

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 6187 - L2 Version 2
Chandra X-Ray Center

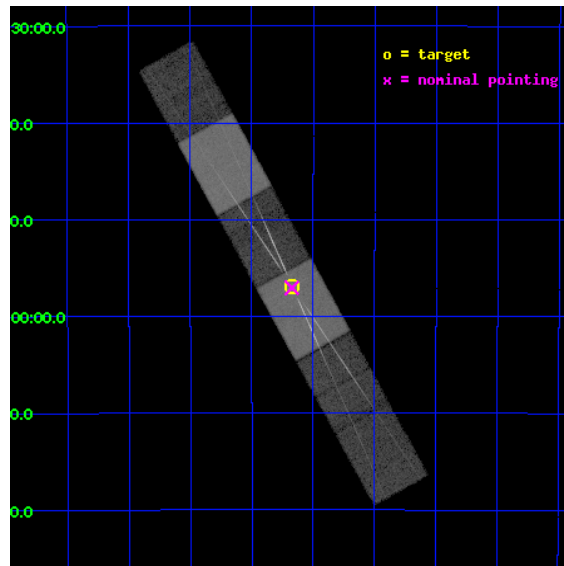
L2 Processing Date : Mar 18 2012

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1 Front

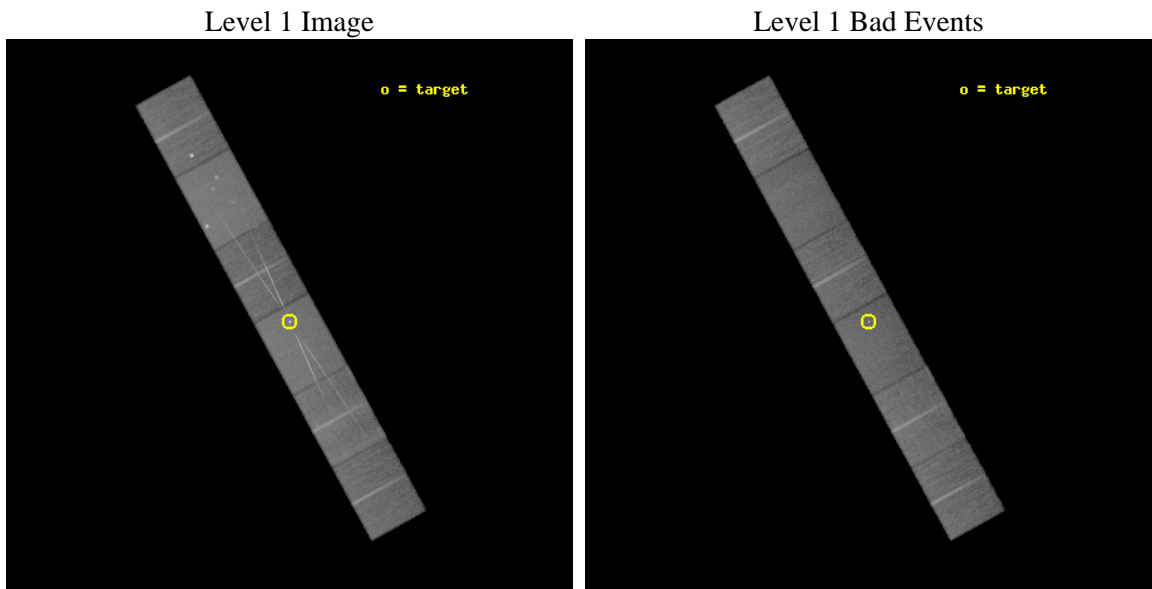
seq_num	701171	Sequence number
obs_id	6187	Observation id
title	Revealing the Relativistic Iron line in the Seyfert 1.9 Galaxy, MCG-5-23-16	Proposal title
observer	Dr James Reeves	Principal investigator
object	MCG -5-23-16	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	146.9175	Observer's specified target RA [deg]
dec_targ	-30.948889	Observer's specified target Dec [deg]
ra_nom	146.91835960872	Nominal RA [deg]
dec_nom	-30.950985190474	Nominal Dec [deg]
roll_nom	61.204435164064	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30079.493141472	Sum of GTIs [s]
livetime	29593.683237446	Livetime [s]
ontime4	30082.075171679	Sum of GTIs [s]
ontime5	30079.452121377	Sum of GTIs [s]
ontime6	30081.952051669	Sum of GTIs [s]
ontime7	30079.493141472	Sum of GTIs [s]
ontime8	30081.911011666	Sum of GTIs [s]
ontime9	30076.787941545	Sum of GTIs [s]
l2events	360869	Number of level 2 events



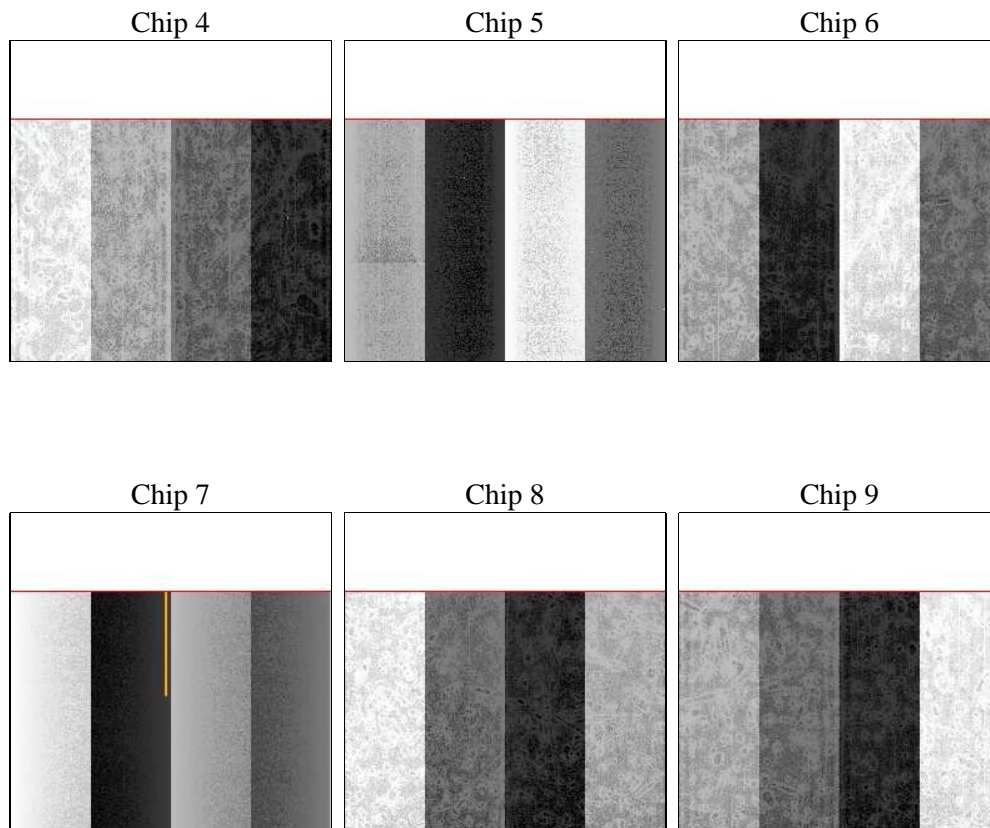
2 OBI

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	8.4.3	Processing system revision	ontime	30079.493141472	Sum of GTIs [s]
caldbver	4.4.8	 	ontime4	30082.075171679	Sum of GTIs [s]
date	2012-03-18T10:05:18	Date and time of file creation	ontime5	30079.452121377	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	30081.952051669	Sum of GTIs [s]
			ontime7	30079.493141472	Sum of GTIs [s]
			ontime8	30081.911011666	Sum of GTIs [s]
			ontime9	30076.787941545	Sum of GTIs [s]
			l1events	1418450	Number of level 1 events

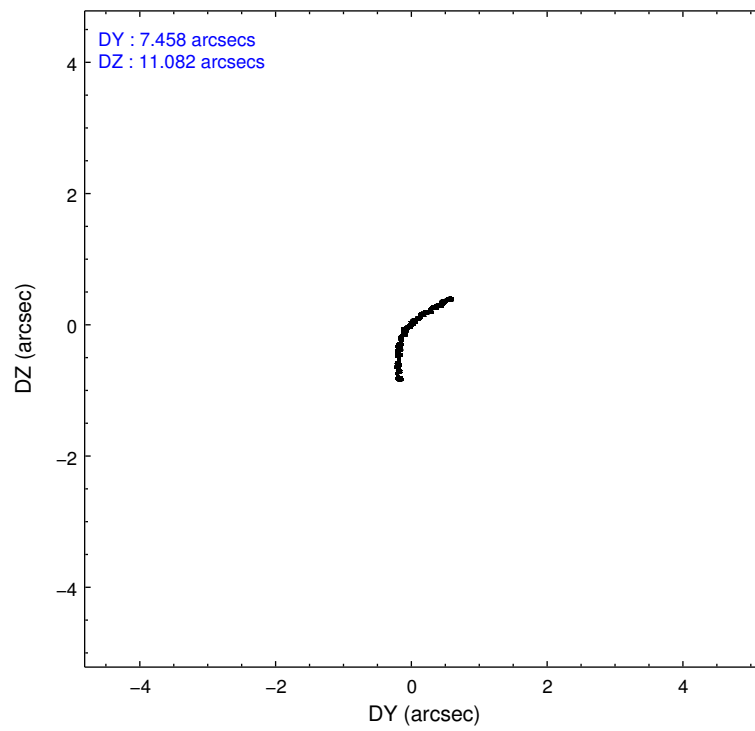
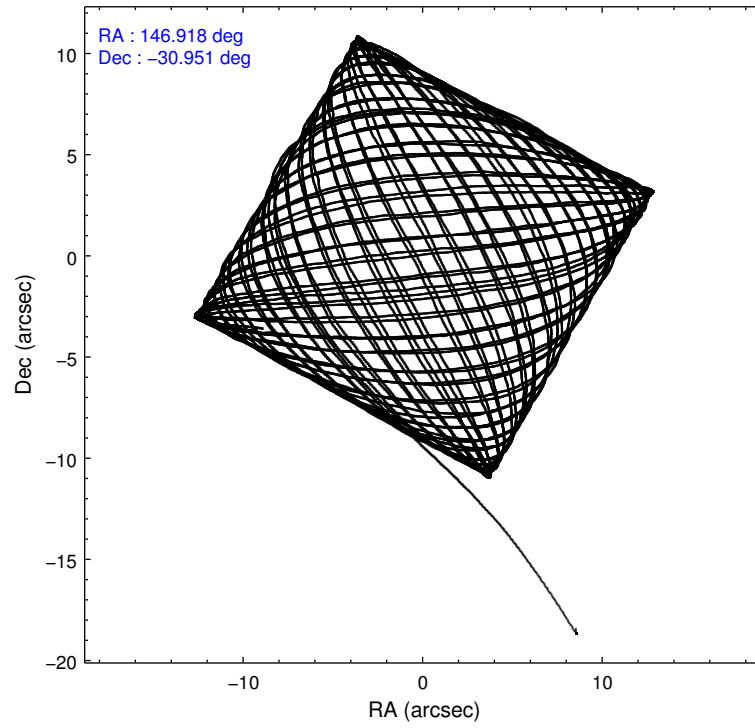
2.1.4 Events

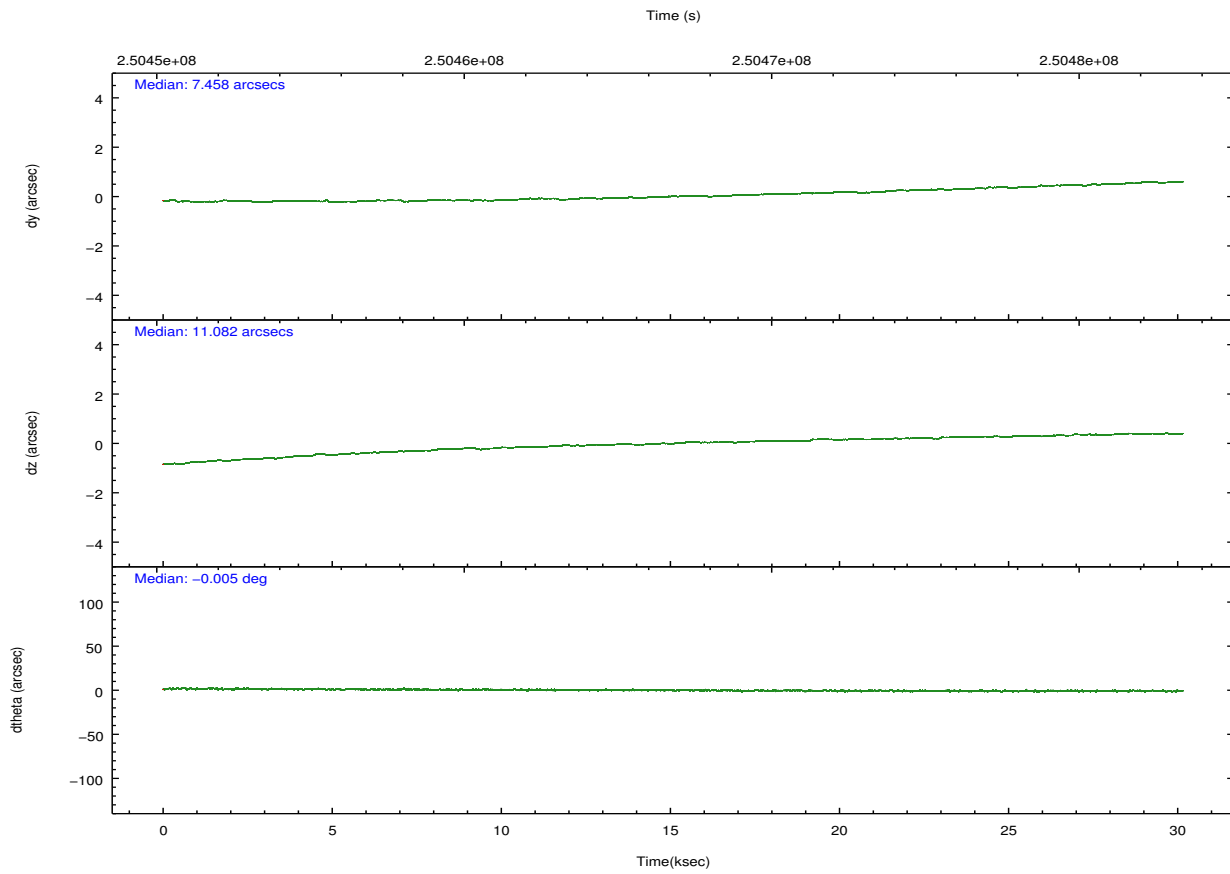
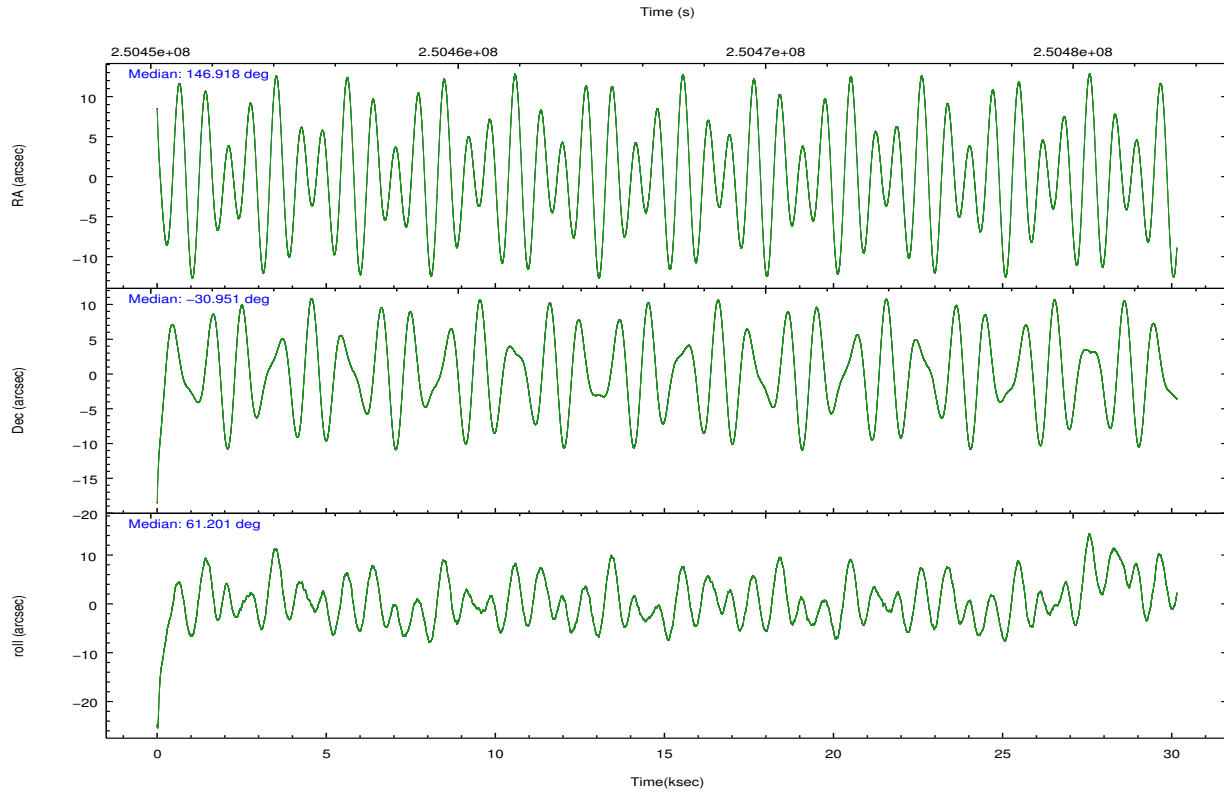
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	216911	284046	203898	286877	242331	184387	grade 0 events	18877	16934	23040	15020	20099	10243
rejected events	184206	150818	161957	151195	185321	159988		8%	5%	11%	5%	8%	5%
rejected %	84%	53%	79%	52%	76%	86%	grade 1 events	196	435	139	506	162	101
								0%	0%	0%	0%	0%	0%
							grade 2 events	5214	37764	7079	28525	11870	4645
								2%	13%	3%	9%	4%	2%
							grade 3 events	2450	5875	3079	12713	5820	2542
								1%	2%	1%	4%	2%	1%
							grade 4 events	2414	5741	3033	12391	5498	2459
								1%	2%	1%	4%	2%	1%
							grade 5 events	8170	21248	8676	25241	11260	9035
								3%	7%	4%	8%	4%	4%
							grade 6 events	3752	66925	5715	67041	13728	4513
								1%	23%	2%	23%	5%	2%
							grade 7 events	175838	129124	153137	125440	173894	150849
								81%	45%	75%	43%	71%	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	146.919469	146.9183596087219	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-30.978206	-30.9509851904742	Subarray start row	1	1
[deg] Pointing Roll	61.048387	61.20443516406357	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)	250451867.184000	250450890.46043			
Observation start date	2005-12-08T17:56:43	2005-12-08T17:41:30			
[s] Observation end time (MET)	250481867.184000	250482839.7119			
Observation end date	2005-12-09T02:16:43	2005-12-09T02:33:59			
Read mode	TIMED	TIMED			

2.3 Aspect



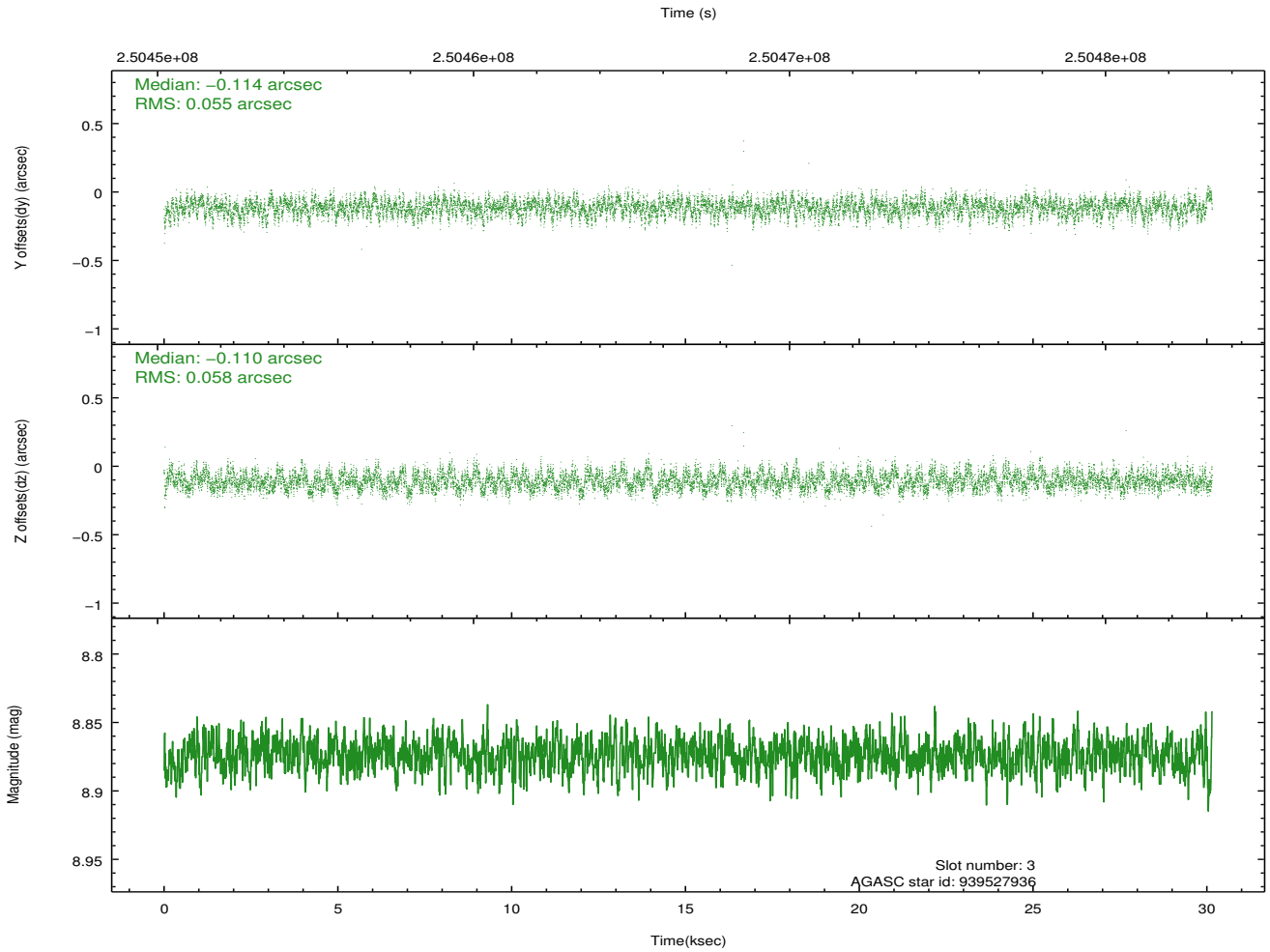
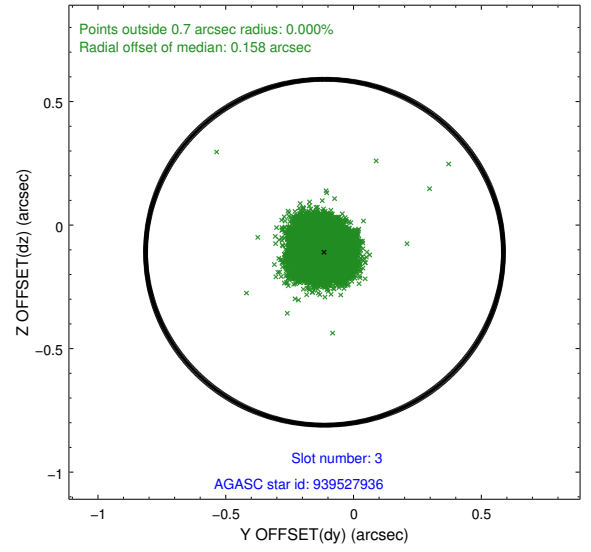
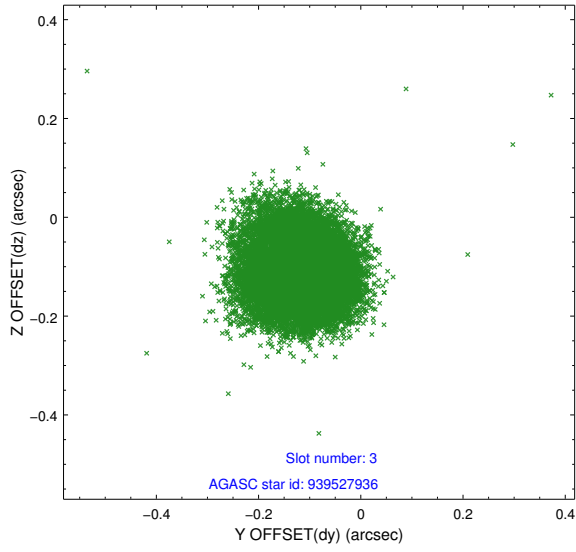


Slot Statistics

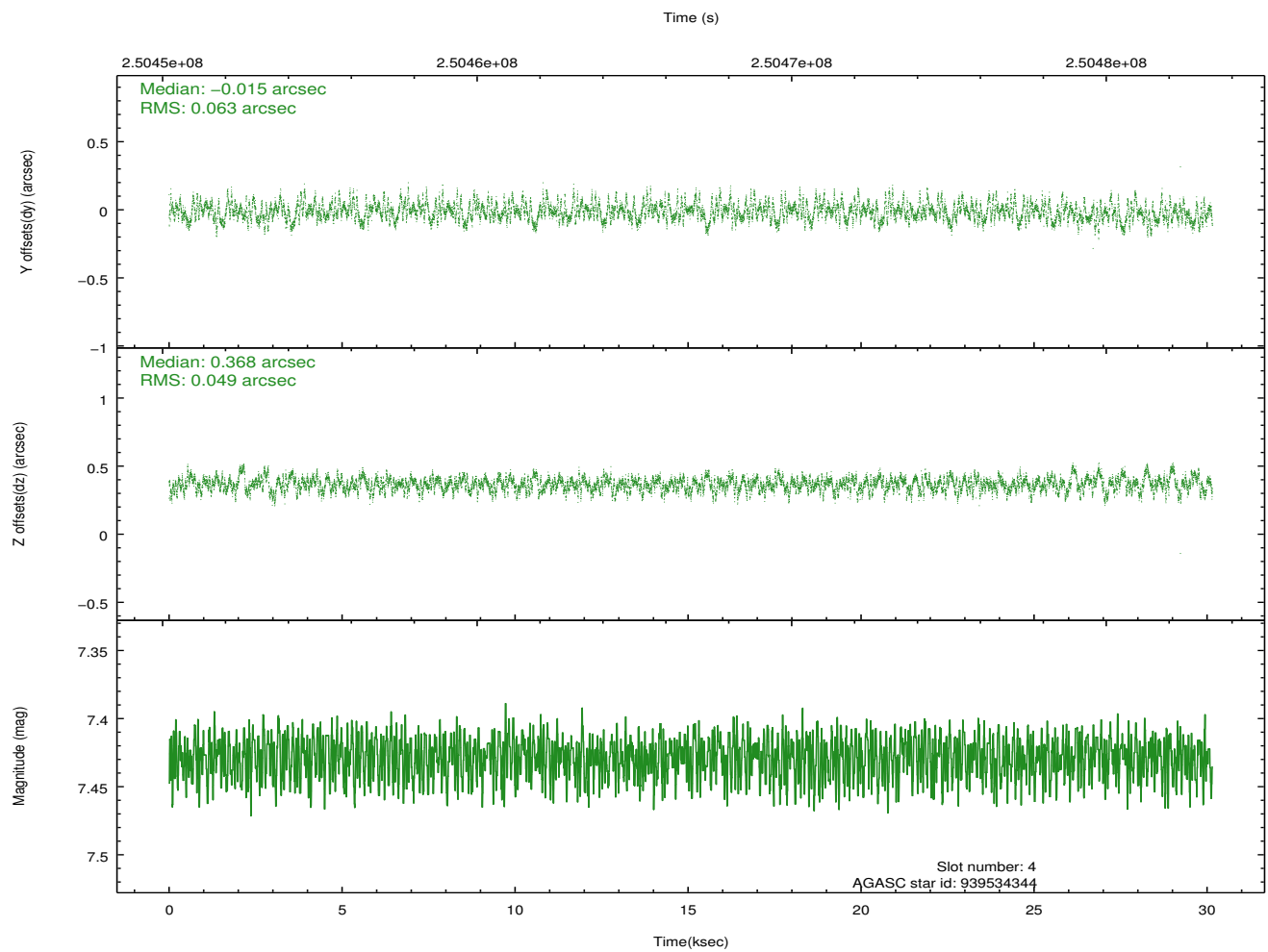
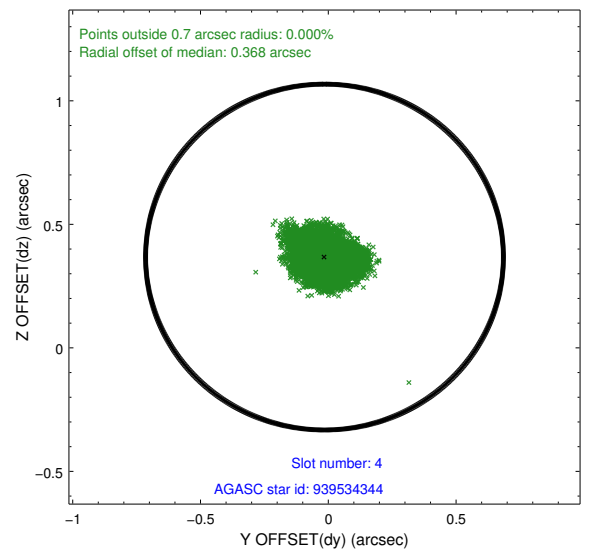
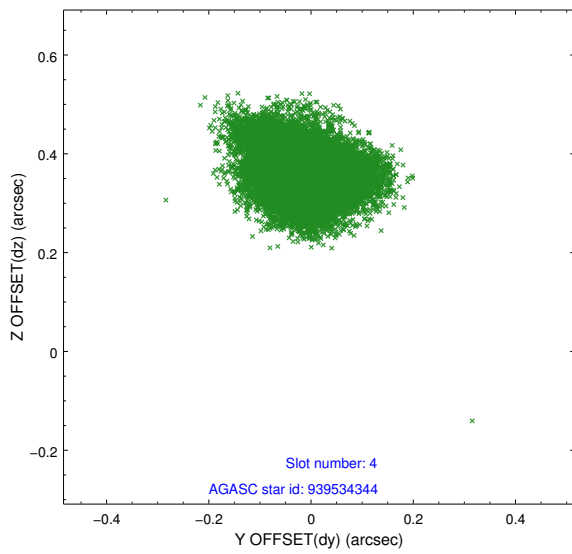
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	7355	0.038	0.093	0.011	0.033	0.000000	0.000000	935.96	-1789.98
1	FID	ACIS-S-2	7.09	7354	-0.126	-0.089	0.012	0.023	0.000000	0.000000	-760.07	-1794.77
2	FID	ACIS-S-4	7.19	7353	0.063	0.002	0.009	0.016	0.000000	0.000000	2153.22	113.99
3	GUIDE	939527936	8.87	14625	-0.114	-0.110	0.086	0.135	146.559458	-30.580866	710.02	1668.12
4	GUIDE	939534344	7.43	14710	-0.015	0.368	0.086	0.136	146.766481	-31.268117	-1141.17	-92.94
5	GUIDE	939536488	8.98	14701	0.199	-0.098	0.069	0.114	146.629105	-31.360261	-1636.69	114.59
6	GUIDE	939527696	8.61	14704	-0.167	-0.148	0.062	0.103	146.792310	-30.270932	2036.34	1578.98
7	GUIDE	939532752	9.49	14693	0.097	-0.011	0.133	0.243	147.948677	-30.729629	2312.51	-2360.38

2.4 Star Slots

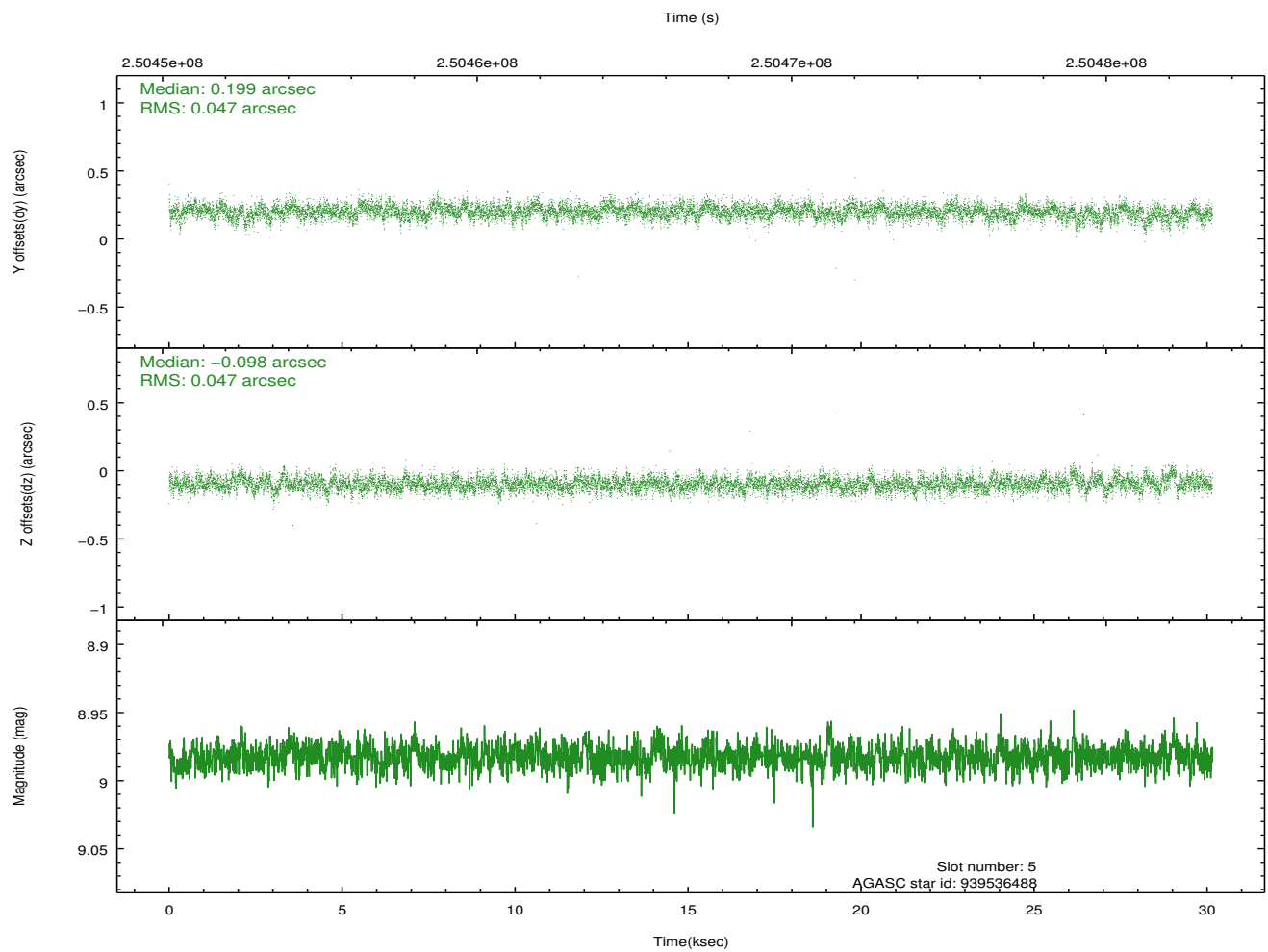
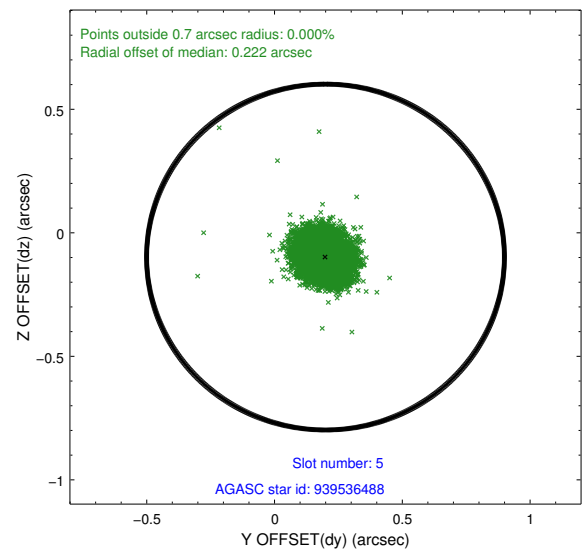
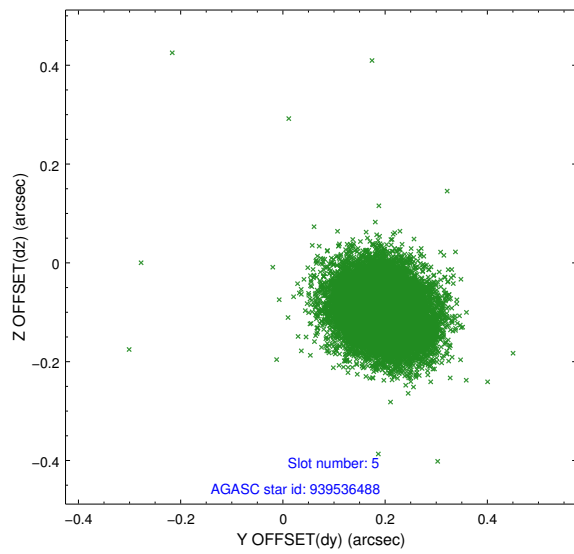
2.4.1 Slot 3



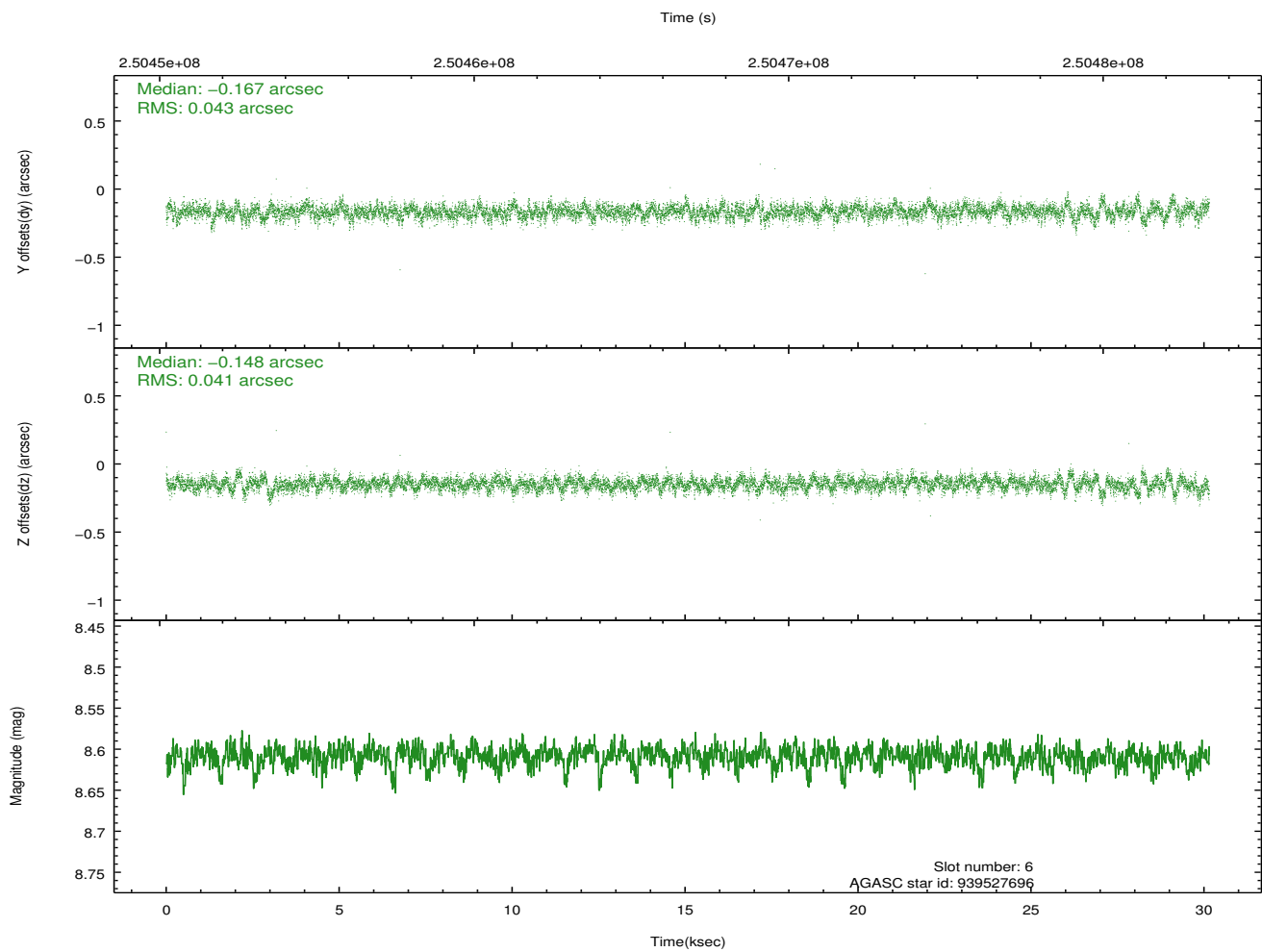
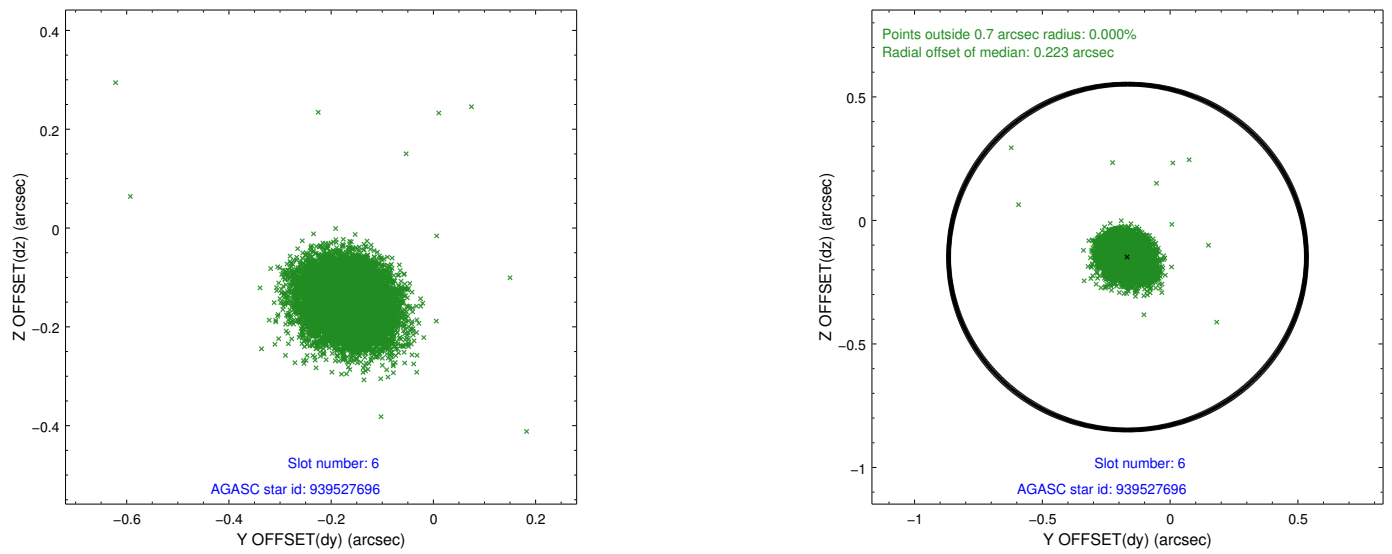
2.4.2 Slot 4



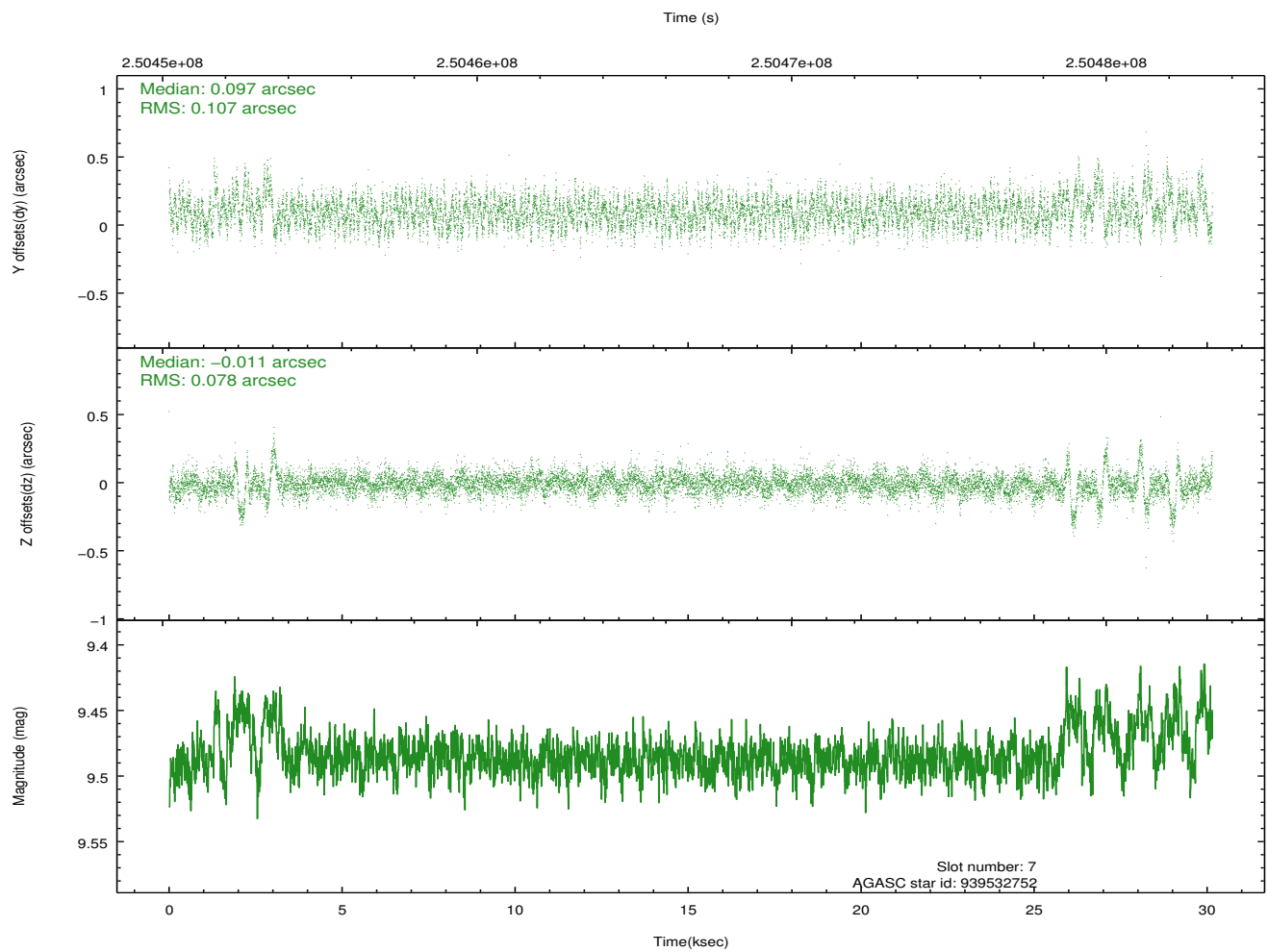
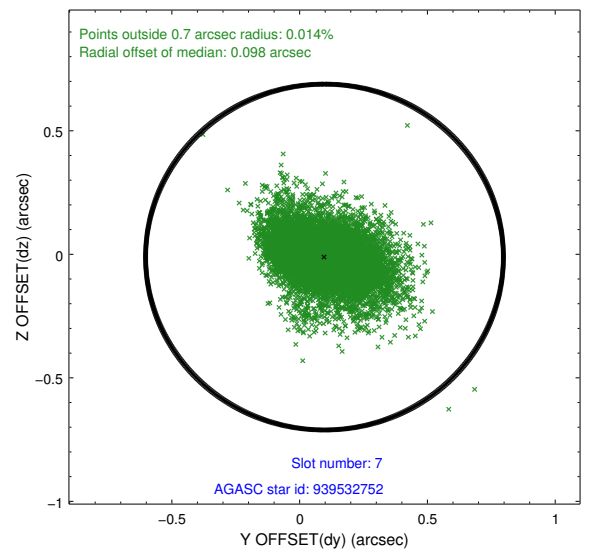
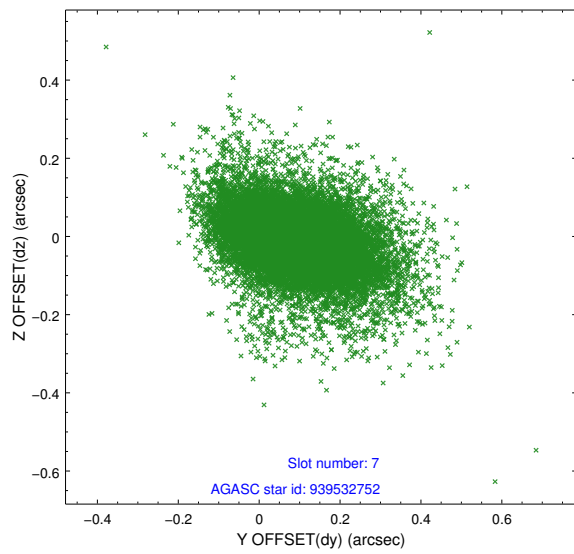
2.4.3 Slot 5



2.4.4 Slot 6

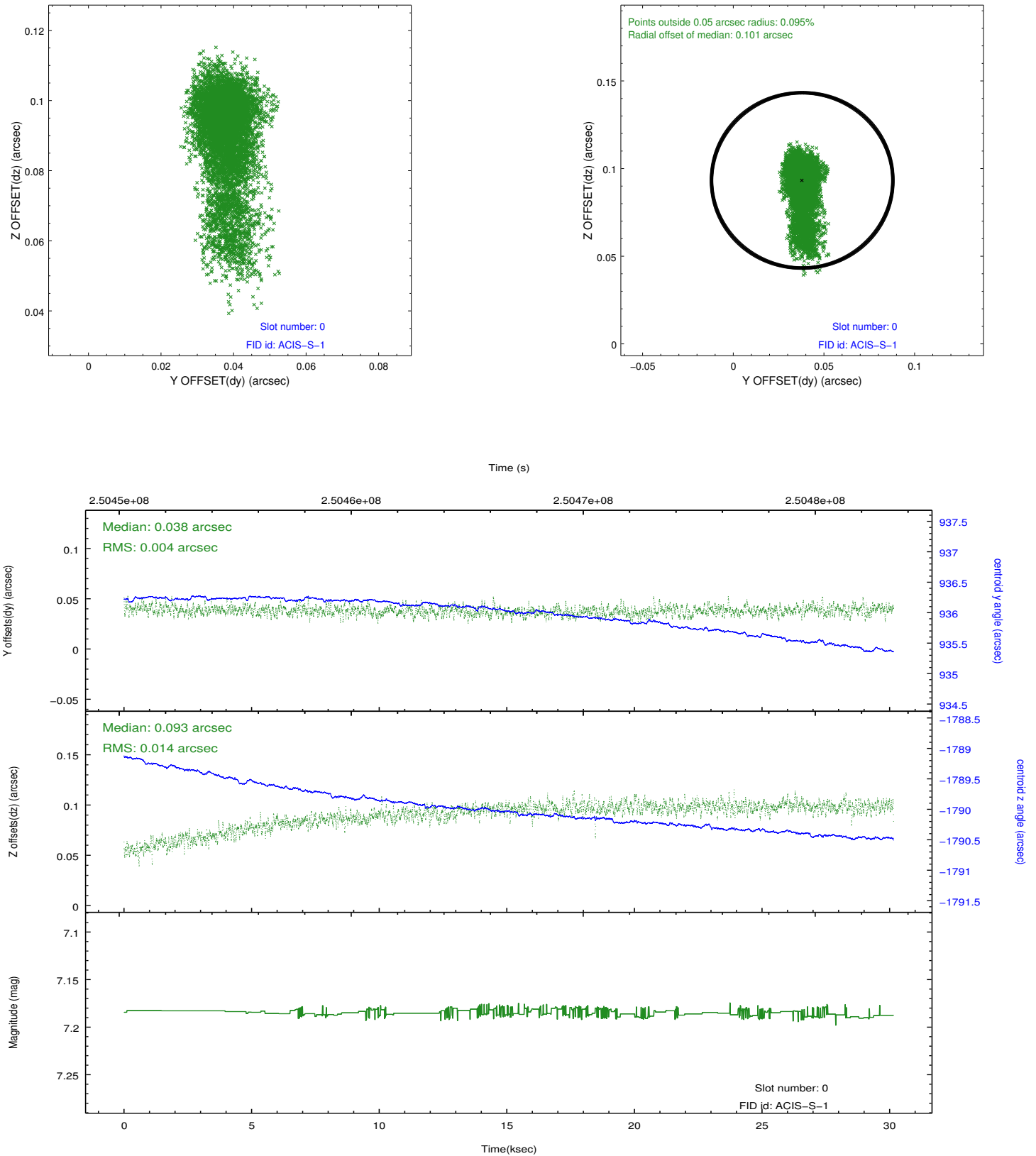


2.4.5 Slot 7

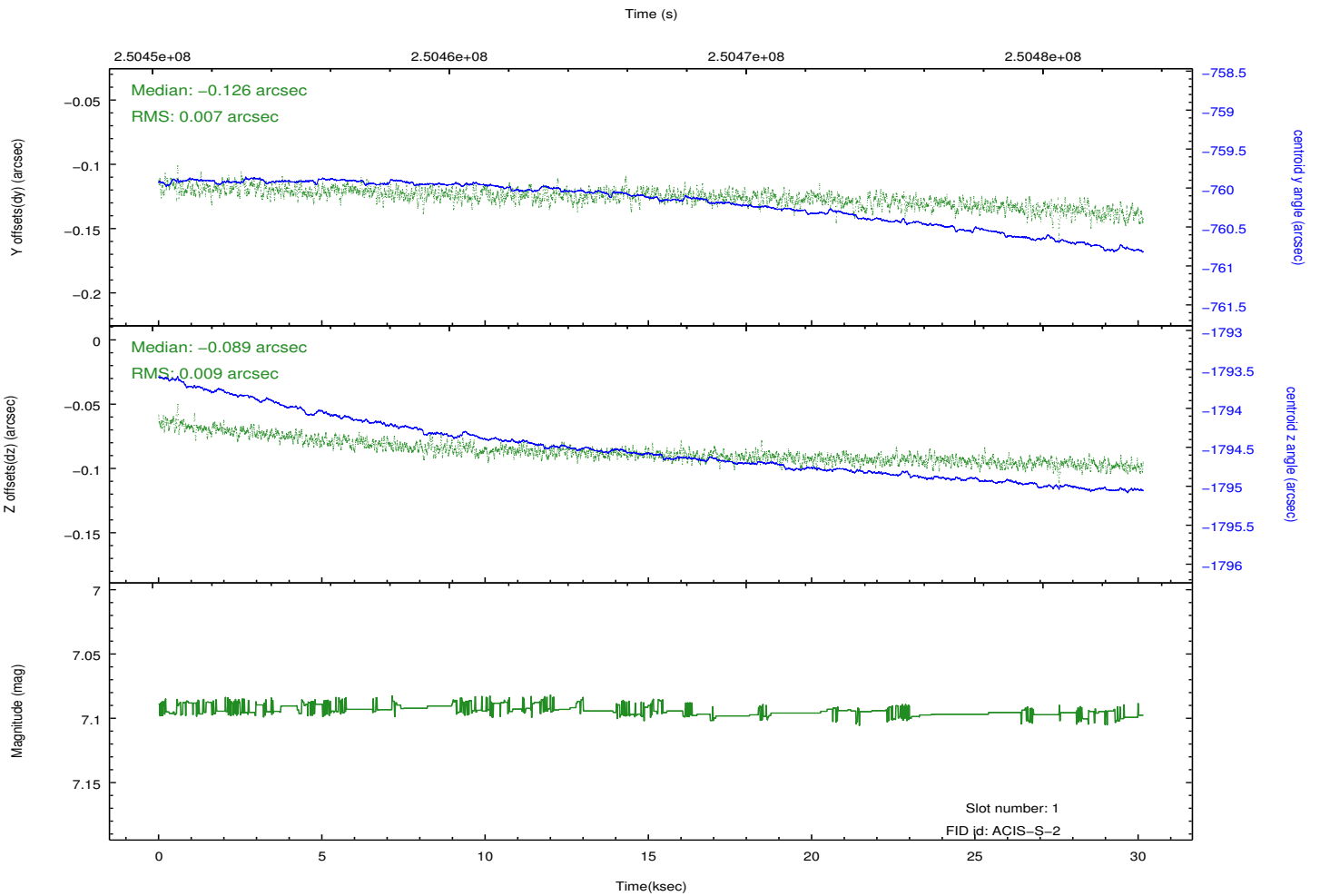
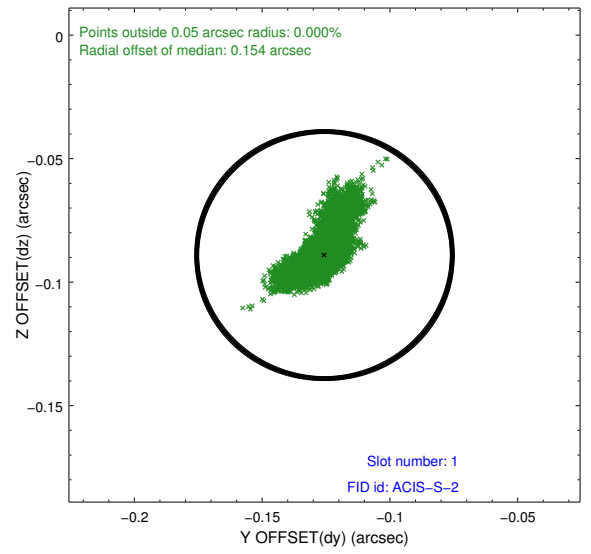
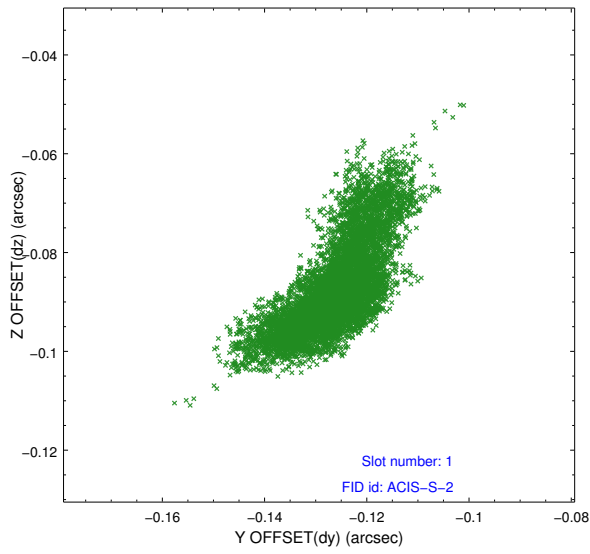


2.5 FID Slots

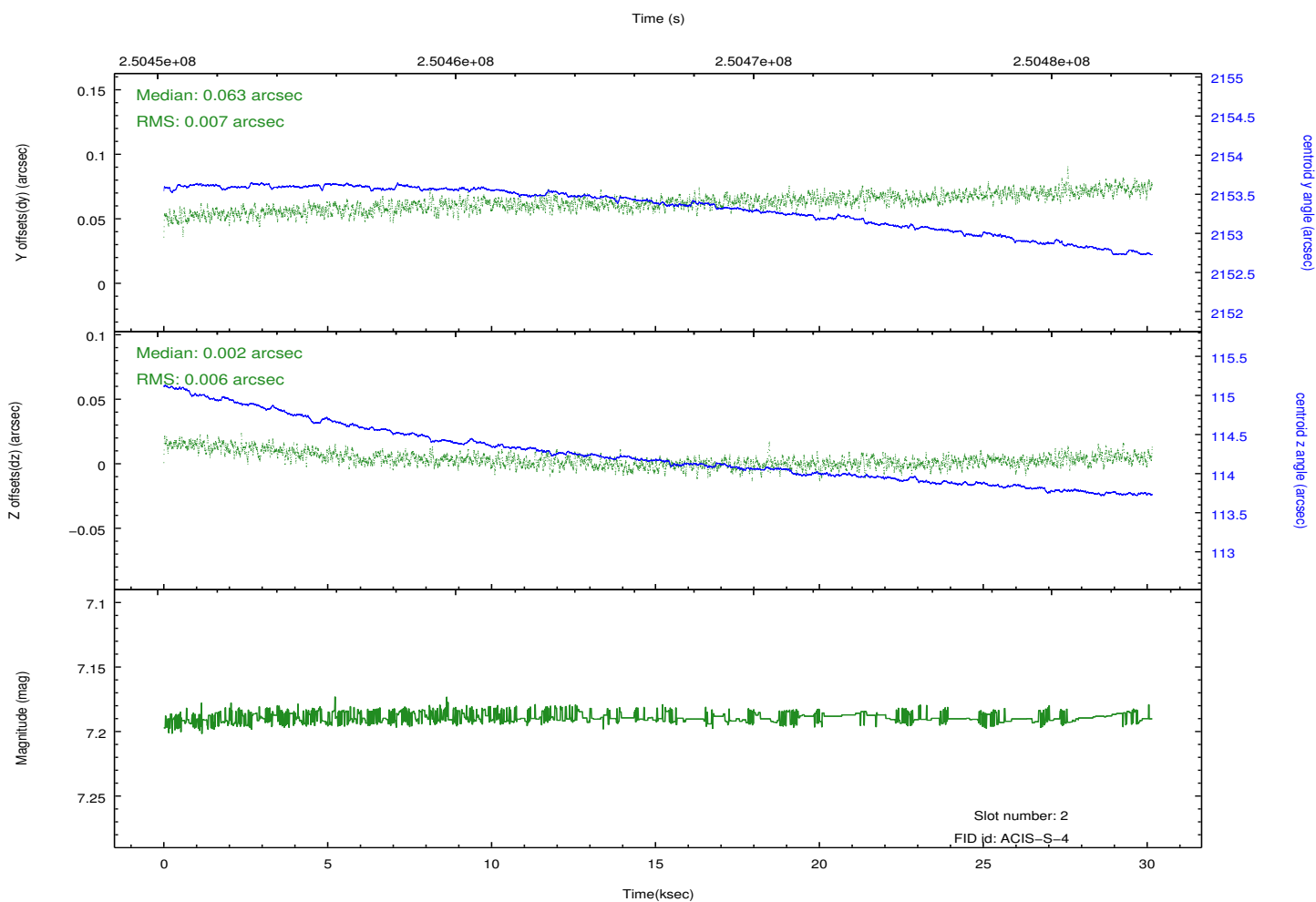
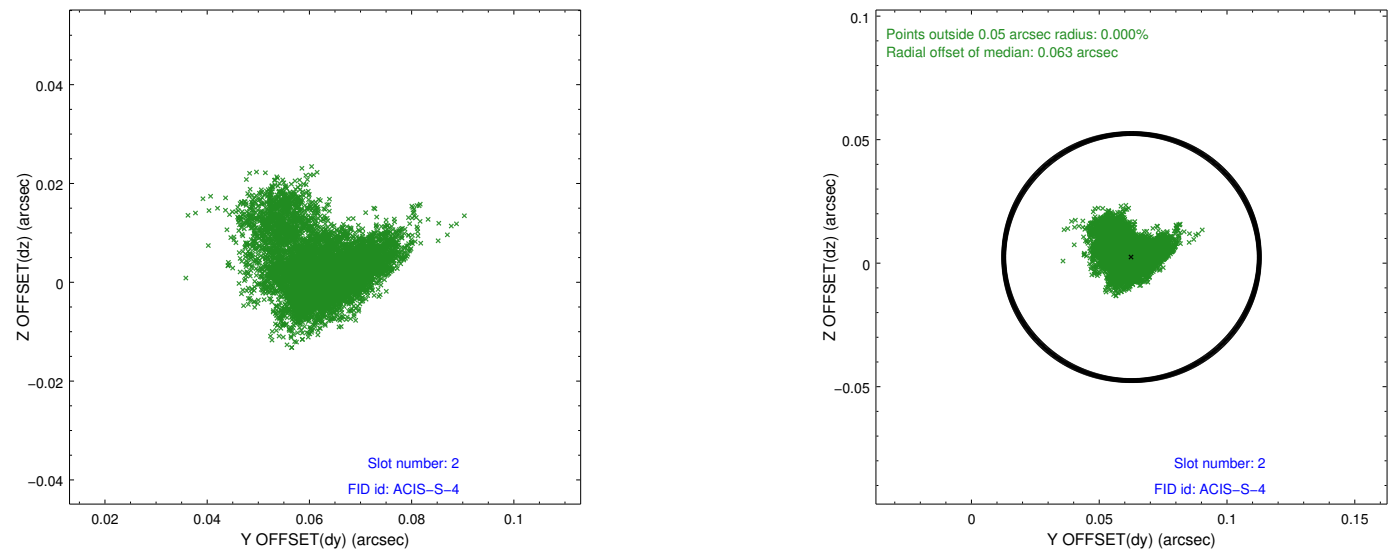
2.5.1 Slot 0



2.5.2 Slot 1

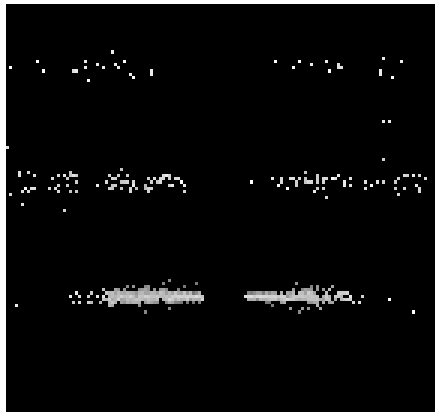


2.5.3 Slot 2

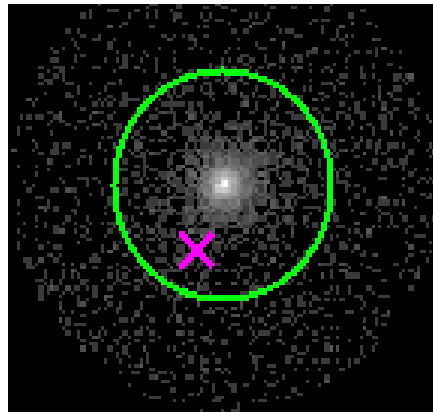


3 Gratings

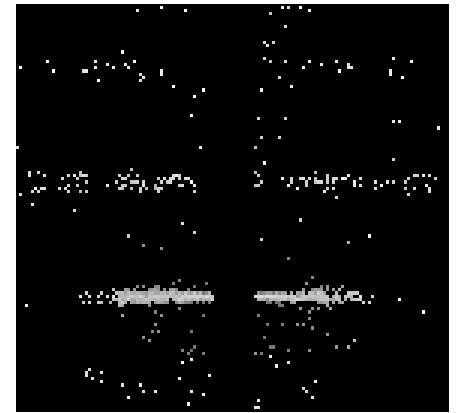
3.1 HEG Arm



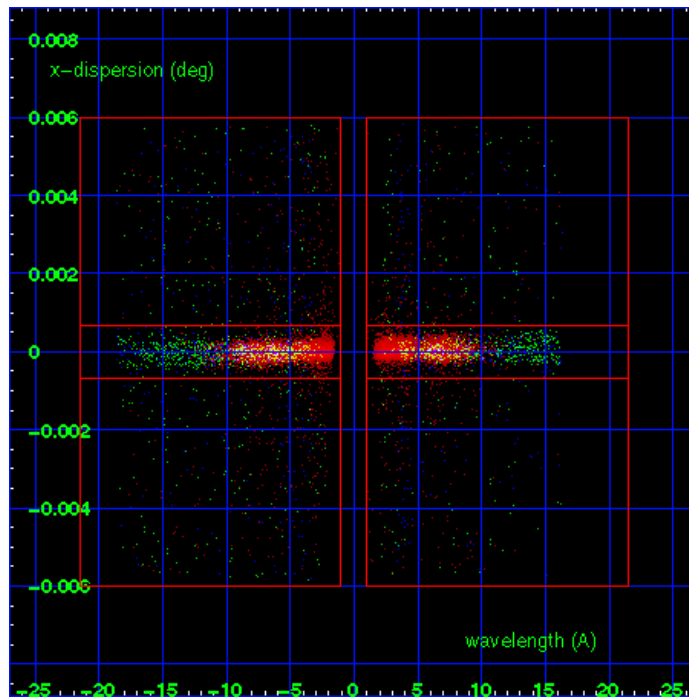
HEG Order Sort 123



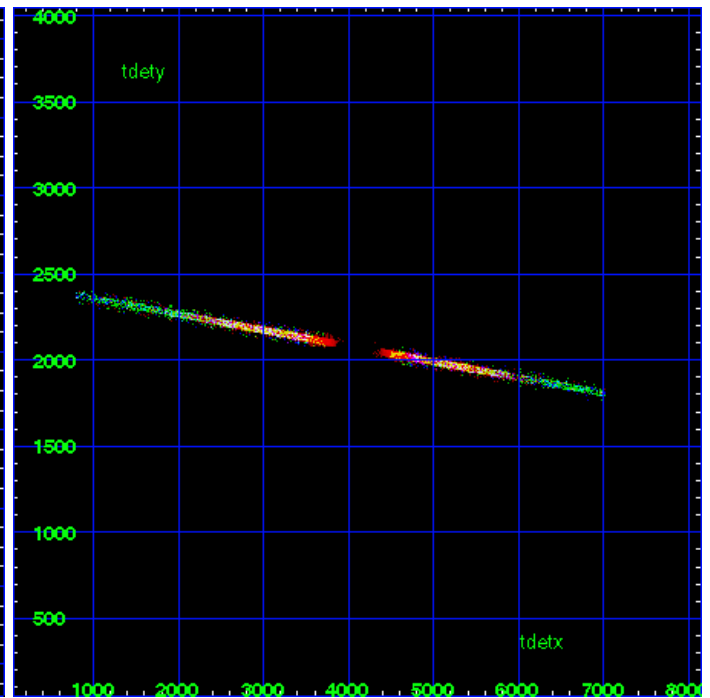
HEG Zero Order



HEG Order Sort ALL

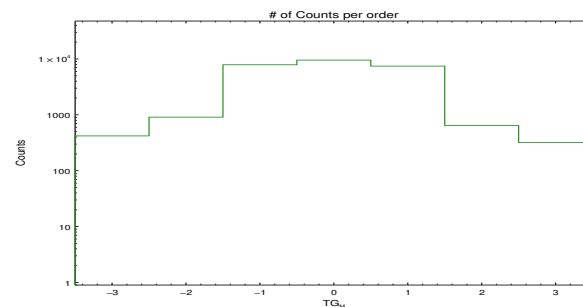


Spot Image HEG

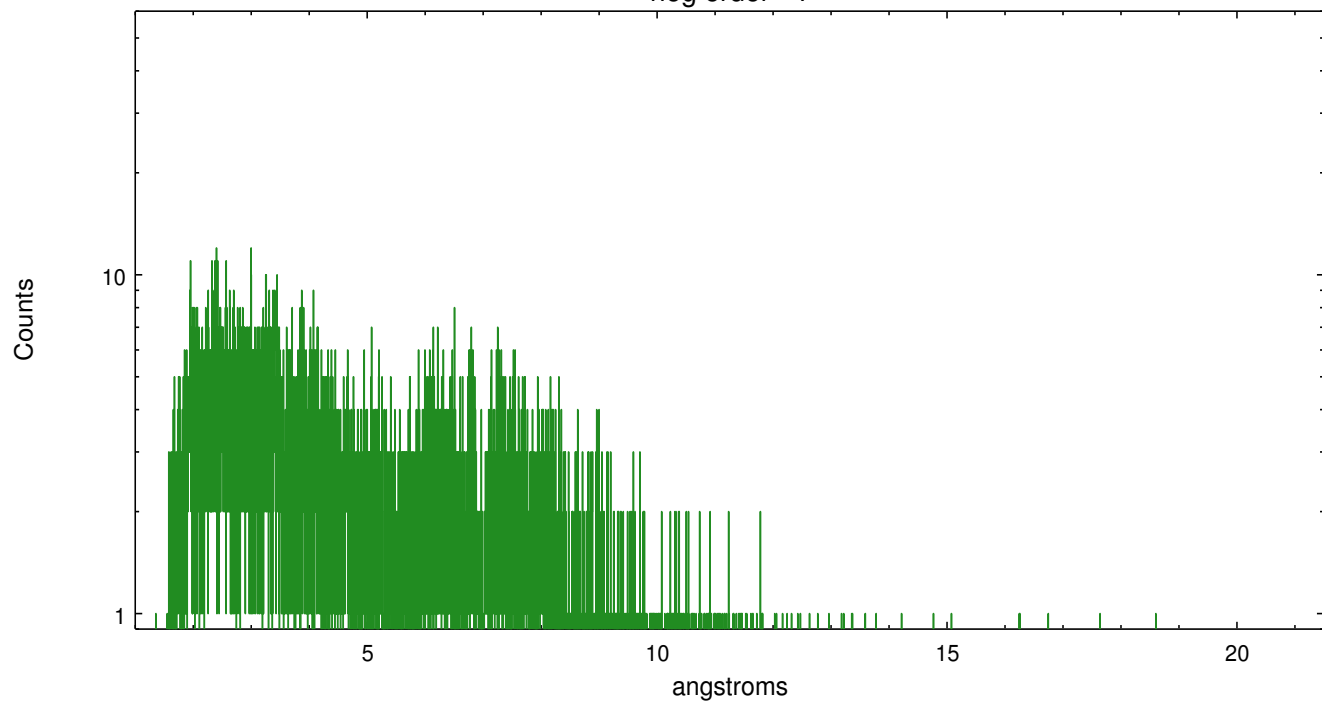


Full Detector HEG

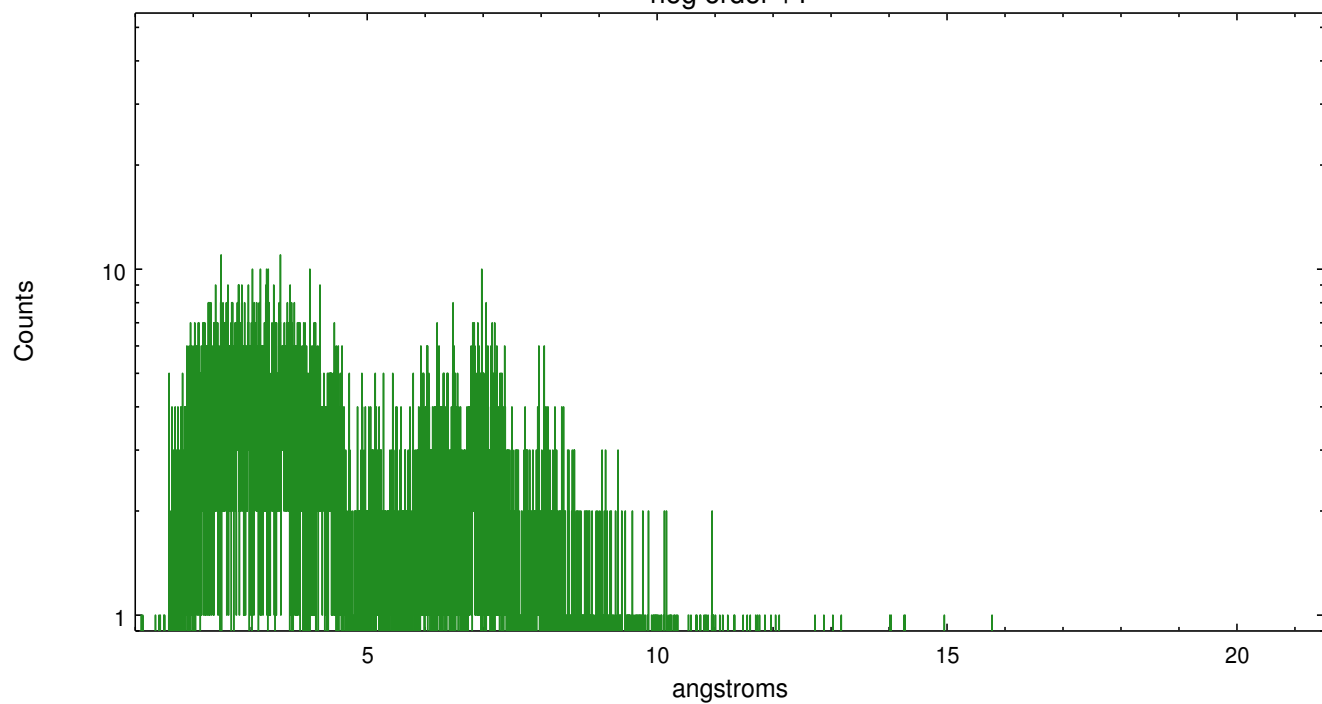
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	420	909	7869	9542	7448	647	320



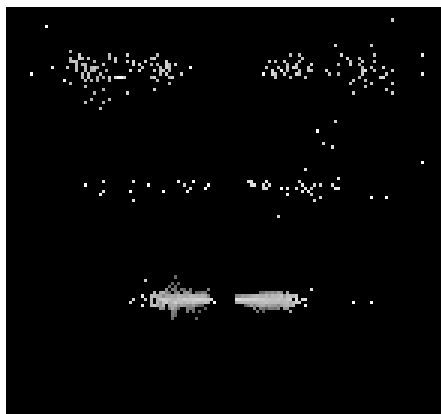
heg order -1



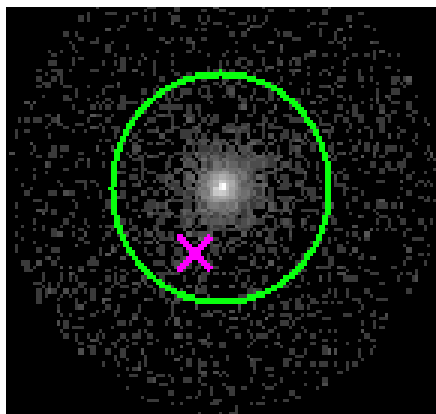
heg order +1



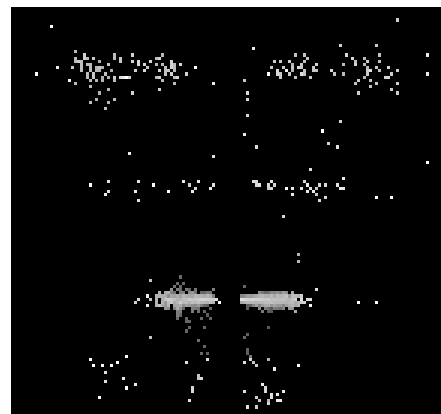
3.2 MEG Arm



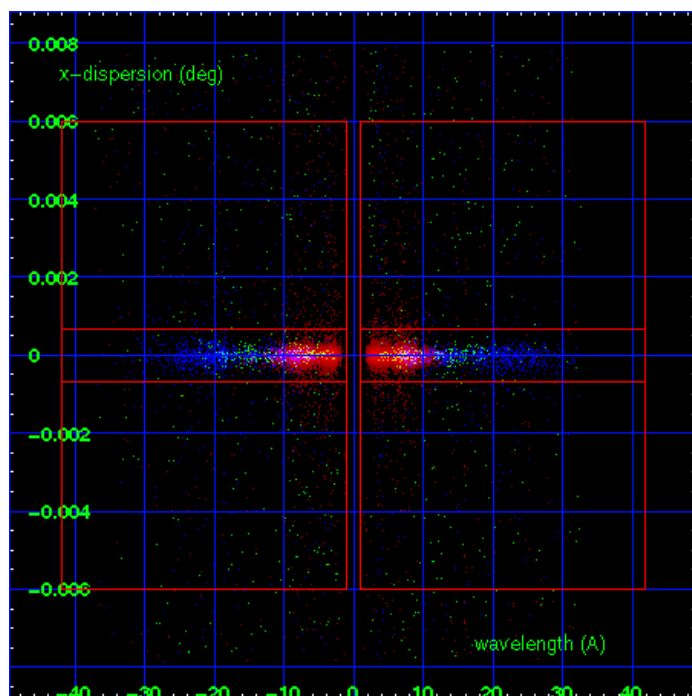
MEG Order Sort 123



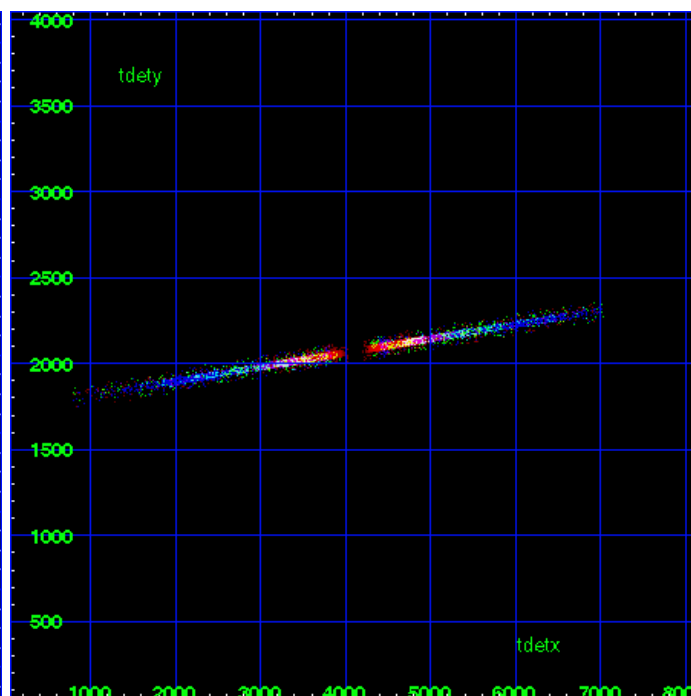
MEG Zero Order



MEG Order Sort ALL

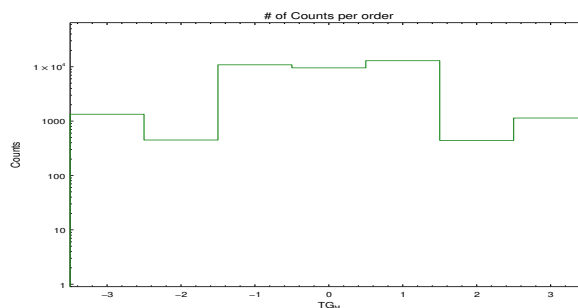


Spot Image MEG

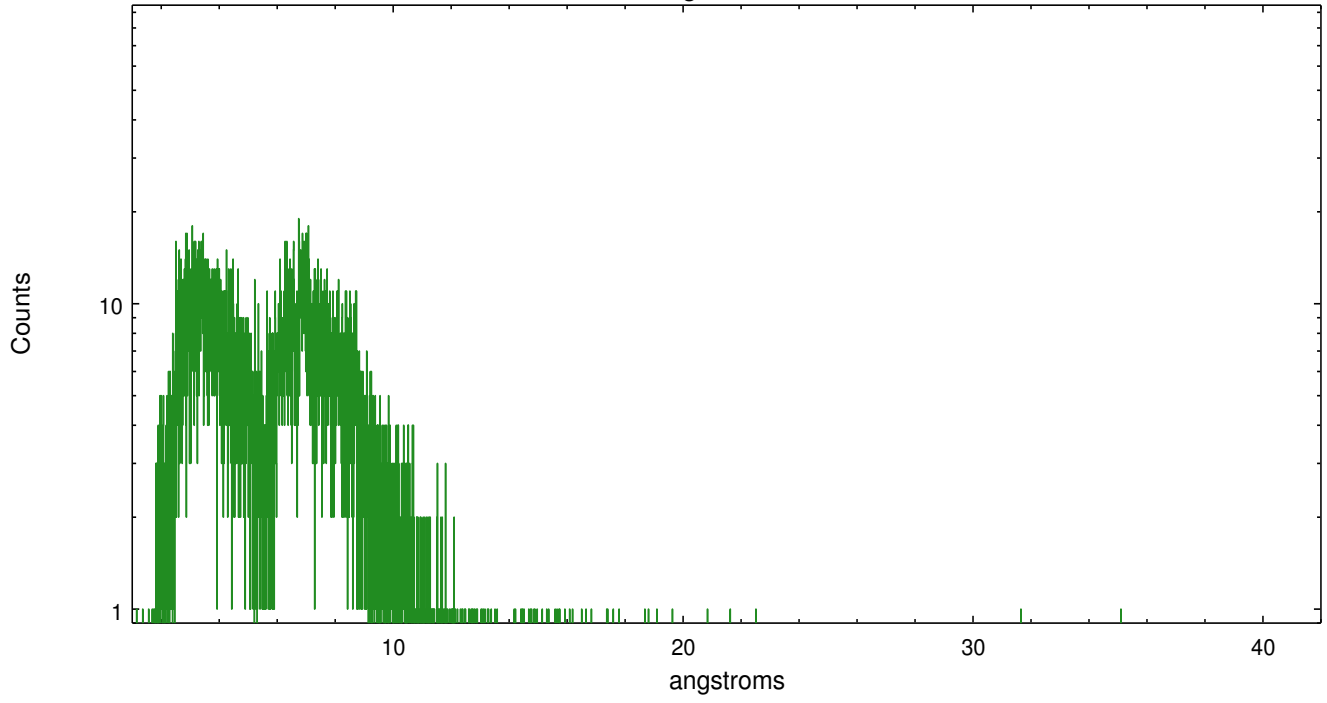


Full Detector MEG

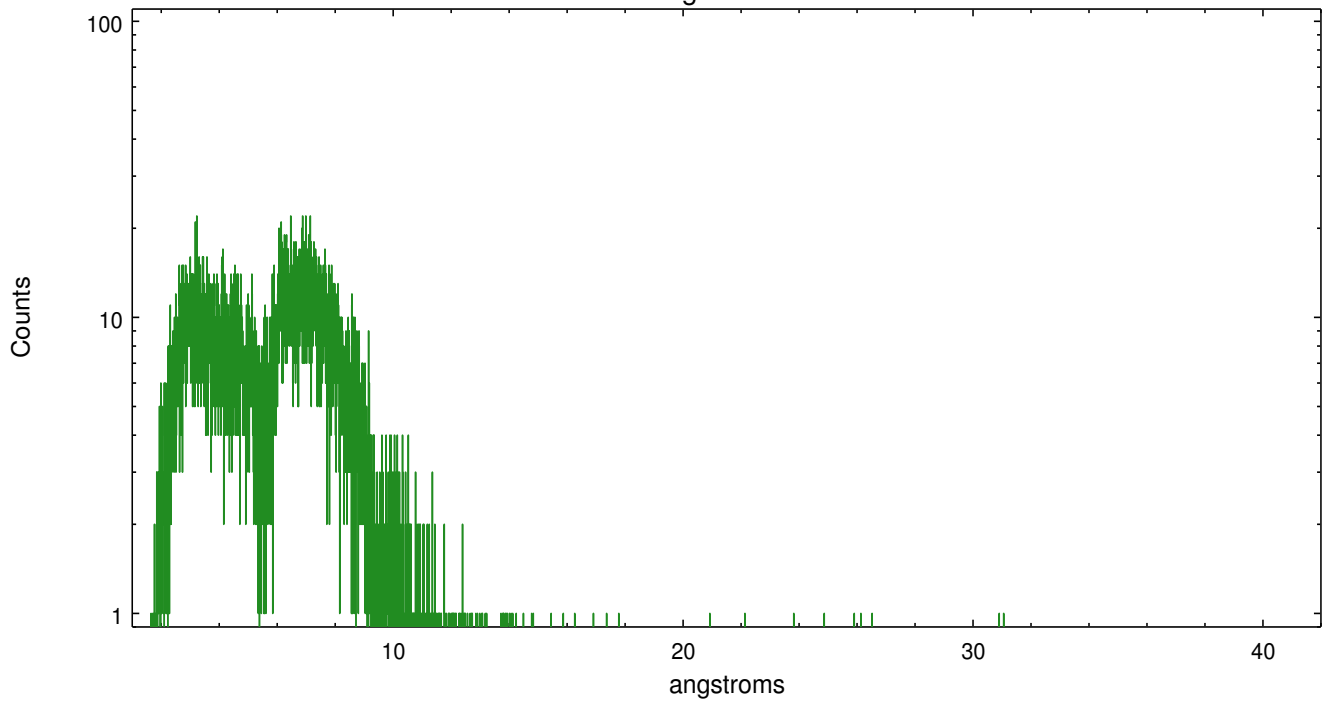
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1337	449	10857	9542	12925	441	1140



meg order -1



meg order +1



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	30.07995

A.2 Comments