

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6346 - L2 Version 3
Chandra X-Ray Center

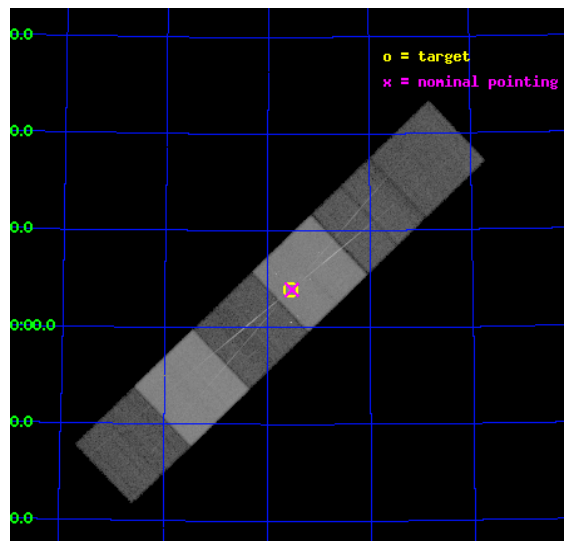
L2 Processing Date : Dec 28 2012

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1 Front

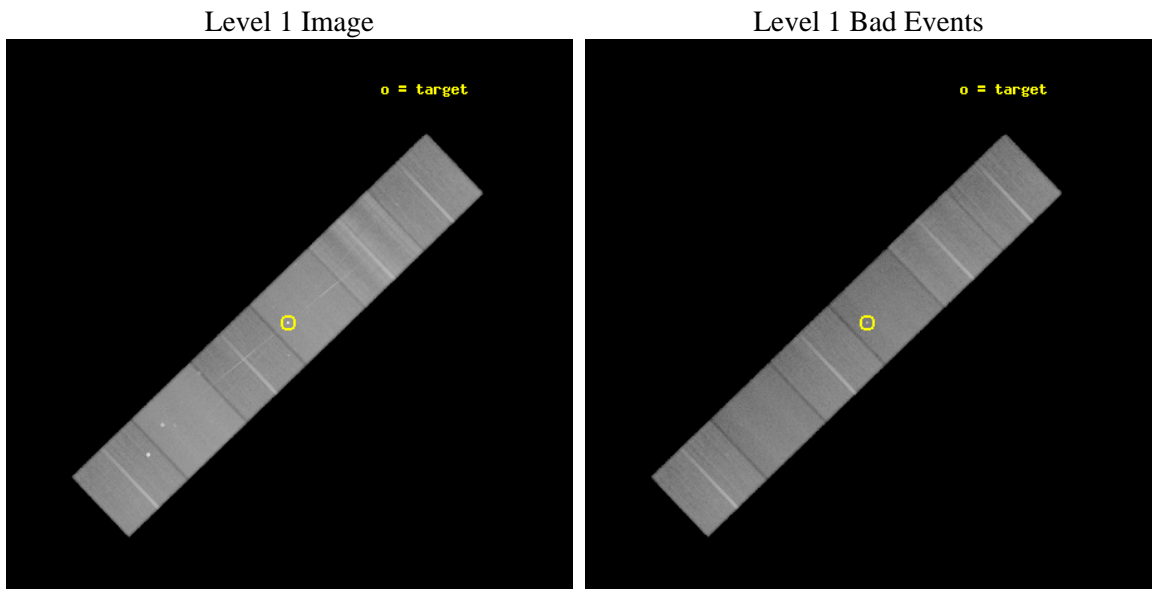
seq_num	701024	Sequence number
obs_id	6346	Observation id
title	Understanding the accretion process in a Low-Luminosity AGN: is M81* a starved black hole?	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	M81*	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.888333	Observer's specified target RA [deg]
dec_targ	69.065306	Observer's specified target Dec [deg]
ra_nom	148.88214349051	Nominal RA [deg]
dec_nom	69.065121469296	Nominal Dec [deg]
roll_nom	316.16240908694	Nominal Roll [deg]
revision	3	Processing version of data
ontime	55177.599794447	Sum of GTIs [s]
livetime	54478.907801888	Livetime [s]
ontime4	55177.599794447	Sum of GTIs [s]
ontime5	55177.599794447	Sum of GTIs [s]
ontime6	55174.358834177	Sum of GTIs [s]
ontime7	55177.599794447	Sum of GTIs [s]
ontime8	55177.599794447	Sum of GTIs [s]
ontime9	55177.599794447	Sum of GTIs [s]
l2events	763468	Number of level 2 events



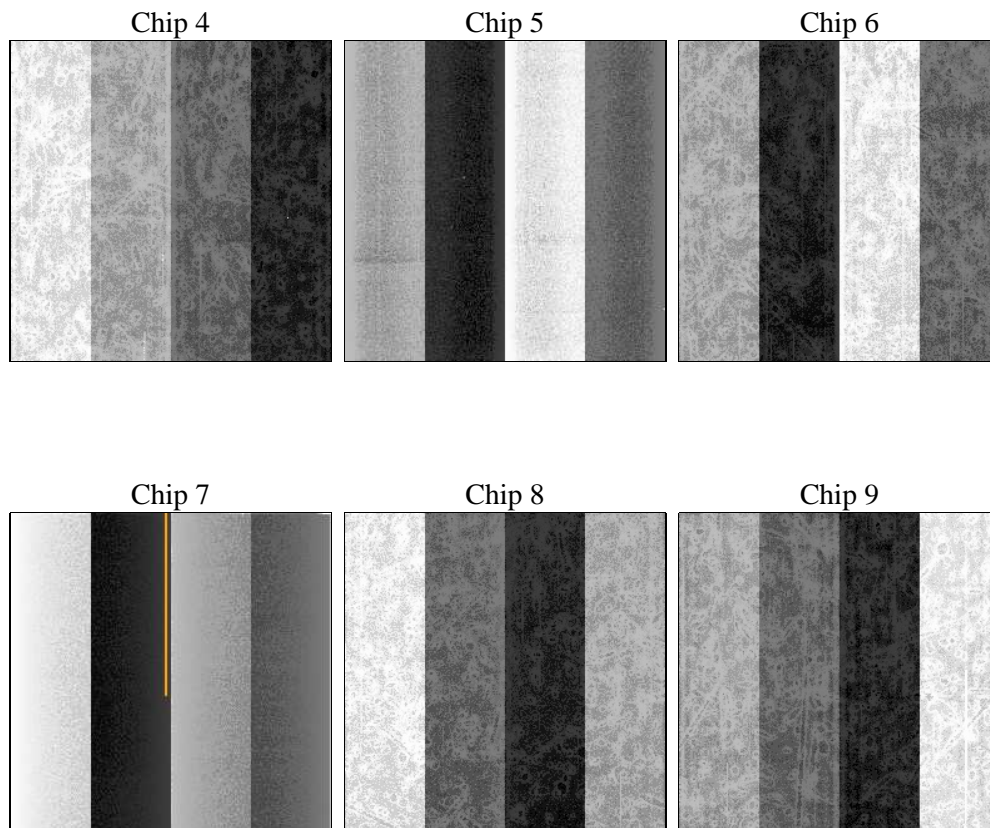
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	55000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	55177.599794447	Sum of GTIs [s]
caldbver	4.5.5	 	ontime4	55177.599794447	Sum of GTIs [s]
date	2012-12-26T03:21:44	Date and time of file creation	ontime5	55177.599794447	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	55174.358834177	Sum of GTIs [s]
			ontime7	55177.599794447	Sum of GTIs [s]
			ontime8	55177.599794447	Sum of GTIs [s]
			ontime9	55177.599794447	Sum of GTIs [s]
			l1events	3274046	Number of level 1 events

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	503189	626872	460867	590486	648497	444135	grade 0 events	40914	23913	30798	27027	62584	25477
rejected events	425643	336404	390734	328619	440914	382277		8%	3%	6%	4%	9%	5%
rejected %	84%	53%	84%	55%	67%	86%	grade 1 events	543	1029	274	674	558	256
								0%	0%	0%	0%	0%	0%
							grade 2 events	14666	89576	14418	53798	39994	12214
								2%	14%	3%	9%	6%	2%
							grade 3 events	5877	12132	5603	23446	26451	5661
								1%	1%	1%	3%	4%	1%
							grade 4 events	5648	11927	5494	23268	23822	5459
								1%	1%	1%	3%	3%	1%
							grade 5 events	18712	45995	19400	54510	26918	20451
								3%	7%	4%	9%	4%	4%
							grade 6 events	10459	153000	13853	134401	54749	13059
								2%	24%	3%	22%	8%	2%
							grade 7 events	406370	289300	371027	273362	413421	361558
								80%	46%	80%	46%	63%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
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	148.807850	148.8821434905131	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.071276	69.0651214692964	Alternating exposures requested	N	N
[deg] Pointing Roll	316.075170	316.1624090869431	[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)	237693917.184000	237692695.39863			
Observation start date	2005-07-14T02:04:13	2005-07-14T01:44:55			
[s] Observation end time (MET)	237748917.184000	237749654.13873			
Observation end date	2005-07-14T17:20:53	2005-07-14T17:34:14			
Read mode	TIMED	TIMED			

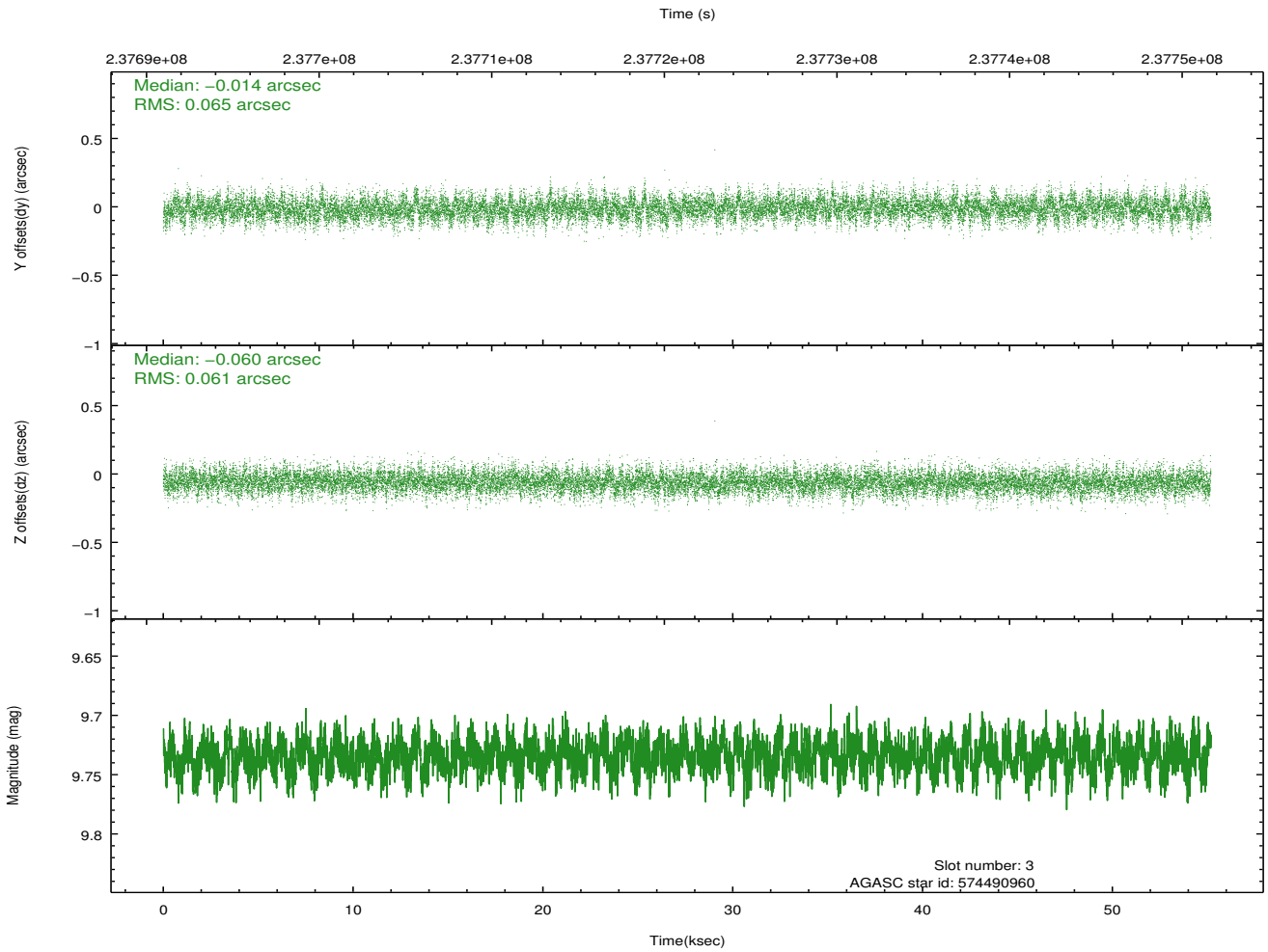
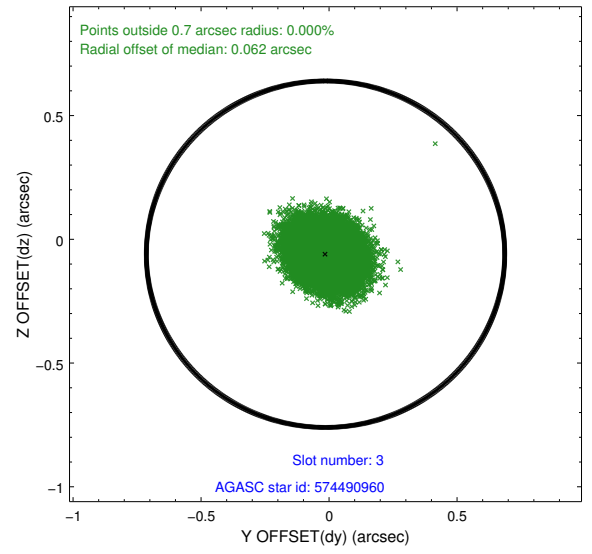
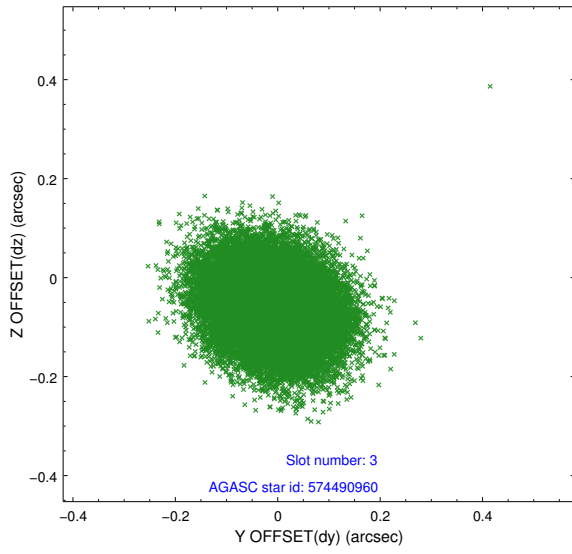
2.3 Aspect

Slot Statistics

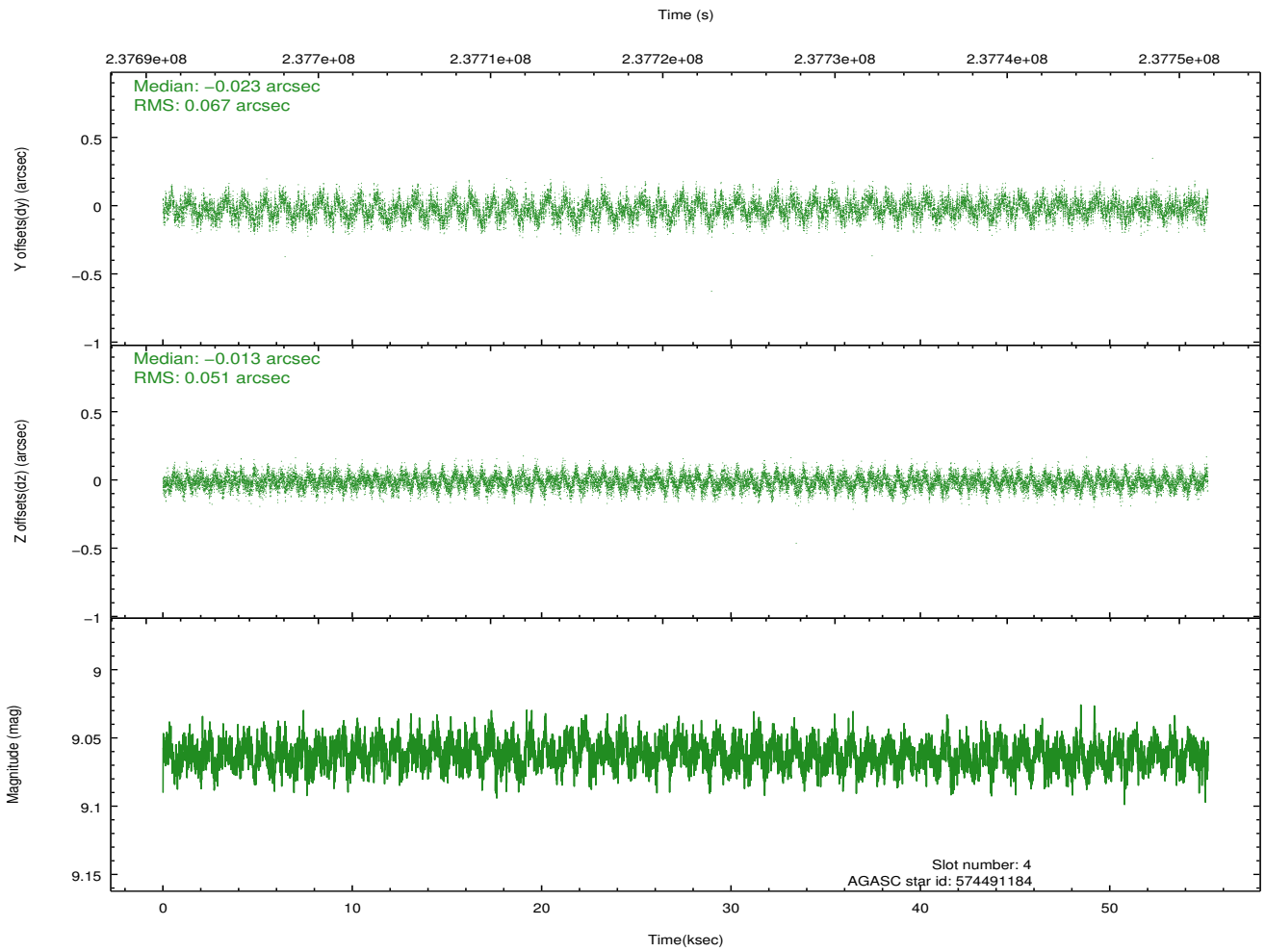
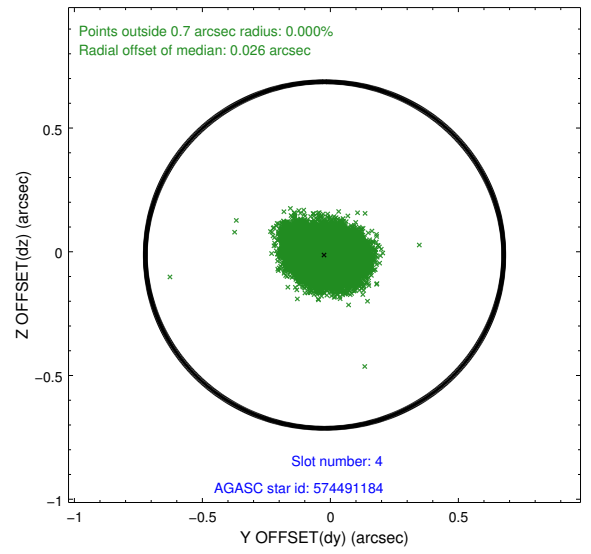
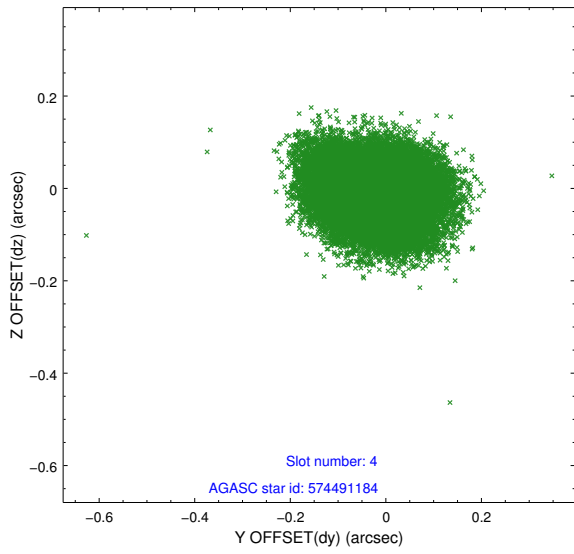
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	13459	-0.020	-0.032	0.011	0.035	0.000000	0.000000	-760.07	-1733.45
1	FID	ACIS-S-4	7.20	13459	0.073	0.018	0.018	0.028	0.000000	0.000000	2153.32	175.11
2	FID	ACIS-S-5	7.23	13459	-0.082	0.023	0.021	0.029	0.000000	0.000000	-1813.01	168.75
3	GUIDE	574490960	9.73	26903	-0.014	-0.060	0.094	0.154	148.185918	69.658768	-2030.23	986.26
4	GUIDE	574491184	9.06	26915	-0.023	-0.013	0.090	0.145	148.582453	69.768699	-1944.11	1614.39
5	GUIDE	574491280	9.33	26904	-0.026	-0.039	0.088	0.142	148.611567	69.450135	-1125.02	810.01
6	GUIDE	574496312	10.27	26763	0.031	-0.004	0.162	0.280	149.547505	68.718299	1573.84	-240.13
7	GUIDE	574489568	9.79	26893	0.039	0.118	0.119	0.195	147.223974	69.438157	-2376.01	-418.86

2.4 Star Slots

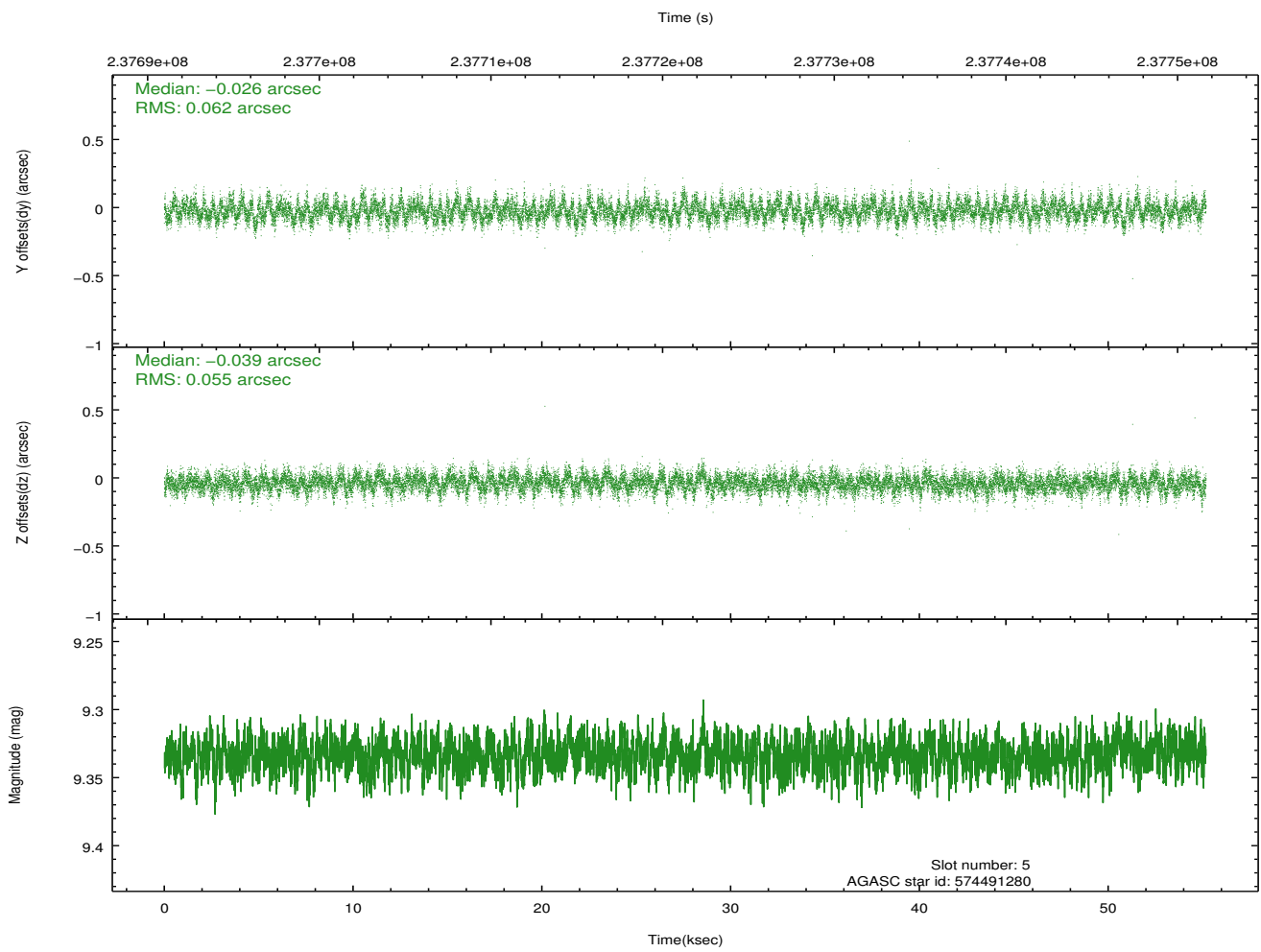
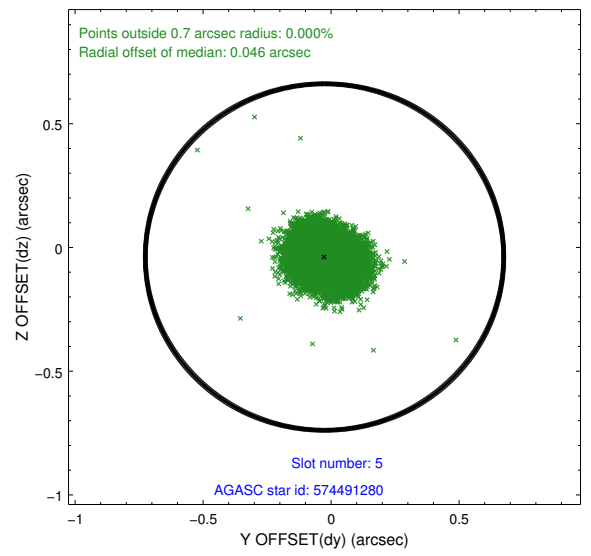
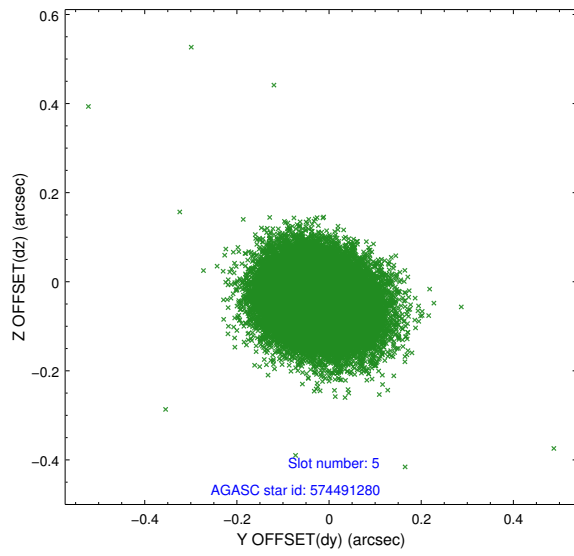
2.4.1 Slot 3



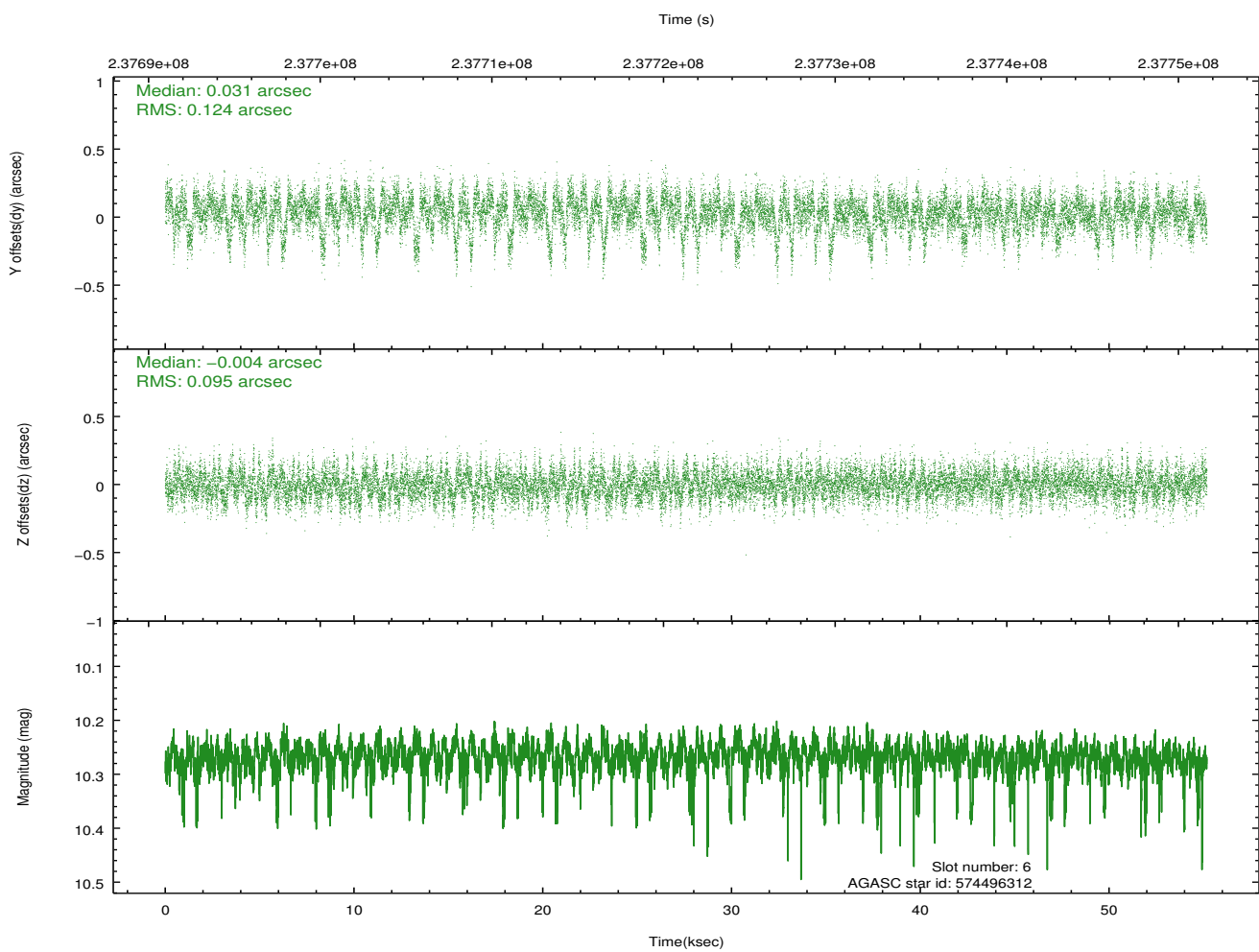
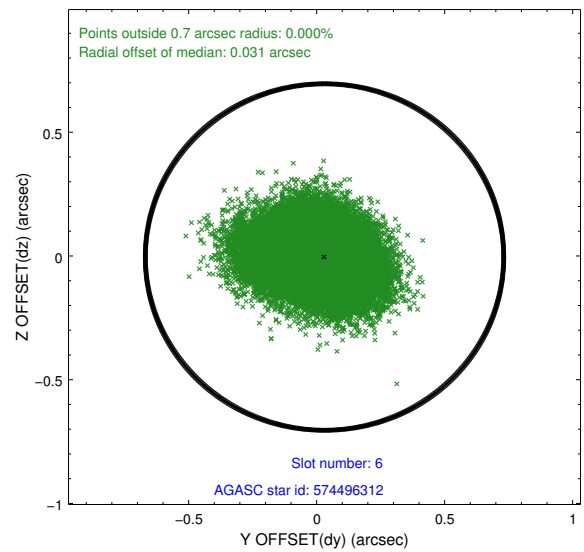
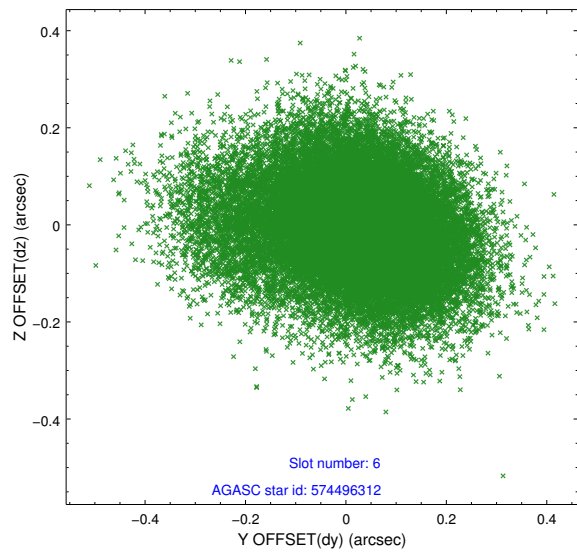
2.4.2 Slot 4



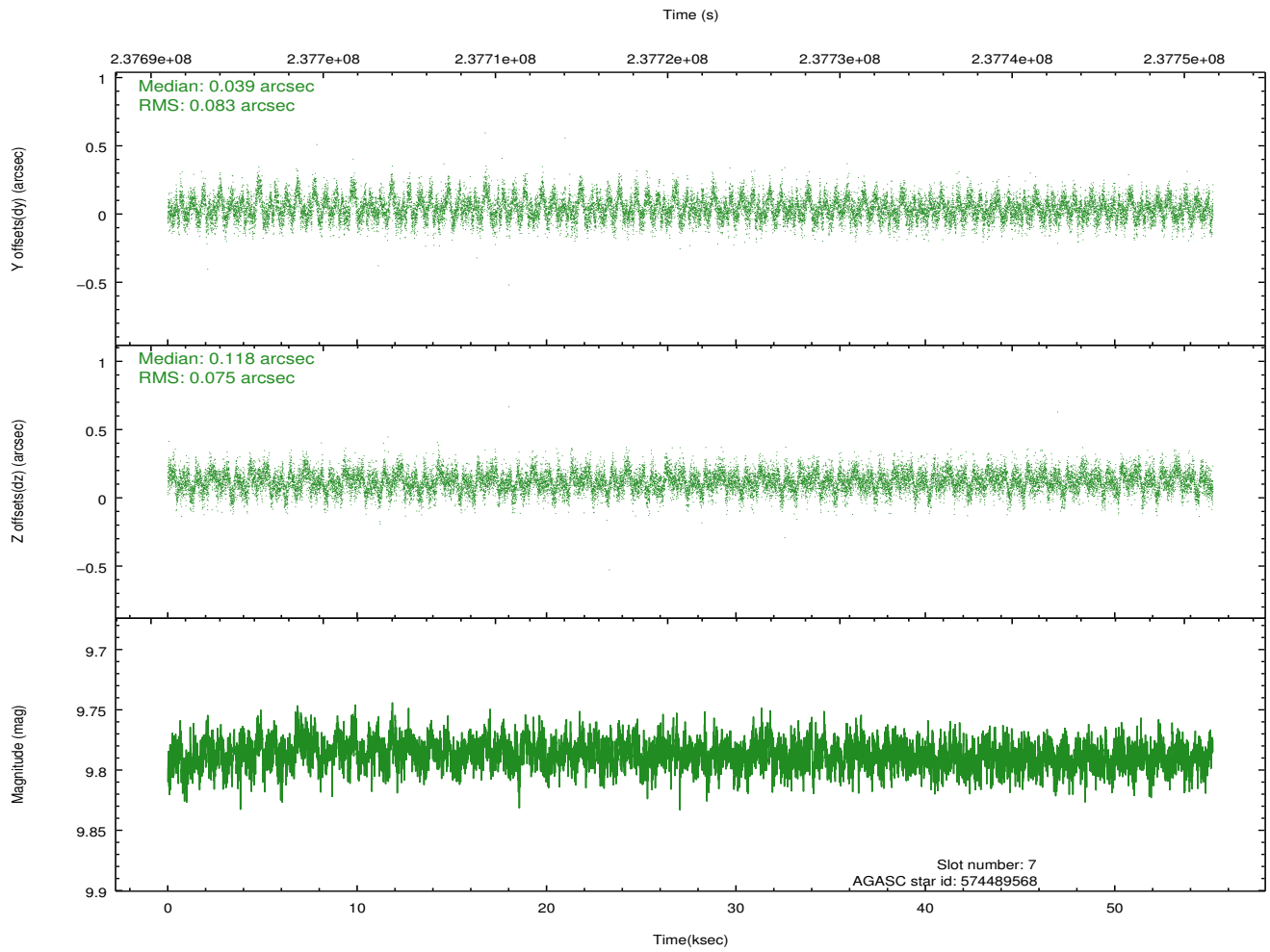
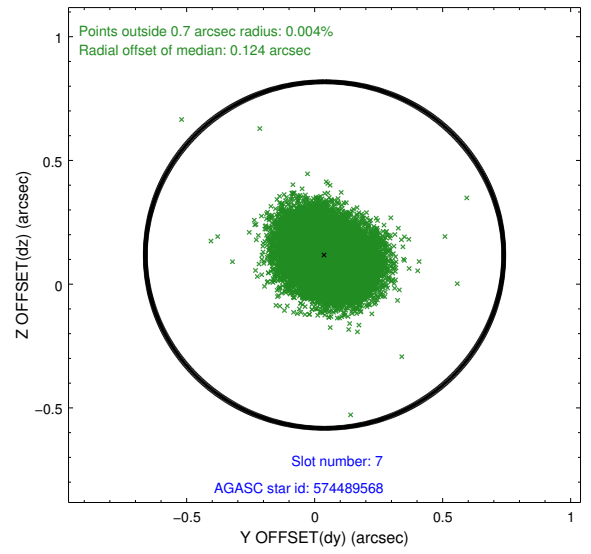
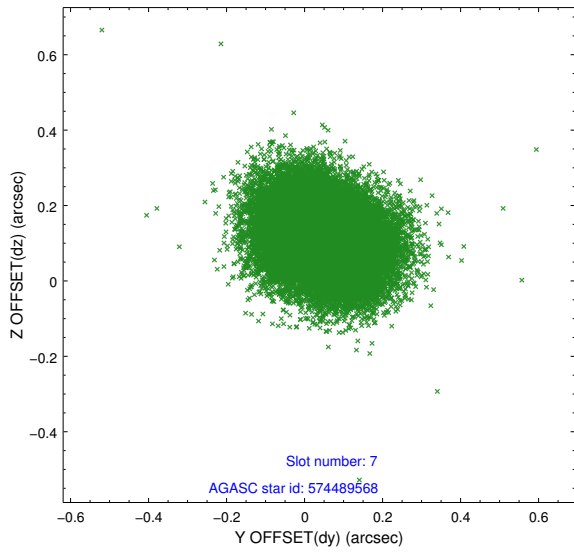
2.4.3 Slot 5



2.4.4 Slot 6

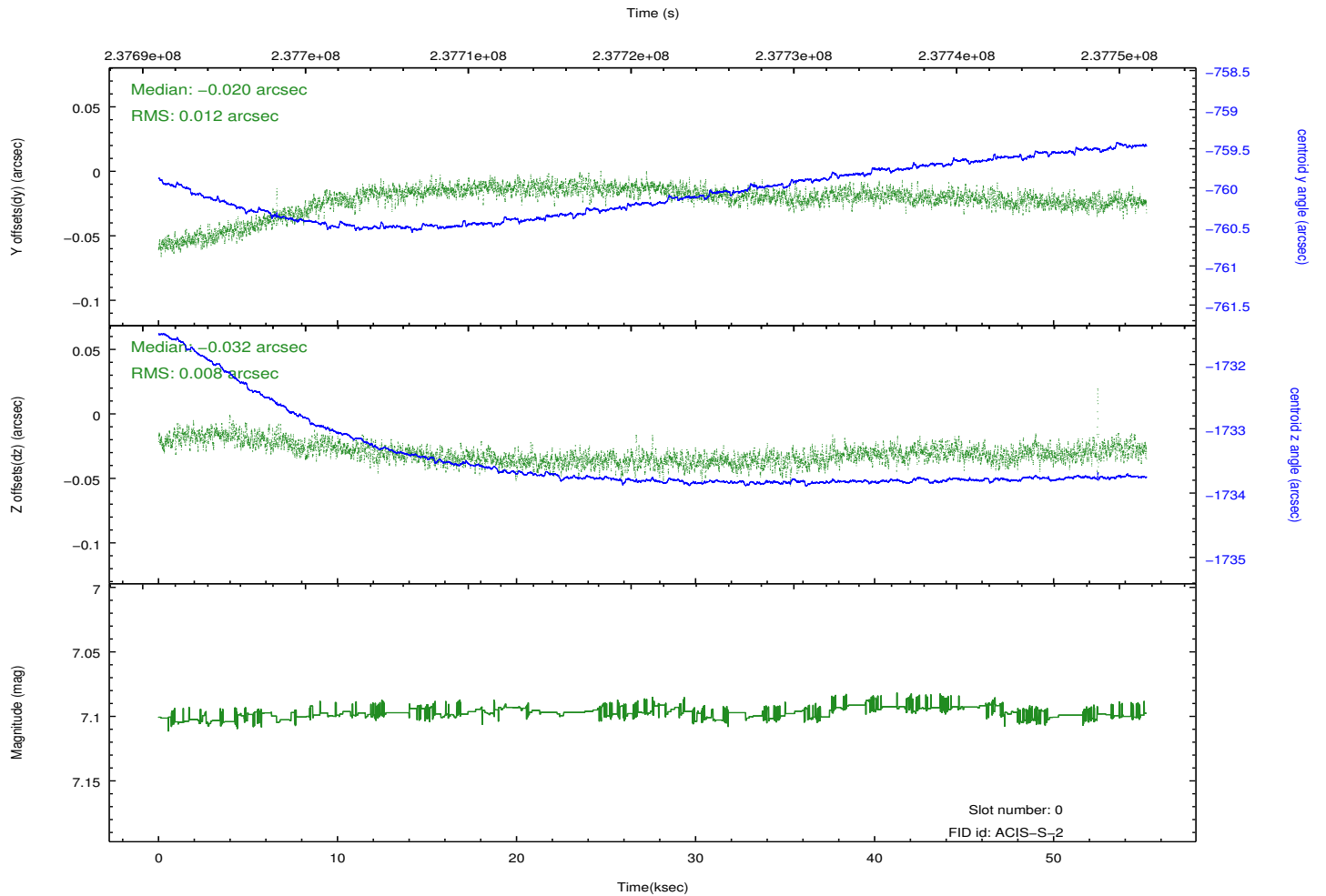
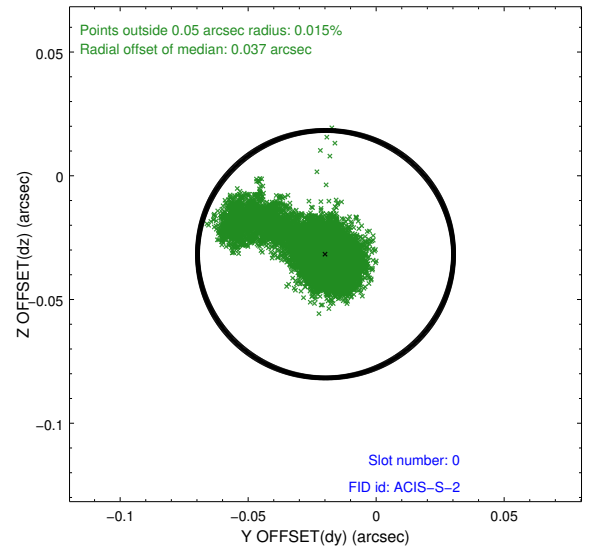
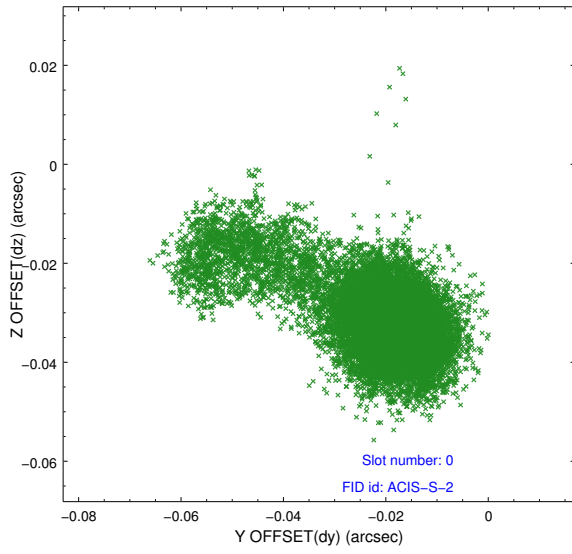


2.4.5 Slot 7

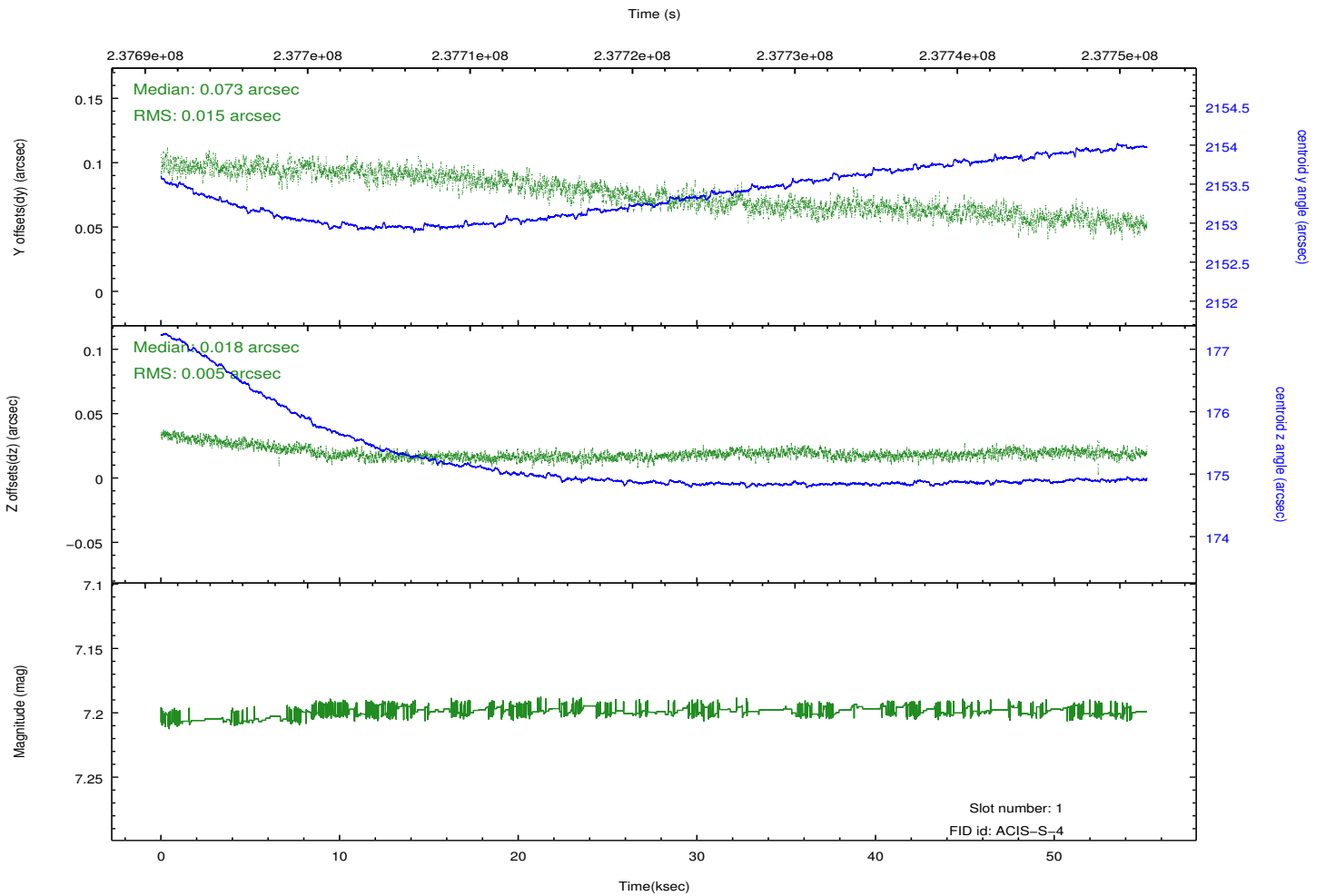
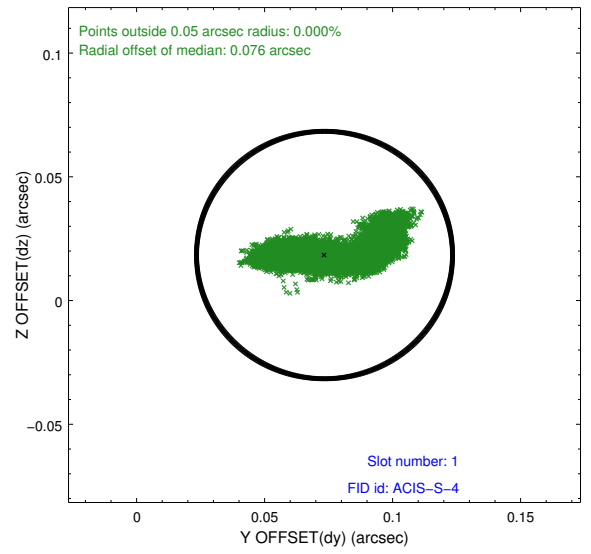
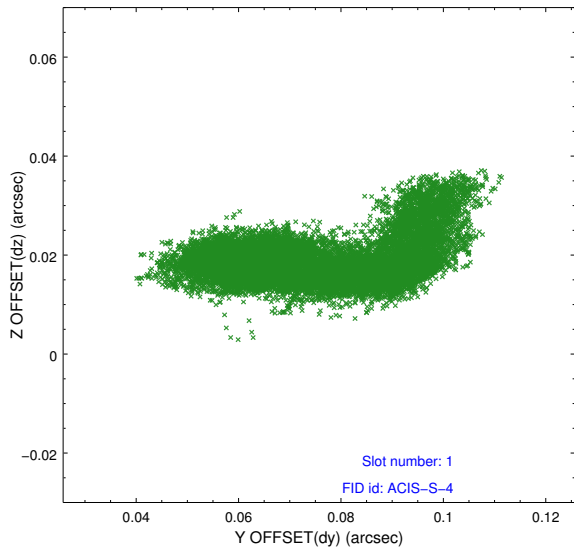


2.5 FID Slots

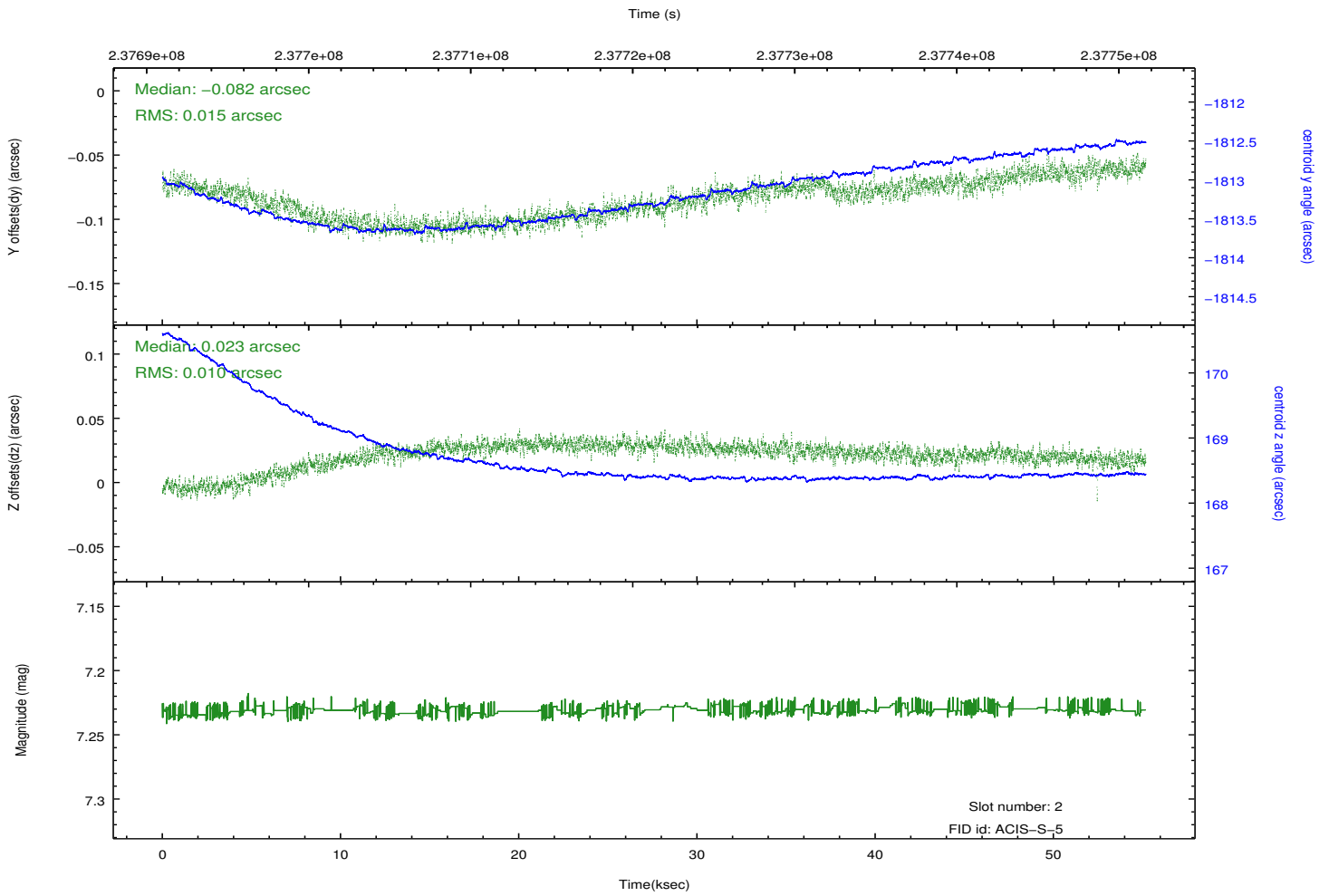
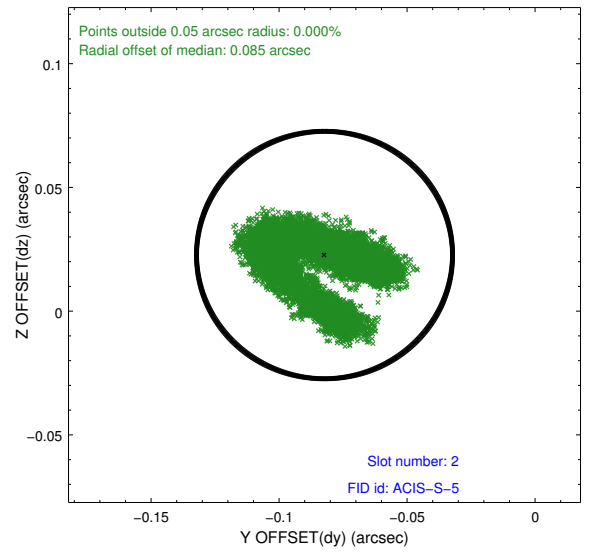
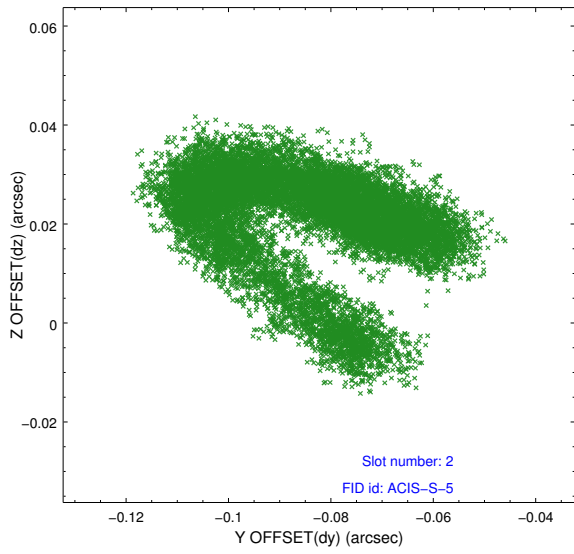
2.5.1 Slot 0



2.5.2 Slot 1

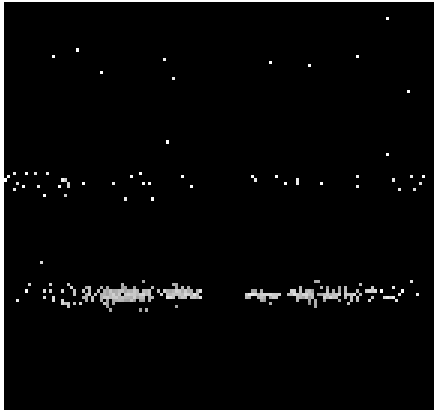


2.5.3 Slot 2

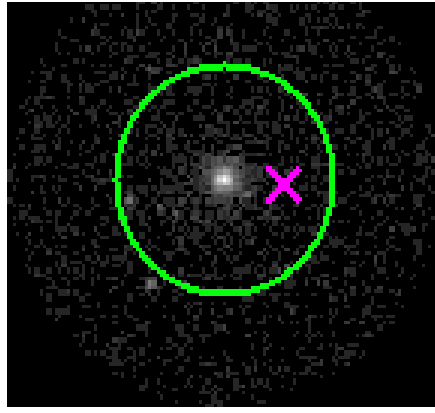


3 Gratings

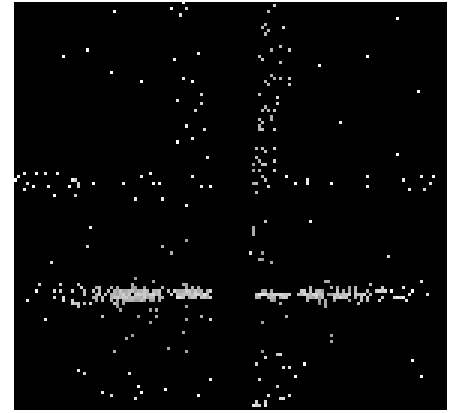
3.1 HEG Arm



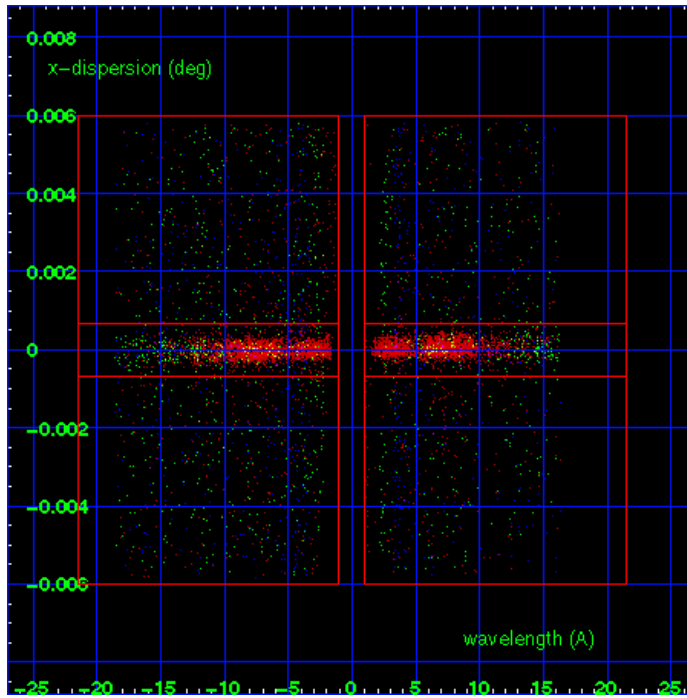
HEG Order Sort 123



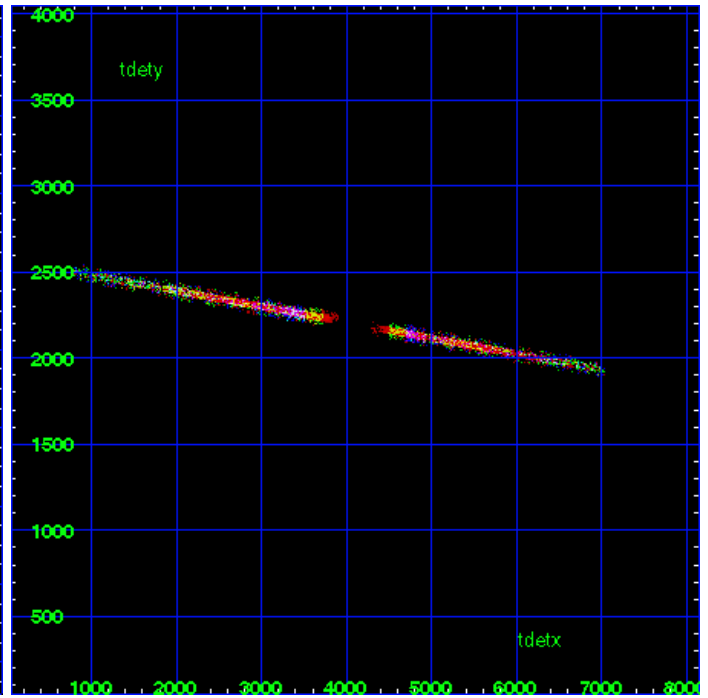
HEG Zero Order



HEG Order Sort ALL

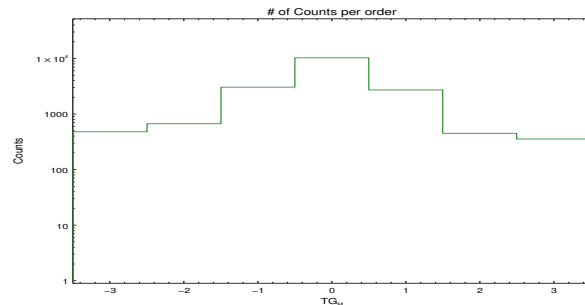


Spot Image HEG

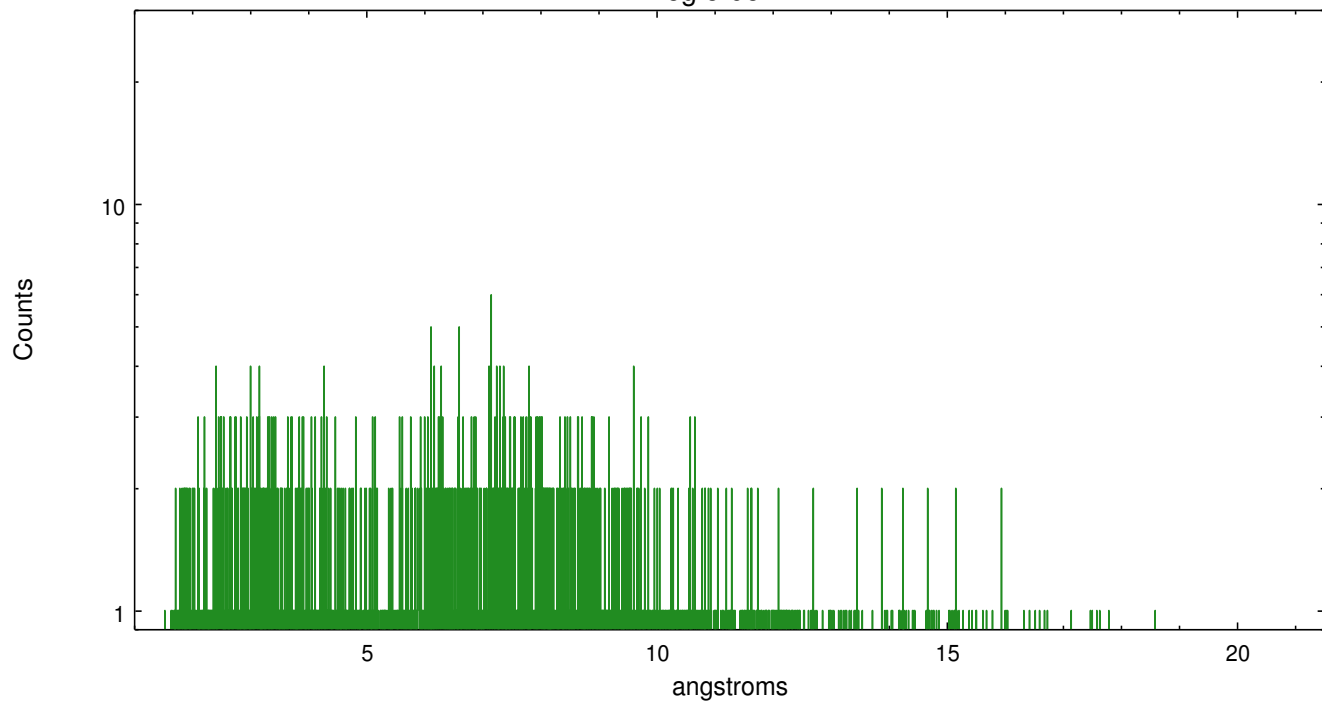


Full Detector HEG

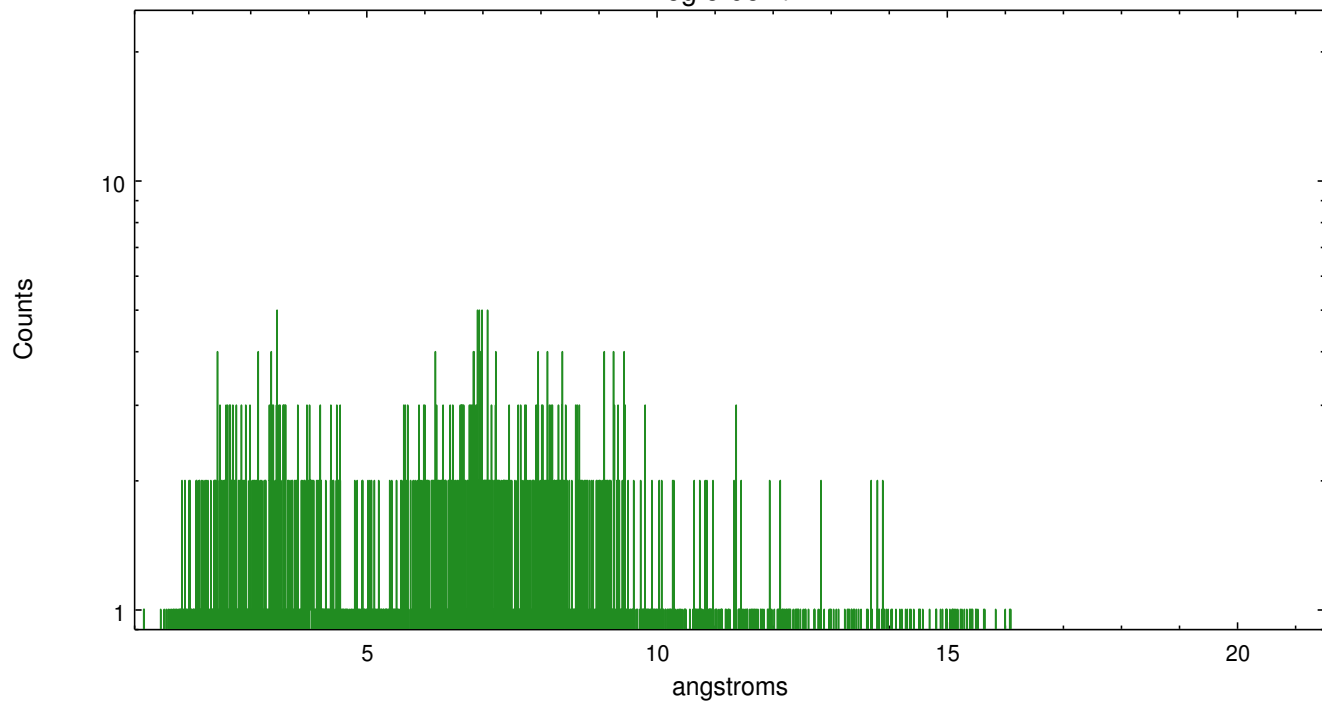
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	480	670	3062	10352	2724	451	356



heg order -1



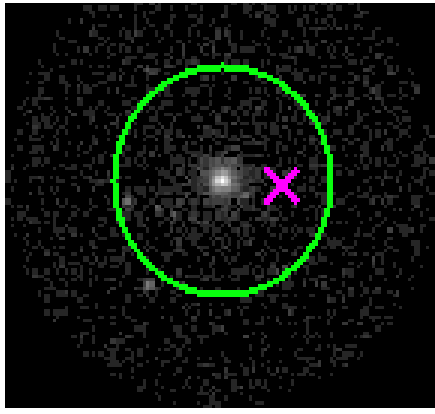
heg order +1



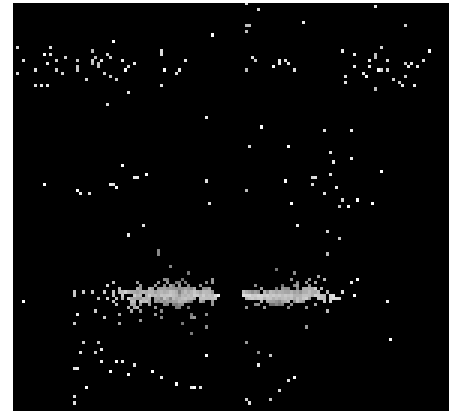
3.2 MEG Arm



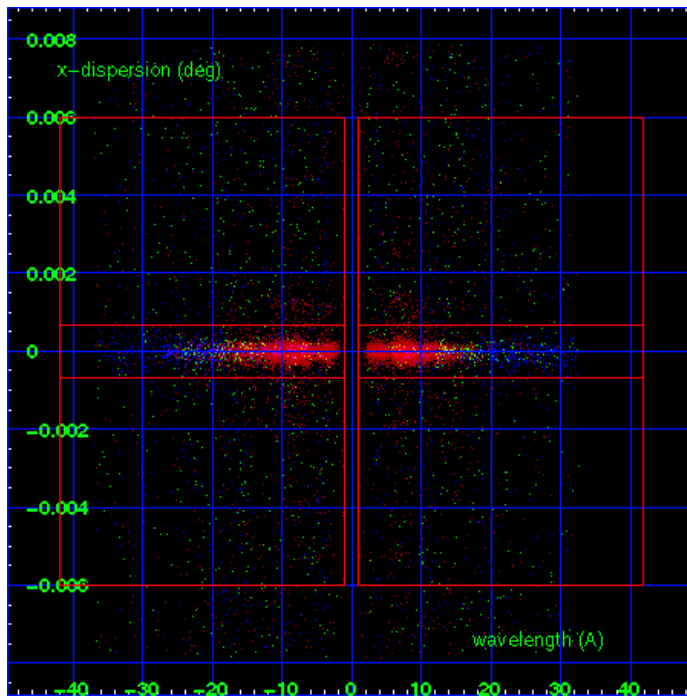
MEG Order Sort 123



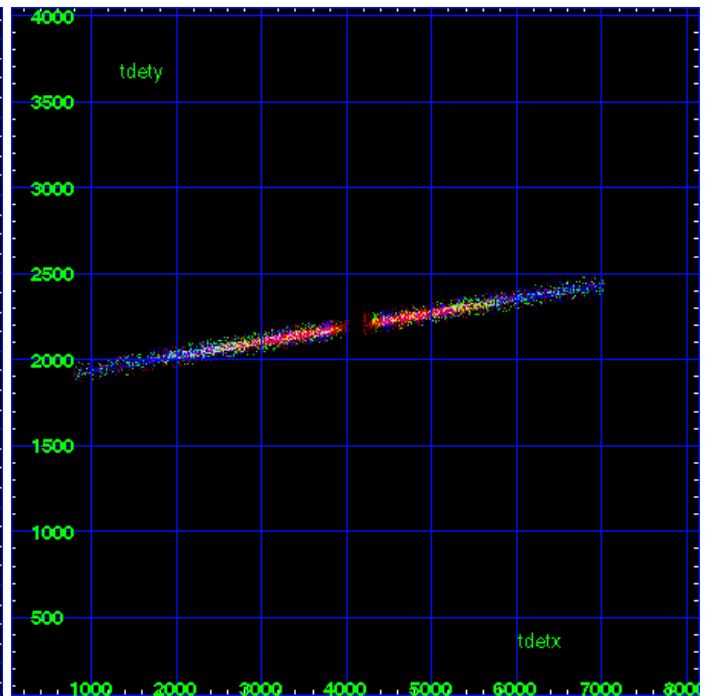
MEG Zero Order



MEG Order Sort ALL

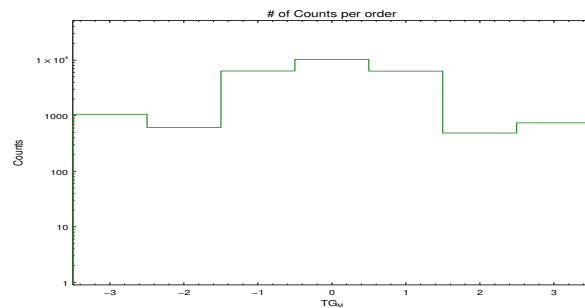


Spot Image MEG

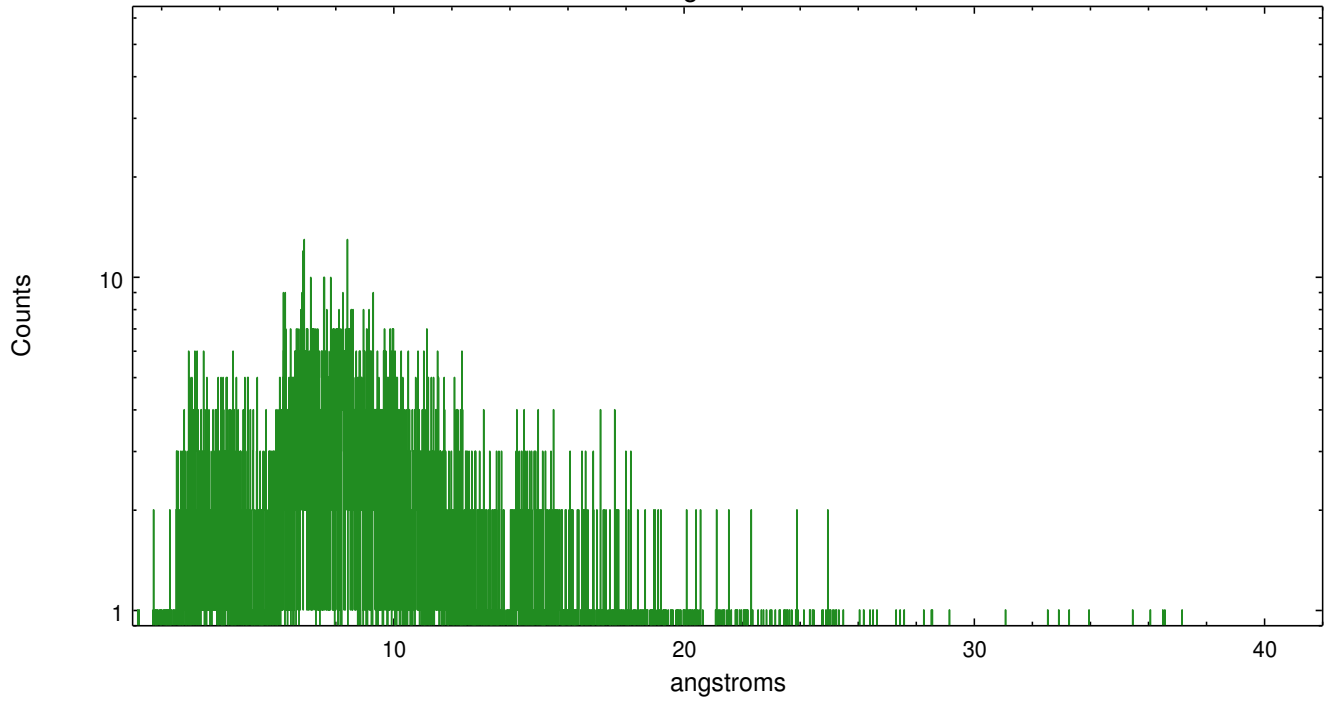


Full Detector MEG

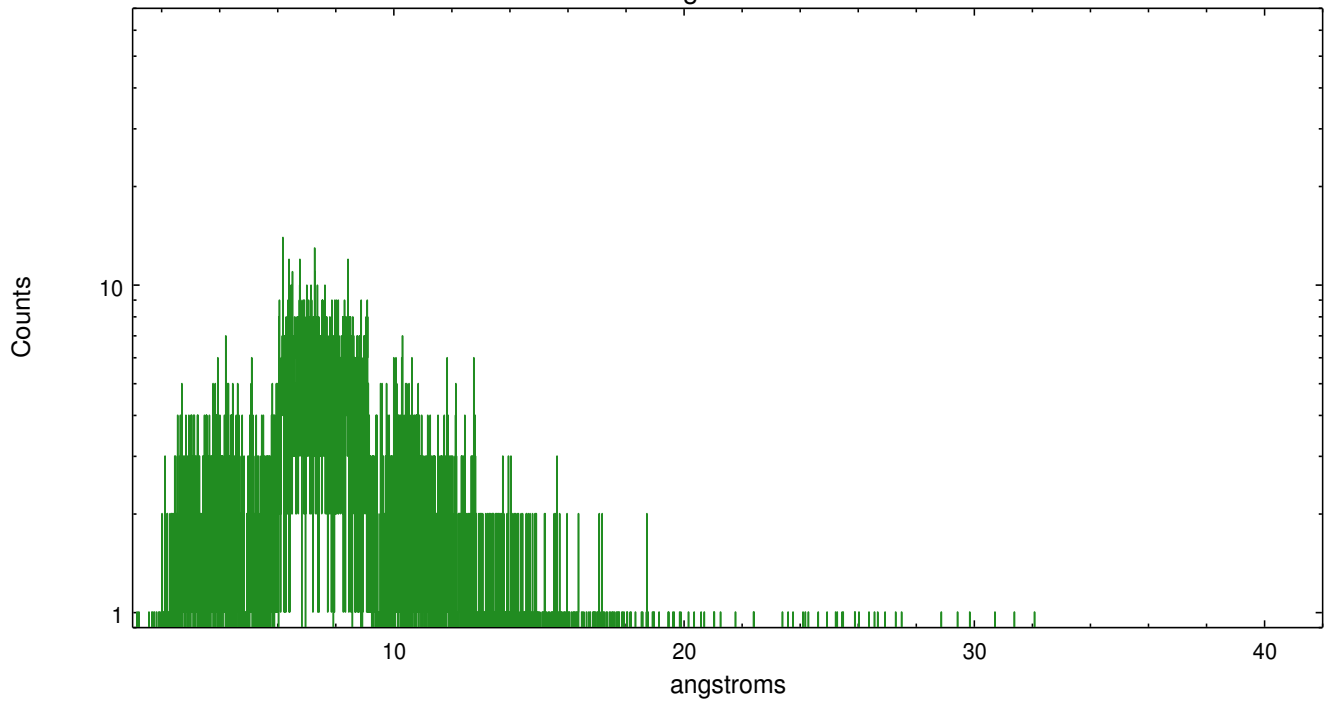
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1063	615	6412	10352	6374	488	745



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	55.17759

A.2 Comments

Multiple sources as well as at least one dispersed spectrum from these sources. This extraction is of M81*, the brightest source.