

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5942 - L2 Version 4
Chandra X-Ray Center

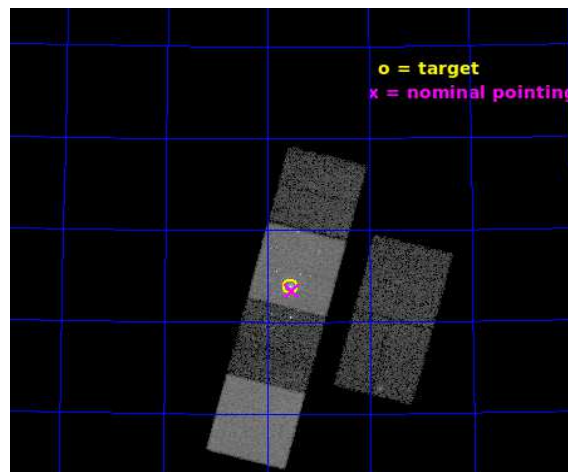
L2 Processing Date : Oct 8 2020

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

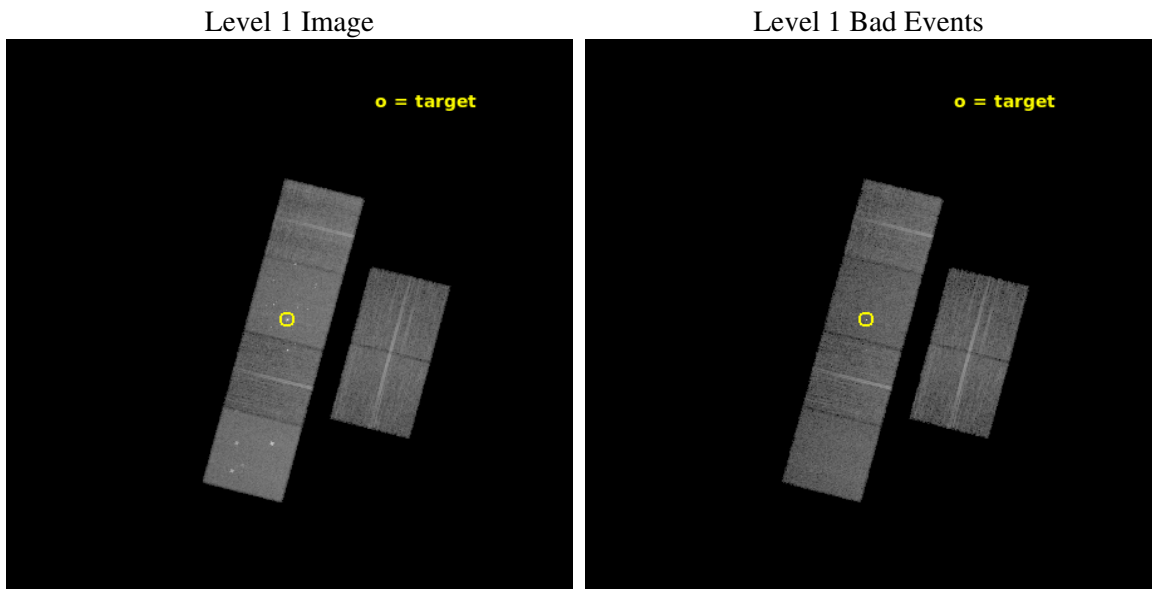
seq_num	600461	Sequence number
obs_id	5942	Observation id
title	An Unprecedented View of a Galaxy's Dynamic X-ray Source Population	
observer	David Pooley	Principal investigator
object	M81	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.888333	Observer's specified target RA [deg]
dec_targ	69.065306	Observer's specified target Dec [deg]
ra_nom	148.88002921407	Nominal RA [deg]
dec_nom	69.057017253206	Nominal Dec [deg]
roll_nom	284.60960083712	Nominal Roll [deg]
revision	4	Processing version of data
ontime	12105.599954903	Sum of GTIs [s]
livetime	11952.311559157	Livetime [s]
ontime2	12105.599954903	Sum of GTIs [s]
ontime3	12105.599954903	Sum of GTIs [s]
ontime5	12105.599954903	Sum of GTIs [s]
ontime6	12105.599954903	Sum of GTIs [s]
ontime7	12105.599954903	Sum of GTIs [s]
ontime8	12105.599954903	Sum of GTIs [s]
l2events	157107	Number of level 2 events



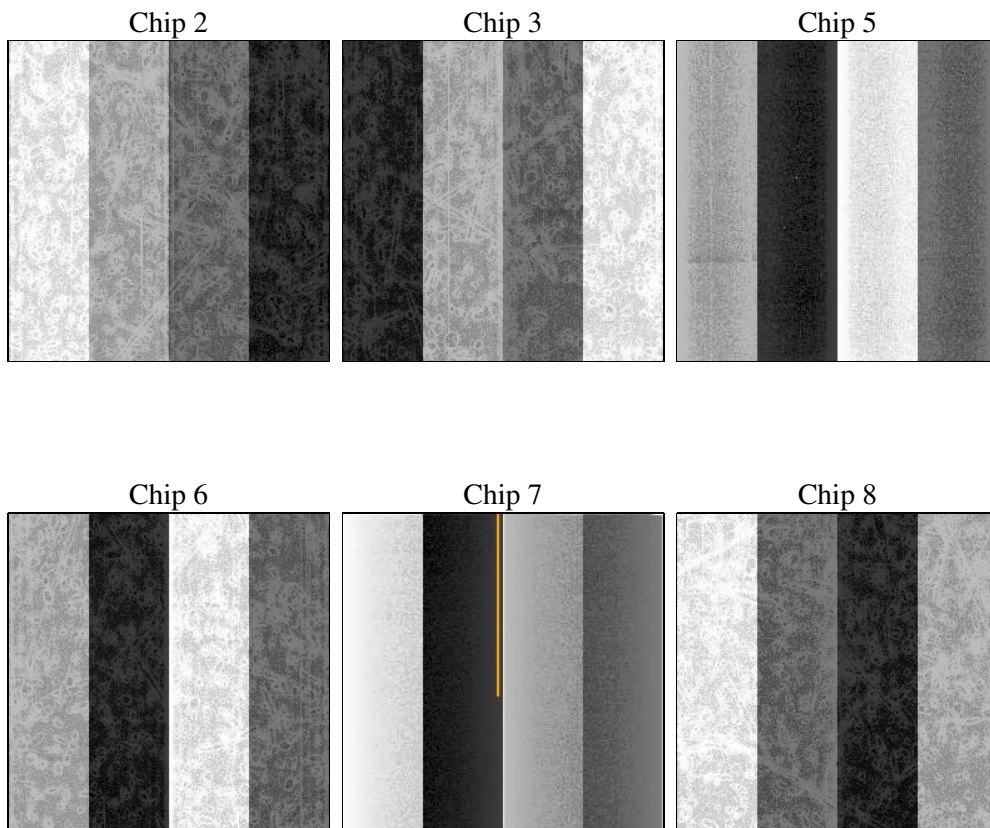
2 OBI

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	12105.599954903	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	12105.599954903	Sum of GTIs [s]
date	2020-10-08T19:47:40	Date and time of file creation	ontime3	12105.599954903	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	12105.599954903	Sum of GTIs [s]
			ontime6	12105.599954903	Sum of GTIs [s]
			ontime7	12105.599954903	Sum of GTIs [s]
			ontime8	12105.599954903	Sum of GTIs [s]
			l1events	657236	Number of level 1 events

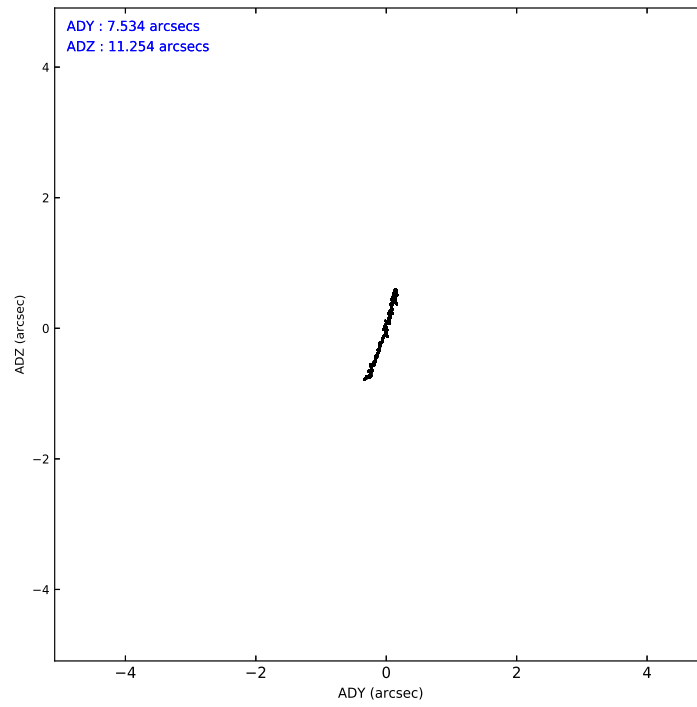
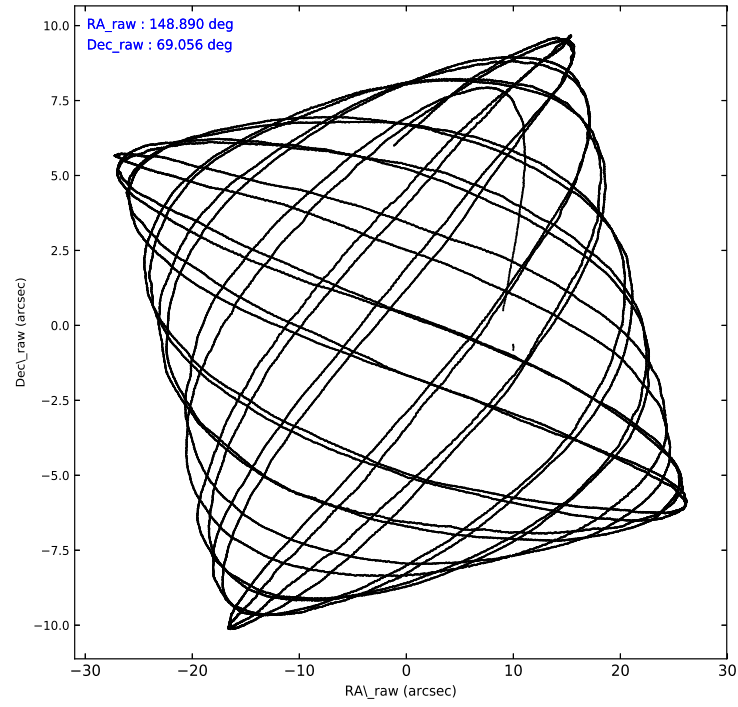
2.1.4 Events

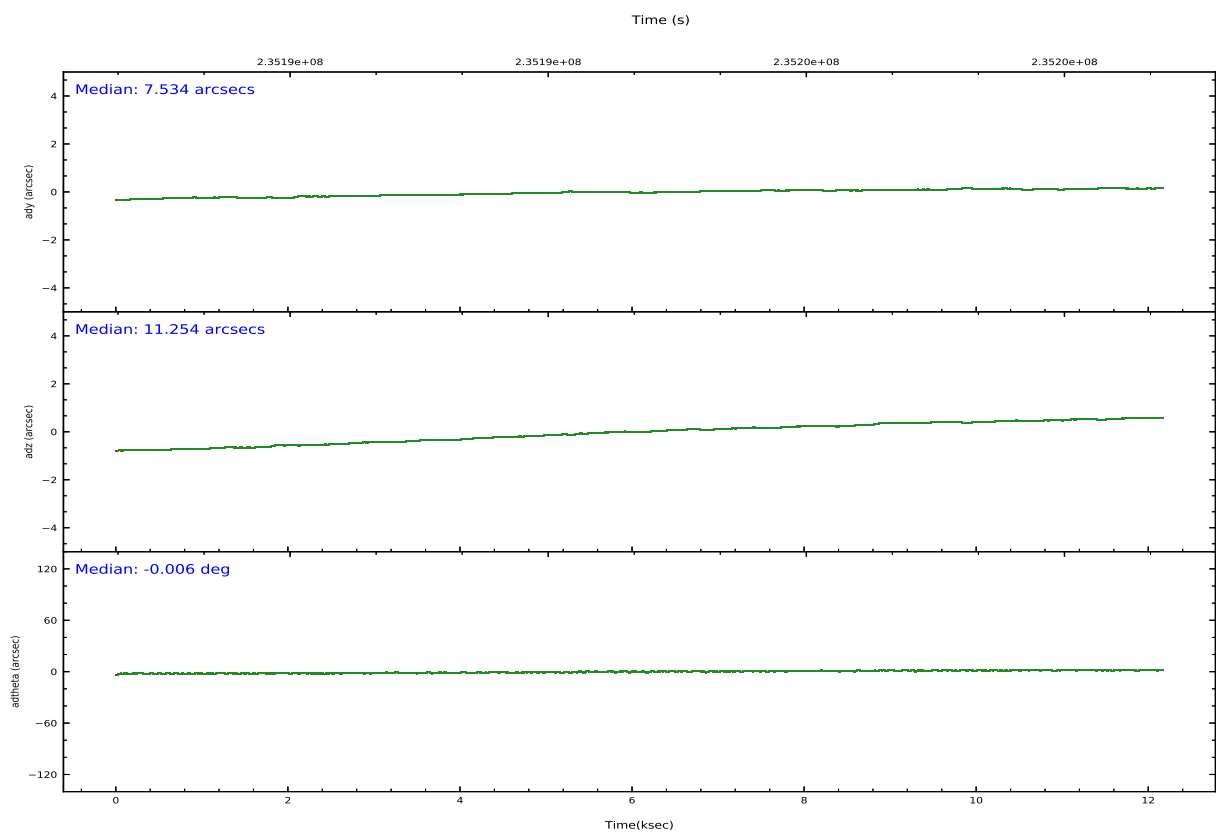
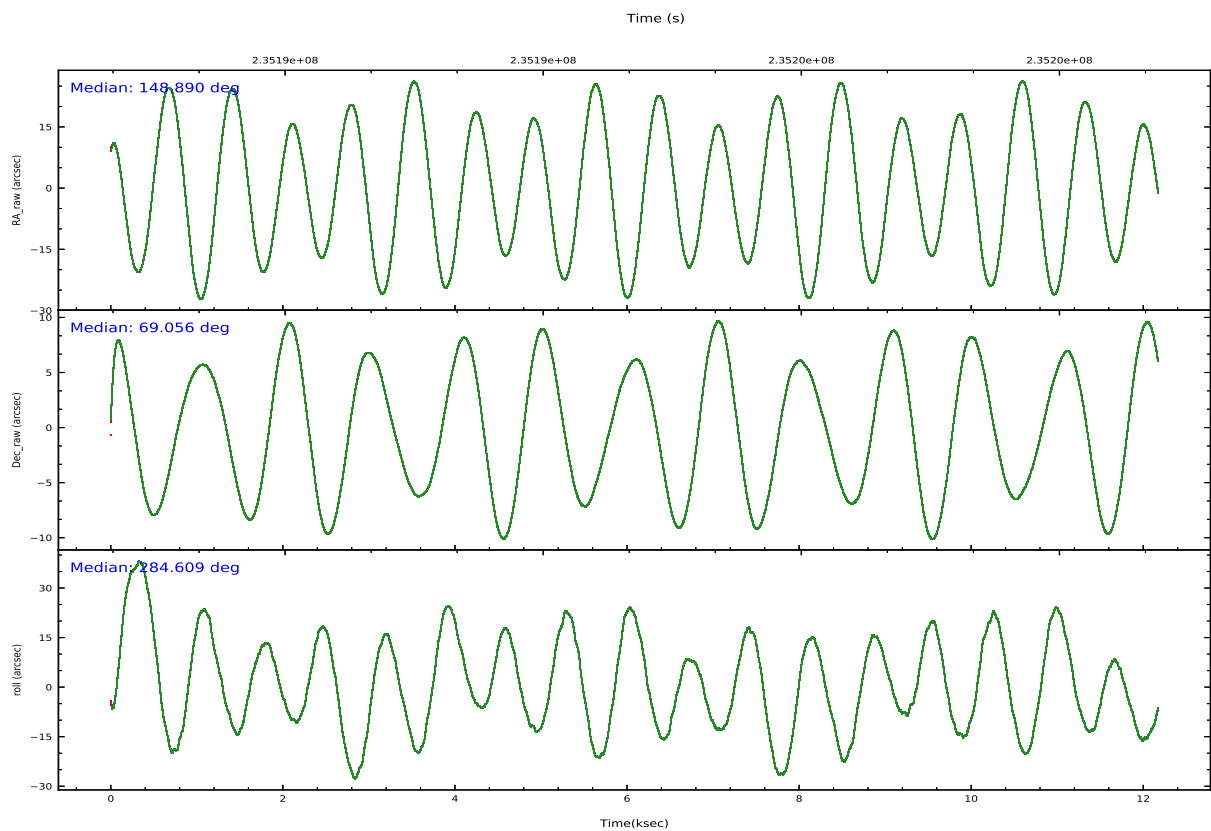
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	92158	84676	137604	91676	134559	116563	grade 0 events	5023	4593	8477	5808	7058	8663
rejected events	81026	74058	72756	78825	74821	89759		5%	5%	6%	6%	5%	7%
rejected %	87%	87%	52%	85%	55%	77%	grade 1 events	59	57	249	65	220	83
								0%	0%	0%	0%	0%	0%
							grade 2 events	2237	2065	19082	2601	12292	5777
								2%	2%	13%	2%	9%	4%
							grade 3 events	1031	1074	2437	1120	5590	2962
								1%	1%	1%	1%	4%	2%
							grade 4 events	1063	1022	2320	1091	5489	2878
								1%	1%	1%	1%	4%	2%
							grade 5 events	3632	4031	9960	4234	12288	5598
								3%	4%	7%	4%	9%	4%
							grade 6 events	1783	1871	32560	2239	29340	6570
								1%	2%	23%	2%	21%	5%
							grade 7 events	77330	69963	62519	74518	62282	84032
								83%	82%	45%	81%	46%	72%

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	148.836175	148.88002921407	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.074779	69.057017253206	Alternating exposures requested	N	N
[deg] Pointing Roll	284.497608	284.60960083712	[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)	235187148.184000	235186113.64656			
Observation start date	2005-06-15T01:44:44	2005-06-15T01:28:33			
[s] Observation end time (MET)	235199148.184000	235200020.3347			
Observation end date	2005-06-15T05:04:44	2005-06-15T05:20:20			
Read mode	TIMED	TIMED			

2.3 Aspect



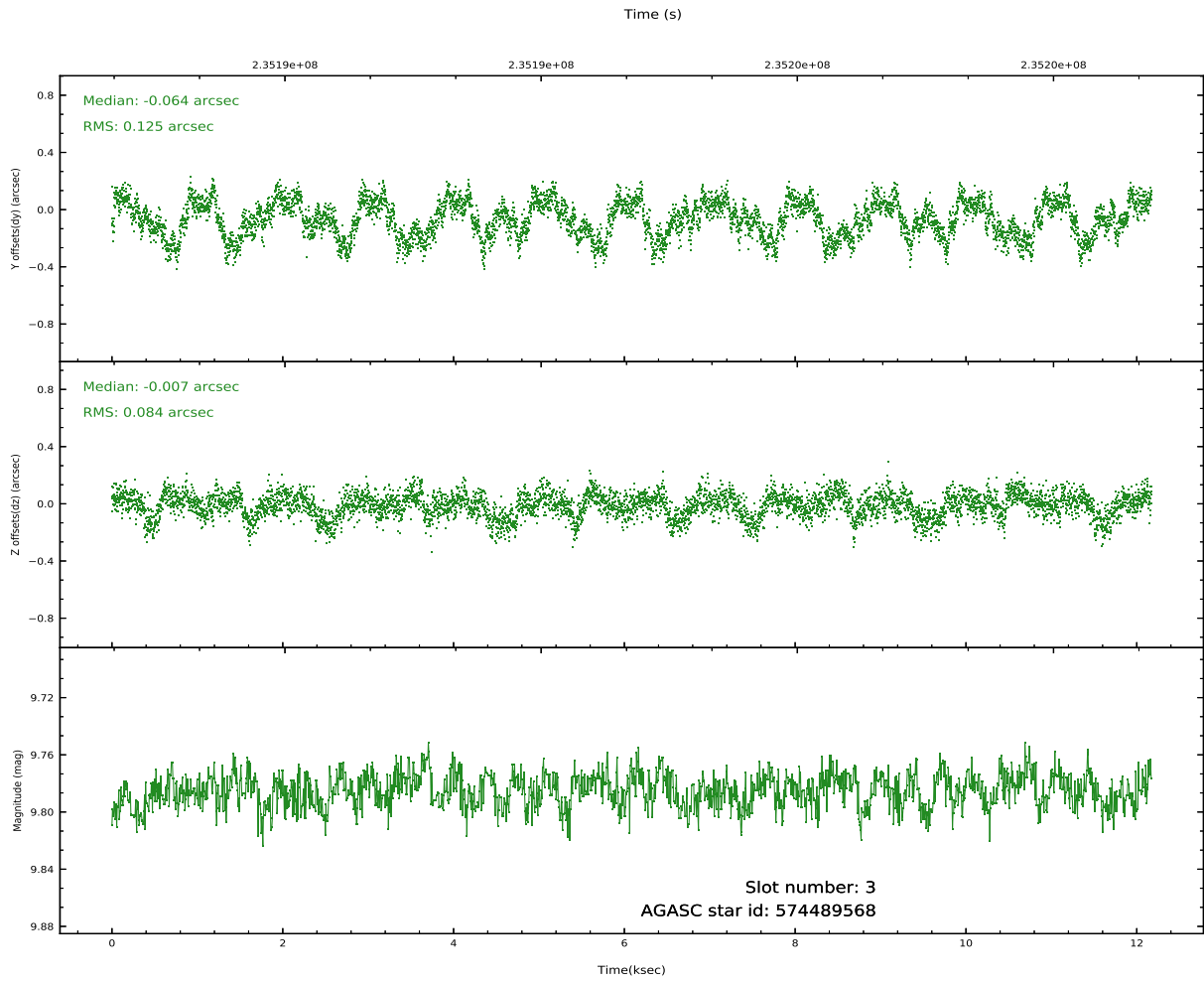
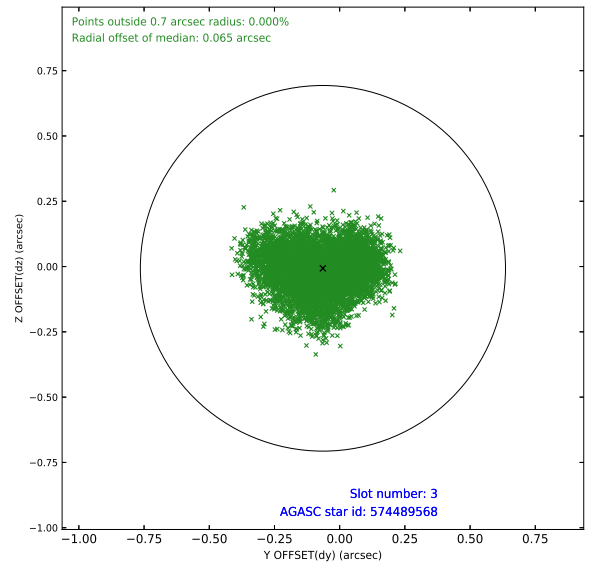
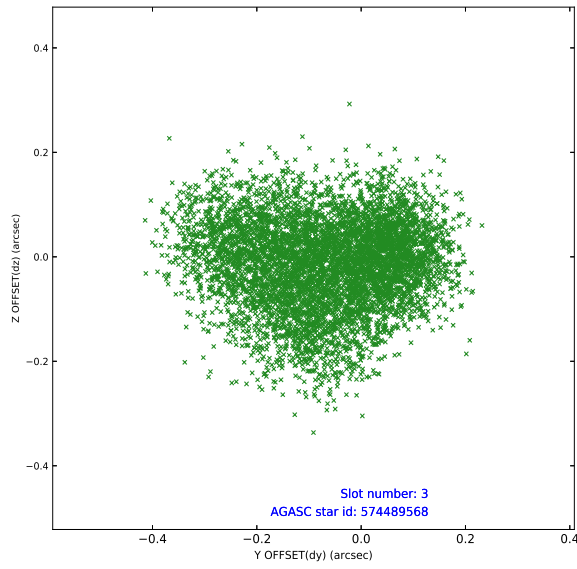


Slot Statistics

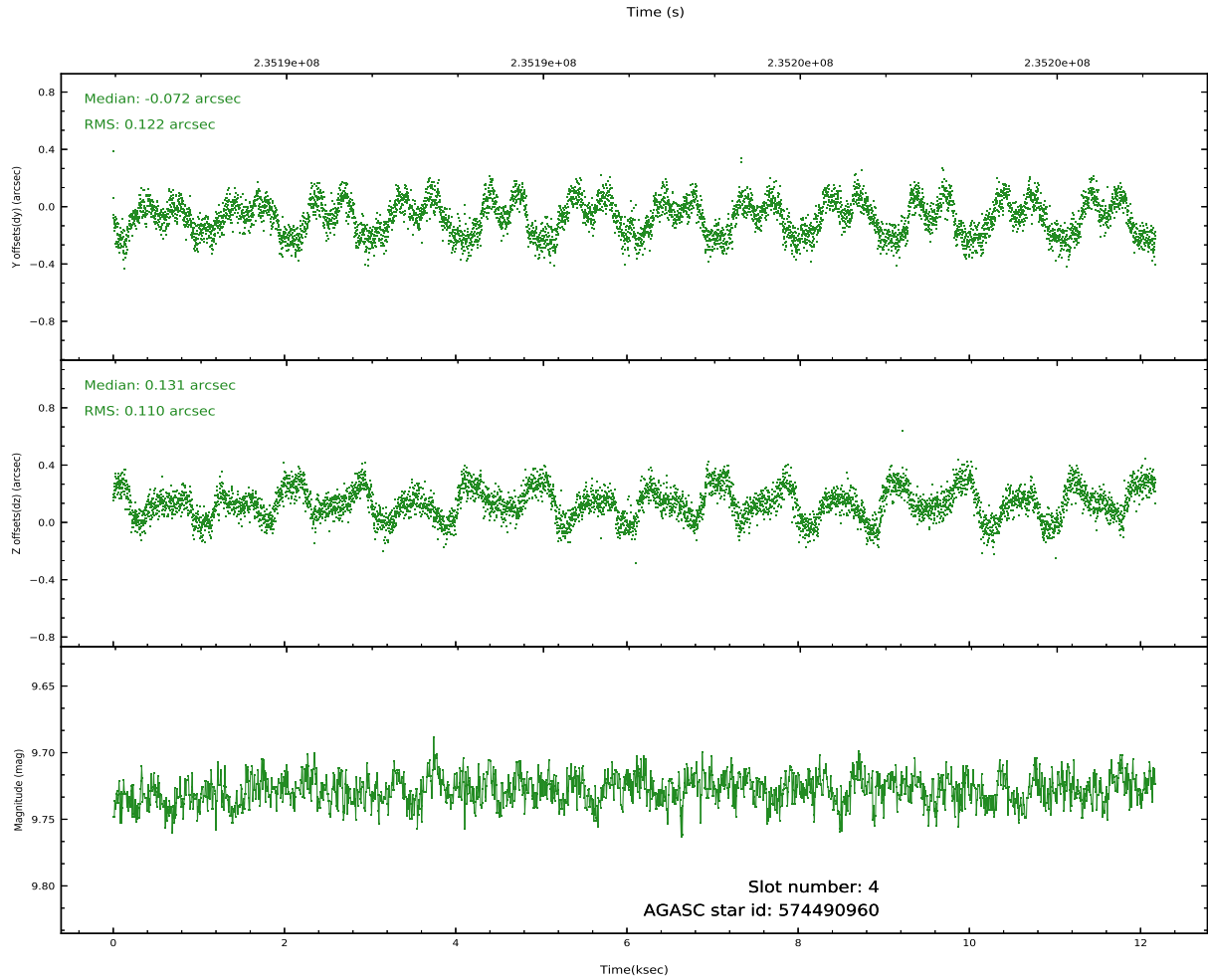
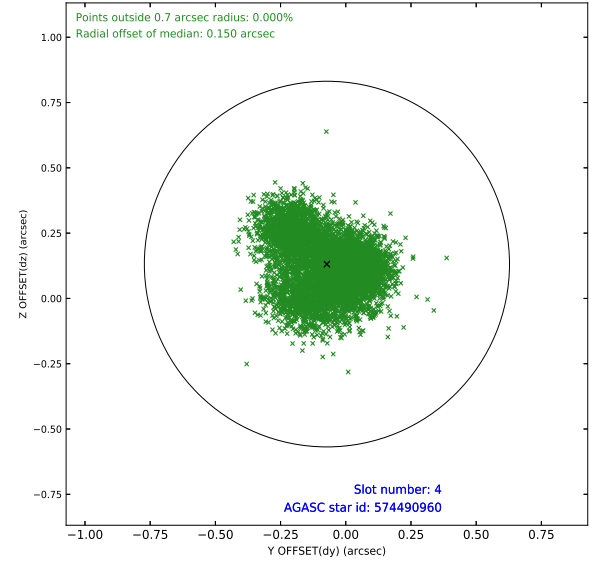
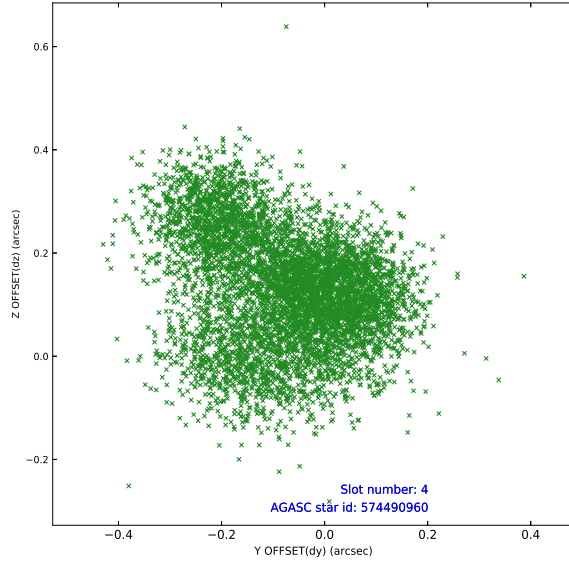
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	2970	1.000	0.069	-0.117	0.014	0.031	0.000000	0.000000	935.84	-1728
1	FID		ACIS-S-5	7.23	2969	1.000	-0.113	0.030	0.012	0.017	0.000000	0.000000	-1813.11	169
2	FID		ACIS-S-6	7.35	2970	1.000	0.023	0.096	0.014	0.021	0.000000	0.000000	400.91	813
3	GUIDE	used	574489568	9.79	5935	1.000	-0.064	-0.007	0.164	0.250	147.223974	69.438157	-1802.36	-1638
4	GUIDE	used	574490960	9.73	5931	1.000	-0.072	0.131	0.181	0.271	148.185918	69.658768	-2243.10	-260
5	GUIDE	used	574491280	9.34	5936	1.000	-0.099	-0.109	0.110	0.176	148.611567	69.450135	-1379.46	62
6	GUIDE	used	574497600	10.47	5874	1.000	0.127	0.082	0.271	0.447	147.824120	68.451903	1825.83	-1854
7	GUIDE	used	574496312	10.25	5918	1.000	0.128	-0.076	0.249	0.419	149.547505	68.718299	1470.89	579

2.4 Star Slots

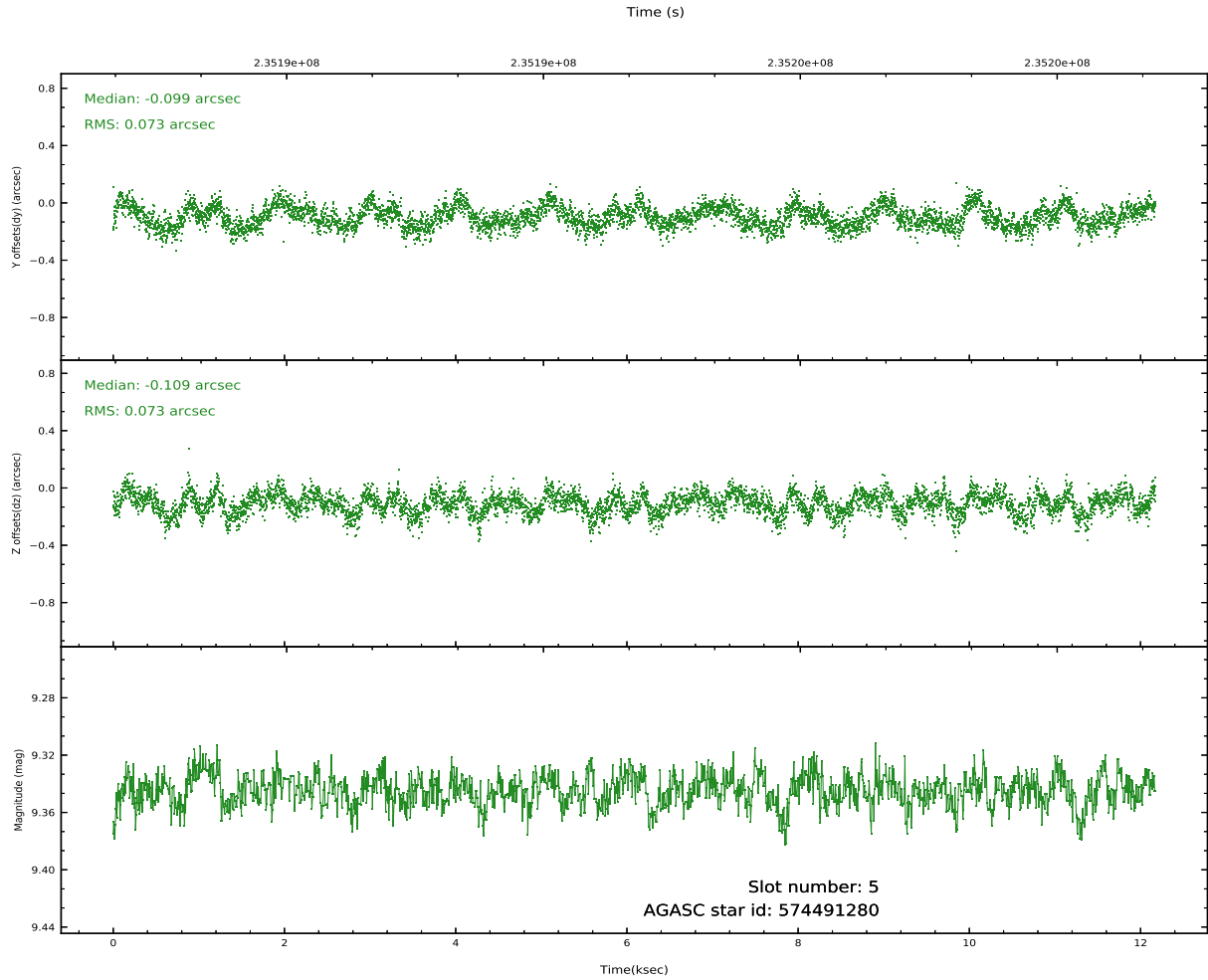
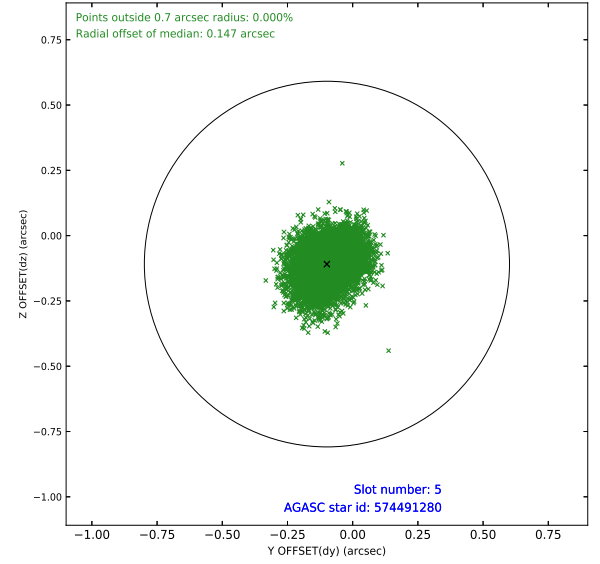
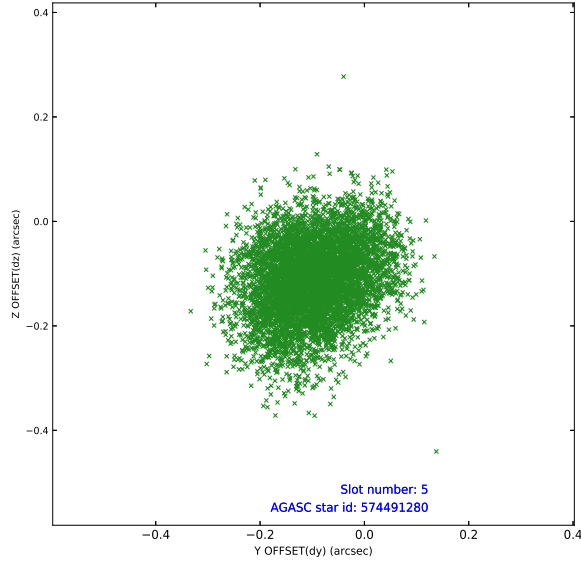
2.4.1 Slot 3



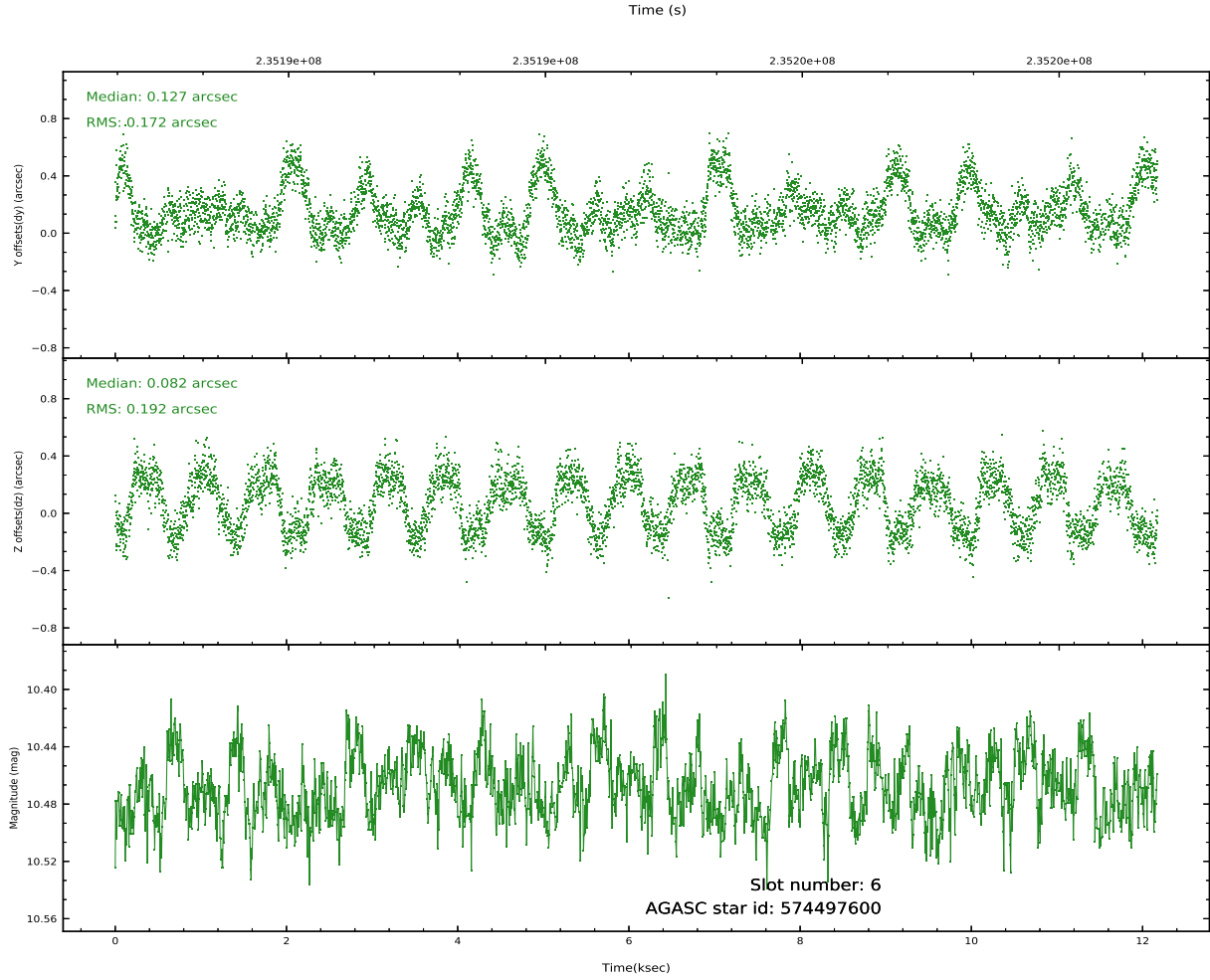
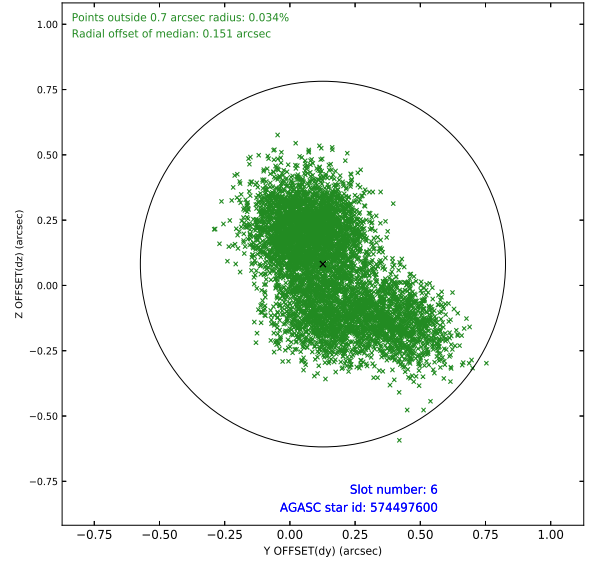
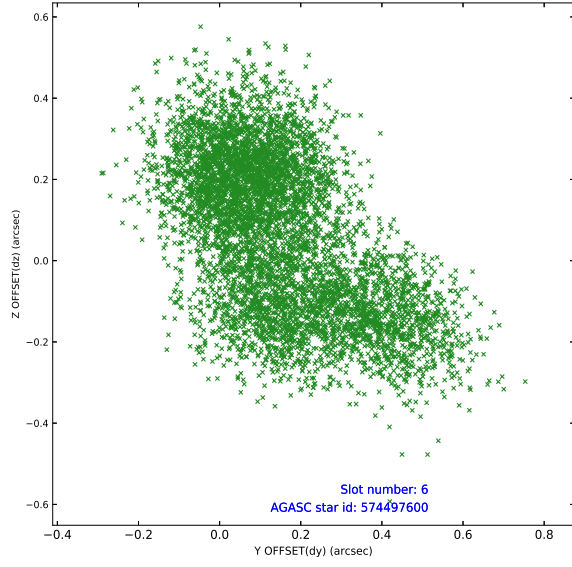
2.4.2 Slot 4



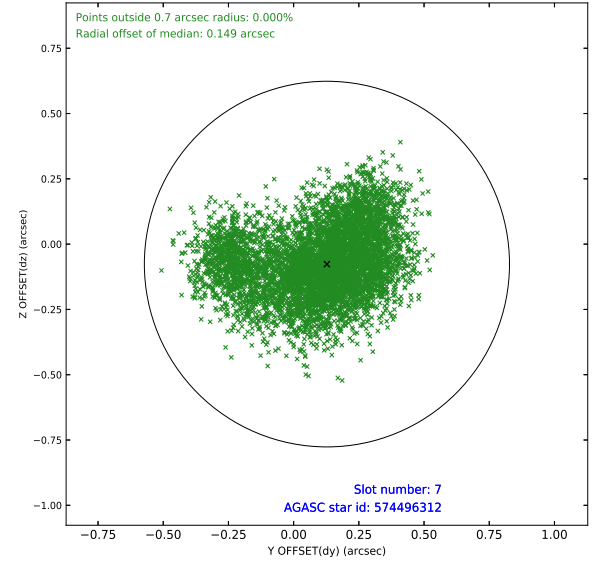
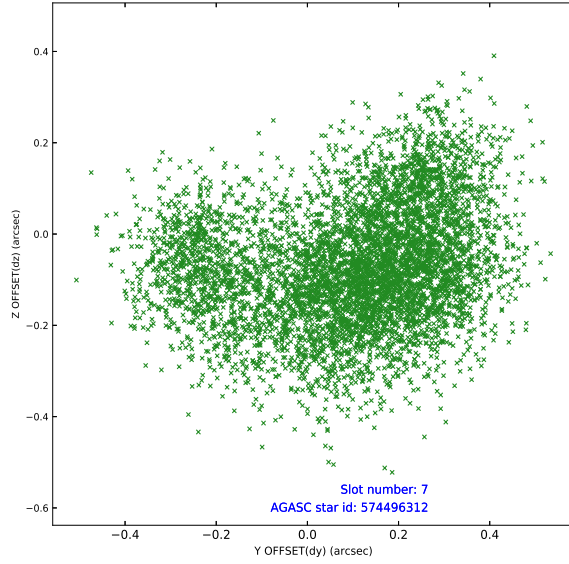
2.4.3 Slot 5



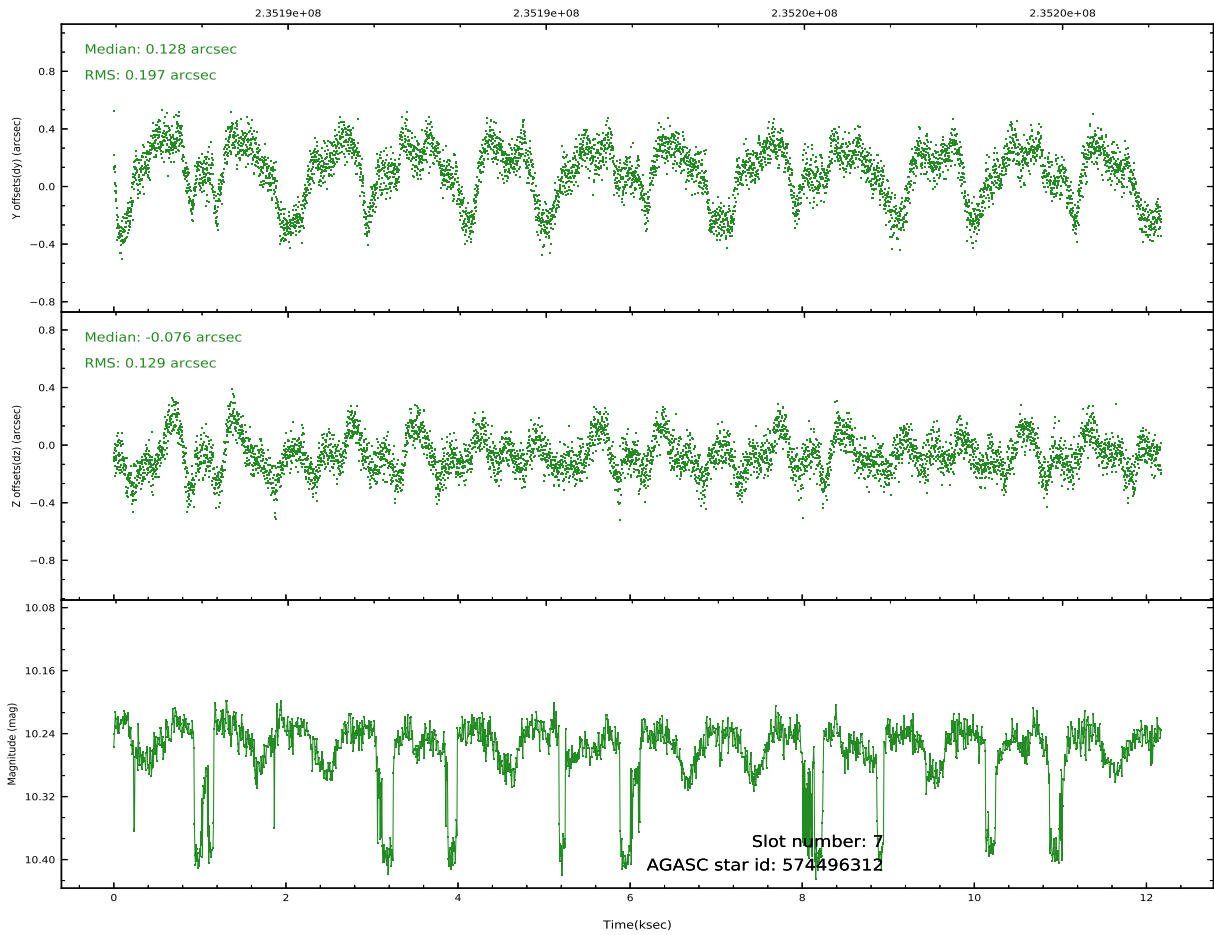
2.4.4 Slot 6



2.4.5 Slot 7

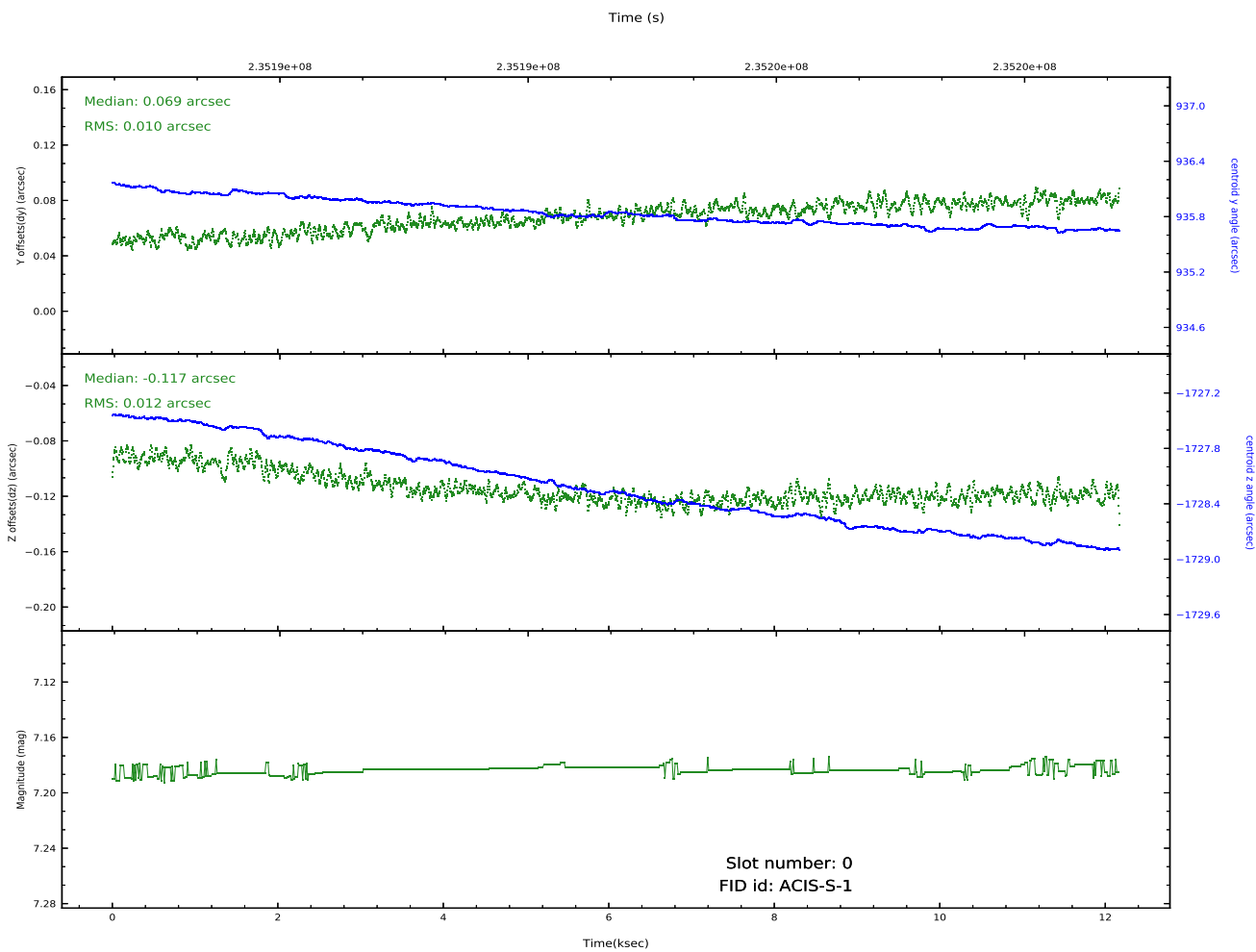
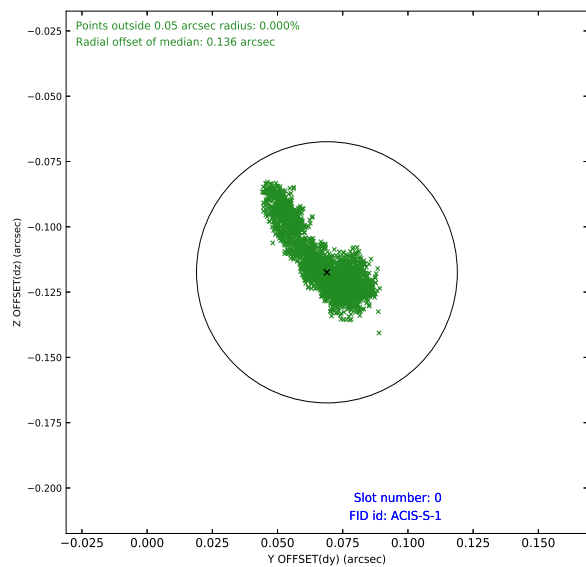
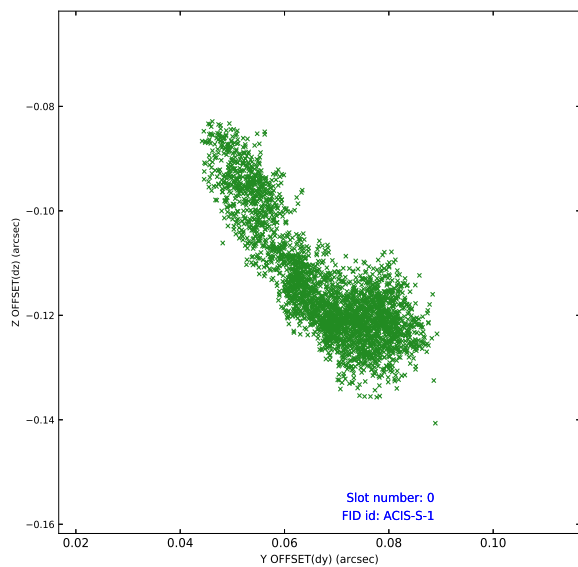


Time (s)

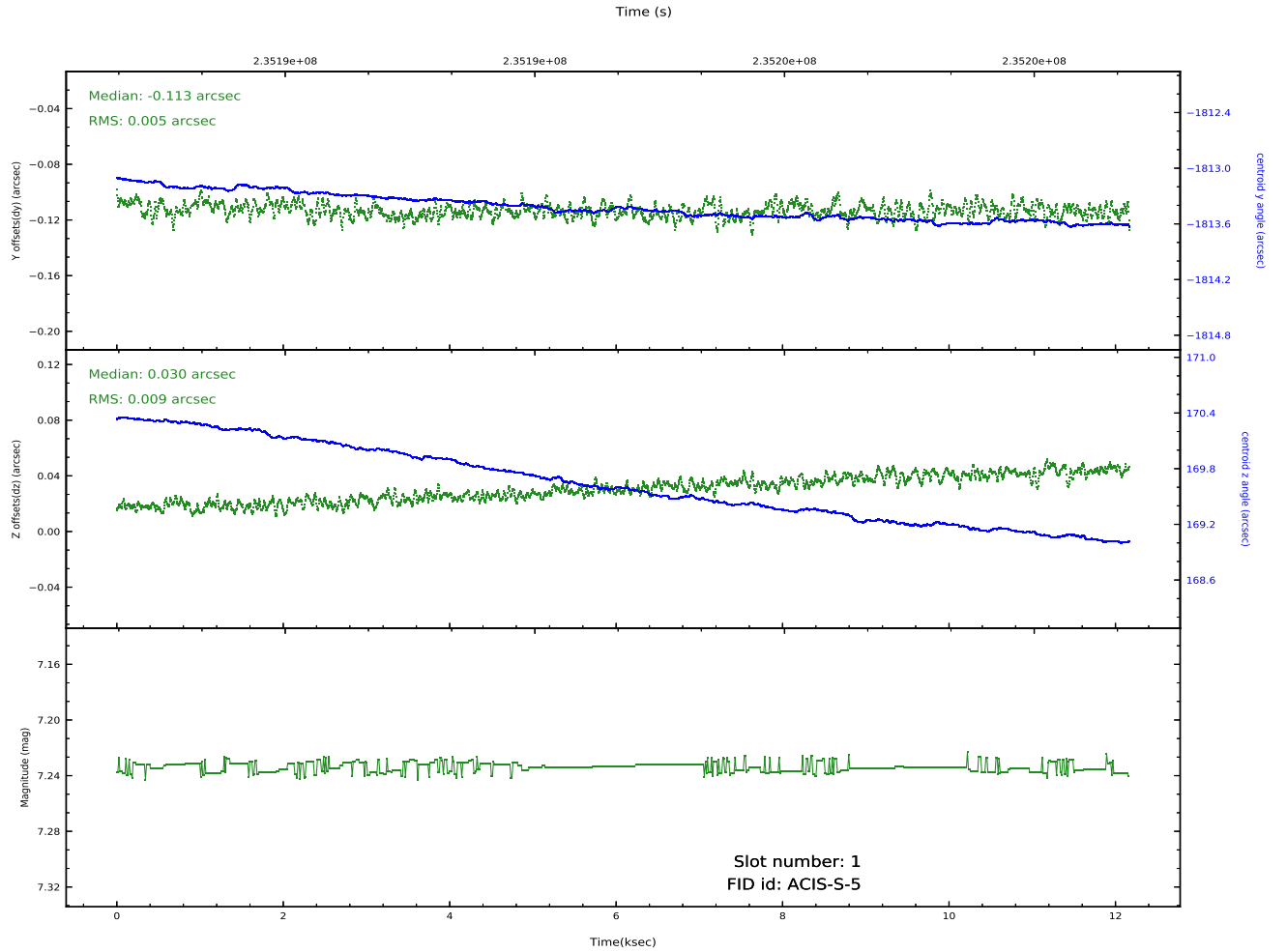
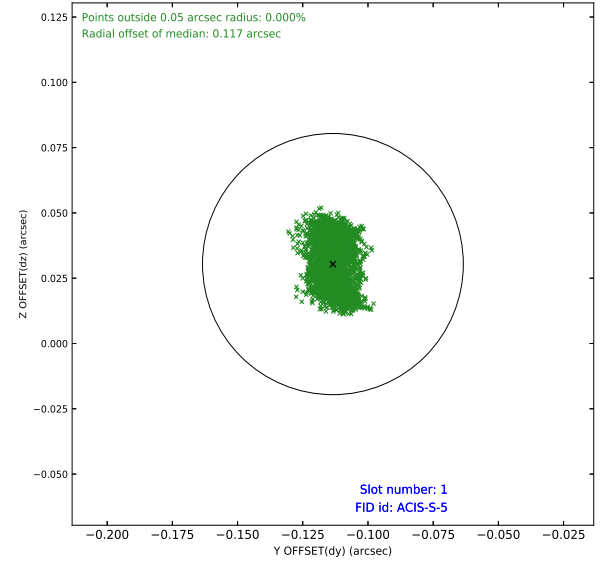
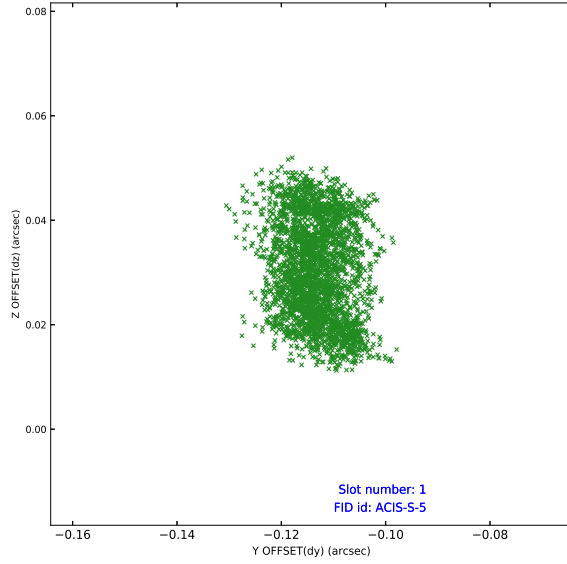


2.5 FID Slots

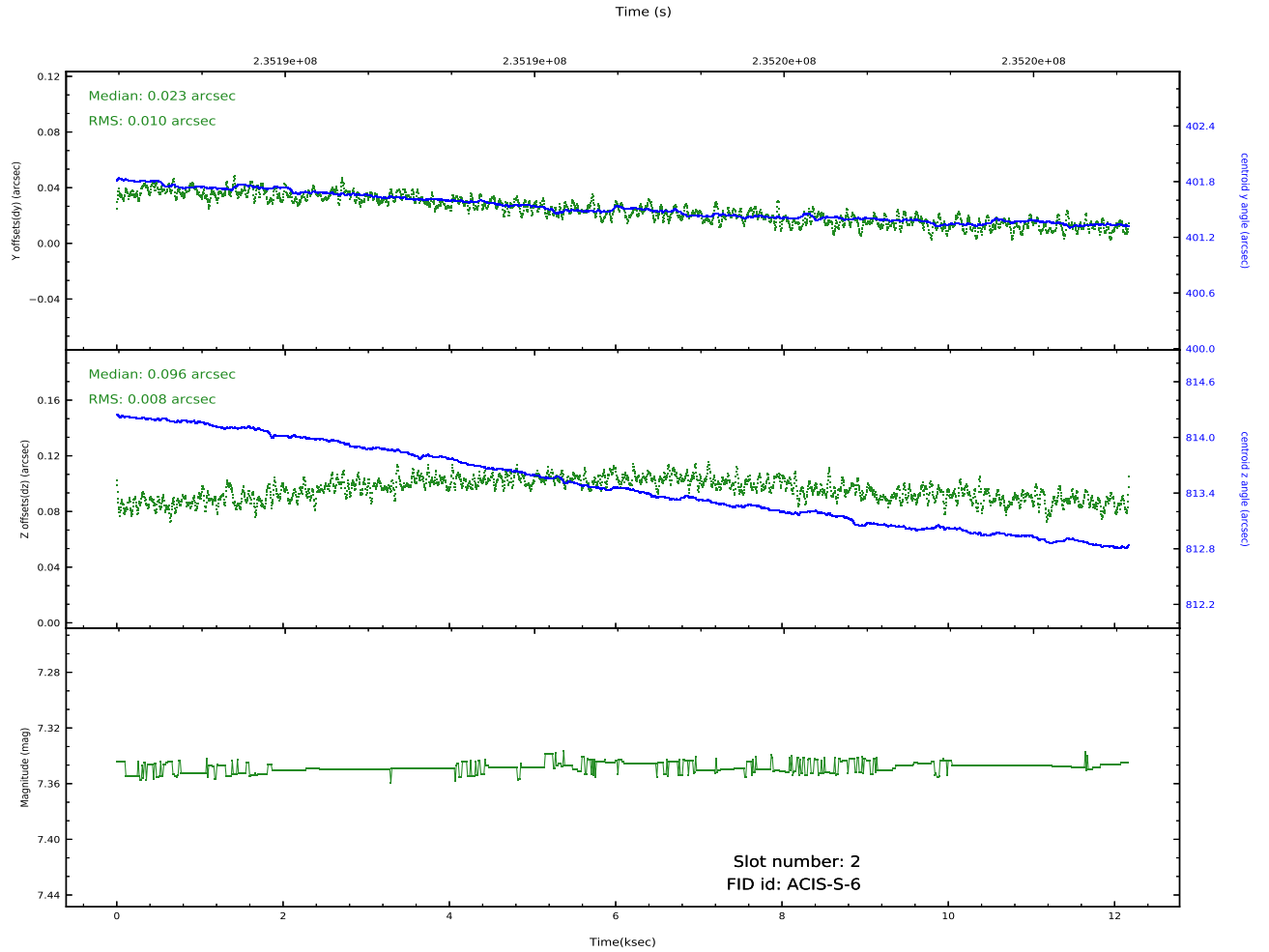
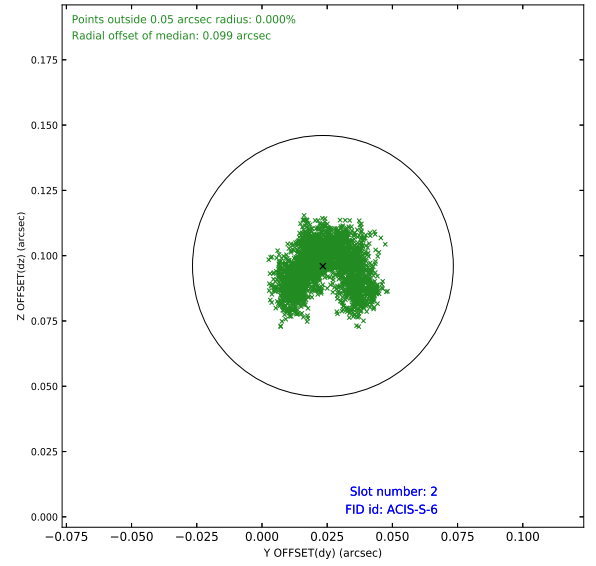
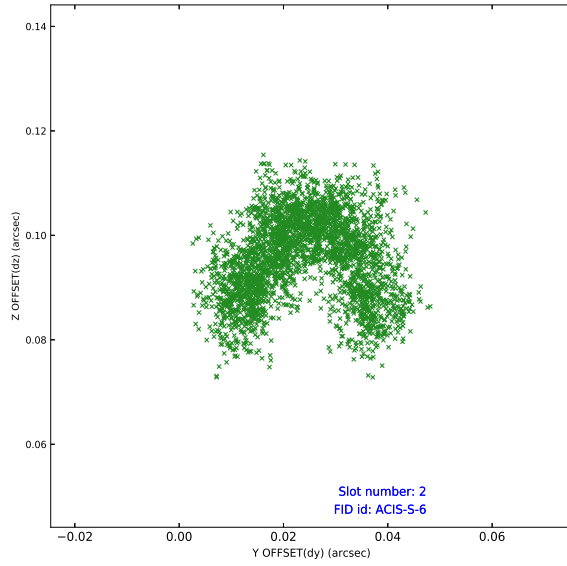
2.5.1 Slot 0



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)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.10559

A.2 Comments