

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10897 - L2 Version 2
Chandra X-Ray Center

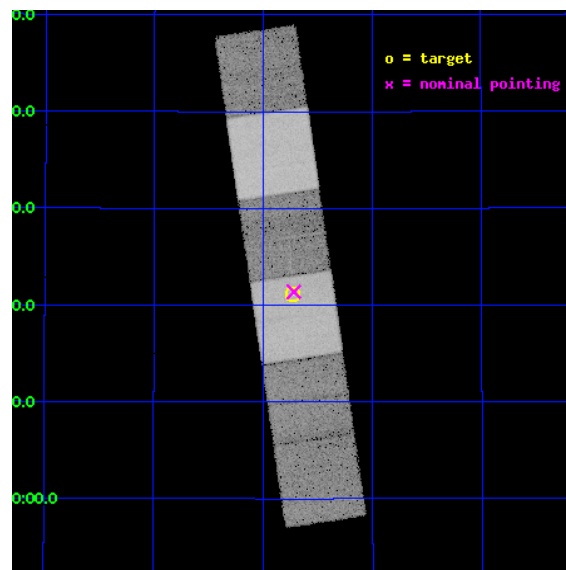
L2 Processing Date : Jun 3 2012

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1 Front

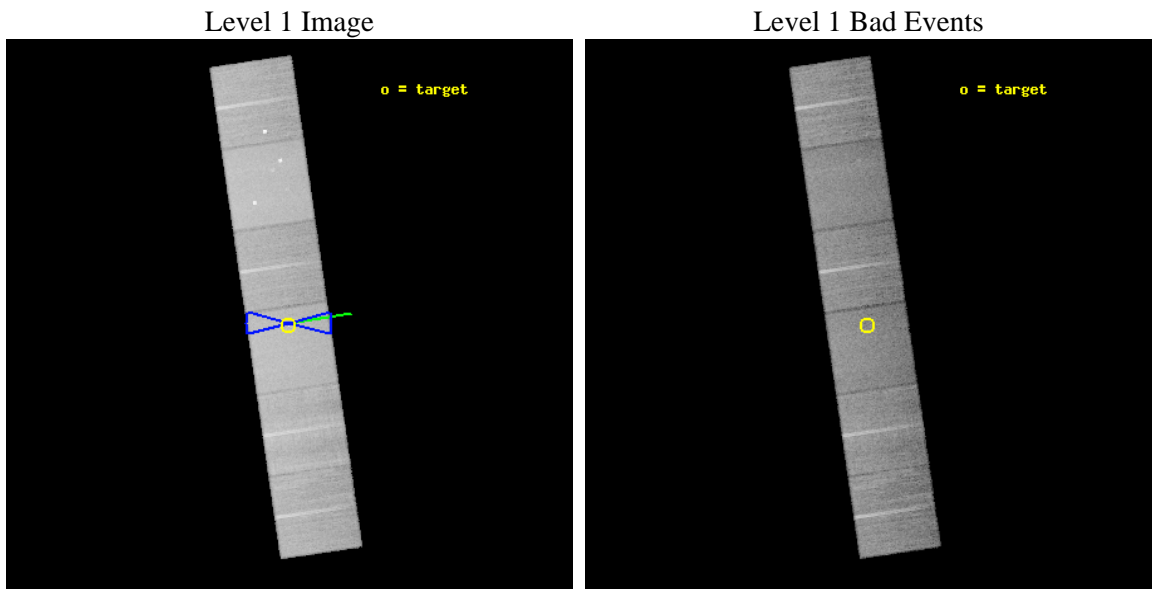
seq_num	200556	Sequence number
obs_id	10897	Observation id
title	Testing the Colliding Wind Paradigm: X-rays from the Wolf-Rayet Binary System WR 147	Proposal title
observer	Dr Svetozar ZHEKOV	Principal investigator
object	WR 147	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	309.182083	Observer's specified target RA [deg]
dec_targ	40.352028	Observer's specified target Dec [deg]
ra_nom	309.1795849792	Nominal RA [deg]
dec_nom	40.356462090254	Nominal Dec [deg]
roll_nom	81.658270691624	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15944.132130623	Sum of GTIs [s]
livetime	15742.237929181	Livetime [s]
ontime4	15944.173170626	Sum of GTIs [s]
ontime5	15944.09109062	Sum of GTIs [s]
ontime6	15944.050050616	Sum of GTIs [s]
ontime7	15944.132130623	Sum of GTIs [s]
ontime8	15944.009010613	Sum of GTIs [s]
ontime9	15943.96797061	Sum of GTIs [s]
l2events	285844	Number of level 2 events



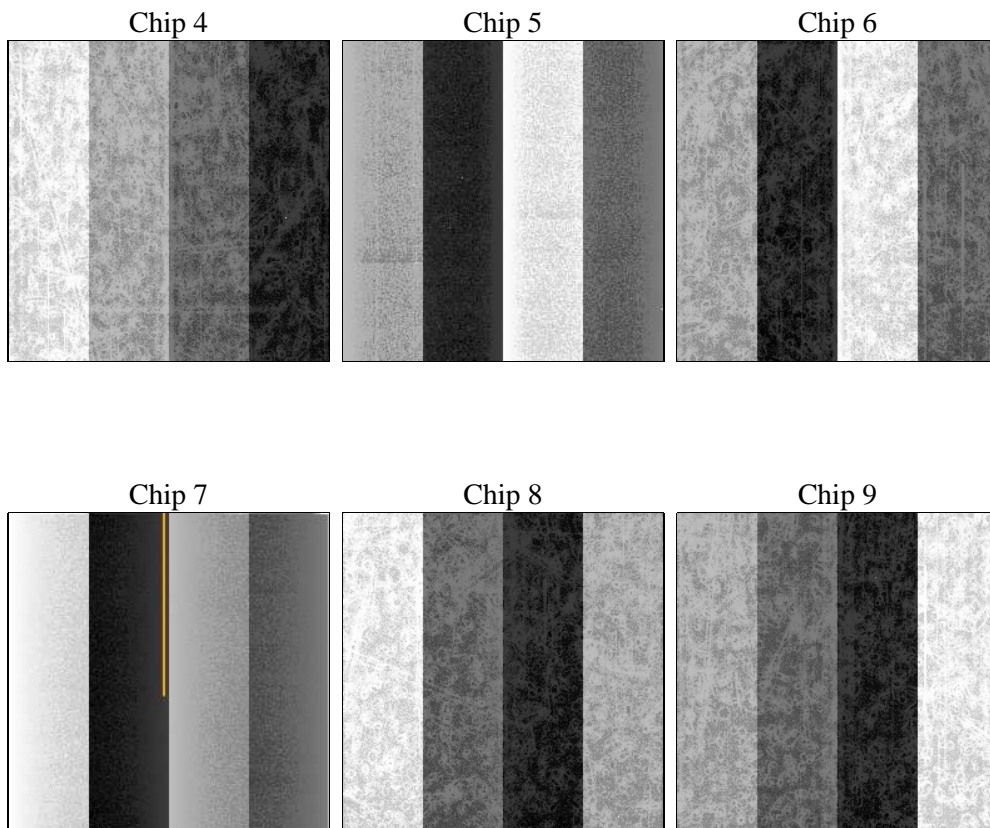
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	15944.132130623	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	15944.173170626	Sum of GTIs [s]
date	2012-06-03T22:34:34	Date and time of file creation	ontime5	15944.09109062	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15944.050050616	Sum of GTIs [s]
			ontime7	15944.132130623	Sum of GTIs [s]
			ontime8	15944.009010613	Sum of GTIs [s]
			ontime9	15943.96797061	Sum of GTIs [s]
			l1events	1243475	Number of level 1 events

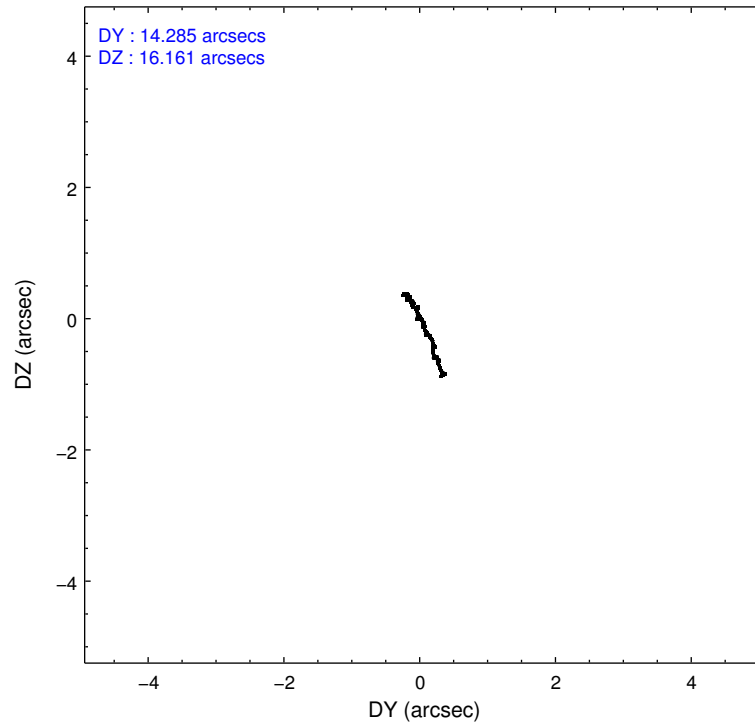
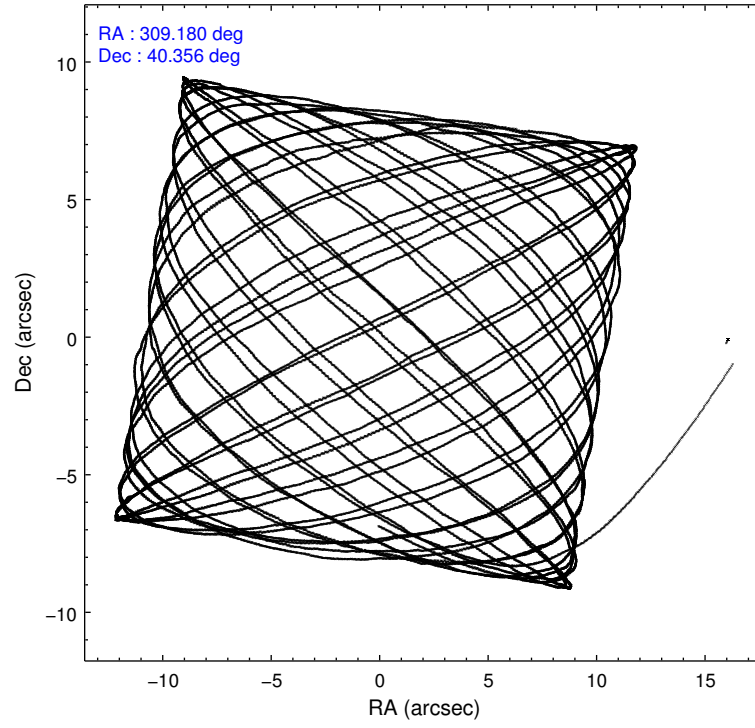
2.1.4 Events

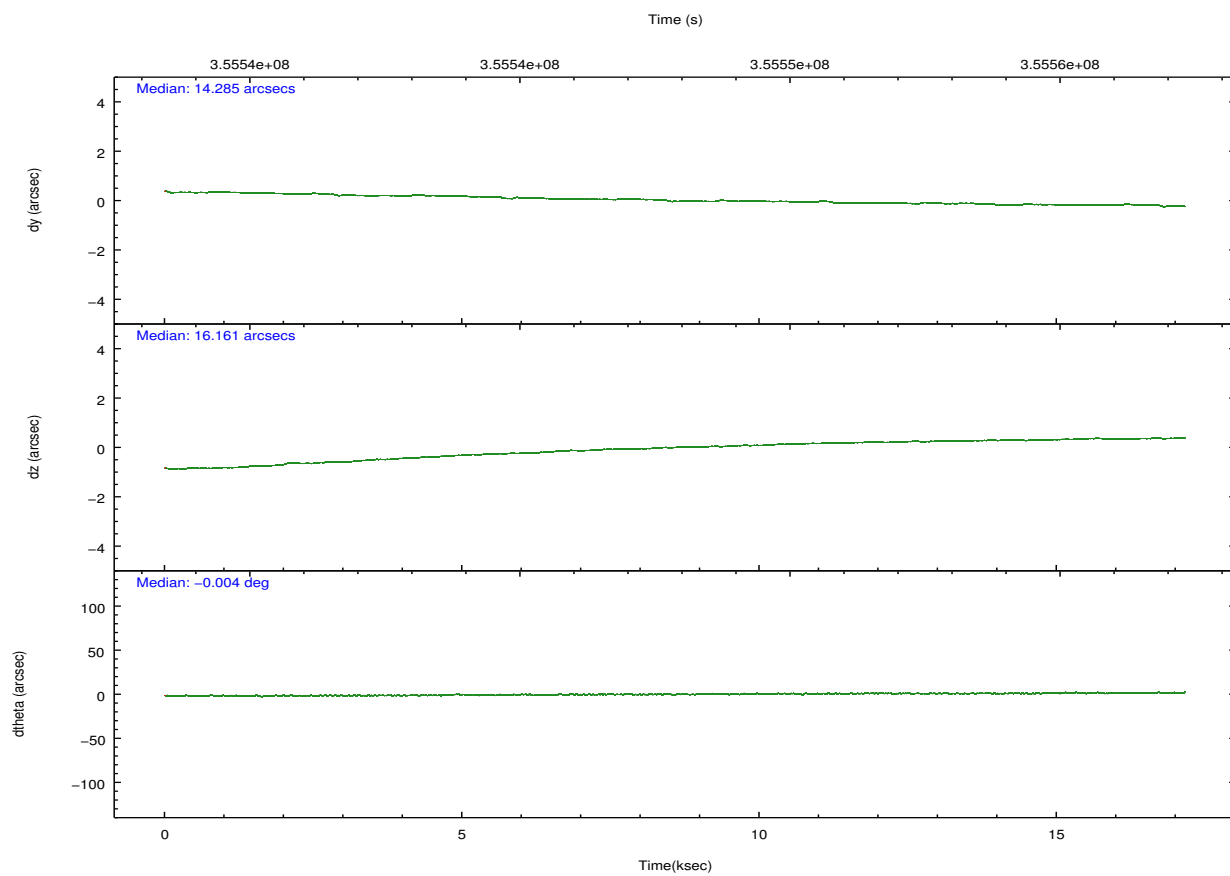
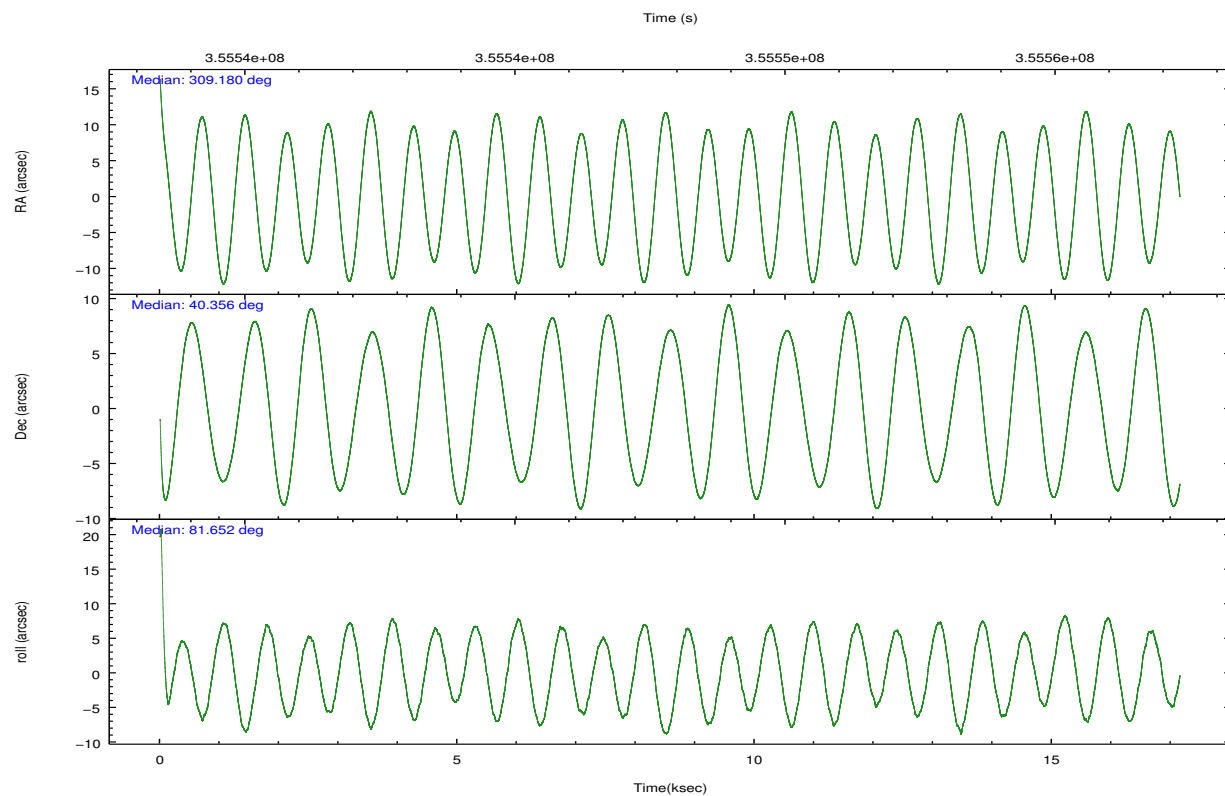
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	192018	263310	169181	236156	213224	169586	grade 0 events	13143	11293	7961	8319	15759	8620
rejected events	166448	141204	148630	137189	162836	148419		6%	4%	4%	3%	7%	5%
rejected %	86%	53%	87%	58%	76%	87%	grade 1 events	197	495	90	238	168	107
								0%	0%	0%	0%	0%	0%
							grade 2 events	4743	37801	4624	20566	11289	4337
								2%	14%	2%	8%	5%	2%
							grade 3 events	2154	4371	1974	8300	5421	2044
								1%	1%	1%	3%	2%	1%
							grade 4 events	2018	4228	1874	8234	5006	1979
								1%	1%	1%	3%	2%	1%
							grade 5 events	8065	18697	8076	21917	10695	8691
								4%	7%	4%	9%	5%	5%
							grade 6 events	3514	64461	4126	53586	12930	4201
								1%	24%	2%	22%	6%	2%
							grade 7 events	158184	121964	140456	114996	151956	139607
								82%	46%	83%	48%	71%	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	309.193258	309.1795849792037	CCD I2 on	N	N
[deg] Pointing Dec	40.331205	40.35646209025419	CCD I3 on	N	N
[deg] Pointing Roll	81.492775	81.65827069162445	CCD S0 on	O1	Y
[deg] Roll angle	90.000000	90.000000	CCD S1 on	Y	Y
[deg] Roll tolerance	15.000000	15.000000	CCD S2 on	Y	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S4 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S5 on	O2	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	0.00754346686406393	On-chip summing requested	N	N
[s] Observation start time (MET)	355540460.184000	355538256.13849	Subarray requested	NONE	NONE
Observation start date	2009-04-08T01:13:14	2009-04-08T00:37:36	Alternating exposures requested	N	N
[s] Observation end time (MET)	355556460.184000	355556593.9019	[s] Primary exposure time	0.000000	3.2
Observation end date	2009-04-08T05:39:54	2009-04-08T05:43:13			
Read mode	TIMED	TIMED			

2.3 Aspect



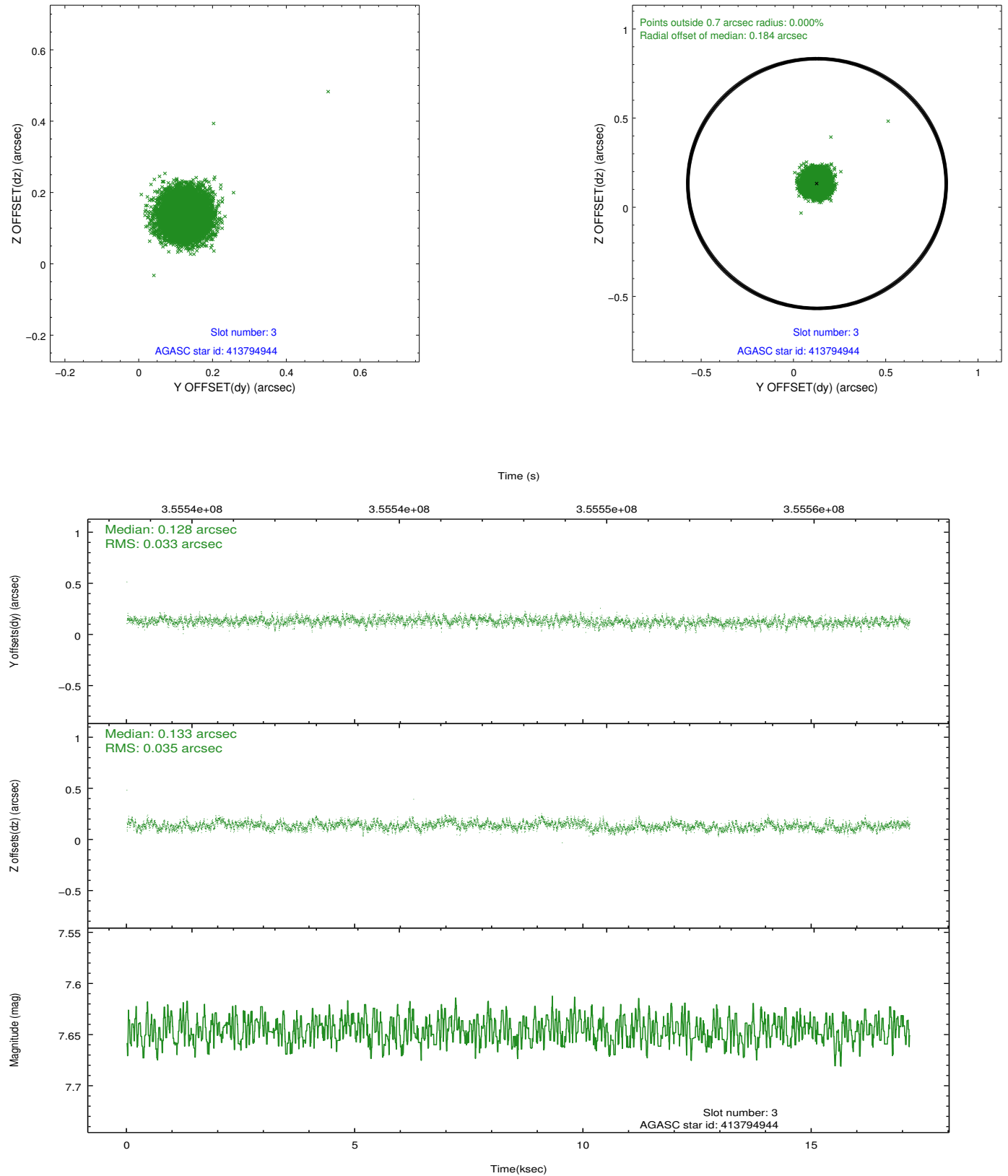


Slot Statistics

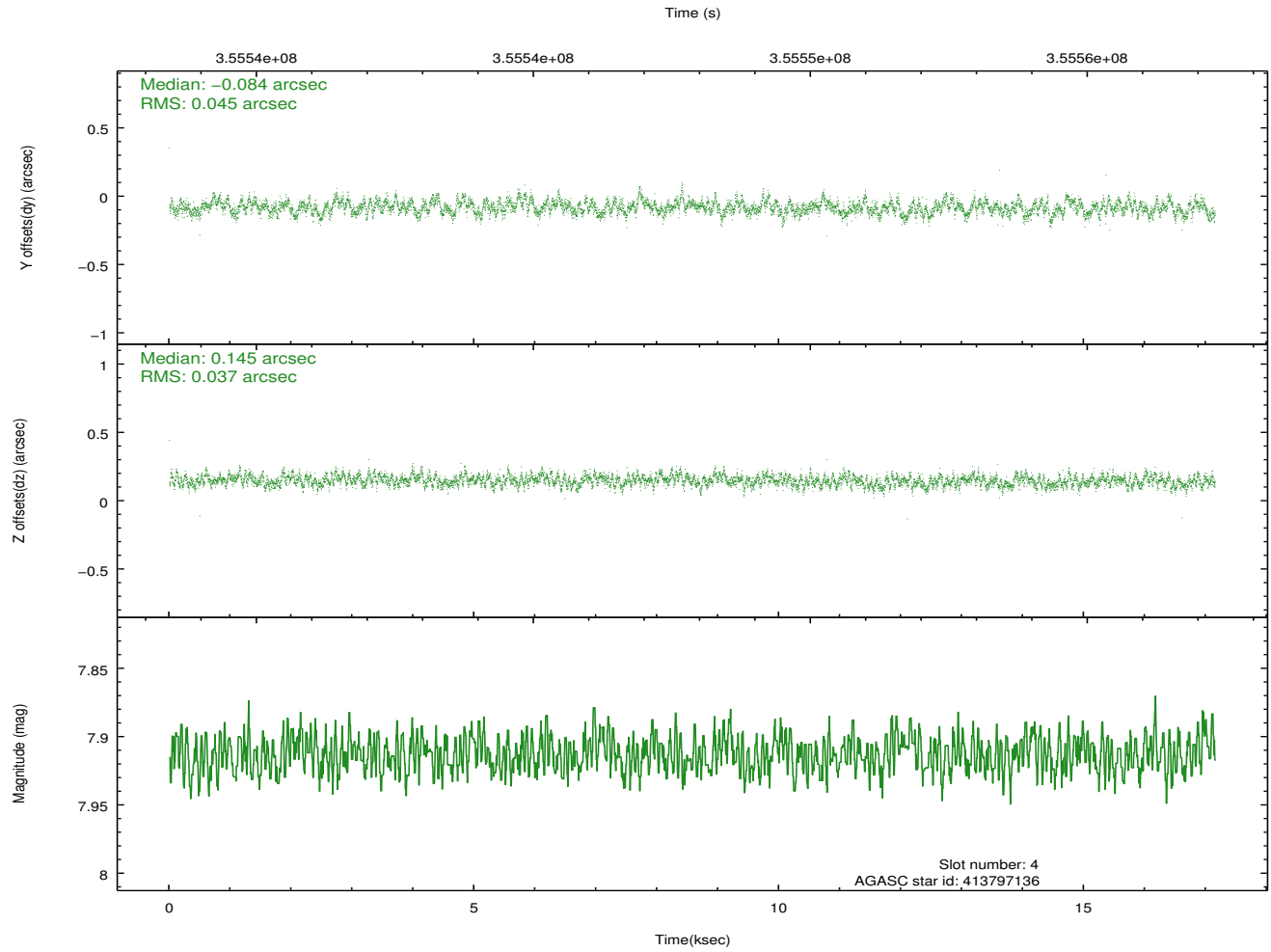
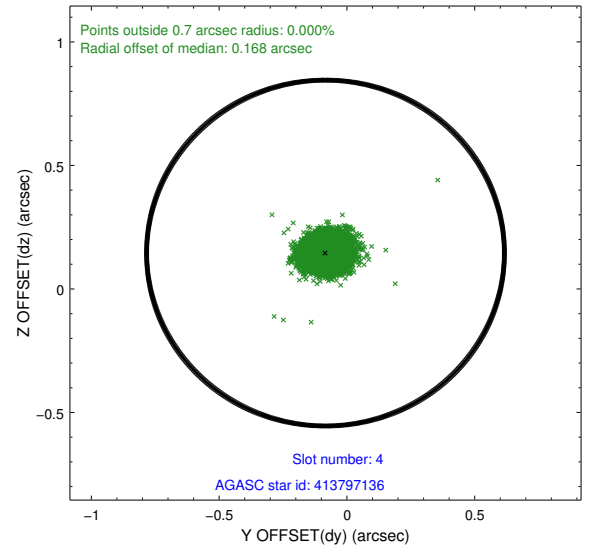
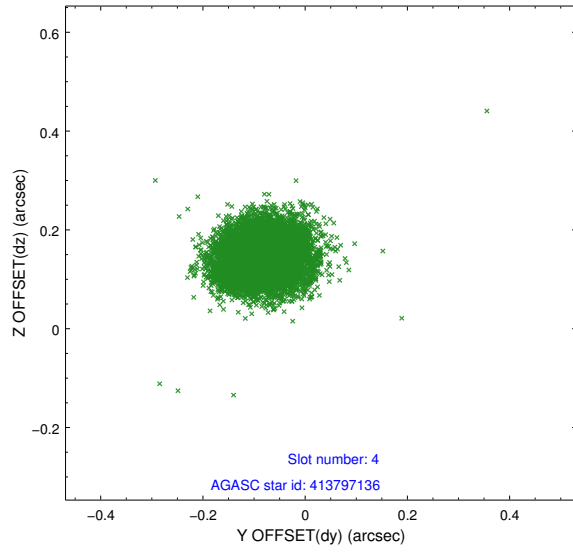
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	4184	-0.073	-0.021	0.017	0.025	0.000000	0.000000	-767.35	-1737.49
1	FID	ACIS-S-4	6.97	4183	0.207	0.041	0.011	0.019	0.000000	0.000000	2146.10	170.80
2	FID	ACIS-S-5	7.00	4183	-0.159	-0.014	0.018	0.028	0.000000	0.000000	-1819.97	164.70
3	GUIDE	413794944	7.65	8368	0.128	0.133	0.051	0.082	309.554319	39.690543	-2130.79	-1329.81
4	GUIDE	413797136	7.91	8367	-0.084	0.145	0.062	0.099	309.356621	39.806092	-1802.52	-726.31
5	GUIDE	413799600	8.55	8366	0.037	-0.187	0.089	0.140	308.280373	39.866891	-2013.86	2249.22
6	GUIDE	413803744	8.83	8363	-0.094	-0.137	0.076	0.124	308.586342	40.704904	1090.91	1838.46
7	GUIDE	415503960	9.24	8358	0.014	0.042	0.105	0.178	310.022122	40.895650	2354.42	-1927.71

2.4 Star Slots

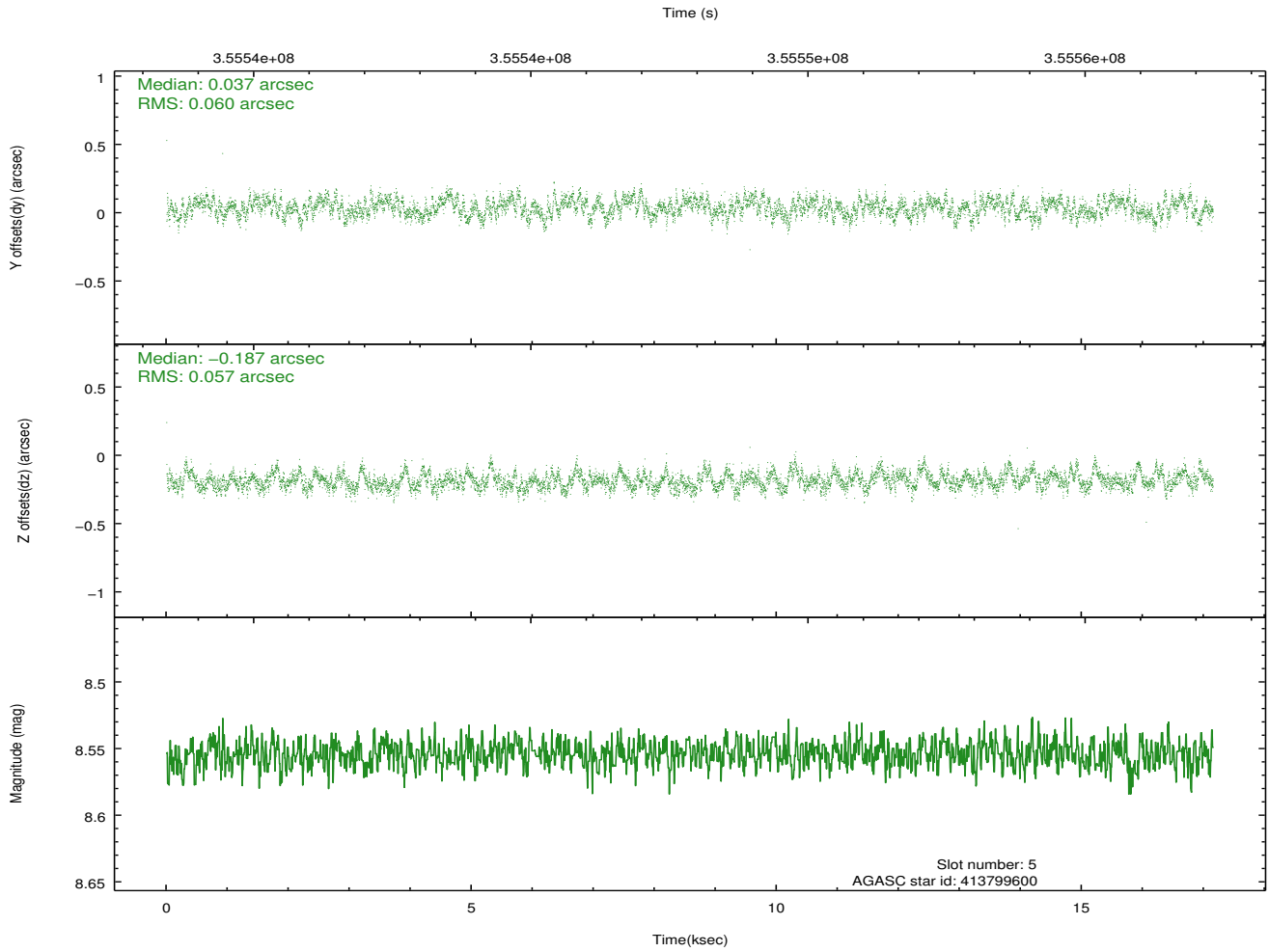
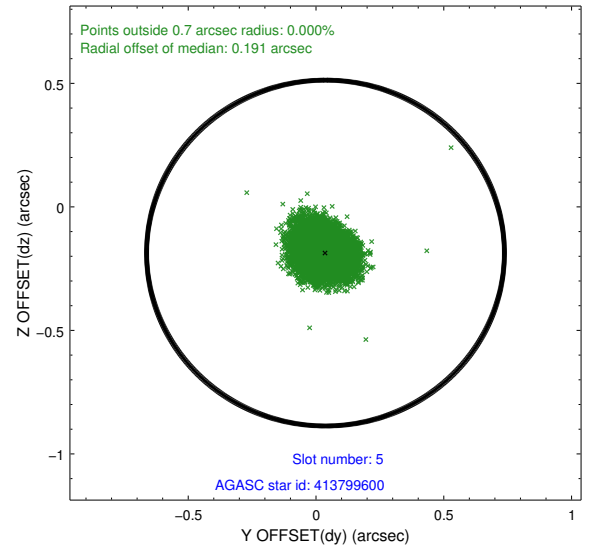
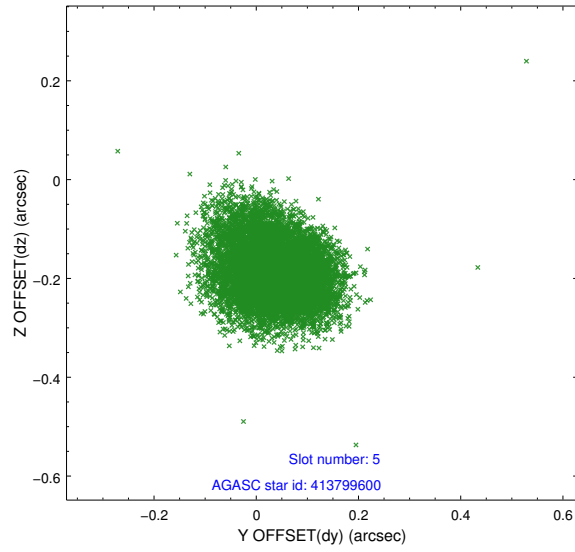
2.4.1 Slot 3



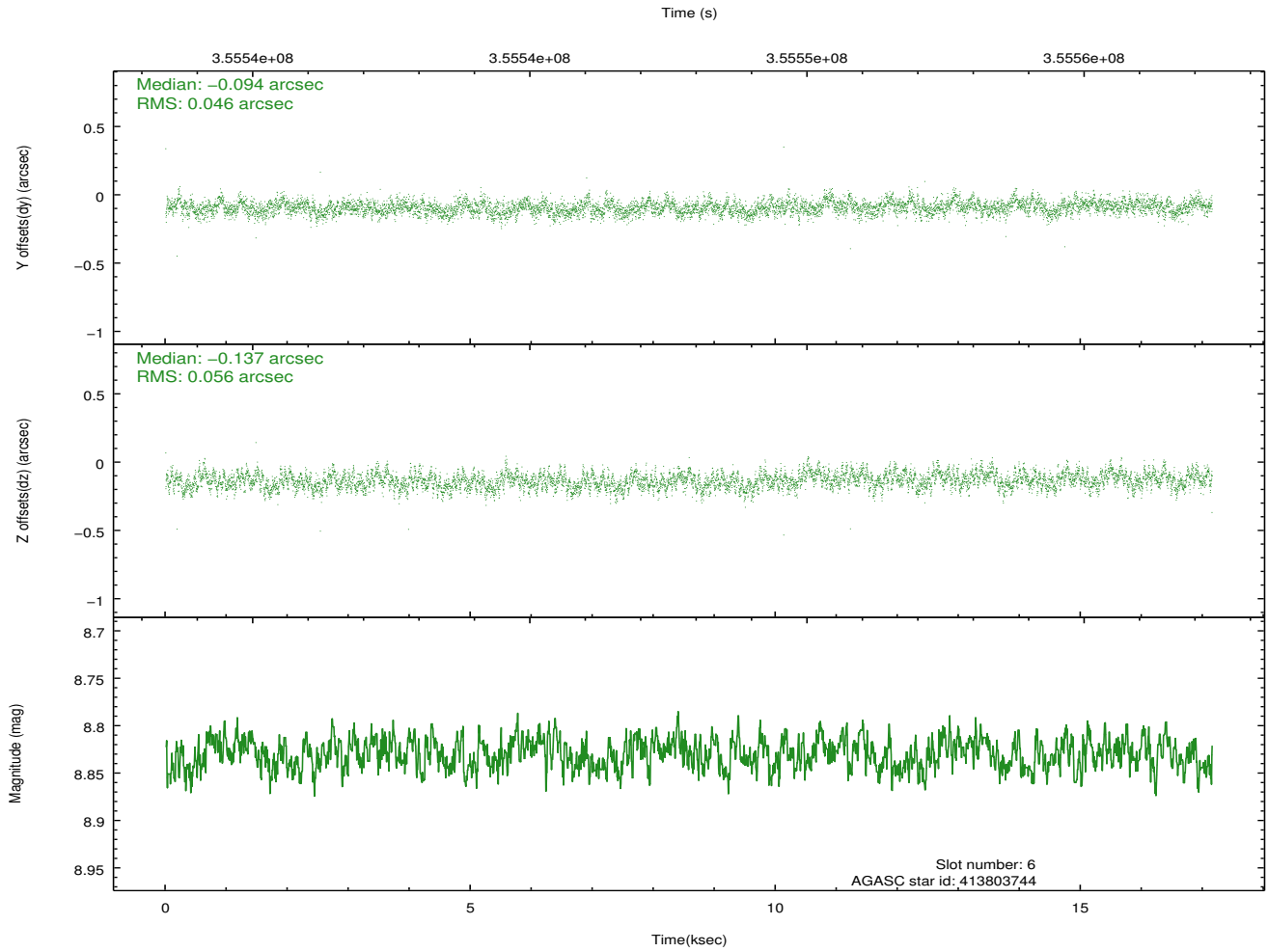
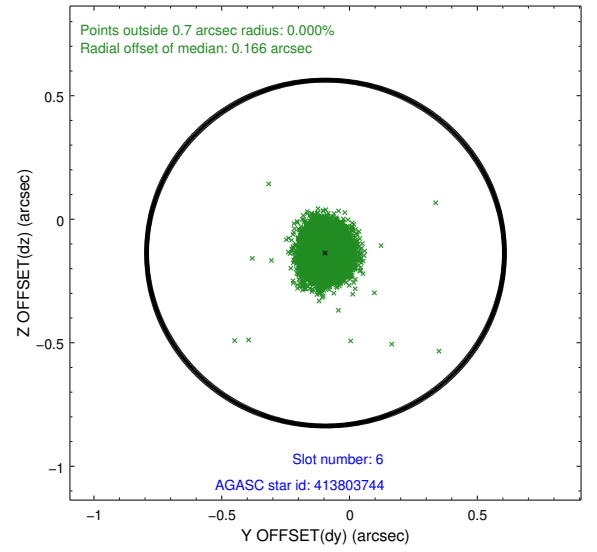
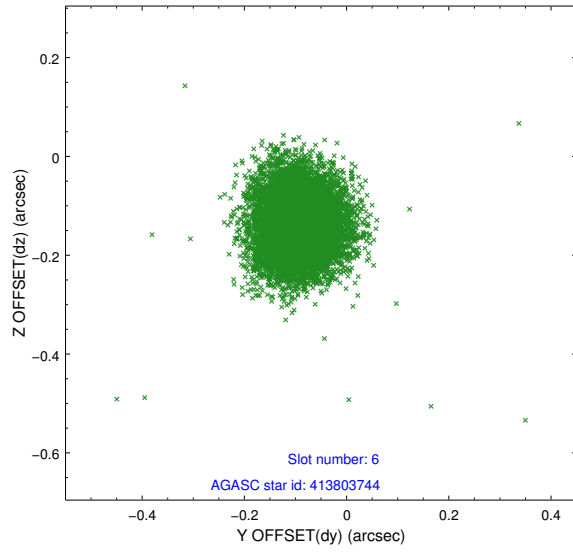
2.4.2 Slot 4



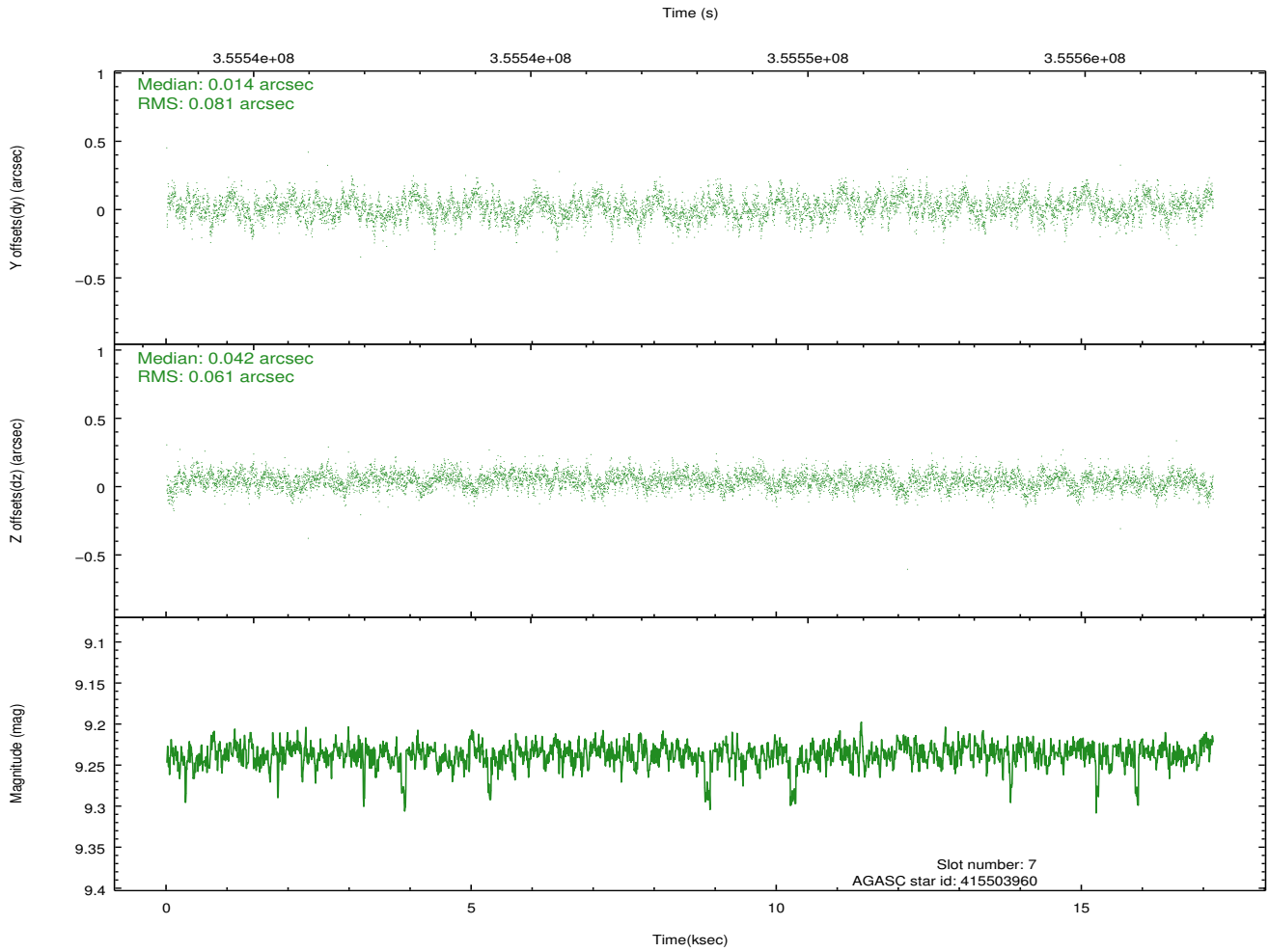
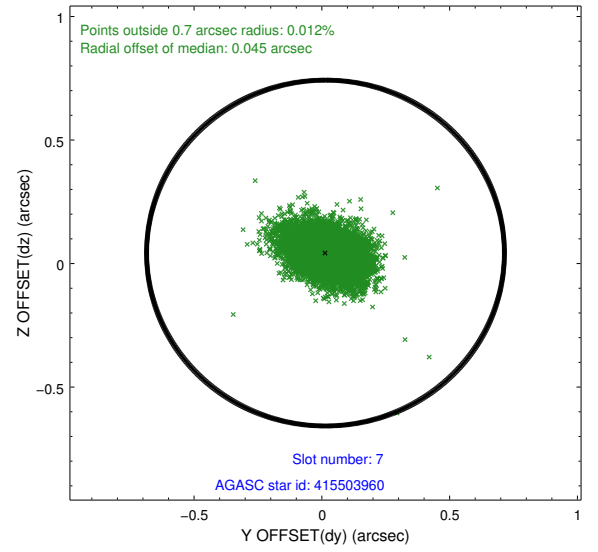
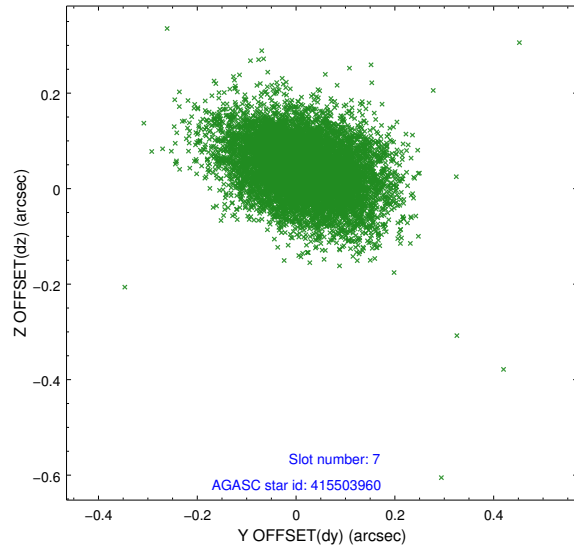
2.4.3 Slot 5



2.4.4 Slot 6

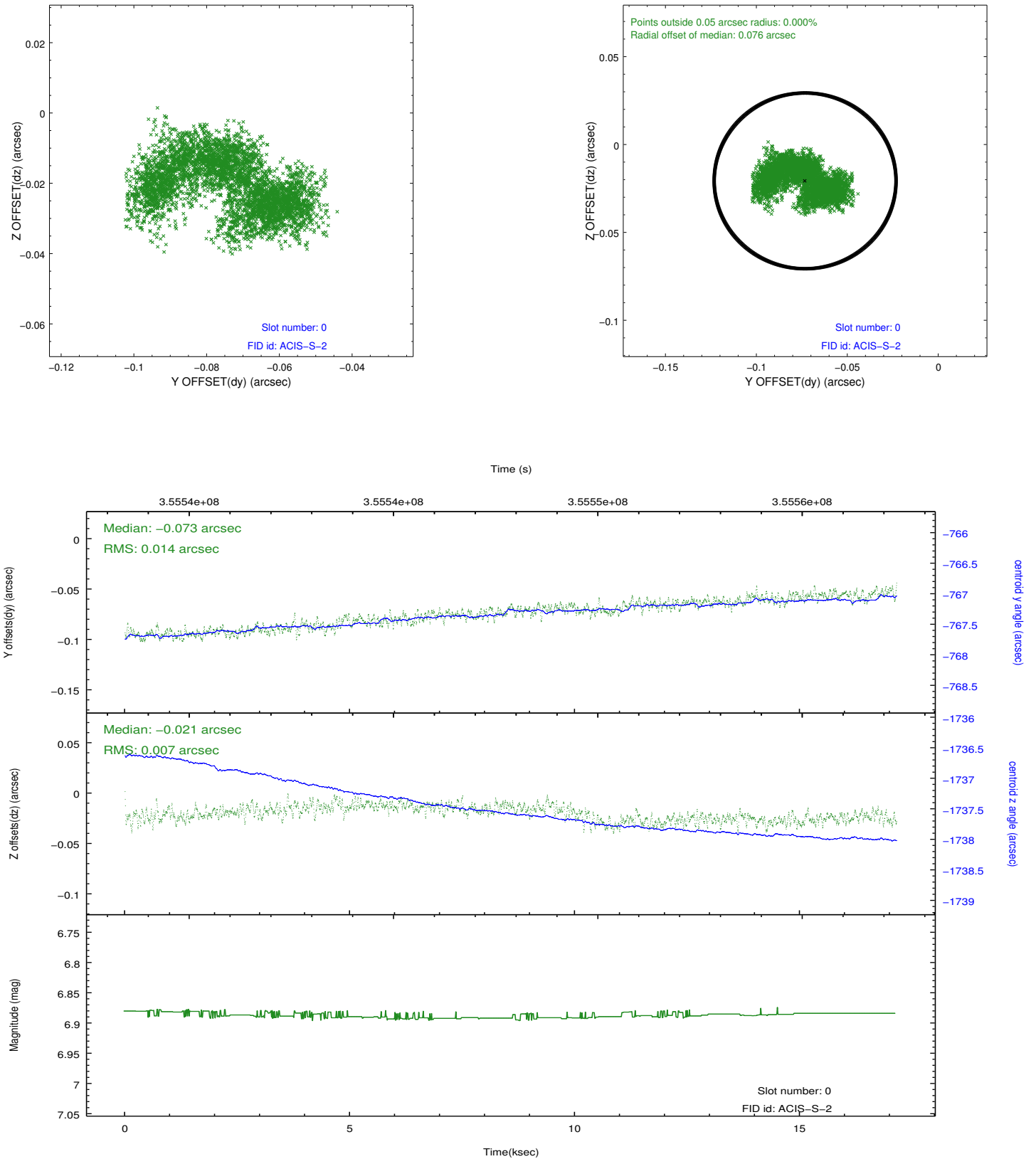


2.4.5 Slot 7

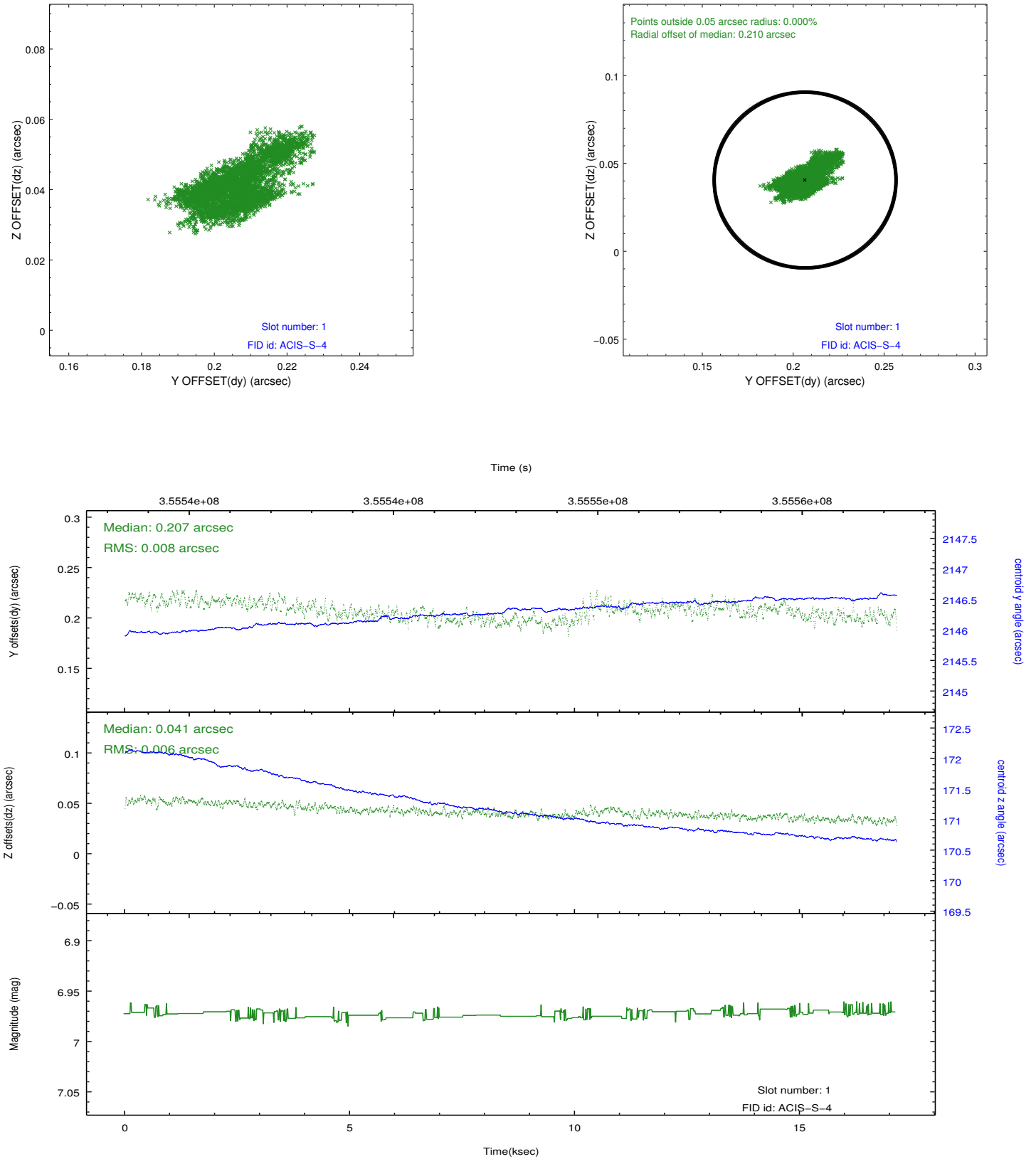


2.5 FID Slots

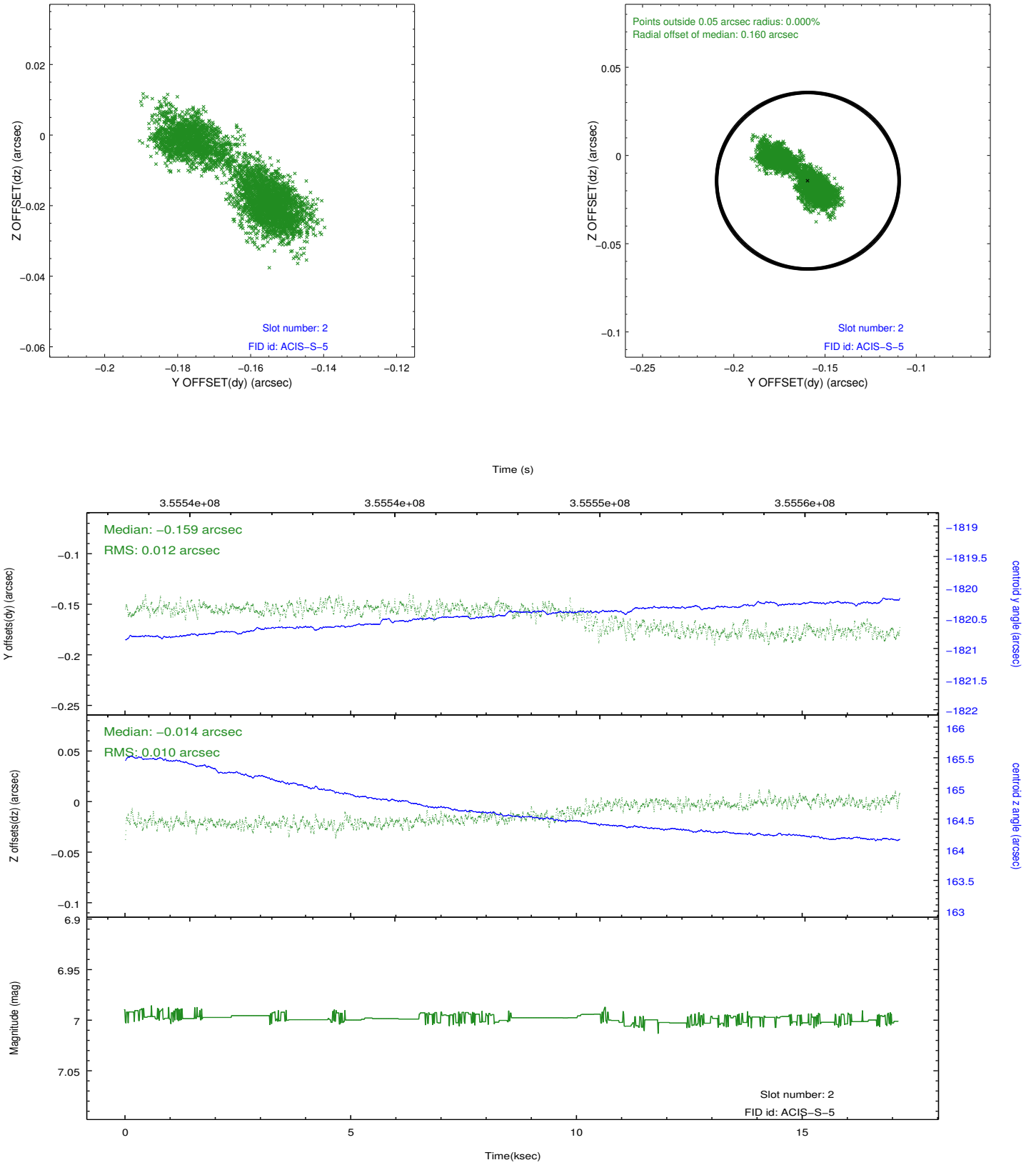
2.5.1 Slot 0



2.5.2 Slot 1

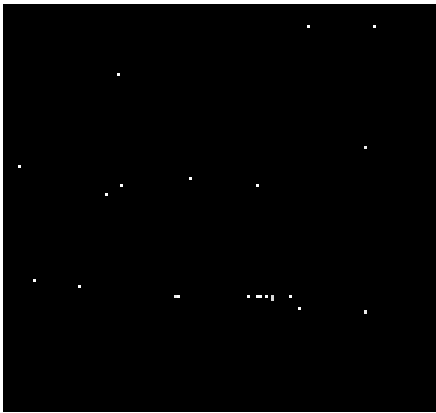


2.5.3 Slot 2

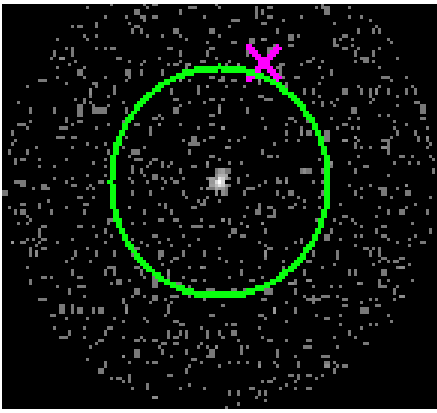


3 Gratings

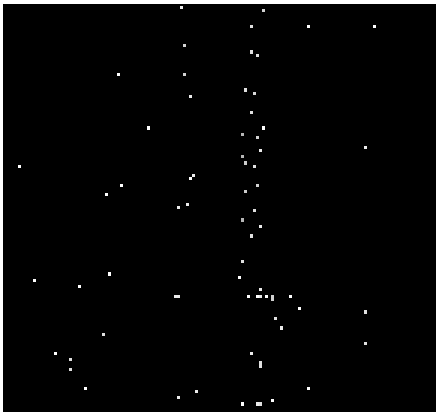
3.1 HEG Arm



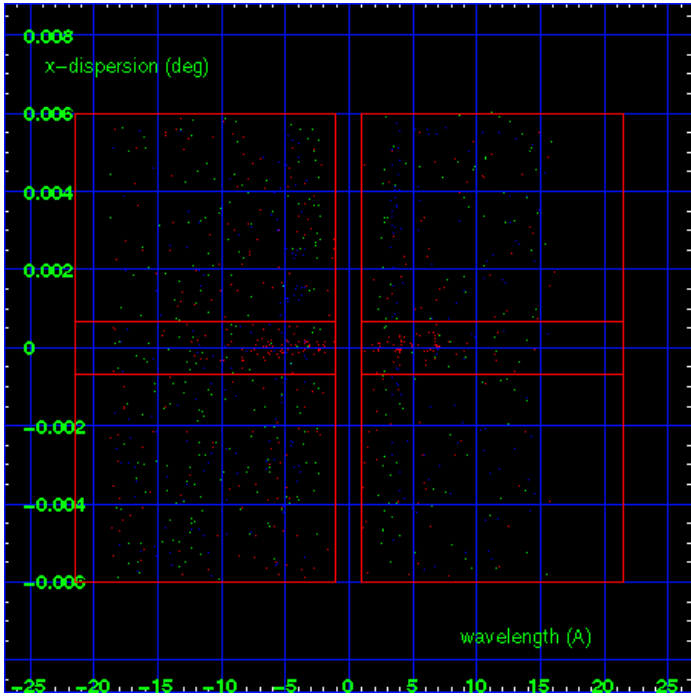
HEG Order Sort 123



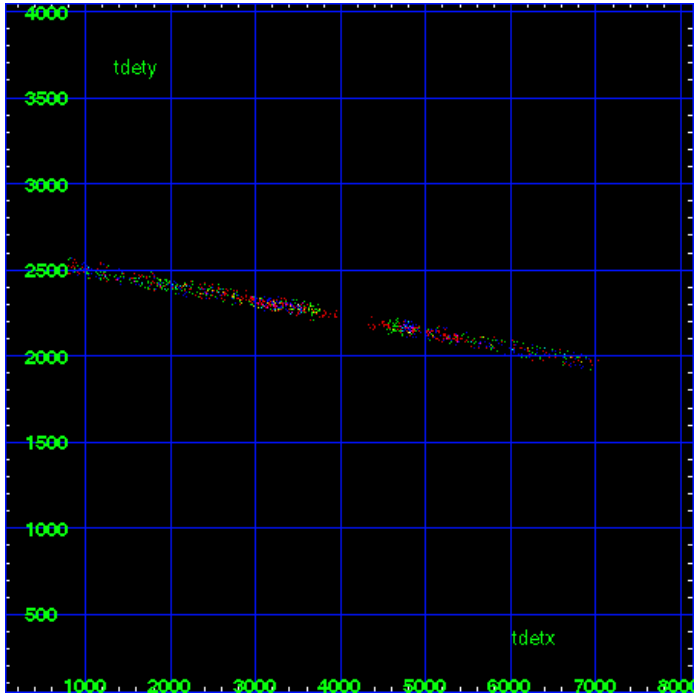
HEG Zero Order



HEG Order Sort ALL

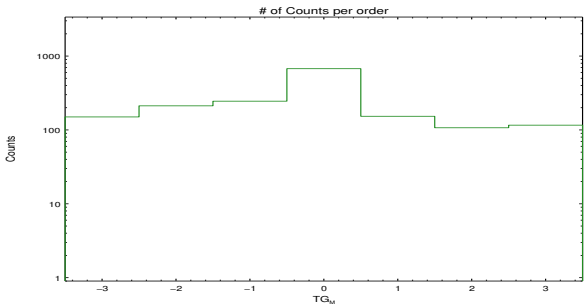


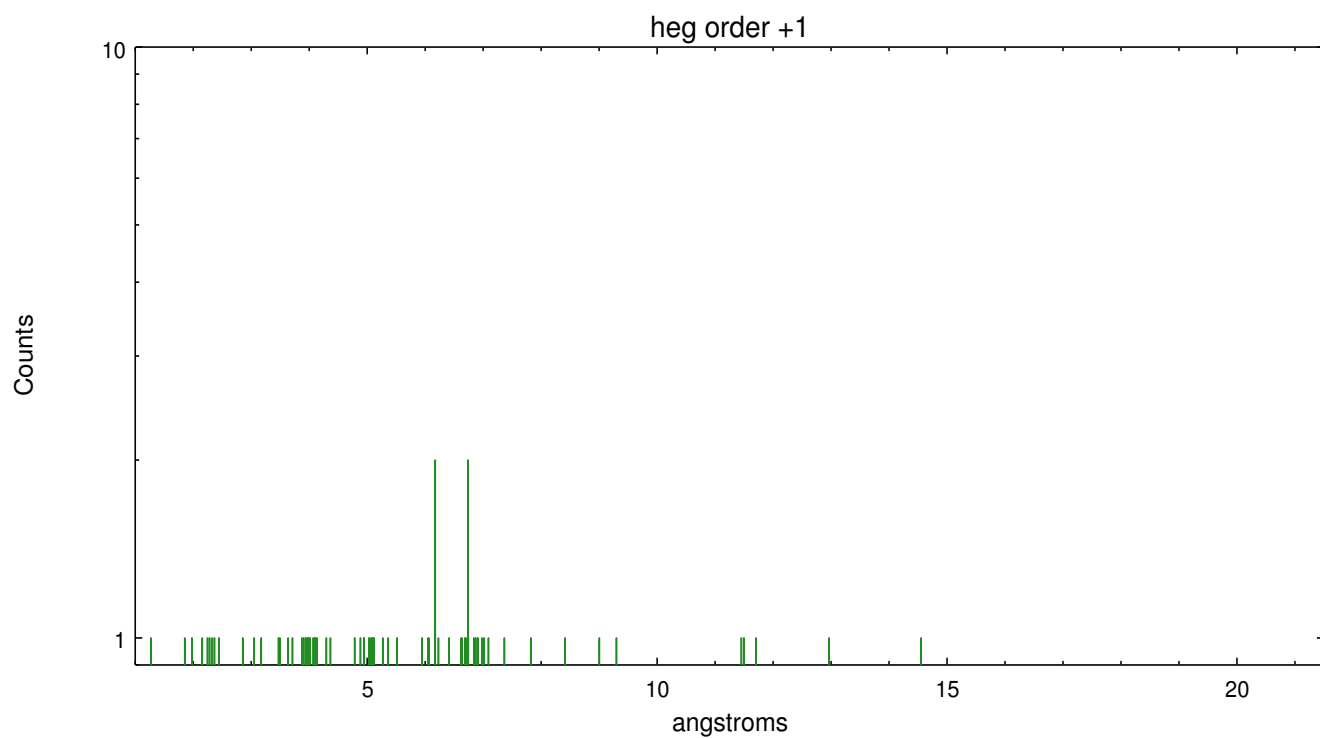
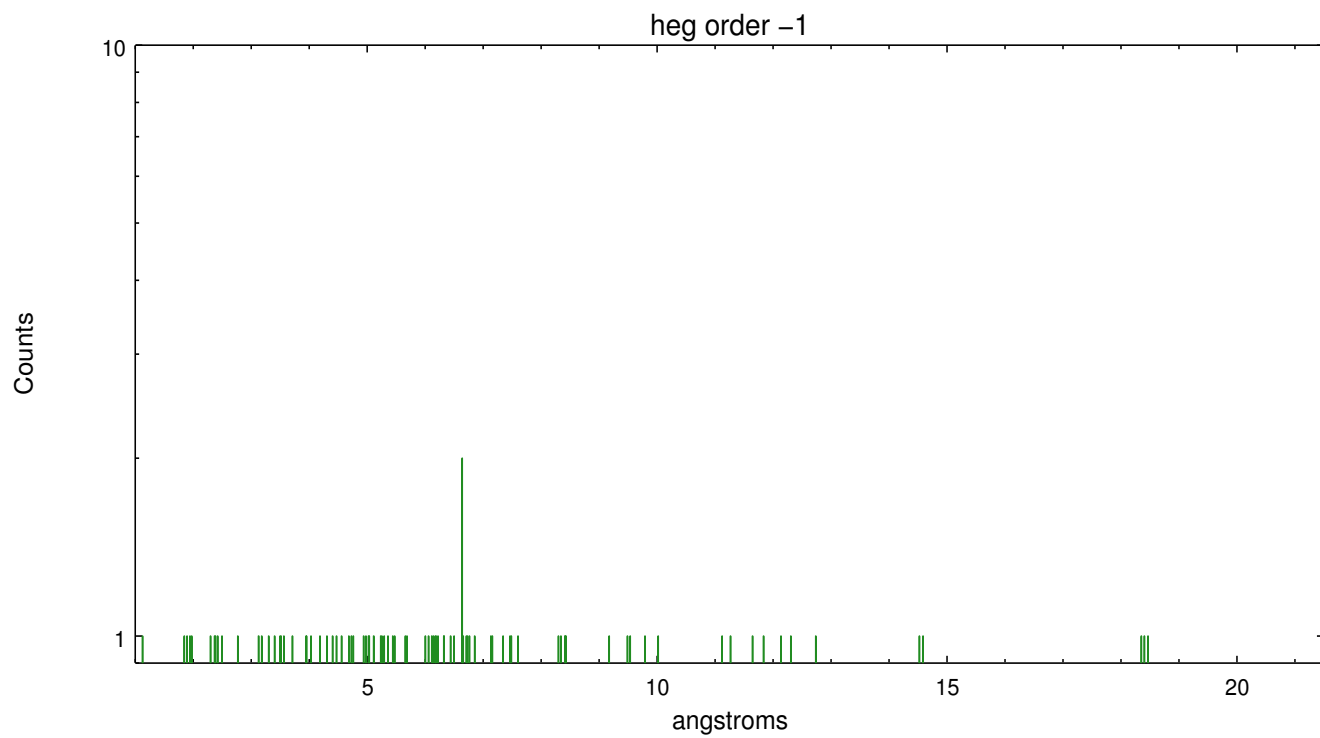
Spot Image HEG



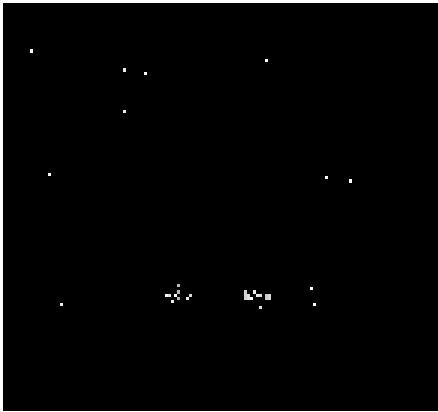
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	150	212	245	675	153	107	116

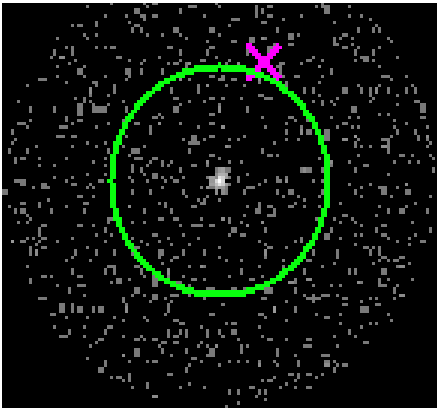




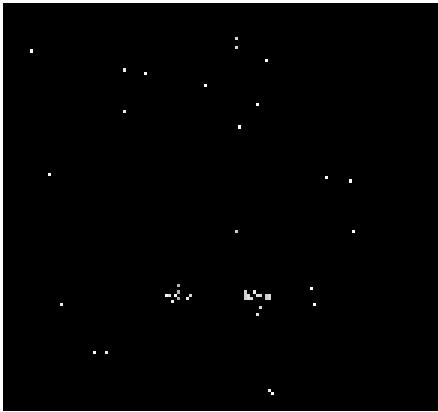
3.2 MEG Arm



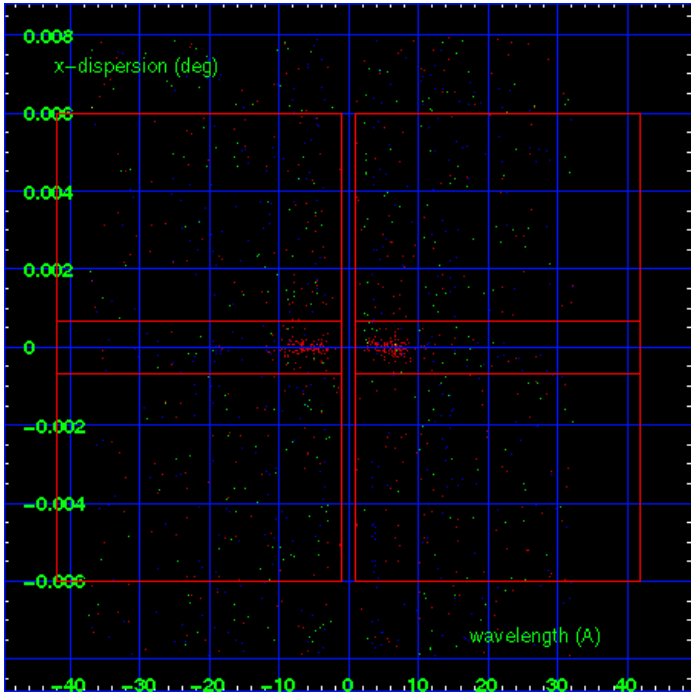
MEG Order Sort 123



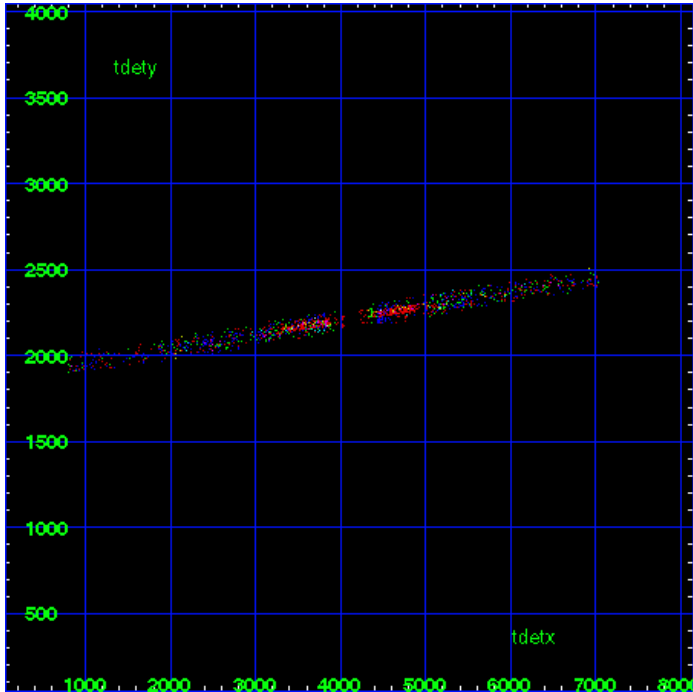
MEG Zero Order



MEG Order Sort ALL

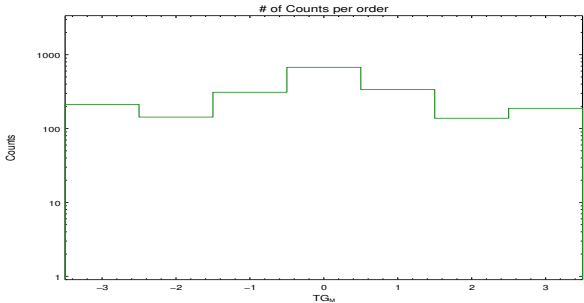


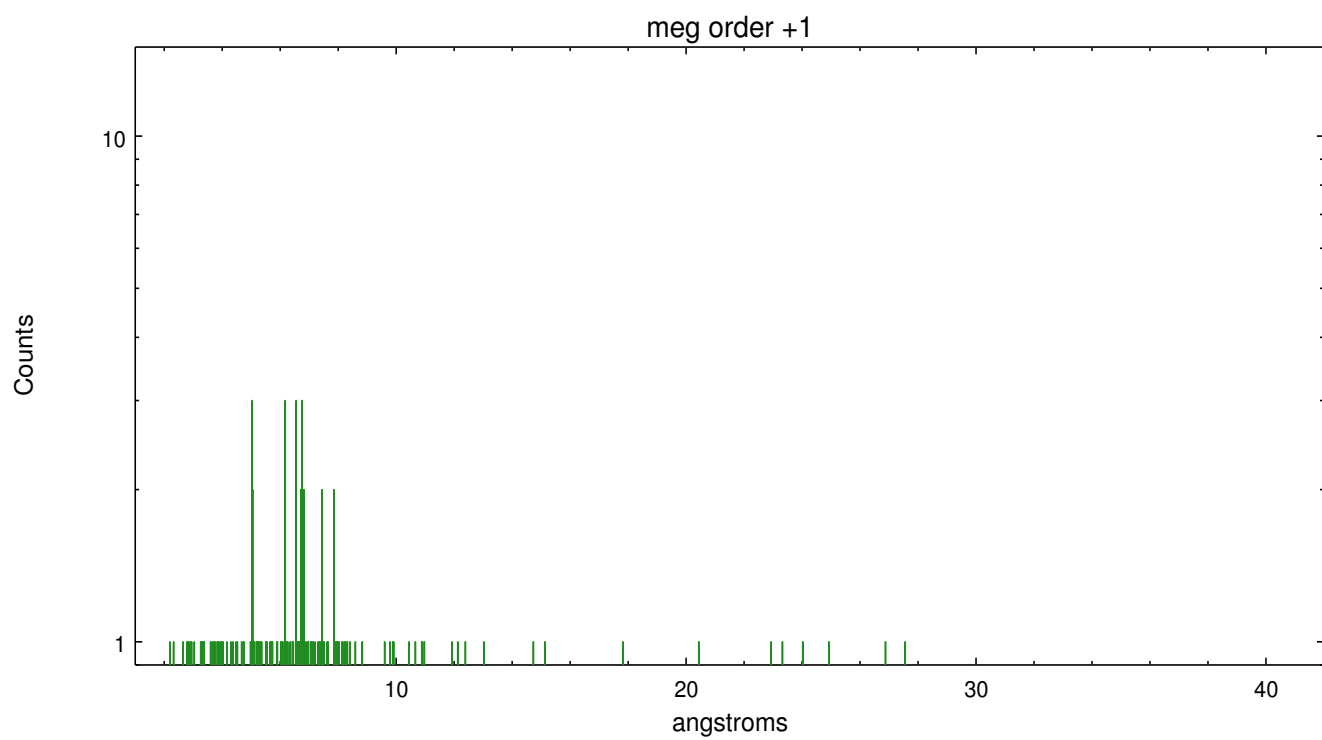
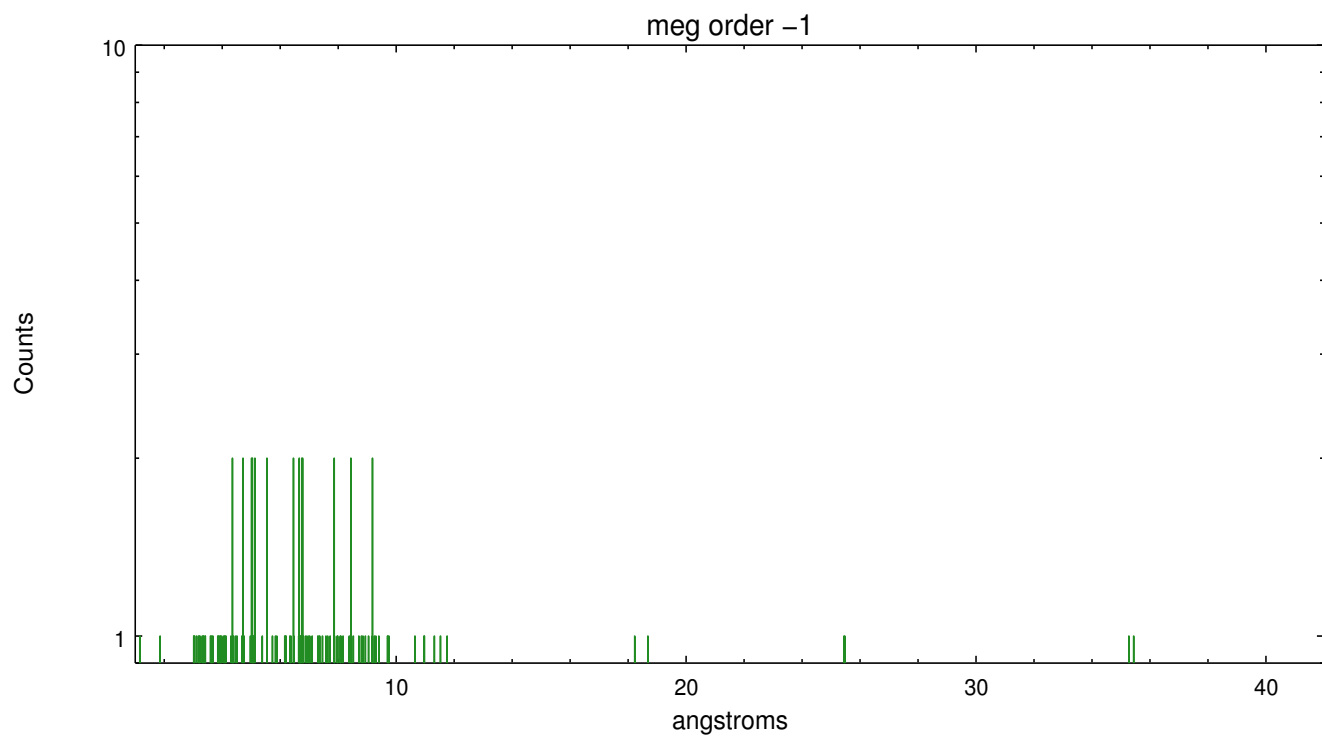
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	212	143	310	675	337	138	188





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.9455999

A.2 Comments

Roll constraint met.