

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 9 - L2 Version 3
Chandra X-Ray Center

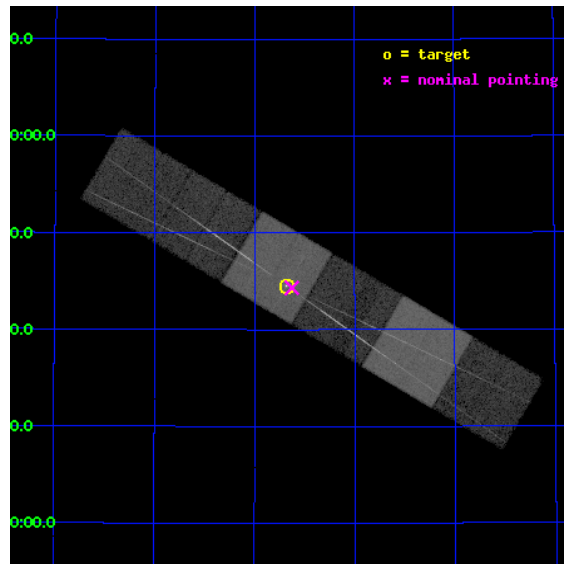
L2 Processing Date : Sep 1 2012

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1 Front

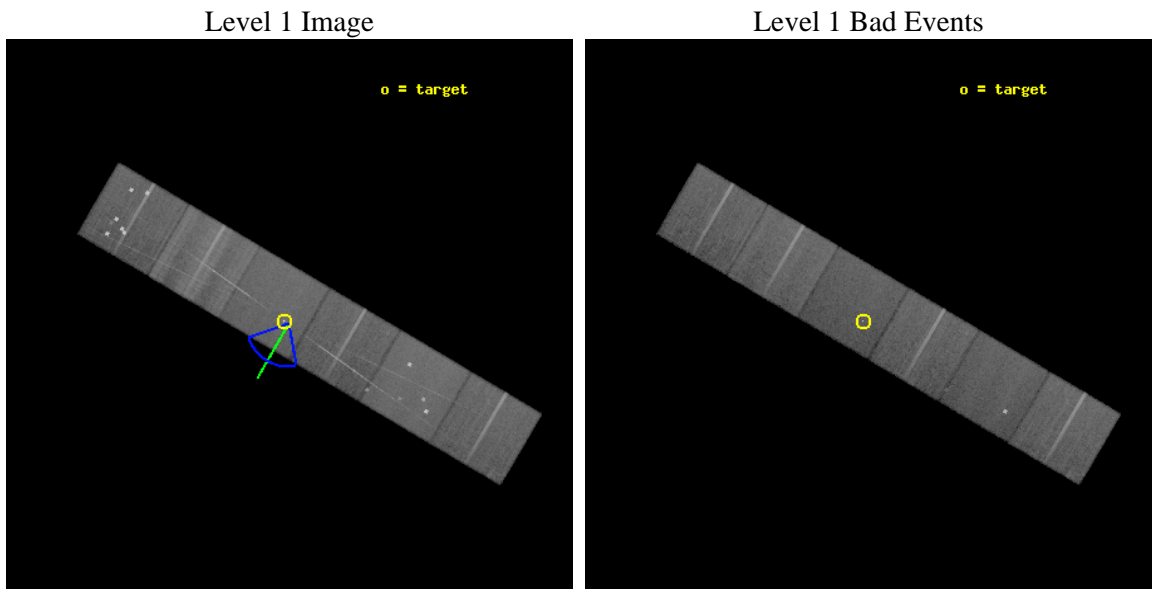
seq_num	200007	Sequence number
obs_id	9	Observation id
title	STELLAR CORONAL SPECTROSCOPY OF COOL STARS	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	AR LAC-4 ECLIPSE (2)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742222	Observer's specified target Dec [deg]
ra_nom	332.15666174804	Nominal RA [deg]
dec_nom	45.738846881955	Nominal Dec [deg]
roll_nom	210.40937394712	Nominal Roll [deg]
revision	3	Processing version of data
ontime	32579.184610918	Sum of GTIs [s]
livetime	32166.647358545	Livetime [s]
ontime4	32579.200030327	Sum of GTIs [s]
ontime5	32579.143570915	Sum of GTIs [s]
ontime6	32579.102530926	Sum of GTIs [s]
ontime7	32579.184610918	Sum of GTIs [s]
ontime8	32572.579540506	Sum of GTIs [s]
ontime9	32575.77949068	Sum of GTIs [s]
l2events	318262	Number of level 2 events



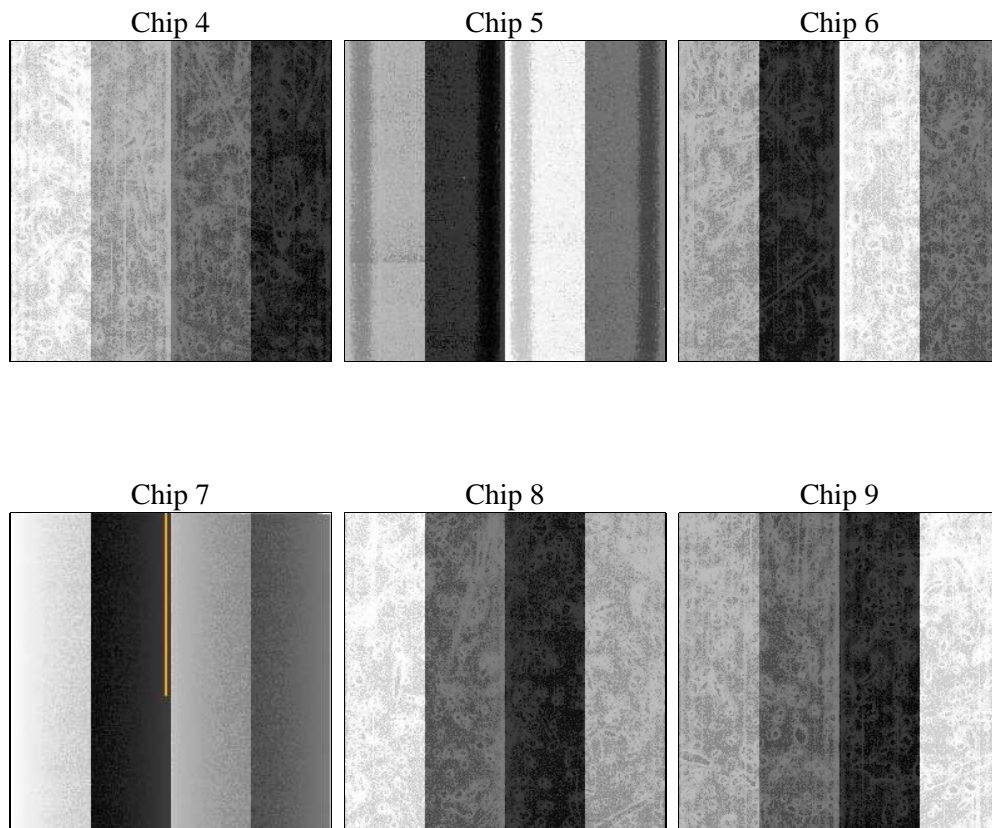
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32825.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	32579.184610918	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	32579.200030327	Sum of GTIs [s]
date	2012-09-01T18:29:30	Date and time of file creation	ontime5	32579.143570915	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	32579.102530926	Sum of GTIs [s]
			ontime7	32579.184610918	Sum of GTIs [s]
			ontime8	32572.579540506	Sum of GTIs [s]
			ontime9	32575.77949068	Sum of GTIs [s]
			l1events	1461318	Number of level 1 events

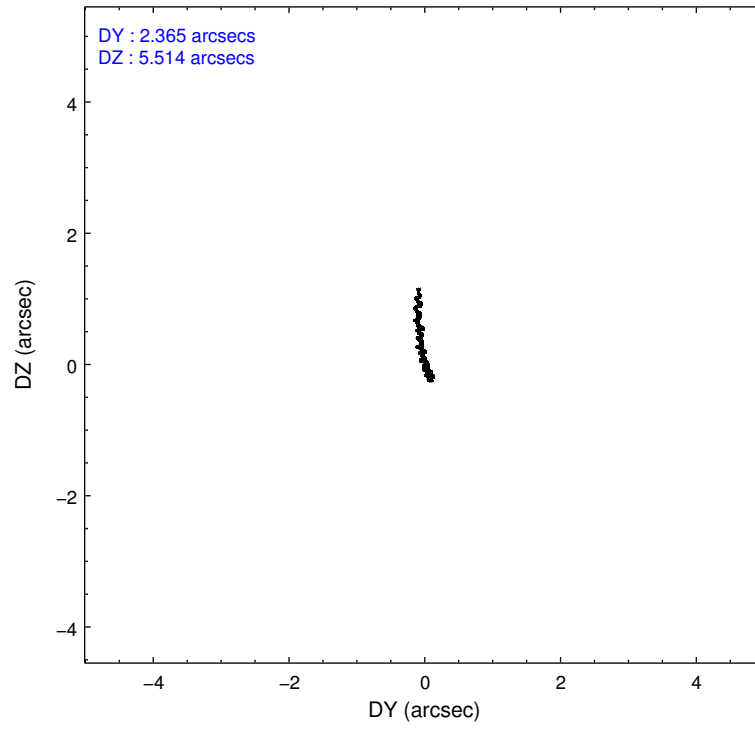
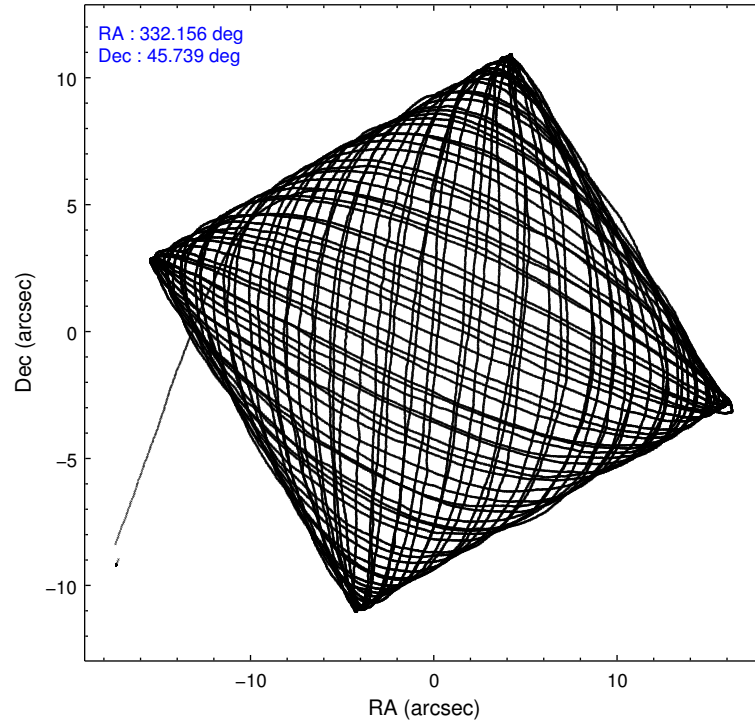
2.1.4 Events

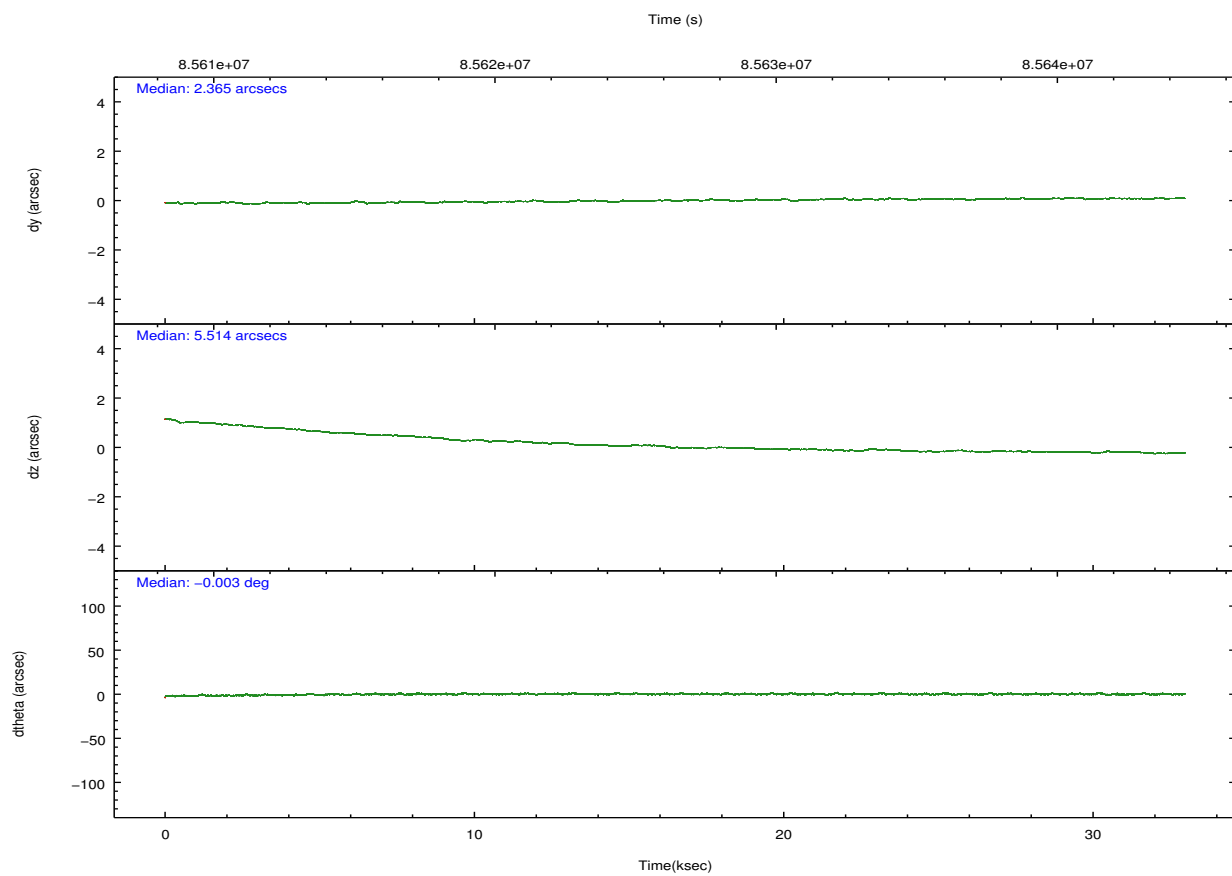
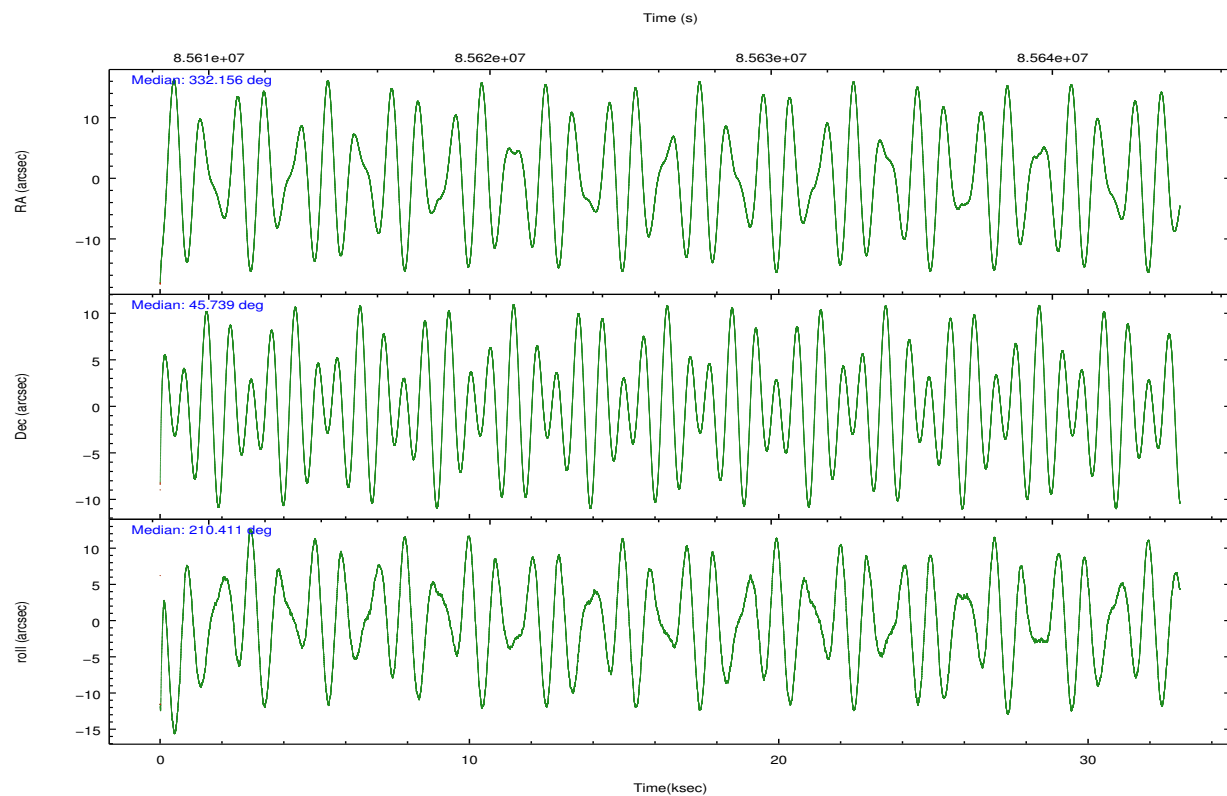
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	207501	266846	201510	235155	301489	248817	grade 0 events	12190	23400	19922	10955	41271	50198
rejected events	179612	136636	165887	131071	194719	164131		5%	8%	9%	4%	13%	20%
rejected %	86%	51%	82%	55%	64%	65%	grade 1 events	103	494	138	493	303	271
								0%	0%	0%	0%	0%	0%
							grade 2 events	7089	37234	6260	21288	15484	25061
								3%	13%	3%	9%	5%	10%
							grade 3 events	2031	6053	2393	9814	16168	2252
								0%	2%	1%	4%	5%	0%
							grade 4 events	2114	5927	2365	9747	14367	2239
								1%	2%	1%	4%	4%	0%
							grade 5 events	6148	19779	7217	22224	9827	7477
								2%	7%	3%	9%	3%	3%
							grade 6 events	4469	57625	4691	52303	19485	4950
								2%	21%	2%	22%	6%	1%
							grade 7 events	173357	116334	158524	108331	184584	156369
								83%	43%	78%	46%	61%	62%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	332.175820	332.1566617480401	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.762724	45.73884688195479	Alternating exposures requested	N	N
[deg] Pointing Roll	210.239033	210.4093739471174	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	210.000000	210.000000			
[deg] Roll tolerance	40.000000	40.000000			
Roll constraint allows 180D rotation	N	N			
[s] Window start time (MET)	50061664.184000	50061664.184000			
[s] Window stop time (MET)	93754864.184000	93754864.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-187.132523	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
Phase constraints	Y	Y			
[d] Phase period	1.983180	1.983180			
[d] Phase epoch (MJD)	48501.123200	48501.123200			
Phase start	0.898000	0.898000			
Phase end	0.102000	0.102000			
Phase start error	0.022000	0.022000			
Phase end error	0.022000	0.022000			
[s] Observation start	85610064.184000	85608132.59374			

2.3 Aspect



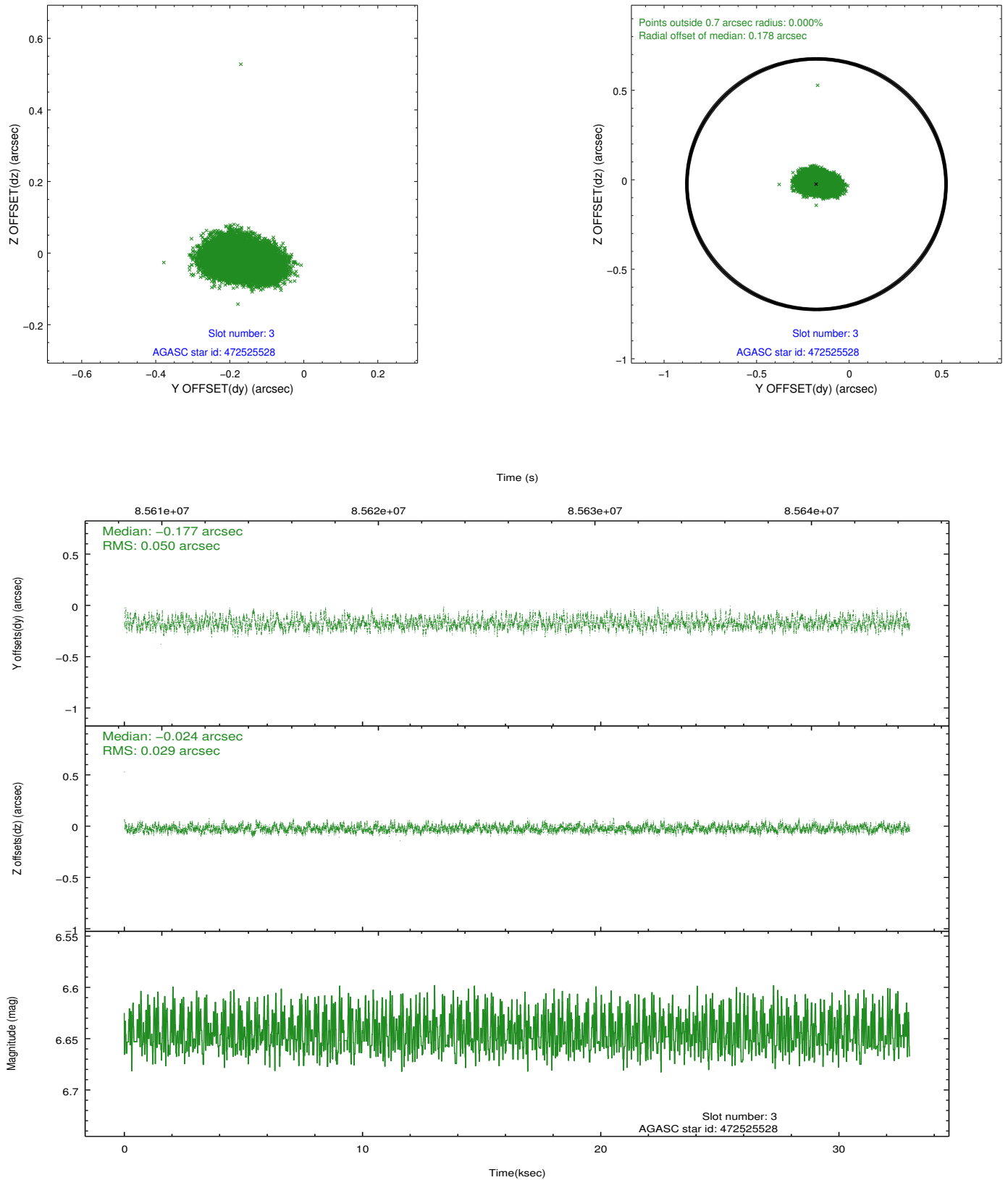


Slot Statistics

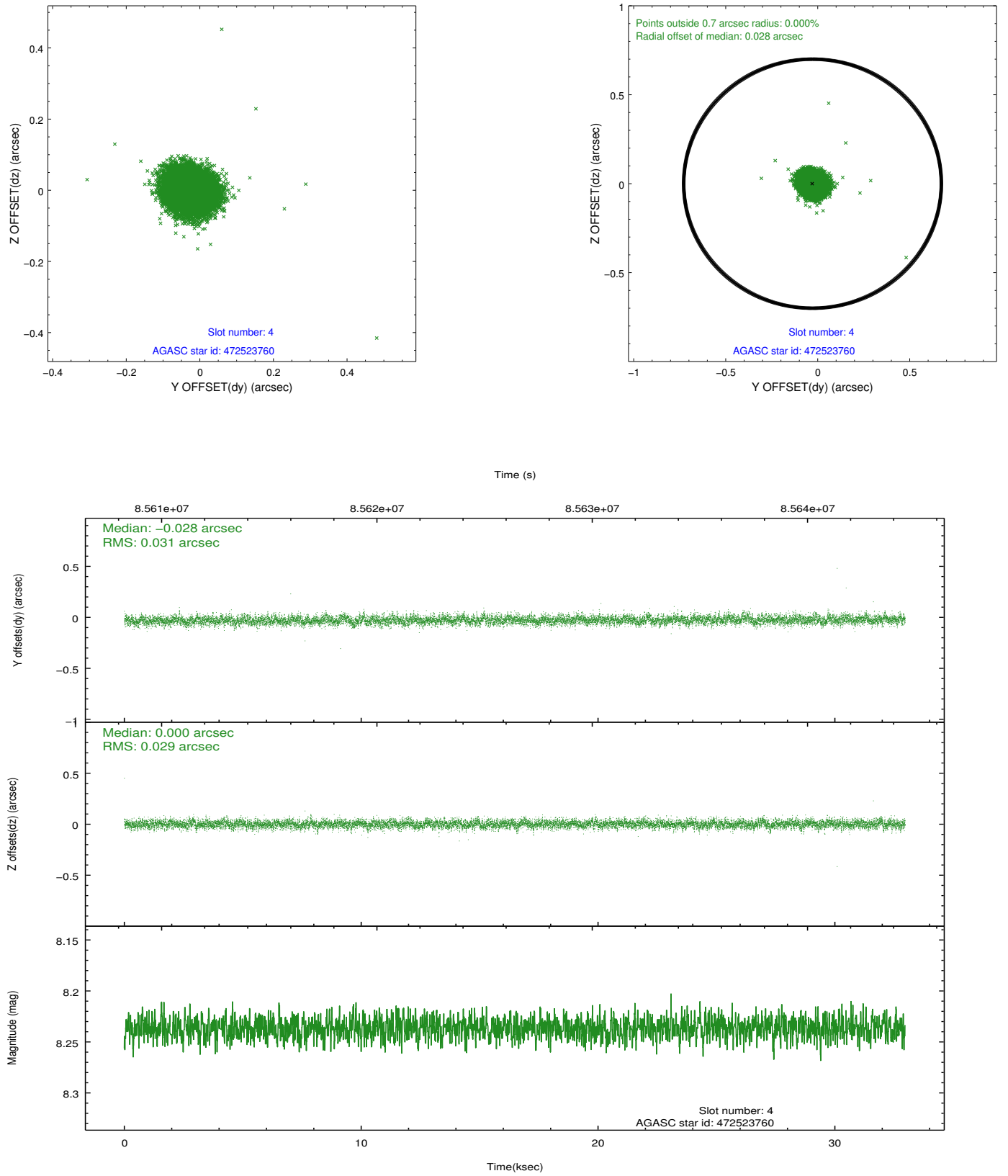
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	8039	-0.025	-0.051	0.015	0.035	0.000000	0.000000	-754.83	-1788.98
1	FID	ACIS-S-4	7.20	8041	-0.013	0.026	0.009	0.015	0.000000	0.000000	2158.46	119.46
2	FID	ACIS-S-5	7.23	8041	0.008	0.033	0.012	0.025	0.000000	0.000000	-1807.54	113.26
3	GUIDE	472525528	6.65	16080	-0.177	-0.024	0.061	0.100	331.551102	45.248694	2296.30	796.76
4	GUIDE	472523760	8.24	16079	-0.028	0.000	0.044	0.073	331.645363	45.403260	1807.66	439.75
5	GUIDE	472665256	9.00	16079	0.106	0.021	0.064	0.102	332.808125	46.195041	-2148.30	-555.53
6	GUIDE	472659832	9.45	16058	0.061	0.121	0.080	0.130	332.780399	46.098139	-1915.23	-287.12
7	GUIDE	472655152	9.43	16070	0.030	-0.120	0.089	0.144	332.504239	45.862991	-894.32	102.05

2.4 Star Slots

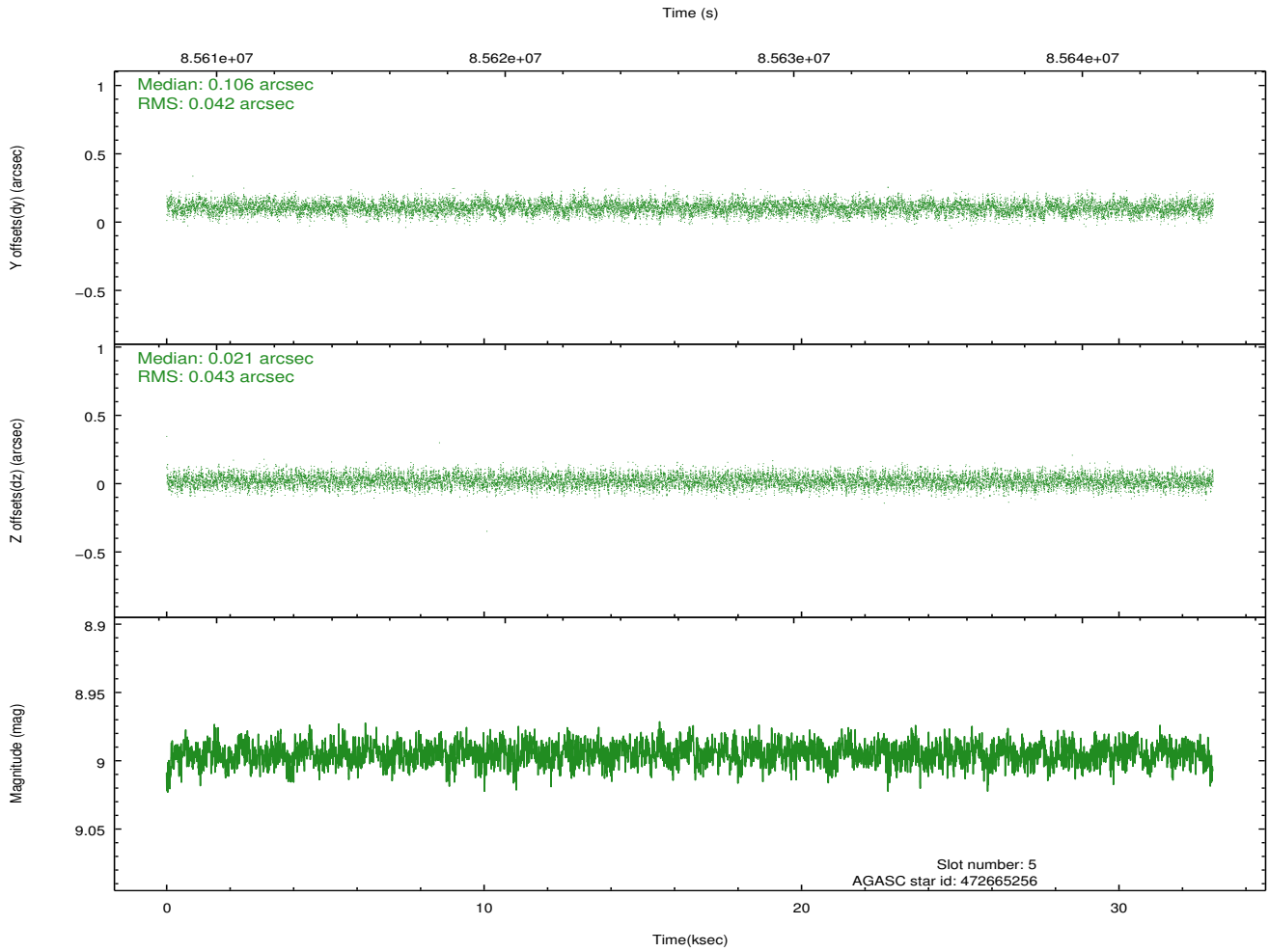
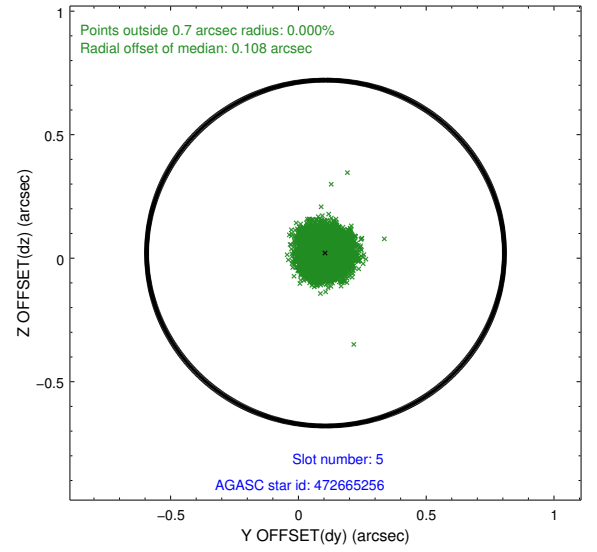
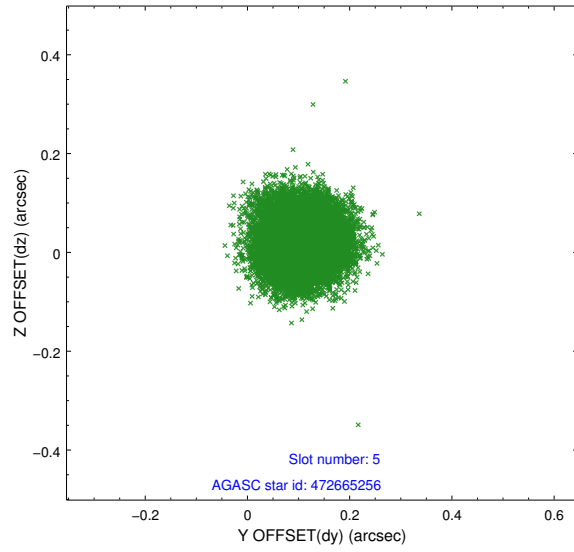
2.4.1 Slot 3



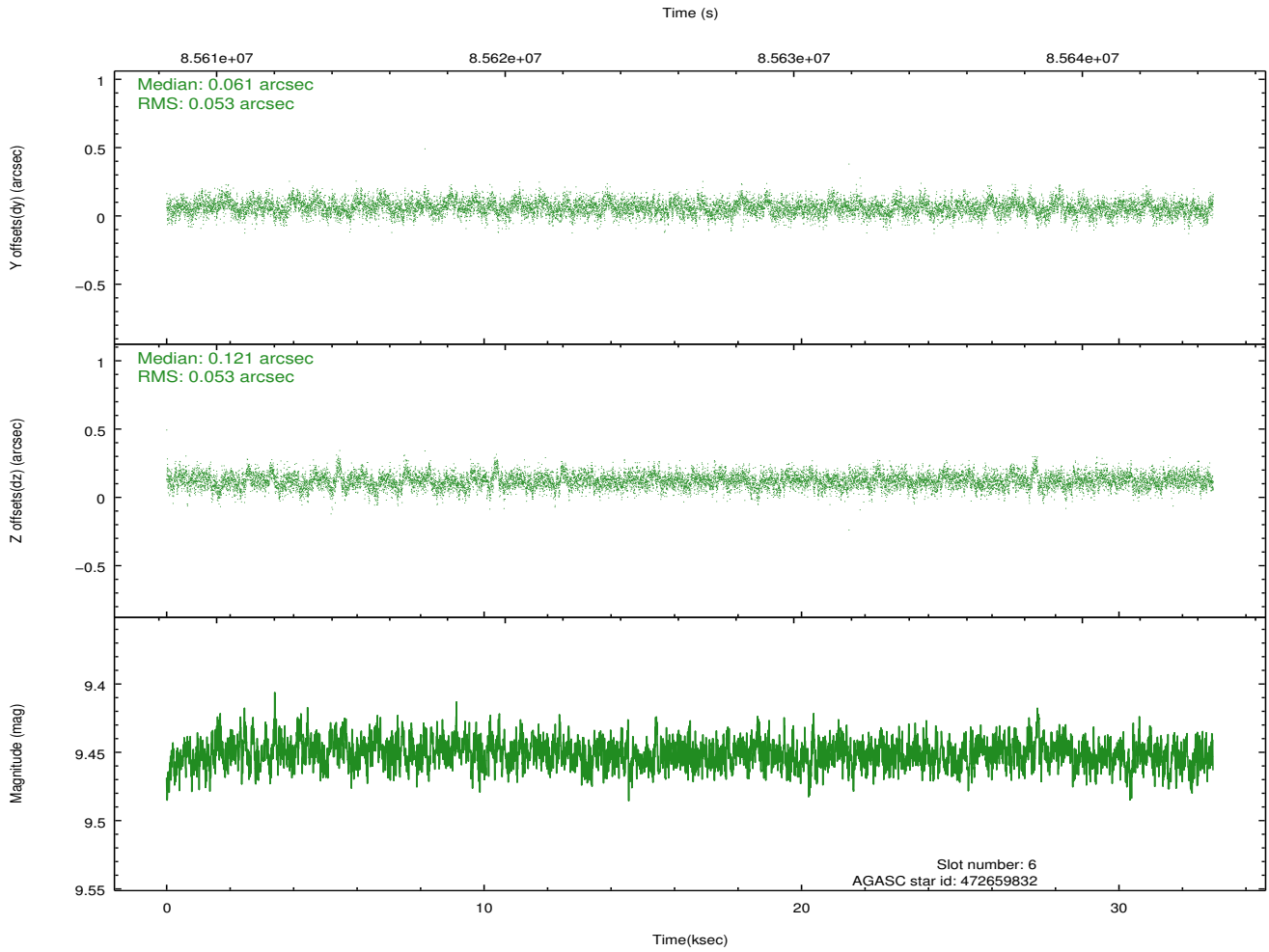
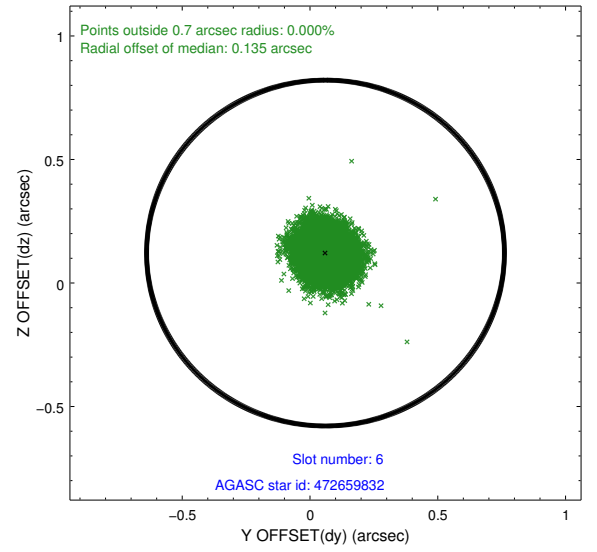
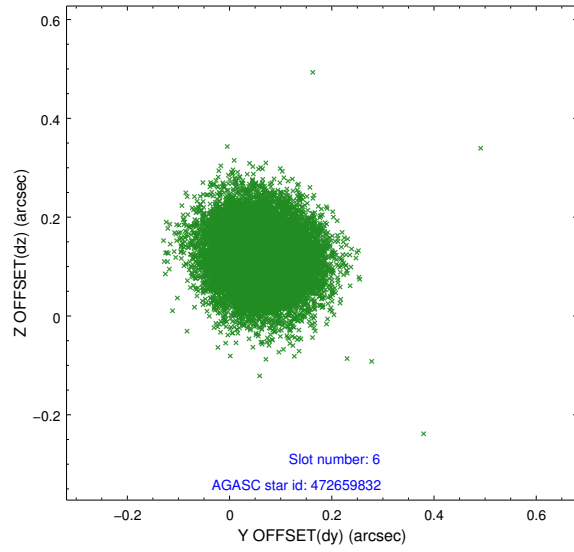
2.4.2 Slot 4



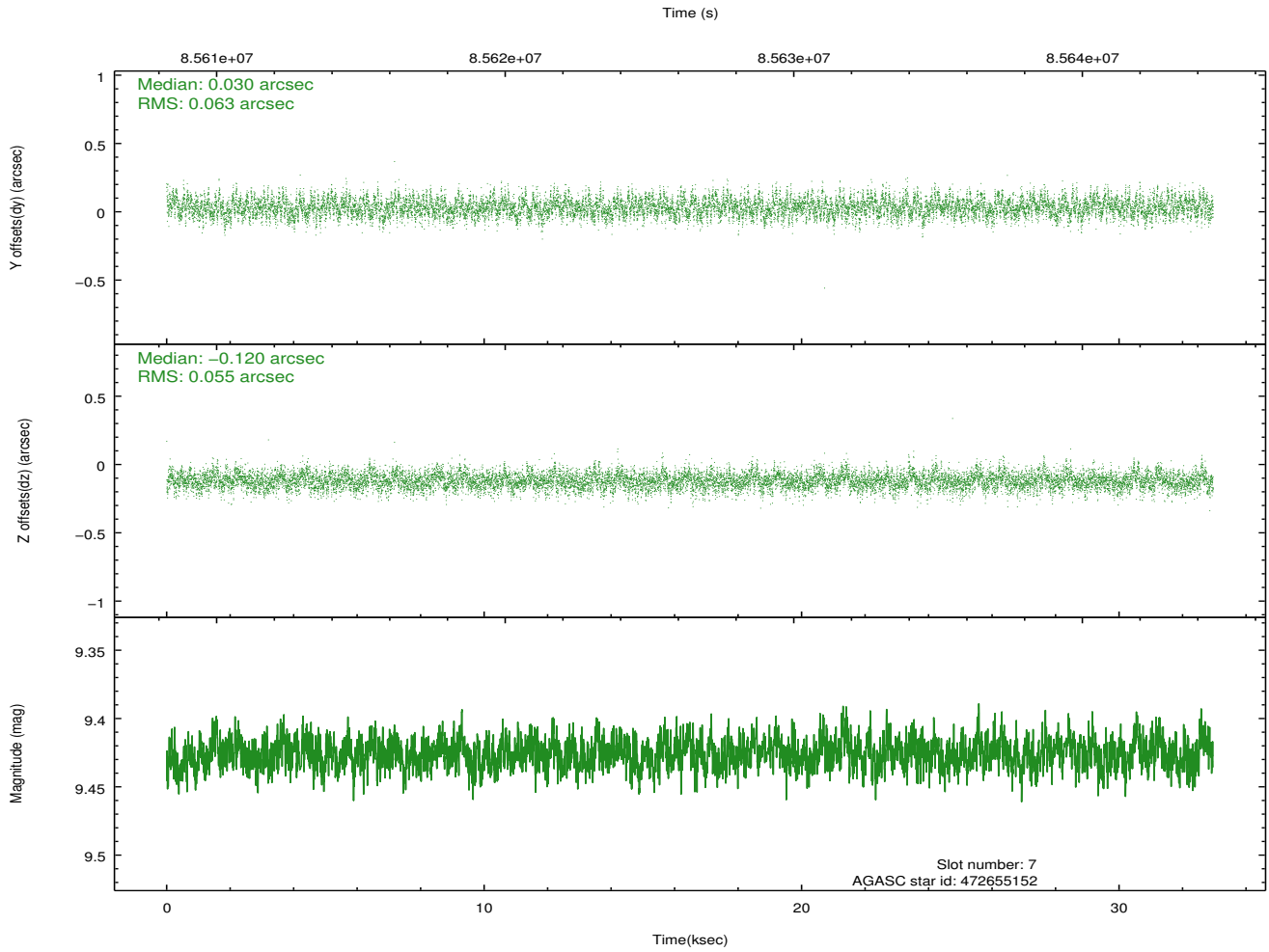
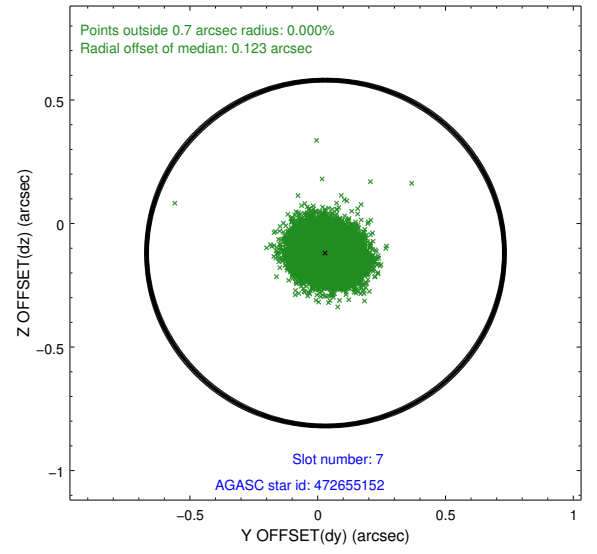
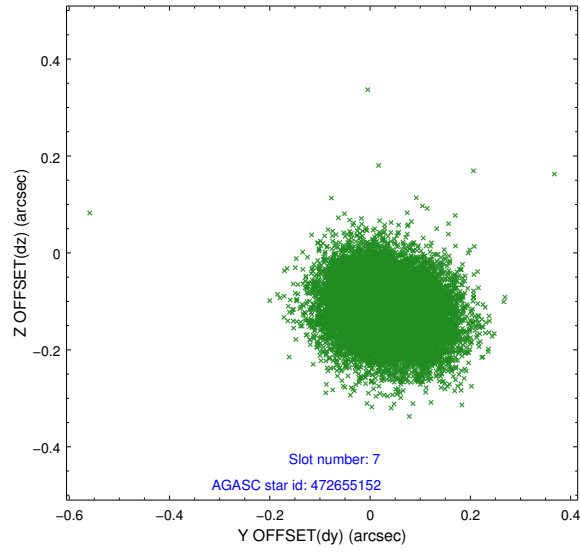
2.4.3 Slot 5



2.4.4 Slot 6

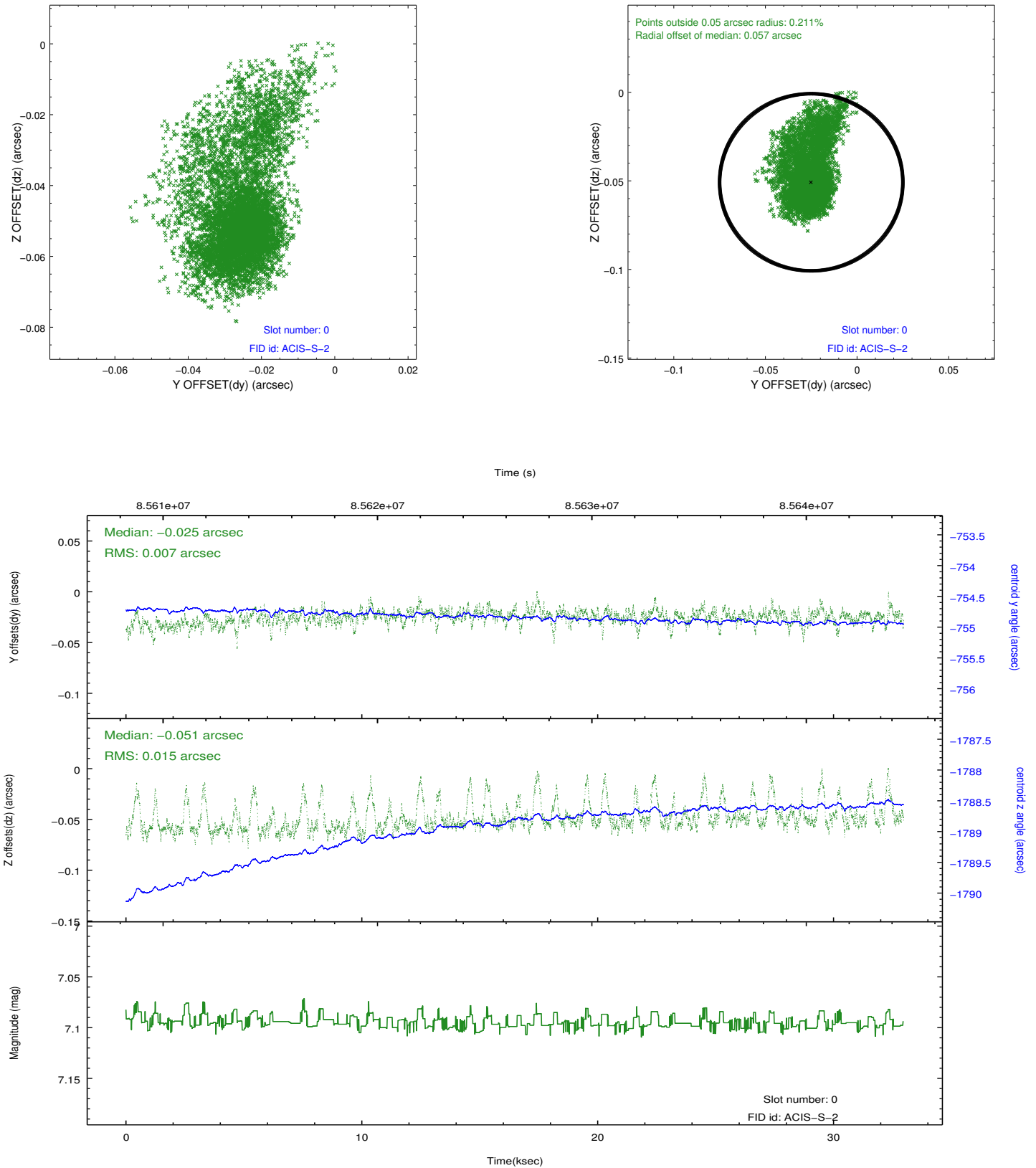


2.4.5 Slot 7

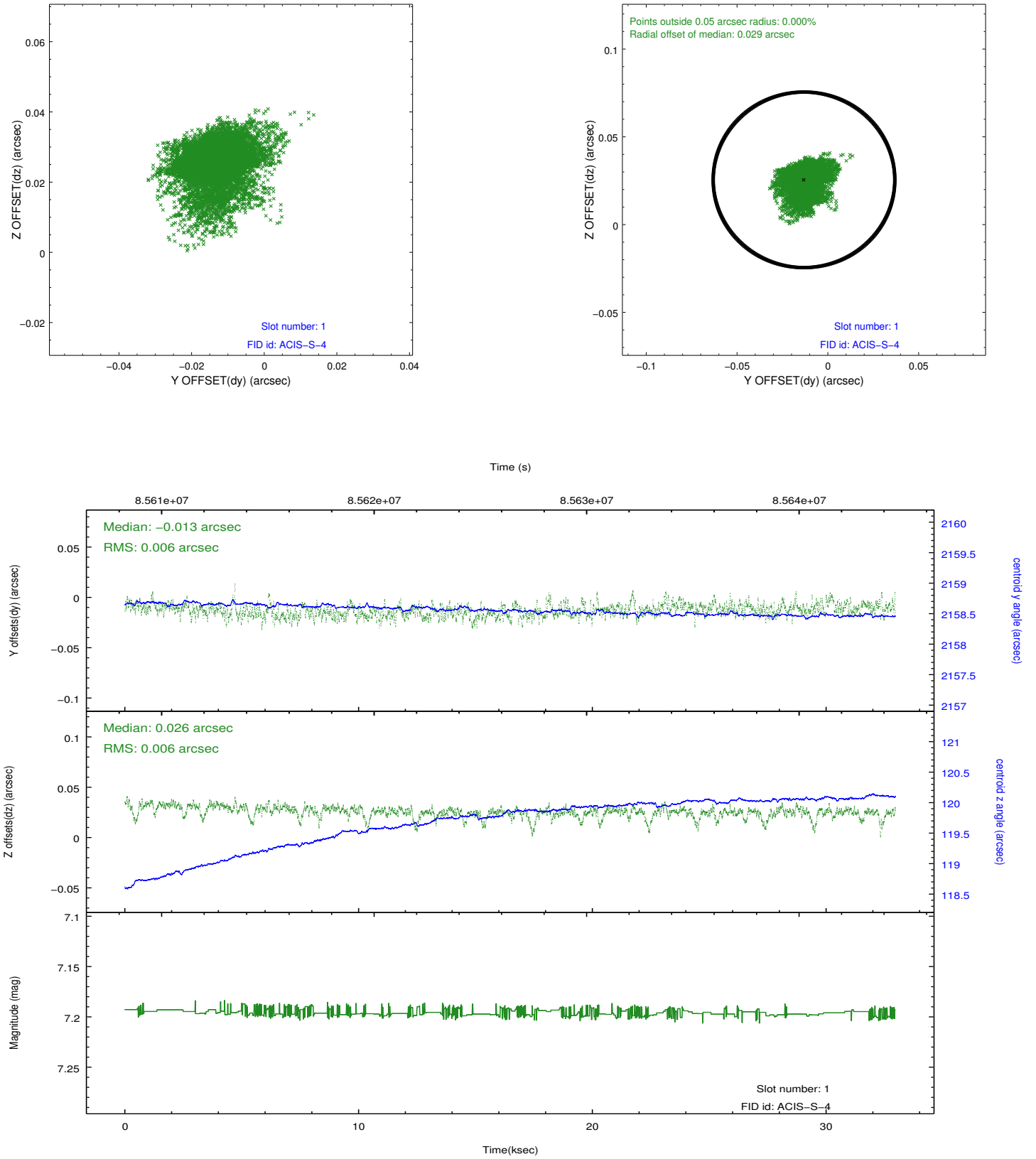


2.5 FID Slots

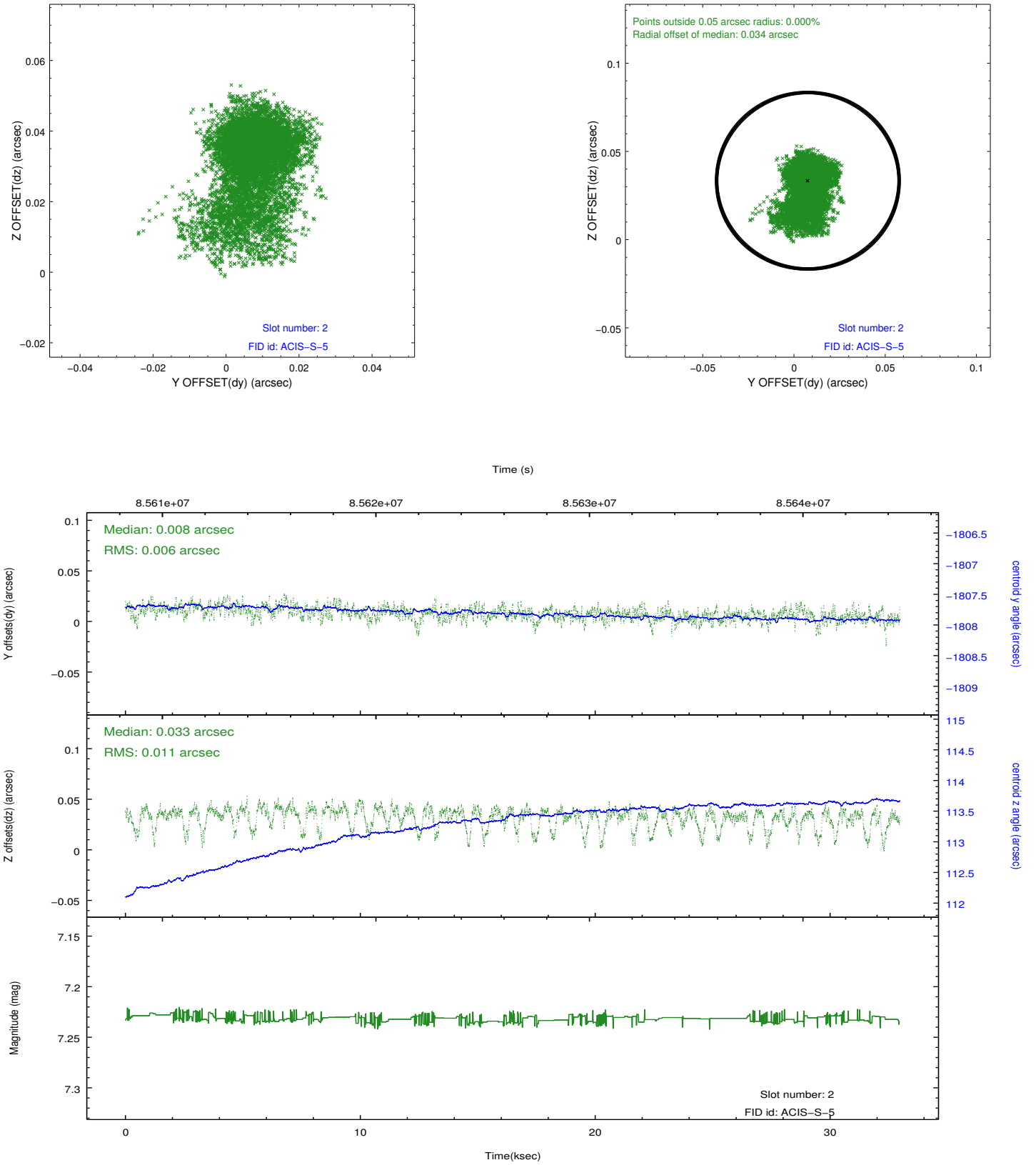
2.5.1 Slot 0



2.5.2 Slot 1

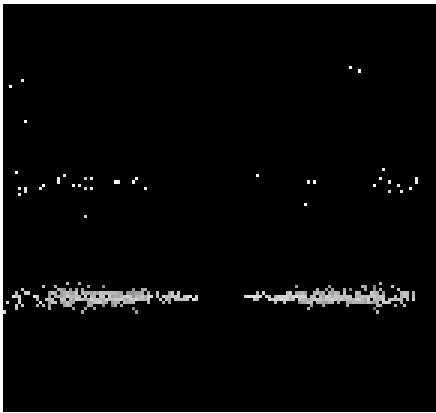


2.5.3 Slot 2

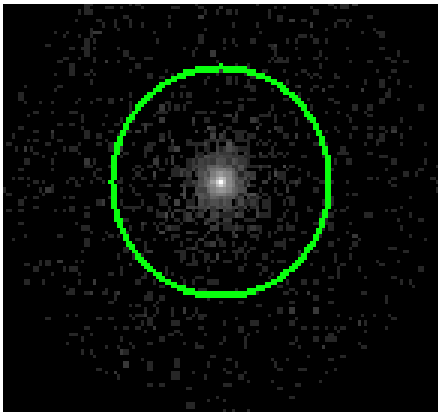


3 Gratings

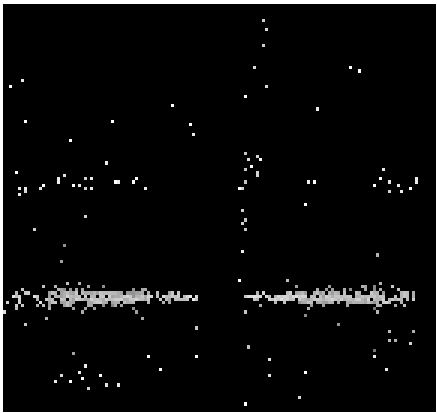
3.1 HEG Arm



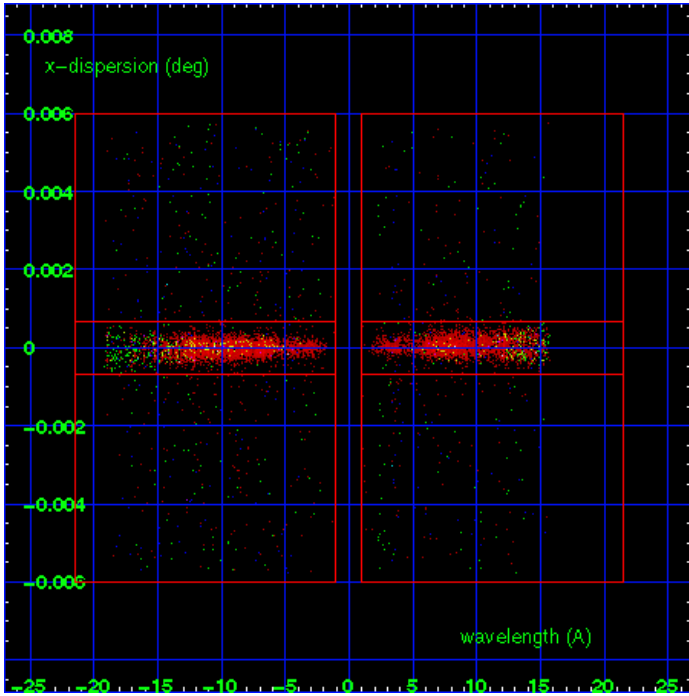
HEG Order Sort 123



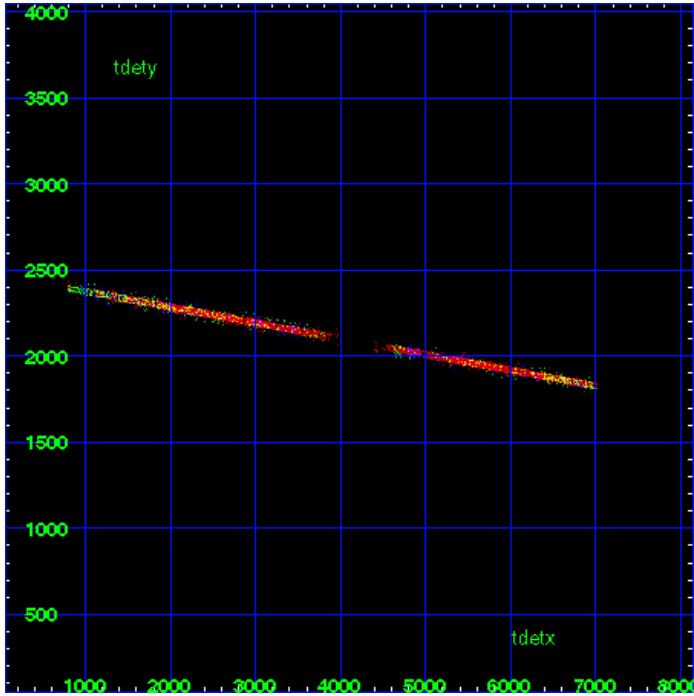
HEG Zero Order



HEG Order Sort ALL

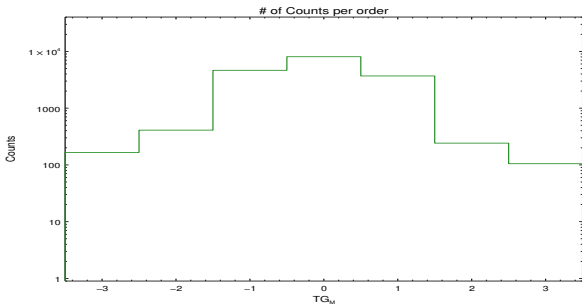


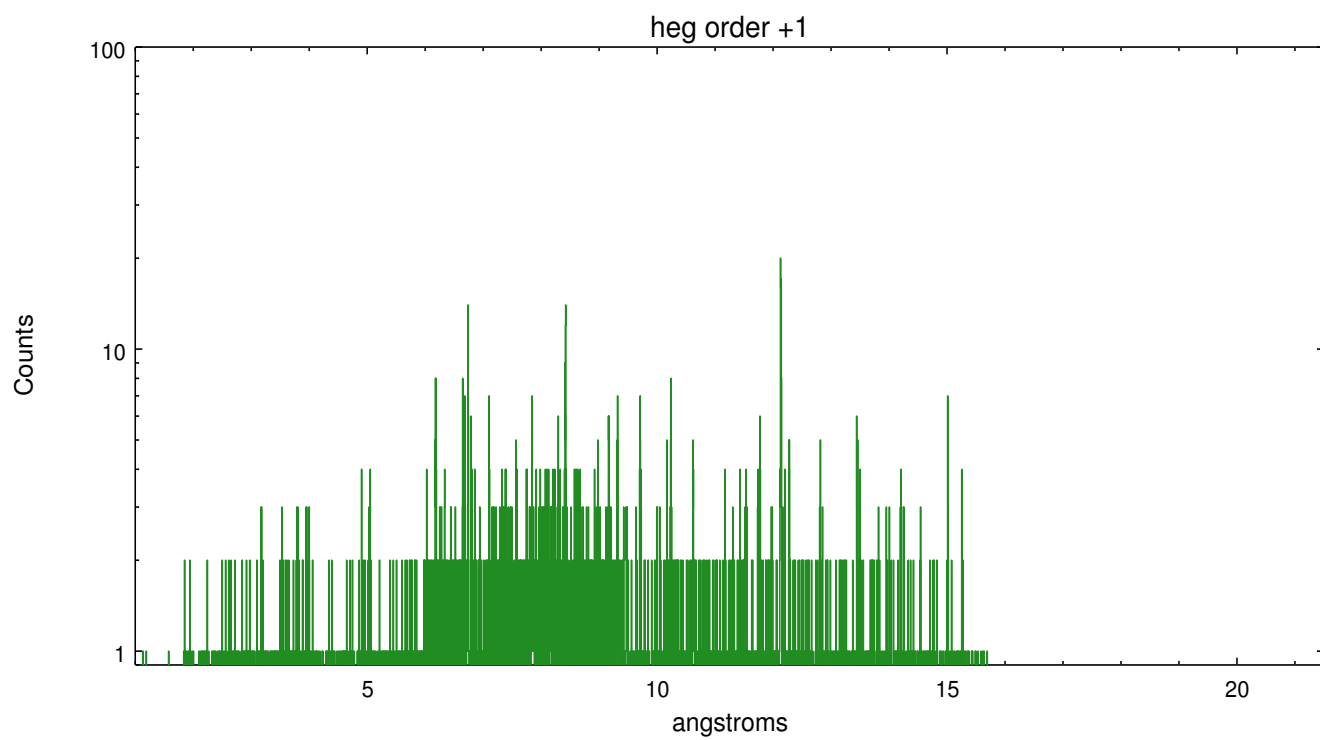
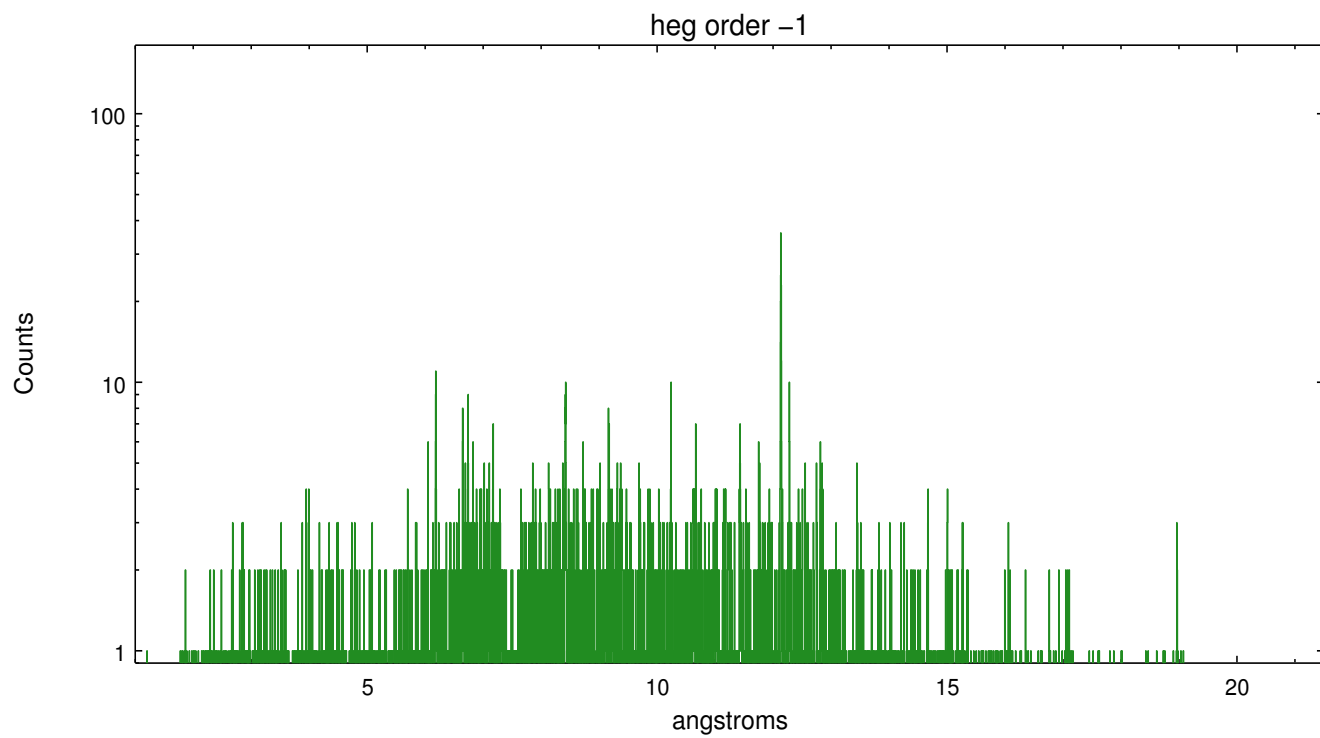
Spot Image HEG



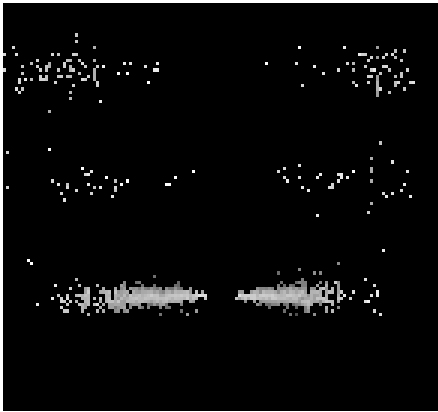
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	166	410	4641	8055	3691	242	105

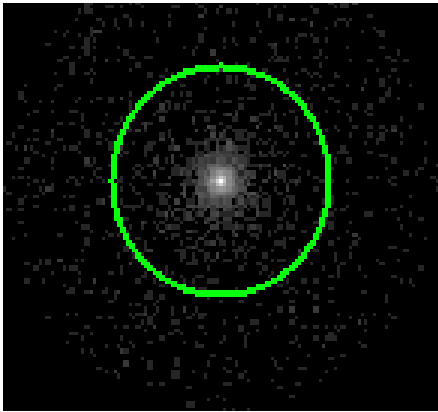




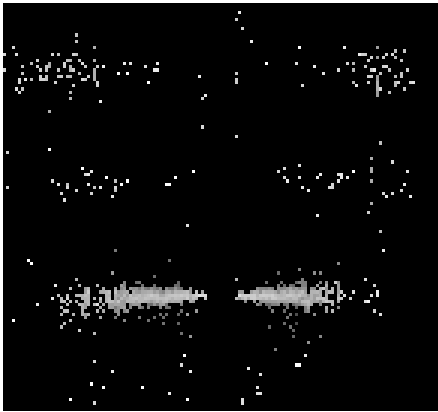
3.2 MEG Arm



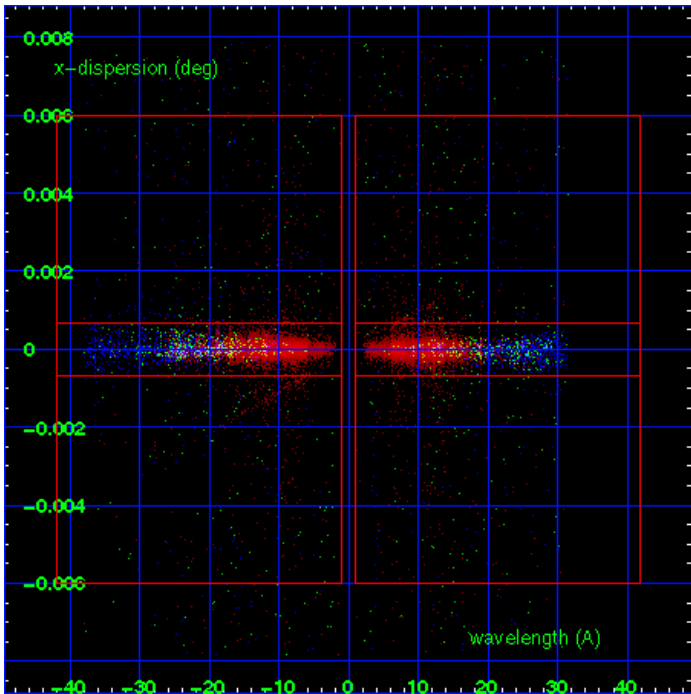
MEG Order Sort 123



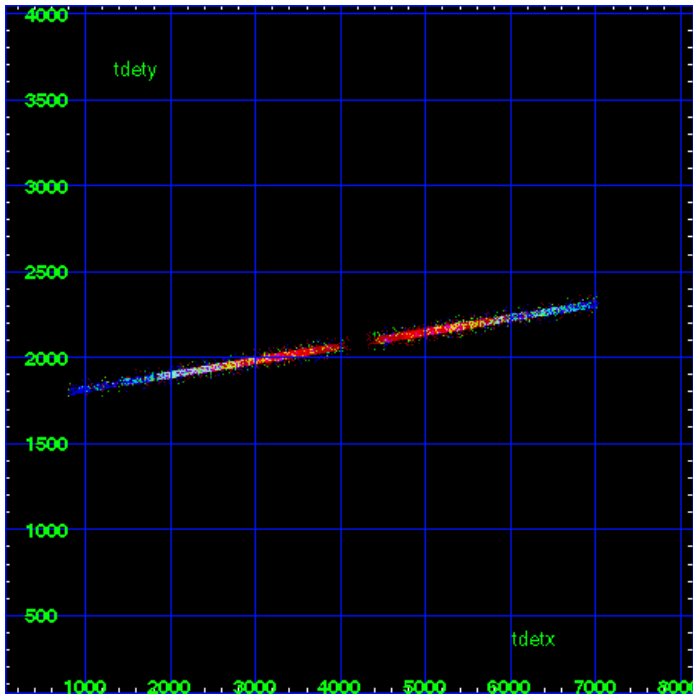
MEG Zero Order



MEG Order Sort ALL

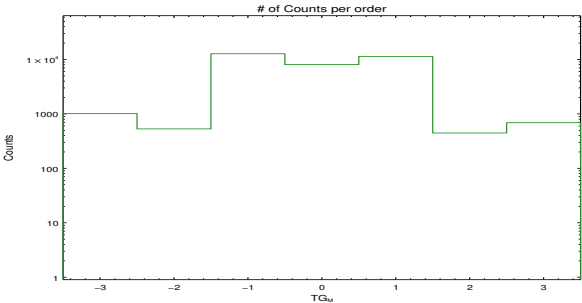


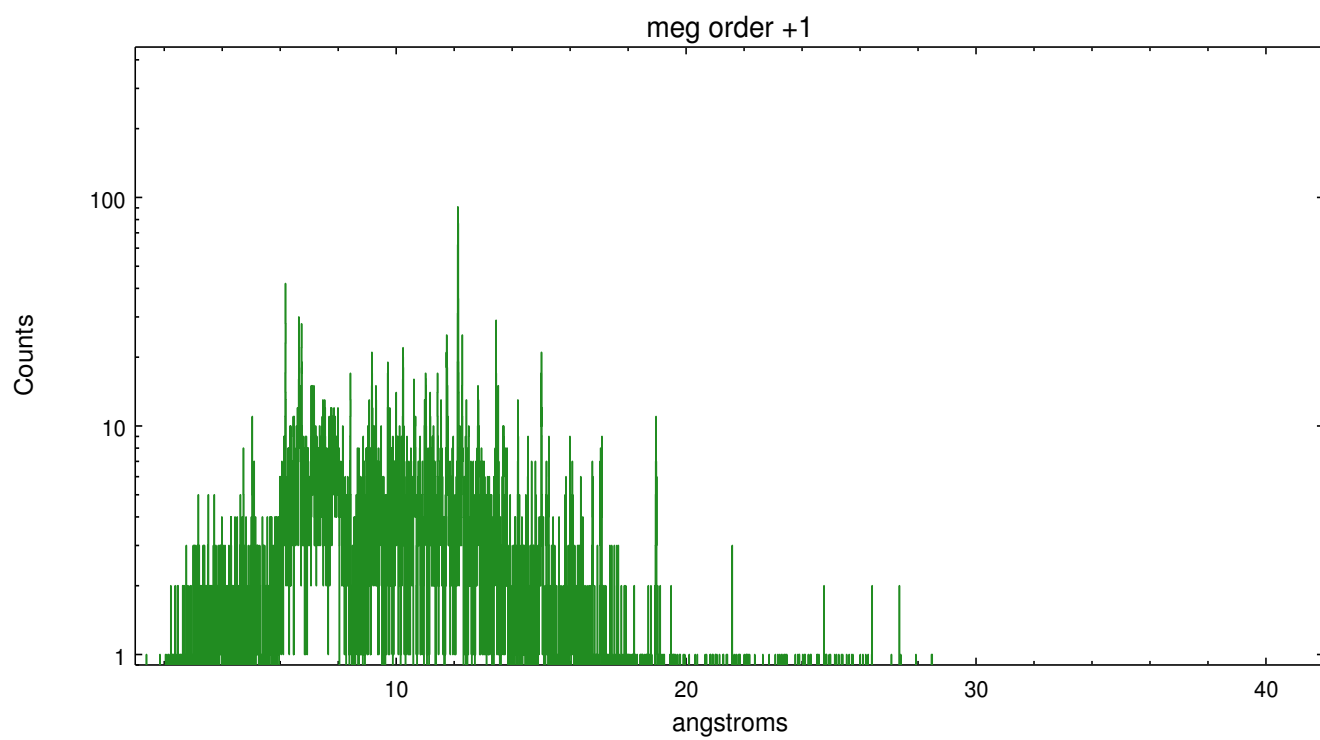
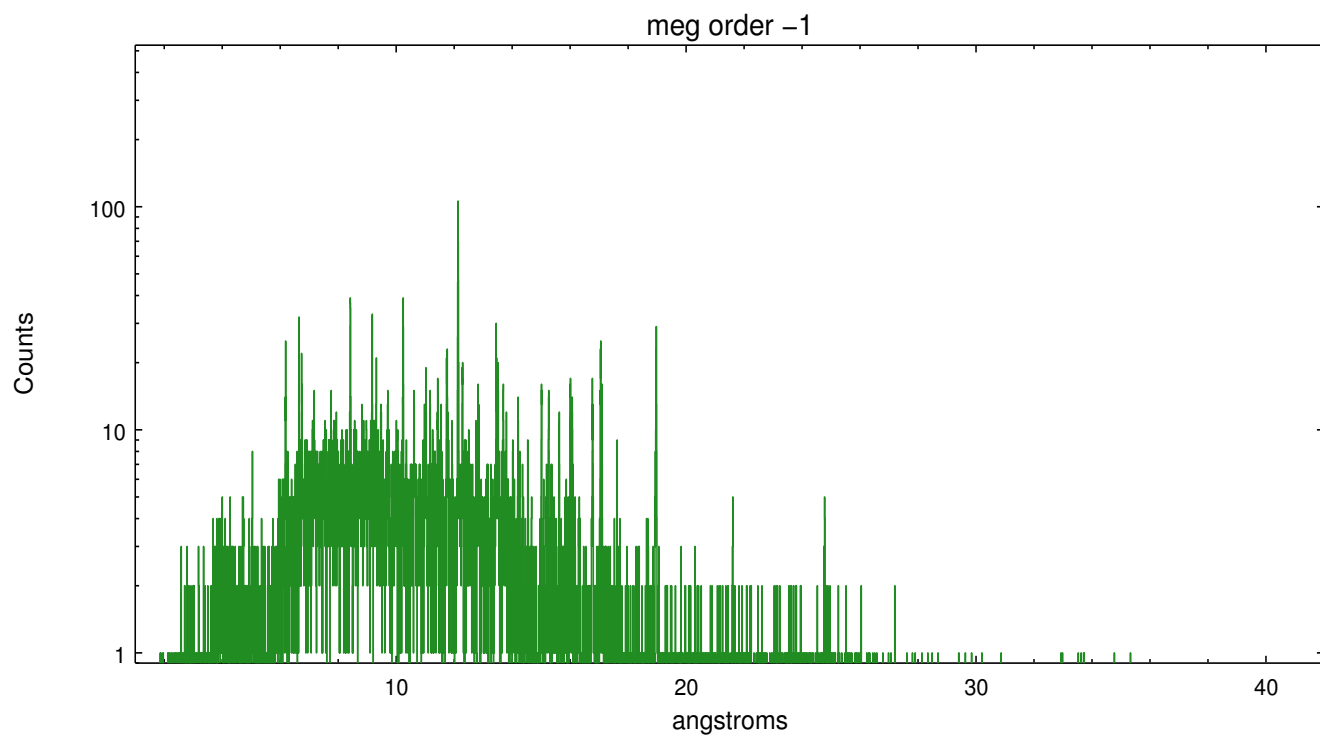
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1012	530	12748	8055	11330	446	689





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.582

A.2 Comments

Roll constraint met. Caveat: due to an 0.5 day observer error on the ephemeris, comments on the phase in the header 'OBJECT' are wrong.