

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5944 - L2 Version 4
Chandra X-Ray Center

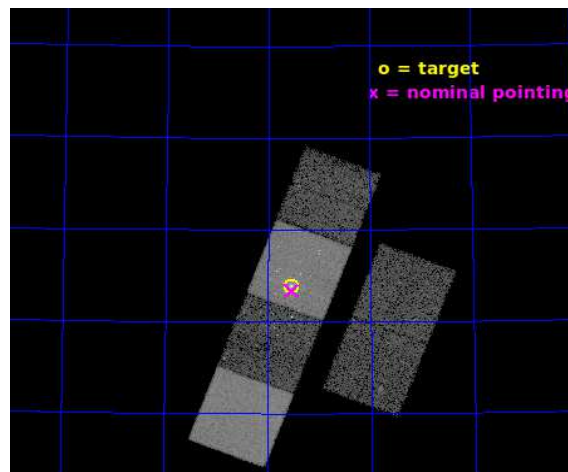
L2 Processing Date : Oct 8 2020

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

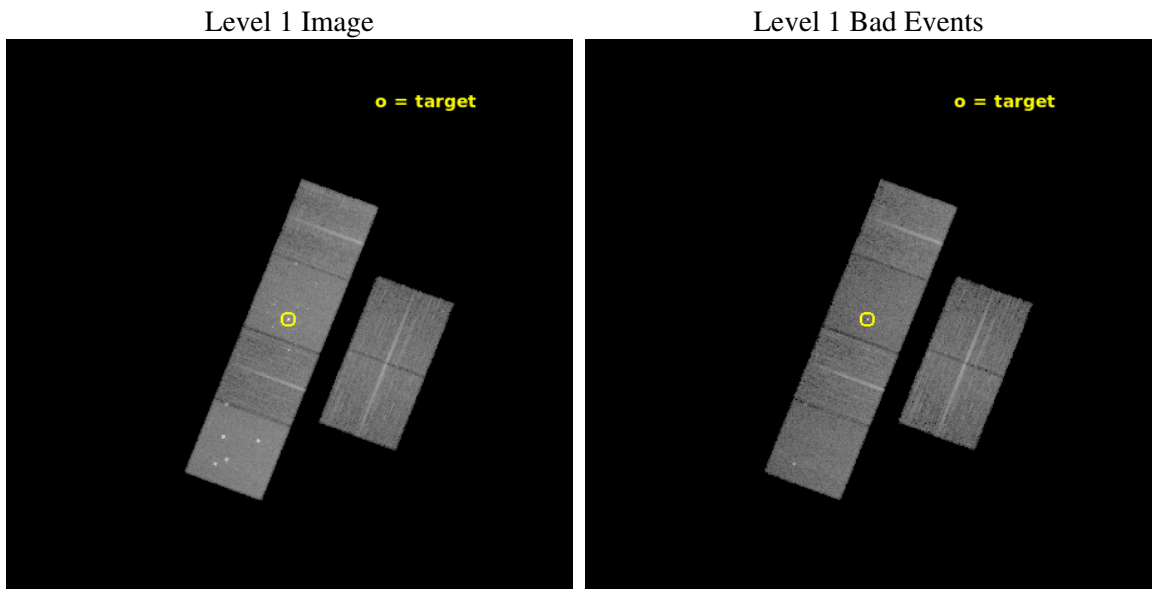
seq_num	600463	Sequence number
obs_id	5944	Observation id
title	An Unprecedented View of a Galaxy's Dynamic X-ray Source Population	
observer	David Pooley	Principal investigator
object	M81	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.888333	Observer's specified target RA [deg]
dec_targ	69.065306	Observer's specified target Dec [deg]
ra_nom	148.88357673902	Nominal RA [deg]
dec_nom	69.056499247888	Nominal Dec [deg]
roll_nom	290.97018832232	Nominal Roll [deg]
revision	4	Processing version of data
ontime	11958.399955451	Sum of GTIs [s]
livetime	11806.975494732	Livetime [s]
ontime2	11955.158995152	Sum of GTIs [s]
ontime3	11958.399955451	Sum of GTIs [s]
ontime5	11958.399955451	Sum of GTIs [s]
ontime6	11958.399955451	Sum of GTIs [s]
ontime7	11958.399955451	Sum of GTIs [s]
ontime8	11958.399955451	Sum of GTIs [s]
l2events	157523	Number of level 2 events



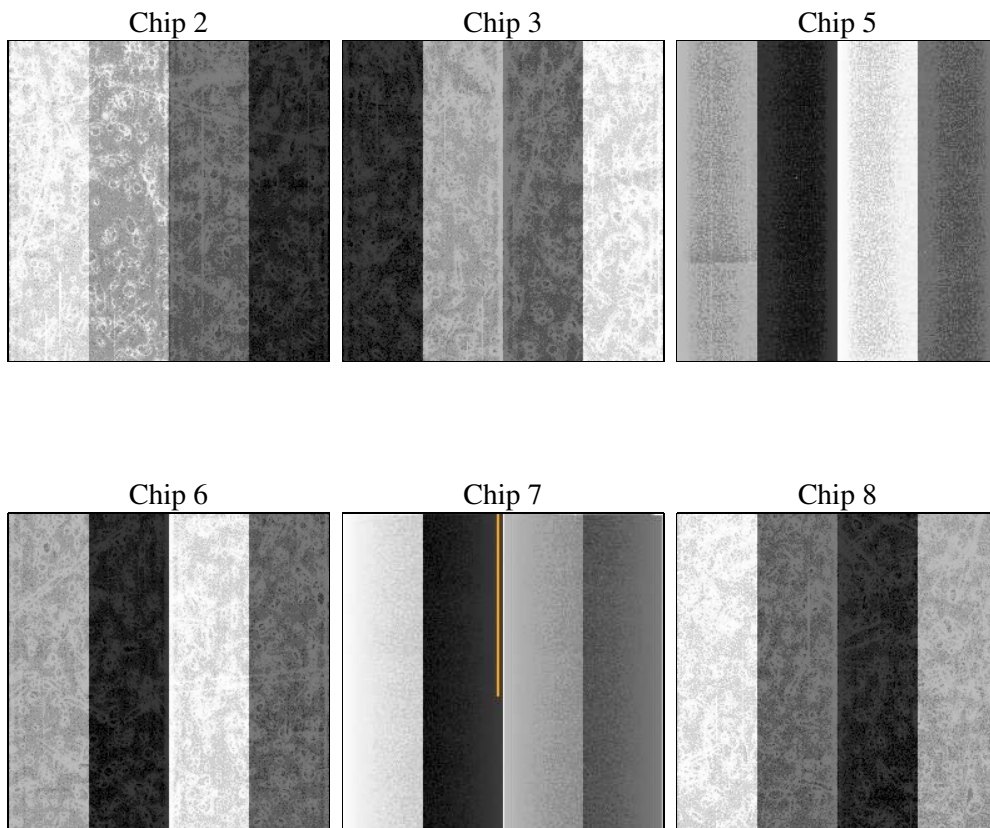
2 OBI

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	10.9.1	Processing system revision	ontime	11958.399955451	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	11955.158995152	Sum of GTIs [s]
date	2020-10-09T00:44:58	Date and time of file creation	ontime3	11958.399955451	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	11958.399955451	Sum of GTIs [s]
			ontime6	11958.399955451	Sum of GTIs [s]
			ontime7	11958.399955451	Sum of GTIs [s]
			ontime8	11958.399955451	Sum of GTIs [s]
			l1events	669945	Number of level 1 events

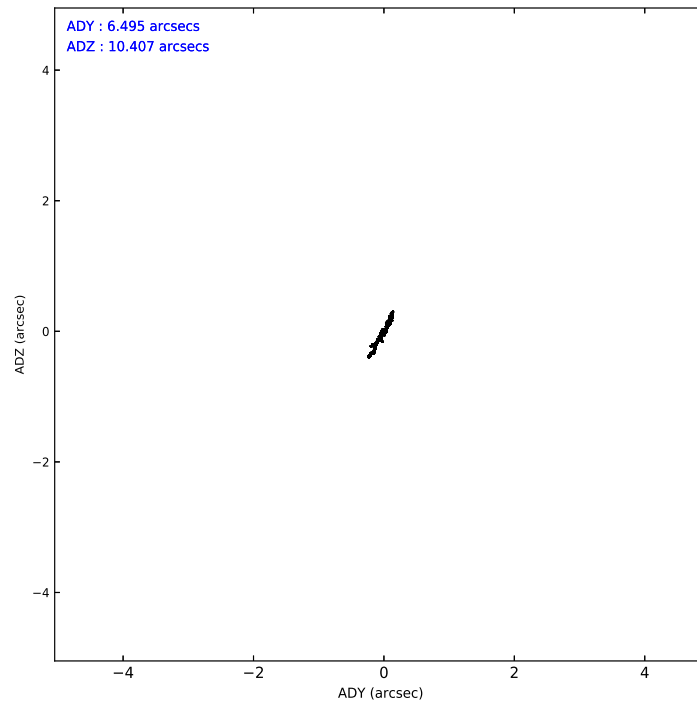
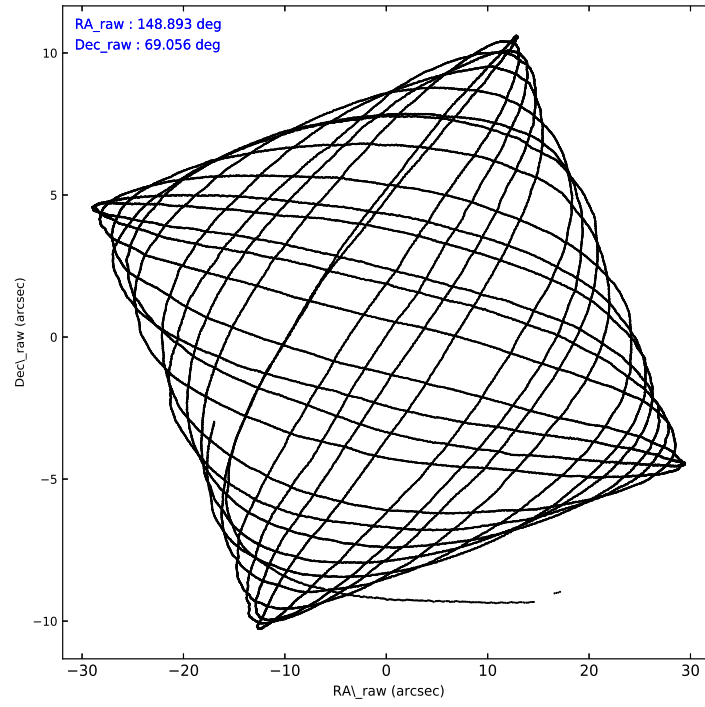
2.1.4 Events

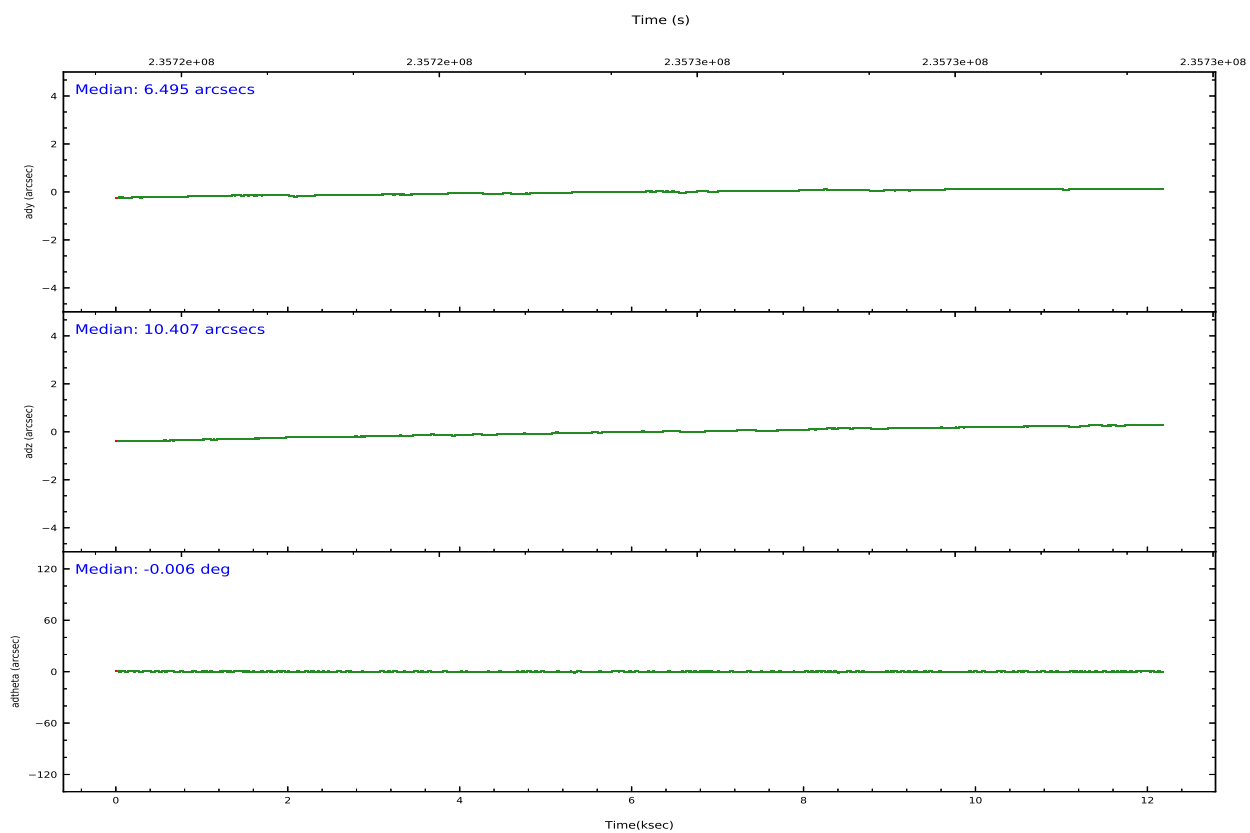
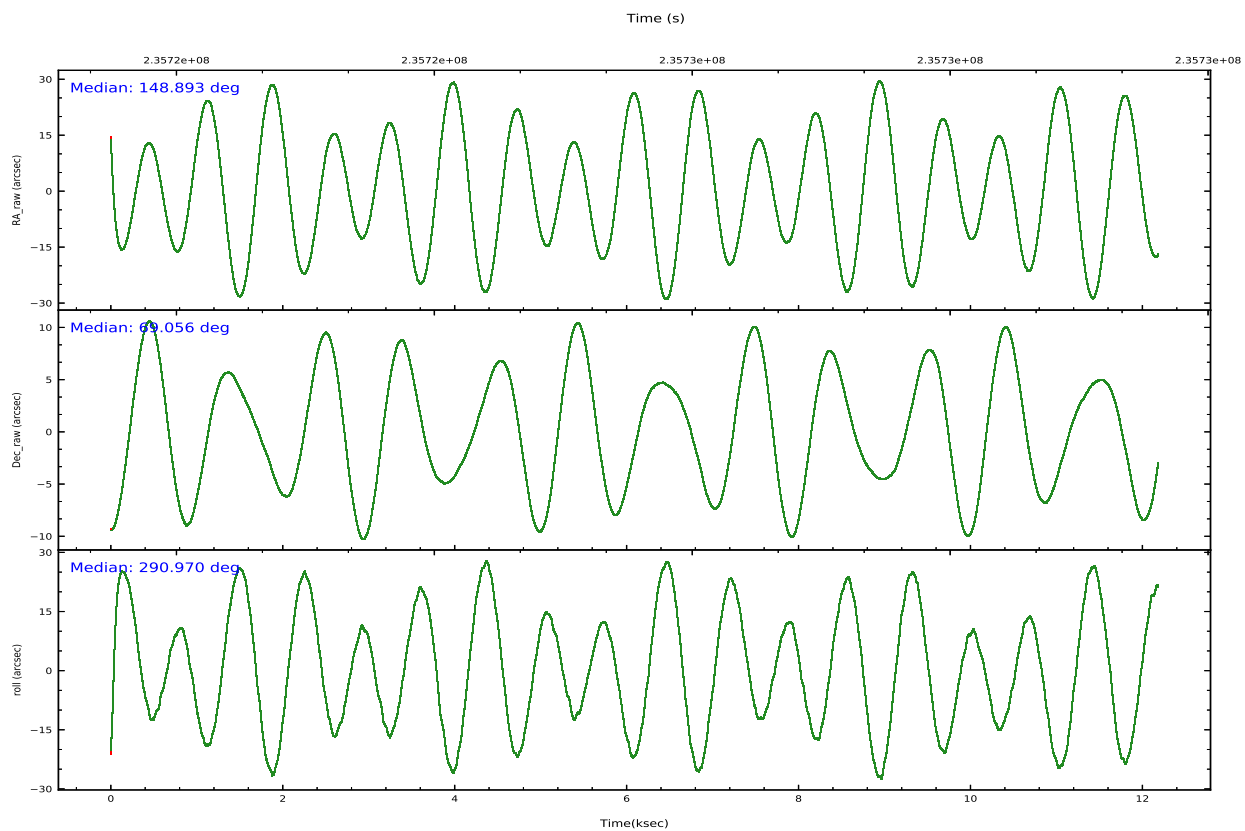
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	94471	85456	144196	94761	136691	114370	grade 0 events	4869	4611	11000	5836	6793	7477
rejected events	83489	74889	75507	81914	76164	90017		5%	5%	7%	6%	4%	6%
rejected %	88%	87%	52%	86%	55%	78%	grade 1 events	59	51	334	81	232	78
								0%	0%	0%	0%	0%	0%
							grade 2 events	2212	2042	19969	2563	12559	5500
								2%	2%	13%	2%	9%	4%
							grade 3 events	1061	1024	2274	1128	5521	2359
								1%	1%	1%	1%	4%	2%
							grade 4 events	1058	995	2207	1094	5430	2286
								1%	1%	1%	1%	3%	1%
							grade 5 events	3642	4126	9909	4297	12426	5520
								3%	4%	6%	4%	9%	4%
							grade 6 events	1791	1901	33277	2234	30264	6739
								1%	2%	23%	2%	22%	5%
							grade 7 events	79779	70706	65226	77528	63466	84411
								84%	82%	45%	81%	46%	73%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	148.833564	148.88357673902	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.072669	69.056499247888	Alternating exposures requested	N	N
[deg] Pointing Roll	290.862831	290.97018832232	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	235719421.184000	235718459.72086			
Observation start date	2005-06-21T05:35:57	2005-06-21T05:20:59			
[s] Observation end time (MET)	235731421.184000	235732521.6965			
Observation end date	2005-06-21T08:55:57	2005-06-21T09:15:21			
Read mode	TIMED	TIMED			

2.3 Aspect



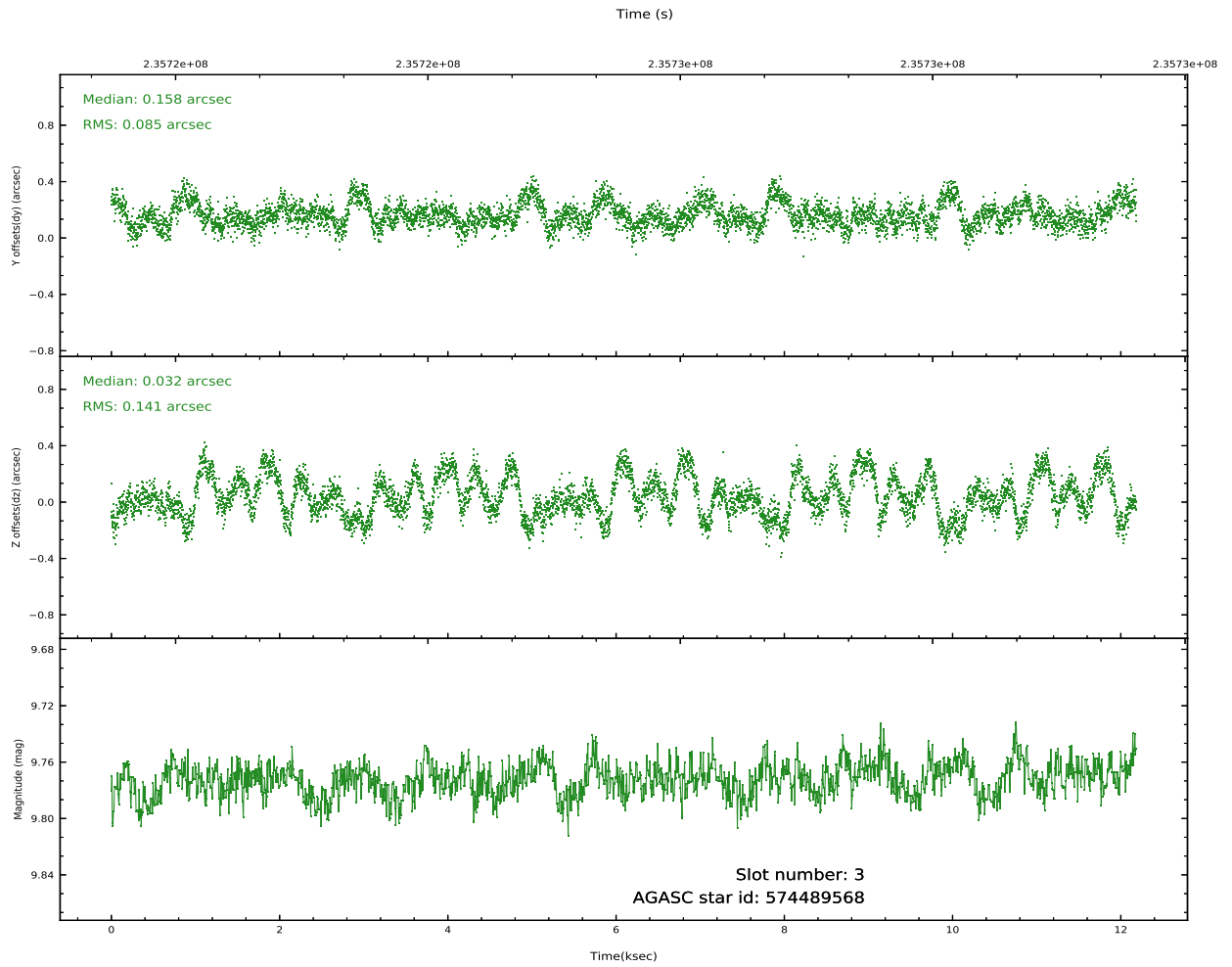
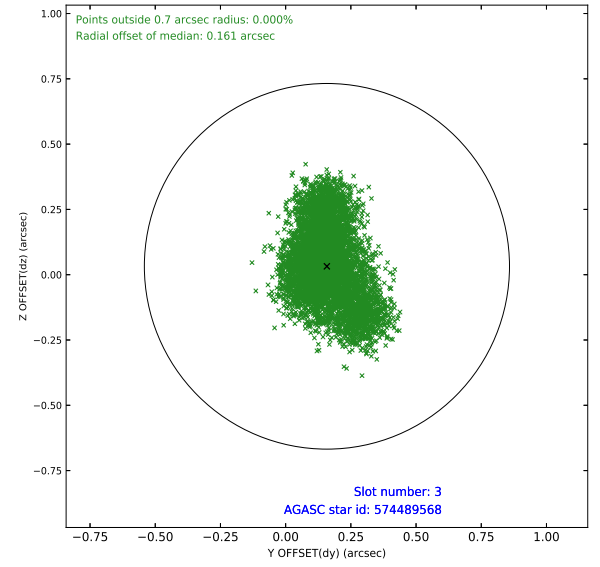
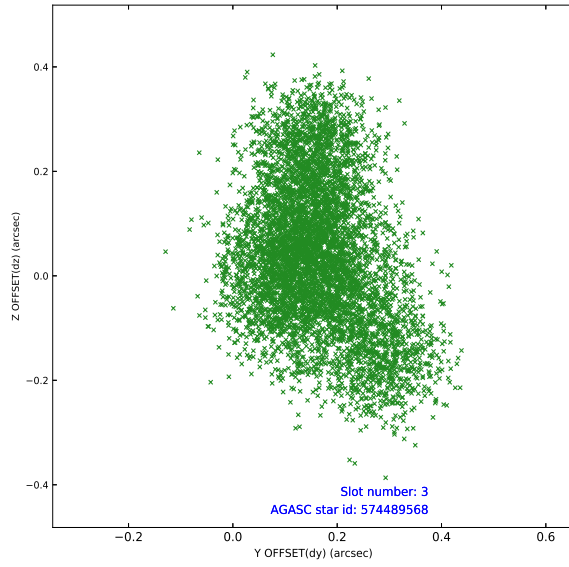


Slot Statistics

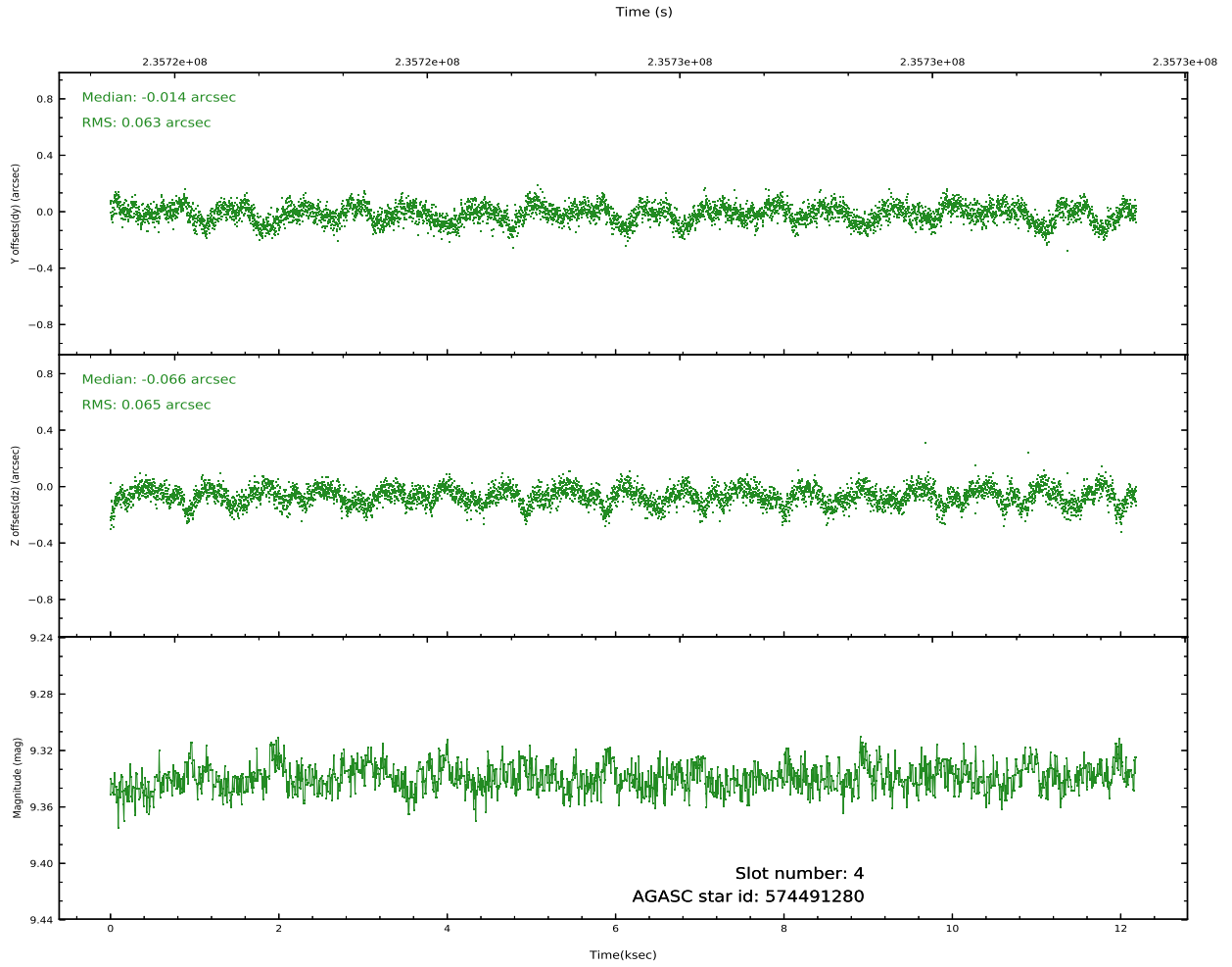
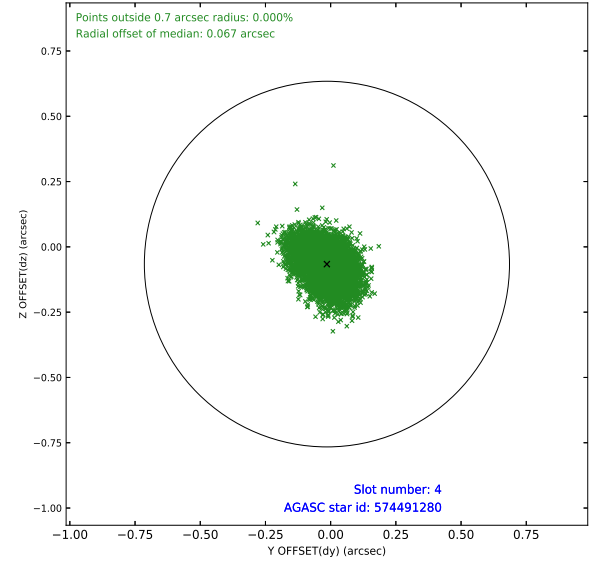
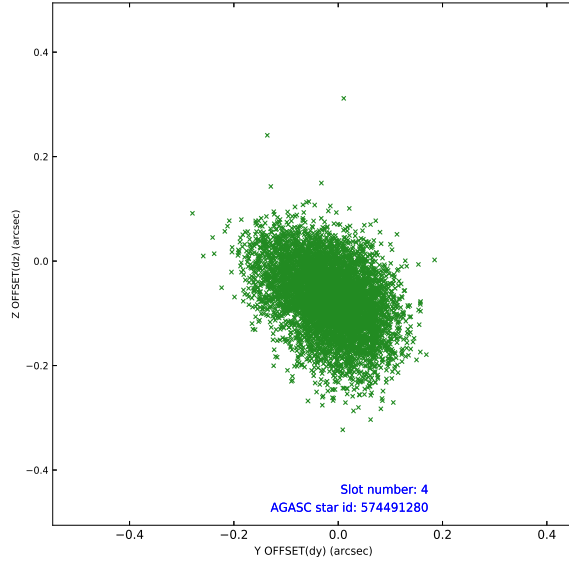
	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	m
	FID		ACIS-S-1	7.19	2972	1.000	-0.012	-0.074	0.014	0.023	0.000000	0.000000	936.83	-17
	FID		ACIS-S-4	7.21	2972	1.000	0.107	0.061	0.010	0.016	0.000000	0.000000	2154.55	1
	FID		ACIS-S-5	7.23	2972	1.000	-0.122	0.025	0.008	0.012	0.000000	0.000000	-1811.66	1
	GUIDE	used	574489568	9.77	5937	1.000	0.158	0.032	0.177	0.288	147.223974	69.438157	-1978.80	-14
	GUIDE	used	574491280	9.34	5942	1.000	-0.014	-0.066	0.097	0.158	148.611567	69.450135	-1370.01	2
	GUIDE	used	574496080	9.92	5927	1.000	-0.203	0.103	0.132	0.212	149.336129	69.802025	-2233.27	15
	BAD	used	574497600	10.42	5621	1.000	-0.081	-0.283	0.261	0.413	147.824120	68.451903	1602.54	-20
	GUIDE	used	574496312	10.29	5927	1.000	0.138	0.198	0.195	0.339	149.547505	68.718299	1519.96	4

2.4 Star Slots

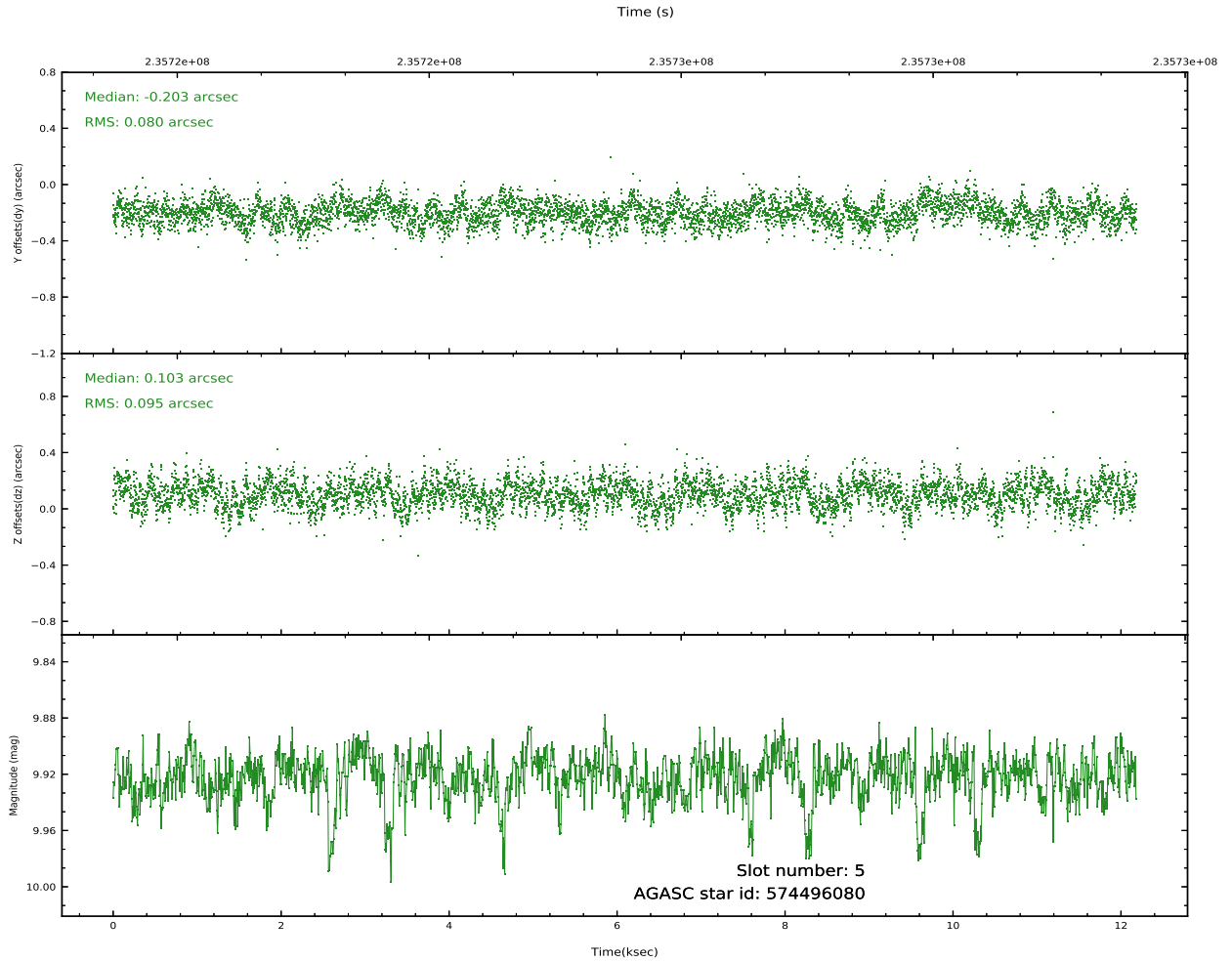
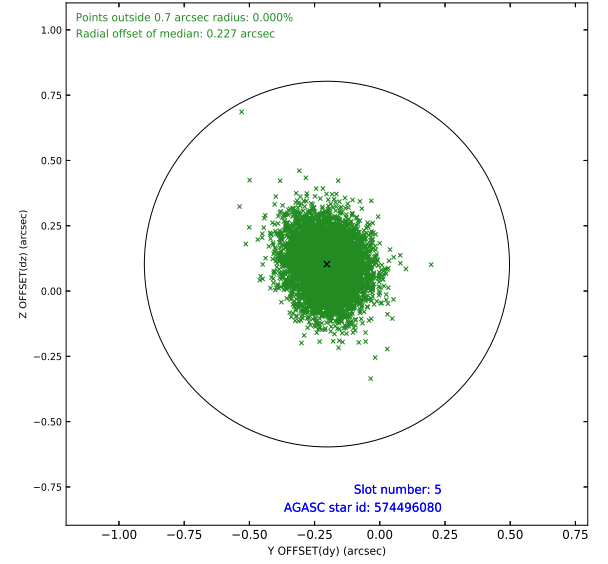
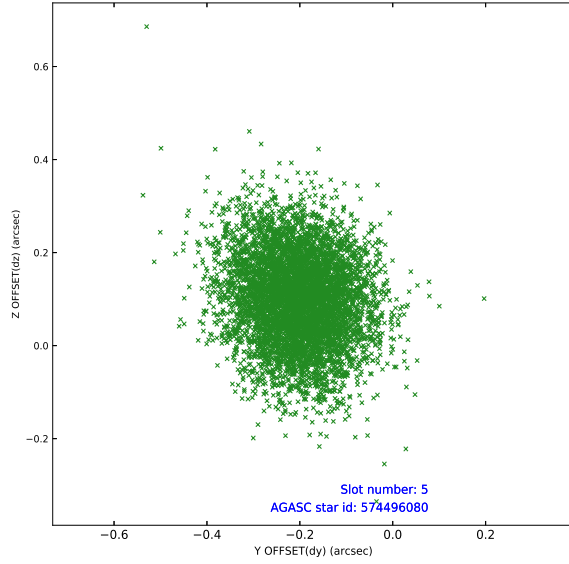
2.4.1 Slot 3



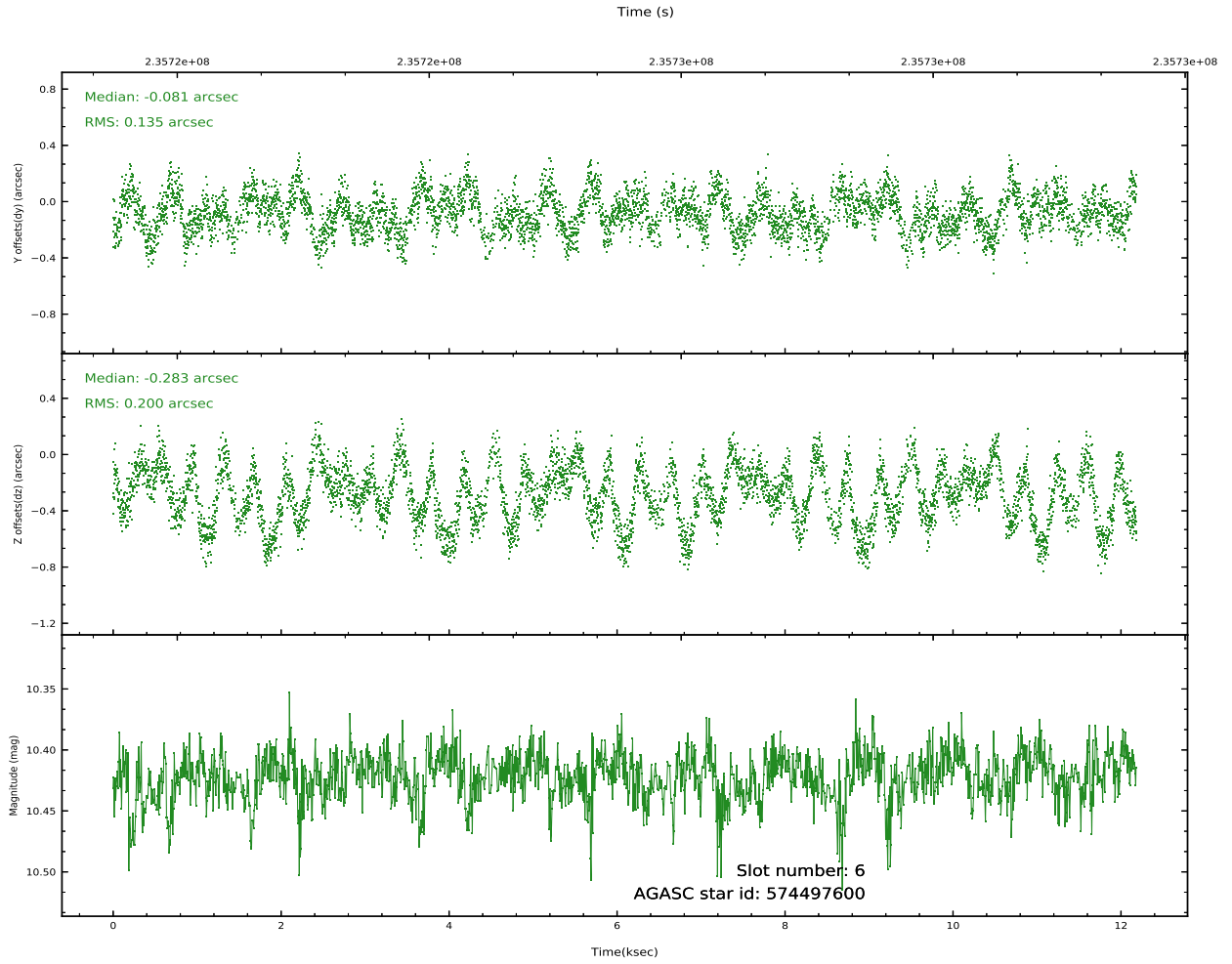
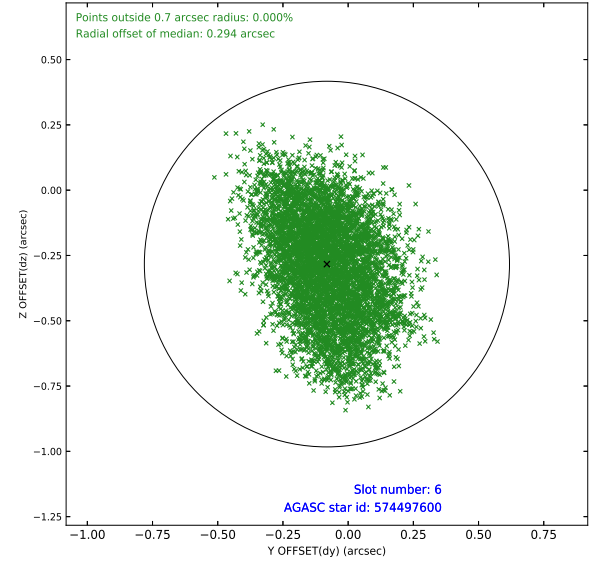
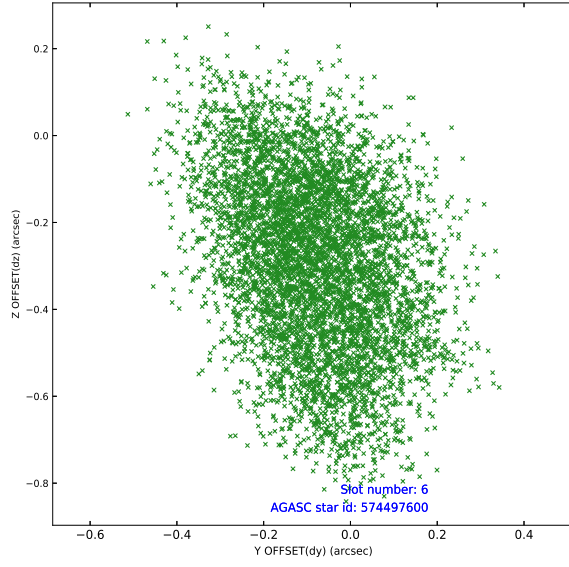
2.4.2 Slot 4



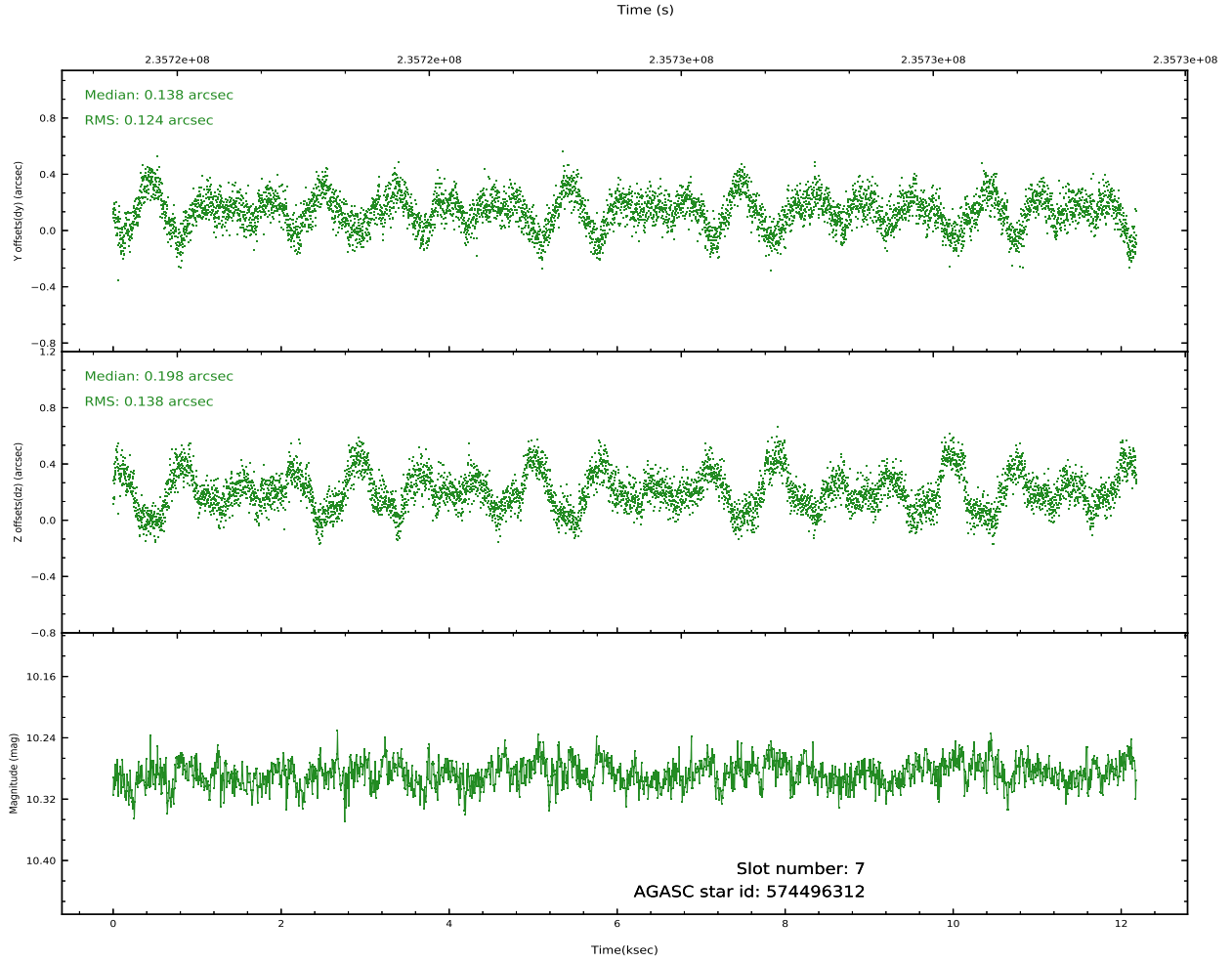
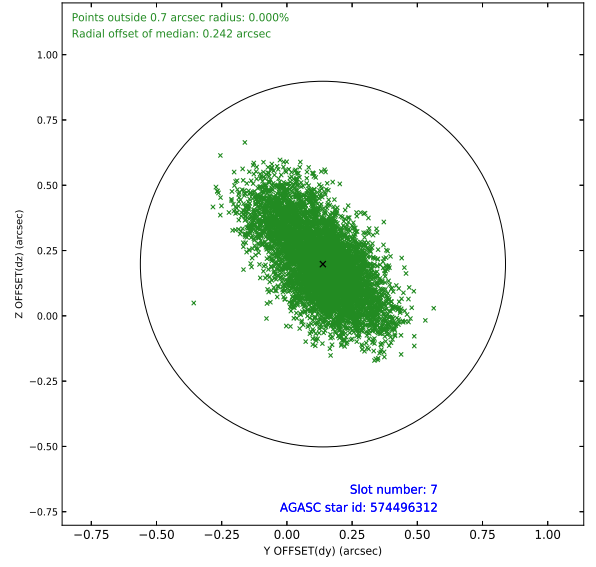
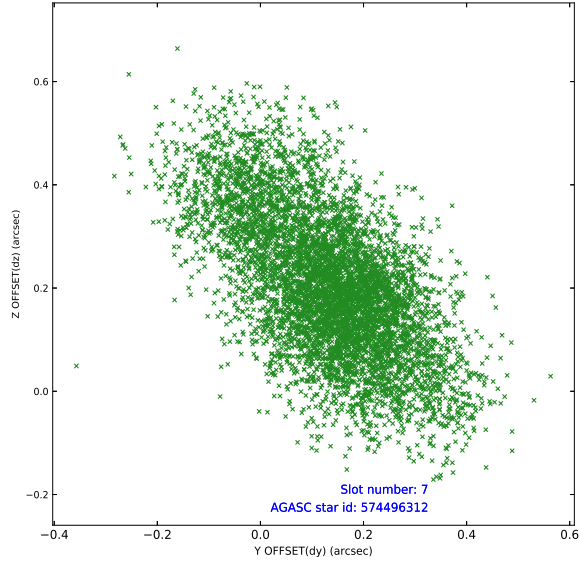
2.4.3 Slot 5



2.4.4 Slot 6

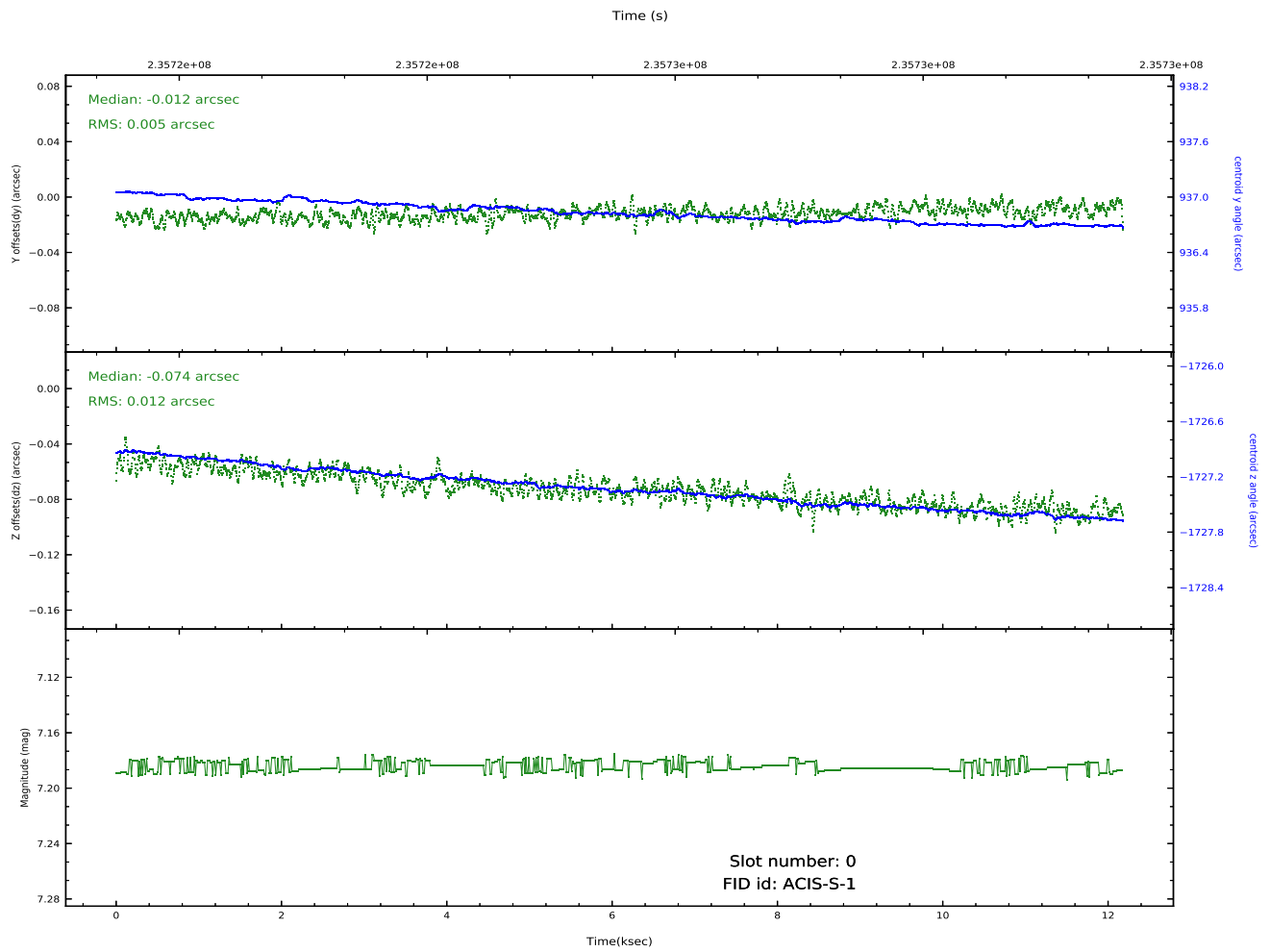
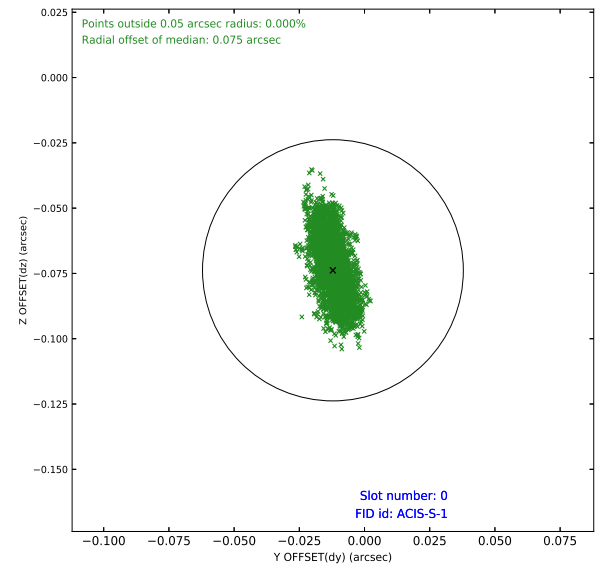
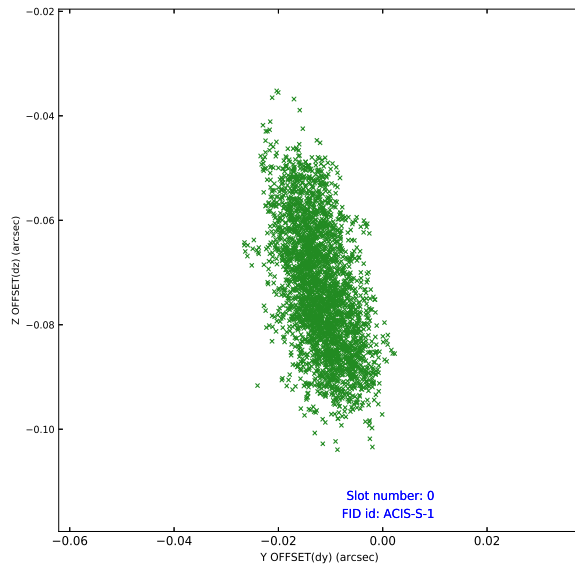


2.4.5 Slot 7

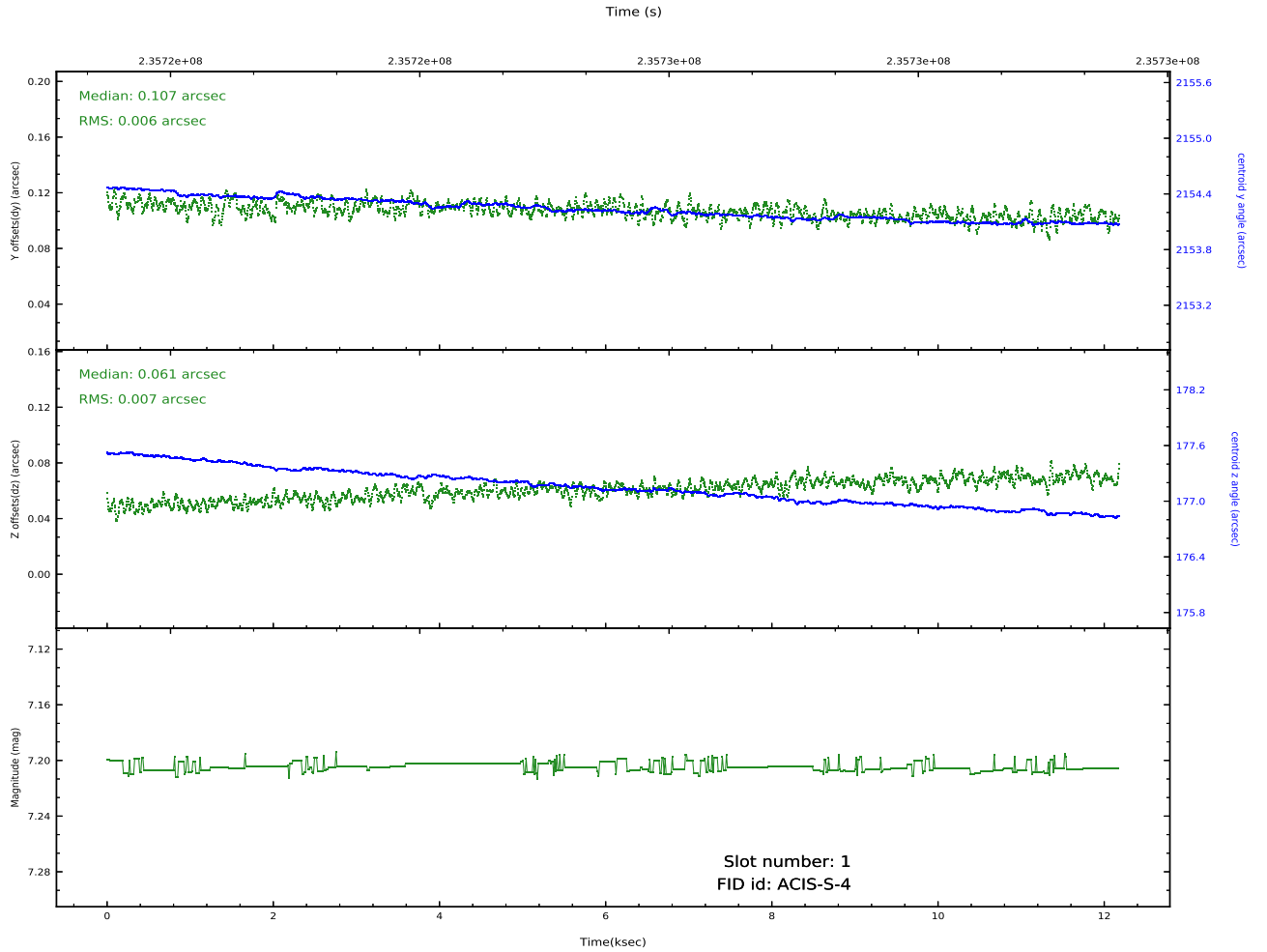
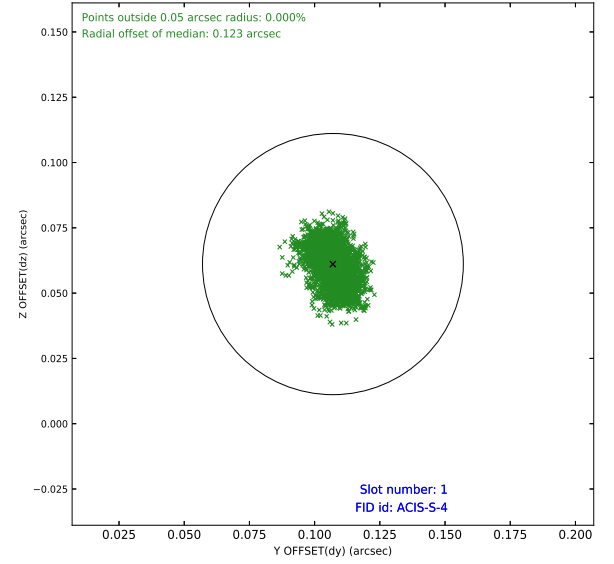
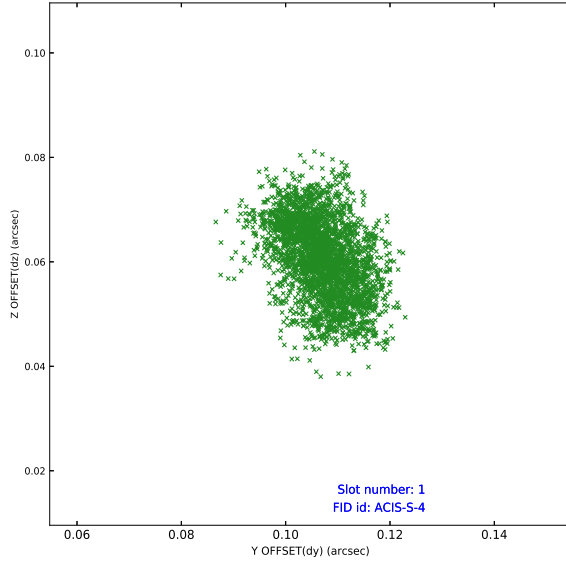


2.5 FID Slots

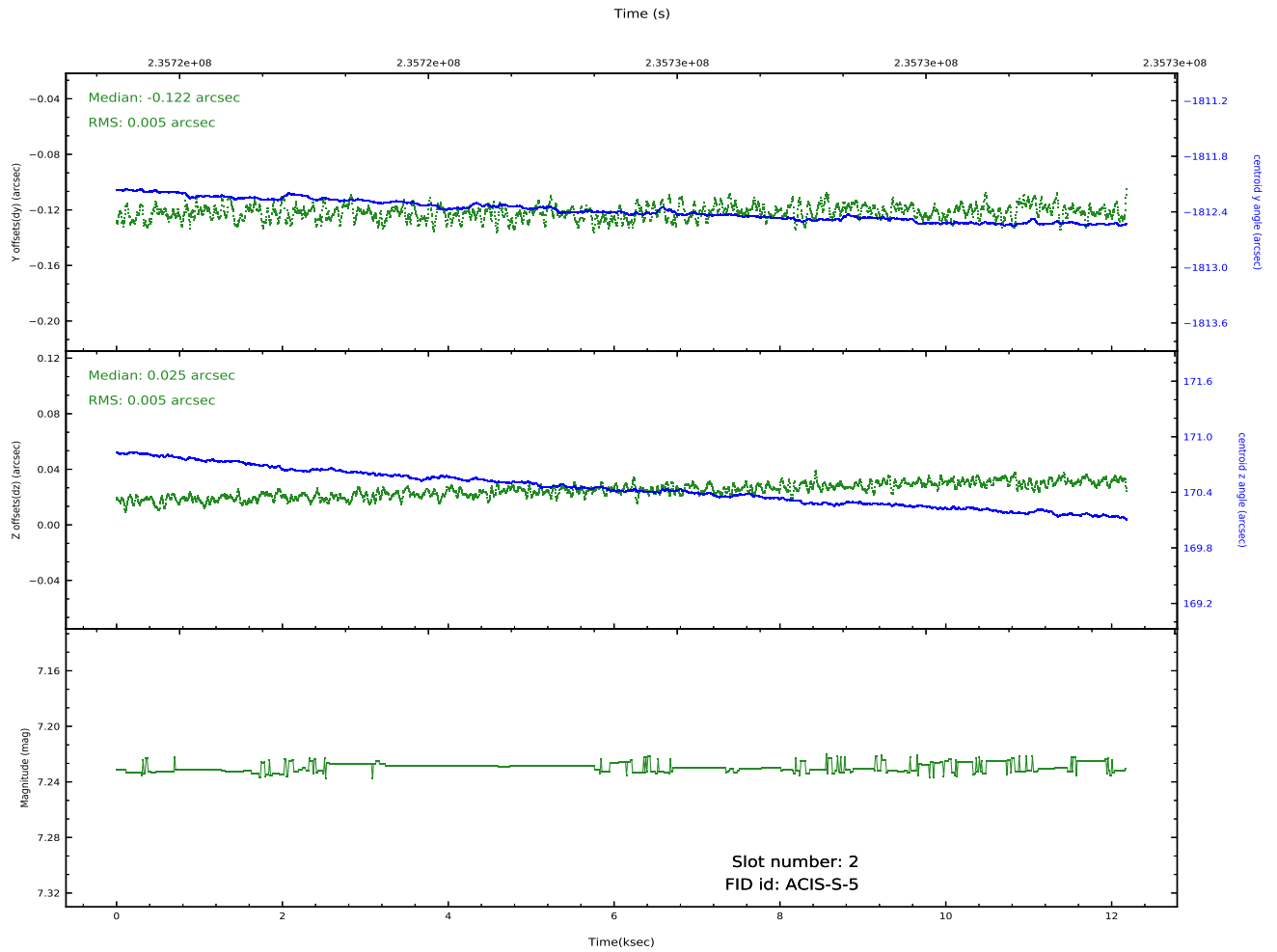
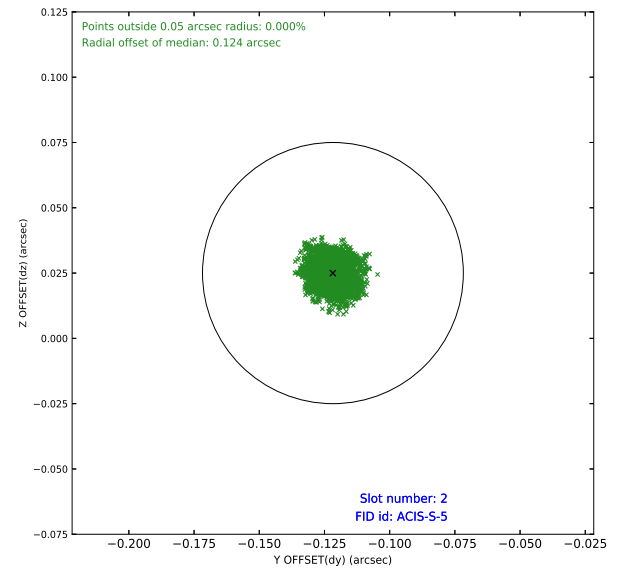
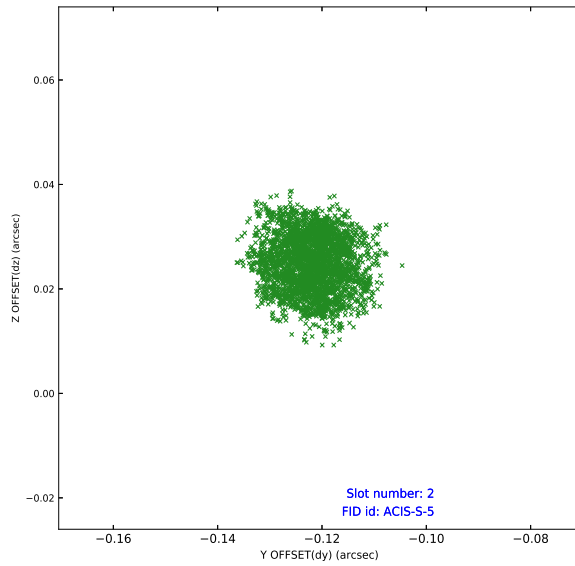
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.95839

A.2 Comments

Roll preference met. Monitor constraint met.