

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5314 - L2 Version 4
Chandra X-Ray Center

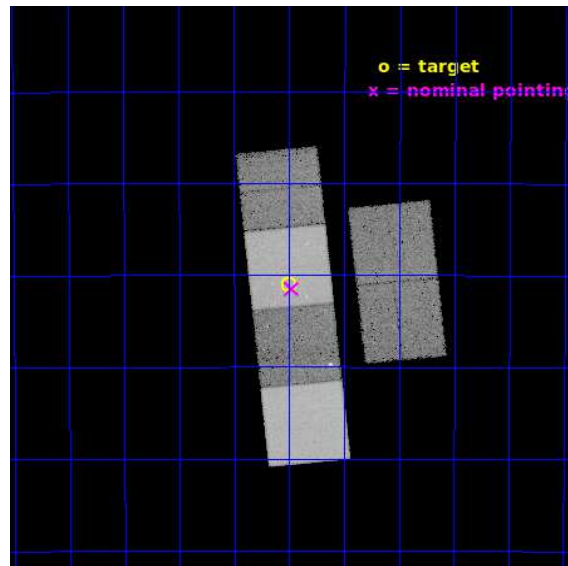
L2 Processing Date : Sep 25 2020

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1 Front

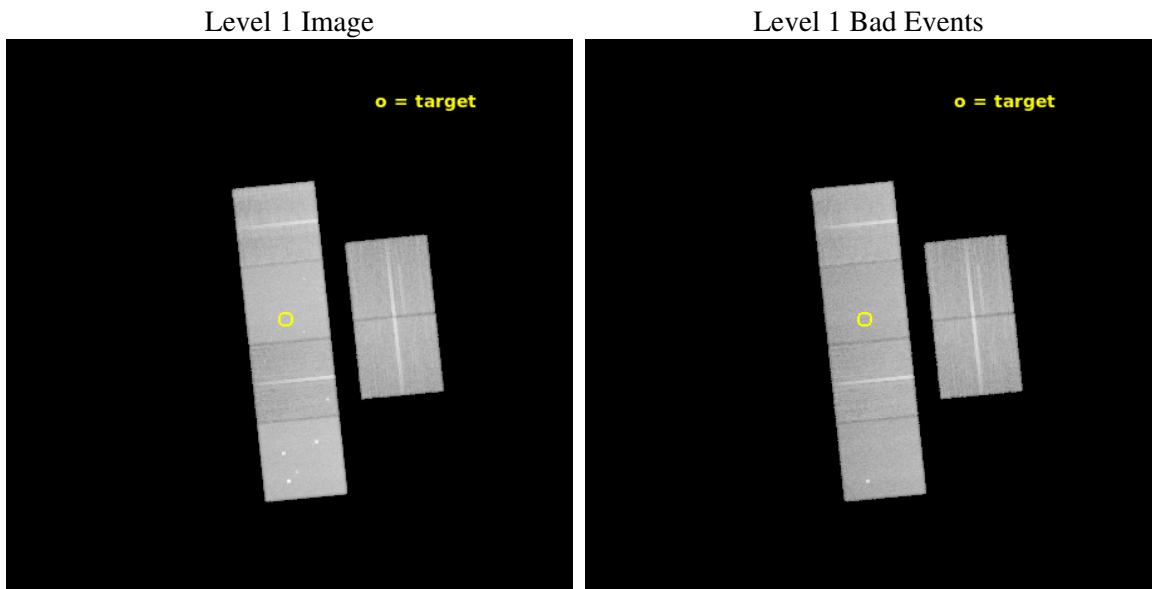
seq_num	500506	Sequence number
obs_id	5314	Observation id
title	Is GRB 031203 a GRB-SN seen off axis?	Proposal title
observer	Chryssa Kouveliotou	Principal investigator
object	GRB031203	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	120.625833	Observer's specified target RA [deg]
dec_targ	-39.850778	Observer's specified target Dec [deg]
ra_nom	120.61897573033	Nominal RA [deg]
dec_nom	-39.857938620541	Nominal Dec [deg]
roll_nom	264.14560033416	Nominal Roll [deg]
revision	4	Processing version of data
ontime	30156.799887657	Sum of GTIs [s]
livetime	29774.936329235	Livetime [s]
ontime2	30156.799887657	Sum of GTIs [s]
ontime3	30156.799887657	Sum of GTIs [s]
ontime5	30156.799887657	Sum of GTIs [s]
ontime6	30156.799887657	Sum of GTIs [s]
ontime7	30156.799887657	Sum of GTIs [s]
ontime8	30150.31789729	Sum of GTIs [s]
l2events	344108	Number of level 2 events



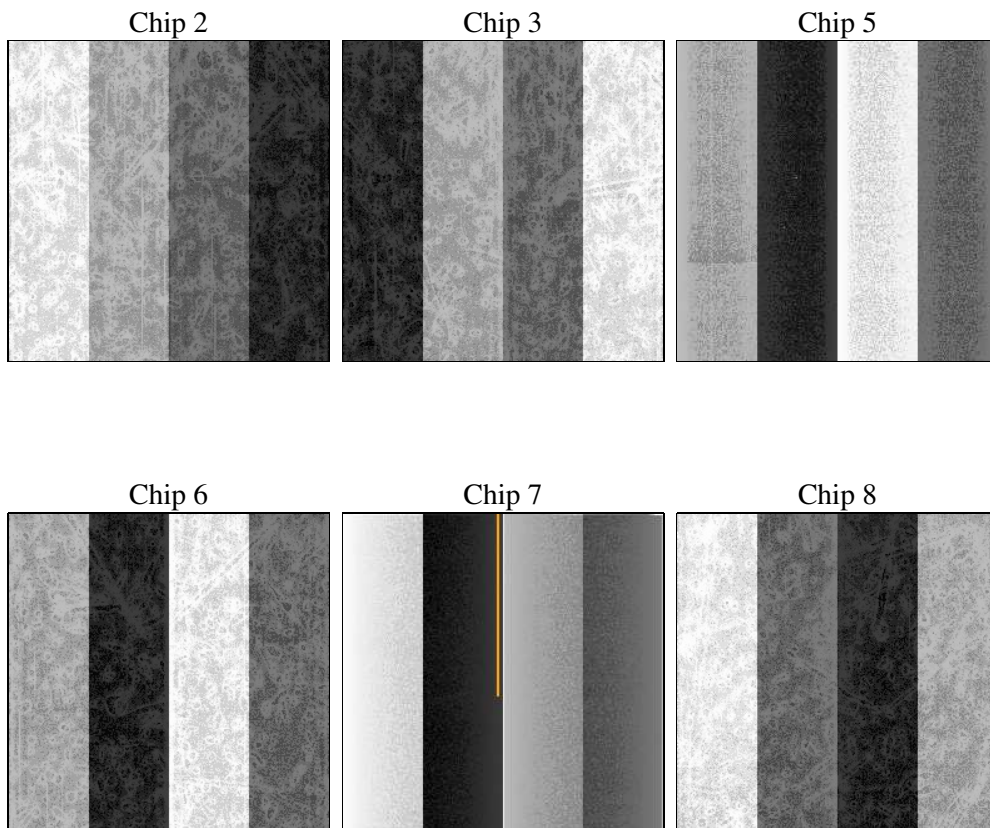
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	30156.799887657	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	30156.799887657	Sum of GTIs [s]
date	2020-09-25T08:55:21	Date and time of file creation	ontime3	30156.799887657	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	30156.799887657	Sum of GTIs [s]
			ontime6	30156.799887657	Sum of GTIs [s]
			ontime7	30156.799887657	Sum of GTIs [s]
			ontime8	30150.31789729	Sum of GTIs [s]
			l1events	1611943	Number of level 1 events

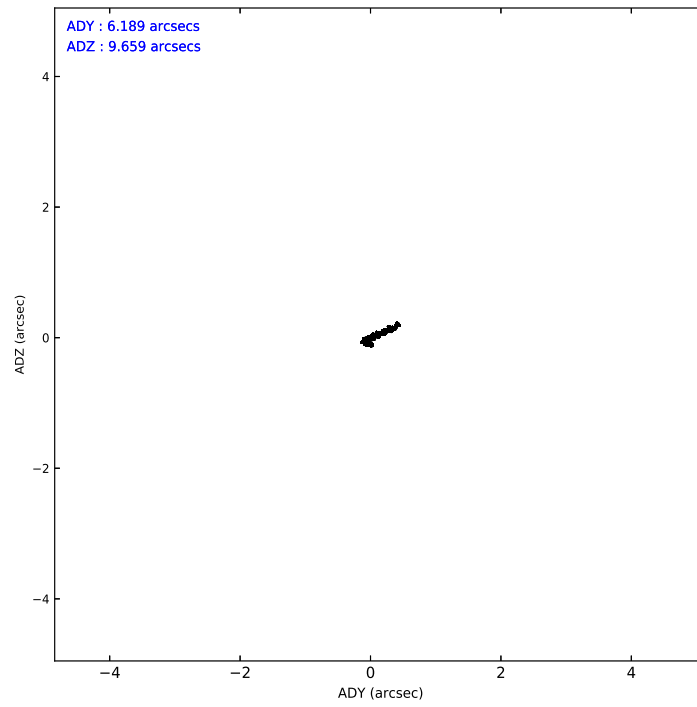
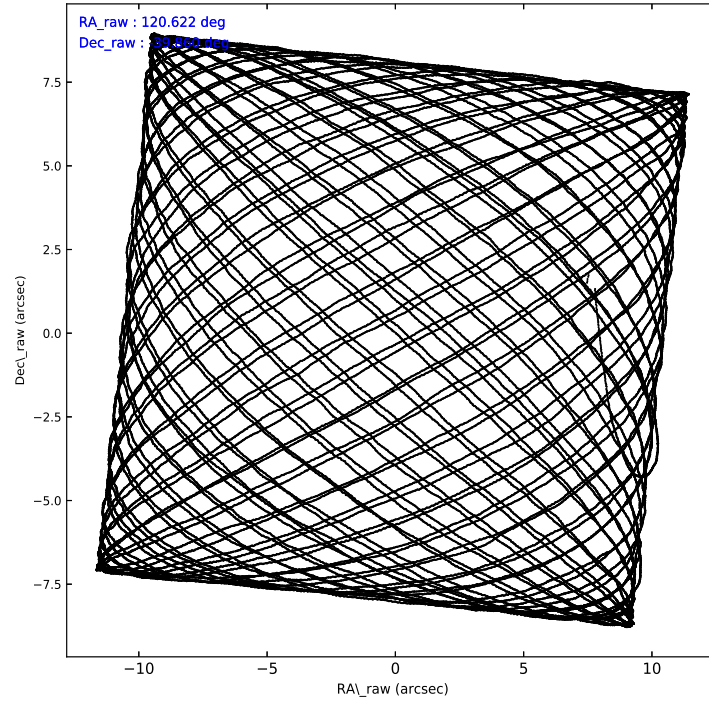
2.1.4 Events

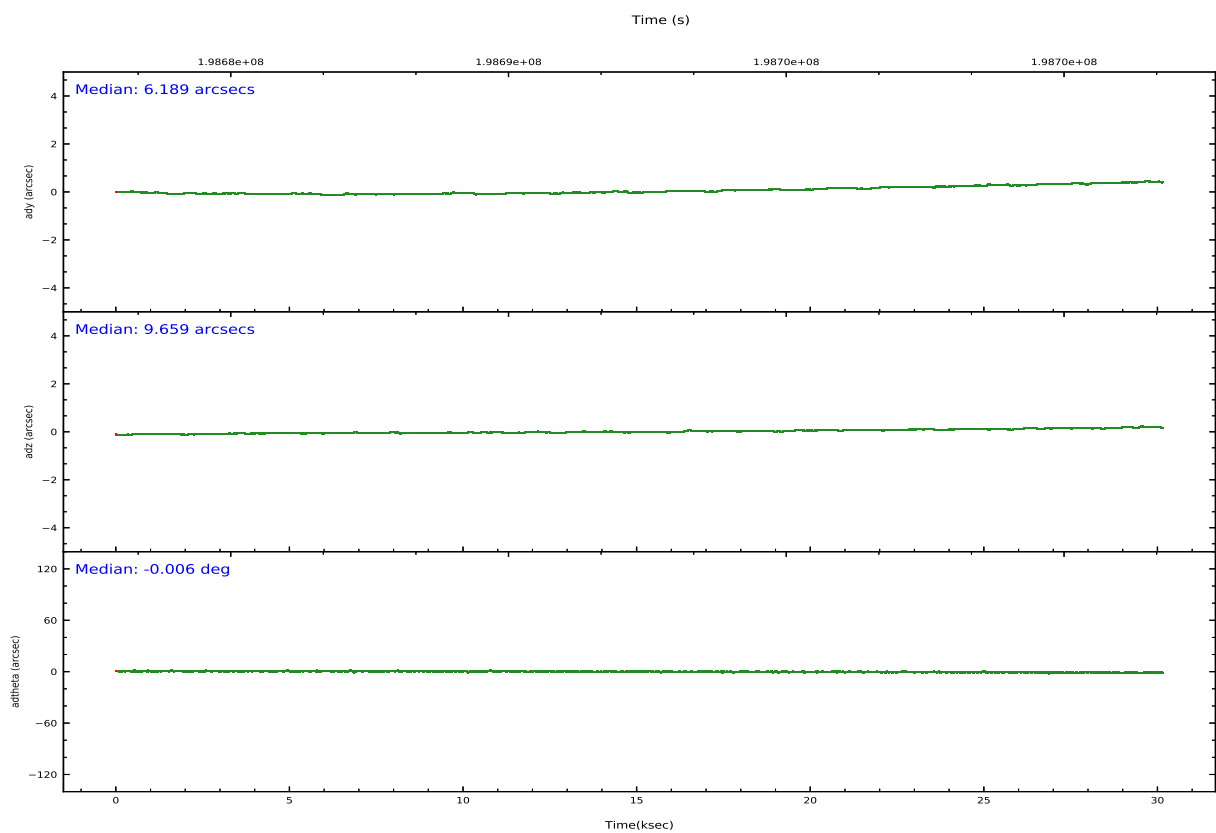
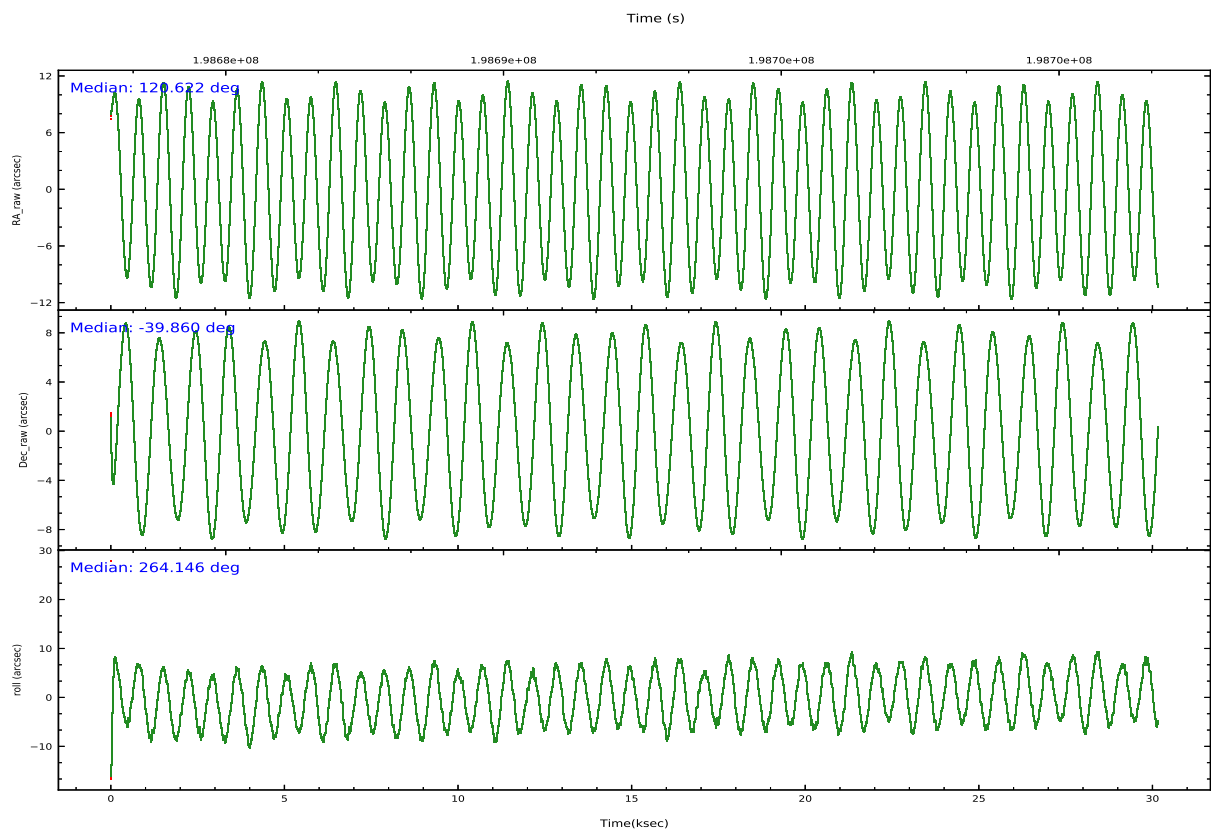
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	228024	217117	340669	229682	307514	288937	grade 0 events	11826	11245	14898	11253	11452	19177
rejected events	202610	192531	194438	203280	186979	231166		5%	5%	4%	4%	3%	6%
rejected %	88%	88%	57%	88%	60%	80%	grade 1 events	164	121	409	123	291	186
								0%	0%	0%	0%	0%	0%
							grade 2 events	5377	4930	45300	5614	25038	12816
								2%	2%	13%	2%	8%	4%
							grade 3 events	2504	2589	6734	2721	11527	6576
								1%	1%	1%	1%	3%	2%
							grade 4 events	2495	2555	5585	2601	11153	6408
								1%	1%	1%	1%	3%	2%
							grade 5 events	9026	9832	26286	10489	29335	13509
								3%	4%	7%	4%	9%	4%
							grade 6 events	4508	4487	81212	5472	67420	15513
								1%	2%	23%	2%	21%	5%
							grade 7 events	192124	181358	160245	191409	151298	214752
								84%	83%	47%	83%	49%	74%

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	120.607424	120.61897573033	Subarray requested	NONE	NONE
[deg] Pointing Dec	-39.835380	-39.857938620541	Alternating exposures requested	N	N
[deg] Pointing Roll	263.980383	264.14560033416	[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)	198676854.184000	198675041.08332			
Observation start date	2004-04-18T11:59:50	2004-04-18T11:30:41			
[s] Observation end time (MET)	198706854.184000	198708197.27228			
Observation end date	2004-04-18T20:19:50	2004-04-18T20:43:17			
Read mode	TIMED	TIMED			

2.3 Aspect



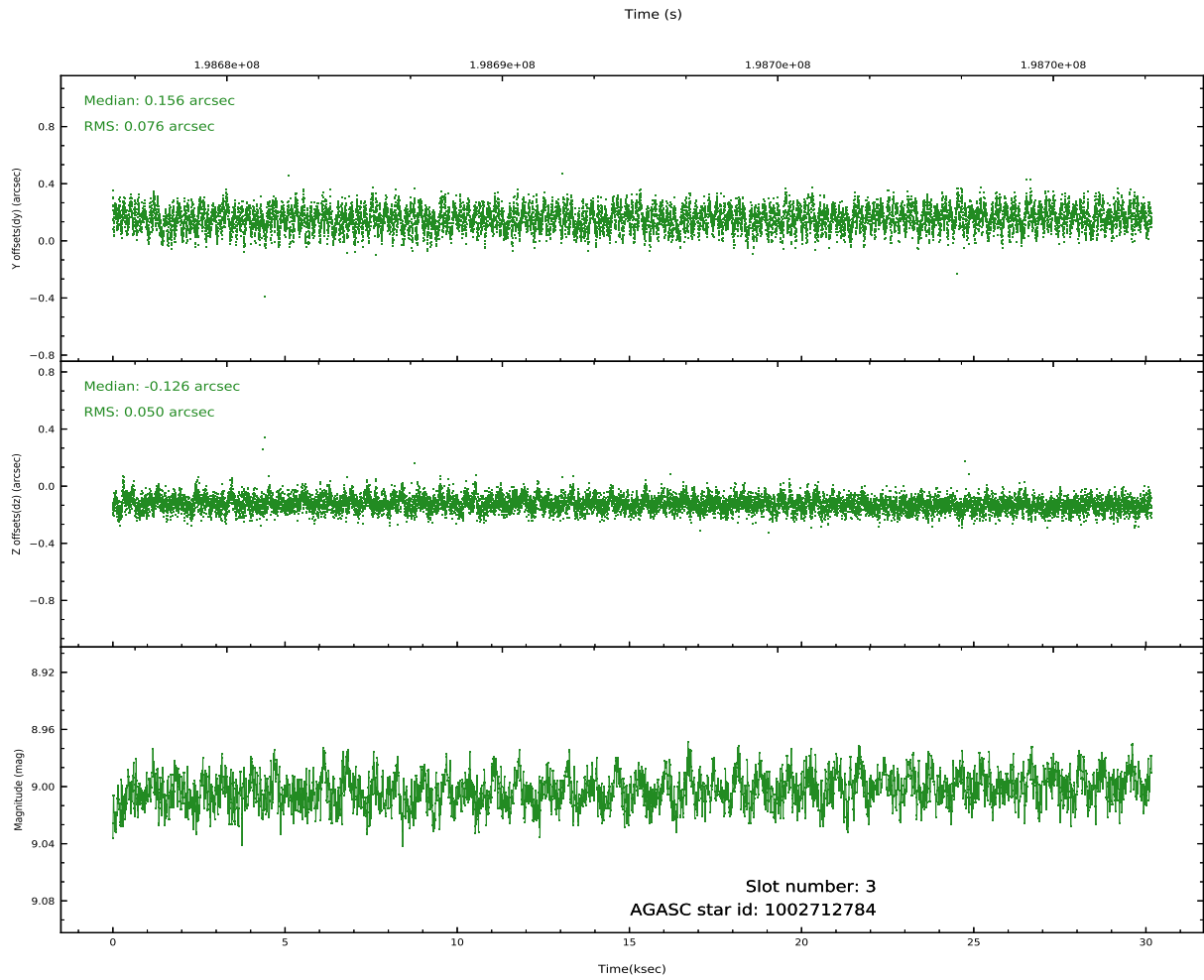
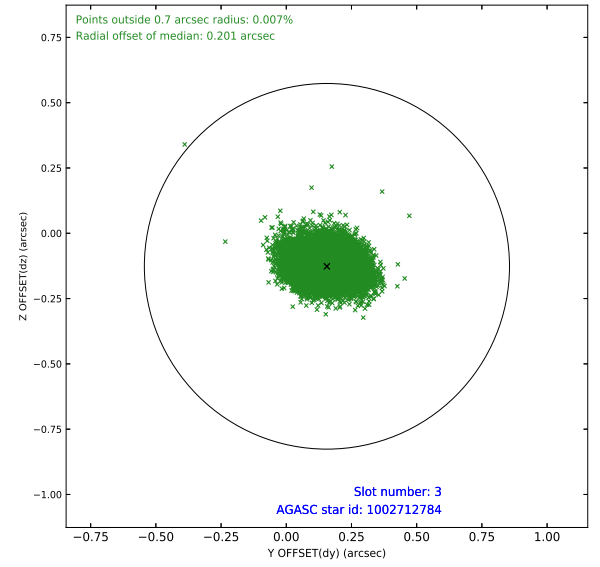
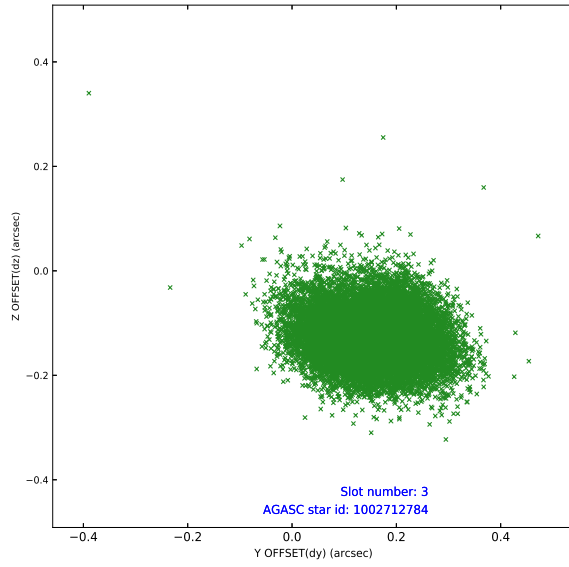


Slot Statistics

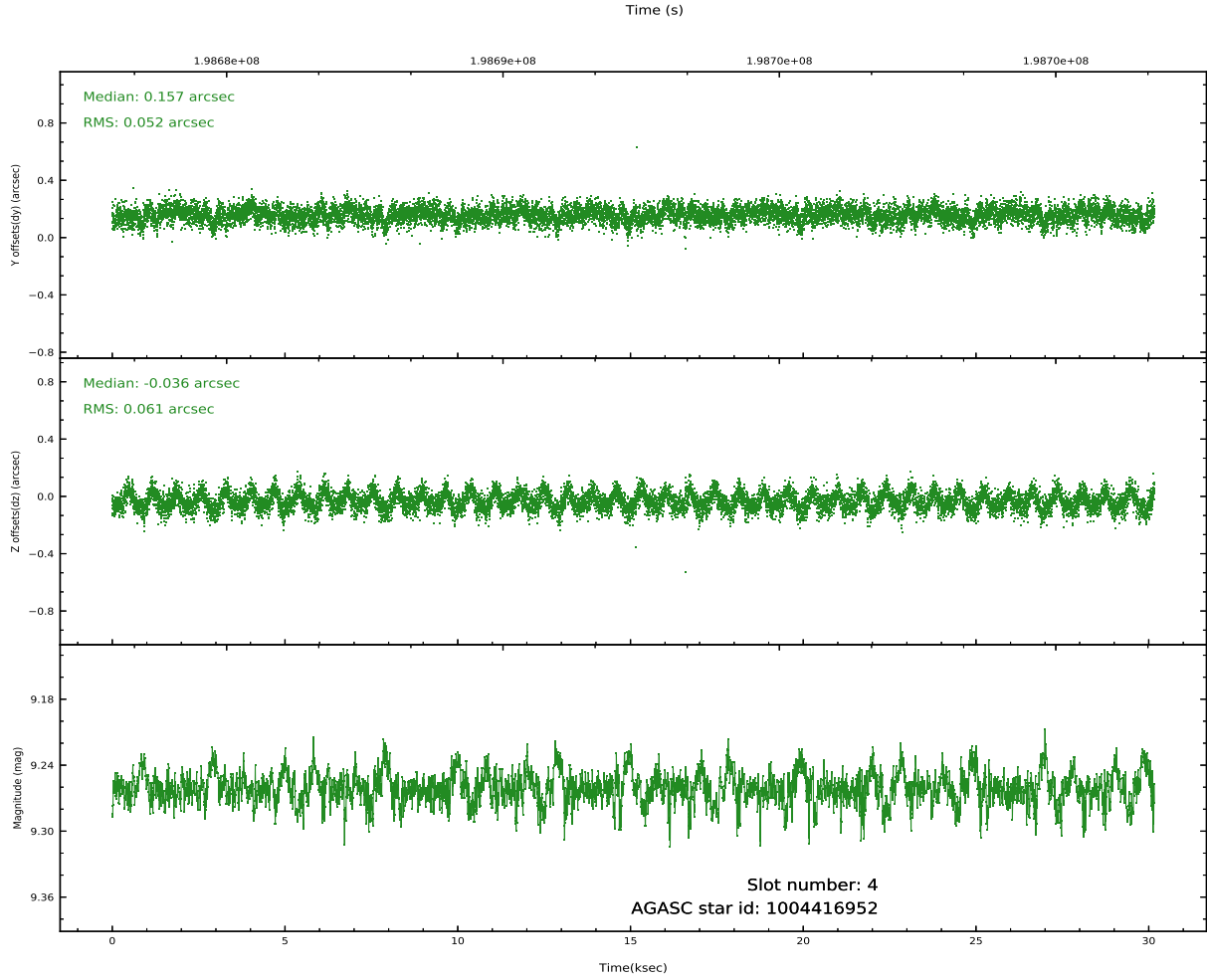
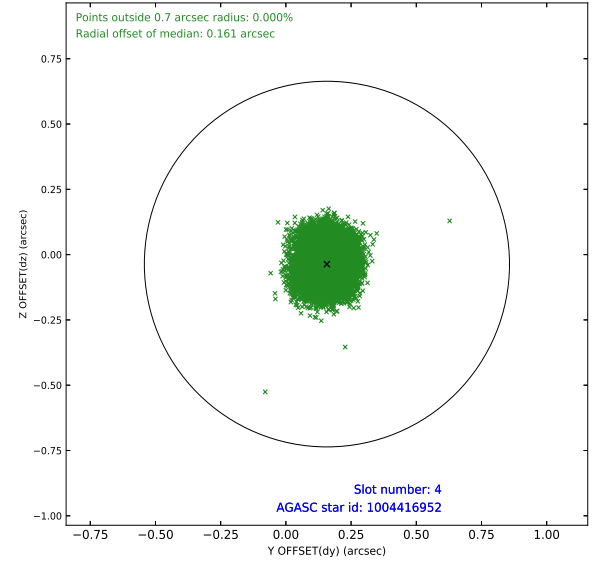
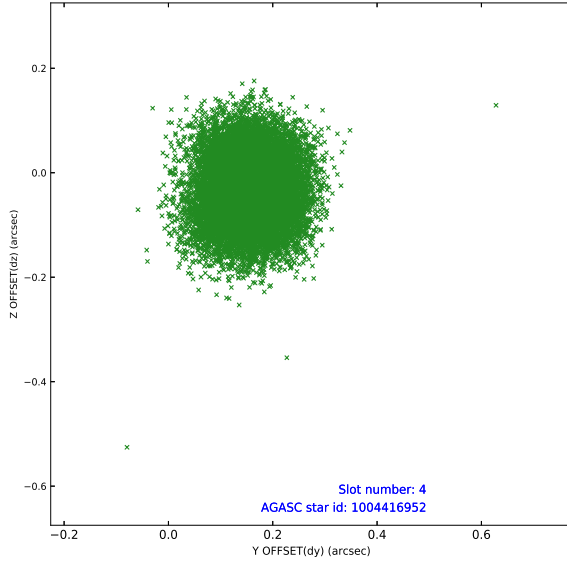
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	7358	1.000	-0.007	-0.043	0.008	0.013	0.000000	0.000000	937.05	-1726
1	FID		ACIS-S-4	7.21	7358	1.000	0.110	0.037	0.008	0.013	0.000000	0.000000	2154.59	177
2	FID		ACIS-S-5	7.23	7357	1.000	-0.129	0.018	0.007	0.012	0.000000	0.000000	-1811.87	171
3	GUIDE	used	1002712784	9.00	14711	1.000	0.156	-0.126	0.097	0.156	119.710142	-40.342962	2088.57	-2255
4	GUIDE	used	1004416952	9.26	14695	1.000	0.157	-0.036	0.086	0.138	120.668606	-40.123891	1015.87	276
5	GUIDE	used	1004428200	9.34	14634	1.000	0.184	0.150	0.078	0.127	120.904943	-40.387705	1893.72	1020
6	GUIDE	used	1002714360	7.72	14714	1.000	-0.276	-0.077	0.070	0.115	119.781728	-39.420308	-1234.29	-2439
7	GUIDE	used	1004425112	8.88	14708	1.000	-0.214	0.096	0.109	0.166	121.364029	-39.923076	103.48	2111

2.4 Star Slots

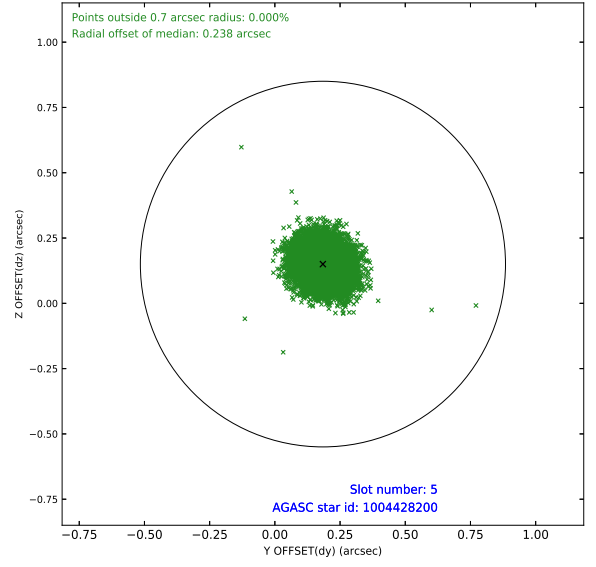
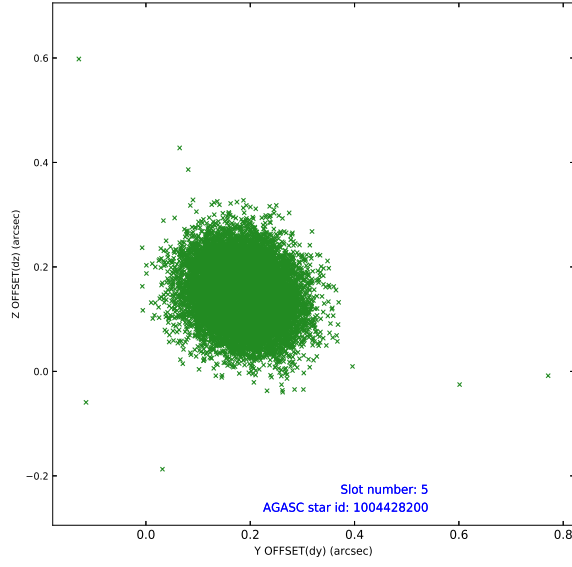
2.4.1 Slot 3



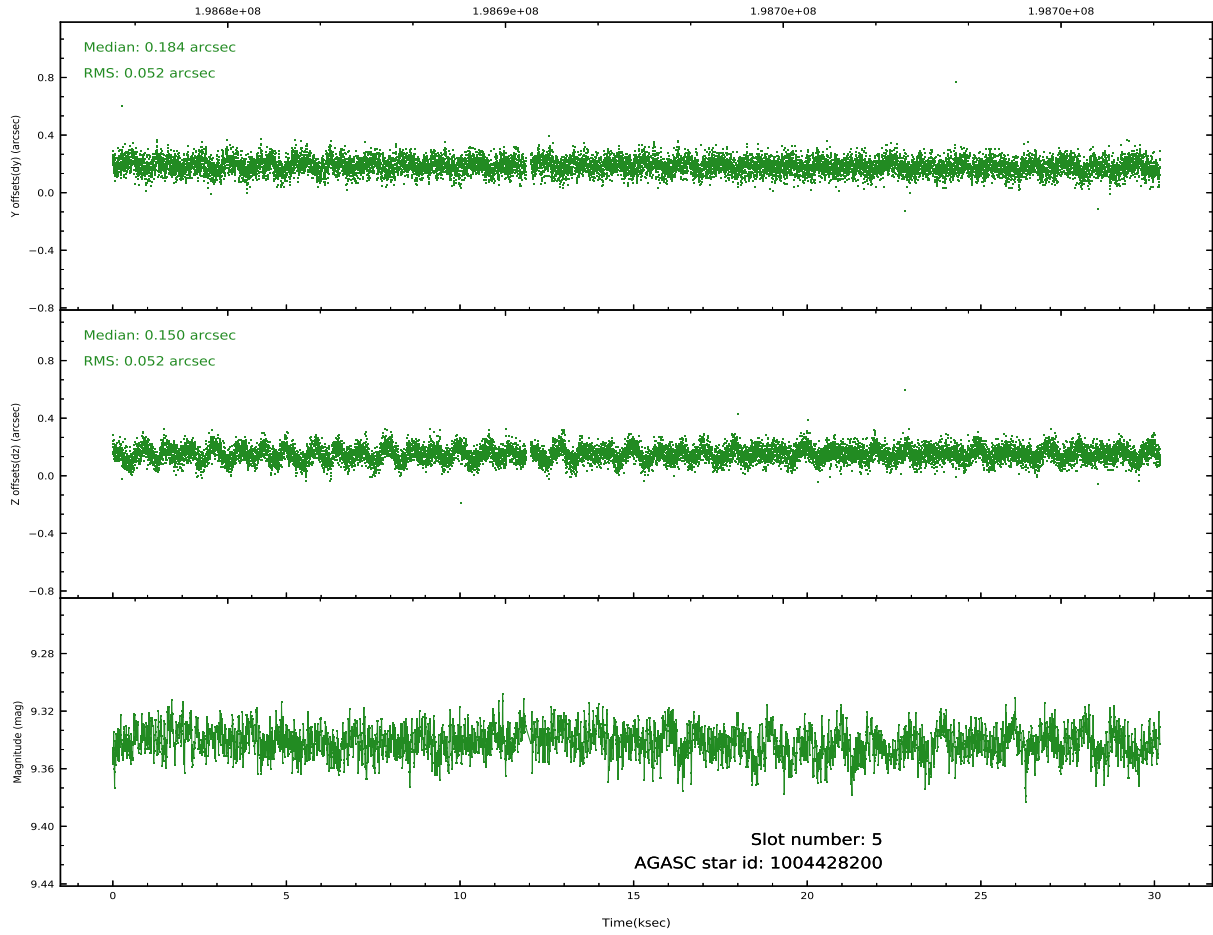
2.4.2 Slot 4



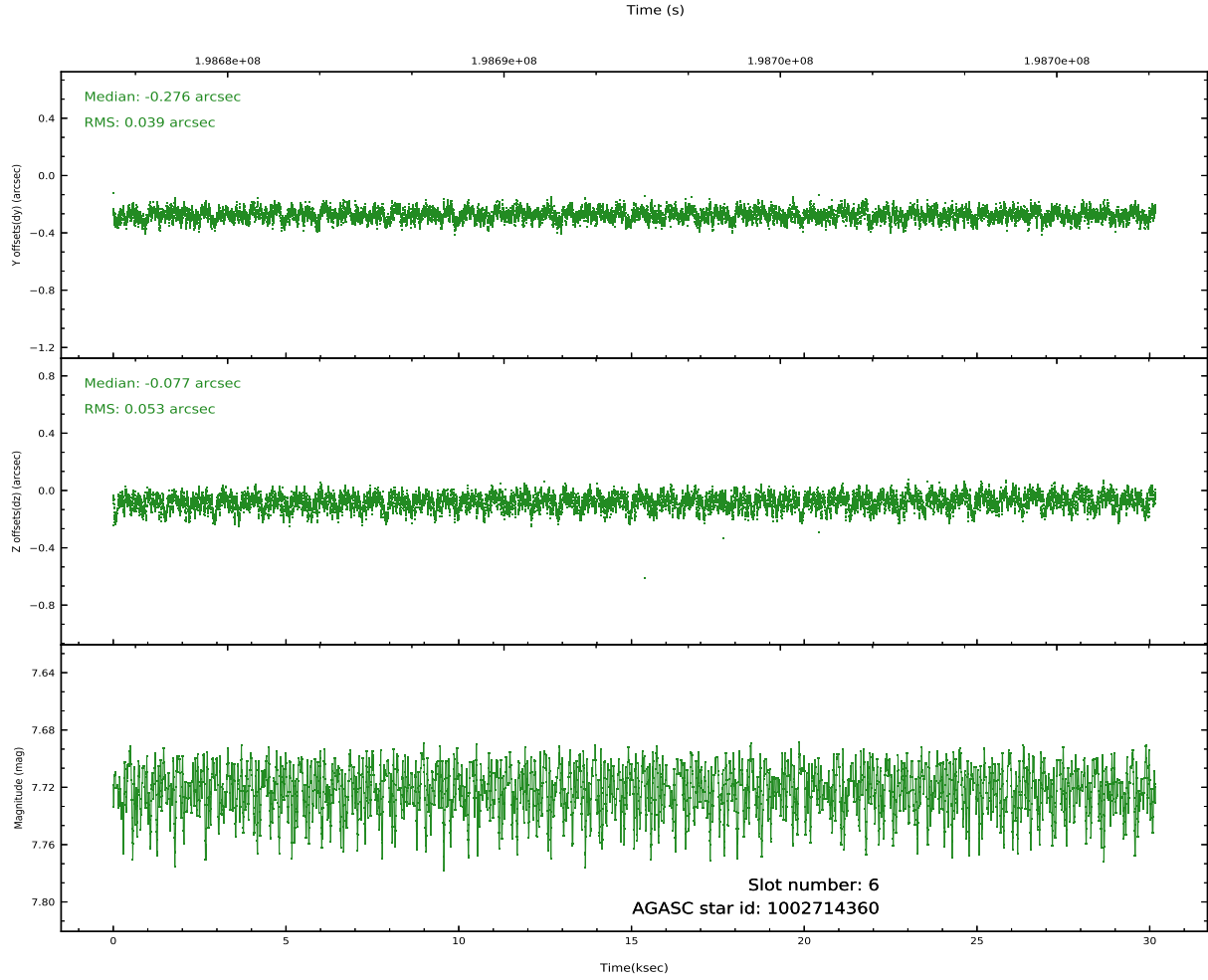
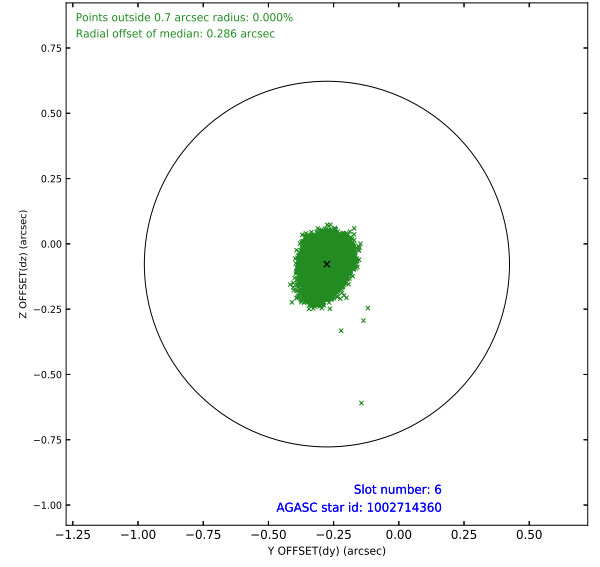
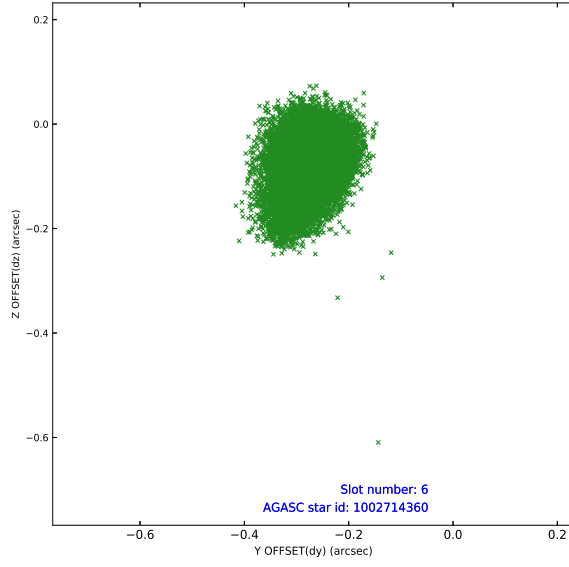
2.4.3 Slot 5



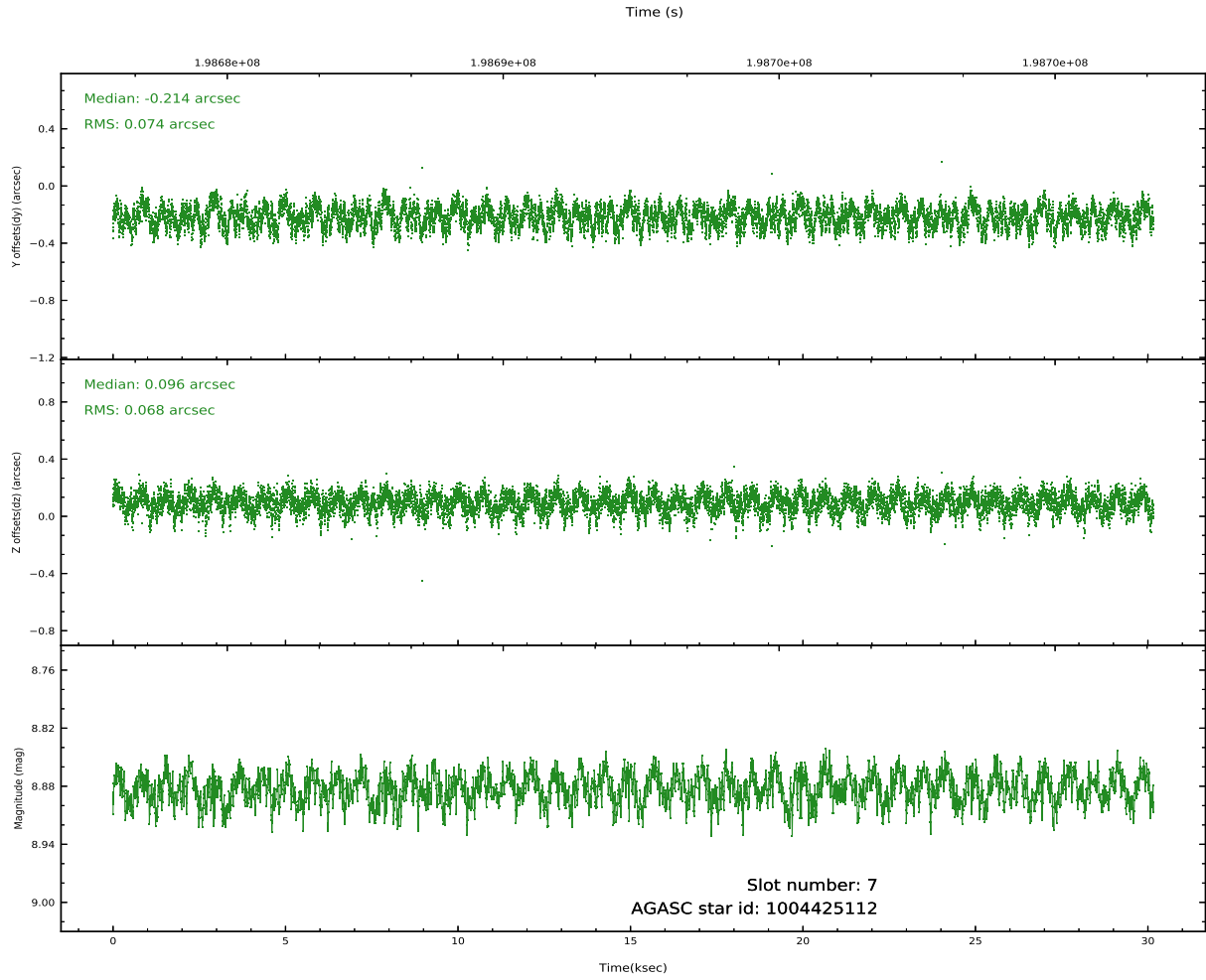
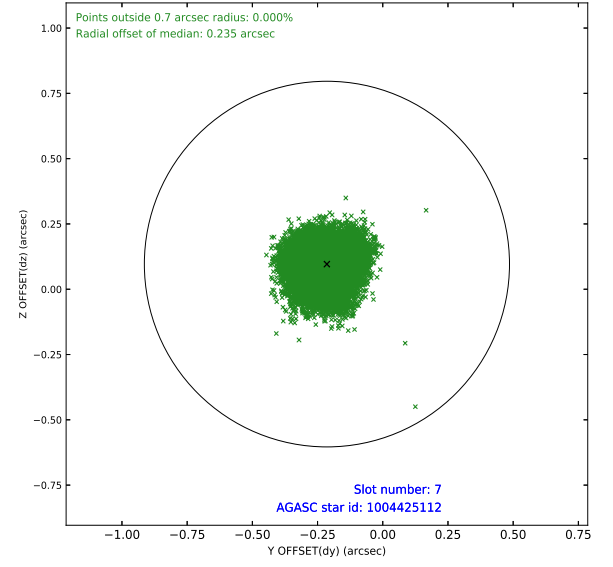
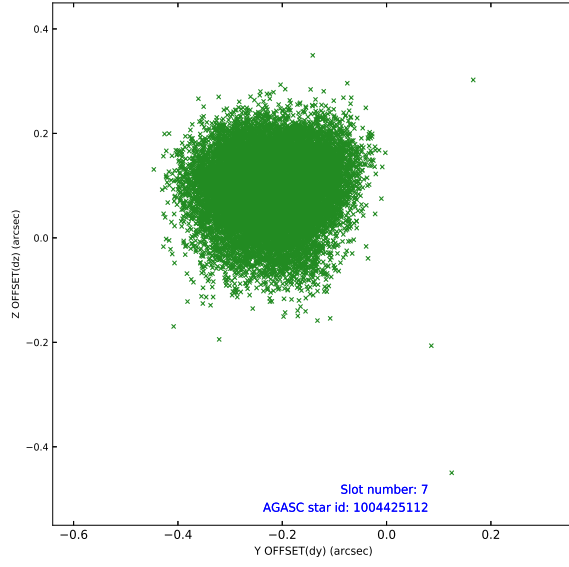
Time (s)



2.4.4 Slot 6

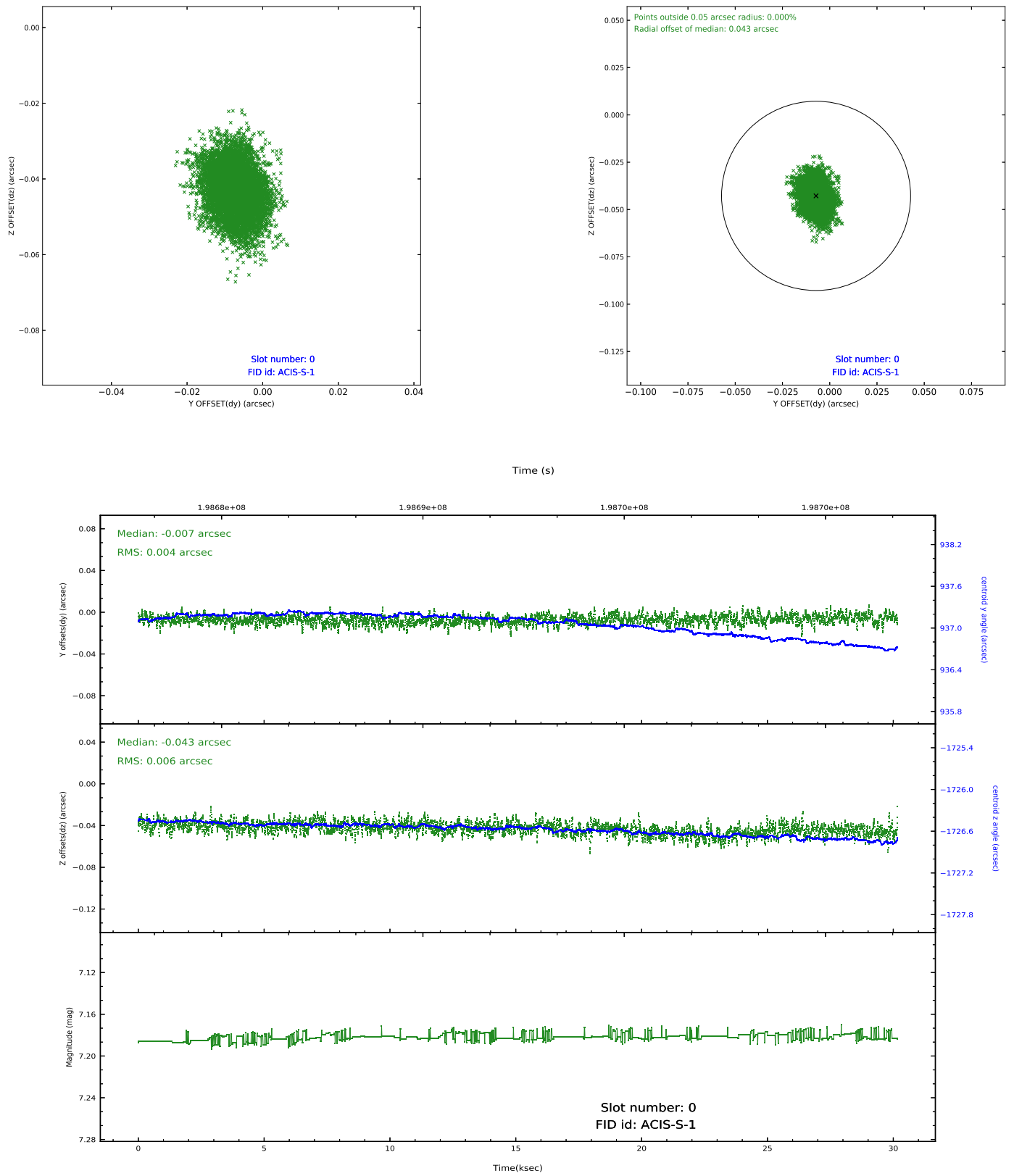


2.4.5 Slot 7

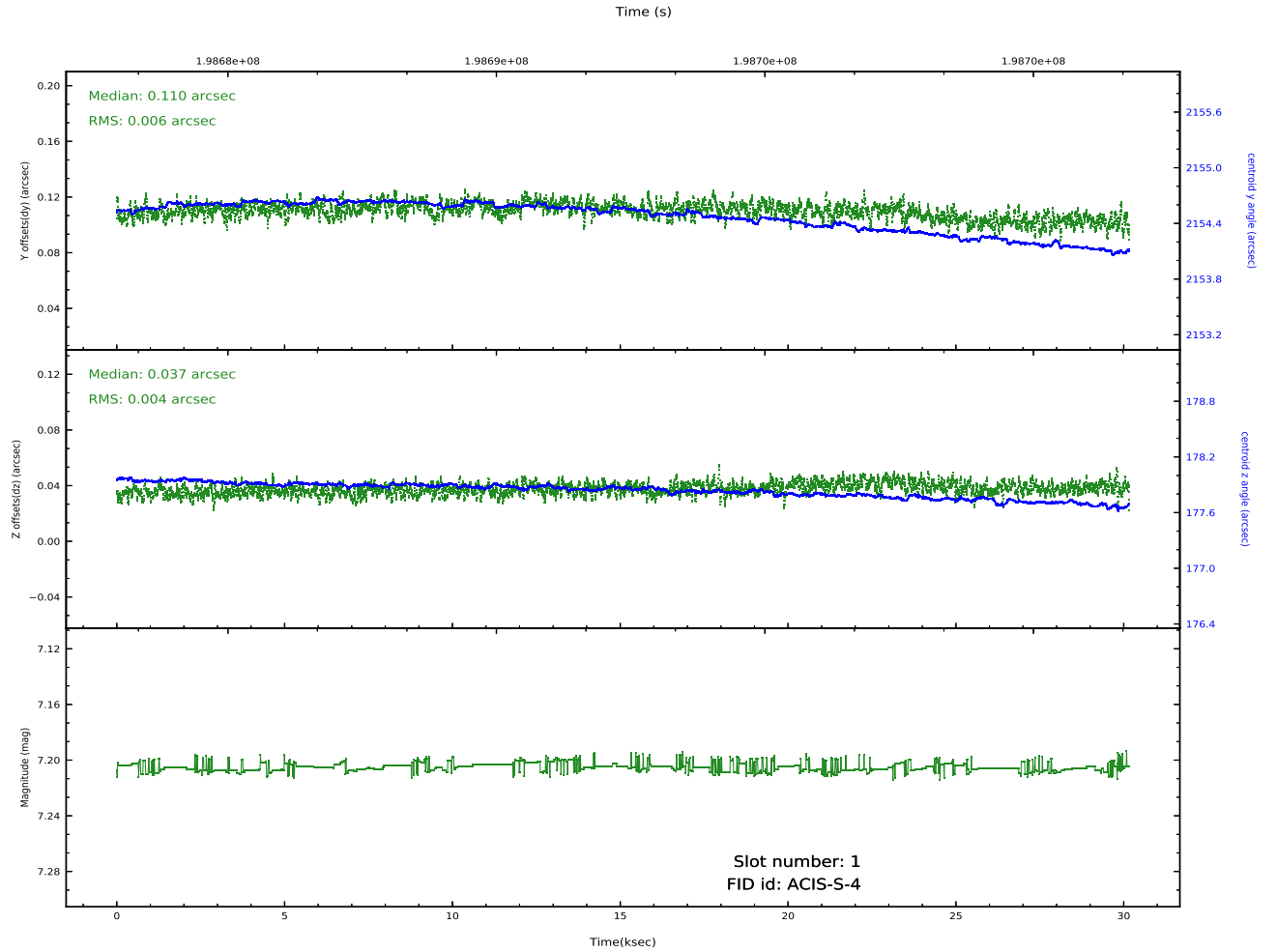
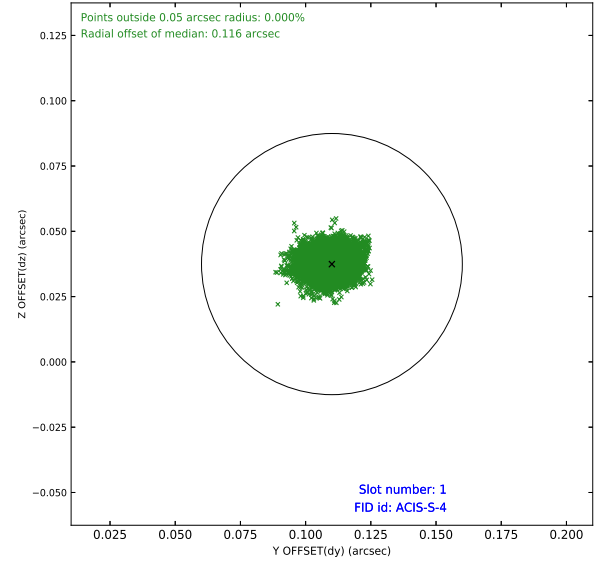
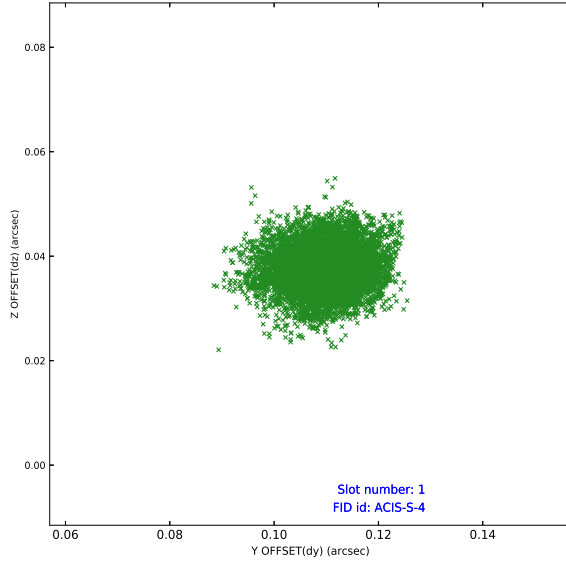


2.5 FID Slots

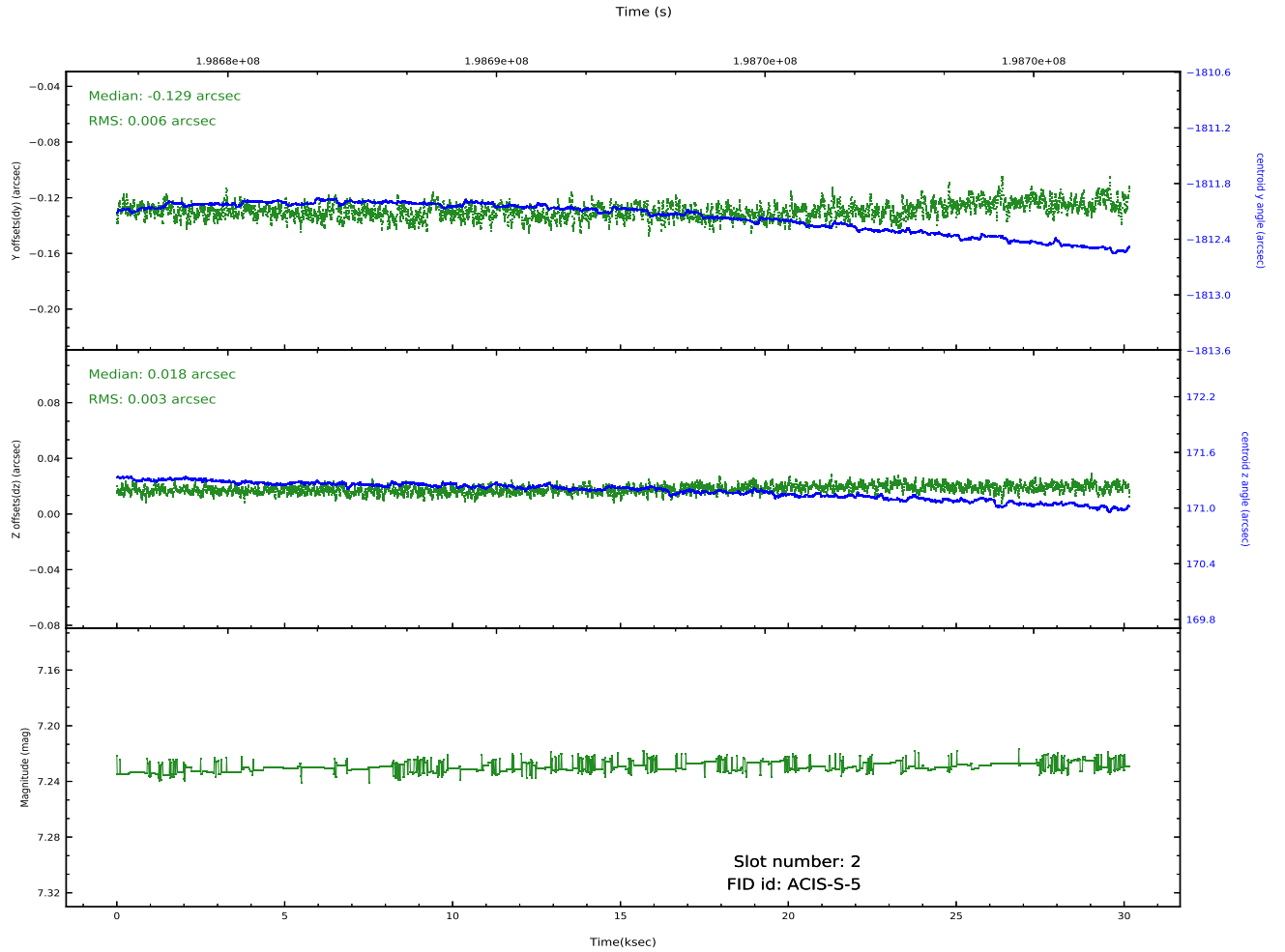
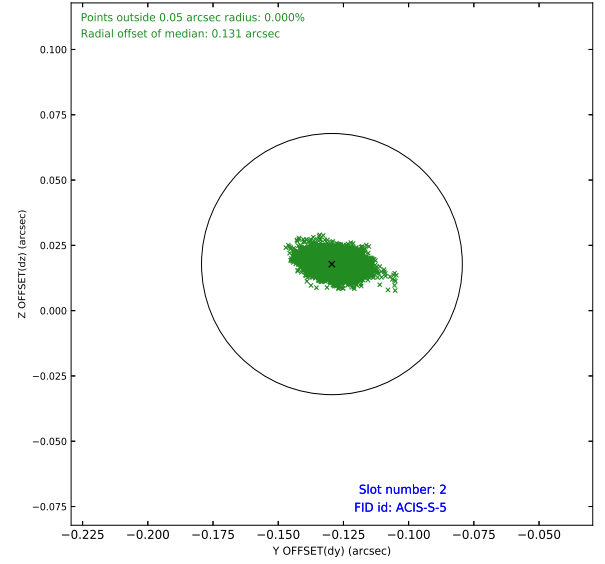
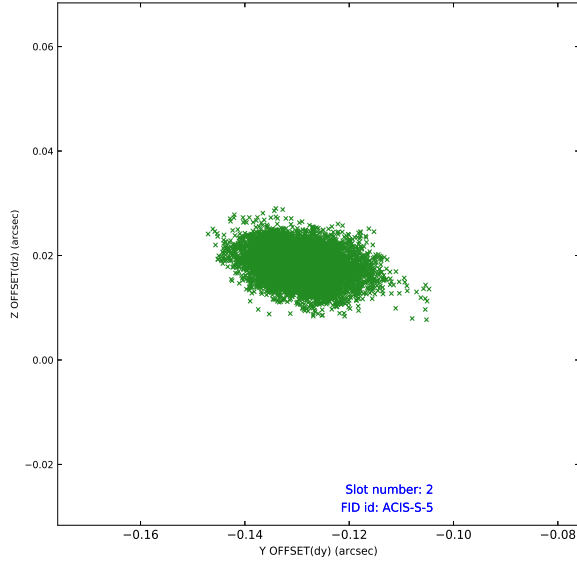
2.5.1 Slot 0



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)	2020.09.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.156

A.2 Comments

At the request of the PI and CD0: no obvious source present at 08:02:30.2, -39:51:02.8 (radio position, GCN 2473) or 08:02:30.36, -39:51:00.1 (opt/ir astrometry, GCN 2481). Region file was created from XMM source list (GN 2474) and overlaid on Chandra image. All XMM positions systematically shifted to NE by a few arcsec (mean of eyeballed offsets for ra, dec determined from nearest 6 XMM sources are 5.5, 2.8 pixels, respectively). Correcting for shift, extracted counts in circle 10 pixels in radius yields 47 ± 6.9 counts from 314.2 pixels; background counts = 151 ± 12.3 counts in circle of radius 20 pixels. Multiplying by 0.25 scale factor for areas yields background counts of 37.8 counts, so *at most*, source contains $\sim 9 \pm 7.6$ counts (if scaled bkgrd error and source error are added in quadrature). Judgment: GRB not detected with Chandra.