

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5339 - L2 Version 4
Chandra X-Ray Center

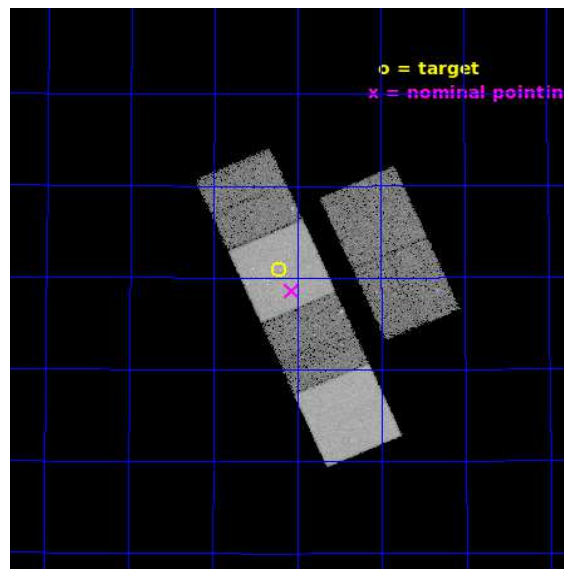
L2 Processing Date : Sep 27 2020

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1 Front

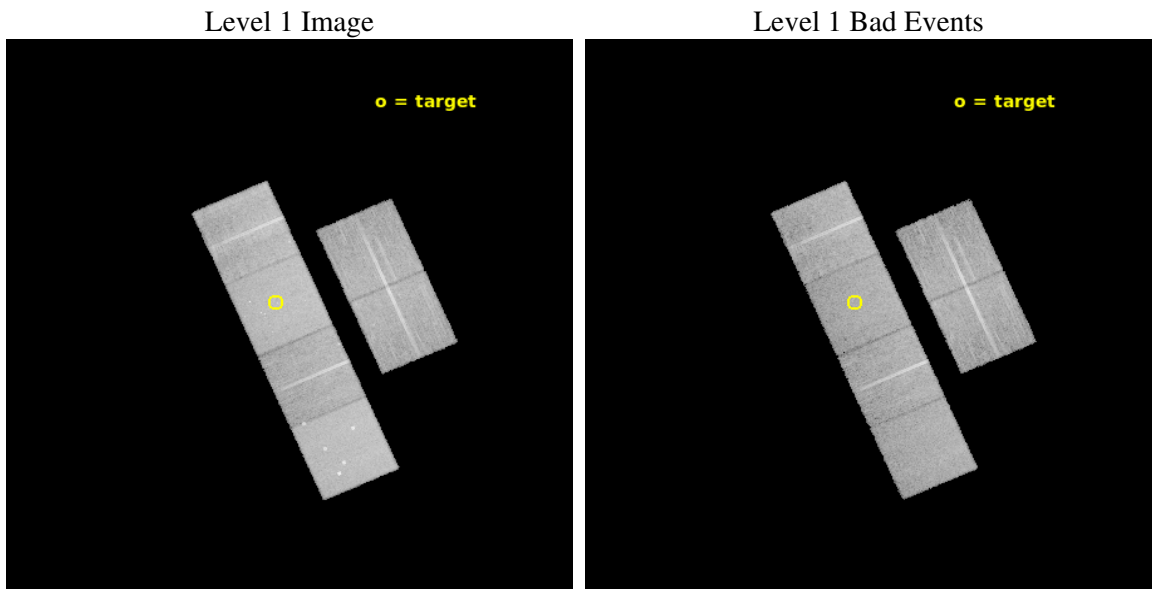
seq_num	600389	Sequence number
obs_id	5339	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.76630457298	Nominal RA [deg]
dec_nom	54.310089511594	Nominal Dec [deg]
roll_nom	246.18393514905	Nominal Roll [deg]
revision	4	Processing version of data
ontime	14505.599945962	Sum of GTIs [s]
livetime	14321.921305223	Livetime [s]
ontime2	14502.358985662	Sum of GTIs [s]
ontime3	14505.599945962	Sum of GTIs [s]
ontime5	14505.599945962	Sum of GTIs [s]
ontime6	14505.599945962	Sum of GTIs [s]
ontime7	14505.599945962	Sum of GTIs [s]
ontime8	14505.599945962	Sum of GTIs [s]
l2events	195788	Number of level 2 events



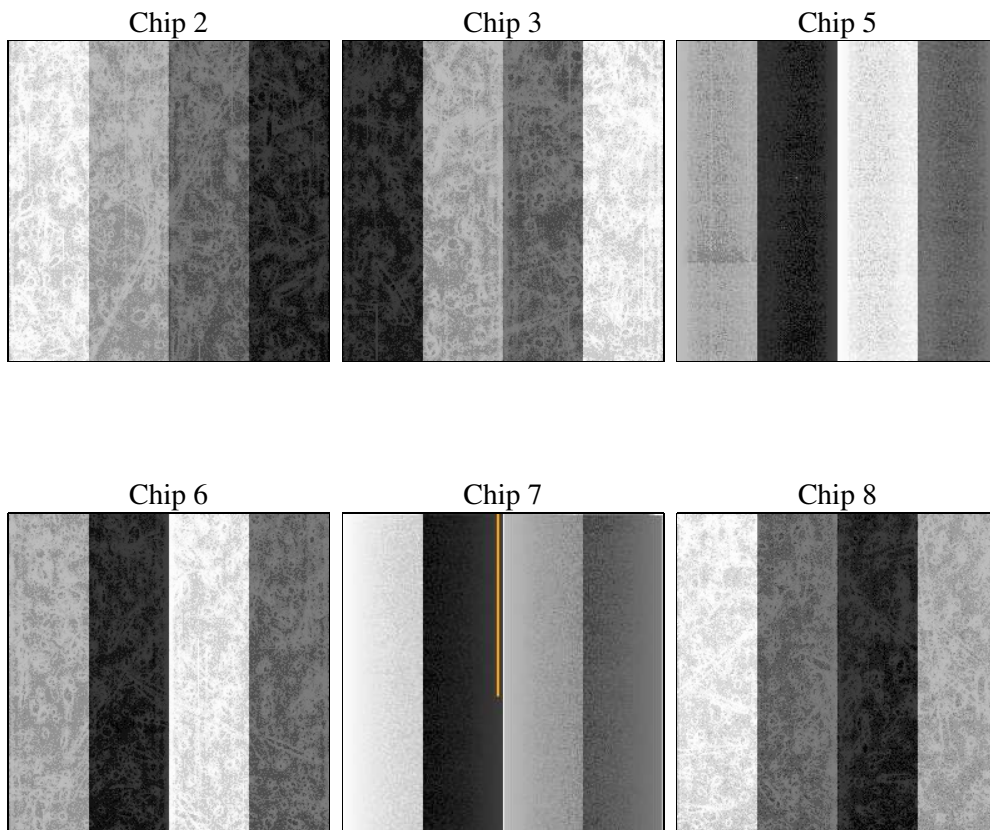
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14335.706000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	14505.599945962	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	14502.358985662	Sum of GTIs [s]
date	2020-09-27T03:39:40	Date and time of file creation	ontime3	14505.599945962	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	14505.599945962	Sum of GTIs [s]
			ontime6	14505.599945962	Sum of GTIs [s]
			ontime7	14505.599945962	Sum of GTIs [s]
			ontime8	14505.599945962	Sum of GTIs [s]
			l1events	801519	Number of level 1 events

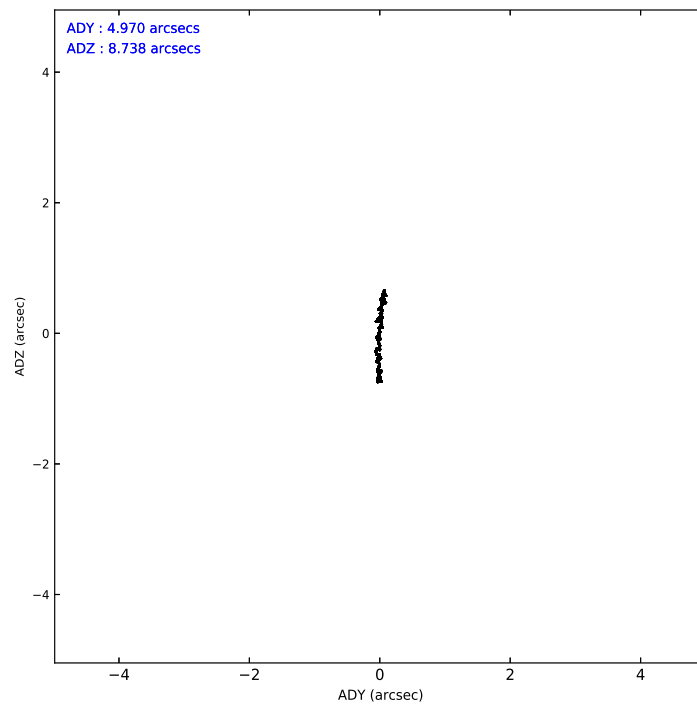
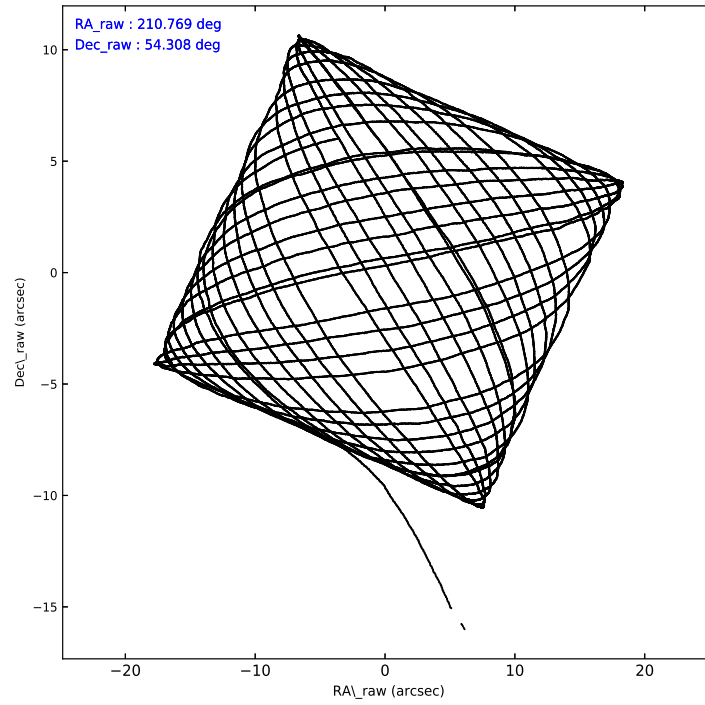
2.1.4 Events

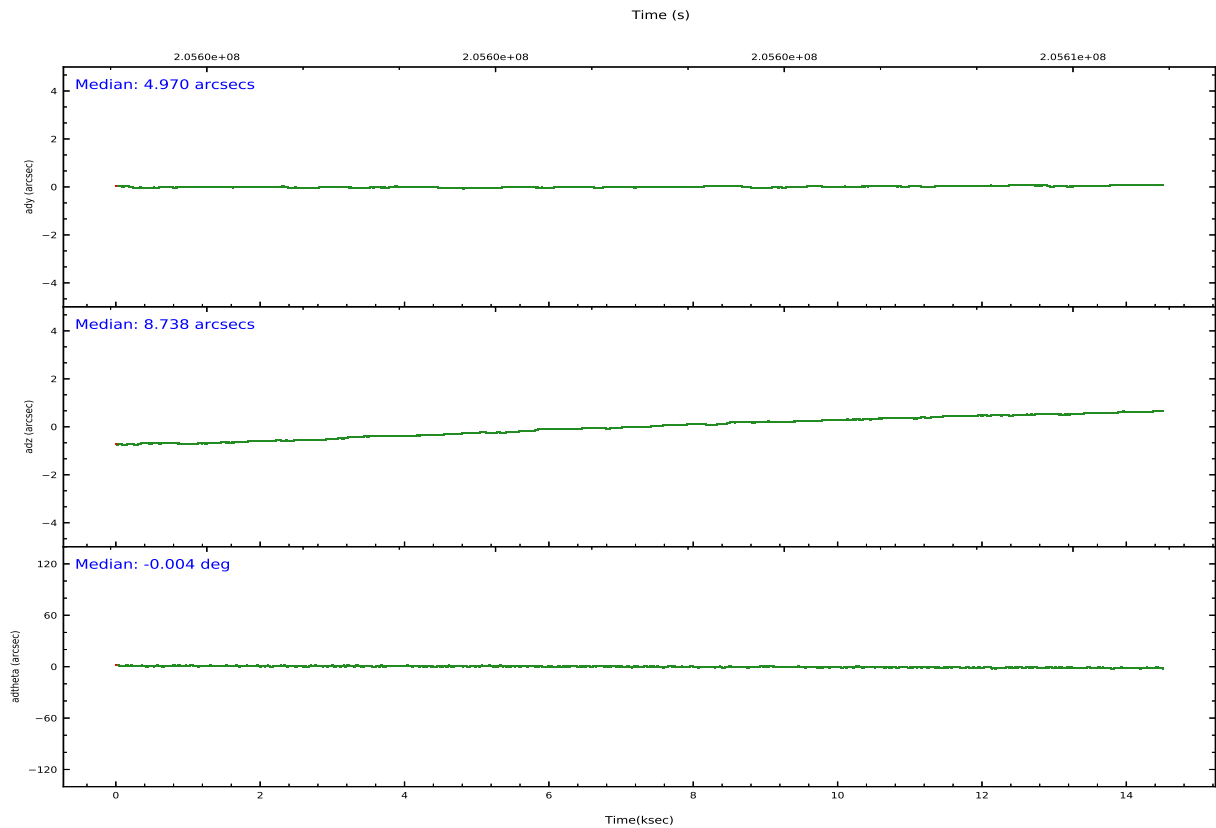
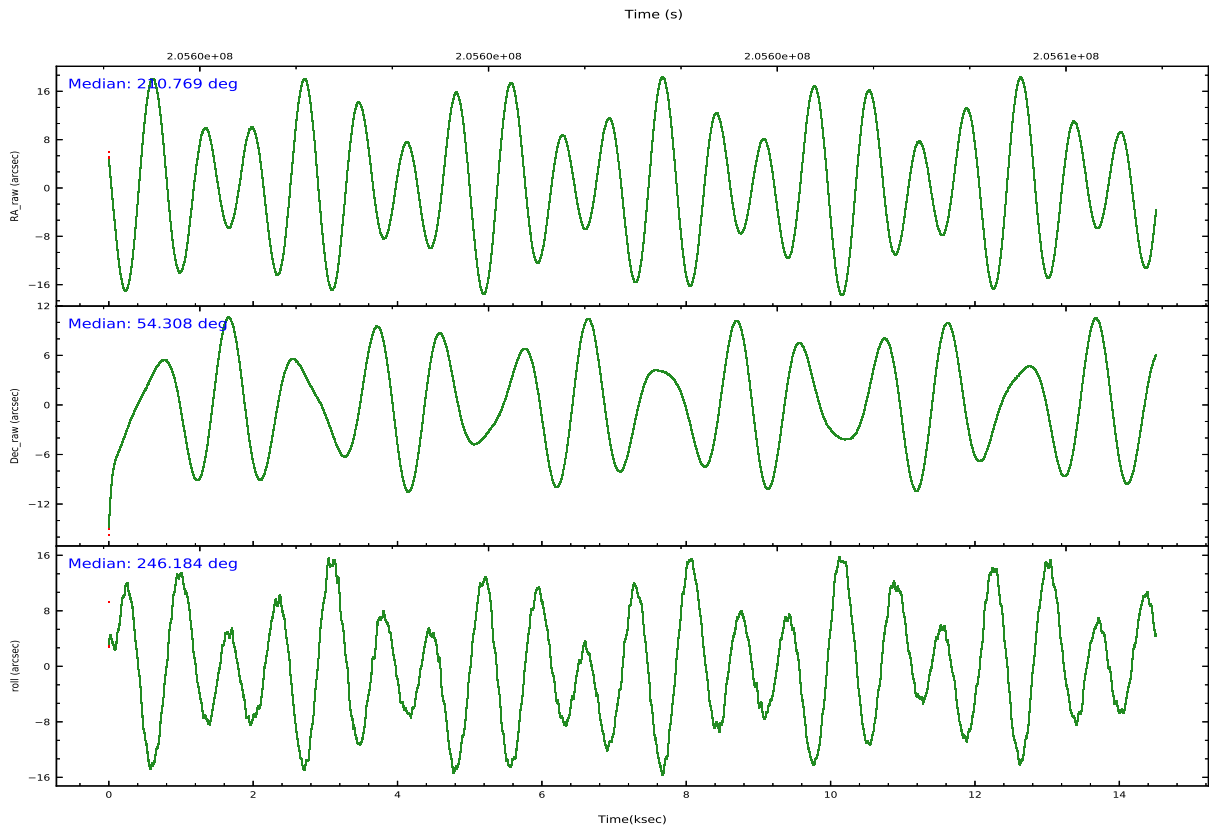
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	115073	109874	168607	113168	155522	139275	grade 0 events	7931	7490	9307	7678	7139	11390
rejected events	99290	94767	88955	97073	87320	107963		6%	6%	5%	6%	4%	8%
rejected %	86%	86%	52%	85%	56%	77%	grade 1 events	84	76	272	68	121	109
								0%	0%	0%	0%	0%	0%
							grade 2 events	2980	2681	23026	3046	13469	6488
								2%	2%	13%	2%	8%	4%
							grade 3 events	1323	1273	3116	1319	5856	3069
								1%	1%	1%	1%	3%	2%
							grade 4 events	1316	1300	3035	1340	5790	2995
								1%	1%	1%	1%	3%	2%
							grade 5 events	4348	4831	12081	5137	14170	6444
								3%	4%	7%	4%	9%	4%
							grade 6 events	2251	2380	41265	2736	36026	7384
								1%	2%	24%	2%	23%	5%
							grade 7 events	94840	89843	76505	91844	72951	101396
								82%	81%	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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	210.763621	210.76630457298	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.334730	54.310089511594	Alternating exposures requested	N	N
[deg] Pointing Roll	246.032598	246.18393514905	[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)	205594914.184000	205593841.61406			
Observation start date	2004-07-07T13:40:50	2004-07-07T13:24:01			
[s] Observation end time (MET)	205609250.184000	205609477.98976			
Observation end date	2004-07-07T17:39:46	2004-07-07T17:44:37			
Read mode	TIMED	TIMED			

2.3 Aspect



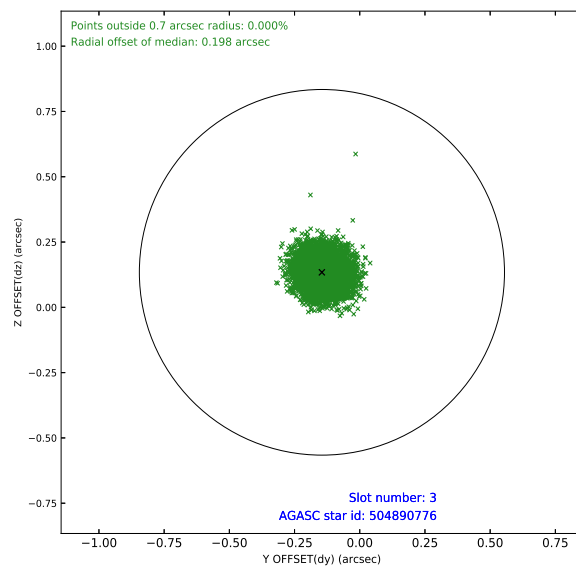
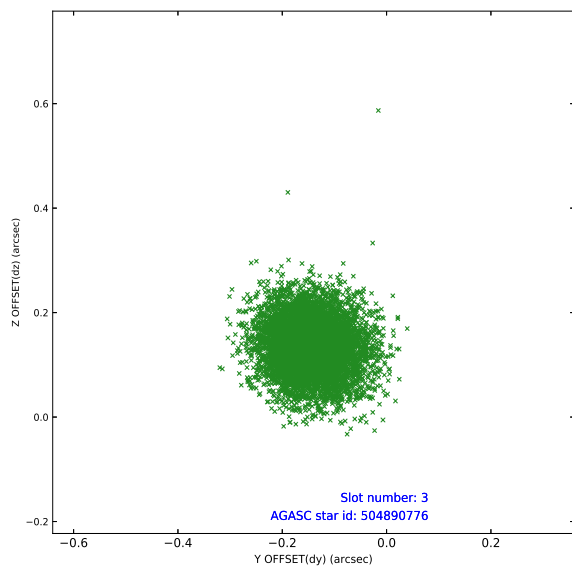


Slot Statistics

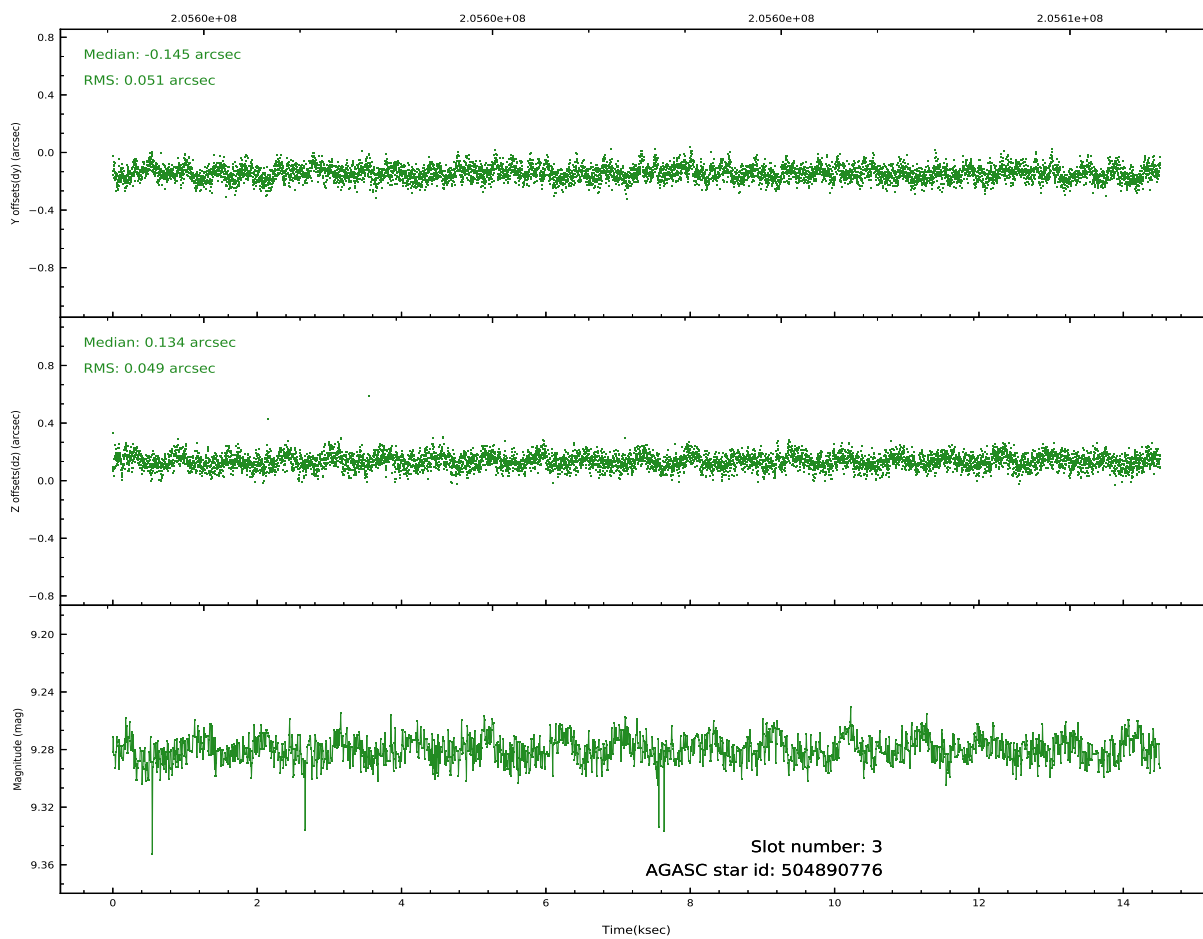
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	3539	1.000	-0.129	-0.099	0.013	0.020	0.000000	0.000000	-757.81	-1729
1	FID		ACIS-S-4	7.20	3540	1.000	0.092	0.076	0.009	0.016	0.000000	0.000000	2155.55	178
2	FID		ACIS-S-6	7.35	3540	1.000	0.010	0.030	0.008	0.013	0.000000	0.000000	404.73	816
3	GUIDE	used	504890776	9.28	7075	1.000	-0.145	0.134	0.075	0.123	211.095934	54.816966	-1867.71	-75
4	GUIDE	used	504891480	8.08	7079	1.000	-0.148	-0.034	0.060	0.095	210.708012	54.666096	-1043.13	-590
5	GUIDE	used	504893088	9.21	7073	1.000	0.061	-0.071	0.077	0.126	210.351715	54.364955	249.53	-834
6	GUIDE	used	504894856	8.98	7076	1.000	0.134	-0.115	0.076	0.123	209.819510	54.132689	1461.99	-1529
7	GUIDE	used	504890480	8.18	7077	1.000	0.097	0.086	0.067	0.106	210.132463	53.768436	2404.14	-401

2.4 Star Slots

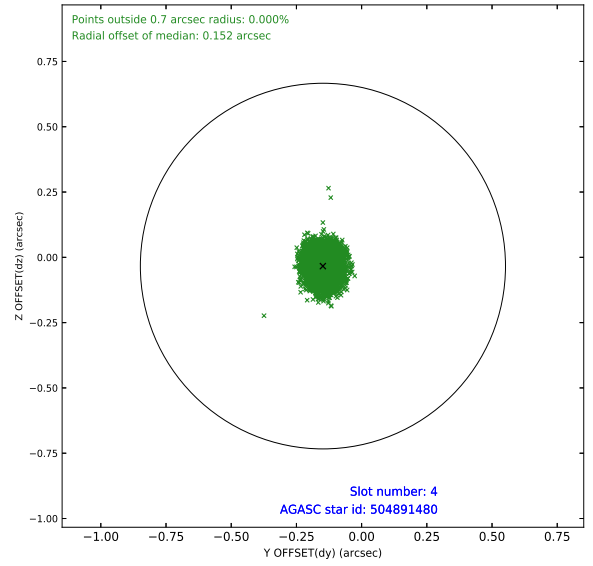
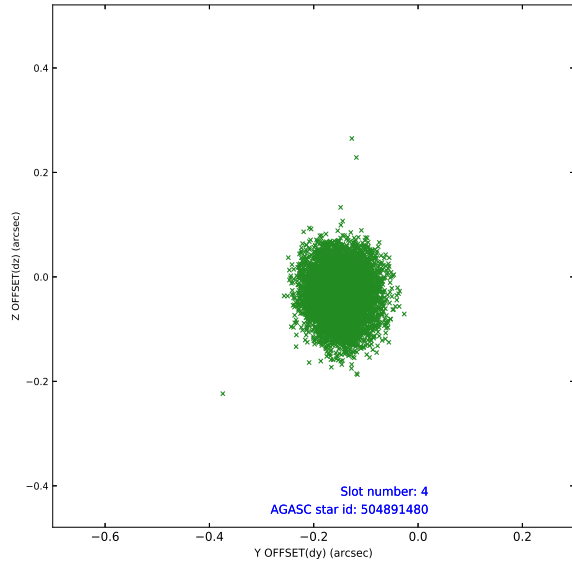
2.4.1 Slot 3



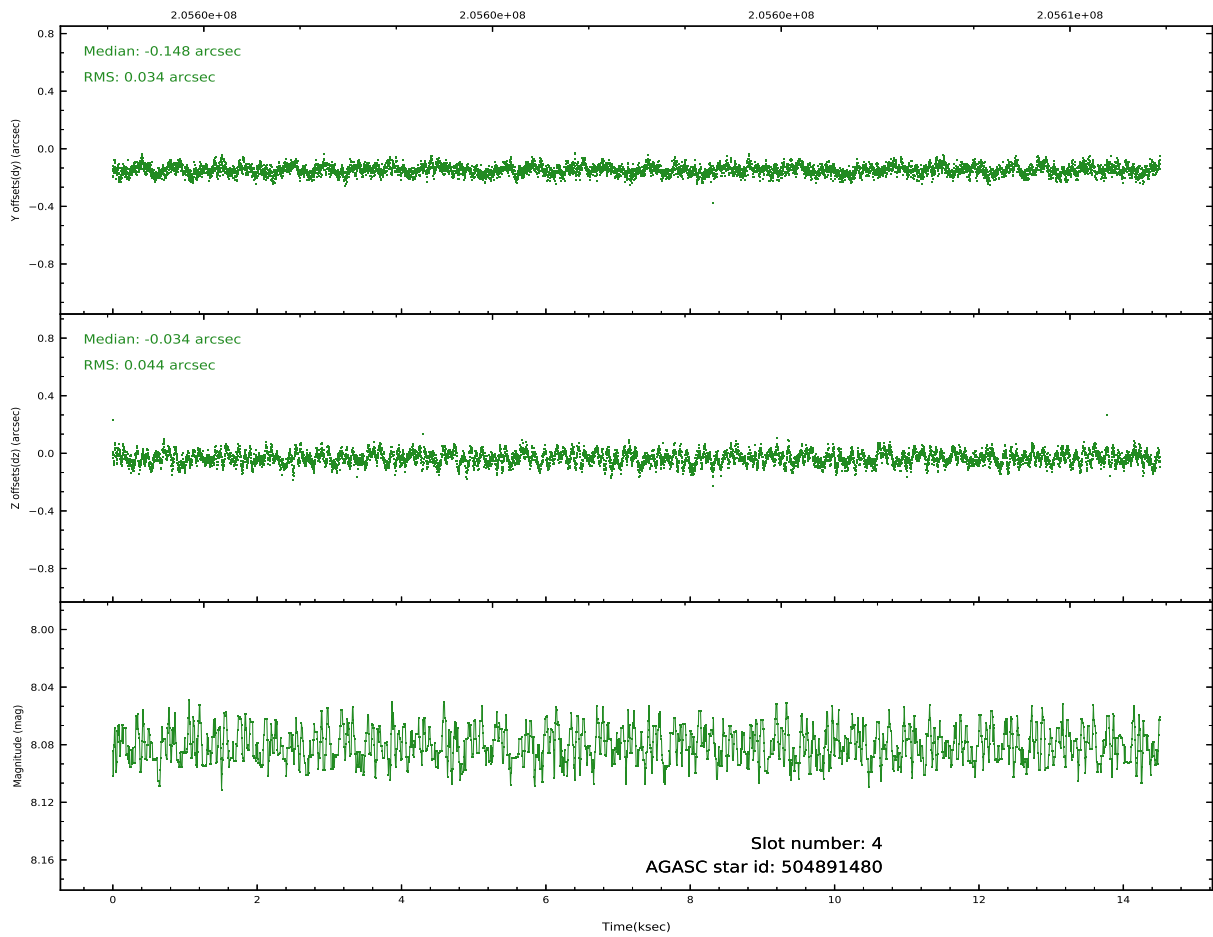
Time (s)



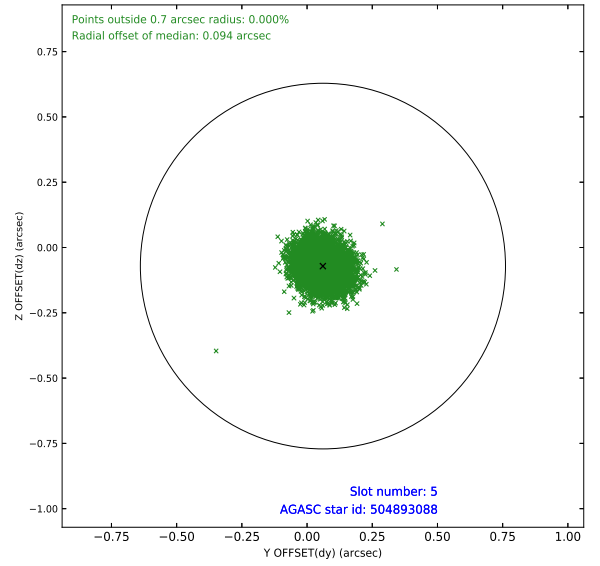
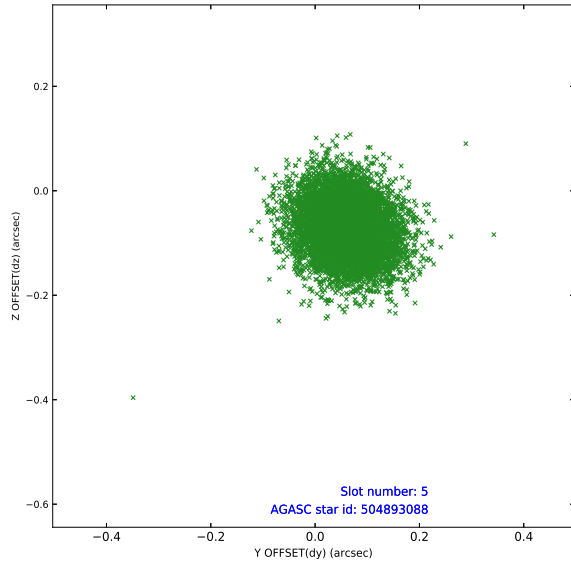
2.4.2 Slot 4



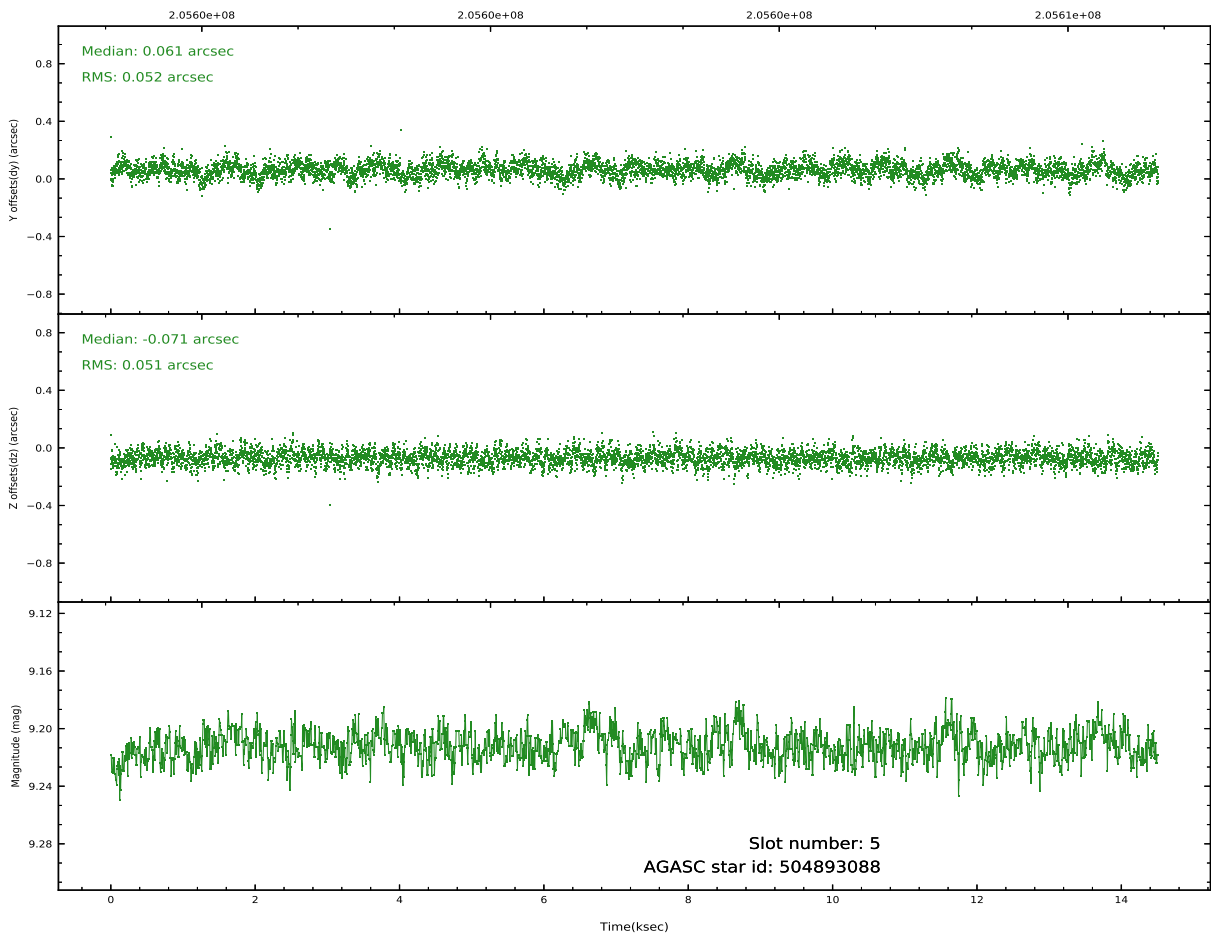
Time (s)



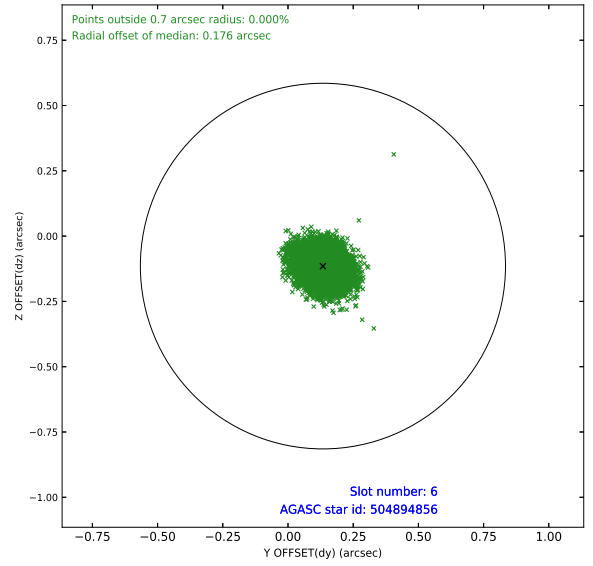
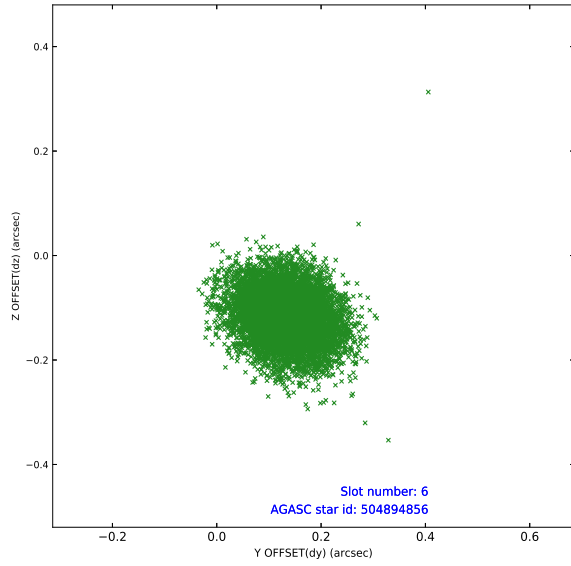
2.4.3 Slot 5



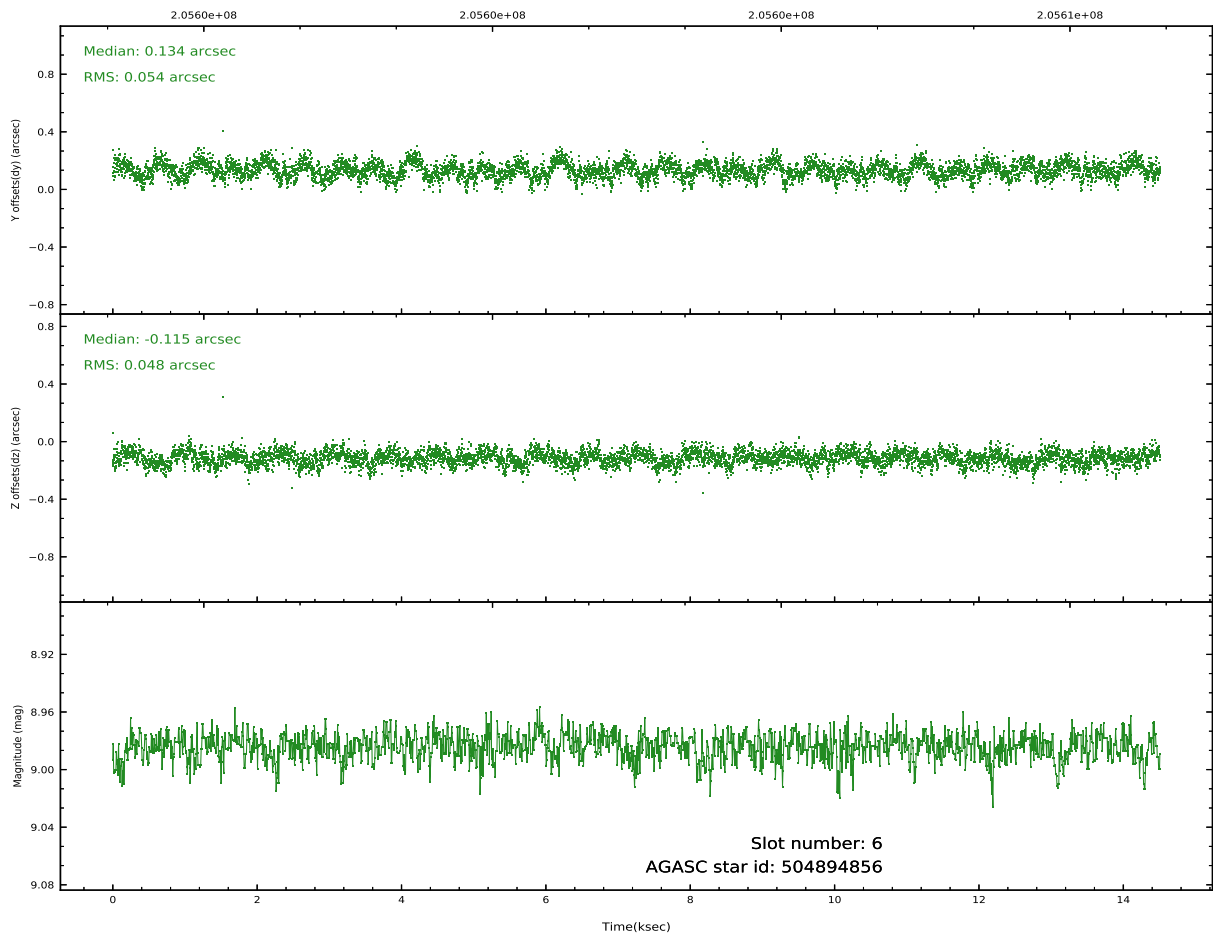
Time (s)



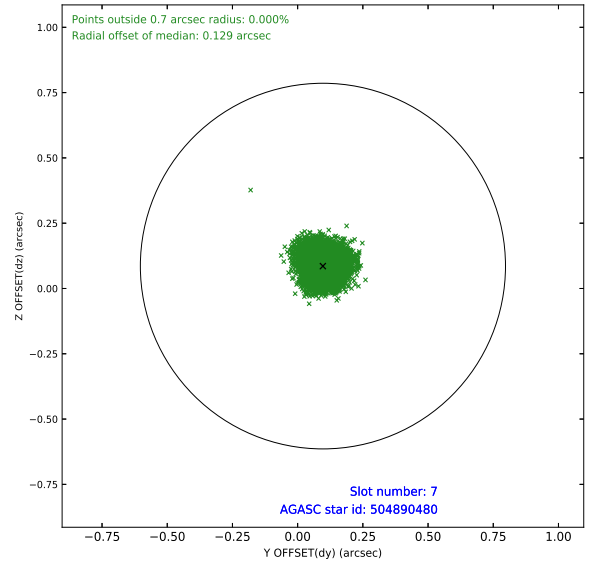
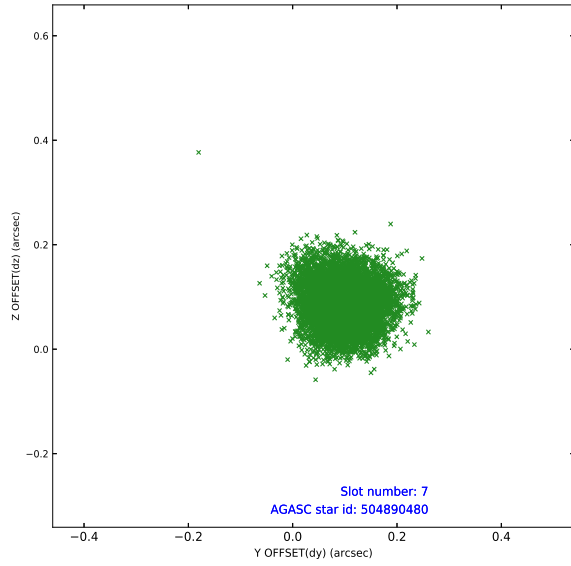
2.4.4 Slot 6



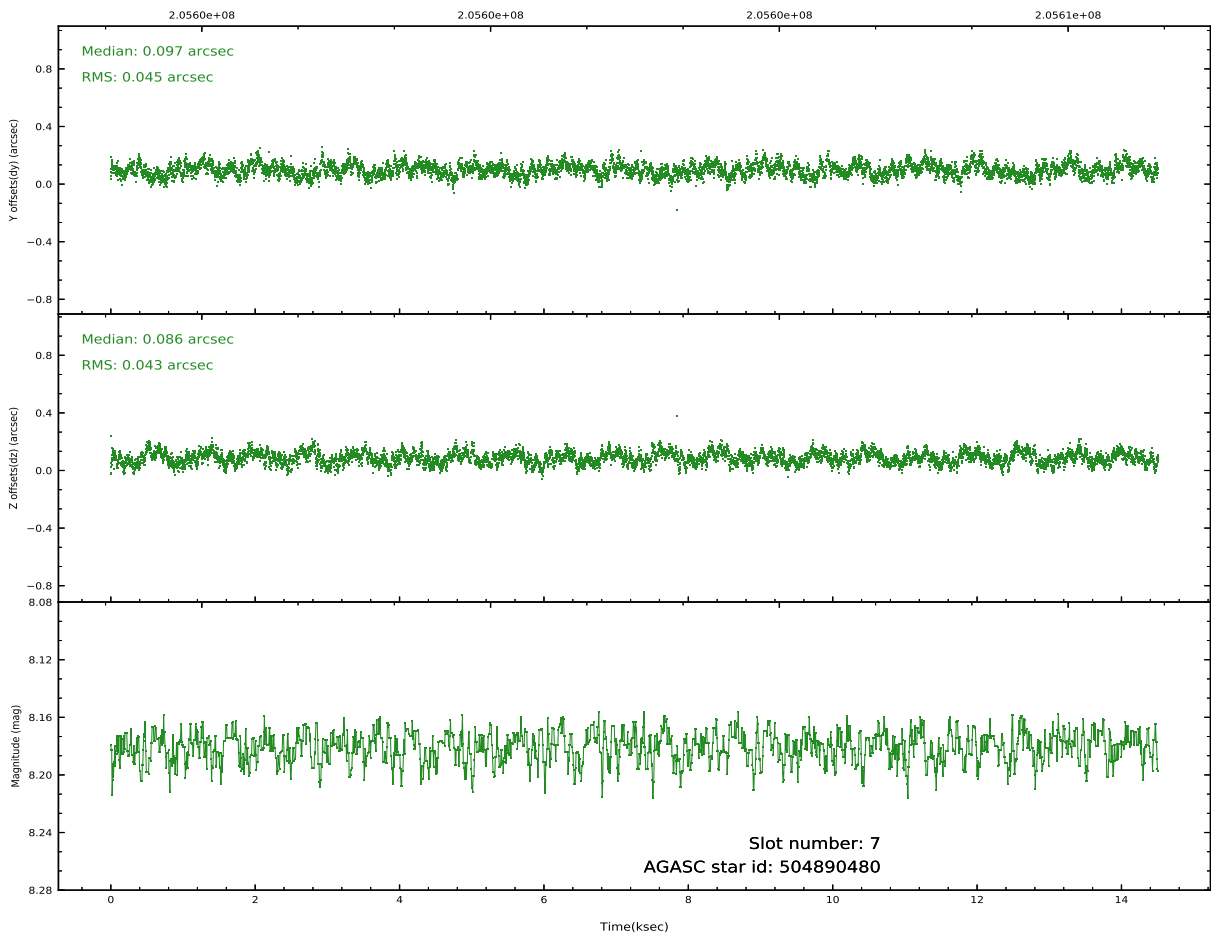
Time (s)



2.4.5 Slot 7

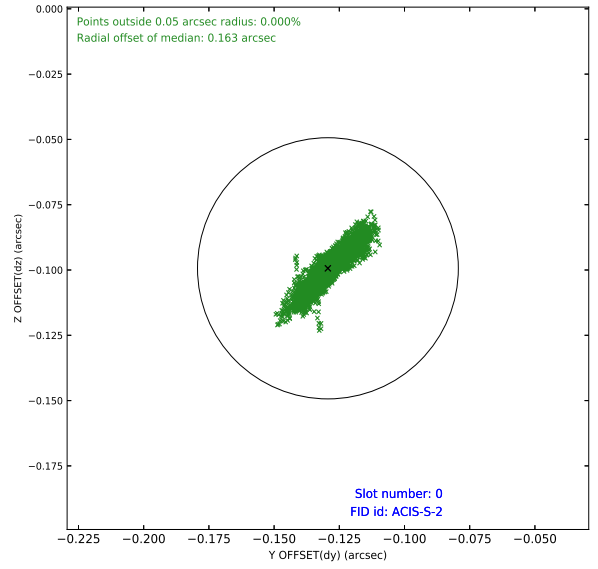
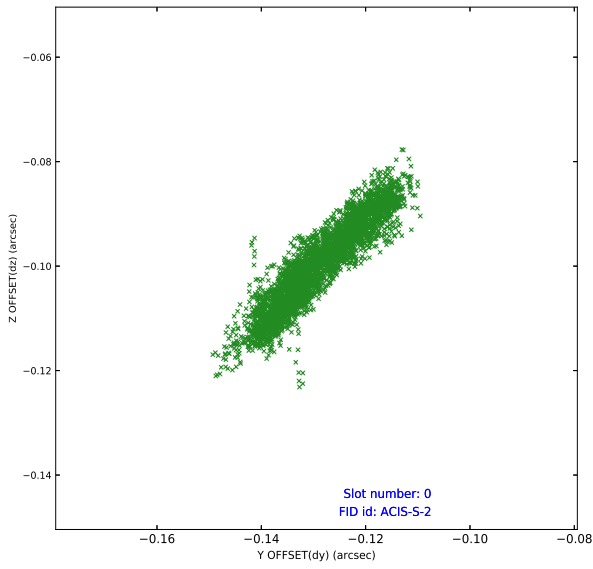


Time (s)

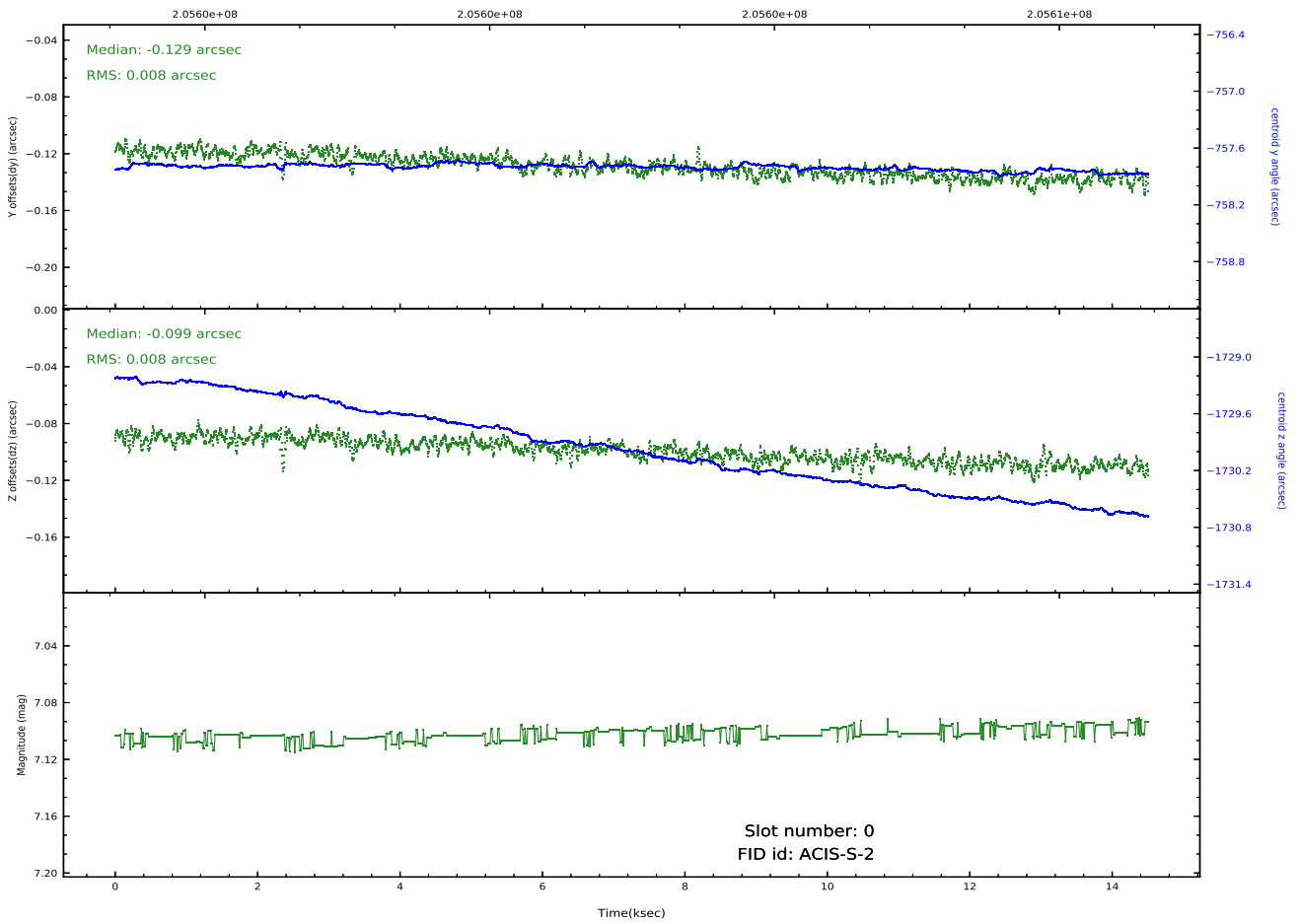


2.5 FID Slots

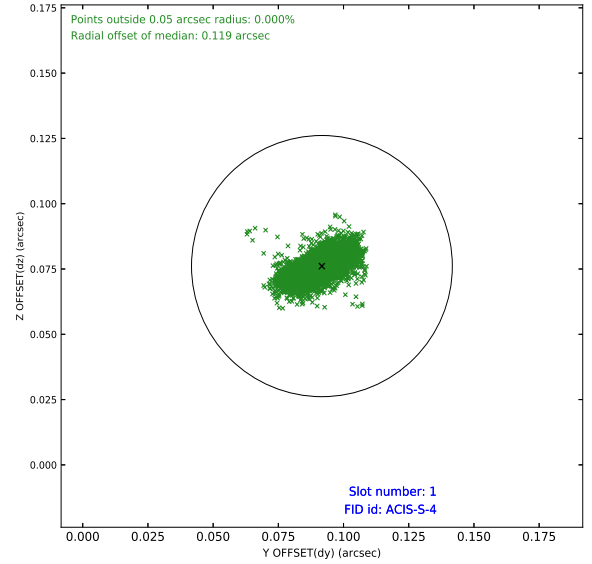
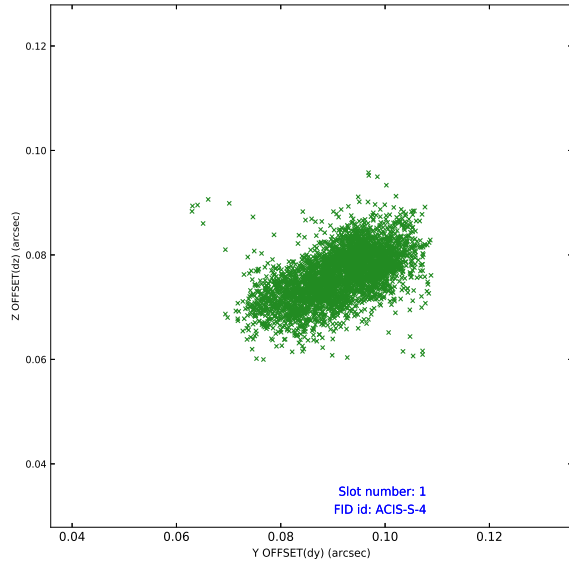
2.5.1 Slot 0



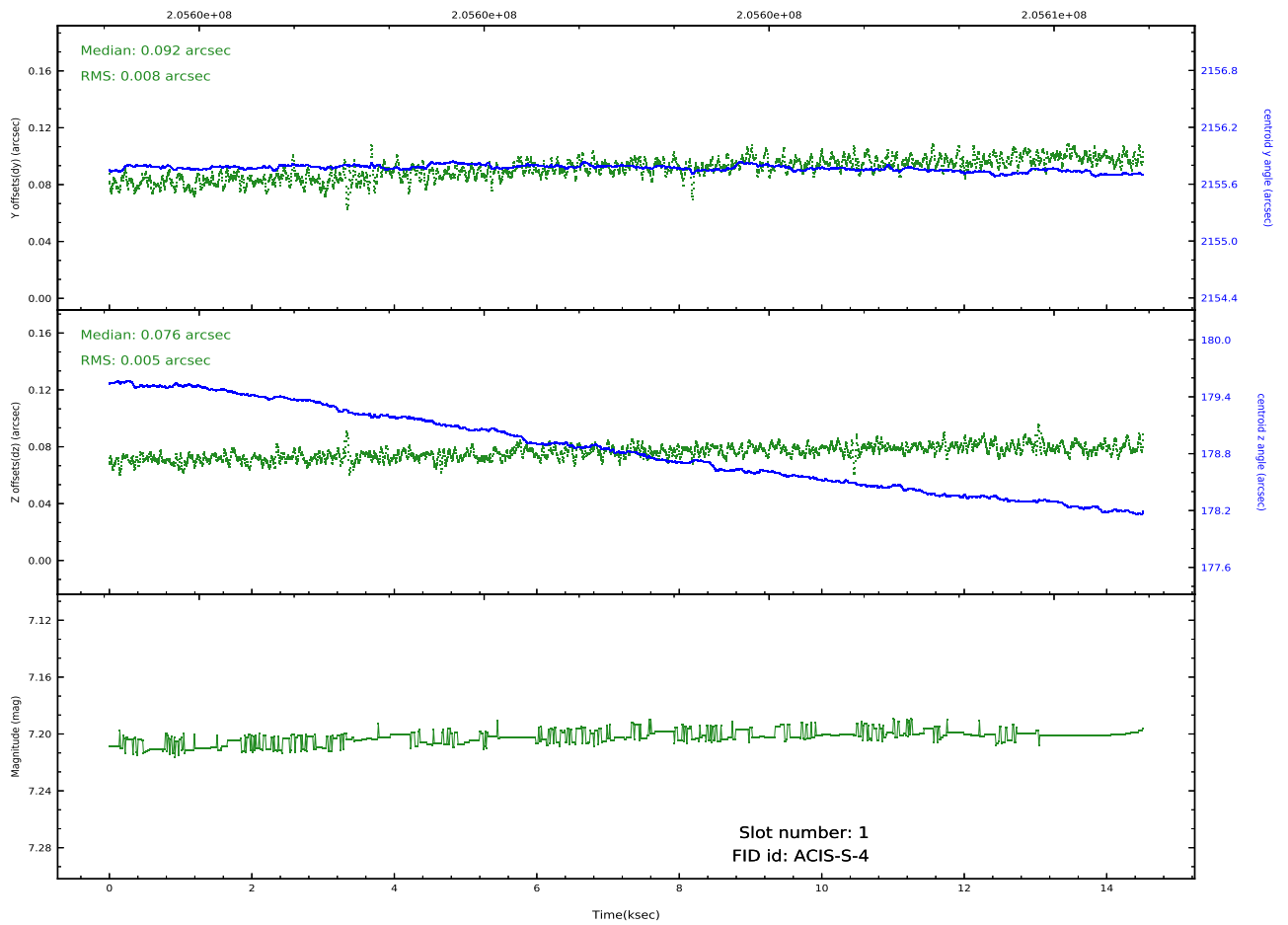
Time (s)



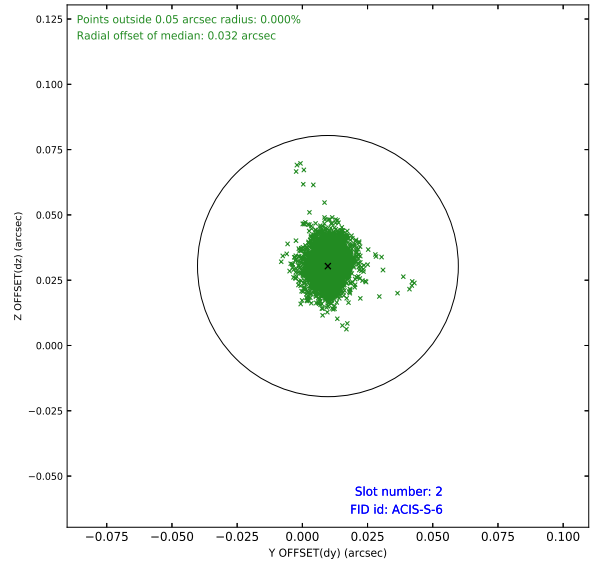
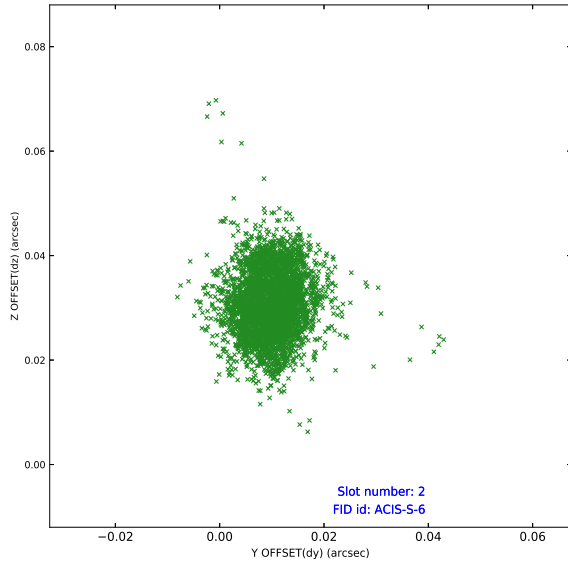
2.5.2 Slot 1



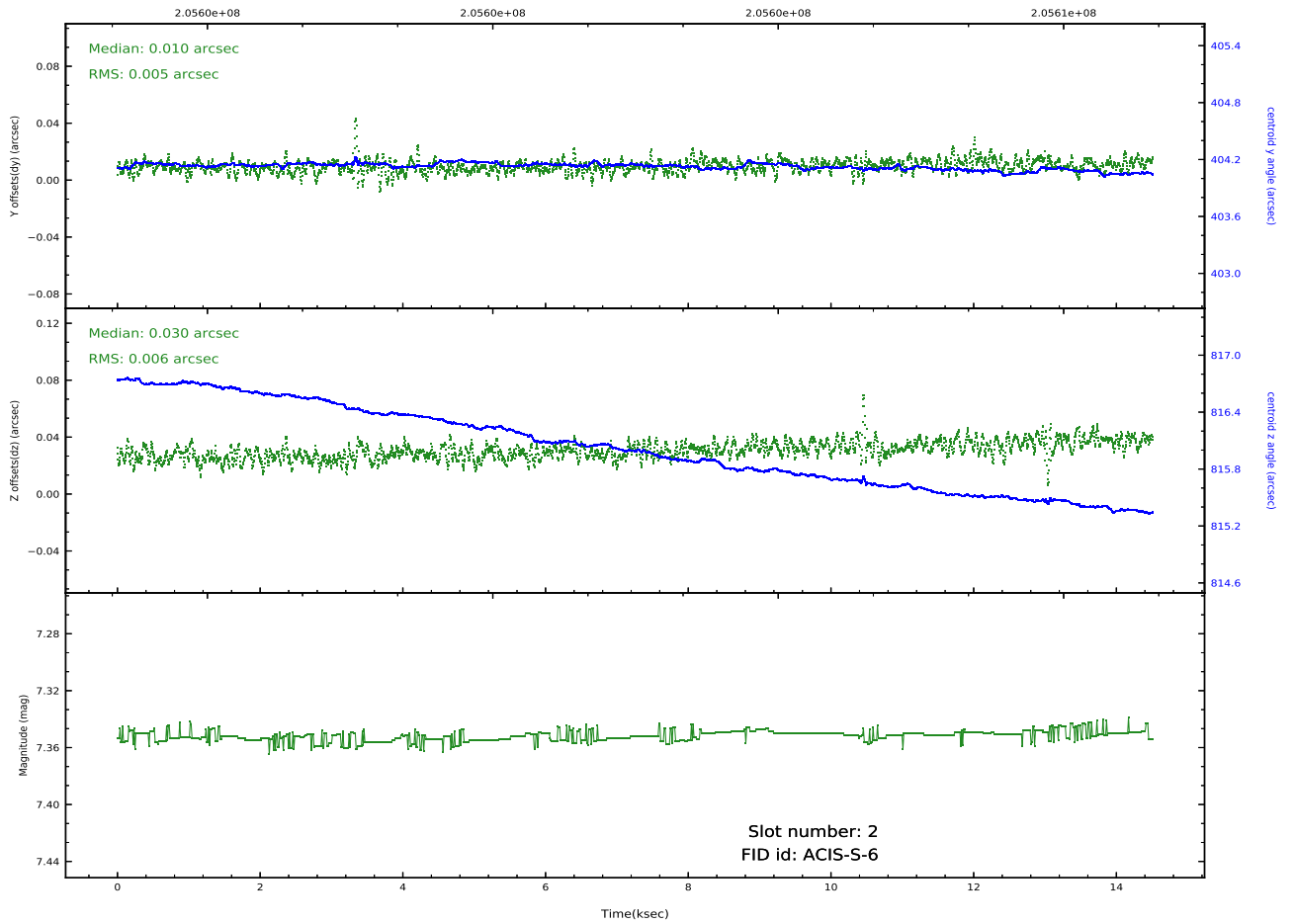
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.505

A.2 Comments