

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 12117 - L2 Version 2
Chandra X-Ray Center

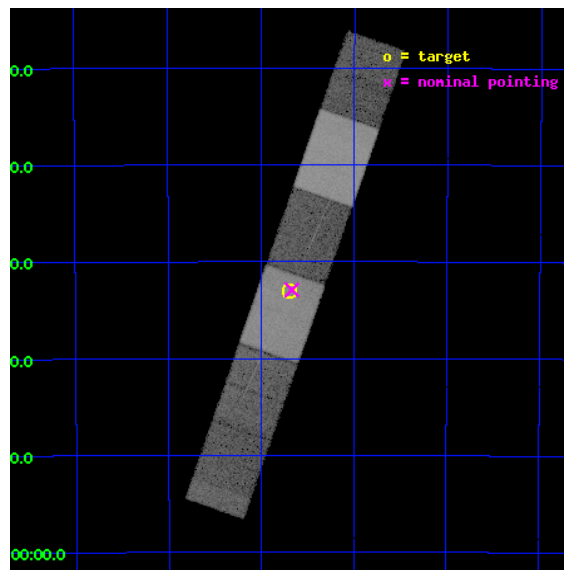
L2 Processing Date : Jul 3 2012

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1 Front

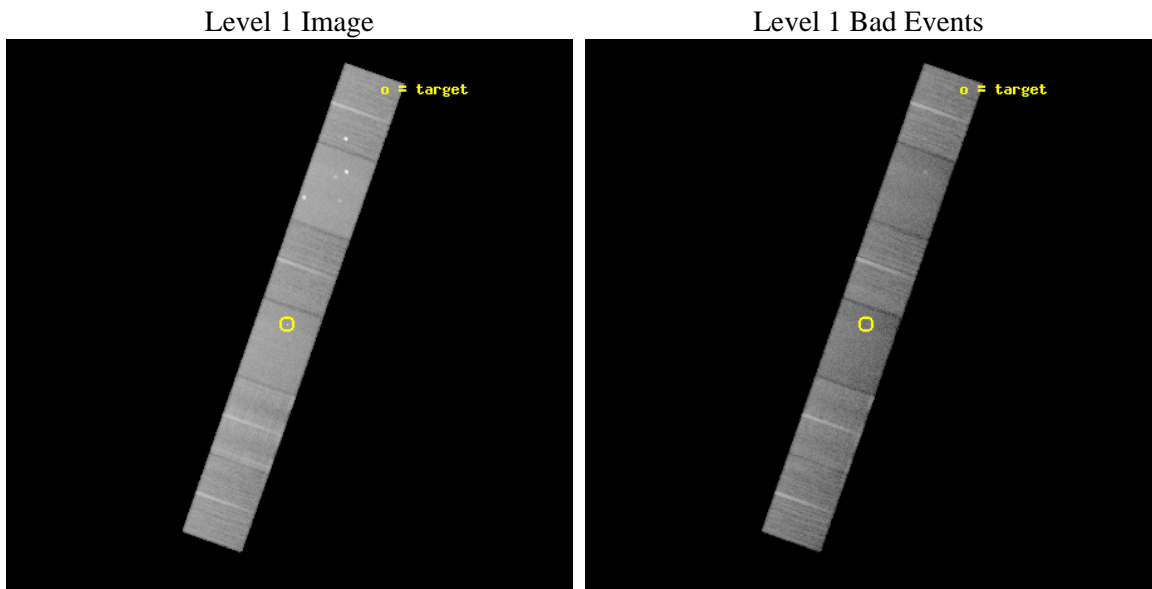
seq_num	702322	Sequence number
obs_id	12117	Observation id
title	The First Test of General Relativity in a Strong Gravitational Field	
observer	Dr. Norbert Schartel	Principal investigator
object	1H0707-495	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	107.172917	Observer's specified target RA [deg]
dec_targ	-49.551611	Observer's specified target Dec [deg]
ra_nom	107.16713775093	Nominal RA [deg]
dec_nom	-49.548552952532	Nominal Dec [deg]
roll_nom	109.32623379554	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30045.0	Sum of GTIs [s]
livetime	29559.747190127	Livetime [s]
ontime4	30045.0	Sum of GTIs [s]
ontime5	30045.0	Sum of GTIs [s]
ontime6	30045.0	Sum of GTIs [s]
ontime7	30045.0	Sum of GTIs [s]
ontime8	30045.0	Sum of GTIs [s]
ontime9	30045.0	Sum of GTIs [s]
l2events	276117	Number of level 2 events



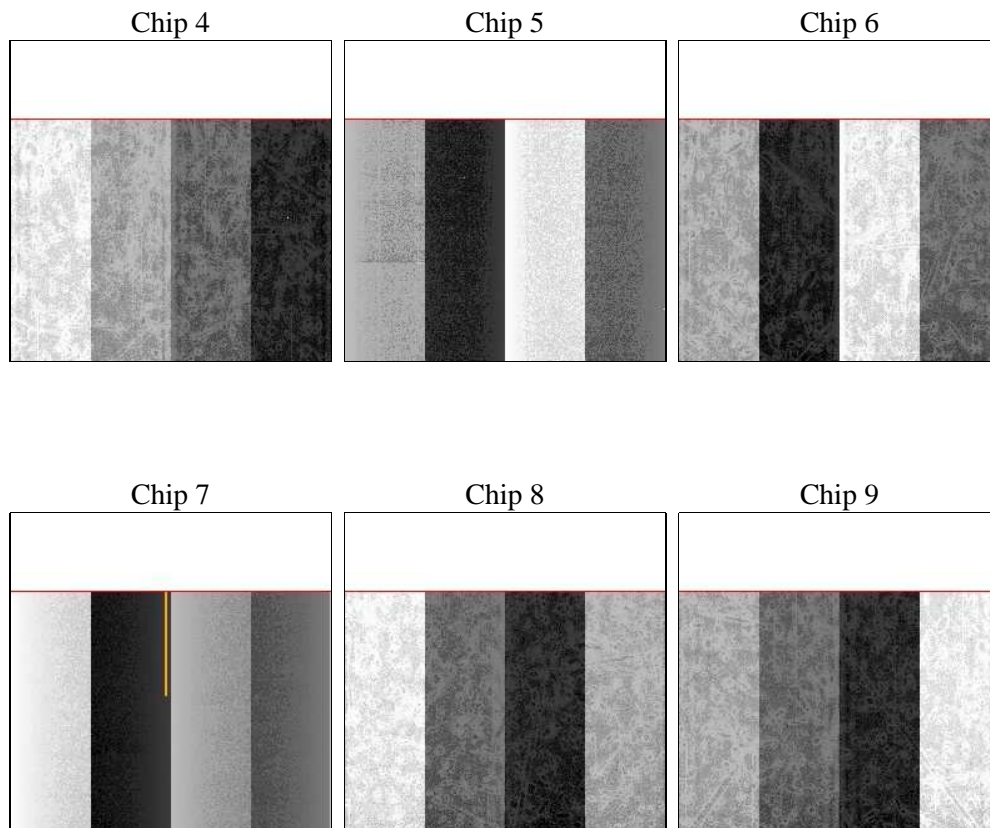
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30045.0	Sum of GTIs [s]
caldbver	4.5.0	 	ontime4	30045.0	Sum of GTIs [s]
date	2012-07-03T08:27:32	Date and time of file creation	ontime5	30045.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	30045.0	Sum of GTIs [s]
			ontime7	30045.0	Sum of GTIs [s]
			ontime8	30045.0	Sum of GTIs [s]
			ontime9	30045.0	Sum of GTIs [s]
			l1events	1184471	Number of level 1 events

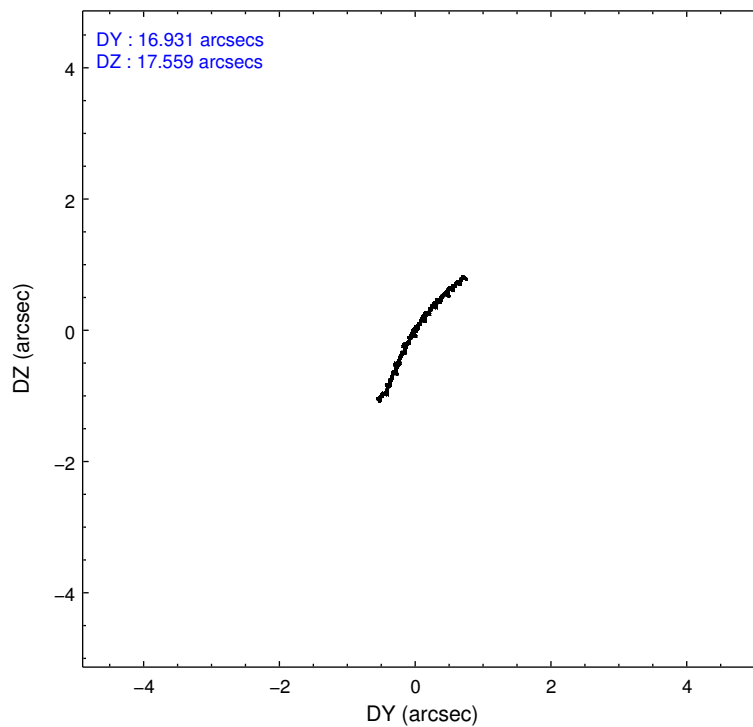
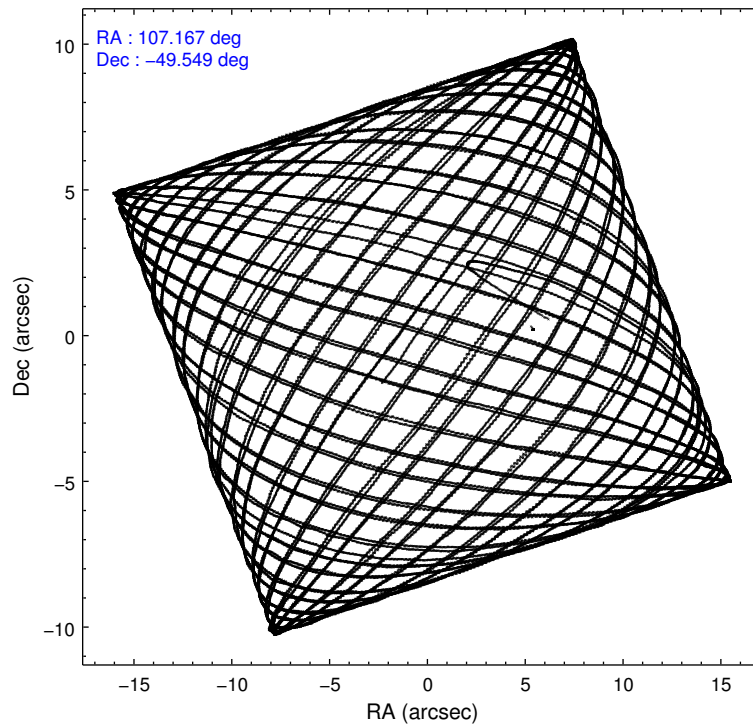
2.1.4 Events

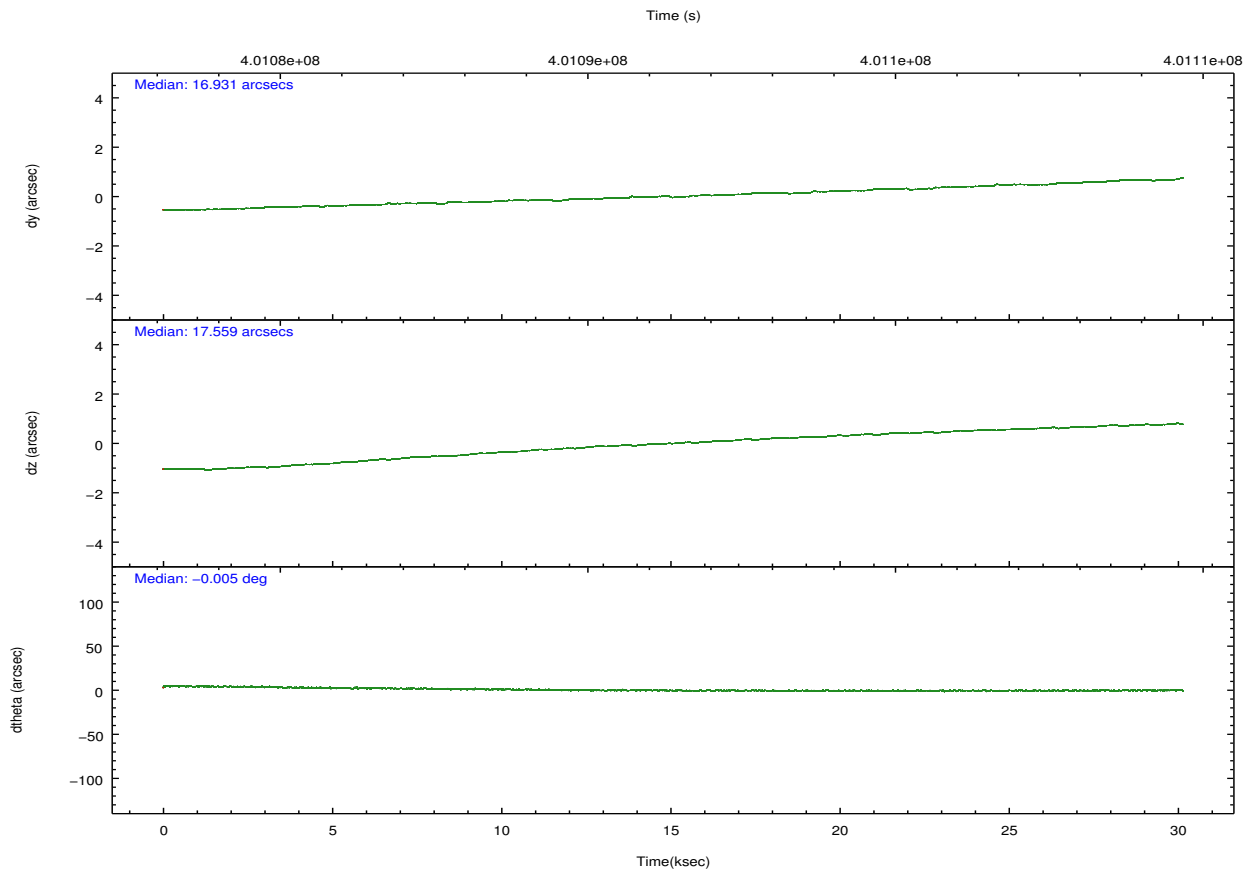
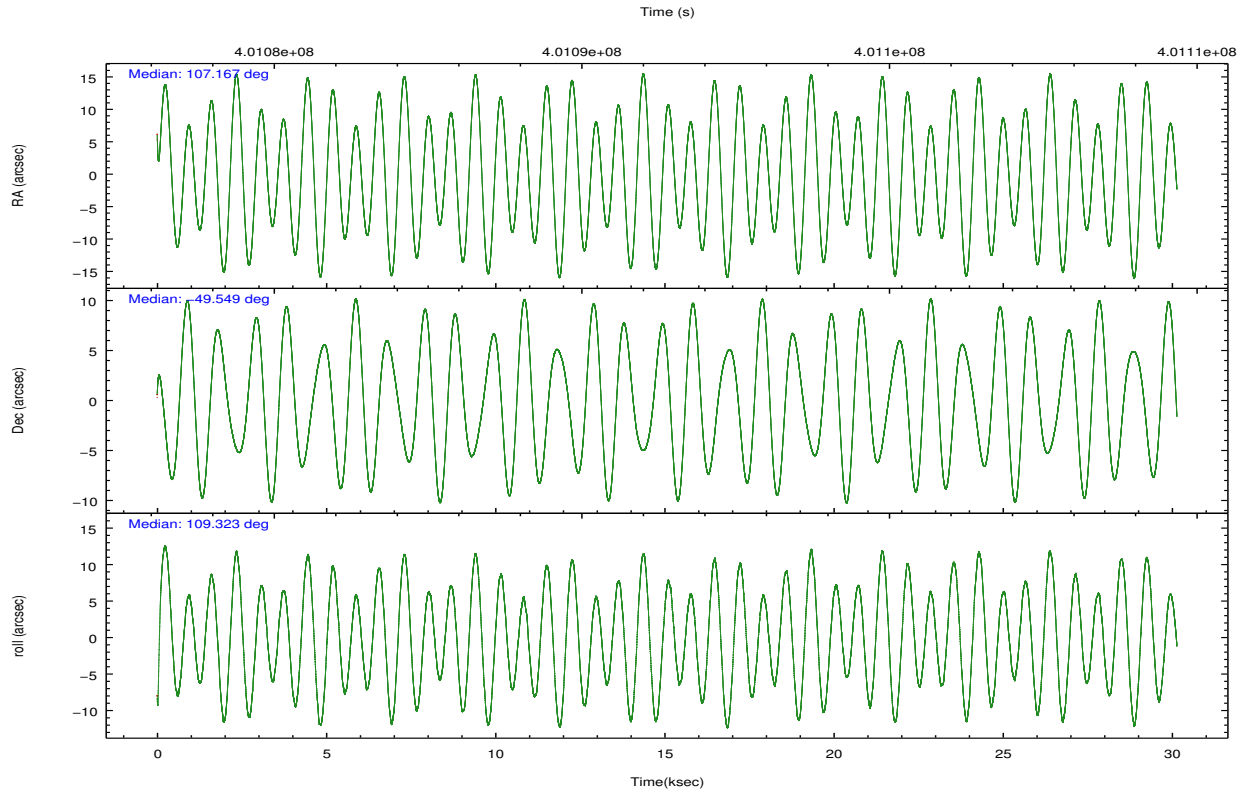
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	193022	252487	164056	200000	213770	161136	grade 0 events	14931	19529	6756	8709	17269	7202
rejected events	165347	122163	144848	107485	156102	141221		7%	7%	4%	4%	8%	4%
rejected %	85%	48%	88%	53%	73%	87%	grade 1 events	207	742	76	232	180	89
								0%	0%	0%	0%	0%	0%
							grade 2 events	4989	36571	4282	19094	13313	4381
								2%	14%	2%	9%	6%	2%
							grade 3 events	2238	5790	2129	8732	6070	2113
								1%	2%	1%	4%	2%	1%
							grade 4 events	2051	5460	2031	8339	5618	2175
								1%	2%	1%	4%	2%	1%
							grade 5 events	7175	19948	7265	20868	10602	7879
								3%	7%	4%	10%	4%	4%
							grade 6 events	3469	62985	4013	47656	15403	4046
								1%	24%	2%	23%	7%	2%
							grade 7 events	157962	101462	137504	86370	145315	133251
								81%	40%	83%	43%	67%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	107.199462	107.1671377509313	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-49.566085	-49.54855295253175	Subarray start row	1	1
[deg] Pointing Roll	109.194209	109.3262337955431	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)	401077829.184000	401076652.98892			
Observation start date	2010-09-17T02:29:23	2010-09-17T02:10:52			
[s] Observation end time (MET)	401107829.184000	401108762.65307			
Observation end date	2010-09-17T10:49:23	2010-09-17T11:06:02			
Read mode	TIMED	TIMED			

2.3 Aspect



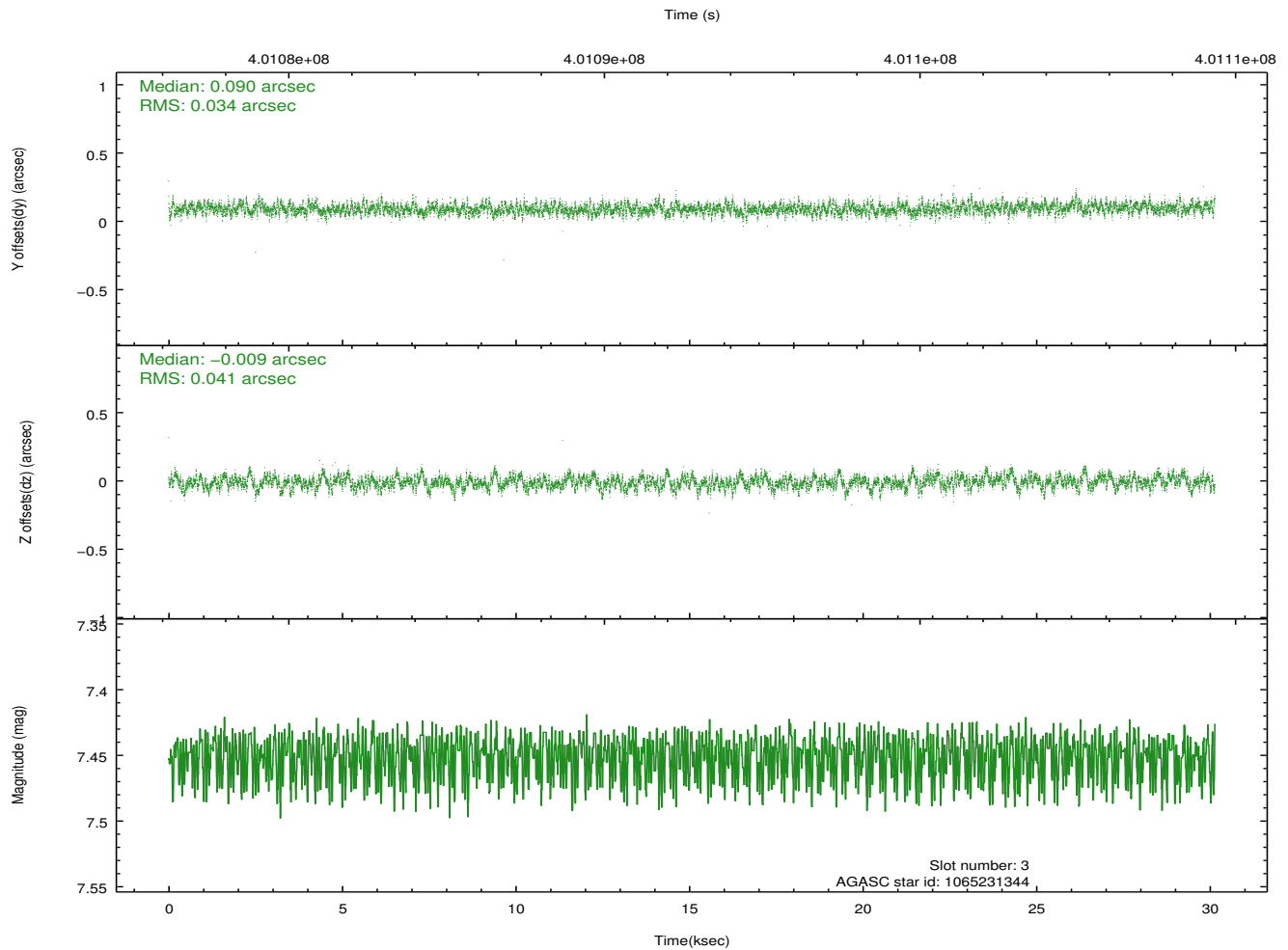
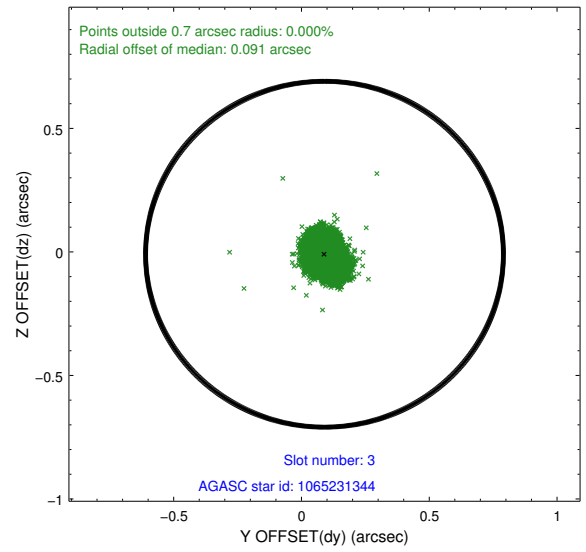
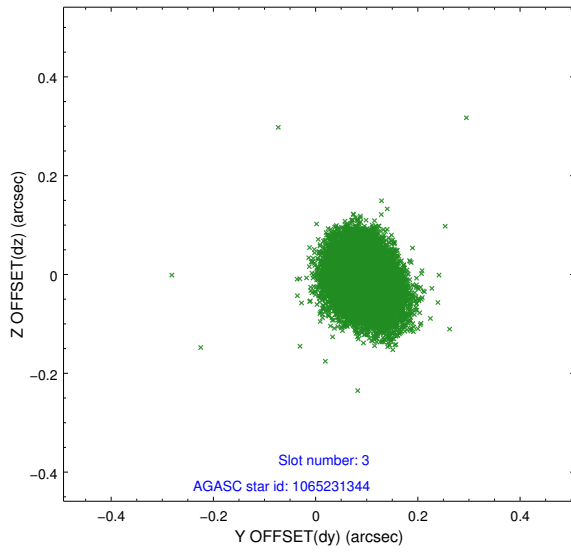


Slot Statistics

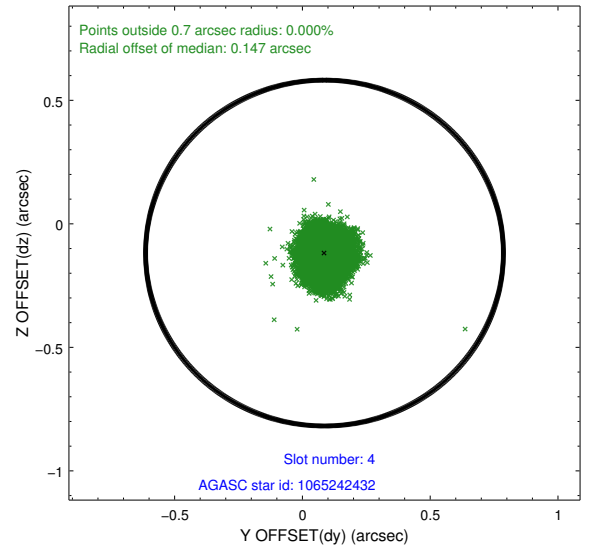
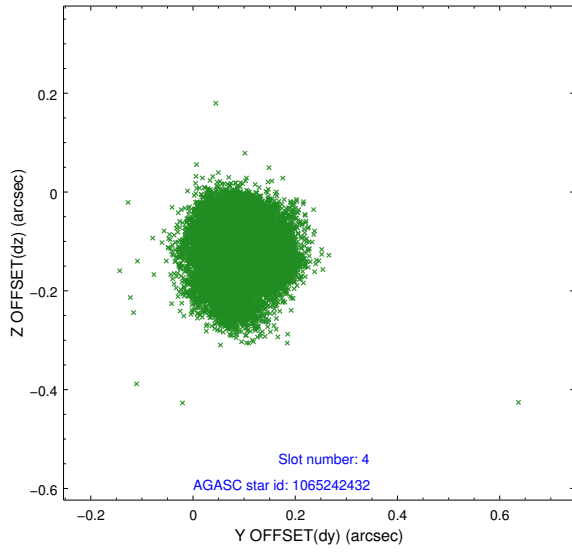
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	7353	-0.122	-0.046	0.022	0.036	0.000000	0.000000	-769.87	-1801.09
1	FID	ACIS-S-4	6.98	7353	0.221	0.073	0.009	0.017	0.000000	0.000000	2143.68	107.48
2	FID	ACIS-S-5	7.01	7352	-0.130	-0.019	0.015	0.031	0.000000	0.000000	-1822.66	101.08
3	GUIDE	1065231344	7.45	14705	0.090	-0.009	0.056	0.094	108.108874	-49.825503	-1588.08	-1683.30
4	GUIDE	1065242432	7.81	14705	0.086	-0.118	0.078	0.123	107.094192	-50.100313	-1736.82	861.82
5	GUIDE	1065105600	7.55	14702	-0.184	-0.139	0.069	0.111	106.289320	-49.073997	2366.31	1449.18
6	GUIDE	1065238920	7.33	14704	0.029	0.157	0.064	0.101	108.105033	-49.327001	103.00	-2284.89
7	GUIDE	1065231152	6.97	14703	-0.027	0.114	0.053	0.084	108.467342	-49.936613	-2248.77	-2327.74

2.4 Star Slots

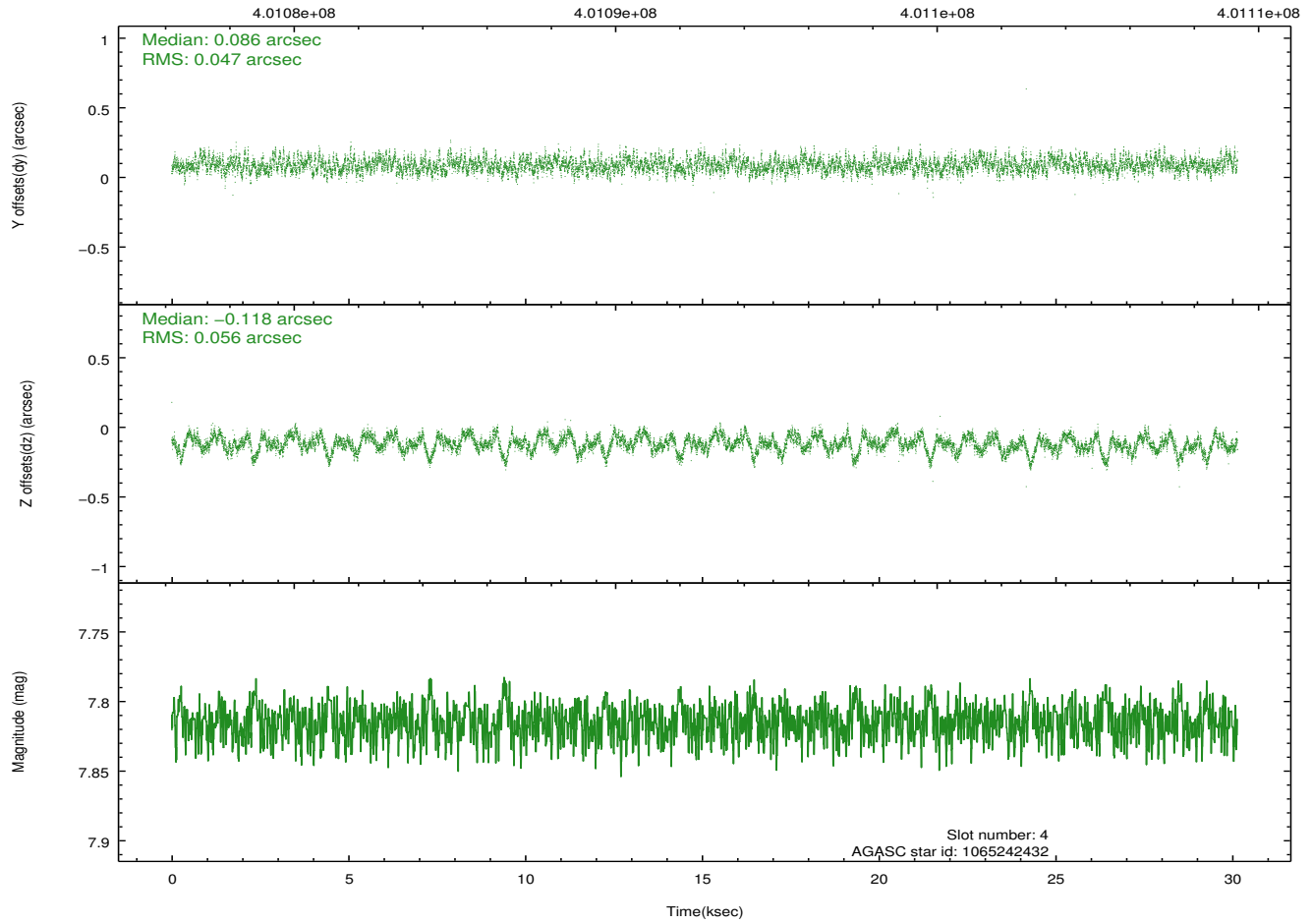
2.4.1 Slot 3



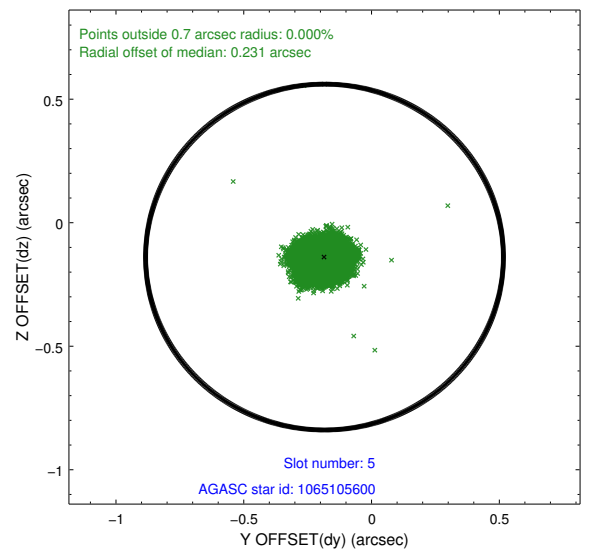
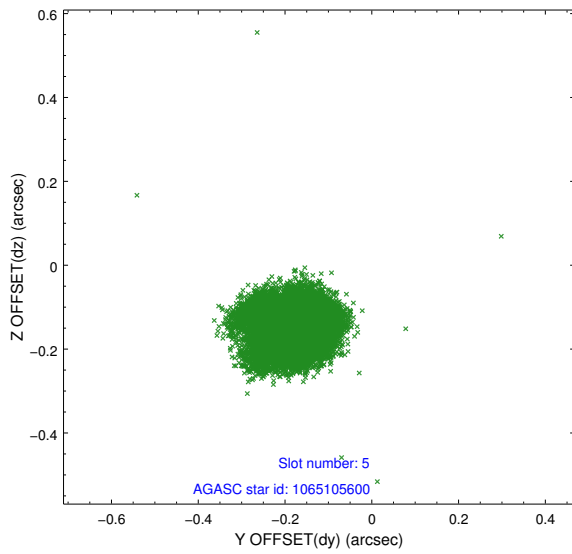
2.4.2 Slot 4



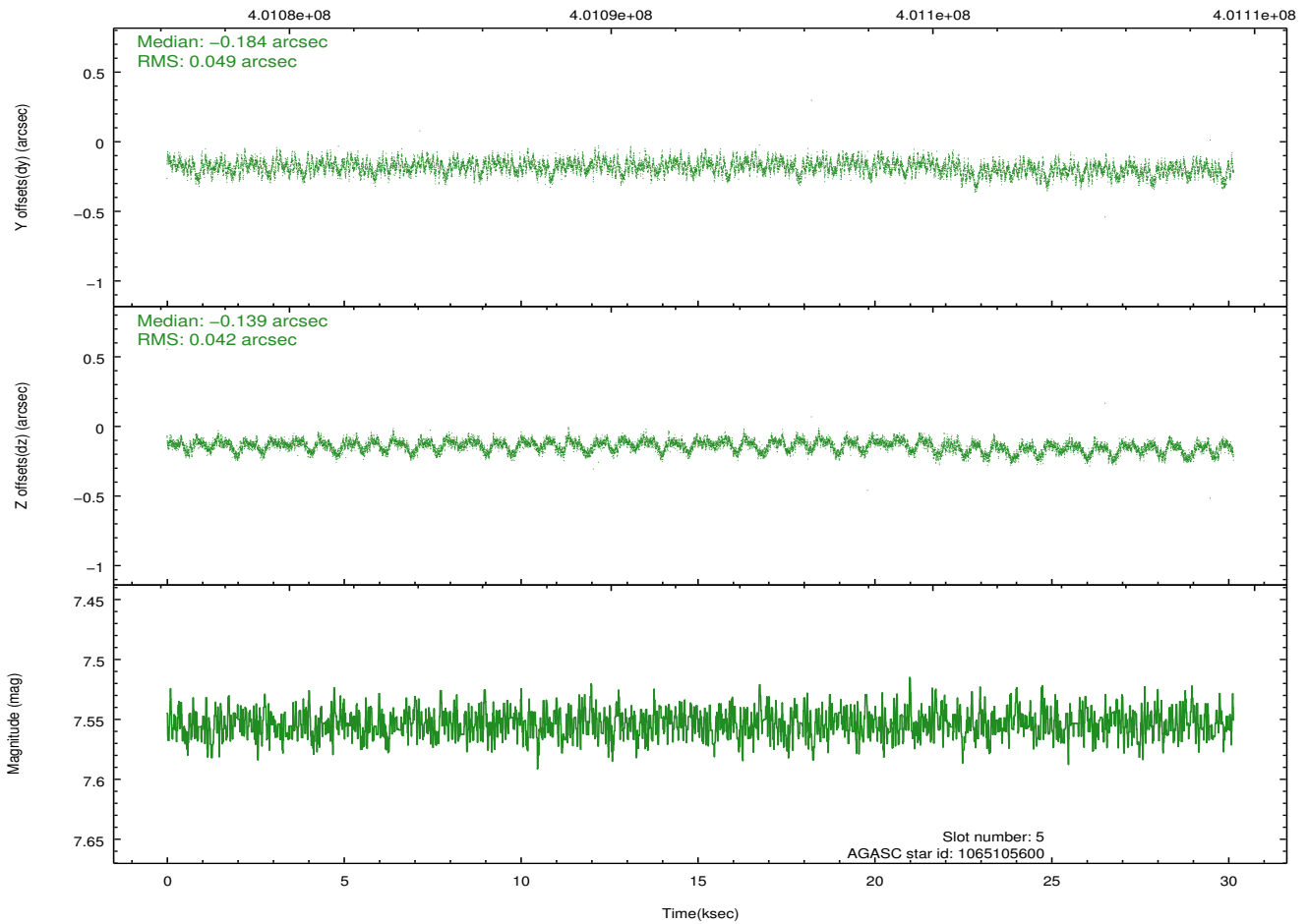
Time (s)



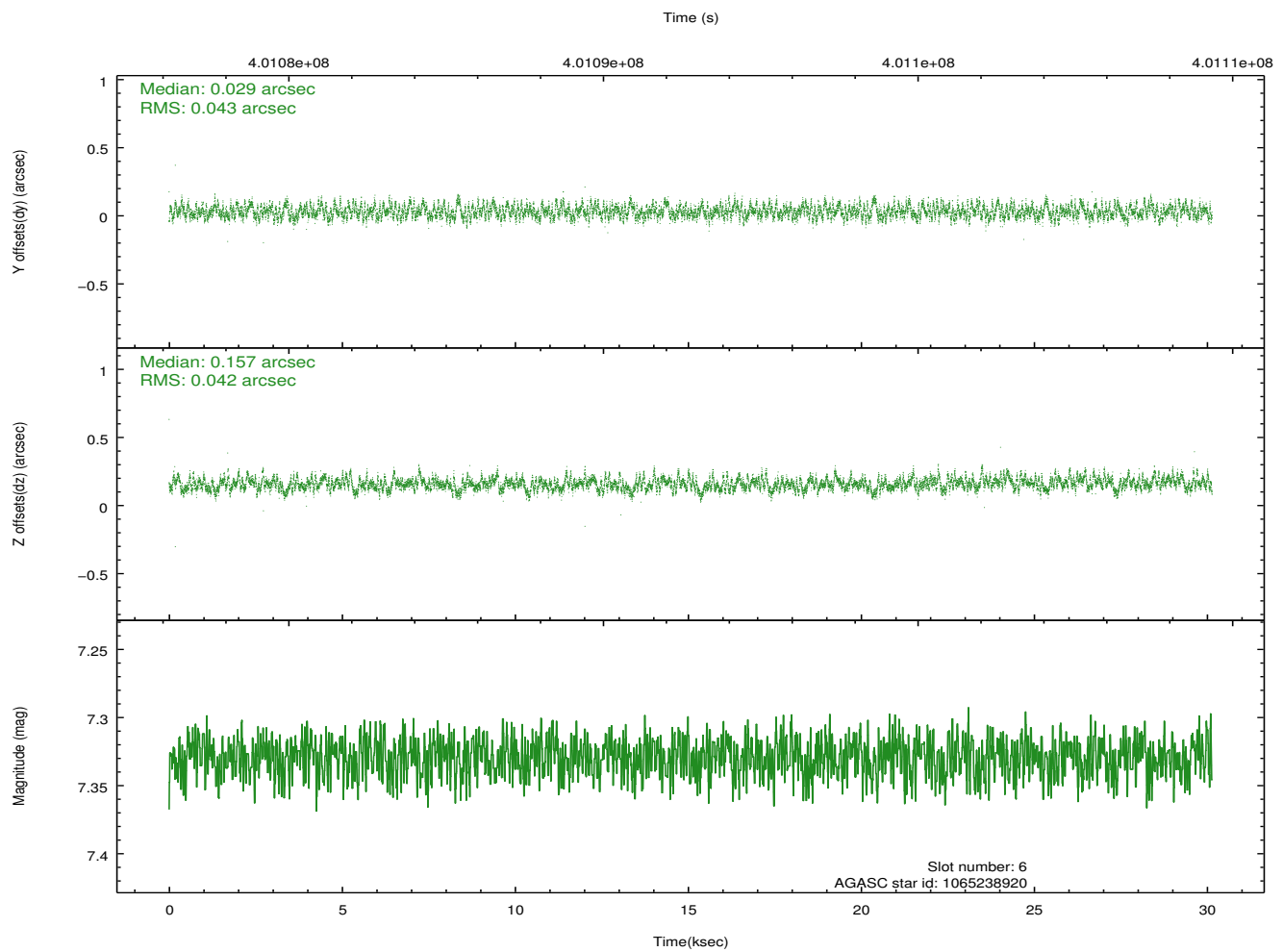
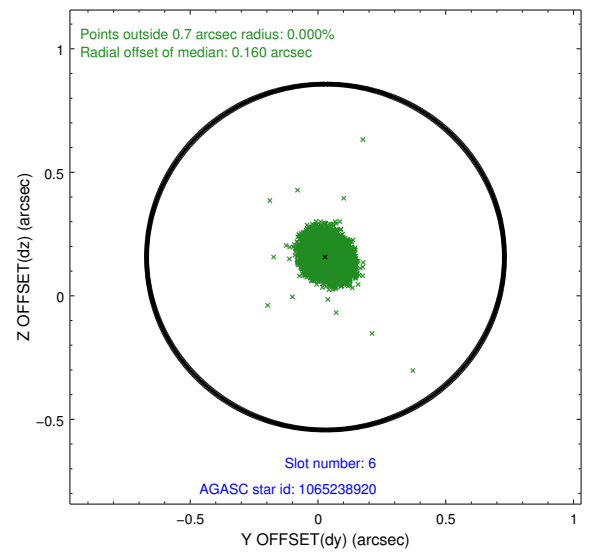
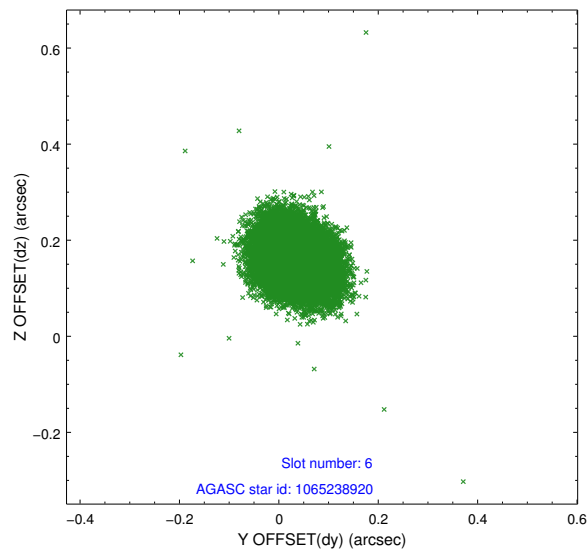
2.4.3 Slot 5



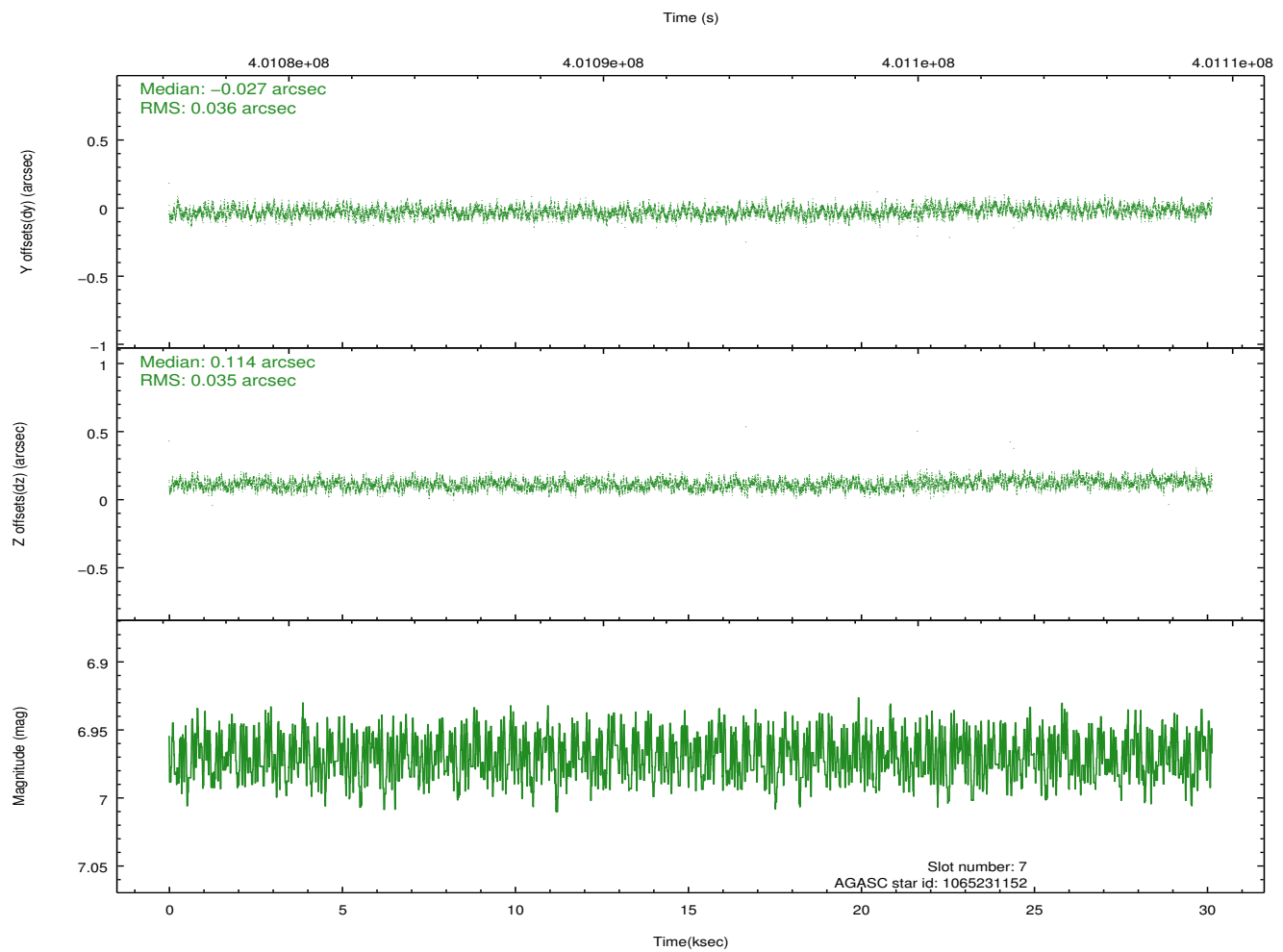
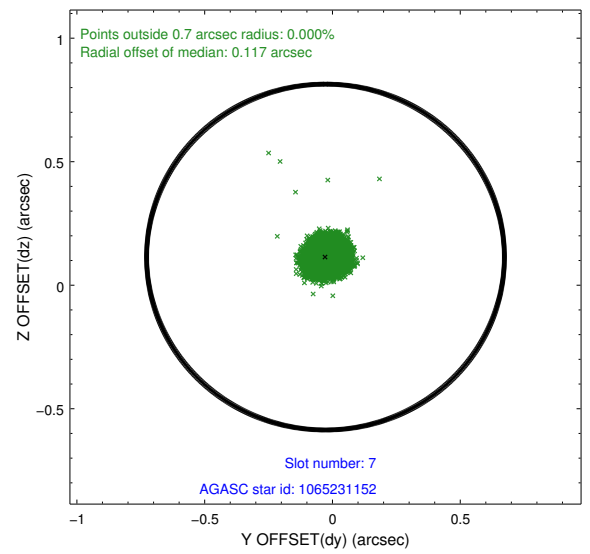
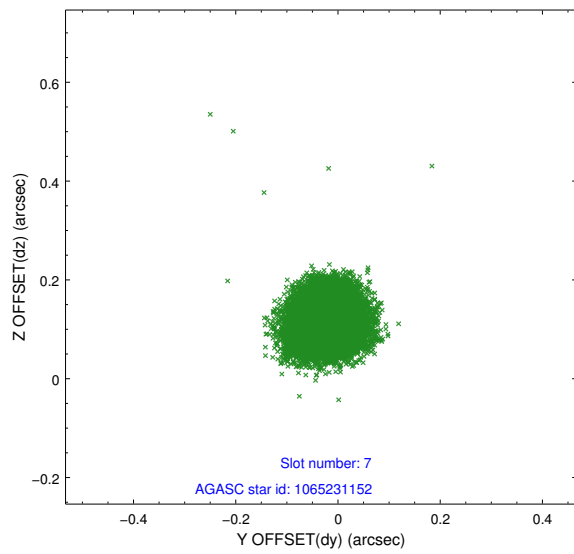
Time (s)



2.4.4 Slot 6

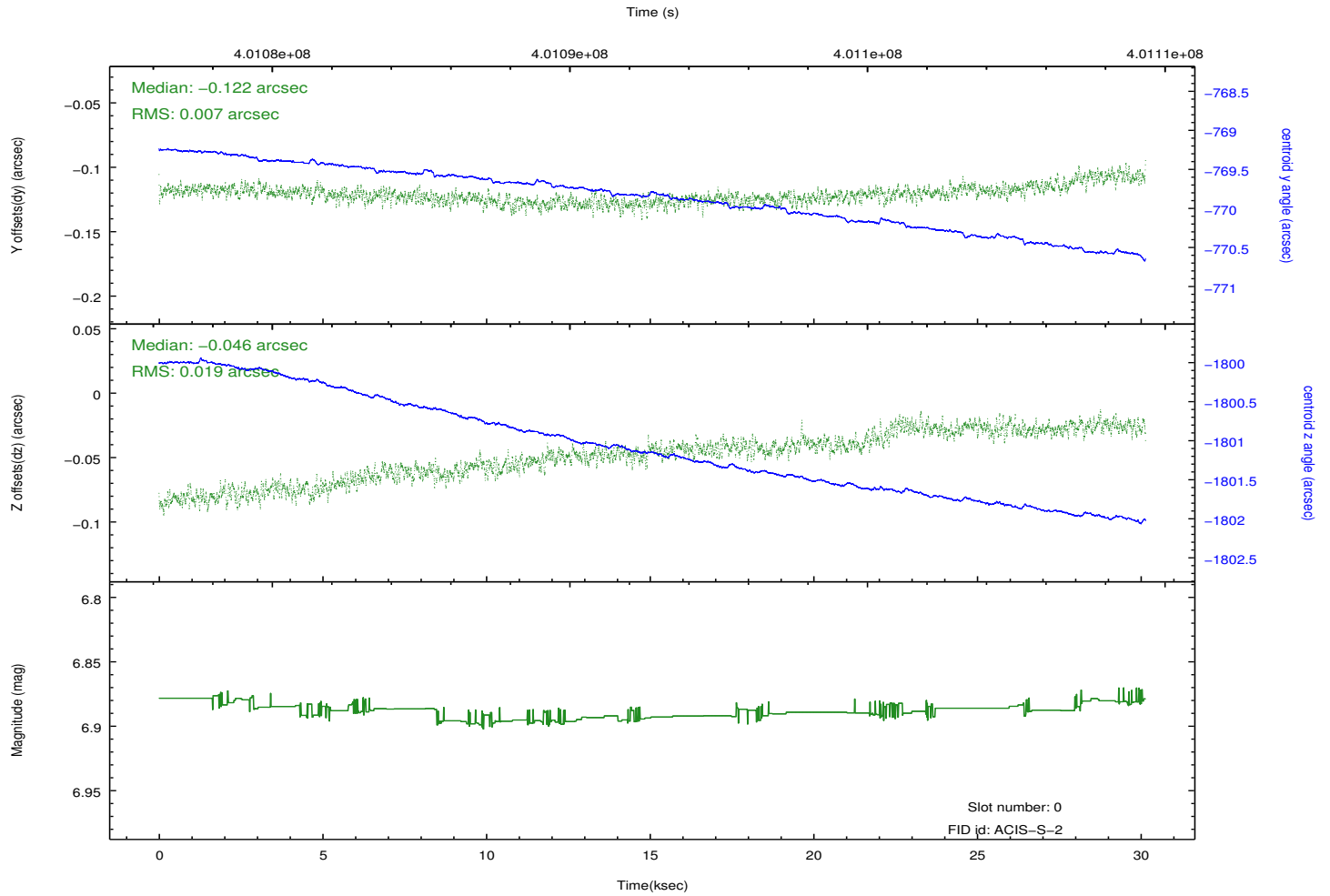
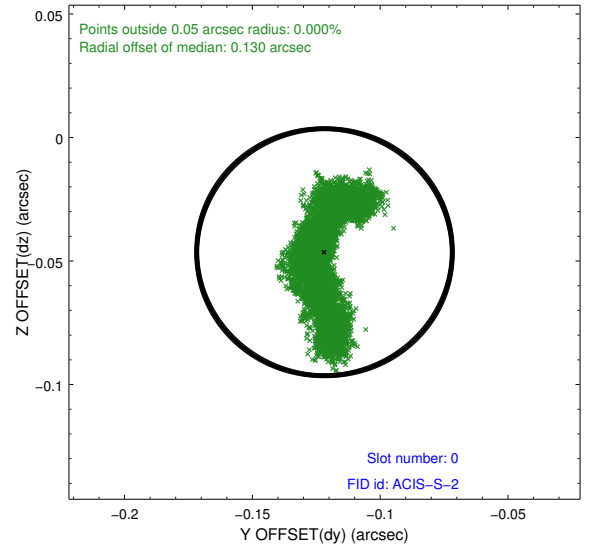
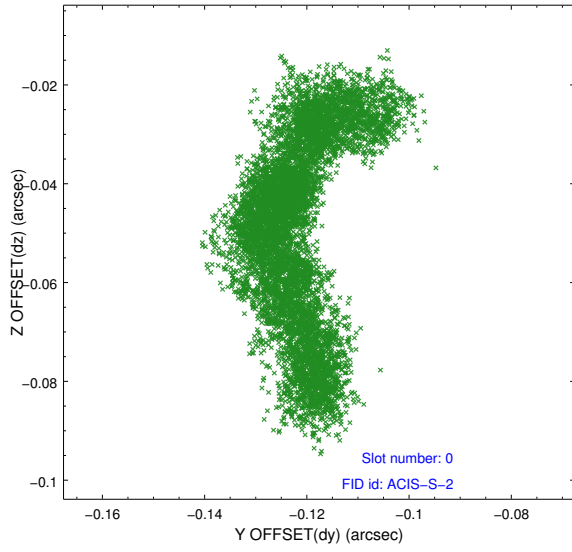


2.4.5 Slot 7

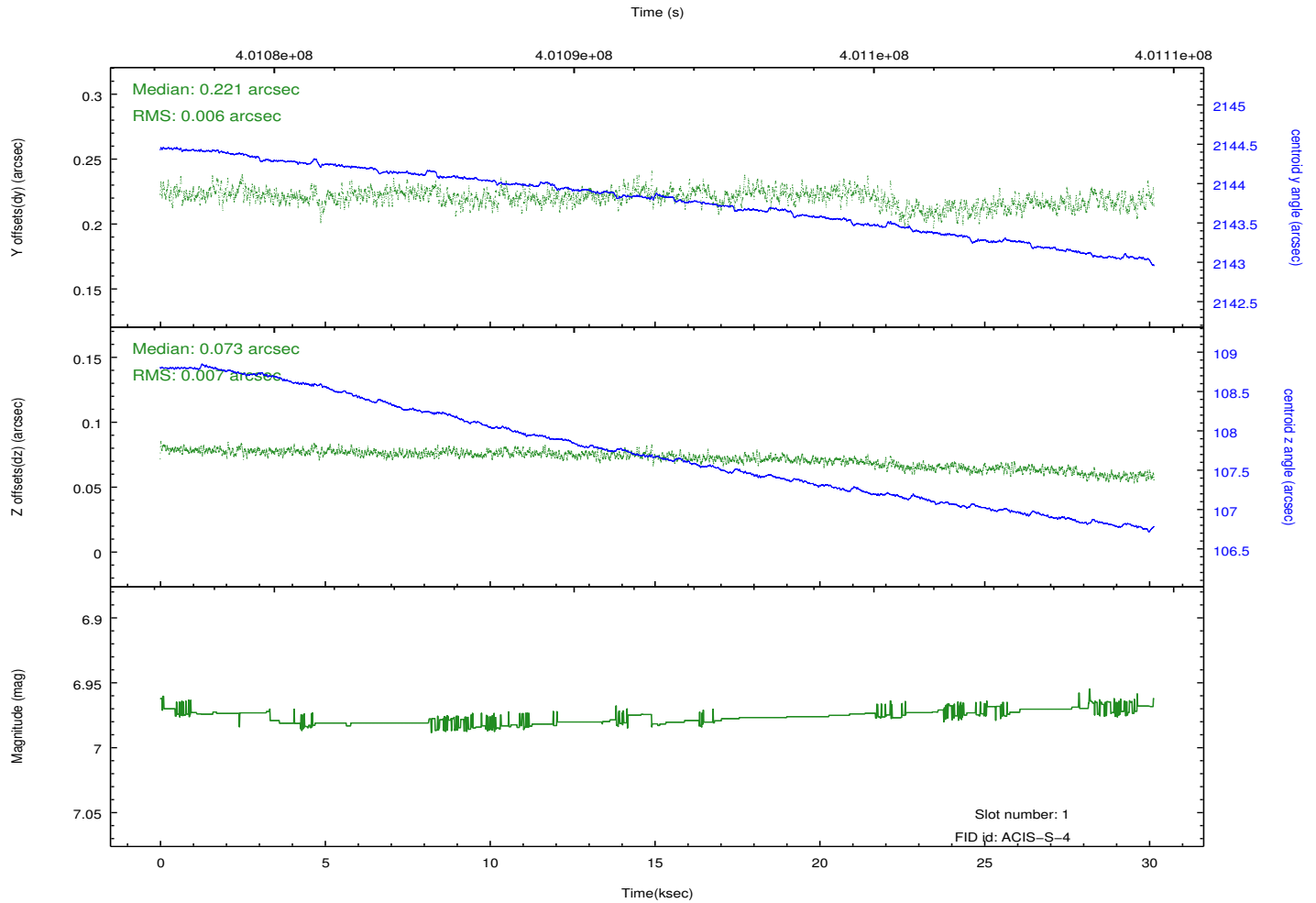
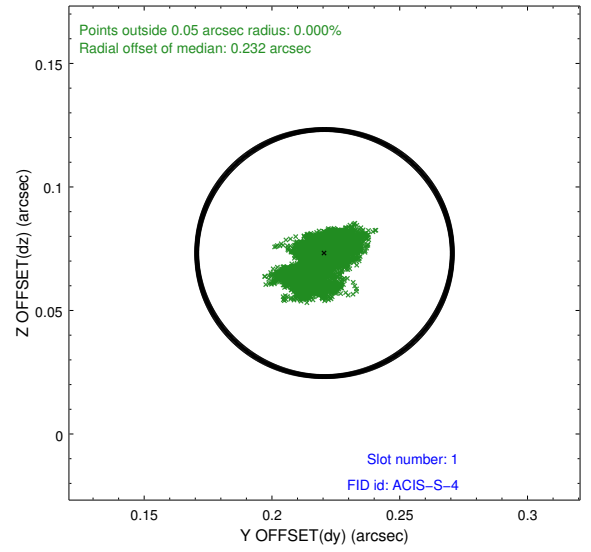
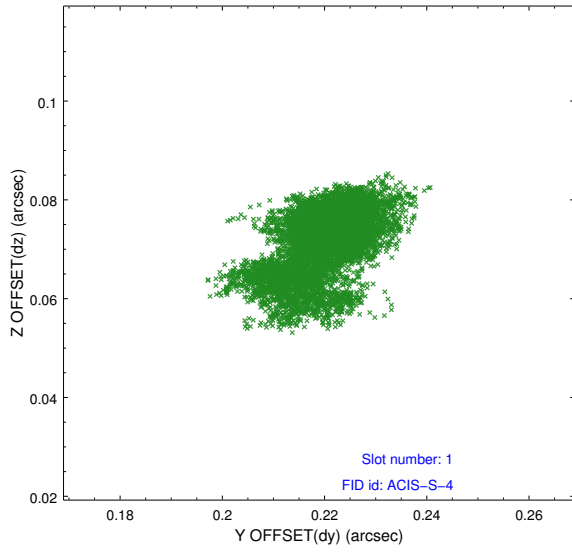


2.5 FID Slots

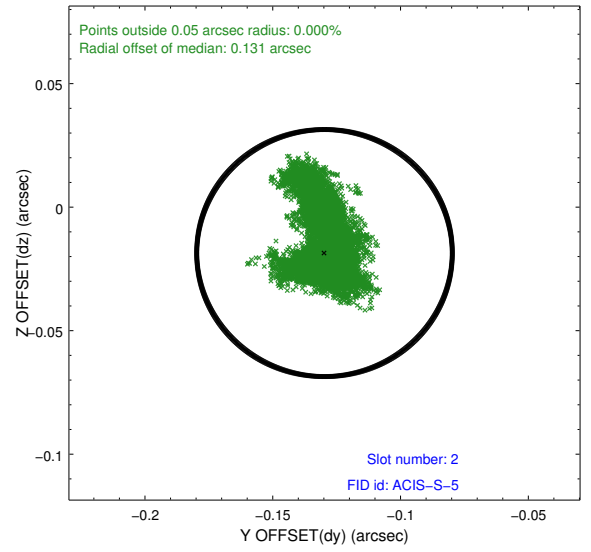
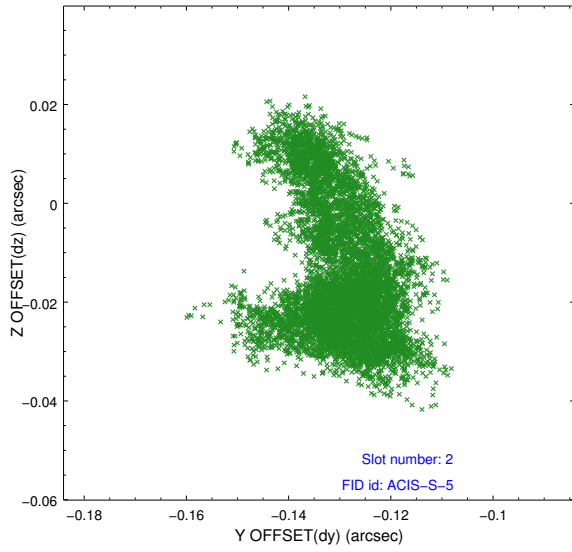
2.5.1 Slot 0



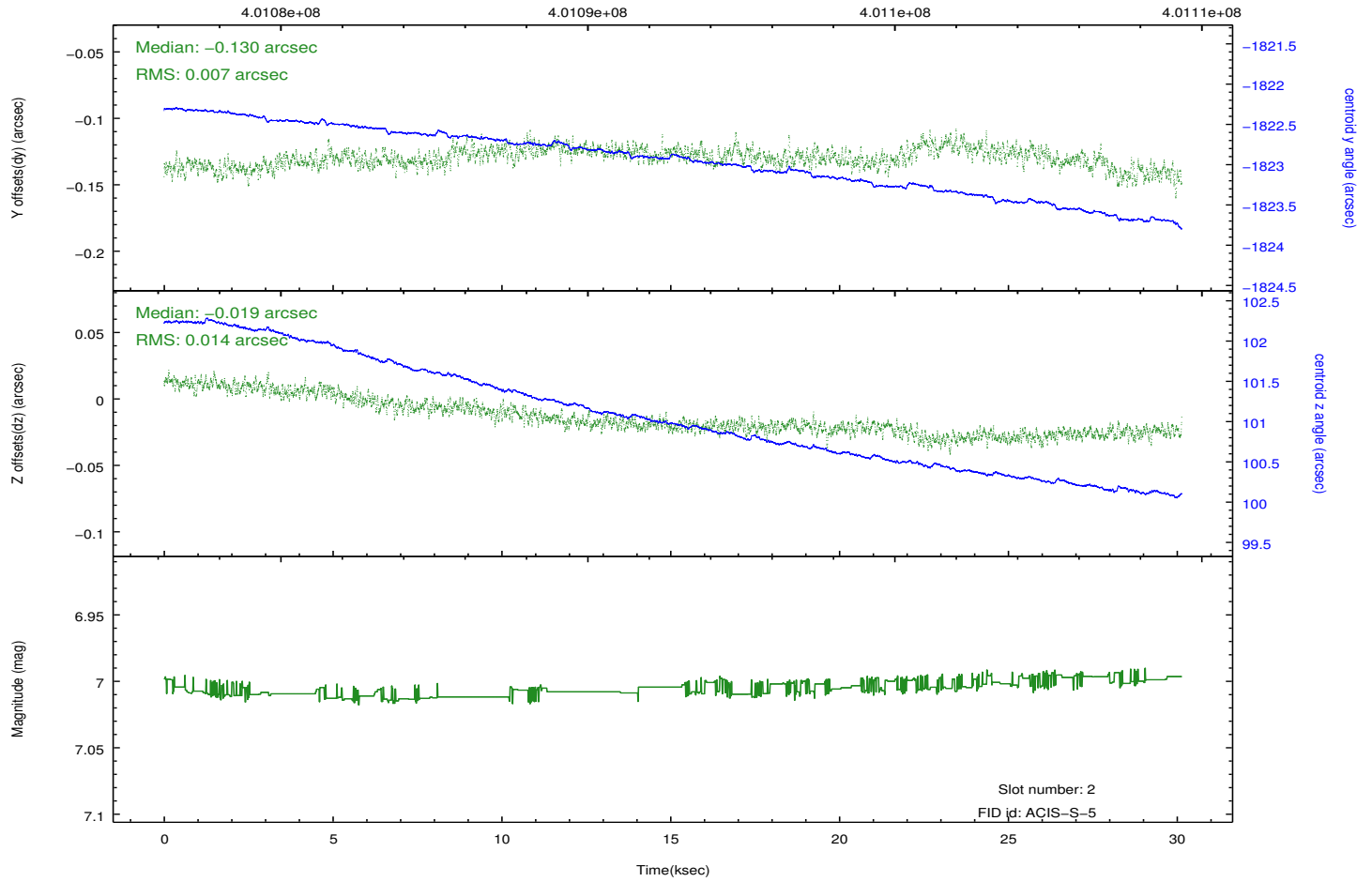
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)

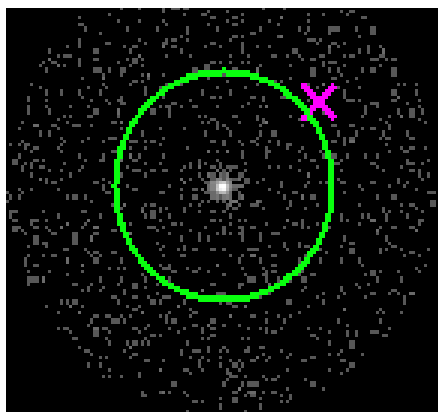


3 Gratings

3.1 HEG Arm



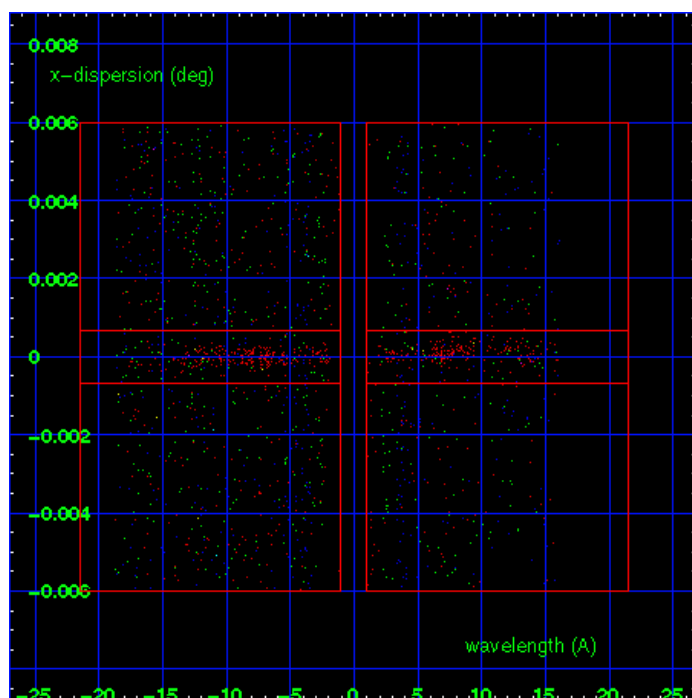
HEG Order Sort 123



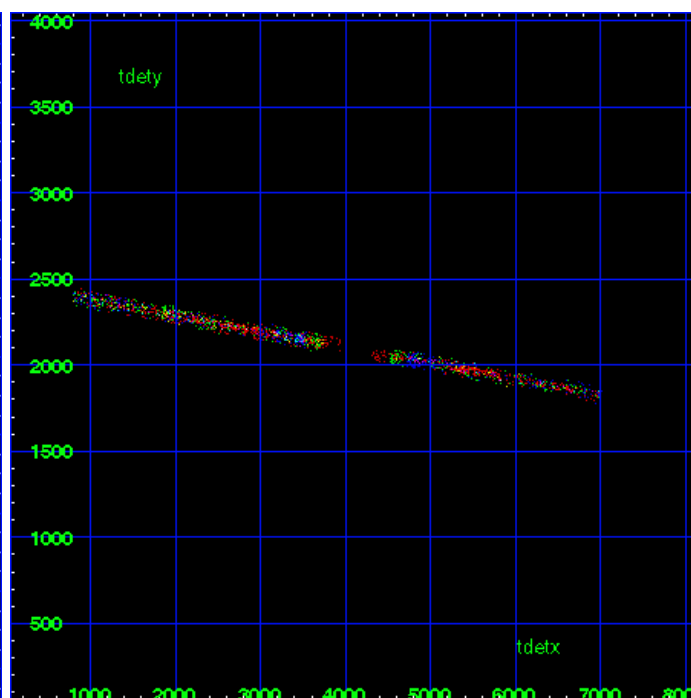
HEG Zero Order



HEG Order Sort ALL

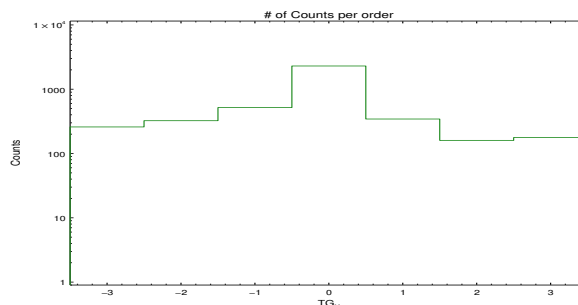


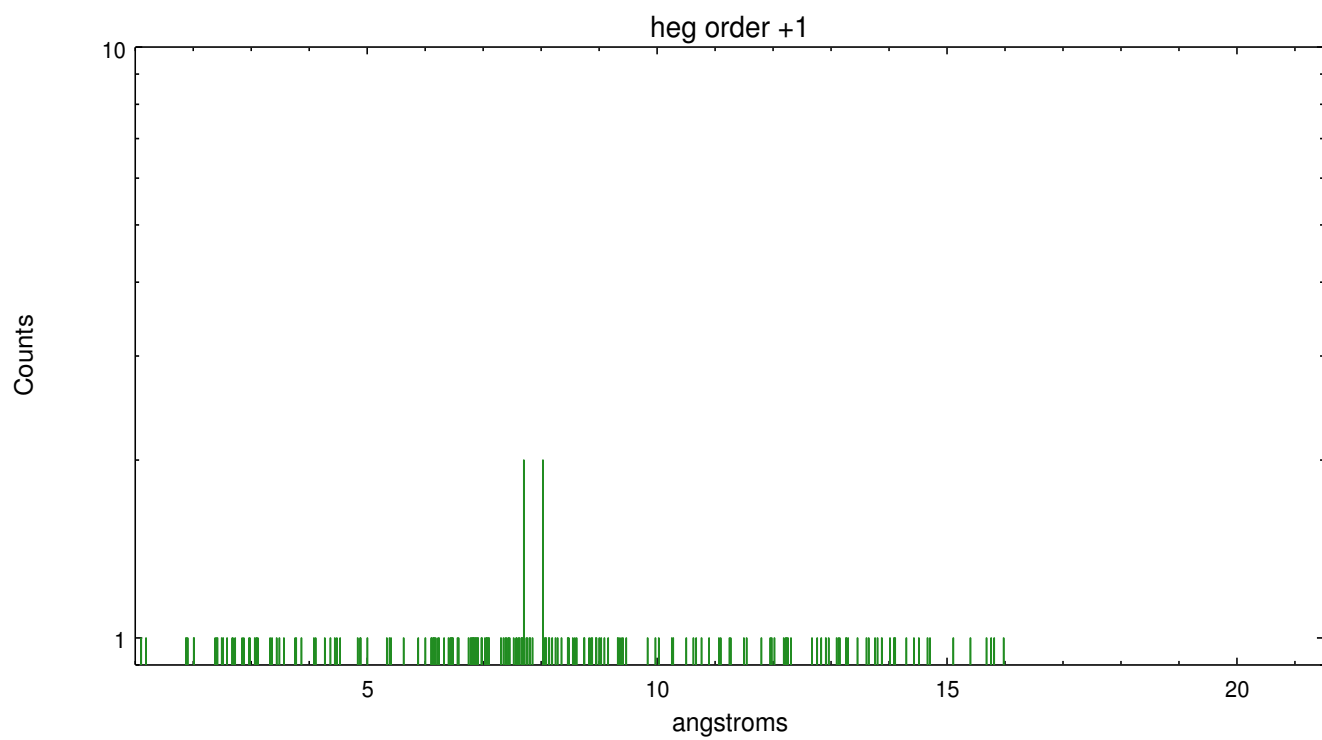
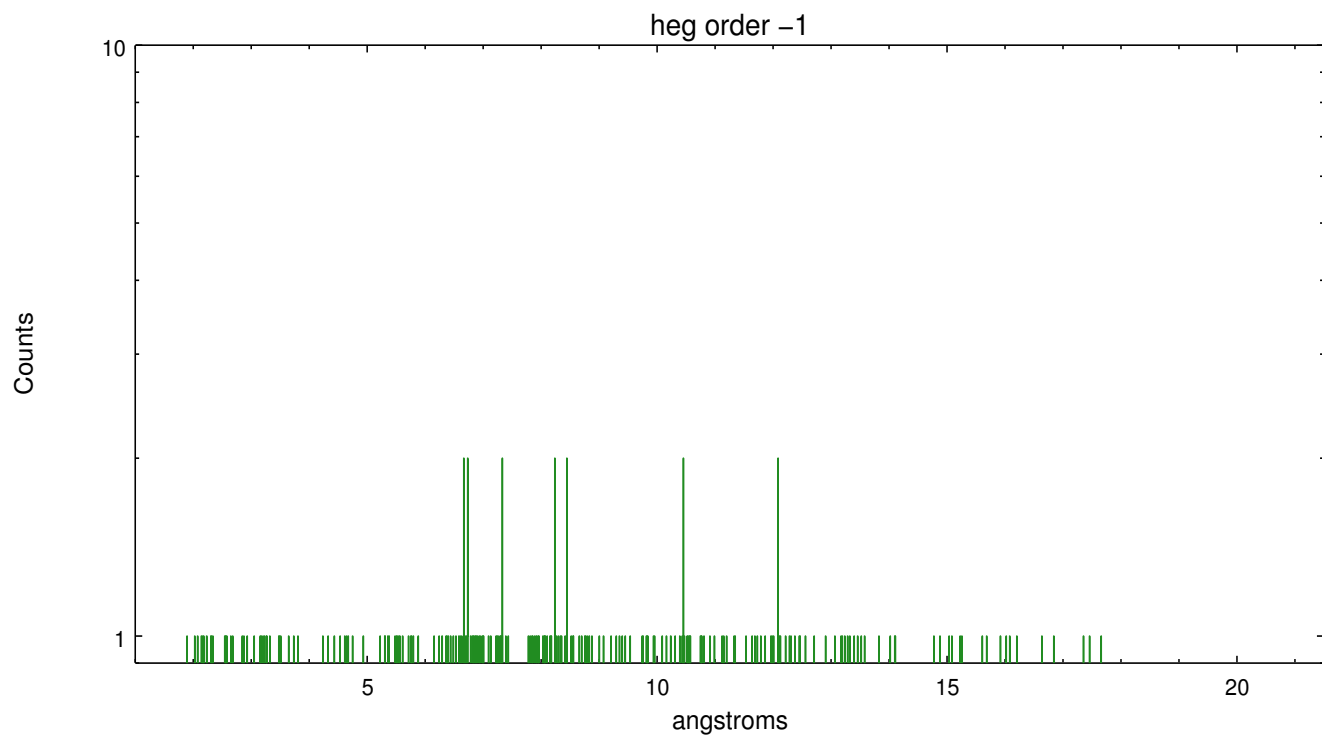
Spot Image HEG



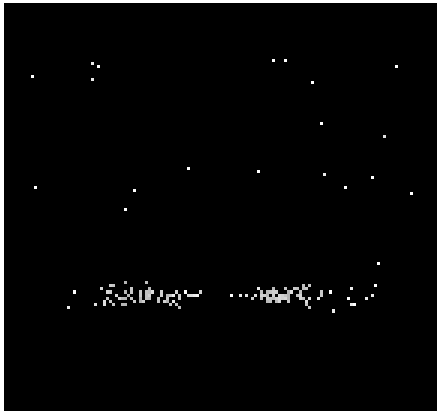
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	259	324	518	2298	344	160	177

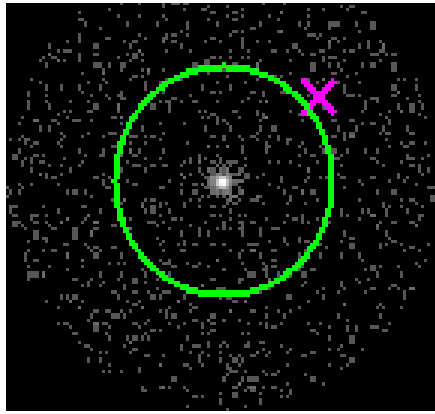




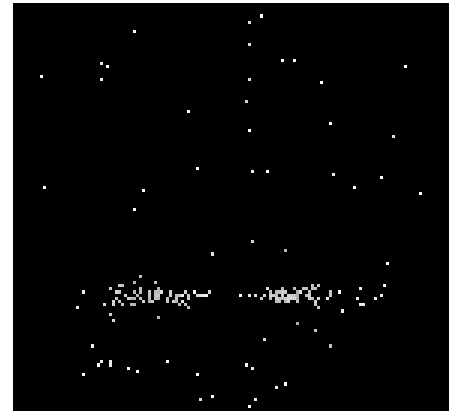
3.2 MEG Arm



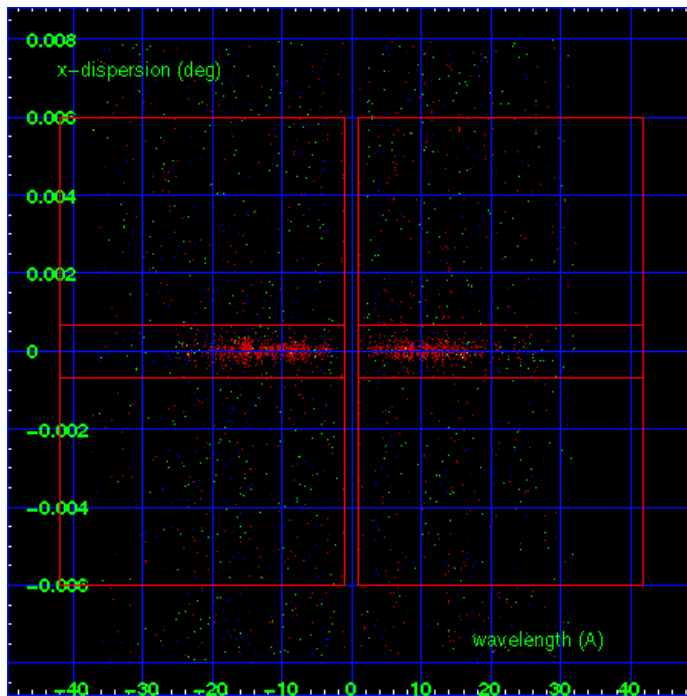
MEG Order Sort 123



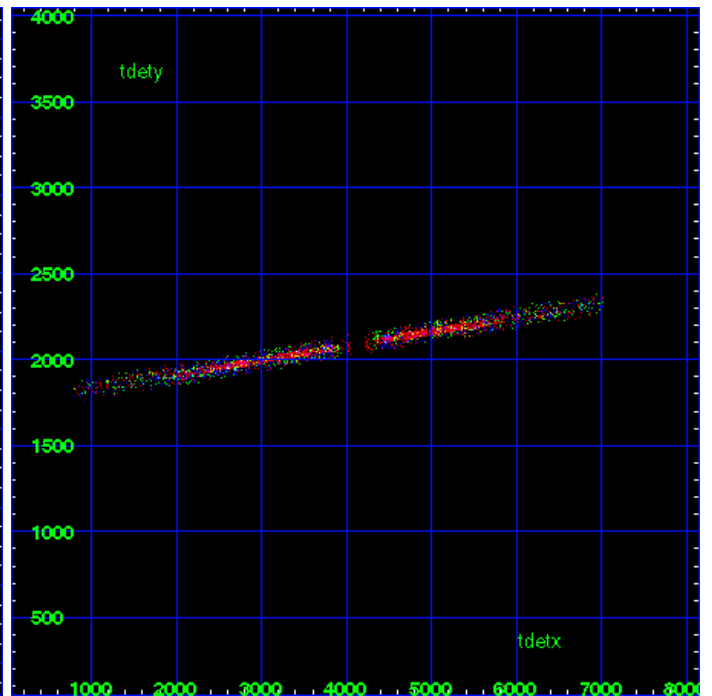
MEG Zero Order



MEG Order Sort ALL

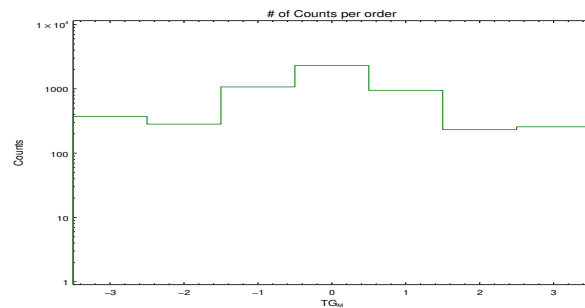


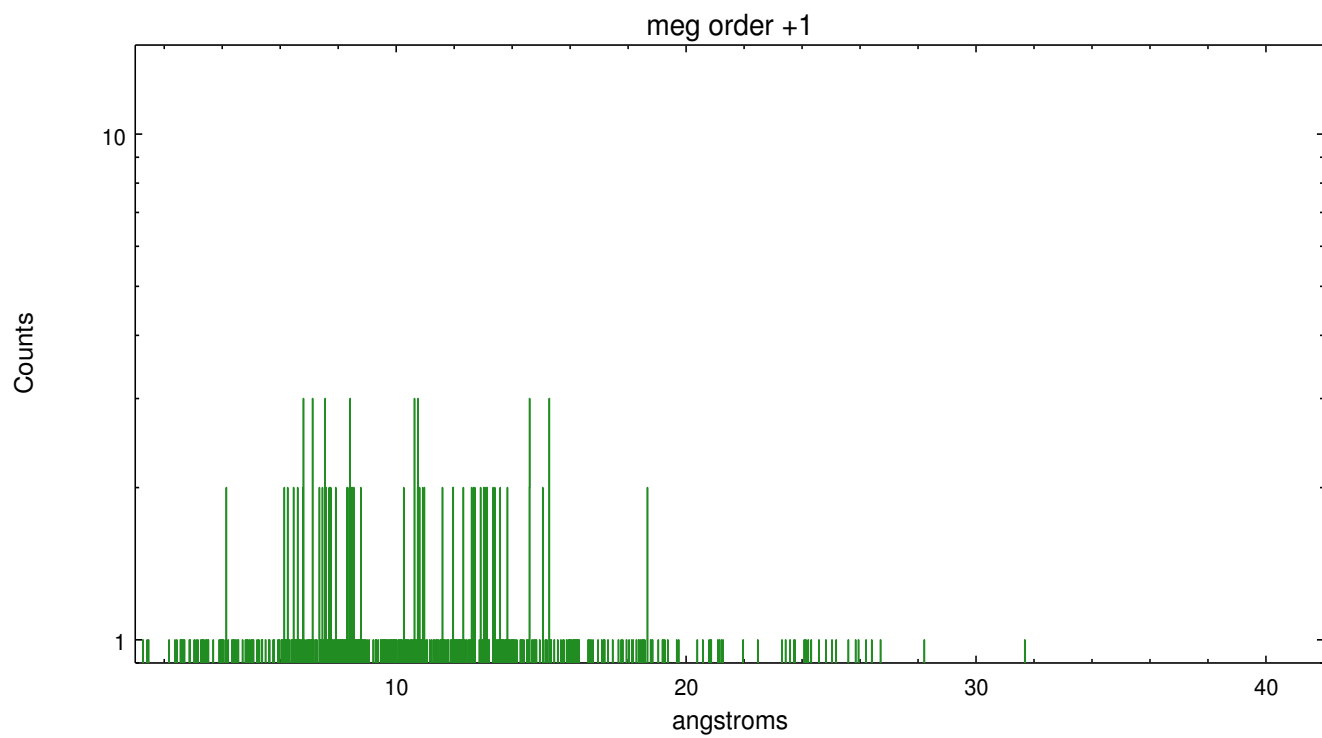
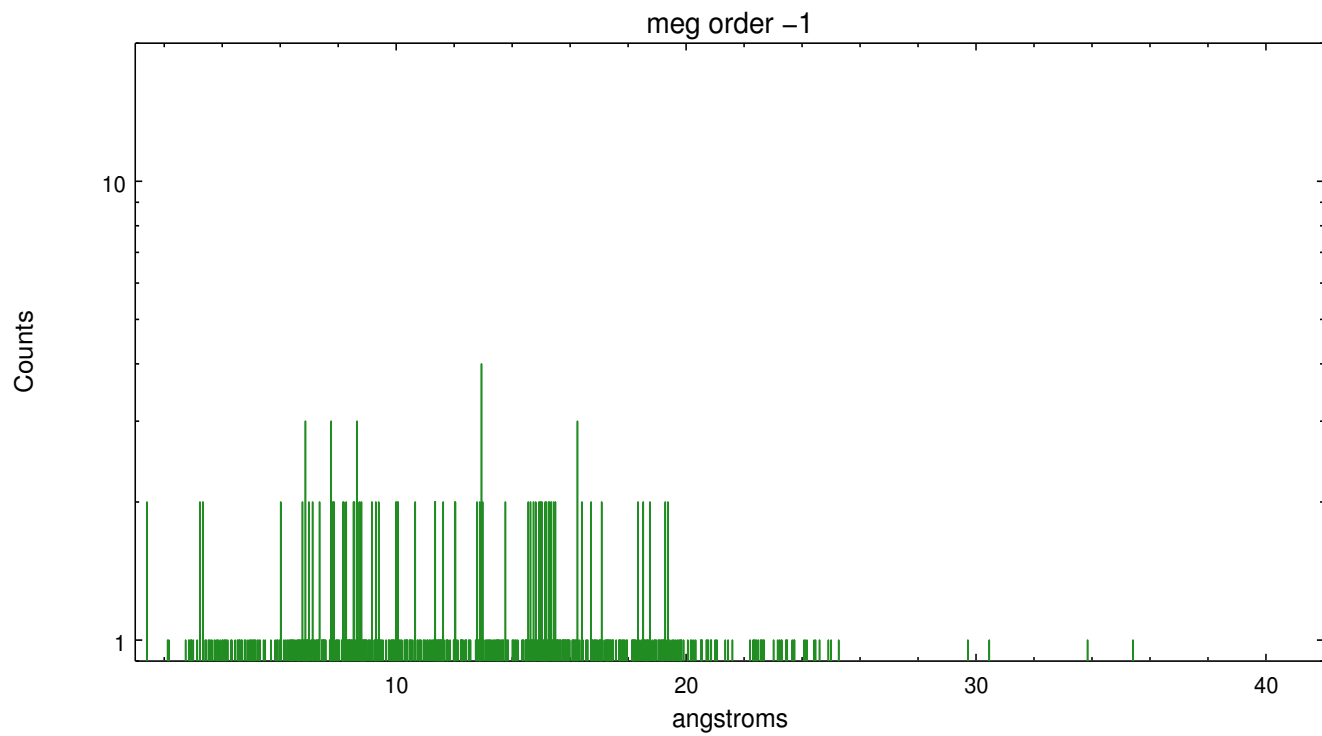
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	372	283	1072	2298	948	232	257





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.07.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.045

A.2 Comments