

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12830 - L2 Version 2
Chandra X-Ray Center

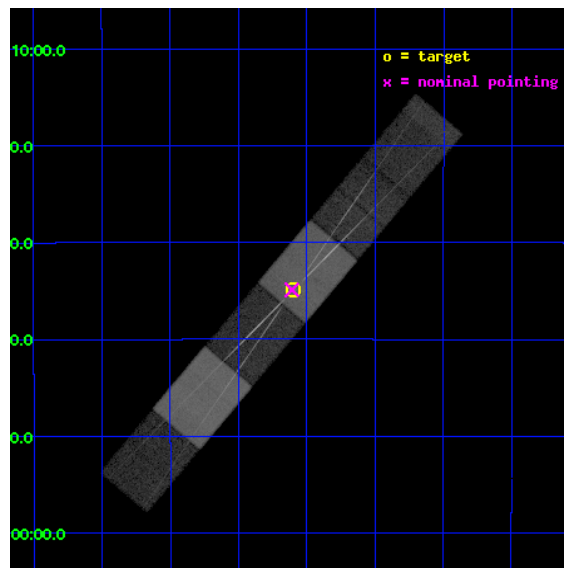
L2 Processing Date : Feb 24 2012

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1 Front

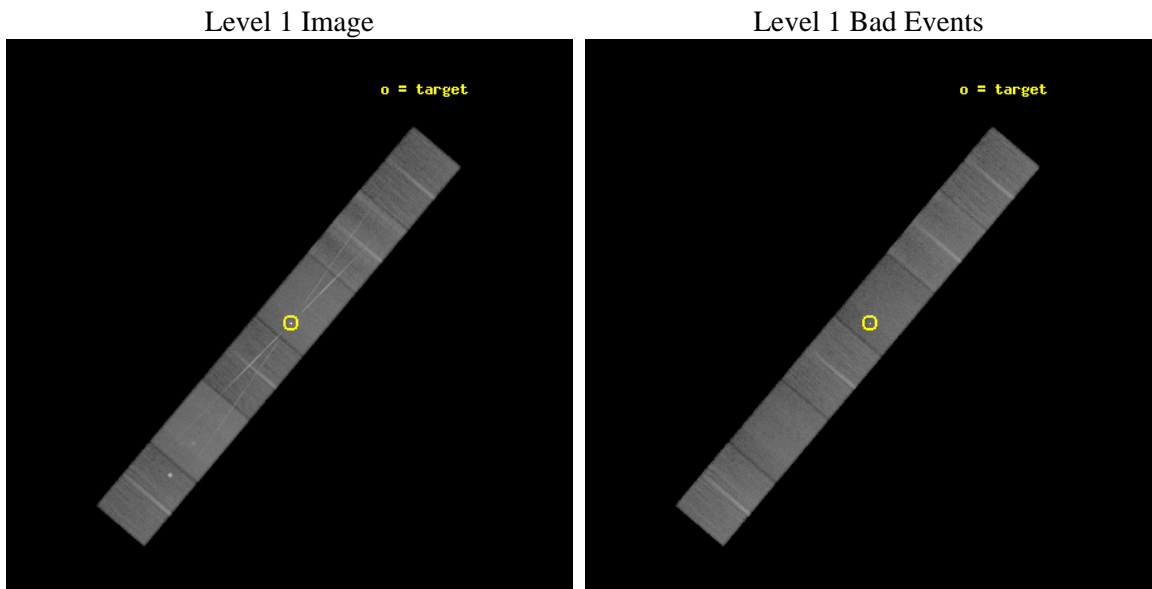
seq_num	702463	Sequence number
obs_id	12830	Observation id
title	A Definitive Observation of an Accretion Disk Wind in the Quasar MR 2251-178	Proposal title
observer	Dr James Reeves	Principal investigator
object	MR 2251-178	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	343.524167	Observer's specified target RA [deg]
dec_targ	-17.581944	Observer's specified target Dec [deg]
ra_nom	343.52730777096	Nominal RA [deg]
dec_nom	-17.581535581675	Nominal Dec [deg]
roll_nom	310.15757599705	Nominal Roll [deg]
revision	2	Processing version of data
ontime	48603.967873156	Sum of GTIs [s]
livetime	47818.971634799	Livetime [s]
ontime4	48604.008913159	Sum of GTIs [s]
ontime5	48603.926833153	Sum of GTIs [s]
ontime6	48603.885793149	Sum of GTIs [s]
ontime7	48603.967873156	Sum of GTIs [s]
ontime8	48603.844753146	Sum of GTIs [s]
ontime9	48601.262683034	Sum of GTIs [s]
l2events	423305	Number of level 2 events



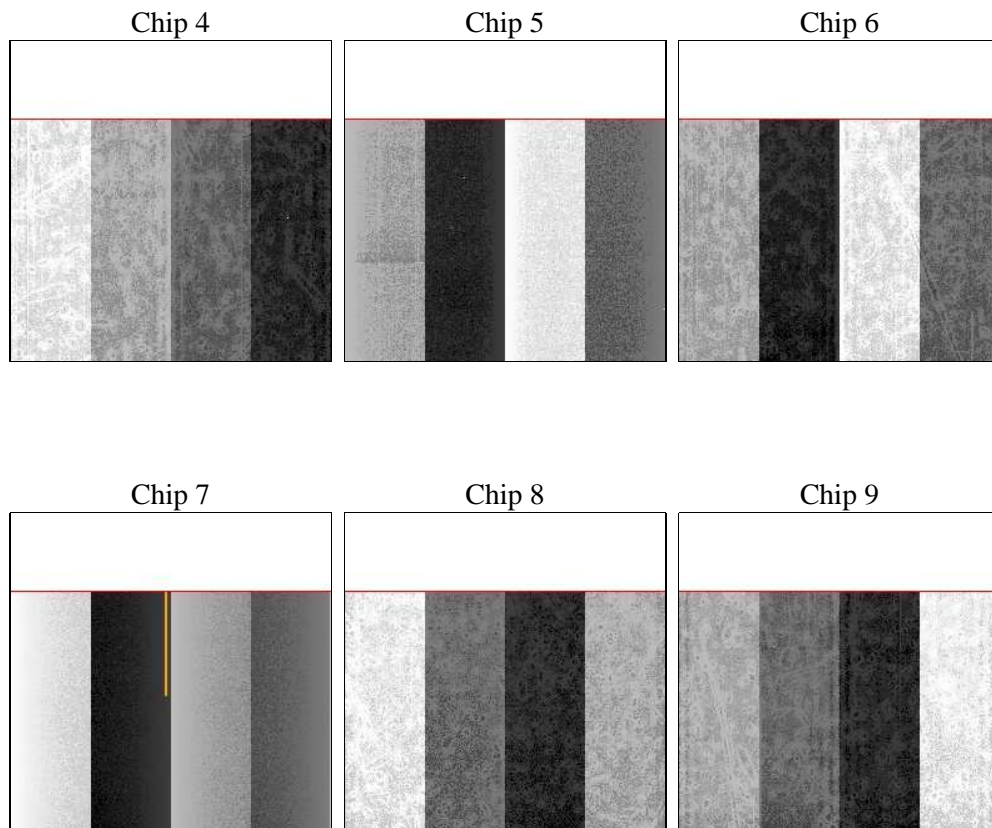
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48554.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	48603.967873156	Sum of GTIs [s]
caldbver	4.4.8	 	ontime4	48604.008913159	Sum of GTIs [s]
date	2012-02-24T05:34:53	Date and time of file creation	ontime5	48603.926833153	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	48603.885793149	Sum of GTIs [s]
			ontime7	48603.967873156	Sum of GTIs [s]
			ontime8	48603.844753146	Sum of GTIs [s]
			ontime9	48601.262683034	Sum of GTIs [s]
			l1events	1615110	Number of level 1 events

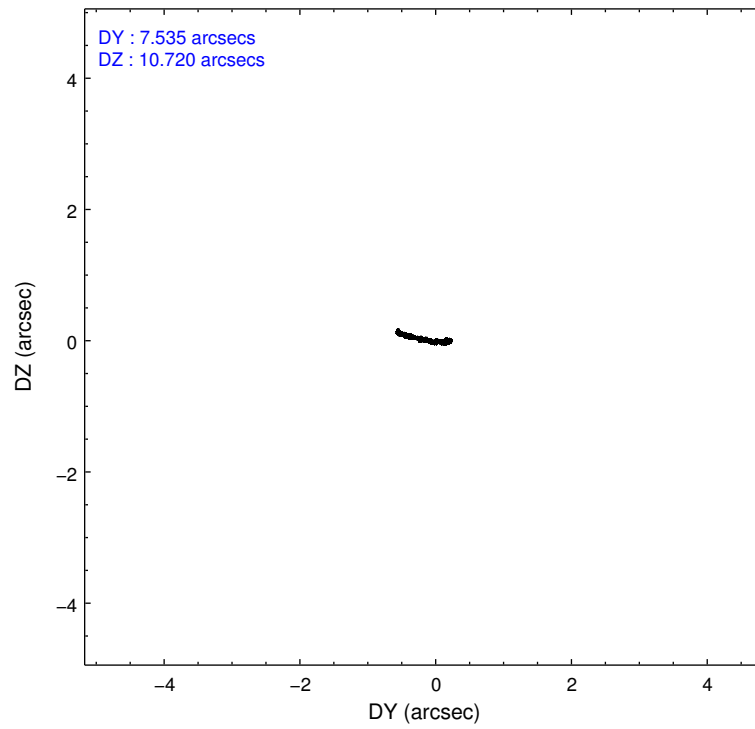
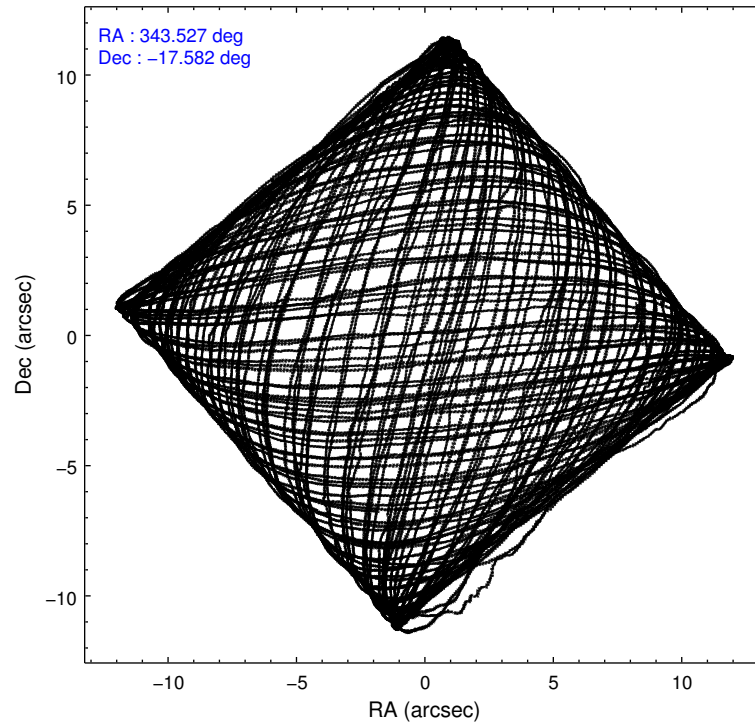
2.1.4 Events

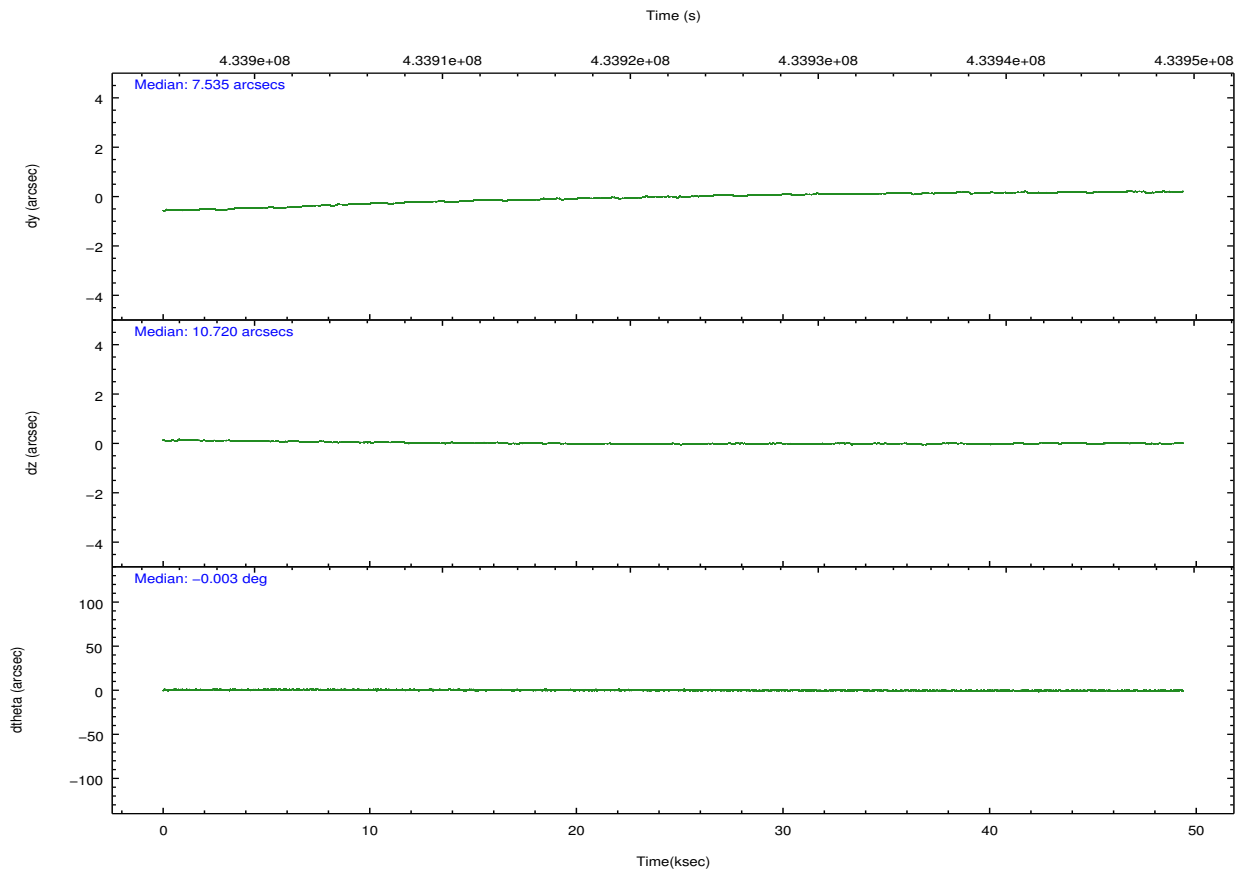
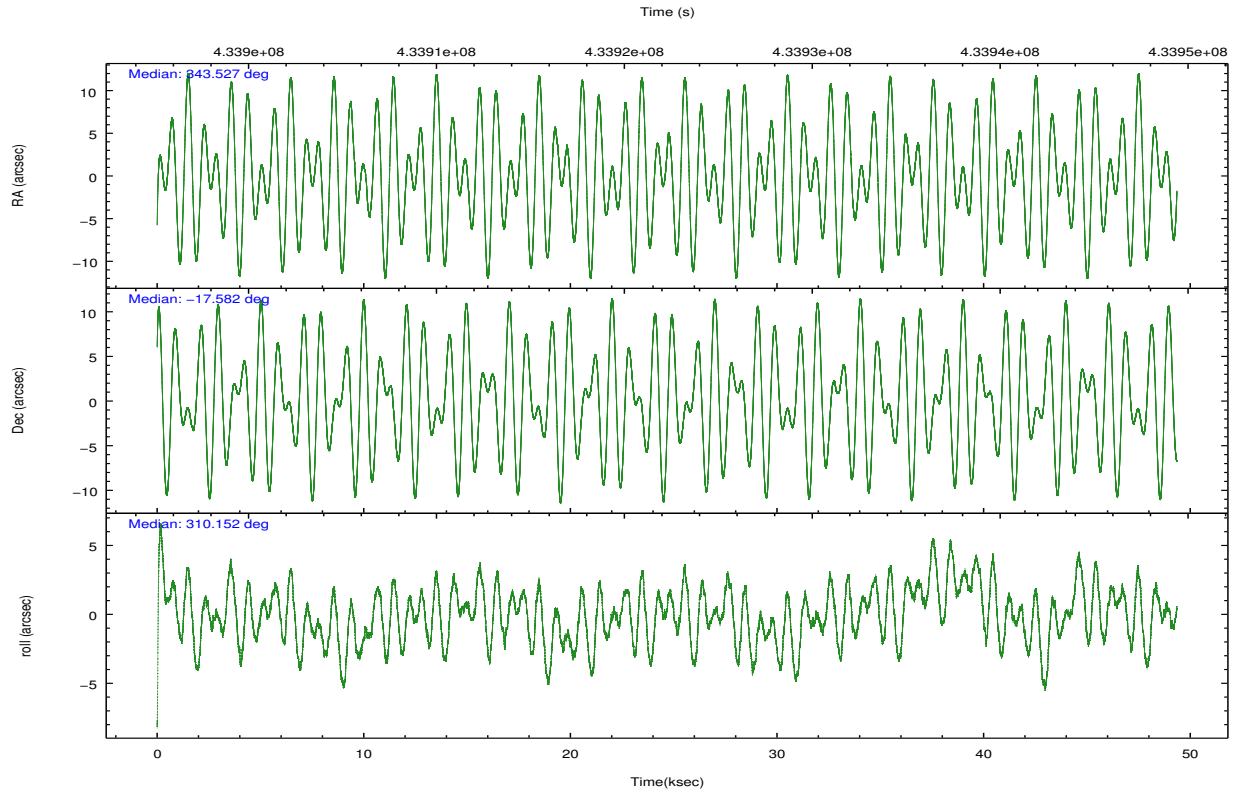
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	242829	331959	230706	309644	290184	209788	grade 0 events	16091	12415	22477	17009	25938	10634
rejected events	209803	169926	187113	156765	209875	181803		6%	3%	9%	5%	8%	5%
rejected %	86%	51%	81%	50%	72%	86%	grade 1 events	171	453	143	636	192	135
								0%	0%	0%	0%	0%	0%
							grade 2 events	6511	48372	7971	32260	18050	5893
								2%	14%	3%	10%	6%	2%
							grade 3 events	2948	7334	3457	14102	8216	2937
								1%	2%	1%	4%	2%	1%
							grade 4 events	2793	6790	3471	14091	7768	2813
								1%	2%	1%	4%	2%	1%
							grade 5 events	10038	25980	10260	29997	14938	10835
								4%	7%	4%	9%	5%	5%
							grade 6 events	4683	87129	6220	75422	20338	5708
								1%	26%	2%	24%	7%	2%
							grade 7 events	199594	143486	176707	126127	194744	170833
								82%	43%	76%	40%	67%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	343.500201	343.5273077709627	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-17.572612	-17.58153558167479	Subarray start row	1	1
[deg] Pointing Roll	309.992758	310.157575997053	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	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
[s] Observation start time (MET)	433898402.184000	433896864.24428			
Observation start date	2011-10-01T23:18:56	2011-10-01T22:54:24			
[s] Observation end time (MET)	433946956.184000	433947741.14695			
Observation end date	2011-10-02T12:48:10	2011-10-02T13:02:21			
Read mode	TIMED	TIMED			

2.3 Aspect



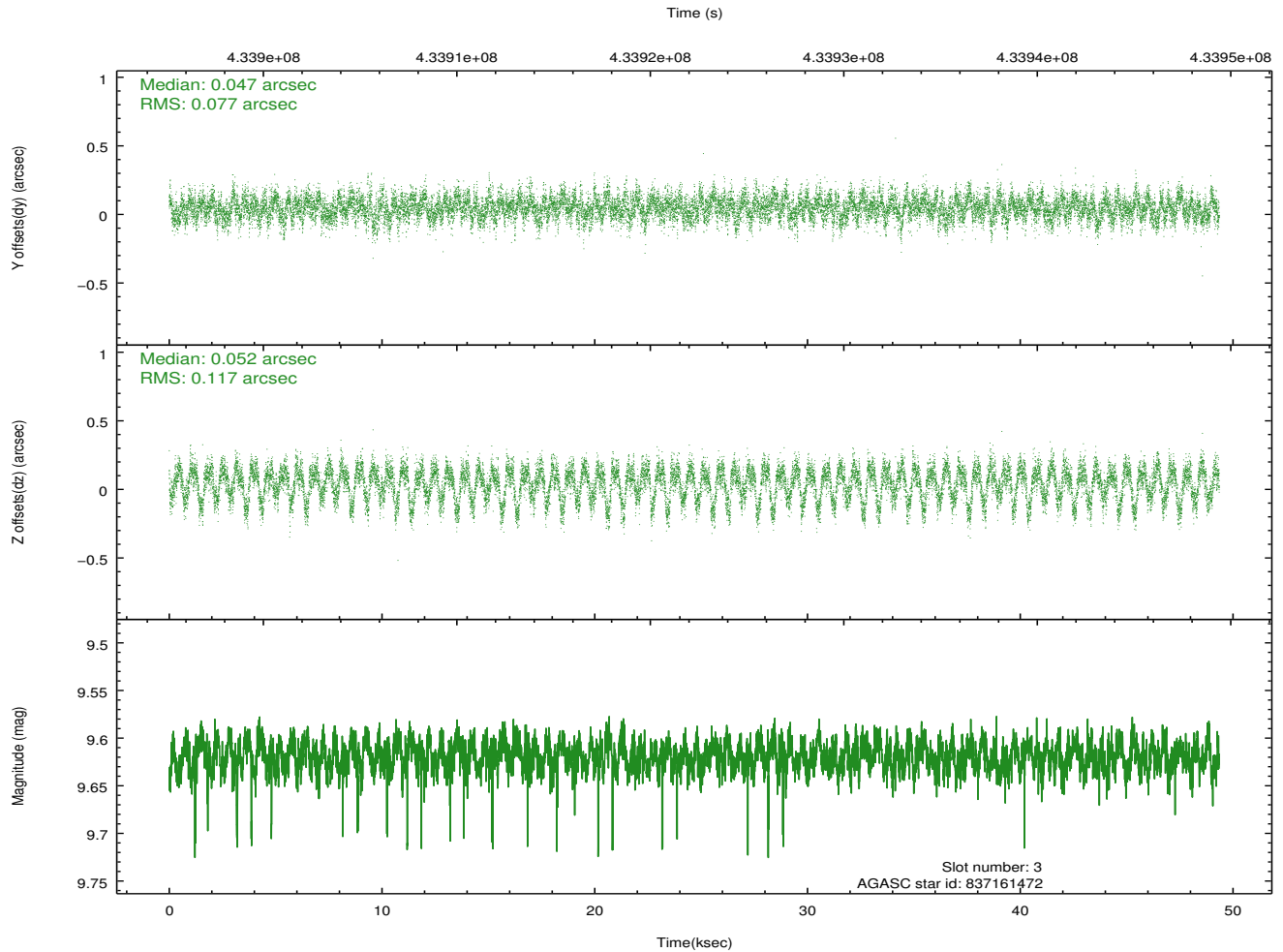
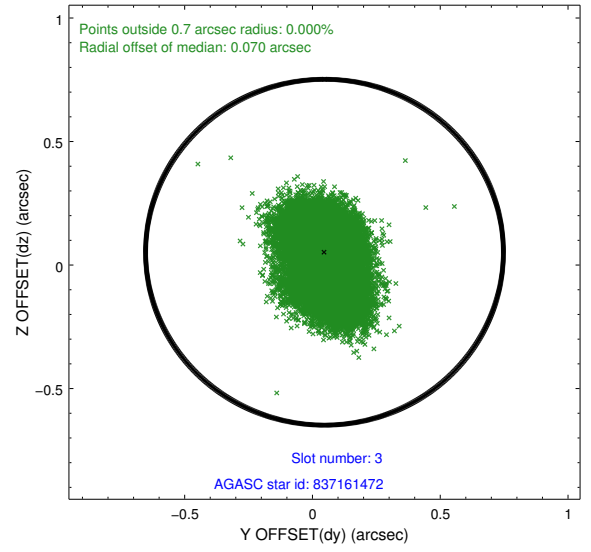
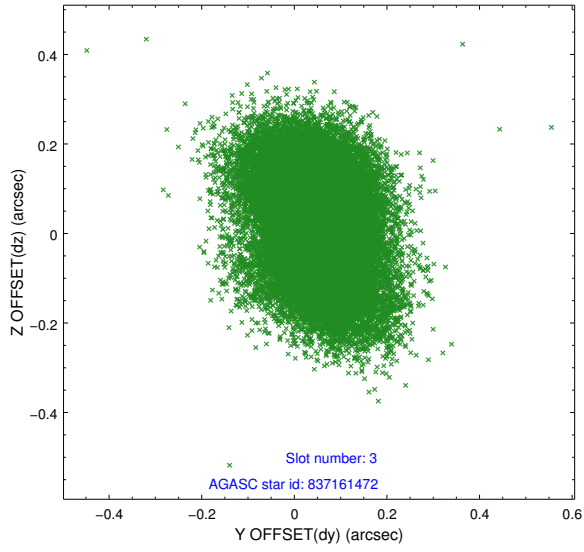


Slot Statistics

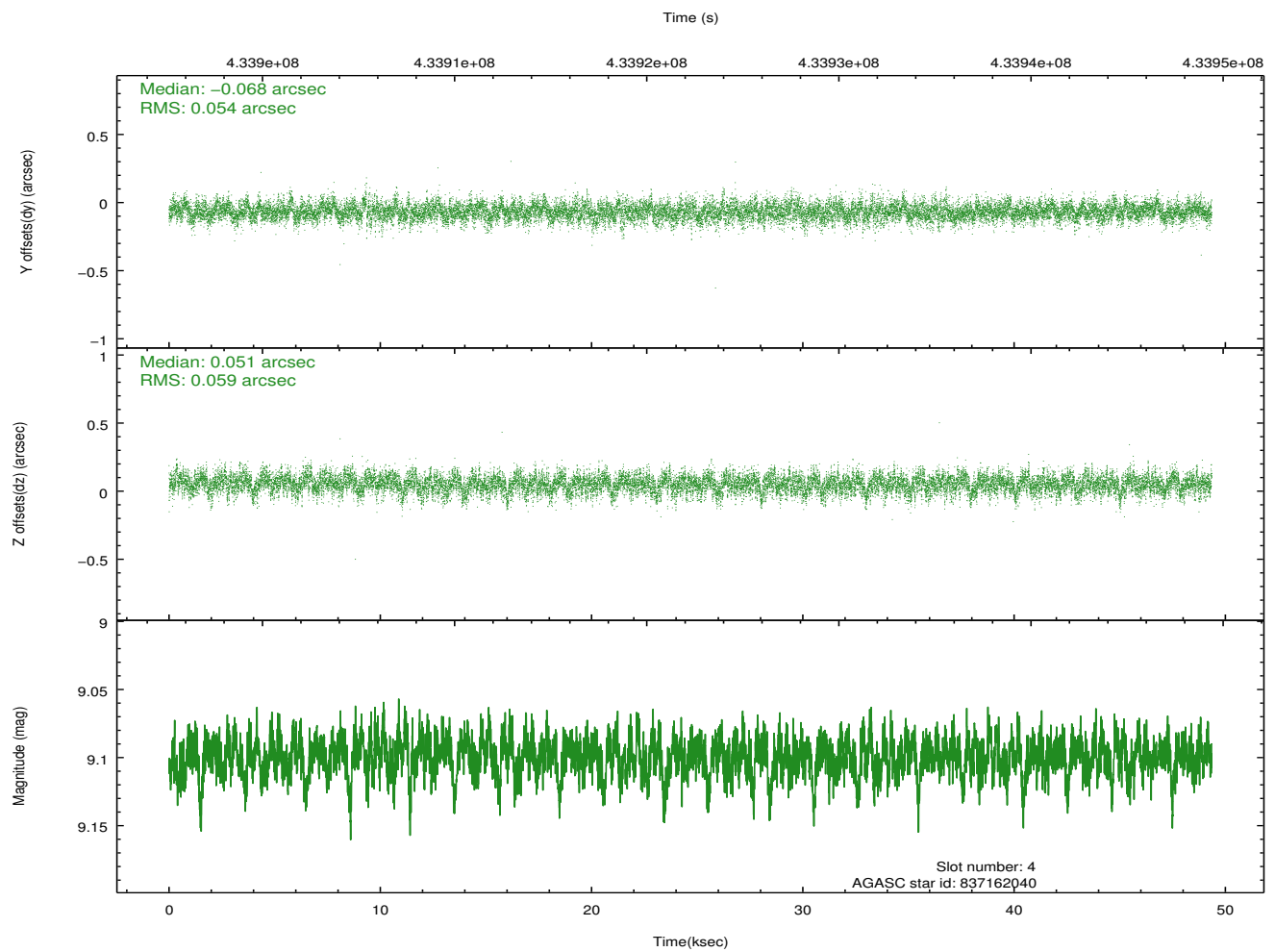
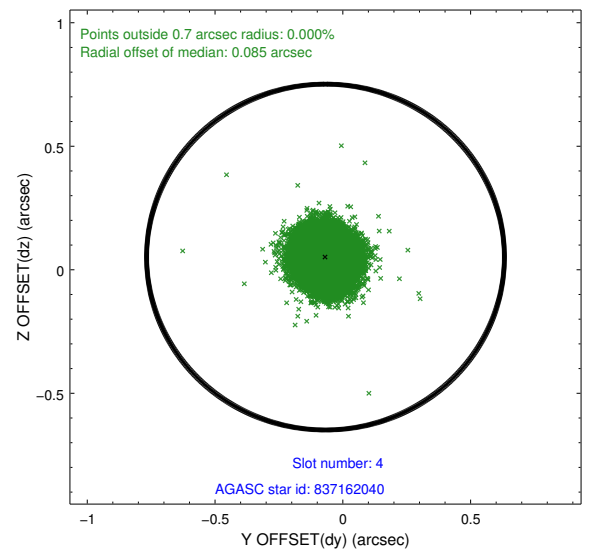
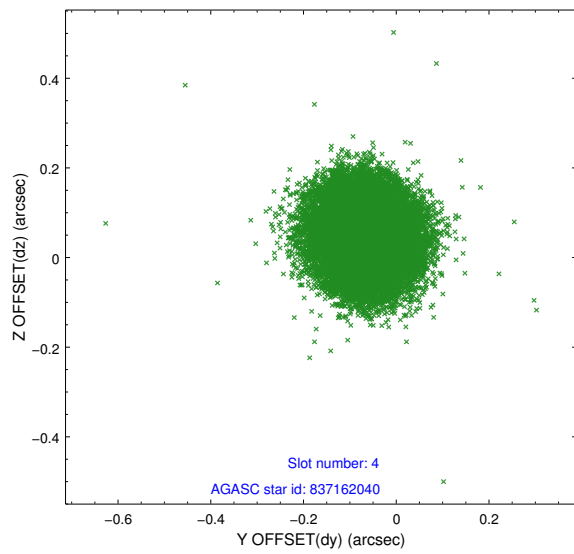
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	12037	-0.050	-0.094	0.009	0.017	0.000000	0.000000	-760.12	-1794.21
1	FID	ACIS-S-4	7.05	12038	0.170	0.049	0.008	0.015	0.000000	0.000000	2153.43	114.36
2	FID	ACIS-S-5	7.10	12037	-0.152	0.053	0.008	0.013	0.000000	0.000000	-1813.04	108.10
3	GUIDE	837161472	9.62	24049	0.047	0.052	0.146	0.249	343.568933	-17.032215	-1338.22	1431.12
4	GUIDE	837162040	9.10	24061	-0.068	0.051	0.085	0.139	343.811093	-17.243485	-220.01	1580.16
5	GUIDE	837162832	8.85	24066	-0.055	0.019	0.087	0.141	343.313375	-17.165164	-1536.27	450.34
6	GUIDE	837550944	9.50	24018	-0.011	-0.075	0.123	0.194	343.324796	-17.865759	423.52	-1139.11
7	GUIDE	837555048	8.48	24061	0.083	-0.026	0.080	0.129	343.494742	-18.059239	1331.12	-1139.89

2.4 Star Slots

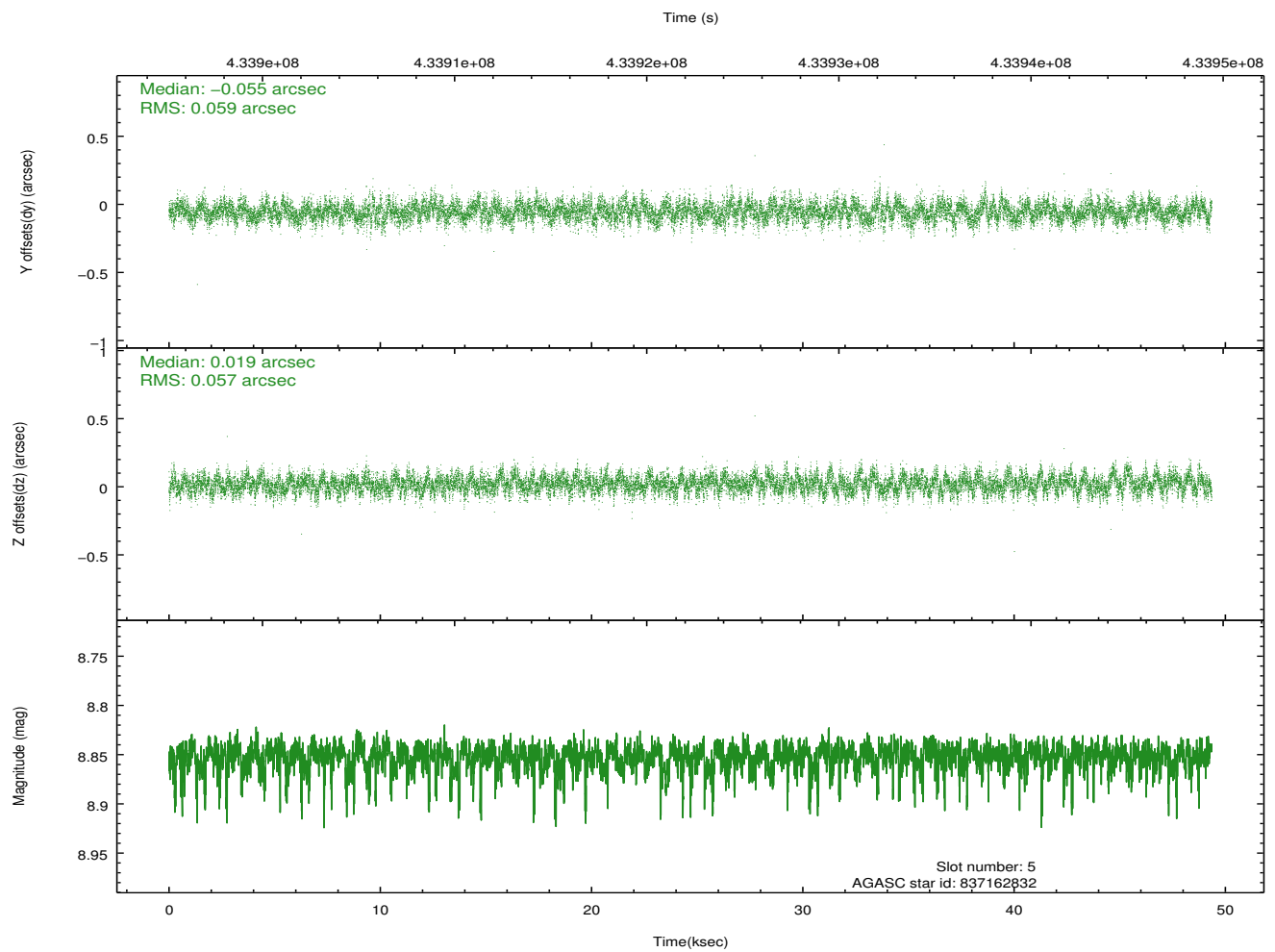
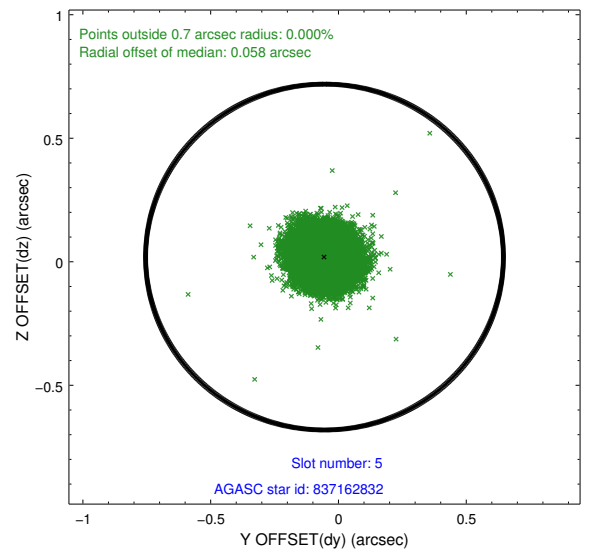
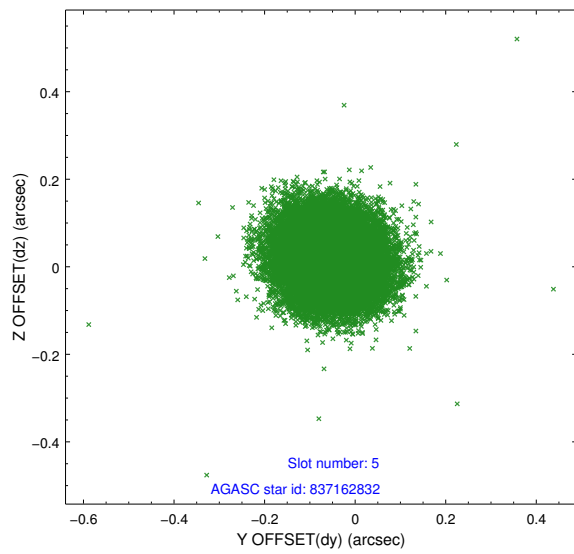
2.4.1 Slot 3



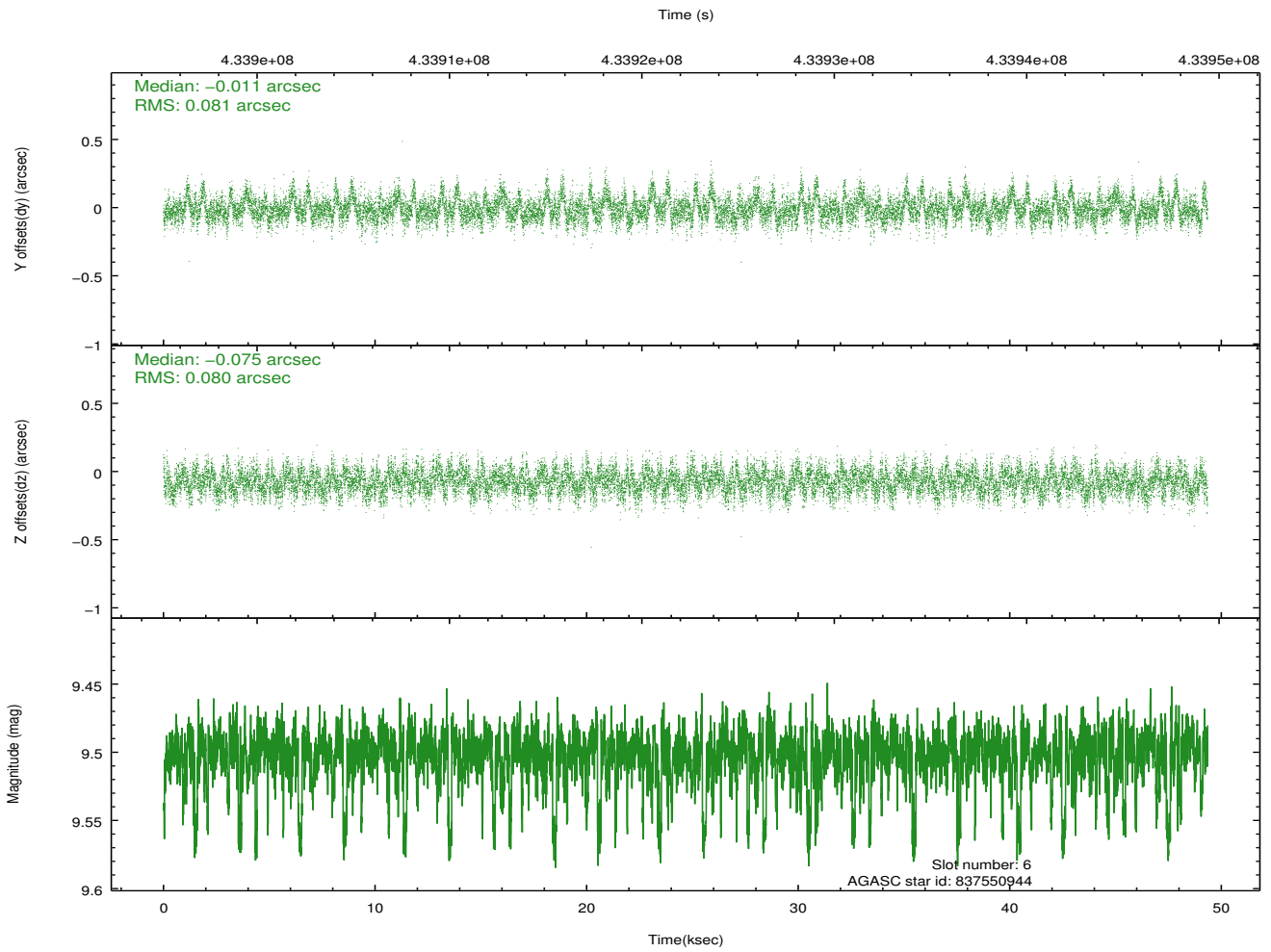
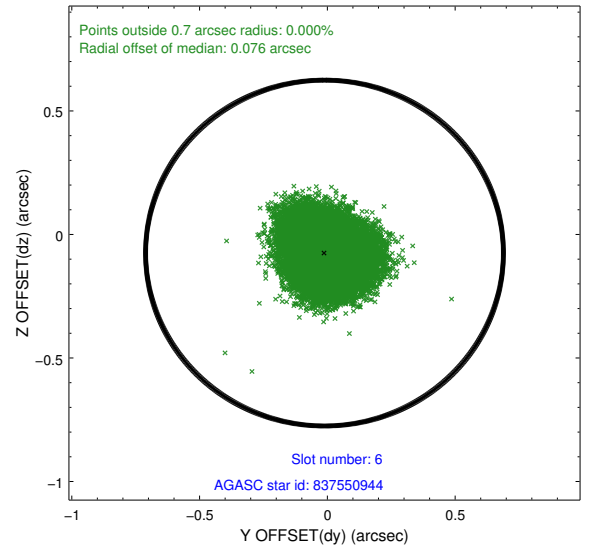
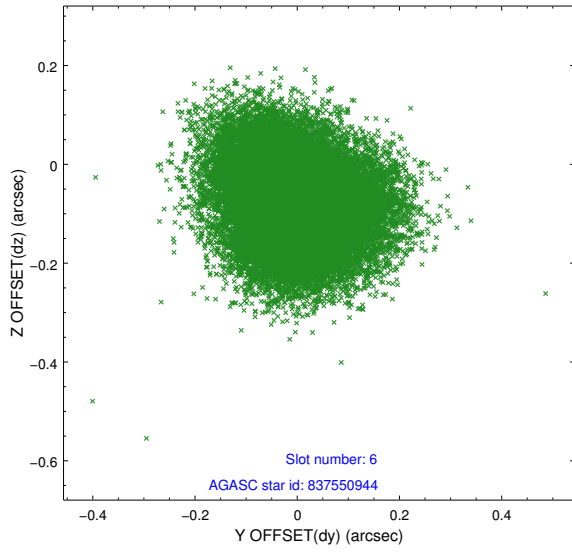
2.4.2 Slot 4



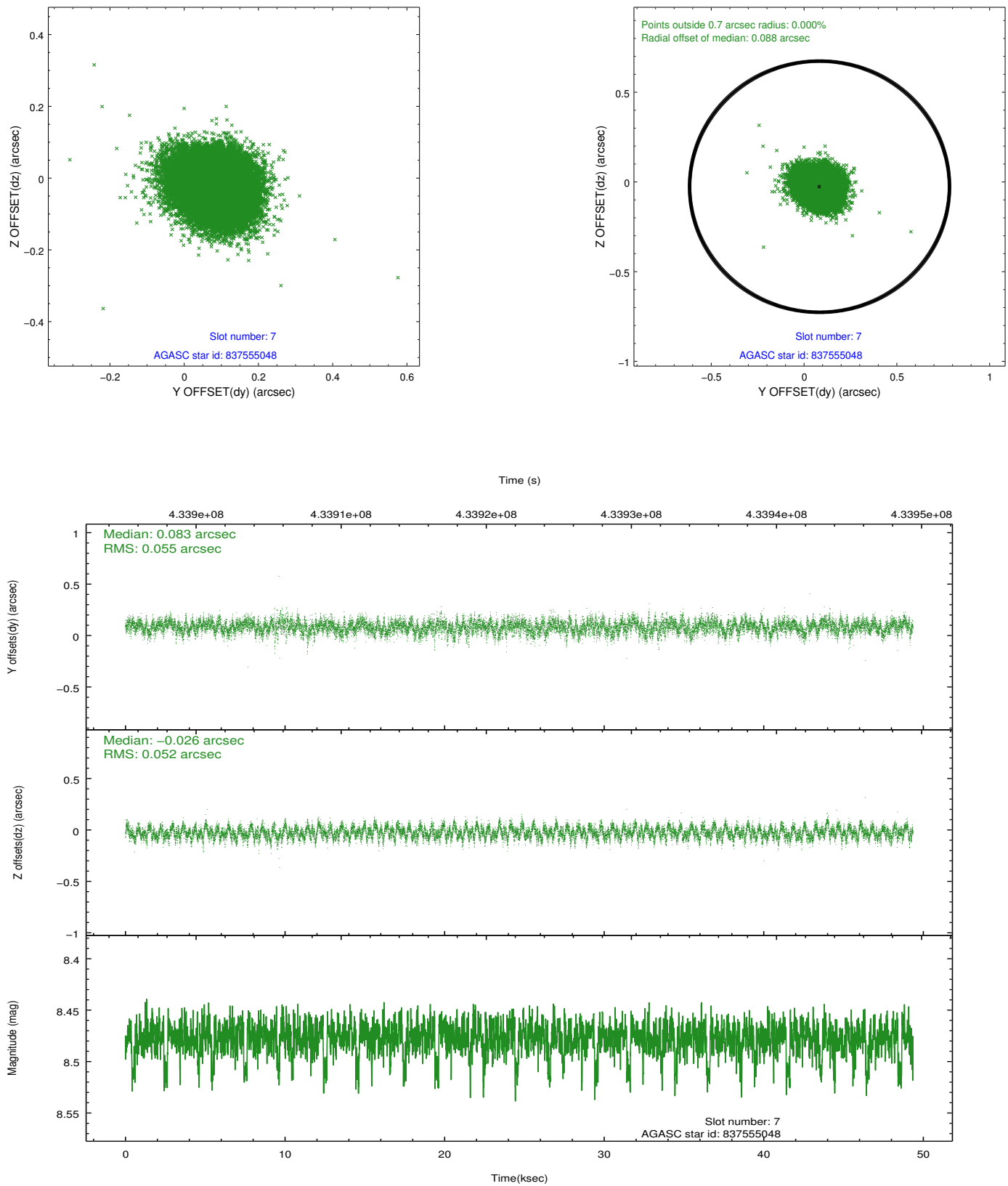
2.4.3 Slot 5



2.4.4 Slot 6

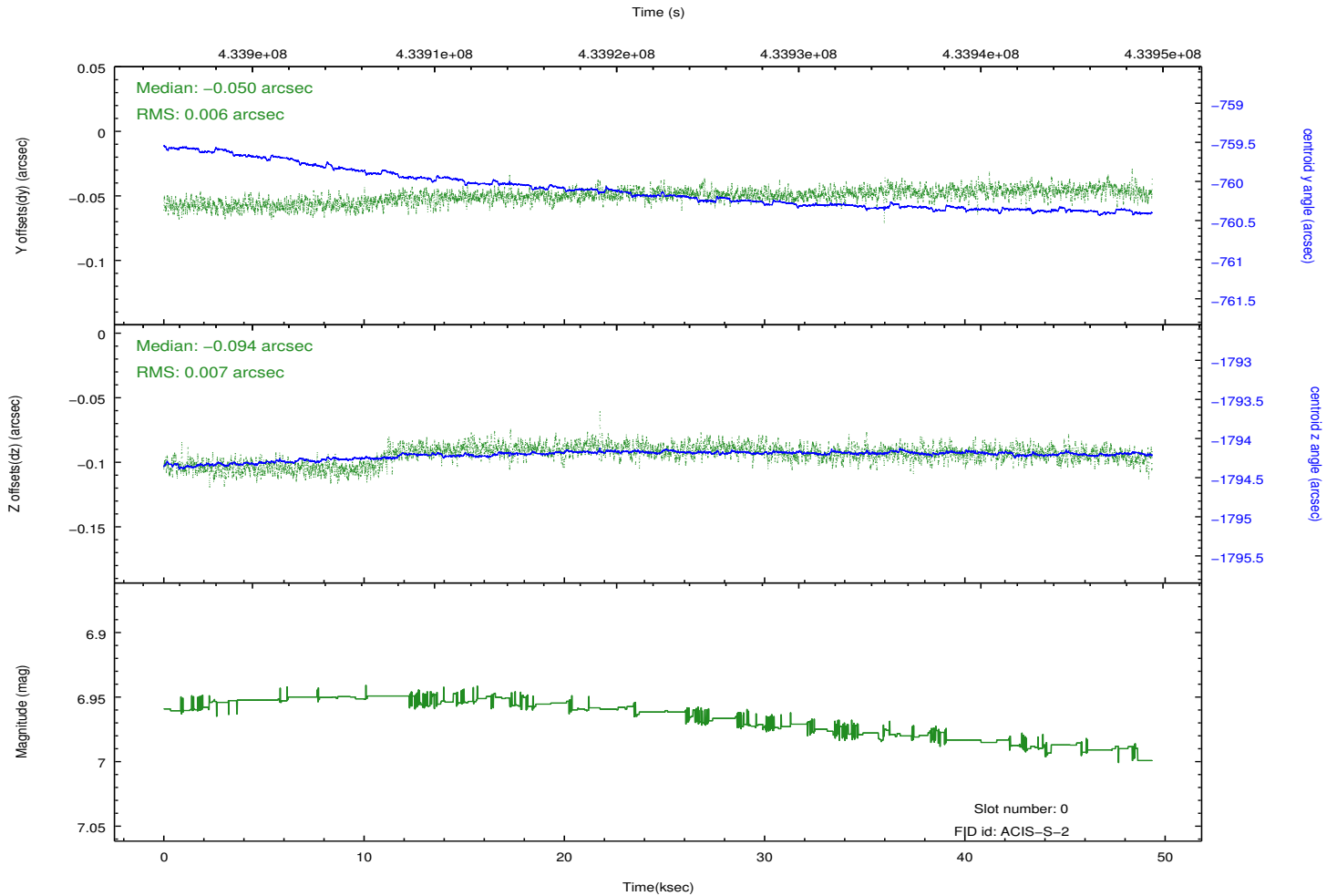
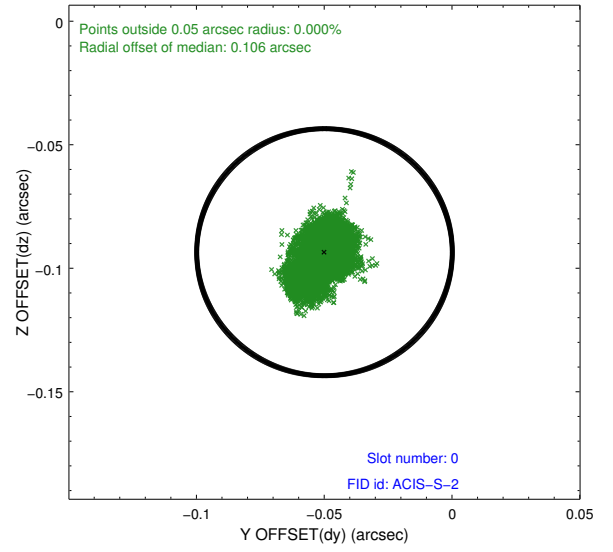
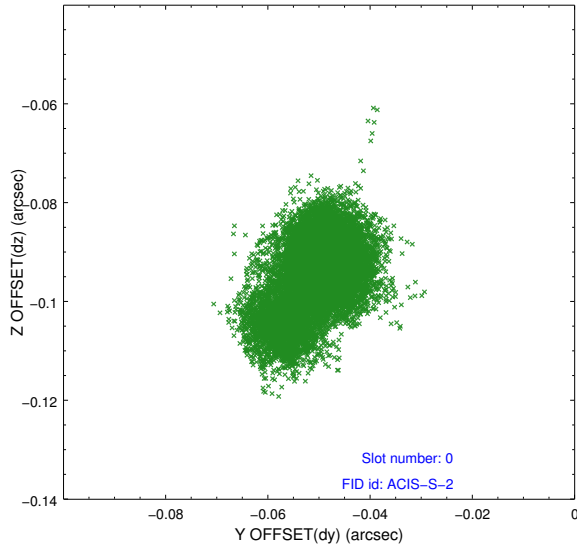


2.4.5 Slot 7

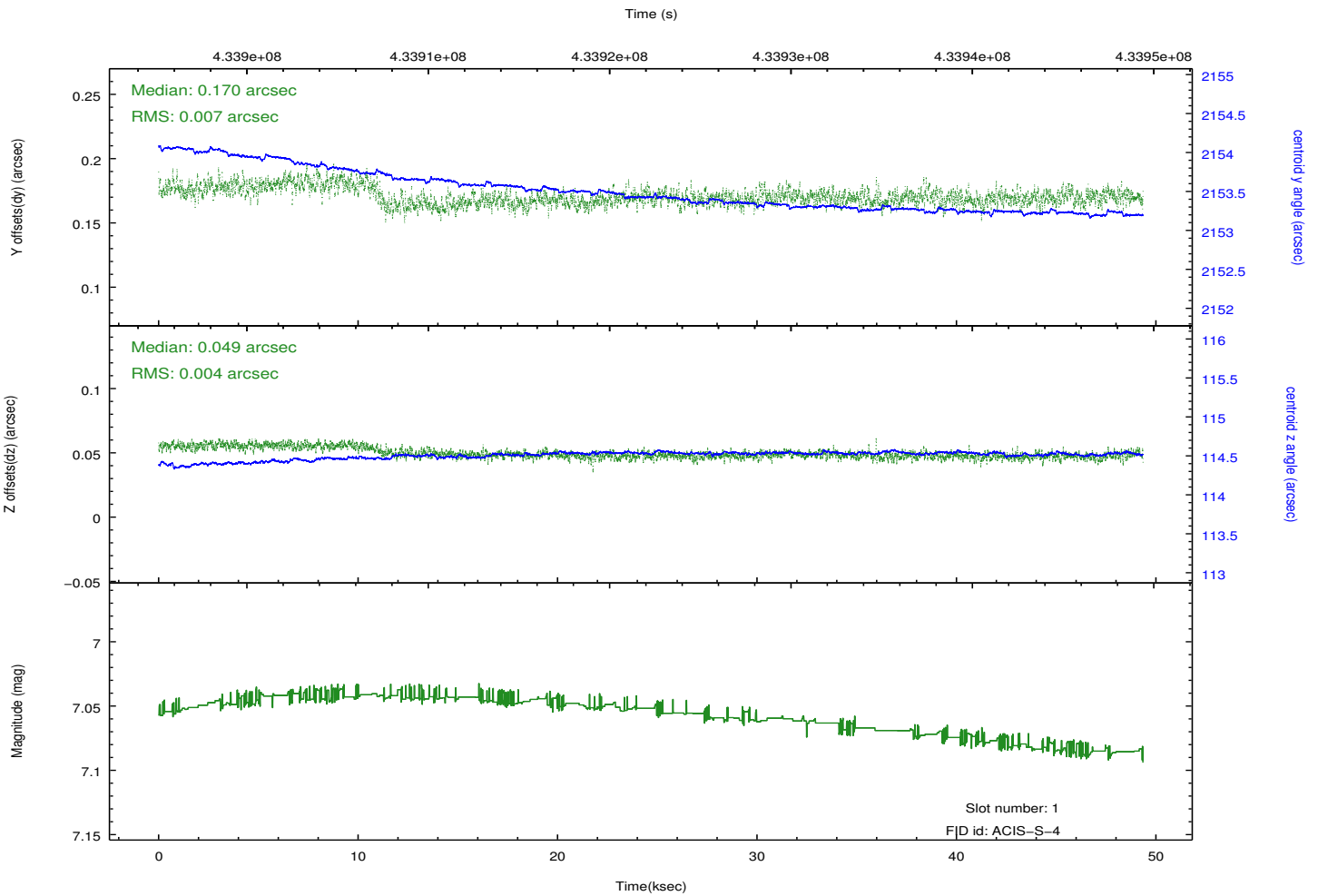
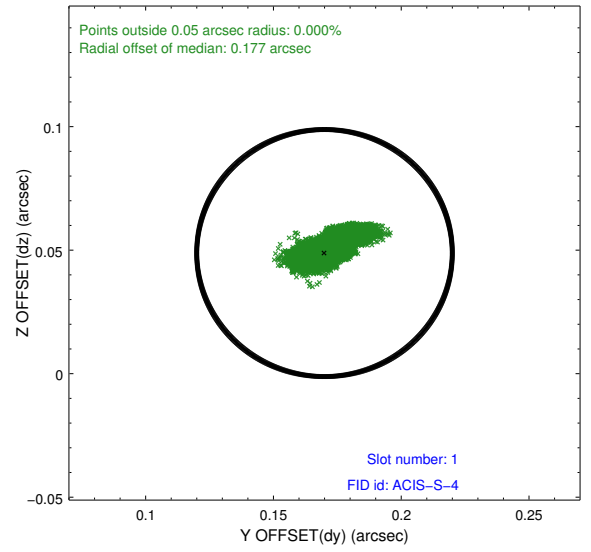
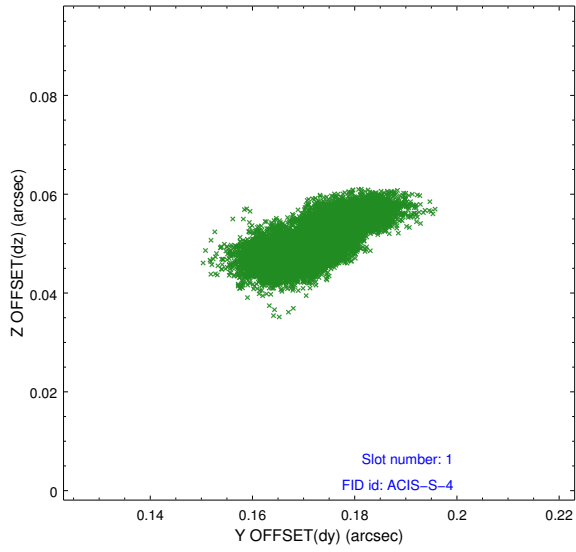


2.5 FID Slots

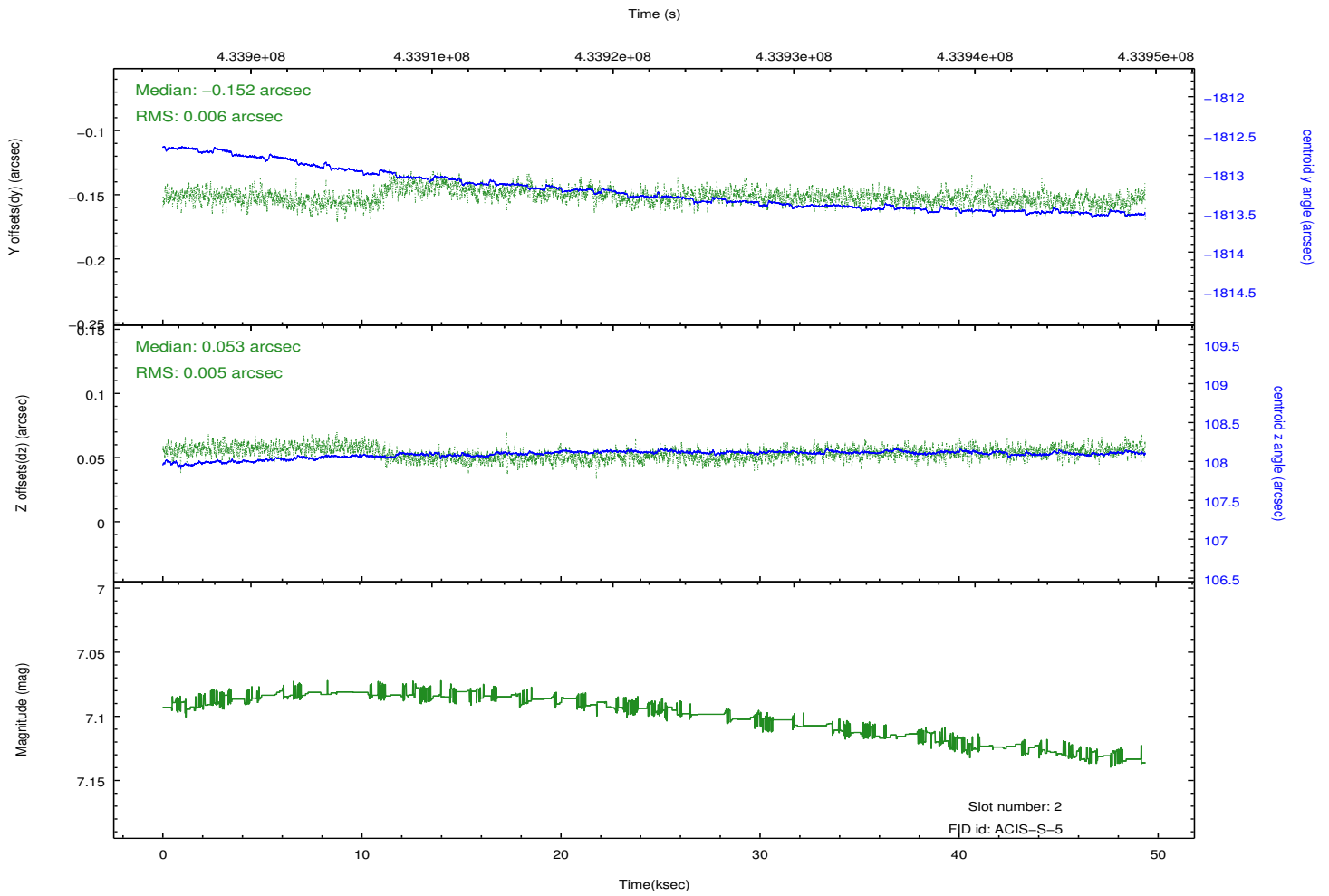
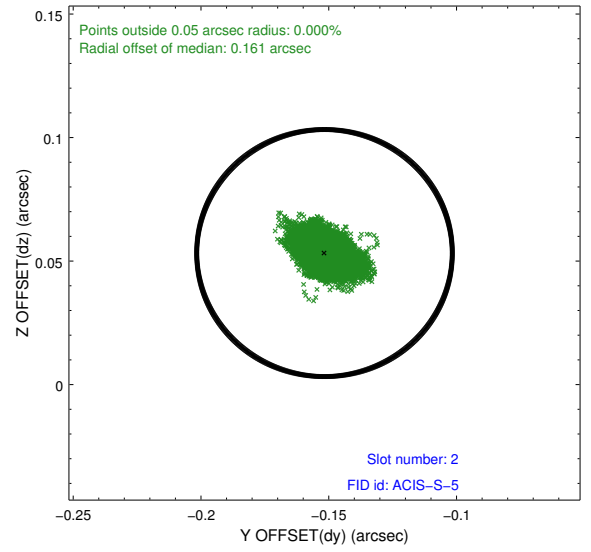
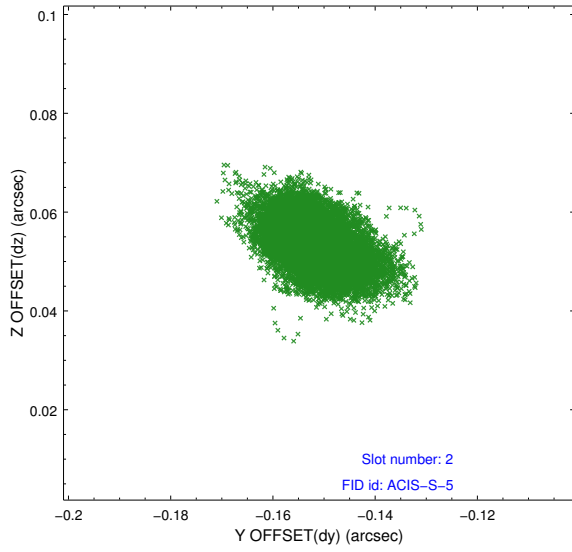
2.5.1 Slot 0



2.5.2 Slot 1

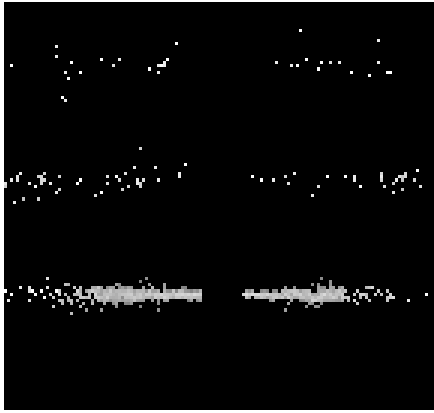


2.5.3 Slot 2

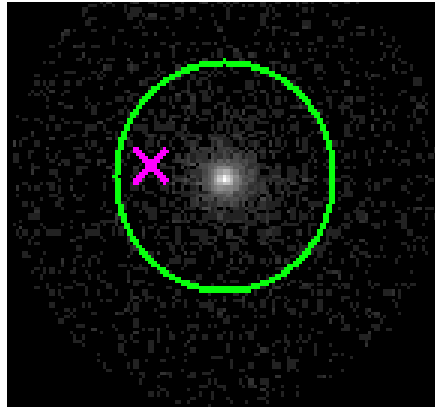


3 Gratings

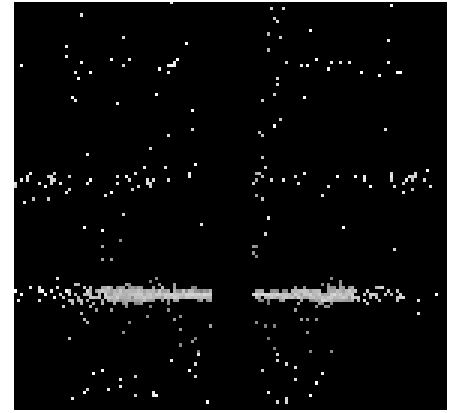
3.1 HEG Arm



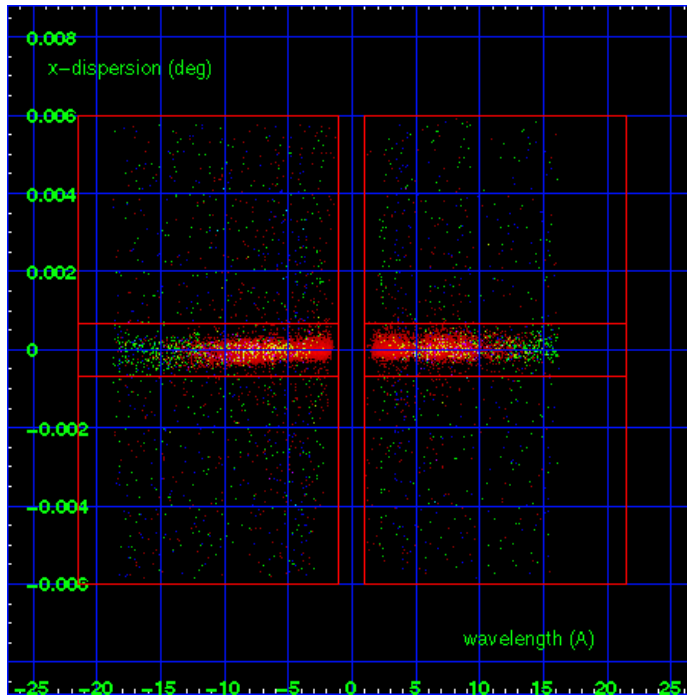
HEG Order Sort 123



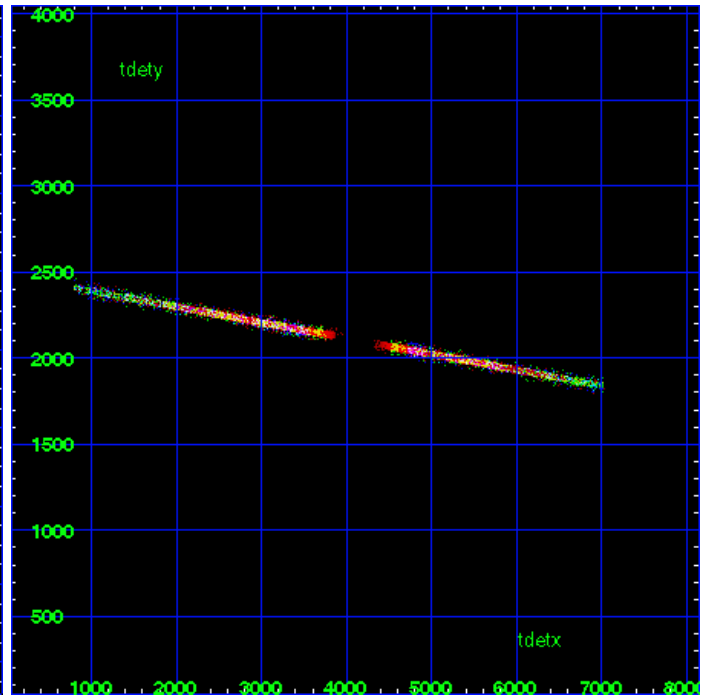
HEG Zero Order



HEG Order Sort ALL

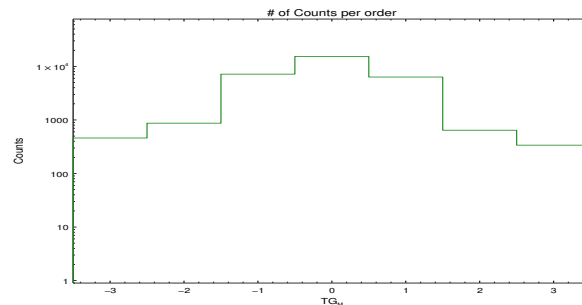


Spot Image HEG

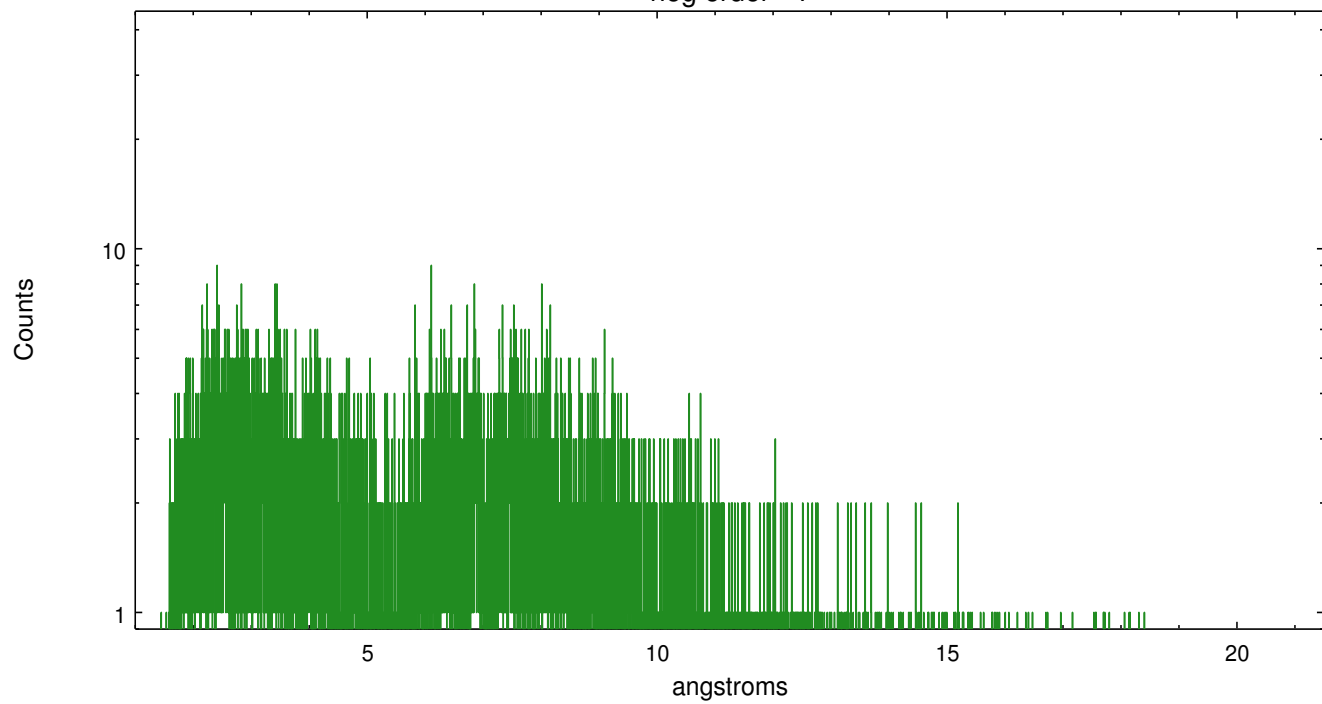


Full Detector HEG

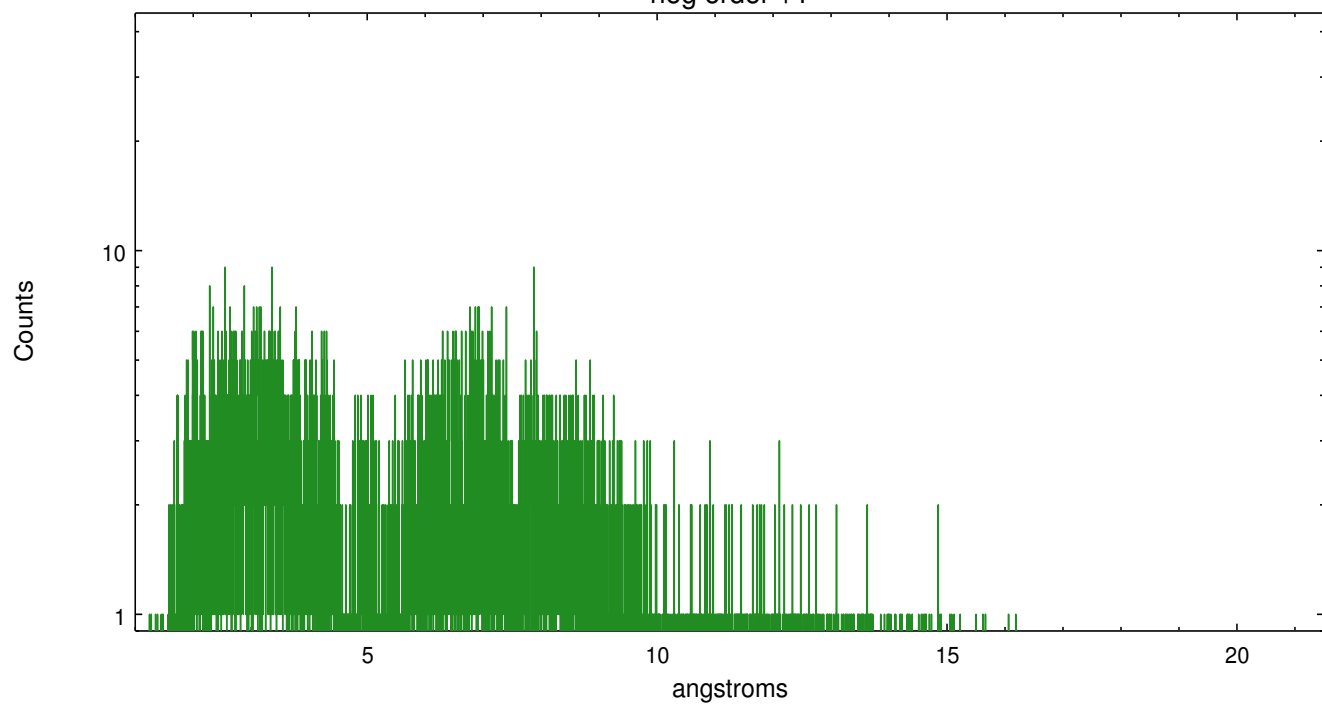
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	460	870	7161	15316	6328	642	338



heg order -1



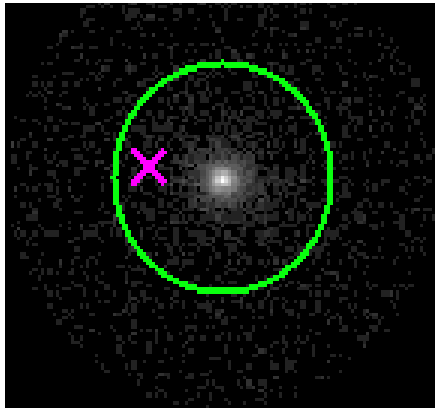
heg order +1



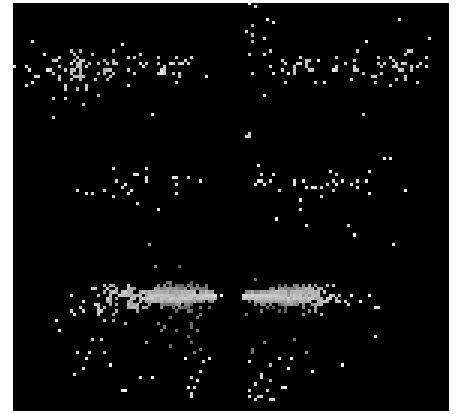
3.2 MEG Arm



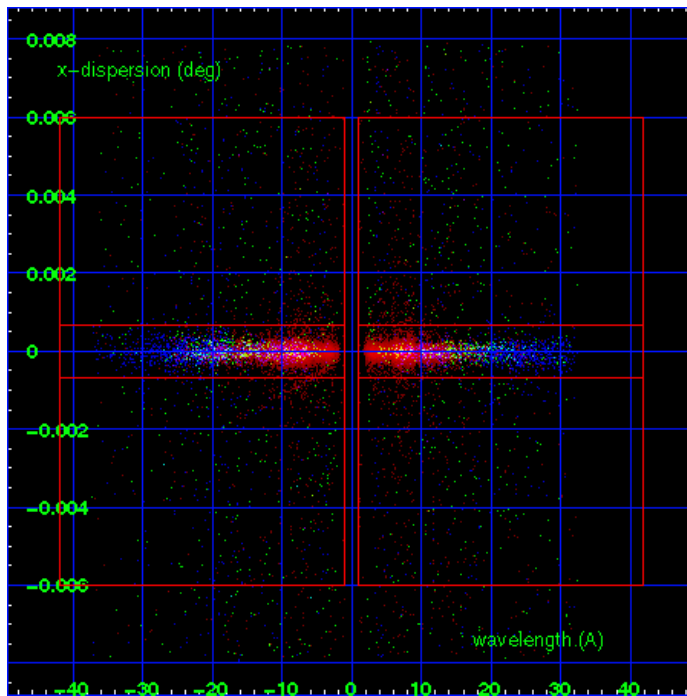
MEG Order Sort 123



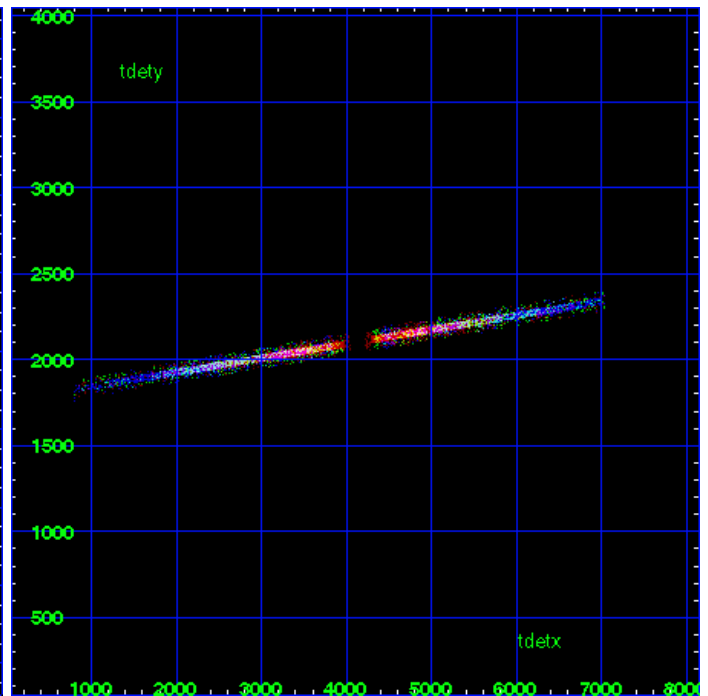
MEG Zero Order



MEG Order Sort ALL

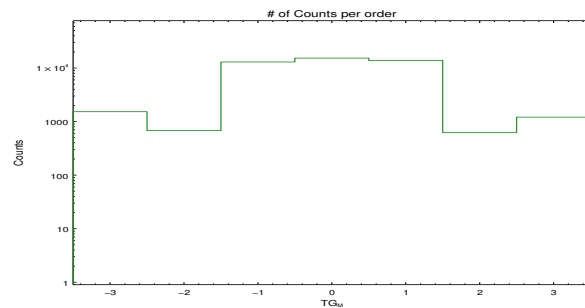


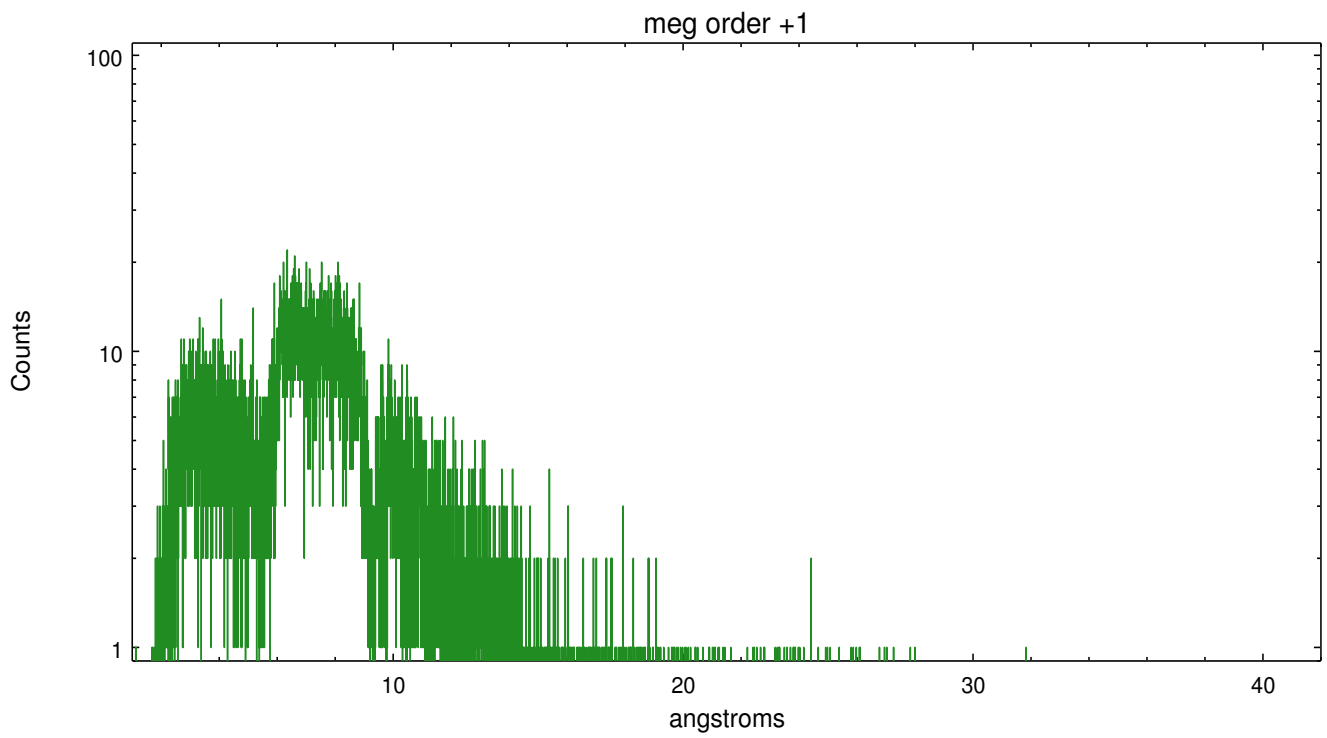
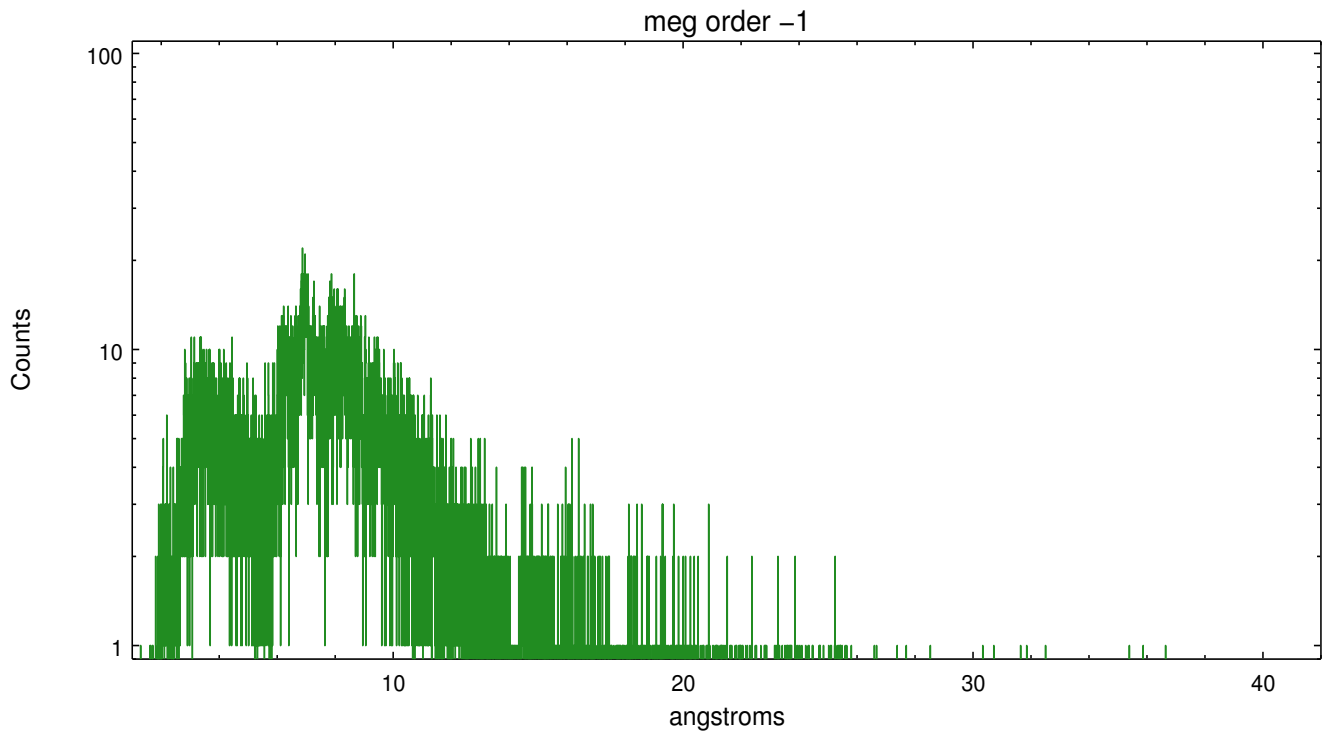
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1530	678	12982	15316	13811	621	1211





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.603967872381

A.2 Comments