

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10894 - L2 Version 2
Chandra X-Ray Center

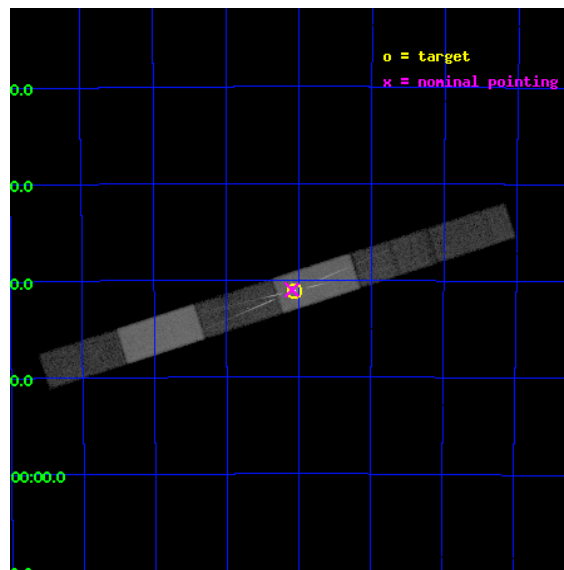
L2 Processing Date : Jun 2 2012

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1 Front

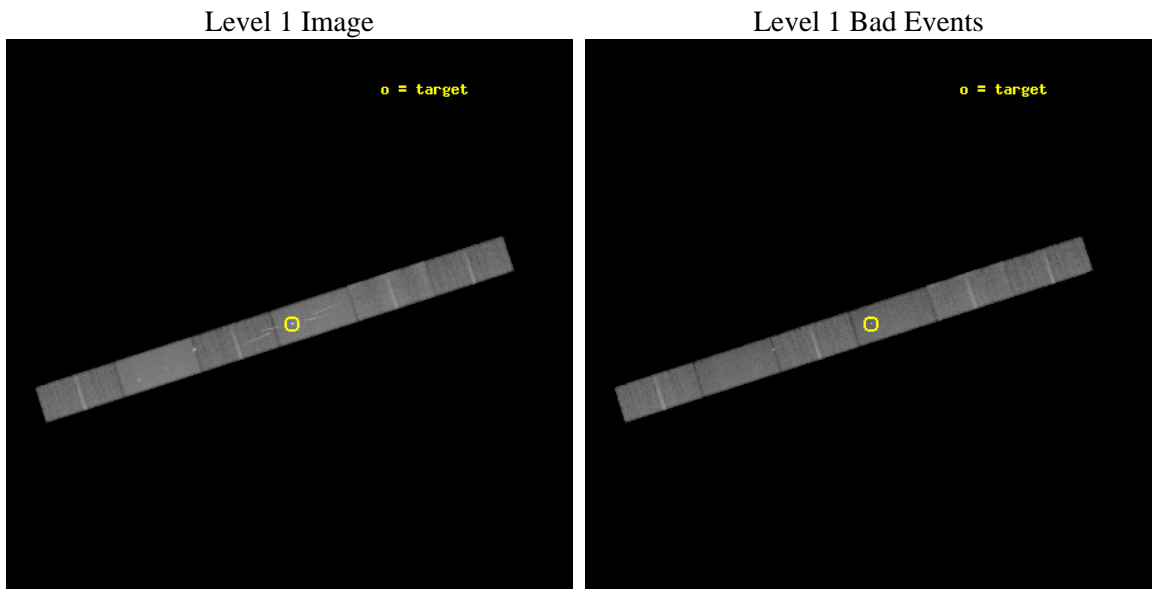
seq_num	200558	Sequence number
obs_id	10894	Observation id
title	Testing Shock Dynamics in Eta Carinae with HETGS After the 2009 Periastron Passage	Proposal title
observer	Dr Michael Corcoran	Principal investigator
object	Eta Car, Post-Minimum	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.265	Observer's specified target RA [deg]
dec_targ	-59.684528	Observer's specified target Dec [deg]
ra_nom	161.27436509902	Nominal RA [deg]
dec_nom	-59.683361789599	Nominal Dec [deg]
roll_nom	342.16470807545	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22588.004172921	Sum of GTIs [s]
livetime	21986.454770403	Livetime [s]
ontime4	22588.045212924	Sum of GTIs [s]
ontime5	22587.963132918	Sum of GTIs [s]
ontime6	22587.922092915	Sum of GTIs [s]
ontime7	22588.004172921	Sum of GTIs [s]
ontime8	22587.881052911	Sum of GTIs [s]
ontime9	22587.840012908	Sum of GTIs [s]
l2events	210949	Number of level 2 events



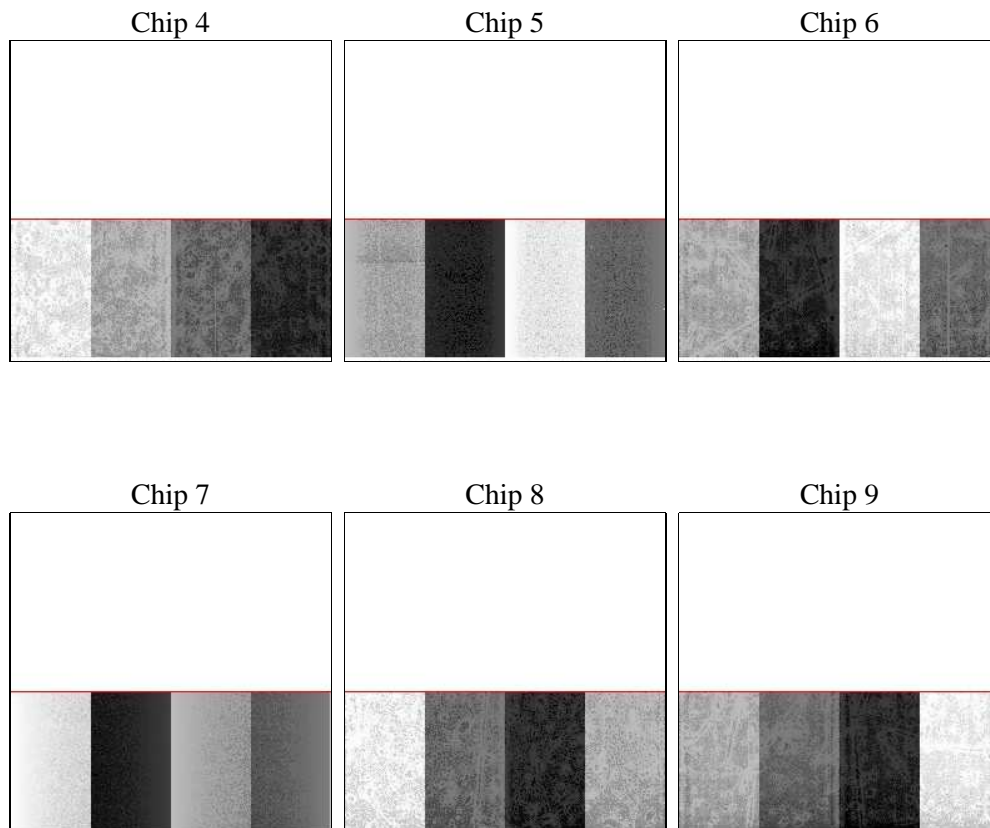
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	22588.004172921	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	22588.045212924	Sum of GTIs [s]
date	2012-06-02T14:51:46	Date and time of file creation	ontime5	22587.963132918	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	22587.922092915	Sum of GTIs [s]
			ontime7	22588.004172921	Sum of GTIs [s]
			ontime8	22587.881052911	Sum of GTIs [s]
			ontime9	22587.840012908	Sum of GTIs [s]
			l1events	808001	Number of level 1 events

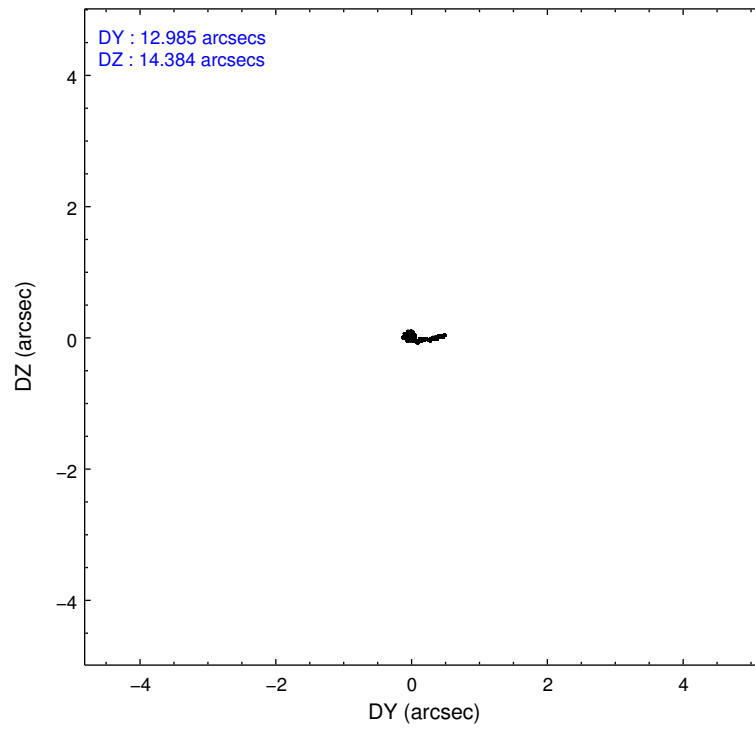
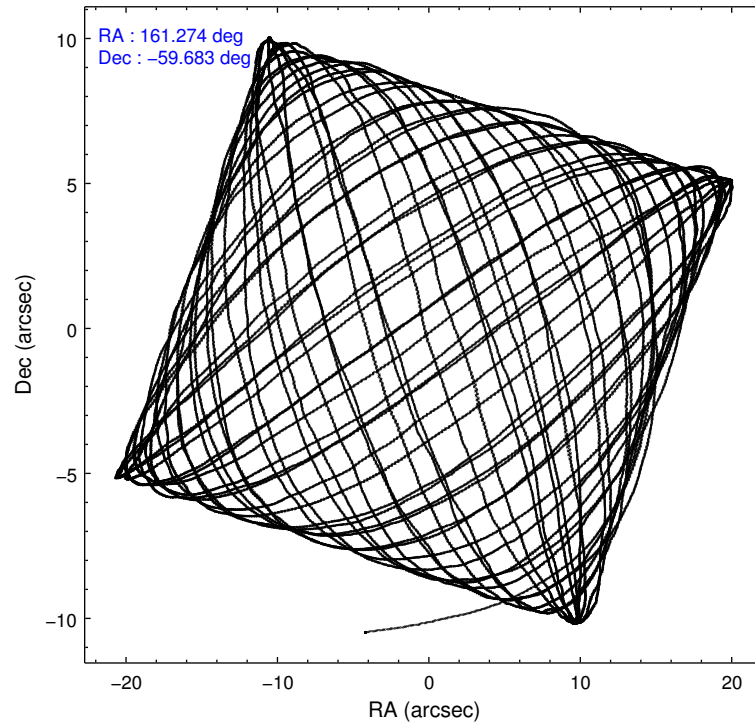
2.1.4 Events

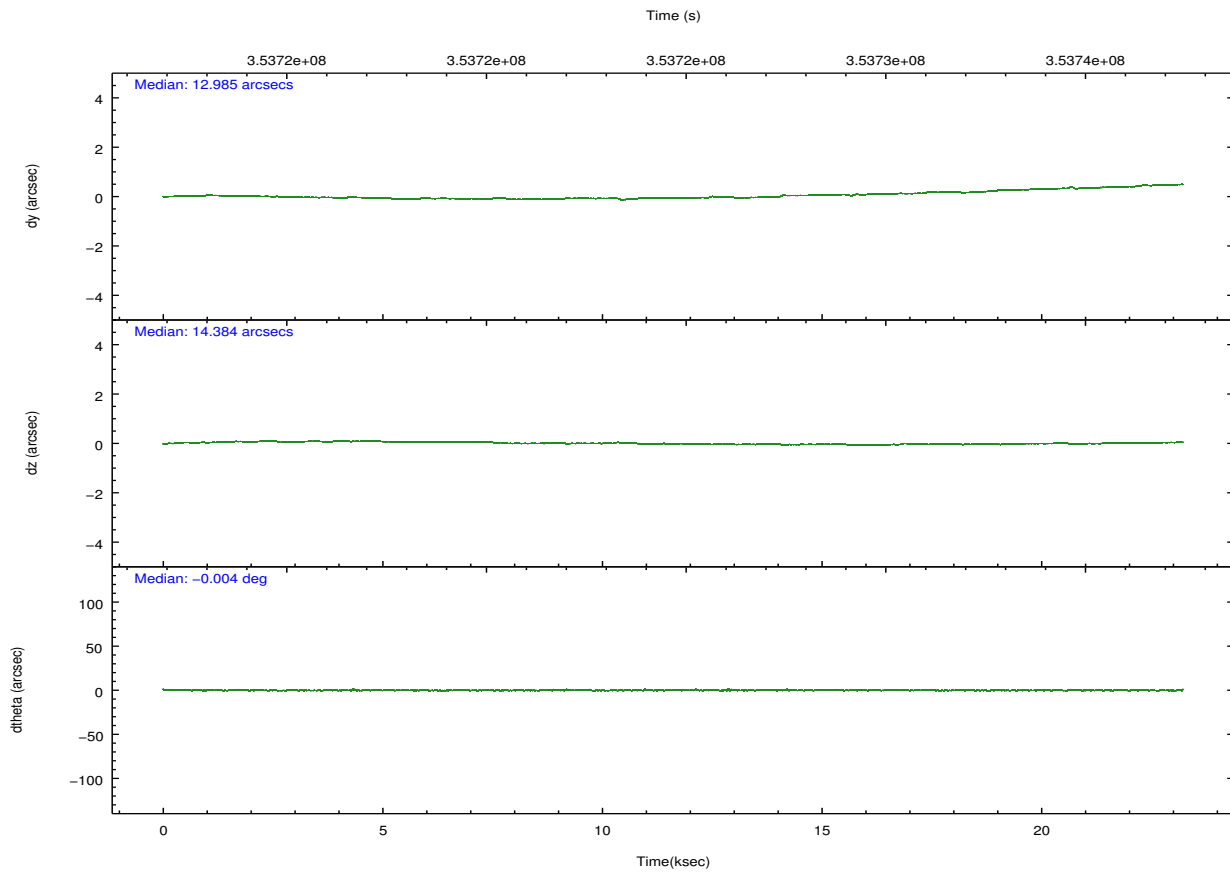
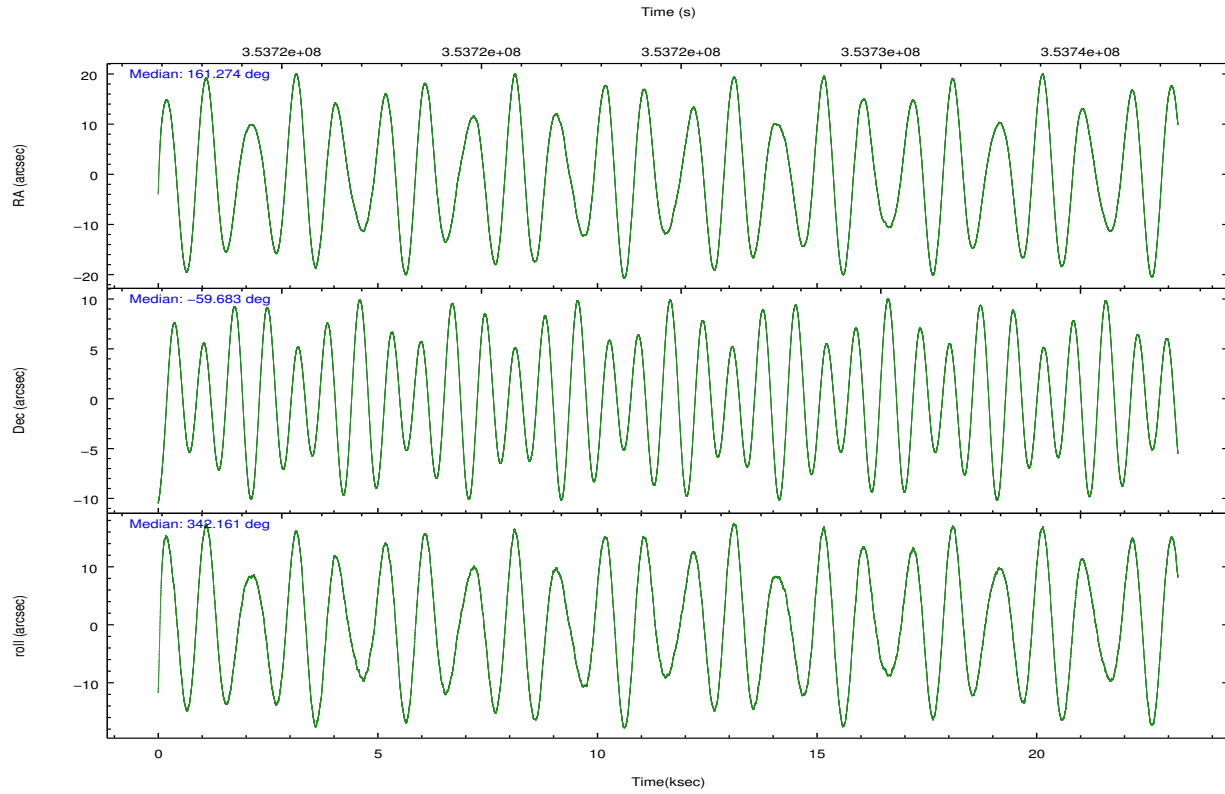
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	117368	163446	113648	166896	141787	104856	grade 0 events	6402	8553	9596	9608	11608	5895
rejected events	102147	85818	93456	84801	106509	90390		5%	5%	8%	5%	8%	5%
rejected %	87%	52%	82%	50%	75%	86%	grade 1 events	58	701	62	332	86	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	3208	22088	3679	17509	7291	2694
								2%	13%	3%	10%	5%	2%
							grade 3 events	1706	4319	1824	7652	4008	1665
								1%	2%	1%	4%	2%	1%
							grade 4 events	1532	4194	1857	7677	3690	1524
								1%	2%	1%	4%	2%	1%
							grade 5 events	4620	12771	4696	14454	6224	5012
								3%	7%	4%	8%	4%	4%
							grade 6 events	2374	38477	3238	39654	8681	2689
								2%	23%	2%	23%	6%	2%
							grade 7 events	97468	72343	88696	70010	100199	85340
								83%	44%	78%	41%	70%	81%

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	161.221534	161.2743650990235	CCD I2 on	N	N
[deg] Pointing Dec	-59.689498	-59.68336178959871	CCD I3 on	N	N
[deg] Pointing Roll	341.962474	342.1647080754463	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	-183.332523	-183.3212429520412	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.8	-6.811279630966652	CCD S4 on	Y	Y
[s] Observation start time (MET)	353713772.184000	353712400.9977	CCD S5 on	O2	Y
Observation start date	2009-03-17T21:48:26	2009-03-17T21:26:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	353736272.184000	353736984.59892	On-chip summing requested	N	N
Observation end date	2009-03-18T04:03:26	2009-03-18T04:16:24	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	15	15
			Subarray row count	440	440
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.5

2.3 Aspect



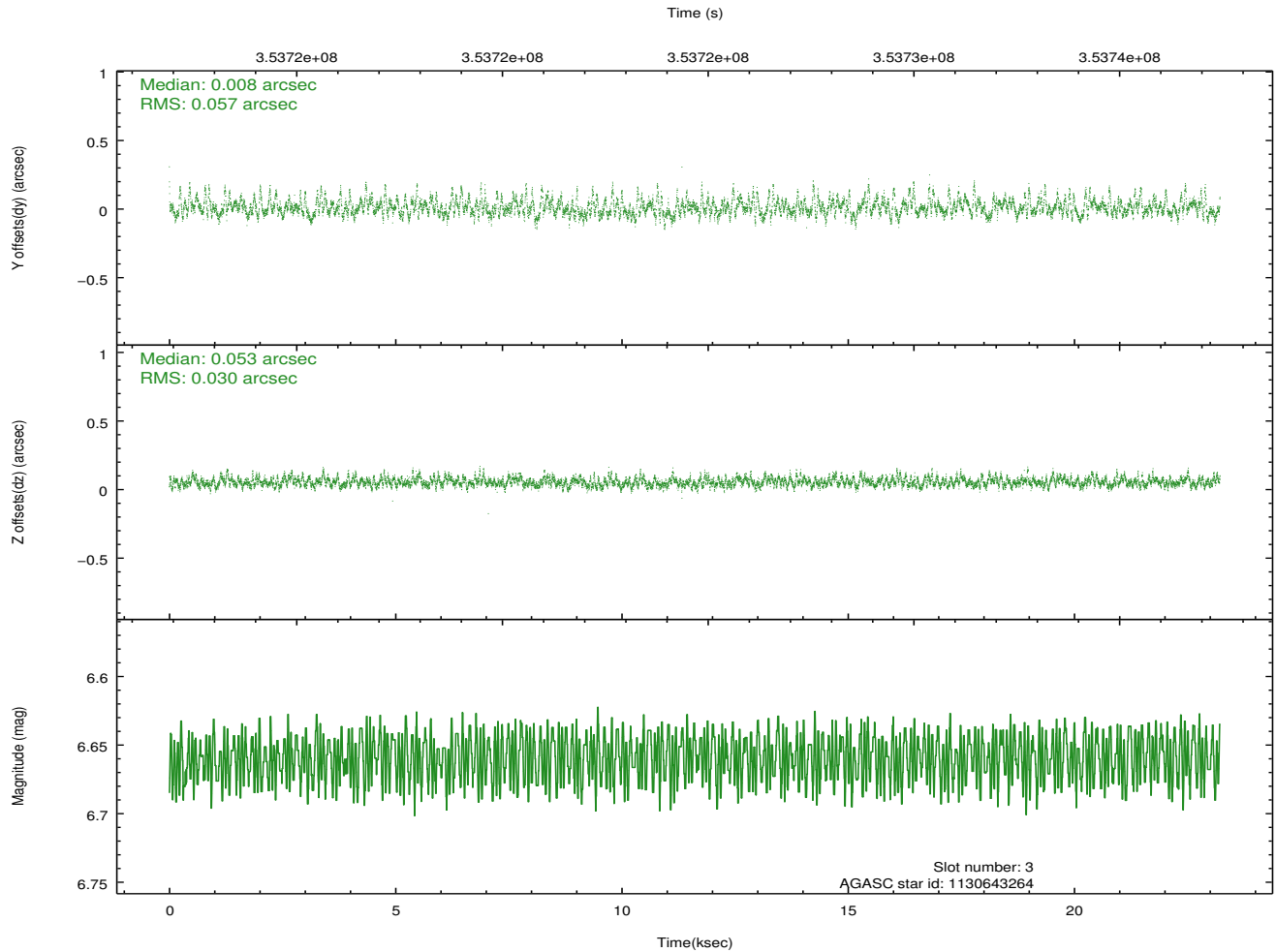
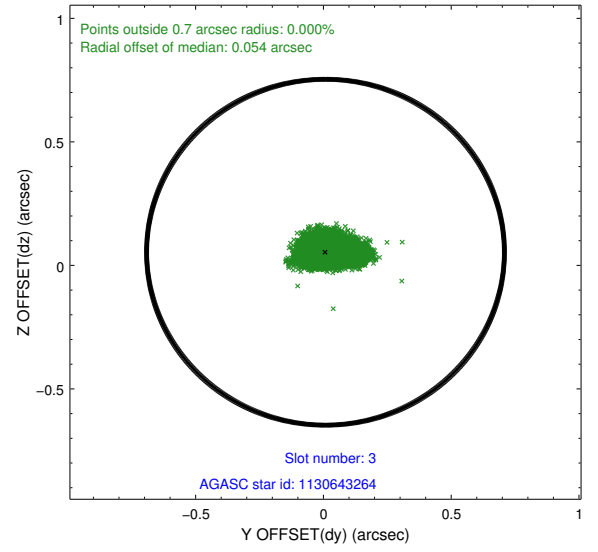
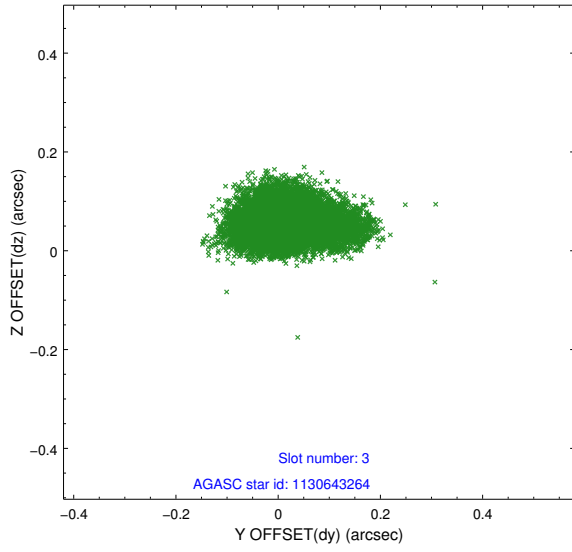


Slot Statistics

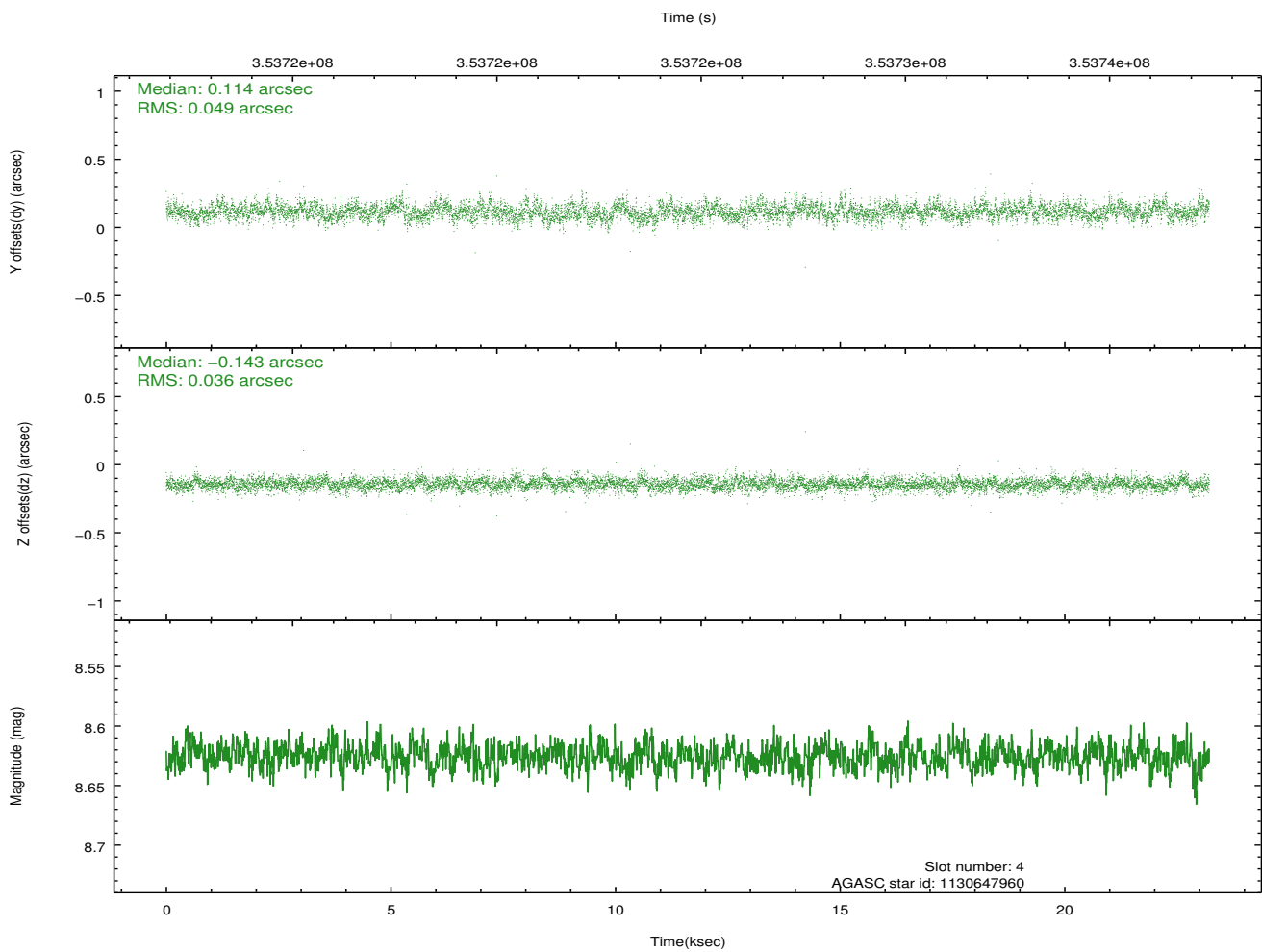
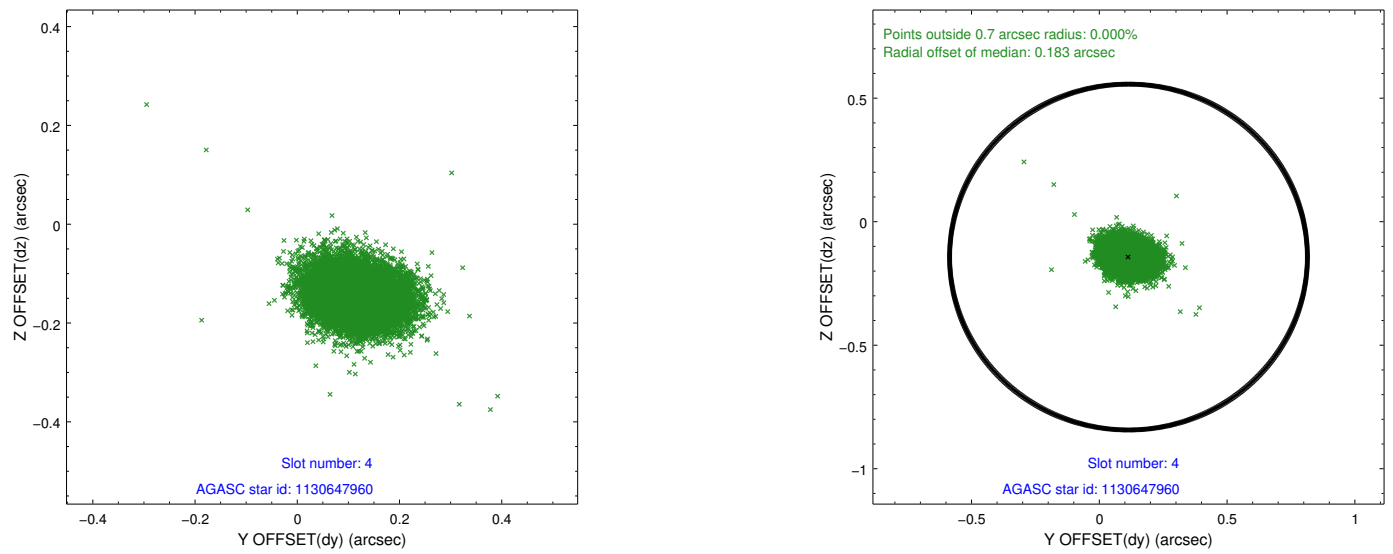
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	5664	-0.081	-0.063	0.008	0.015	0.000000	0.000000	-765.55	-1876.19
1	FID	ACIS-S-4	6.95	5663	0.167	0.056	0.008	0.015	0.000000	0.000000	2147.90	32.25
2	FID	ACIS-S-5	7.01	5664	-0.117	0.015	0.008	0.014	0.000000	0.000000	-1818.26	26.02
3	GUIDE	1130643264	6.66	11328	0.008	0.053	0.065	0.121	160.322990	-59.676912	-1563.23	-472.98
4	GUIDE	1130647960	8.63	11324	0.114	-0.143	0.063	0.106	160.287471	-59.247776	-2123.43	968.07
5	GUIDE	1130640672	8.28	11328	-0.038	-0.018	0.069	0.108	162.096044	-59.540805	1354.85	993.46
6	GUIDE	1130646160	8.64	11327	-0.061	-0.087	0.064	0.104	162.161730	-59.561264	1491.43	958.61
7	GUIDE	1174012960	7.14	11326	-0.029	0.192	0.061	0.094	160.855674	-60.332270	97.58	-2403.39

2.4 Star Slots

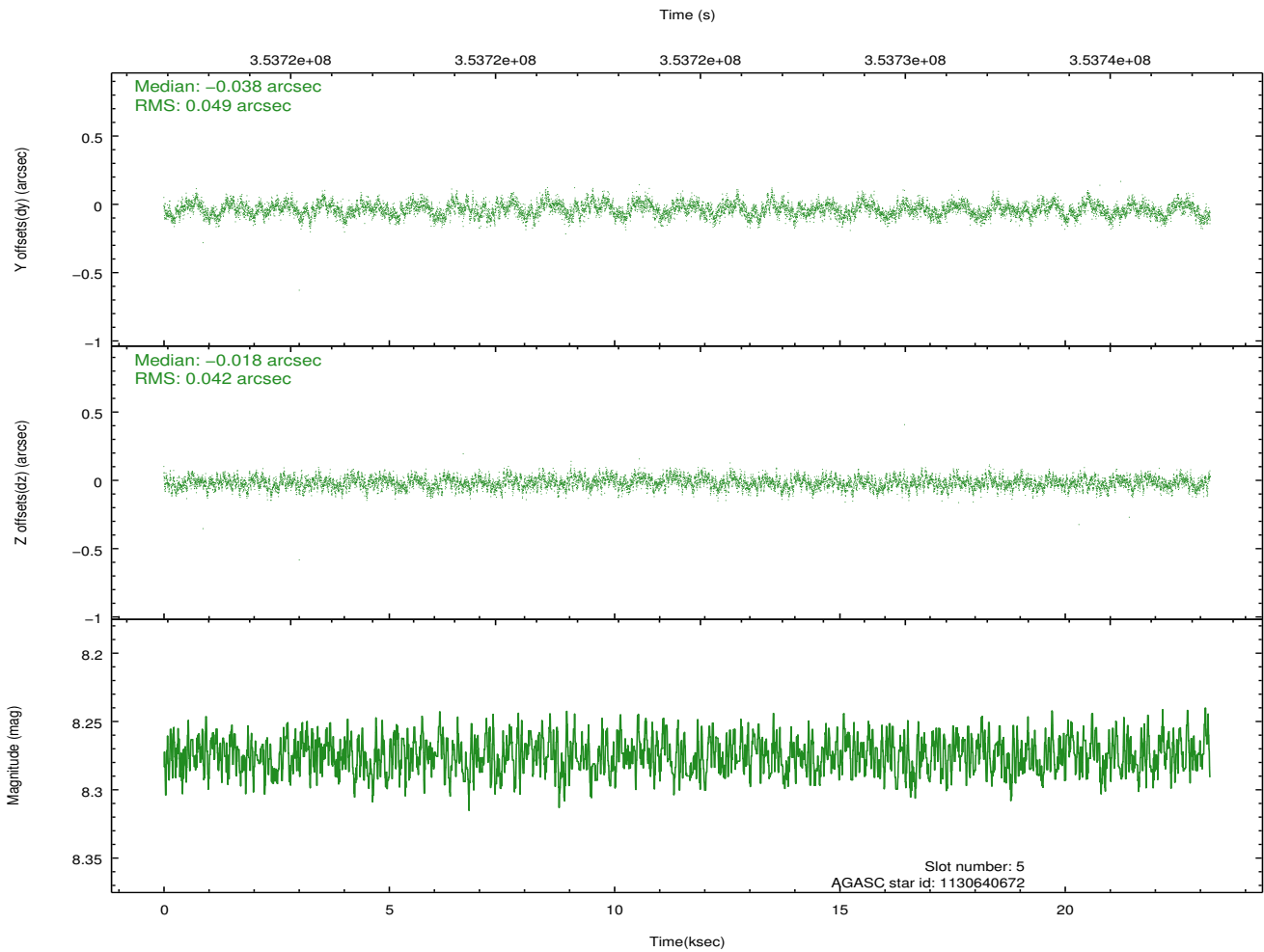
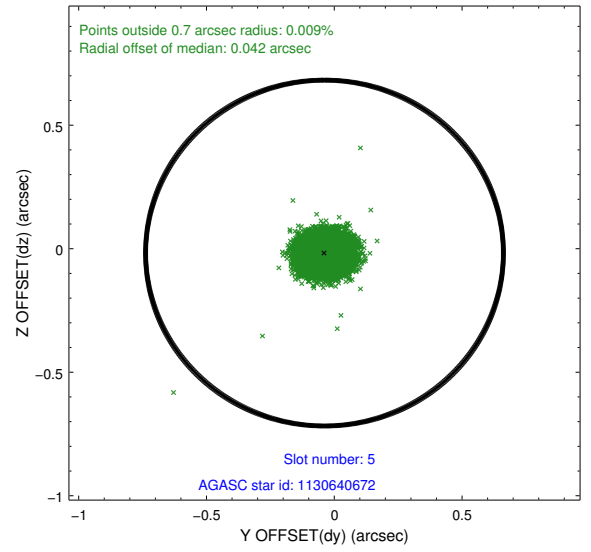
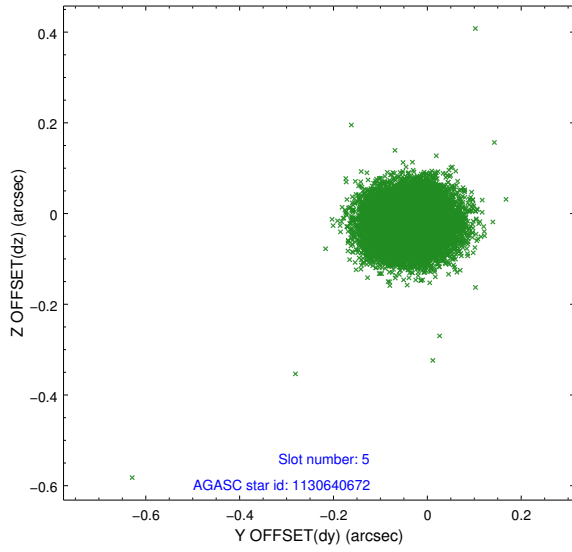
2.4.1 Slot 3



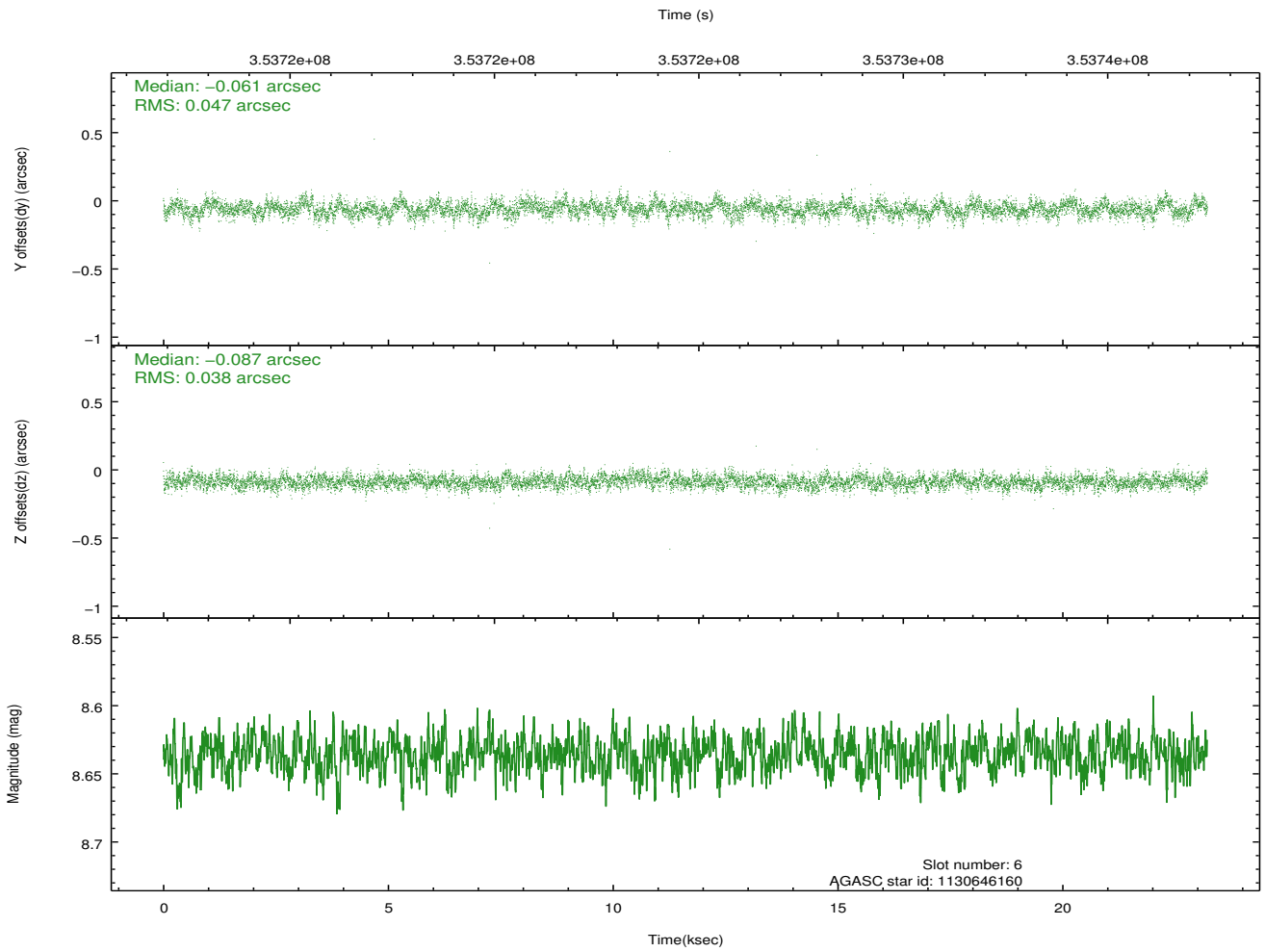
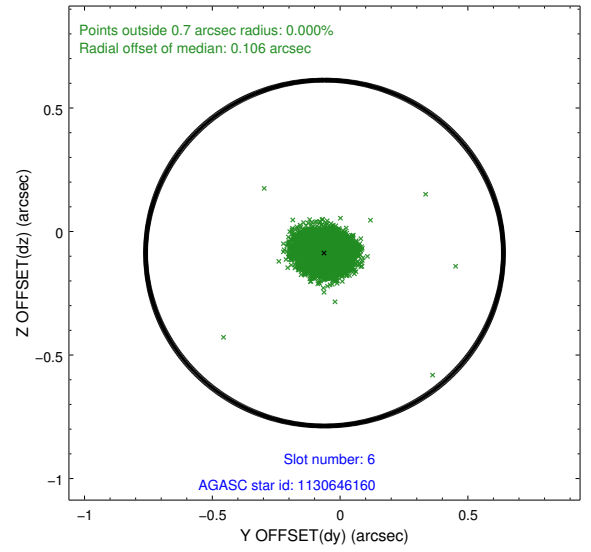
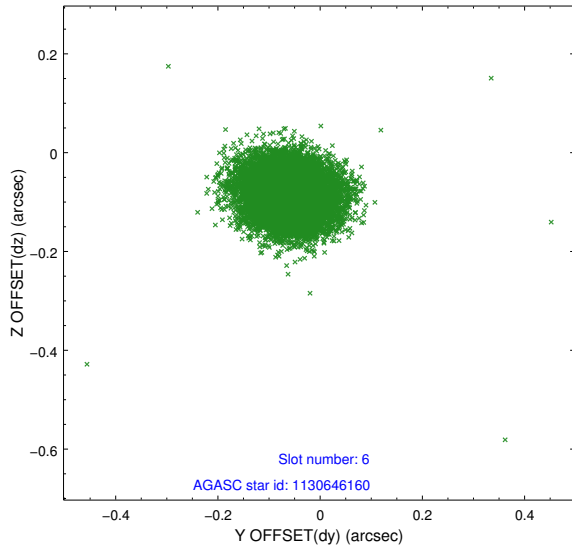
2.4.2 Slot 4



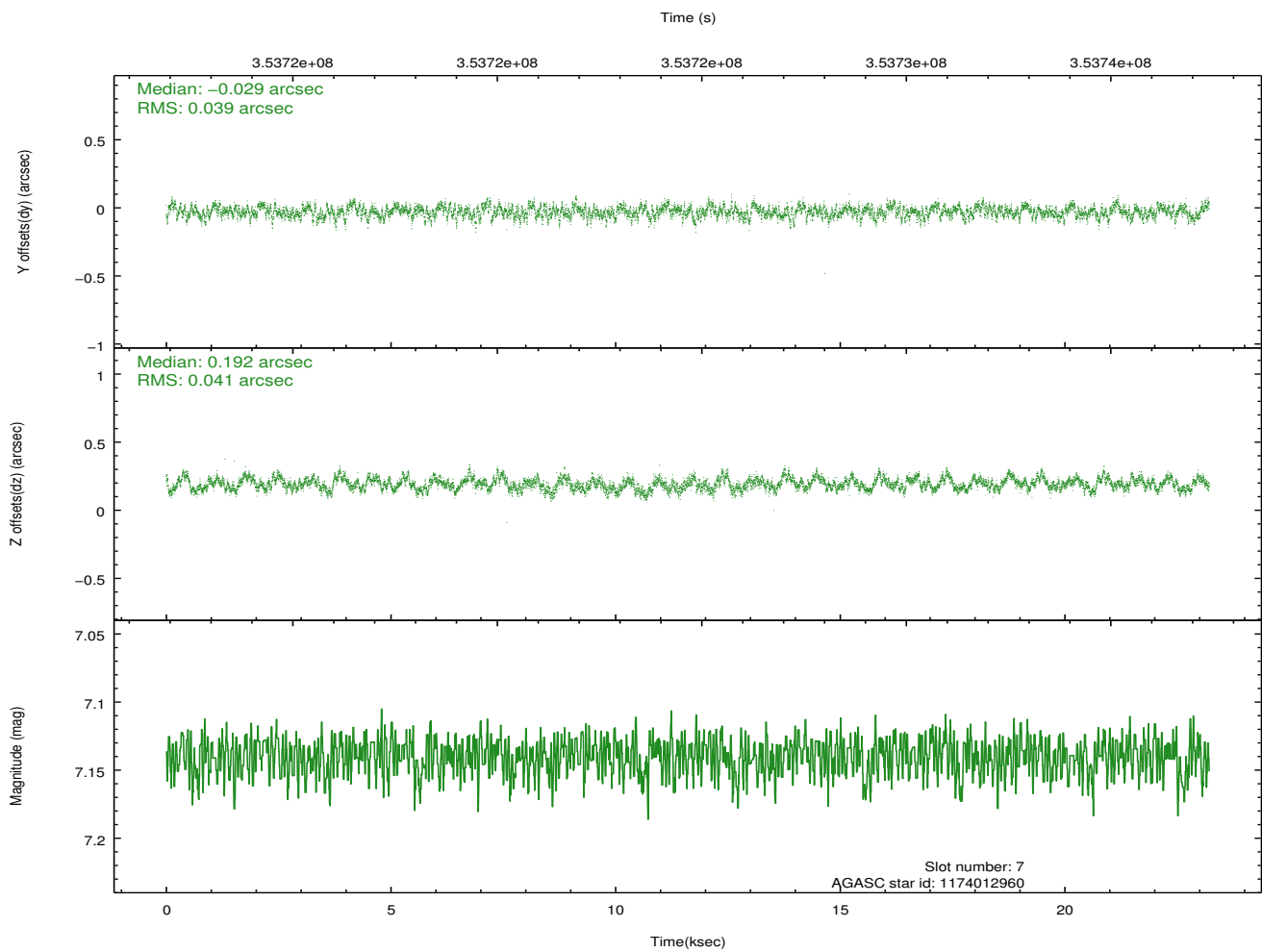
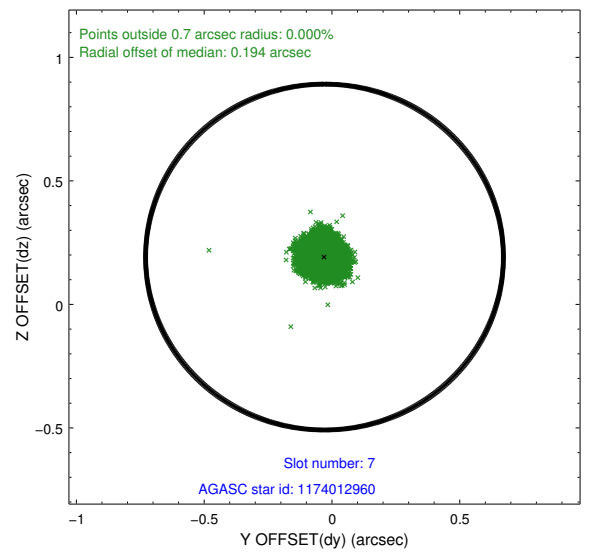
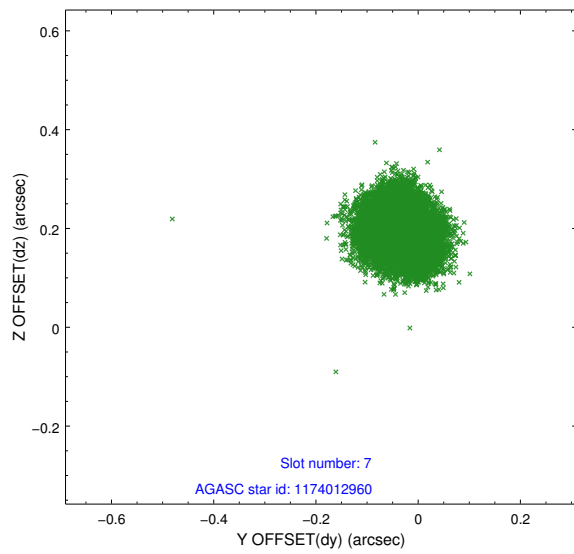
2.4.3 Slot 5



2.4.4 Slot 6

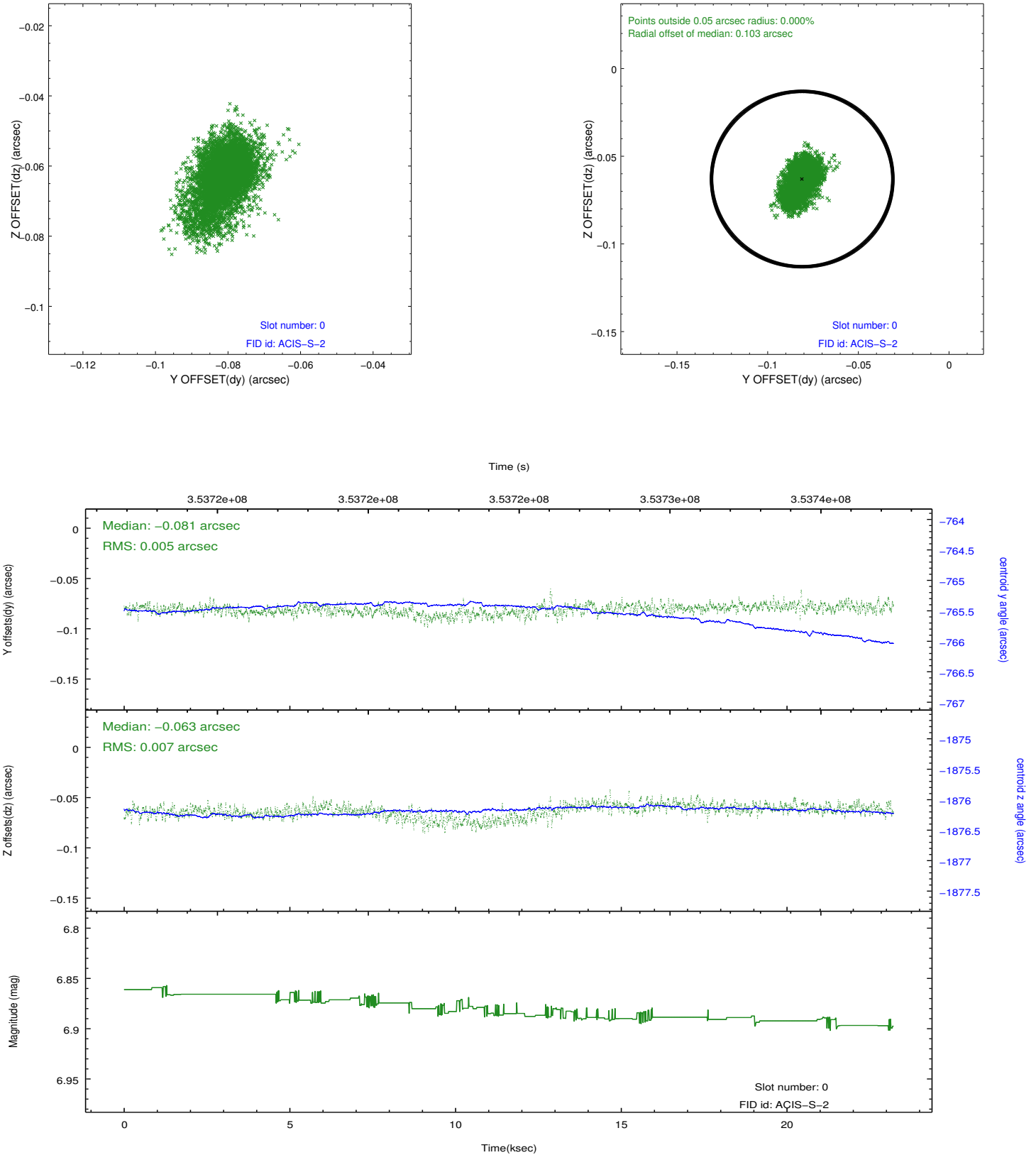


2.4.5 Slot 7

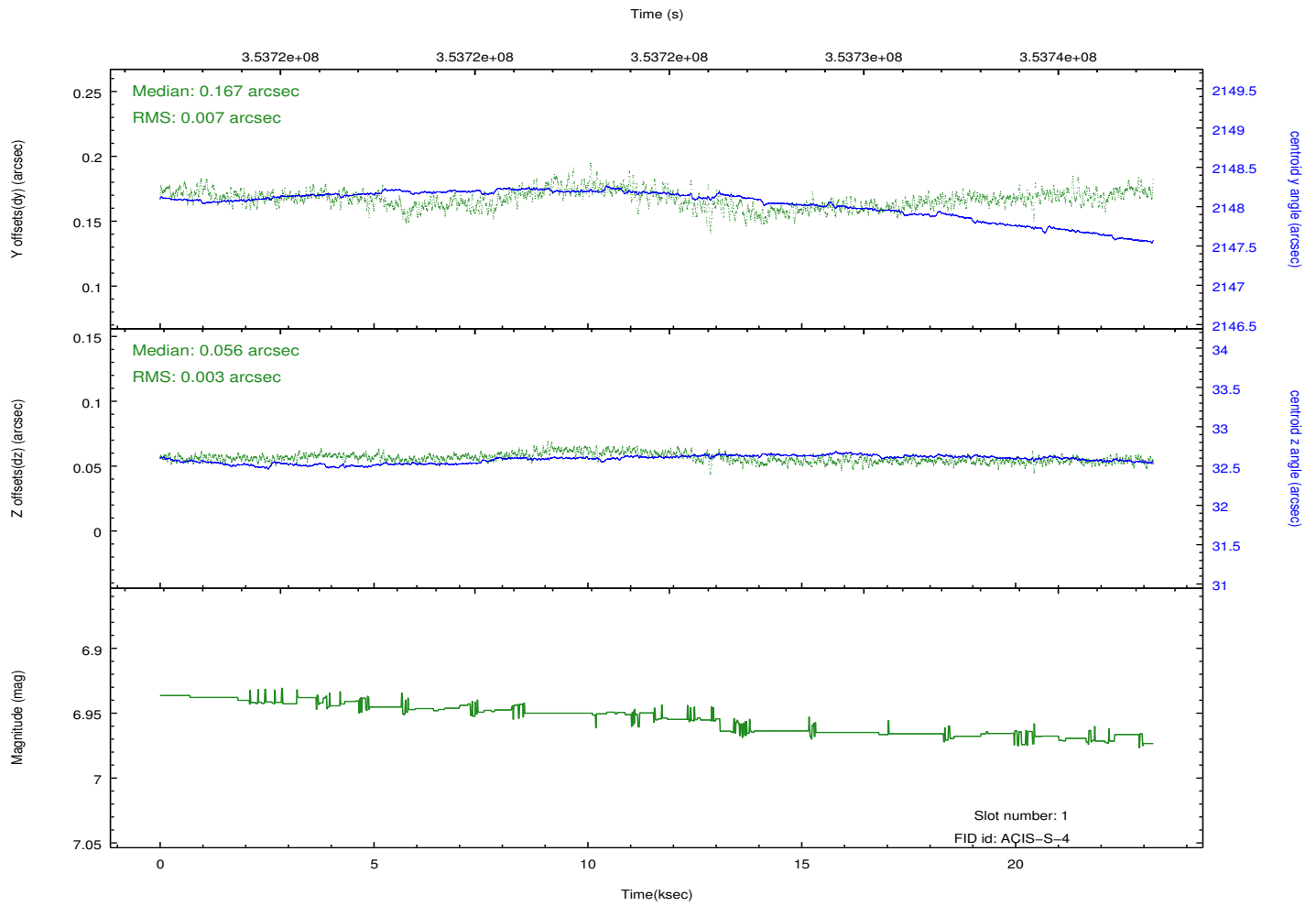
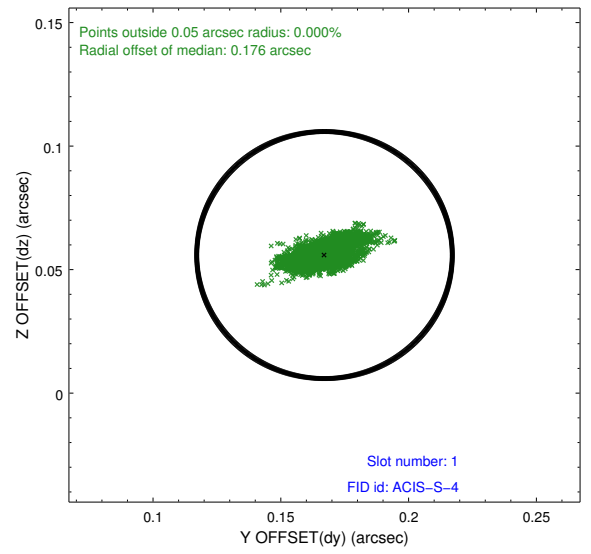
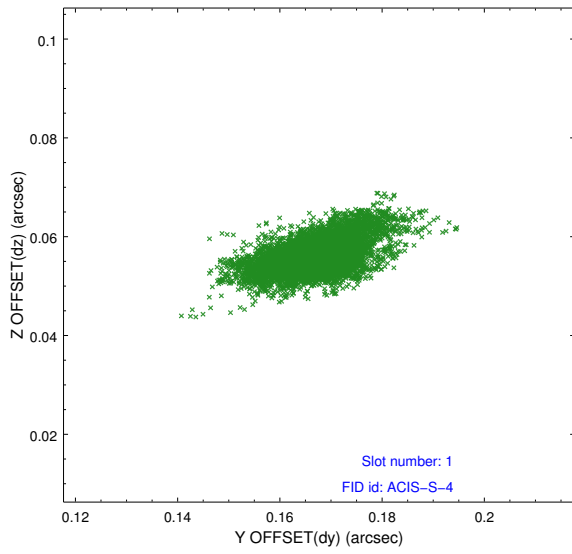


2.5 FID Slots

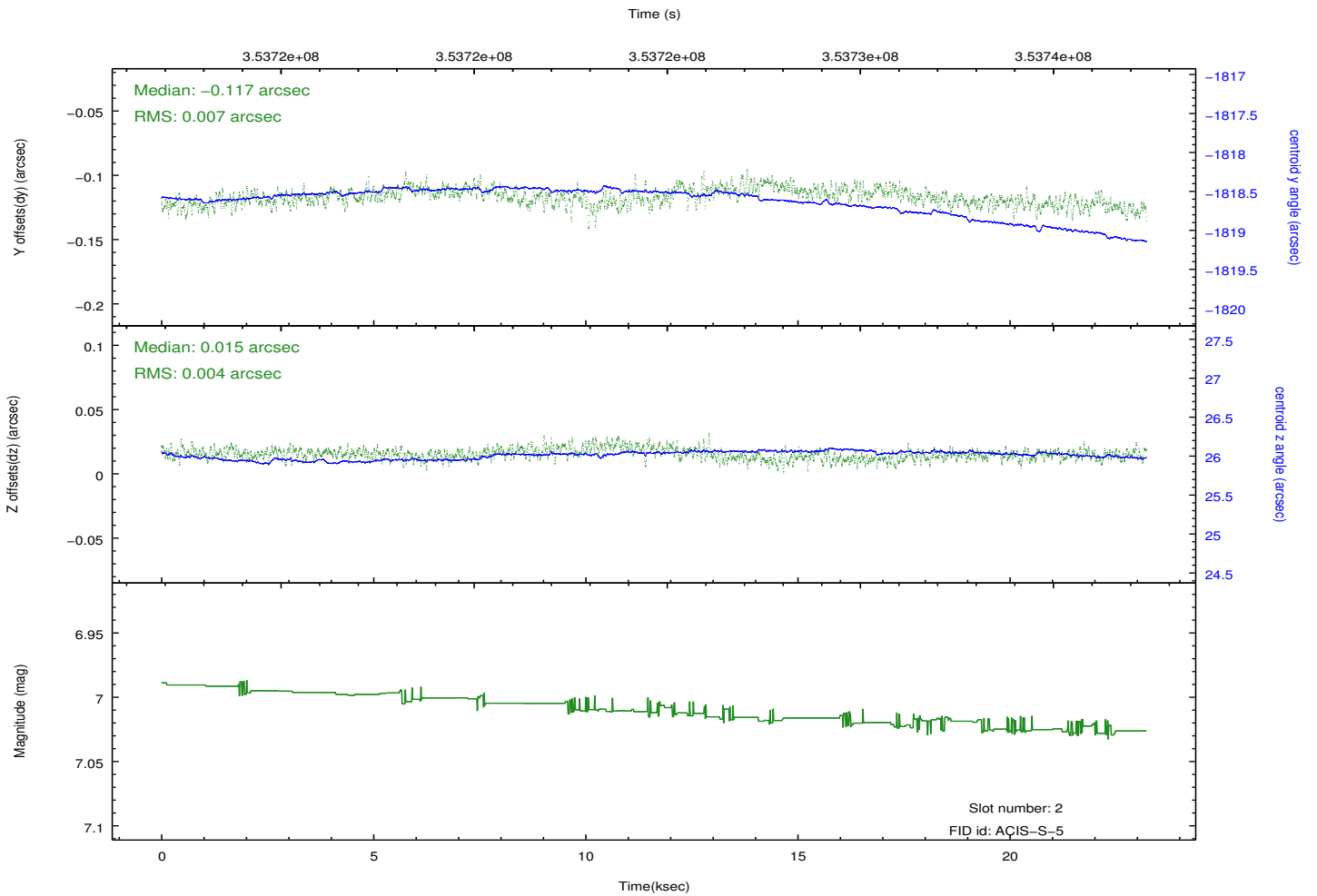
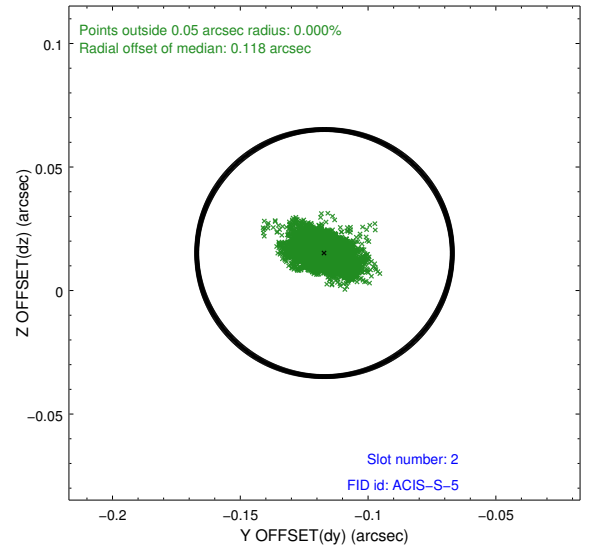
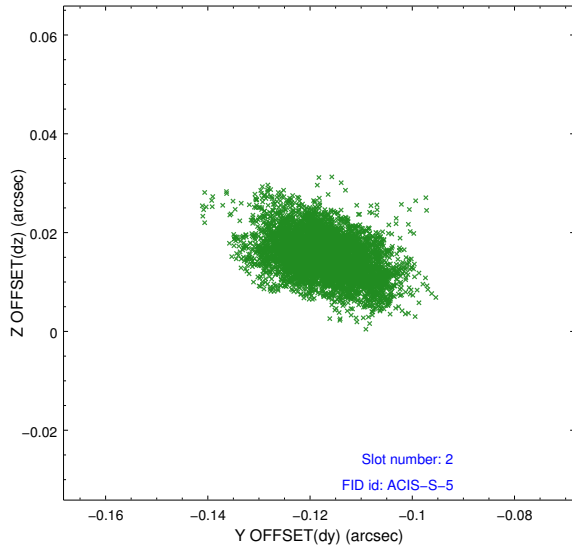
2.5.1 Slot 0



2.5.2 Slot 1

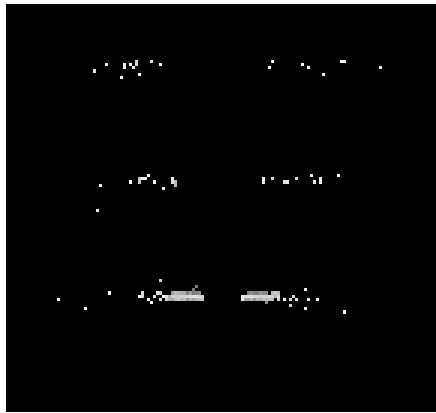


2.5.3 Slot 2

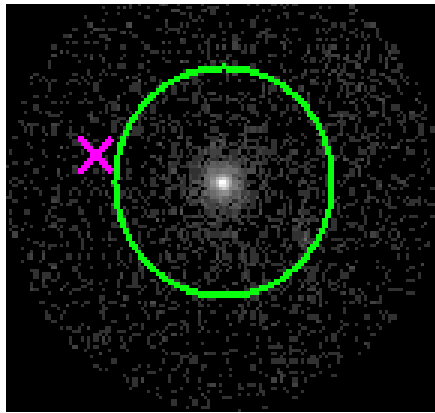


3 Gratings

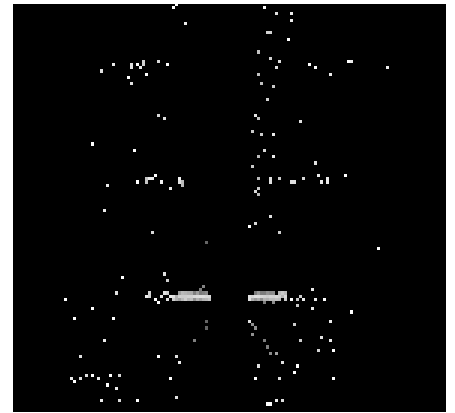
3.1 HEG Arm



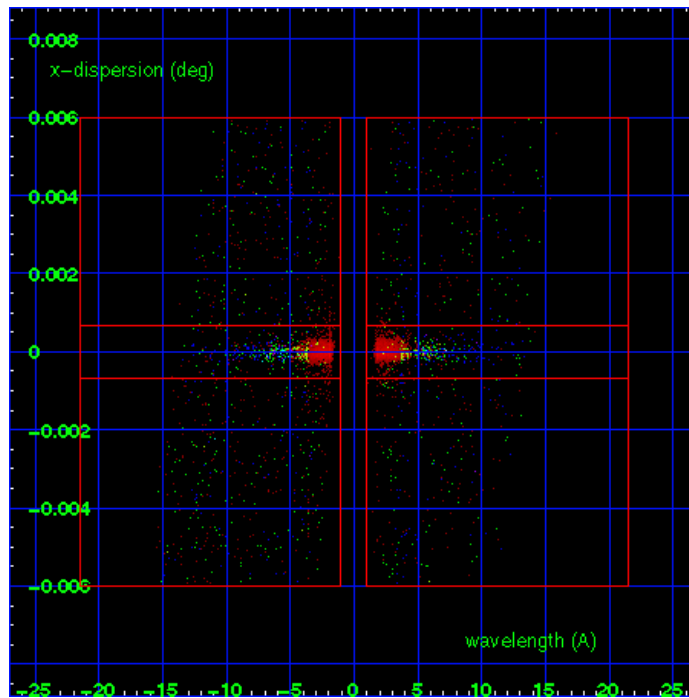
HEG Order Sort 123



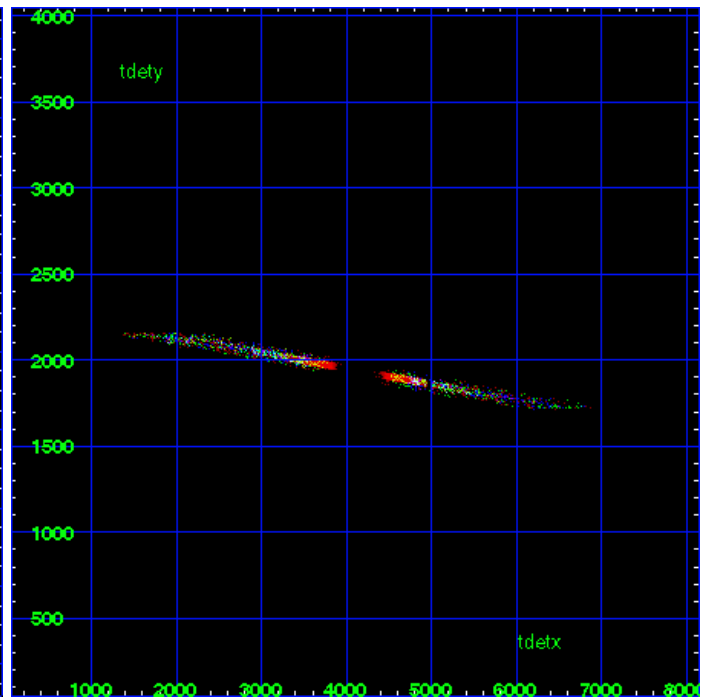
HEG Zero Order



HEG Order Sort ALL

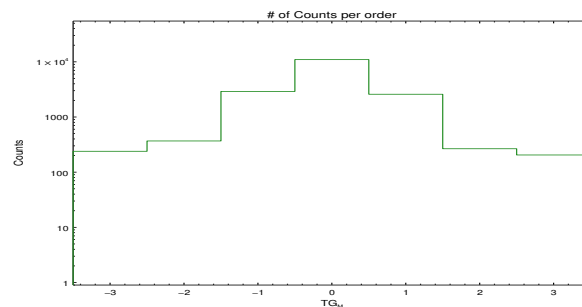


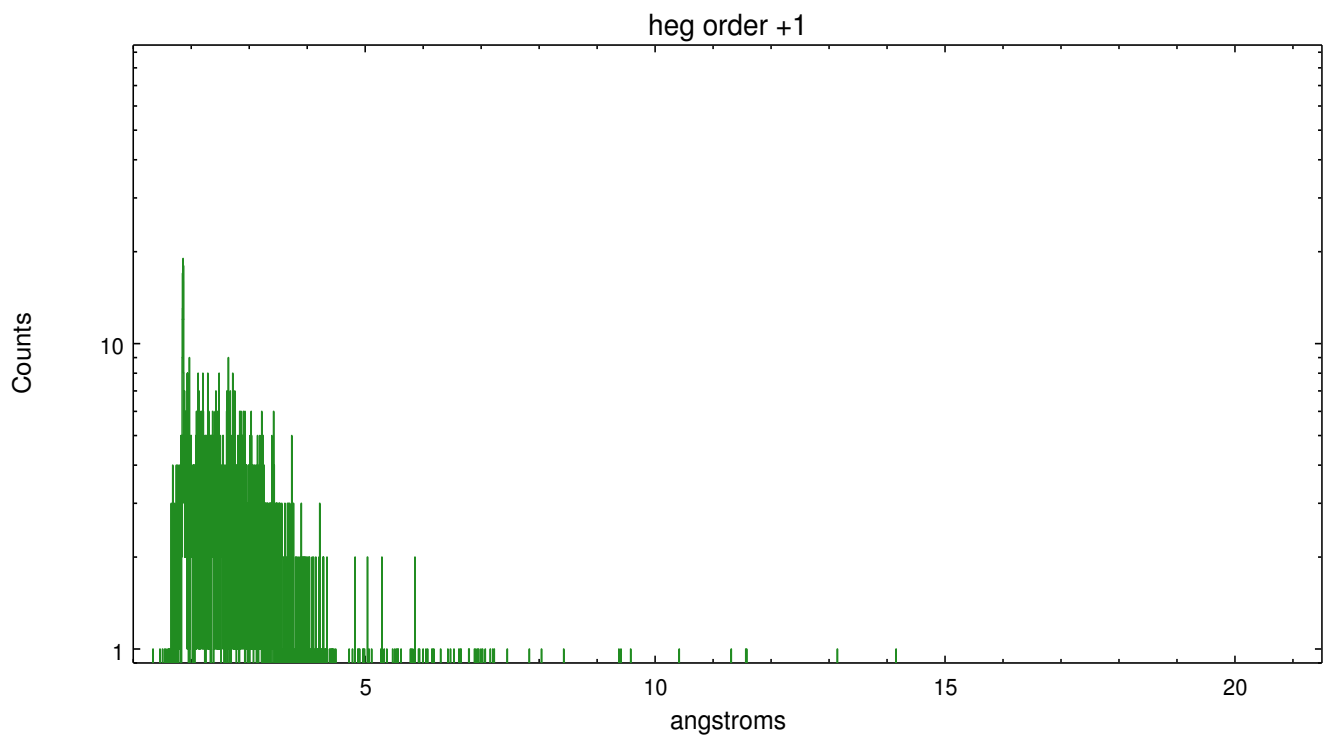
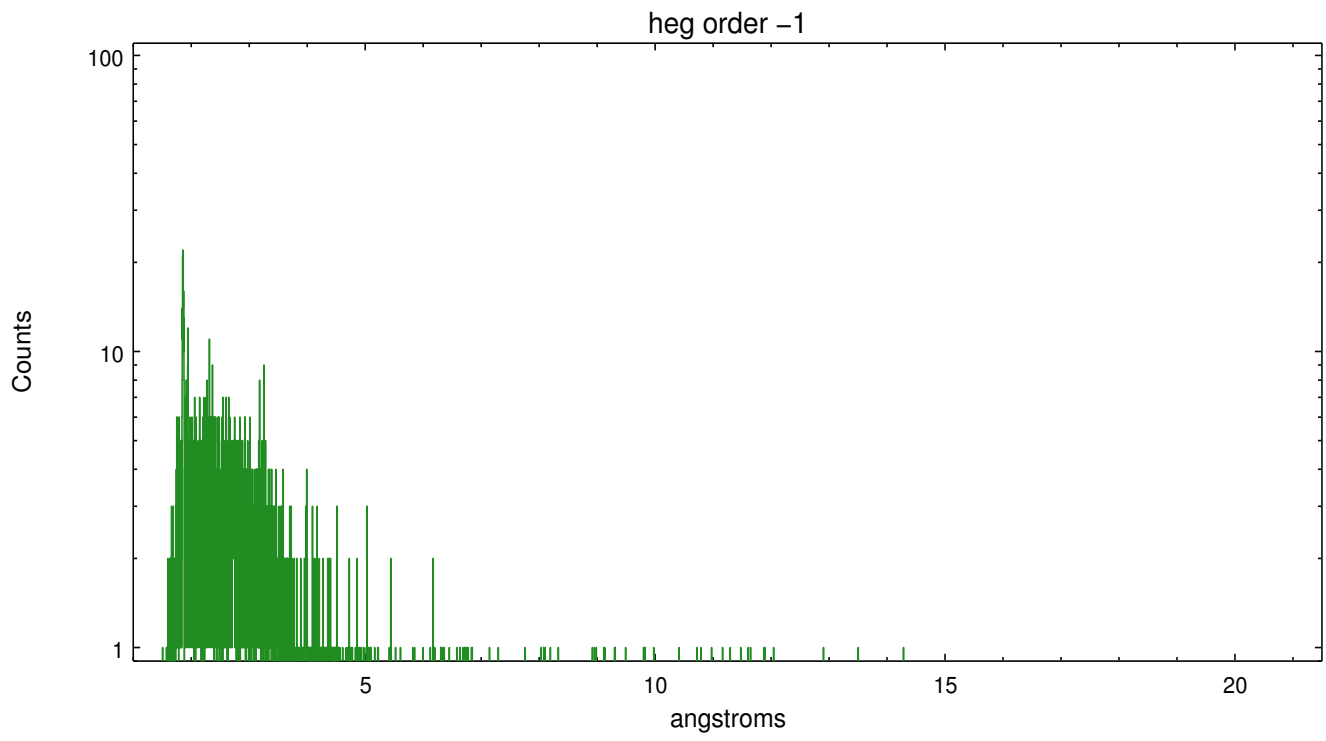
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	239	368	2910	10970	2583	266	205

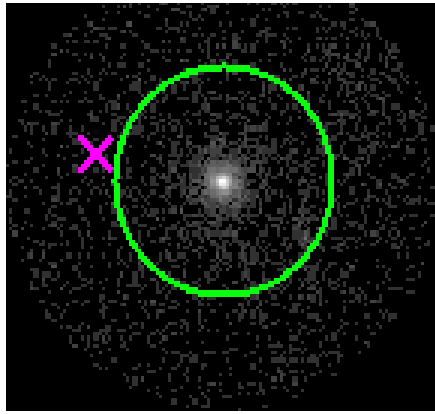




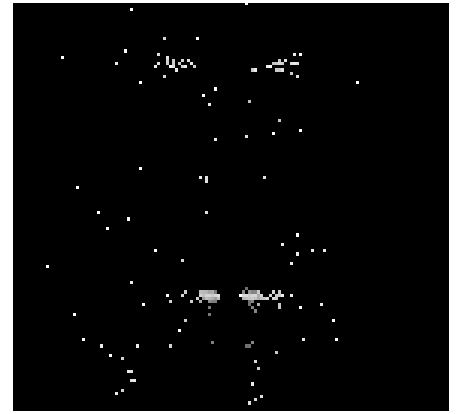
3.2 MEG Arm



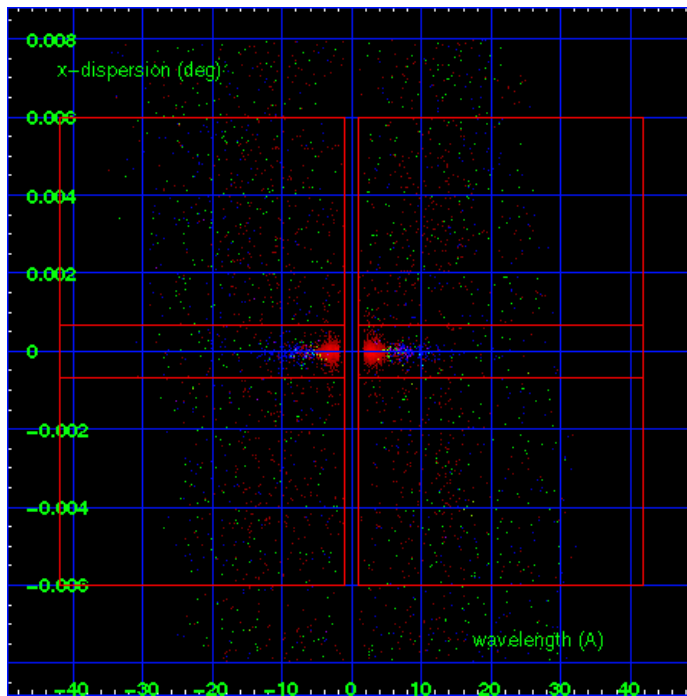
MEG Order Sort 123



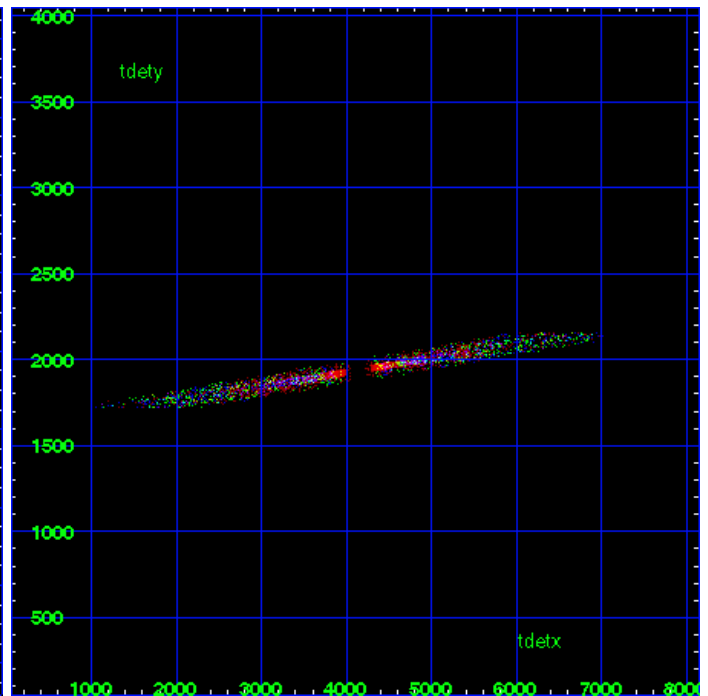
MEG Zero Order



MEG Order Sort ALL

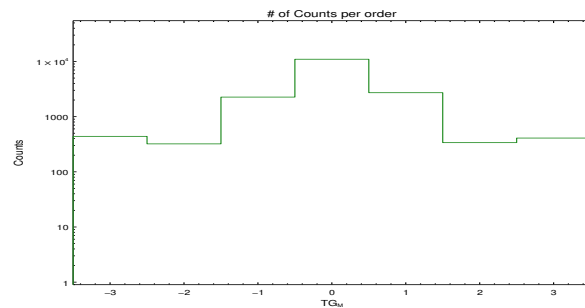


Spot Image MEG

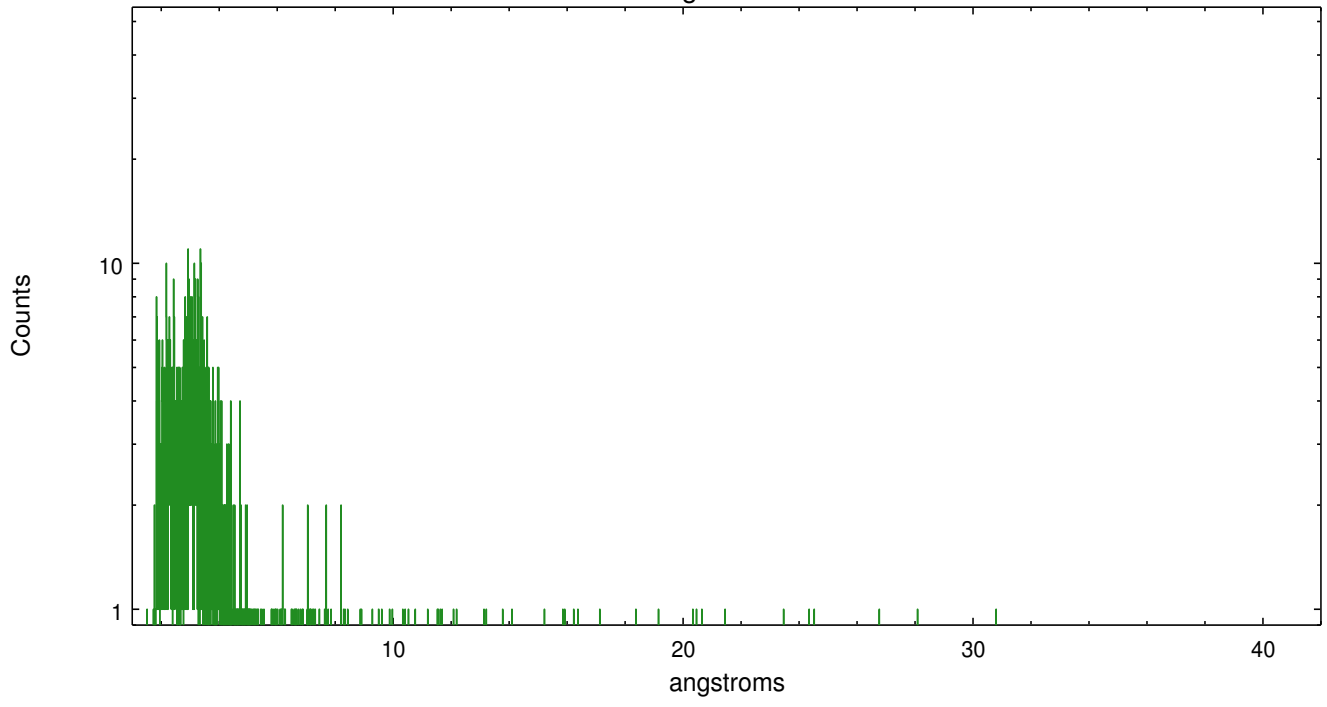


Full Detector MEG

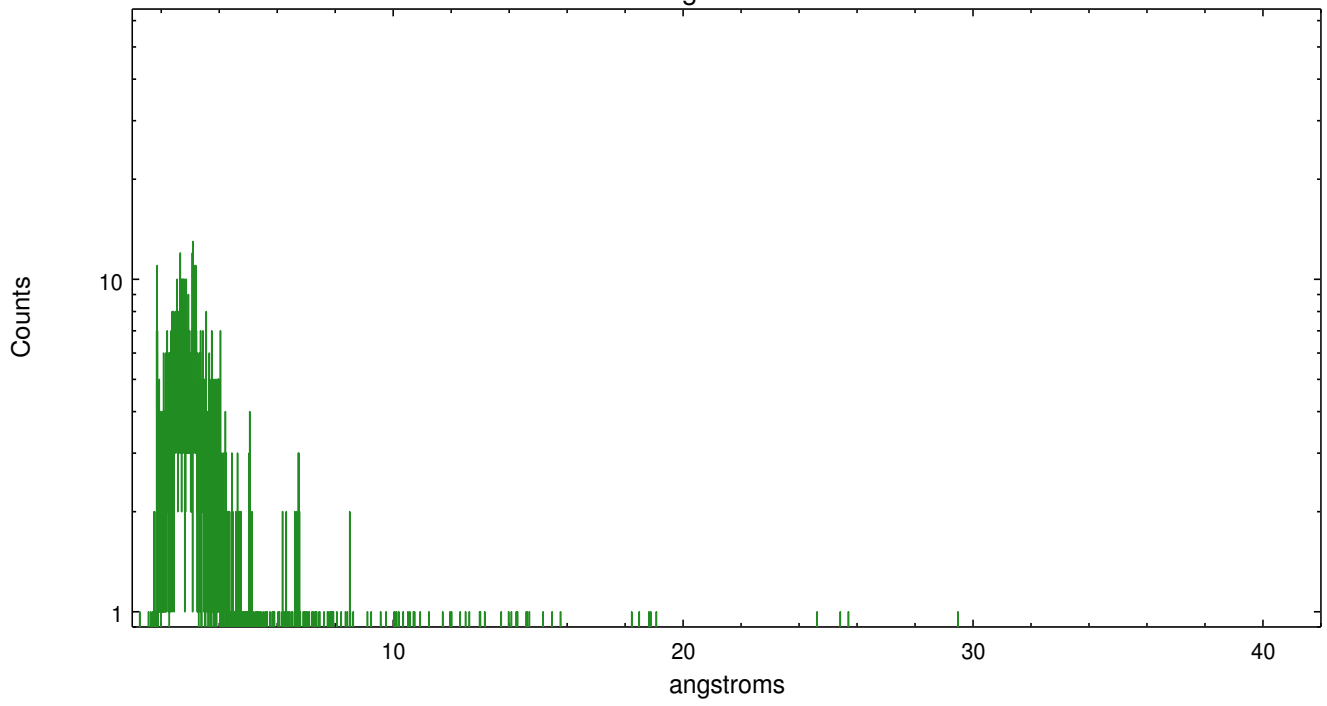
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	439	321	2261	10970	2717	338	409



meg order -1



meg order +1



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	22.5885

A.2 Comments