

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1802 - L2 Version 3
Chandra X-Ray Center

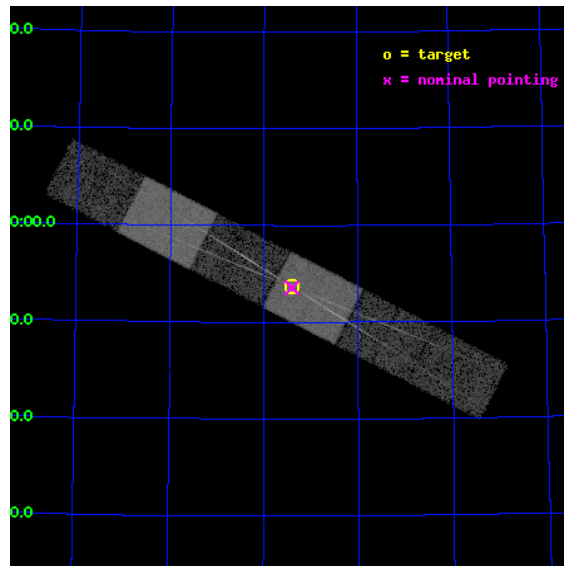
L2 Processing Date : Sep 1 2012

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1 Front

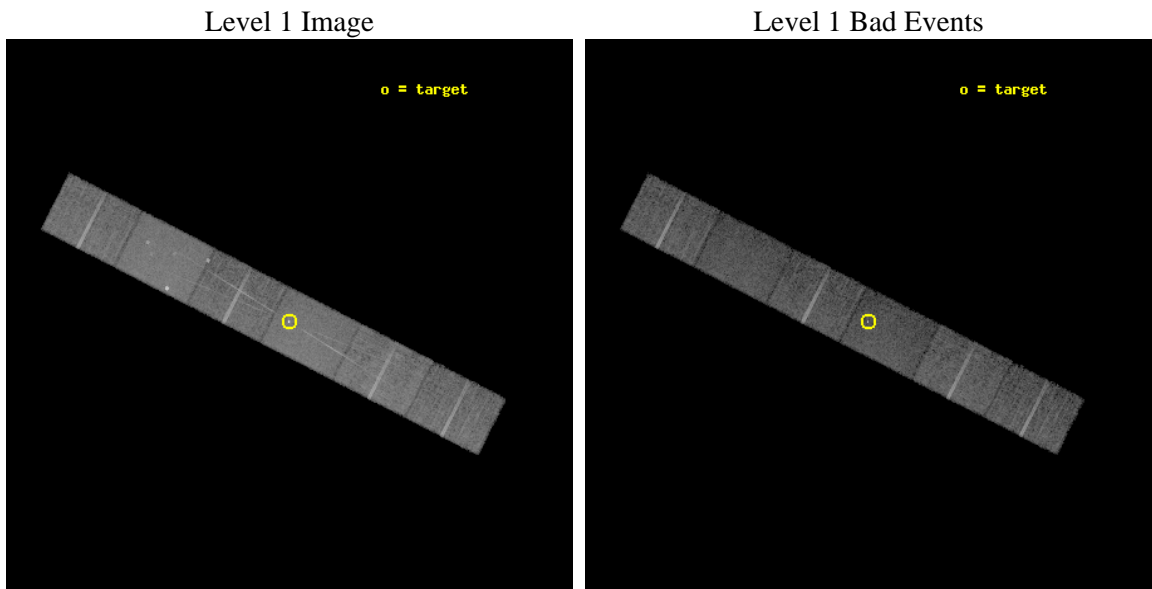
seq_num	700006	Sequence number
obs_id	1802	Observation id
title	HETG OBSERVATIONS OF VARIOUS ACTIVE GALACTIC NUCLEI	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	Q0836+7104	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	130.35125	Observer's specified target RA [deg]
dec_targ	70.895	Observer's specified target Dec [deg]
ra_nom	130.35028822017	Nominal RA [deg]
dec_nom	70.89282863834	Nominal Dec [deg]
roll_nom	27.064267002788	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14152.5	Sum of GTIs [s]
livetime	13923.924849668	Livetime [s]
ontime4	14152.5	Sum of GTIs [s]
ontime5	14152.5	Sum of GTIs [s]
ontime6	14152.5	Sum of GTIs [s]
ontime7	14152.5	Sum of GTIs [s]
ontime8	14152.5	Sum of GTIs [s]
ontime9	14152.5	Sum of GTIs [s]
l2events	108630	Number of level 2 events



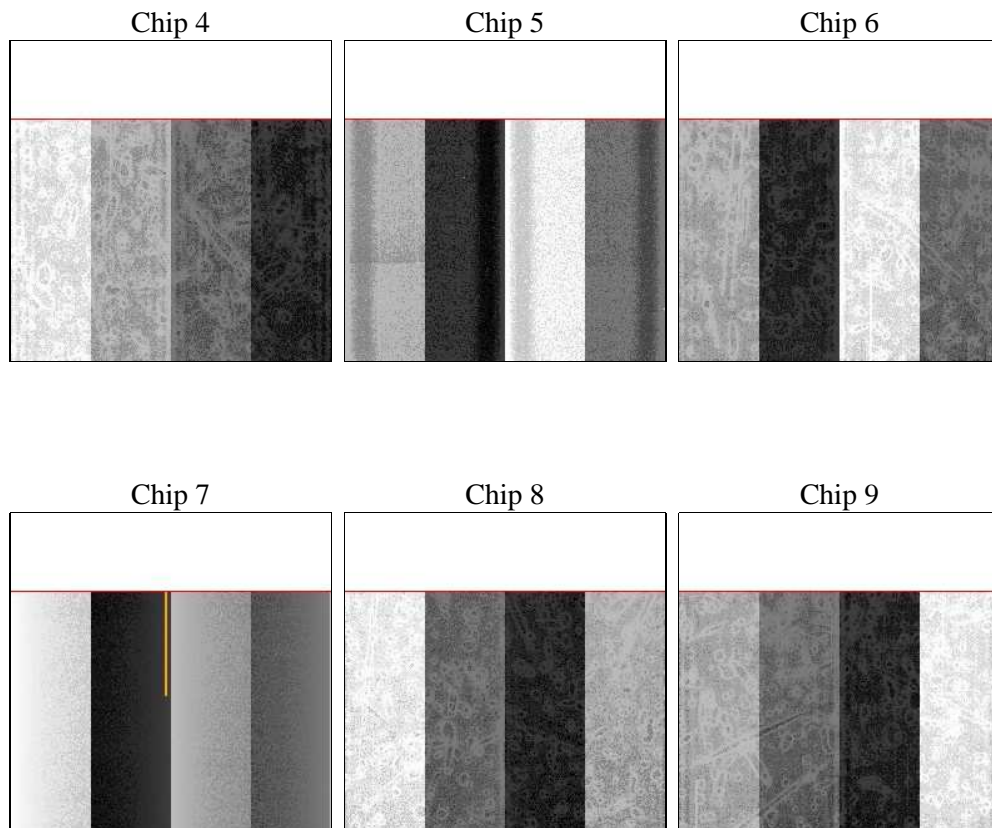
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	14152.5	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	14152.5	Sum of GTIs [s]
date	2012-09-01T02:54:32	Date and time of file creation	ontime5	14152.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	14152.5	Sum of GTIs [s]
			ontime7	14152.5	Sum of GTIs [s]
			ontime8	14152.5	Sum of GTIs [s]
			ontime9	14152.5	Sum of GTIs [s]
			l1events	471461	Number of level 1 events

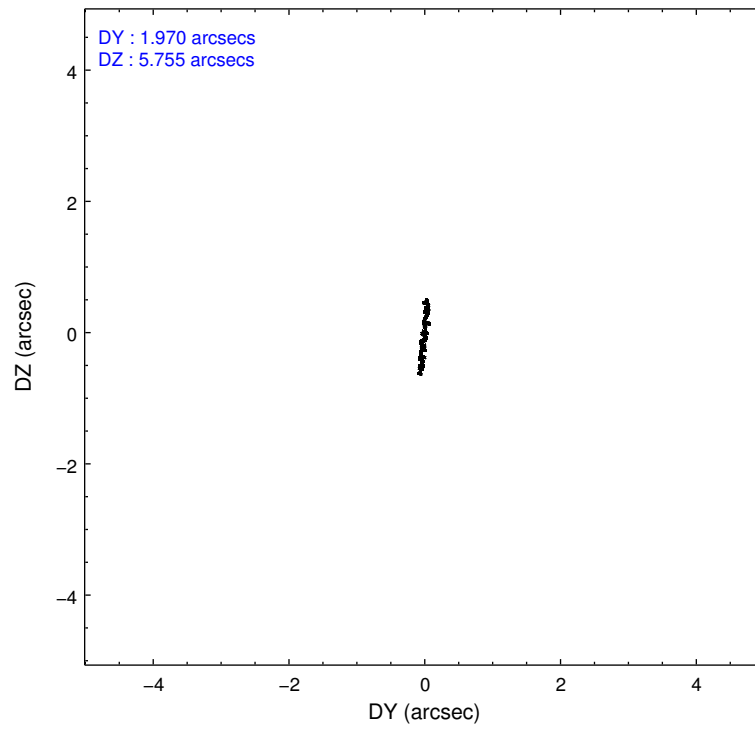
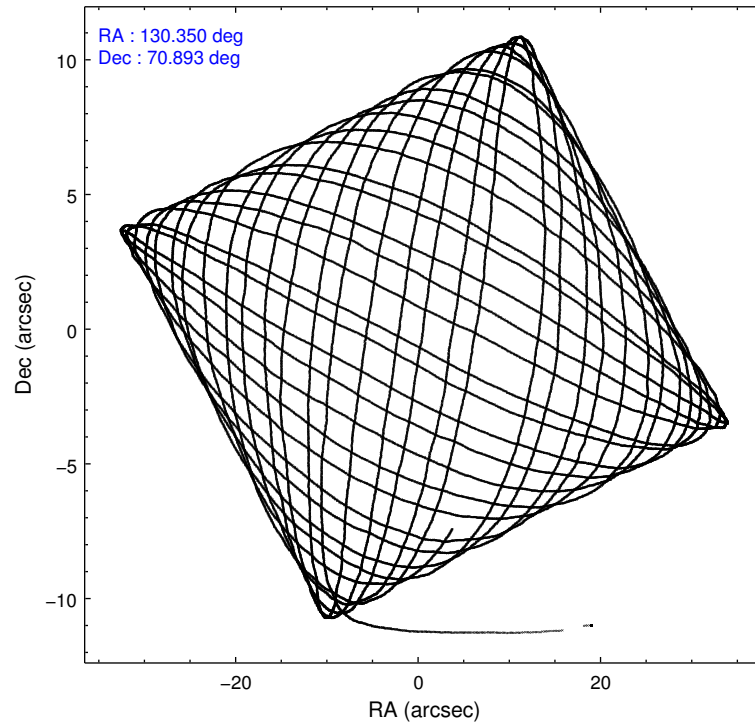
2.1.4 Events

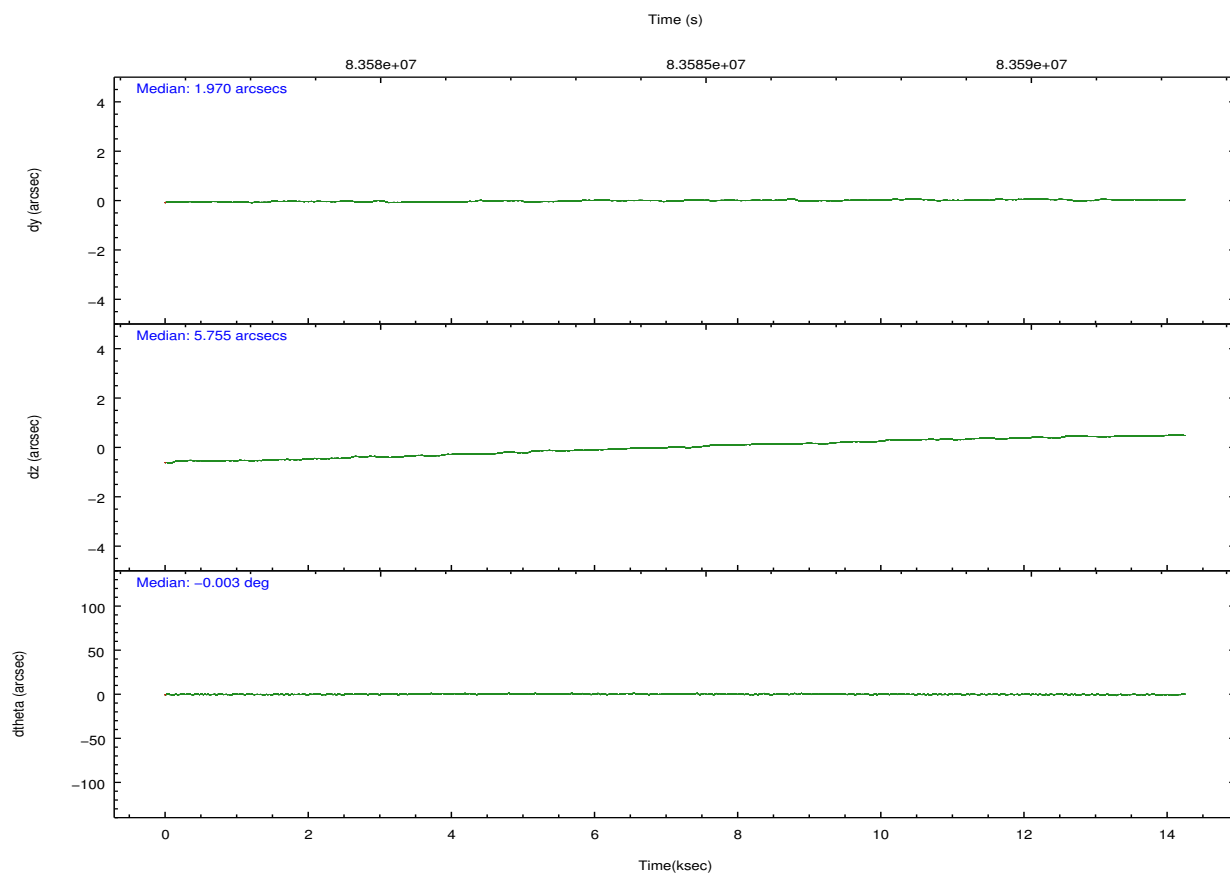
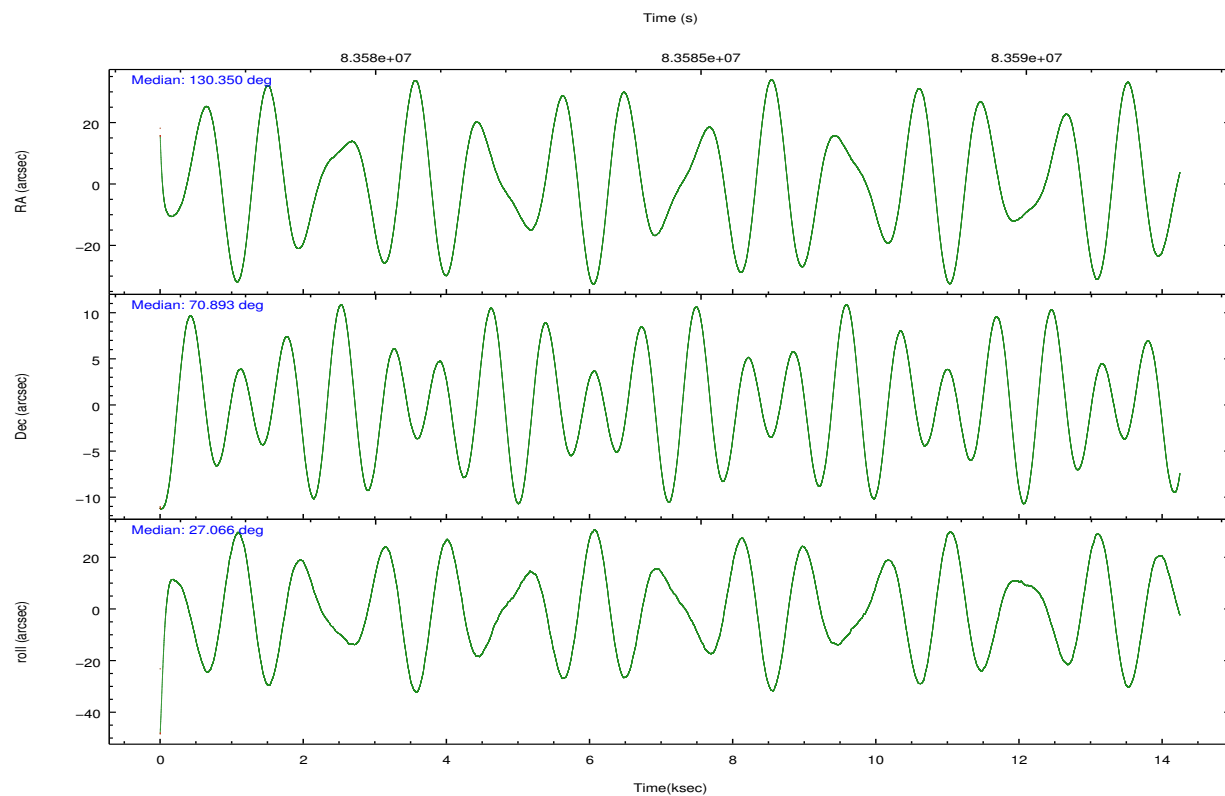
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	70980	91385	68168	87625	87199	66104	grade 0 events	3205	8168	5445	4320	6296	3183
rejected events	63168	46619	57528	47362	69405	58420		4%	8%	7%	4%	7%	4%
rejected %	88%	51%	84%	54%	79%	88%	grade 1 events	23	176	40	131	47	26
								0%	0%	0%	0%	0%	0%
							grade 2 events	1763	11526	1845	8275	3601	1441
								2%	12%	2%	9%	4%	2%
							grade 3 events	785	2200	947	3804	1782	825
								1%	2%	1%	4%	2%	1%
							grade 4 events	783	2095	898	3852	1690	779
								1%	2%	1%	4%	1%	1%
							grade 5 events	2156	6892	2491	7972	3347	2611
								3%	7%	3%	9%	3%	3%
							grade 6 events	1278	20784	1506	20019	4428	1460
								1%	22%	2%	22%	5%	2%
							grade 7 events	60987	39544	54996	39252	66008	55779
								85%	43%	80%	44%	75%	84%

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	130.305324	130.3502882201665	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	70.869796	70.89282863833952	Subarray start row	1	1
[deg] Pointing Roll	26.950158	27.06426700278778	Subarray row count	774	774
[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	2.5
[mm] SIM translation stage pos	-187.132523	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	83577650.184000	83576640.42993601			
Observation start date	2000-08-25T07:59:46	2000-08-25T07:44:00			
[s] Observation end time (MET)	83591650.184000	83592676.555538			
Observation end date	2000-08-25T11:53:06	2000-08-25T12:11:16			
Read mode	TIMED	TIMED			

2.3 Aspect



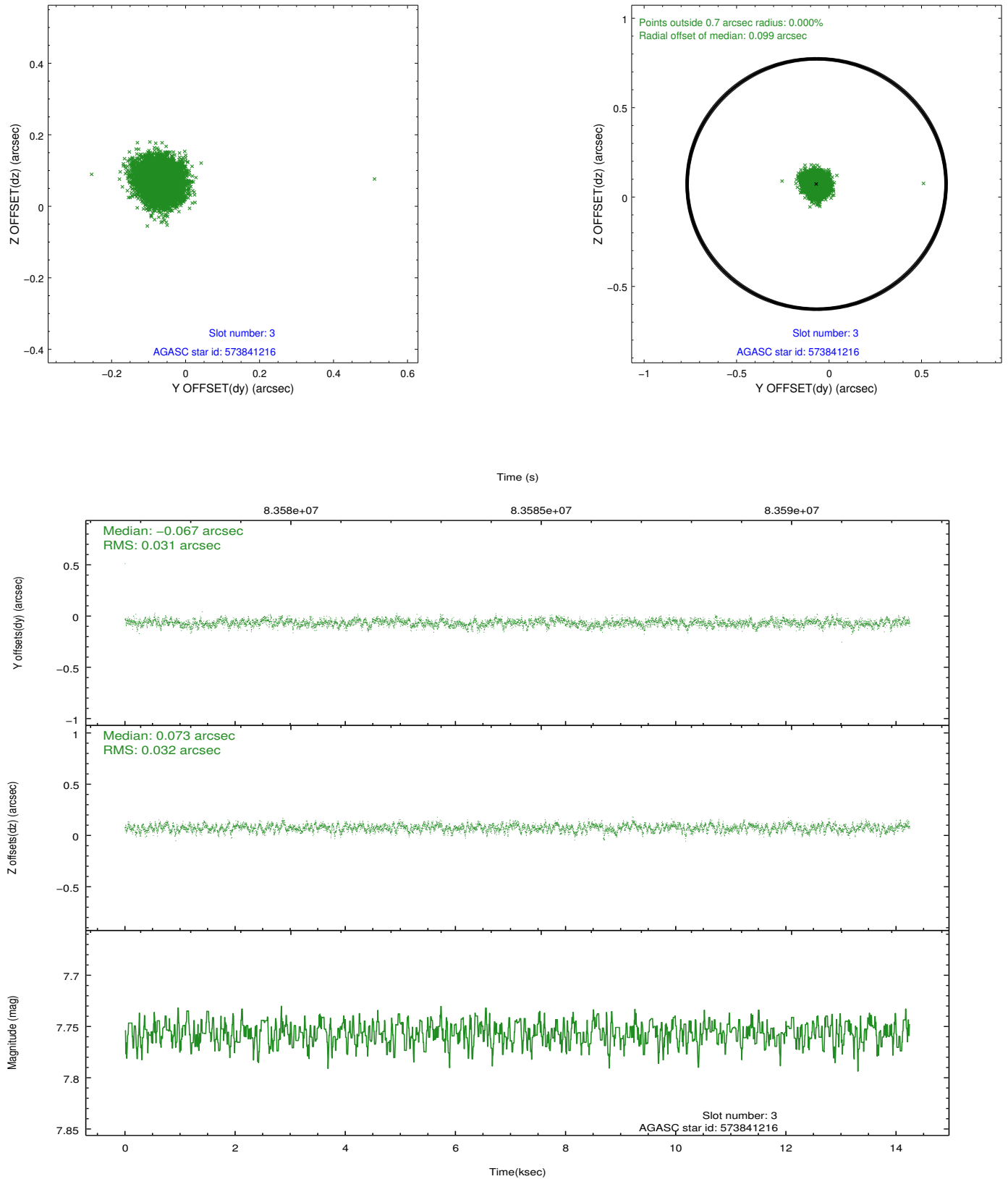


Slot Statistics

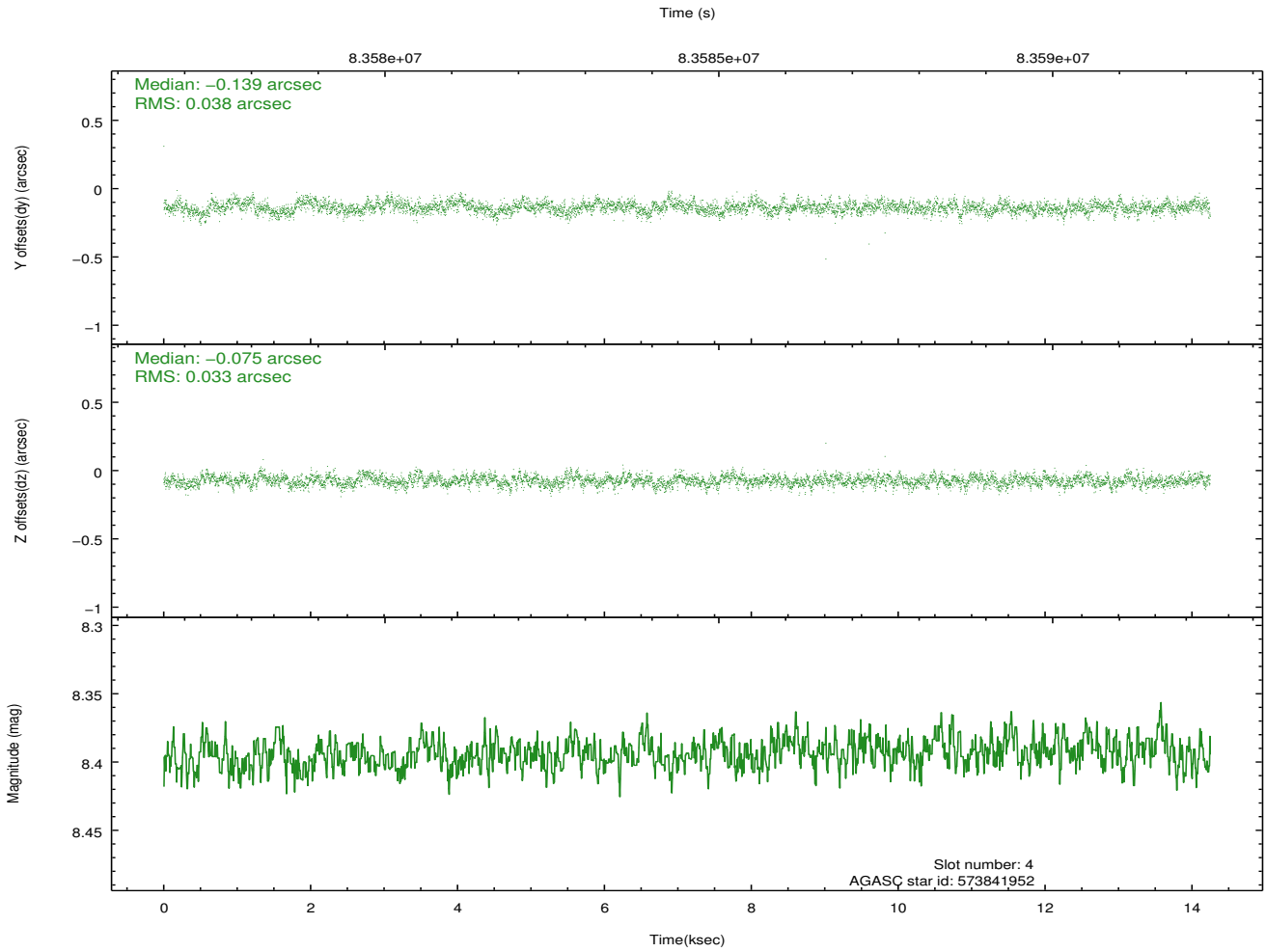
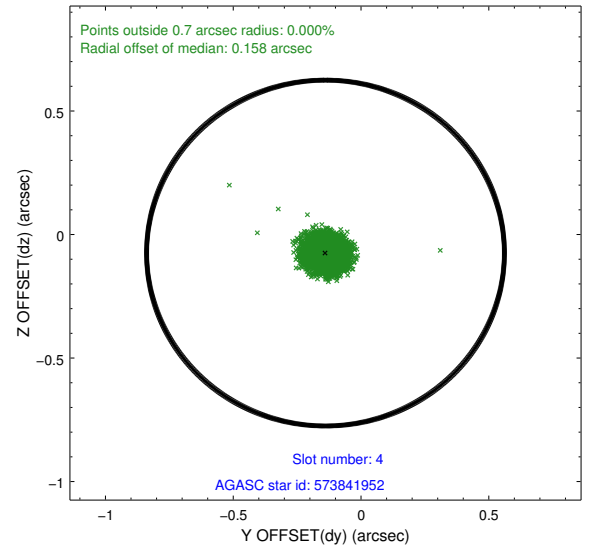
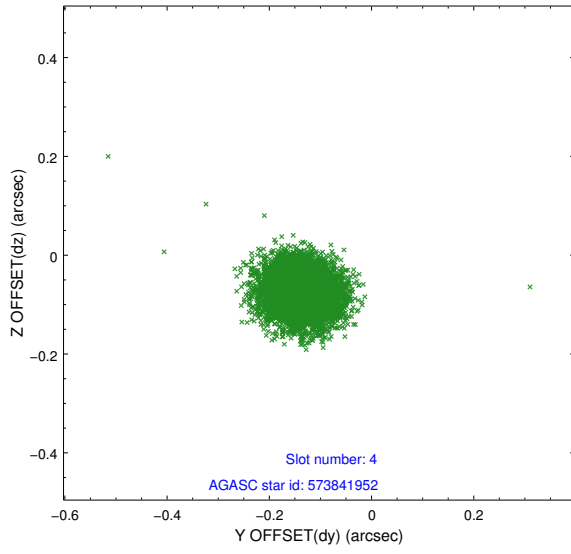
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	3476	-0.021	-0.056	0.009	0.016	0.000000	0.000000	-754.42	-1789.00
1	FID	ACIS-S-4	7.19	3475	-0.010	0.025	0.006	0.010	0.000000	0.000000	2158.75	119.16
2	FID	ACIS-S-5	7.23	3475	0.000	0.039	0.008	0.014	0.000000	0.000000	-1806.79	113.28
3	GUIDE	573841216	7.76	6950	-0.067	0.073	0.047	0.076	131.551603	70.944177	1433.31	-411.96
4	GUIDE	573841952	8.39	6949	-0.139	-0.075	0.053	0.087	131.342455	71.292757	1761.80	823.28
5	GUIDE	573844192	8.91	6946	0.191	-0.041	0.063	0.101	128.397809	70.667986	-2339.15	414.24
6	GUIDE	573843648	9.18	6950	0.093	0.085	0.079	0.124	129.513201	70.245974	-1874.93	-1559.63
7	GUIDE	573839184	9.39	6941	-0.076	-0.039	0.086	0.138	131.928163	71.260188	2320.50	424.03

2.4 Star Slots

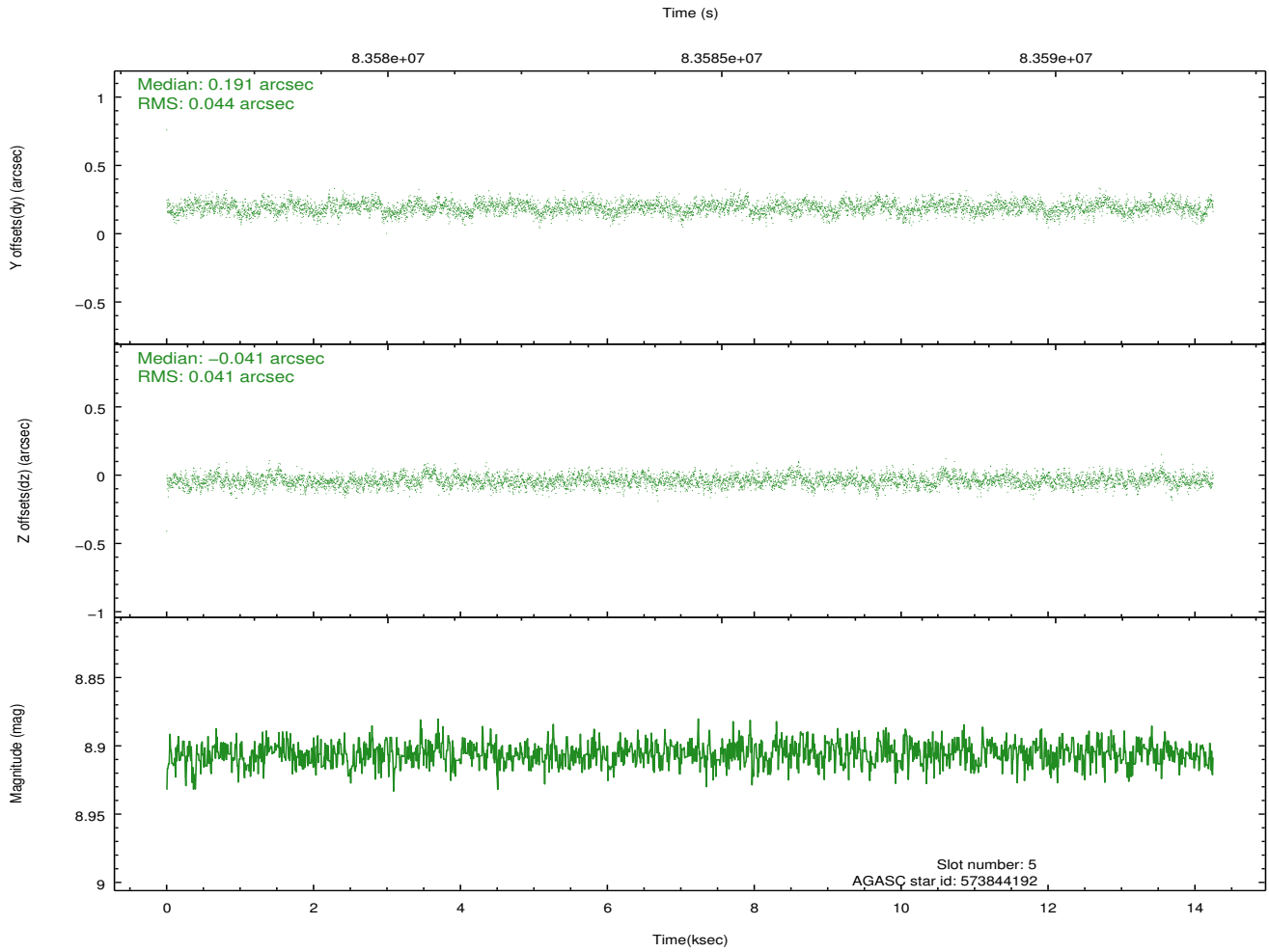
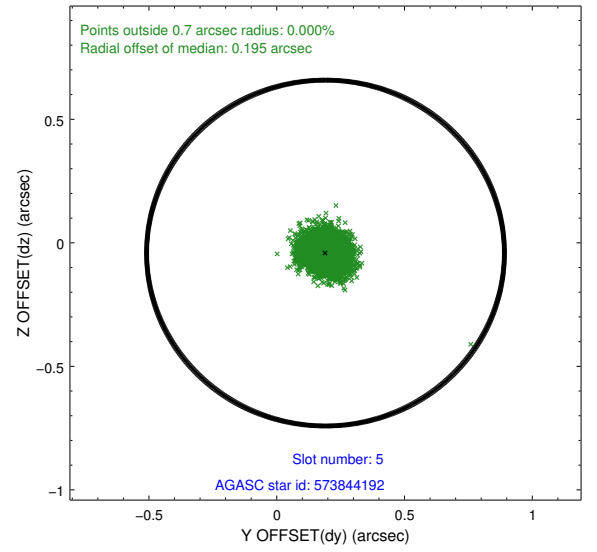
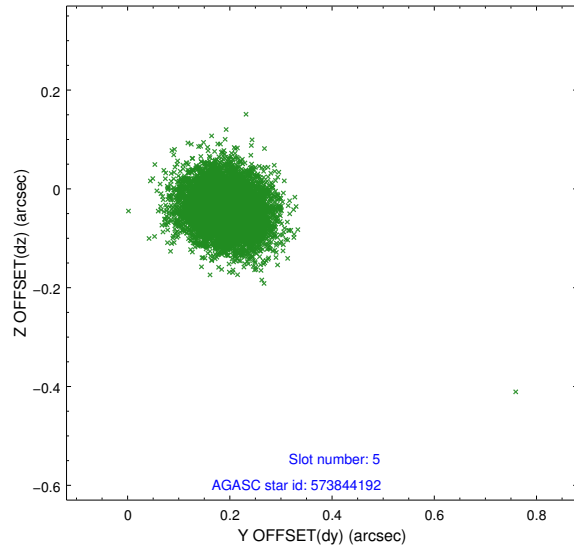
2.4.1 Slot 3



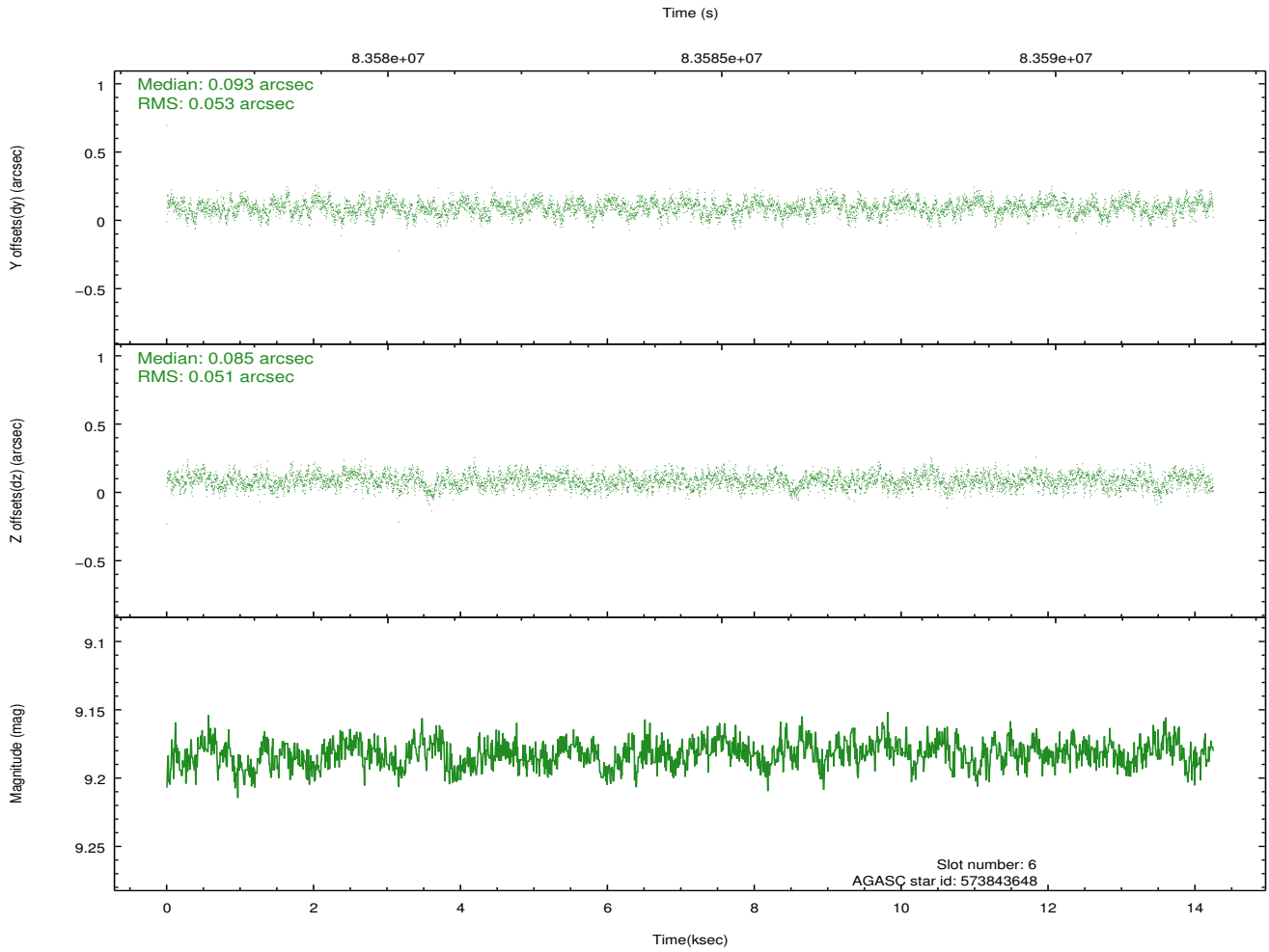
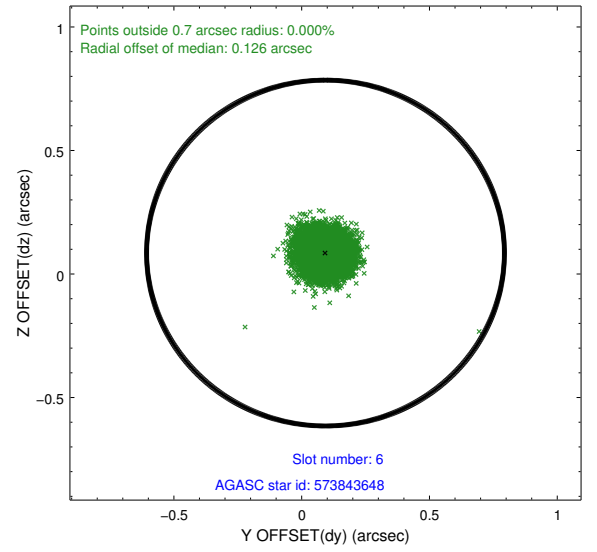
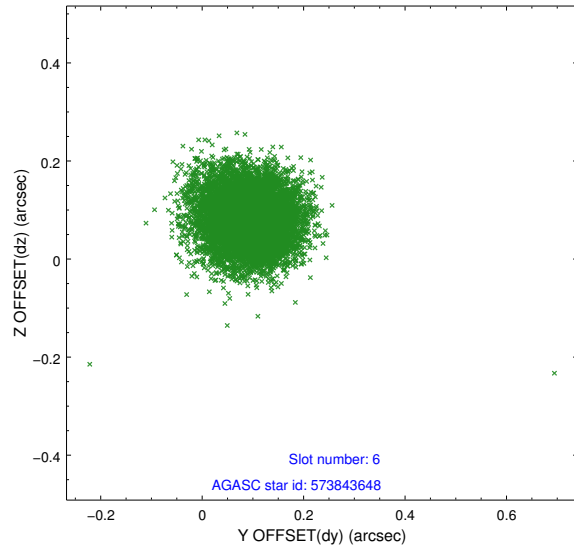
2.4.2 Slot 4



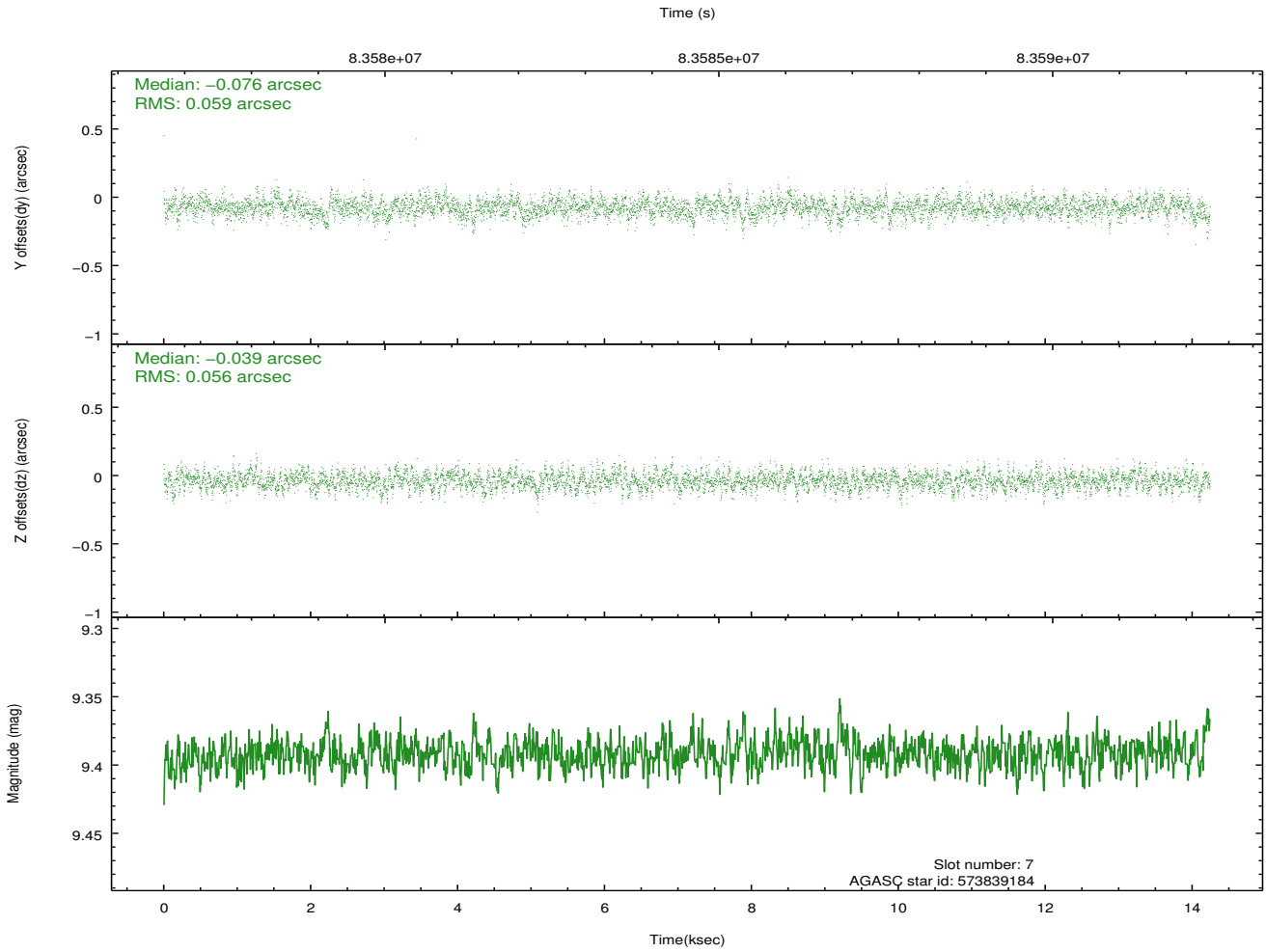
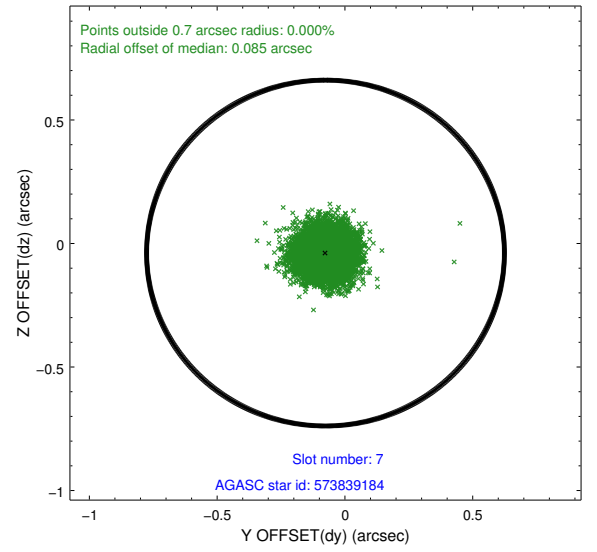
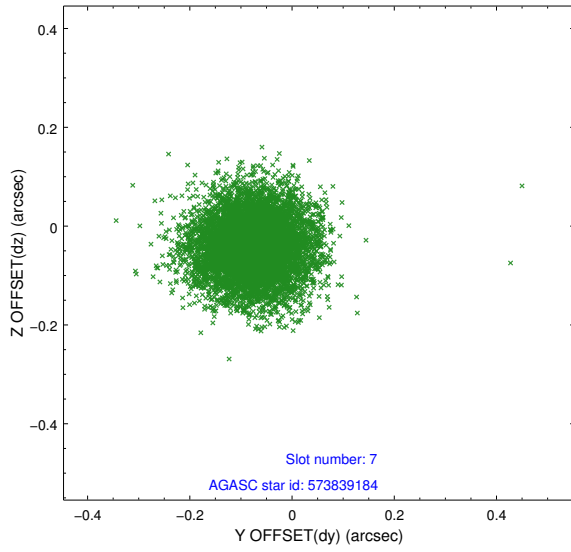
2.4.3 Slot 5



2.4.4 Slot 6

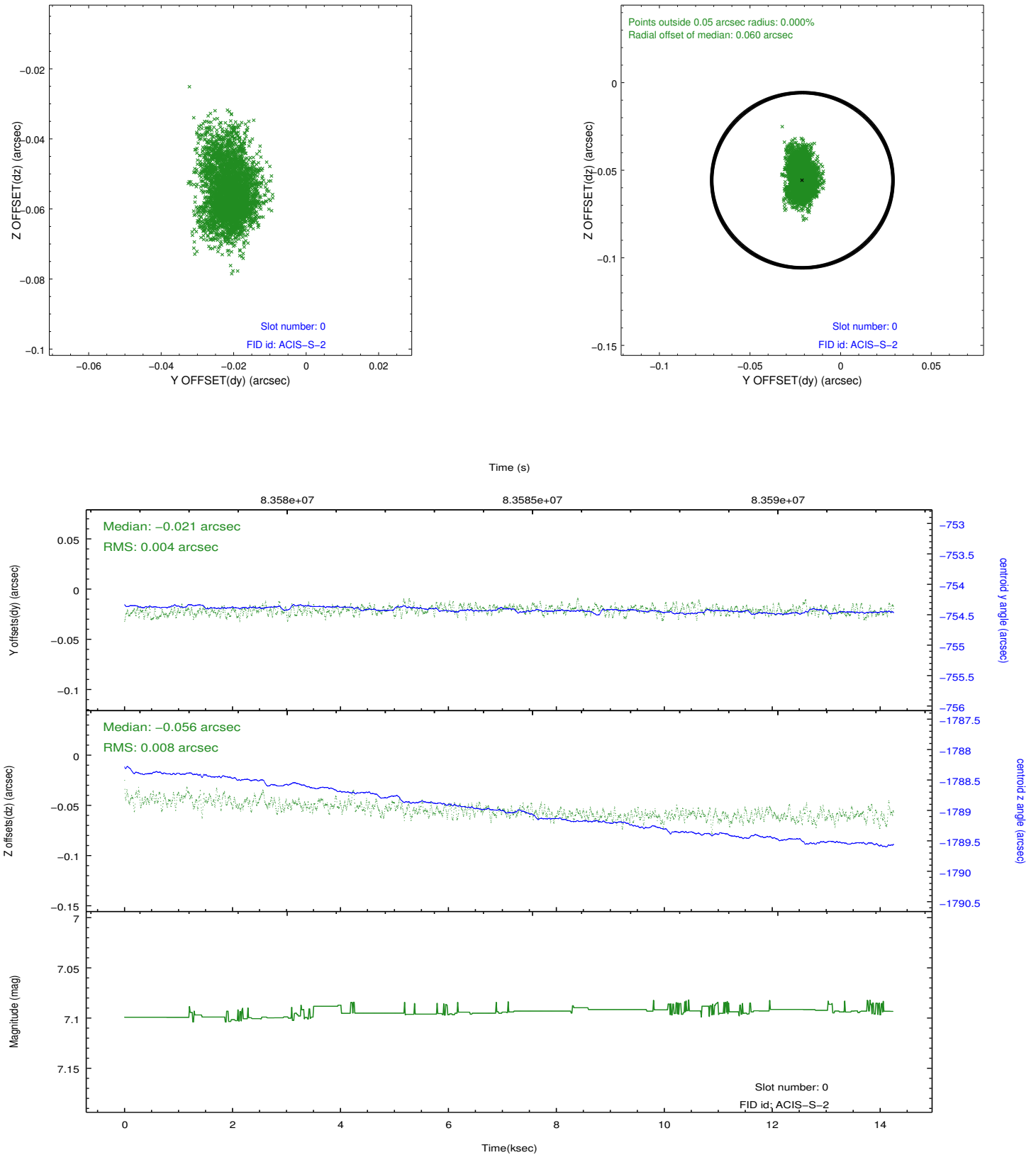


2.4.5 Slot 7

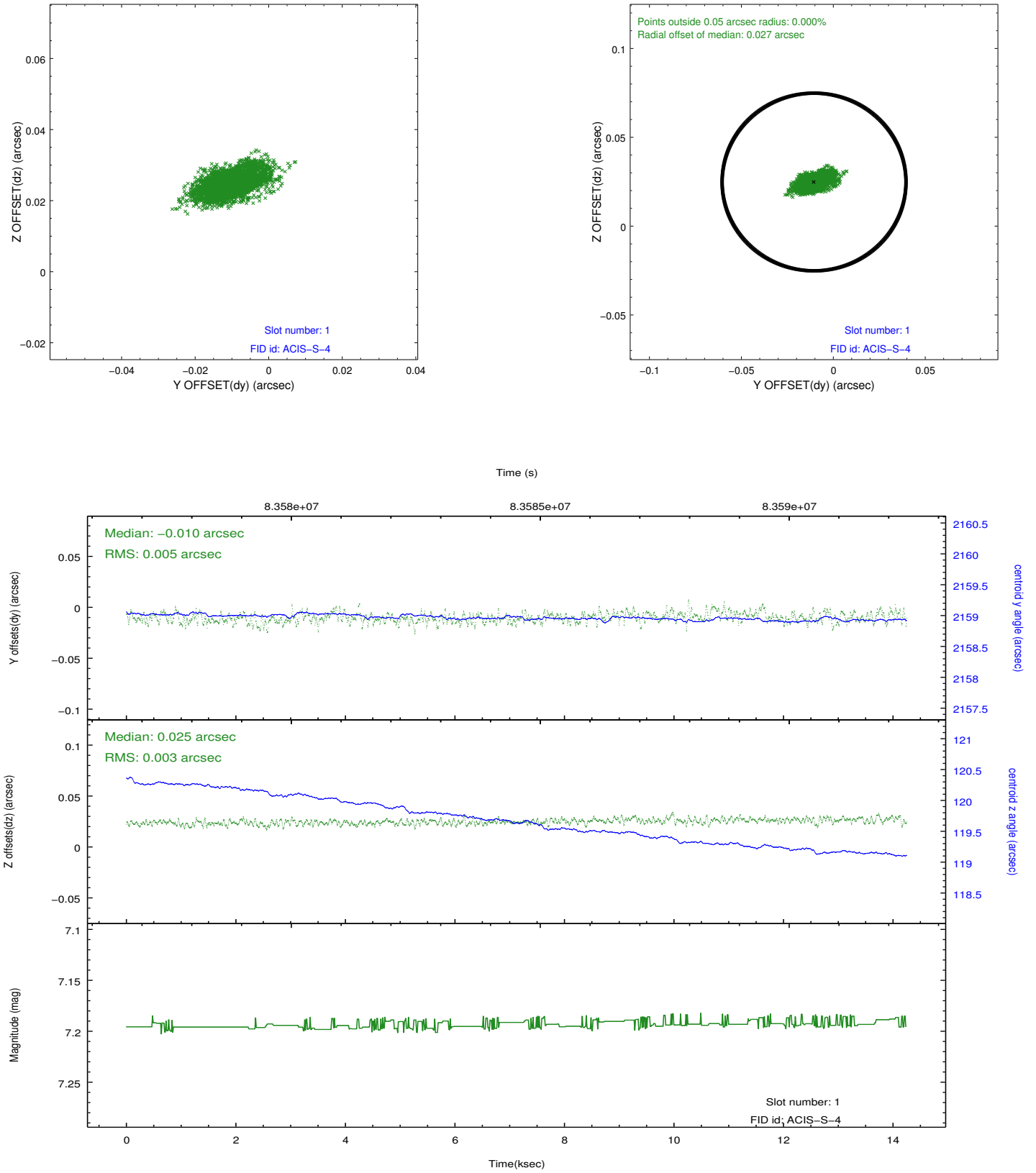


2.5 FID Slots

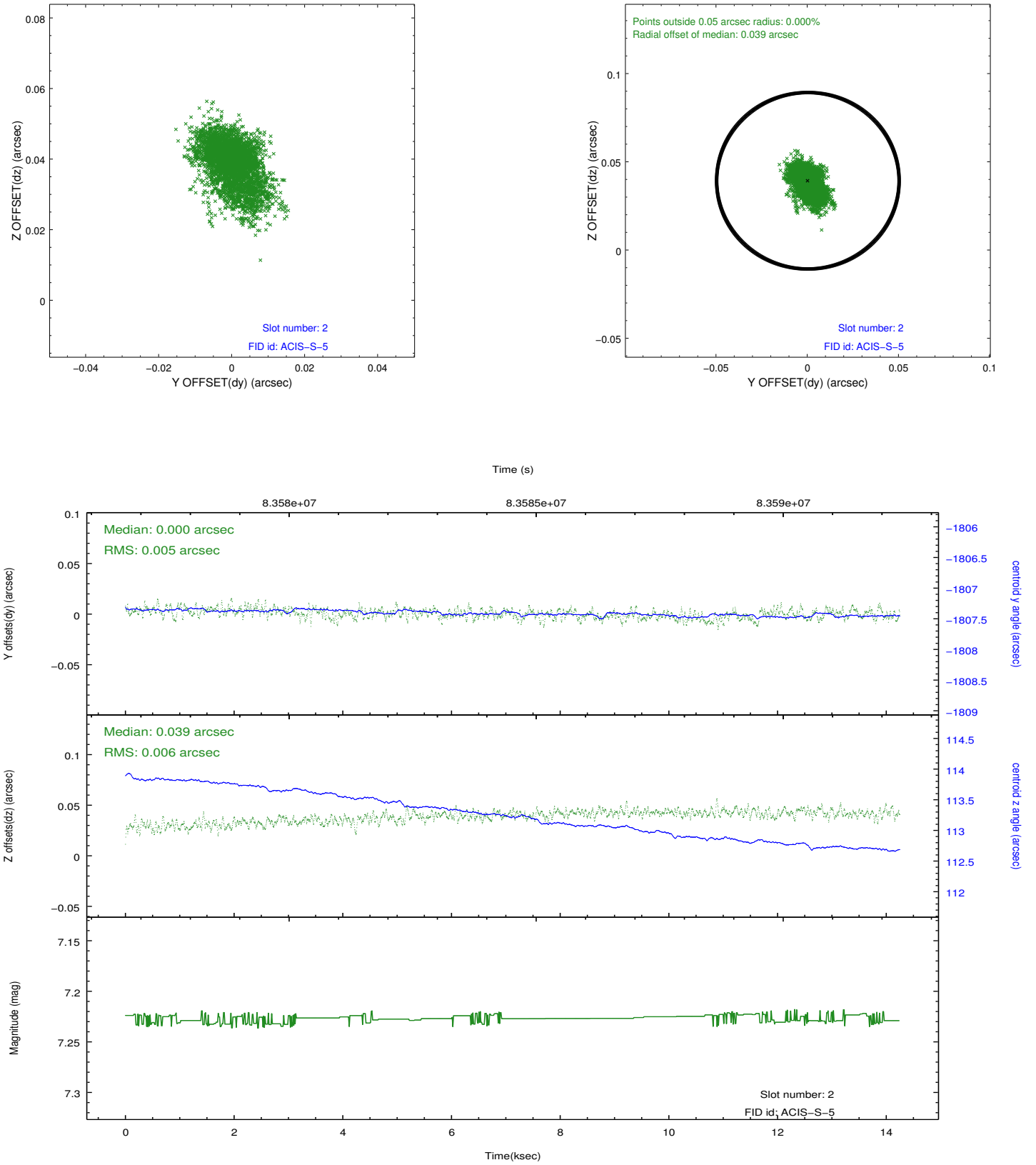
2.5.1 Slot 0



2.5.2 Slot 1

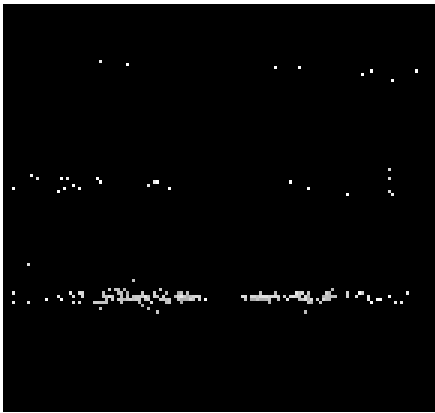


2.5.3 Slot 2

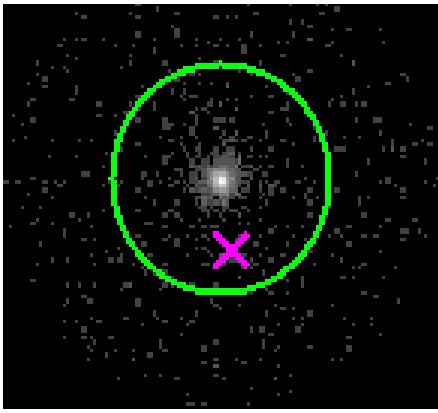


3 Gratings

3.1 HEG Arm



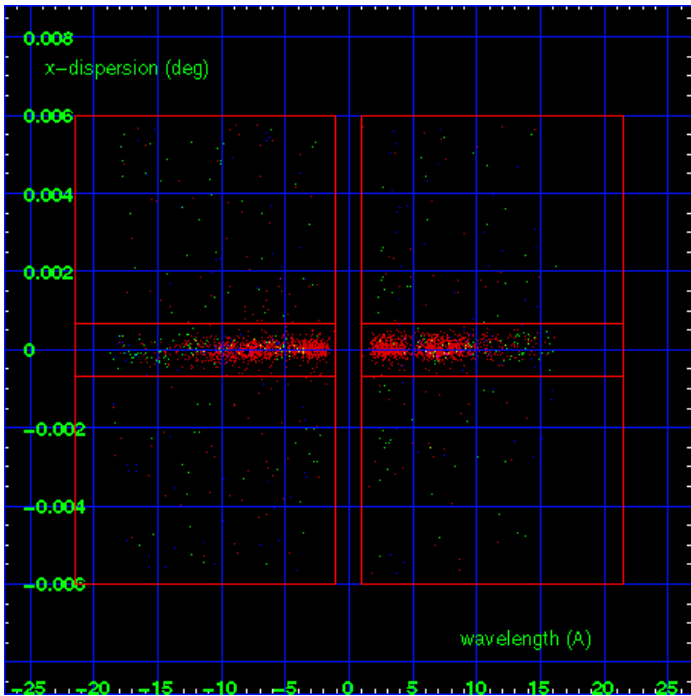
HEG Order Sort 123



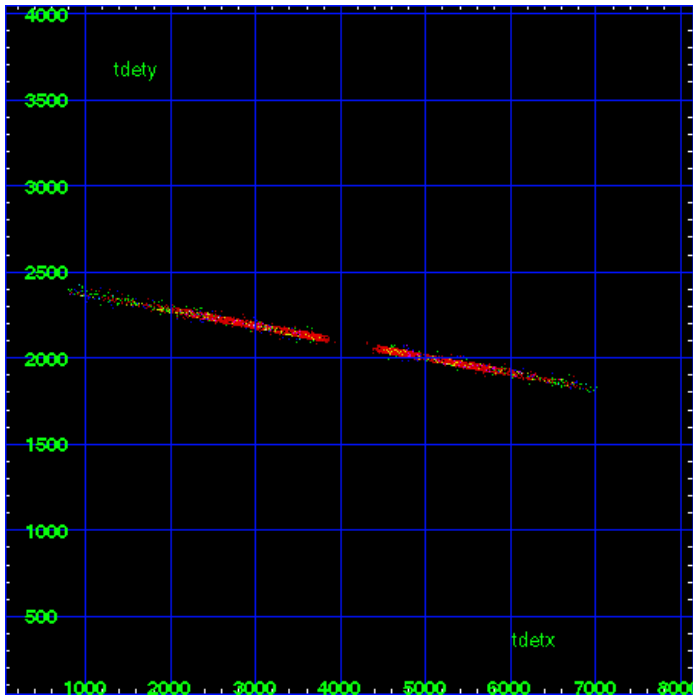
HEG Zero Order



HEG Order Sort ALL

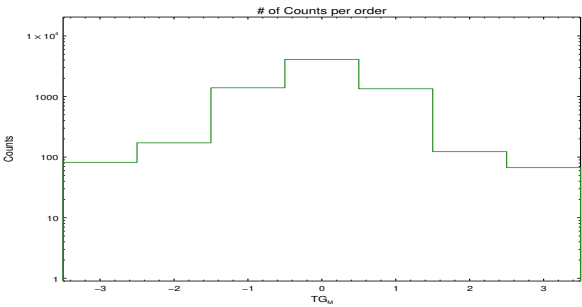


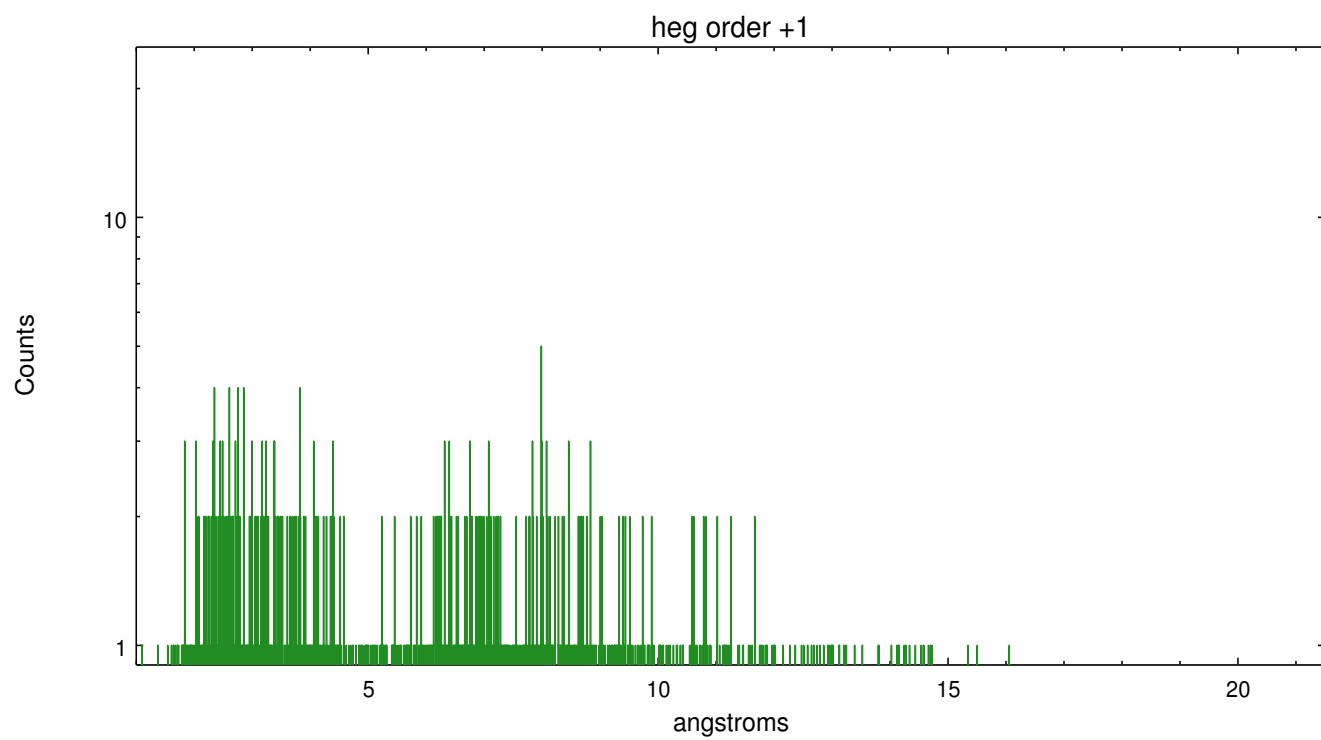
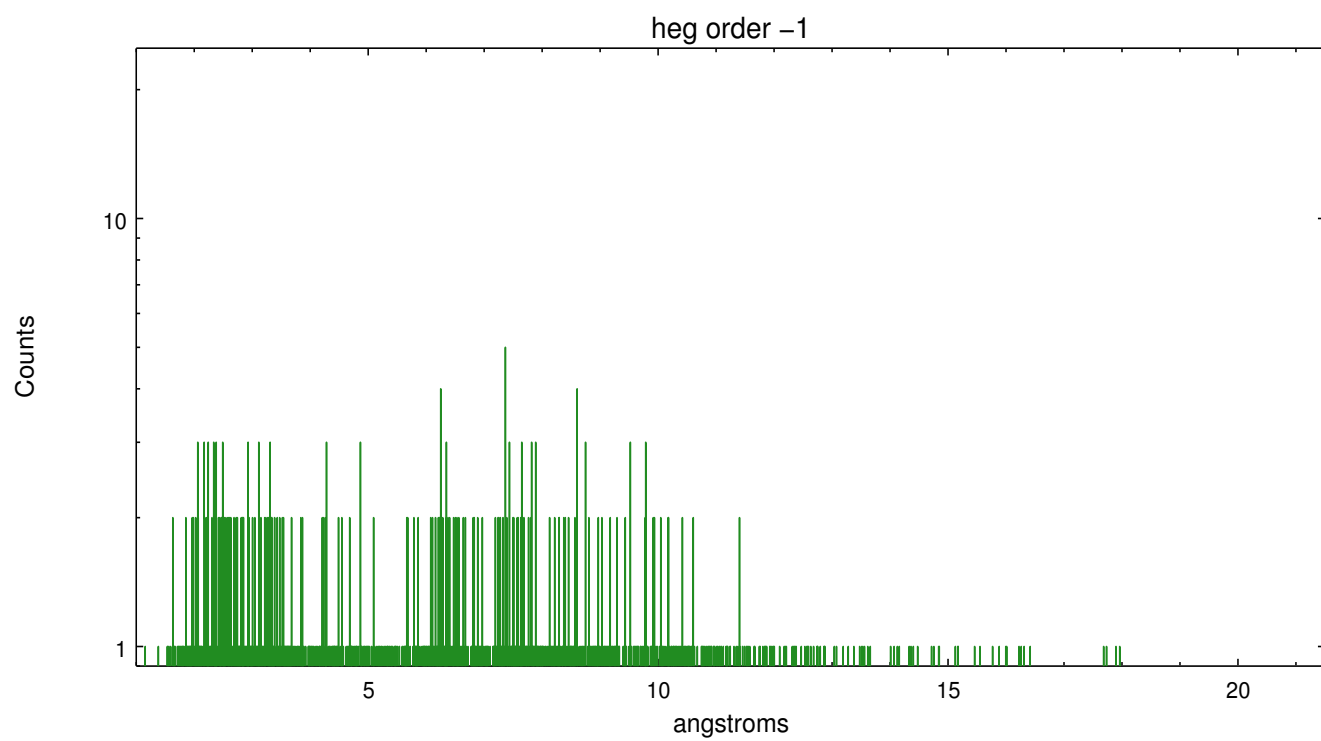
Spot Image HEG



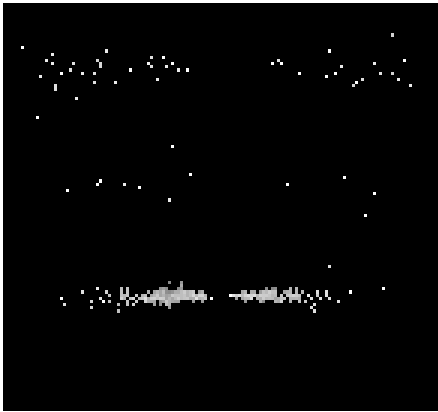
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	82	172	1394	4104	1343	123	67

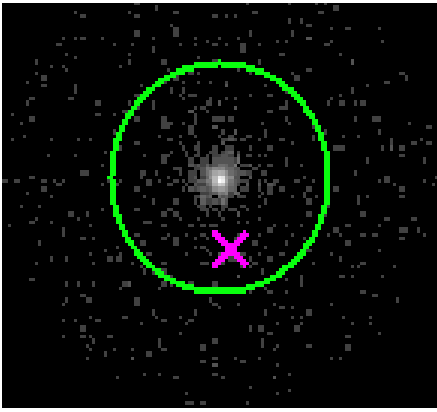




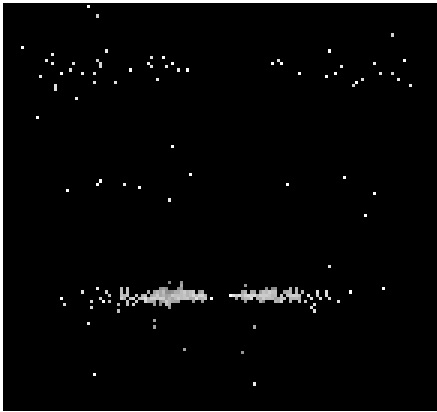
3.2 MEG Arm



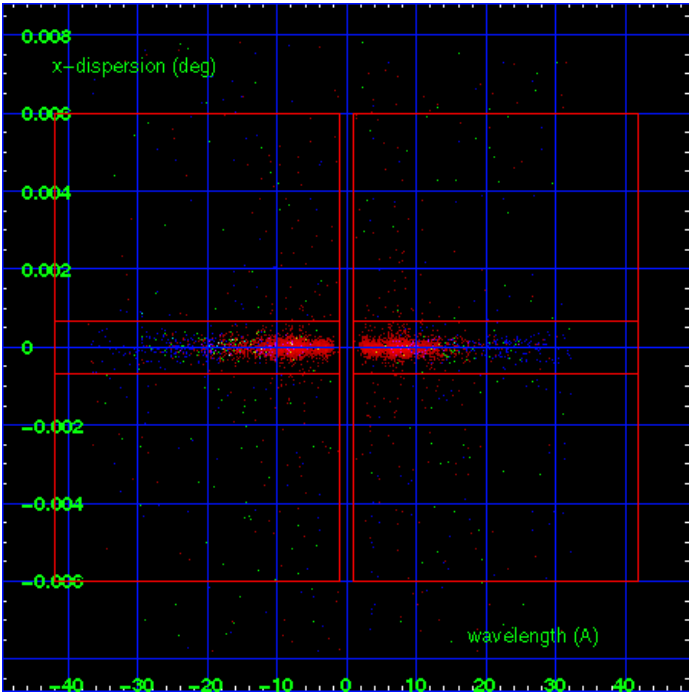
MEG Order Sort 123



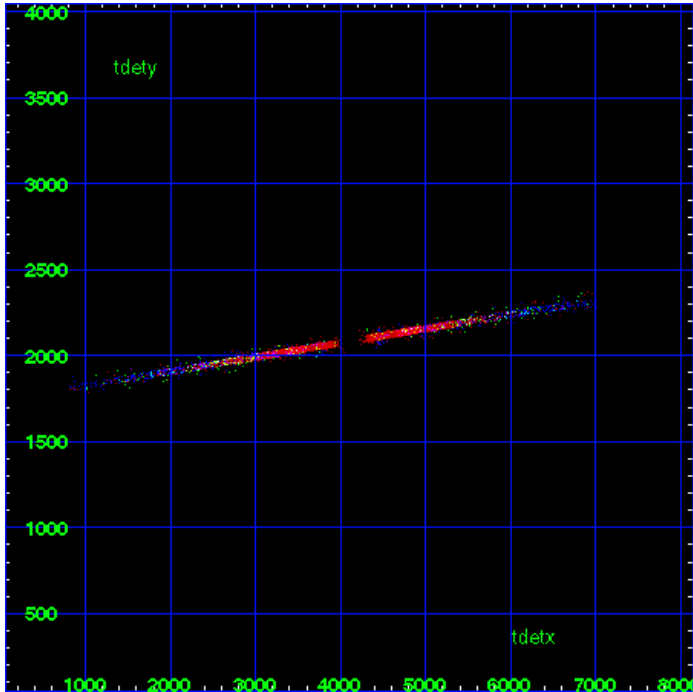
MEG Zero Order



MEG Order Sort ALL

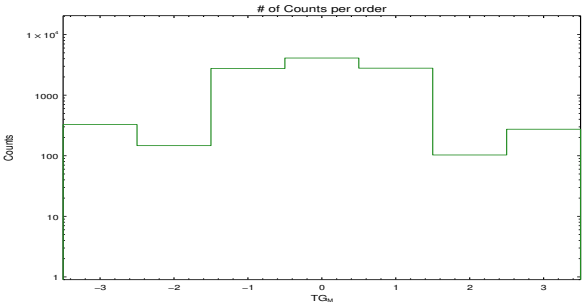


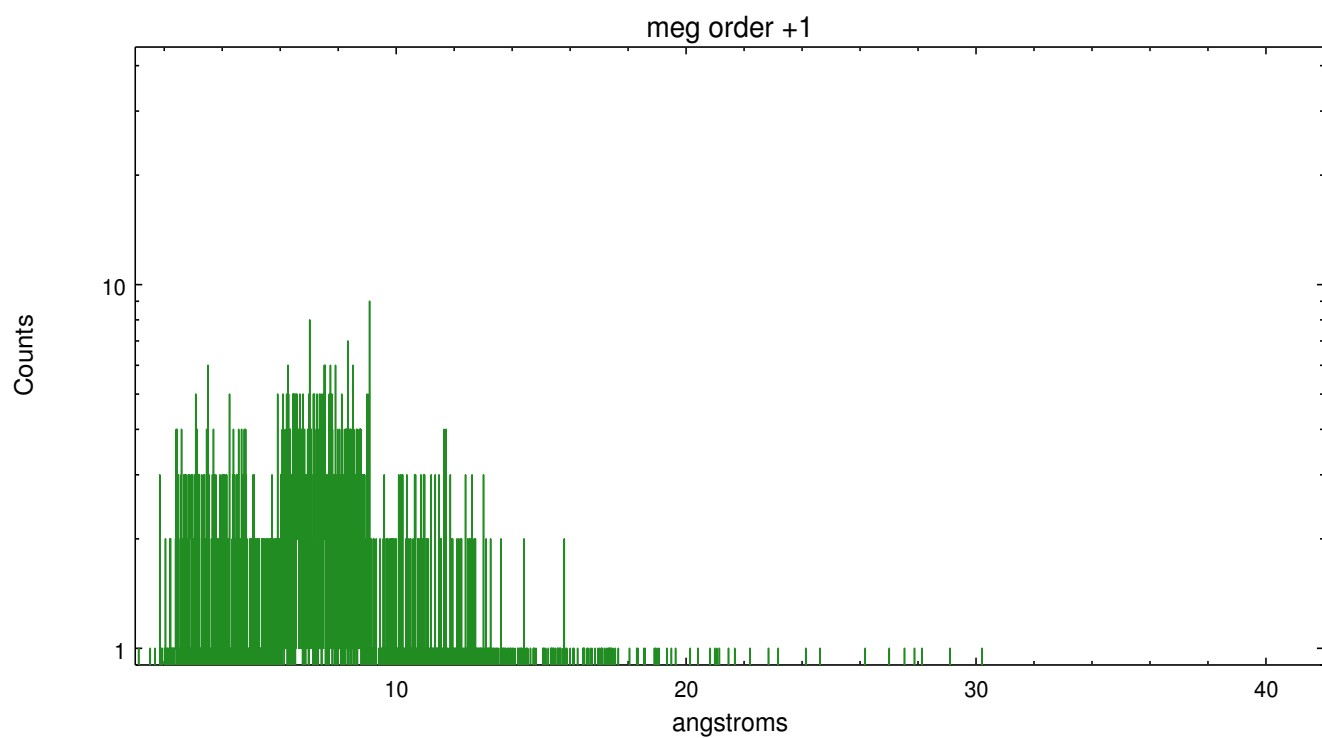
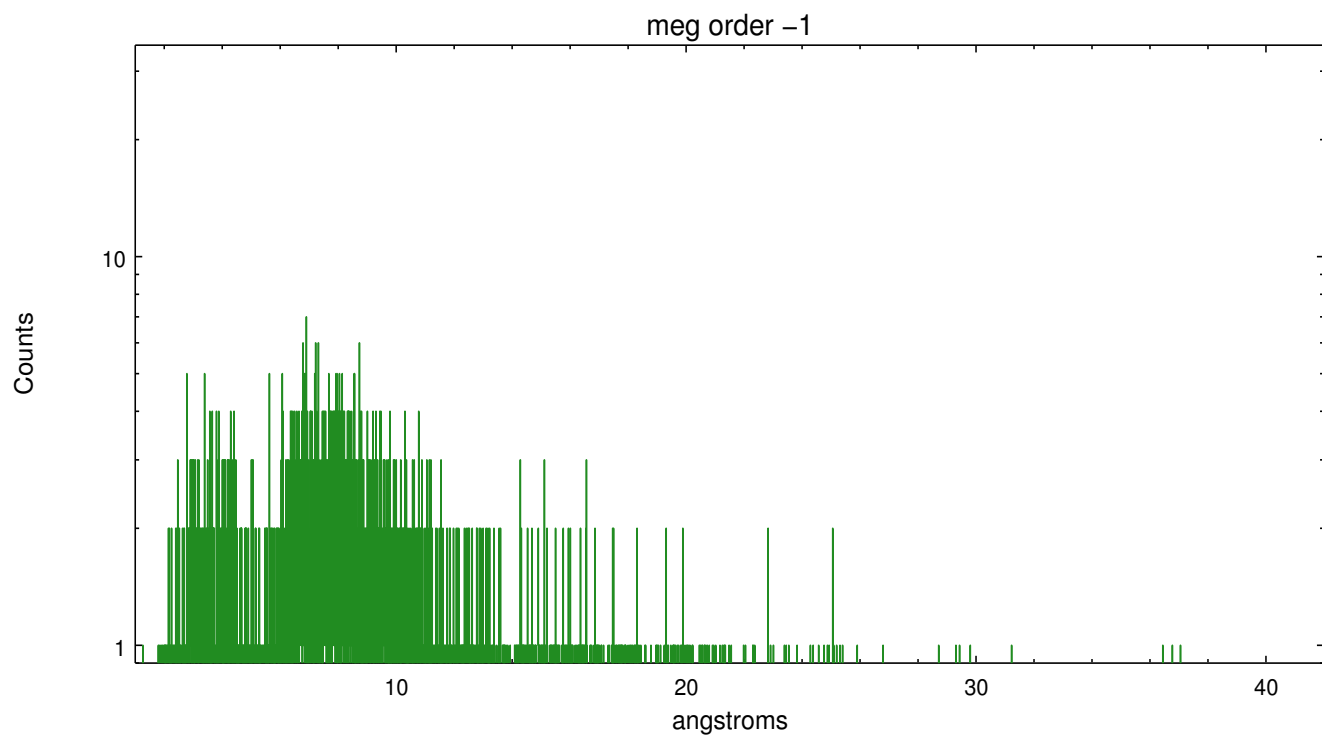
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	327	147	2758	4104	2790	103	274





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.155

A.2 Comments