

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5475 - L2 Version 5
Chandra X-Ray Center

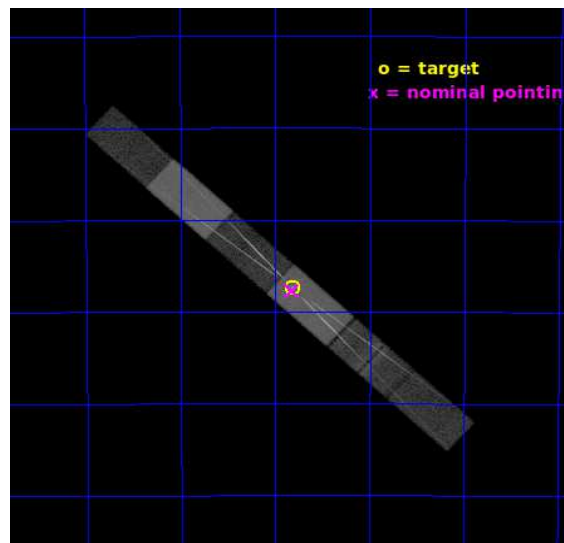
L2 Processing Date : Oct 8 2020

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1 Front

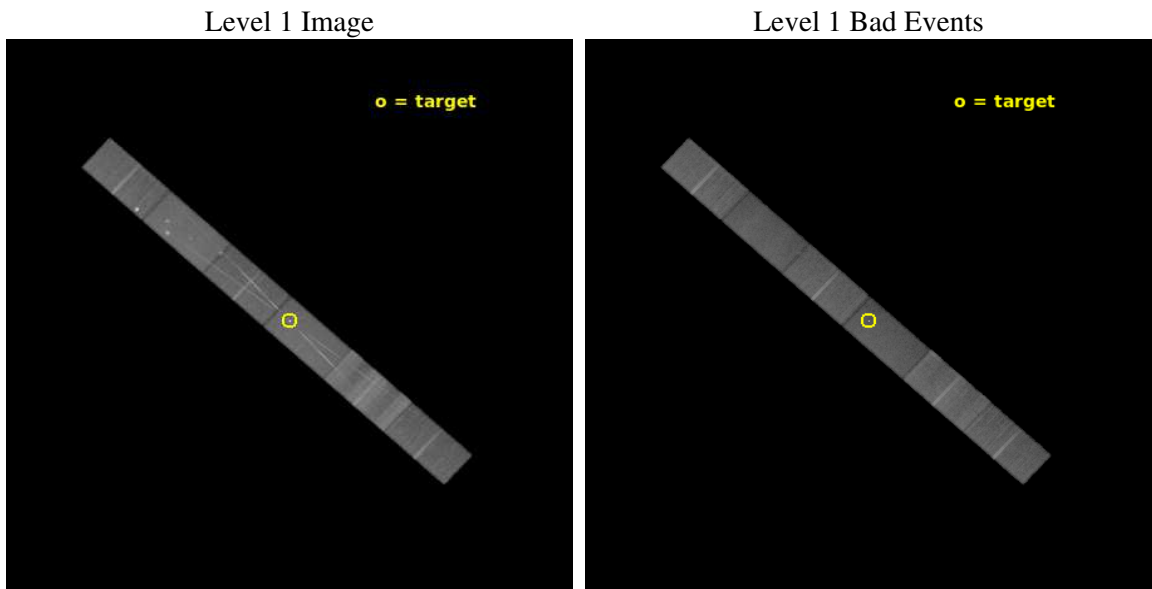
seq_num	400405	Sequence number
obs_id	5475	Observation id
title	Resolving the Fe Line, Warm Absorber, and Scattering Halo of GX339-4 with Joint Chandra/RXTE Observations	Proposal title
observer	Michael Nowak	Principal investigator
object	GX 339-4	Source name
dtcycle	0	
cycle	P	events from which exps? 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	255.70638319361	Nominal RA [deg]
dec_nom	-48.795307391198	Nominal Dec [deg]
roll_nom	42.363488120042	Nominal Roll [deg]
revision	5	Processing version of data
ontime	38290.24372372	Sum of GTIs [s]
livetime	37387.661587513	Livetime [s]
ontime4	38290.284763724	Sum of GTIs [s]
ontime5	38290.202683717	Sum of GTIs [s]
ontime6	38290.161643714	Sum of GTIs [s]
ontime7	38290.24372372	Sum of GTIs [s]
ontime8	38290.12060371	Sum of GTIs [s]
ontime9	38290.079563737	Sum of GTIs [s]
l2events	349606	Number of level 2 events



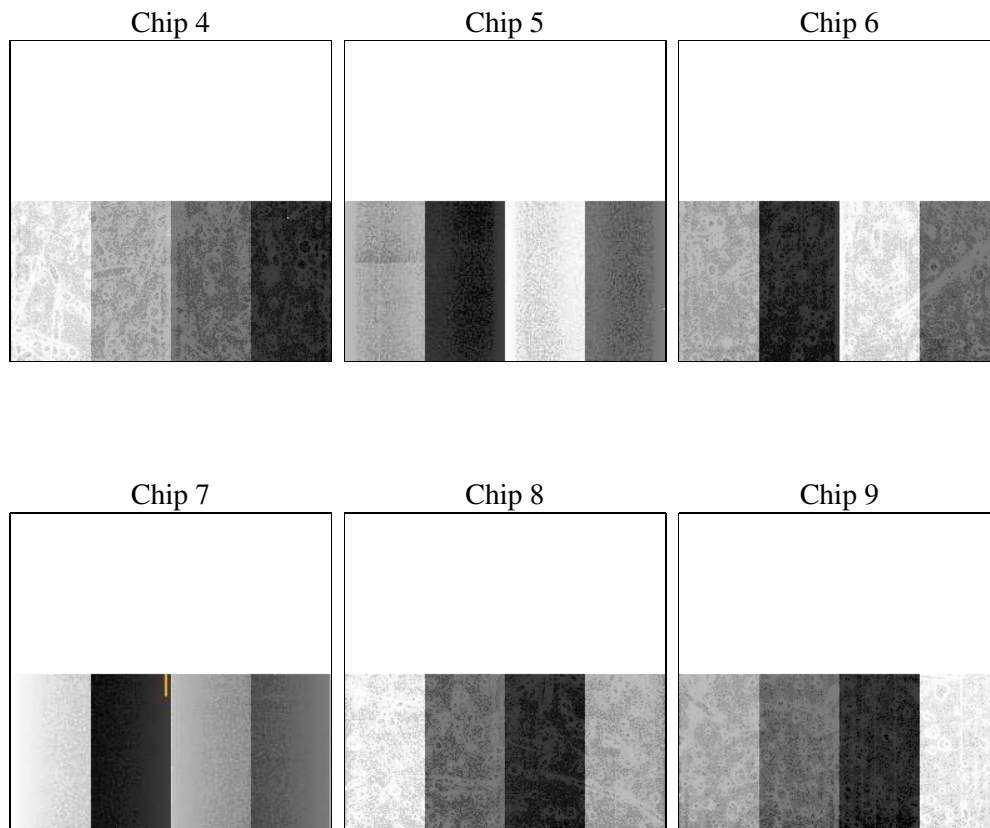
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	58000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	38290.24372372	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	38290.284763724	Sum of GTIs [s]
date	2020-10-08T12:02:29	Date and time of file creation	ontime5	38290.202683717	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	38290.161643714	Sum of GTIs [s]
			ontime7	38290.24372372	Sum of GTIs [s]
			ontime8	38290.12060371	Sum of GTIs [s]
			ontime9	38290.079563737	Sum of GTIs [s]
			l1events	1366319	Number of level 1 events
			tgmethod	FINDZO	Method used to create src1a file
			z0_pos	(4000.08 4137.47)	src1a sky pixel position

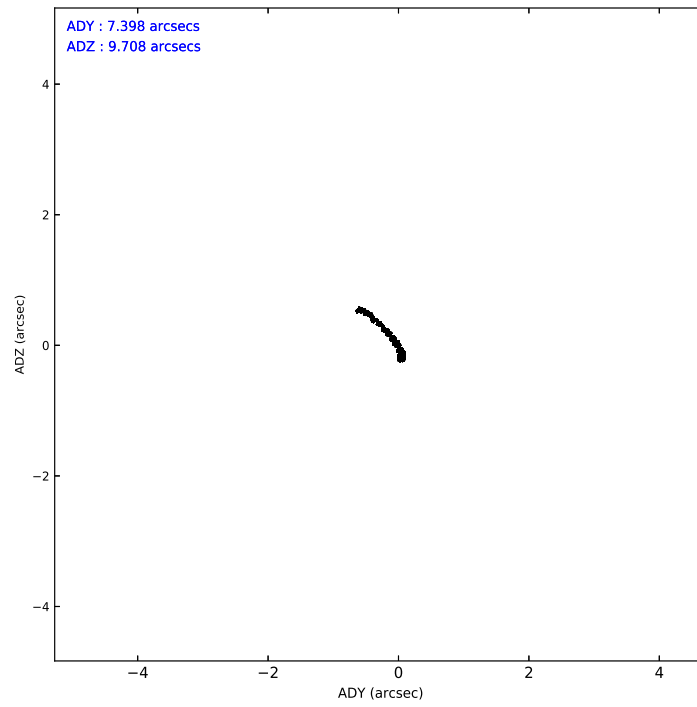
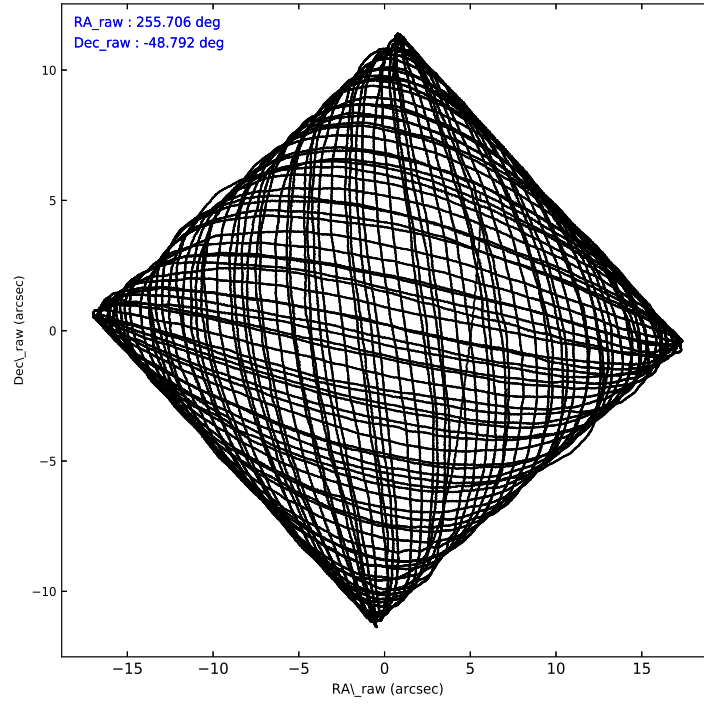
2.1.4 Events

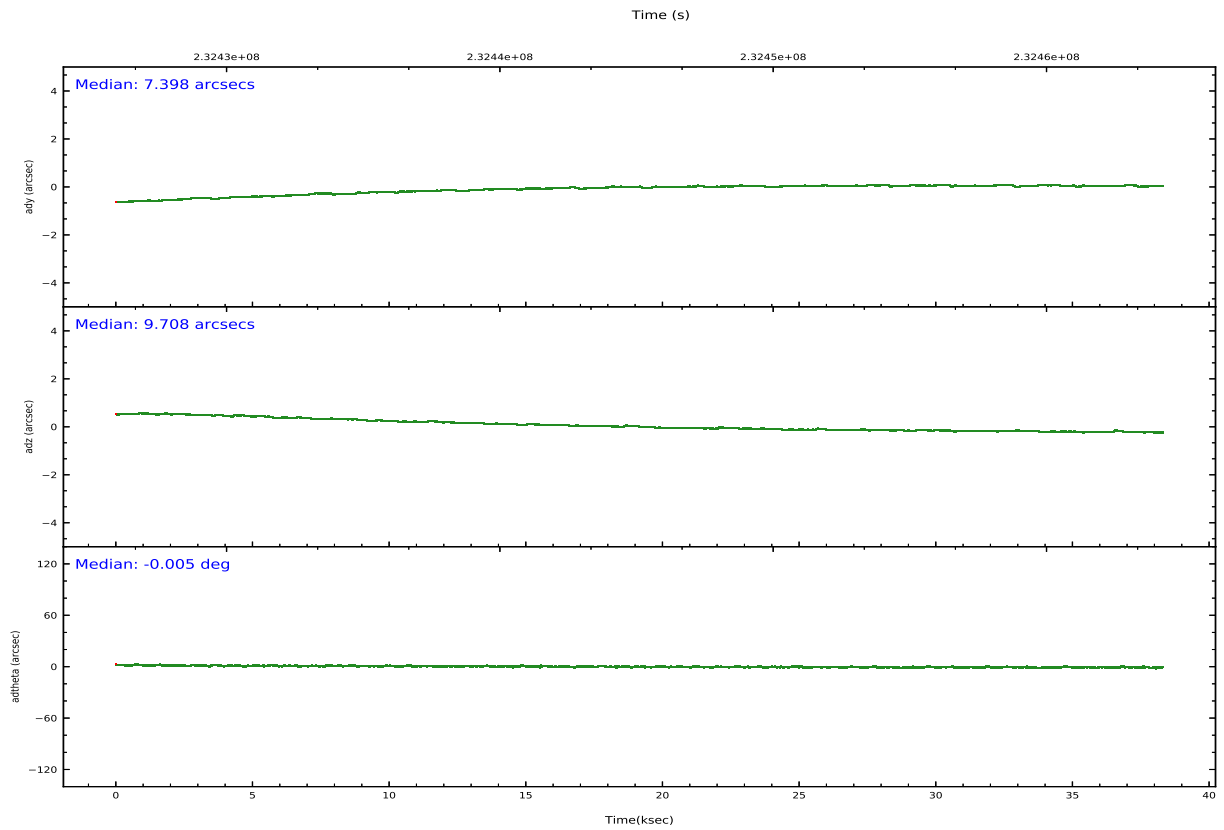
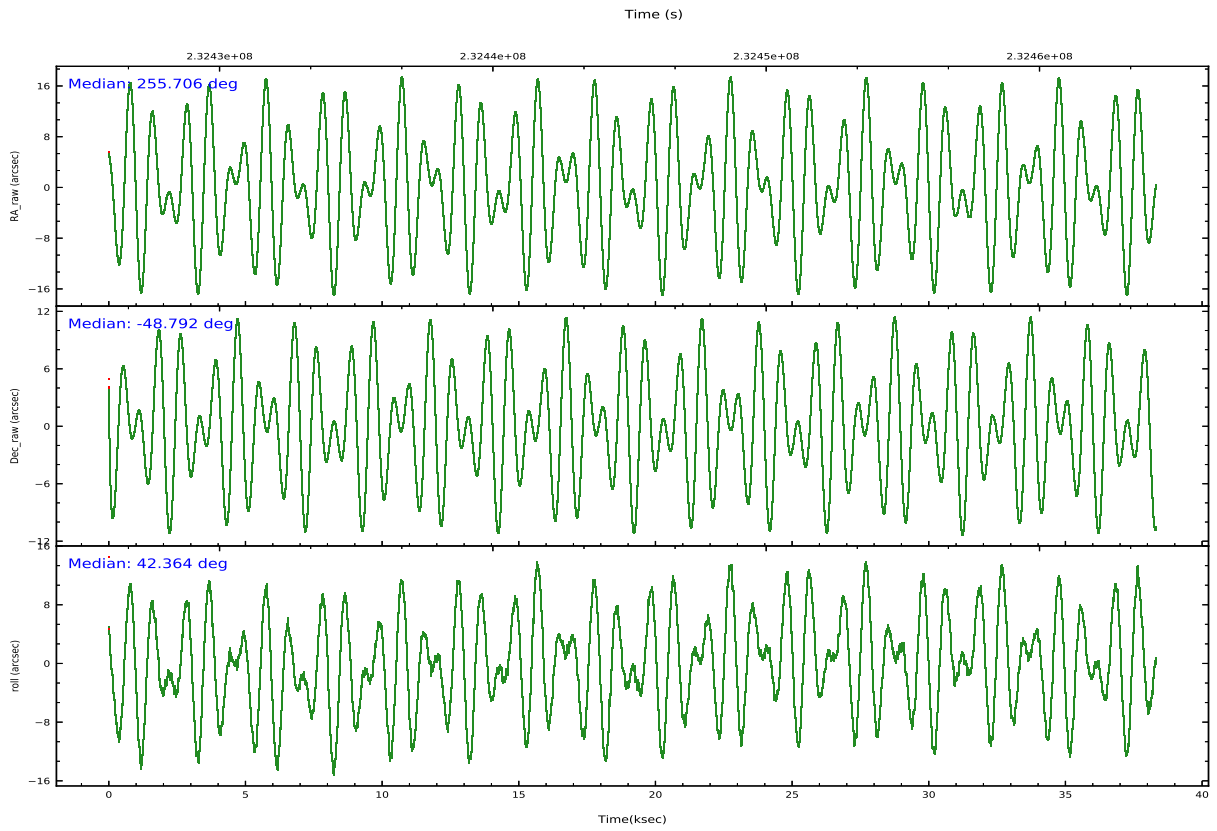
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	208082	239723	199644	251861	300457	166552	grade 0 events	26995	18051	27919	16135	35970	10883
rejected events	165949	118444	152611	120243	182328	142119		12%	7%	13%	6%	11%	6%
rejected %	79%	49%	76%	47%	60%	85%	grade 1 events	160	402	113	553	238	74
								0%	0%	0%	0%	0%	0%
							grade 2 events	6588	34777	7990	28676	20605	4738
								3%	14%	4%	11%	6%	2%
							grade 3 events	2530	6884	3246	12763	16574	2490
								1%	2%	1%	5%	5%	1%
							grade 4 events	2425	6778	3094	12639	14902	2385
								1%	2%	1%	5%	4%	1%
							grade 5 events	6093	17614	6506	20261	9714	6689
								2%	7%	3%	8%	3%	4%
							grade 6 events	3627	54850	4807	61471	30216	3952
								1%	22%	2%	24%	10%	2%
							grade 7 events	159664	100367	145969	99363	172238	135341
								76%	41%	73%	39%	57%	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	255.693890	255.70638319361	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	-48.817848	-48.795307391198	Subarray start row	1	1
[deg] Pointing Roll	42.197110	42.363488120042	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	-183.985022191653			
[mm] SIM translation stage offset	-6.14	-6.147500391354811			
[s] Observation start time (MET)	232426134.184000	232425122.27065			
Observation start date	2005-05-14T02:47:50	2005-05-14T02:32:02			
[s] Observation end time (MET)	232484134.184000	232464268.55994			
Observation end date	2005-05-14T18:54:30	2005-05-14T13:24:28			
Read mode	TIMED	TIMED			

2.3 Aspect



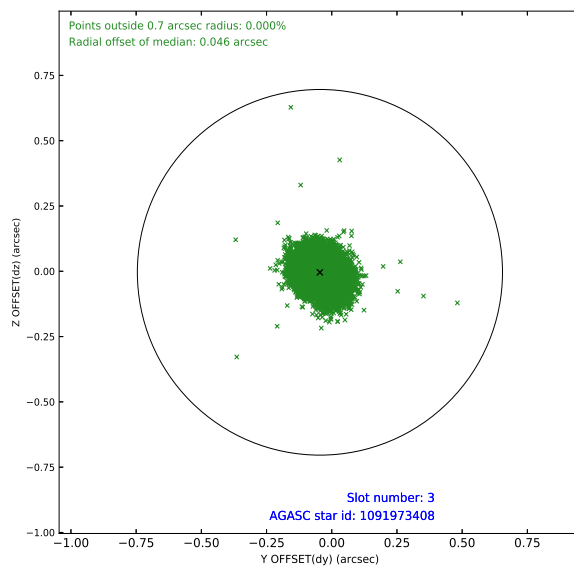
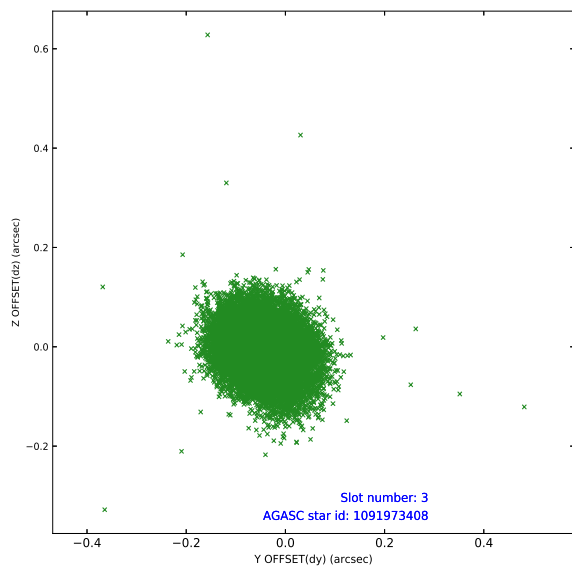


Slot Statistics

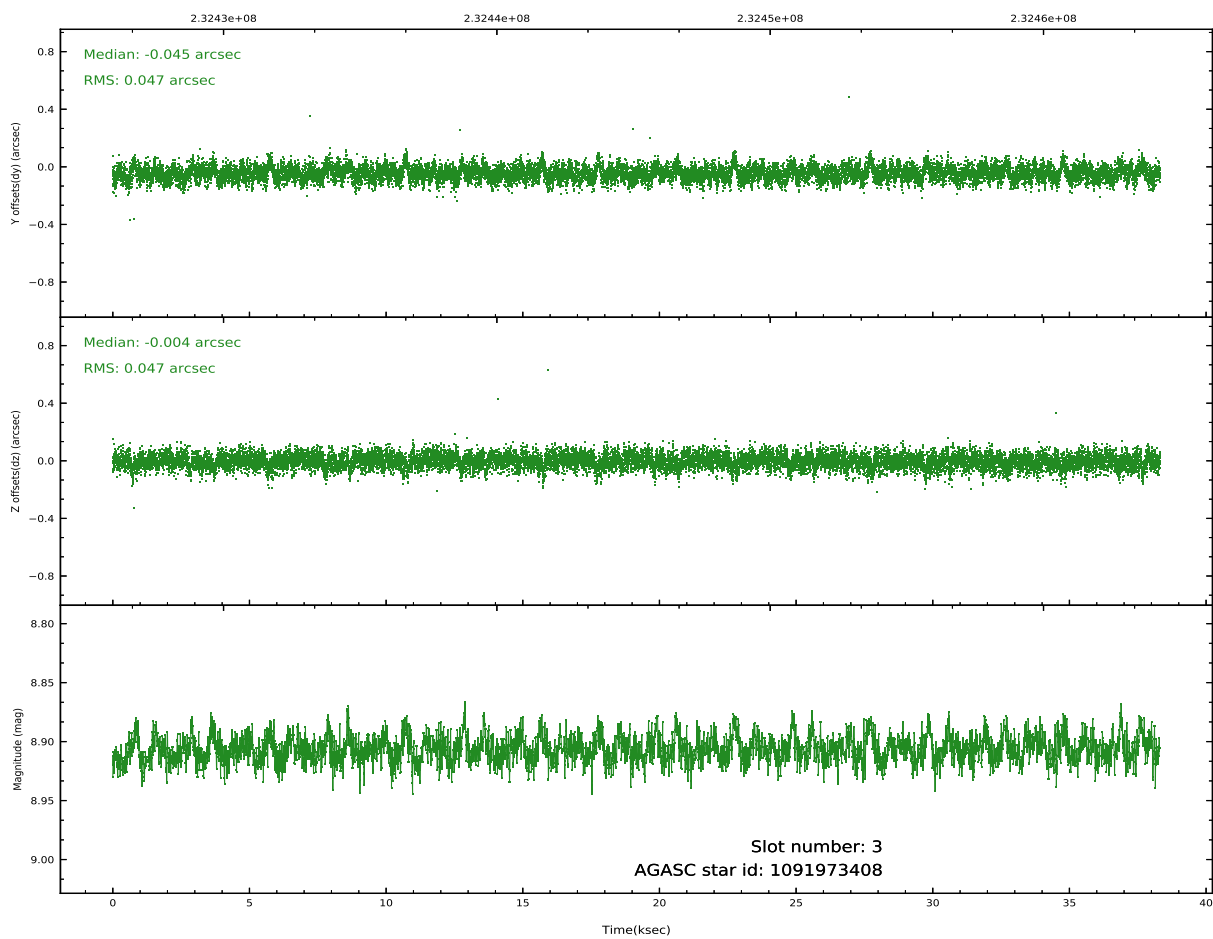
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.07	9346	1.000	-0.084	-0.144	0.012	0.020	0.000000	0.000000	-759.67	-1857
1	FID		ACIS-S-4	7.18	9346	1.000	0.156	0.079	0.007	0.013	0.000000	0.000000	2153.81	50
2	FID		ACIS-S-5	7.22	9344	1.000	-0.103	0.074	0.011	0.017	0.000000	0.000000	-1812.53	44
3	GUIDE	used	1091973408	8.91	18683	1.000	-0.045	-0.004	0.070	0.115	255.800233	-48.601800	710.02	406
4	GUIDE	used	1091975392	6.40	18692	1.000	-0.086	-0.144	0.060	0.090	255.805002	-48.336791	1360.31	1104
5	GUIDE	used	1092485728	6.88	18691	1.000	0.103	-0.064	0.059	0.099	254.773222	-48.875124	-1761.94	1301
6	GUIDE	used	1092491384	9.12	18680	1.000	-0.048	0.118	0.071	0.119	254.923973	-49.184437	-2234.65	232
7	GUIDE	used	1092627912	6.50	18692	1.000	0.071	0.094	0.064	0.104	257.034537	-48.883770	2173.21	-2327

2.4 Star Slots

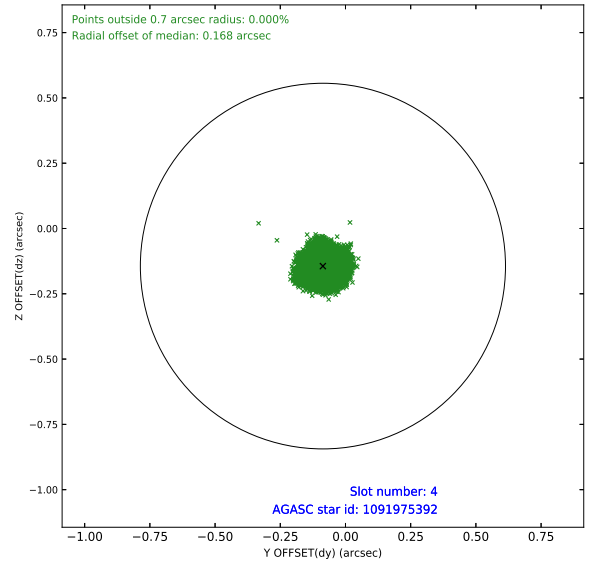
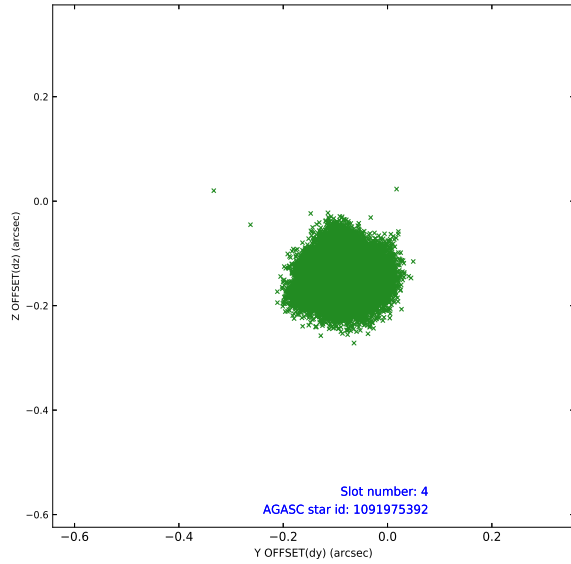
2.4.1 Slot 3



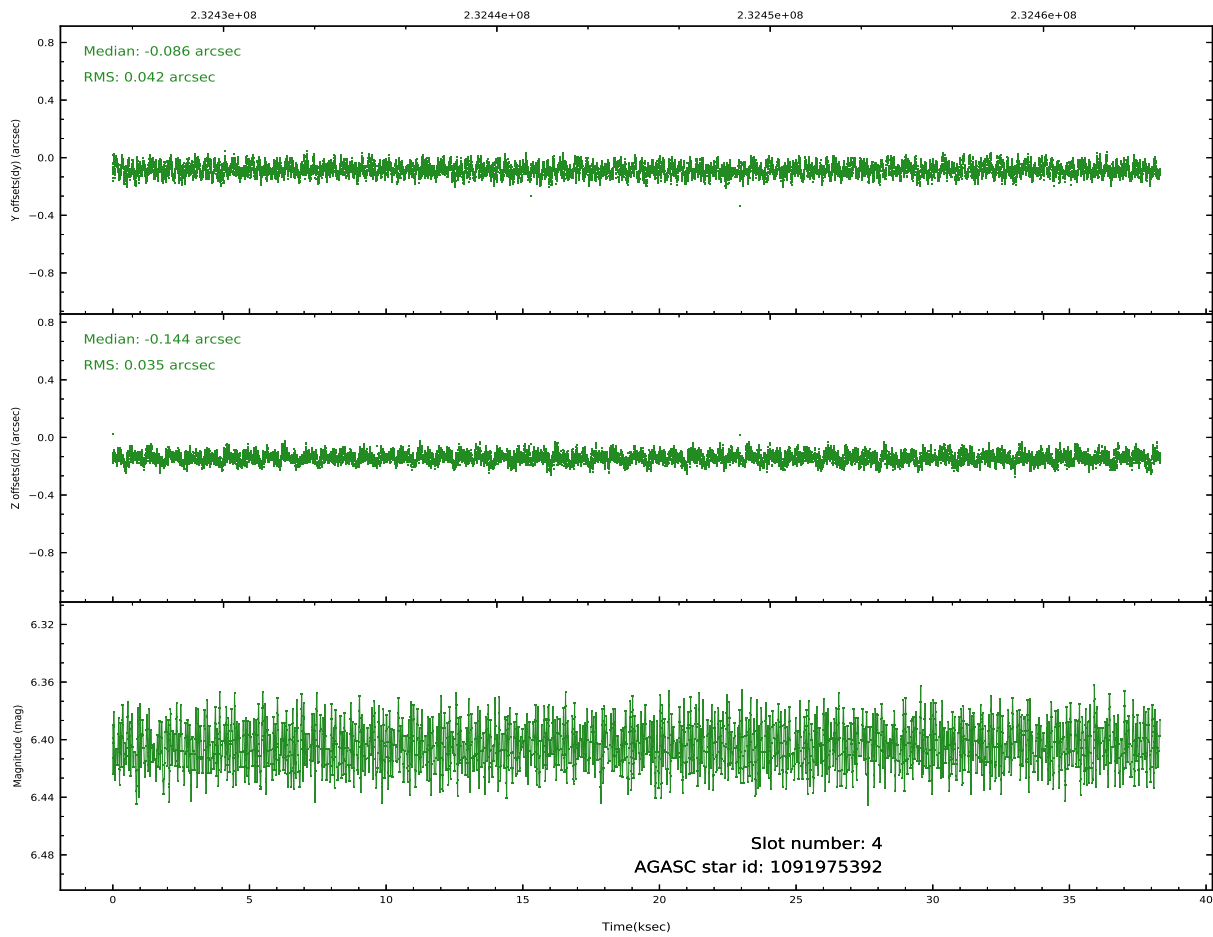
Time (s)



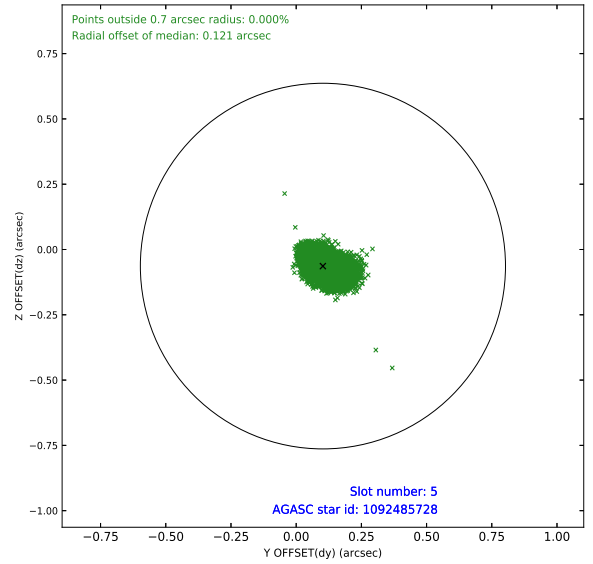
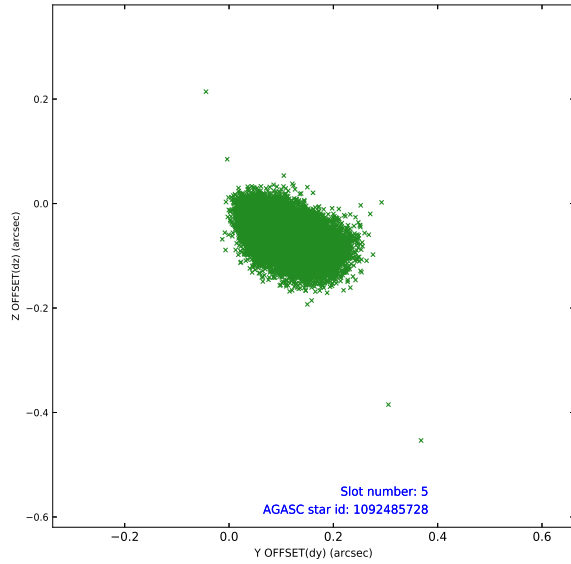
2.4.2 Slot 4



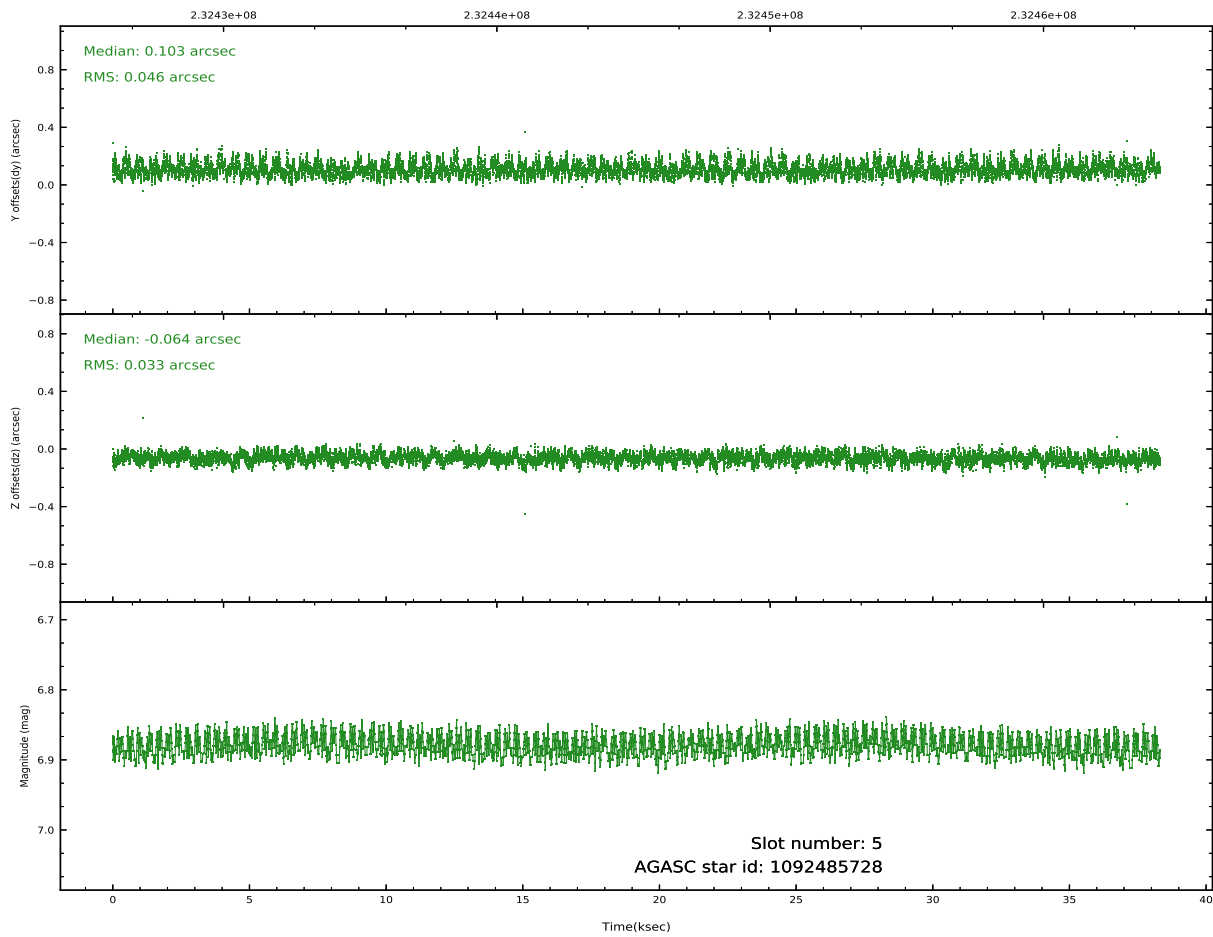
Time (s)



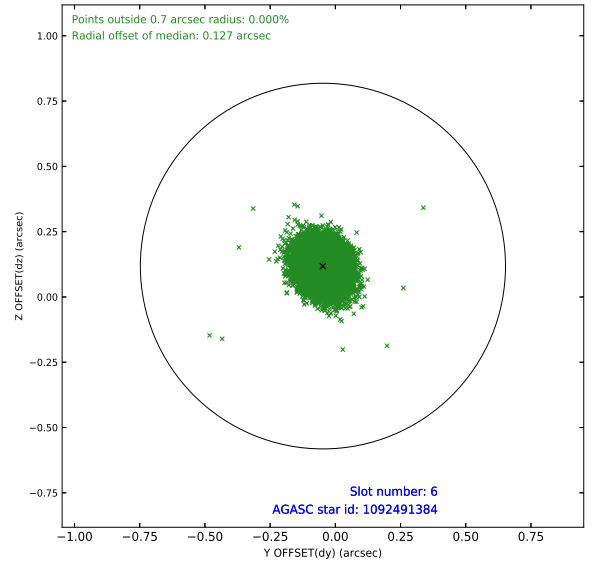
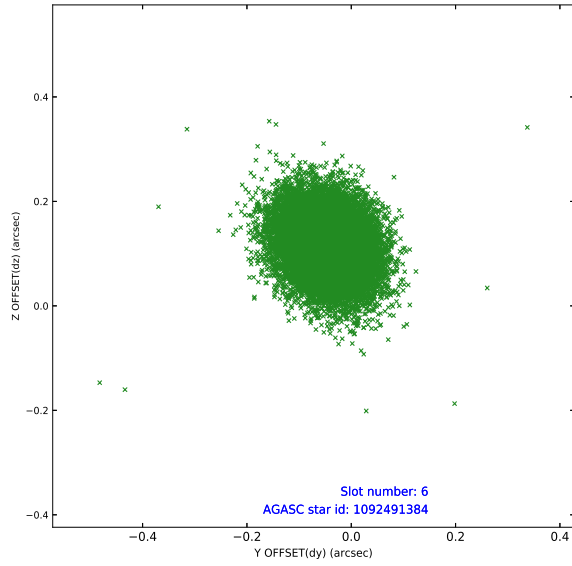
2.4.3 Slot 5



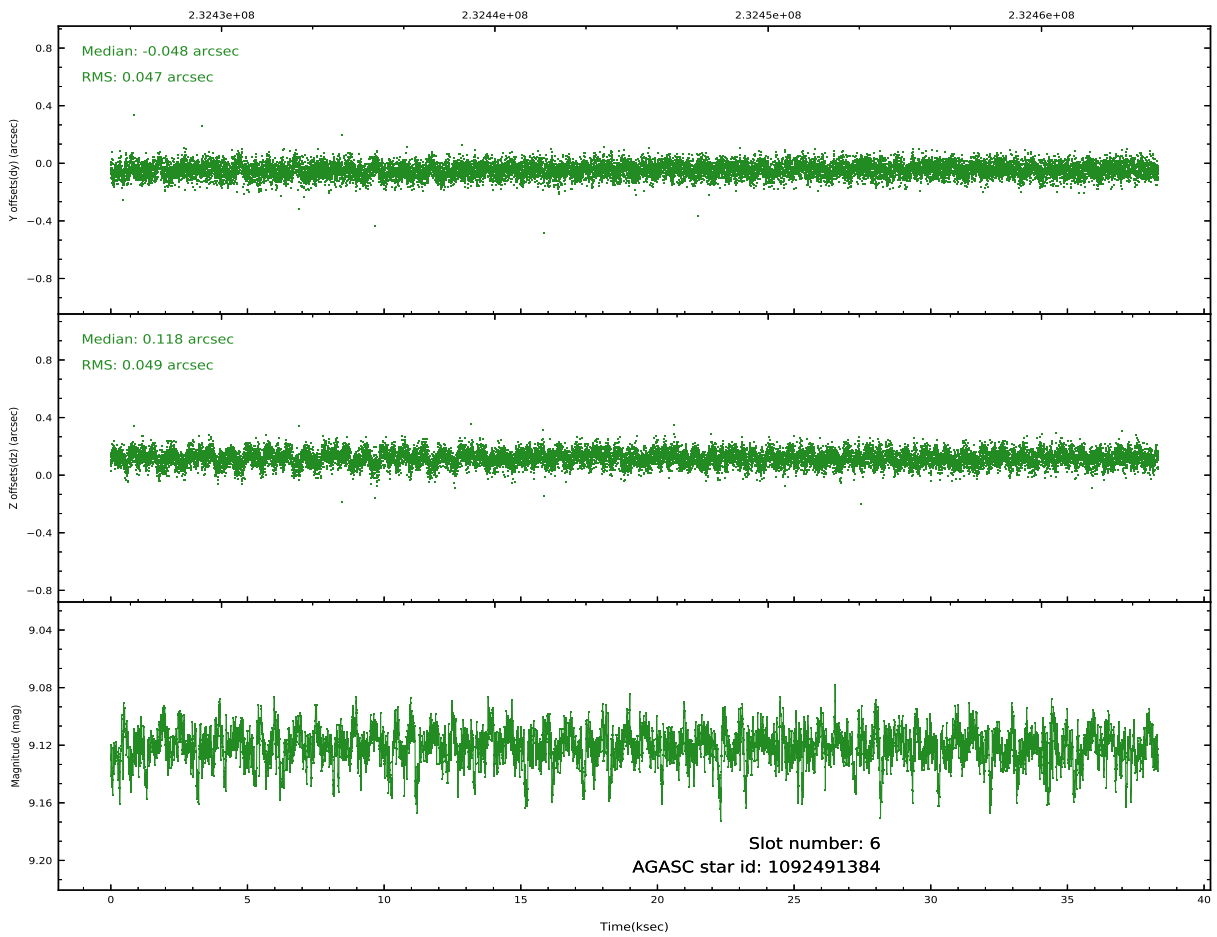
Time (s)



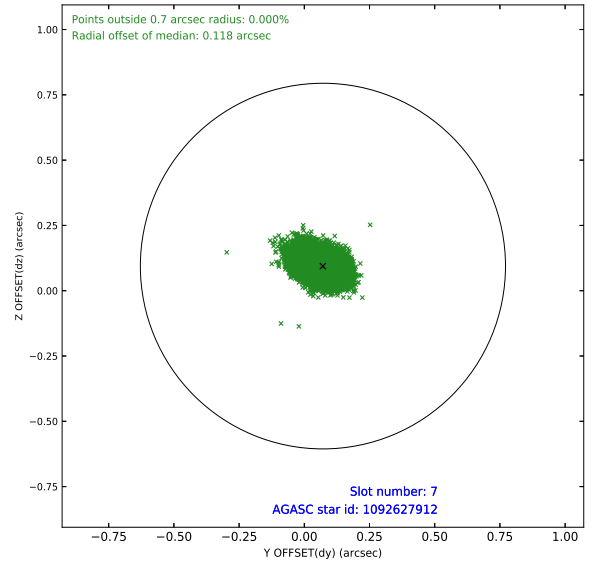
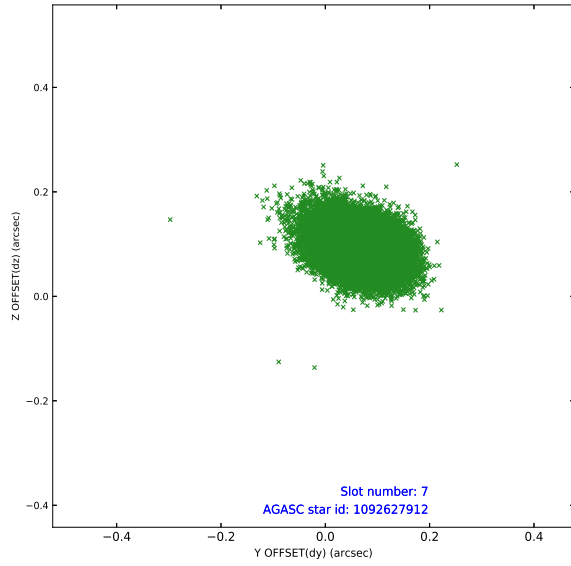
2.4.4 Slot 6



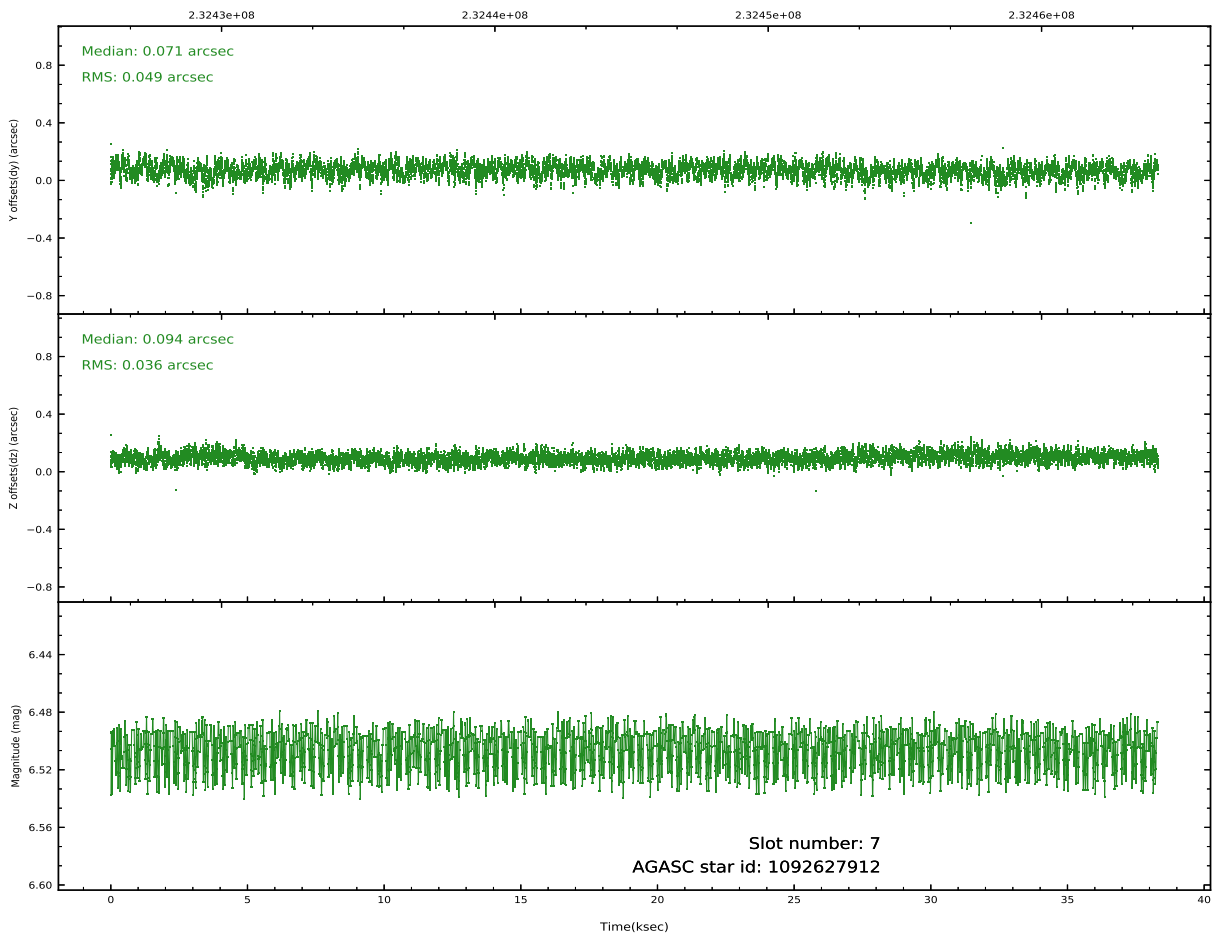
Time (s)



2.4.5 Slot 7

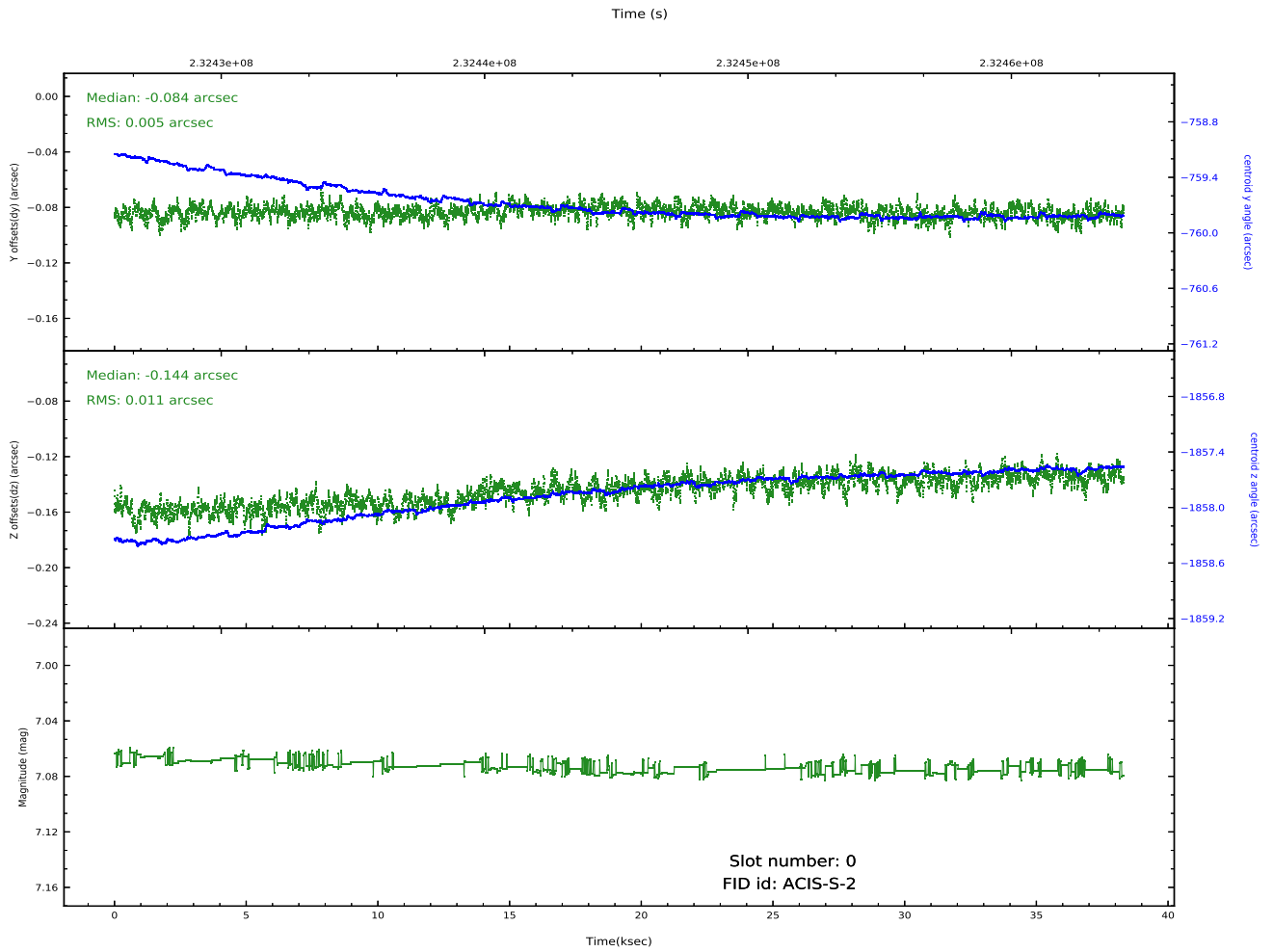
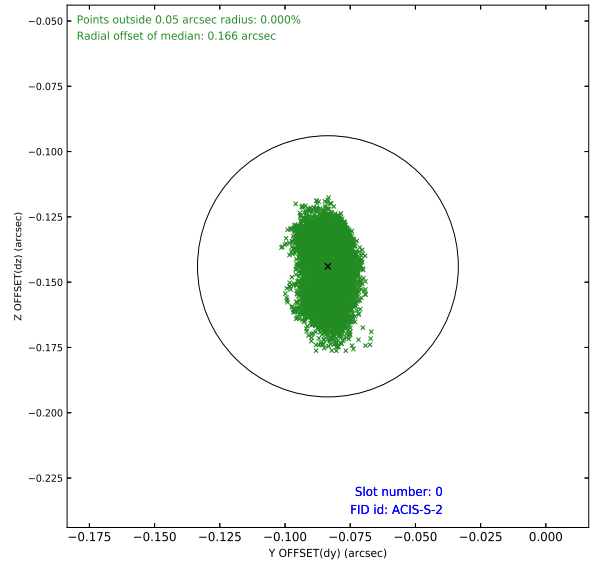
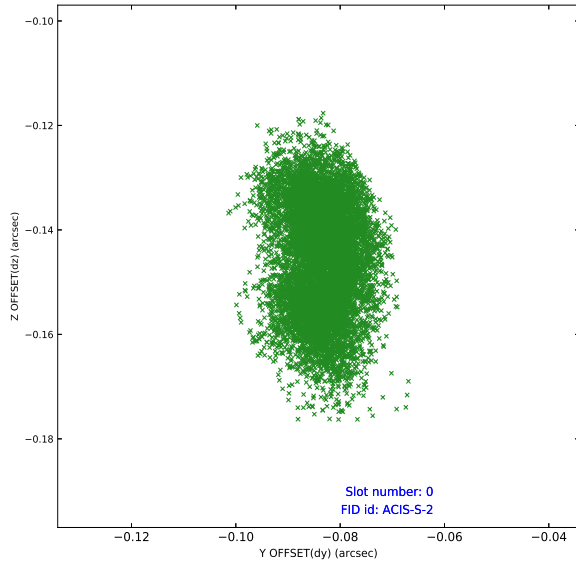


Time (s)

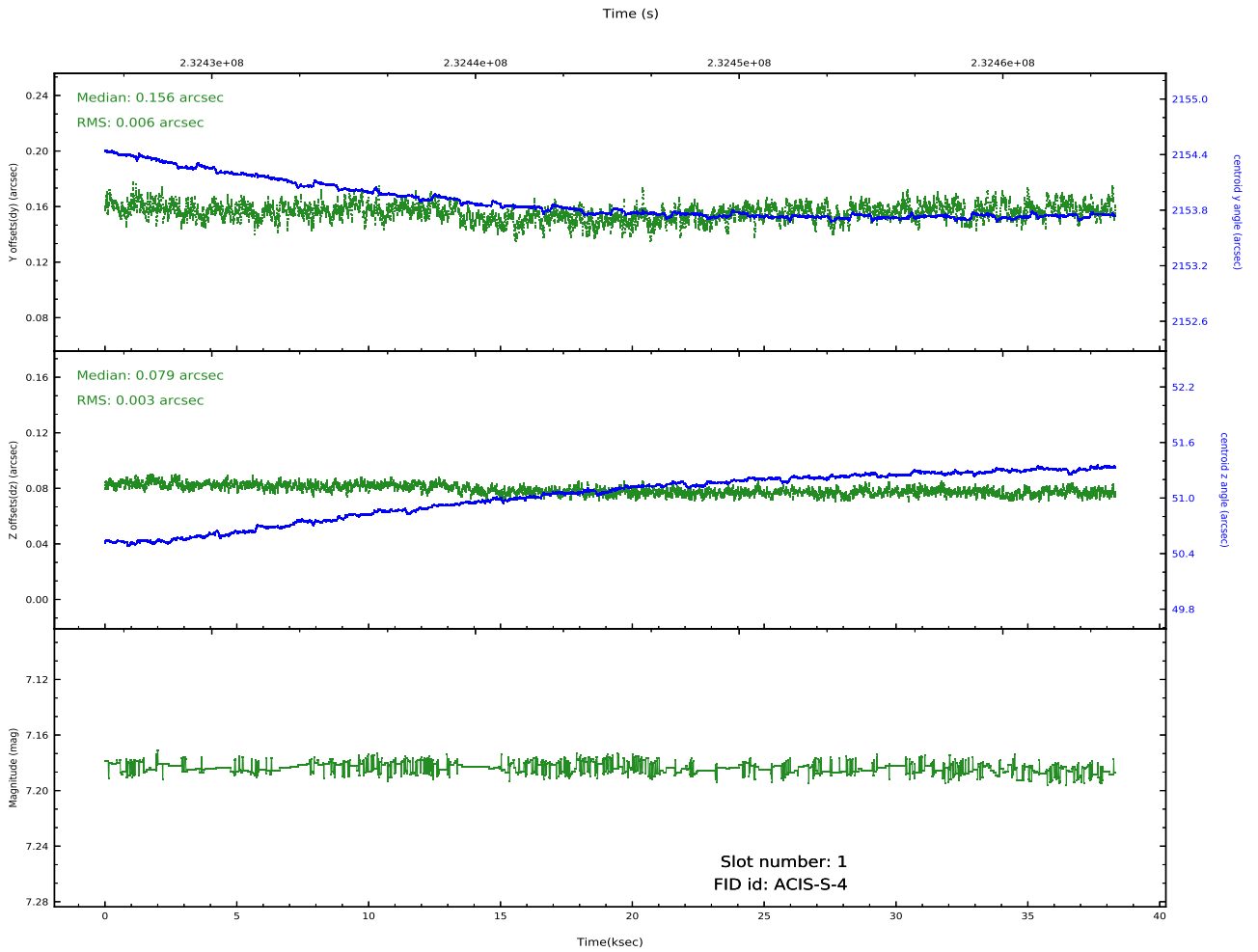
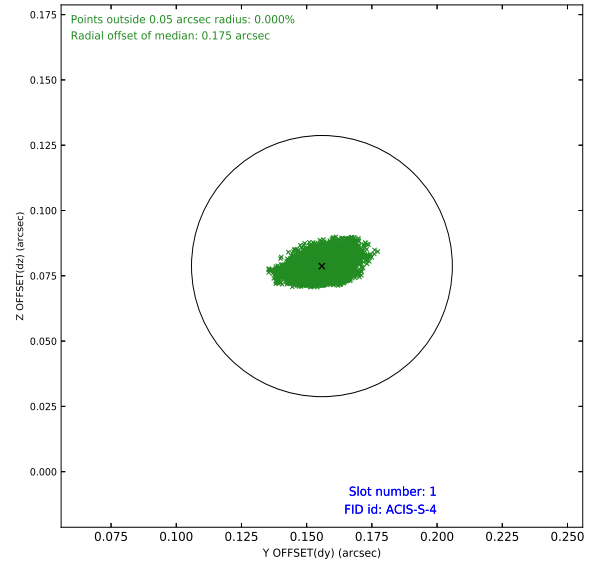
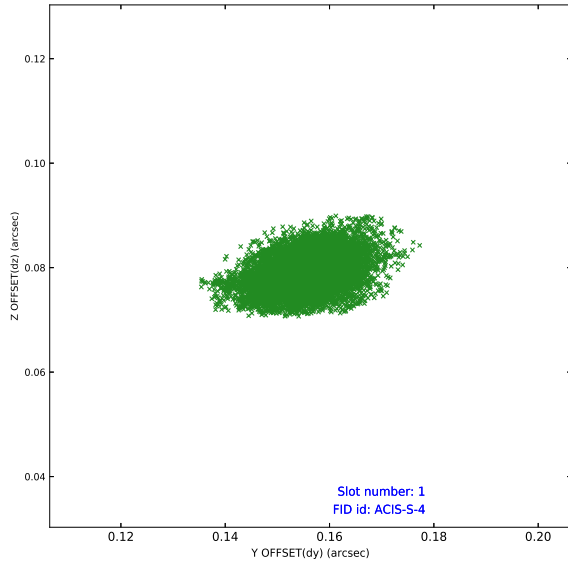


2.5 FID Slots

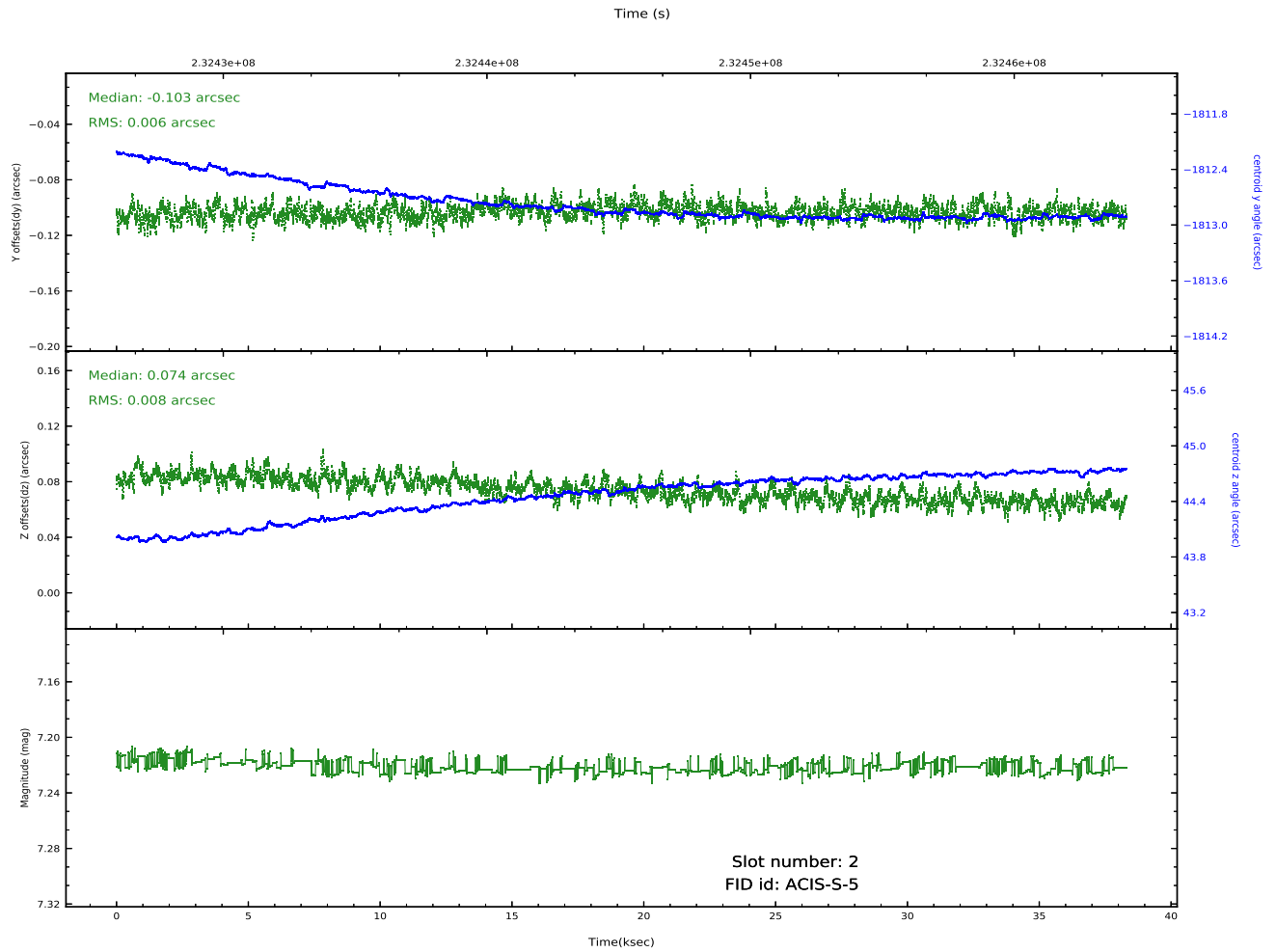
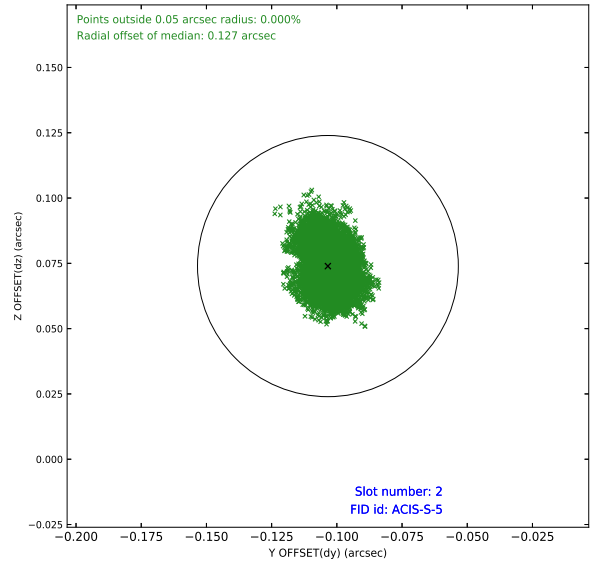
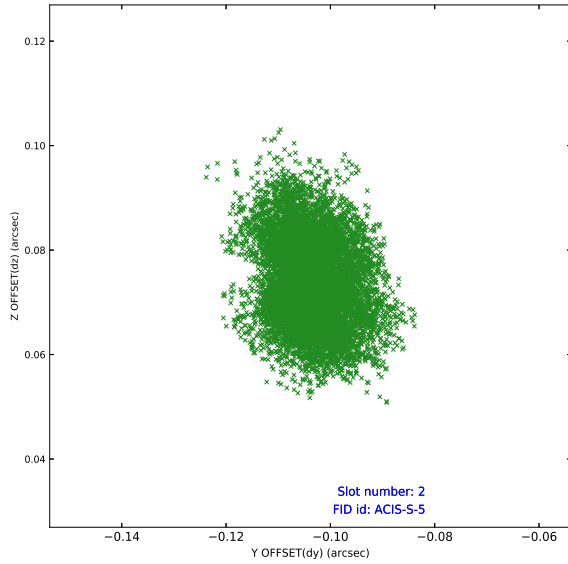
2.5.1 Slot 0



2.5.2 Slot 1

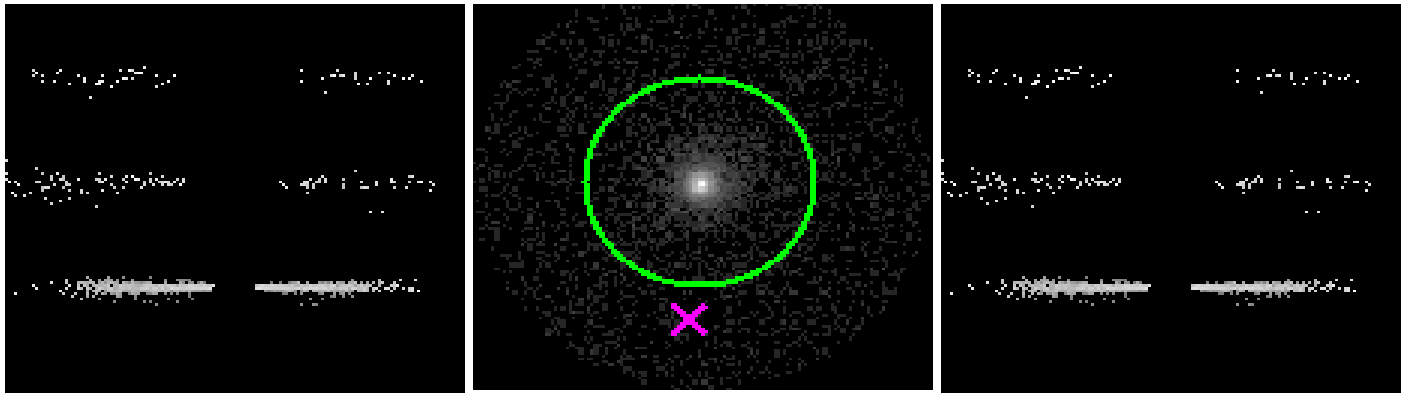


2.5.3 Slot 2



3 Gratings

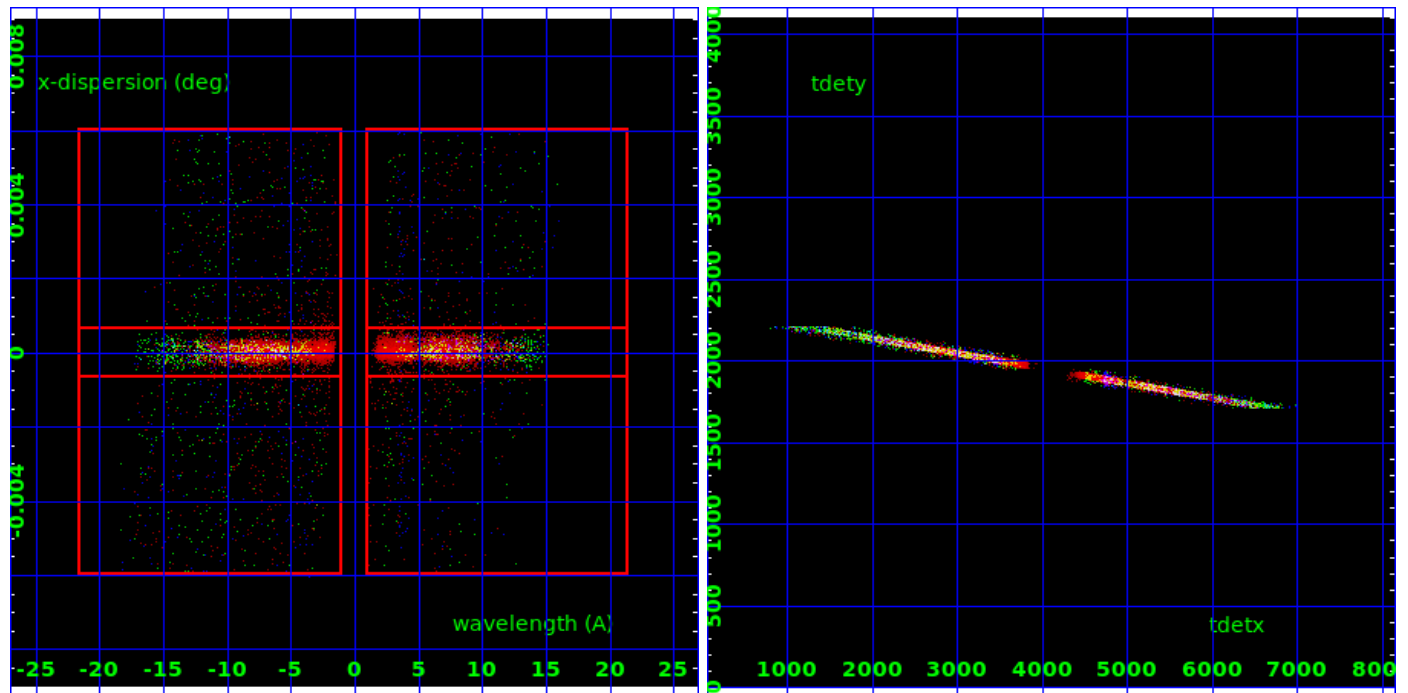
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

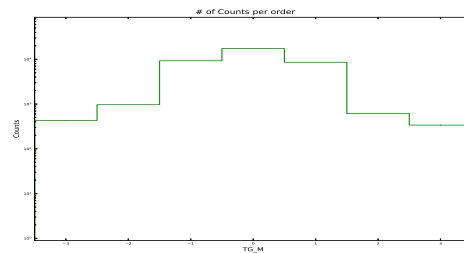
HEG Order Sort ALL

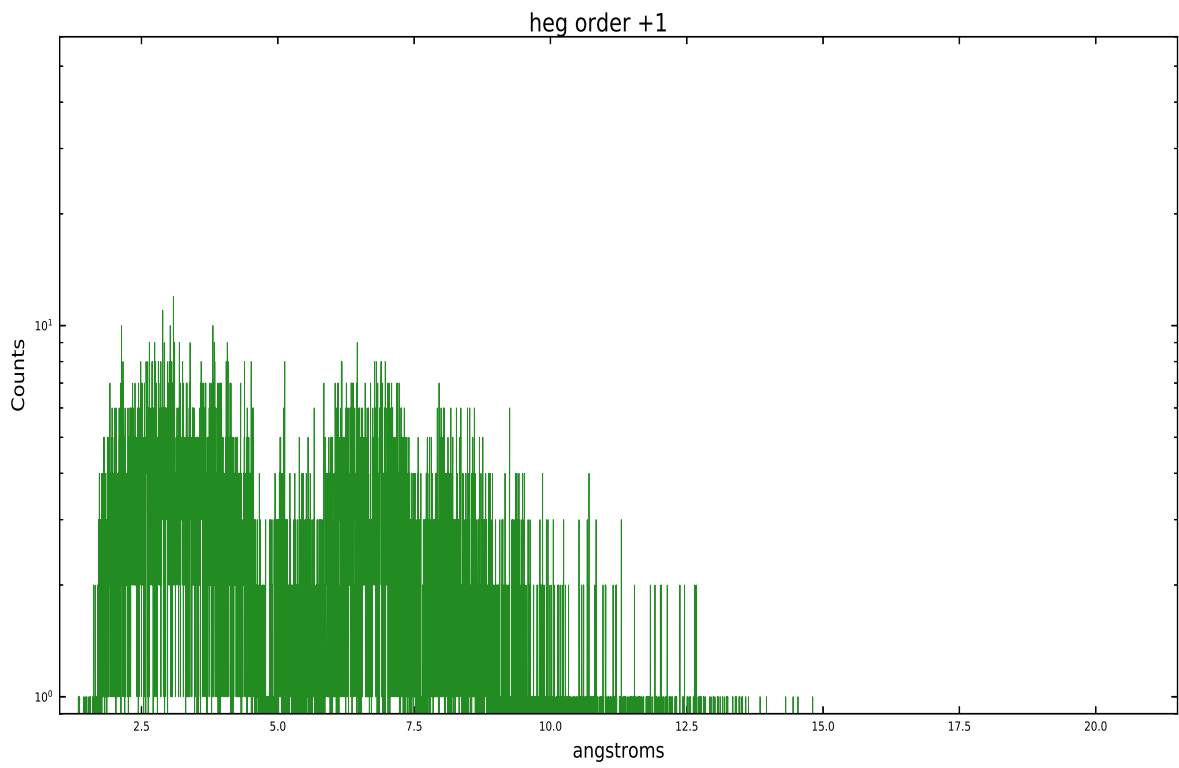
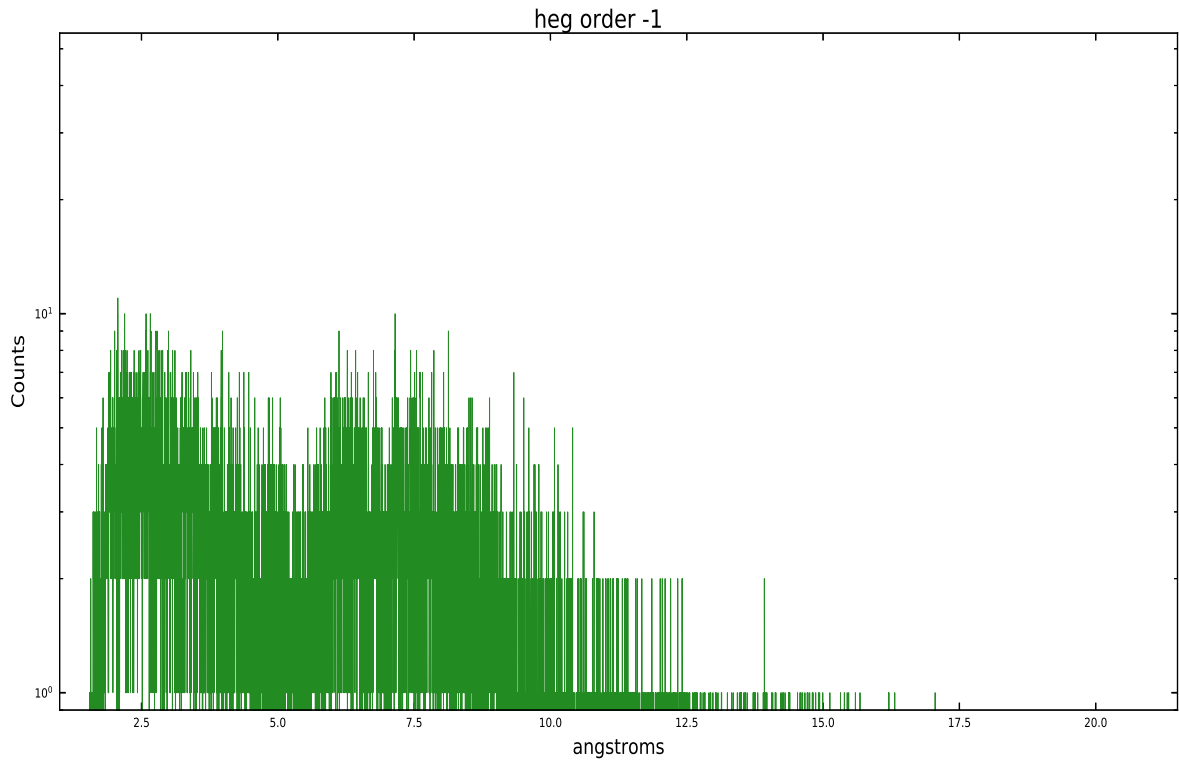


Spot Image HEG

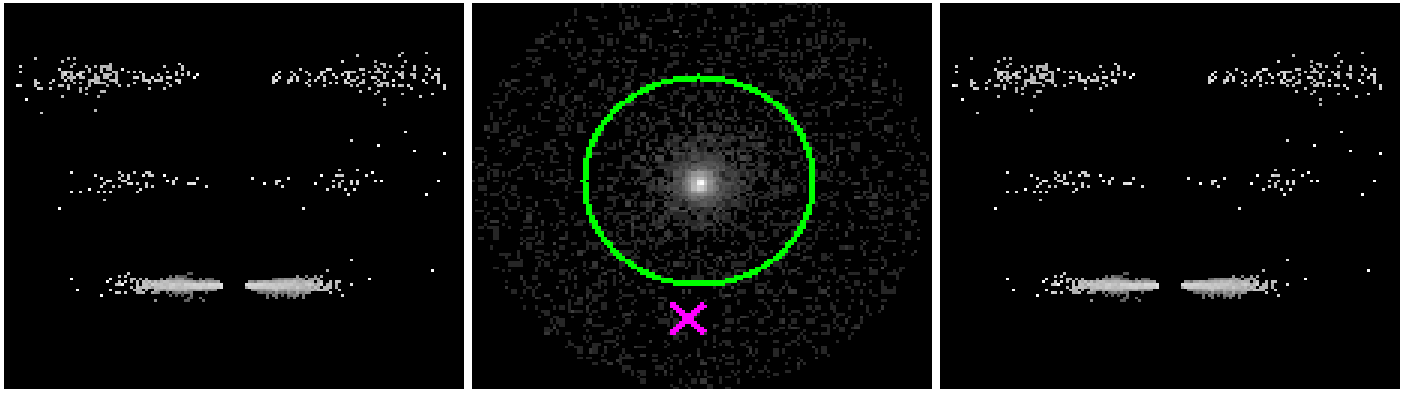
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	432	969	9268	17363	8572	611	339





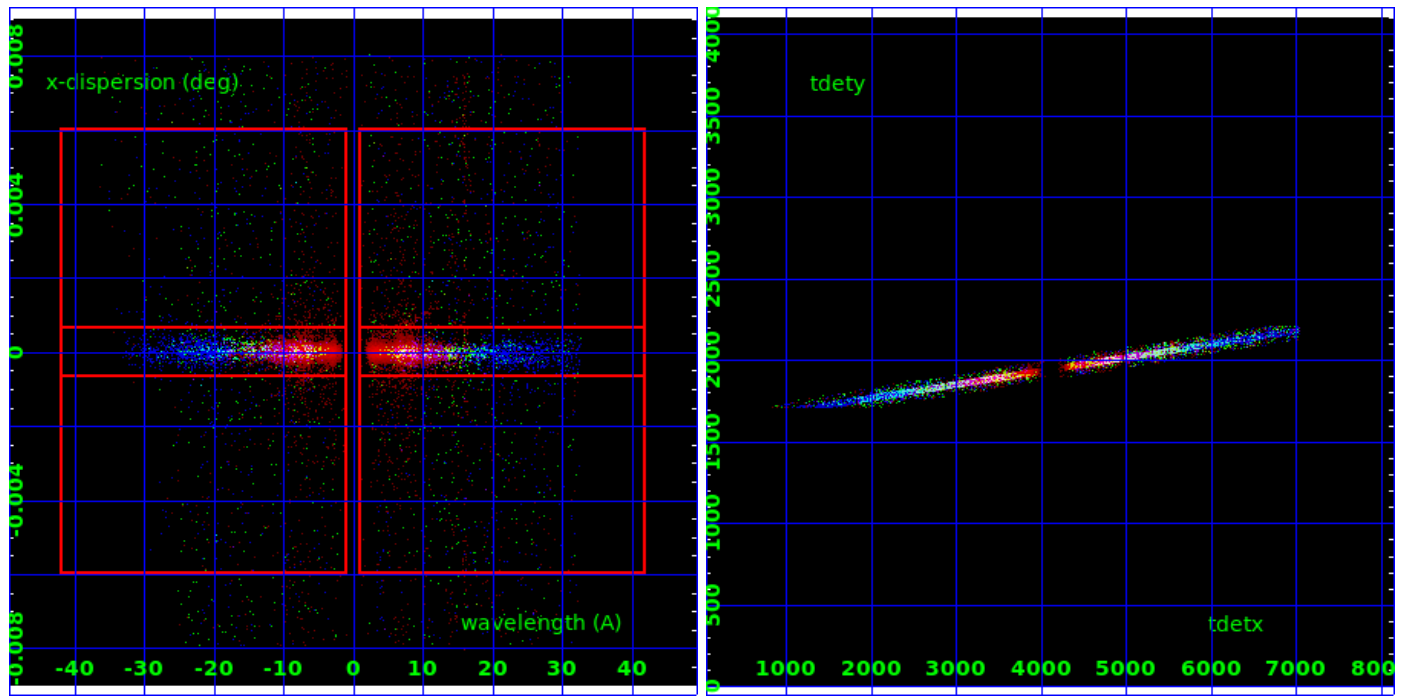
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

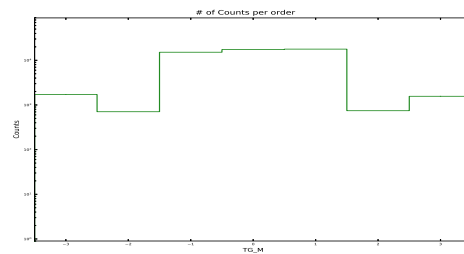
MEG Order Sort ALL

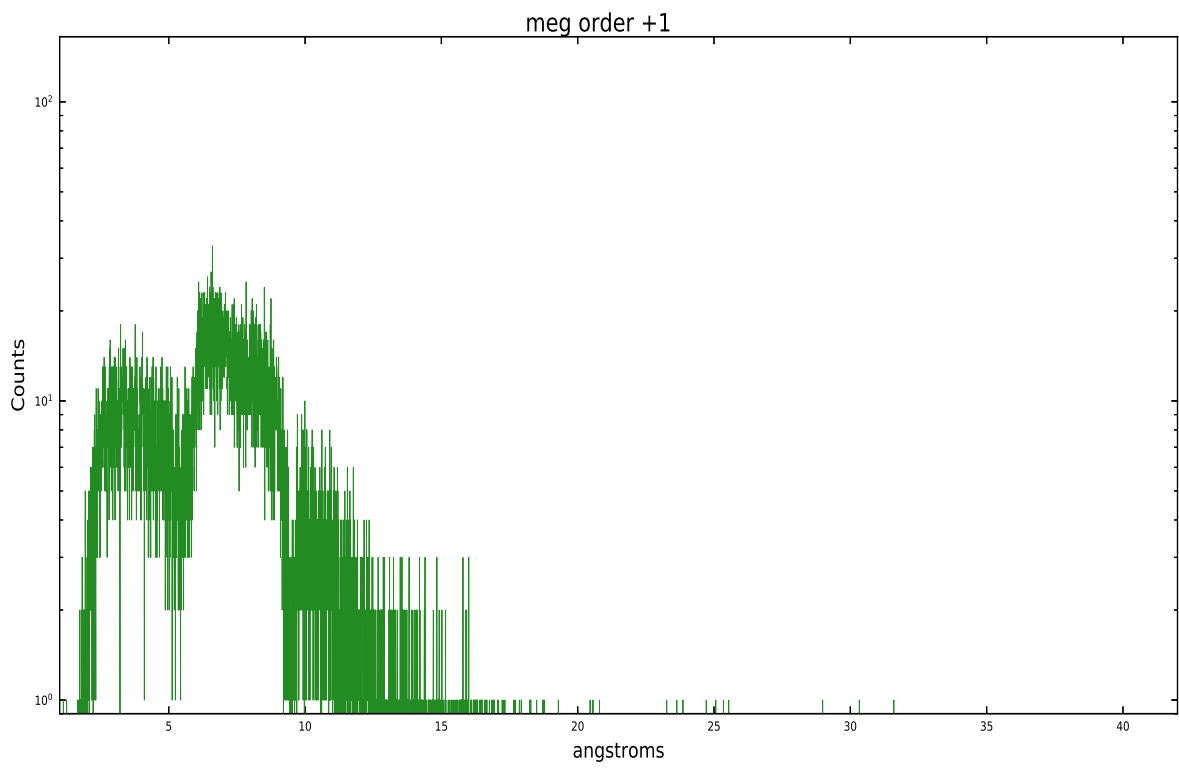
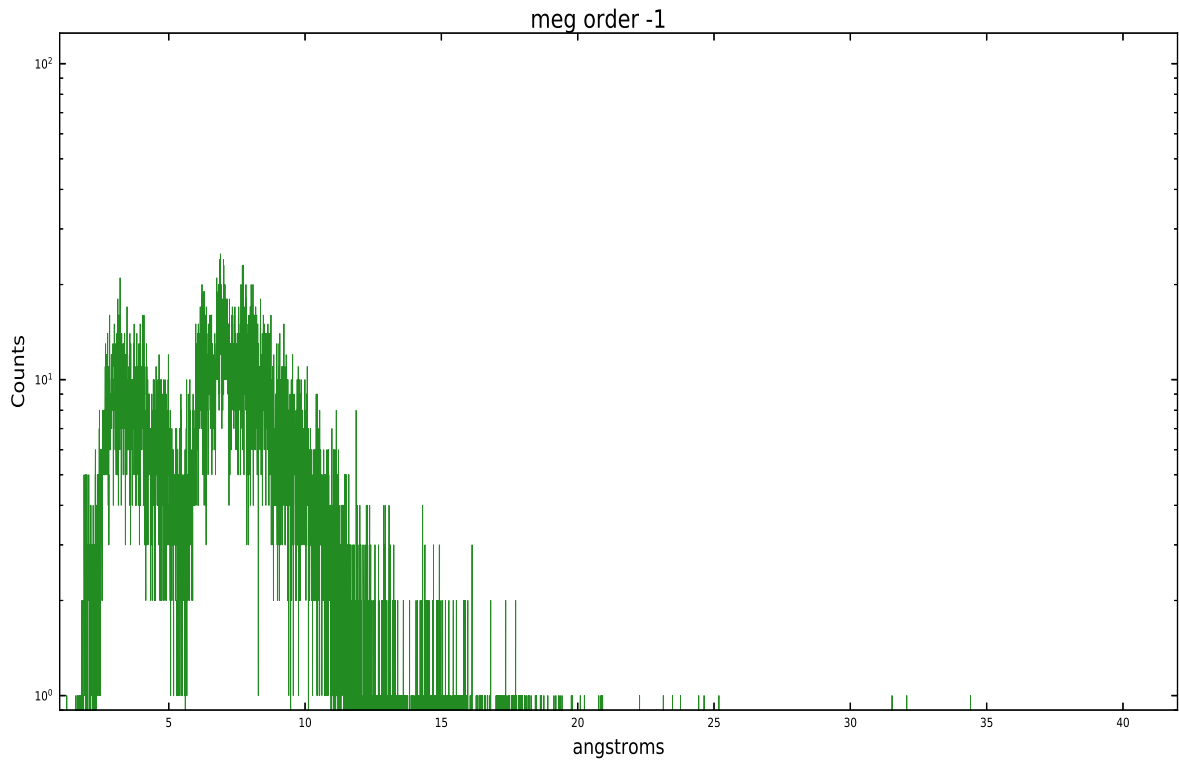


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1712	706	15151	17363	17786	744	1563





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	38.29

A.2 Comments

This observation was interrupted by safing of the science instruments onboard Chandra due to high solar radiation environment. Due to a high radiation environment, the instruments were safed and the observation terminated early.