

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10 - L2 Version 3
Chandra X-Ray Center

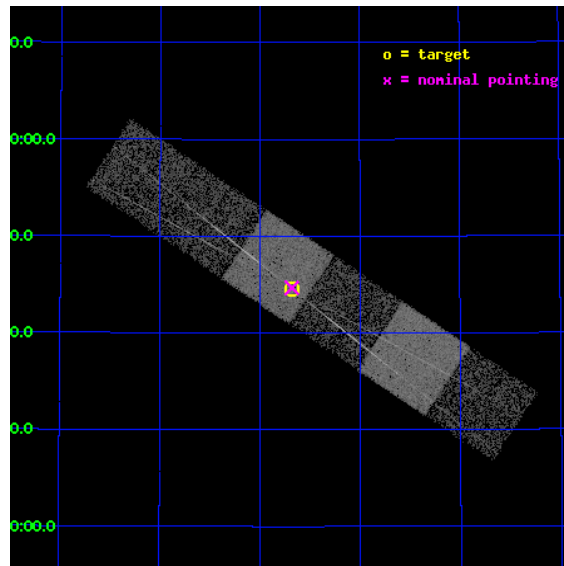
L2 Processing Date : Sep 1 2012

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1 Front

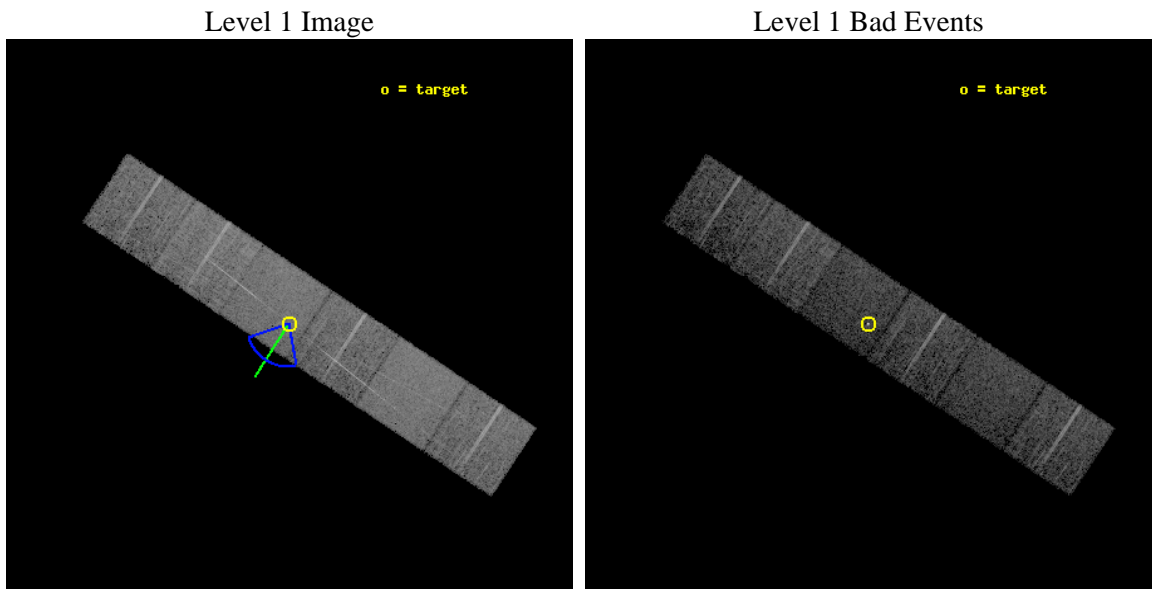
seq_num	200008	Sequence number
obs_id	10	Observation id
title	STELLAR CORONAL SPECTROSCOPY OF COOL STARS	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	AR LAC-5 FIRST QUAD (2)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742222	Observer's specified target Dec [deg]
ra_nom	332.17003153786	Nominal RA [deg]
dec_nom	45.744360725601	Nominal Dec [deg]
roll_nom	213.57397673087	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7256.7782916129	Sum of GTIs [s]
livetime	7164.8885953772	Livetime [s]
ontime4	7256.8193316162	Sum of GTIs [s]
ontime5	7256.7372516096	Sum of GTIs [s]
ontime6	7256.6962116212	Sum of GTIs [s]
ontime7	7256.7782916129	Sum of GTIs [s]
ontime8	7250.1733807772	Sum of GTIs [s]
ontime9	7256.6141316146	Sum of GTIs [s]
l2events	67759	Number of level 2 events



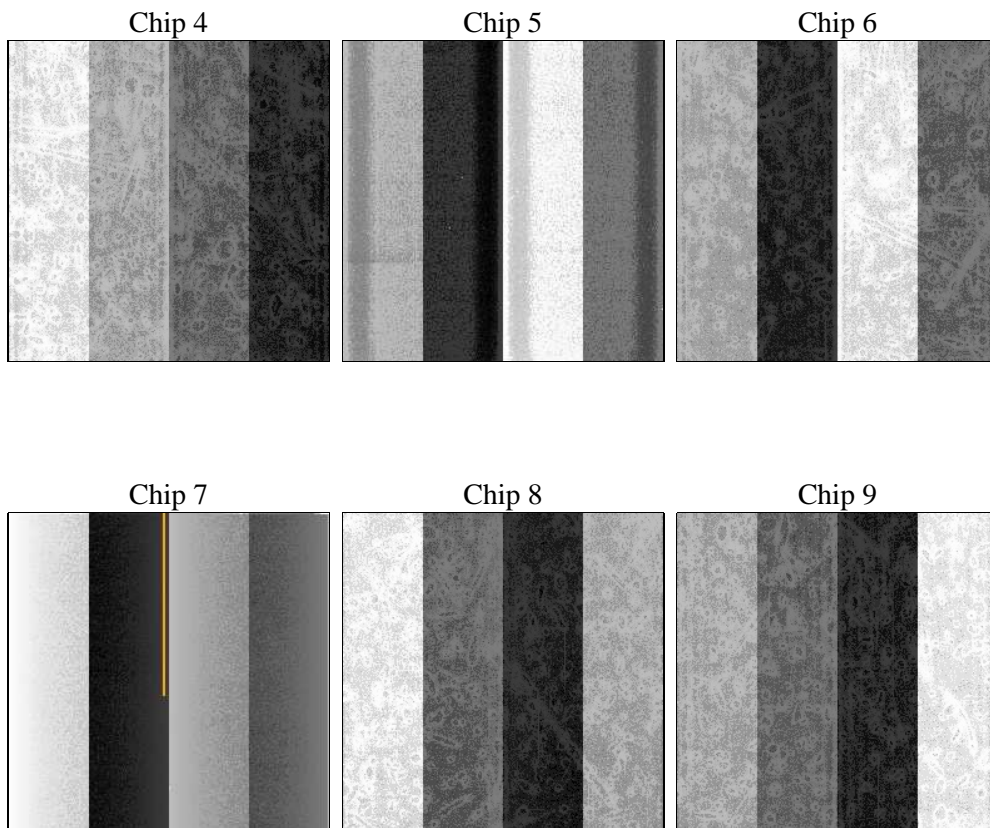
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7256.7782916129	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	7256.8193316162	Sum of GTIs [s]
date	2012-09-01T17:32:54	Date and time of file creation	ontime5	7256.7372516096	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	7256.6962116212	Sum of GTIs [s]
			ontime7	7256.7782916129	Sum of GTIs [s]
			ontime8	7250.1733807772	Sum of GTIs [s]
			ontime9	7256.6141316146	Sum of GTIs [s]
			l1events	287306	Number of level 1 events

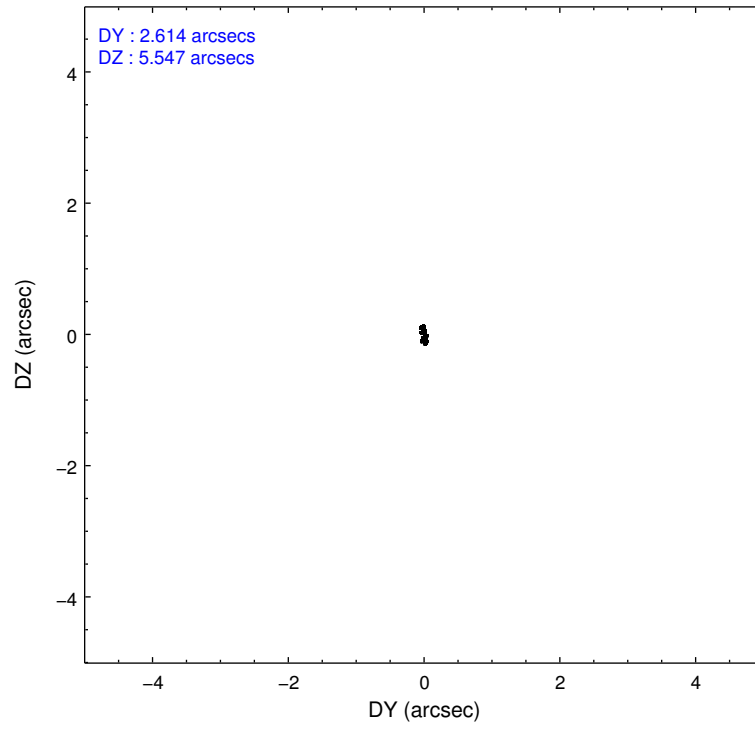
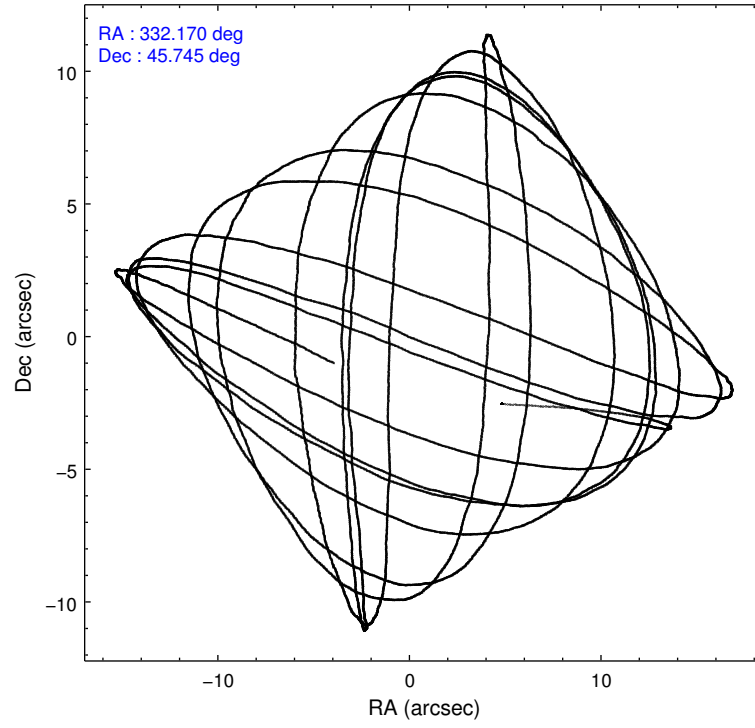
2.1.4 Events

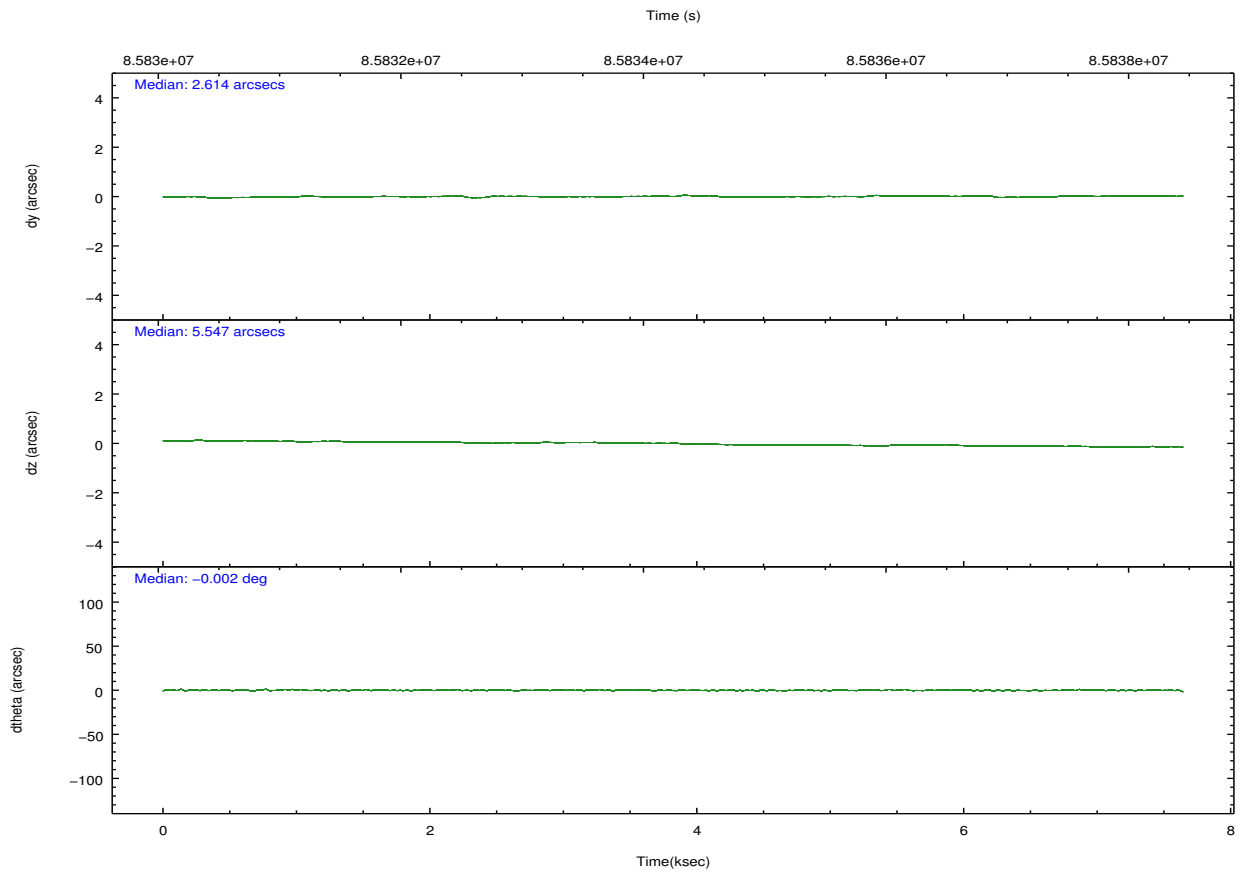
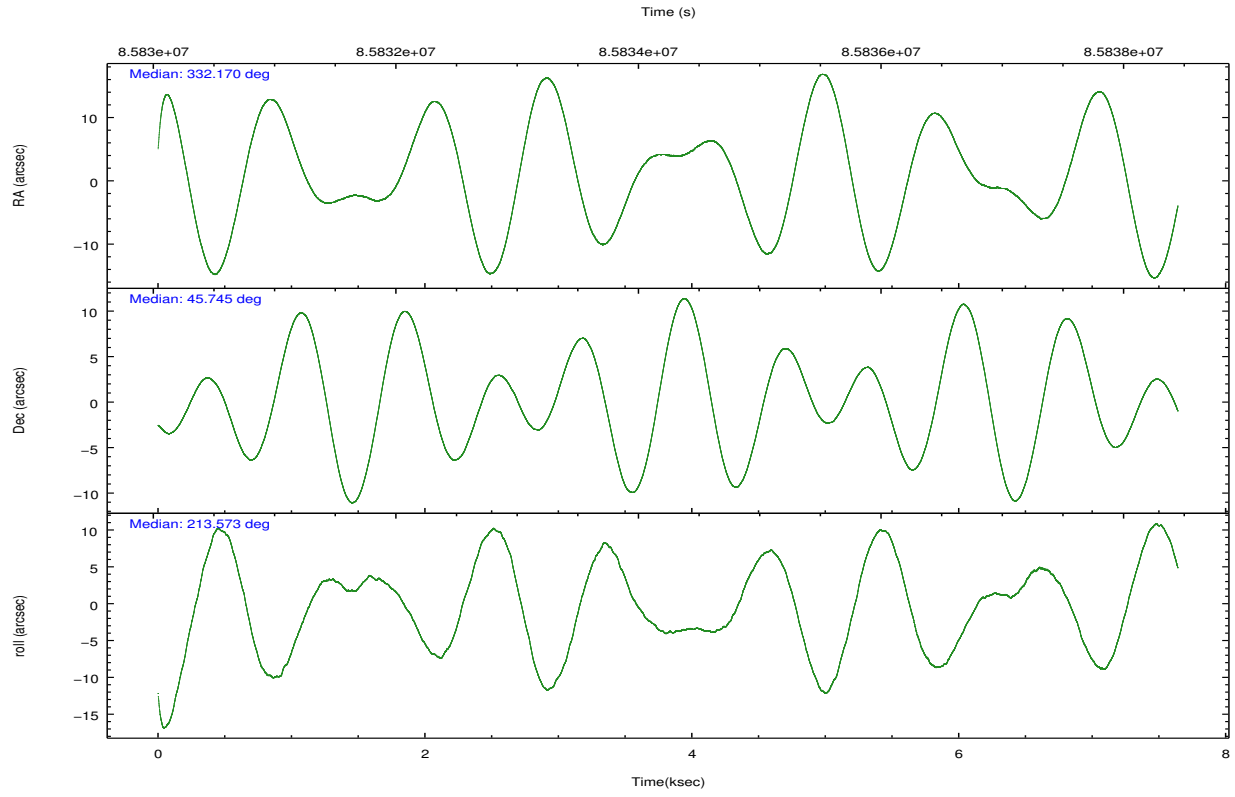
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	42911	54146	42446	52713	55774	39316	grade 0 events	2157	2120	3770	2520	4747	2362
rejected events	37855	29554	35584	29304	43874	34097		5%	3%	8%	4%	8%	6%
rejected %	88%	54%	83%	55%	78%	86%	grade 1 events	22	60	20	88	40	15
								0%	0%	0%	0%	0%	0%
							grade 2 events	1164	7266	1095	4732	2159	996
								2%	13%	2%	8%	3%	2%
							grade 3 events	452	1224	516	2224	1217	465
								1%	2%	1%	4%	2%	1%
							grade 4 events	430	1101	540	2175	1091	454
								1%	2%	1%	4%	1%	1%
							grade 5 events	1387	4190	1610	5049	2083	1563
								3%	7%	3%	9%	3%	3%
							grade 6 events	858	12901	954	11779	2696	942
								1%	23%	2%	22%	4%	2%
							grade 7 events	36441	25284	33941	24146	41741	32519
								84%	46%	79%	45%	74%	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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	332.187348	332.1700315378606	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.768973	45.74436072560059	Alternating exposures requested	N	N
[deg] Pointing Roll	213.404948	213.5739767308652	[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	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
Phase constraints	Y	Y			
[d] Phase period	1.983180	1.983180			
[d] Phase epoch (MJD)	48501.123200	48501.123200			
Phase start	0.228000	0.228000			
Phase end	0.272000	0.272000			
Phase start error	0.080000	0.080000			
Phase end error	0.080000	0.080000			

2.3 Aspect



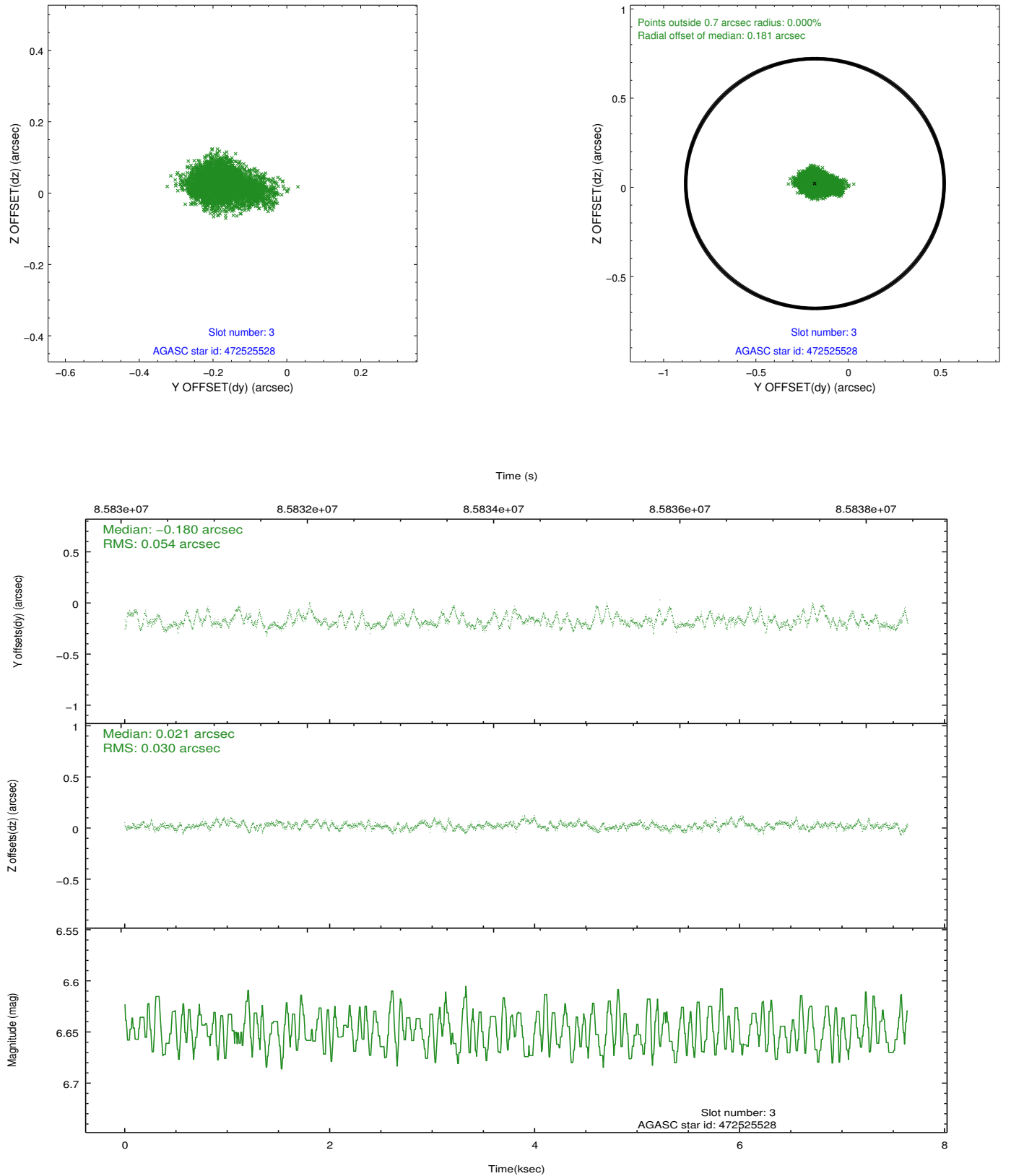


Slot Statistics

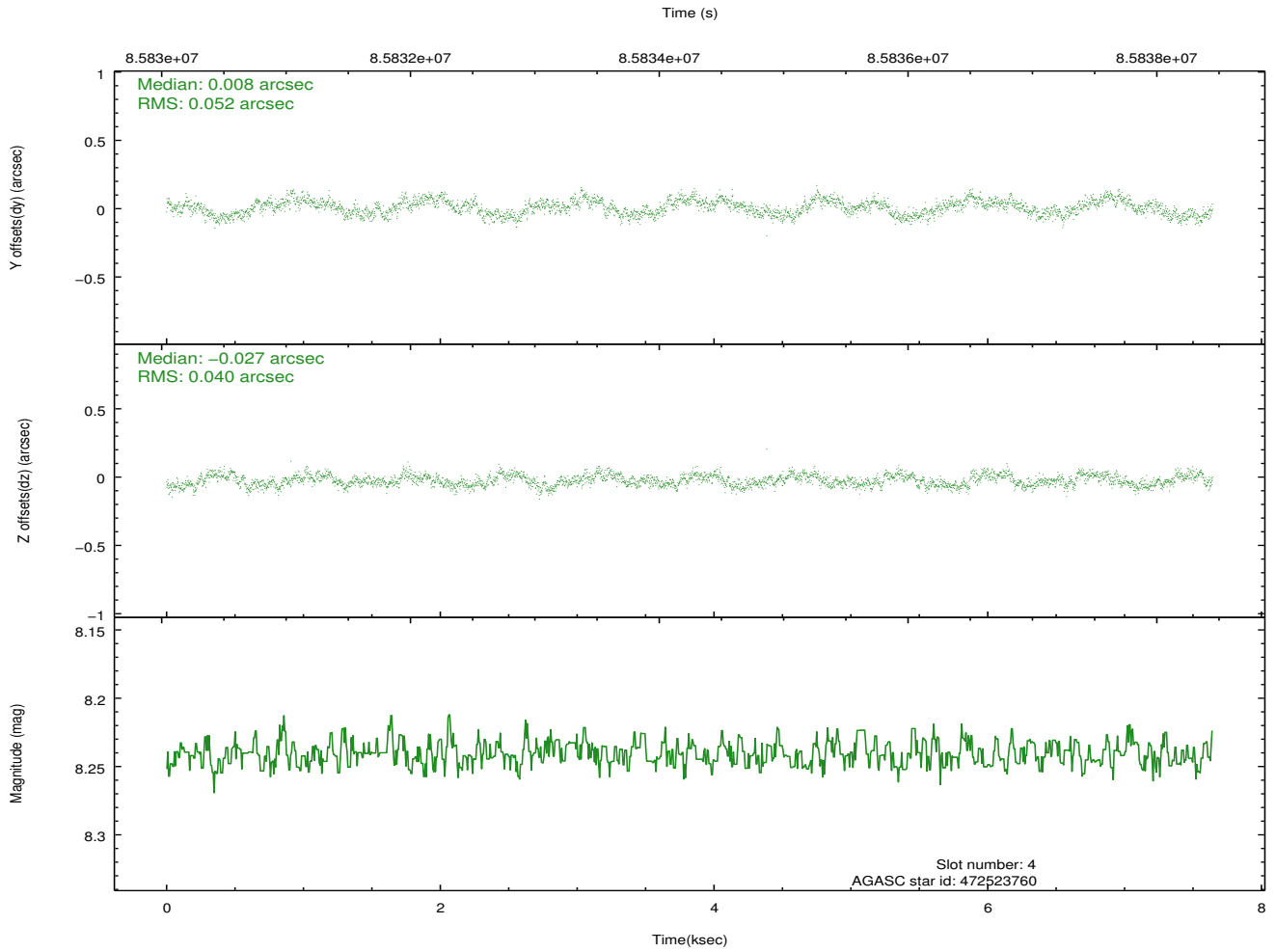
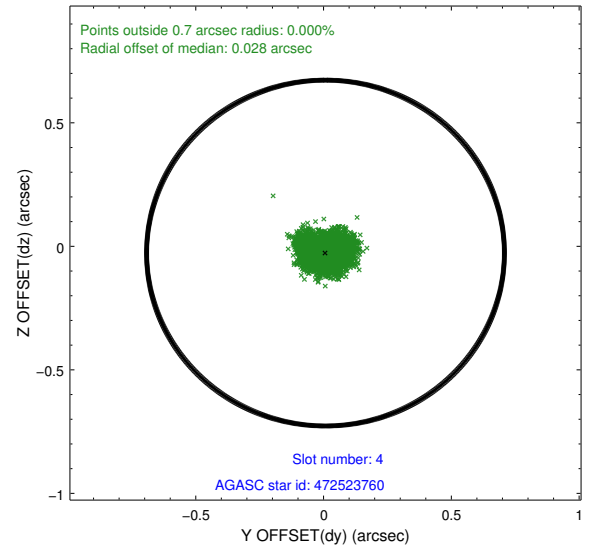
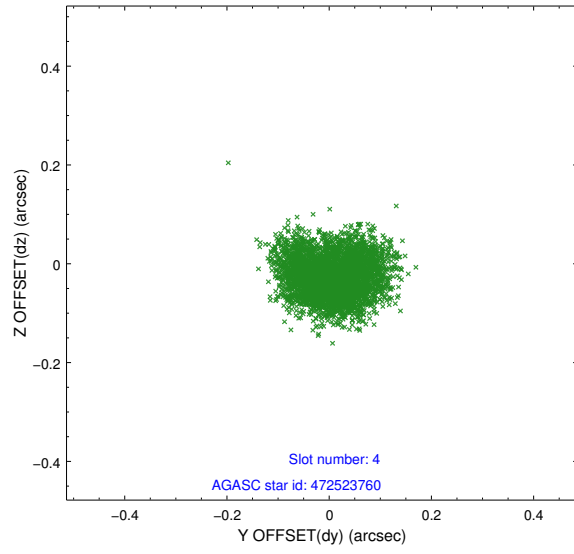
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.36	1864	-0.060	-0.058	0.008	0.013	0.000000	0.000000	58.04	-1917.86
1	FID	ACIS-S-4	7.19	1864	0.012	0.060	0.006	0.010	0.000000	0.000000	2158.35	118.86
2	FID	ACIS-S-5	7.23	1864	0.021	0.008	0.006	0.011	0.000000	0.000000	-1806.90	113.52
3	GUIDE	472525528	6.65	3729	-0.180	0.021	0.064	0.111	331.551102	45.248694	2373.43	671.27
4	GUIDE	472523760	8.24	3727	0.008	-0.027	0.071	0.111	331.645363	45.403260	1866.31	341.92
5	GUIDE	472665256	8.99	3726	0.094	0.010	0.064	0.103	332.808125	46.195041	-2138.79	-433.05
6	GUIDE	472659832	9.45	3727	0.024	0.133	0.083	0.134	332.780399	46.098139	-1892.09	-178.07
7	GUIDE	472655152	9.43	3726	0.048	-0.140	0.091	0.147	332.504239	45.862991	-851.09	154.04

2.4 Star Slots

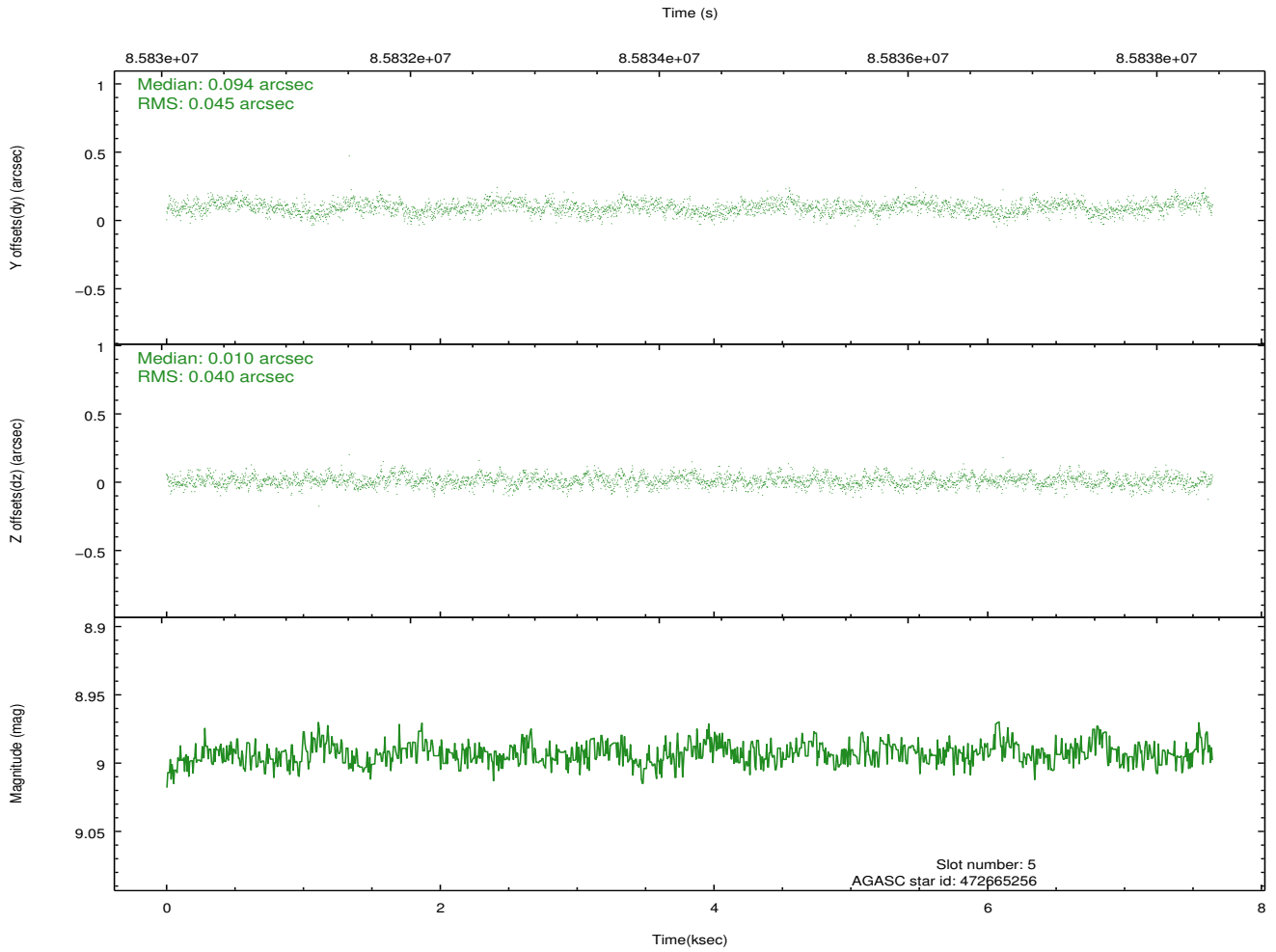
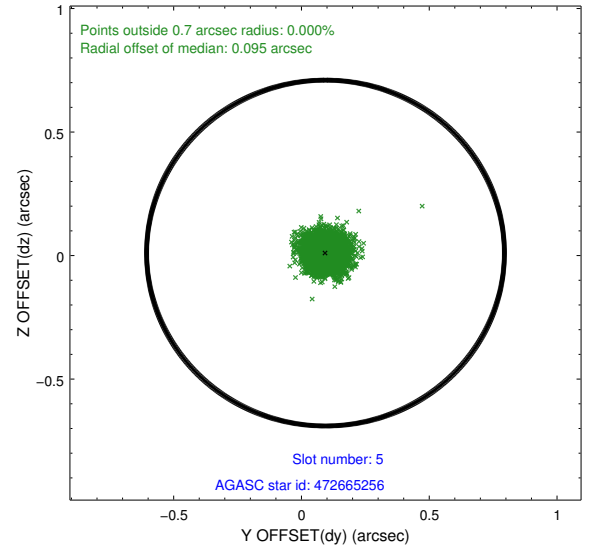
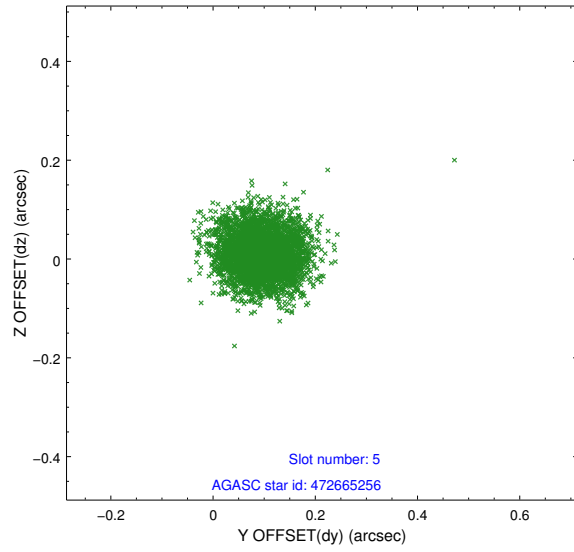
2.4.1 Slot 3



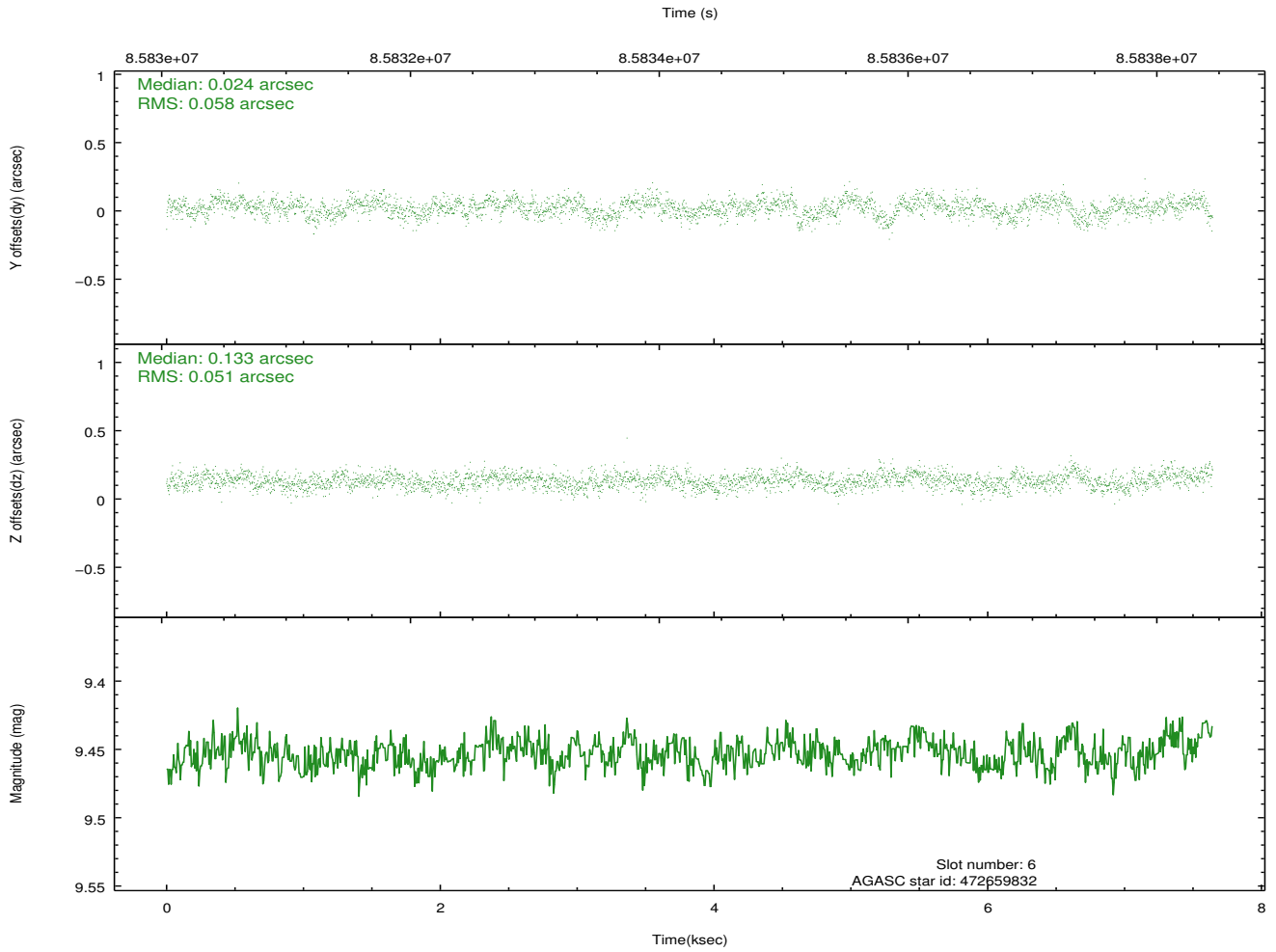
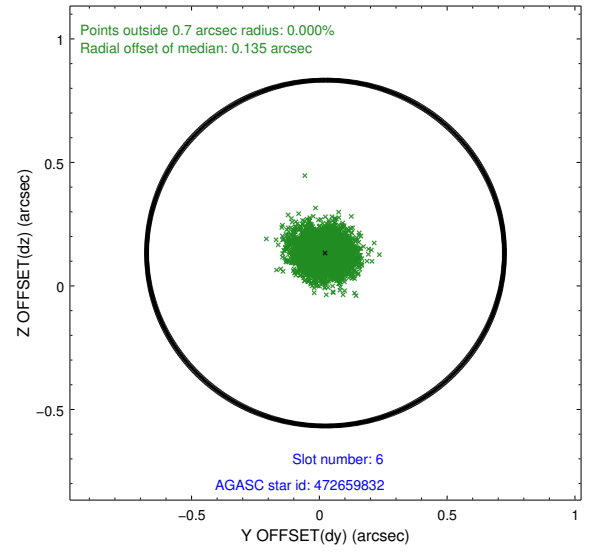
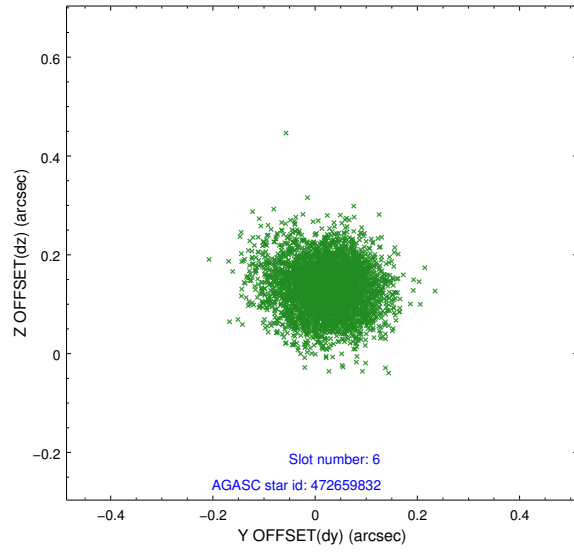
2.4.2 Slot 4



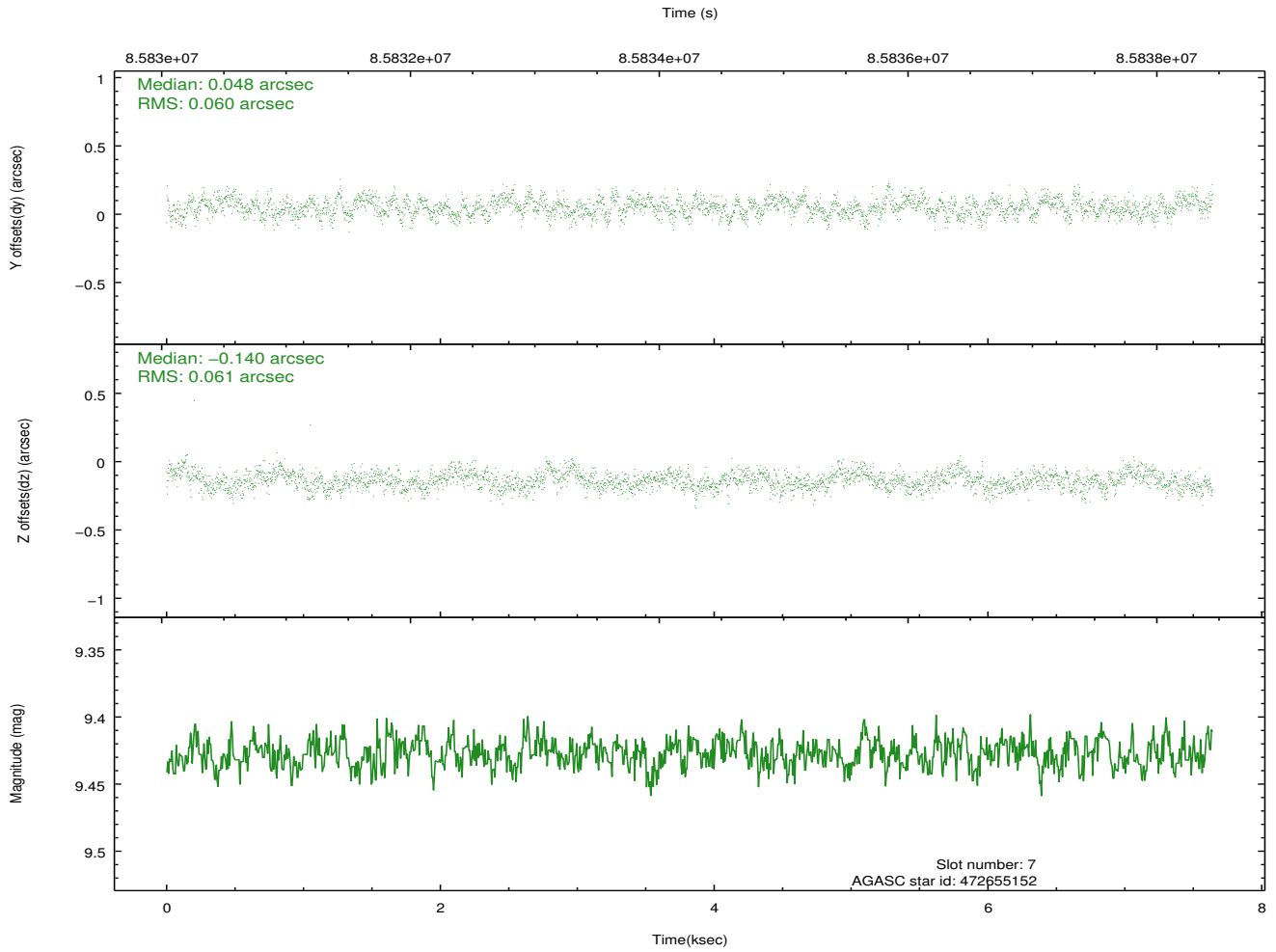
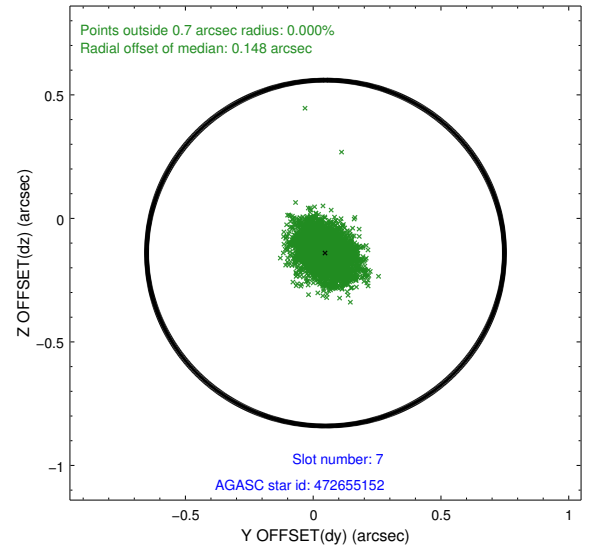
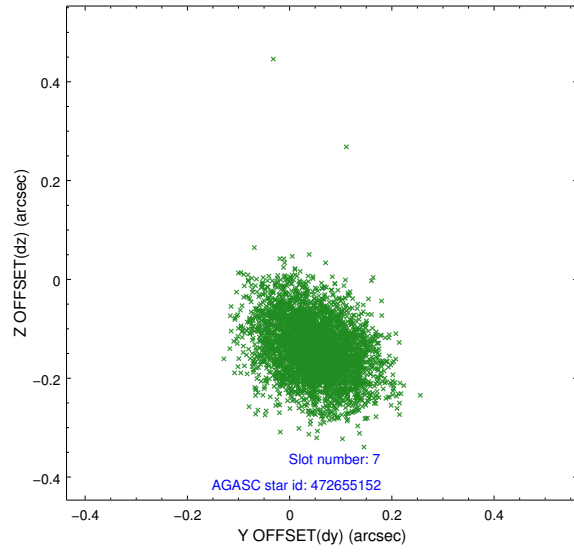
2.4.3 Slot 5



2.4.4 Slot 6

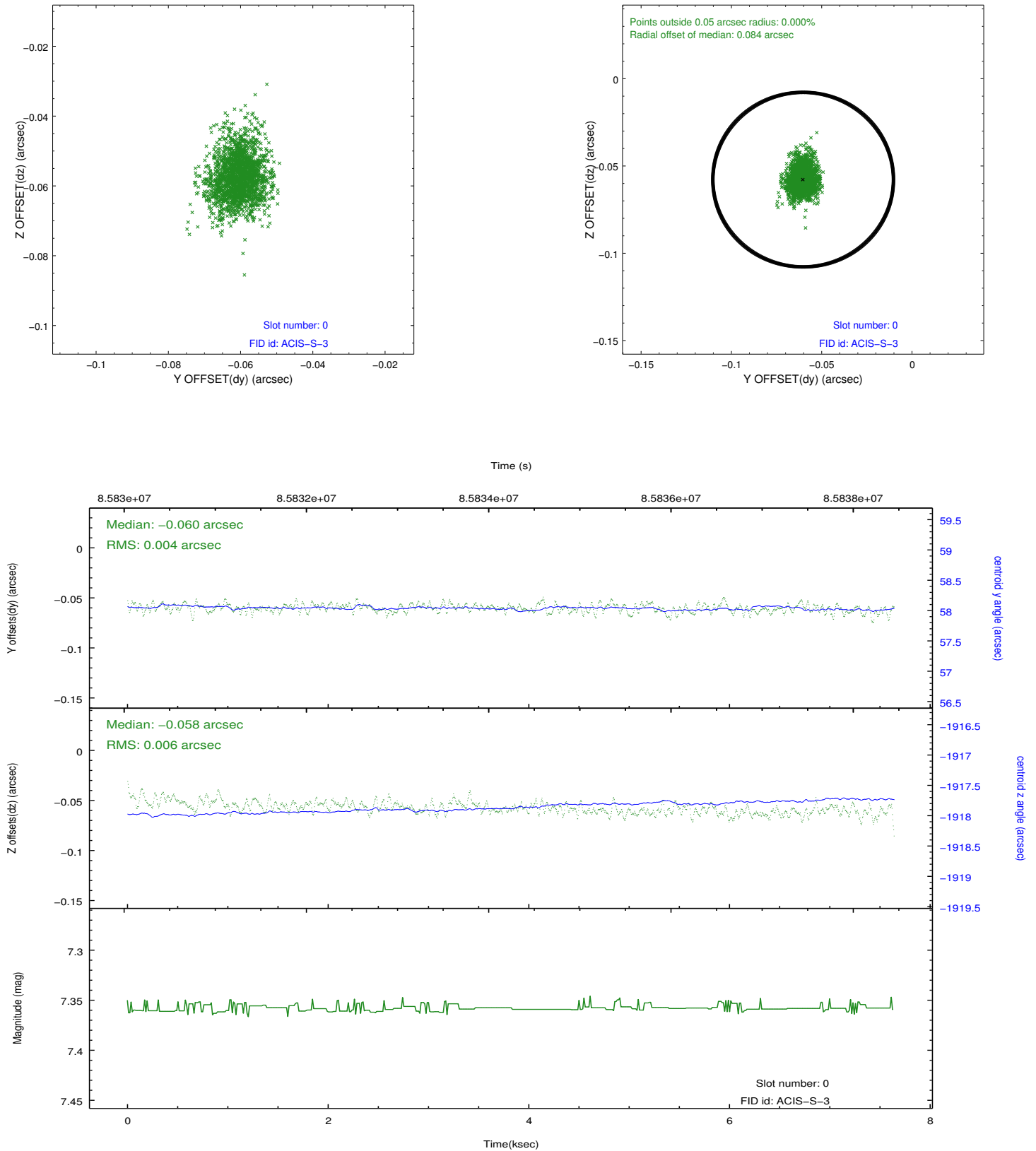


2.4.5 Slot 7

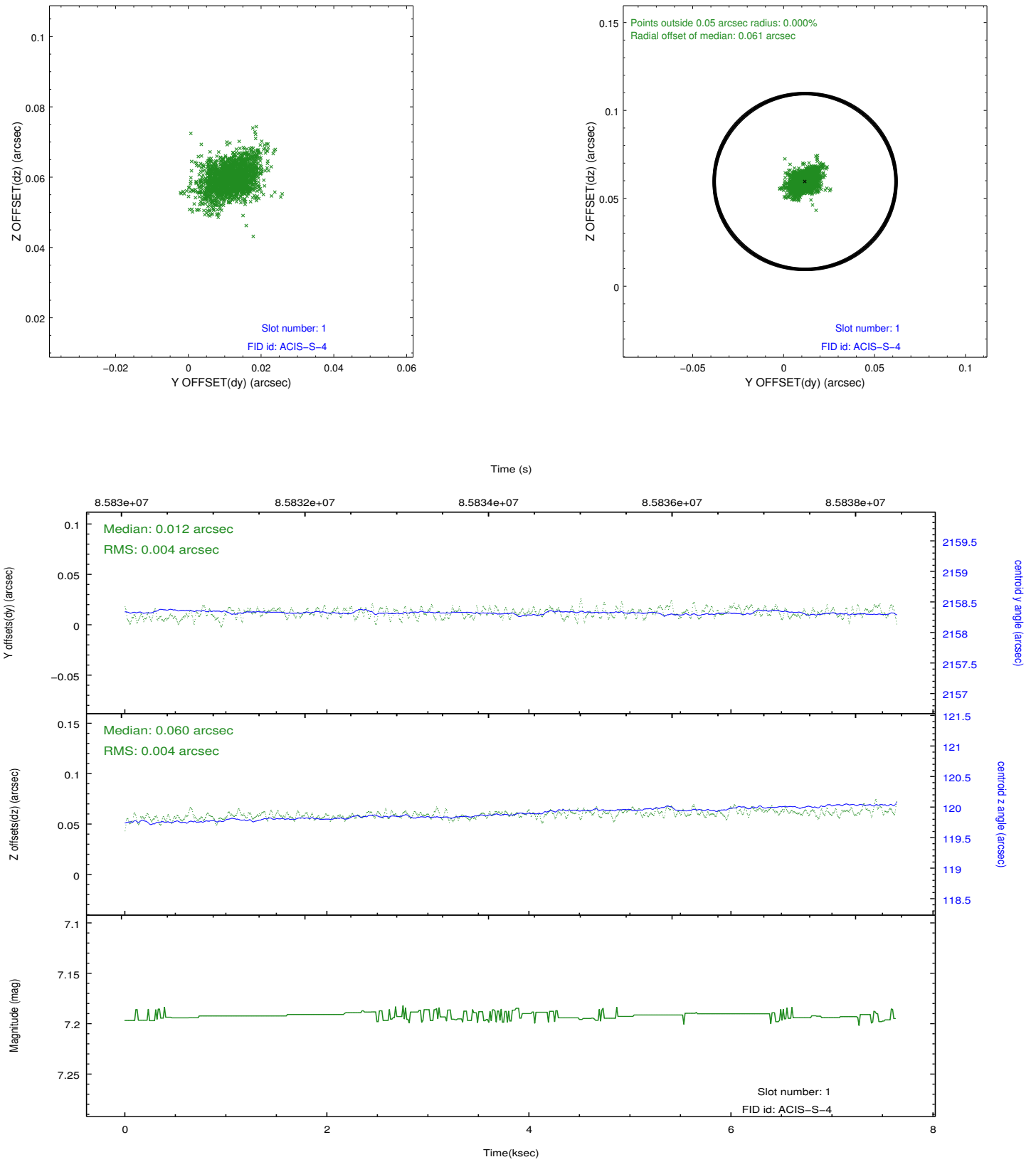


2.5 FID Slots

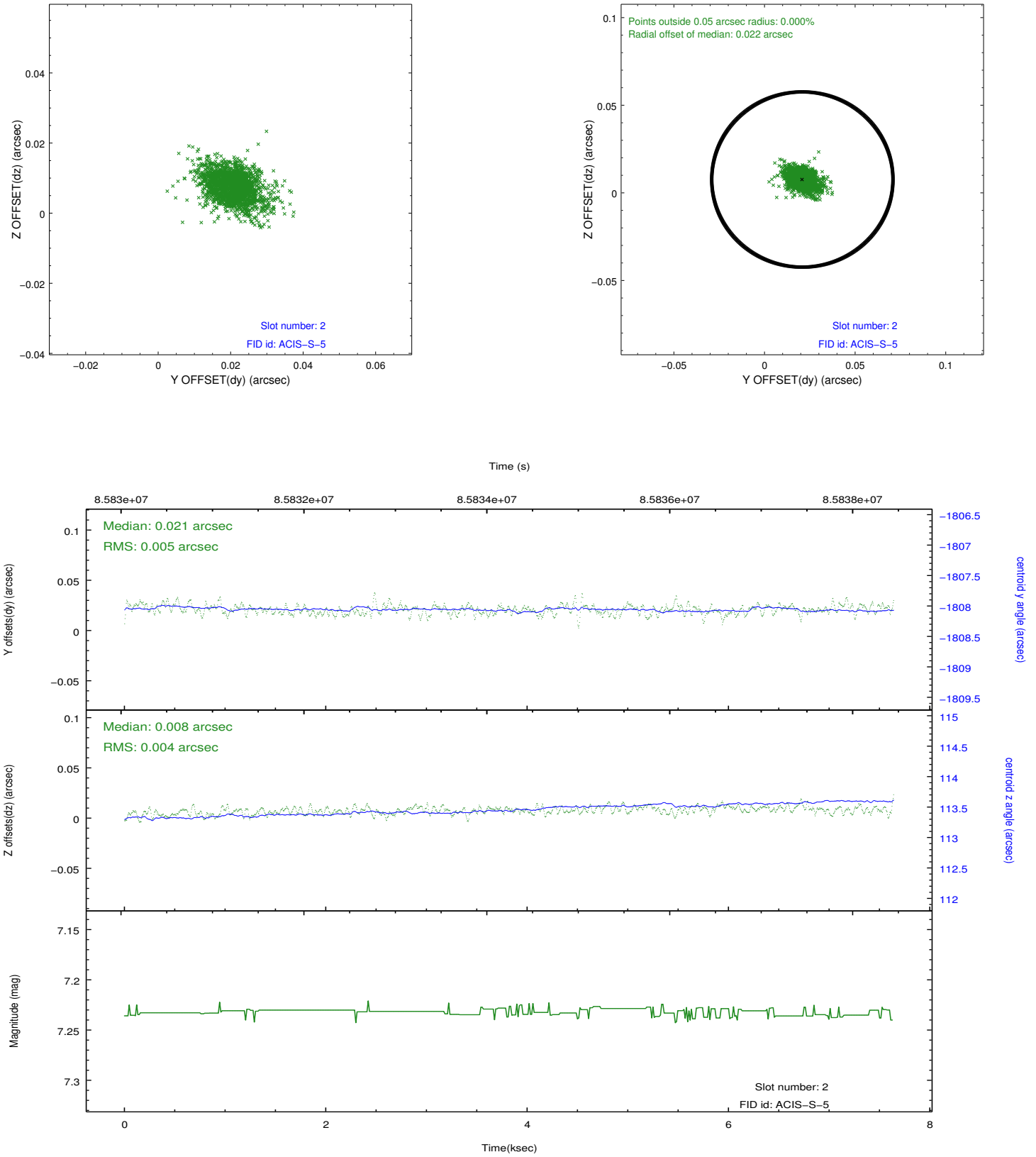
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

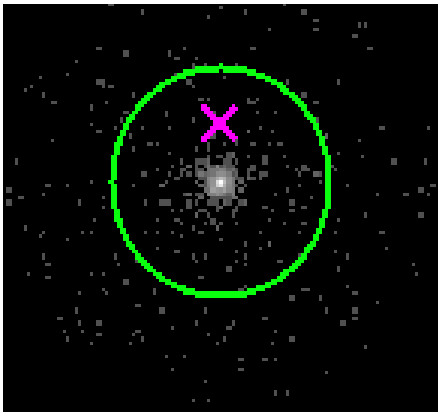


3 Gratings

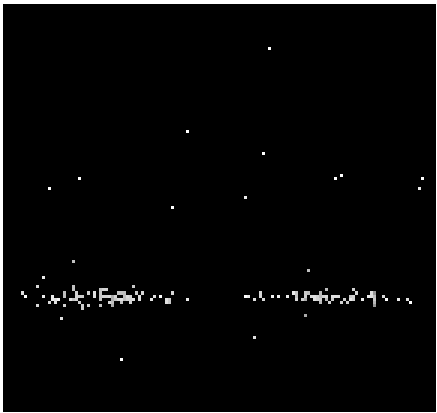
3.1 HEG Arm



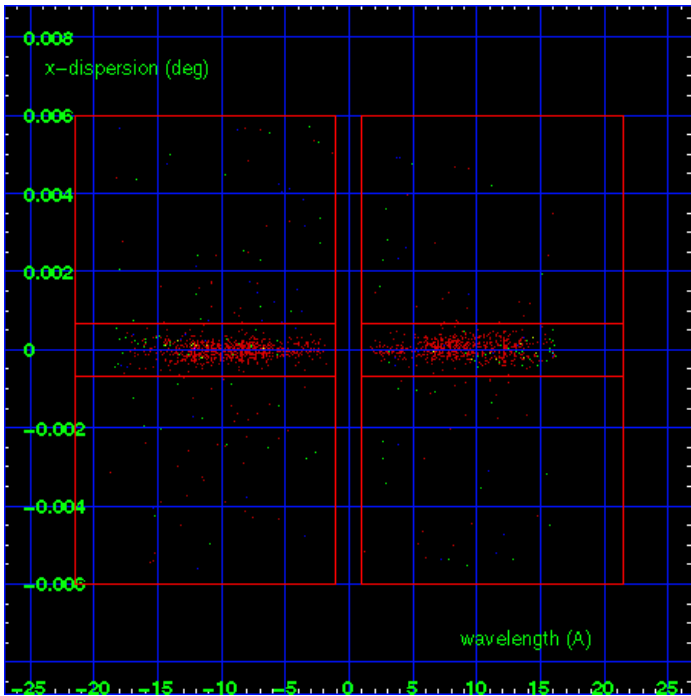
HEG Order Sort 123



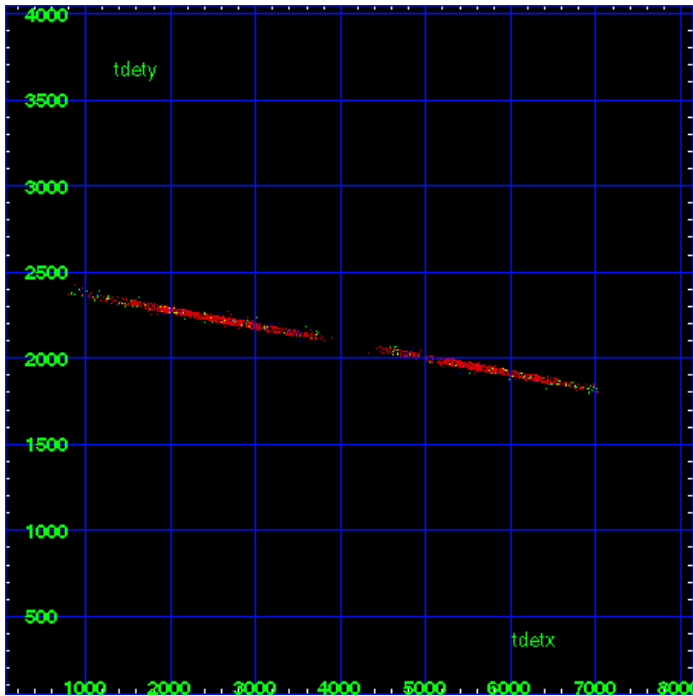
HEG Zero Order



HEG Order Sort ALL

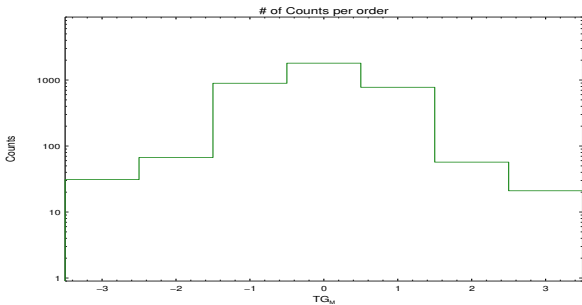


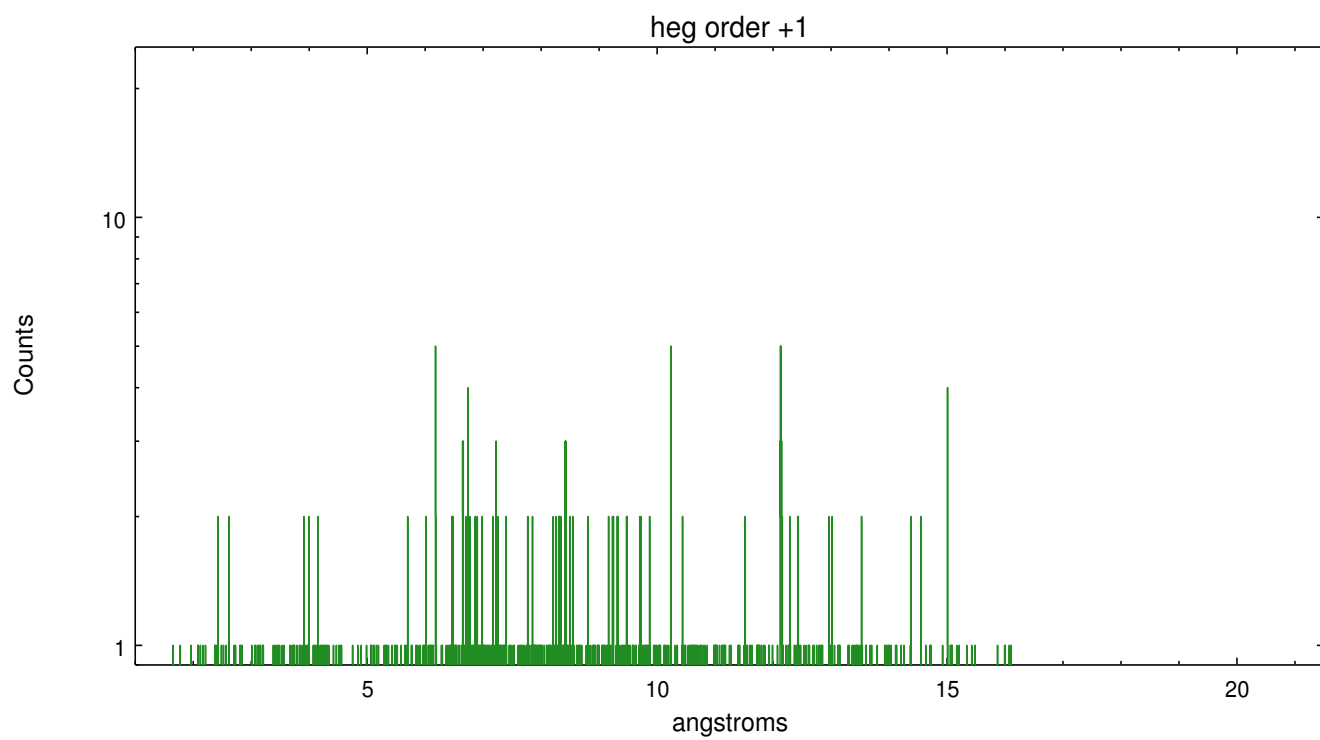
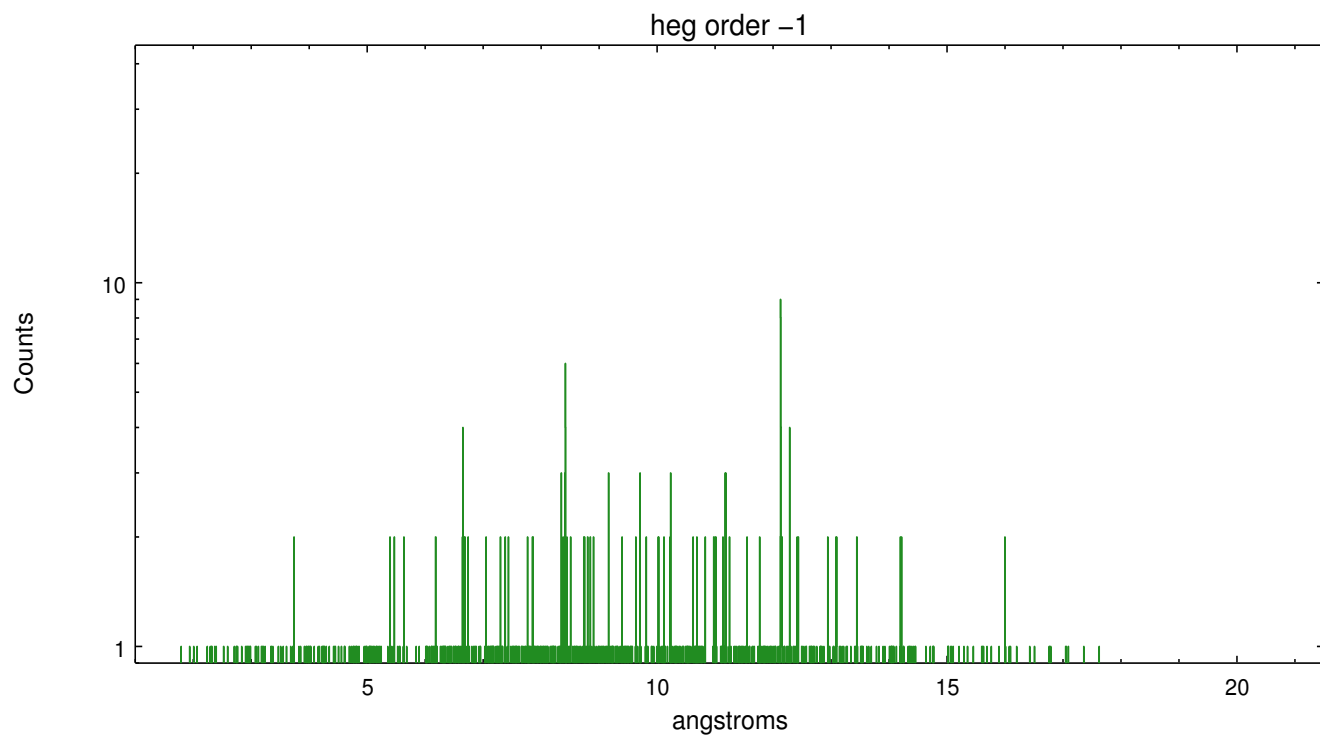
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	31	67	893	1800	776	57	21

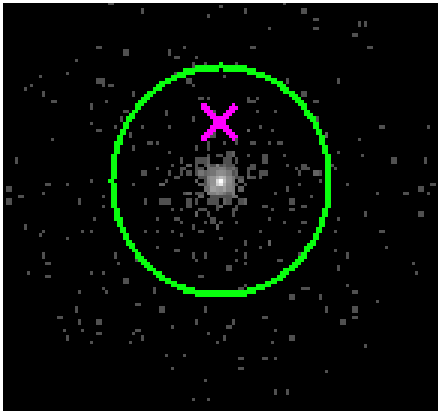




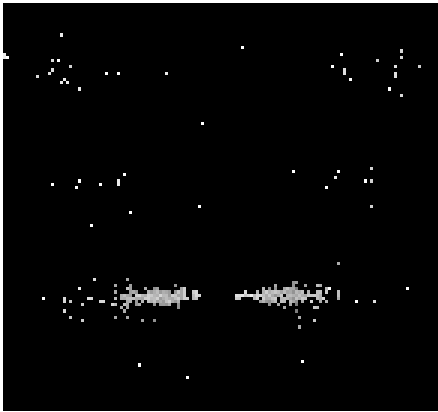
3.2 MEG Arm



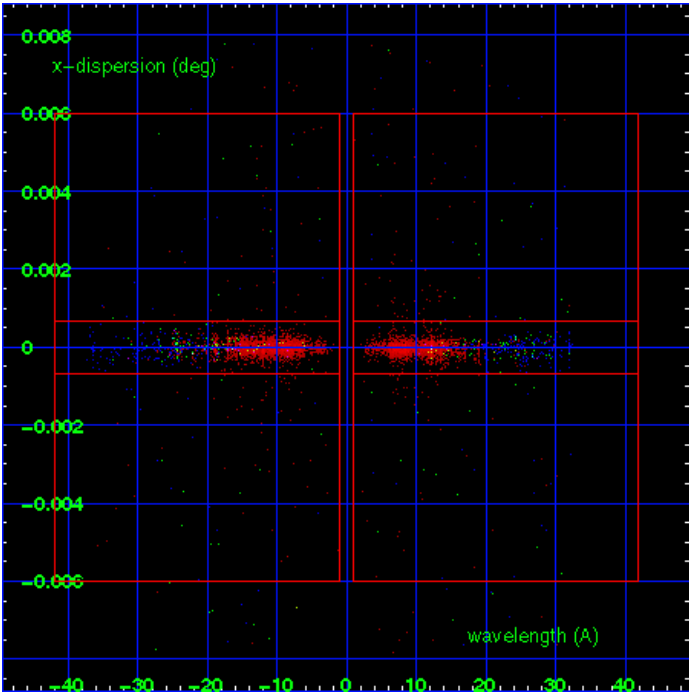
MEG Order Sort 123



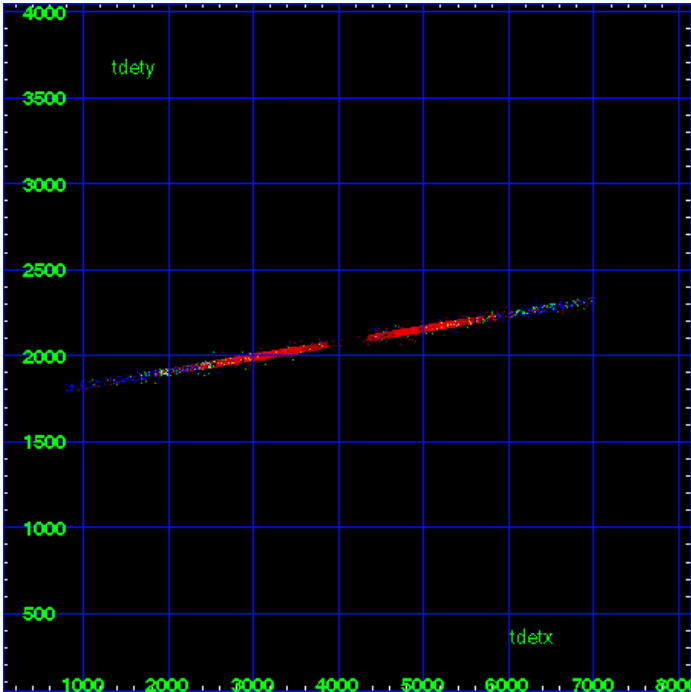
MEG Zero Order



MEG Order Sort ALL

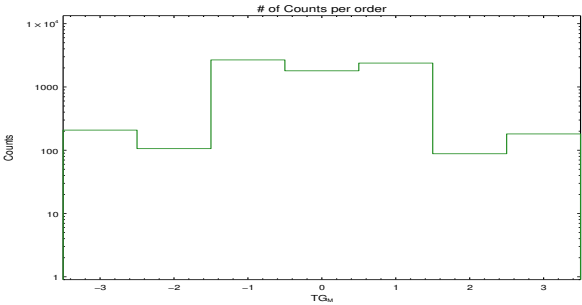


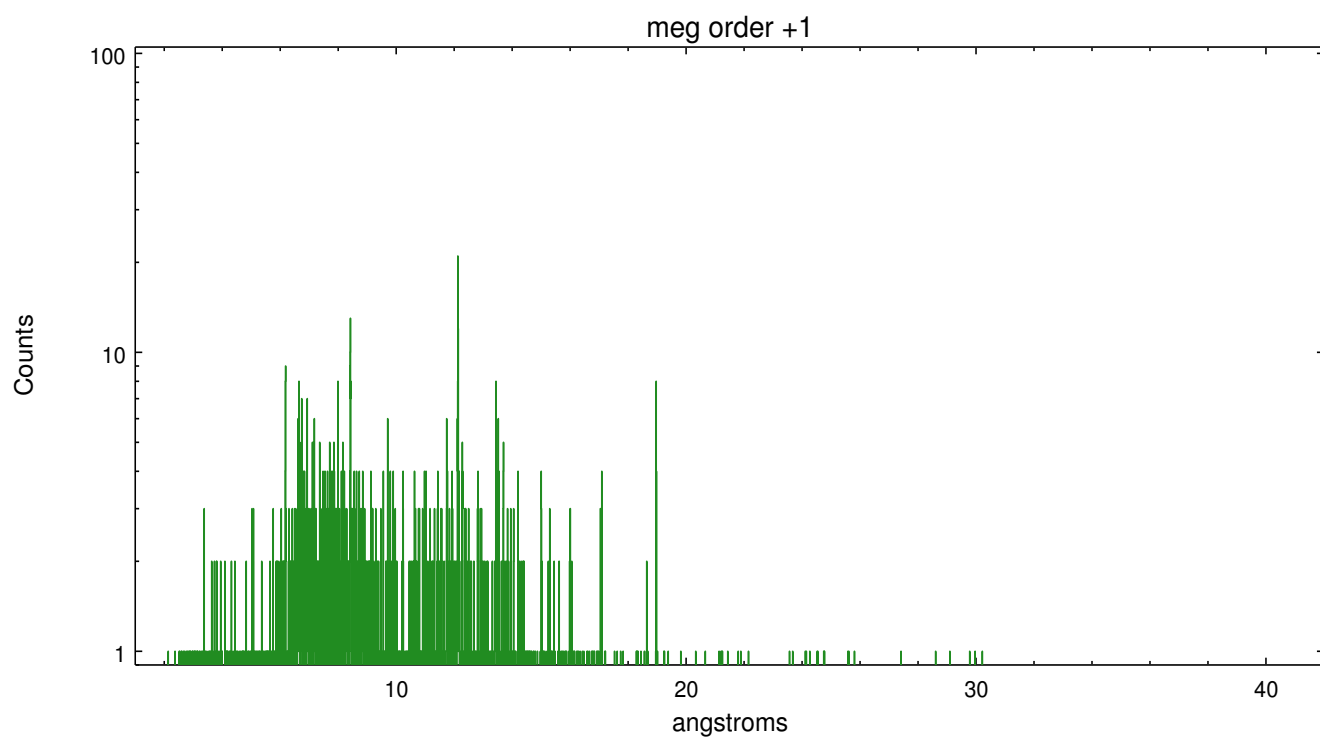
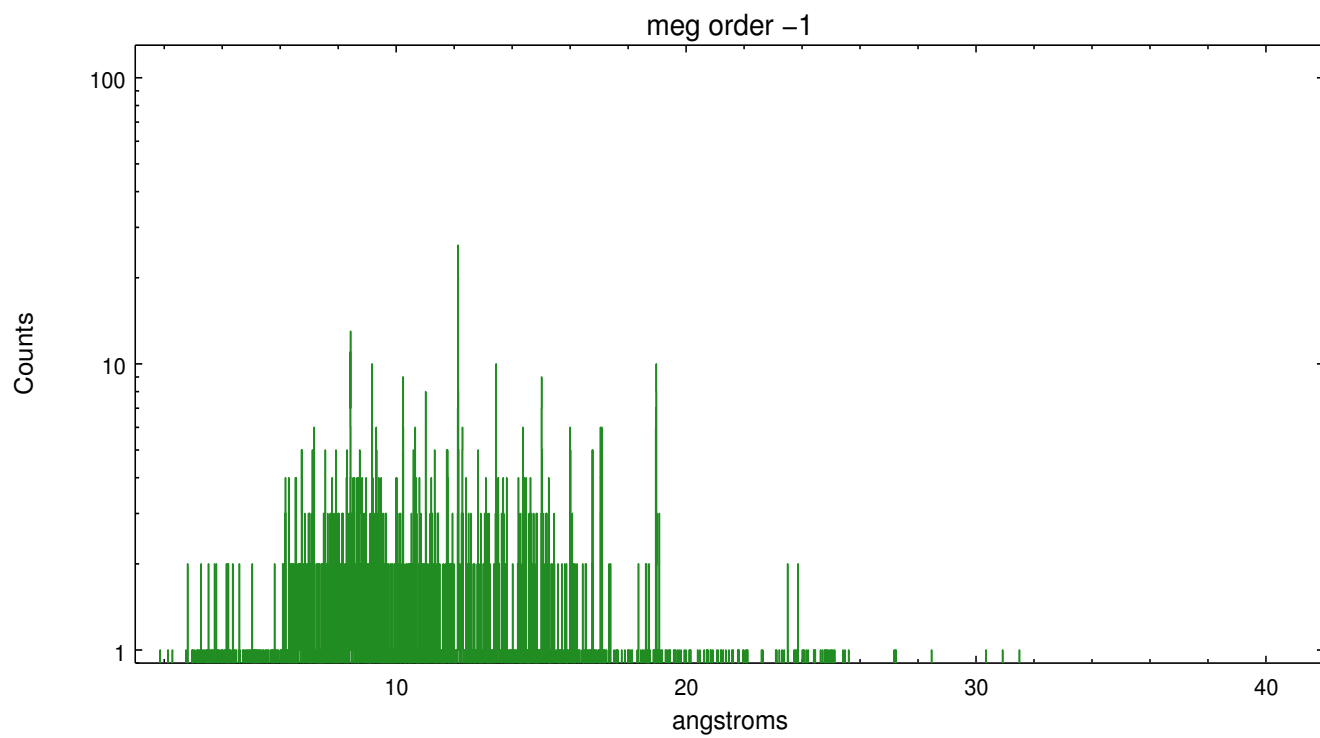
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	208	106	2675	1800	2384	88	181





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	7.257

A.2 Comments

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