

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13259 - L2 Version 2
Chandra X-Ray Center

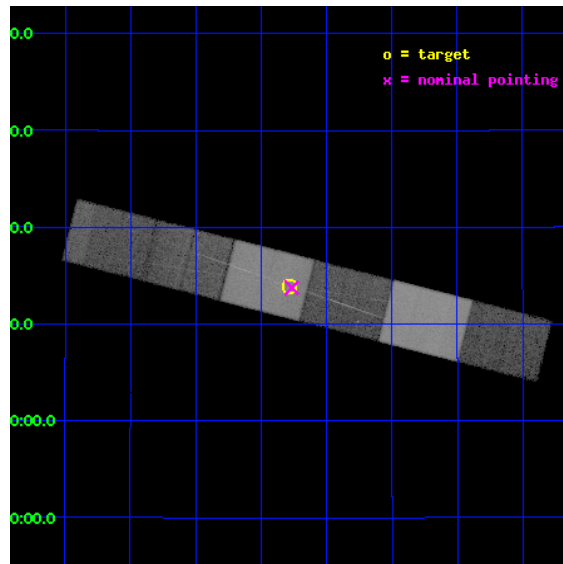
L2 Processing Date : Feb 9 2012

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1 Front

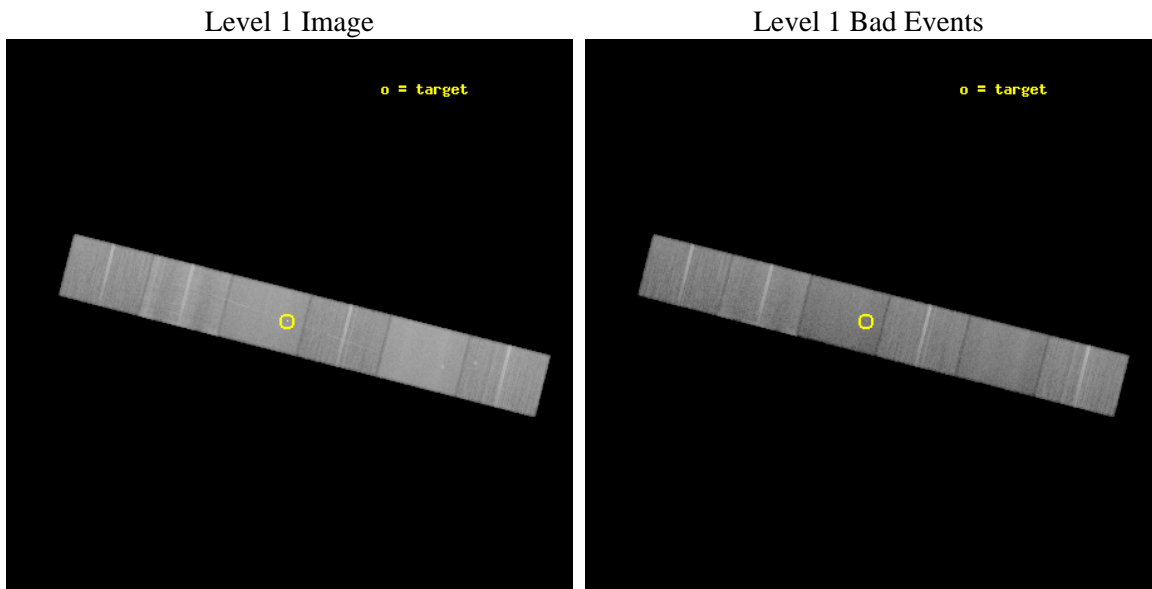
seq_num	200691	Sequence number
obs_id	13259	Observation id
title	SPINNING CORONA OF FK COM	Proposal title
observer	Dr. Vinay Kashyap	Principal investigator
object	FK Com	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	202.695	Observer's specified target RA [deg]
dec_targ	24.232694	Observer's specified target Dec [deg]
ra_nom	202.69128667737	Nominal RA [deg]
dec_nom	24.229213838088	Nominal Dec [deg]
roll_nom	194.15815287121	Nominal Roll [deg]
revision	2	Processing version of data
ontime	44747.026249707	Sum of GTIs [s]
livetime	44024.322963931	Livetime [s]
ontime4	44747.06728971	Sum of GTIs [s]
ontime5	44746.985209703	Sum of GTIs [s]
ontime6	44746.9441697	Sum of GTIs [s]
ontime7	44747.026249707	Sum of GTIs [s]
ontime8	44741.821059108	Sum of GTIs [s]
ontime9	44746.862089694	Sum of GTIs [s]
l2events	378332	Number of level 2 events



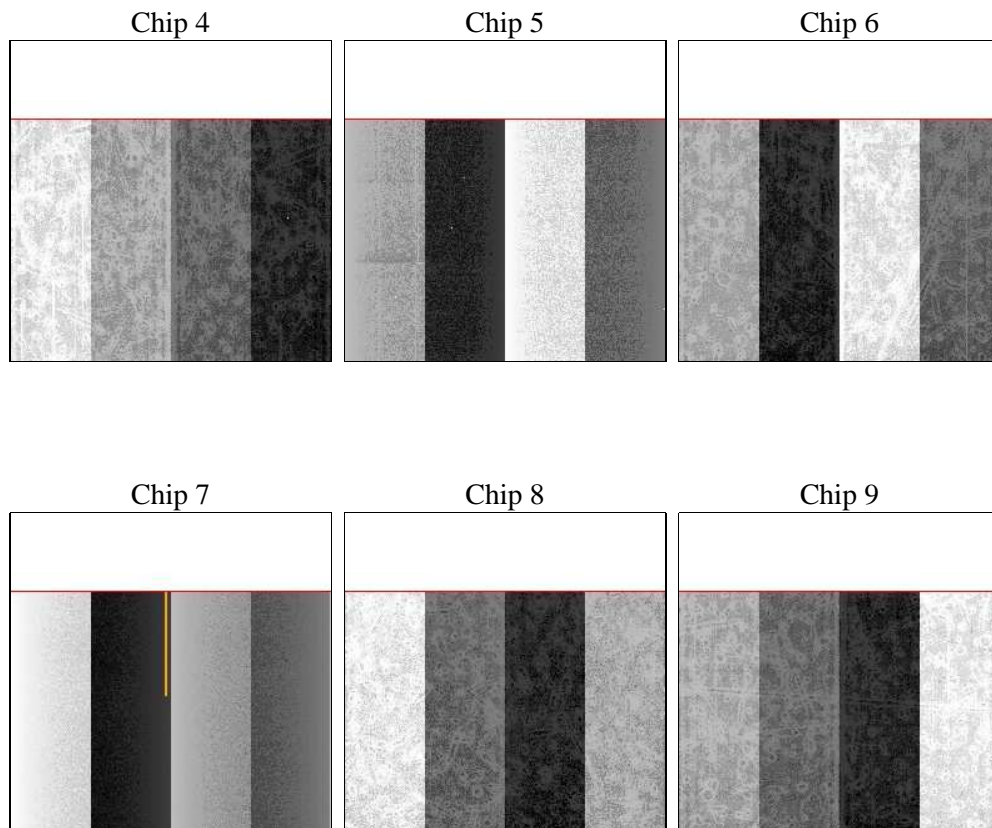
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	44700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	44747.026249707	Sum of GTIs [s]
caldbver	4.4.7	 	ontime4	44747.06728971	Sum of GTIs [s]
date	2012-02-09T00:18:59	Date and time of file creation	ontime5	44746.985209703	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	44746.9441697	Sum of GTIs [s]
			ontime7	44747.026249707	Sum of GTIs [s]
			ontime8	44741.821059108	Sum of GTIs [s]
			ontime9	44746.862089694	Sum of GTIs [s]
			l1events	1621200	Number of level 1 events

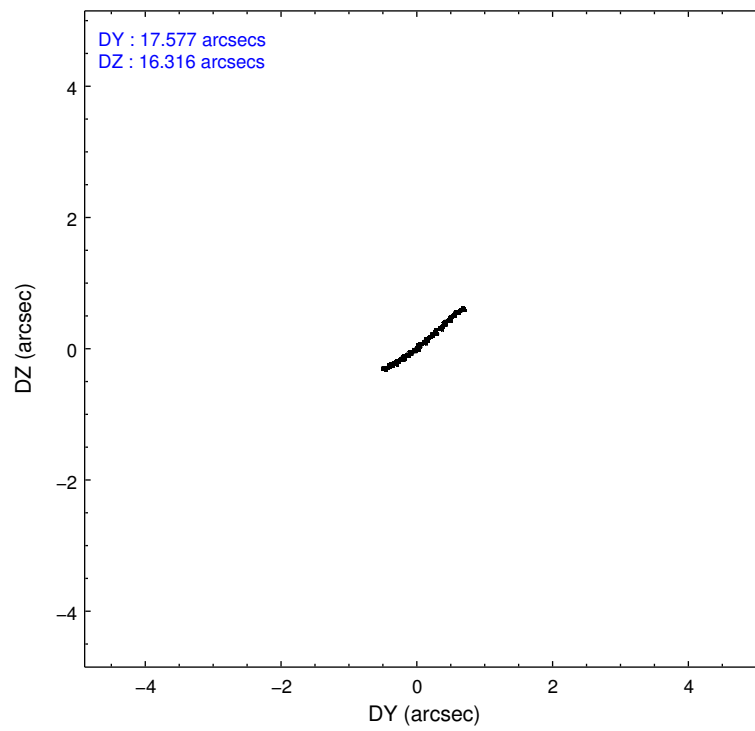
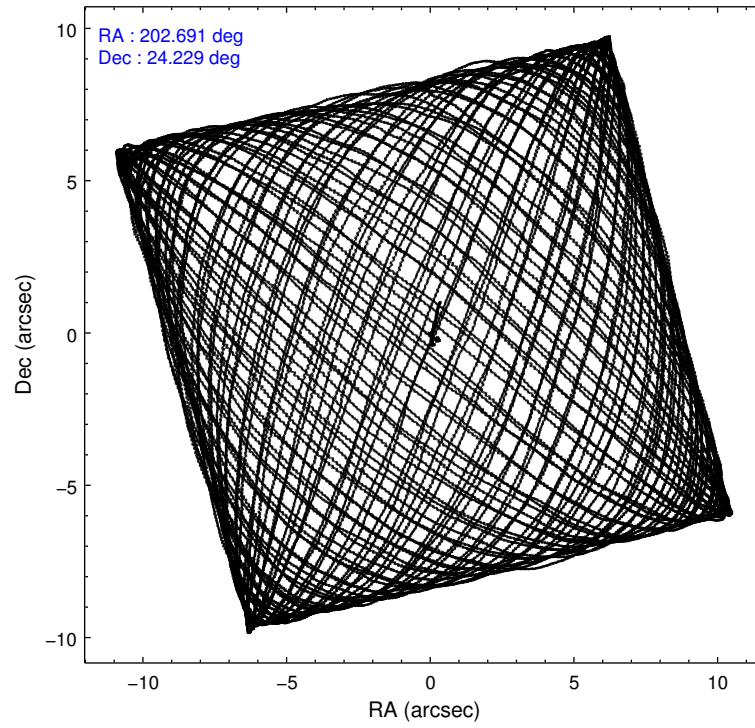
2.1.4 Events

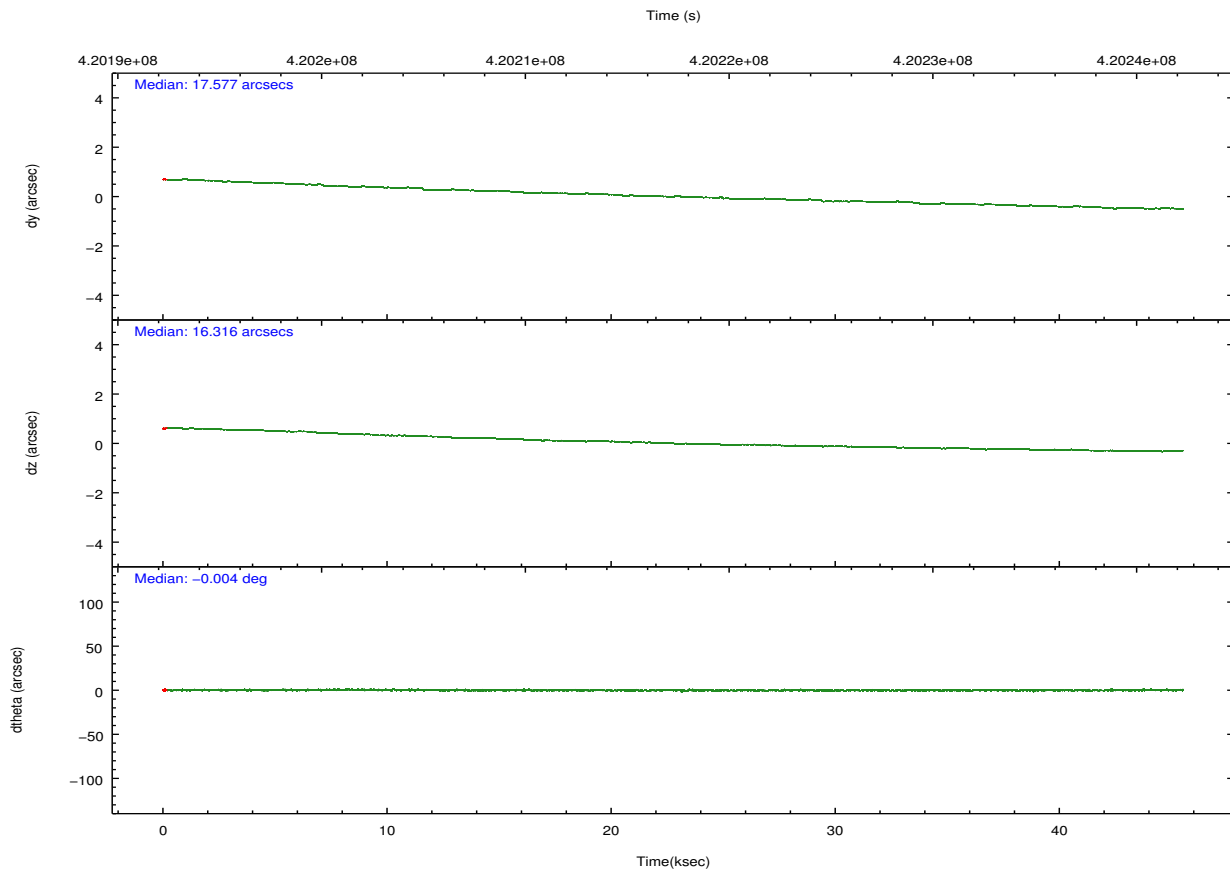
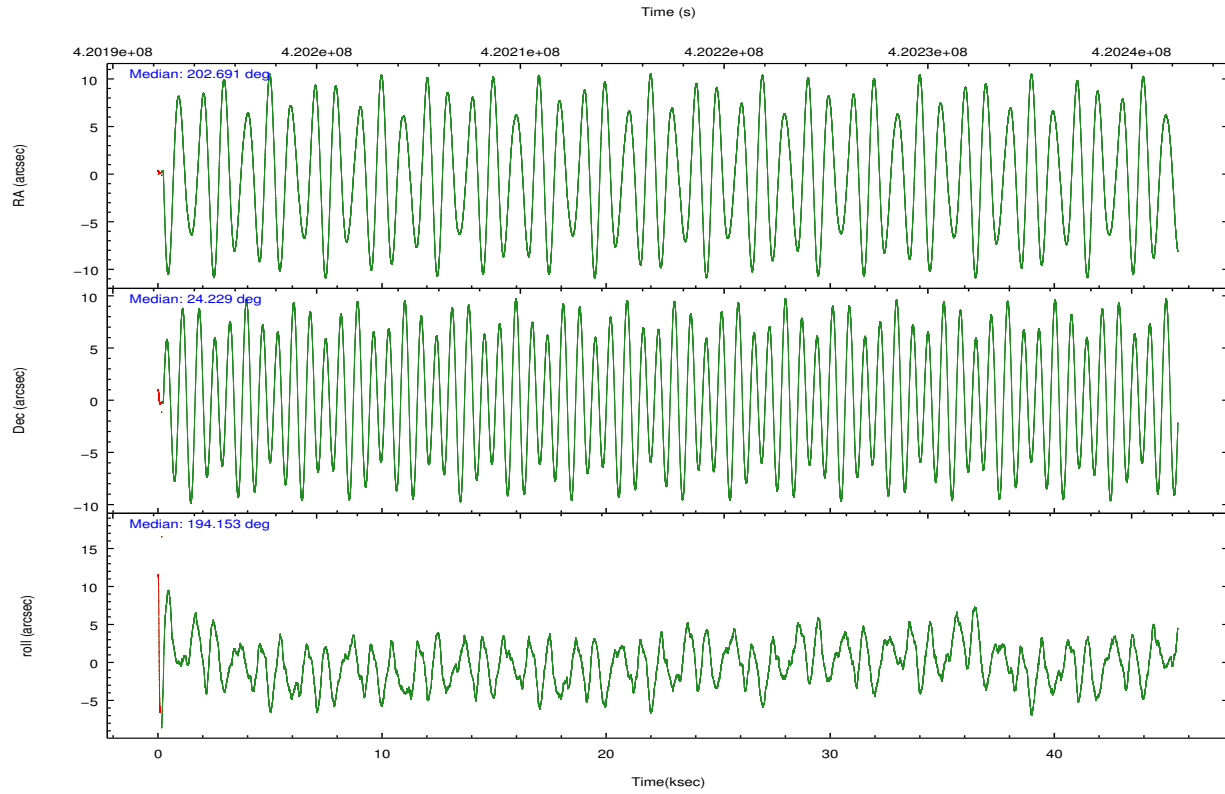
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	259674	339131	228172	283462	289869	220892	grade 0 events	9352	10405	9999	11994	20576	9479
rejected events	233296	176228	200534	154553	215641	194058		3%	3%	4%	4%	7%	4%
rejected %	89%	51%	87%	54%	74%	87%	grade 1 events	158	583	118	348	196	119
								0%	0%	0%	0%	0%	0%
							grade 2 events	6548	48898	5947	26326	17503	5784
								2%	14%	2%	9%	6%	2%
							grade 3 events	2963	6592	2919	11615	8032	3086
								1%	1%	1%	4%	2%	1%
							grade 4 events	2918	6486	2987	11342	7569	2876
								1%	1%	1%	4%	2%	1%
							grade 5 events	10233	25024	10336	28759	14822	11325
								3%	7%	4%	10%	5%	5%
							grade 6 events	4601	90532	5787	67640	20550	5612
								1%	26%	2%	23%	7%	2%
							grade 7 events	222901	150611	190079	125438	200621	182611
								85%	44%	83%	44%	69%	82%

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	202.712519	202.6912866773743	CCD I2 on	N	N
[deg] Pointing Dec	24.248523	24.22921383808774	CCD I3 on	N	N
[deg] Pointing Roll	193.992804	194.1581528712128	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-187.132523	-187.1228876879999	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.009634895007935	CCD S4 on	Y	Y
[s] Observation start time (MET)	420195312.184000	420193943.32614	CCD S5 on	Y	Y
Observation start date	2011-04-26T08:54:06	2011-04-26T08:32:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	420240012.184000	420241152.26609	On-chip summing requested	N	N
Observation end date	2011-04-26T21:19:06	2011-04-26T21:39:12	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	774	774
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	2.5

2.3 Aspect



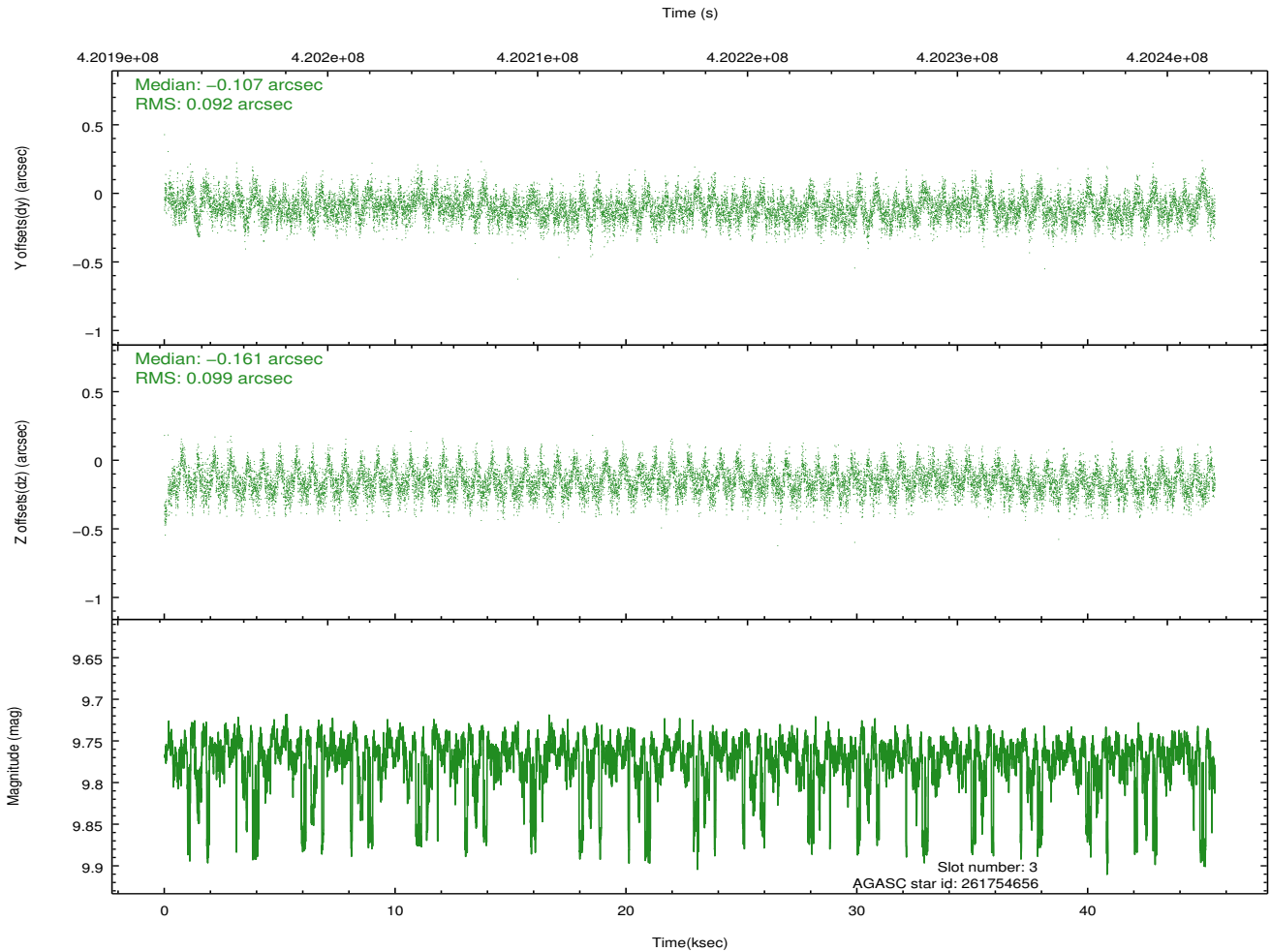
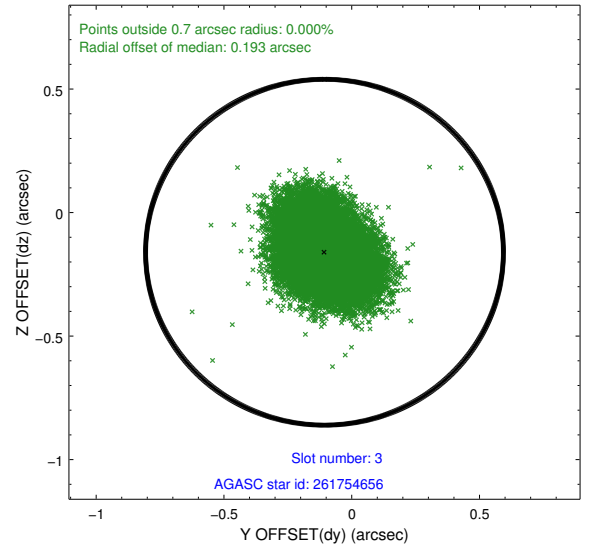
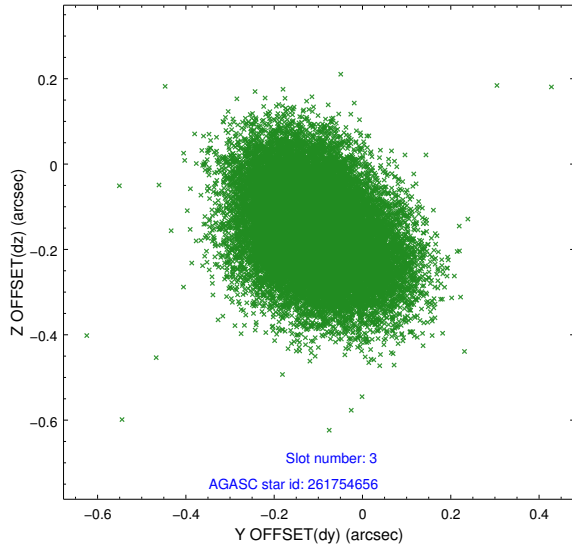


Slot Statistics

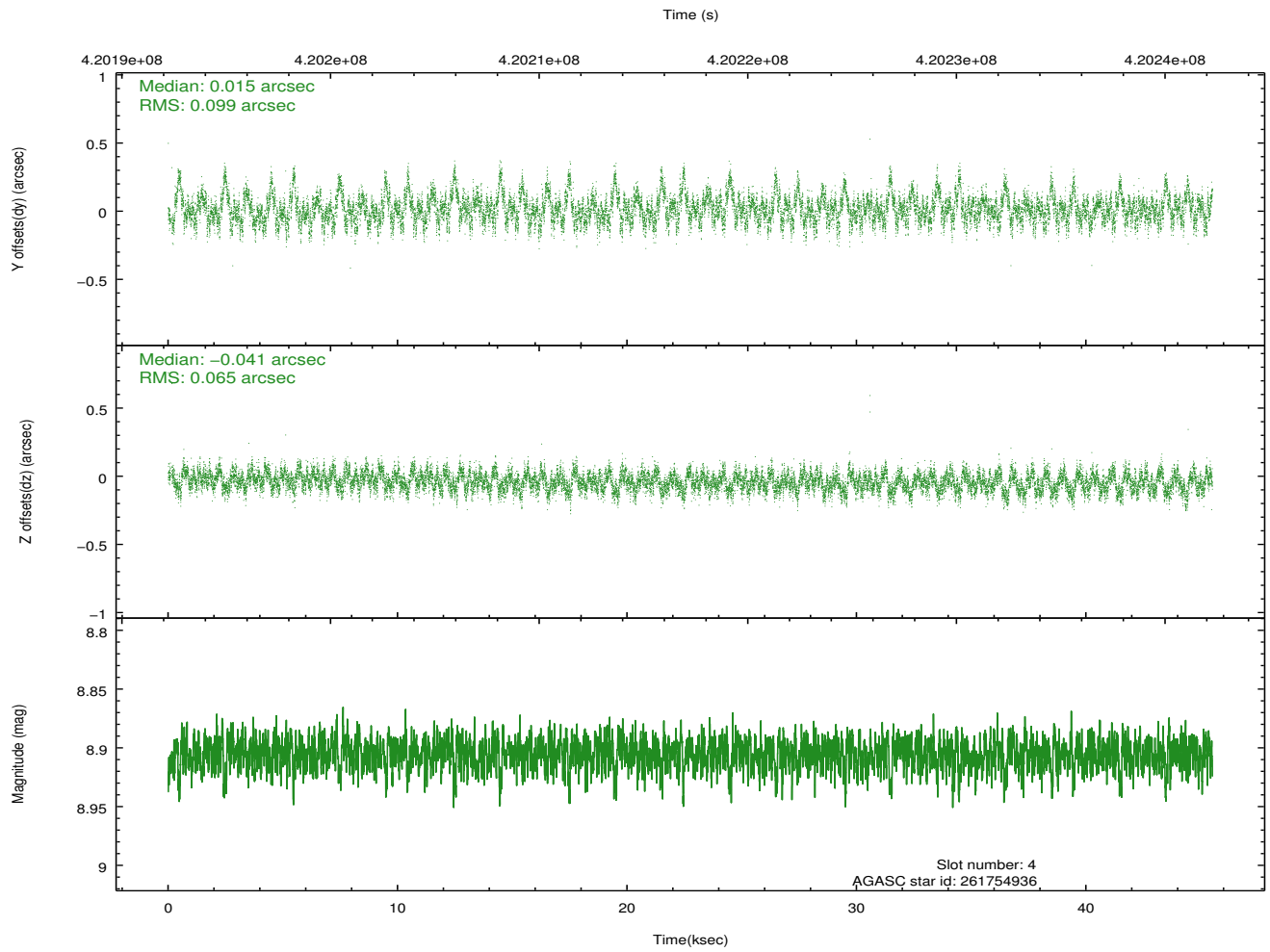
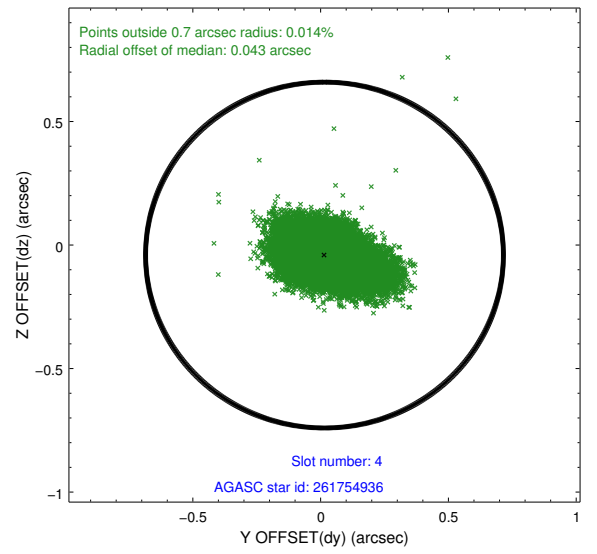
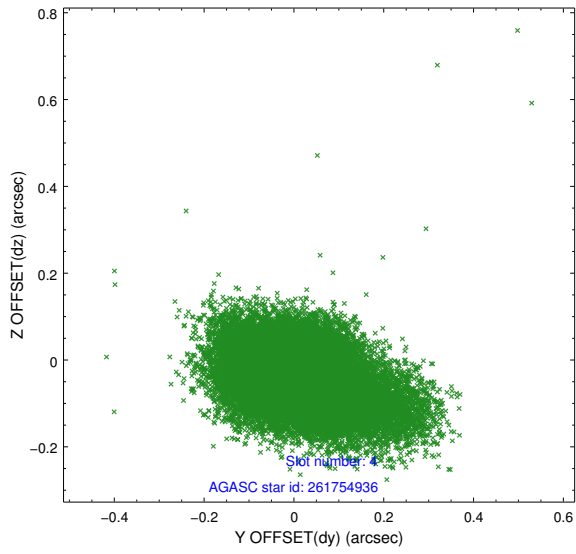
	status	id	mag	n_pts	med_dy	med_dz	dr1
	FID	ACIS-S-2	6.97	11086	-0.150	-0.090	0.007
	FID	ACIS-S-4	7.06	11087	0.160	0.089	0.007
	FID	ACIS-S-6	7.23	11086	-0.038	0.008	0.009
	GUIDE	261754656	9.77	22043	-0.107	-0.161	0.145
	GUIDE	261754936	8.91	22160	0.015	-0.041	0.120
	GUIDE	261755088	10.30	22123	-0.189	0.137	0.206
	GUIDE	261756656	9.53	22143	0.283	0.059	0.130
0.000	0.000	0.000	0.000000	0.000000	0.00	0.00	

2.4 Star Slots

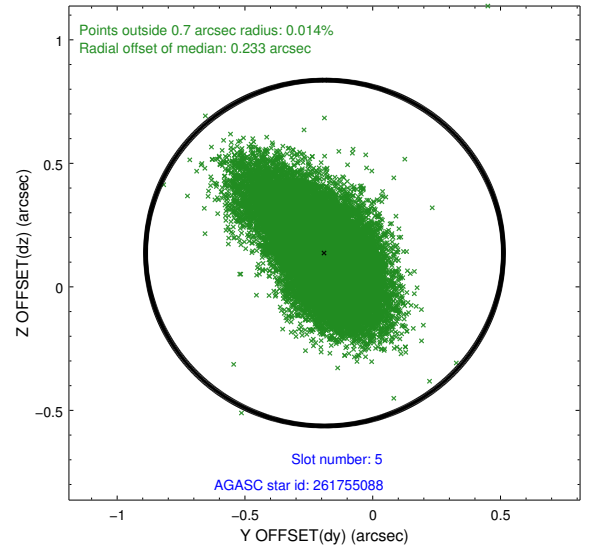
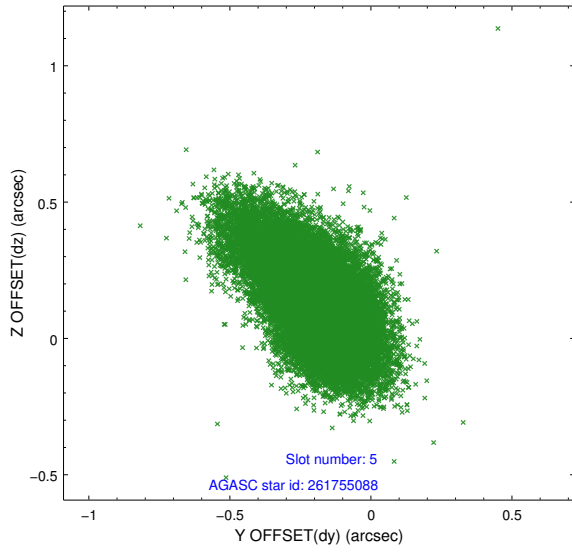
2.4.1 Slot 3



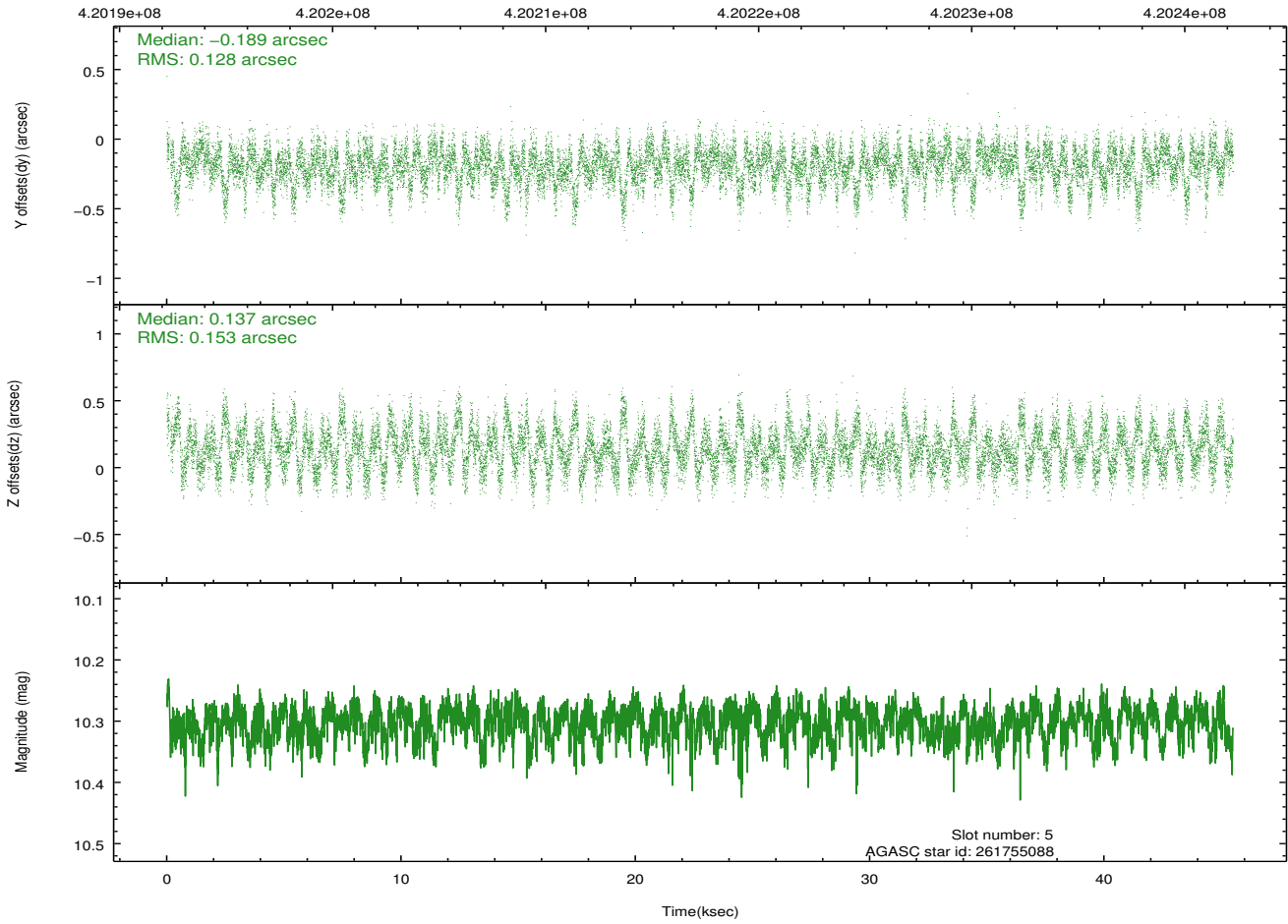
2.4.2 Slot 4



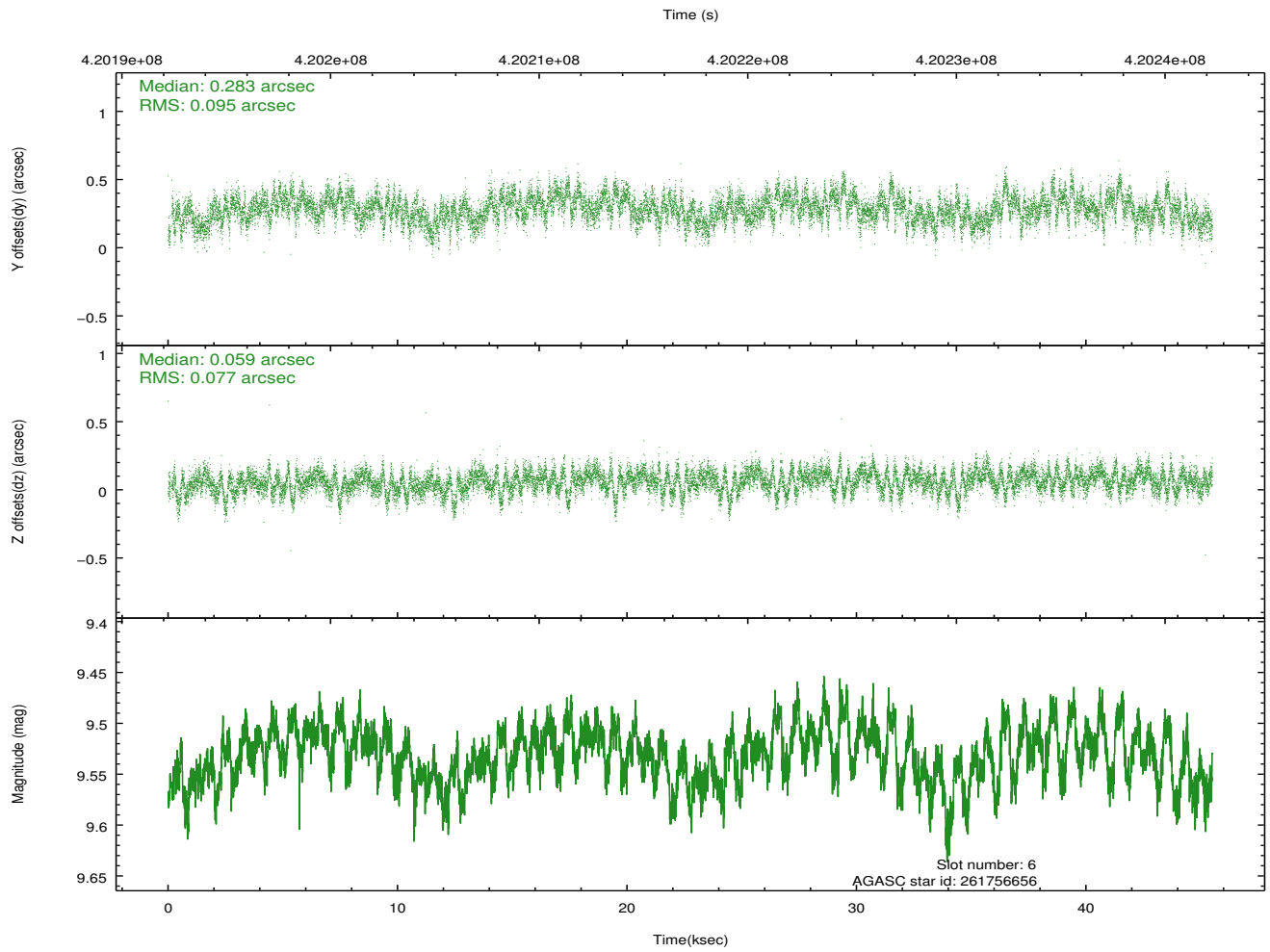
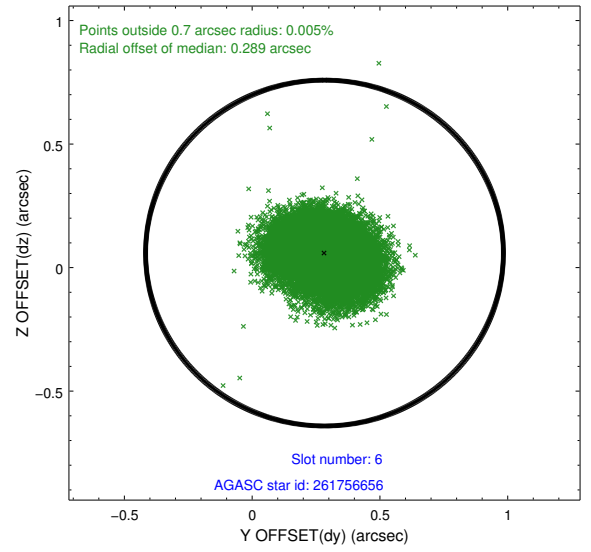
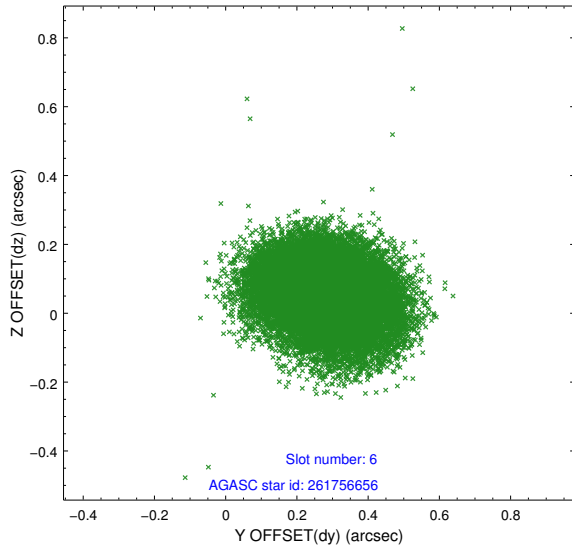
2.4.3 Slot 5



Time (s)

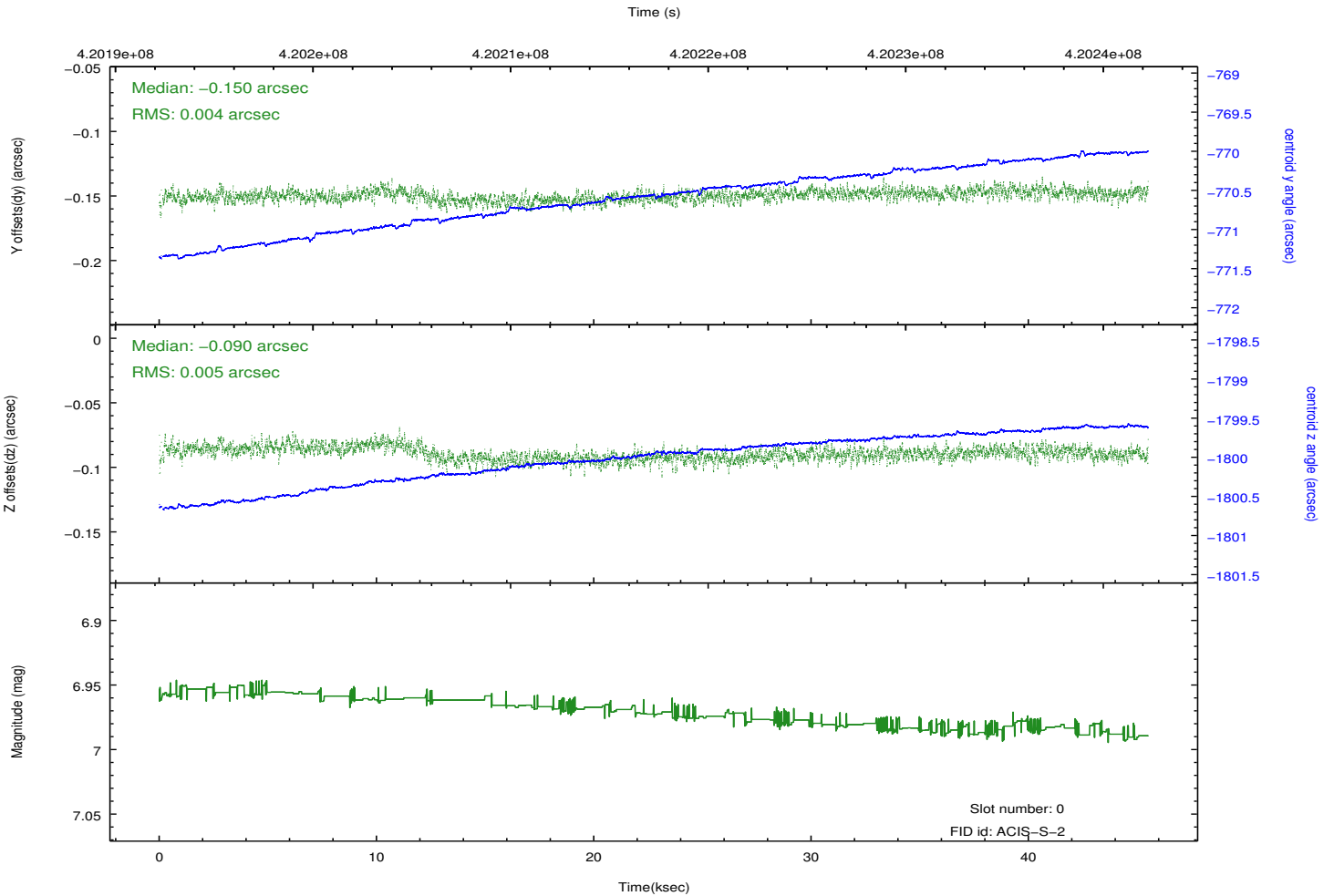
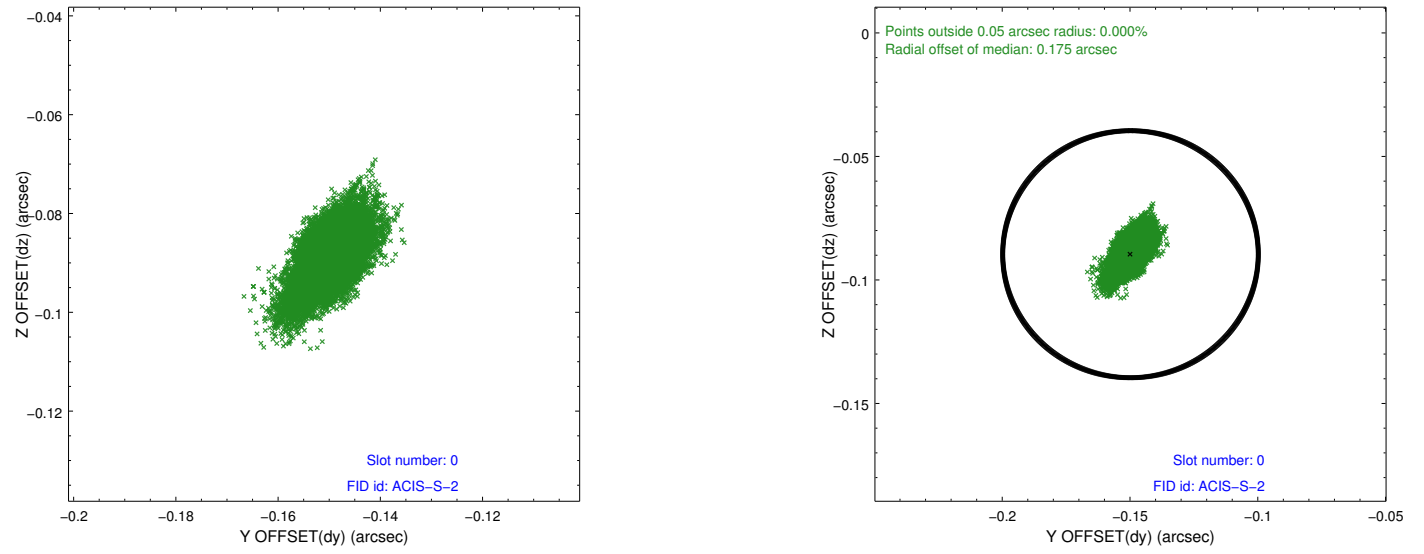


2.4.4 Slot 6

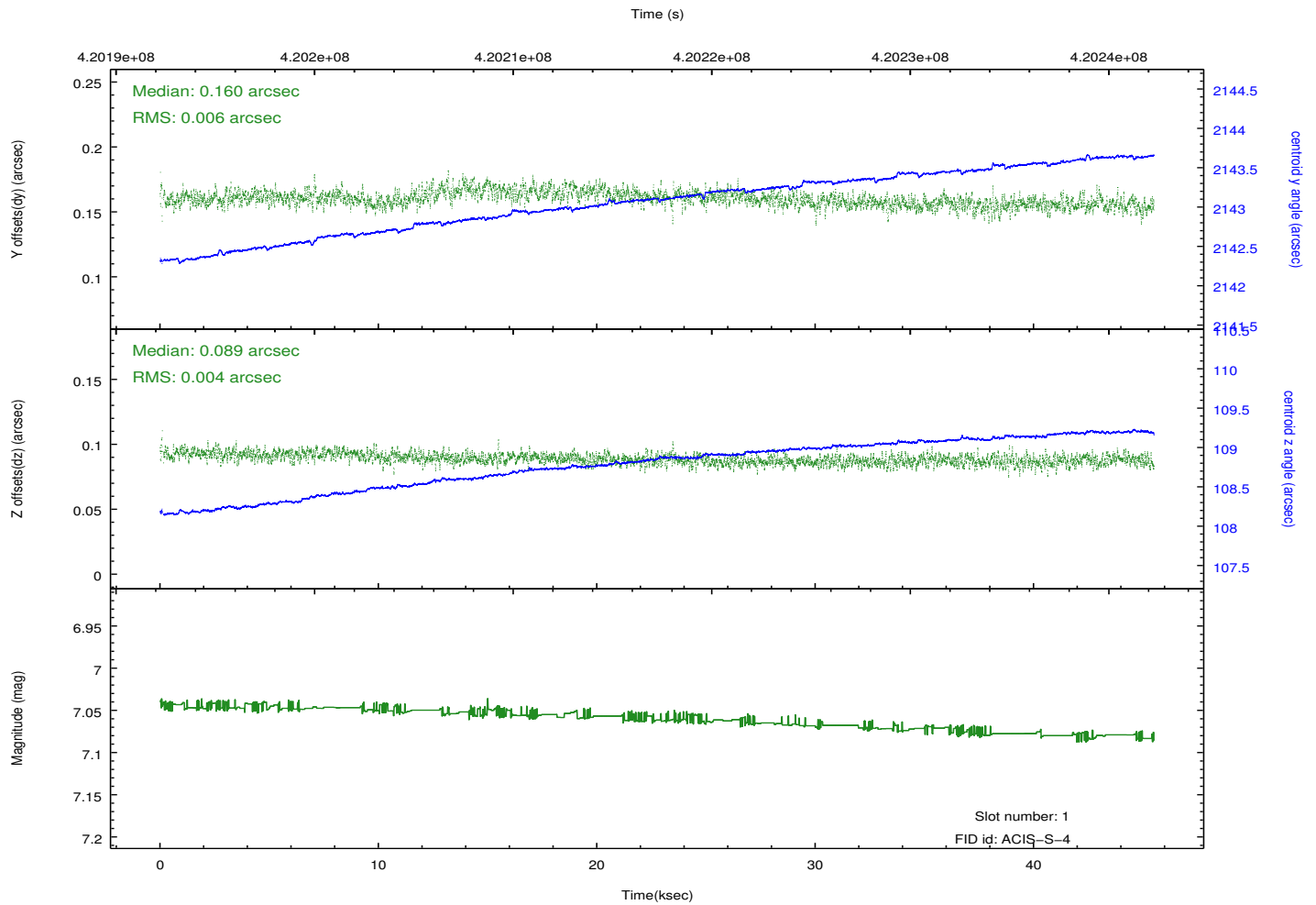
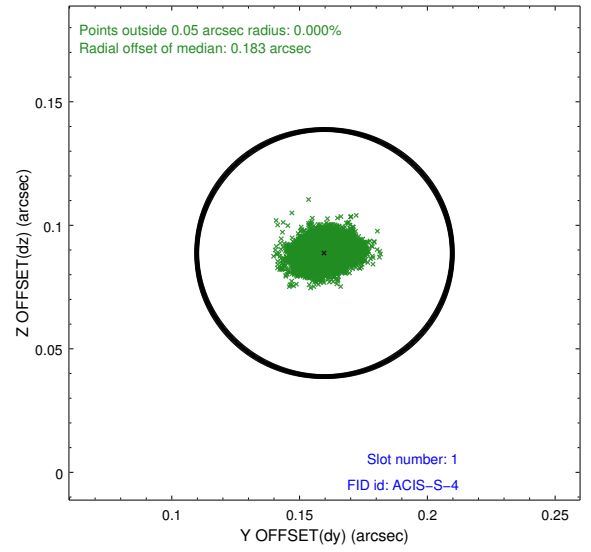
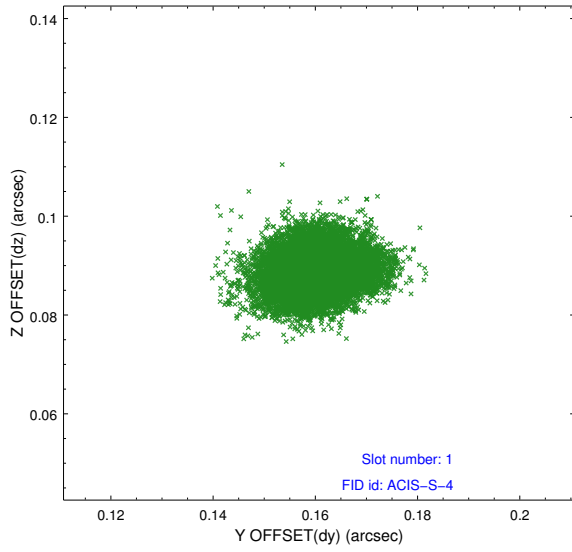


2.5 FID Slots

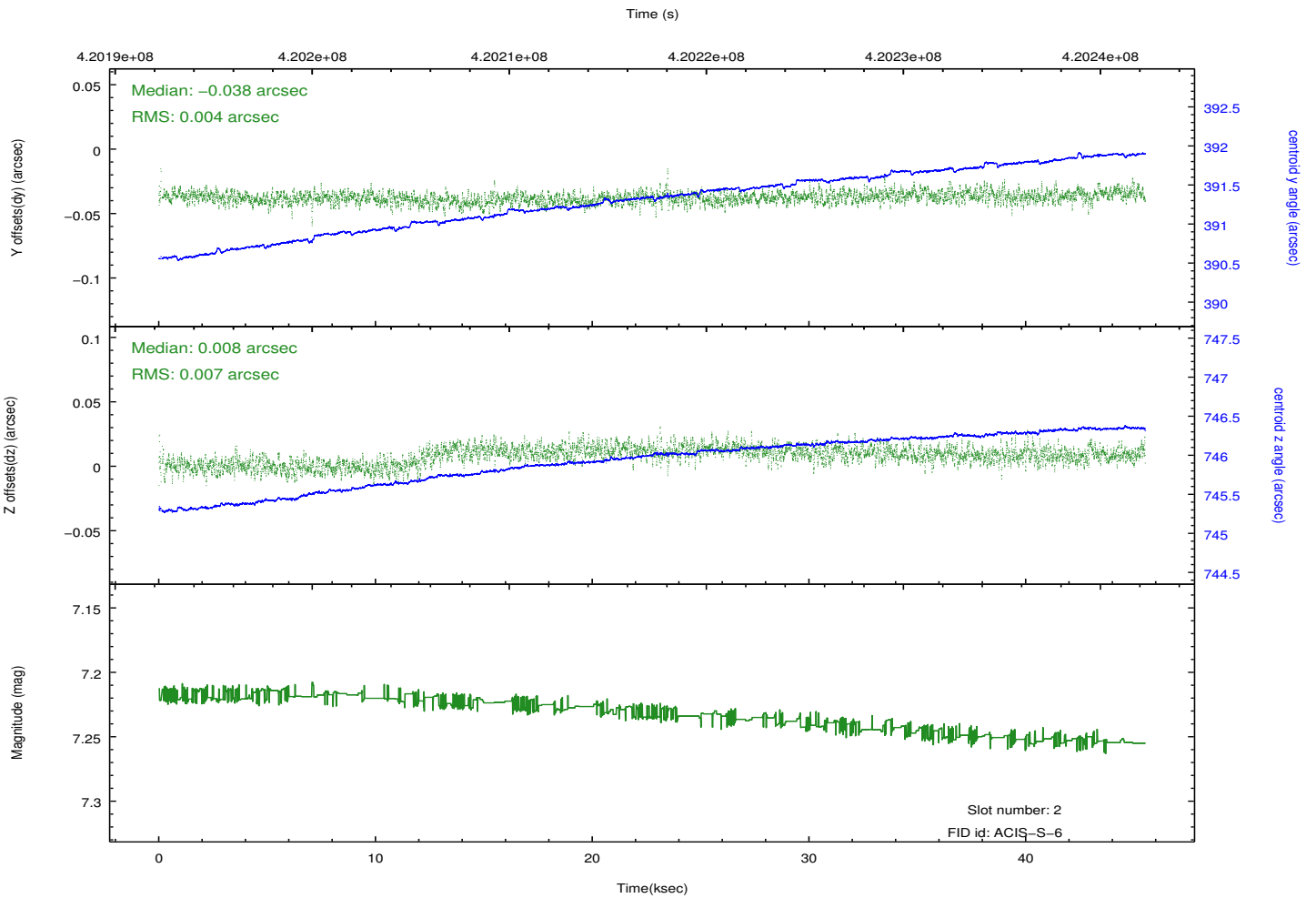
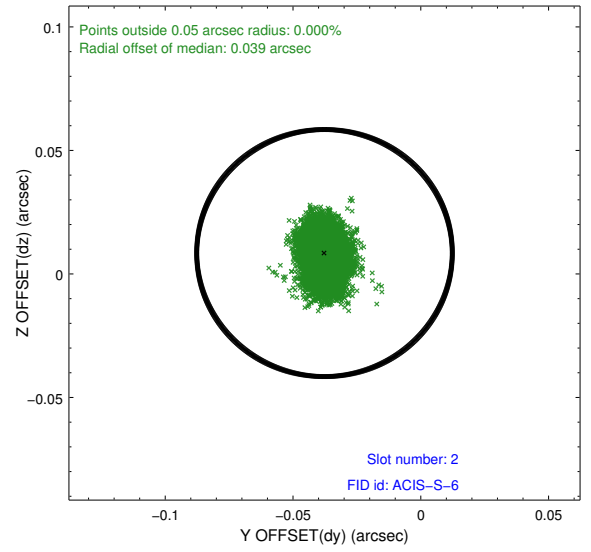
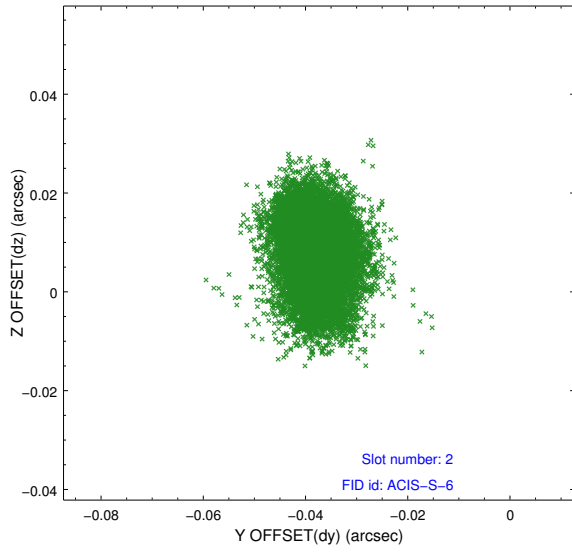
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

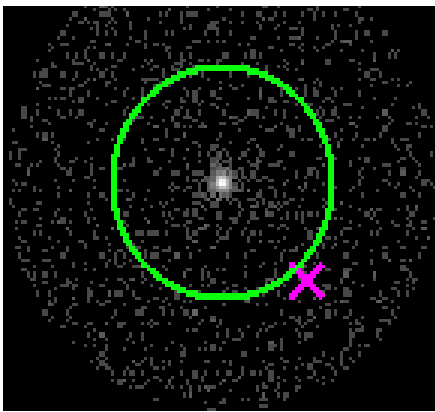


3 Gratings

3.1 HEG Arm



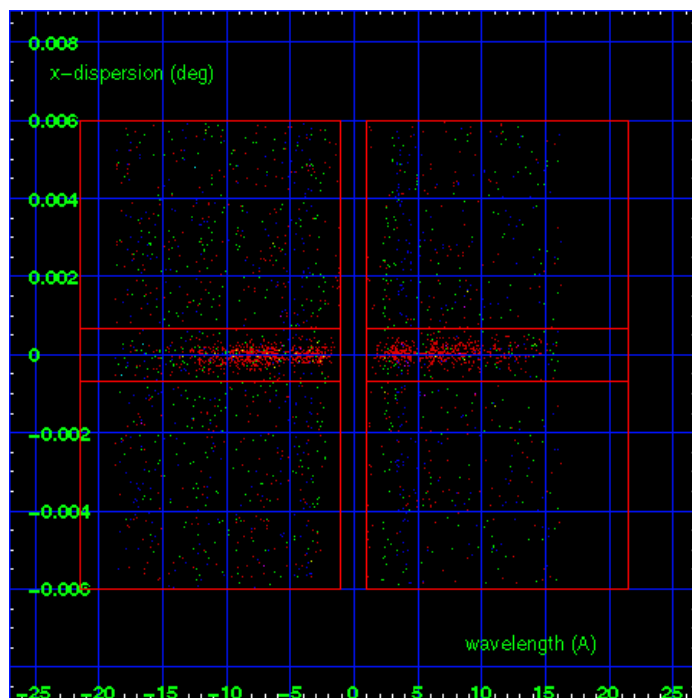
HEG Order Sort 123



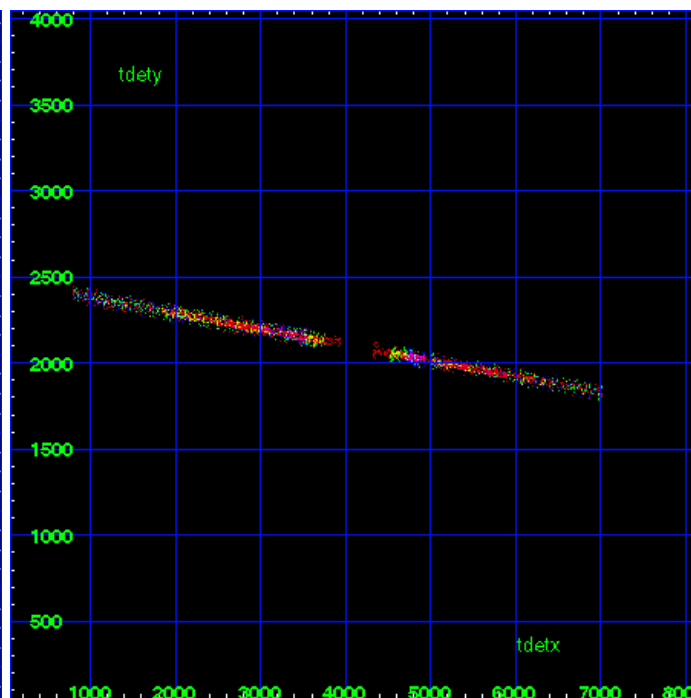
HEG Zero Order



HEG Order Sort ALL

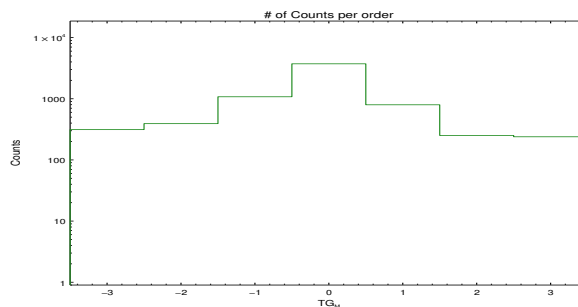


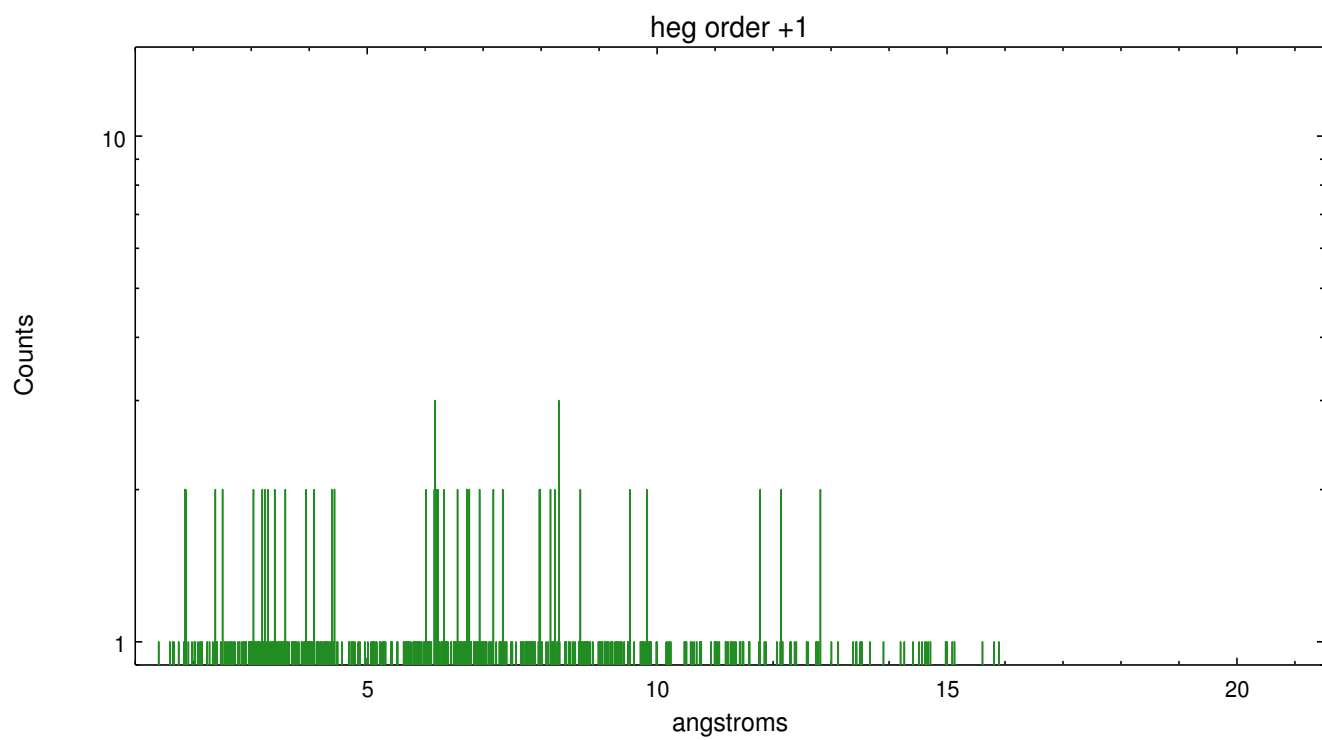
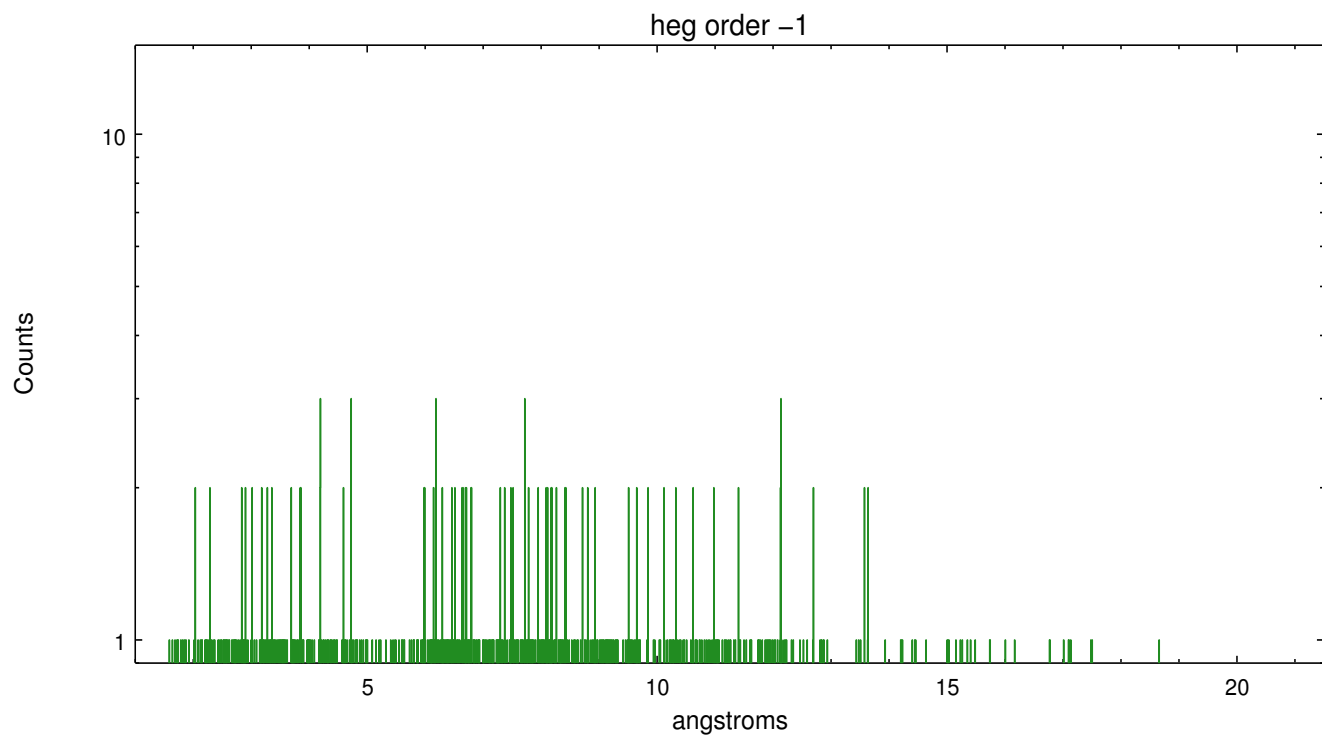
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	313	392	1078	3728	797	251	239

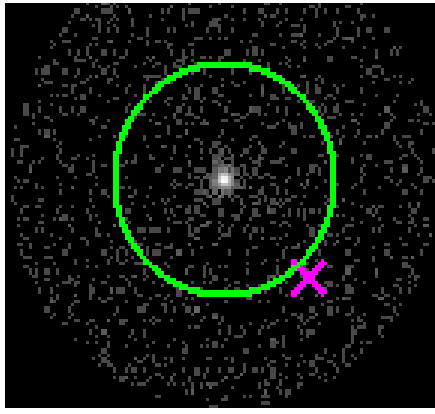




3.2 MEG Arm



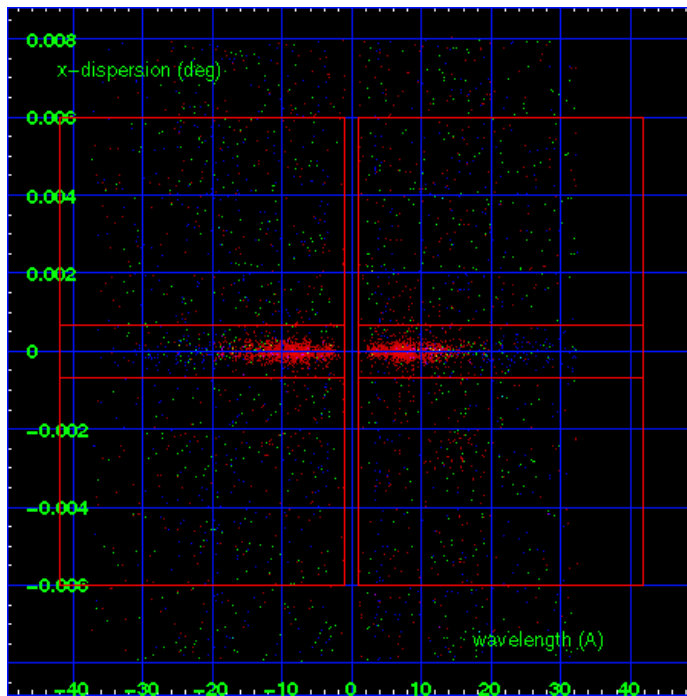
MEG Order Sort 123



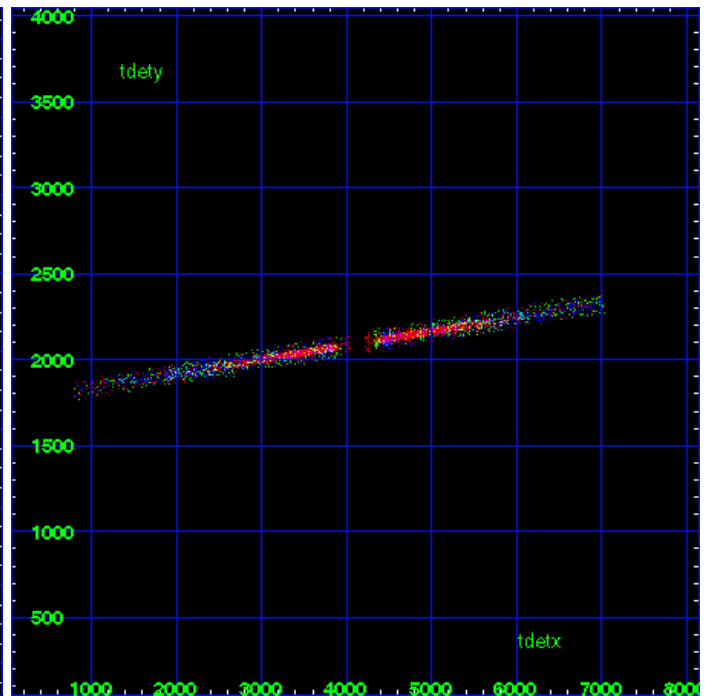
MEG Zero Order



MEG Order Sort ALL

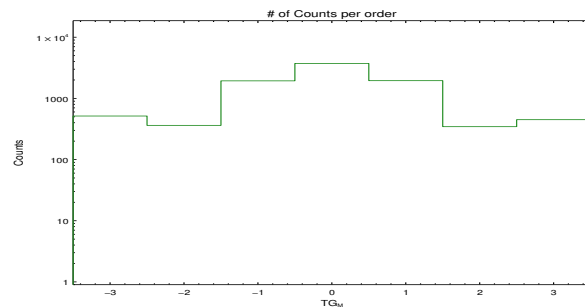


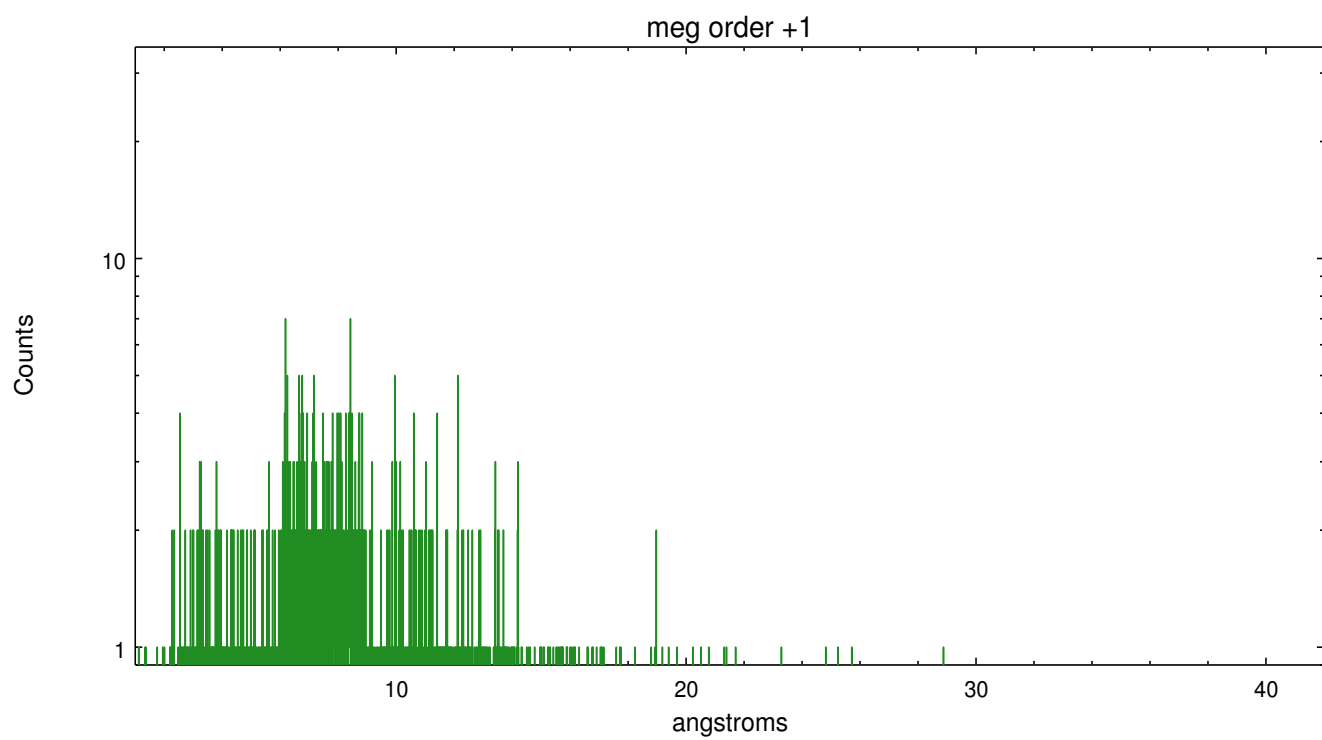
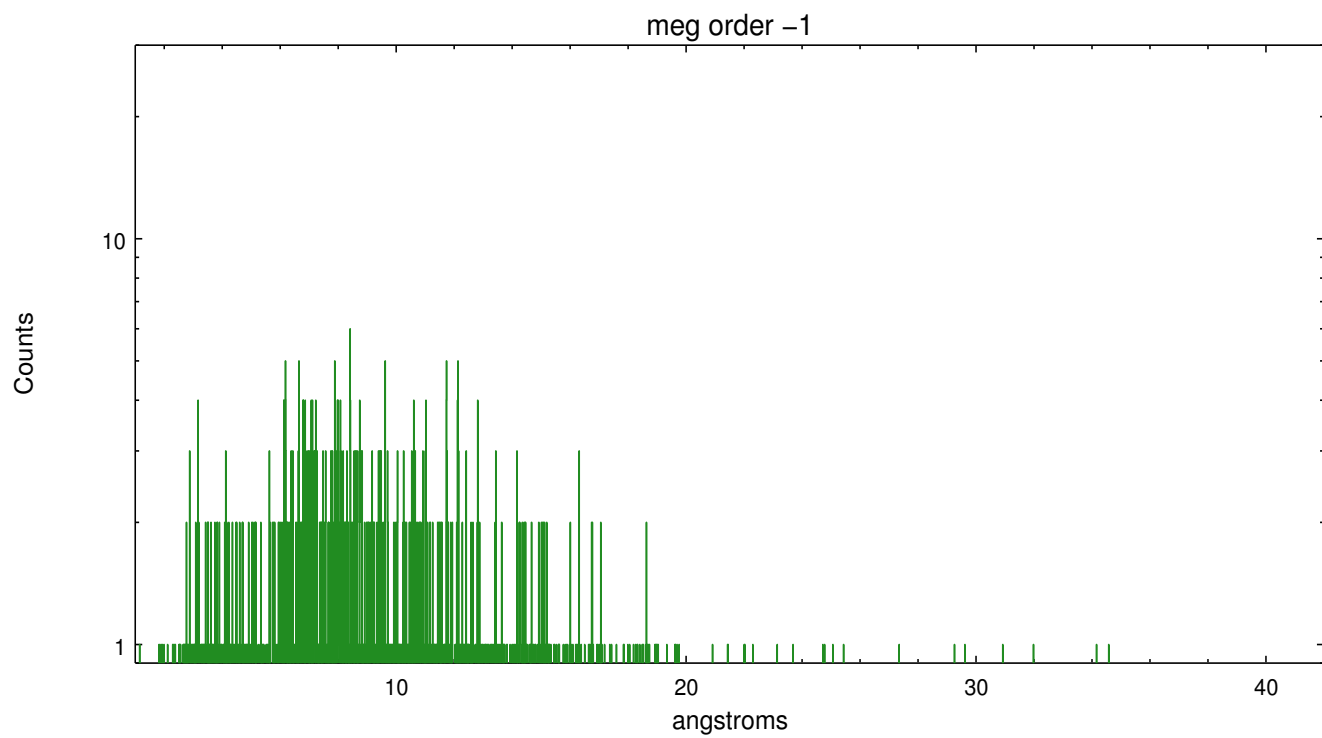
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	515	362	1936	3728	1950	345	449





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.747026247144

A.2 Comments

Guide star slot 7 used for optical monitoring of the target.

===

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.