

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5939 - L2 Version 4
Chandra X-Ray Center

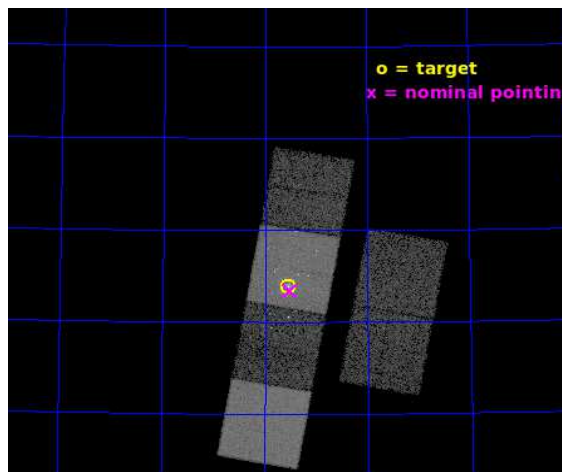
L2 Processing Date : Oct 8 2020

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

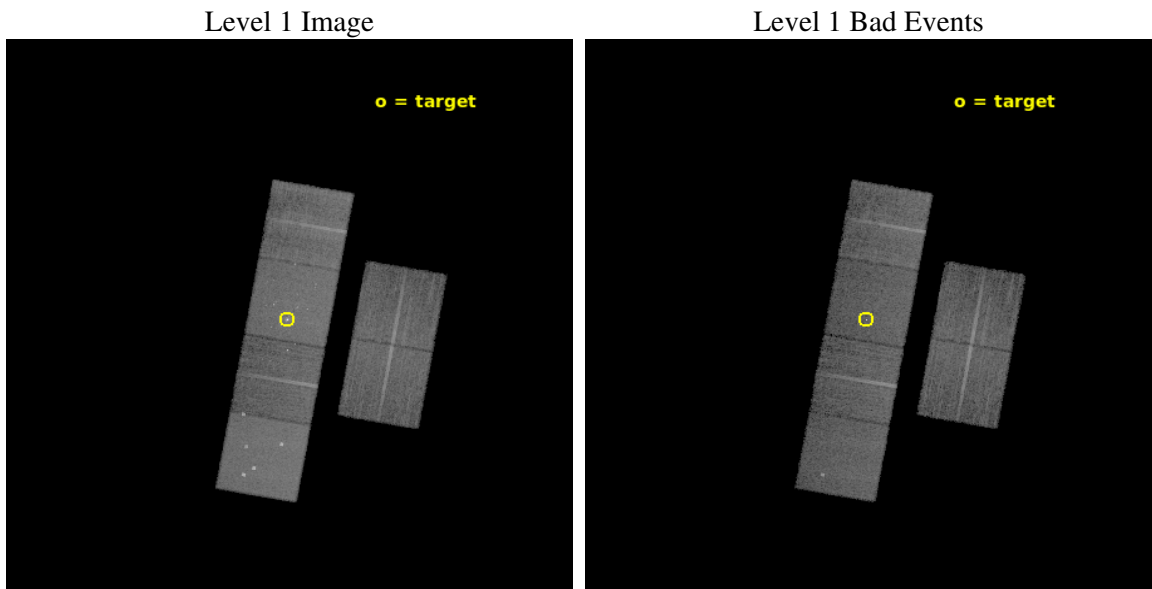
seq_num	600458	Sequence number
obs_id	5939	Observation id
title	An Unprecedented View of a Galaxy's Dynamic X-ray Source Population	
observer	David Pooley	Principal investigator
object	M81	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.888333	Observer's specified target RA [deg]
dec_targ	69.065306	Observer's specified target Dec [deg]
ra_nom	148.87907885846	Nominal RA [deg]
dec_nom	69.057007063736	Nominal Dec [deg]
roll_nom	280.15924595353	Nominal Roll [deg]
revision	4	Processing version of data
ontime	11957.216311932	Sum of GTIs [s]
livetime	11805.806839219	Livetime [s]
ontime2	11957.257351935	Sum of GTIs [s]
ontime3	11957.093191922	Sum of GTIs [s]
ontime5	11957.175271928	Sum of GTIs [s]
ontime6	11957.134231925	Sum of GTIs [s]
ontime7	11957.216311932	Sum of GTIs [s]
ontime8	11957.052151948	Sum of GTIs [s]
l2events	159785	Number of level 2 events



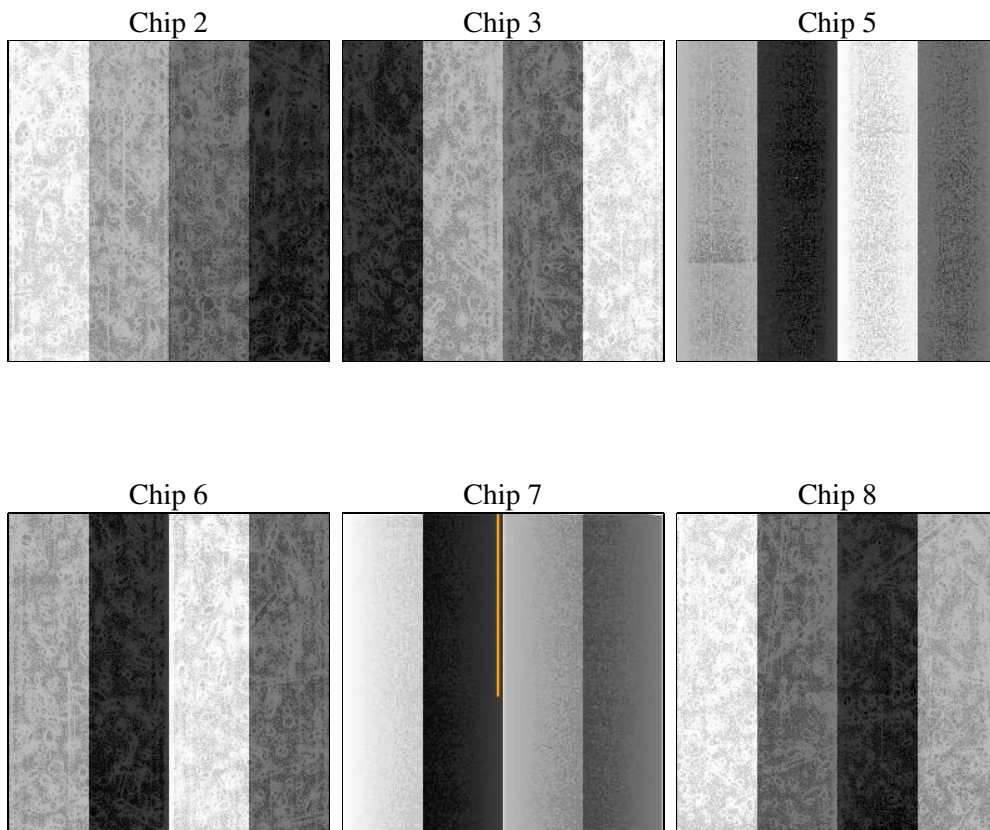
2 OBI

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	11957.216311932	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	11957.257351935	Sum of GTIs [s]
date	2020-10-08T18:33:15	Date and time of file creation	ontime3	11957.093191922	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	11957.175271928	Sum of GTIs [s]
			ontime6	11957.134231925	Sum of GTIs [s]
			ontime7	11957.216311932	Sum of GTIs [s]
			ontime8	11957.052151948	Sum of GTIs [s]
			l1events	679036	Number of level 1 events

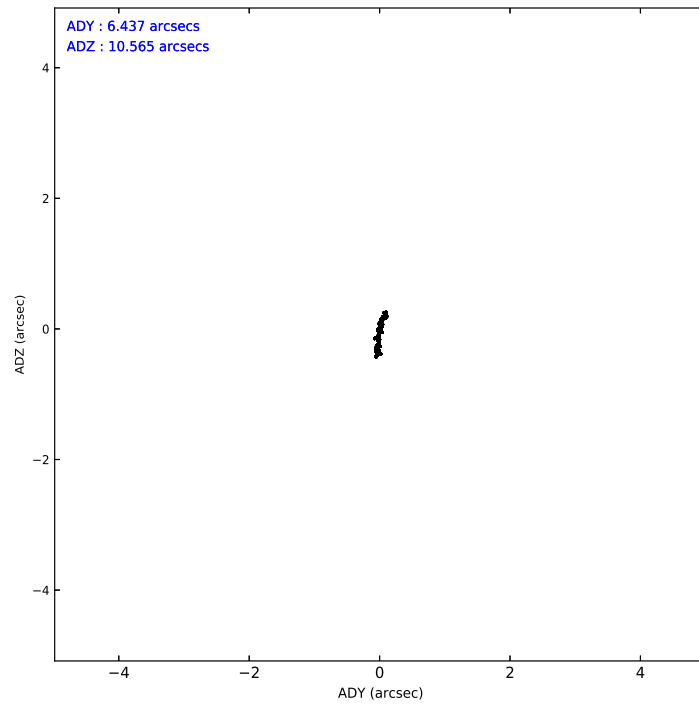
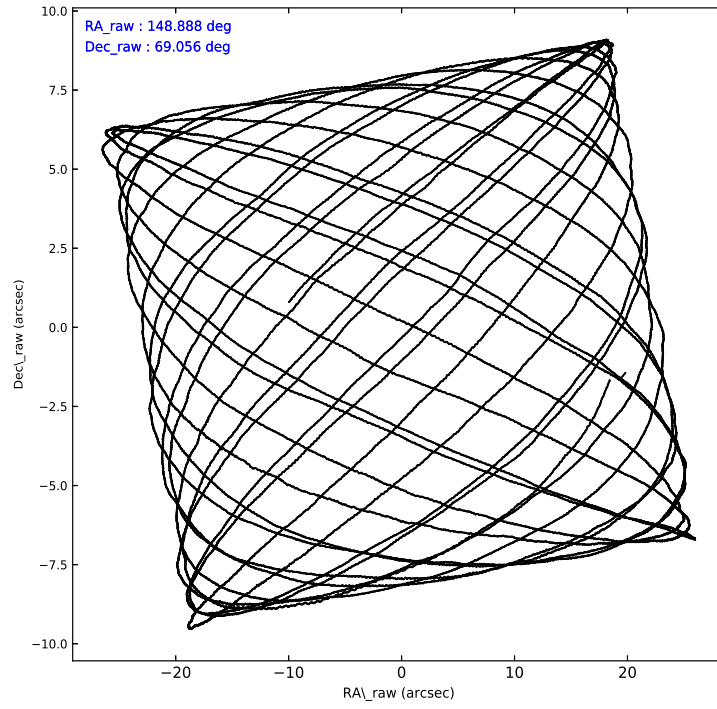
2.1.4 Events

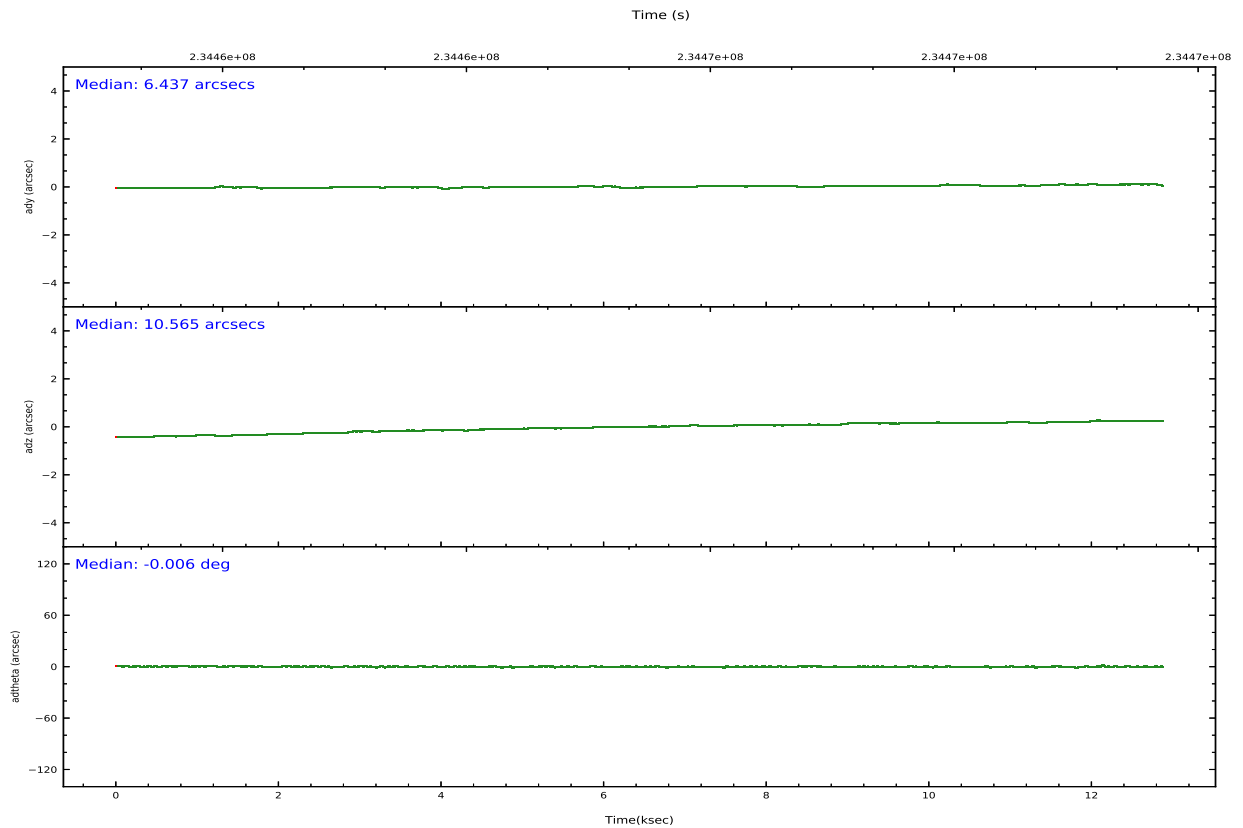
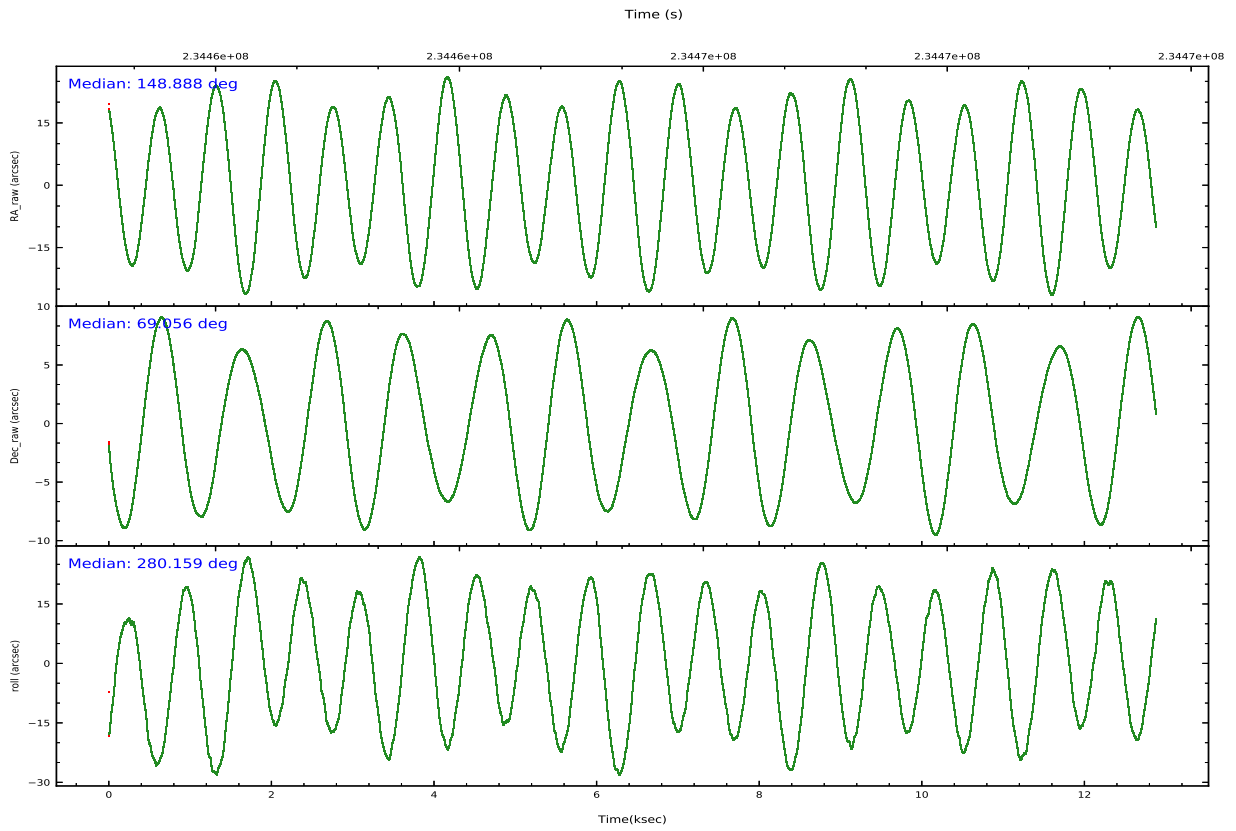
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	94096	89904	144063	93719	137807	119447	grade 0 events	5030	4659	9821	5920	7093	8339
rejected events	82848	78975	76183	80716	76814	92704		5%	5%	6%	6%	5%	6%
rejected %	88%	87%	52%	86%	55%	77%	grade 1 events	53	48	193	80	243	70
								0%	0%	0%	0%	0%	0%
							grade 2 events	2326	2229	19548	2569	12533	5812
								2%	2%	13%	2%	9%	4%
							grade 3 events	1026	1037	2601	1146	5542	3007
								1%	1%	1%	1%	4%	2%
							grade 4 events	1017	1069	2432	1062	5517	2842
								1%	1%	1%	1%	4%	2%
							grade 5 events	3798	4040	10437	4368	12552	5682
								4%	4%	7%	4%	9%	4%
							grade 6 events	1859	1939	33527	2313	30331	6749
								1%	2%	23%	2%	22%	5%
							grade 7 events	78987	74883	65504	76261	63996	86946
								83%	83%	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	148.838401	148.87907885846	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.076205	69.05700706373599	Alternating exposures requested	N	N
[deg] Pointing Roll	280.046645	280.15924595353	[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)	234459570.184000	234458261.11335			
Observation start date	2005-06-06T15:38:26	2005-06-06T15:17:41			
[s] Observation end time (MET)	234471570.184000	234472089.90148			
Observation end date	2005-06-06T18:58:26	2005-06-06T19:08:09			
Read mode	TIMED	TIMED			

2.3 Aspect



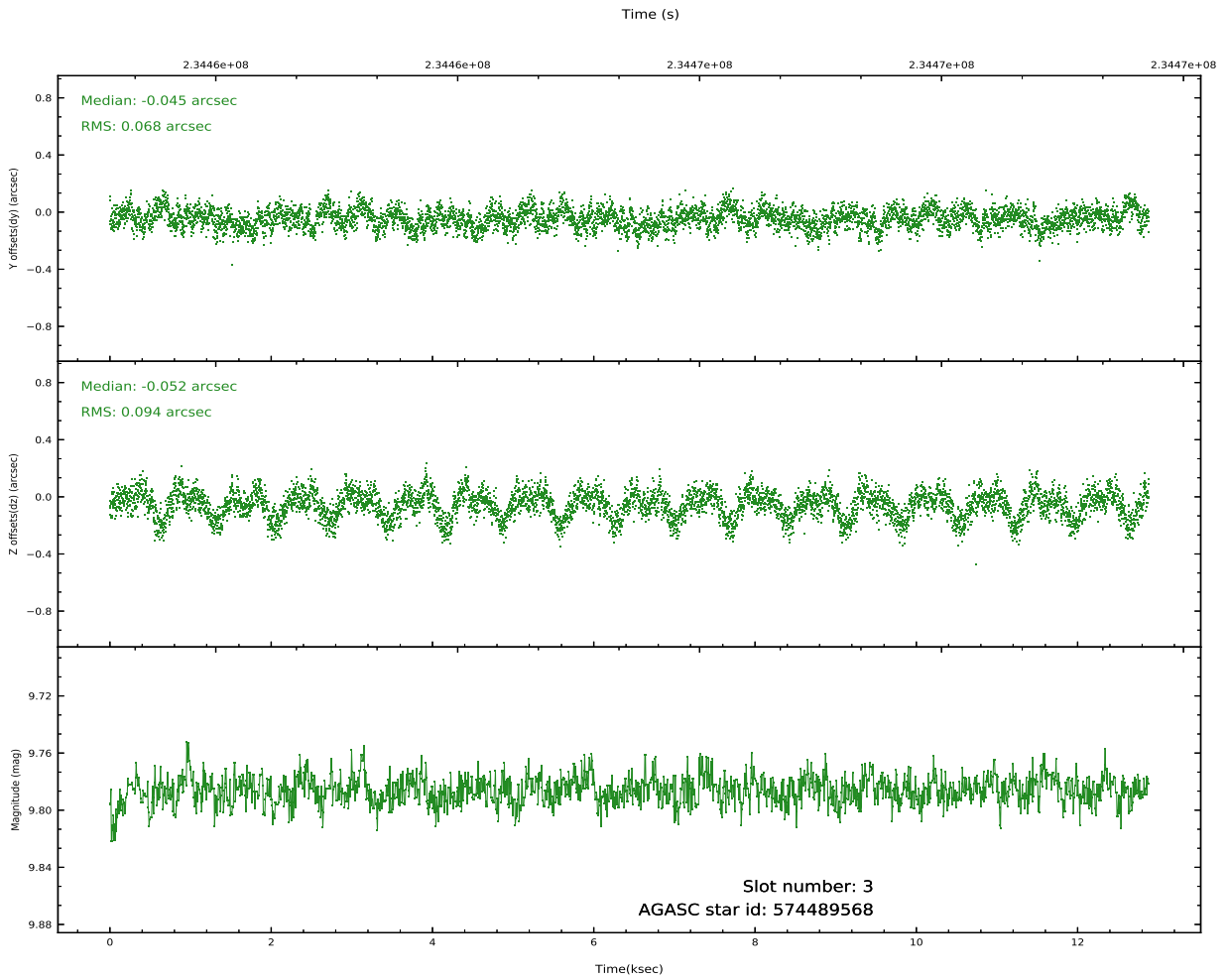
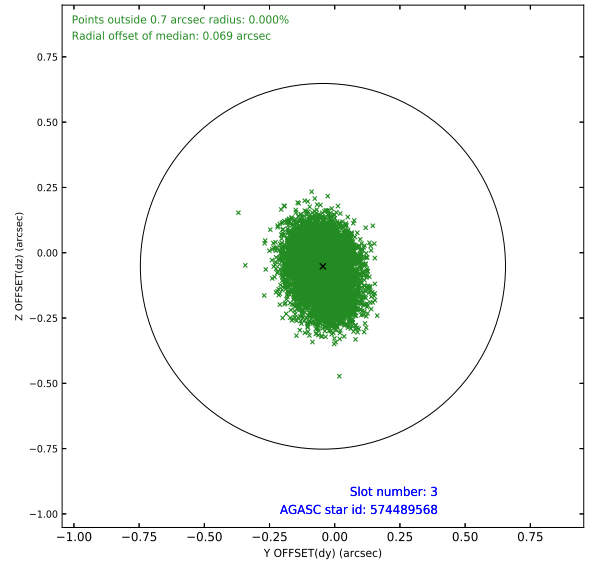
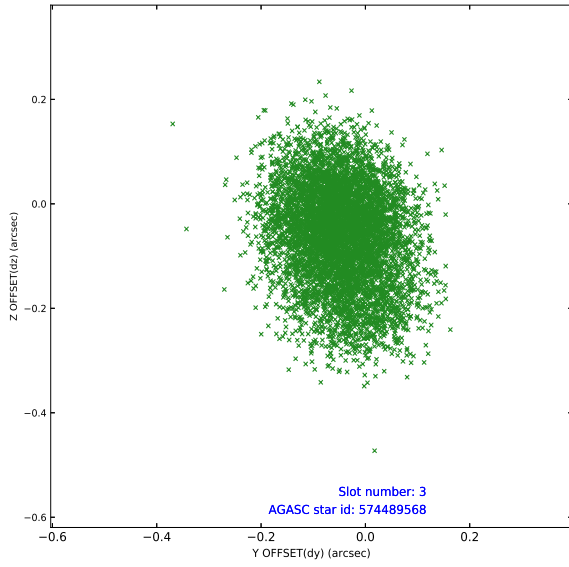


Slot Statistics

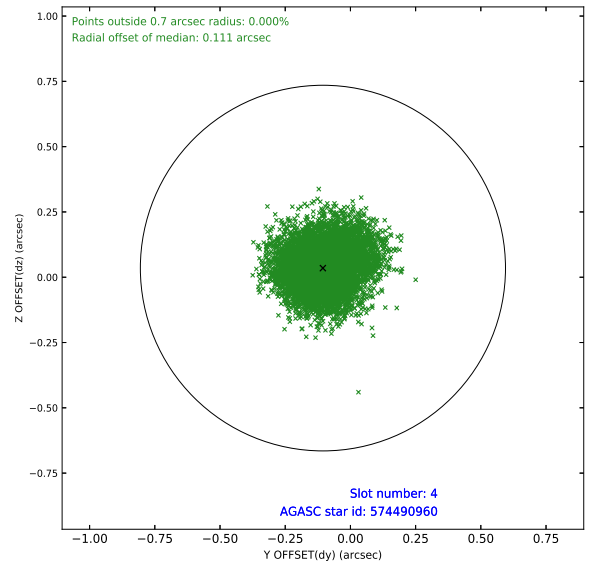
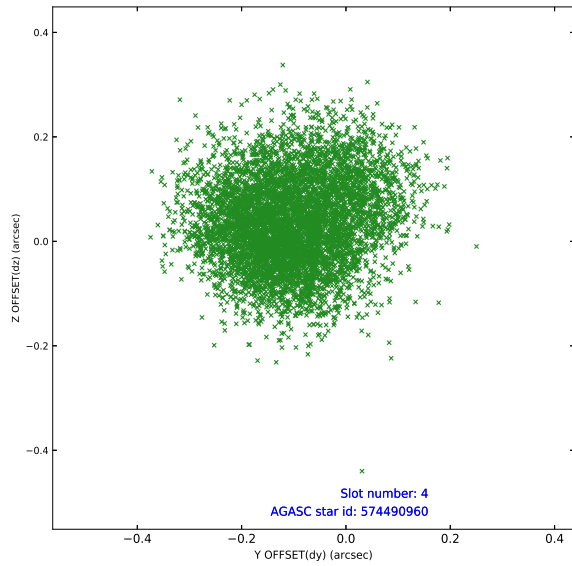
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	3141	1.000	-0.092	-0.051	0.007	0.011	0.000000	0.000000	-759.22	-1731
1	FID		ACIS-S-4	7.20	3142	1.000	0.142	0.058	0.007	0.012	0.000000	0.000000	2154.06	176
2	FID		ACIS-S-5	7.23	3142	1.000	-0.081	0.002	0.007	0.012	0.000000	0.000000	-1811.63	170
3	GUIDE	used	574489568	9.79	6279	1.000	-0.045	-0.052	0.124	0.202	147.223974	69.438157	-1665.18	-1777
4	GUIDE	used	574490960	9.74	6280	1.000	-0.105	0.035	0.136	0.215	148.185918	69.658768	-2211.61	-437
5	GUIDE	used	574491712	9.89	6270	1.000	-0.159	-0.055	0.150	0.233	147.262590	69.570889	-2123.97	-1634
6	GUIDE	used	574496360	9.46	6275	1.000	0.133	0.210	0.119	0.189	150.806604	68.529829	2348.37	2217
7	GUIDE	used	574497600	10.43	6237	1.000	0.174	-0.123	0.174	0.297	147.824120	68.451903	1969.31	-1710

2.4 Star Slots

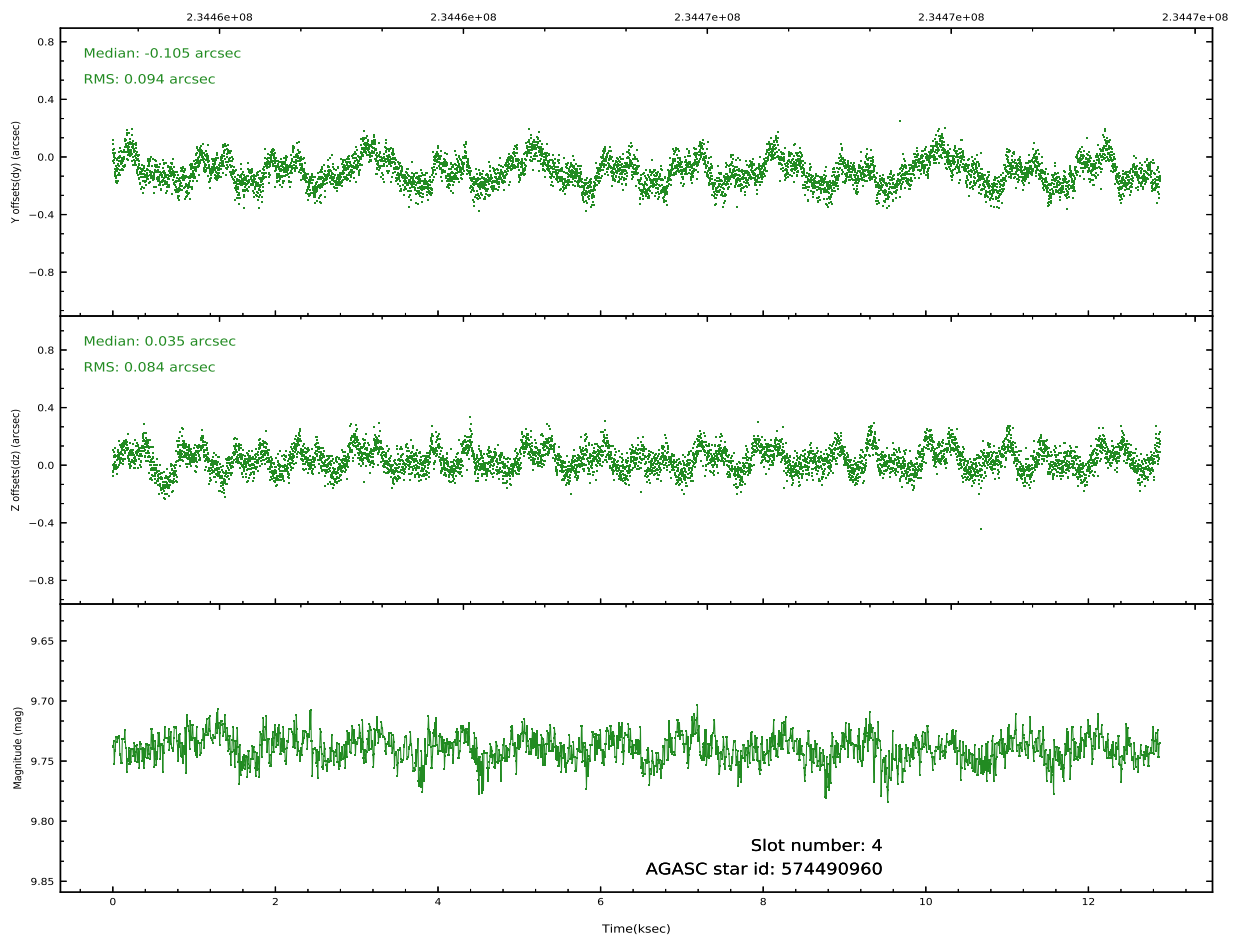
2.4.1 Slot 3



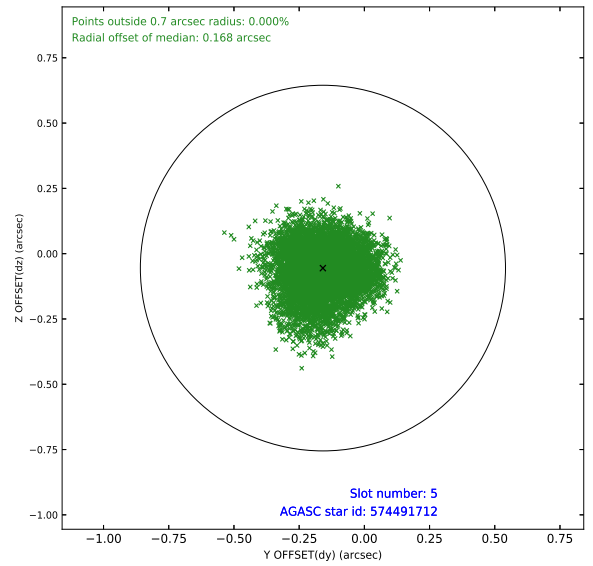
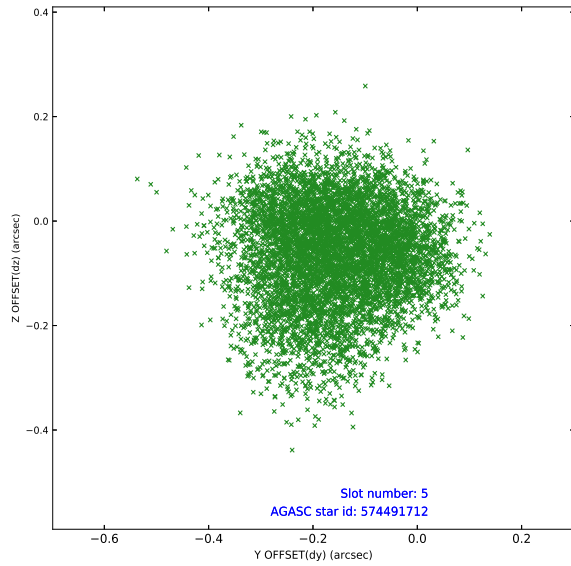
2.4.2 Slot 4



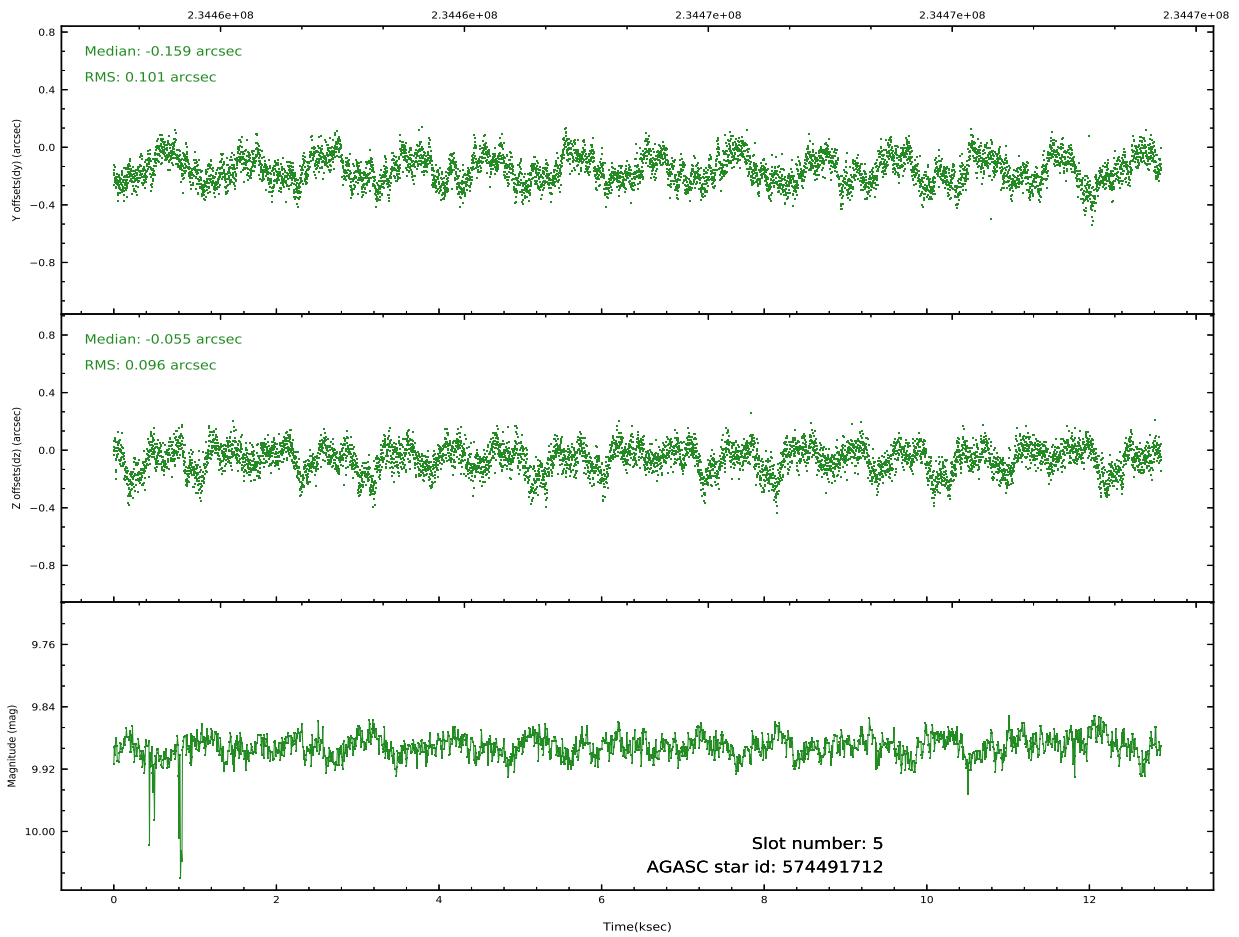
Time (s)



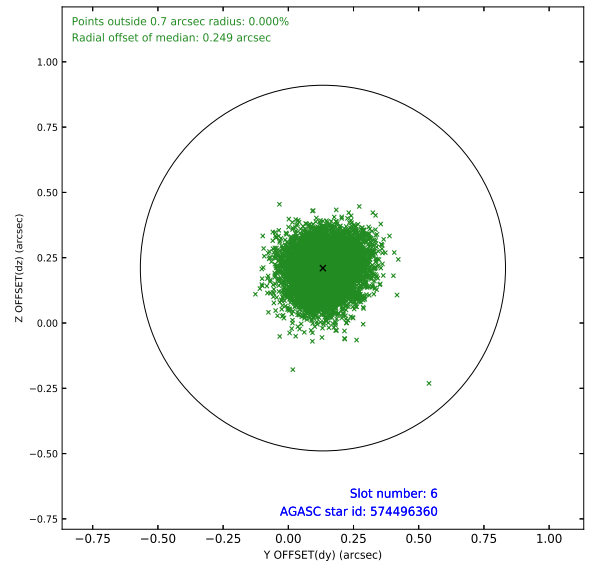
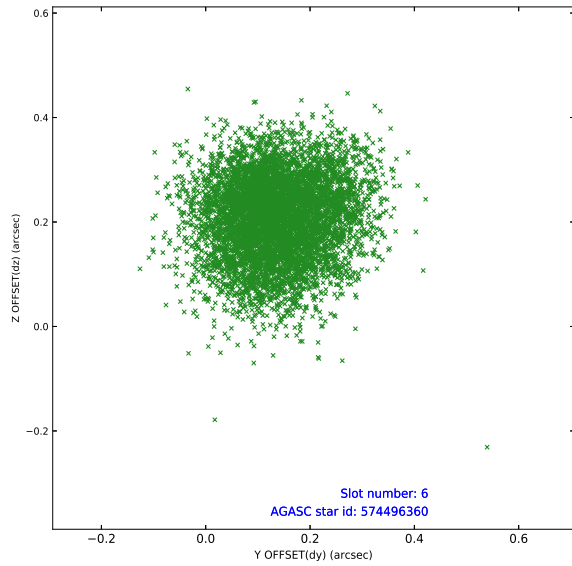
2.4.3 Slot 5



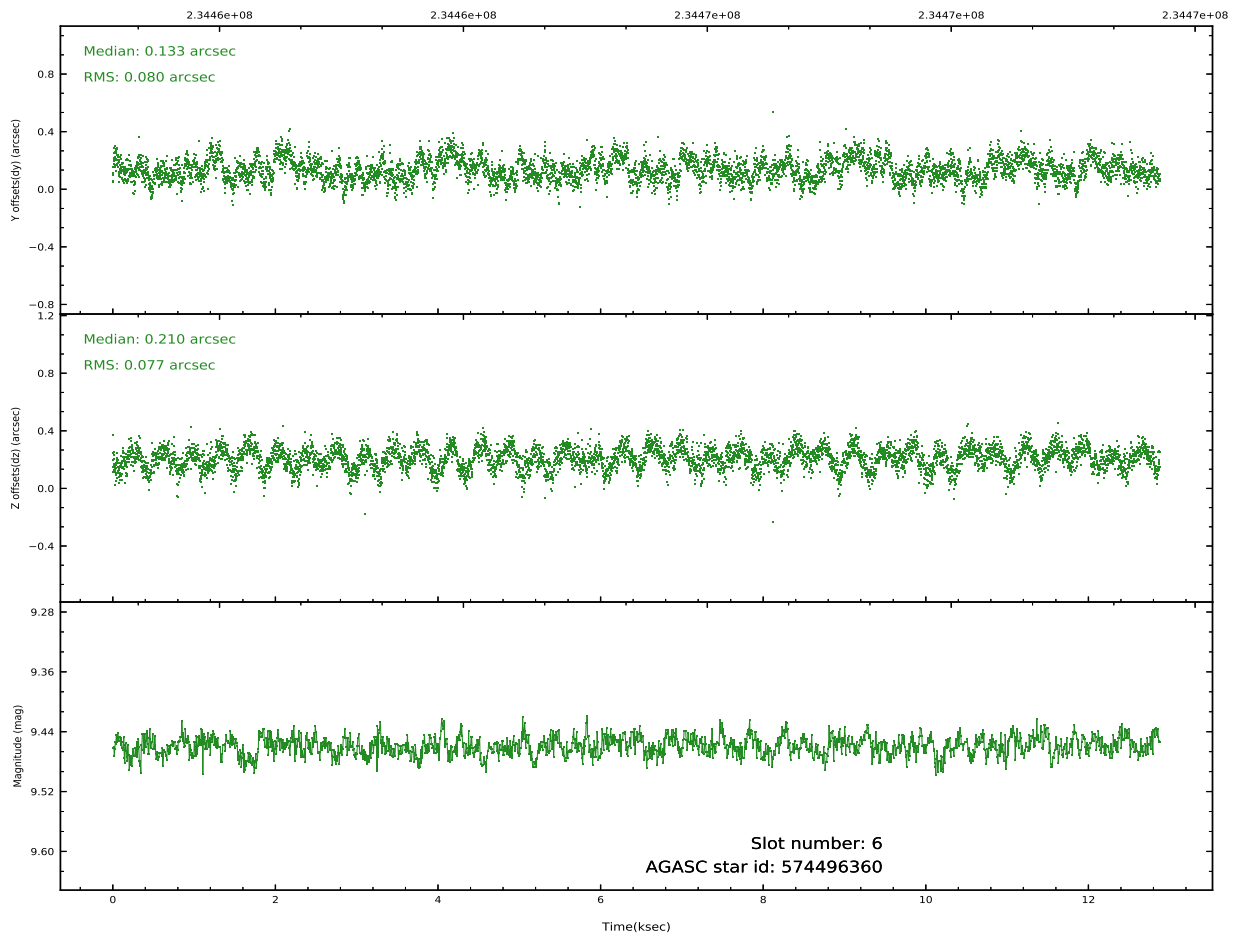
Time (s)



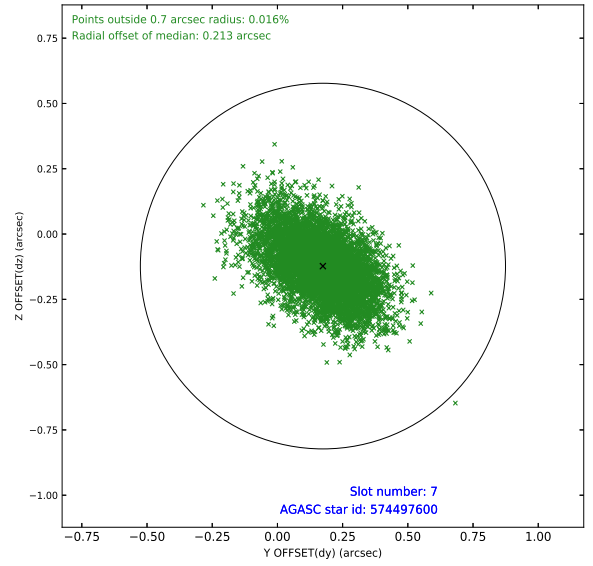
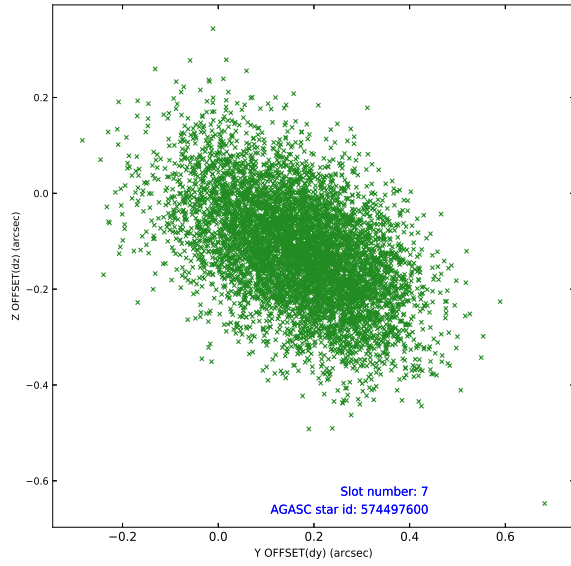
2.4.4 Slot 6



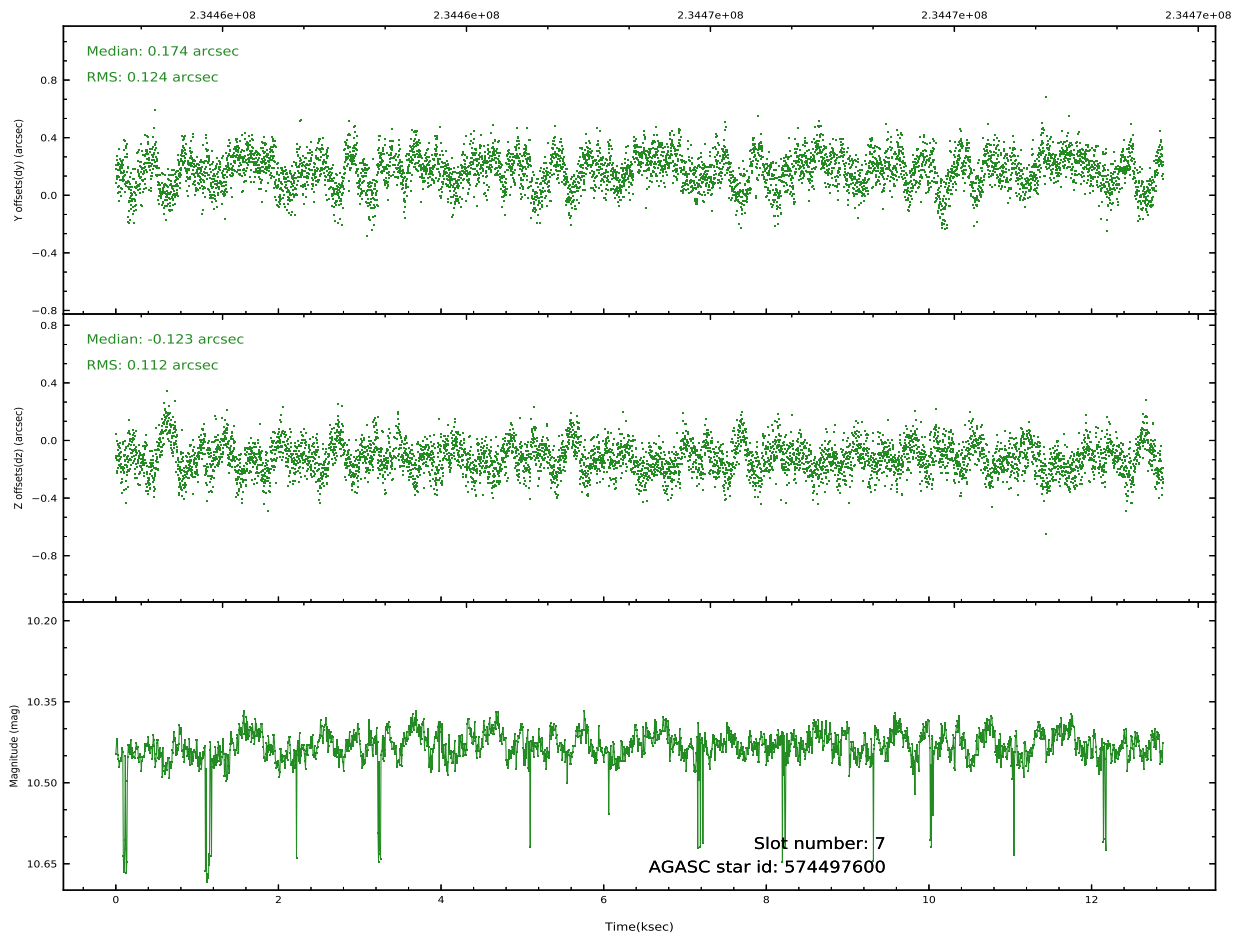
Time (s)



2.4.5 Slot 7

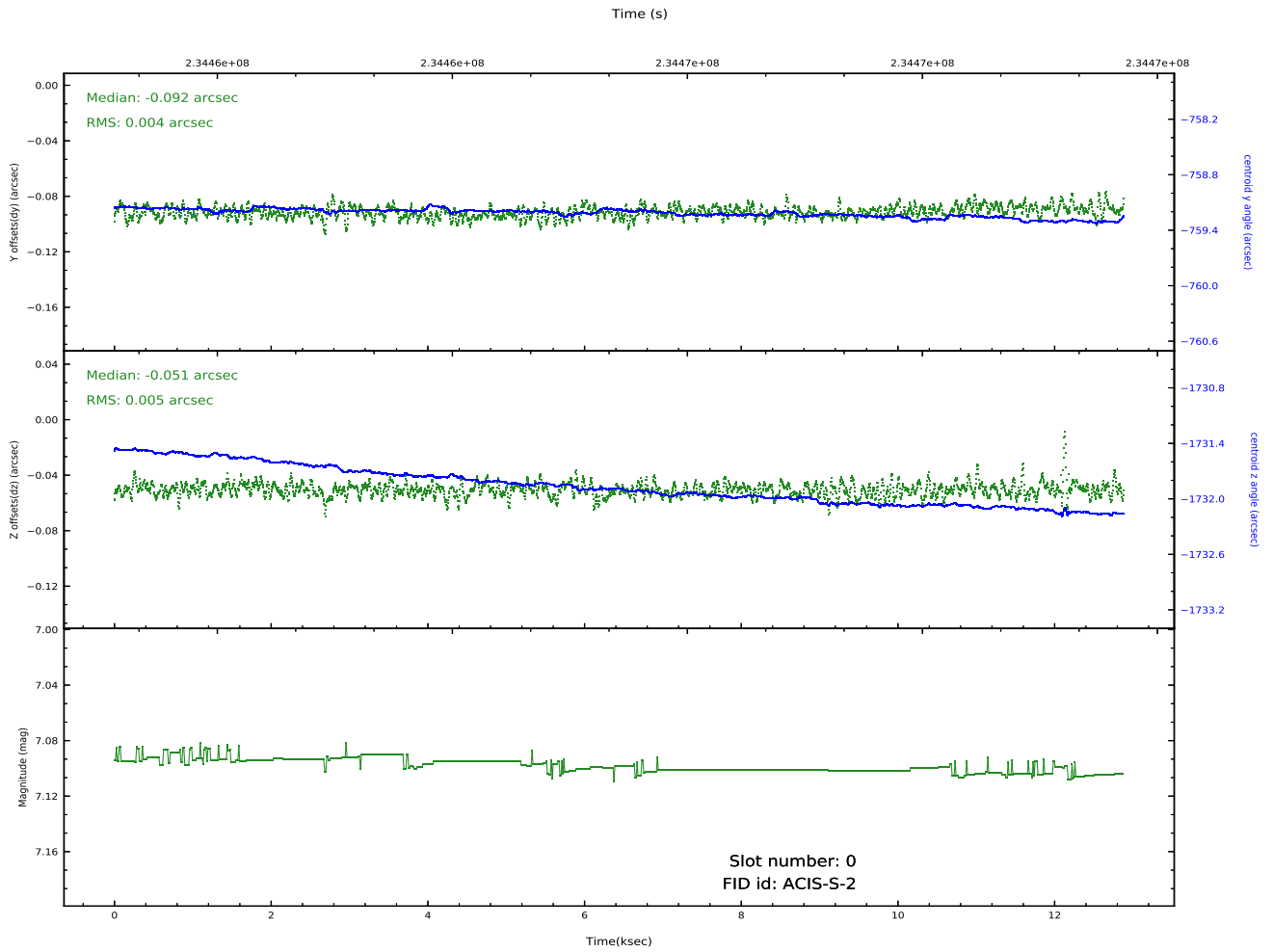
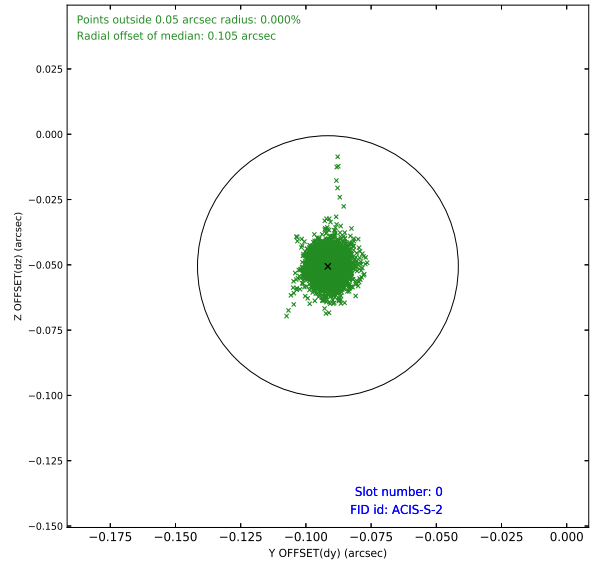
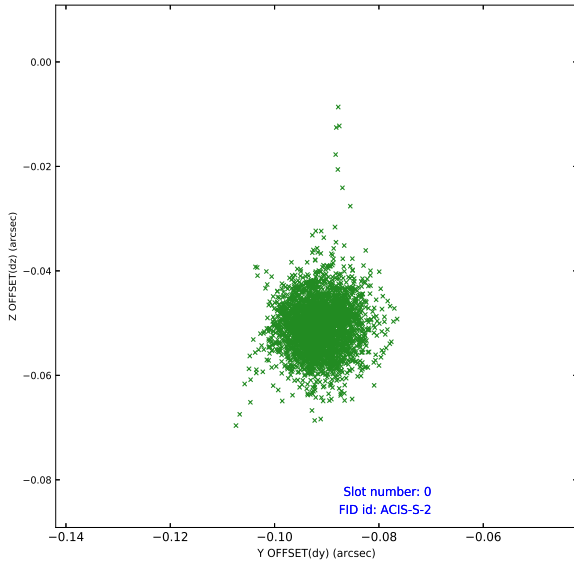


Time (s)

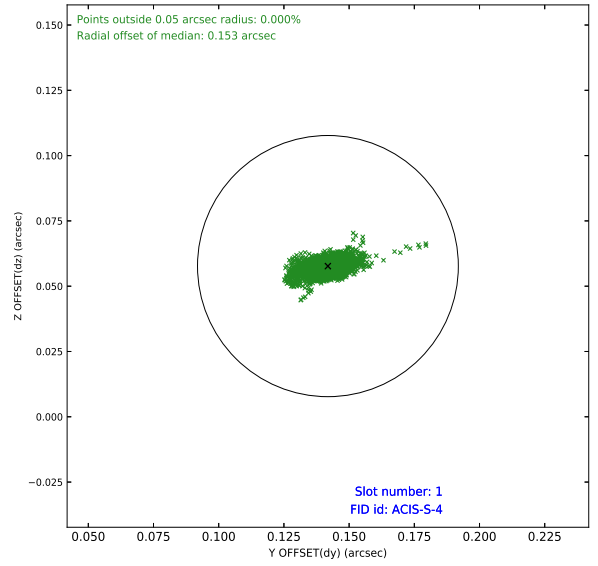
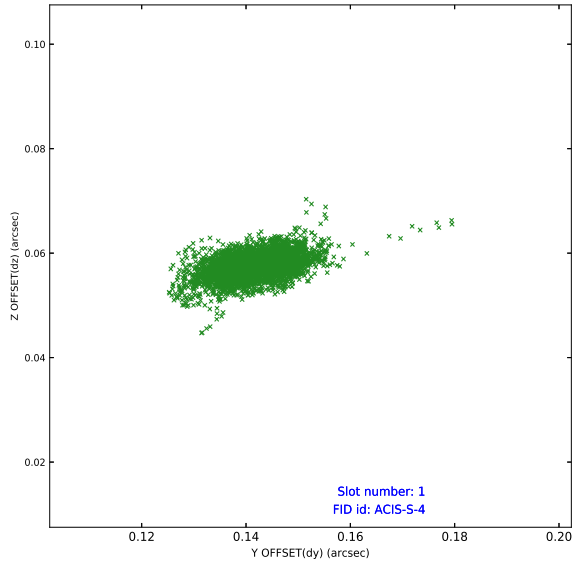


2.5 FID Slots

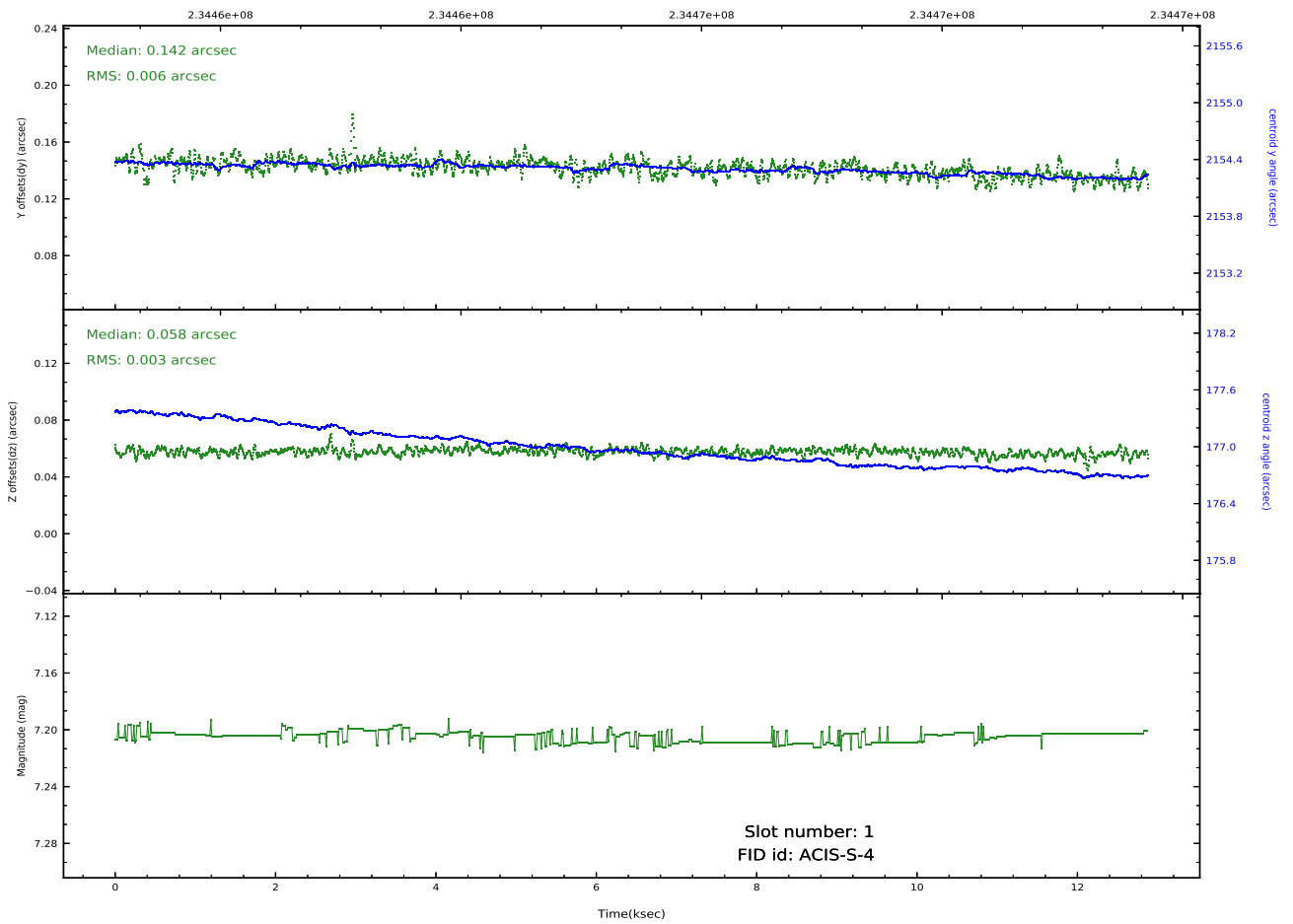
2.5.1 Slot 0



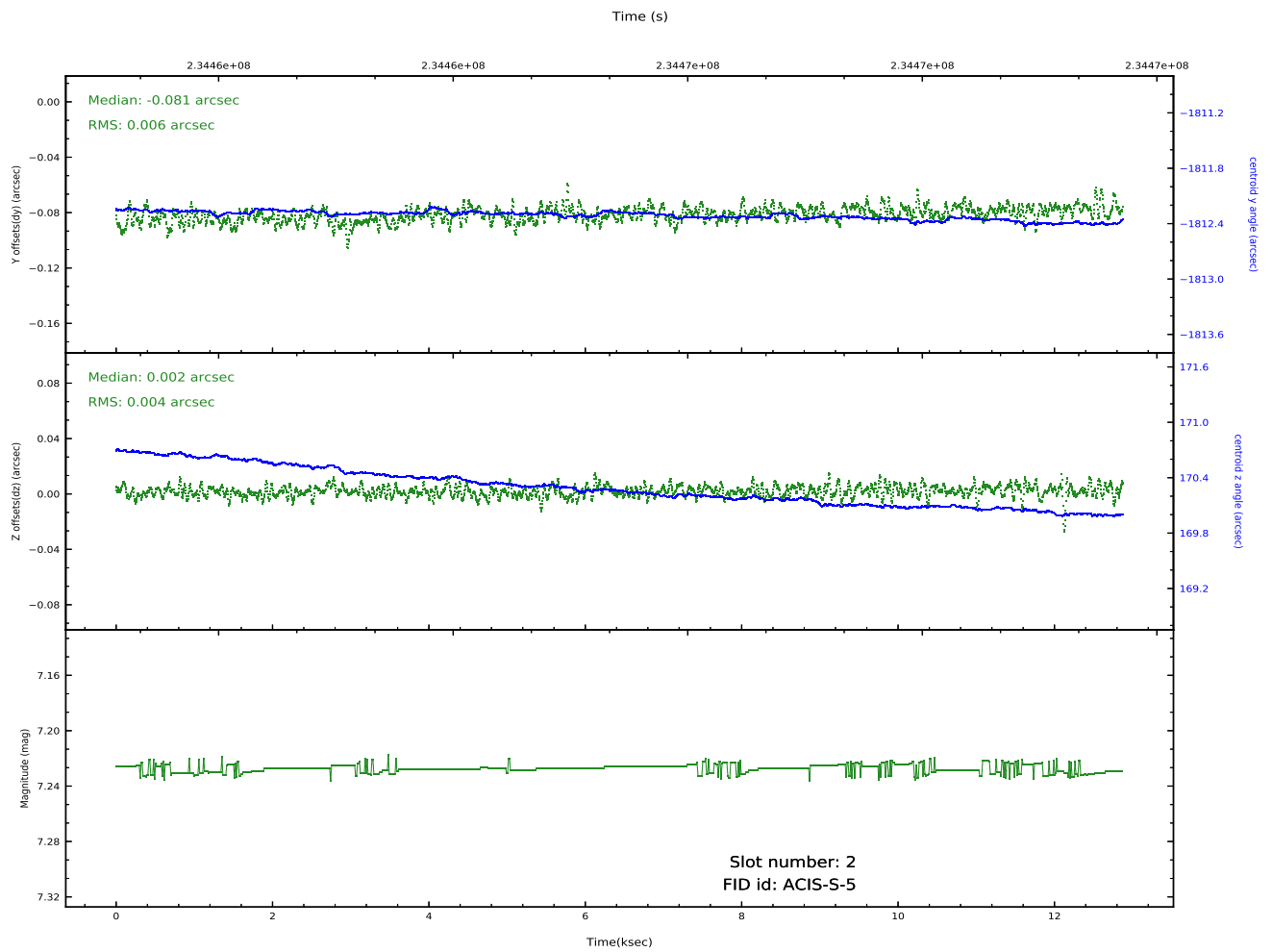
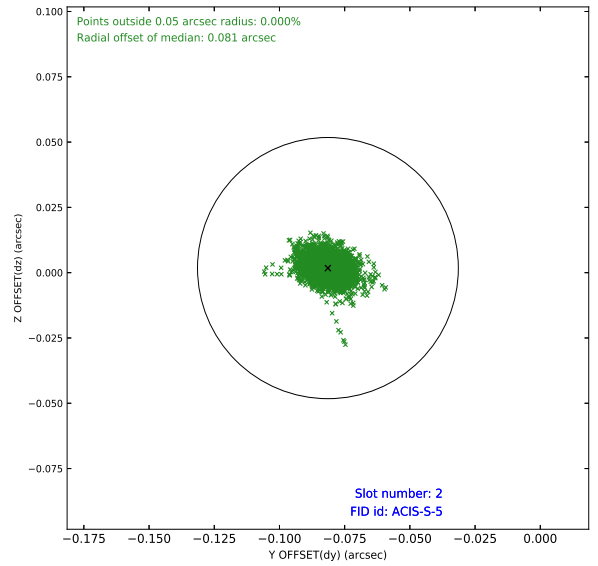
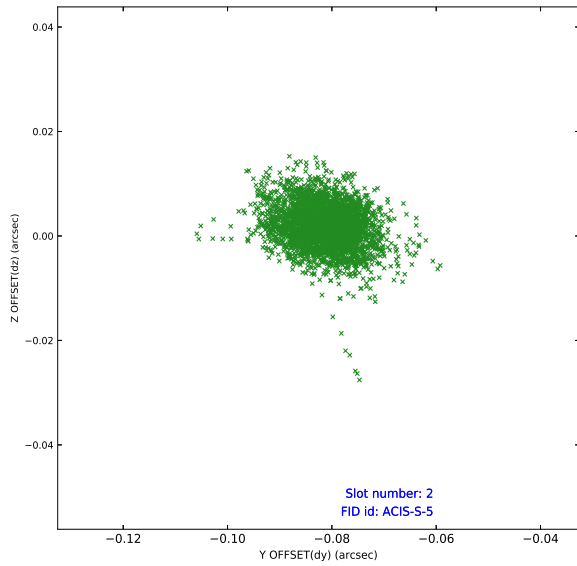
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



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	11.95839

A.2 Comments