

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6290 - L2 Version 4
Chandra X-Ray Center

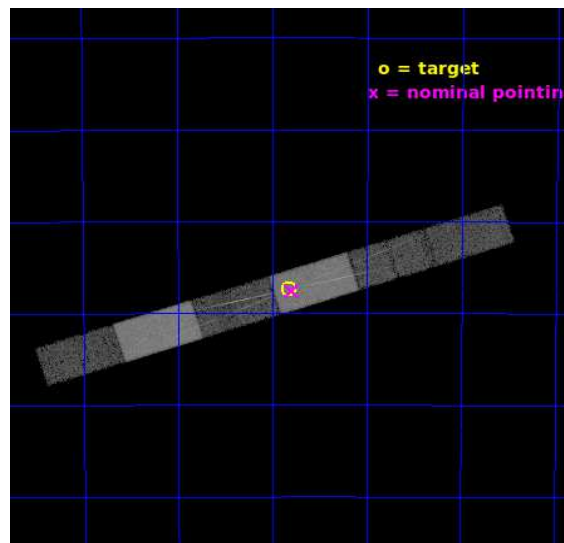
L2 Processing Date : Oct 8 2020

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1 Front

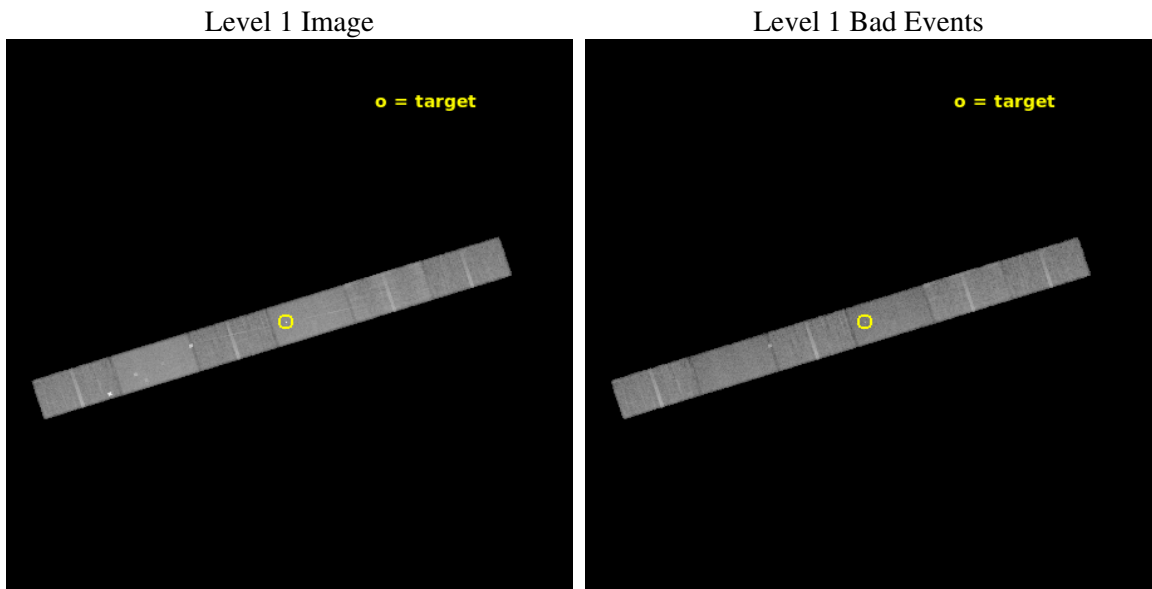
seq_num	400405	Sequence number
obs_id	6290	Observation id
title	Resolving the Fe Line, Warm Absorber, and Scattering Halo of GX339-4 with Joint Chandra/RXTE Observations	Proposal title
observer	Michael Nowak	Principal investigator
object	GX 339-4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.705833	Observer's specified target RA [deg]
dec_targ	-48.789556	Observer's specified target Dec [deg]
ra_nom	255.69817429038	Nominal RA [deg]
dec_nom	-48.792804503605	Nominal Dec [deg]
roll_nom	342.17012586247	Nominal Roll [deg]
revision	4	Processing version of data
ontime	21732.547576994	Sum of GTIs [s]
livetime	21220.265405097	Livetime [s]
ontime4	21732.588616997	Sum of GTIs [s]
ontime5	21732.50653699	Sum of GTIs [s]
ontime6	21732.465496987	Sum of GTIs [s]
ontime7	21732.547576994	Sum of GTIs [s]
ontime8	21732.424456984	Sum of GTIs [s]
ontime9	21732.38341701	Sum of GTIs [s]
l2events	141066	Number of level 2 events



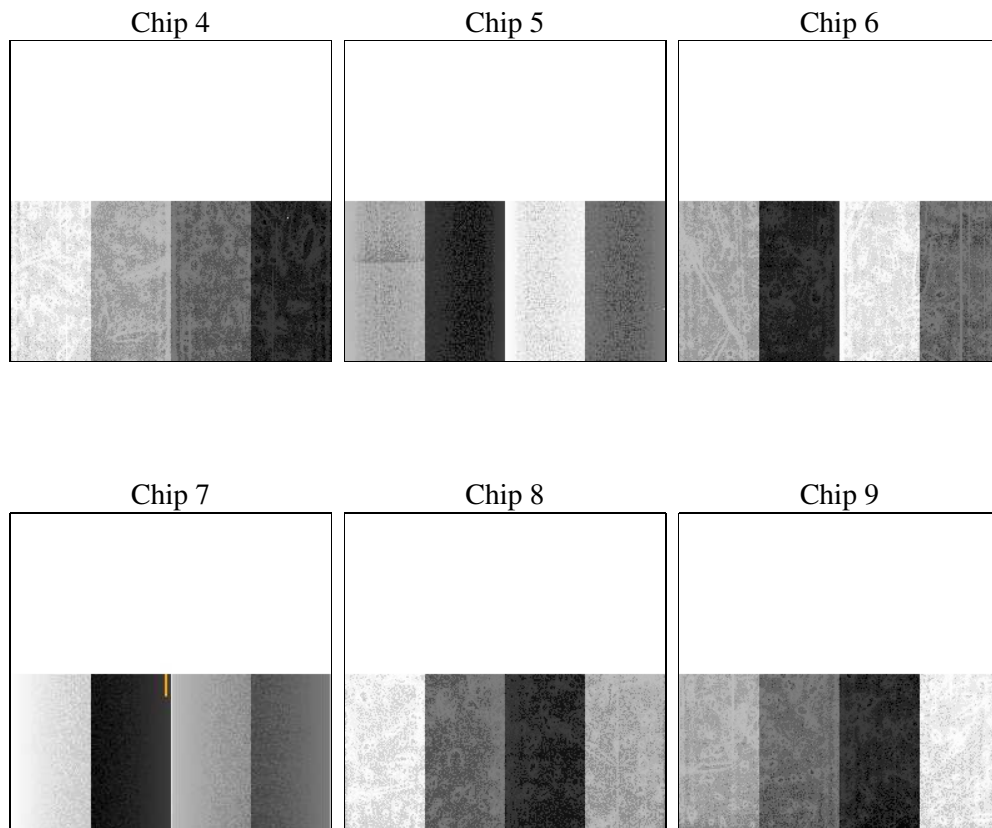
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21660.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	21732.547576994	Sum of GTIs [s]
caldsver	4.9.2	 	ontime4	21732.588616997	Sum of GTIs [s]
date	2020-10-09T00:49:03	Date and time of file creation	ontime5	21732.50653699	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	21732.465496987	Sum of GTIs [s]
			ontime7	21732.547576994	Sum of GTIs [s]
			ontime8	21732.424456984	Sum of GTIs [s]
			ontime9	21732.38341701	Sum of GTIs [s]
			l1events	621919	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			ra_pos	(4050.45 4118.51)	src1a sky level position

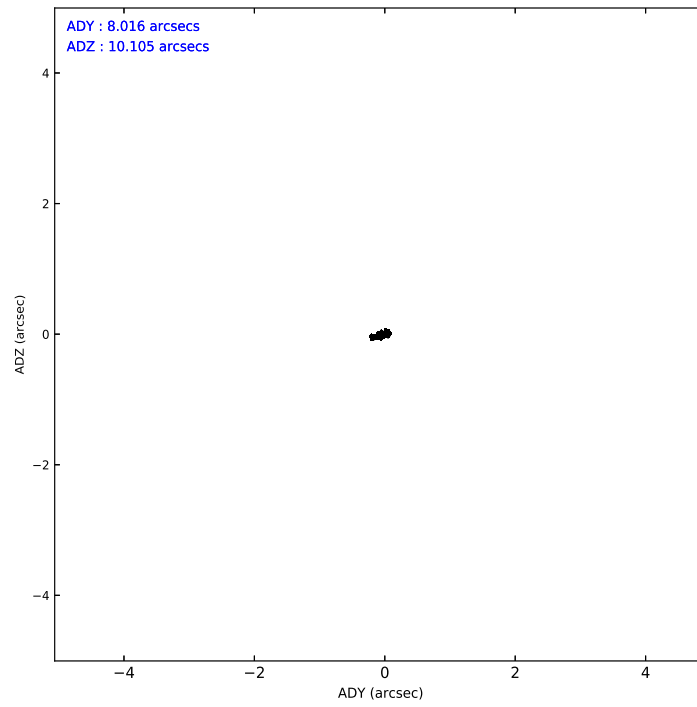
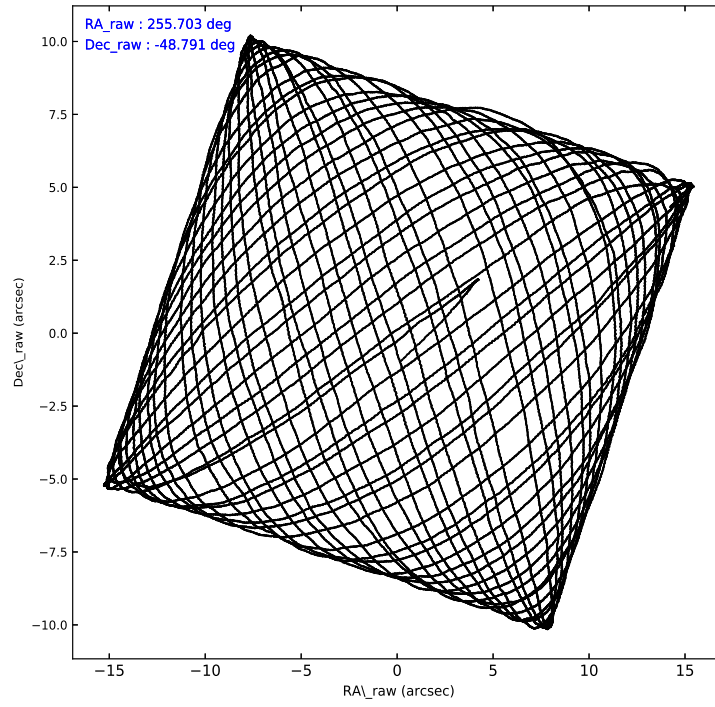
2.1.4 Events

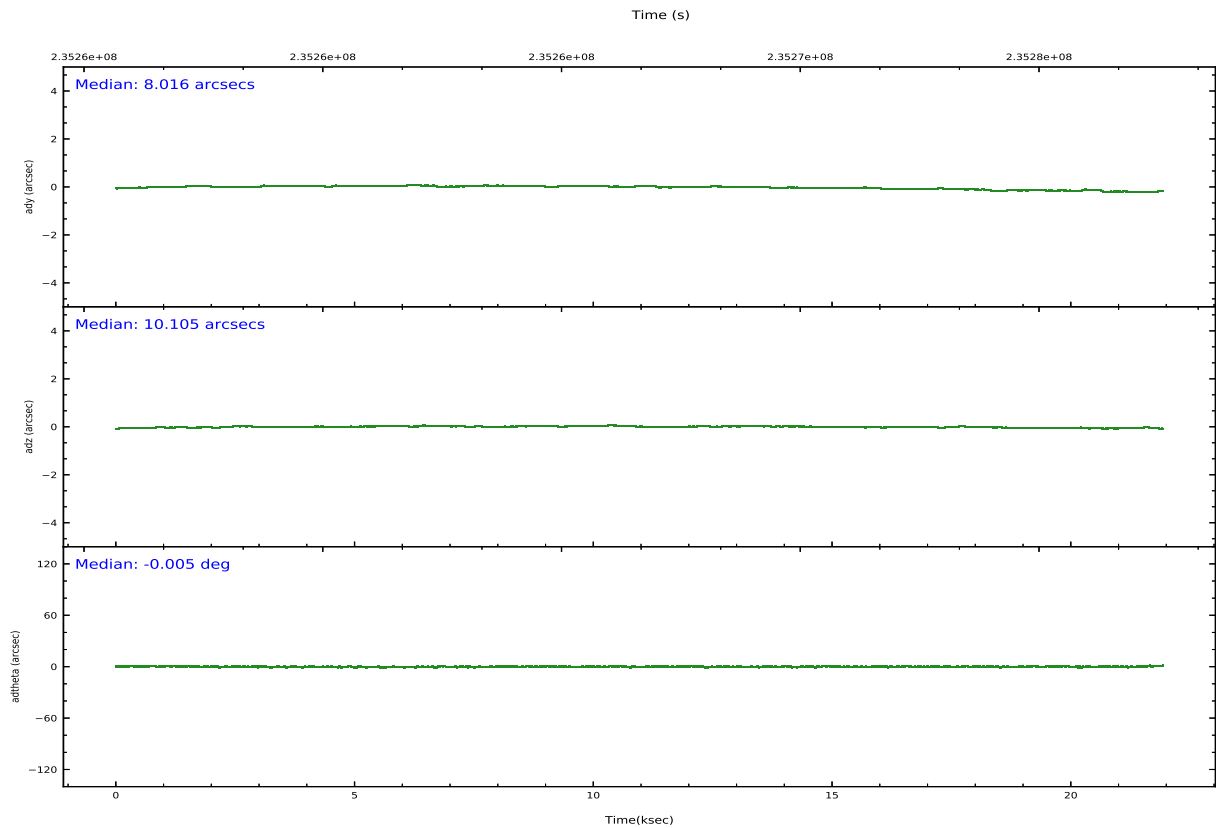
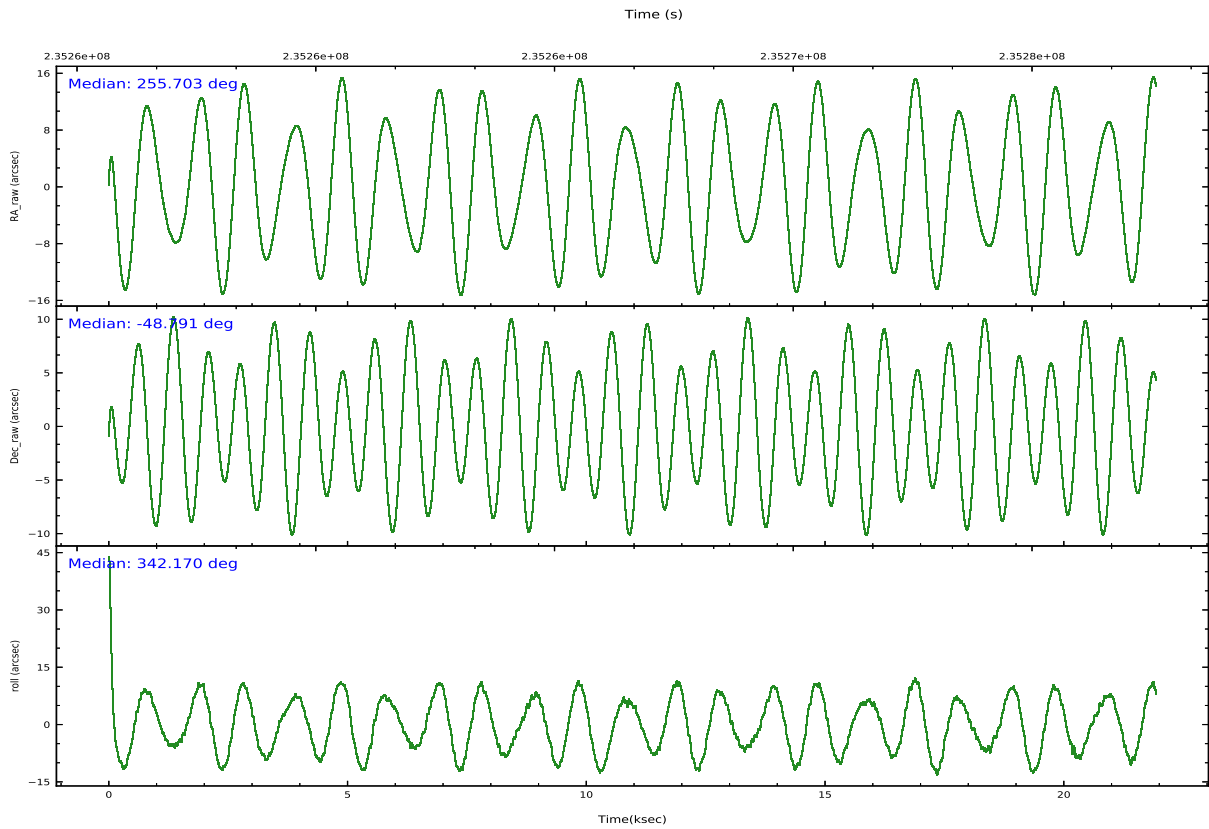
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	100874	125182	87426	114817	111681	81939	grade 0 events	13979	7032	5359	4949	8051	4265
rejected events	80333	66533	75074	63850	86136	71089		13%	5%	6%	4%	7%	5%
rejected %	79%	53%	85%	55%	77%	86%	grade 1 events	91	651	28	103	54	46
								0%	0%	0%	0%	0%	0%
							grade 2 events	2346	16192	2398	10615	5396	2062
								2%	12%	2%	9%	4%	2%
							grade 3 events	1230	3382	1234	4872	2803	1312
								1%	2%	1%	4%	2%	1%
							grade 4 events	1201	3289	1275	4746	2507	1189
								1%	2%	1%	4%	2%	1%
							grade 5 events	3446	10125	3771	10331	4745	3919
								3%	8%	4%	8%	4%	4%
							grade 6 events	1787	28762	2086	25787	6791	2022
								1%	22%	2%	22%	6%	2%
							grade 7 events	76794	55749	71275	53414	81334	67124
								76%	44%	81%	46%	72%	81%

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	255.662627	255.69817429038	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	-48.796789	-48.792804503605	Subarray start row	1	1
[deg] Pointing Roll	341.986619	342.17012586247	Subarray row count	512	512
[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	1.7
[mm] SIM translation stage pos	-183.992523	-183.9875365069546			
[mm] SIM translation stage offset	-6.14	-6.144986076053243			
[s] Observation start time (MET)	235255939.184000	235254954.6997			
Observation start date	2005-06-15T20:51:15	2005-06-15T20:35:54			
[s] Observation end time (MET)	235277599.184000	235278350.83827			
Observation end date	2005-06-16T02:52:15	2005-06-16T03:05:50			
Read mode	TIMED	TIMED			

2.3 Aspect



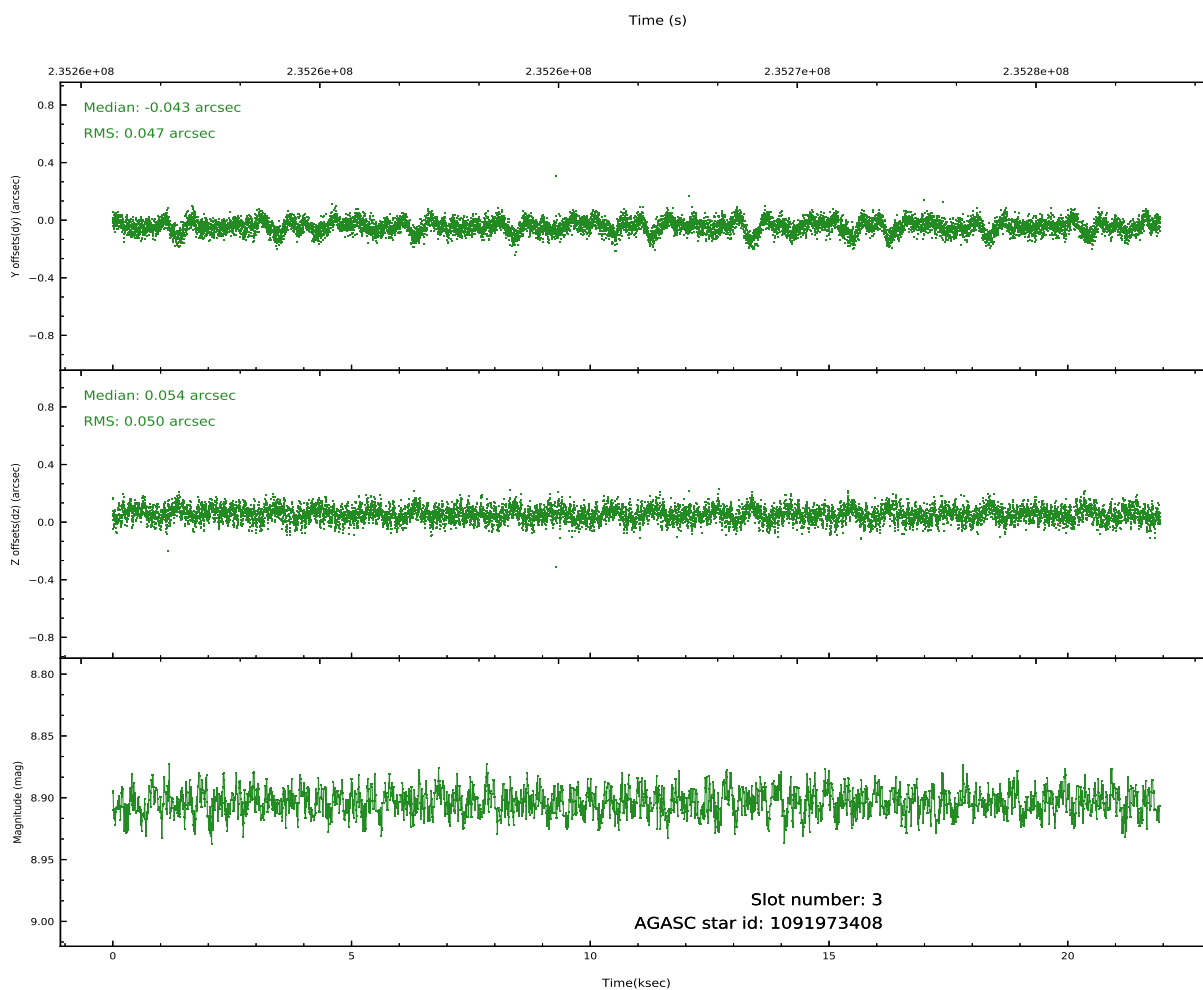
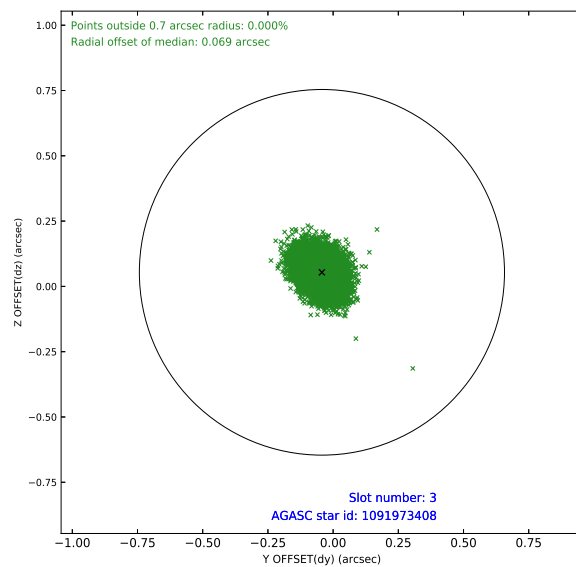
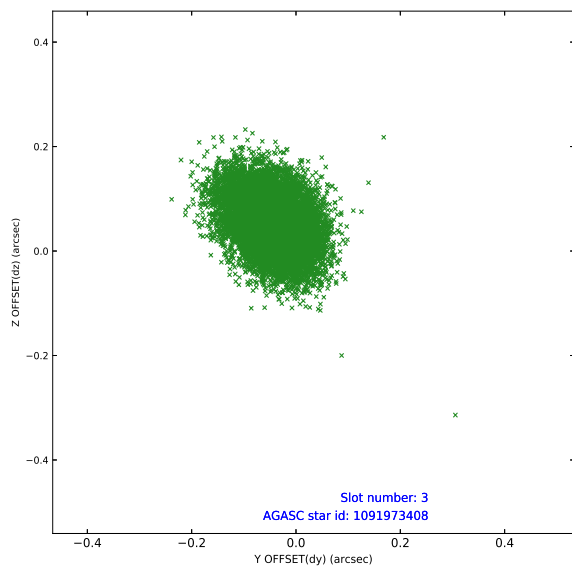


Slot Statistics

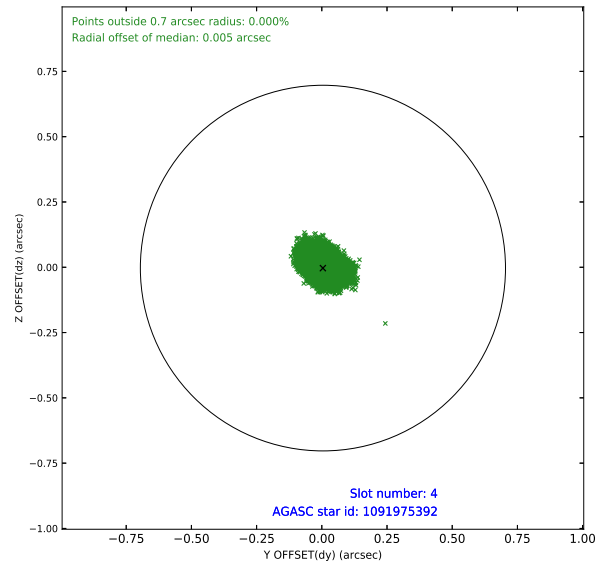
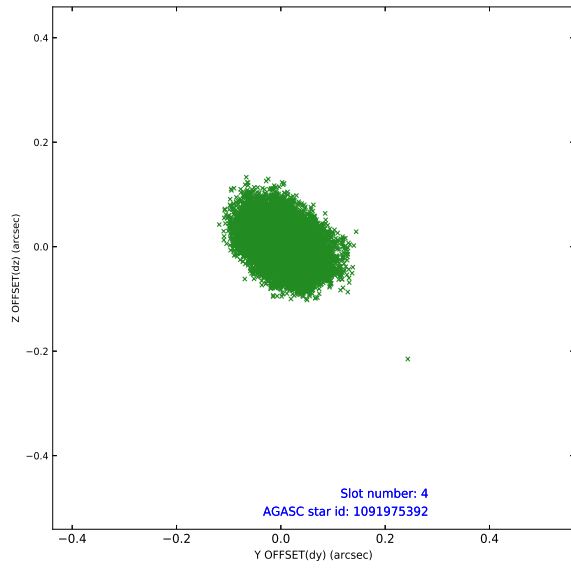
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.08	5349	1.000	-0.153	-0.138	0.006	0.011	0.000000	0.000000	-760.45	-1858
1	FID		ACIS-S-4	7.18	5350	1.000	0.106	0.081	0.006	0.011	0.000000	0.000000	2152.98	50
2	FID		ACIS-S-6	7.40	5349	1.000	0.019	0.065	0.007	0.012	0.000000	0.000000	401.86	687
3	GUIDE	used	1091973408	8.90	10697	1.000	-0.043	0.054	0.073	0.120	255.800233	-48.601800	94.63	768
4	GUIDE	used	1091975392	6.40	10699	1.000	0.004	-0.003	0.063	0.098	255.805002	-48.336791	-188.03	1680
5	GUIDE	used	1092485728	6.88	10699	1.000	0.106	0.005	0.059	0.096	254.773222	-48.875124	-1911.12	-930
6	GUIDE	used	1092491384	9.12	10692	1.000	-0.088	-0.037	0.086	0.139	254.923973	-49.184437	-1218.52	-1872
7	GUIDE	used	1091962216	9.47	10686	1.000	0.014	-0.019	0.100	0.163	255.189308	-47.995738	-1975.38	2386

2.4 Star Slots

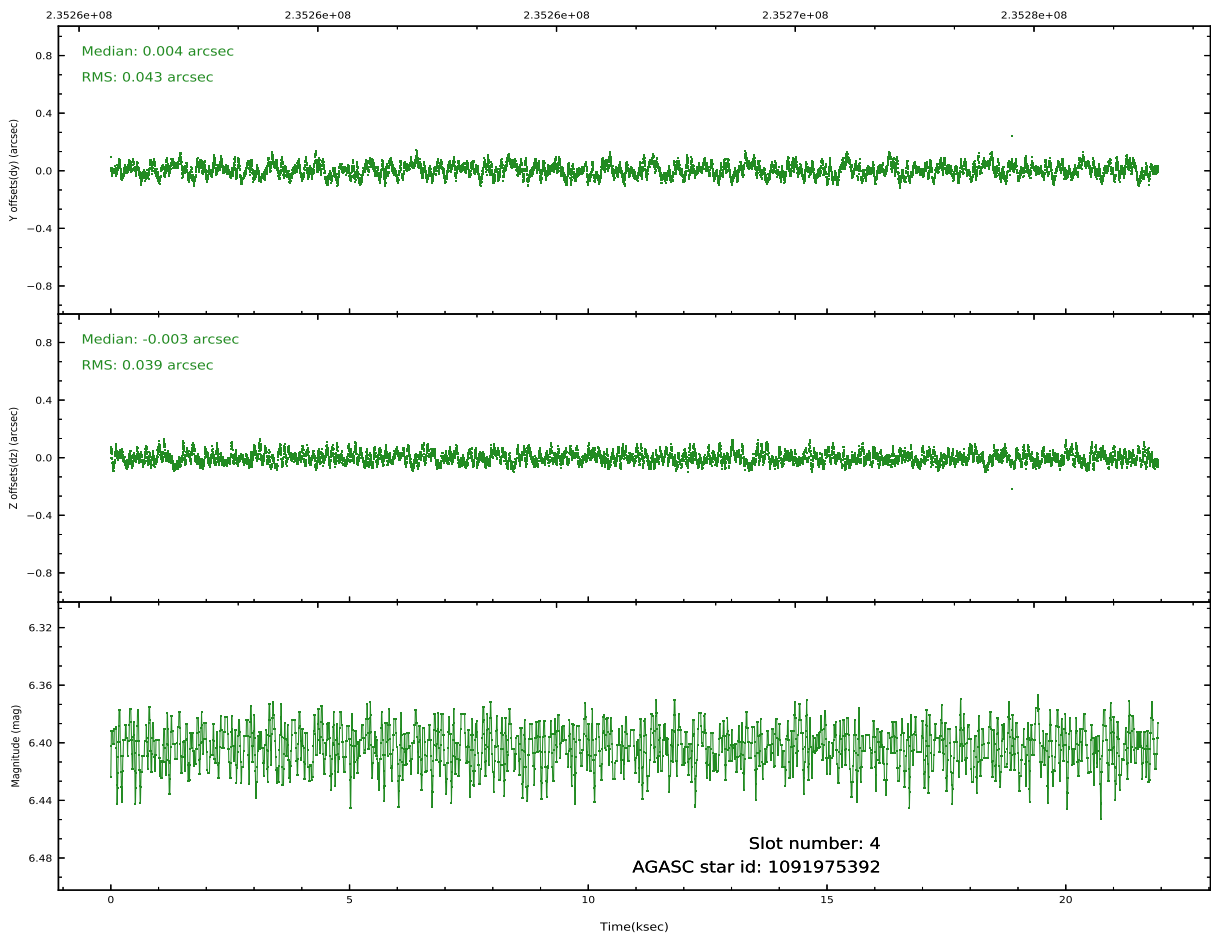
2.4.1 Slot 3



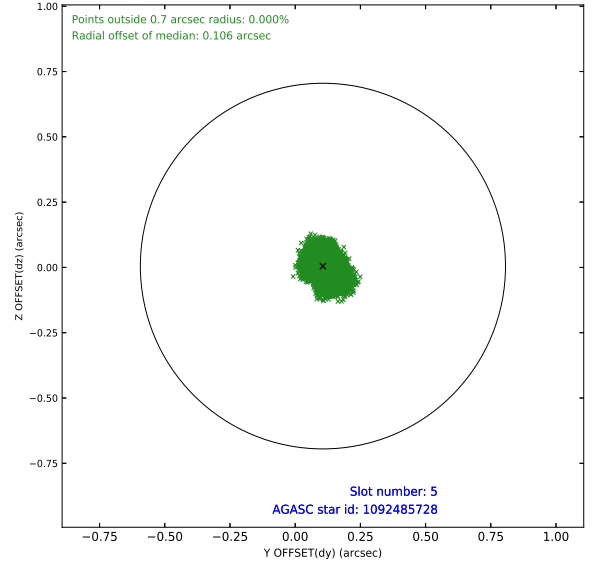
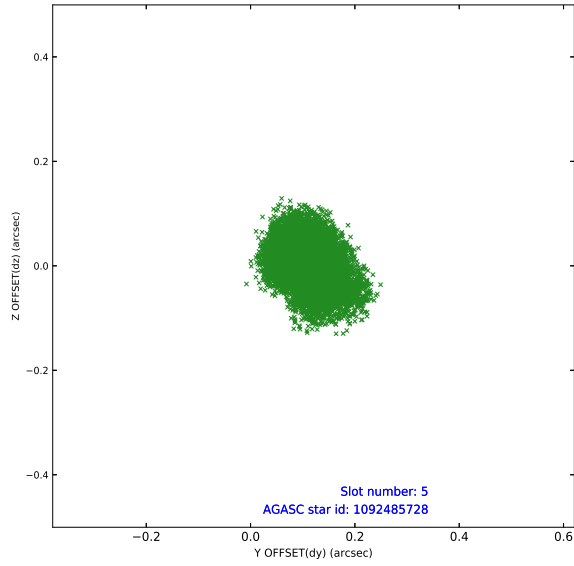
2.4.2 Slot 4



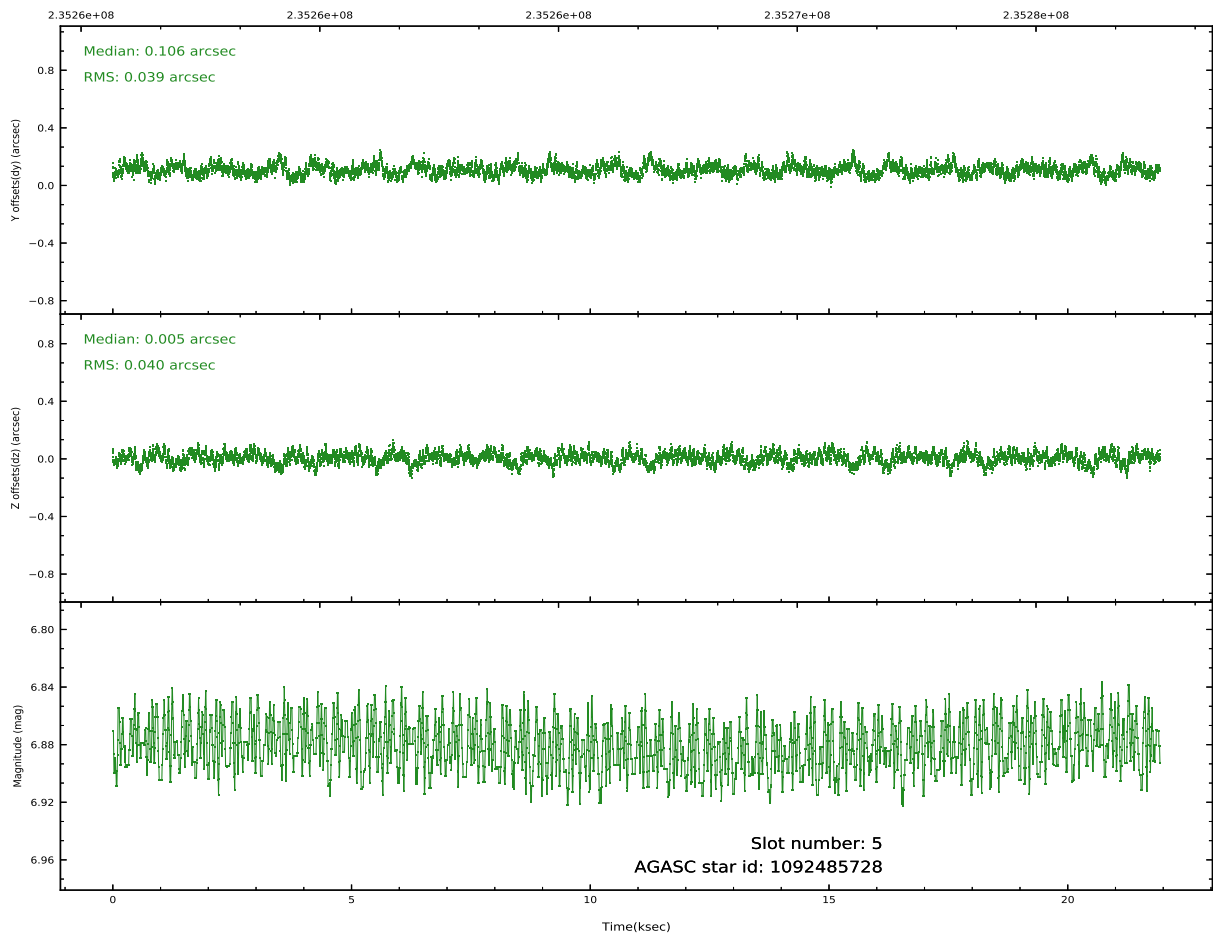
Time (s)



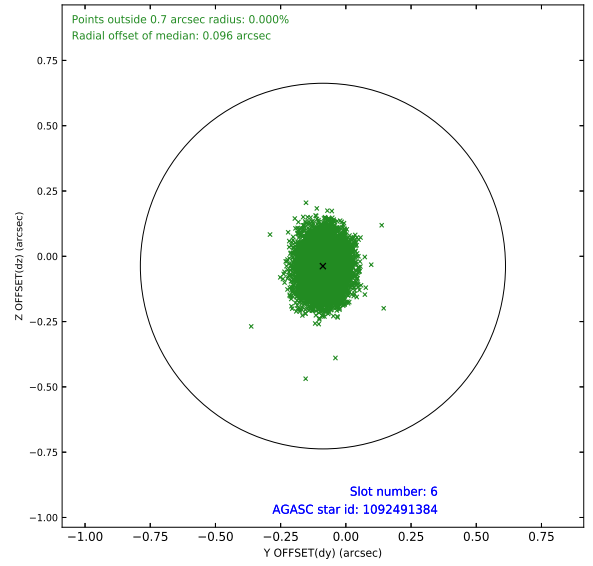
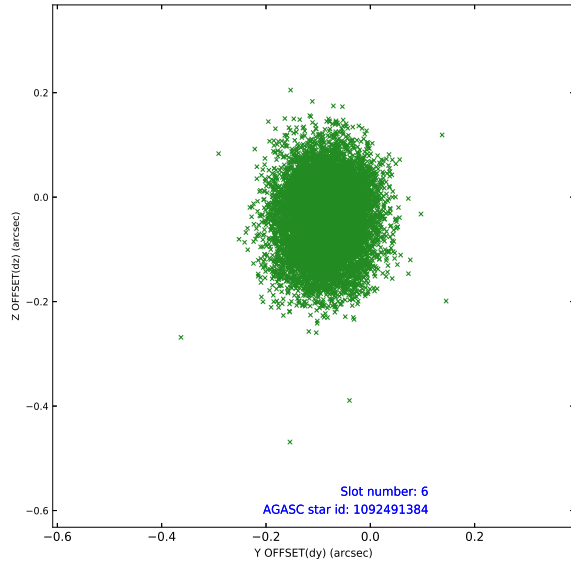
2.4.3 Slot 5



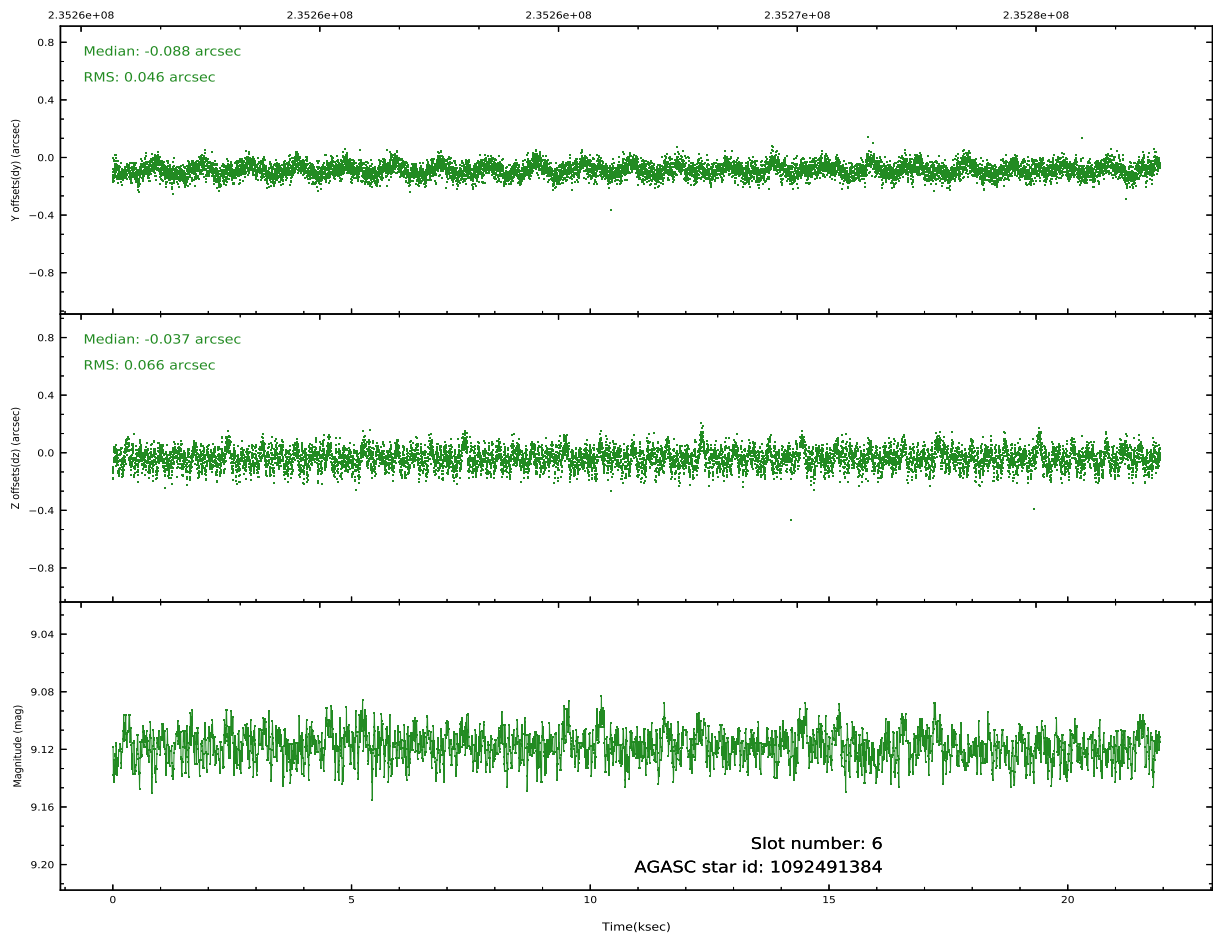
Time (s)



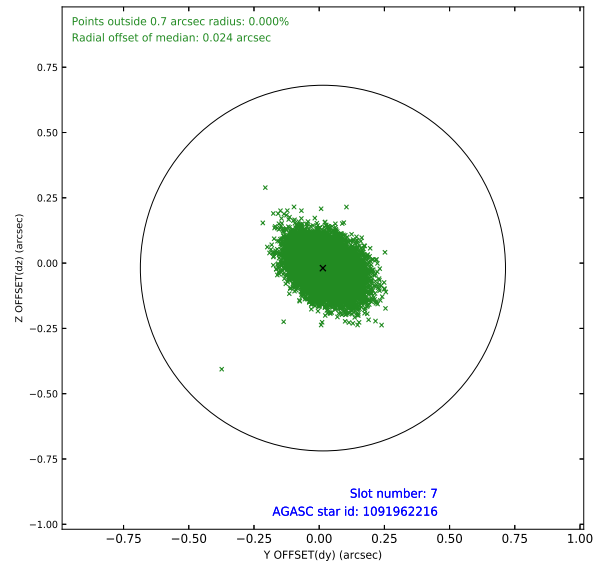
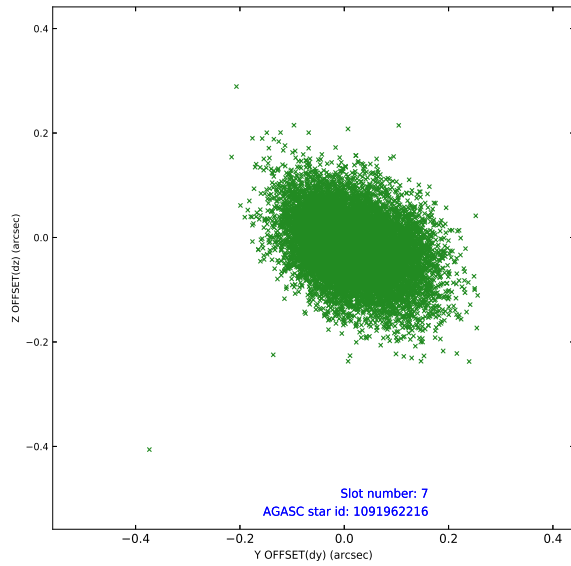
2.4.4 Slot 6



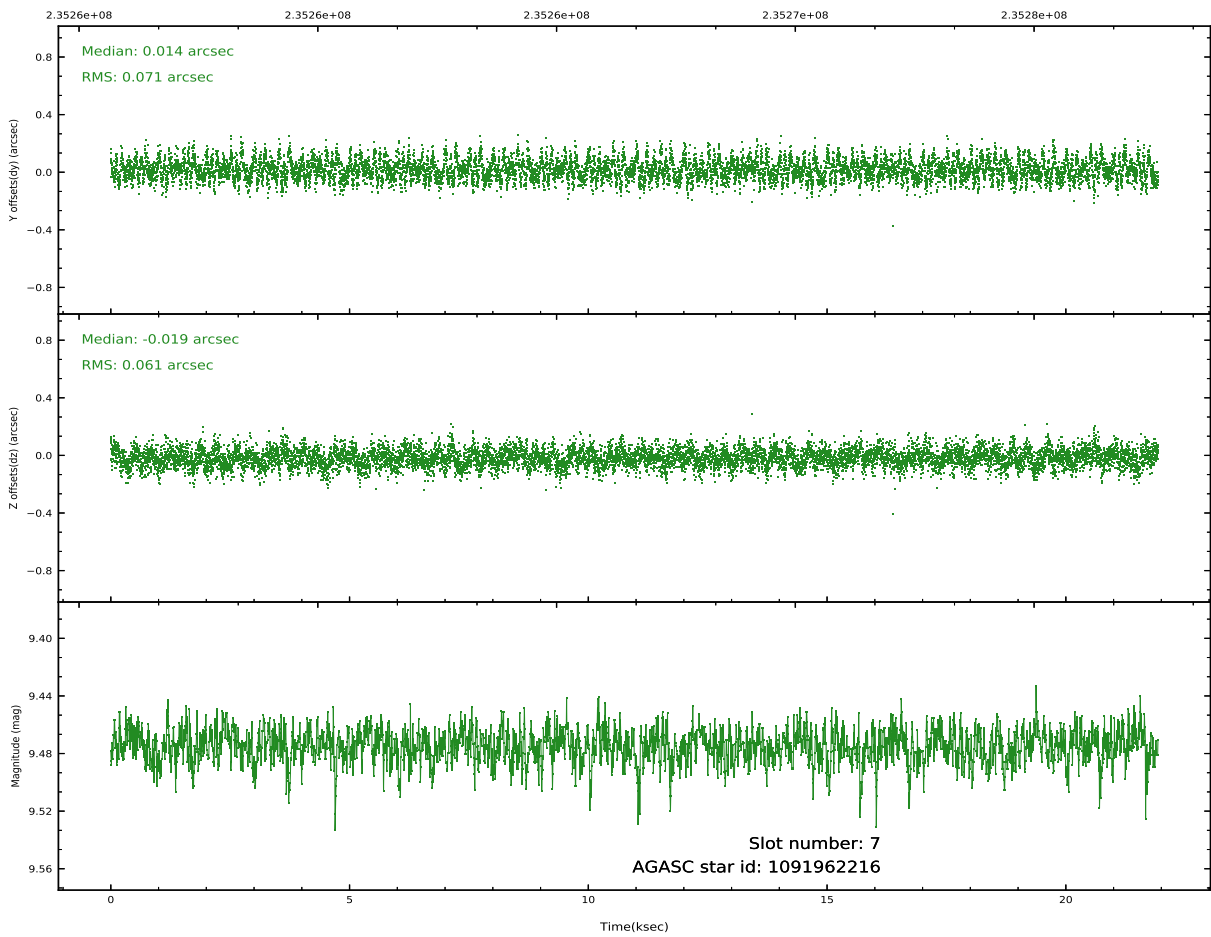
Time (s)



2.4.5 Slot 7

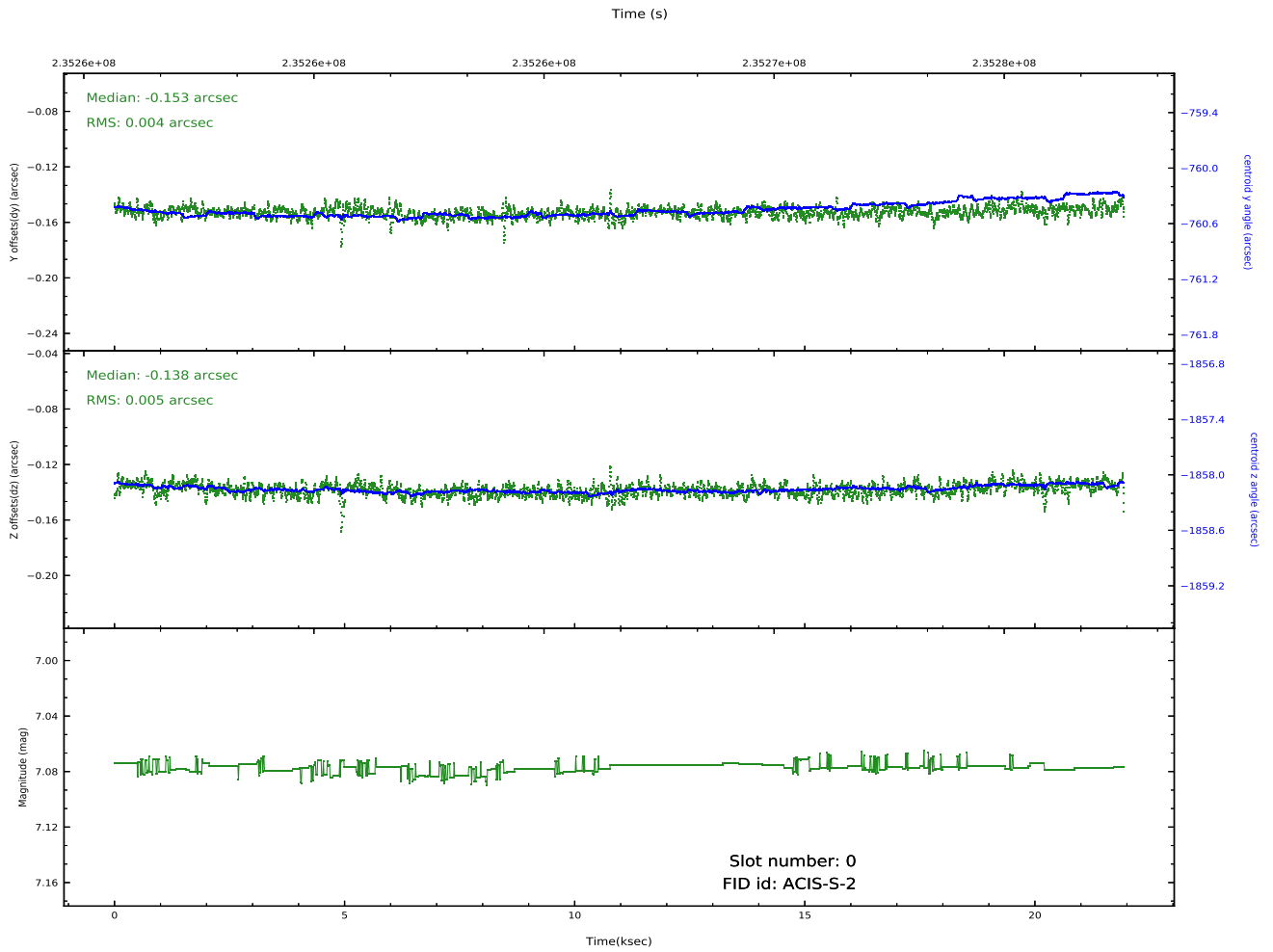
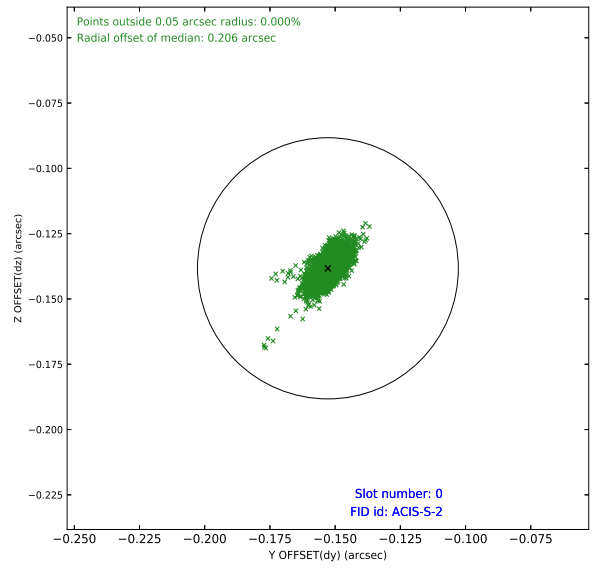
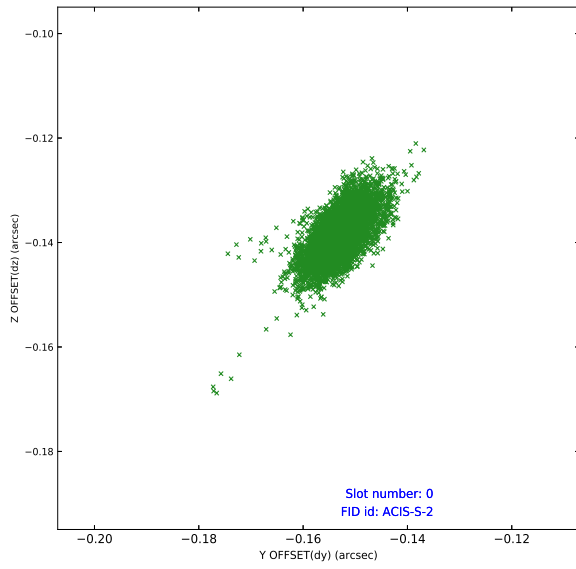


Time (s)

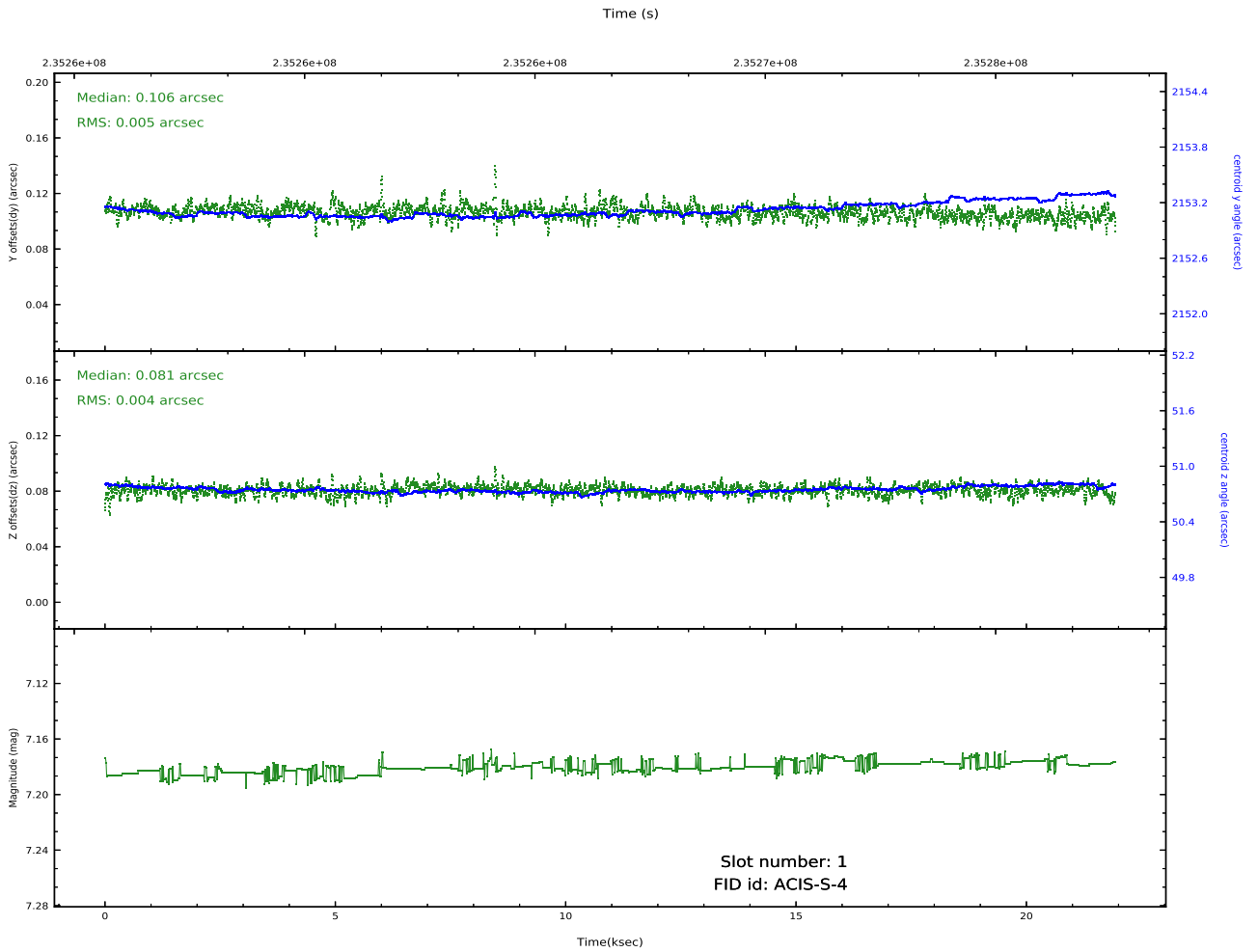
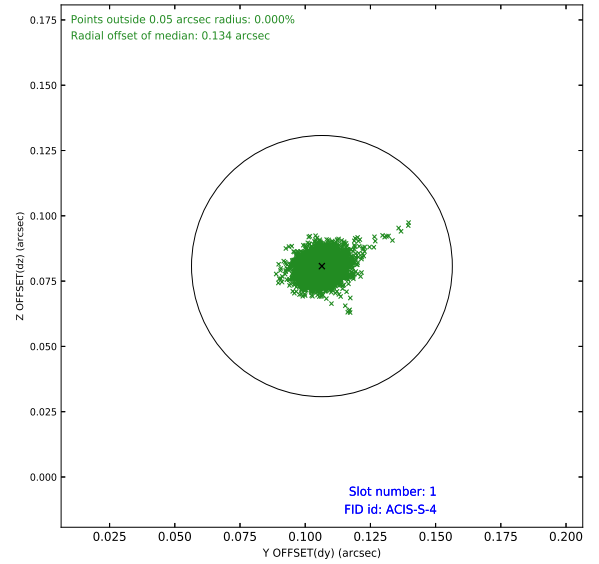
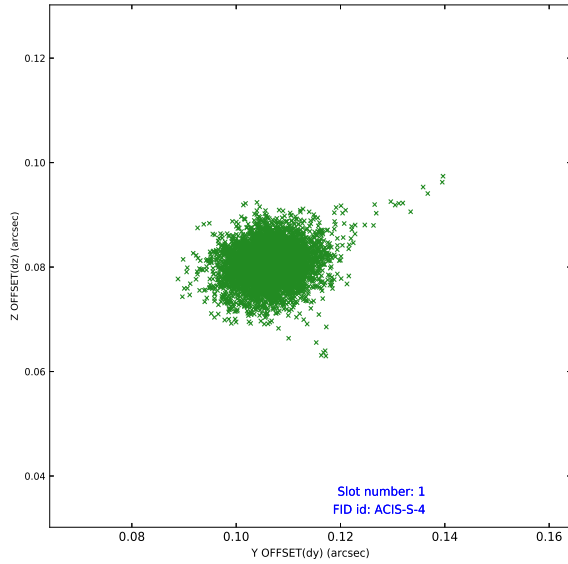


2.5 FID Slots

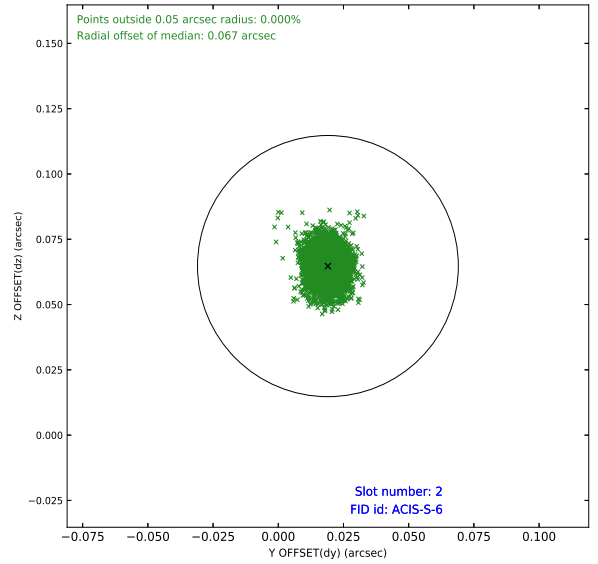
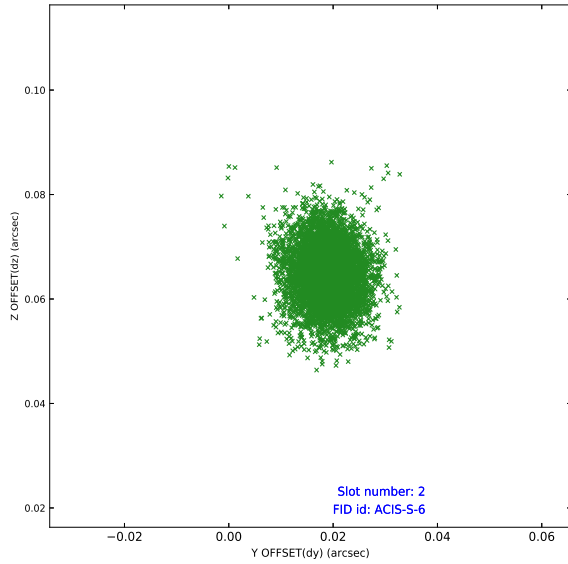
2.5.1 Slot 0



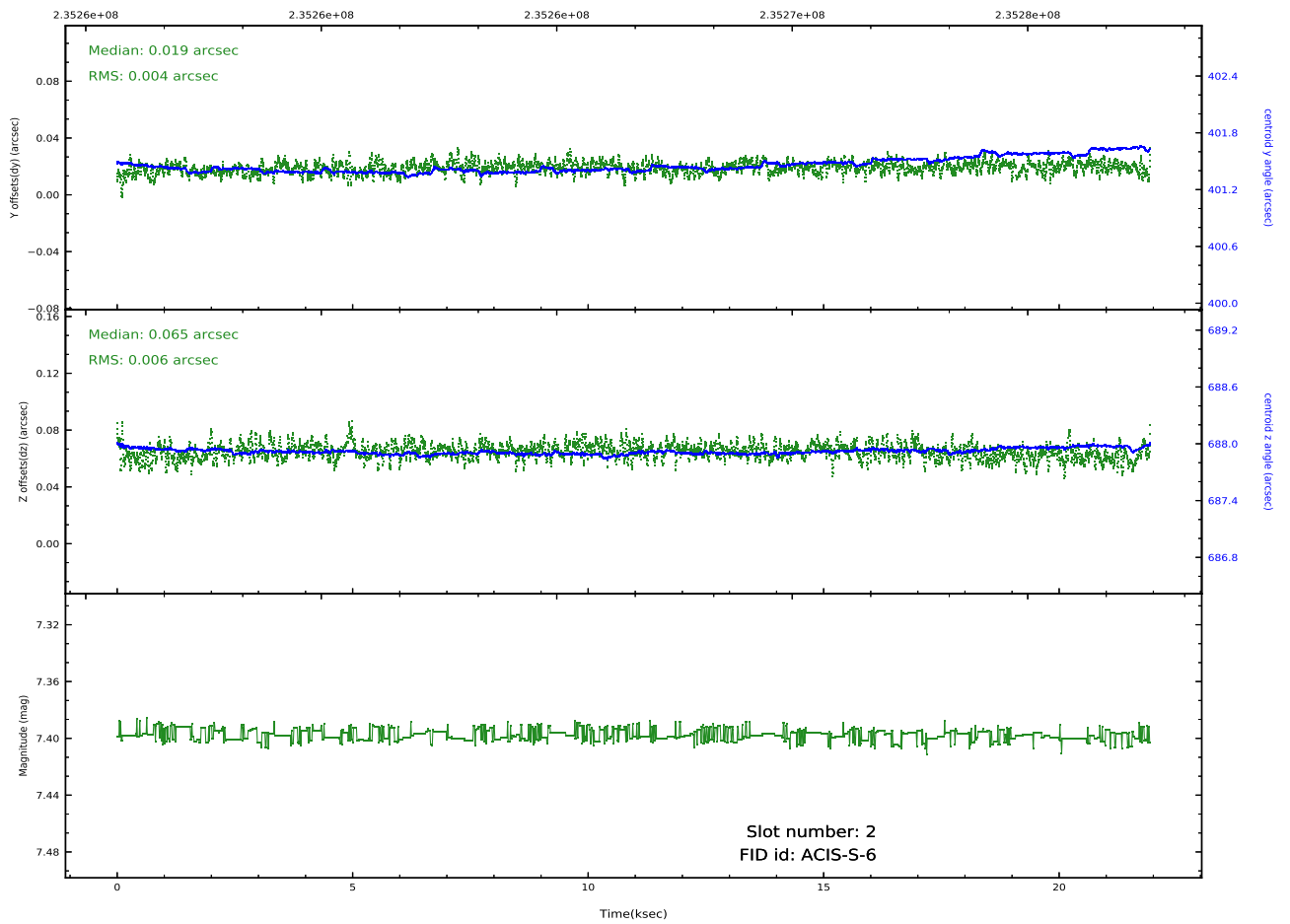
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)

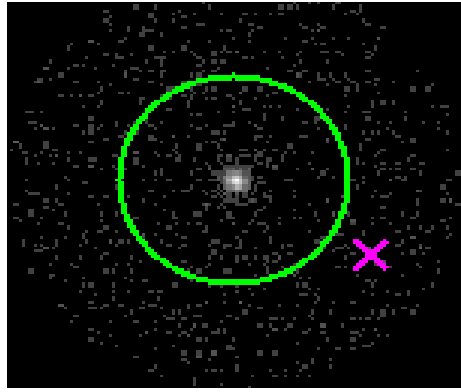


3 Gratings

3.1 HEG Arm



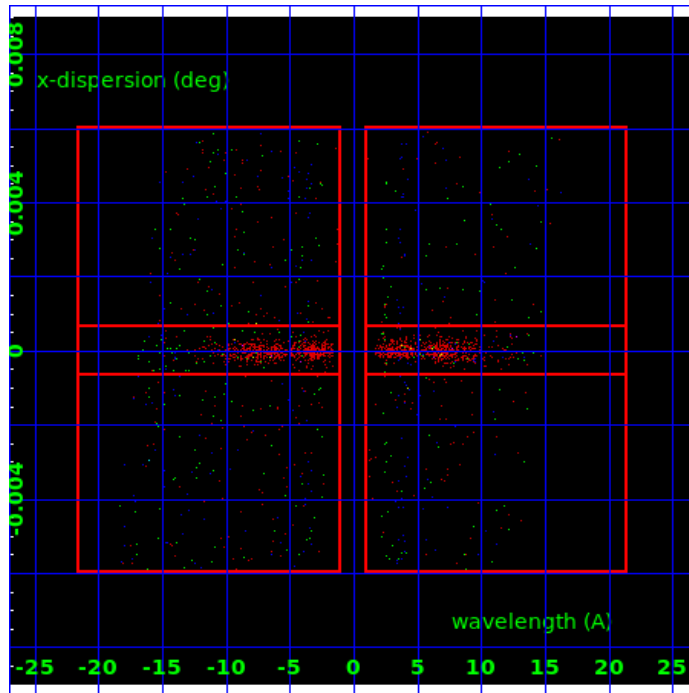
HEG Order Sort 123



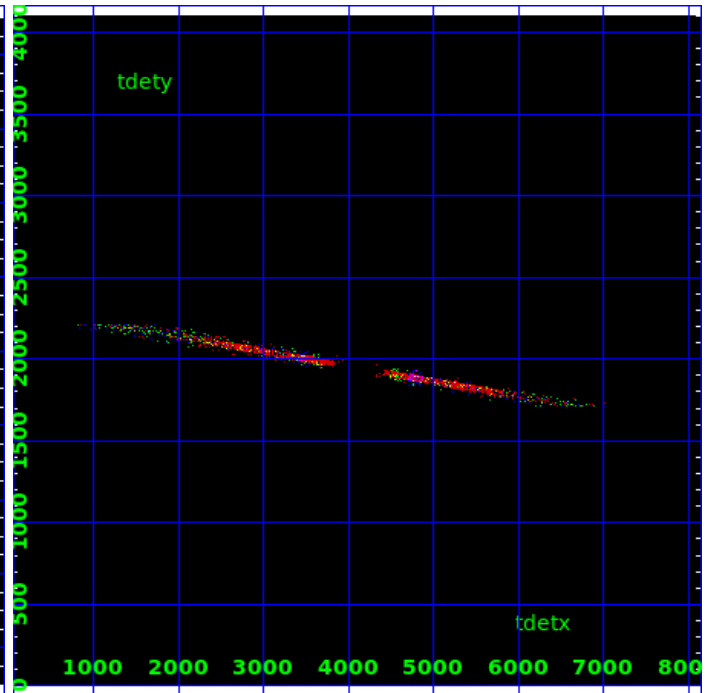
HEG Zero Order



HEG Order Sort ALL

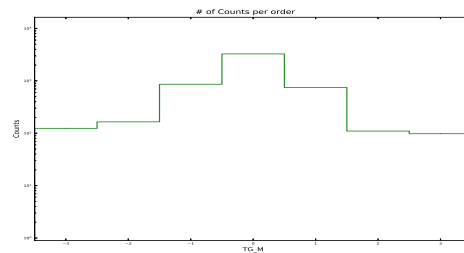


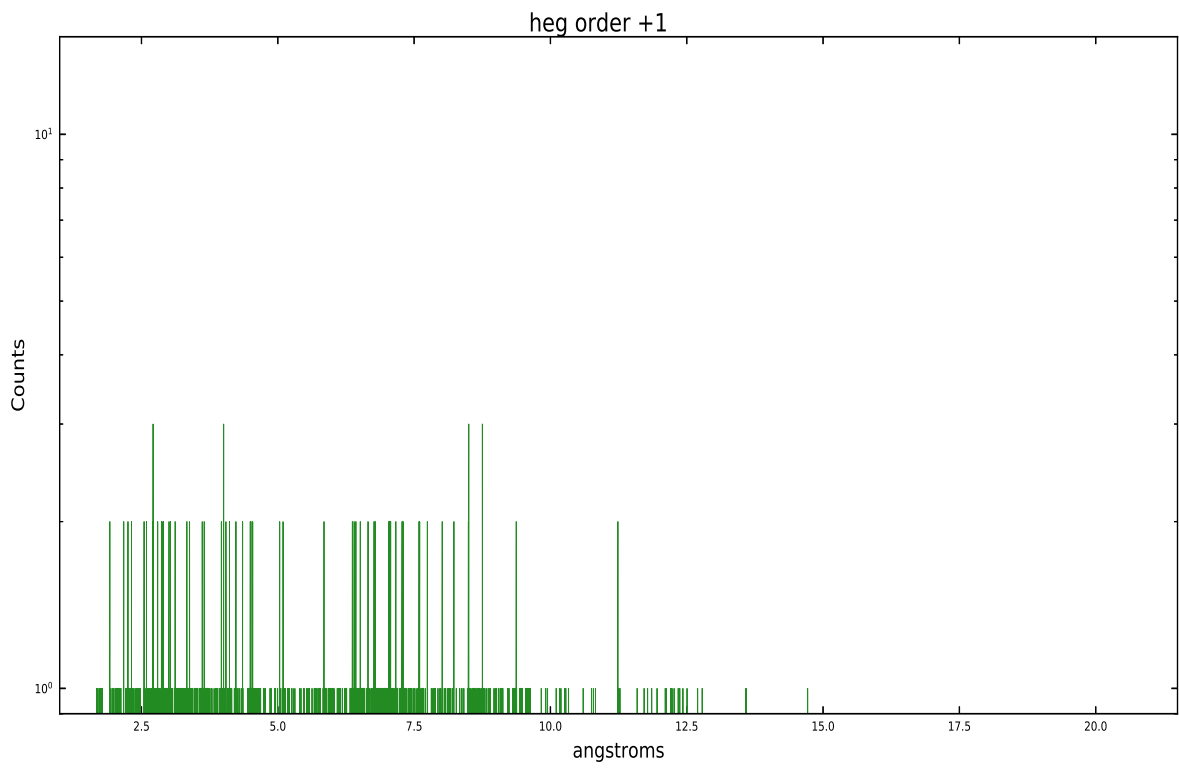
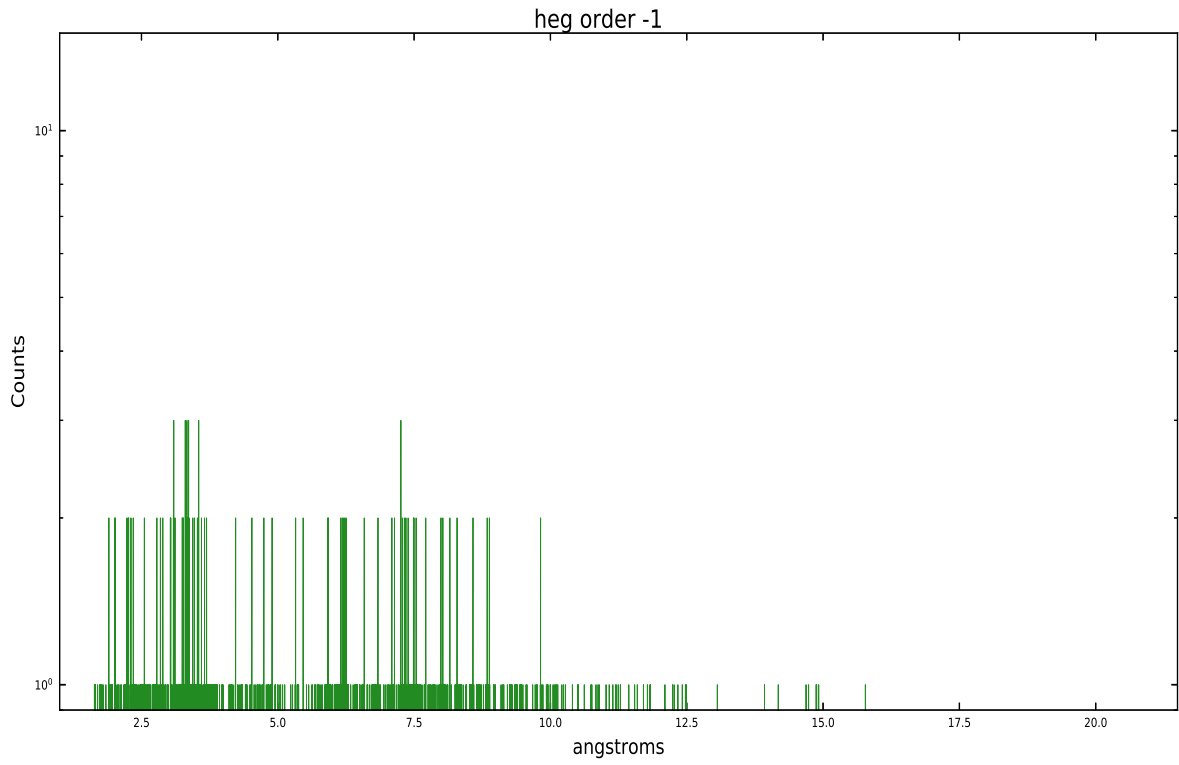
Spot Image HEG



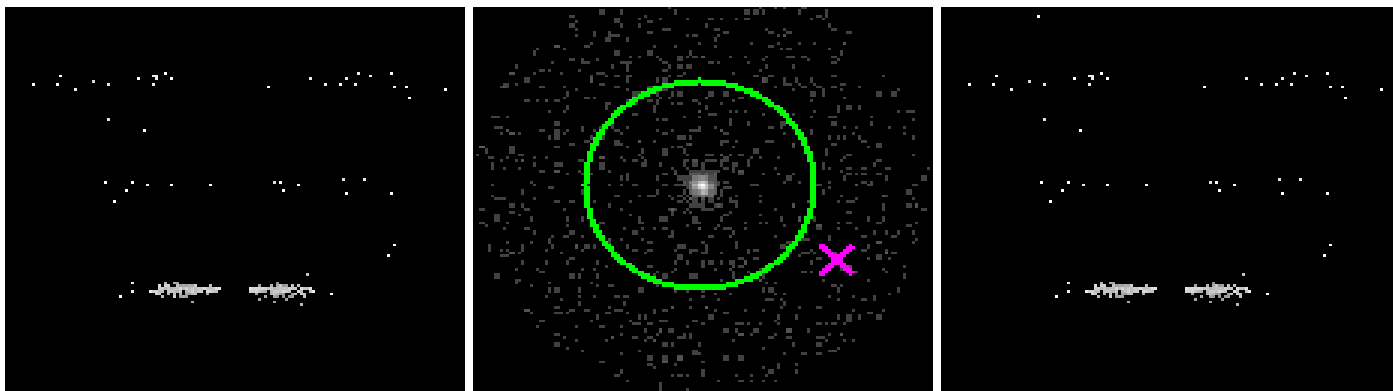
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	124	165	861	3268	745	110	98





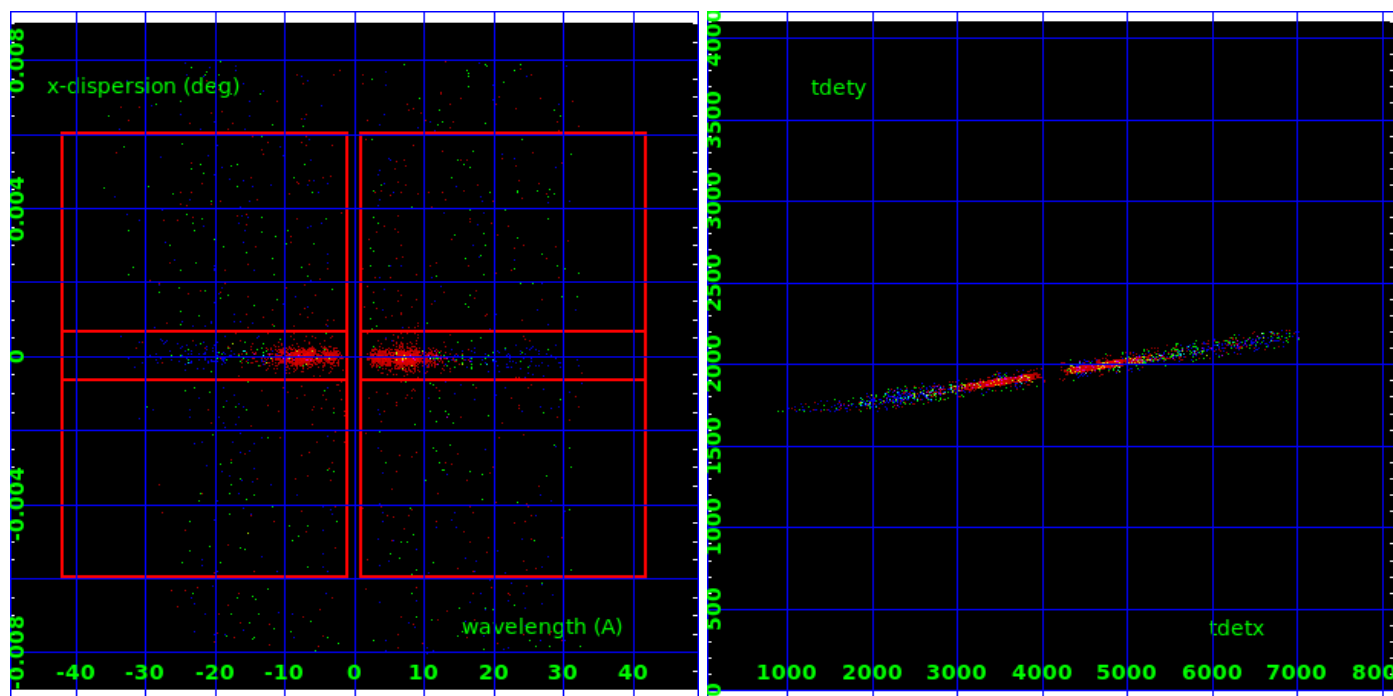
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

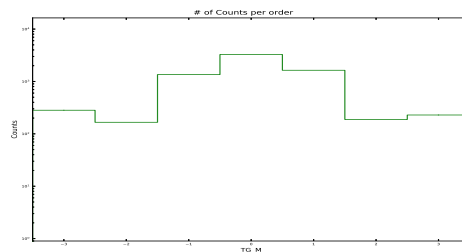
MEG Order Sort ALL

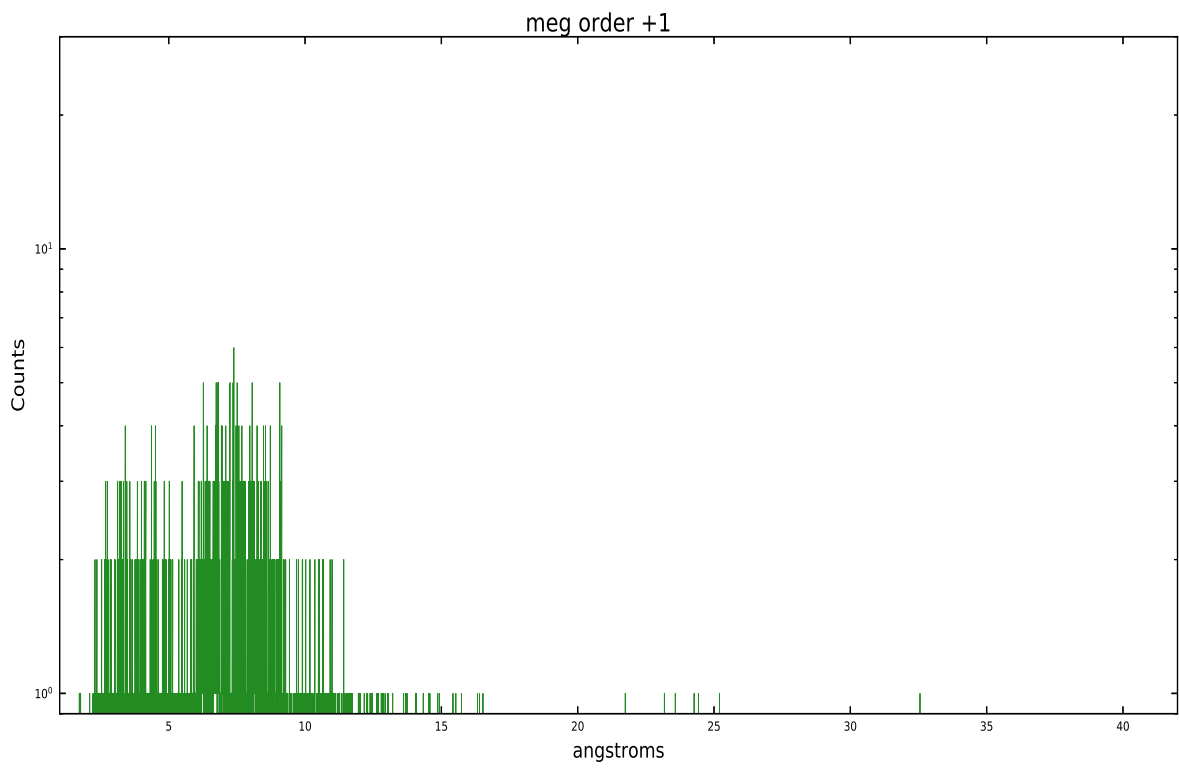
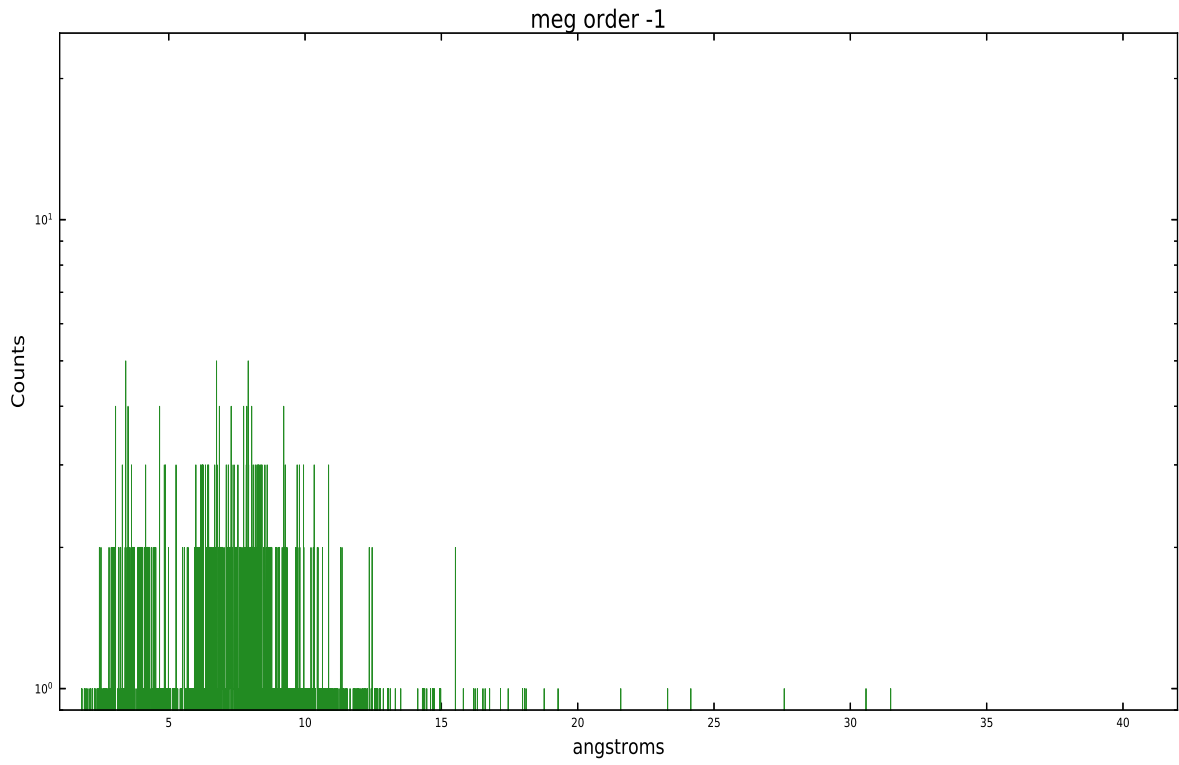


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	282	166	1352	3268	1634	188	229





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.73279

A.2 Comments