

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 7240 - L2 Version 2
Chandra X-Ray Center

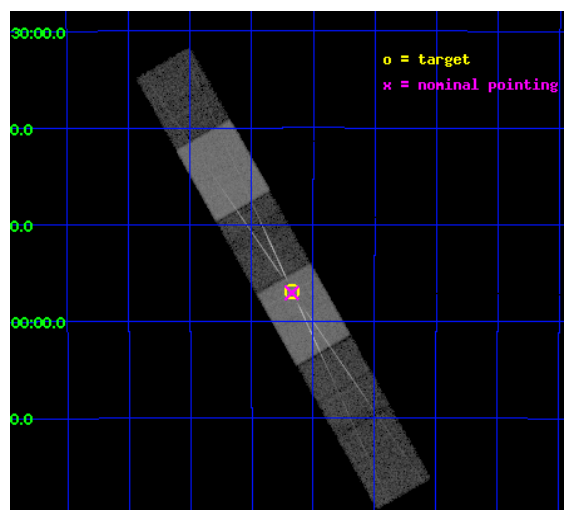
L2 Processing Date : Mar 18 2012

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1 Front

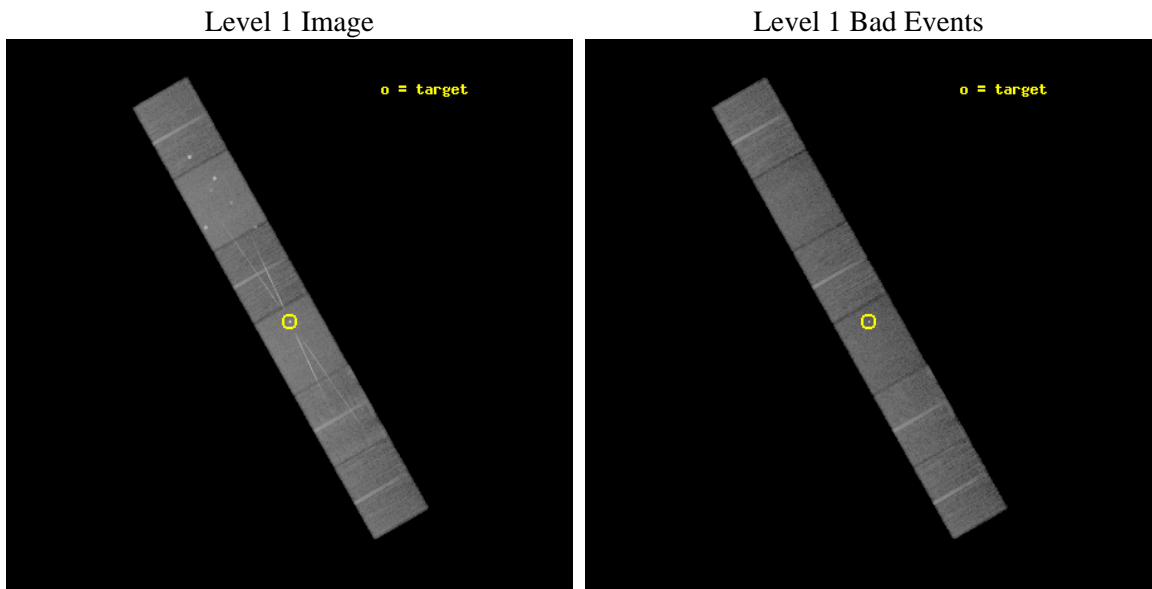
seq_num	701171	Sequence number
obs_id	7240	Observation id
title	Revealing the Relativistic Iron line in the Seyfert 1.9 Galaxy, MCG-5-23-16	Proposal title
observer	Dr James Reeves	Principal investigator
object	MCG -5-23-16	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	146.9175	Observer's specified target RA [deg]
dec_targ	-30.948889	Observer's specified target Dec [deg]
ra_nom	146.9183257757	Nominal RA [deg]
dec_nom	-30.95101969006	Nominal Dec [deg]
roll_nom	60.423607940819	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20245.0	Sum of GTIs [s]
livetime	19918.025690268	Livetime [s]
ontime4	20242.458999813	Sum of GTIs [s]
ontime5	20245.0	Sum of GTIs [s]
ontime6	20245.0	Sum of GTIs [s]
ontime7	20245.0	Sum of GTIs [s]
ontime8	20245.0	Sum of GTIs [s]
ontime9	20242.459009826	Sum of GTIs [s]
l2events	241395	Number of level 2 events



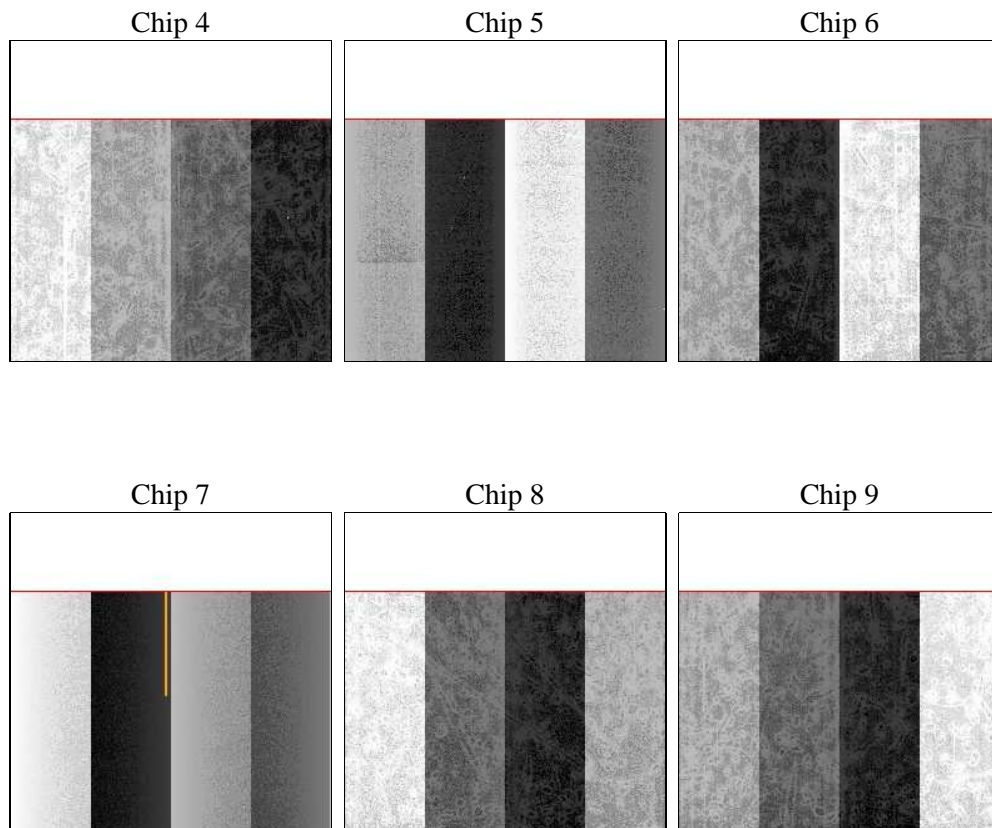
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	20245.0	Sum of GTIs [s]
caldsver	4.4.8	 	ontime4	20242.458999813	Sum of GTIs [s]
date	2012-03-18T09:59:58	Date and time of file creation	ontime5	20245.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20245.0	Sum of GTIs [s]
			ontime7	20245.0	Sum of GTIs [s]
			ontime8	20245.0	Sum of GTIs [s]
			ontime9	20242.459009826	Sum of GTIs [s]
			l1events	959362	Number of level 1 events

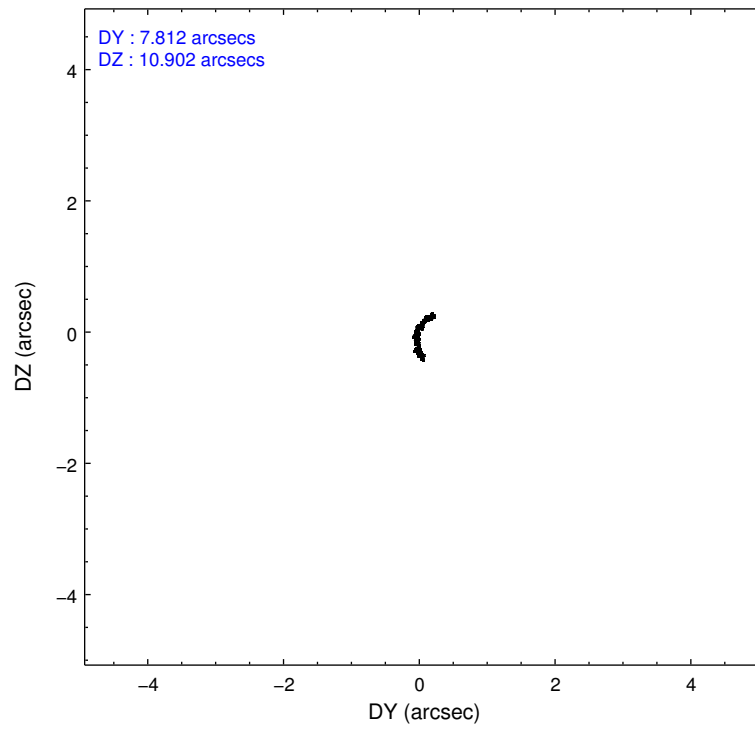
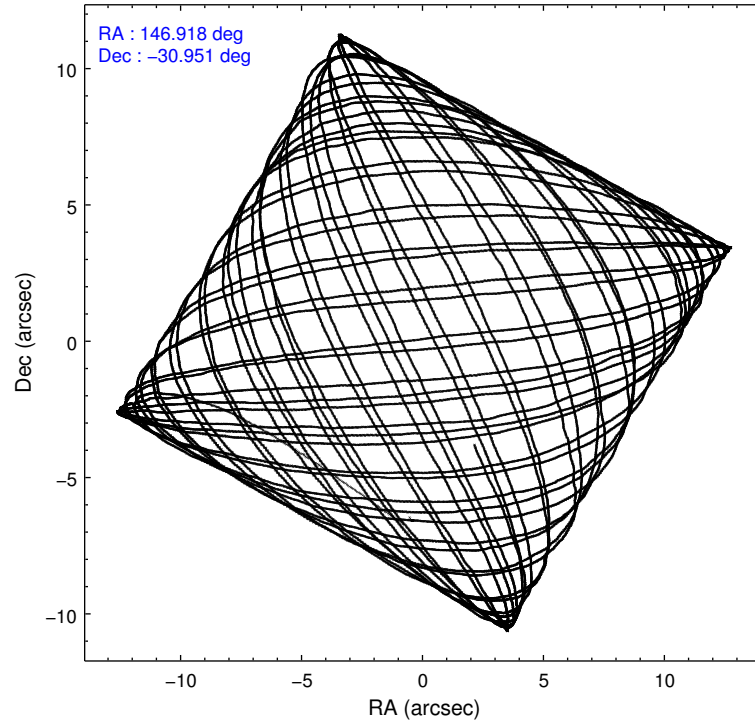
2.1.4 Events

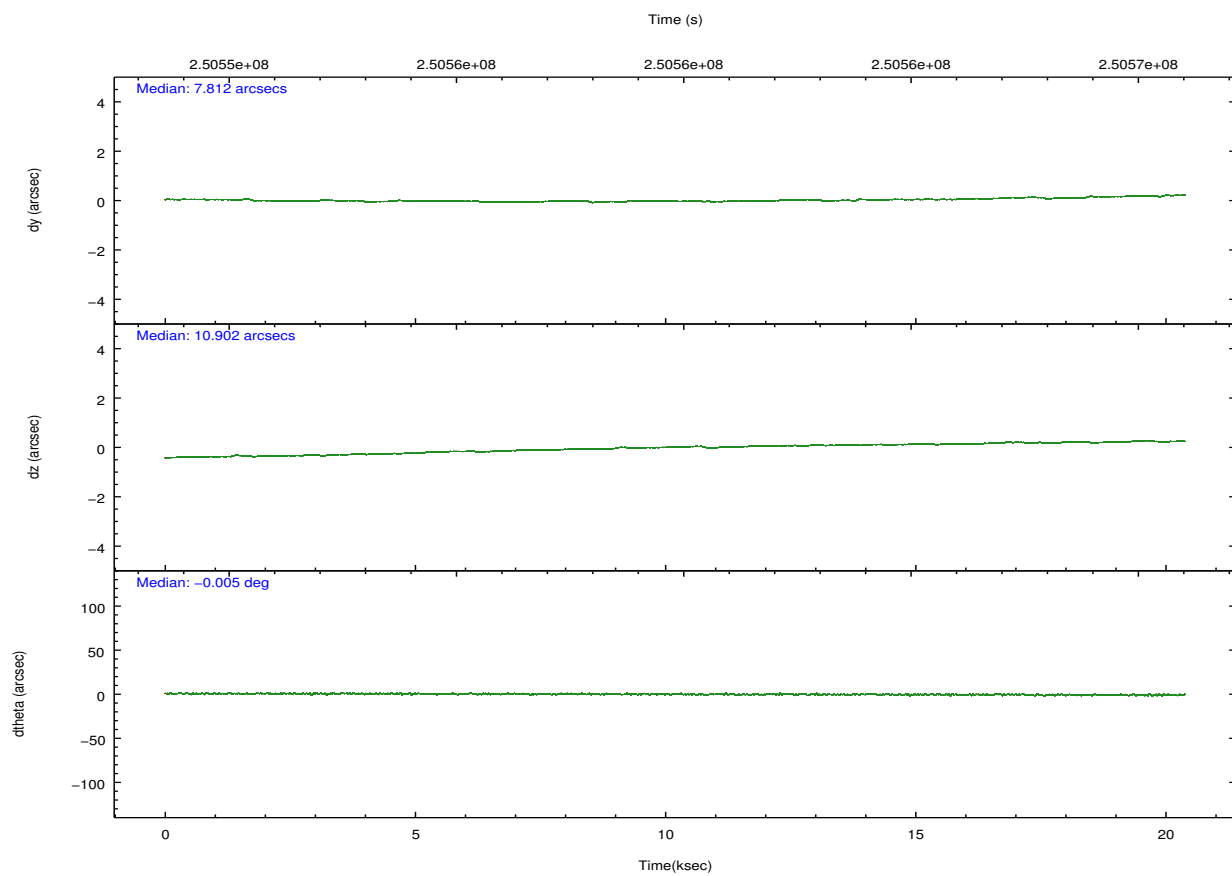
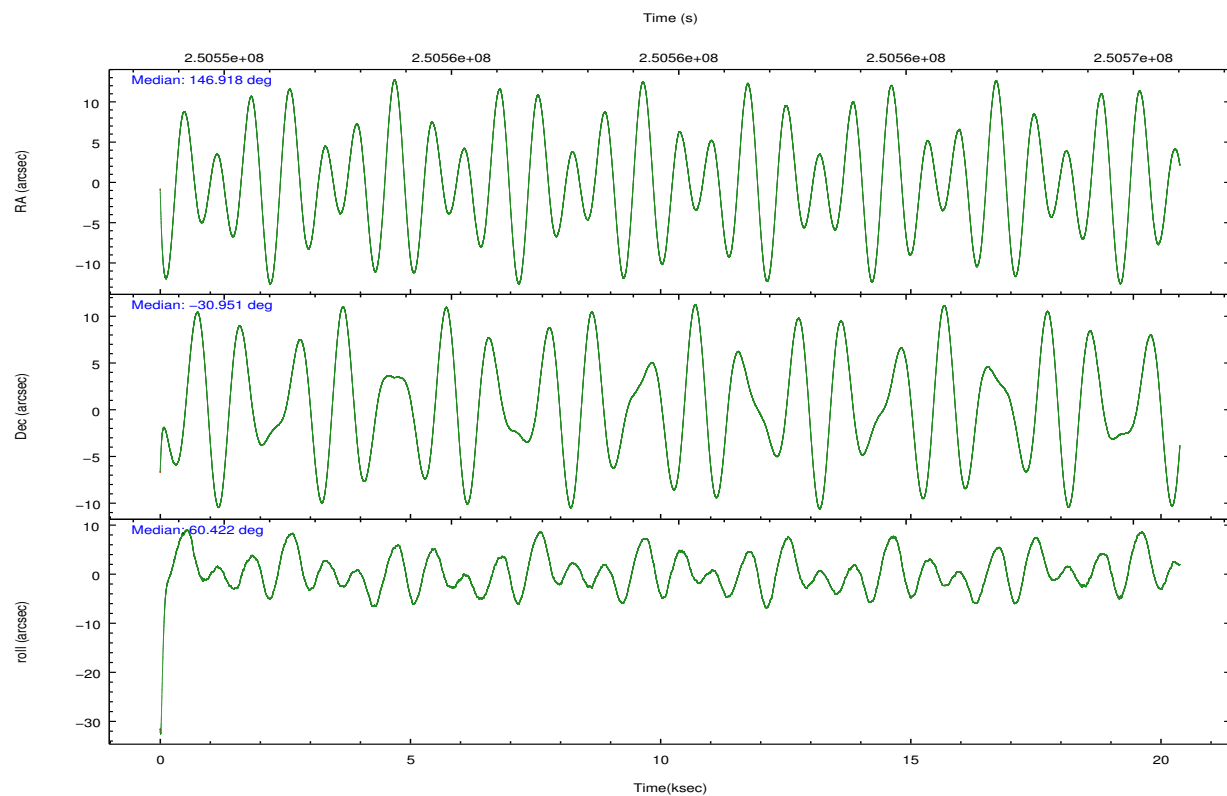
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	144493	193982	139082	192885	162466	126454	grade 0 events	10505	12560	14609	9950	13272	6919
rejected events	124546	102079	112132	102492	124653	110162		7%	6%	10%	5%	8%	5%
rejected %	86%	52%	80%	53%	76%	87%	grade 1 events	133	321	82	301	100	63
								0%	0%	0%	0%	0%	0%
							grade 2 events	3554	25811	4716	18893	7802	3036
								2%	13%	3%	9%	4%	2%
							grade 3 events	1661	4124	2069	8290	3975	1654
								1%	2%	1%	4%	2%	1%
							grade 4 events	1693	3905	2019	8365	3576	1653
								1%	2%	1%	4%	2%	1%
							grade 5 events	5469	14401	5793	17339	7529	6126
								3%	7%	4%	8%	4%	4%
							grade 6 events	2537	45527	3542	44906	9202	3036
								1%	23%	2%	23%	5%	2%
							grade 7 events	118941	87333	106252	84841	117010	103967
								82%	45%	76%	43%	72%	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	146.919007	146.9183257756959	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-30.978225	-30.95101969005956	Subarray start row	1	1
[deg] Pointing Roll	60.267354	60.42360794081932	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)	250549794.184000	250548731.83995			
Observation start date	2005-12-09T21:08:50	2005-12-09T20:52:11			
[s] Observation end time (MET)	250569994.184000	250570810.85347			
Observation end date	2005-12-10T02:45:30	2005-12-10T03:00:10			
Read mode	TIMED	TIMED			

2.3 Aspect



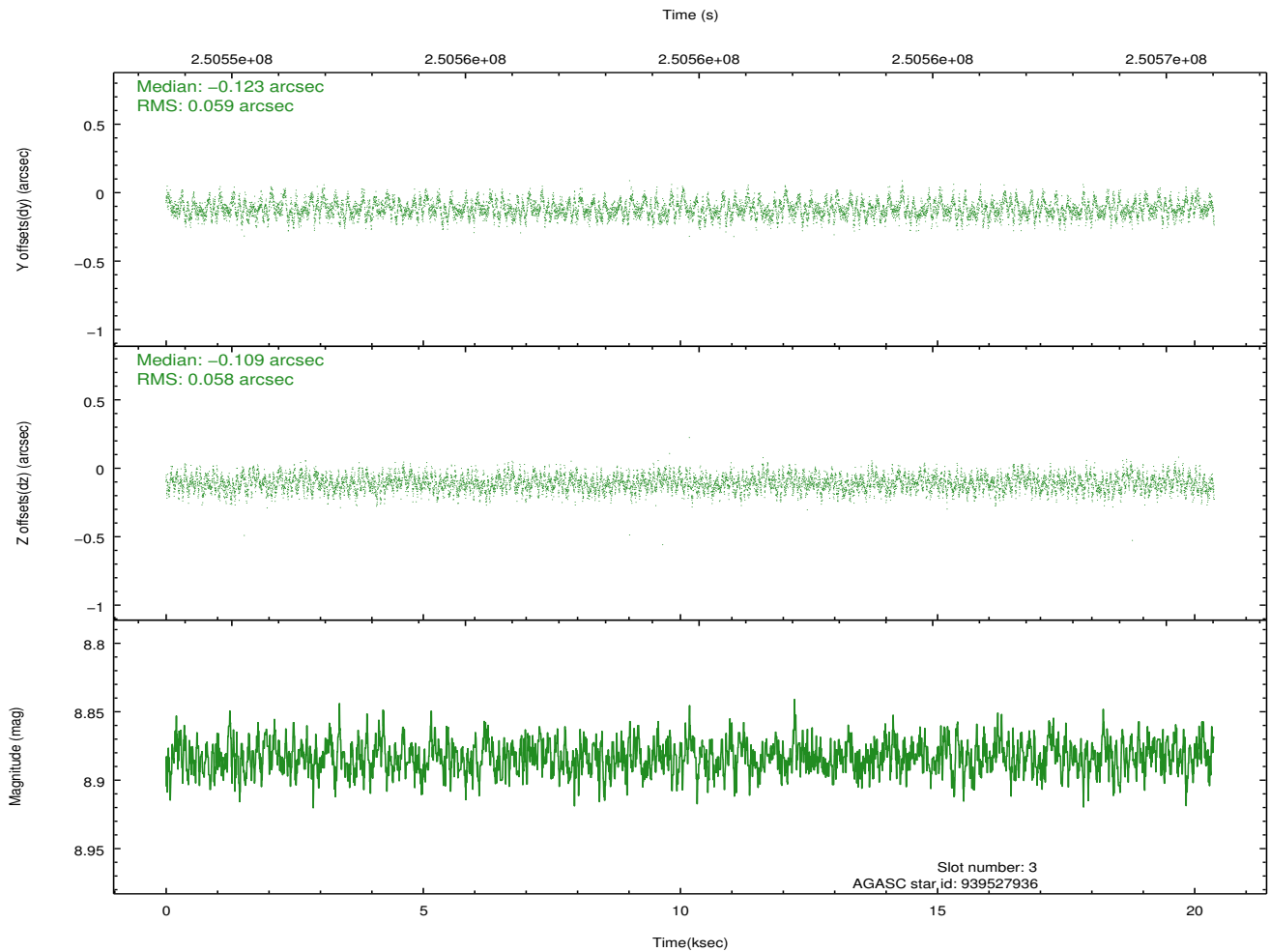
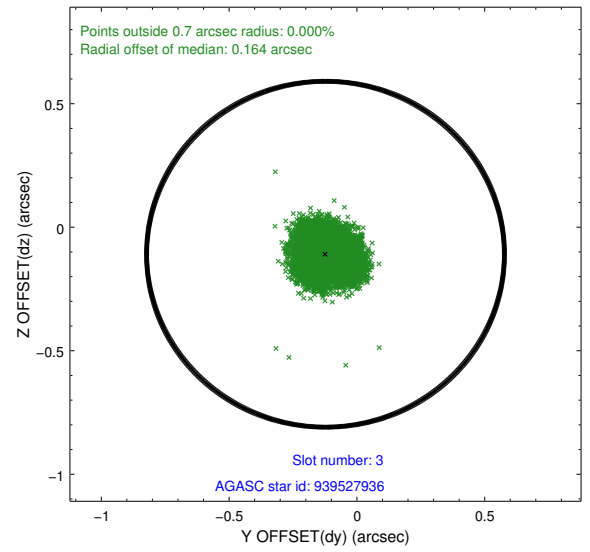
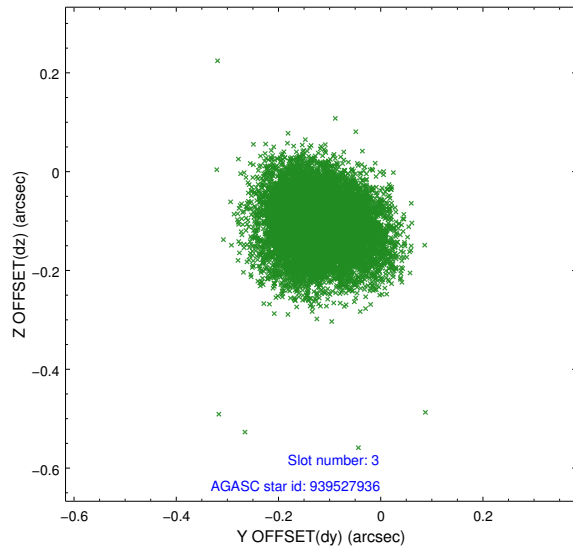


Slot Statistics

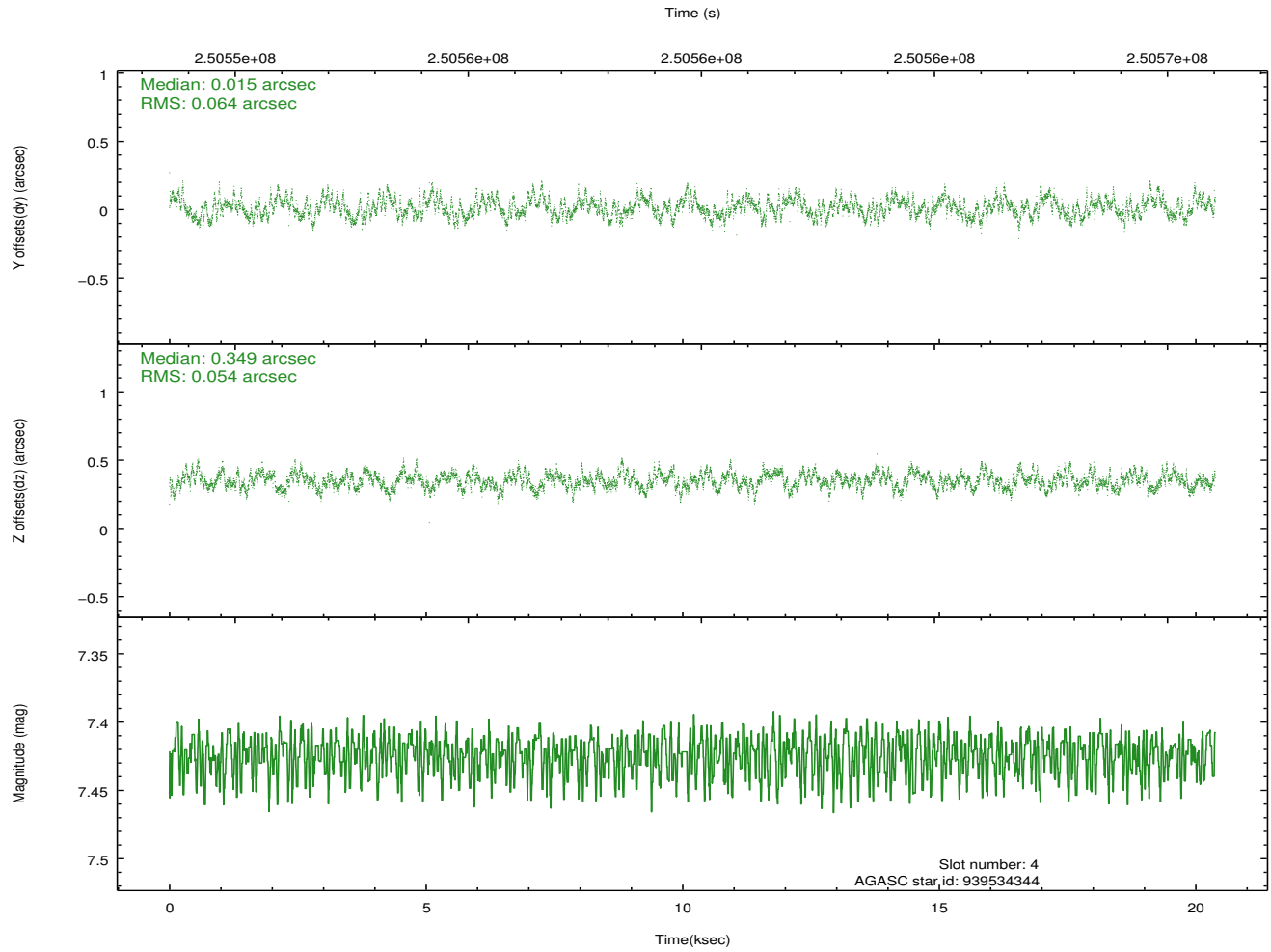
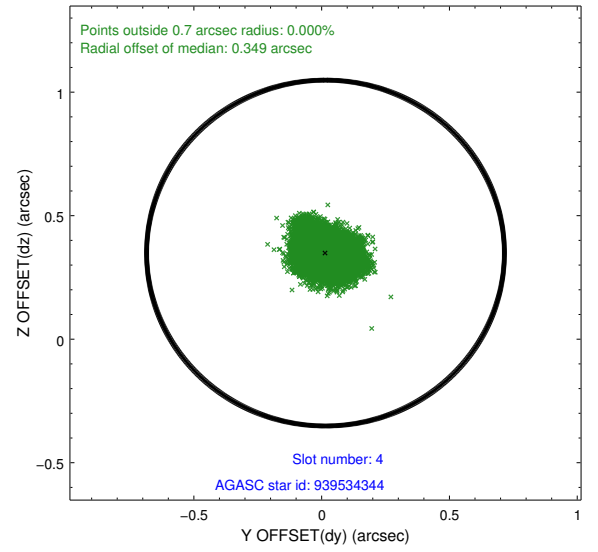
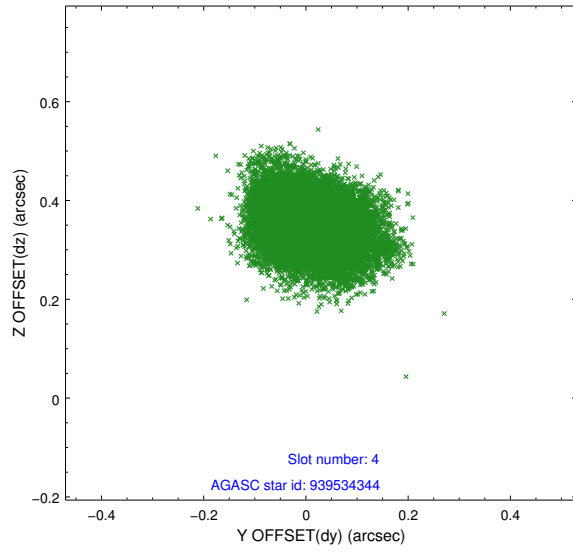
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	4971	0.044	0.084	0.011	0.018	0.000000	0.000000	935.65	-1789.78
1	FID	ACIS-S-2	7.10	4971	-0.135	-0.087	0.011	0.017	0.000000	0.000000	-760.33	-1794.67
2	FID	ACIS-S-4	7.19	4972	0.066	0.009	0.008	0.013	0.000000	0.000000	2152.86	114.09
3	GUIDE	939527936	8.88	9934	-0.123	-0.109	0.090	0.141	146.559458	-30.580866	688.20	1676.40
4	GUIDE	939534344	7.42	9943	0.015	0.349	0.092	0.141	146.766481	-31.268117	-1138.80	-109.63
5	GUIDE	939536488	8.97	9931	0.187	-0.083	0.076	0.125	146.629105	-31.360261	-1637.21	91.11
6	GUIDE	939527696	8.59	9938	-0.164	-0.163	0.073	0.116	146.792310	-30.270932	2015.55	1605.31
7	GUIDE	939532752	9.47	9934	0.085	0.011	0.141	0.234	147.948677	-30.729629	2345.40	-2329.84

2.4 Star Slots

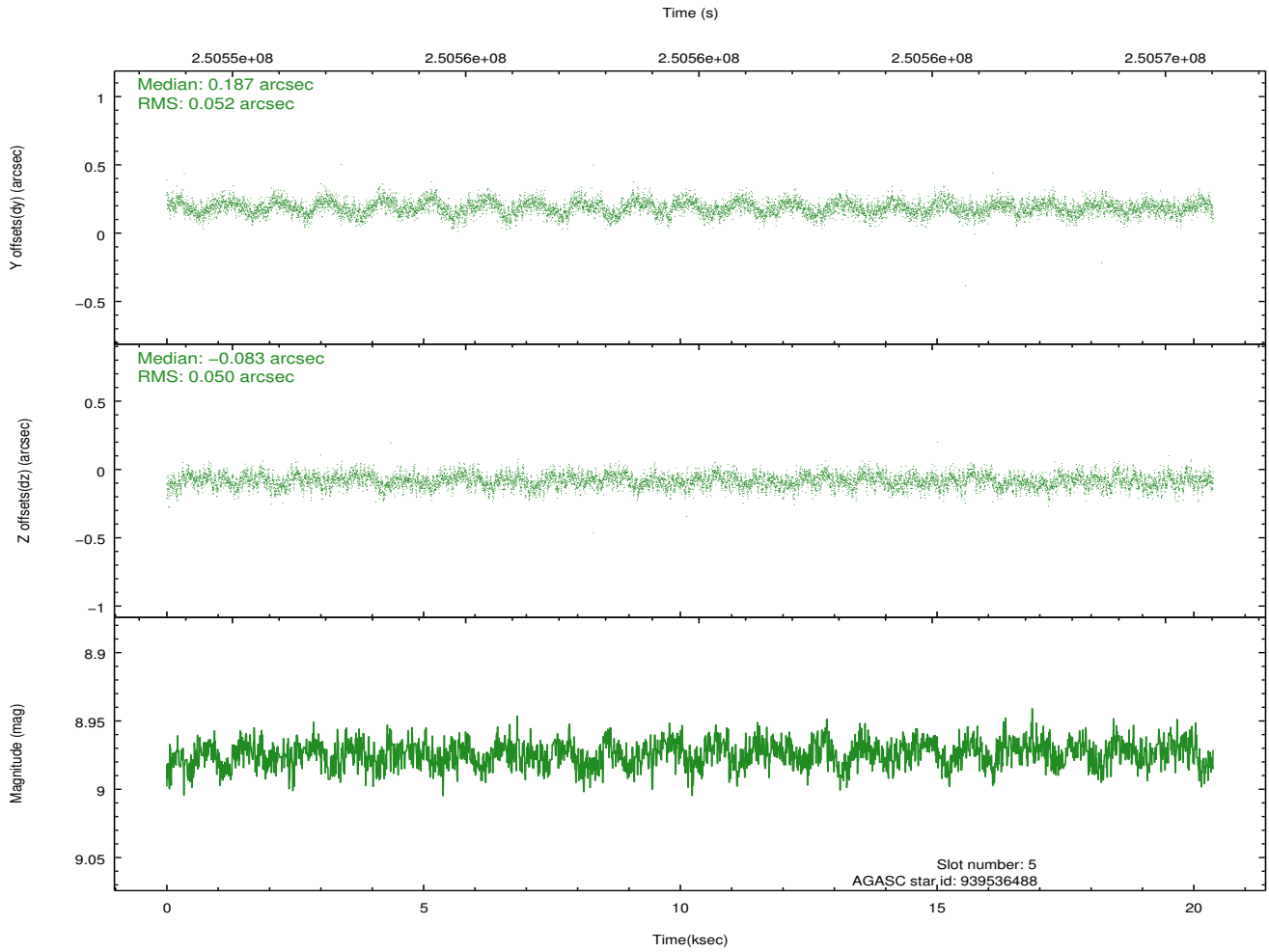
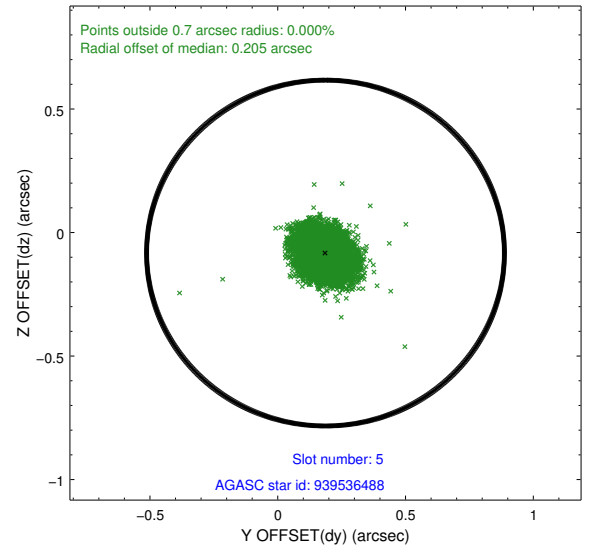
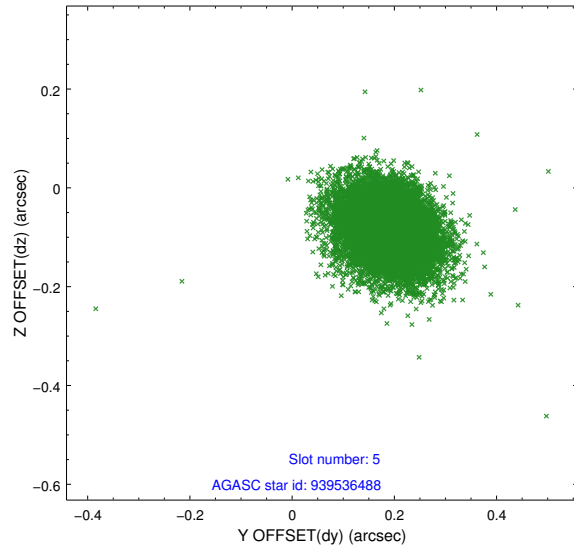
2.4.1 Slot 3



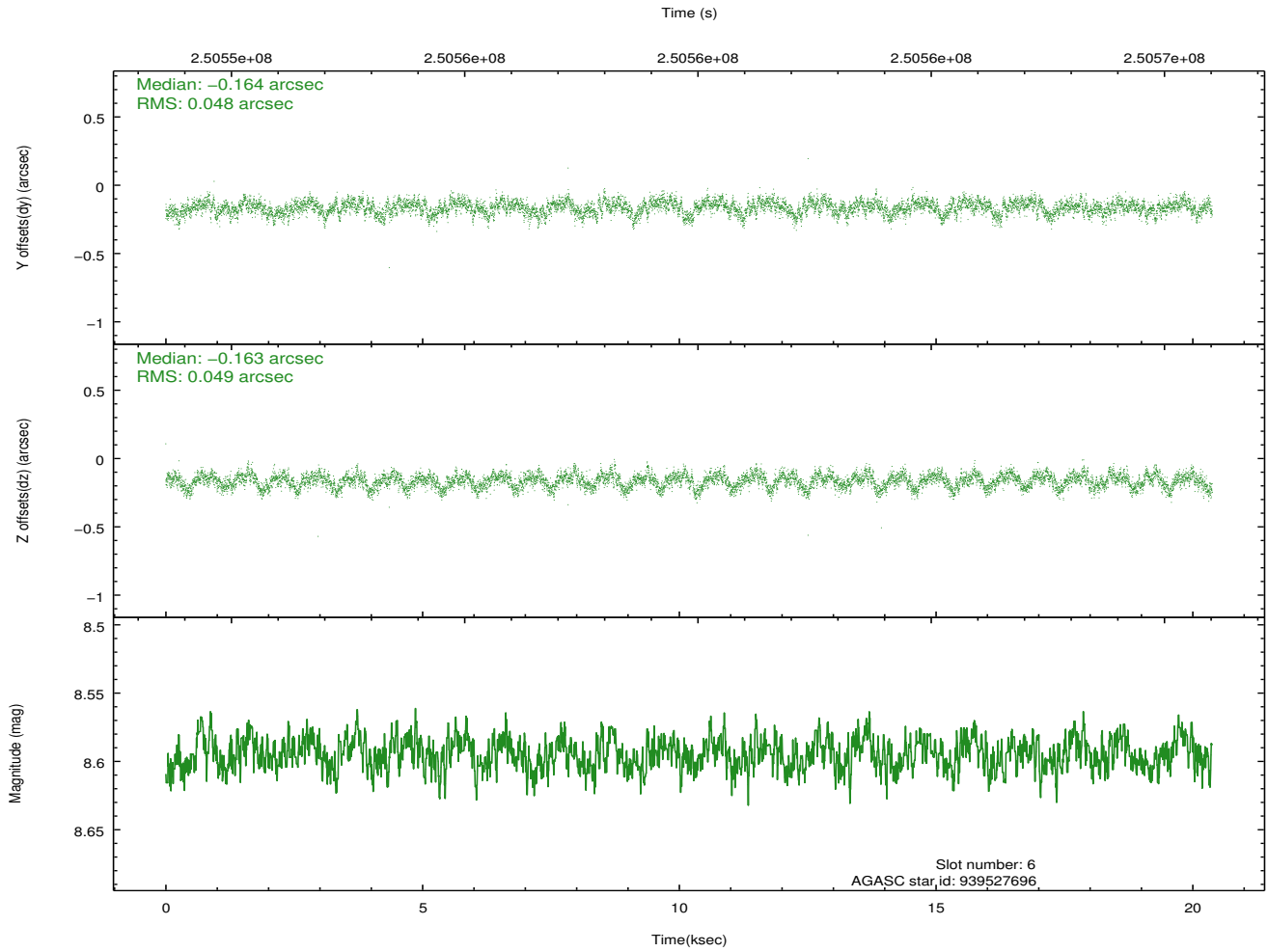
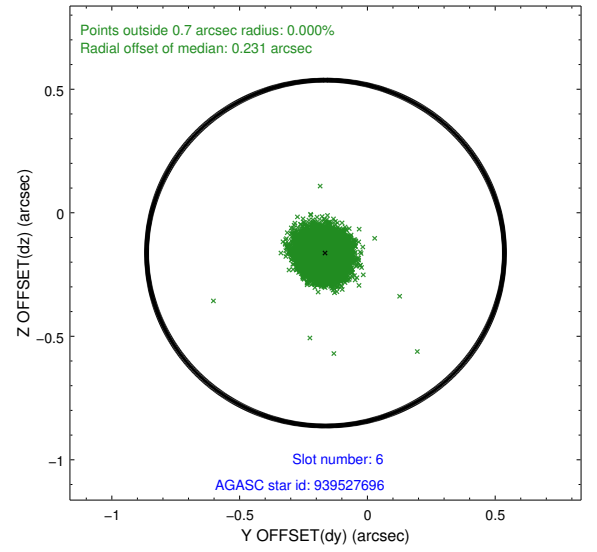
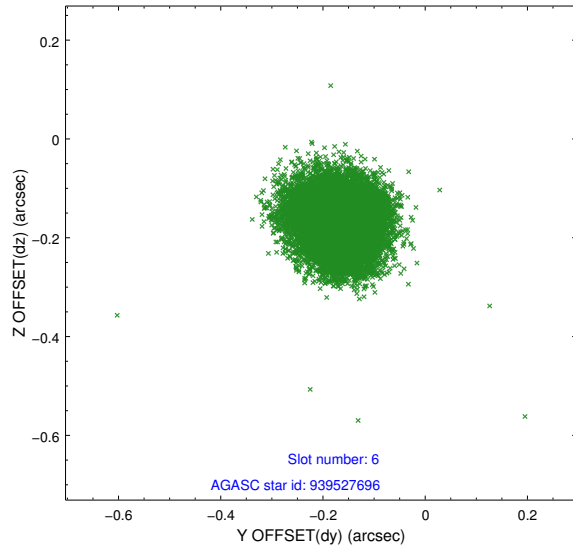
2.4.2 Slot 4



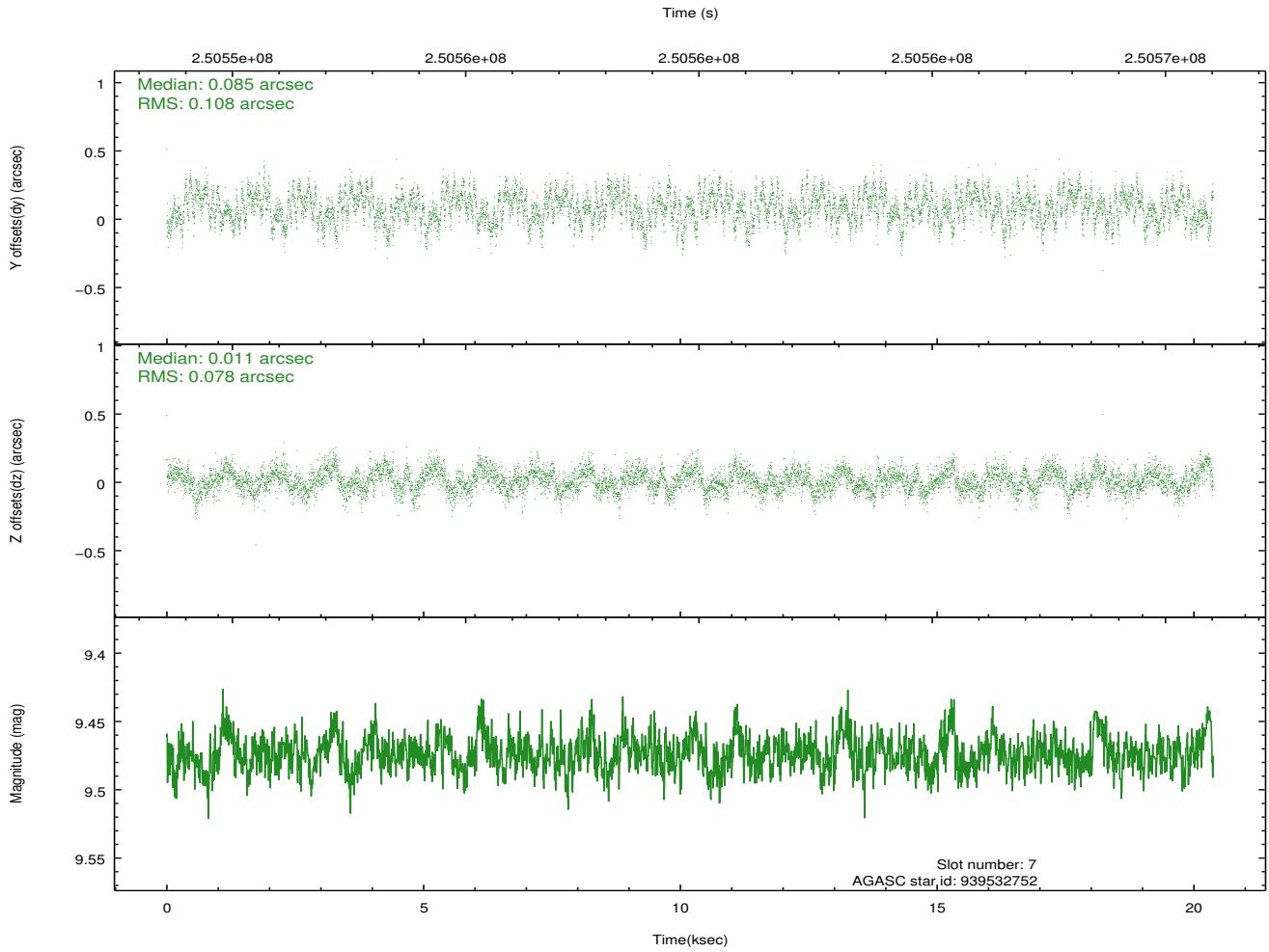
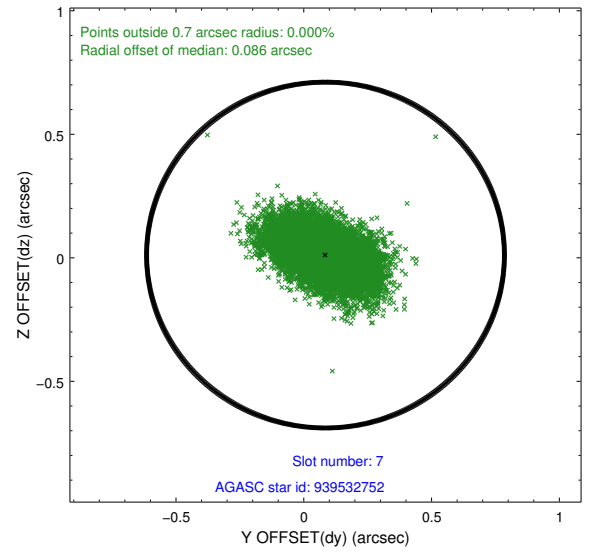
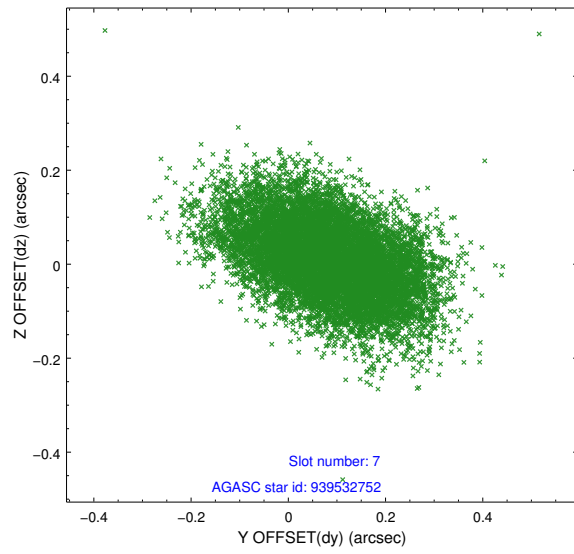
2.4.3 Slot 5



2.4.4 Slot 6

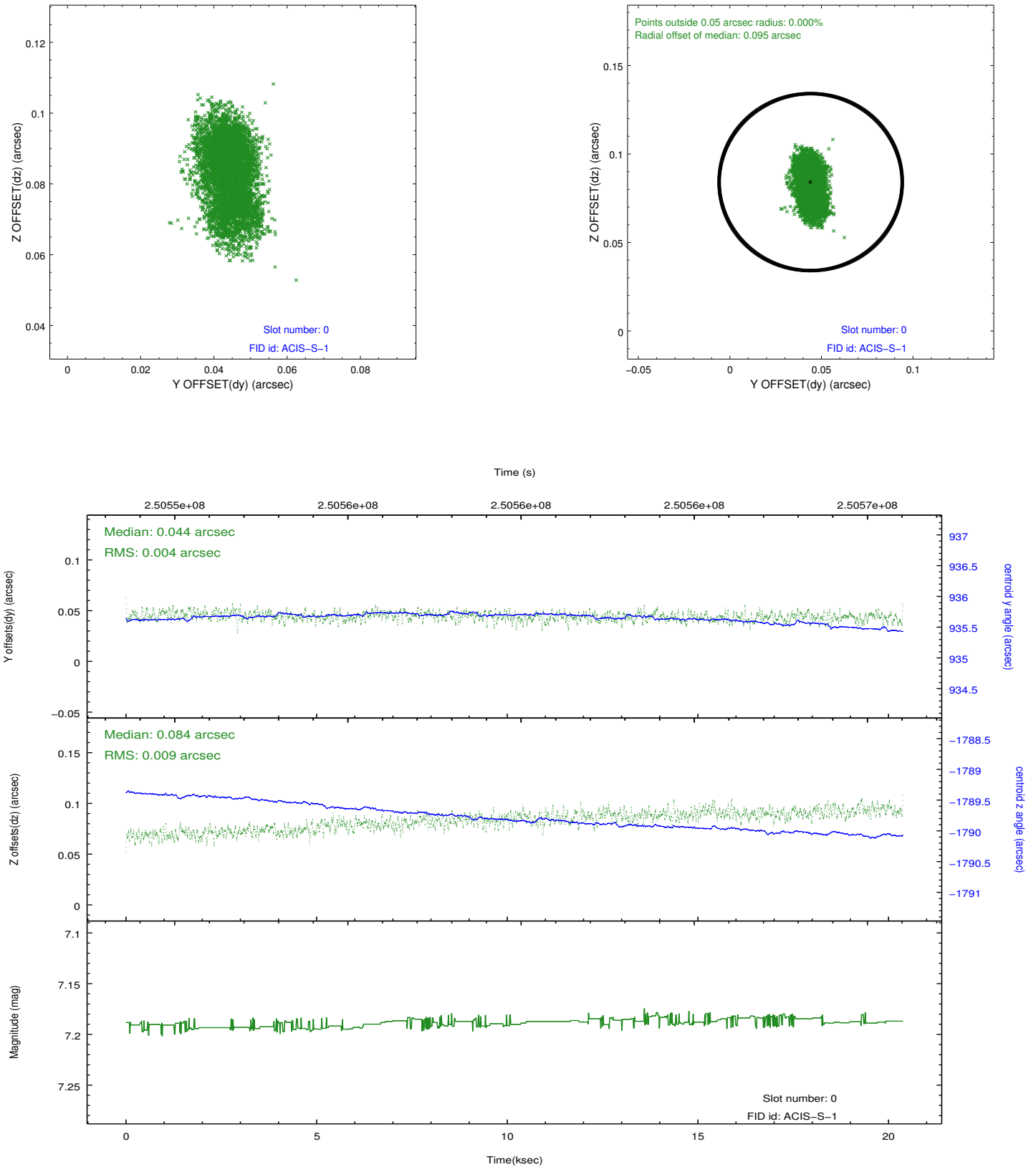


2.4.5 Slot 7

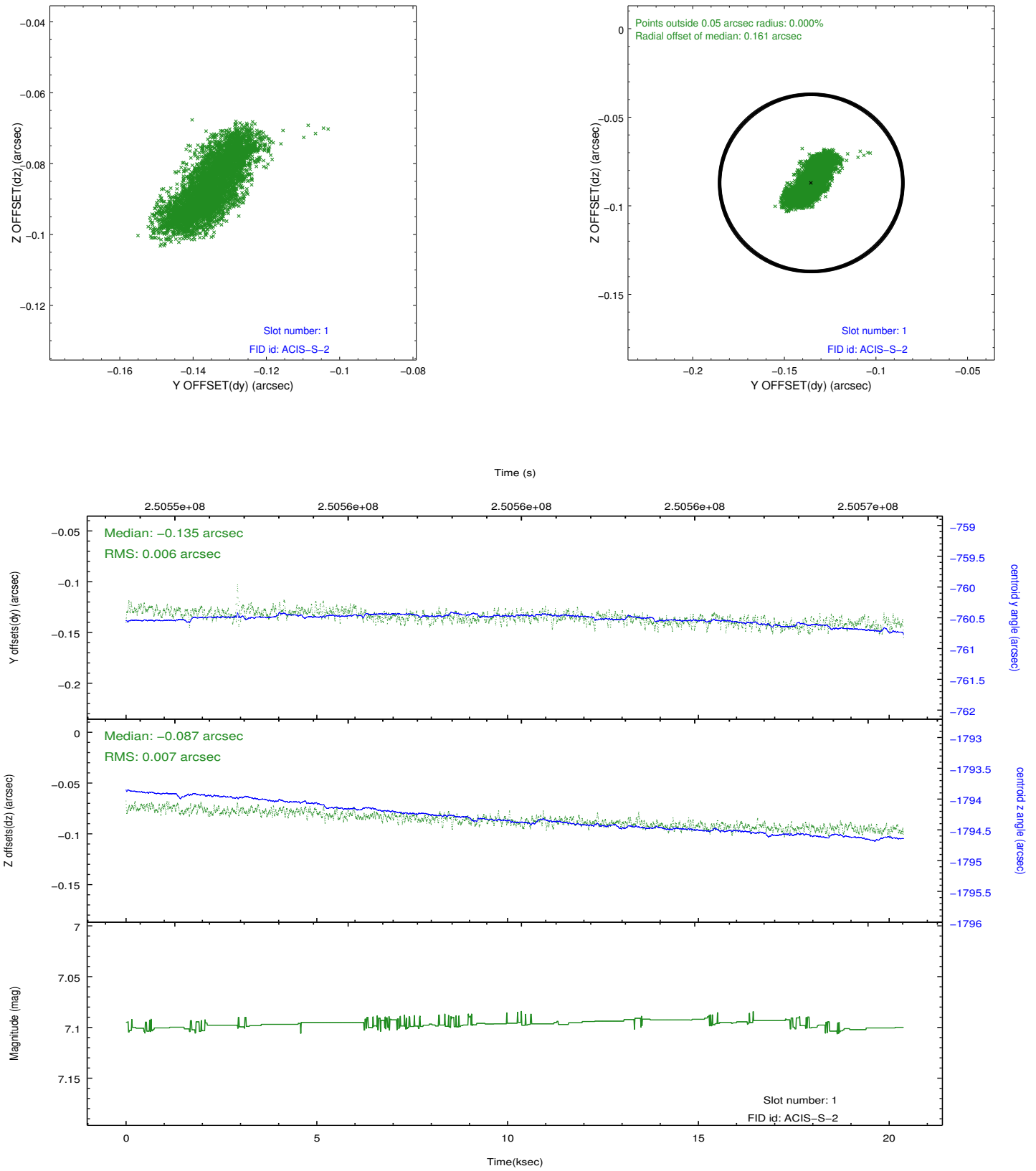


2.5 FID Slots

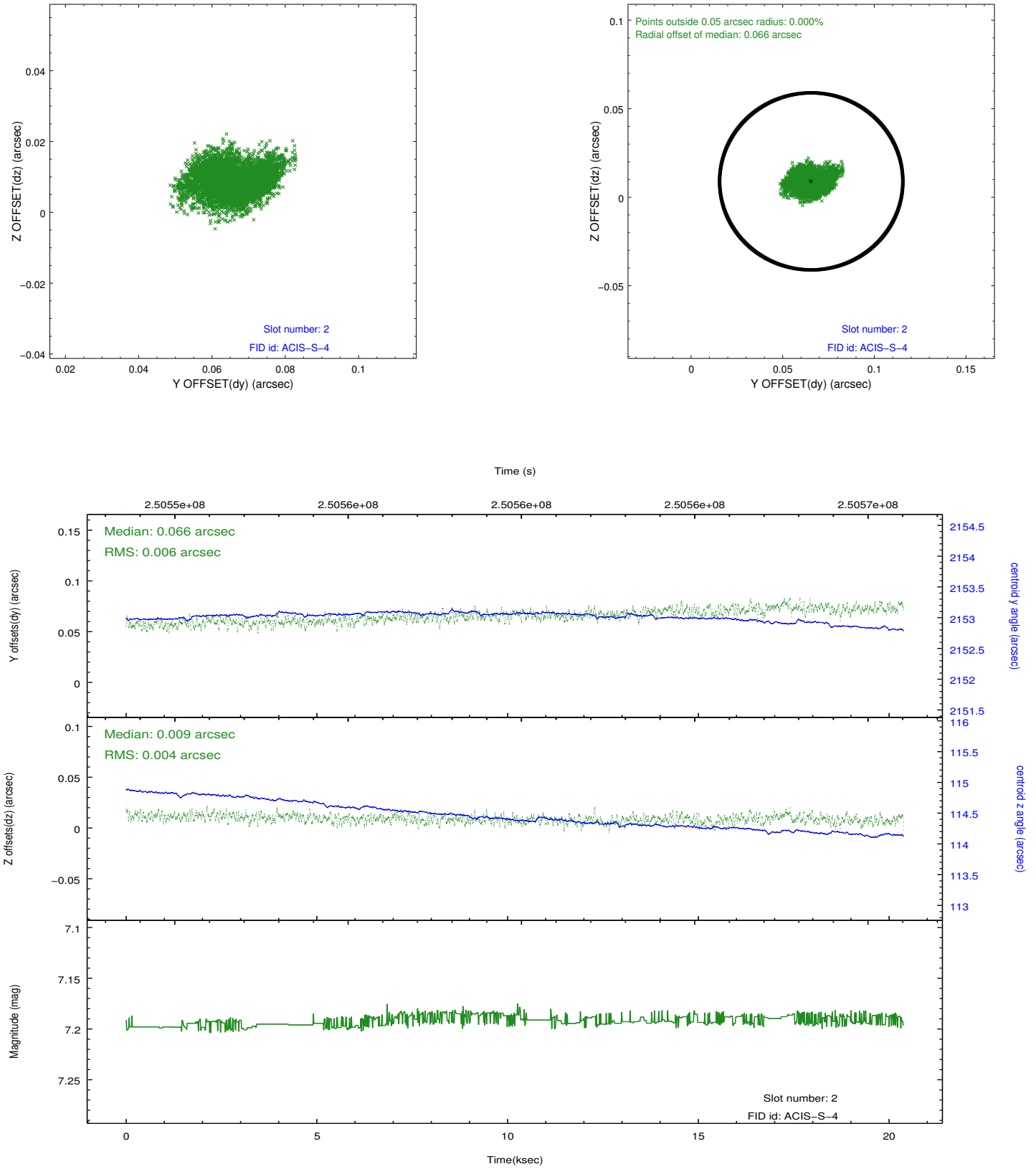
2.5.1 Slot 0



2.5.2 Slot 1

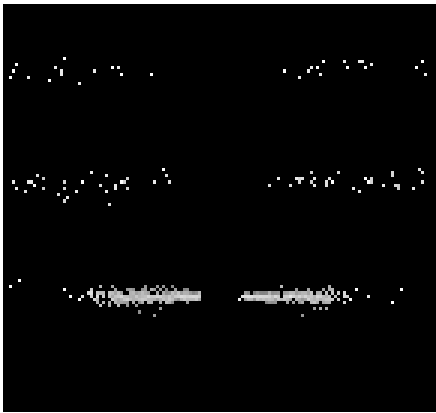


2.5.3 Slot 2

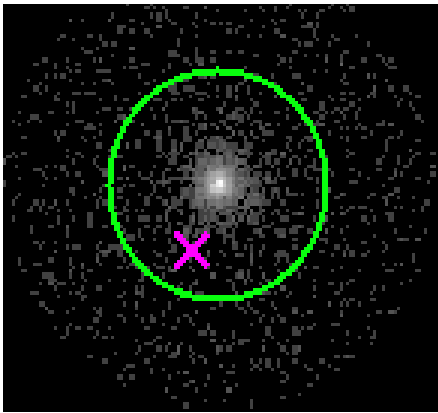


3 Gratings

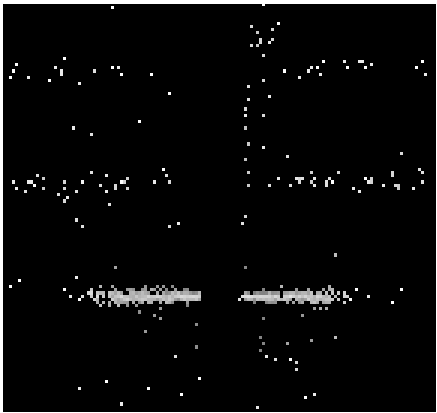
3.1 HEG Arm



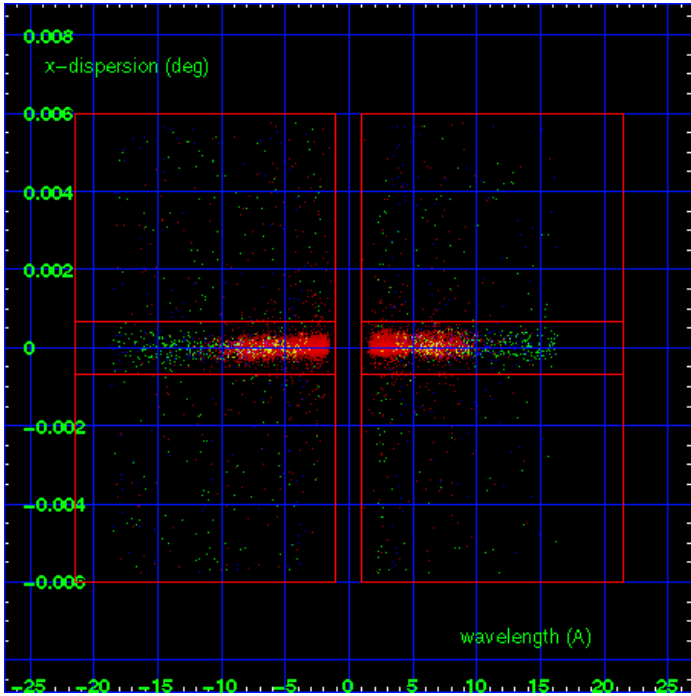
HEG Order Sort 123



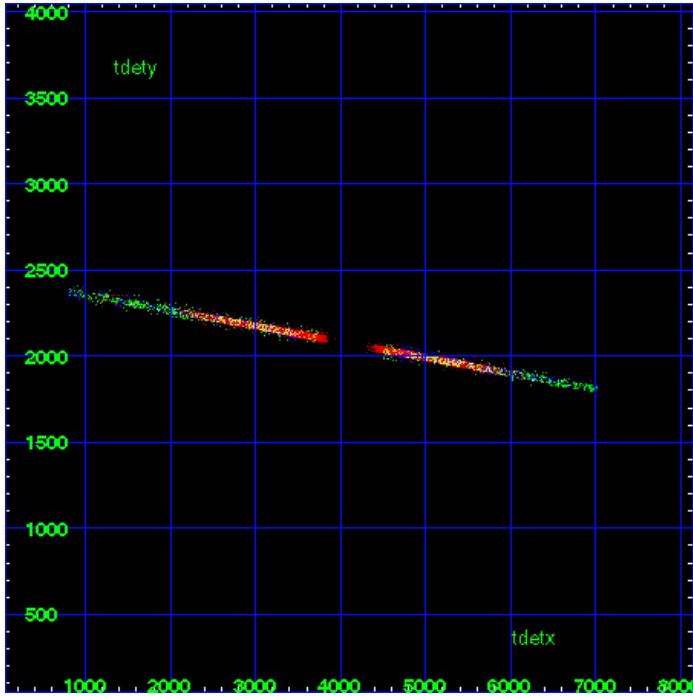
HEG Zero Order



HEG Order Sort ALL

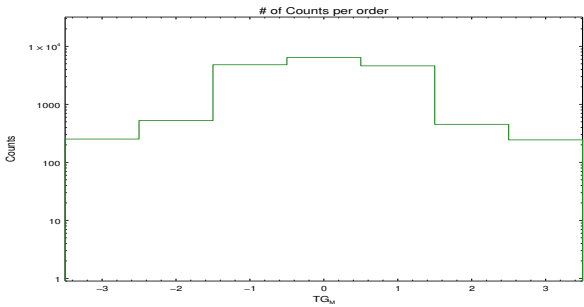


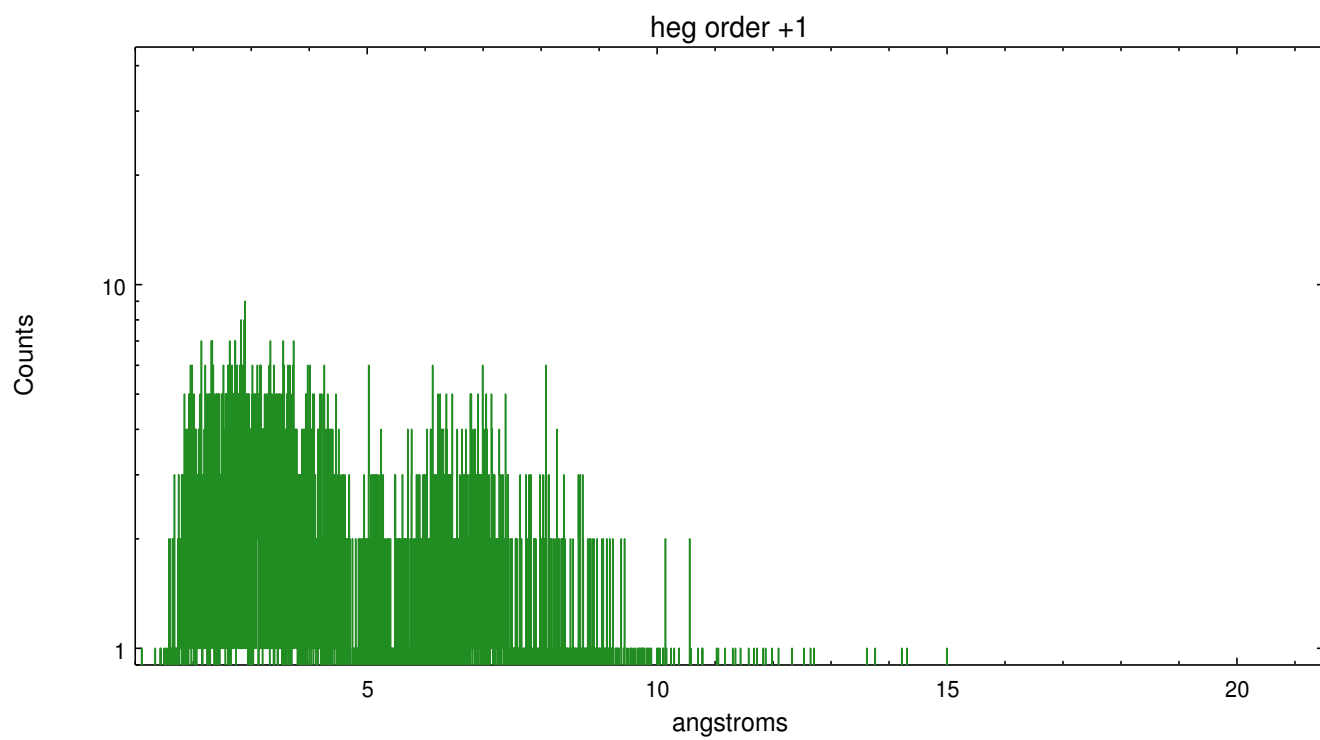
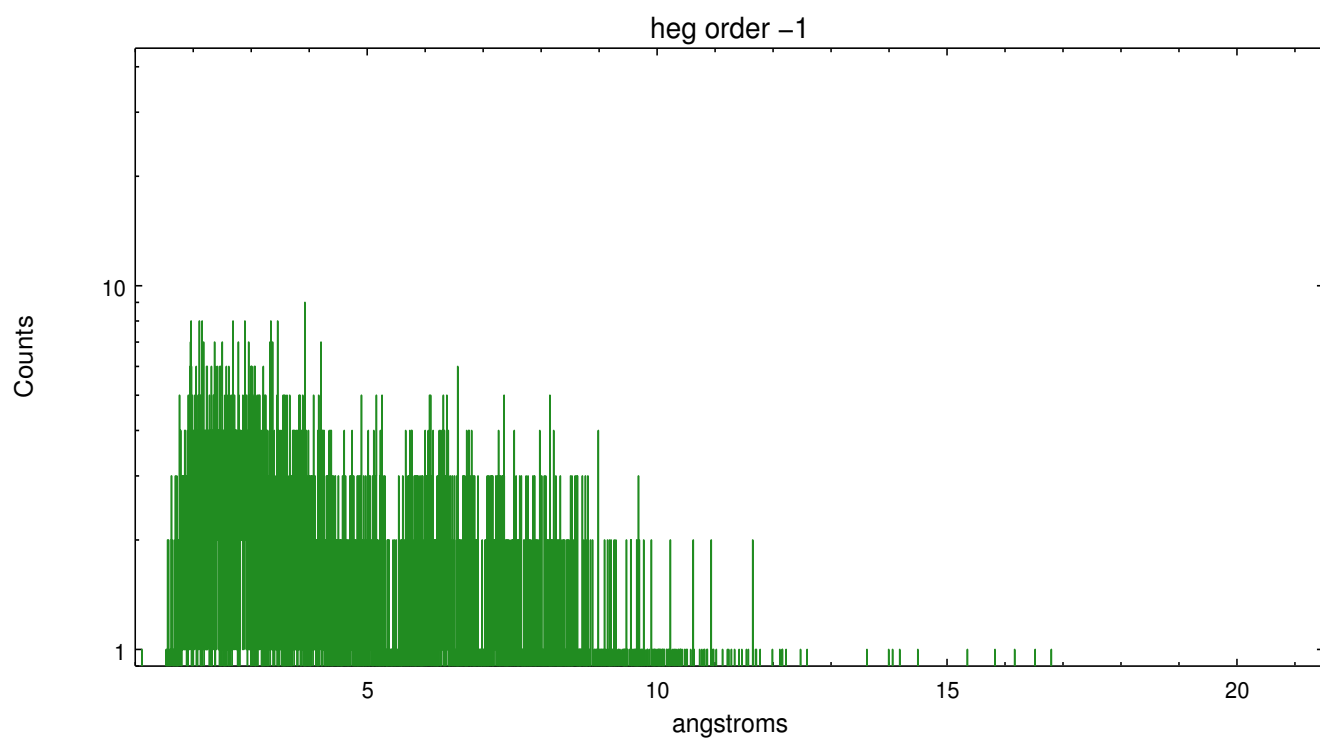
Spot Image HEG



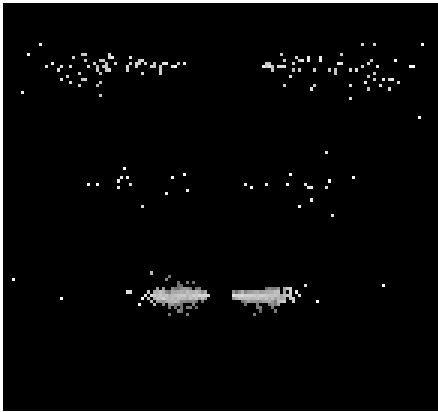
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	252	526	4817	6395	4609	452	244

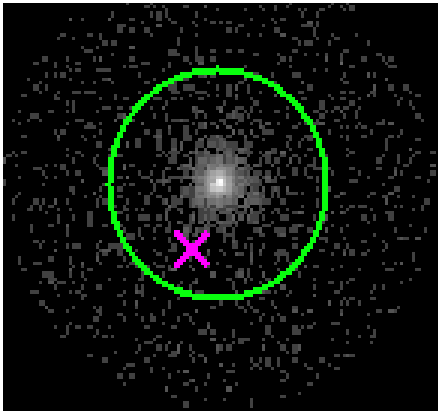




3.2 MEG Arm



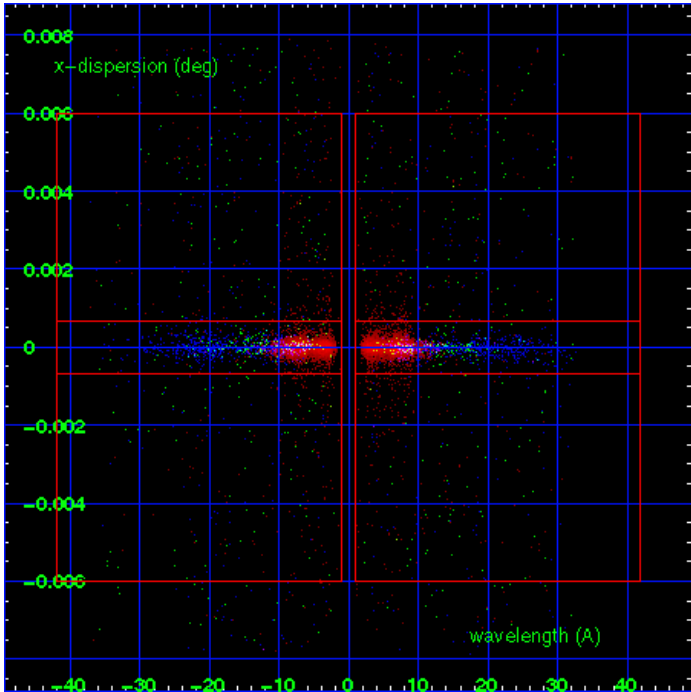
MEG Order Sort 123



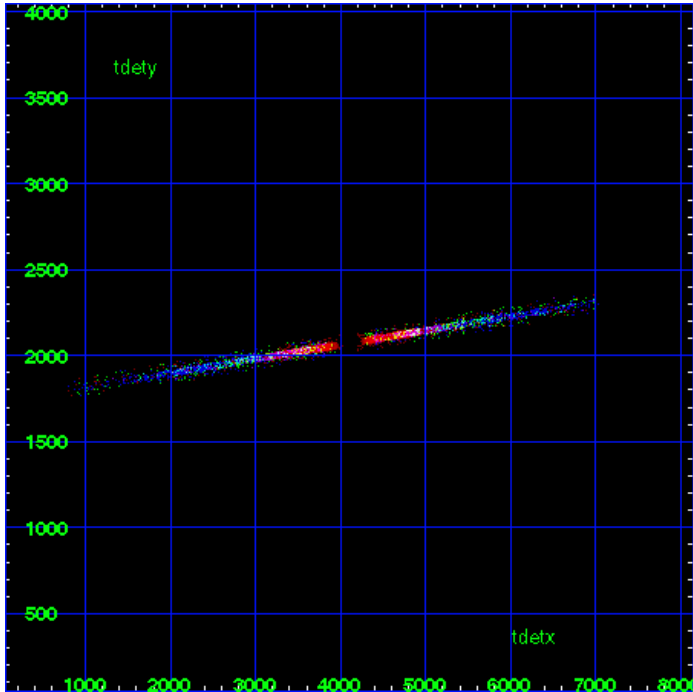
MEG Zero Order



MEG Order Sort ALL

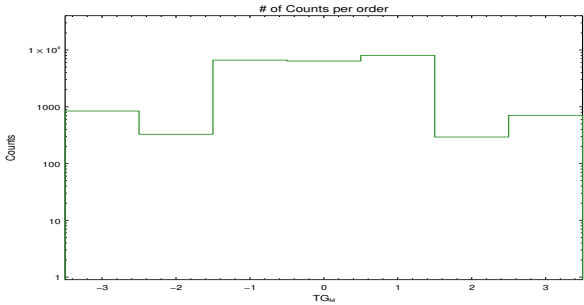


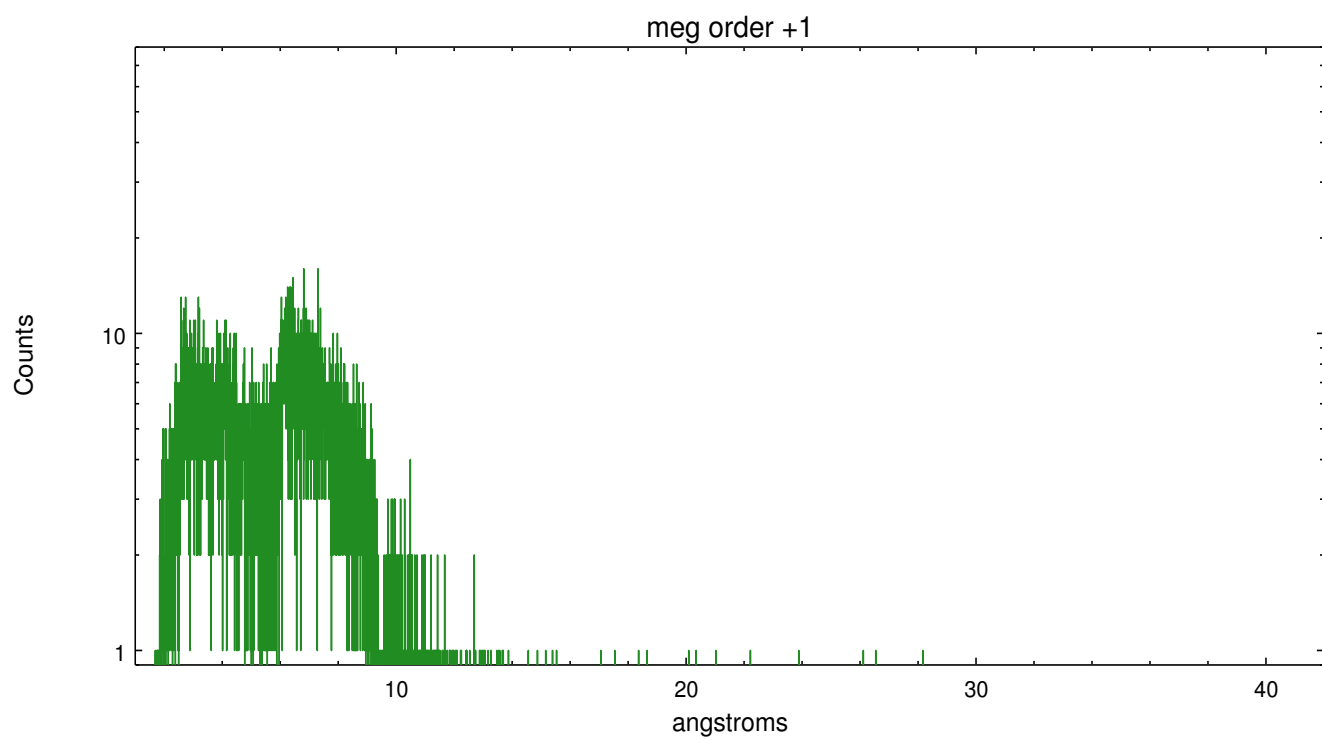
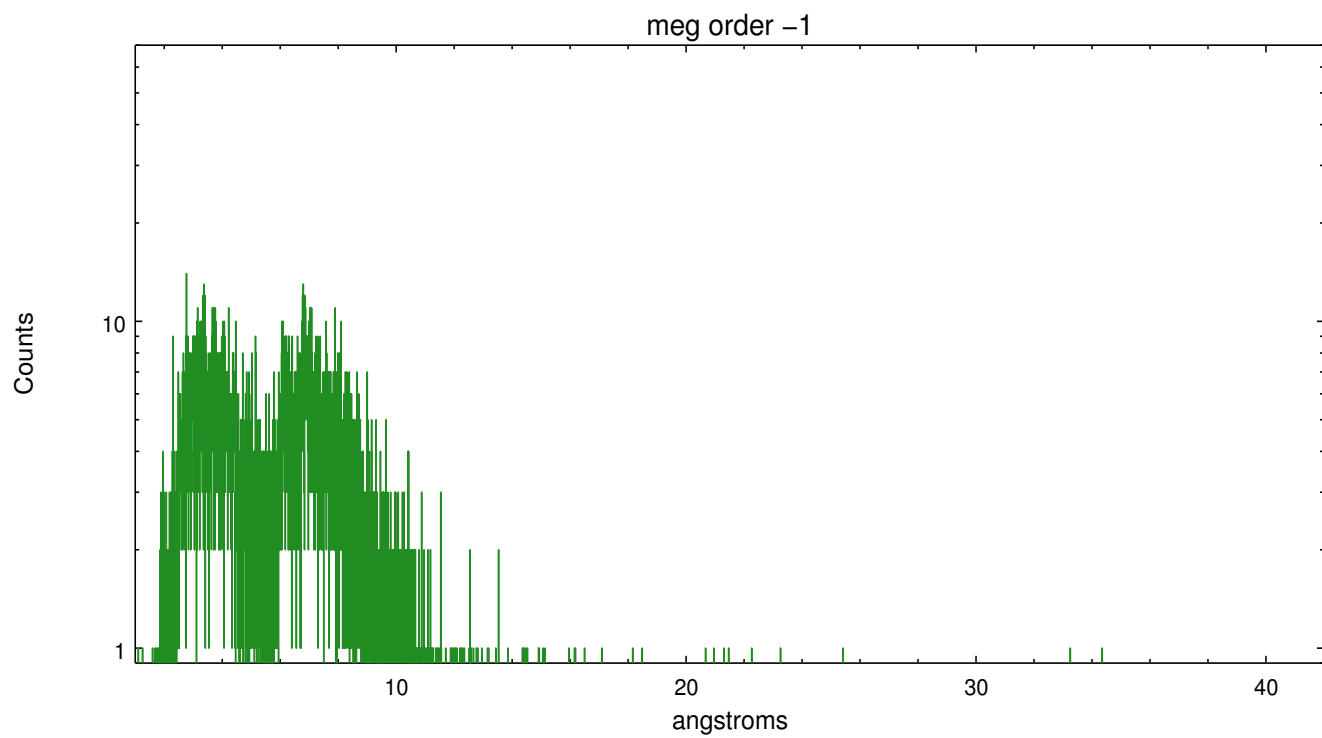
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	841	327	6630	6395	8031	293	706





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.245

A.2 Comments

Observations simultaneous with XMM.