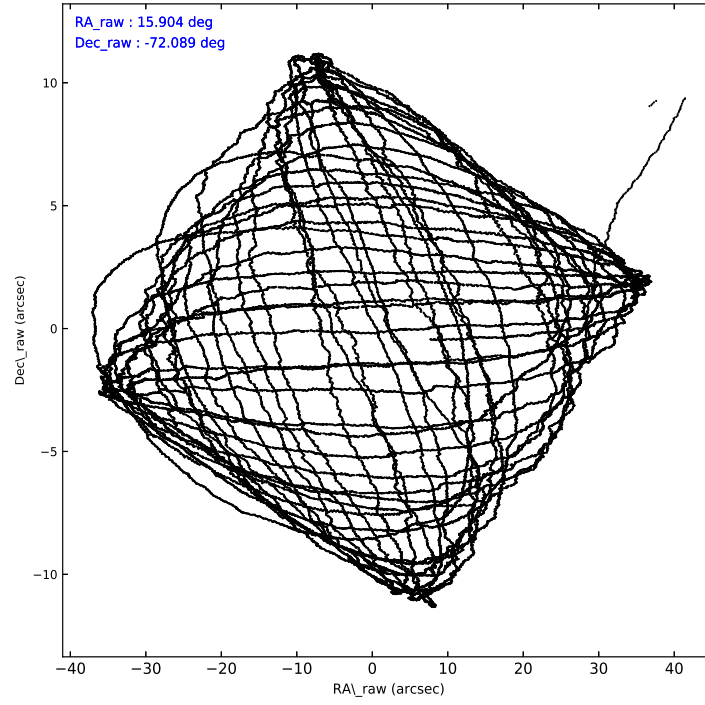
	ccd 7
grade 0 events	11545
	17%
grade 1 events	122
	0%
grade 2 events	11849
	17%
grade 3 events	5368
	7%
grade 4 events	5399
	8%
grade 5 events	4481
	6%
grade 6 events	13018
	19%
grade 7 events	15338
	22%

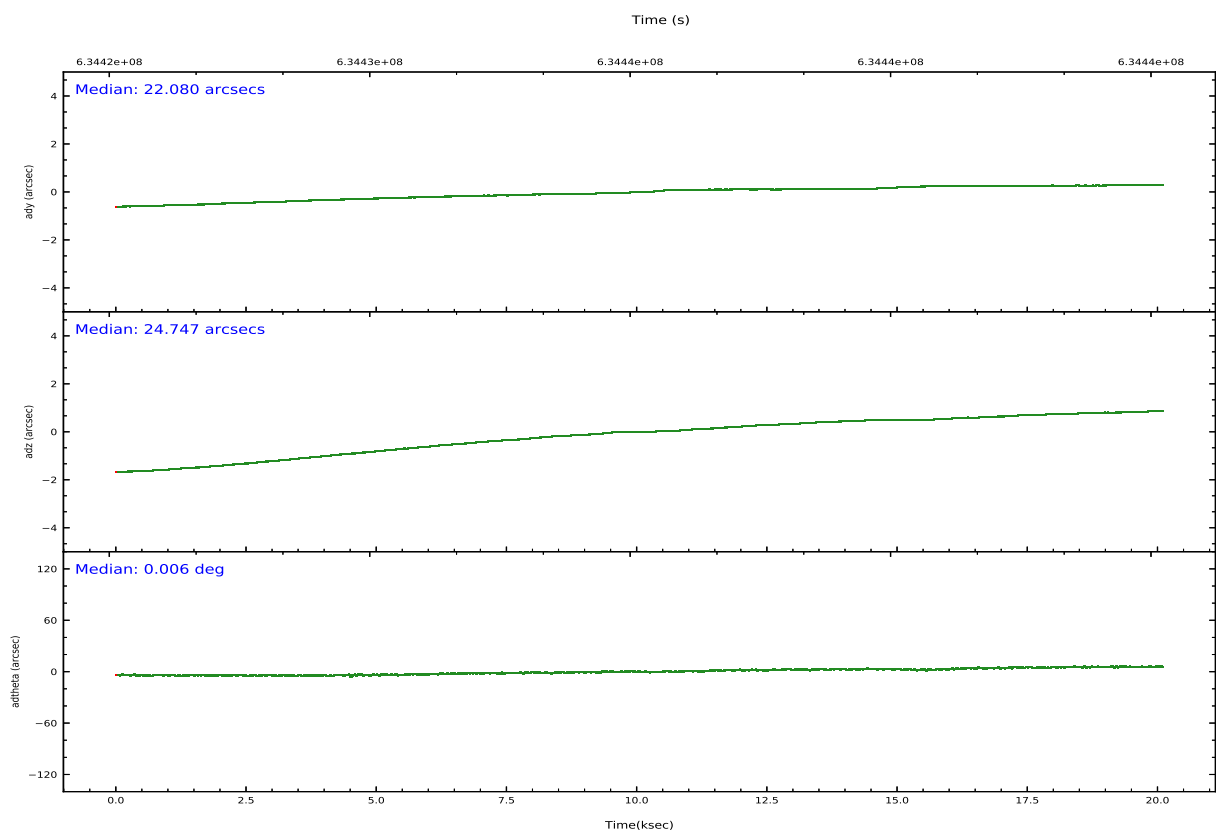
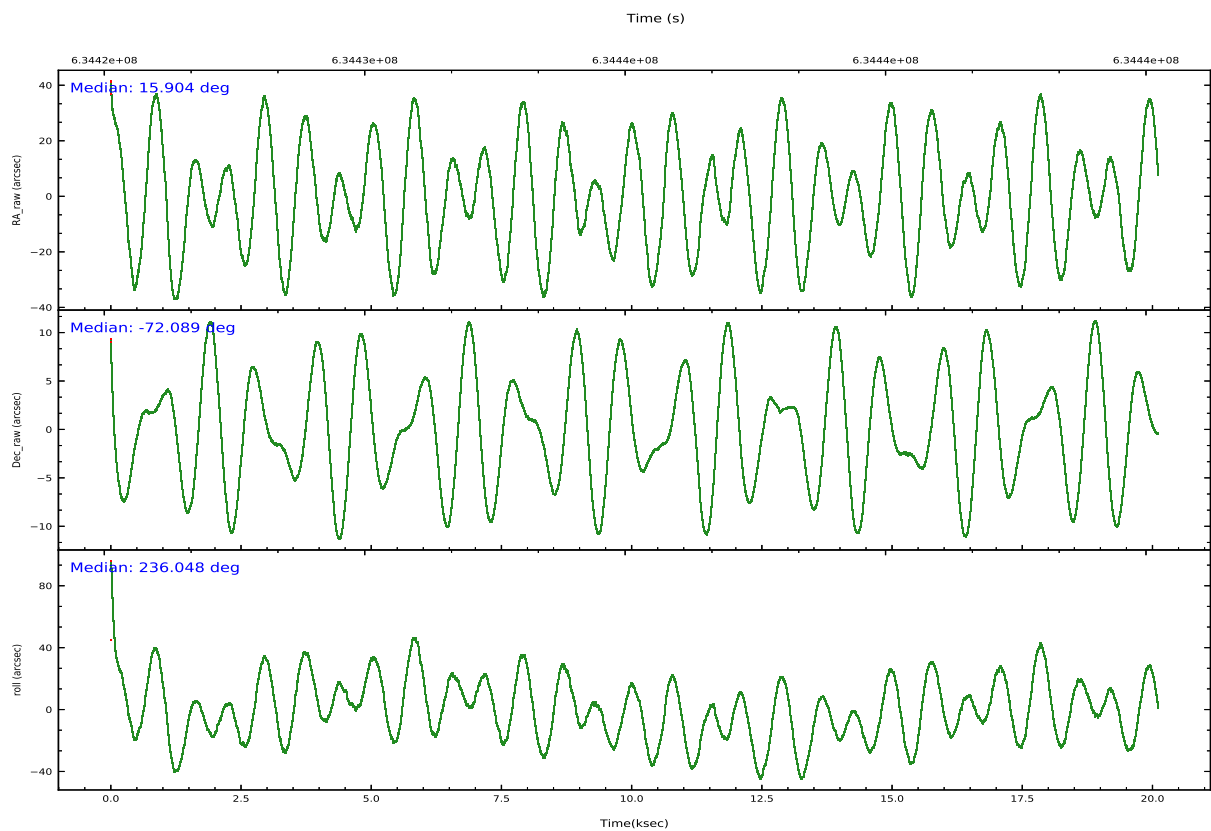
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	15.909176	15.896884537687
[deg] Pointing Dec	-72.061975	-72.08016549610301
[deg] Pointing Roll	235.904072	236.04843032825
[s] Window start time (MET)	633830469.184000	633830469.184000
[s] Window stop time (MET)	638841669.184000	638841669.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-199.707323	-199.7145787182124
[mm] SIM translation stage offset	9.5748	9.582056135204567
[s] Observation start time (MET)	634425234.184000	634423721.0945899
Observation start date	2018-02-07T21:12:45	2018-02-07T20:48:41
[s] Observation end time (MET)	634445234.184000	634445860.0709
Observation end date	2018-02-08T02:46:05	2018-02-08T02:57:40
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/4
Subarray start row	769	769
Subarray row count	256	256
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.8

2.3 Aspect



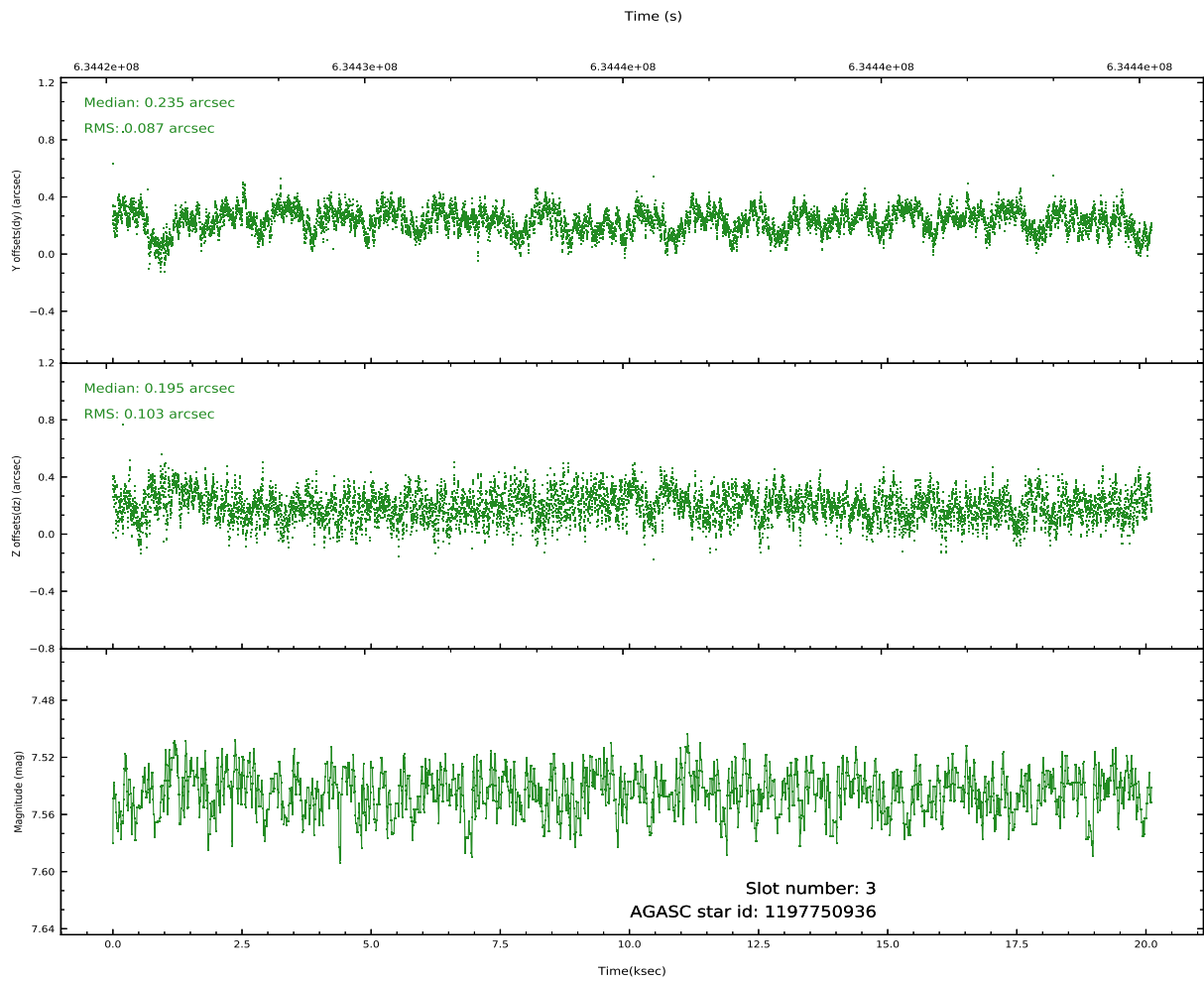
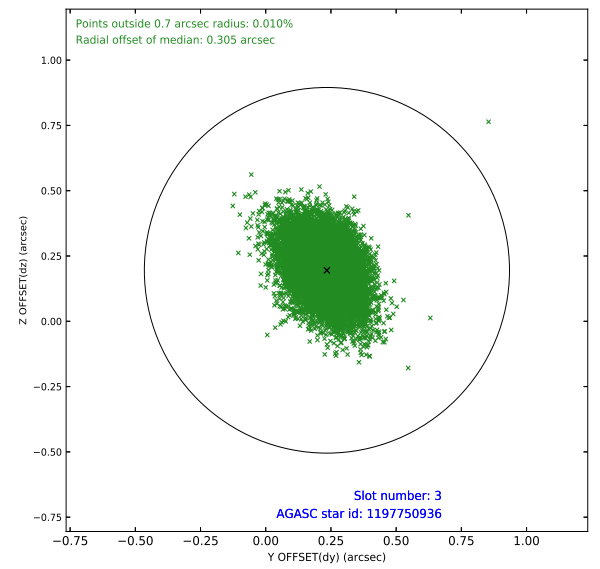
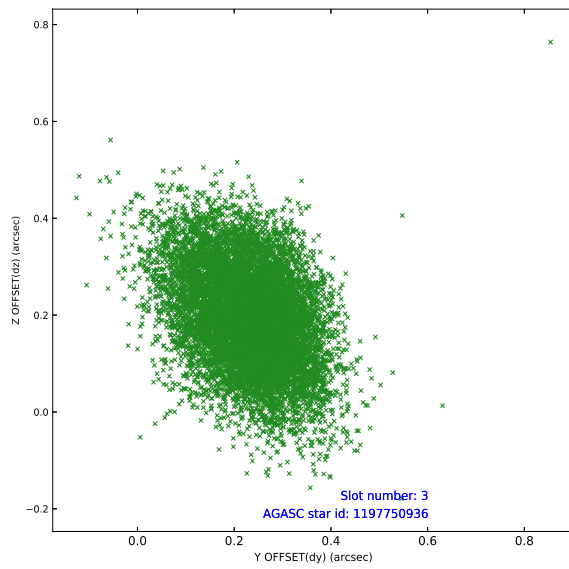


Slot Statistics

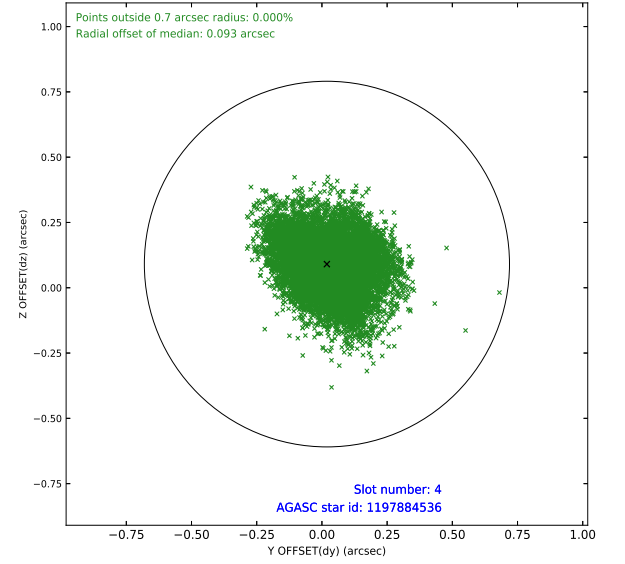
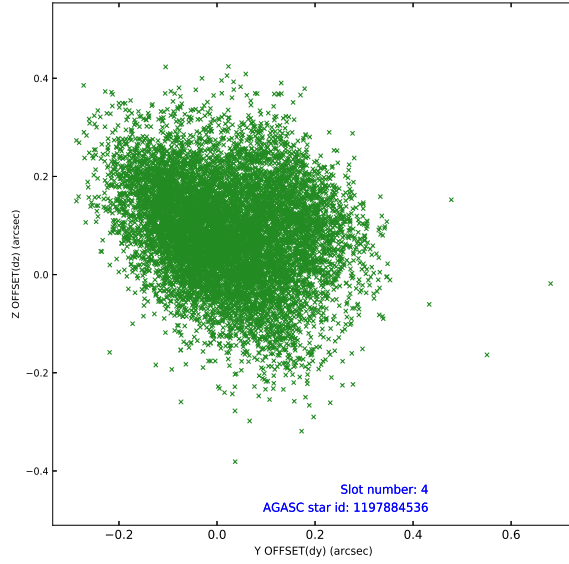
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.12	4905	1.000	0.223	0.174	0.026	0.047	0.000000	0.000000	-775.81	-1548
1	FID		ACIS-S-4	7.18	4902	1.000	0.023	-0.154	0.020	0.035	0.000000	0.000000	2137.51	359
2	FID		ACIS-S-5	7.19	4905	1.000	-0.274	-0.010	0.013	0.022	0.000000	0.000000	-1828.59	353
3	GUIDE	used	1197750936	7.54	9807	1.000	0.235	0.195	0.142	0.232	15.387940	-71.549550	-1191.40	-1523
4	GUIDE	used	1197884536	8.48	9810	1.000	0.019	0.091	0.165	0.259	17.160729	-71.835289	-1450.95	713
5	GUIDE	used	1197884712	8.28	9803	1.000	0.038	-0.007	0.138	0.232	16.087398	-72.252690	459.48	547
6	GUIDE	used	1198189696	7.36	9808	1.000	-0.083	-0.170	0.110	0.200	15.223750	-72.697522	2309.89	677
7	GUIDE	used	1198283128	7.66	9806	1.000	-0.206	-0.104	0.119	0.206	17.272580	-72.642428	923.77	2393

2.4 Star Slots

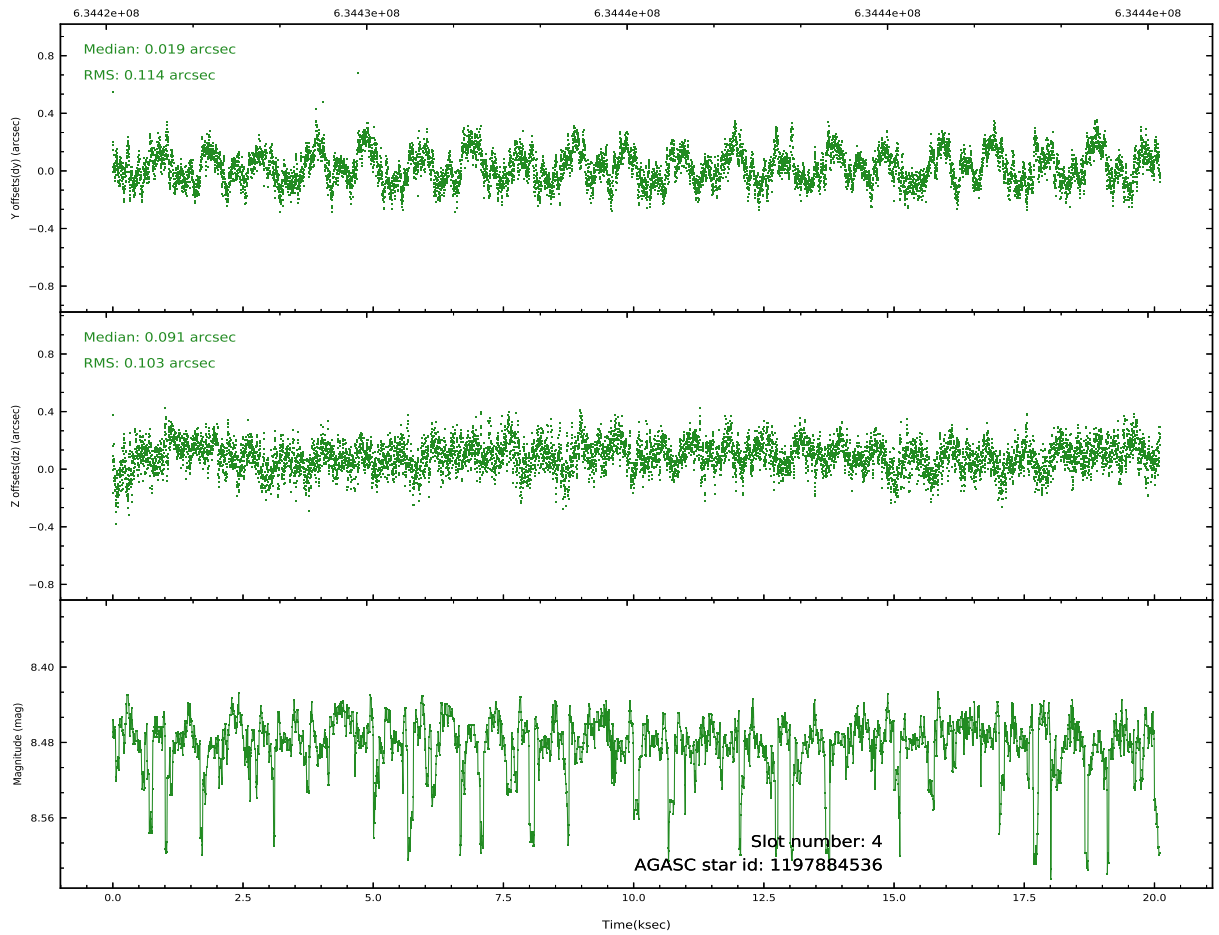
2.4.1 Slot 3



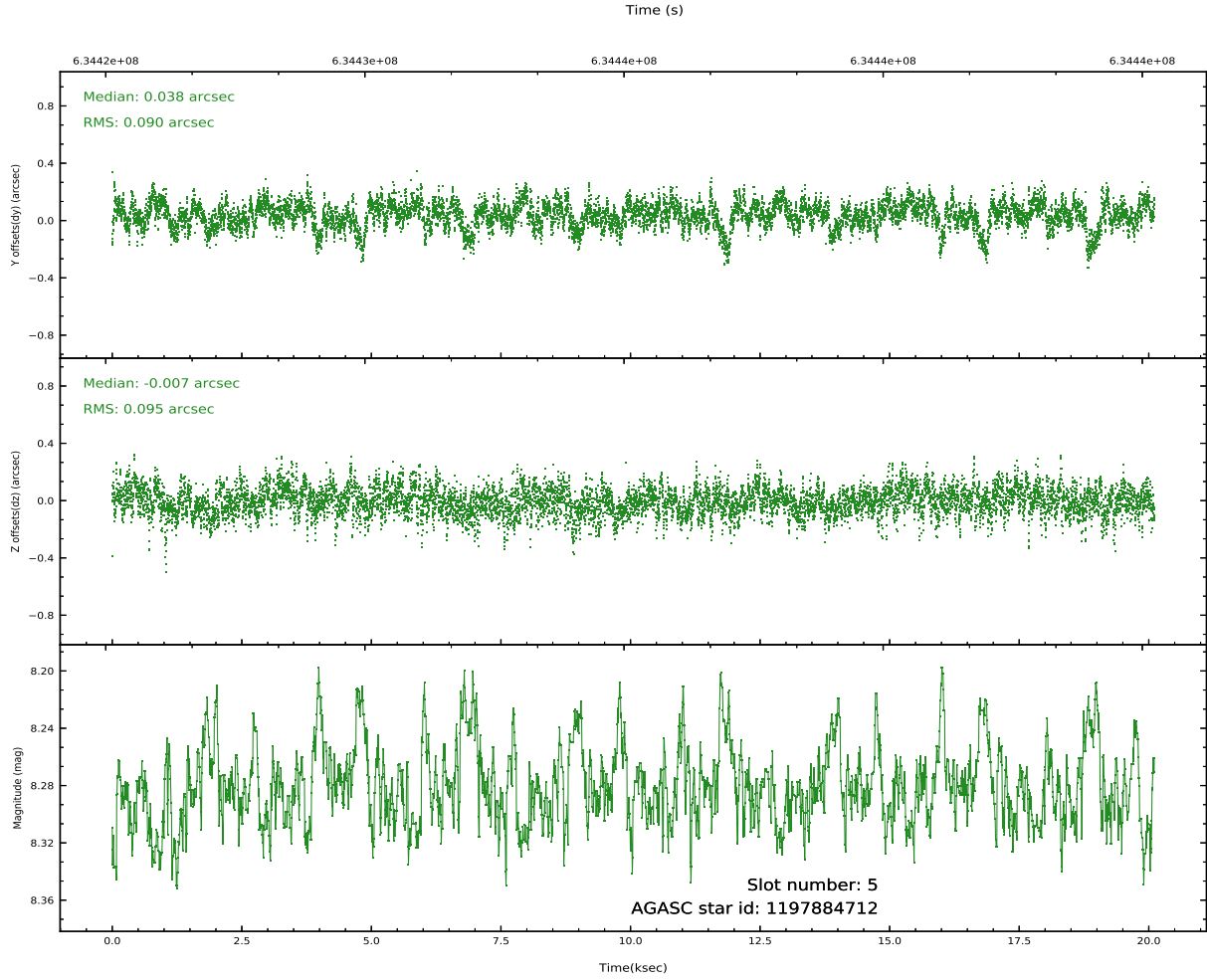
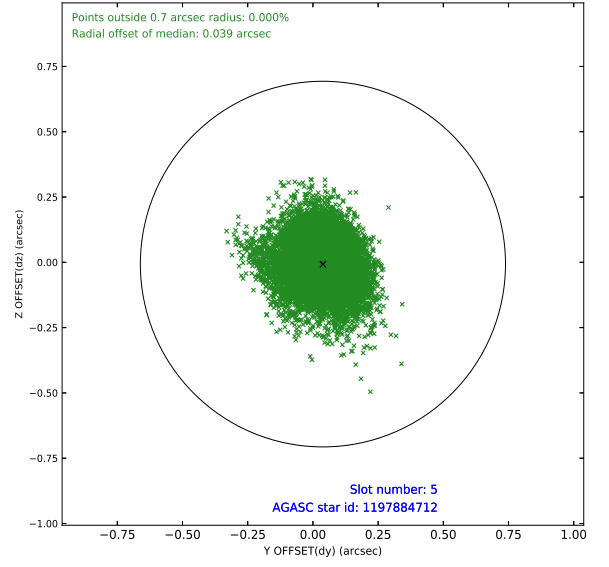
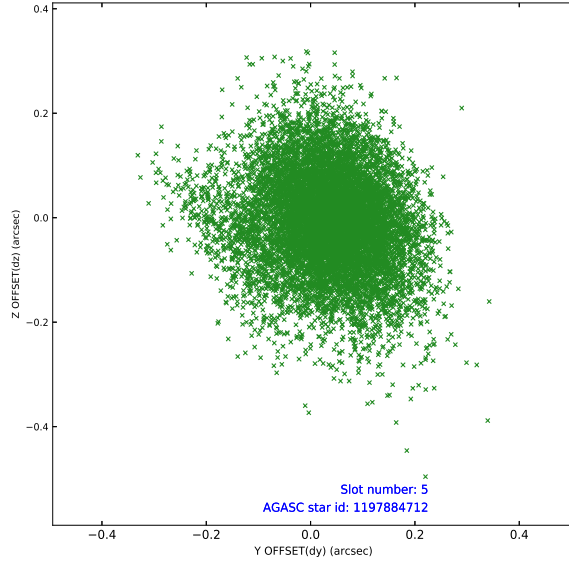
2.4.2 Slot 4



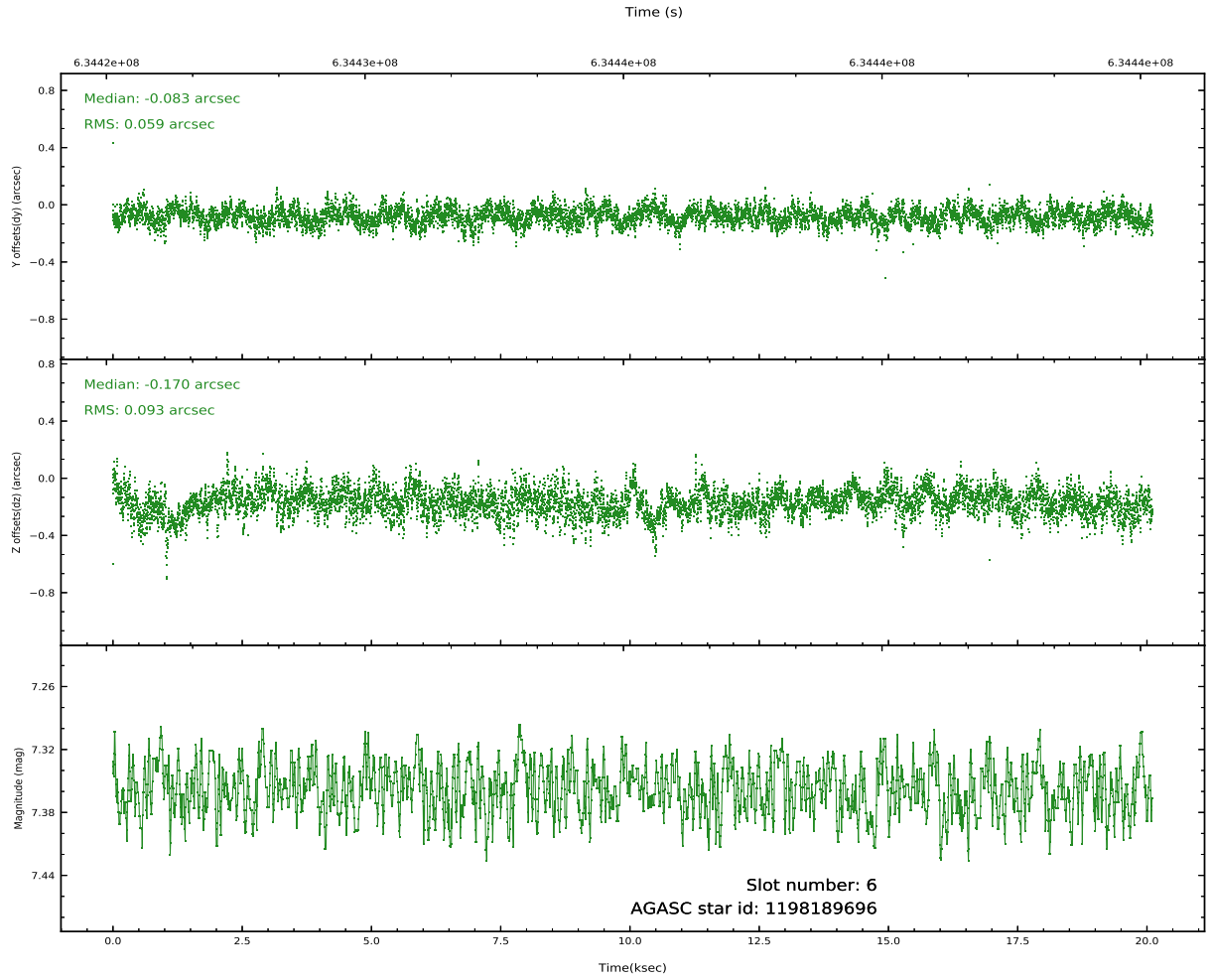
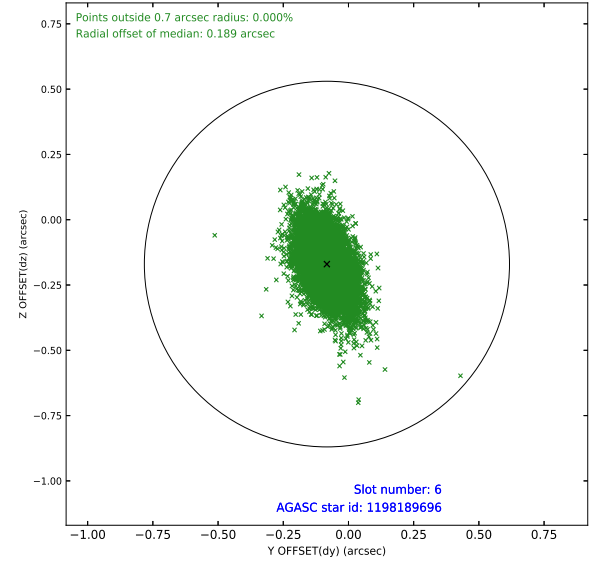
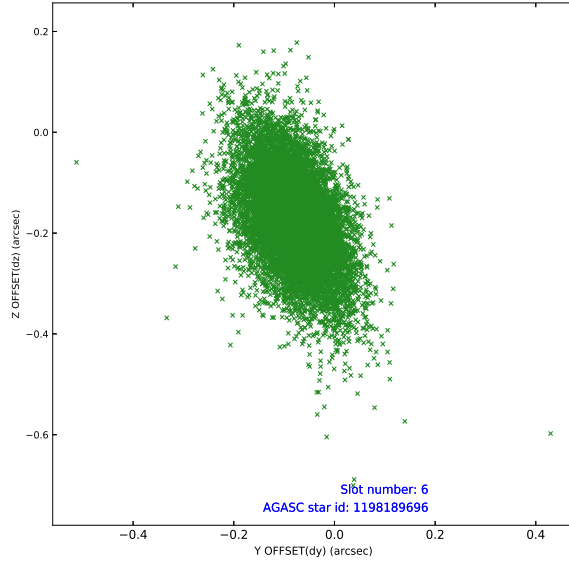
Time (s)



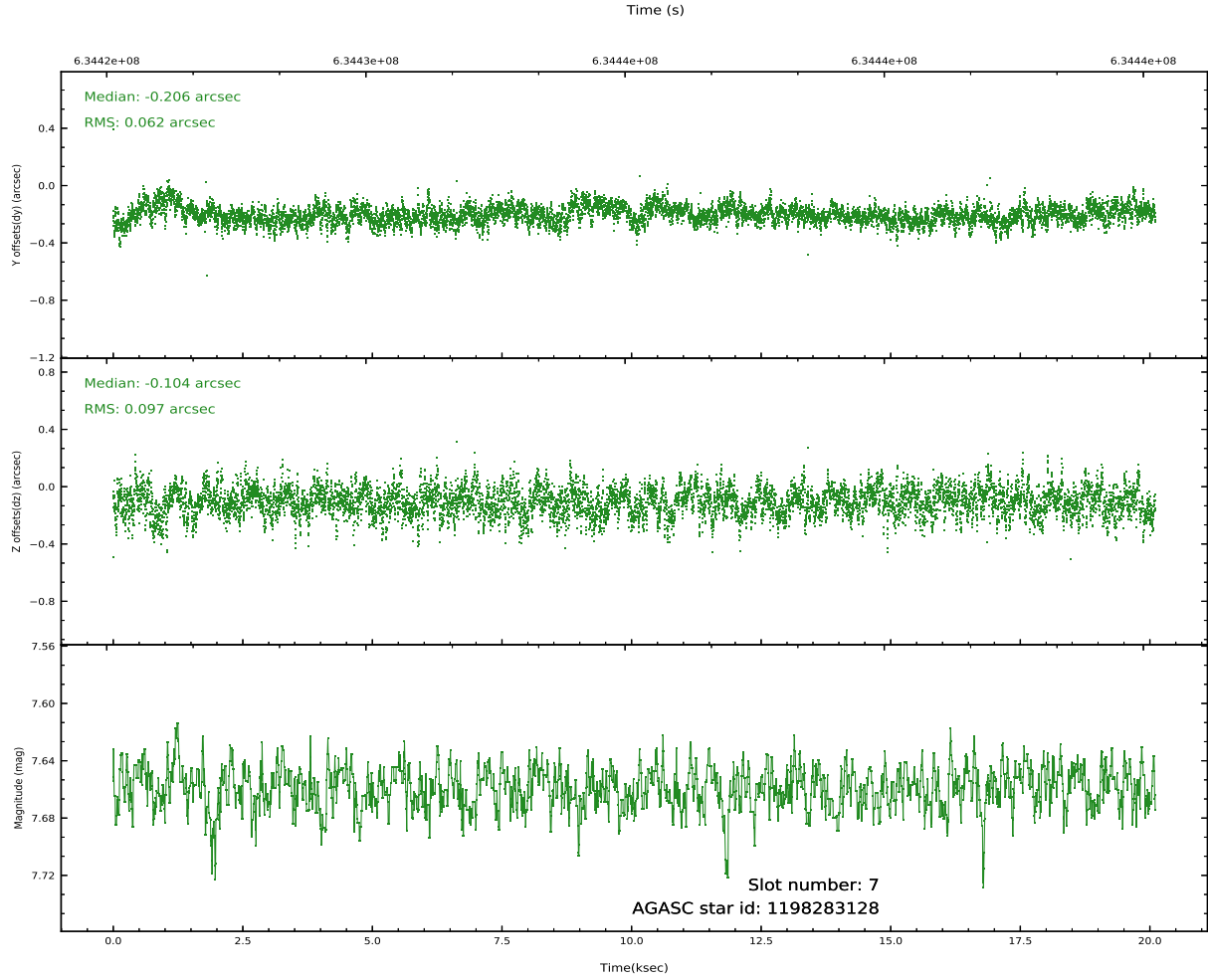
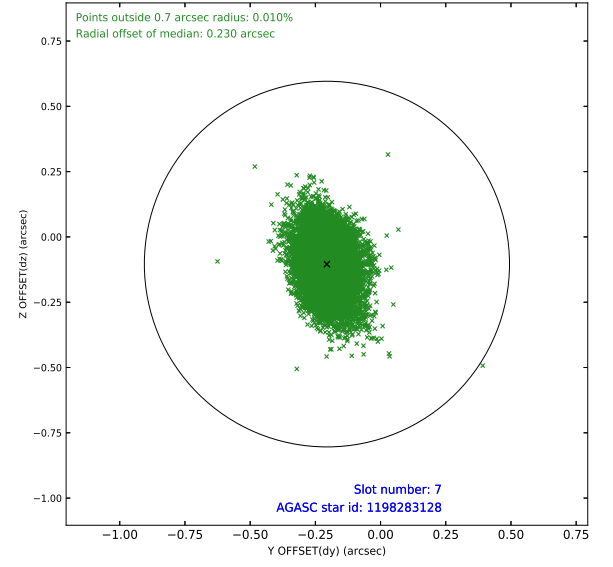
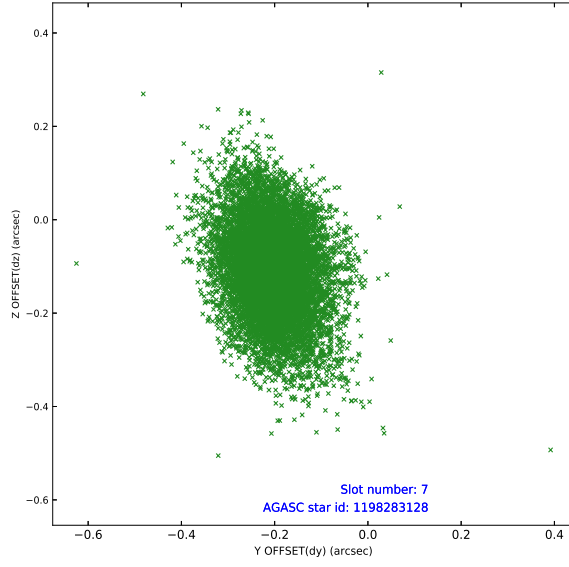
2.4.3 Slot 5



2.4.4 Slot 6

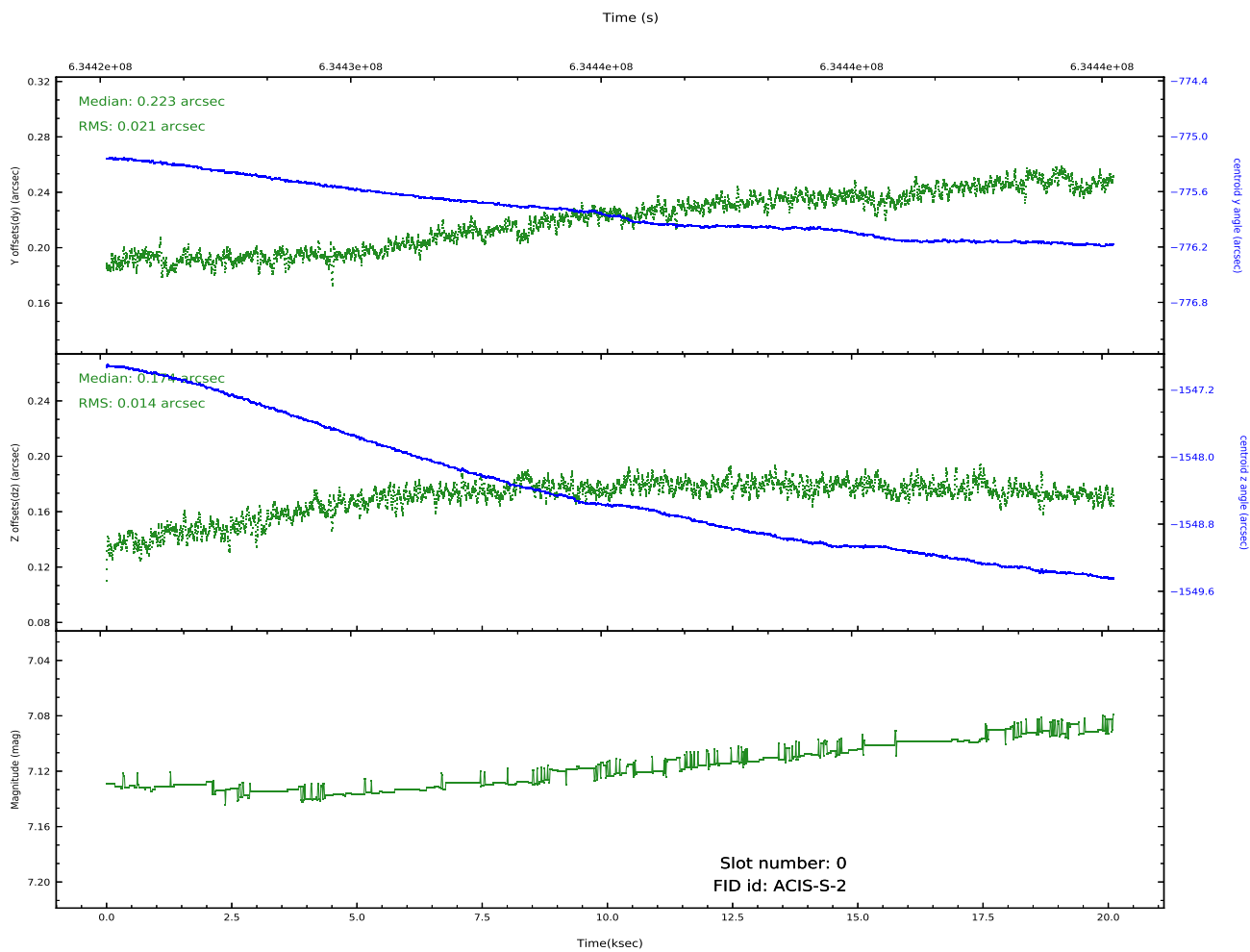
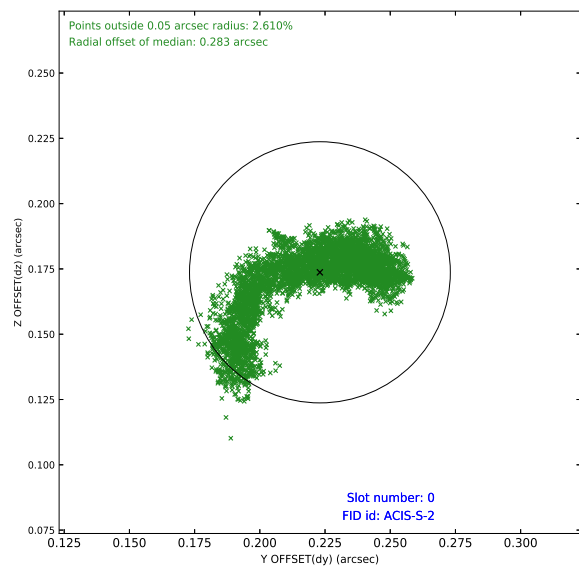
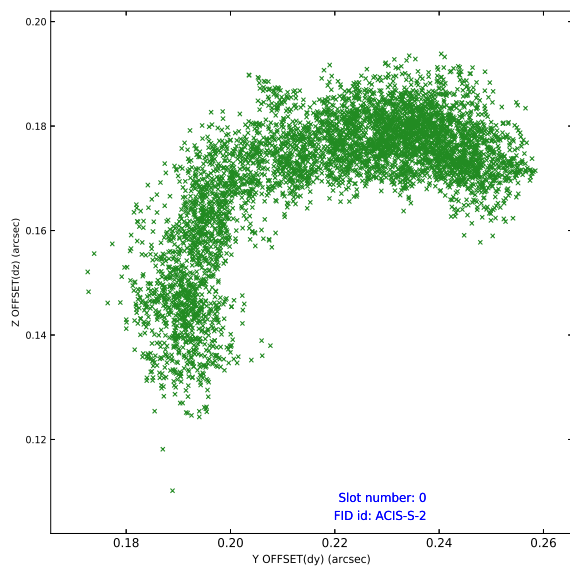


2.4.5 Slot 7

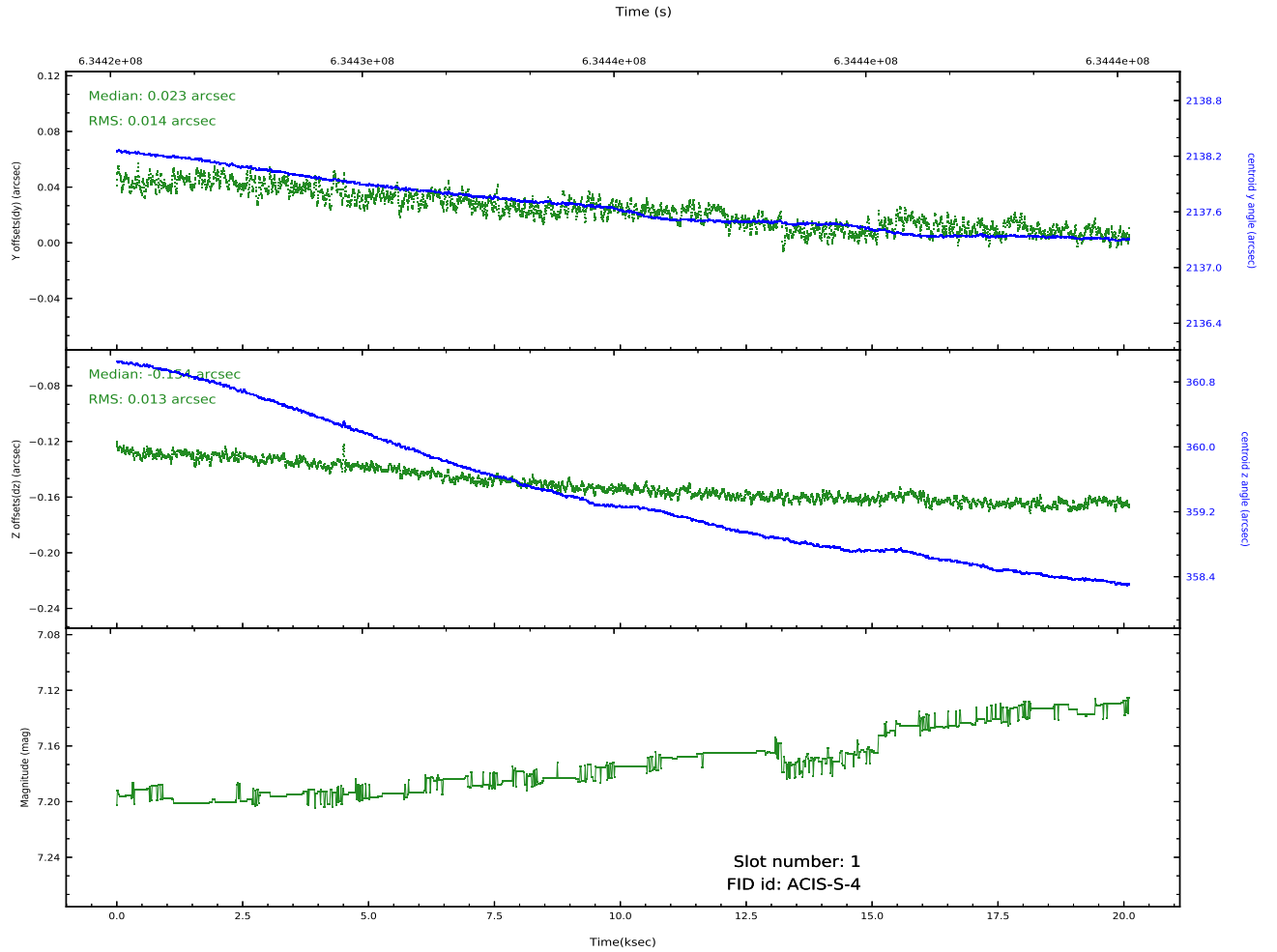
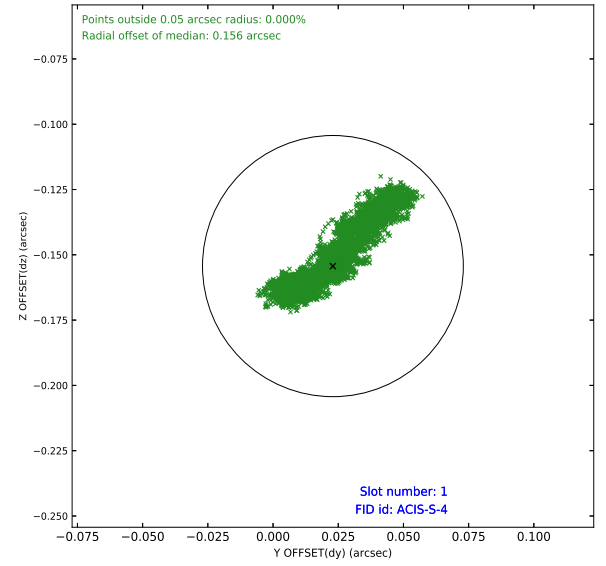
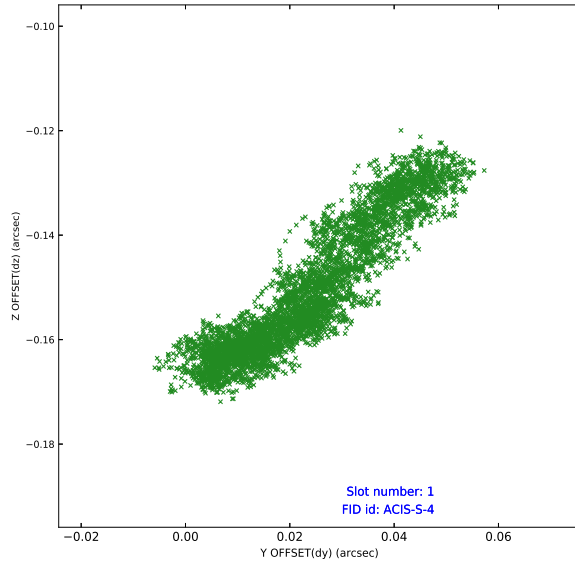


2.5 FID Slots

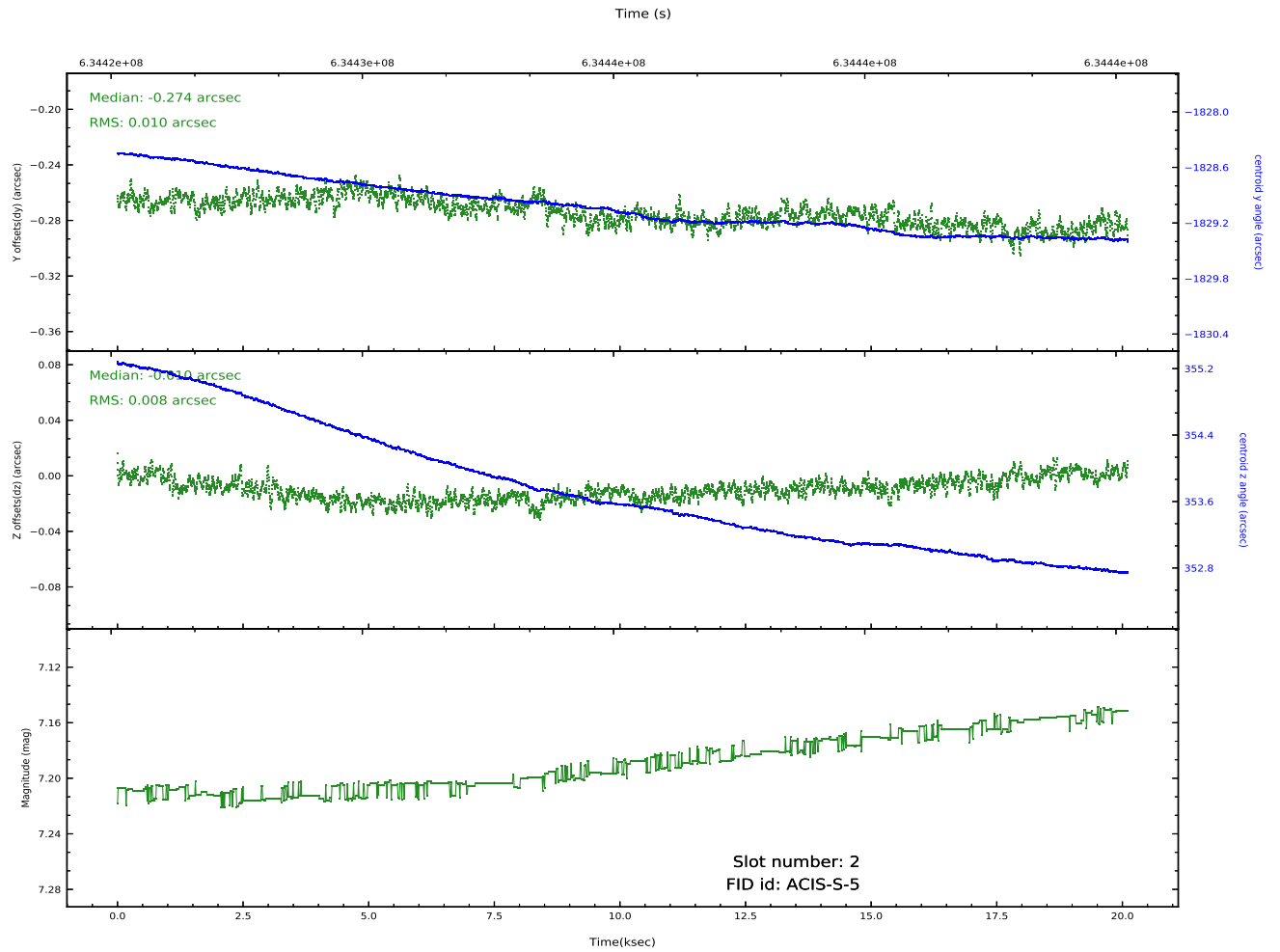
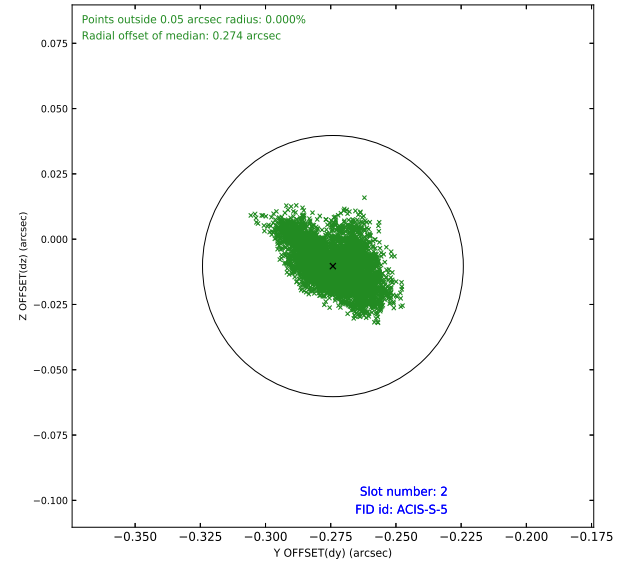
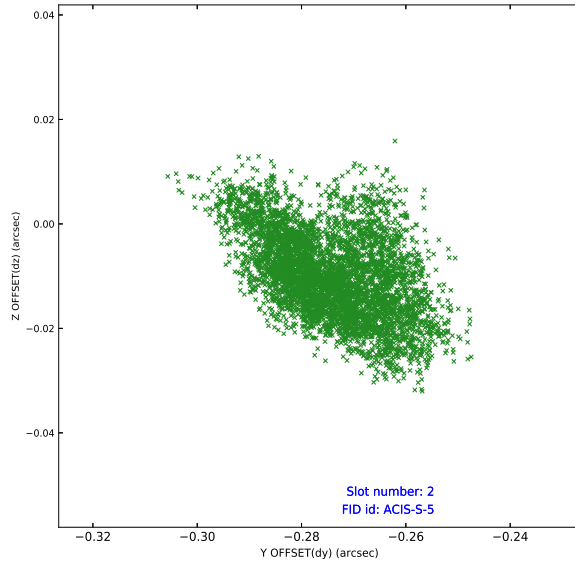
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



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	20.063742167592

A.2 Comments

Window constraint met.