

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5323 - L2 Version 4
Chandra X-Ray Center

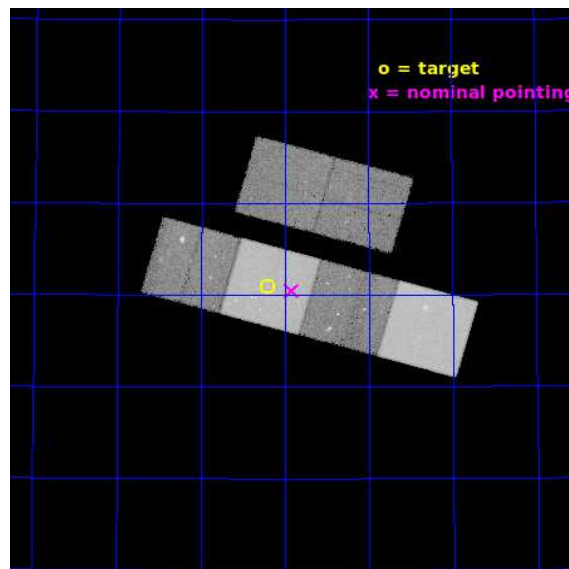
L2 Processing Date : Sep 25 2020

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

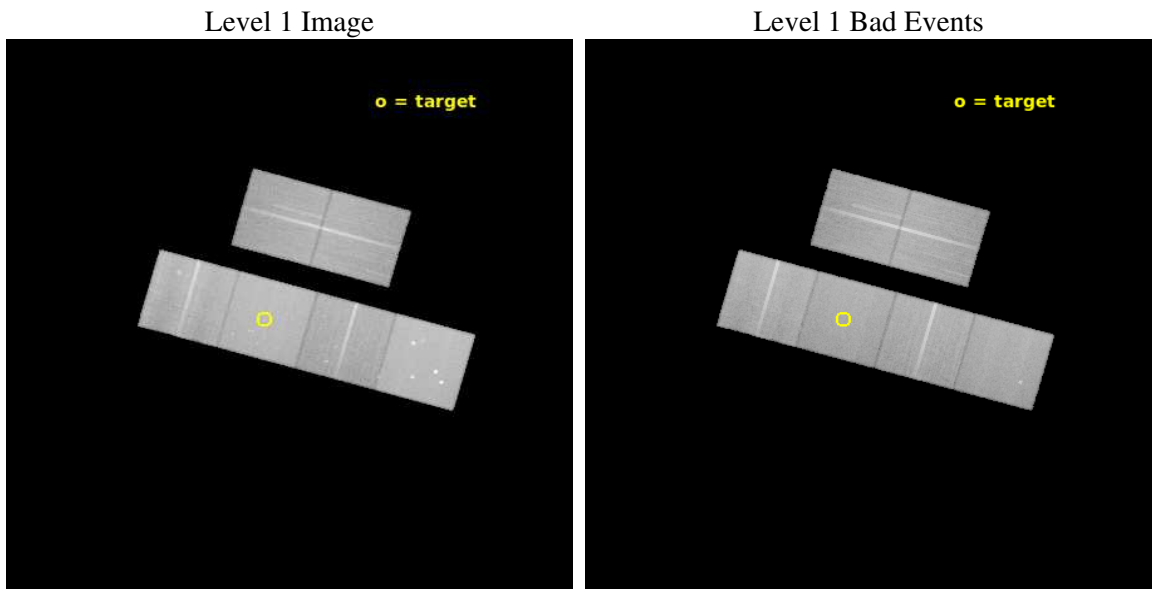
seq_num	600388	Sequence number
obs_id	5323	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.72938344487	Nominal RA [deg]
dec_nom	54.341388572124	Nominal Dec [deg]
roll_nom	195.7046760836	Nominal Roll [deg]
revision	4	Processing version of data
ontime	43161.599839211	Sum of GTIs [s]
livetime	42615.061673251	Livetime [s]
ontime2	42949.768981516	Sum of GTIs [s]
ontime3	42952.845781744	Sum of GTIs [s]
ontime5	43161.599839211	Sum of GTIs [s]
ontime6	42972.332673132	Sum of GTIs [s]
ontime7	43161.599839211	Sum of GTIs [s]
ontime8	42967.140866607	Sum of GTIs [s]
l2events	501843	Number of level 2 events



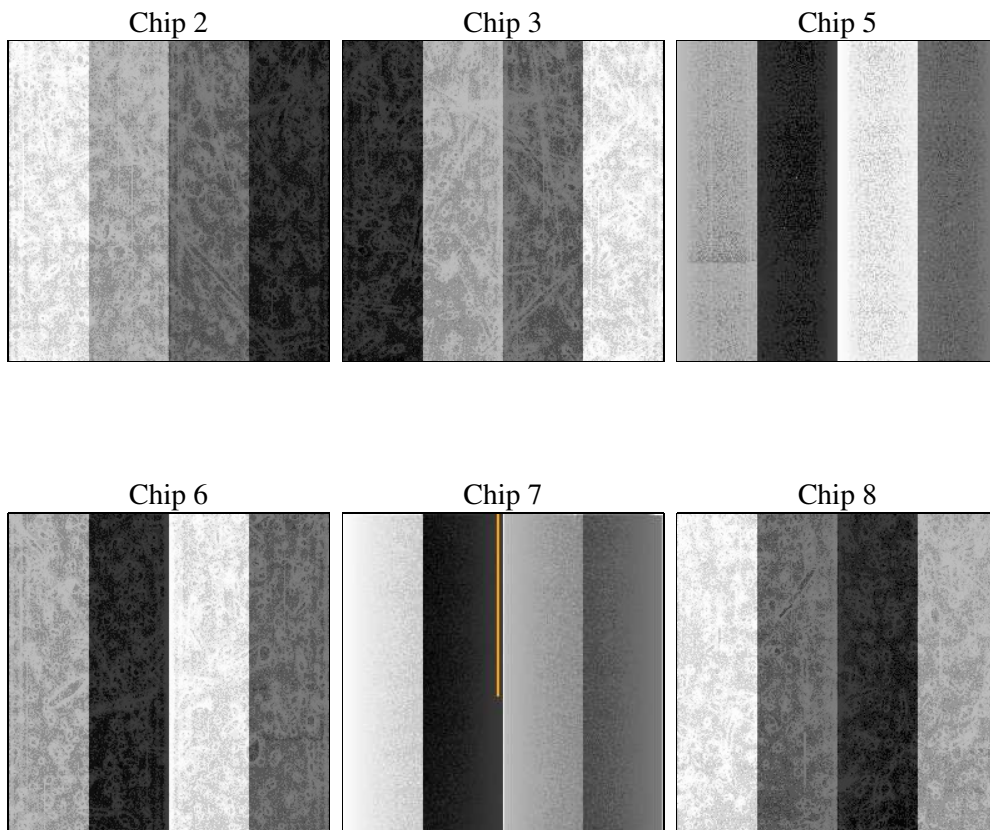
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	43161.599839211	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	42949.768981516	Sum of GTIs [s]
date	2020-09-25T19:34:02	Date and time of file creation	ontime3	42952.845781744	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	43161.599839211	Sum of GTIs [s]
			ontime6	42972.332673132	Sum of GTIs [s]
			ontime7	43161.599839211	Sum of GTIs [s]
			ontime8	42967.140866607	Sum of GTIs [s]
			l1events	2292308	Number of level 1 events

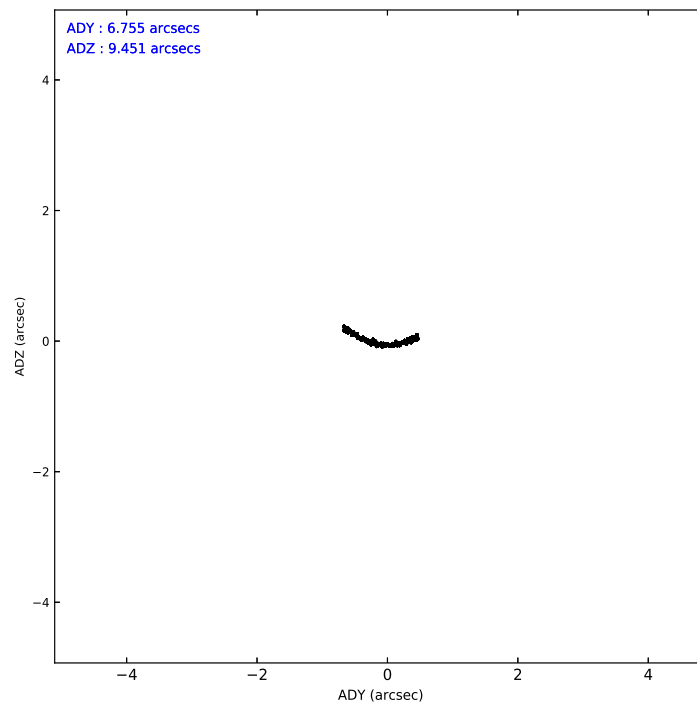
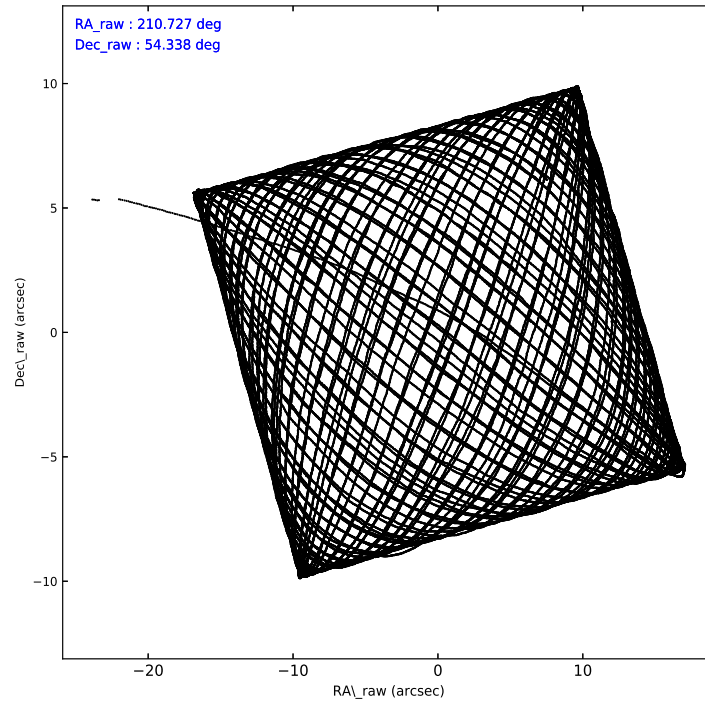
2.1.4 Events

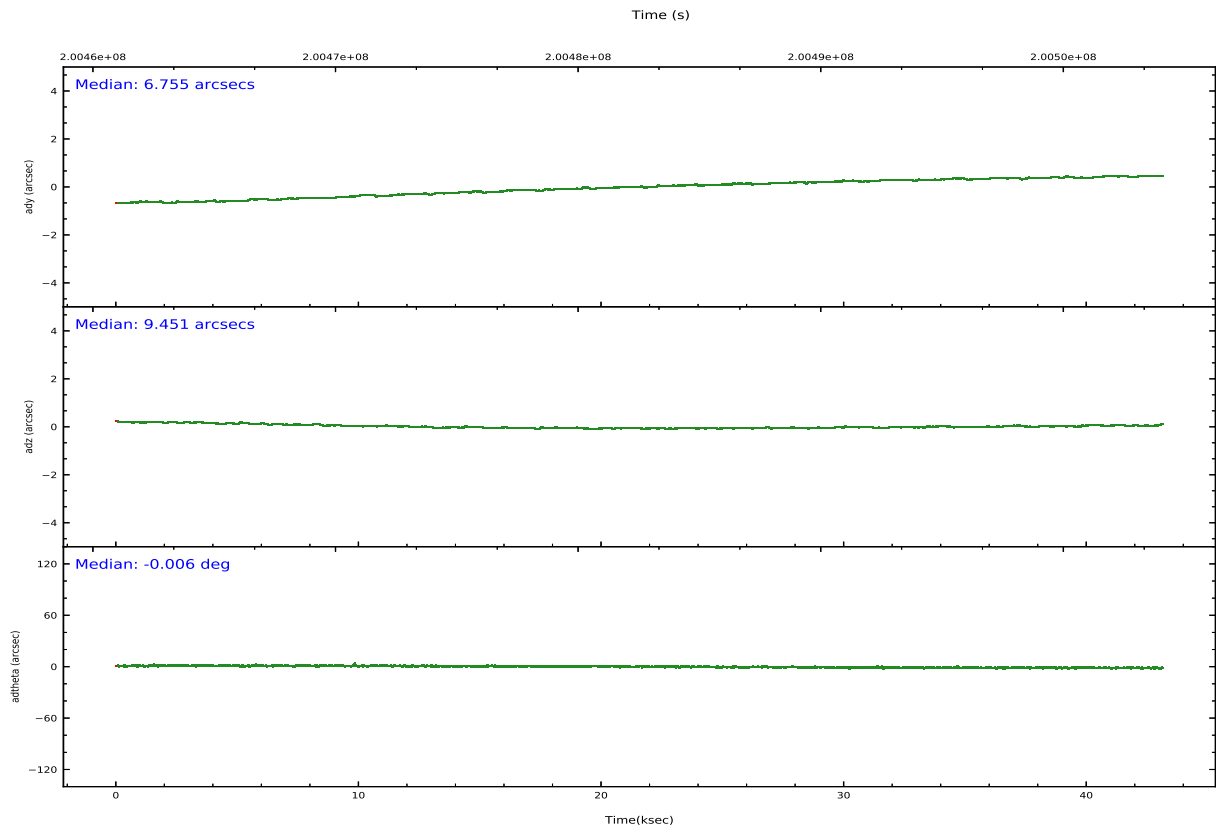
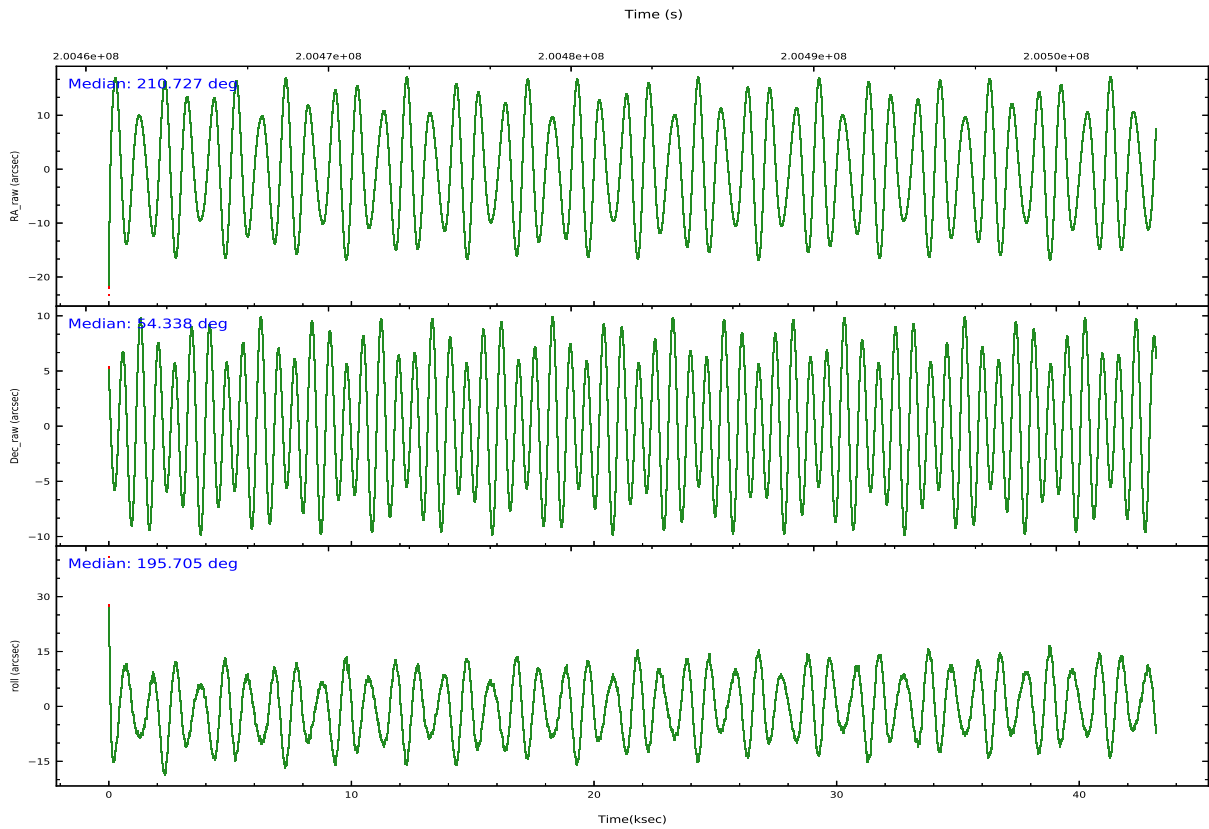
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	323403	305446	493463	323111	447464	399421	grade 0 events	19524	19114	33089	20562	22914	31042
rejected events	287067	270516	274063	284353	268100	317181		6%	6%	6%	6%	5%	7%
rejected %	88%	88%	55%	88%	59%	79%	grade 1 events	217	211	584	193	423	314
								0%	0%	0%	0%	0%	0%
							grade 2 events	8691	7853	69937	8971	40065	19256
								2%	2%	14%	2%	8%	4%
							grade 3 events	3822	3973	9646	4136	18230	8957
								1%	1%	1%	1%	4%	2%
							grade 4 events	3813	3783	9147	3946	18009	8477
								1%	1%	1%	1%	4%	2%
							grade 5 events	12576	13729	35358	14429	41037	18906
								3%	4%	7%	4%	9%	4%
							grade 6 events	6851	7088	115452	8574	98912	21830
								2%	2%	23%	2%	22%	5%
							grade 7 events	267909	249695	220250	262300	207874	290639
								82%	81%	44%	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	210.759638	210.72938344487	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.357901	54.341388572124	Alternating exposures requested	N	N
[deg] Pointing Roll	195.522775	195.7046760836	[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)	200461113.184000	200459492.36198			
Observation start date	2004-05-09T03:37:29	2004-05-09T03:11:32			
[s] Observation end time (MET)	200504113.184000	200504885.51399			
Observation end date	2004-05-09T15:34:09	2004-05-09T15:48:05			
Read mode	TIMED	TIMED			

2.3 Aspect





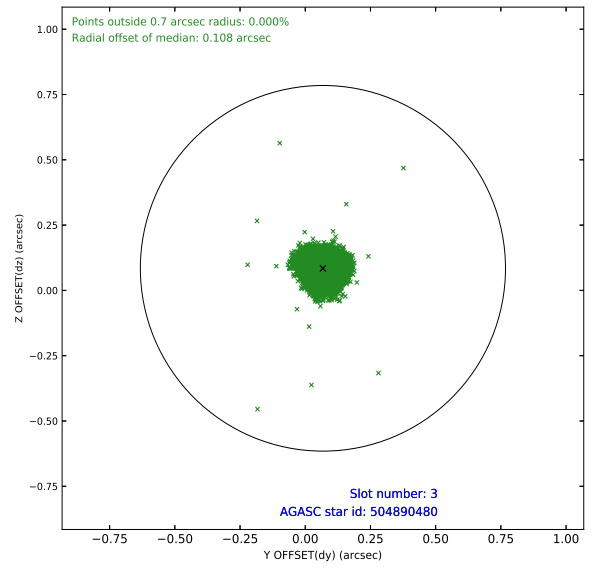
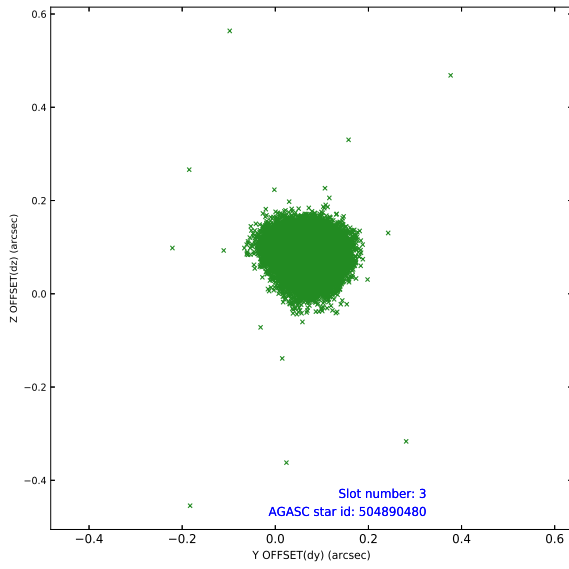
Slot Statistics

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	10530	1.000	0.038	-0.036	0.012	0.020	0.000000	0.000000	936.63	-1726
1	FID		ACIS-S-5	7.24	10530	1.000	-0.099	0.021	0.011	0.020	0.000000	0.000000	-1812.51	171
2	FID		ACIS-S-6	7.35	10529	1.000	0.037	0.028	0.013	0.027	0.000000	0.000000	402.18	815
3	GUIDE	used	504890480	8.16	21058	1.000	0.068	0.085	0.055	0.086	210.132463	53.768436	1852.79	1682
4	GUIDE	used	504890776	9.27	21047	1.000	0.024	-0.070	0.087	0.140	211.095934	54.816966	-1114.40	-1407
5	GUIDE	used	504891480	8.07	21056	1.000	0.077	-0.115	0.066	0.107	210.708012	54.666096	-192.97	-1097
6	GUIDE	used	504894408	9.26	21046	1.000	-0.095	0.146	0.095	0.157	211.942794	54.047749	-2116.29	1725
7	GUIDE	used	505292416	9.29	20995	1.000	-0.071	-0.055	0.108	0.177	210.920759	55.040479	-977.53	-2279

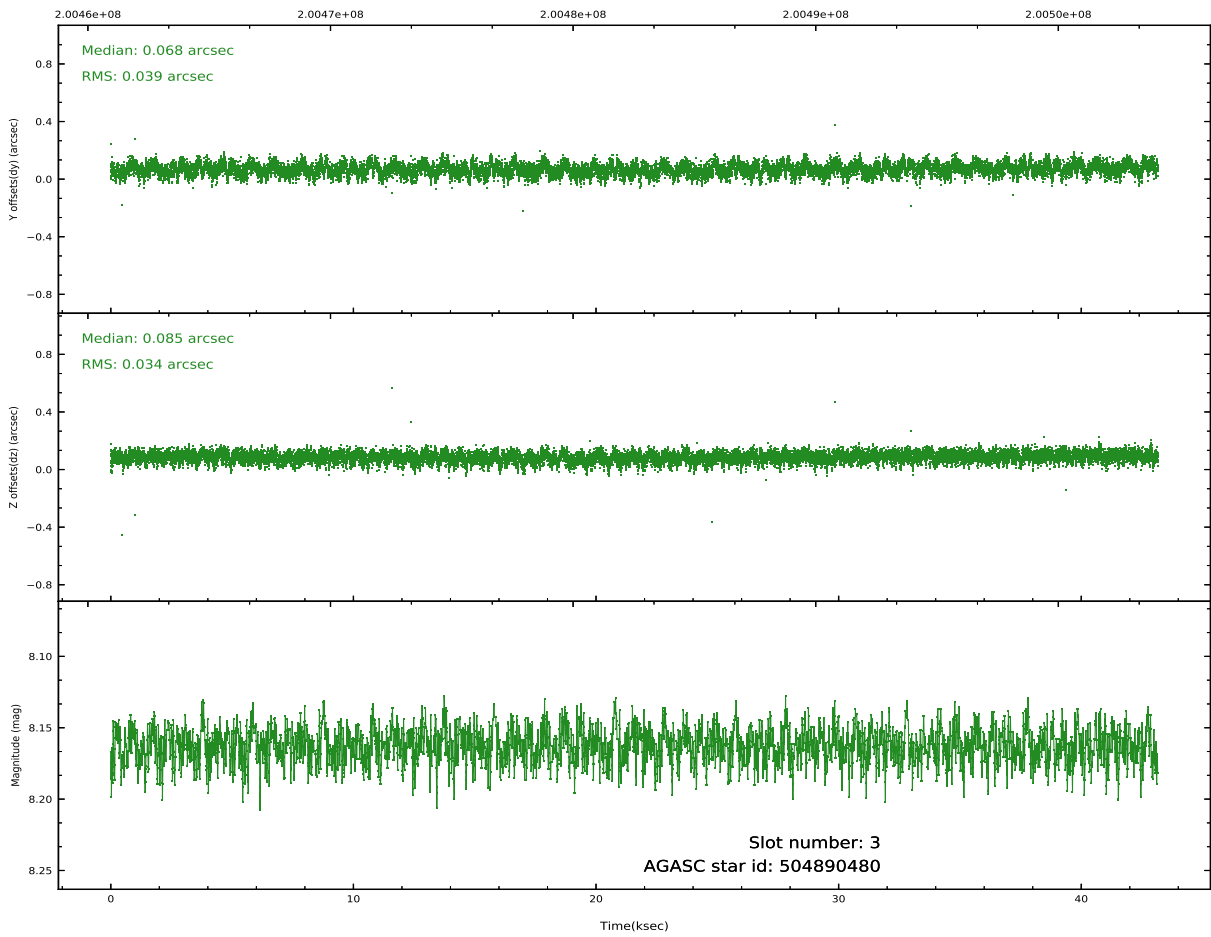
∞

2.4 Star Slots

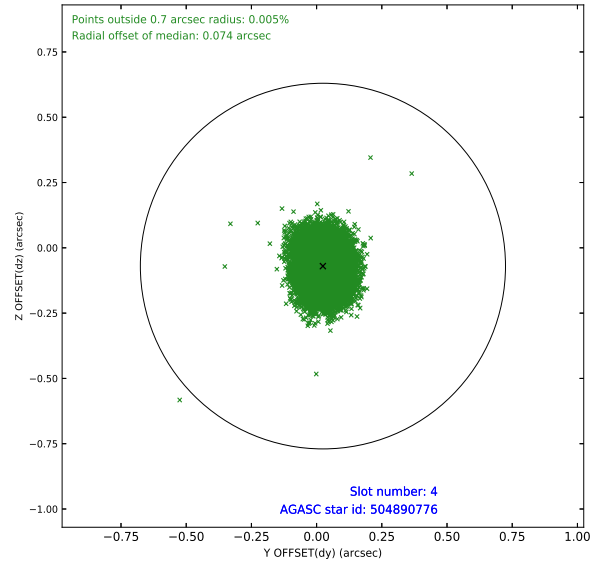
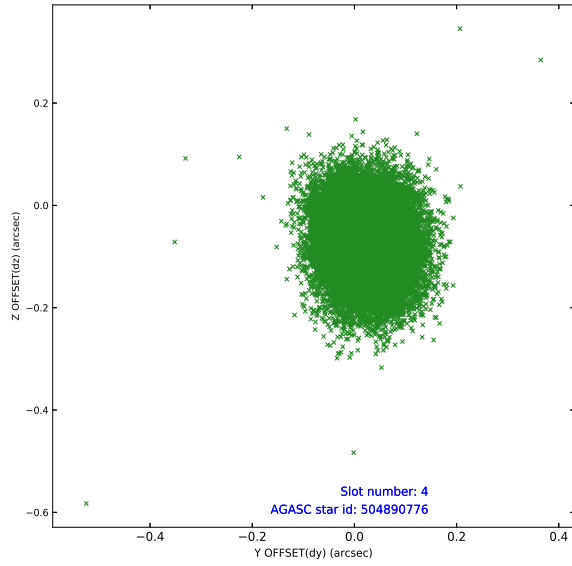
2.4.1 Slot 3



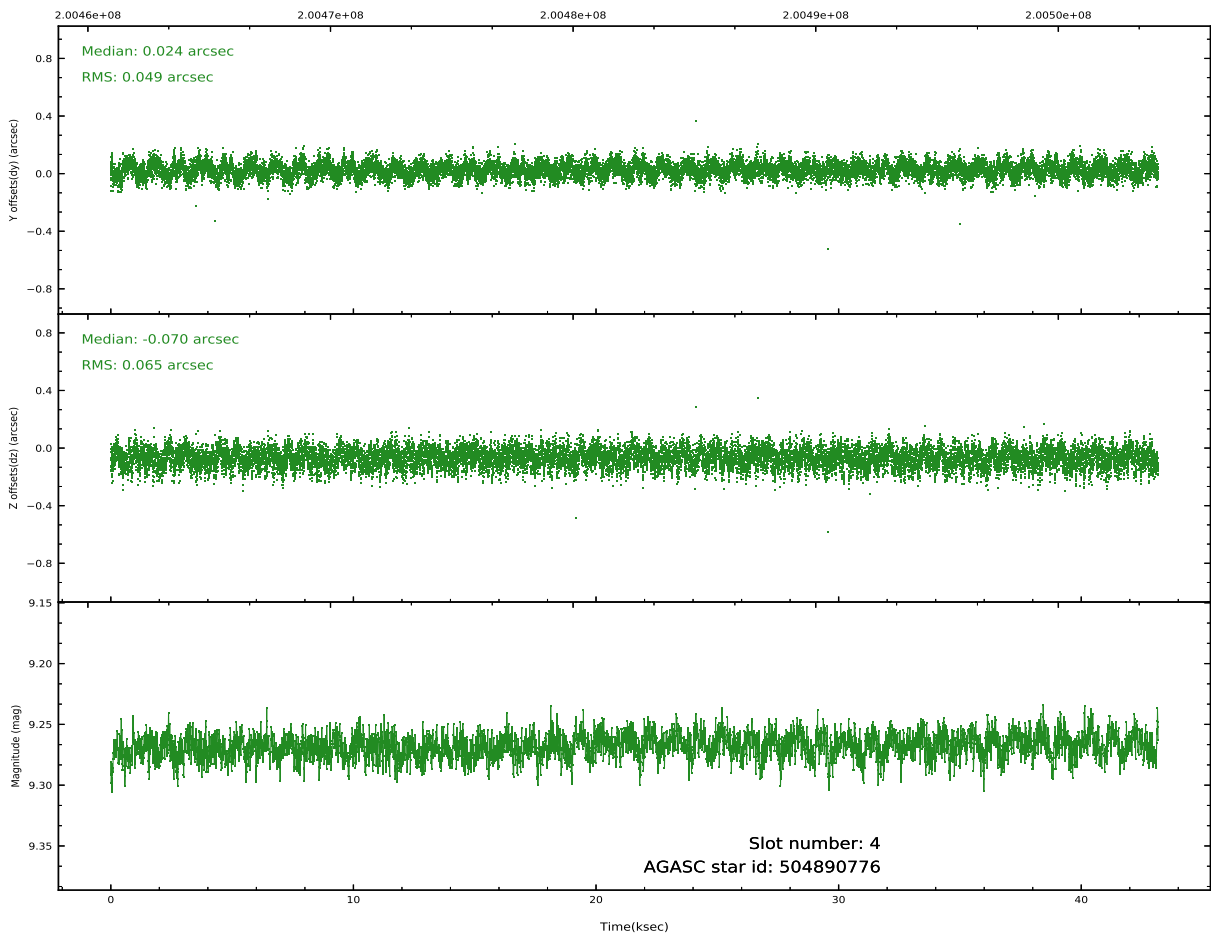
Time (s)



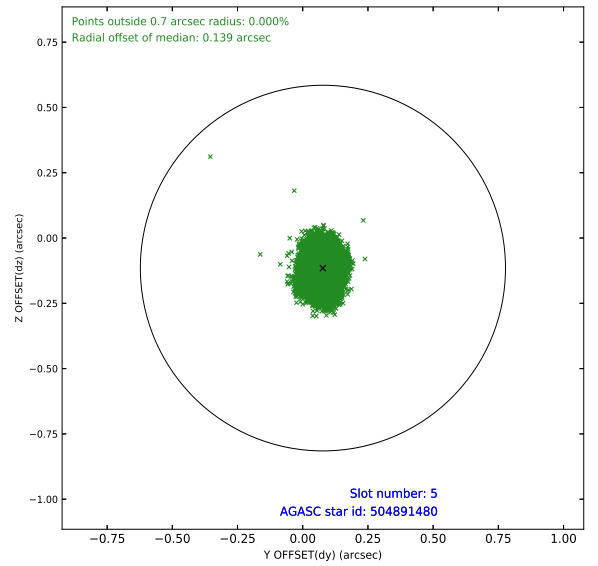
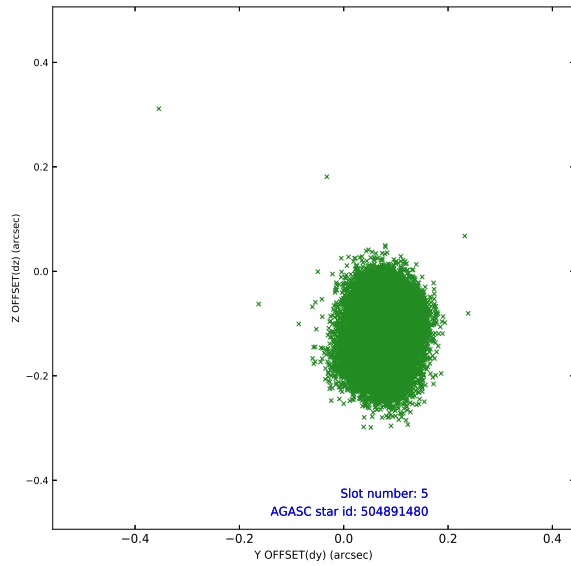
2.4.2 Slot 4



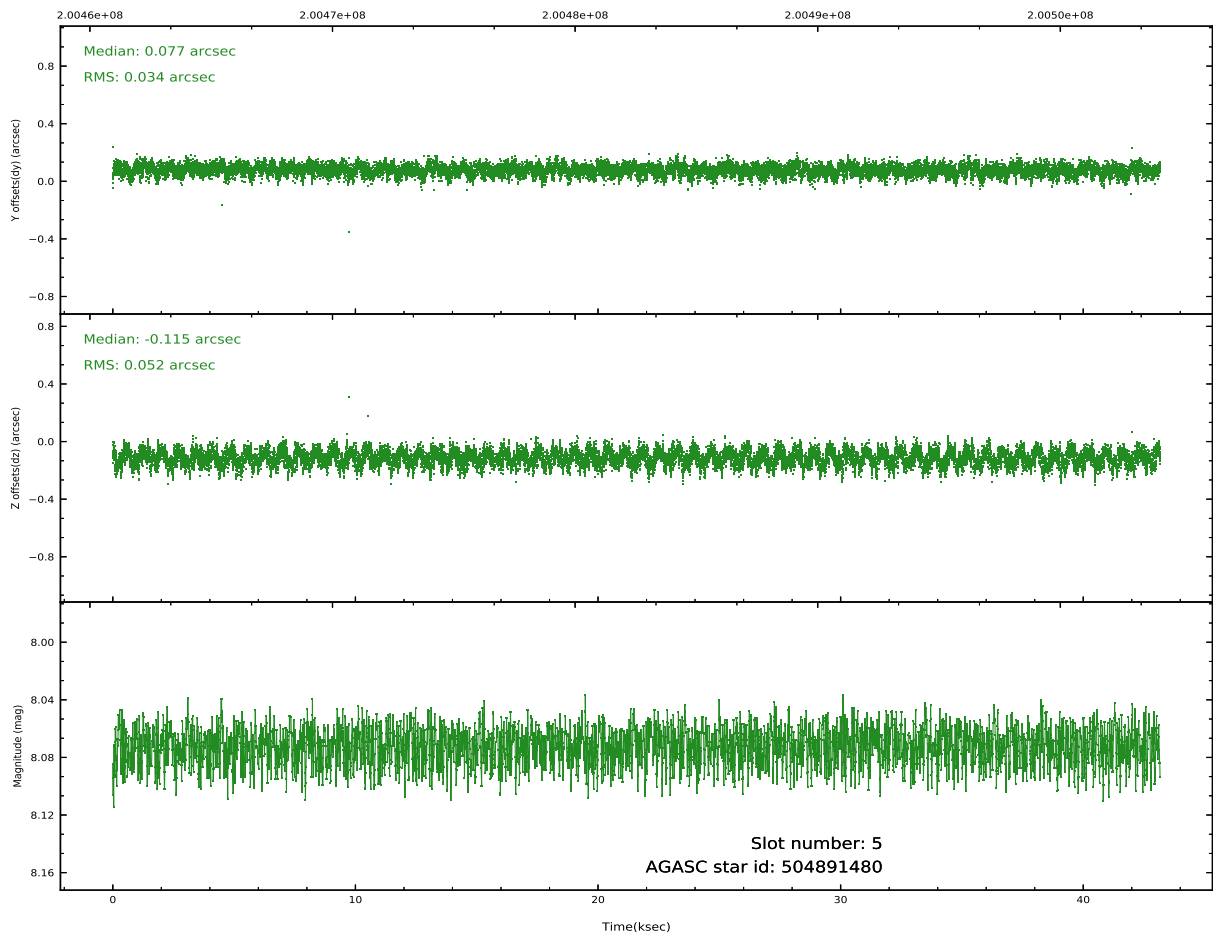
Time (s)



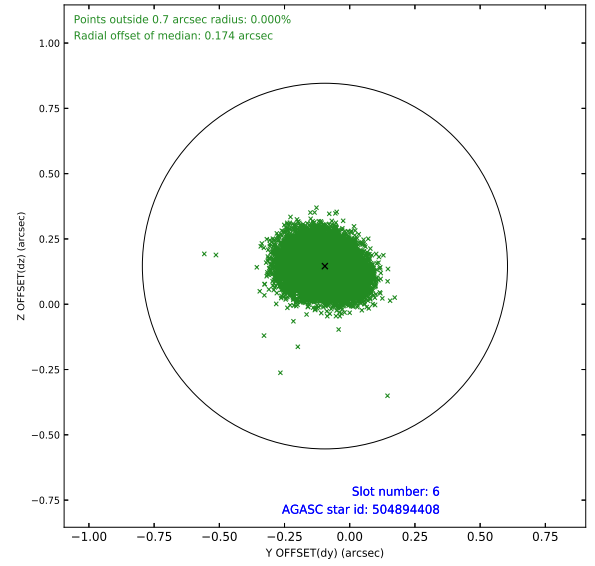
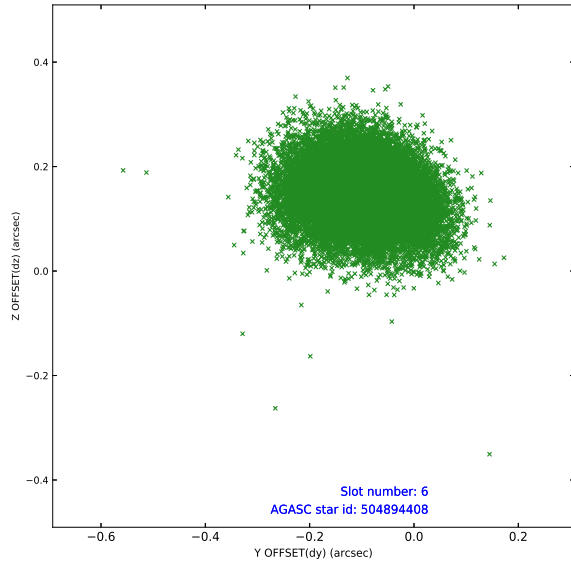
2.4.3 Slot 5



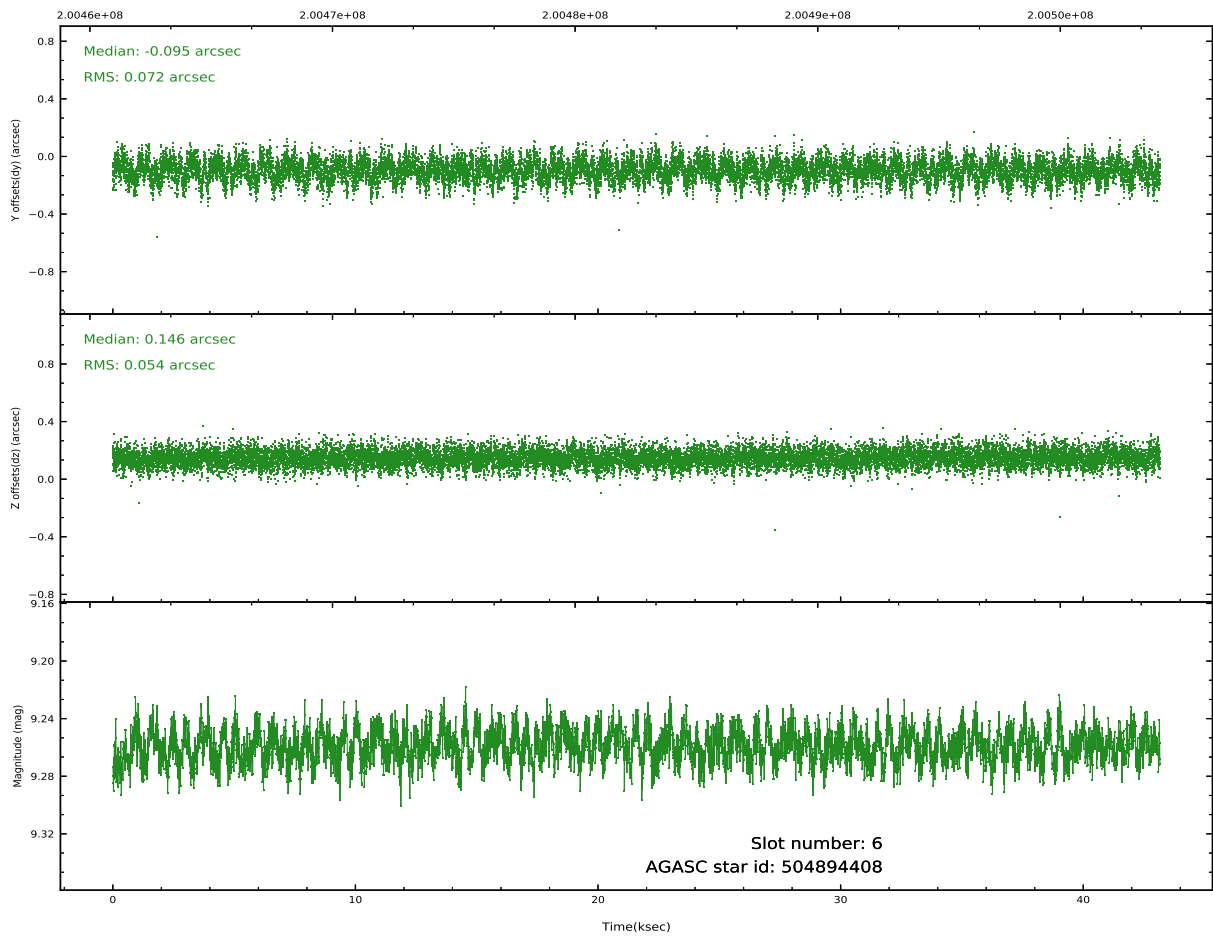
Time (s)



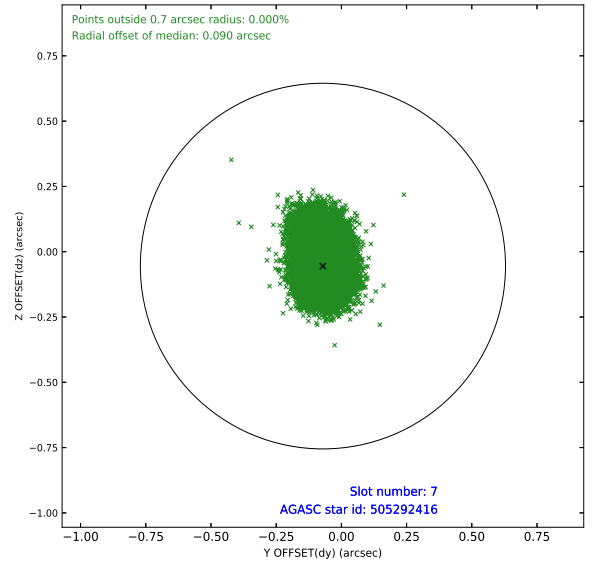
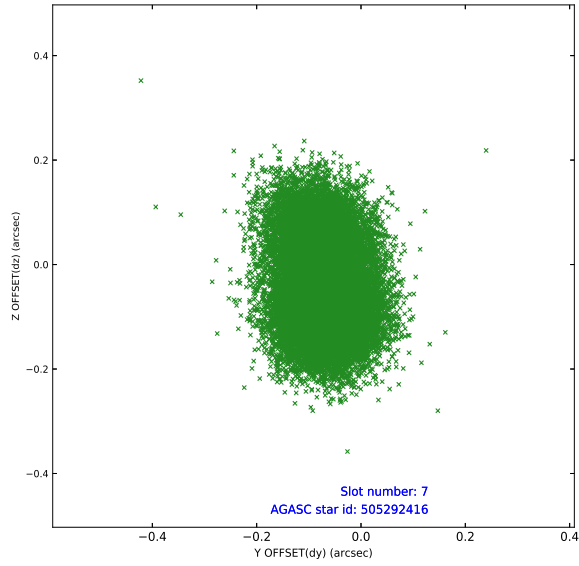
2.4.4 Slot 6



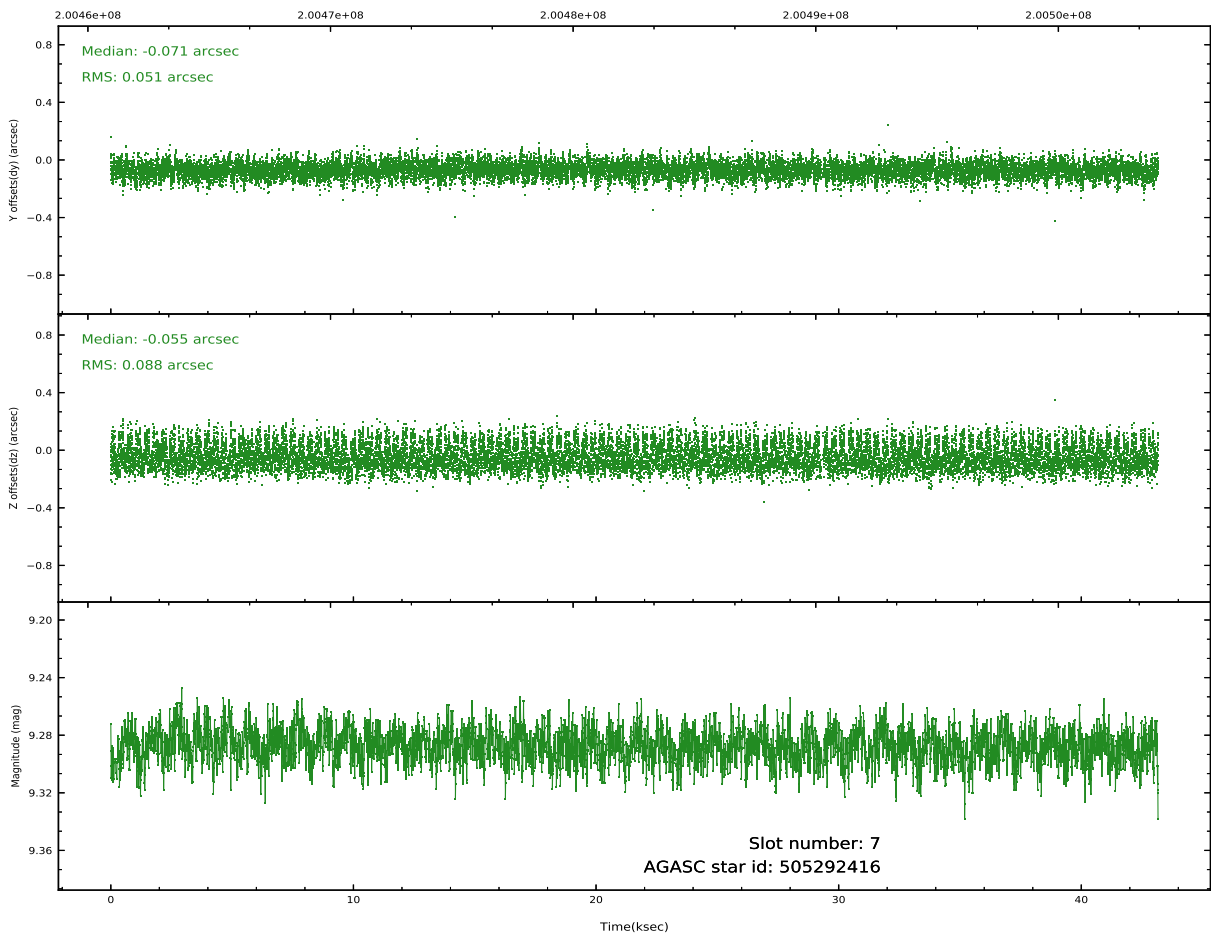
Time (s)



2.4.5 Slot 7

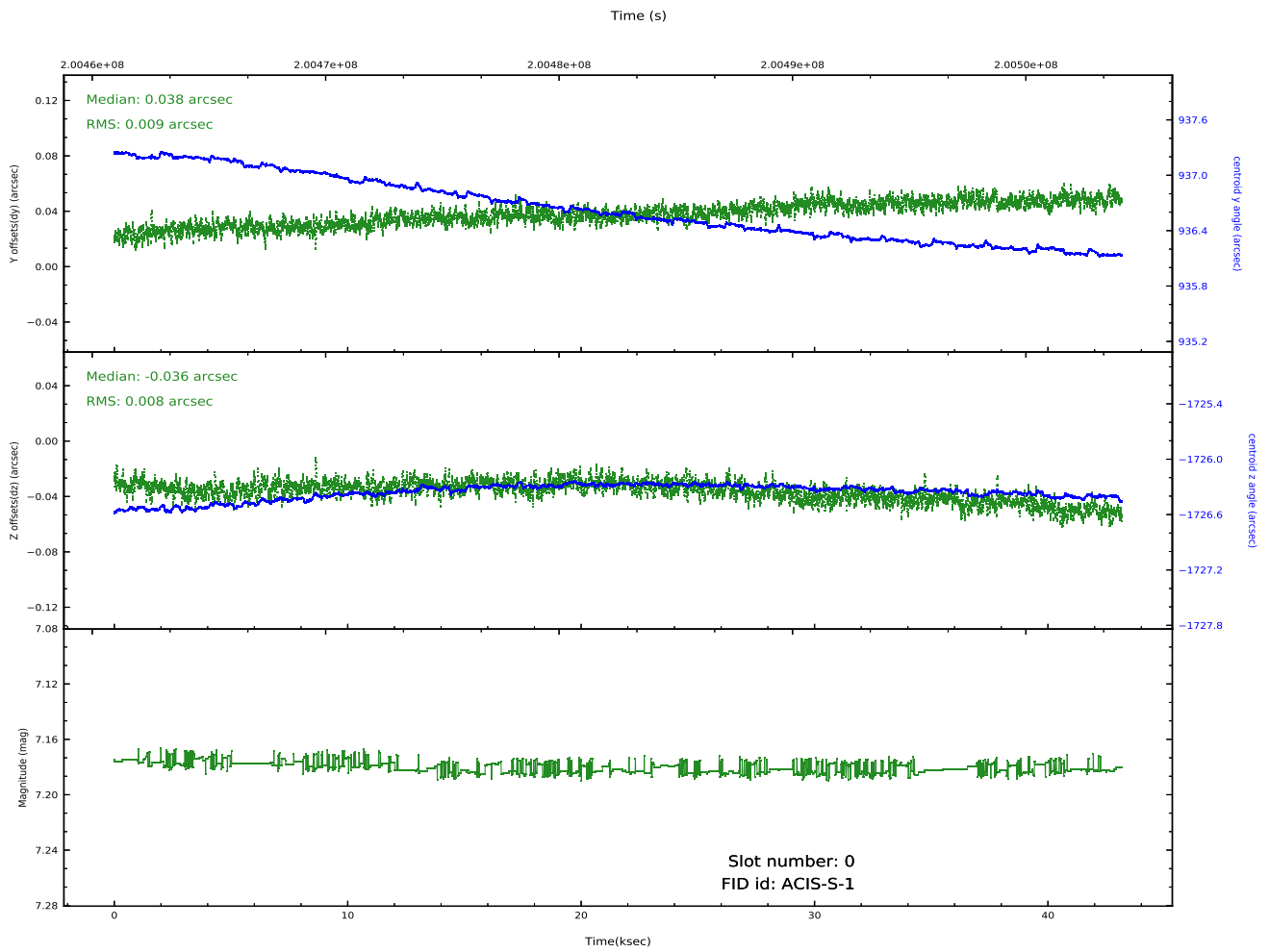
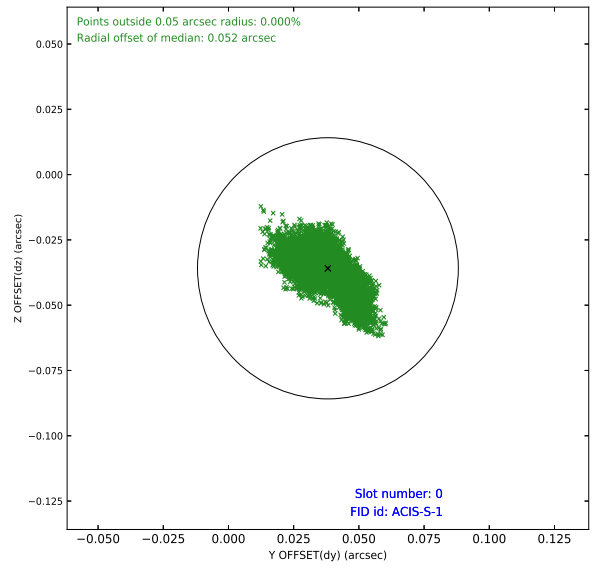
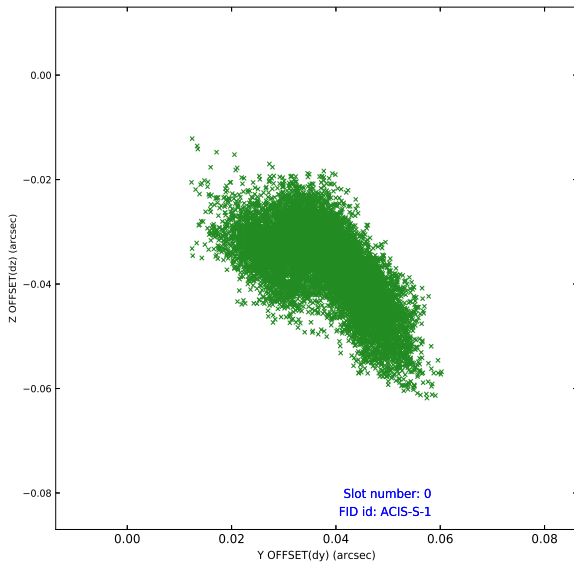


Time (s)

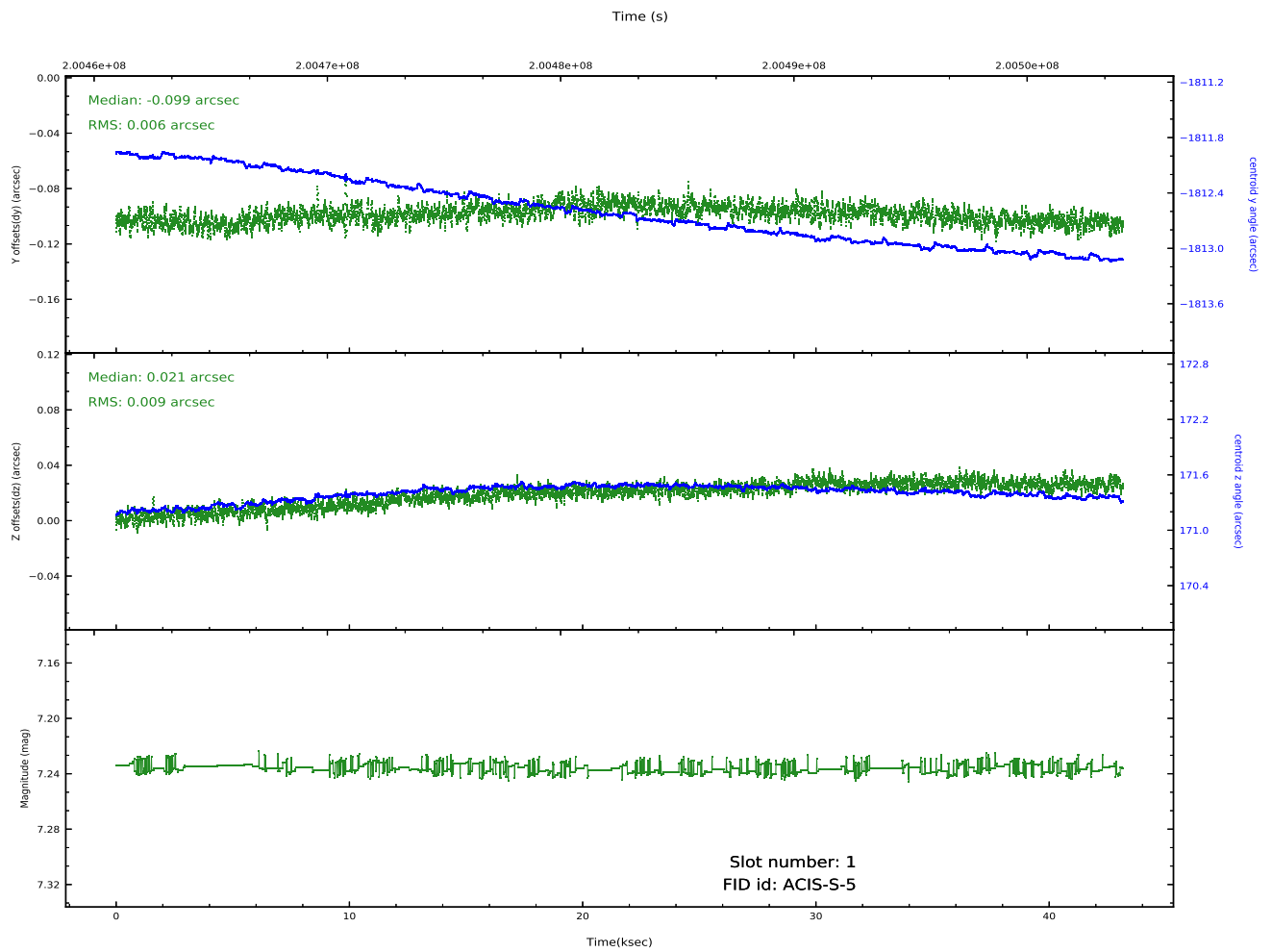
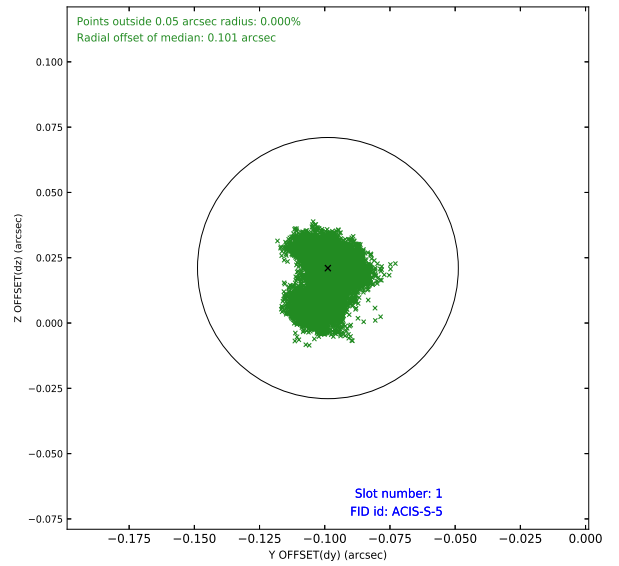
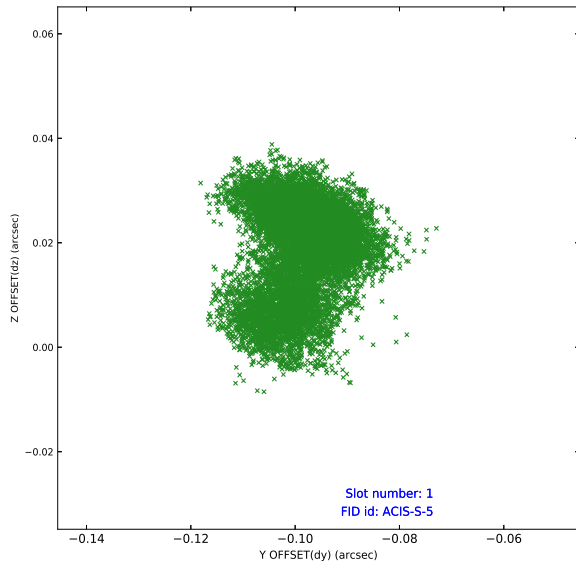


2.5 FID Slots

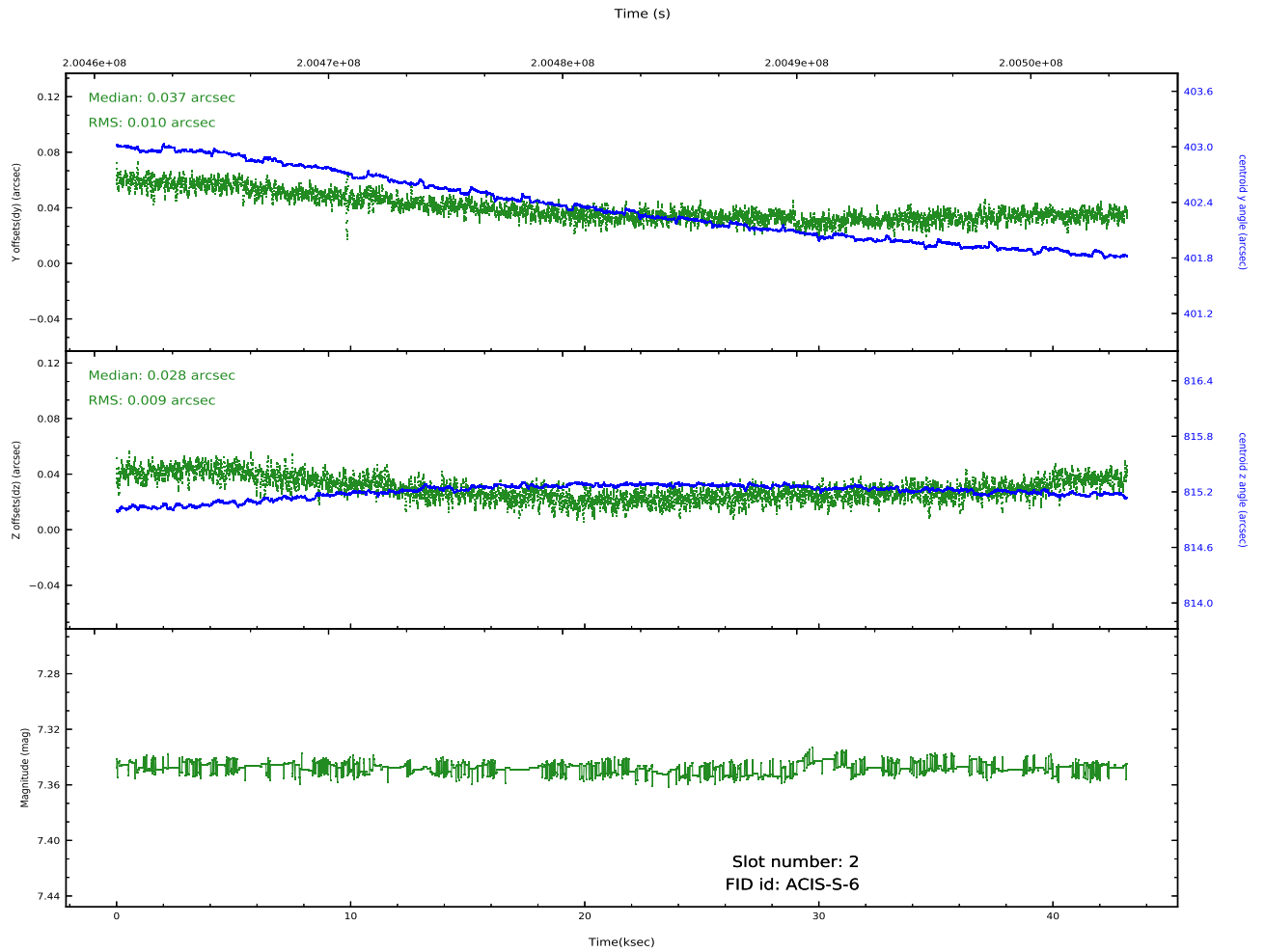
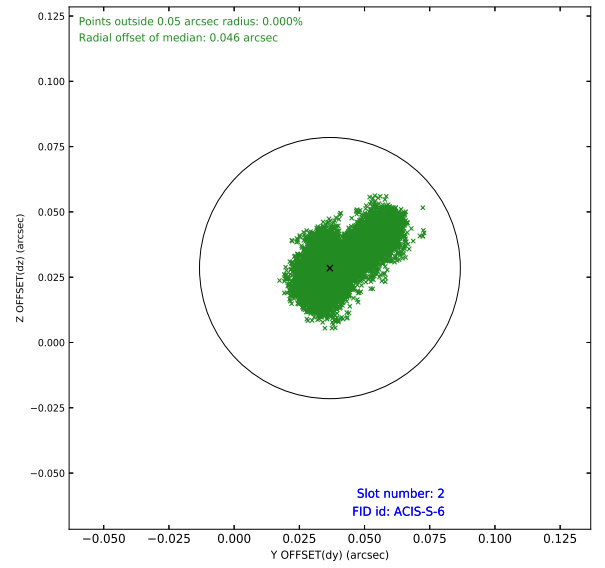
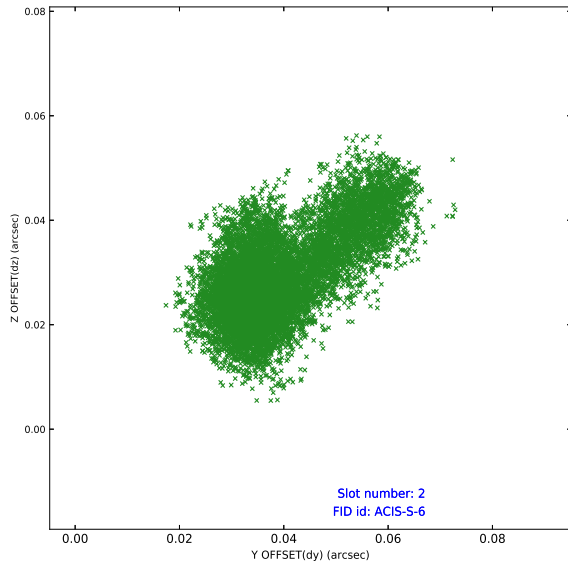
2.5.1 Slot 0



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)	2020.09.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.161

A.2 Comments