

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5531 - L2 Version 4
Chandra X-Ray Center

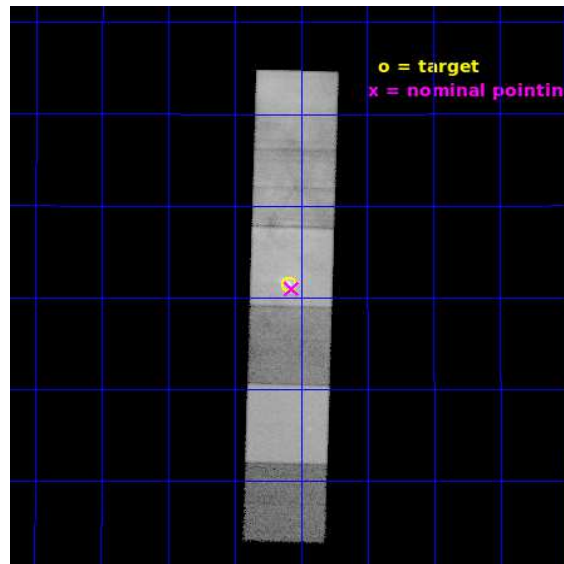
L2 Processing Date : Oct 6 2020

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

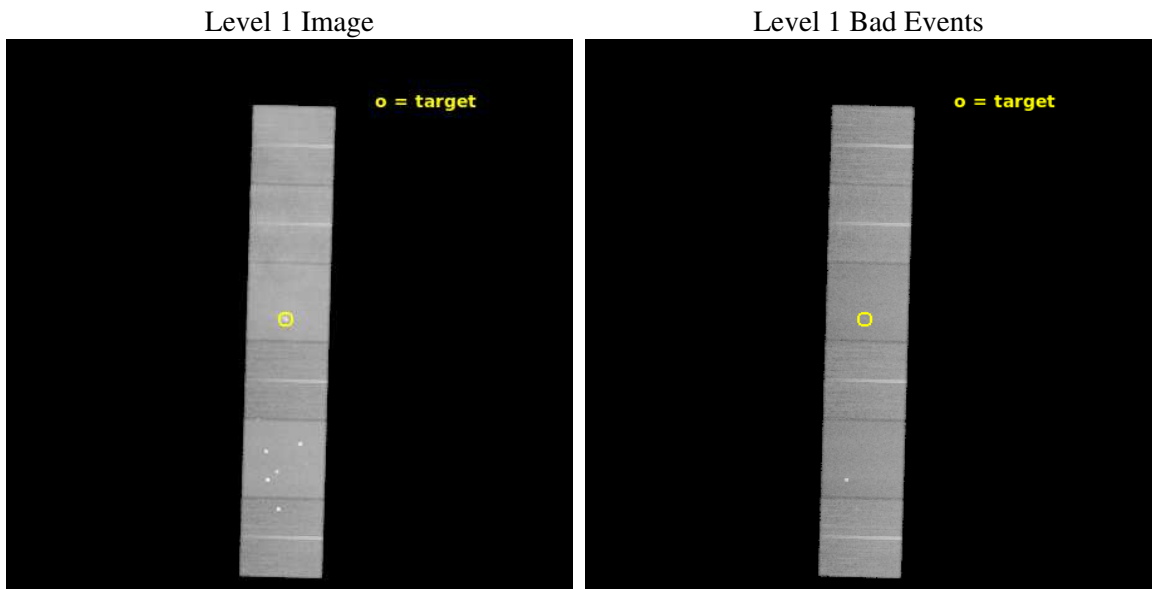
seq_num	500525	Sequence number
obs_id	5531	Observation id
title	X-RAY IMAGING OF PULSAR BOW SHOCKS	Proposal title
observer	Prof. Bryan Gaensler	Principal investigator
object	CXOU J061705.3+222127	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	94.271667	Observer's specified target RA [deg]
dec_targ	22.357417	Observer's specified target Dec [deg]
ra_nom	94.266832110154	Nominal RA [deg]
dec_nom	22.349750768532	Nominal Dec [deg]
roll_nom	271.5532126686	Nominal Roll [deg]
revision	4	Processing version of data
ontime	37951.999858618	Sum of GTIs [s]
livetime	37471.428784457	Livetime [s]
ontime4	37951.999858618	Sum of GTIs [s]
ontime5	37951.999858618	Sum of GTIs [s]
ontime6	37951.999858618	Sum of GTIs [s]
ontime7	37951.999858618	Sum of GTIs [s]
ontime8	37951.999858618	Sum of GTIs [s]
ontime9	37951.999858618	Sum of GTIs [s]
l2events	915374	Number of level 2 events



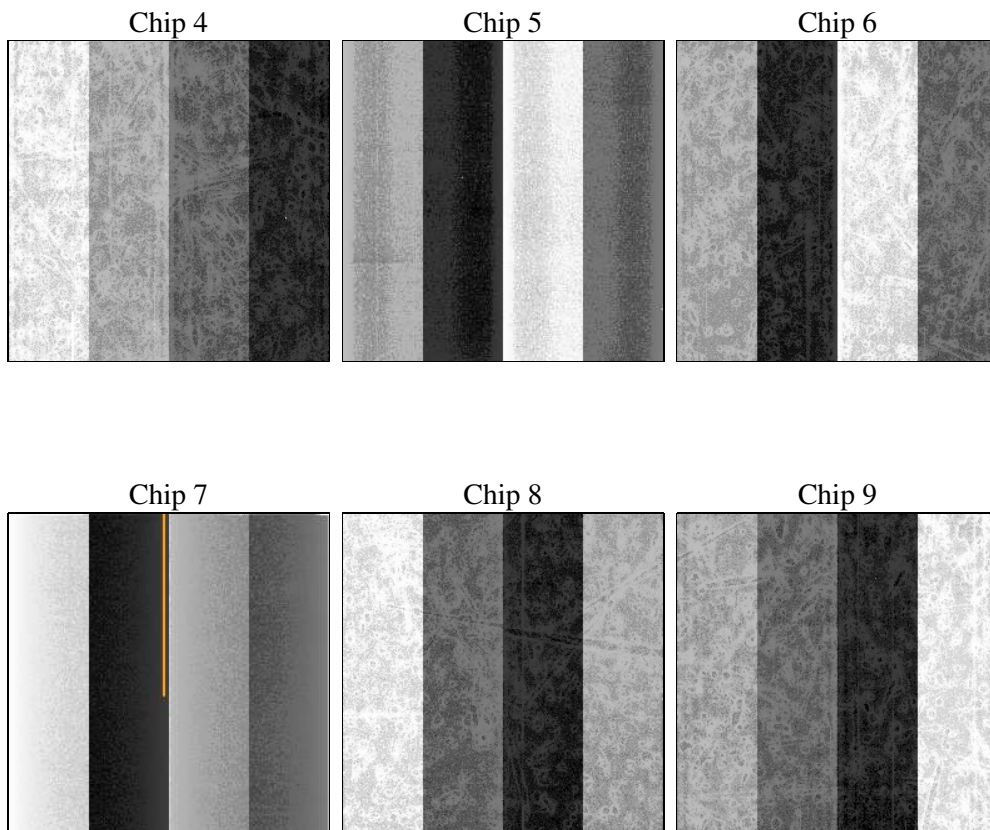
2 OBI

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	10.9.1	Processing system revision	ontime	37951.999858618	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	37951.999858618	Sum of GTIs [s]
date	2020-10-06T04:07:42	Date and time of file creation	ontime5	37951.999858618	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	37951.999858618	Sum of GTIs [s]
			ontime7	37951.999858618	Sum of GTIs [s]
			ontime8	37951.999858618	Sum of GTIs [s]
			ontime9	37951.999858618	Sum of GTIs [s]
			l1events	2550596	Number of level 1 events

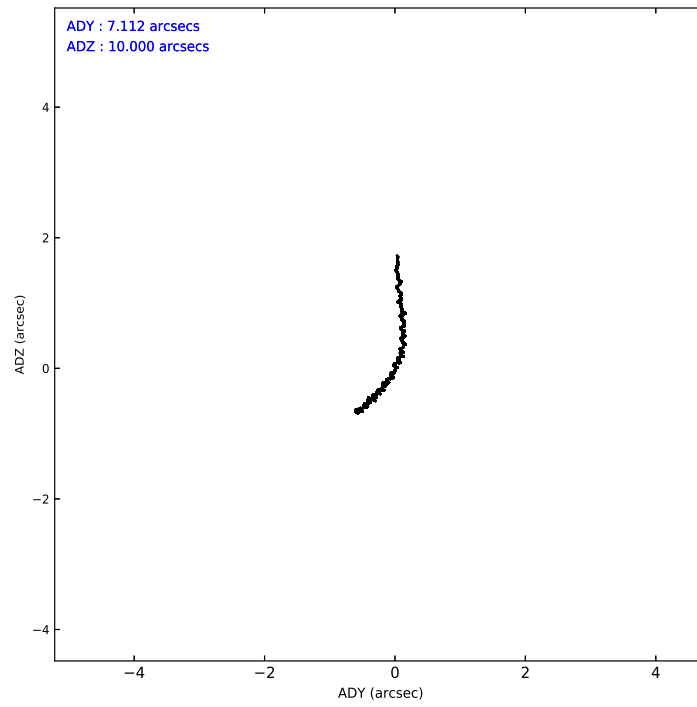
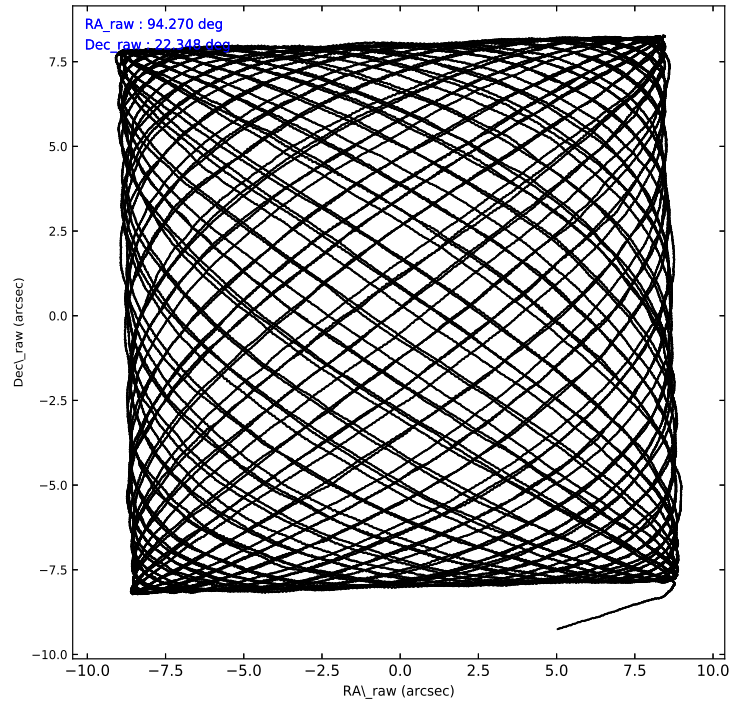
2.1.4 Events

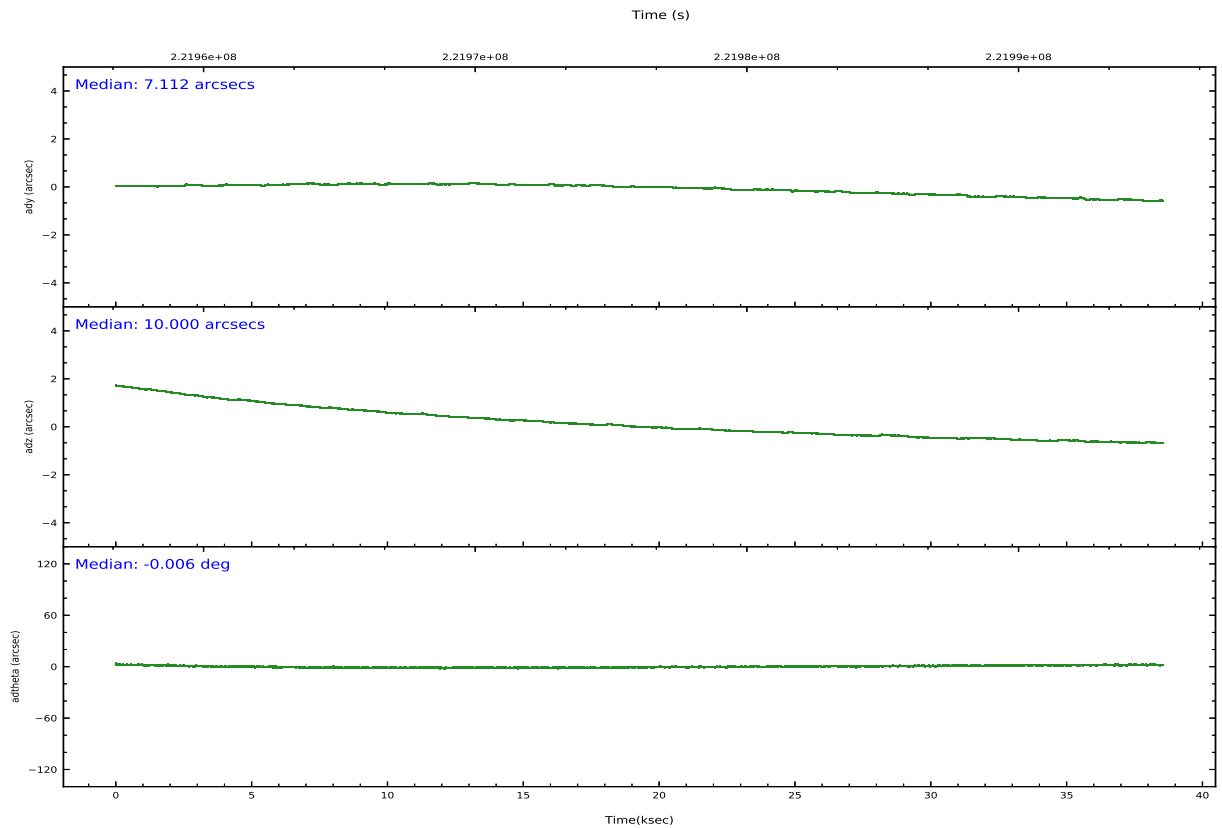
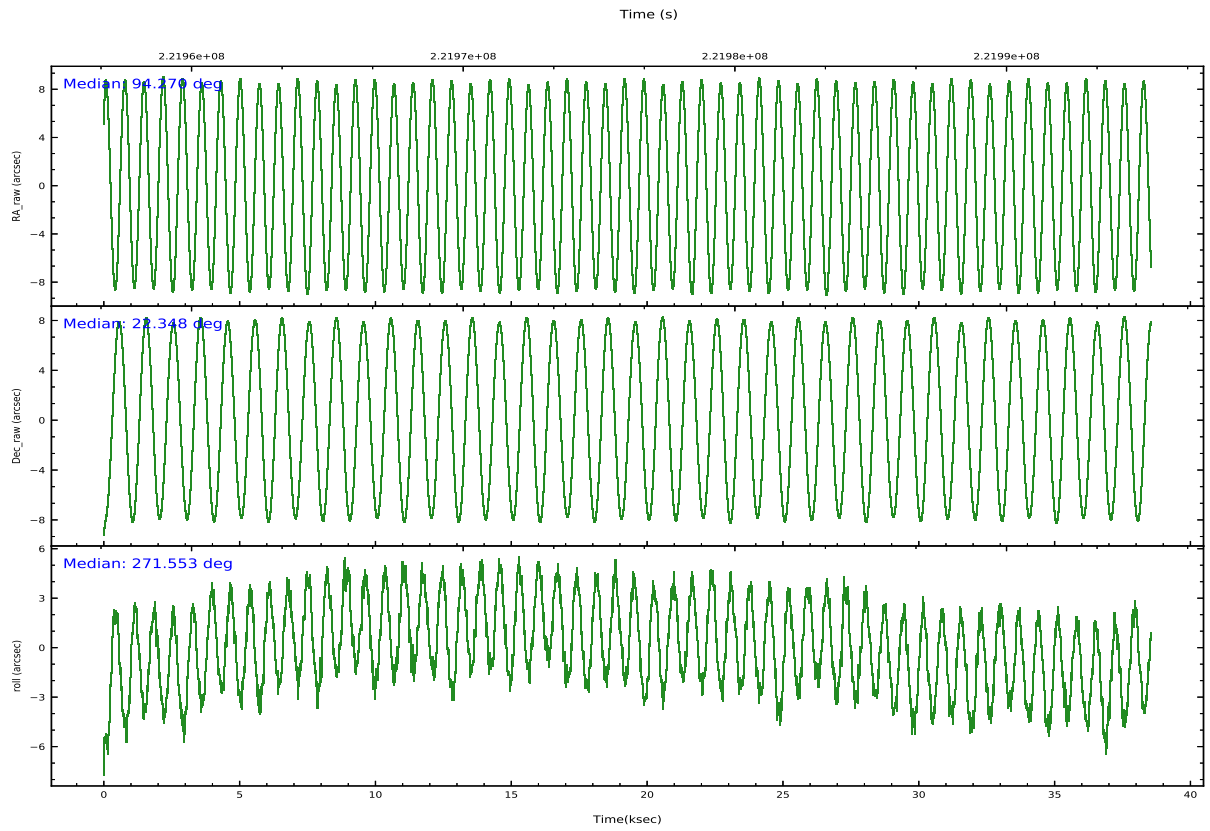
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	319300	455397	316834	515941	482494	460630	grade 0 events	27278	39189	39709	53262	133718	164501
rejected events	272080	228443	252437	223094	279095	251508		8%	8%	12%	10%	27%	35%
rejected %	85%	50%	79%	43%	57%	54%	grade 1 events	331	564	268	397	679	807
								0%	0%	0%	0%	0%	0%
							grade 2 events	7544	66257	9713	67600	27701	21304
								2%	14%	3%	13%	5%	4%
							grade 3 events	3555	9372	3990	30134	10741	7612
								1%	2%	1%	5%	2%	1%
							grade 4 events	3451	9154	3820	29683	10391	7214
								1%	2%	1%	5%	2%	1%
							grade 5 events	12522	31513	13208	37068	16931	14231
								3%	6%	4%	7%	3%	3%
							grade 6 events	5399	103028	7179	112218	20878	8546
								1%	22%	2%	21%	4%	1%
							grade 7 events	259220	196320	238947	185579	261455	236415
								81%	43%	75%	35%	54%	51%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	94.254362	94.266832110154	Subarray requested	NONE	NONE
[deg] Pointing Dec	22.370866	22.349750768532	Alternating exposures requested	N	N
[deg] Pointing Roll	271.397910	271.5532126686	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	221957324.184000	221956177.69599			
Observation start date	2005-01-12T22:47:40	2005-01-12T22:29:37			
[s] Observation end time (MET)	221995324.184000	221996645.21032			
Observation end date	2005-01-13T09:21:00	2005-01-13T09:44:05			
Read mode	TIMED	TIMED			

2.3 Aspect





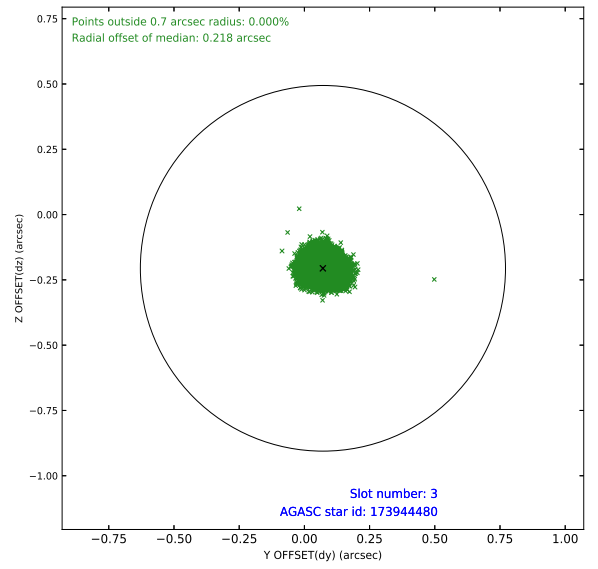
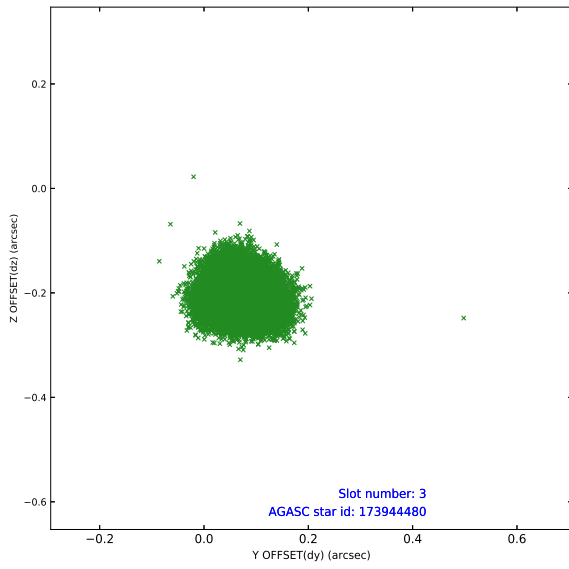
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	9403	1.000	-0.084	-0.067	0.012	0.020	0.000000	0.000000	-759.79	-1731
1	FID		ACIS-S-4	7.21	9401	1.000	0.151	0.058	0.008	0.021	0.000000	0.000000	2153.65	177
2	FID		ACIS-S-5	7.23	9402	1.000	-0.098	0.018	0.009	0.014	0.000000	0.000000	-1812.68	170
3	GUIDE	used	173944480	7.27	18803	1.000	0.071	-0.206	0.057	0.087	94.334818	22.143978	823.06	248
4	GUIDE	used	246160608	8.77	18799	1.000	-0.024	0.074	0.080	0.129	94.789542	22.968548	-2111.03	1826
5	GUIDE	used	246161944	8.73	18805	1.000	-0.023	0.052	0.075	0.118	94.664308	23.007934	-2261.72	1414
6	GUIDE	used	173945656	8.66	18800	1.000	0.103	0.053	0.080	0.129	94.033171	21.698501	2401.42	-797
7	GUIDE	used	246160408	8.11	18807	1.000	-0.126	0.021	0.065	0.110	94.748784	23.001135	-2231.16	1693

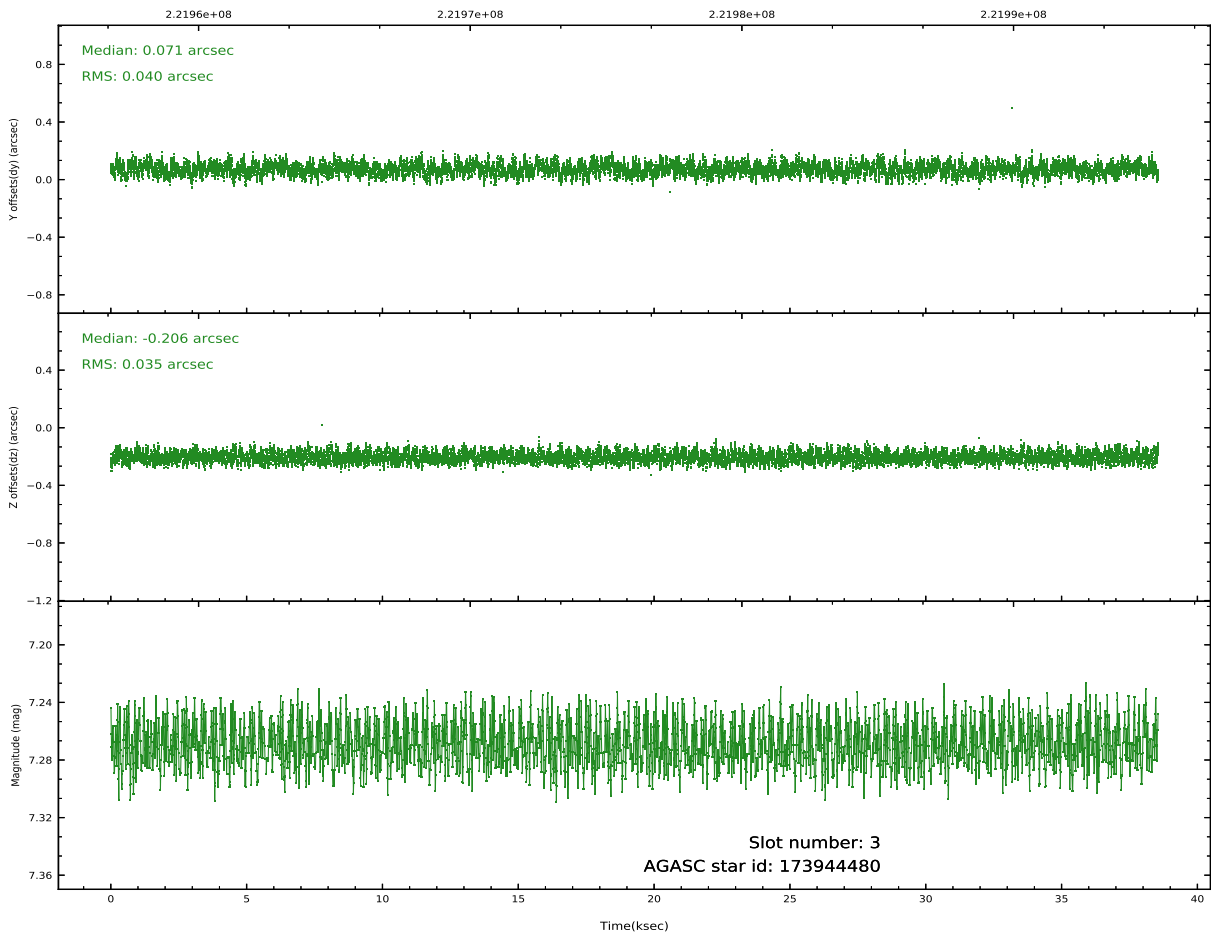
∞

2.4 Star Slots

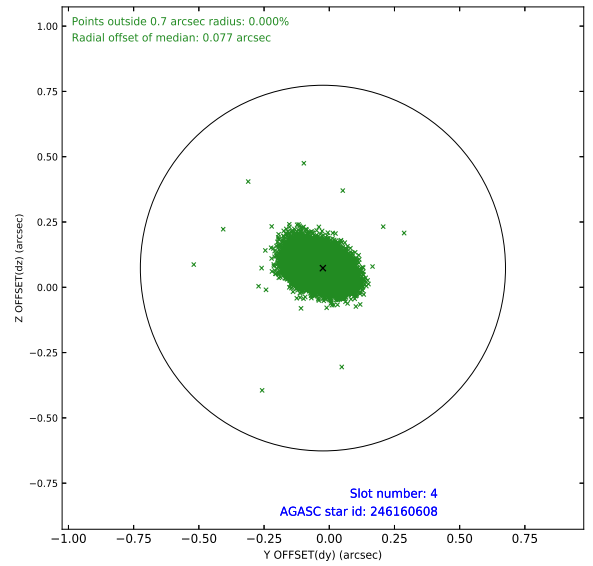
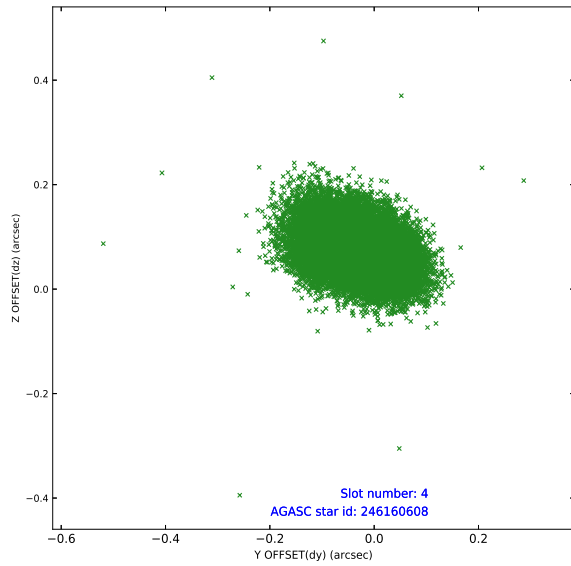
2.4.1 Slot 3



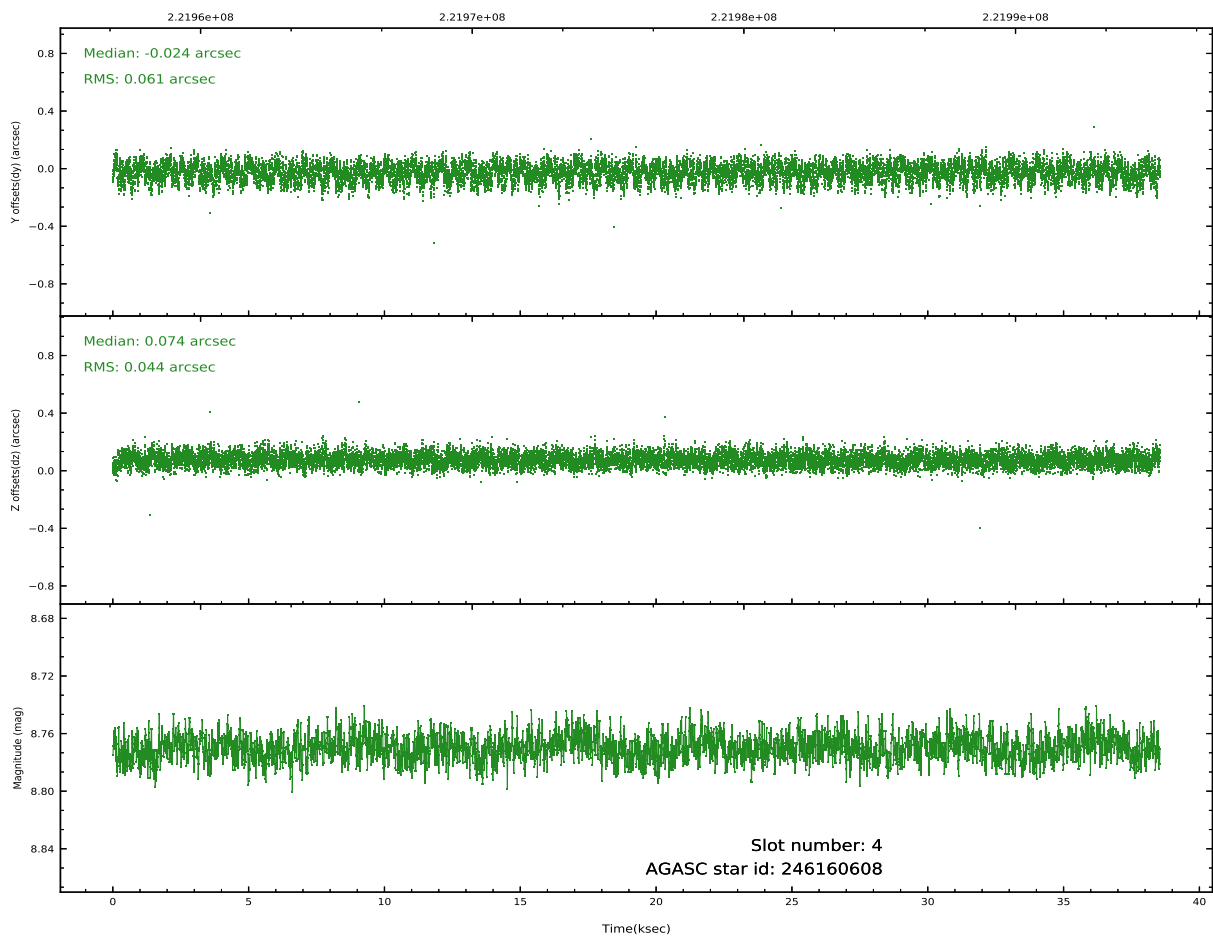
Time (s)



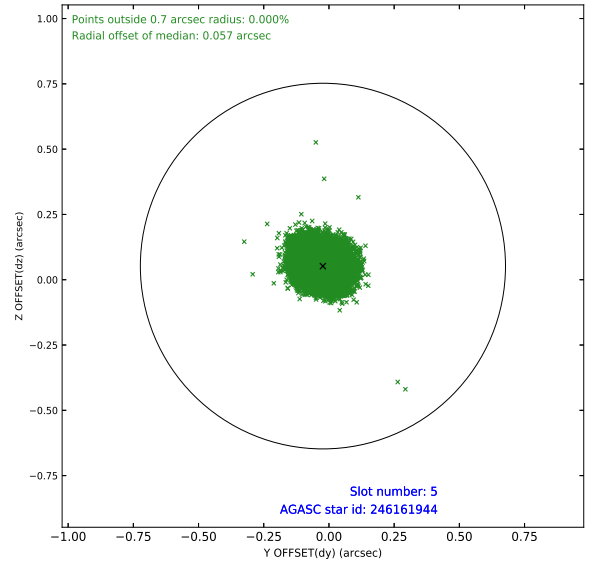
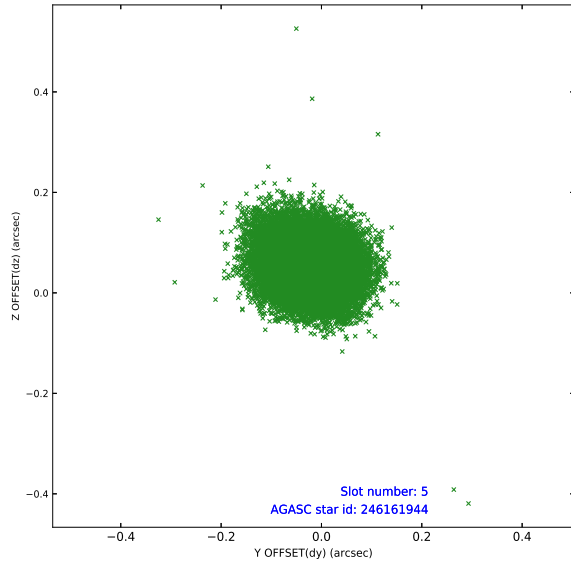
2.4.2 Slot 4



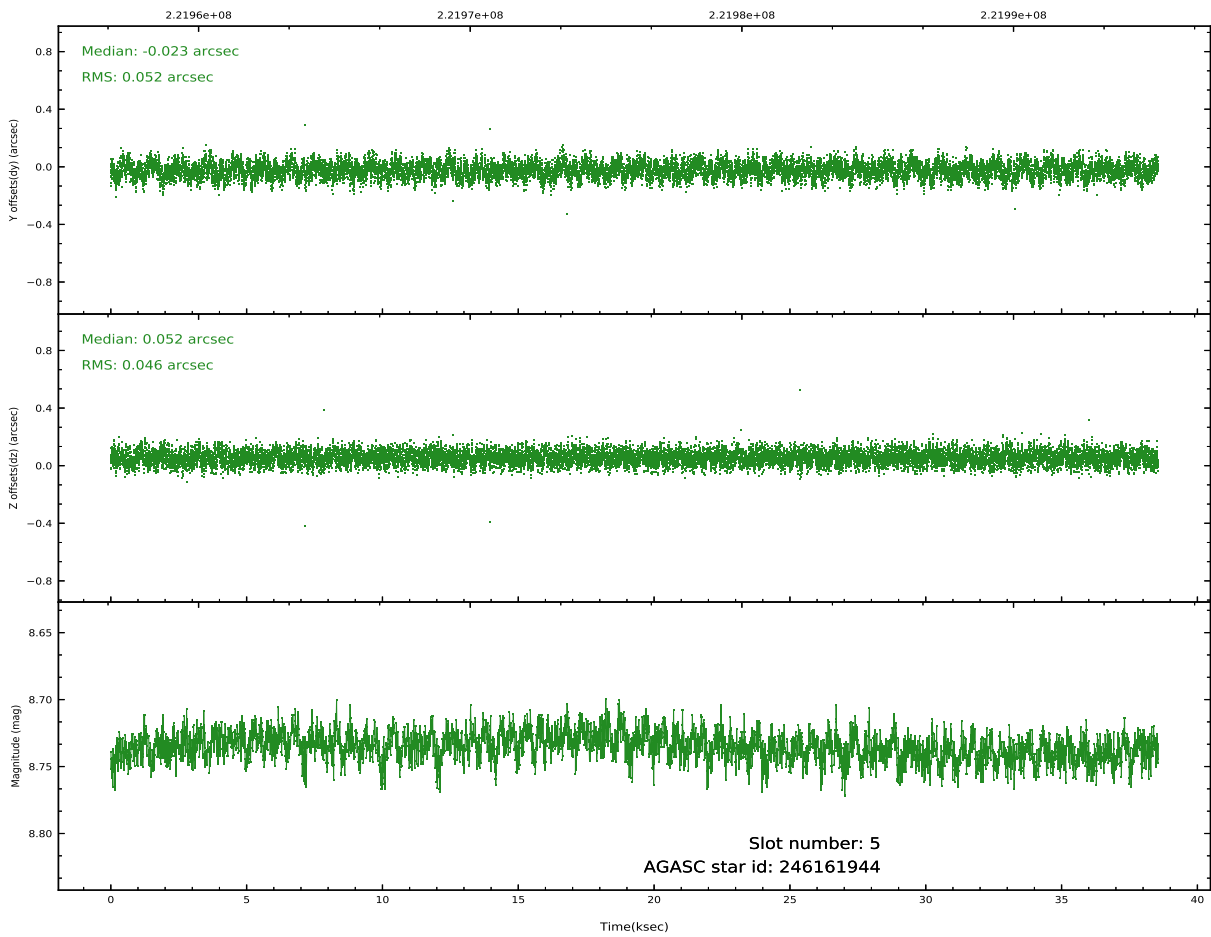
Time (s)



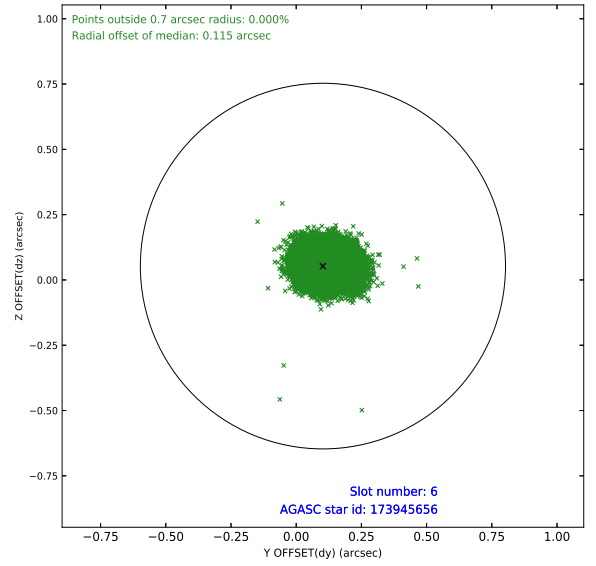
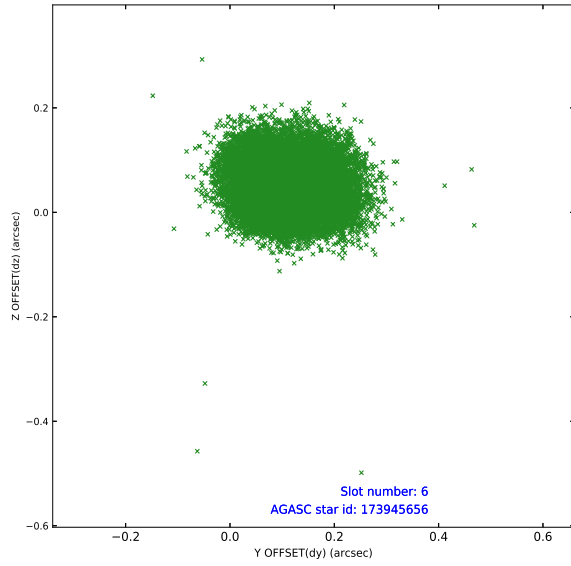
2.4.3 Slot 5



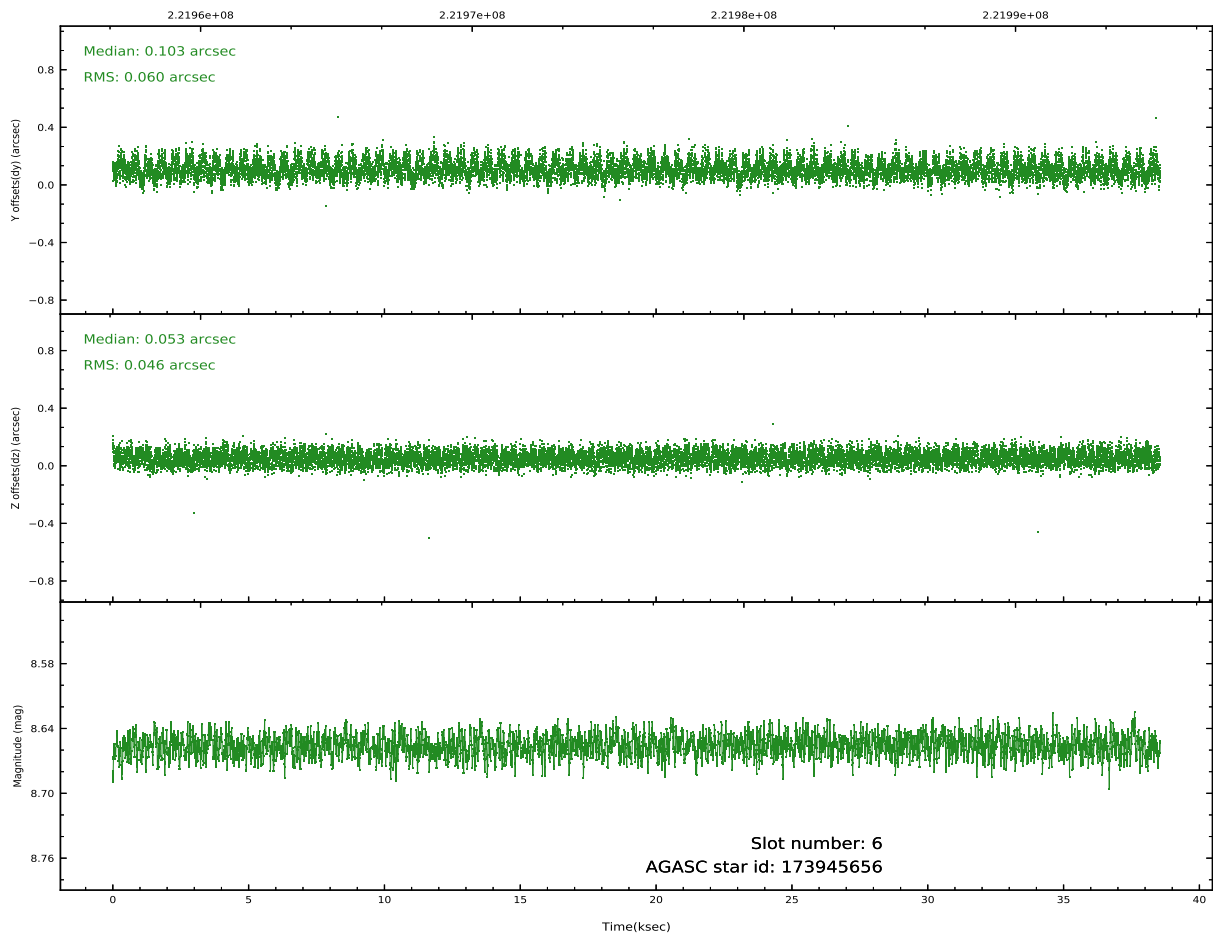
Time (s)



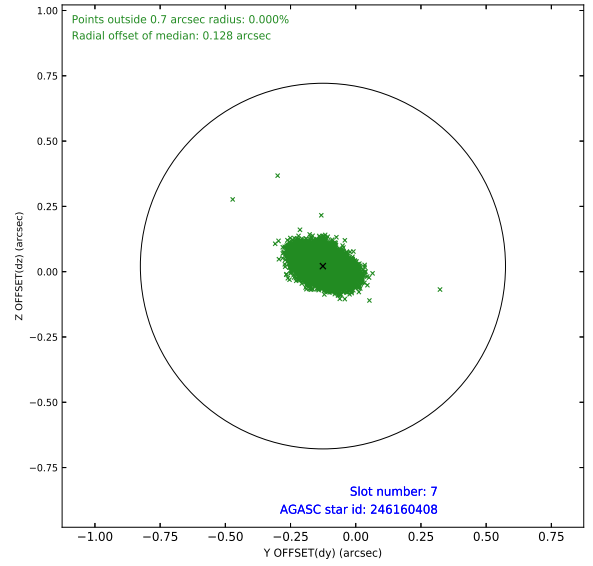
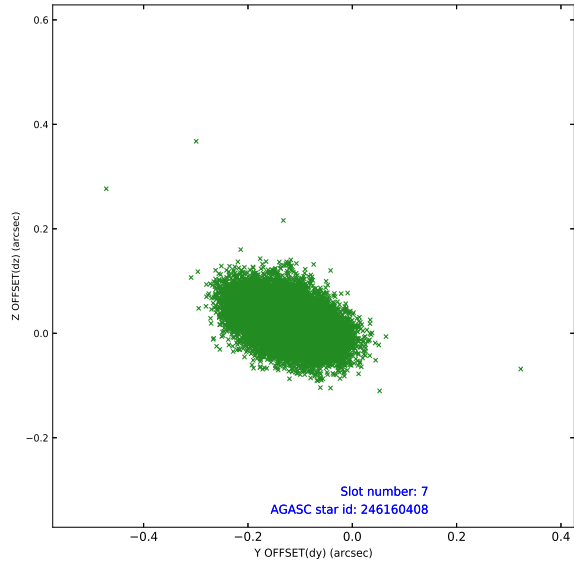
2.4.4 Slot 6



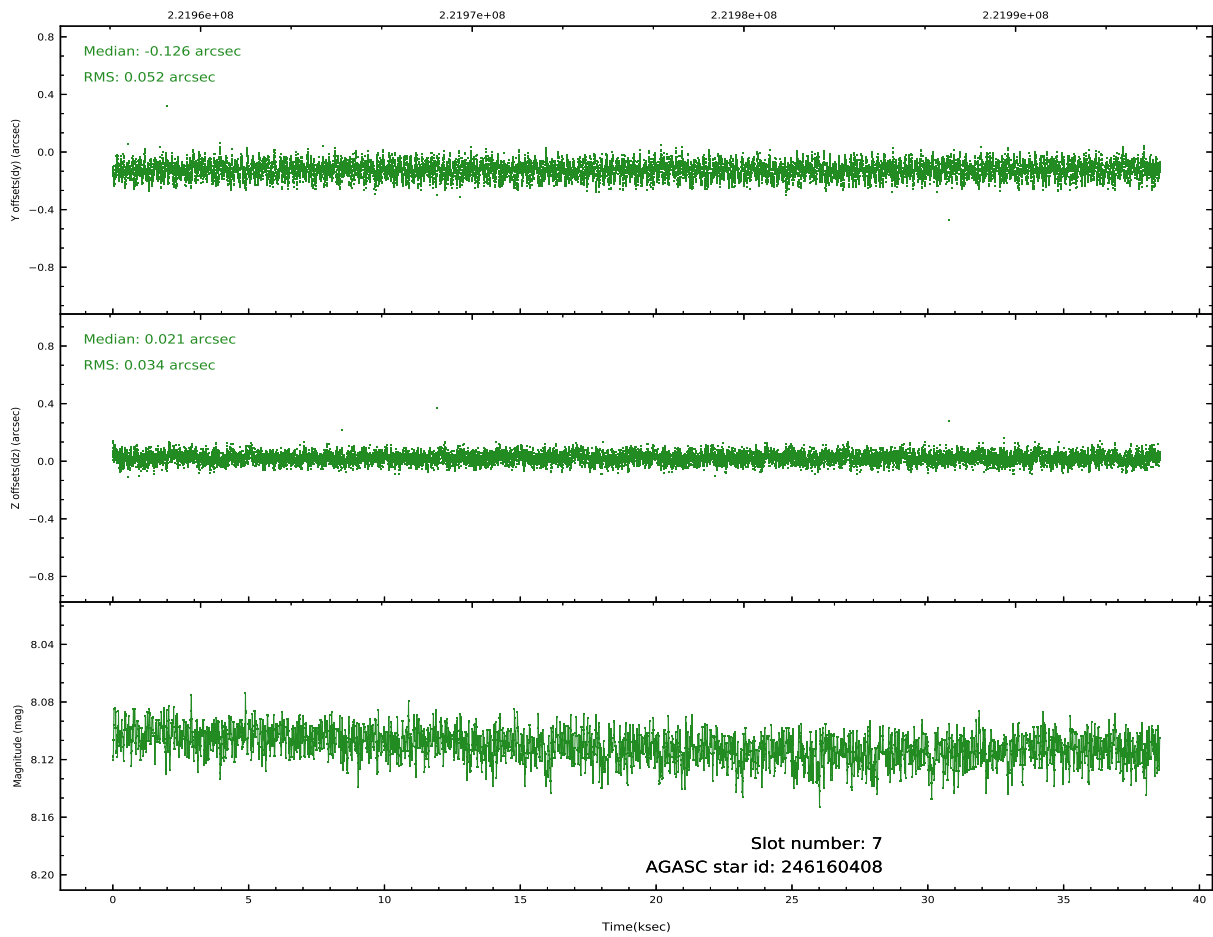
Time (s)



2.4.5 Slot 7

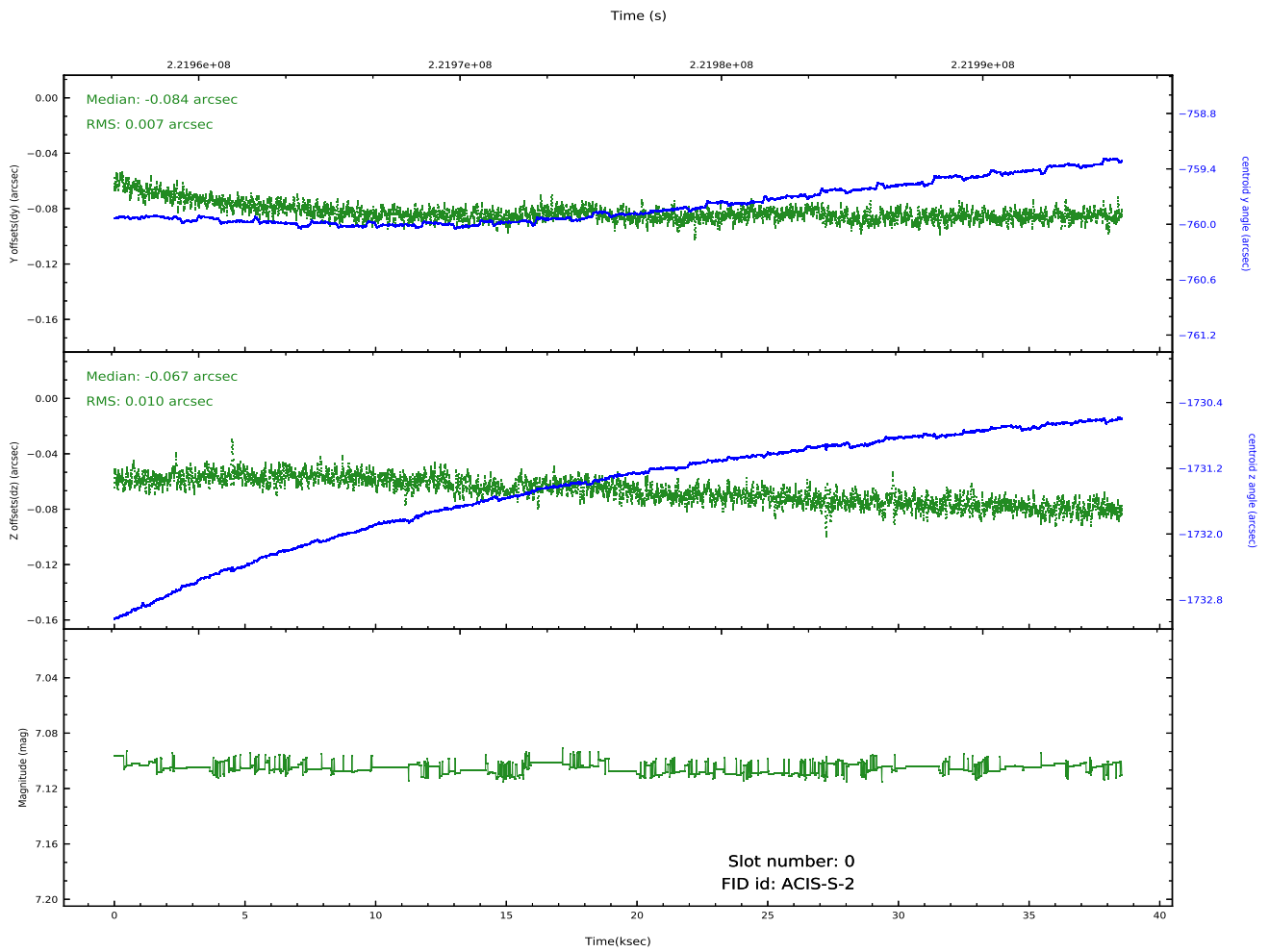
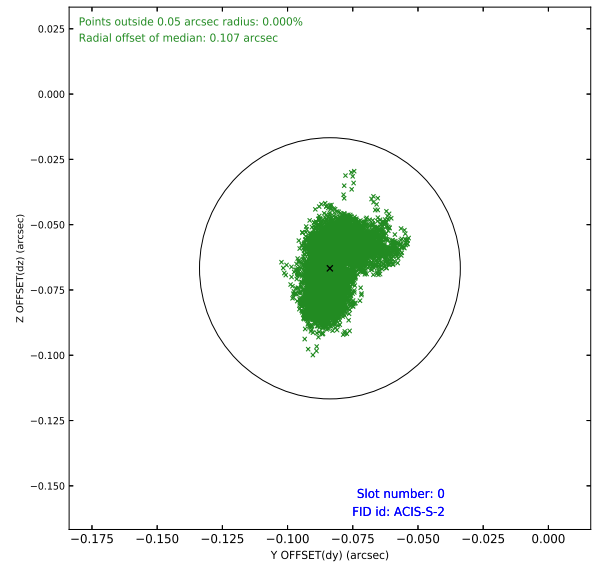
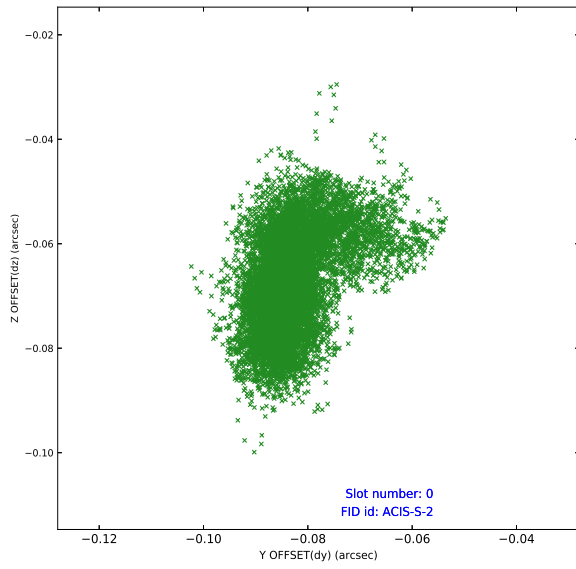


Time (s)

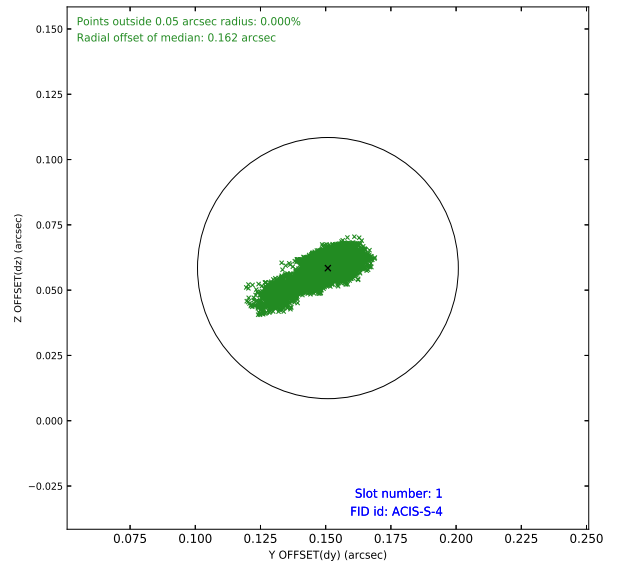
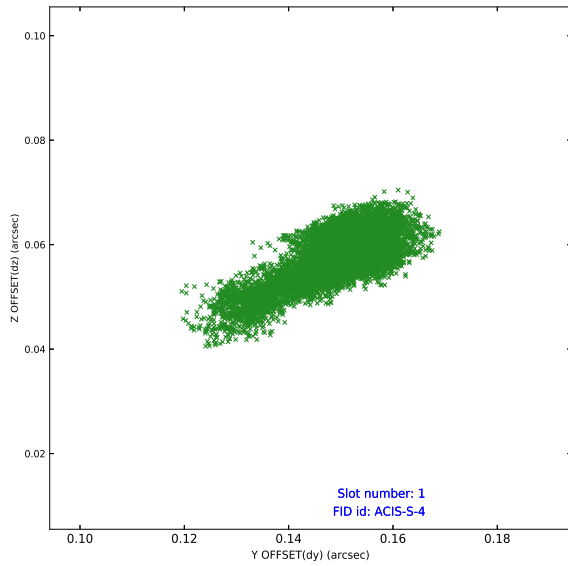


2.5 FID Slots

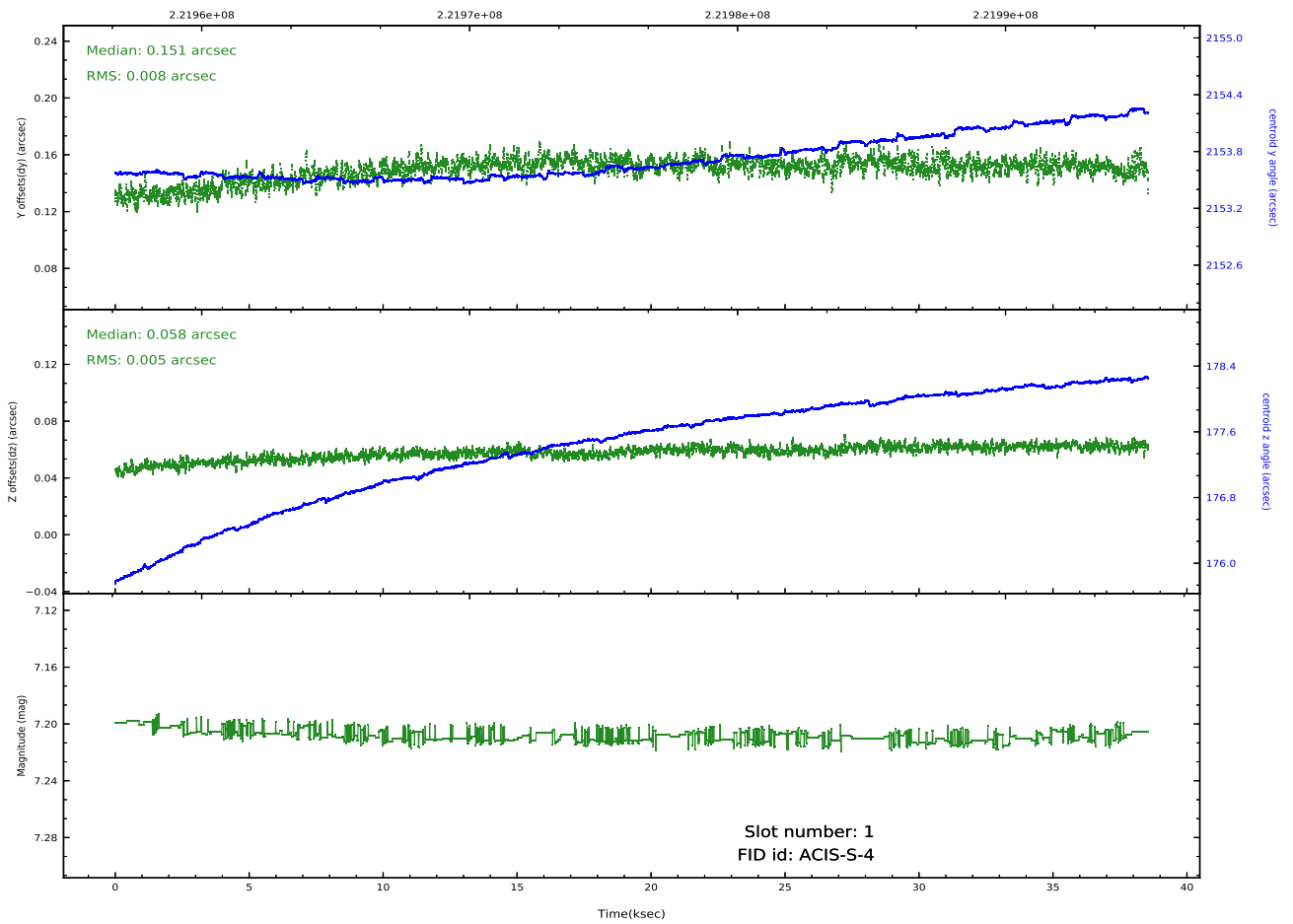
2.5.1 Slot 0



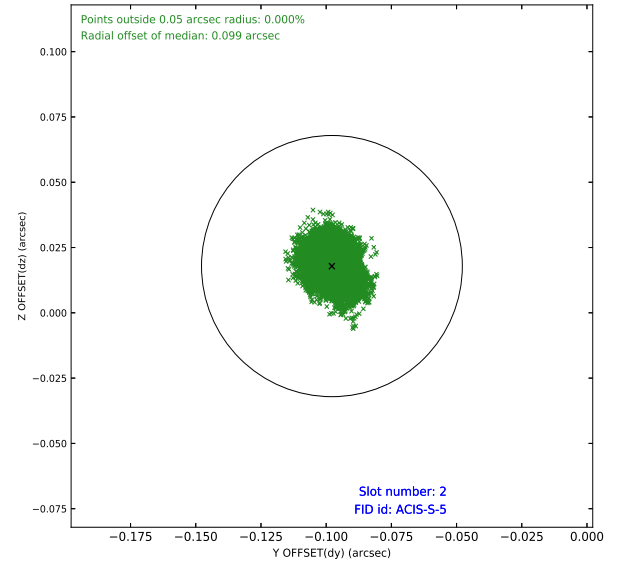
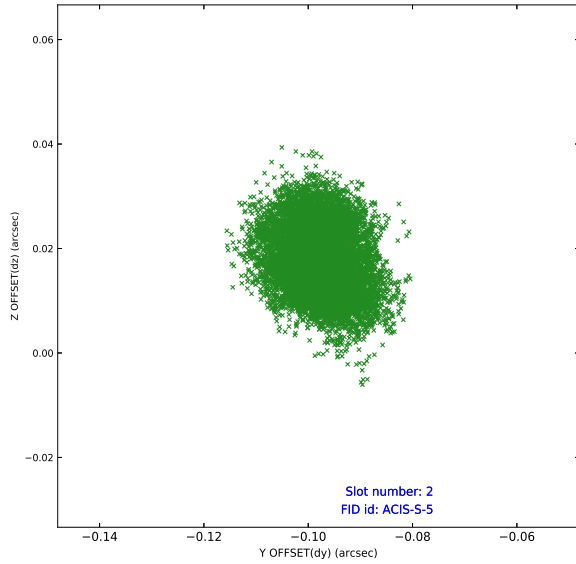
2.5.2 Slot 1



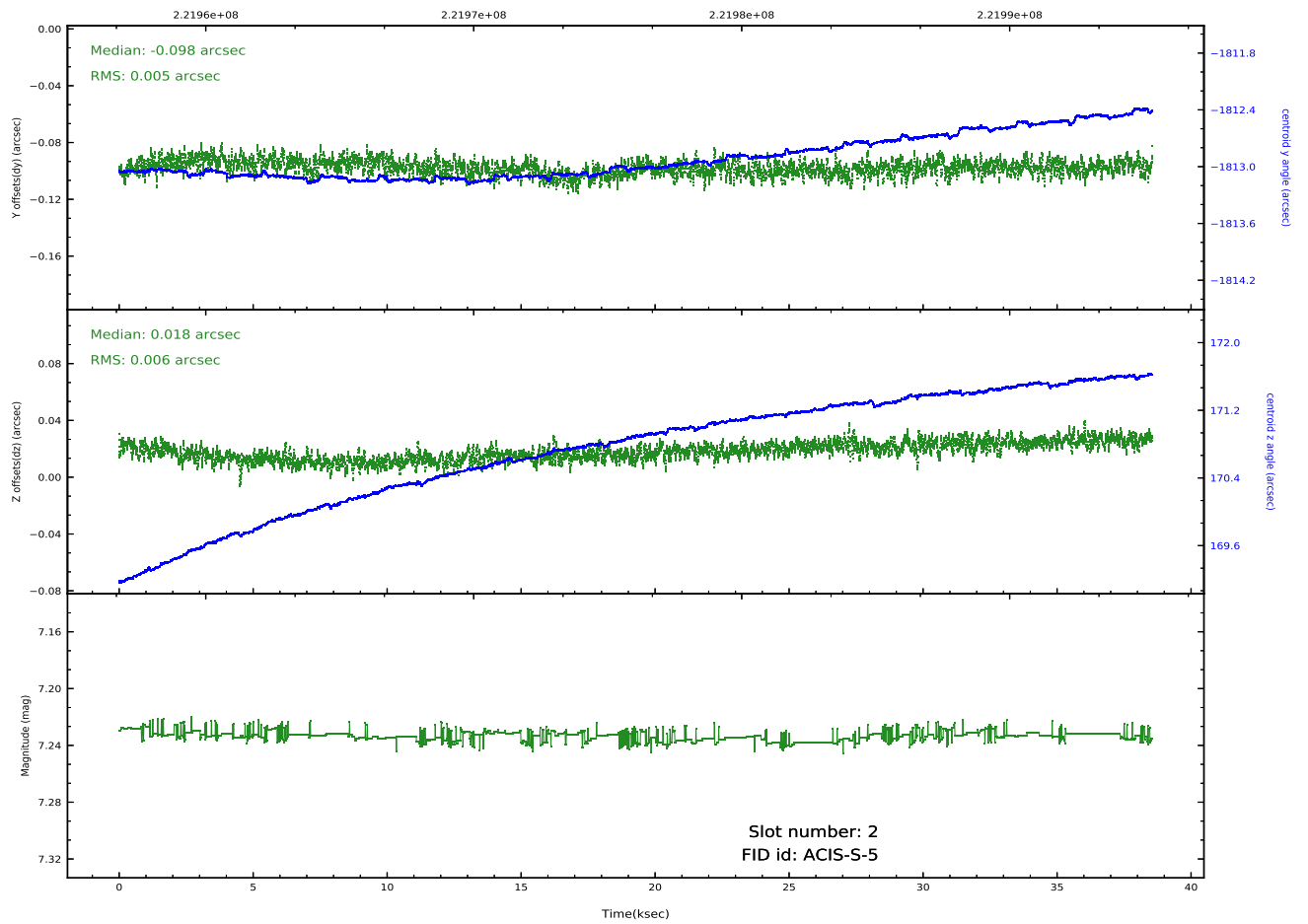
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.95199

A.2 Comments