

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4762 - L2 Version 5
Chandra X-Ray Center

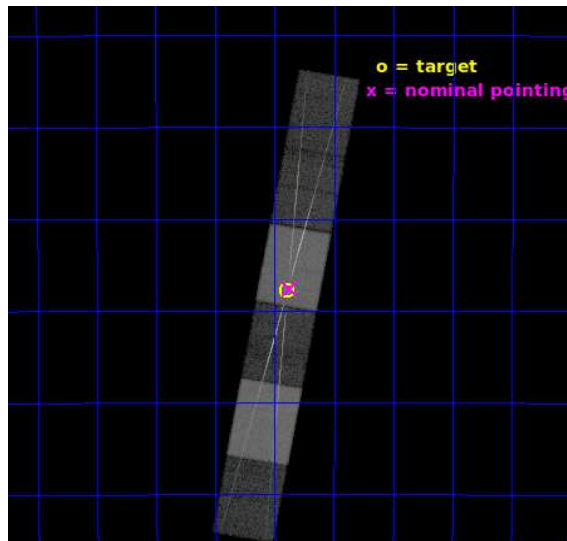
L2 Processing Date : Sep 26 2020

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1 Front

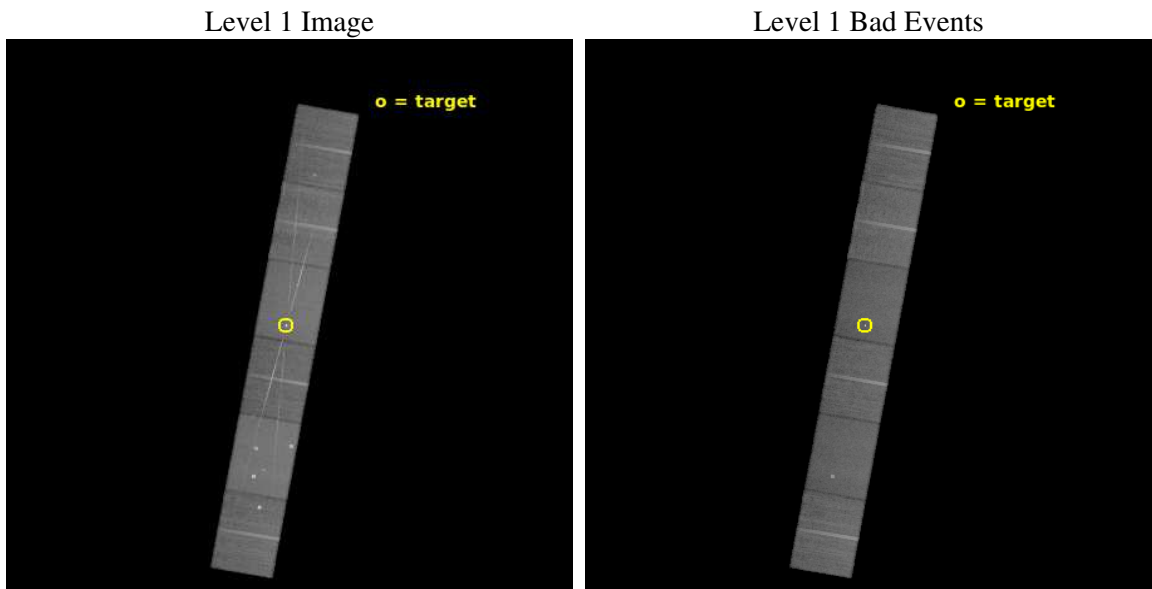
seq_num	700845	Sequence number
obs_id	4762	Observation id
title	DISSECTING THE ENVIRONMENT OF MCG--6-30-15 WITH THE HETGS	Proposal
observer	Dr. Claude Canizares	Principal investigator
object	MCG-06-30-015	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	203.97375	Observer's specified target RA [deg]
dec_targ	-34.295833	Observer's specified target Dec [deg]
ra_nom	203.968045101	Nominal RA [deg]
dec_nom	-34.293286841764	Nominal Dec [deg]
roll_nom	280.15910001376	Nominal Roll [deg]
revision	5	Processing version of data
ontime	38165.0	Sum of GTIs [s]
livetime	37548.602147152	Livetime [s]
ontime4	38165.0	Sum of GTIs [s]
ontime5	38165.0	Sum of GTIs [s]
ontime6	38165.0	Sum of GTIs [s]
ontime7	38165.0	Sum of GTIs [s]
ontime8	38165.0	Sum of GTIs [s]
ontime9	38165.0	Sum of GTIs [s]
l2events	399665	Number of level 2 events



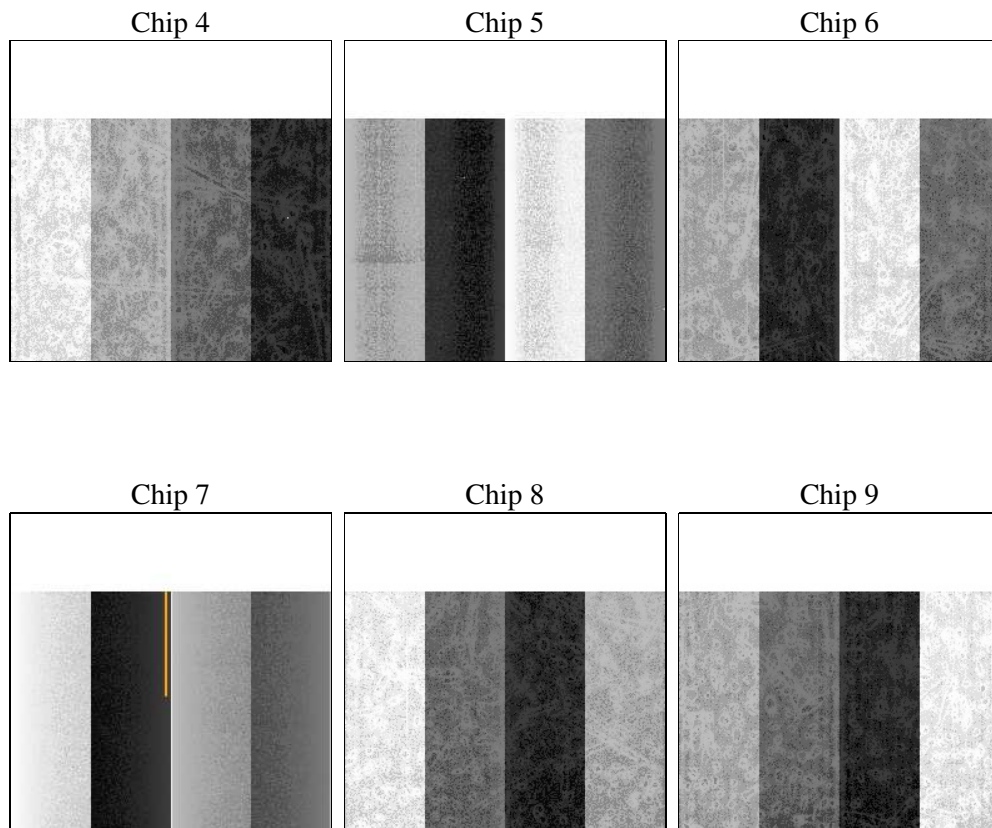
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	38165.0	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	38165.0	Sum of GTIs [s]
date	2020-09-26T02:56:05	Date and time of file creation	ontime5	38165.0	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	38165.0	Sum of GTIs [s]
			ontime7	38165.0	Sum of GTIs [s]
			ontime8	38165.0	Sum of GTIs [s]
			ontime9	38165.0	Sum of GTIs [s]
			l1events	1691538	Number of level 1 events
			tgmetho	FINDZO	Method used to create src1a file
				14060.26	

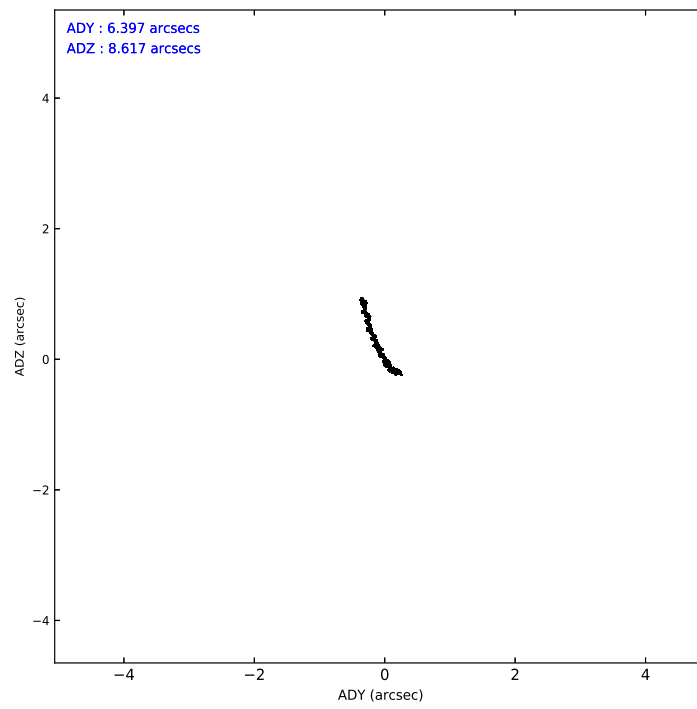
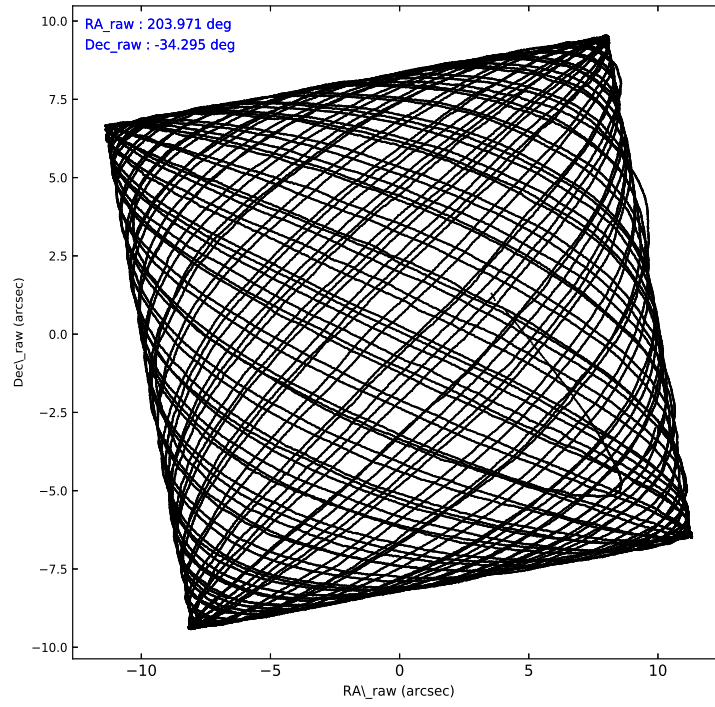
2.1.4 Events

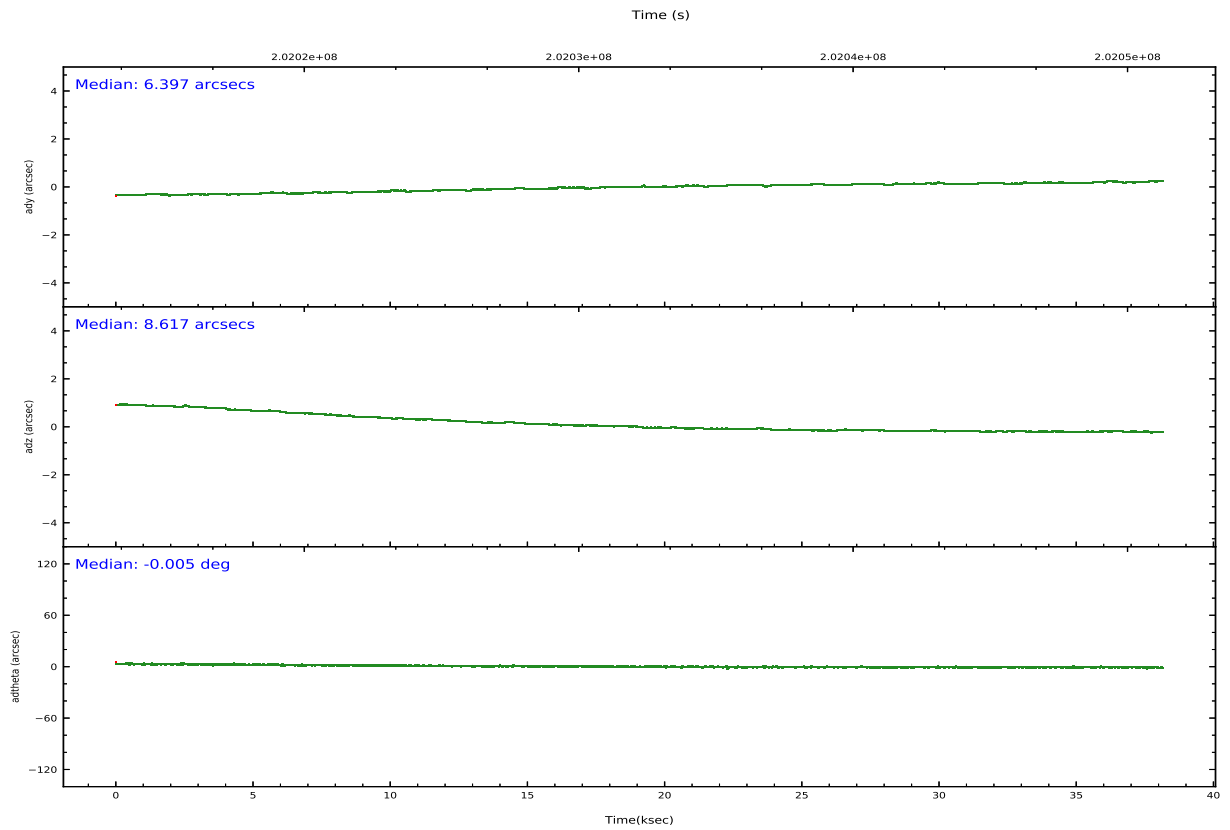
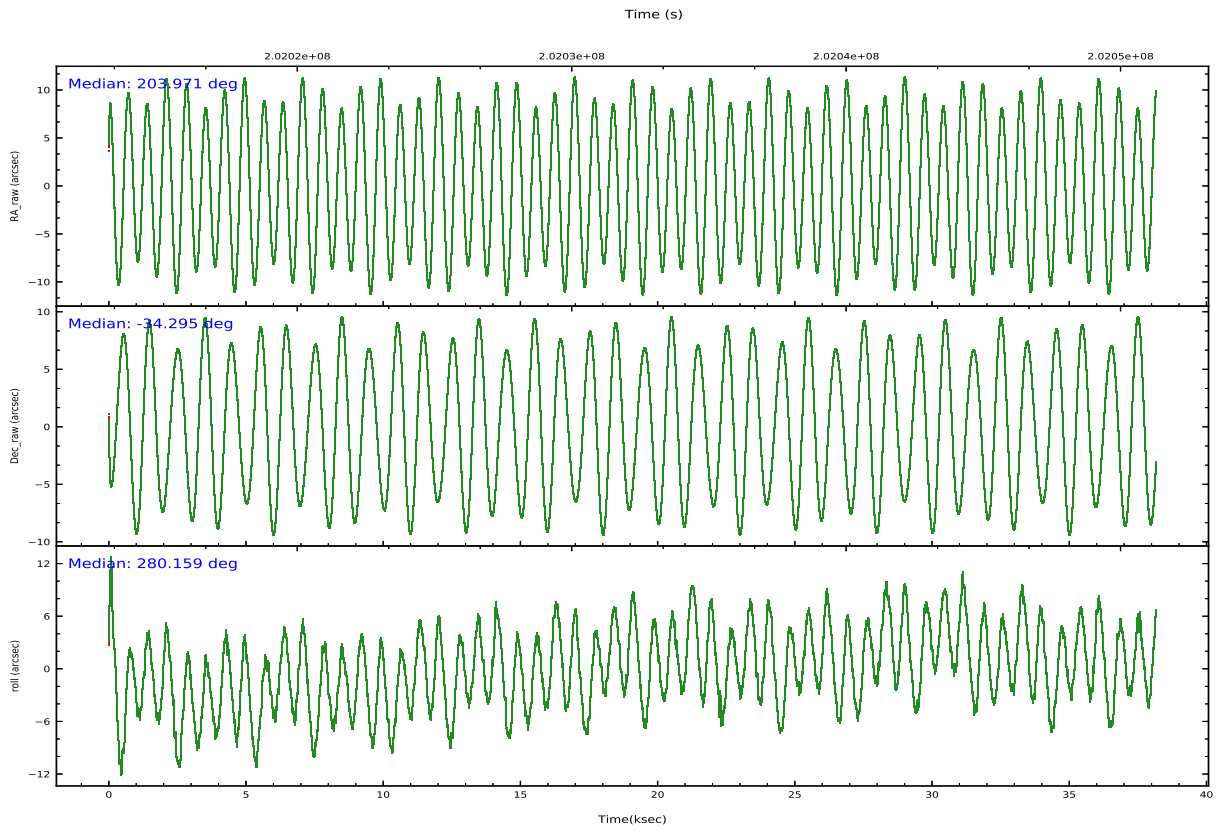
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	256675	349156	241457	329971	291815	222464	grade 0 events	23174	26029	25163	16787	25896	13115
rejected events	218909	185413	197470	183257	226167	194261		9%	7%	10%	5%	8%	5%
rejected %	85%	53%	81%	55%	77%	87%	grade 1 events	219	363	159	542	169	139
								0%	0%	0%	0%	0%	0%
							grade 2 events	5875	51386	7484	31516	13429	5376
								2%	14%	3%	9%	4%	2%
							grade 3 events	2912	7458	3394	14140	6834	2917
								1%	2%	1%	4%	2%	1%
							grade 4 events	2928	7182	3314	14127	6441	2778
								1%	2%	1%	4%	2%	1%
							grade 5 events	9468	26522	9873	30128	12876	10401
								3%	7%	4%	9%	4%	4%
							grade 6 events	4429	78388	5812	75514	15626	5199
								1%	22%	2%	22%	5%	2%
							grade 7 events	207670	151828	186258	147217	210544	182539
								80%	43%	77%	44%	72%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	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	203.949857	203.968045101	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-34.274099	-34.293286841764	Subarray start row	1	1
[deg] Pointing Roll	279.986545	280.15910001376	Subarray row count	774	774
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	2.5
[mm] SIM translation stage pos	-187.132523	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
[s] Observation start time (MET)	202013297.184000	202012177.80554			
Observation start date	2004-05-27T02:47:13	2004-05-27T02:29:37			
[s] Observation end time (MET)	202051297.184000	202052624.81983			
Observation end date	2004-05-27T13:20:33	2004-05-27T13:43:44			
Read mode	TIMED	TIMED			

2.3 Aspect





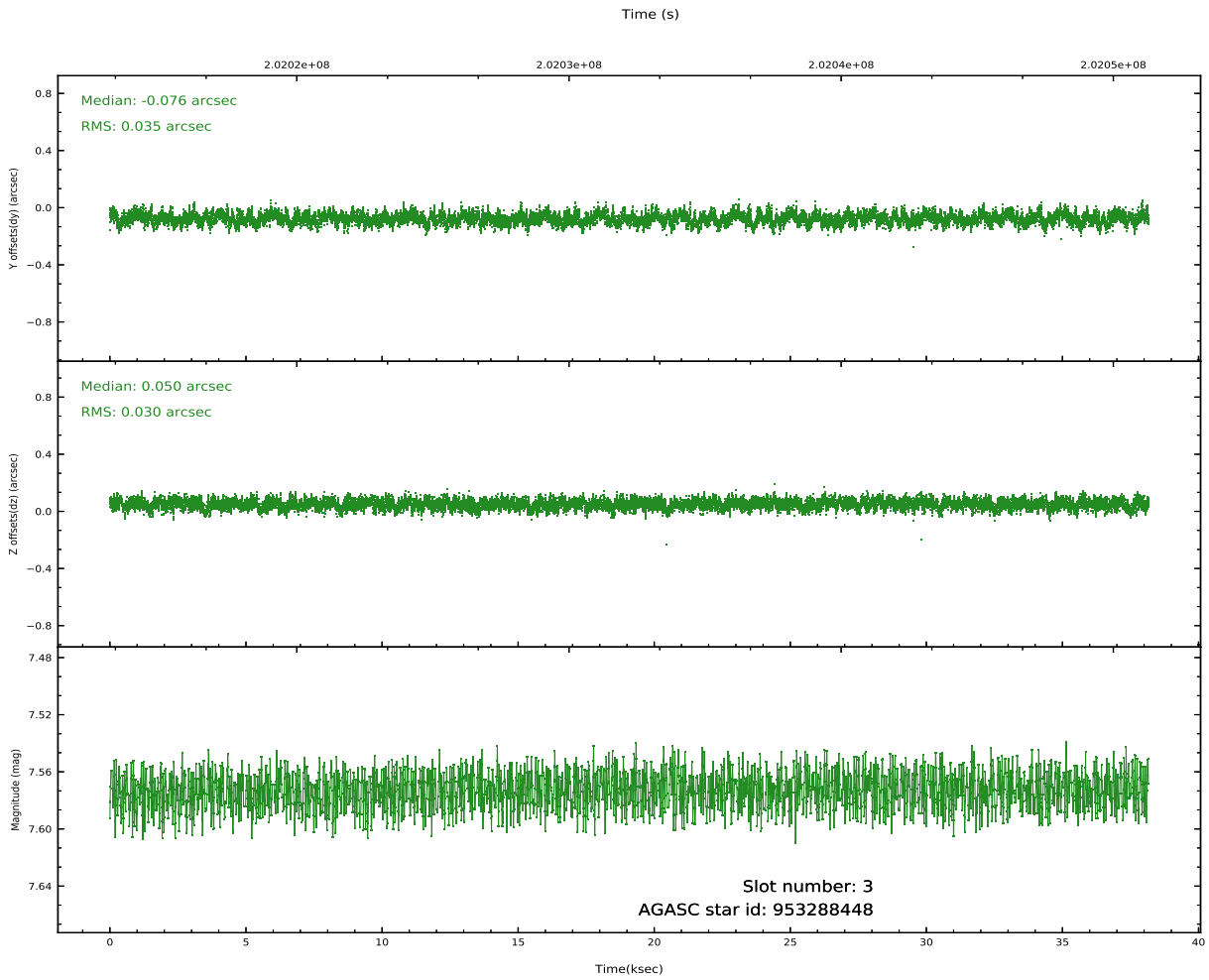
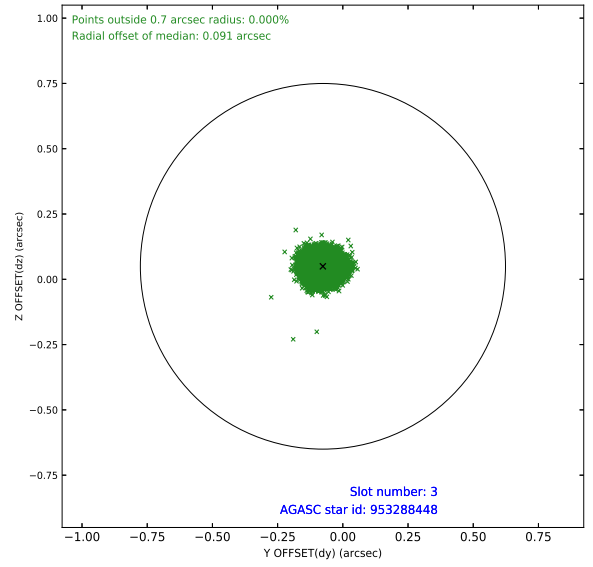
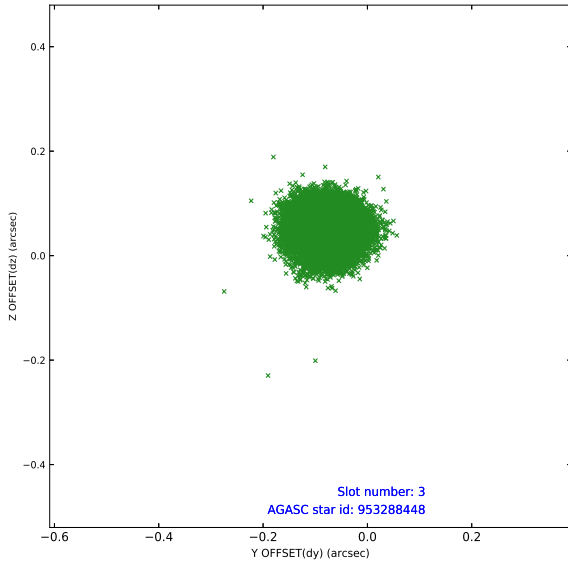
Slot Statistics

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	7.09	9310	1.000	-0.113	-0.082	0.010	0.021	0.000000	0.000000	-758.96	-1792
1	FID		ACIS-S-4	7.20	9310	1.000	0.169	0.076	0.006	0.011	0.000000	0.000000	2154.54	116
2	FID		ACIS-S-5	7.23	9310	1.000	-0.088	0.013	0.011	0.022	0.000000	0.000000	-1811.79	110
3	GUIDE	used	953288448	7.57	18612	1.000	-0.076	0.050	0.050	0.079	203.869544	-34.017546	-950.99	-76
4	GUIDE	used	953294840	8.47	18615	1.000	0.074	0.039	0.055	0.089	204.478170	-34.846425	2304.08	1179
5	GUIDE	used	953295296	7.43	18618	1.000	0.021	-0.193	0.051	0.081	203.563852	-34.387568	205.97	-1200
6	GUIDE	used	953296432	8.99	18605	1.000	-0.020	0.105	0.077	0.123	204.411860	-34.306423	356.14	1332
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

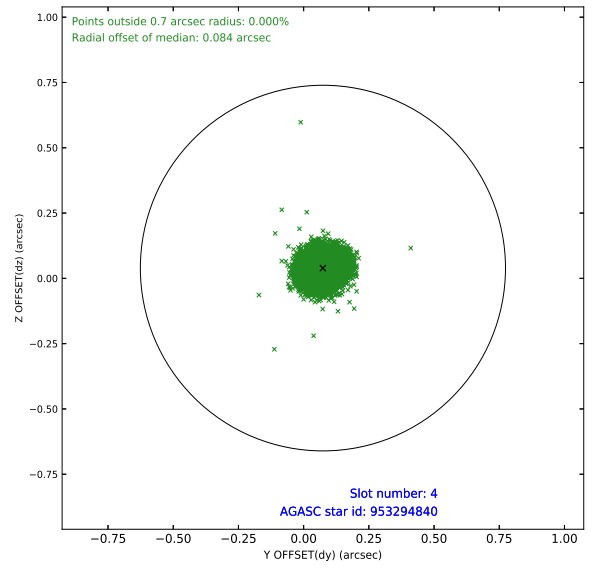
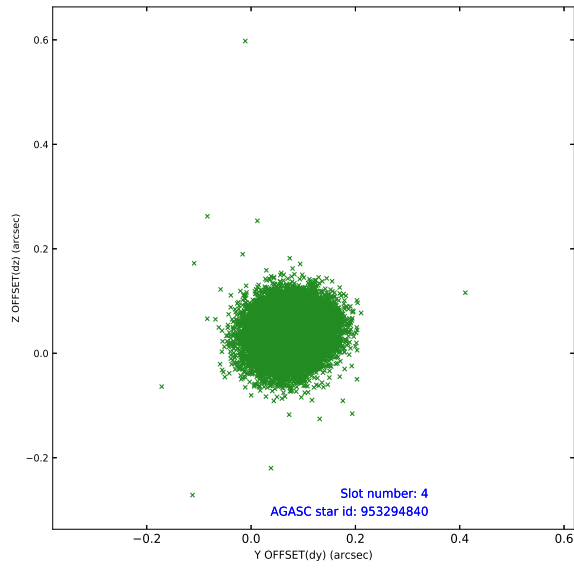
∞

2.4 Star Slots

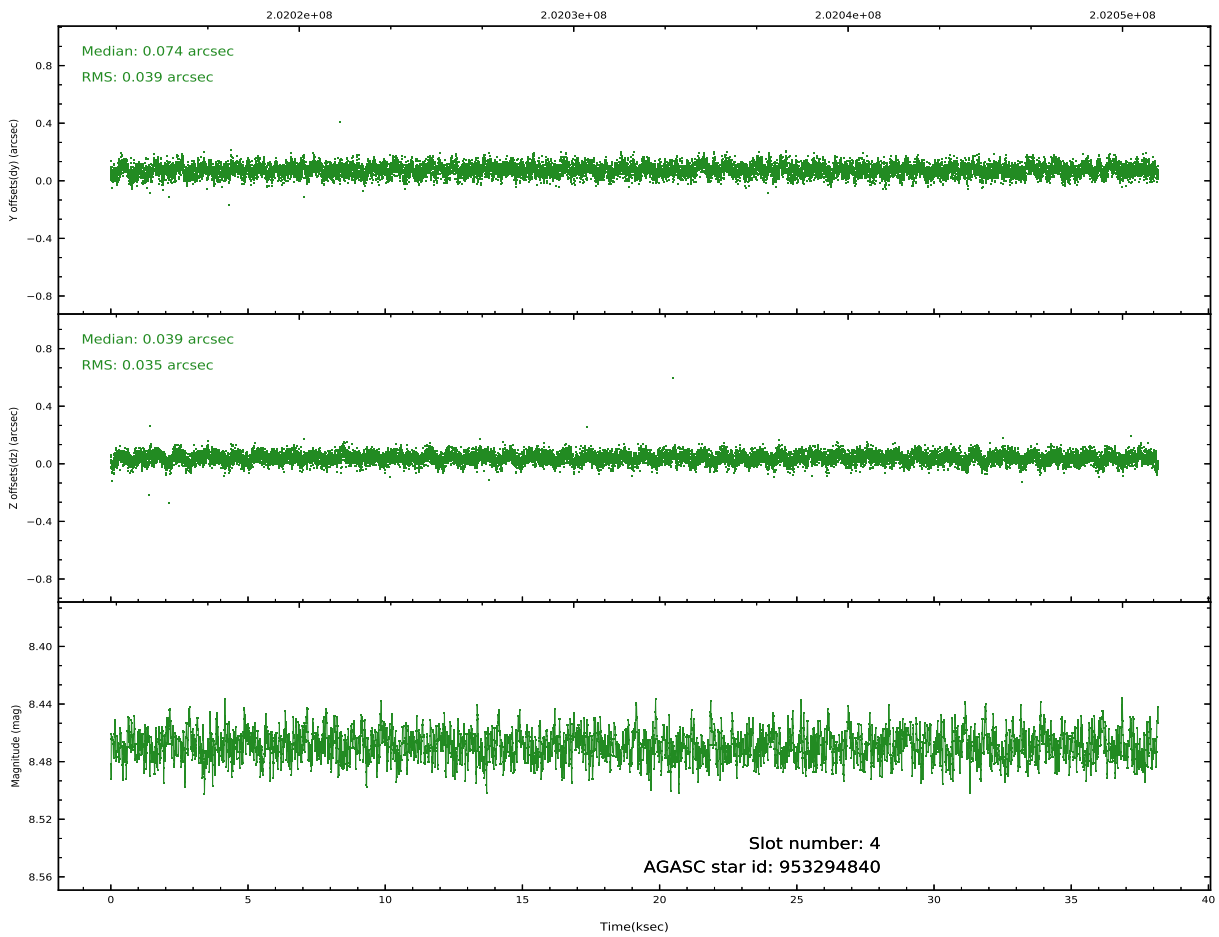
2.4.1 Slot 3



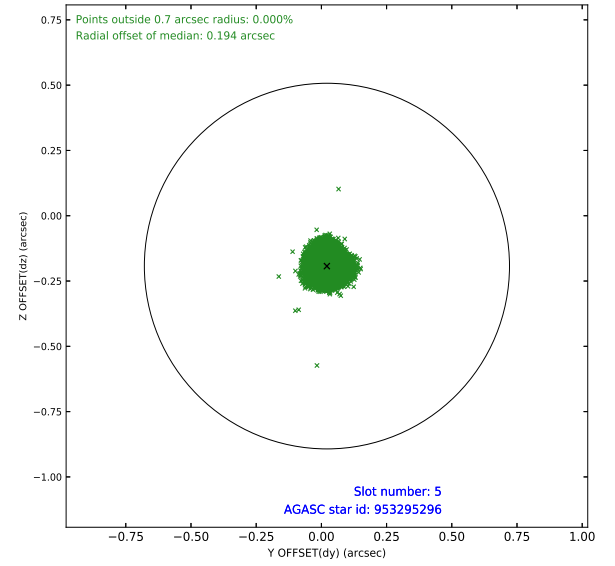
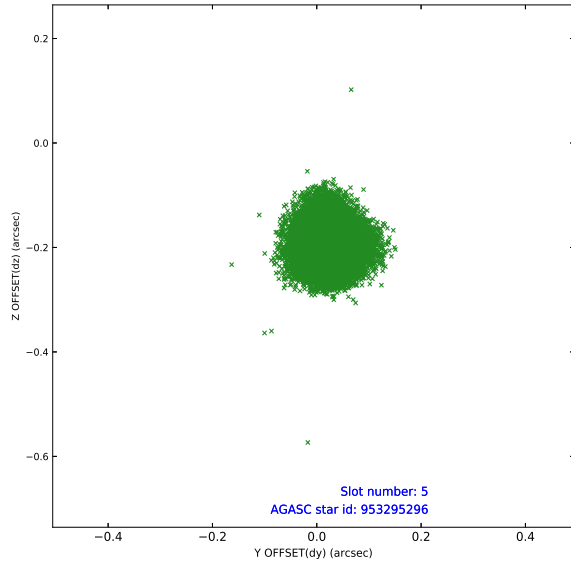
2.4.2 Slot 4



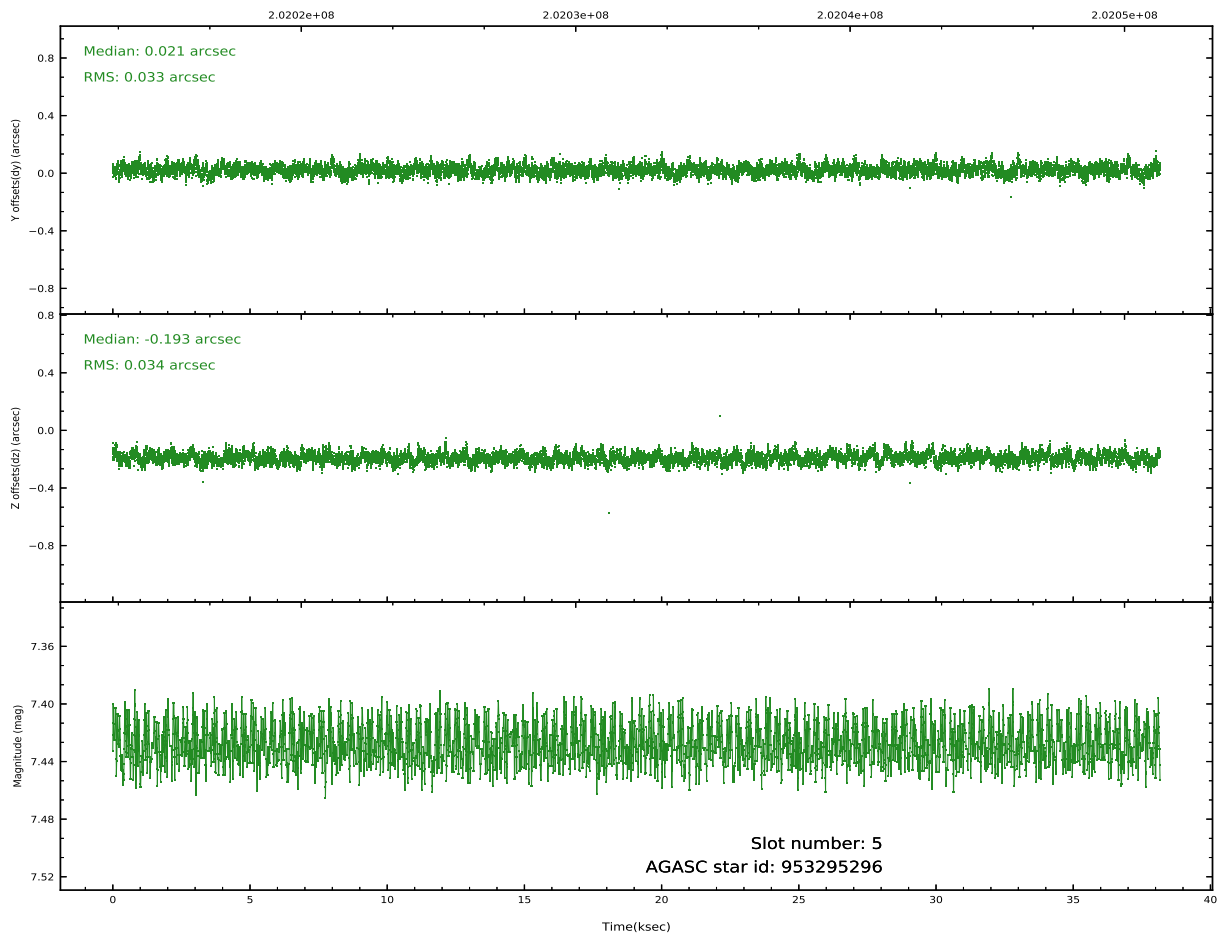
Time (s)



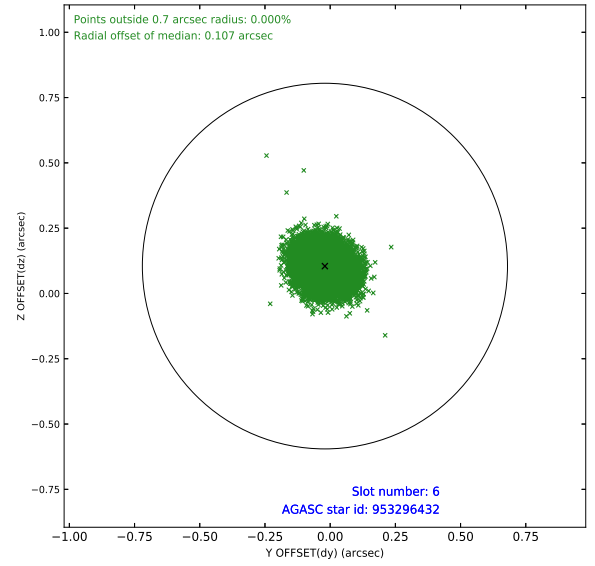
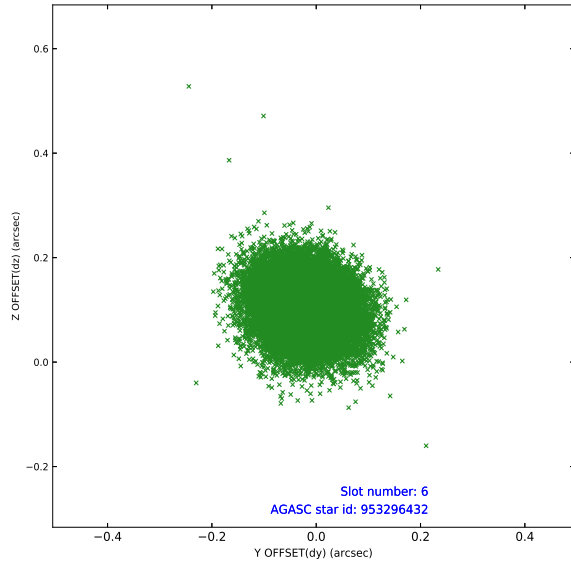
2.4.3 Slot 5



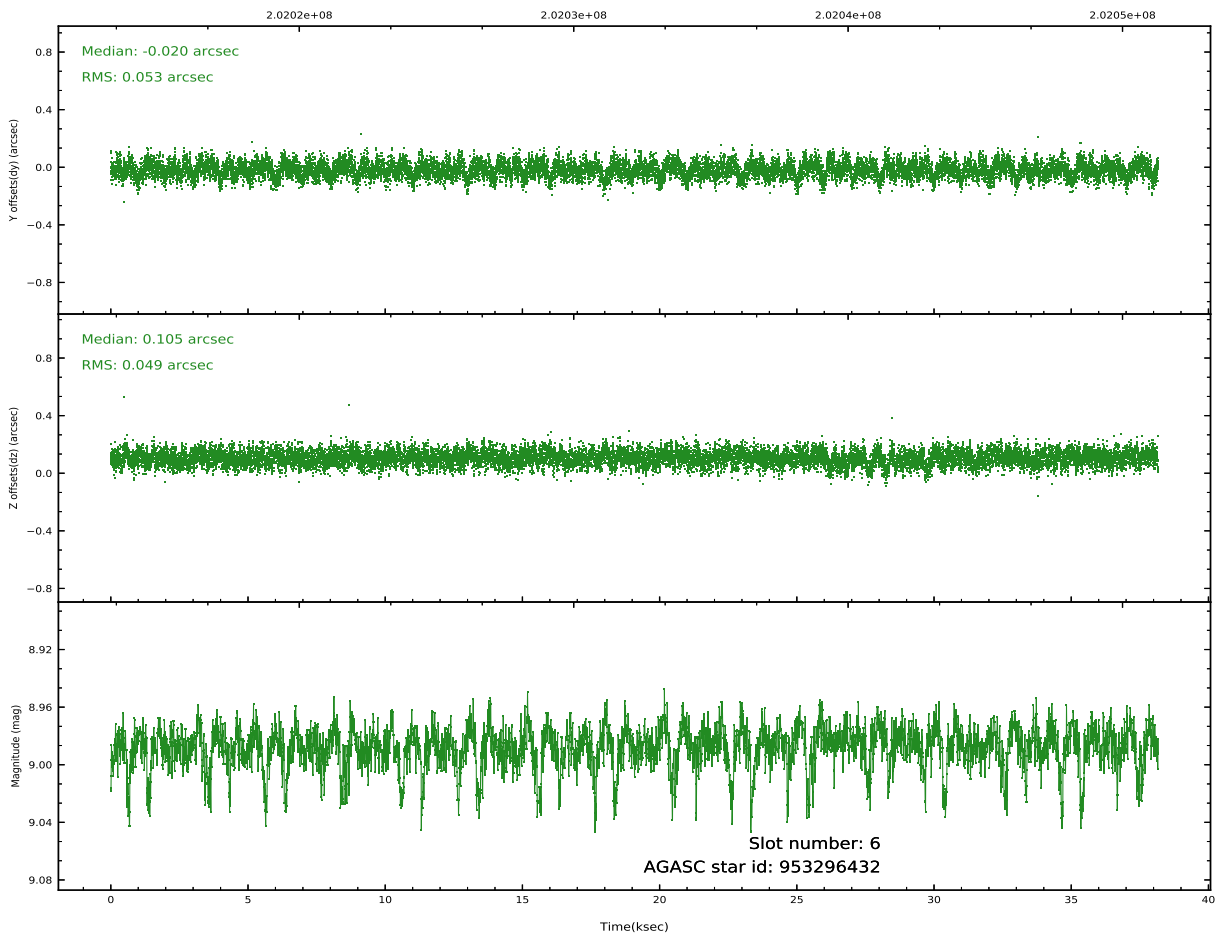
Time (s)



2.4.4 Slot 6

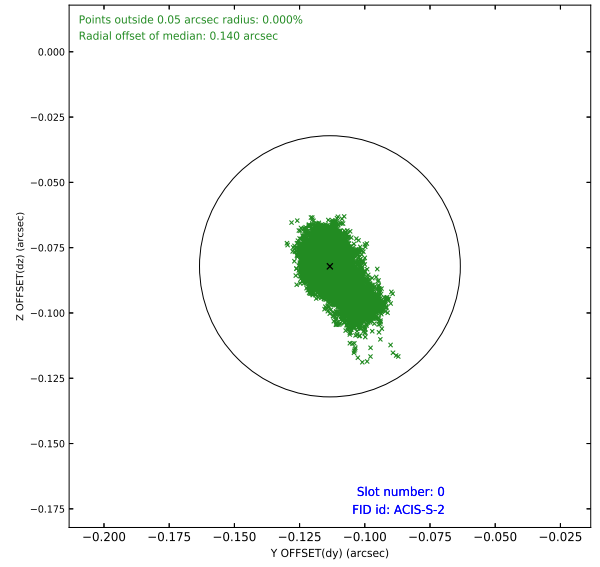
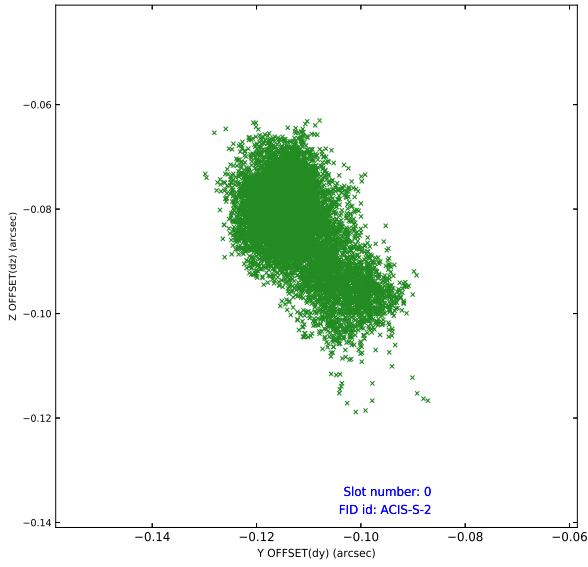


Time (s)

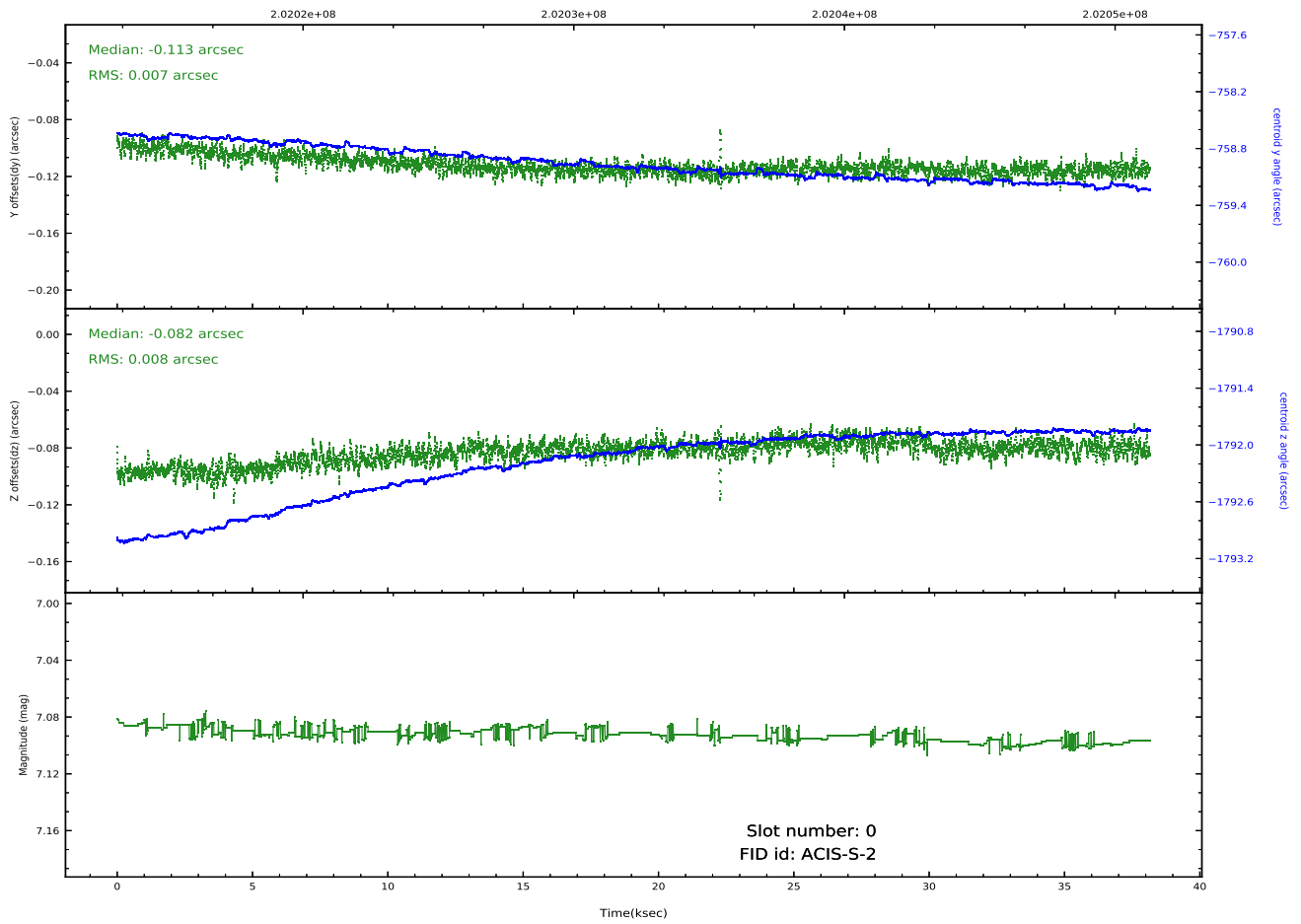


2.5 FID Slots

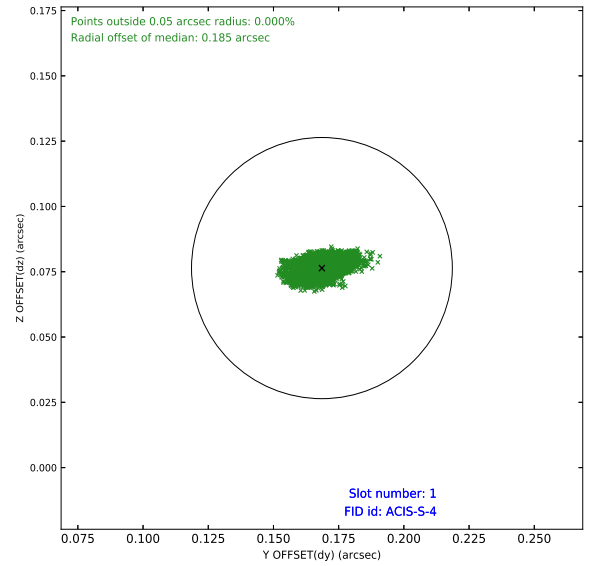
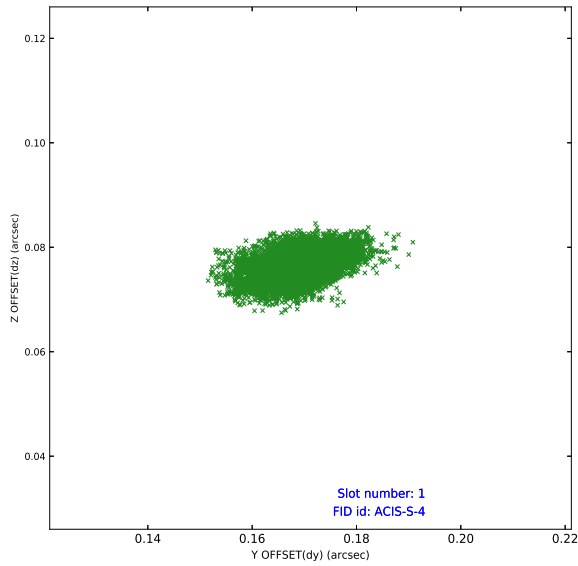
2.5.1 Slot 0



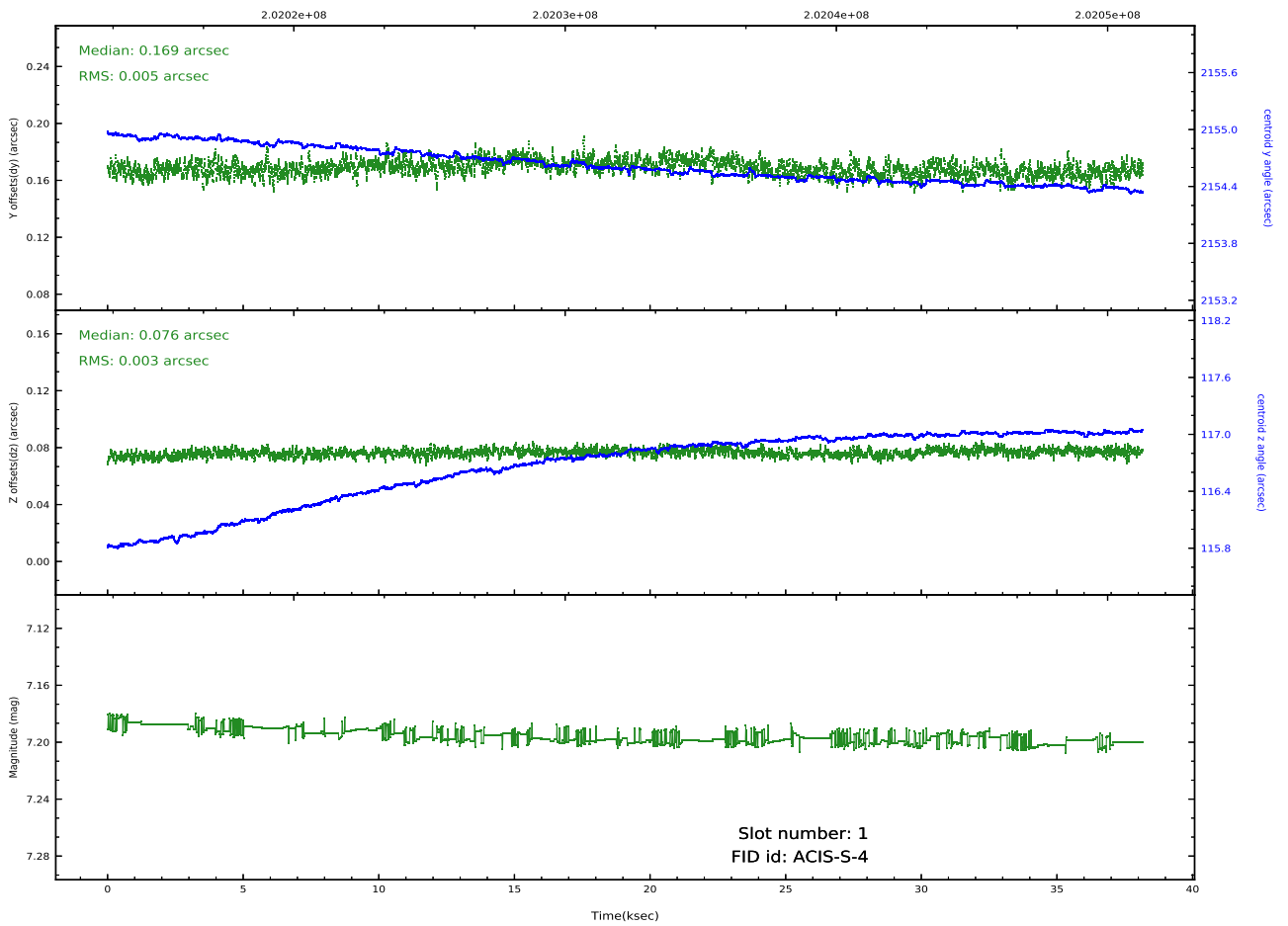
Time (s)



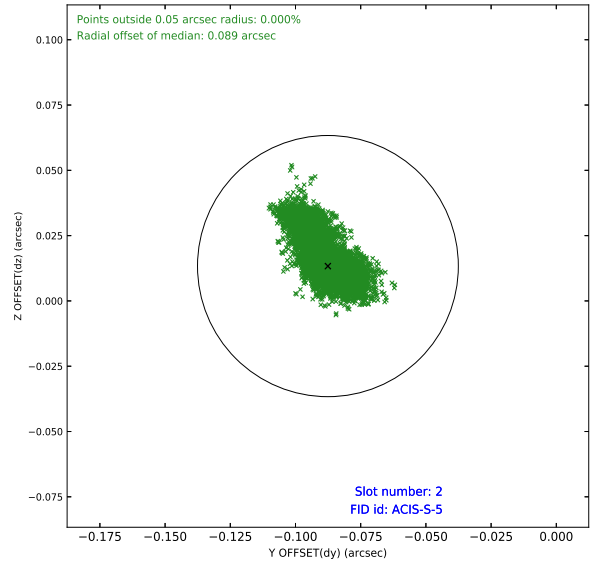
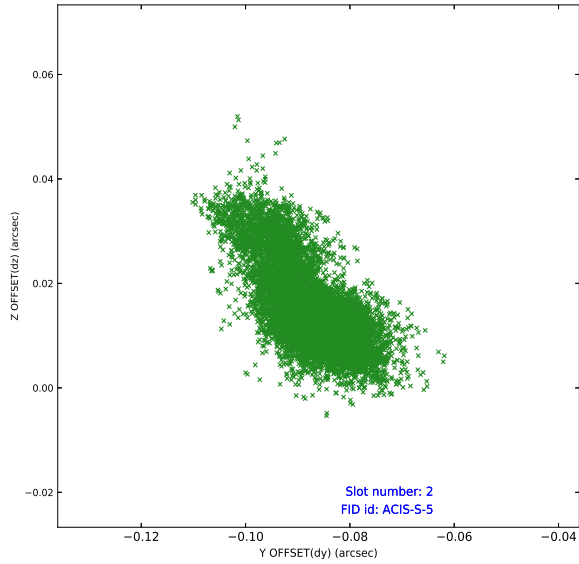
2.5.2 Slot 1



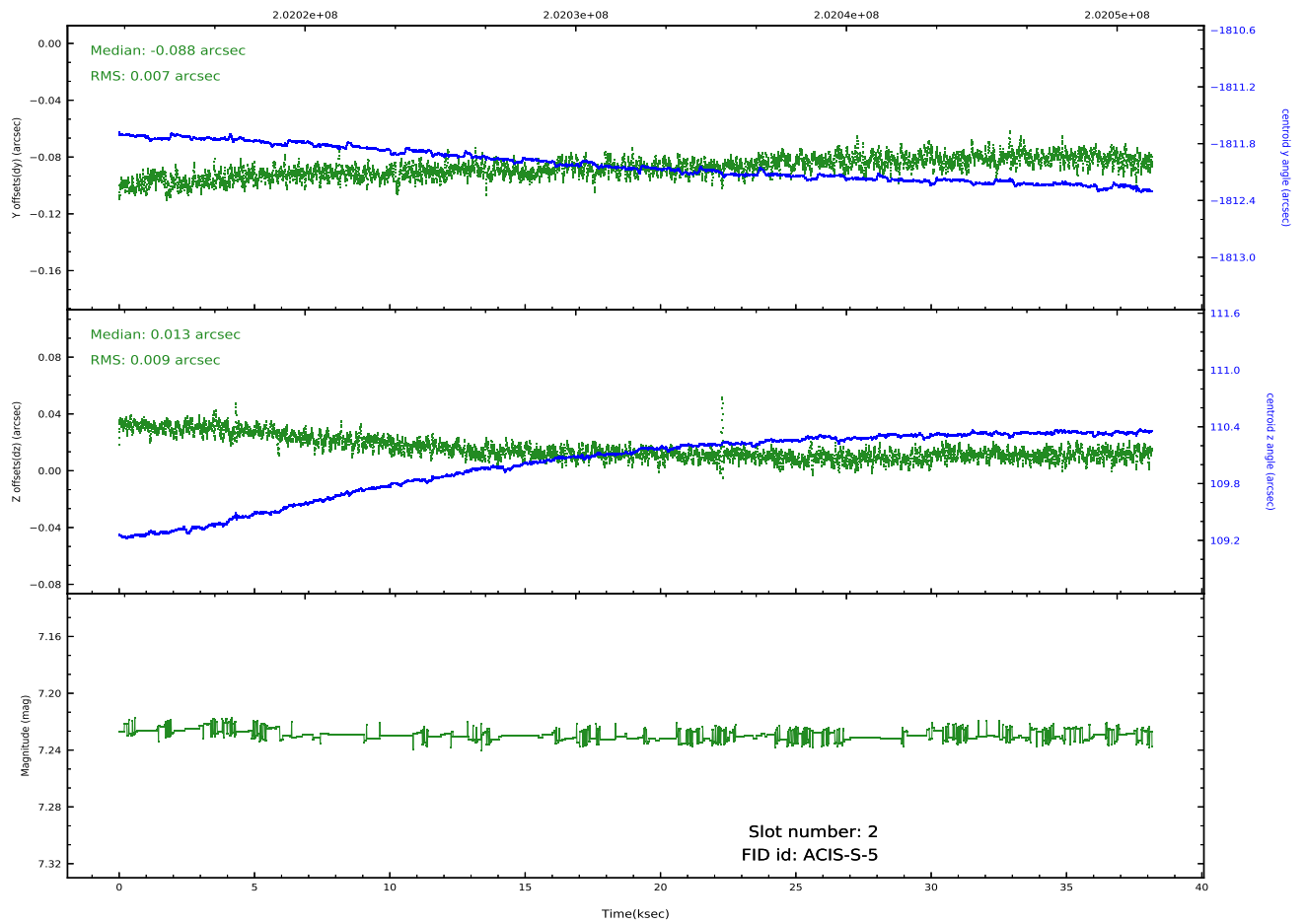
Time (s)



2.5.3 Slot 2

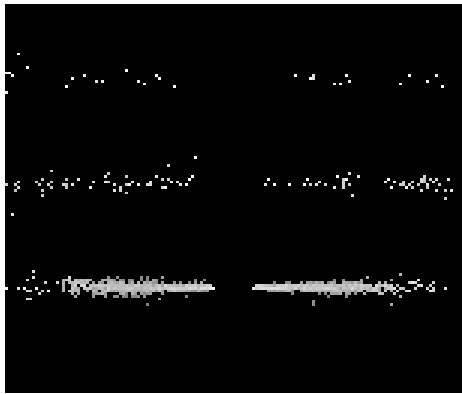


Time (s)

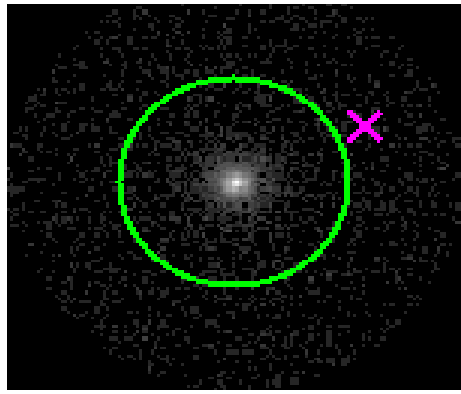


3 Gratings

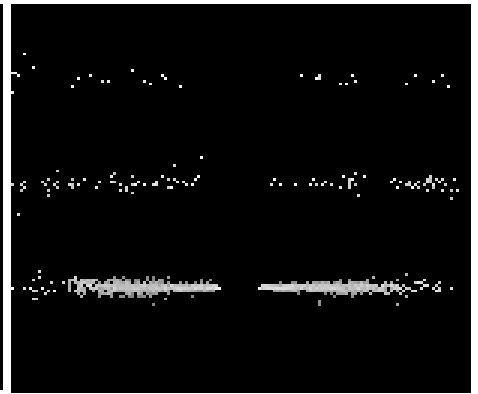
3.1 HEG Arm



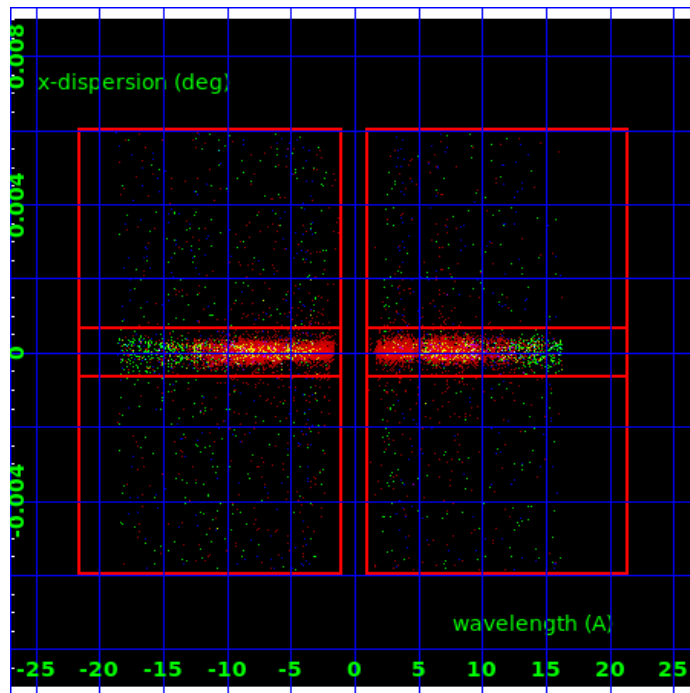
HEG Order Sort 123



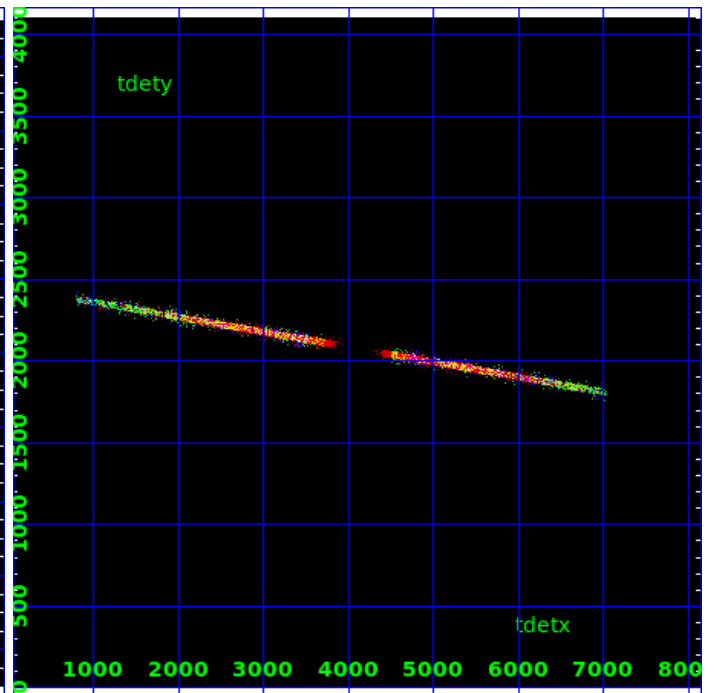
HEG Zero Order



HEG Order Sort ALL

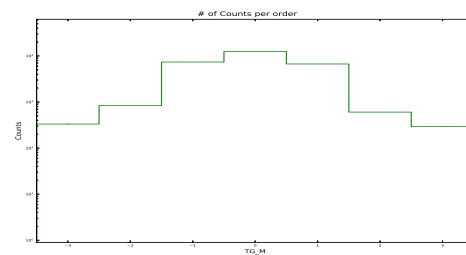


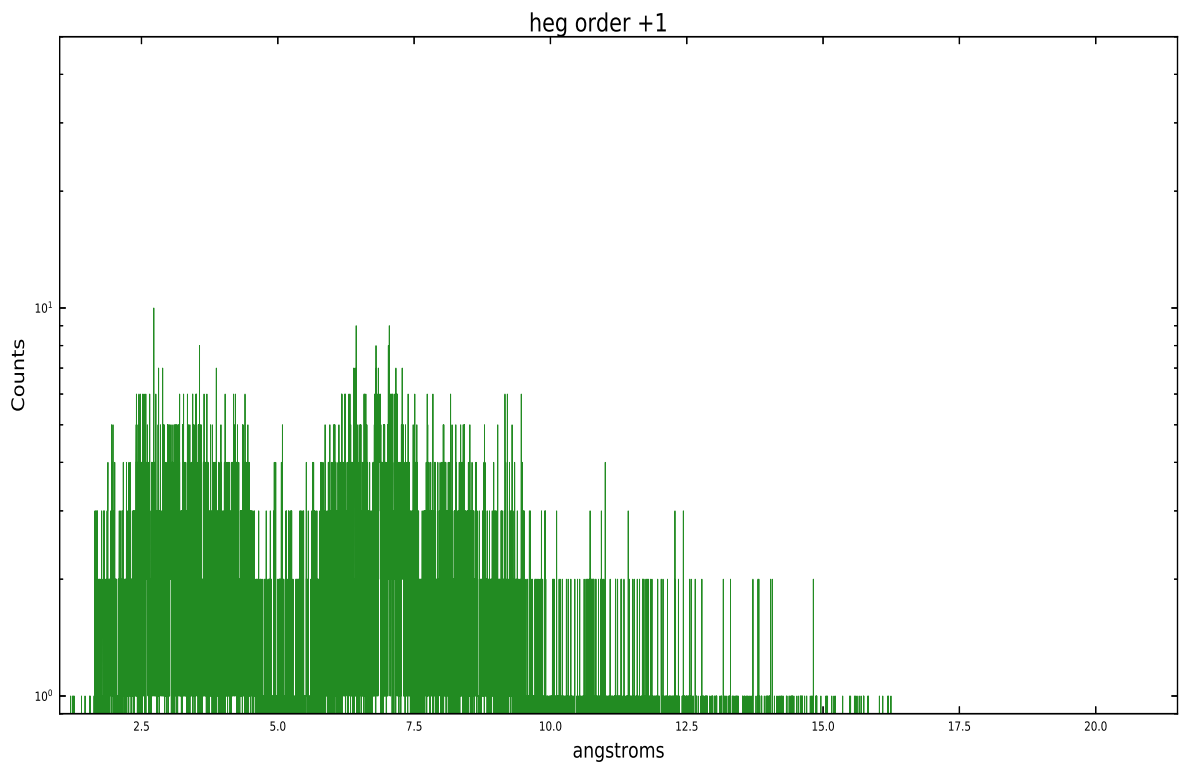
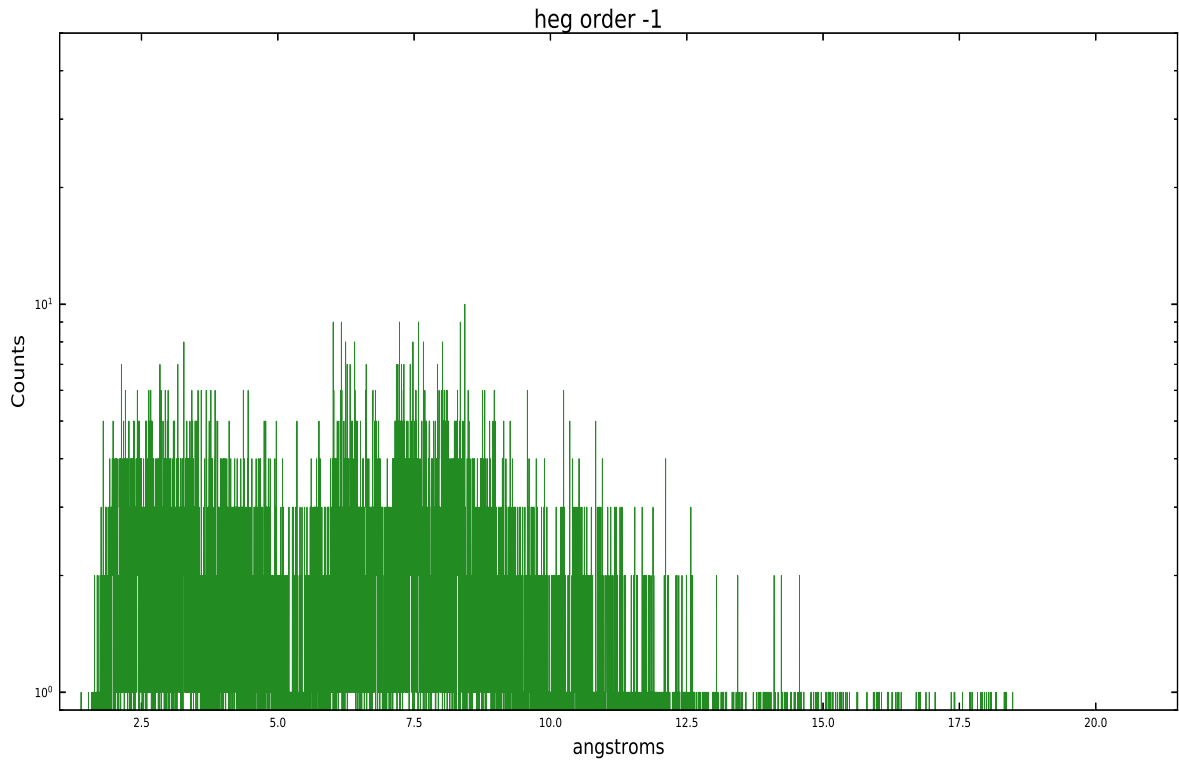
Spot Image HEG



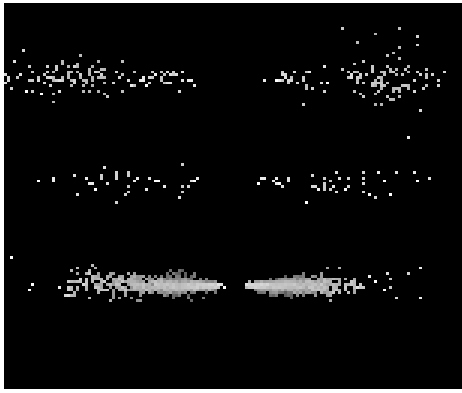
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	332	835	7378	12473	6693	604	294

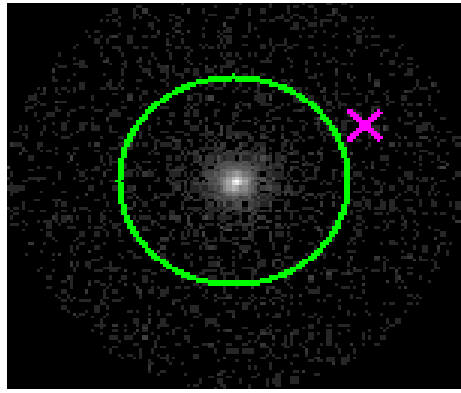




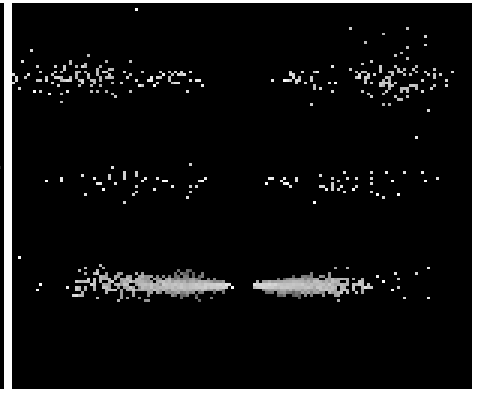
3.2 MEG Arm



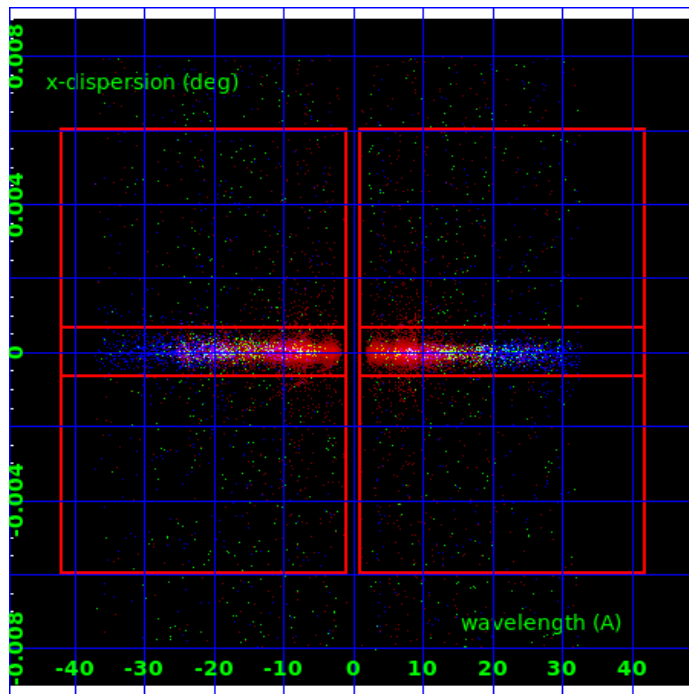
MEG Order Sort 123



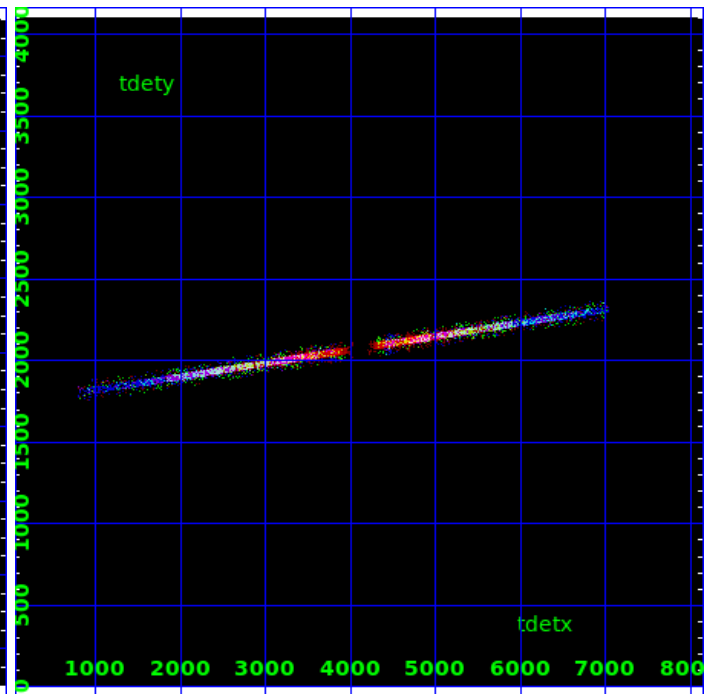
MEG Zero Order



MEG Order Sort ALL

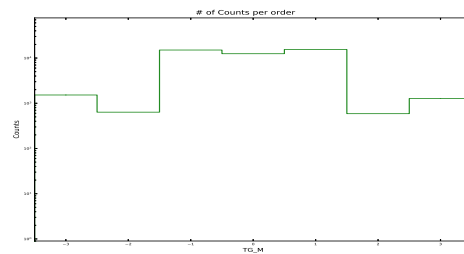


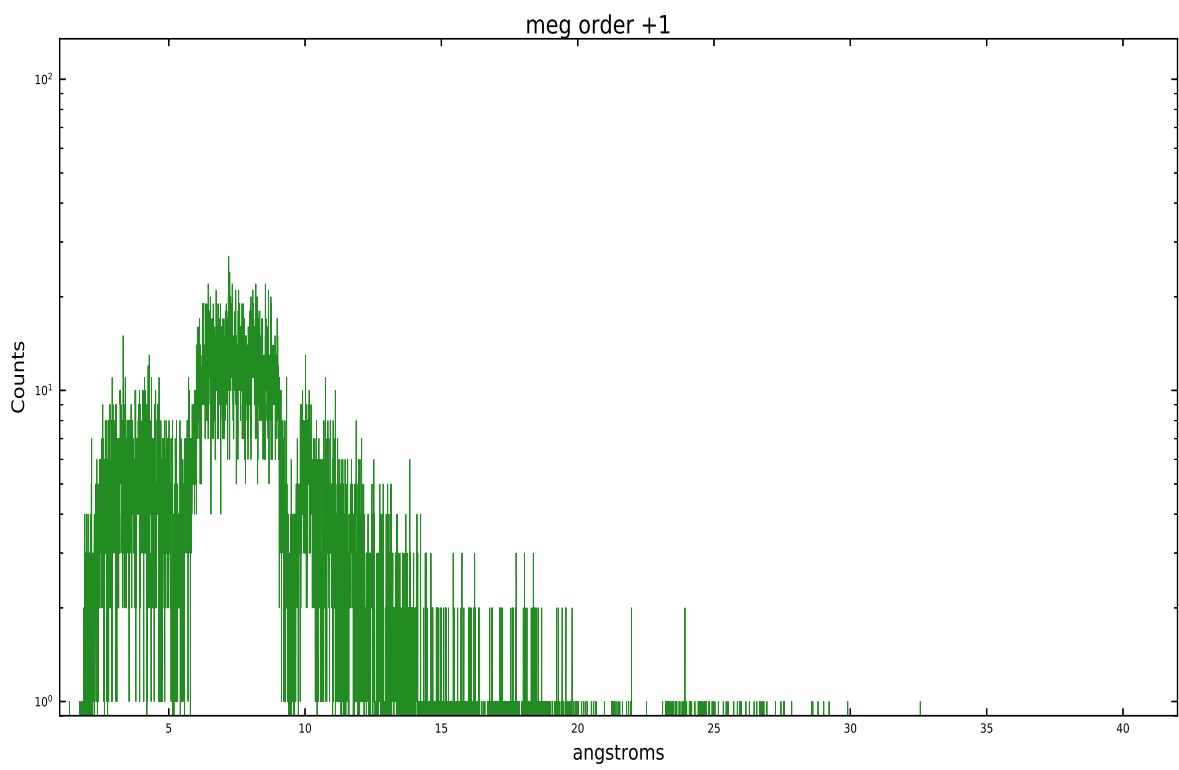
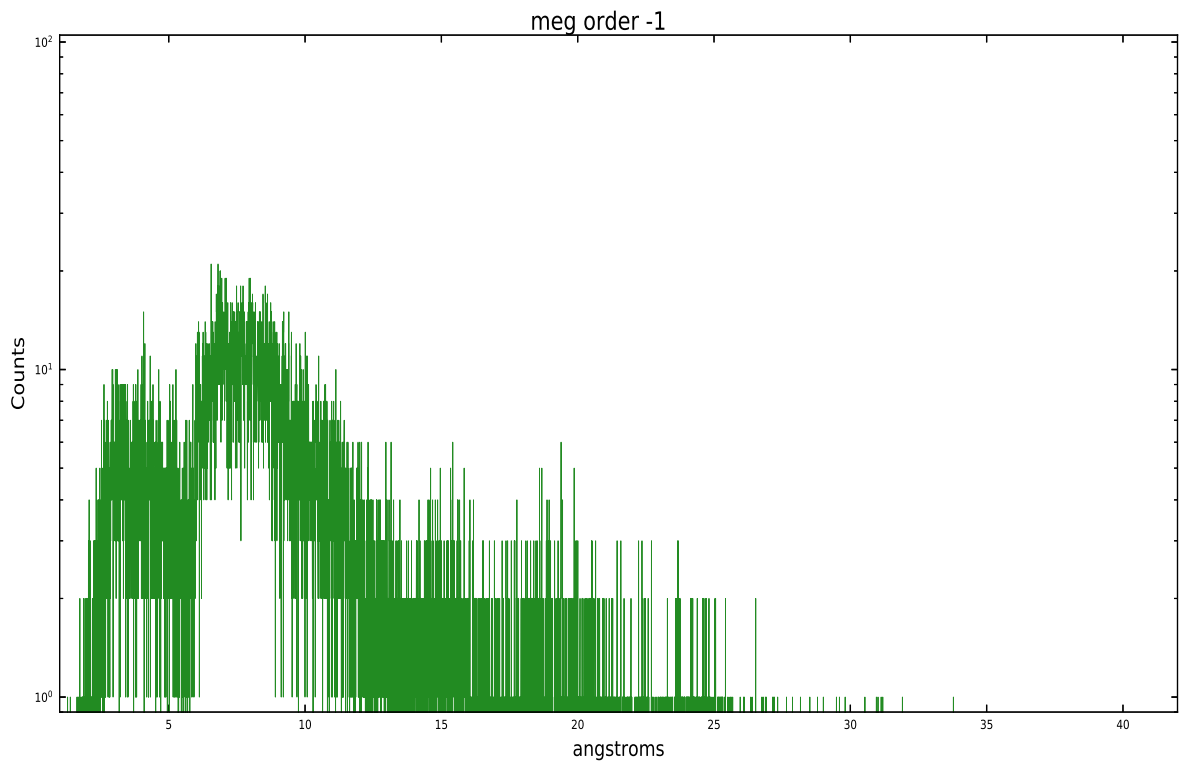
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1524	635	15036	12473	15434	589	1274





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.10.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.165

A.2 Comments