

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5945 - L2 Version 4
Chandra X-Ray Center

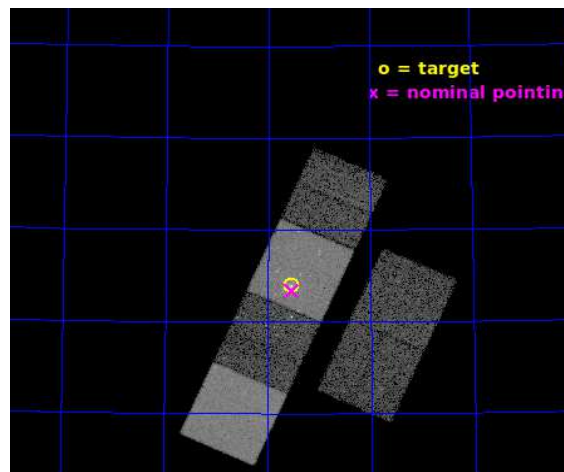
L2 Processing Date : Oct 8 2020

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1 Front

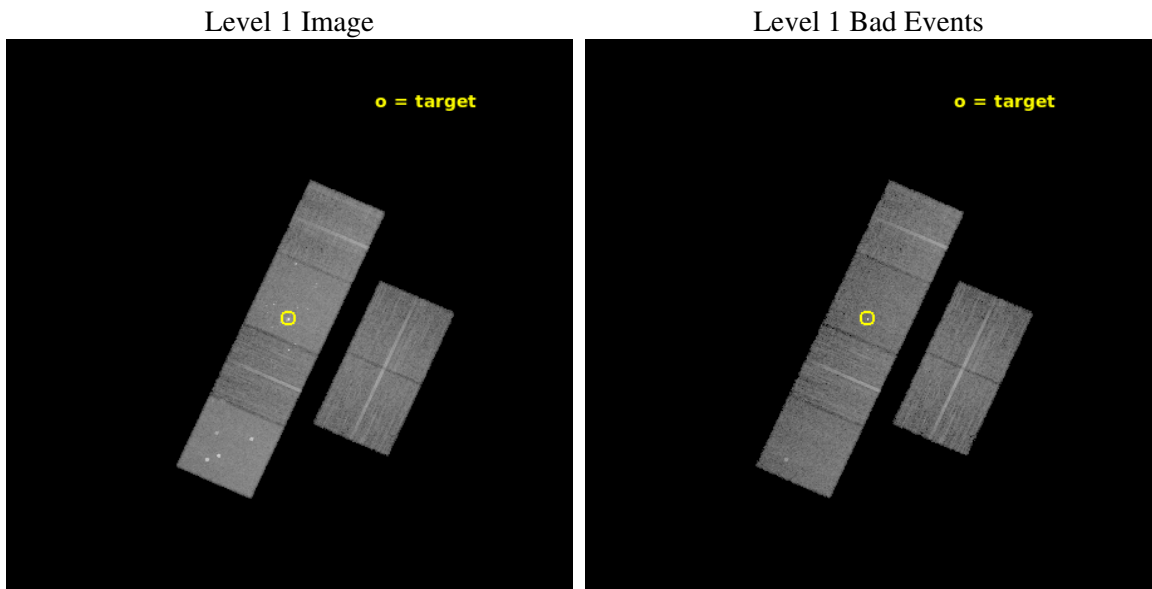
seq_num	600464	Sequence number
obs_id	5945	Observation id
title	An Unprecedented View of a Galaxy's Dynamic X-ray Source Population	
observer	David Pooley	Principal investigator
object	M81	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.888333	Observer's specified target RA [deg]
dec_targ	69.065306	Observer's specified target Dec [deg]
ra_nom	148.88327957114	Nominal RA [deg]
dec_nom	69.056481490855	Nominal Dec [deg]
roll_nom	294.20330304767	Nominal Roll [deg]
revision	4	Processing version of data
ontime	11724.799956322	Sum of GTIs [s]
livetime	11576.333479448	Livetime [s]
ontime2	11724.799956322	Sum of GTIs [s]
ontime3	11724.799956322	Sum of GTIs [s]
ontime5	11724.799956322	Sum of GTIs [s]
ontime6	11724.799956322	Sum of GTIs [s]
ontime7	11724.799956322	Sum of GTIs [s]
ontime8	11724.799956322	Sum of GTIs [s]
l2events	162103	Number of level 2 events



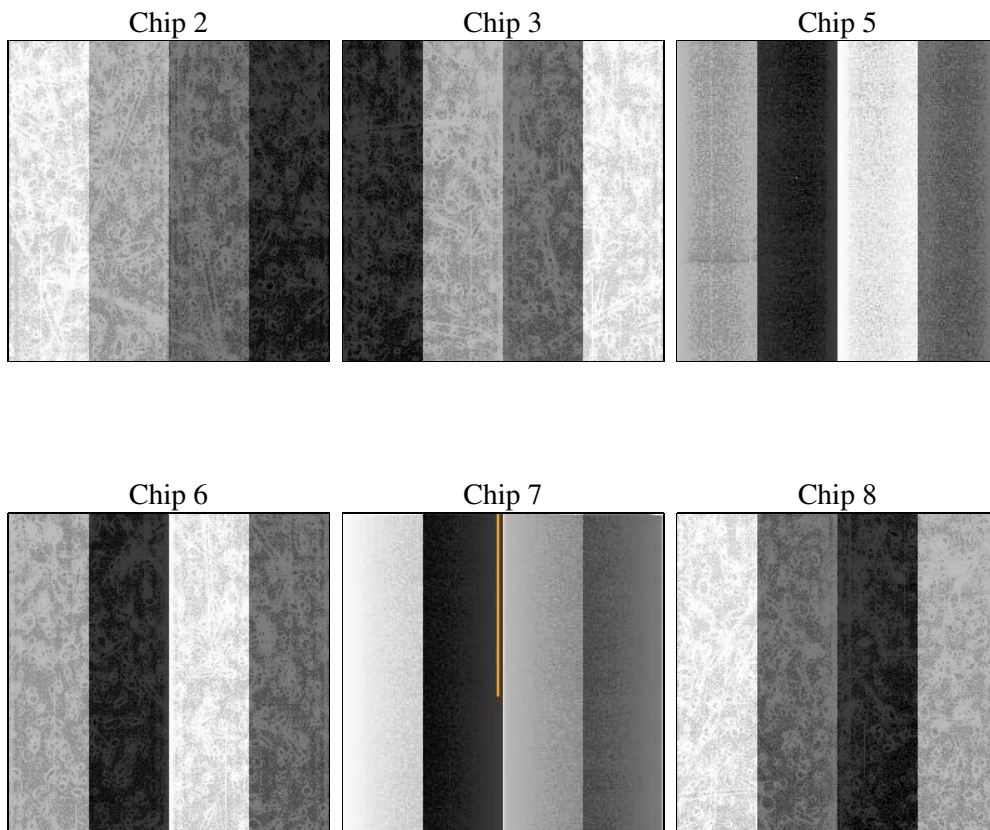
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11584.031000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	11724.799956322	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	11724.799956322	Sum of GTIs [s]
date	2020-10-09T00:49:13	Date and time of file creation	ontime3	11724.799956322	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	11724.799956322	Sum of GTIs [s]
			ontime6	11724.799956322	Sum of GTIs [s]
			ontime7	11724.799956322	Sum of GTIs [s]
			ontime8	11724.799956322	Sum of GTIs [s]
			l1events	705468	Number of level 1 events

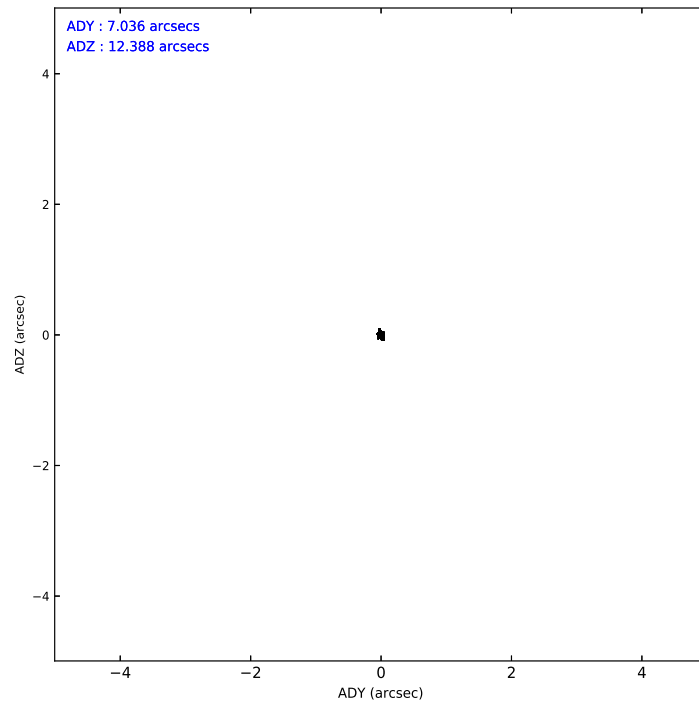
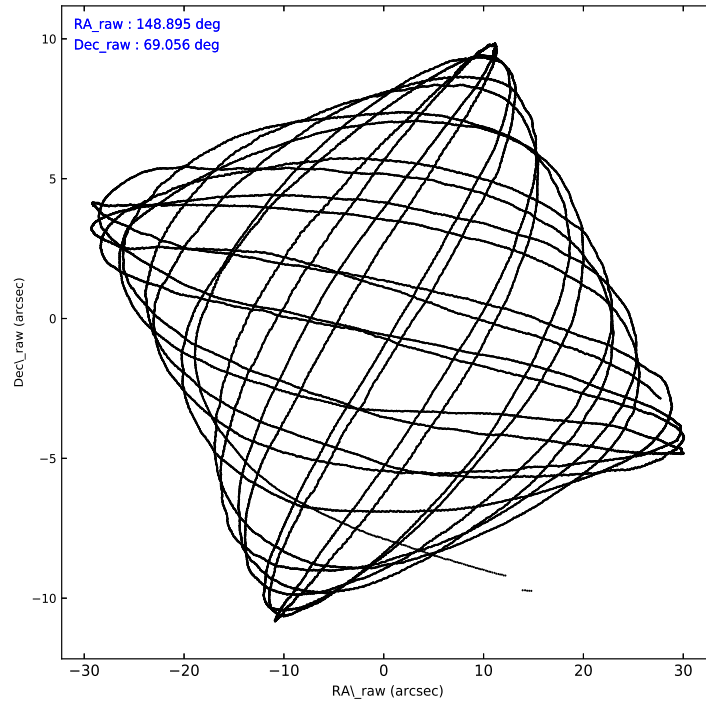
2.1.4 Events

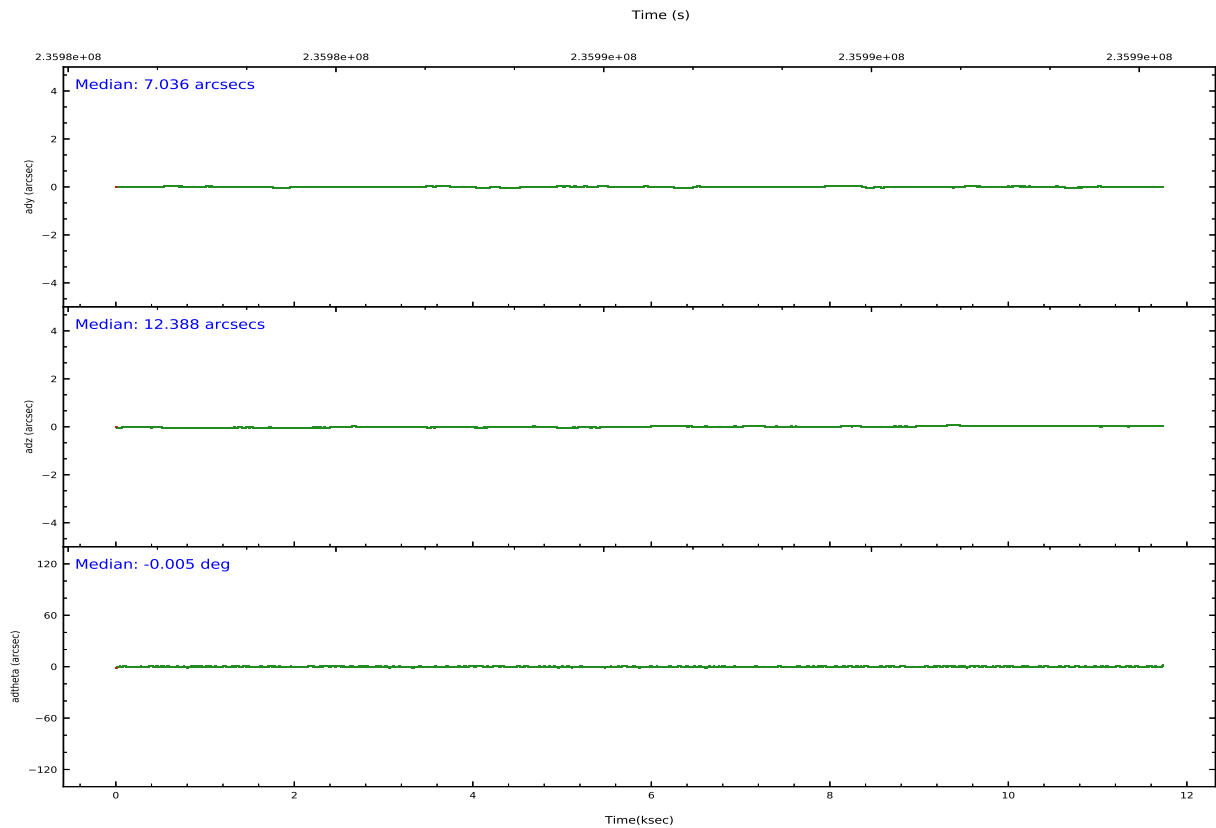
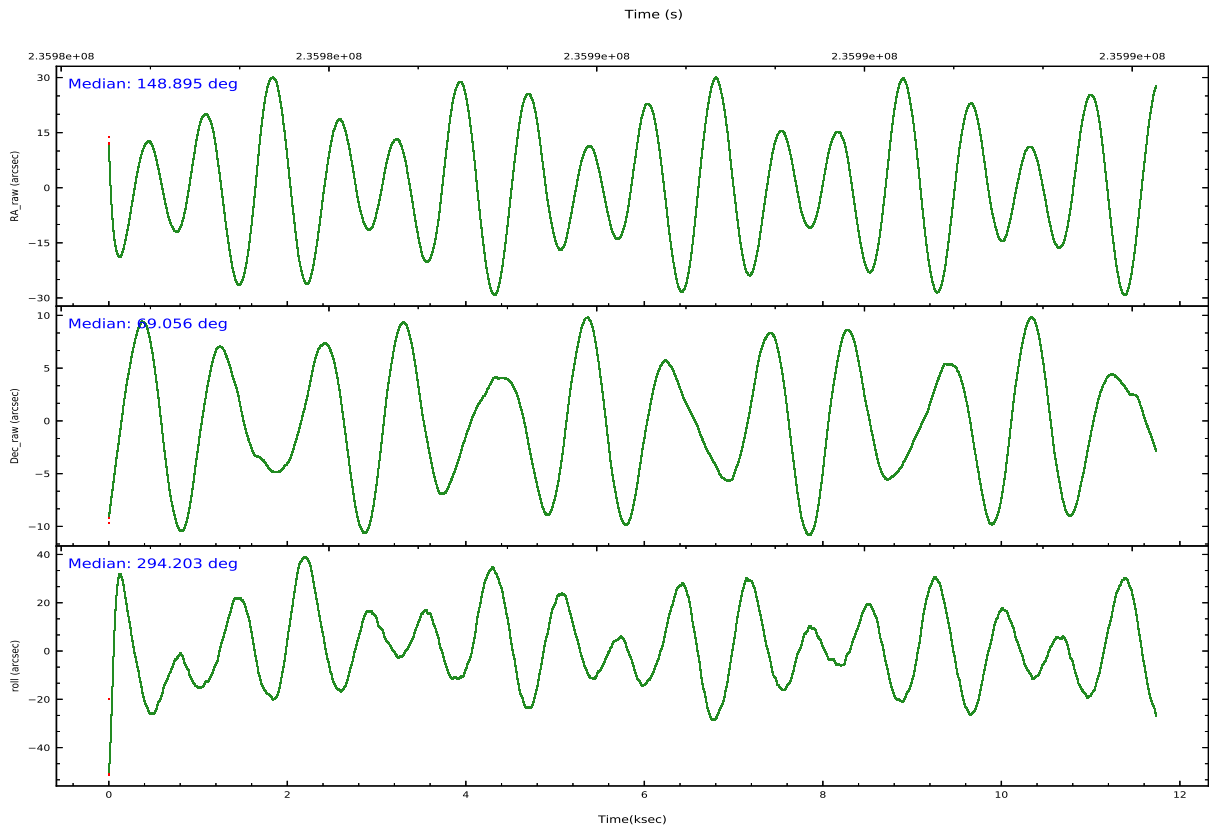
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	96834	92505	151052	99027	144973	121077	grade 0 events	5183	5000	12385	6583	7433	8435
rejected events	85803	81793	81219	85705	82519	95874		5%	5%	8%	6%	5%	6%
rejected %	88%	88%	53%	86%	56%	79%	grade 1 events	64	65	646	102	241	88
								0%	0%	0%	0%	0%	0%
							grade 2 events	2355	2153	20202	2742	13504	5855
								2%	2%	13%	2%	9%	4%
							grade 3 events	1084	1060	2665	1165	5823	2819
								1%	1%	1%	1%	4%	2%
							grade 4 events	1111	1074	2525	1154	5847	2533
								1%	1%	1%	1%	4%	2%
							grade 5 events	3809	4341	10565	4527	12941	5787
								3%	4%	6%	4%	8%	4%
							grade 6 events	1829	1947	35416	2324	32449	6699
								1%	2%	23%	2%	22%	5%
							grade 7 events	81399	76865	66648	80430	66735	88861
								84%	83%	44%	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	148.832504	148.88327957114	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.071543	69.05648149085501	Alternating exposures requested	N	N
[deg] Pointing Roll	294.097377	294.20330304767	[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)	235981684.184000	235980352.87032			
Observation start date	2005-06-24T06:27:00	2005-06-24T06:05:52			
[s] Observation end time (MET)	235993268.184000	235993491.32092			
Observation end date	2005-06-24T09:40:04	2005-06-24T09:44:51			
Read mode	TIMED	TIMED			

2.3 Aspect





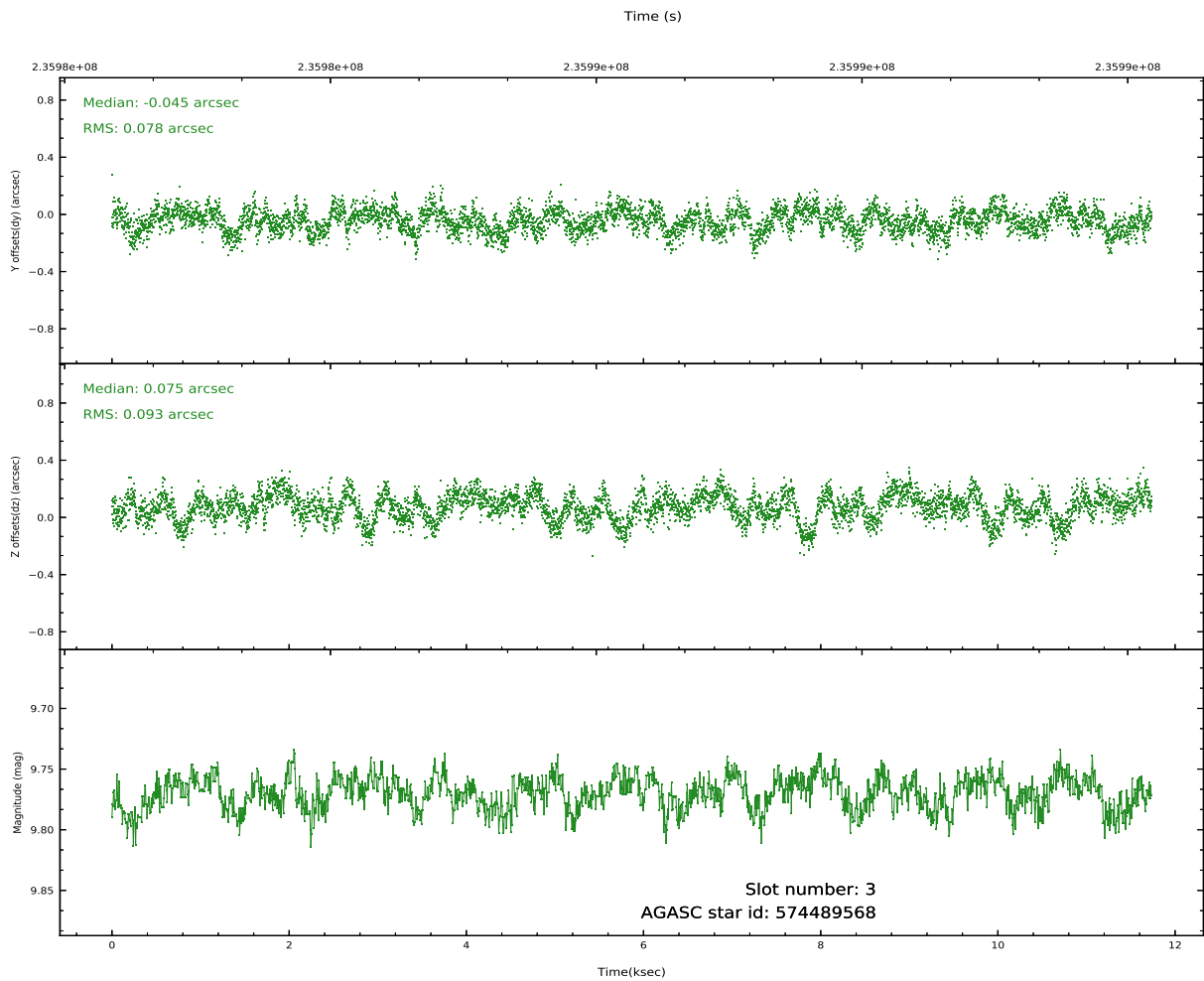
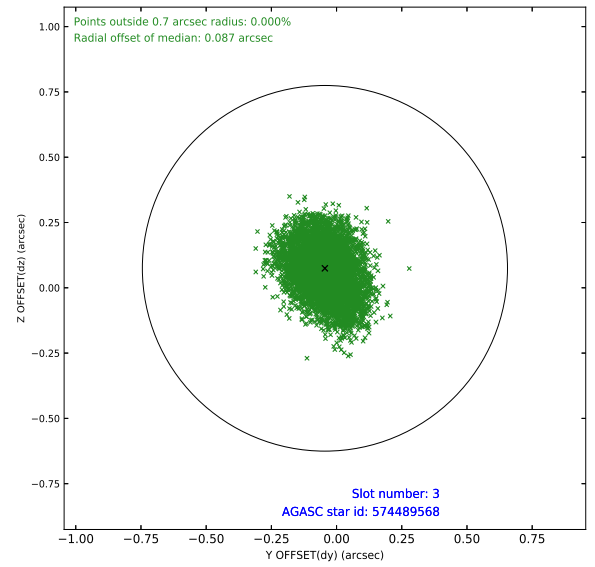
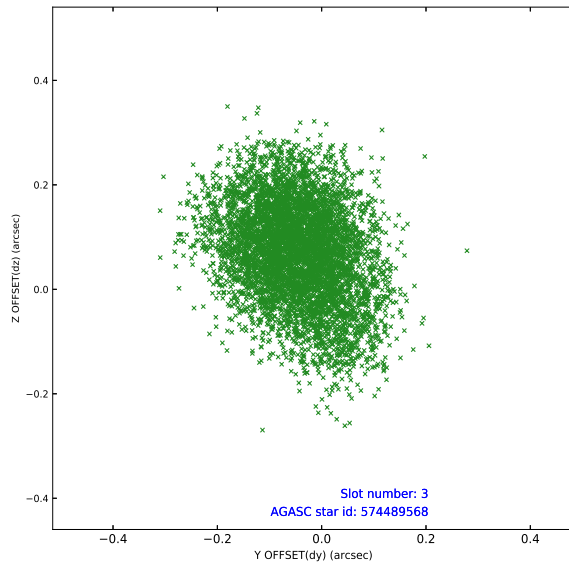
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	2862	1.000	0.037	-0.105	0.007	0.011	0.000000	0.000000	936.26	-1729
1	FID		ACIS-S-4	7.20	2863	1.000	0.084	0.059	0.006	0.011	0.000000	0.000000	2153.97	174
2	FID		ACIS-S-5	7.23	2862	1.000	-0.148	0.058	0.006	0.011	0.000000	0.000000	-1812.23	168
3	GUIDE	used	574489568	9.77	5718	1.000	-0.045	0.075	0.129	0.211	147.223974	69.438157	-2058.77	-1306
4	GUIDE	used	574490960	9.71	5701	1.000	-0.095	0.031	0.140	0.219	148.185918	69.658768	-2263.59	126
5	GUIDE	used	574491280	9.34	5716	1.000	-0.048	-0.033	0.085	0.138	148.611567	69.450135	-1358.01	301
6	GUIDE	used	574497600	10.45	5509	1.000	0.144	-0.004	0.197	0.370	147.824120	68.451903	1482.52	-2123
7	GUIDE	used	574496312	10.29	5703	1.000	0.059	-0.060	0.165	0.262	149.547505	68.718299	1538.57	335

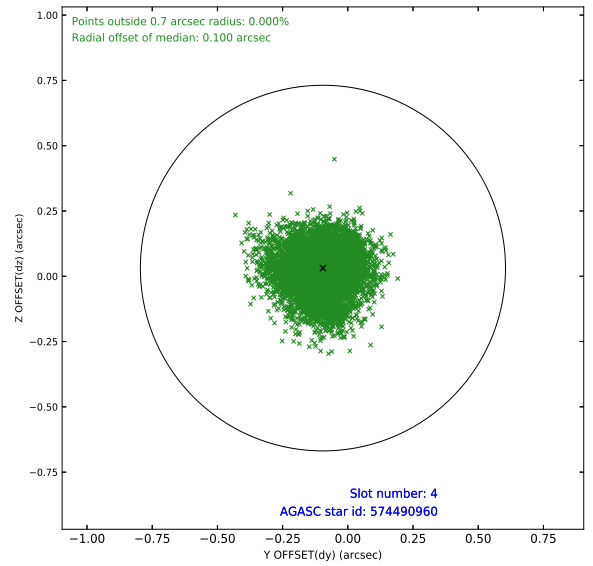
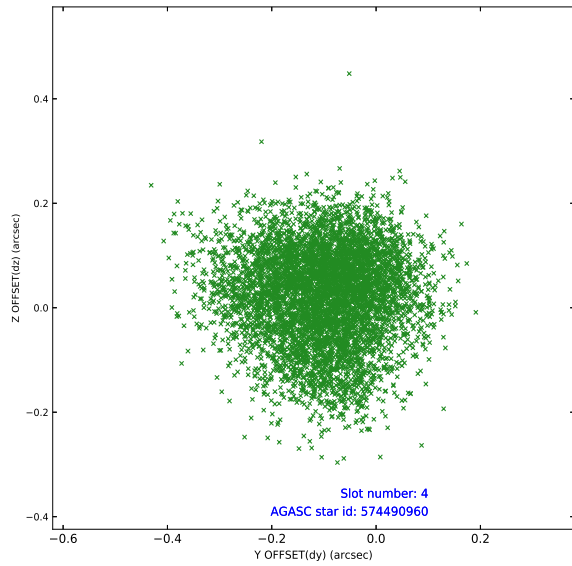
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2.4 Star Slots

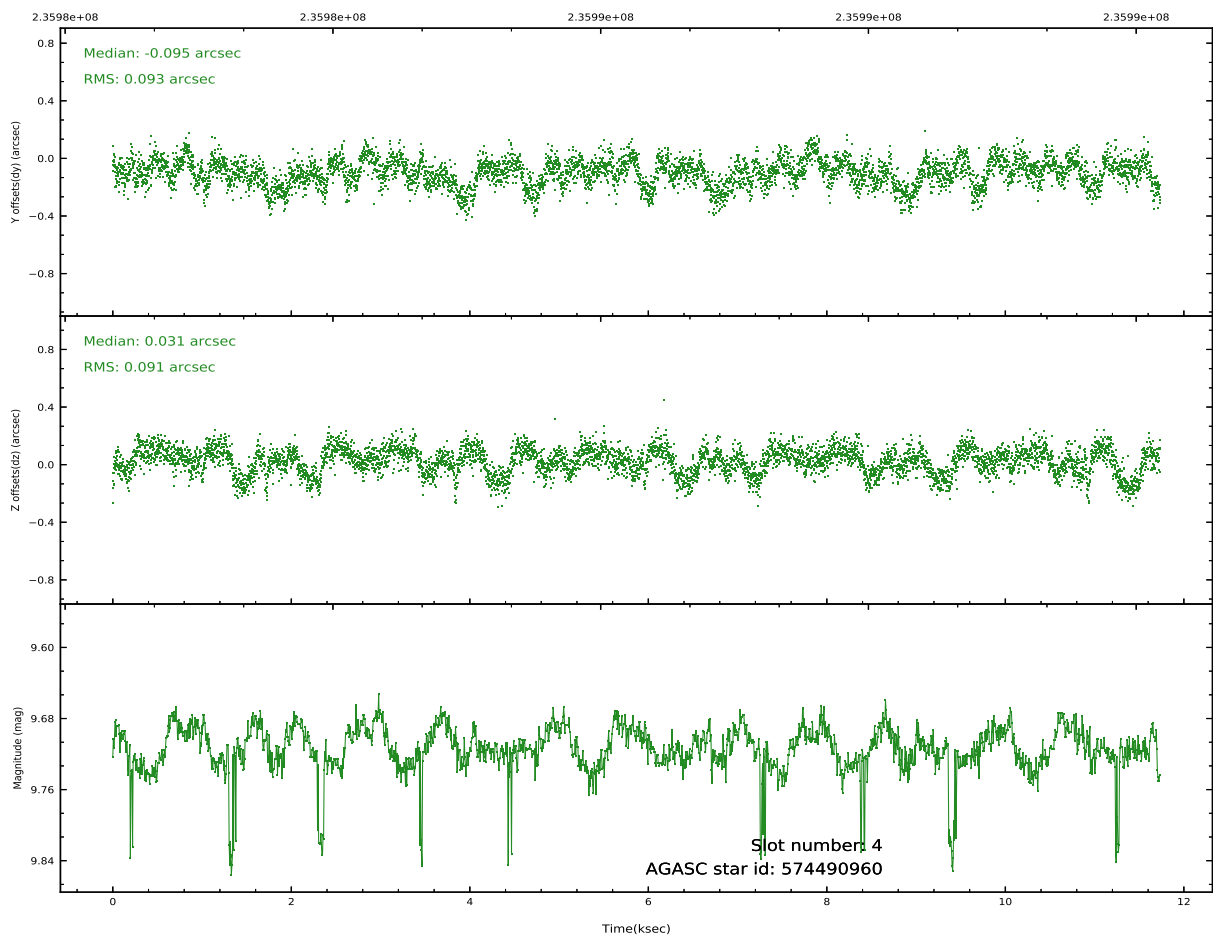
2.4.1 Slot 3



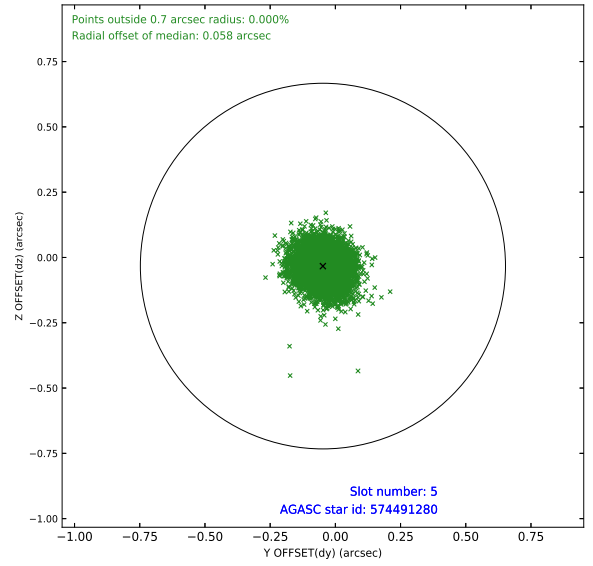
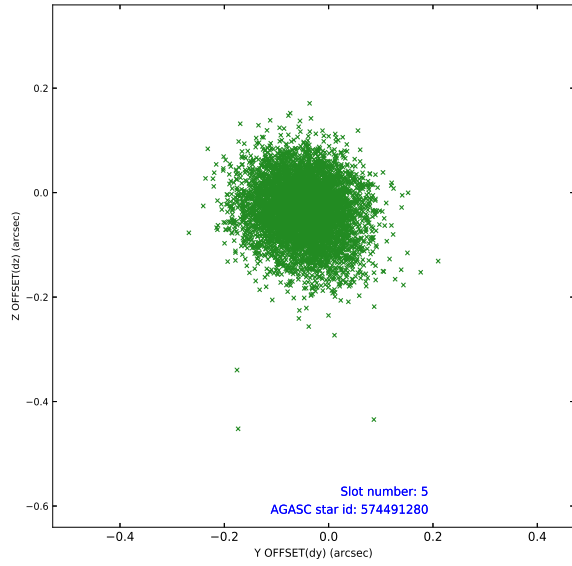
2.4.2 Slot 4



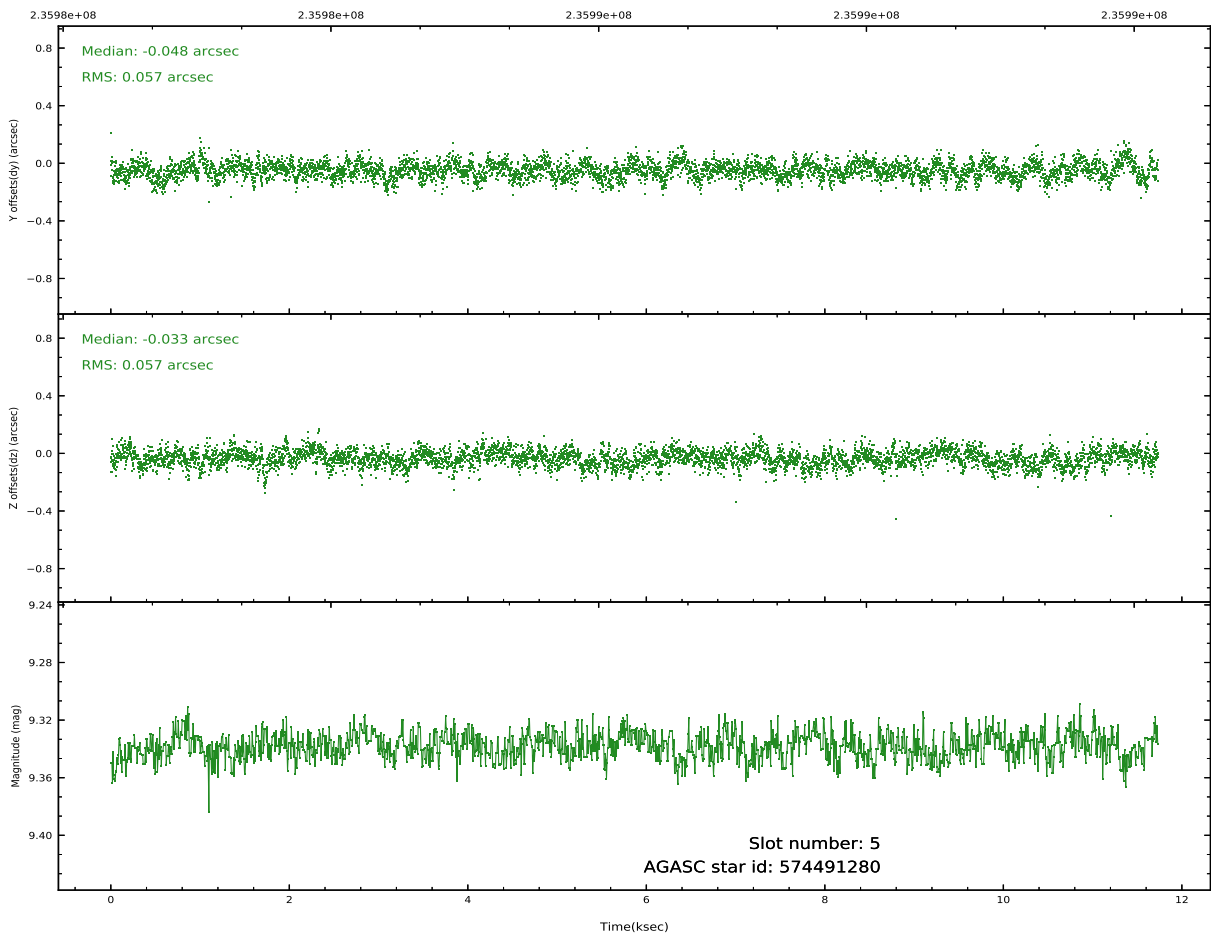
Time (s)



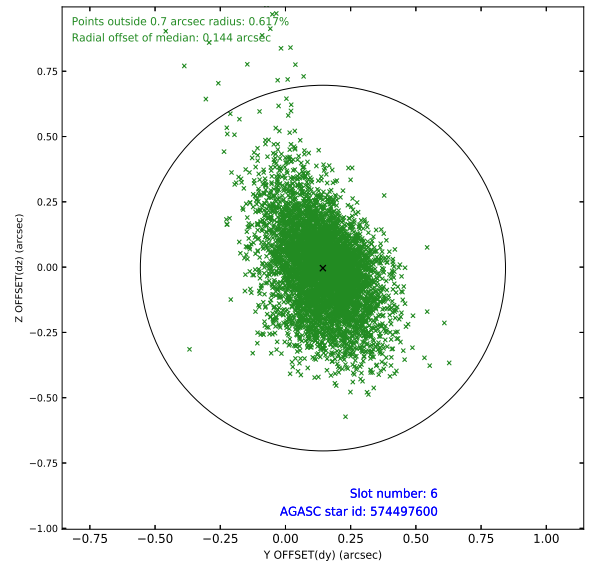
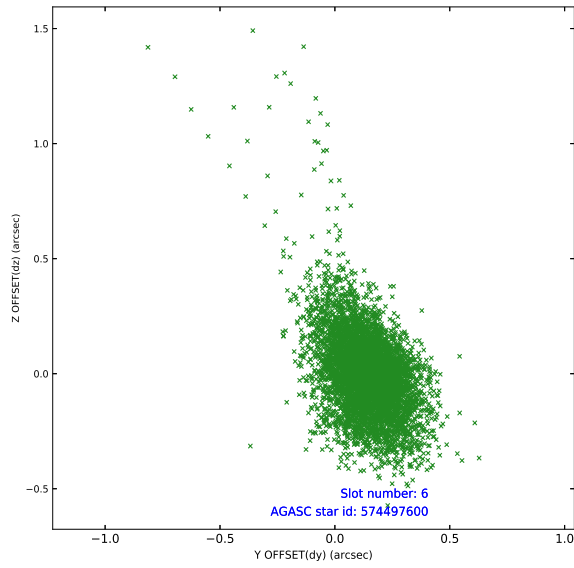
2.4.3 Slot 5



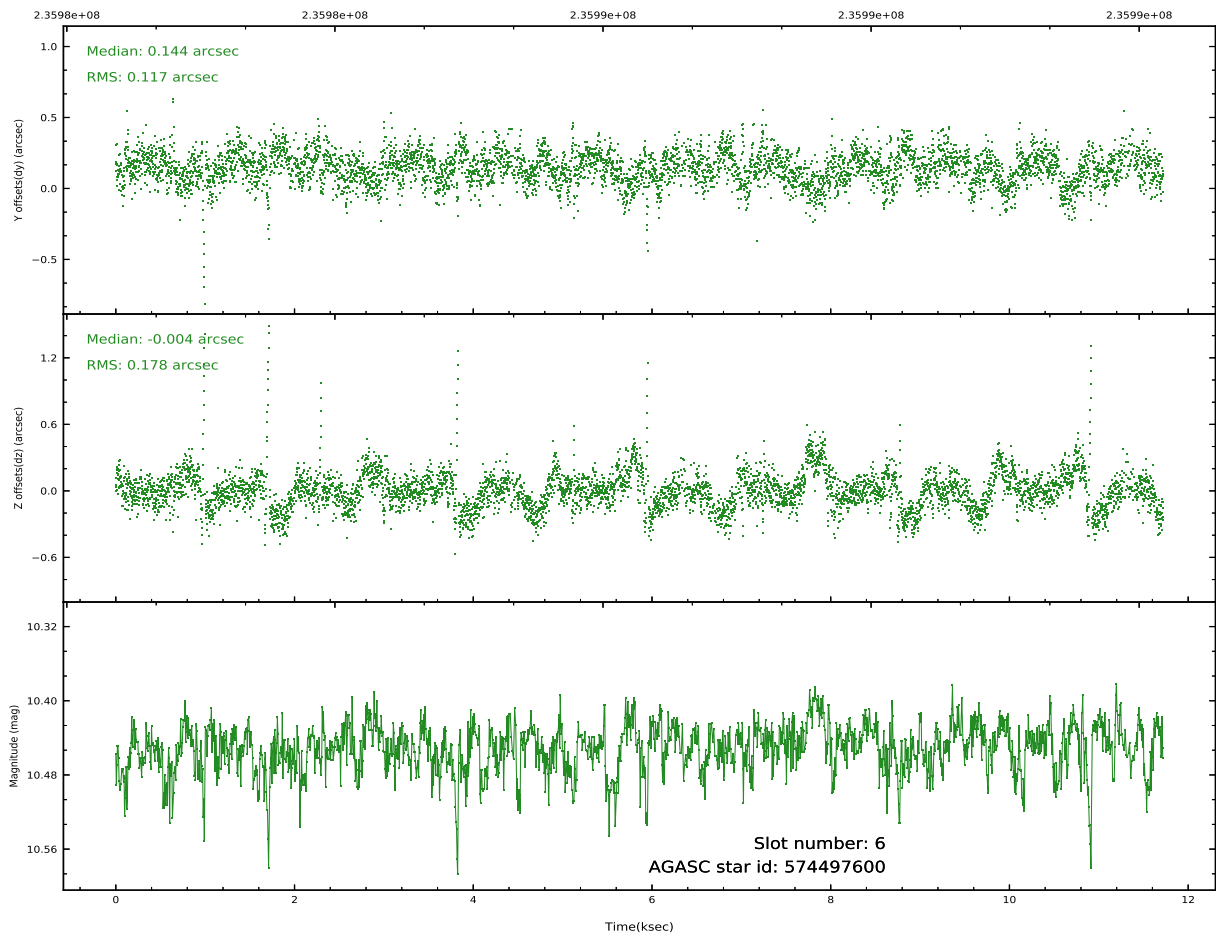
Time (s)



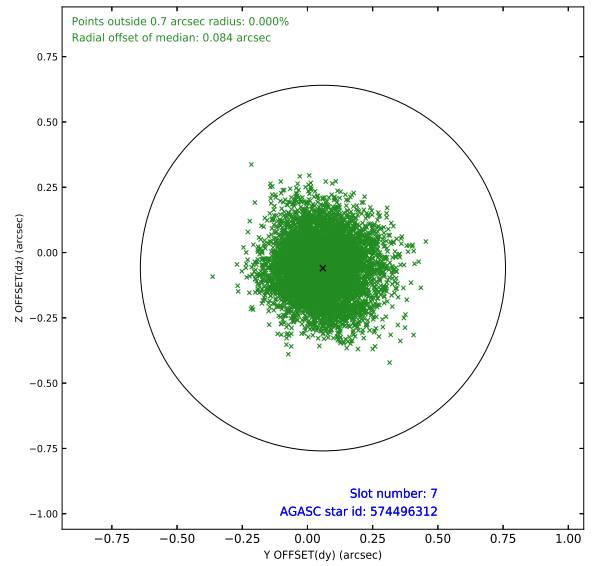
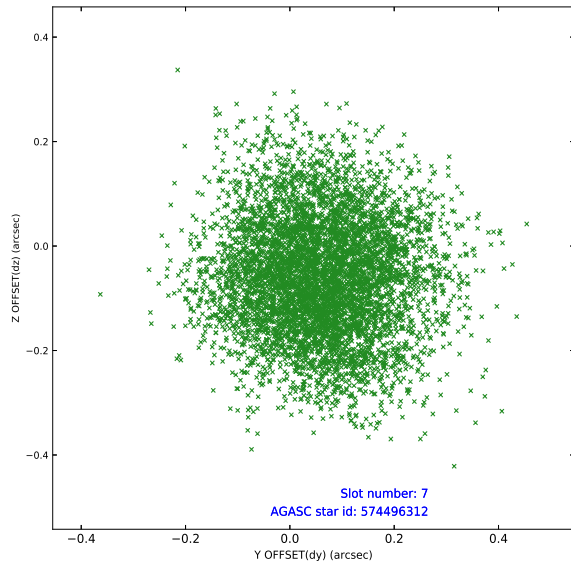
2.4.4 Slot 6



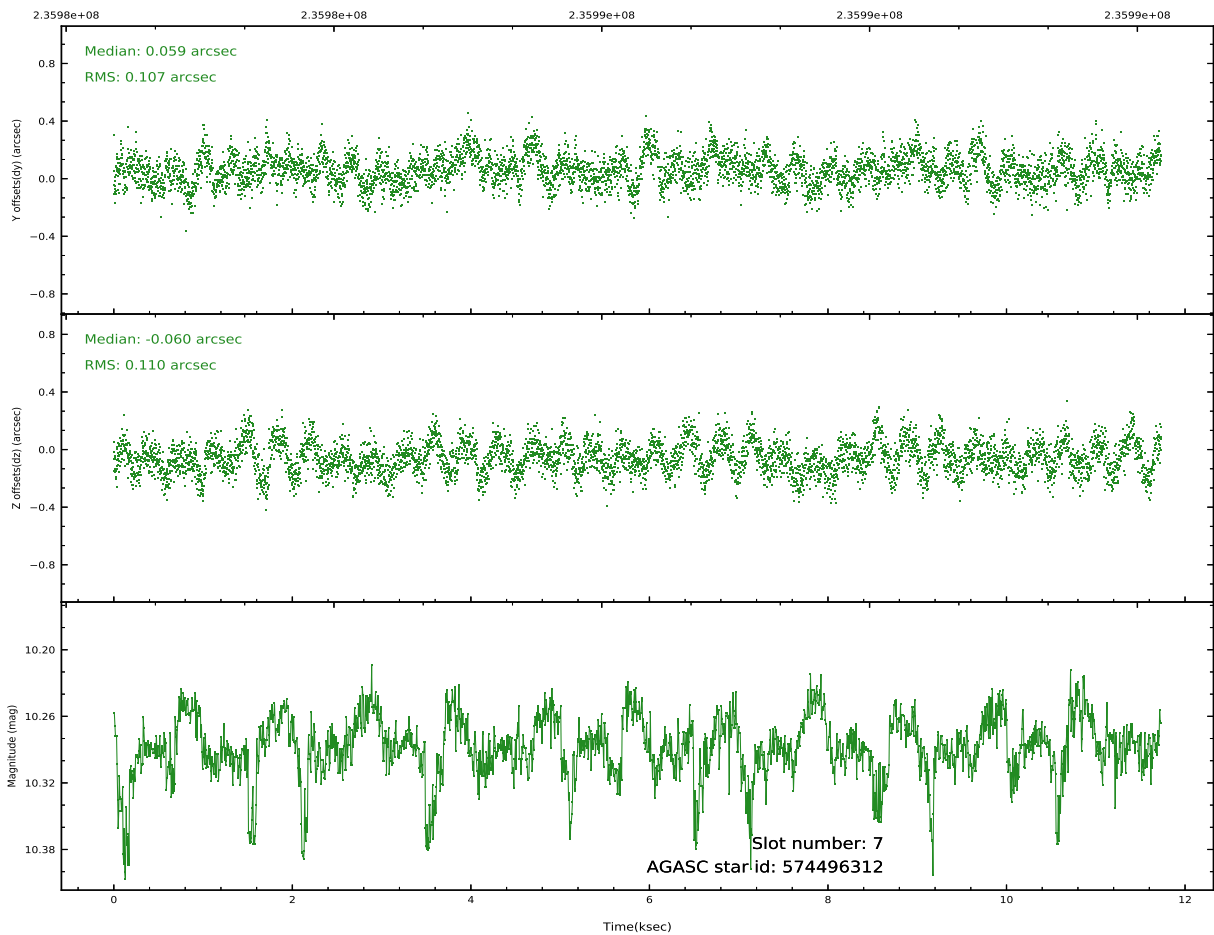
Time (s)



2.4.5 Slot 7

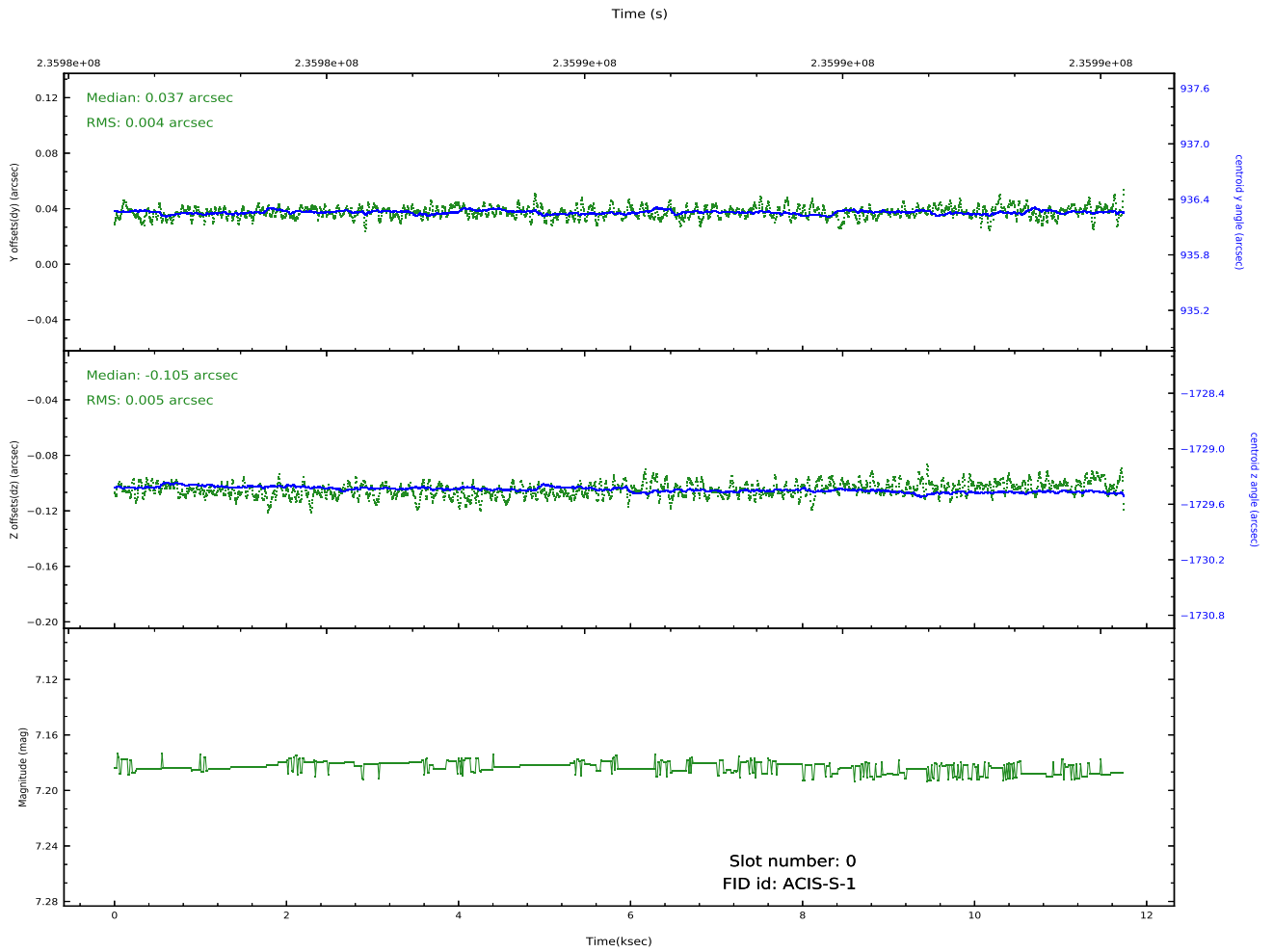
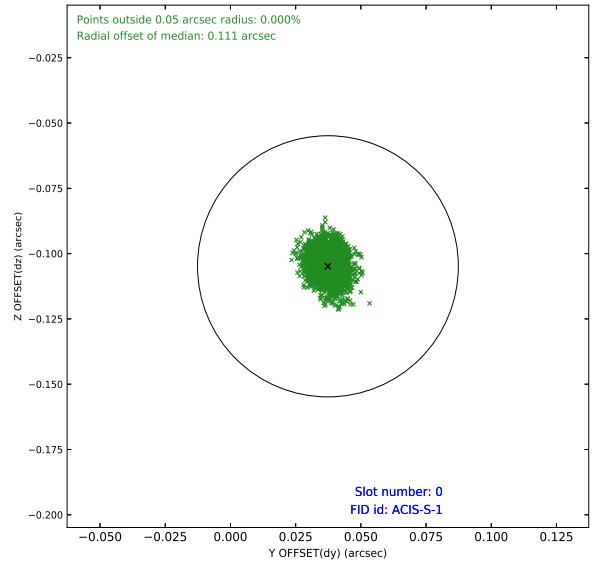
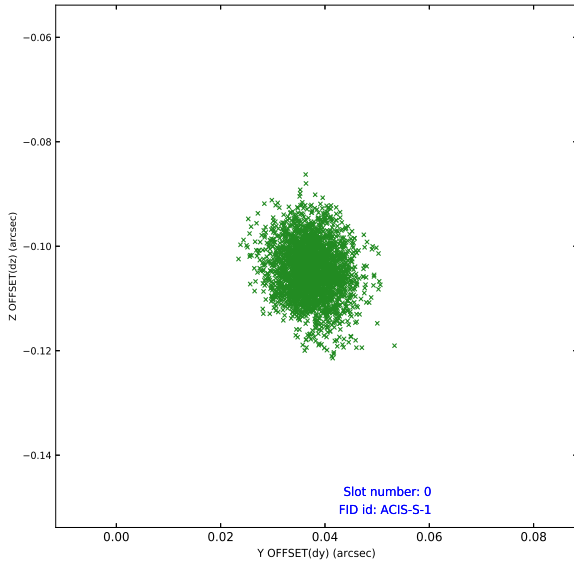


Time (s)

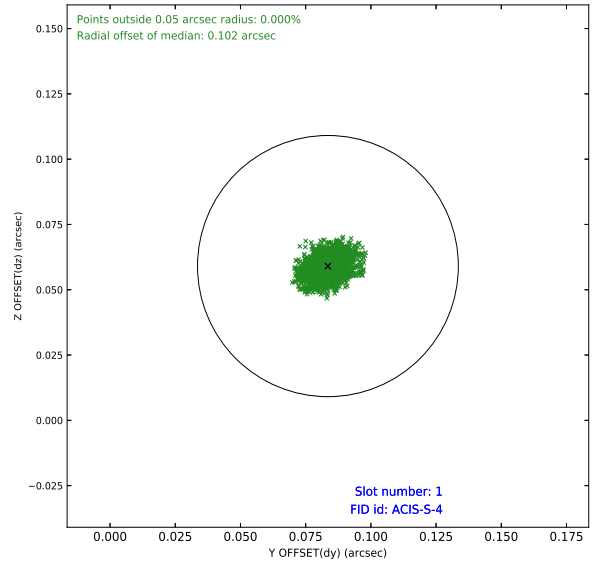
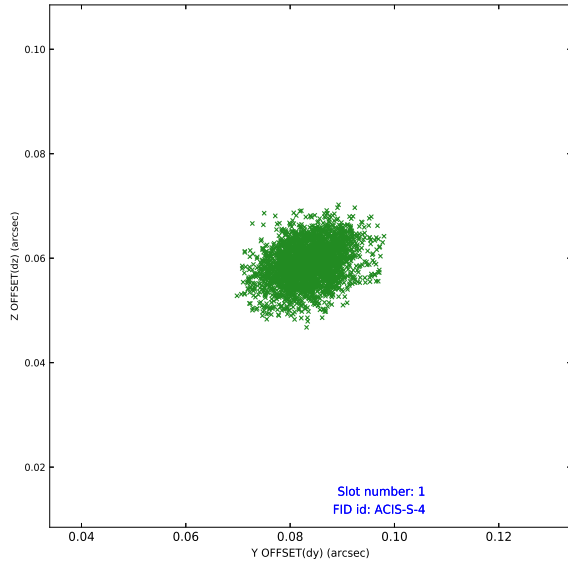


2.5 FID Slots

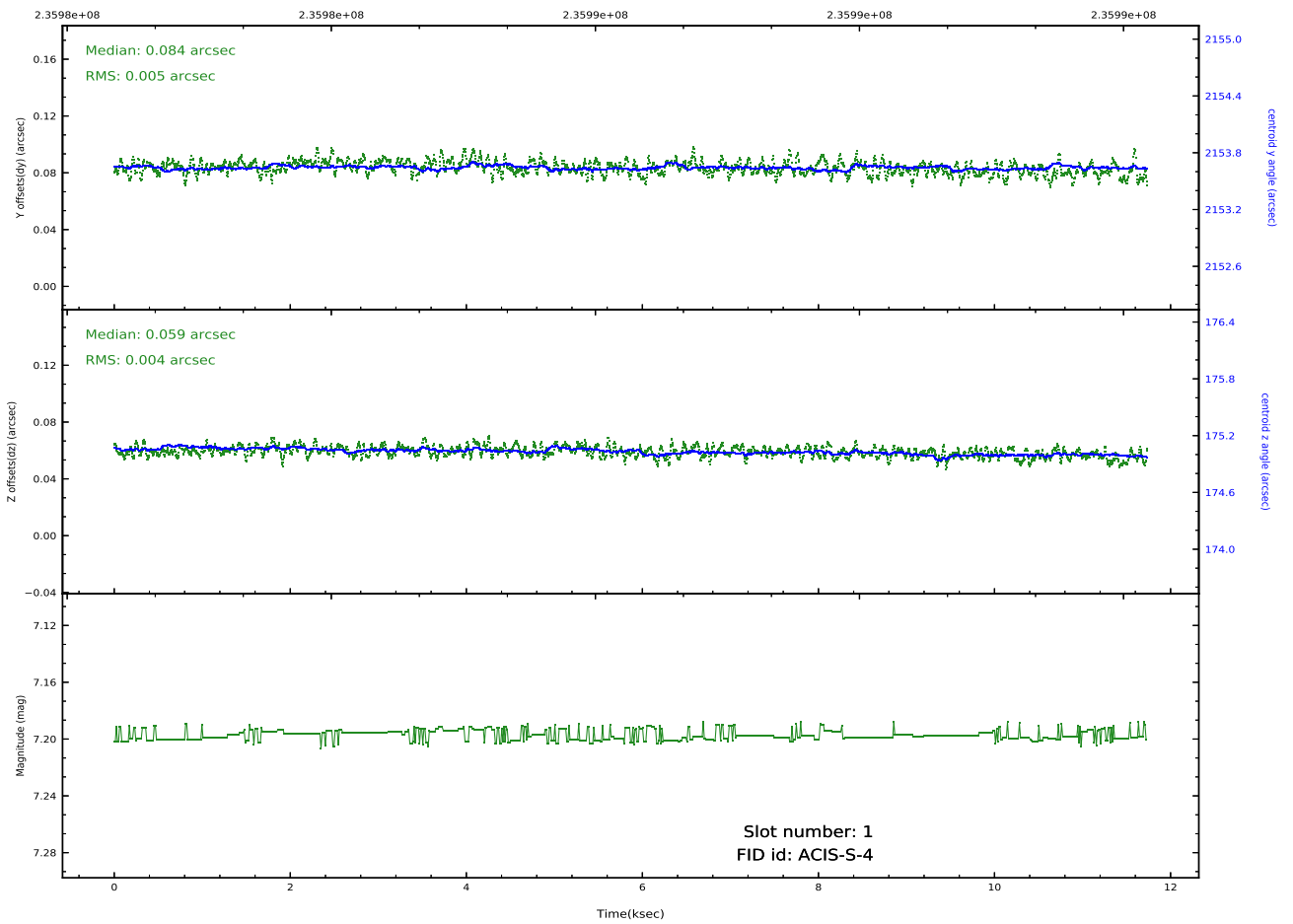
2.5.1 Slot 0



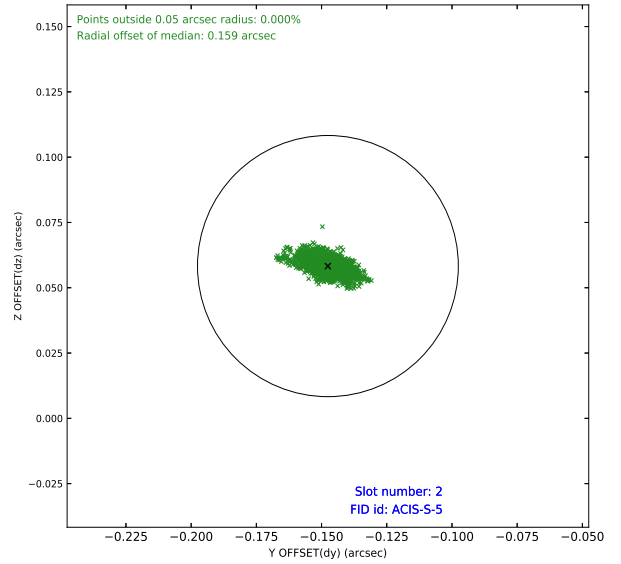
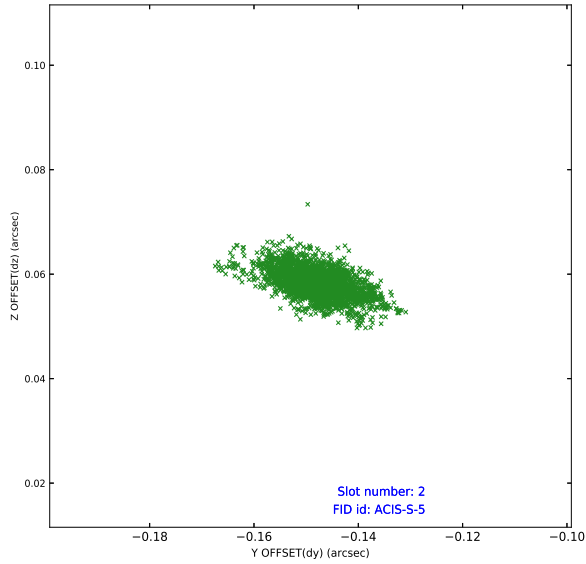
2.5.2 Slot 1



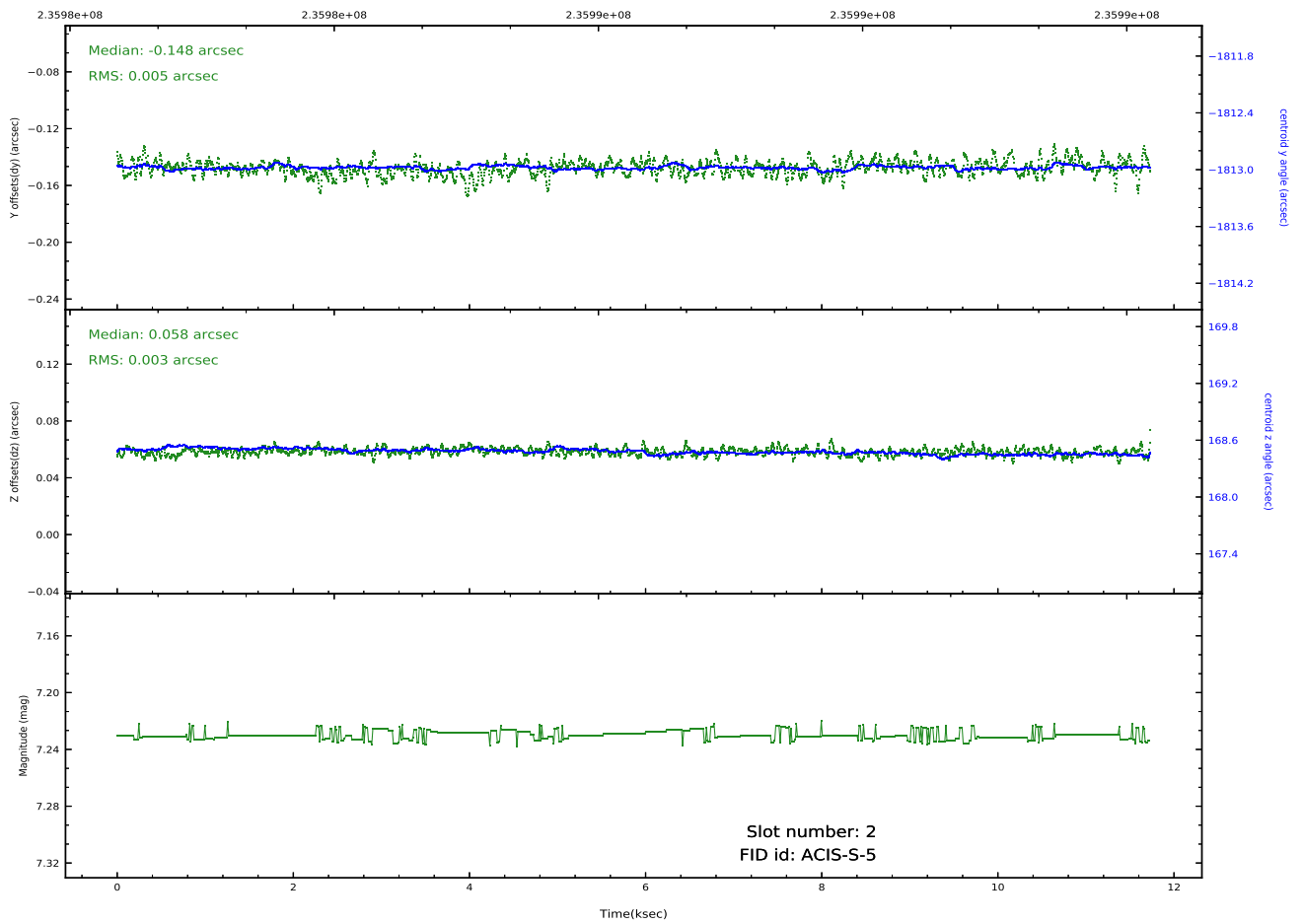
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.72479

A.2 Comments

Preferred roll angle met. Monitor constraint met.