

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 4771 - L2 Version 002
Chandra X-Ray Center

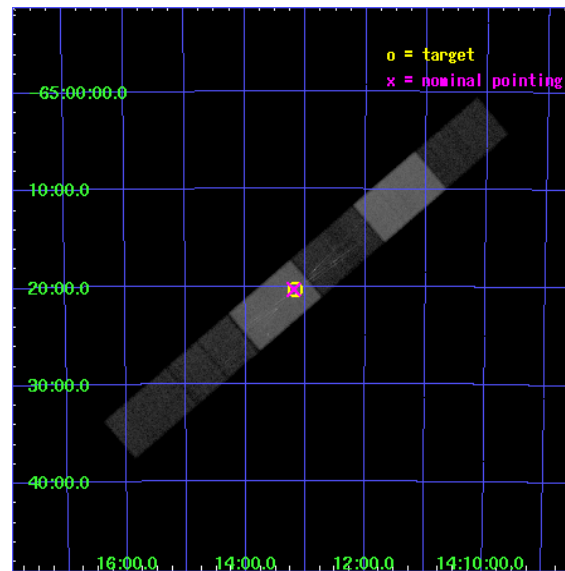
L2 Processing Date : Apr 10 2006

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1 Front

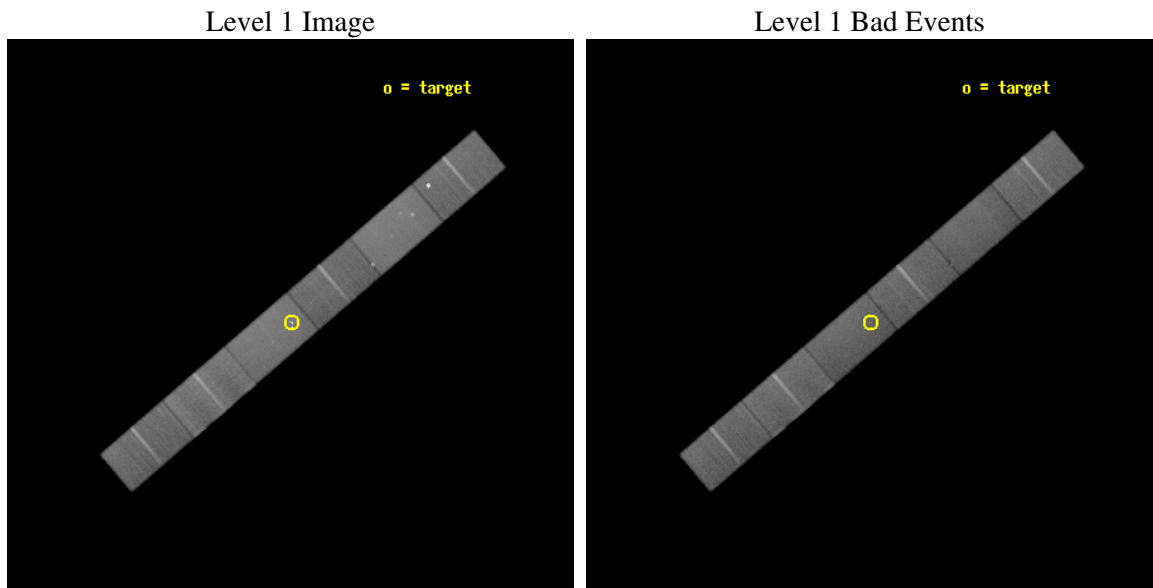
seq_num	700854
obs_id	4771
title	The size of the nuclear reflector in the Circinus Galaxy
observer	Professor Giorgio Matt
object	Circinus Galaxy
dtcycle	0
cycle	P
ra_targ	213.2925
dec_targ	-65.339111
ra_nom	213.29781806677
dec_nom	-65.338819062361
roll_nom	139.41423442261
revision	2
ontime	60178.0
livetime	58967.977109709
ontime4	60178.0
ontime5	60178.0
ontime6	60178.0
ontime7	60178.0
ontime8	60178.0
ontime9	60178.0
l2events	460675



2 OBI

2.1 OBI

2.1.1 Images

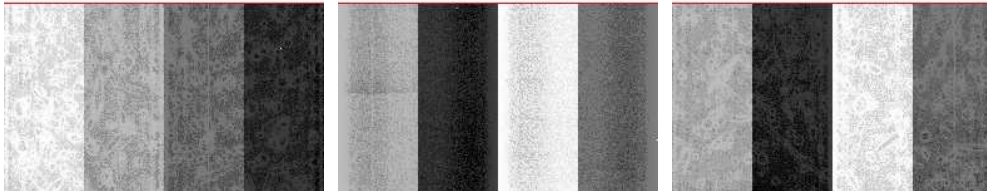


2.1.2 Bias

Chip 4

Chip 5

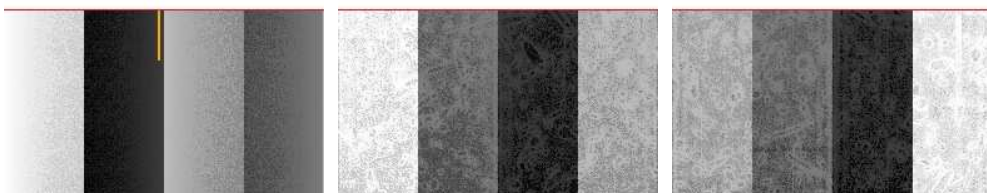
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-04-10T22:58:16
revision	2

sched_exp_time	60000.000000
ontime	60710.001169533
ontime4	60710.001149625
ontime5	60710.001169533
ontime6	60710.001169533
ontime7	60710.001169533
ontime8	60712.042189628
ontime9	60712.042189628
l1events	2101202

2.1.4 Events

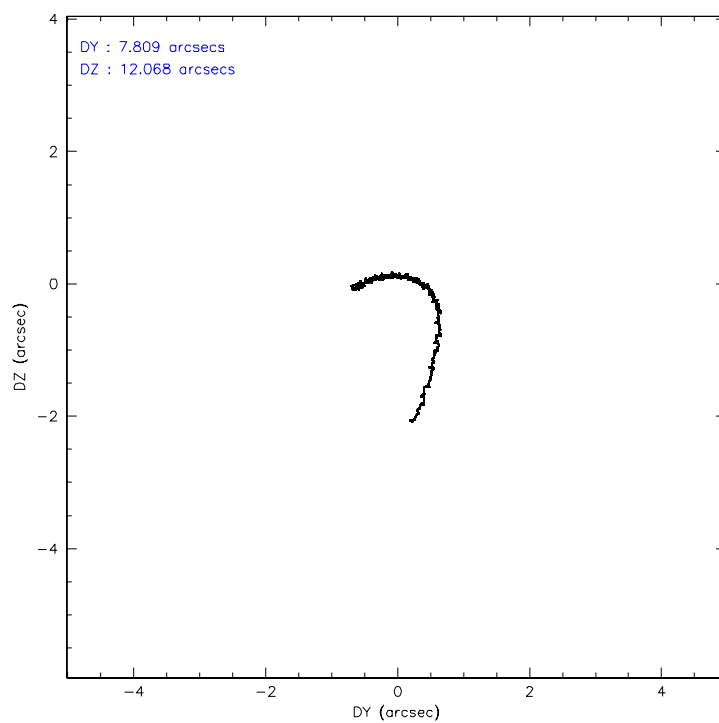
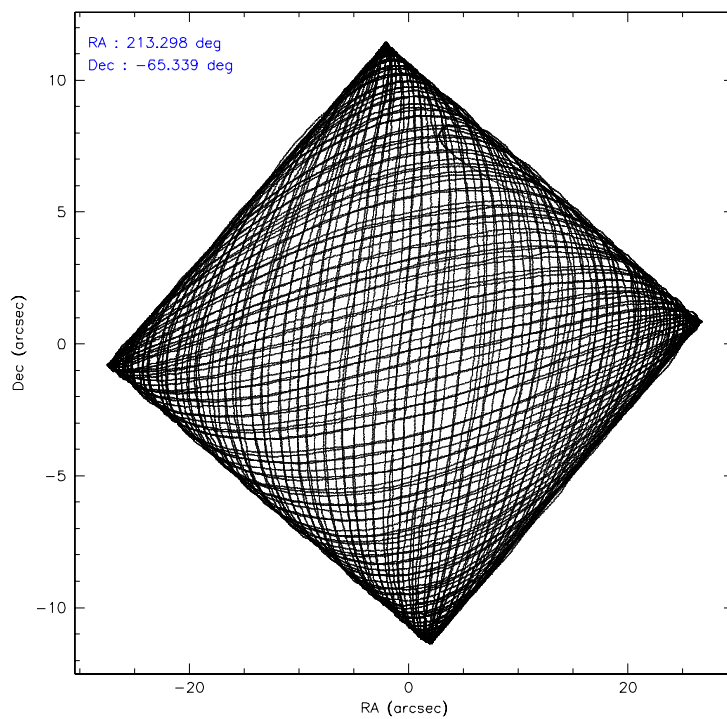
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	347371	415085	294733	390626	371406	281981
rejected events	286340	231537	256917	226774	291002	247074
rejected %	82%	55%	87%	58%	78%	87%

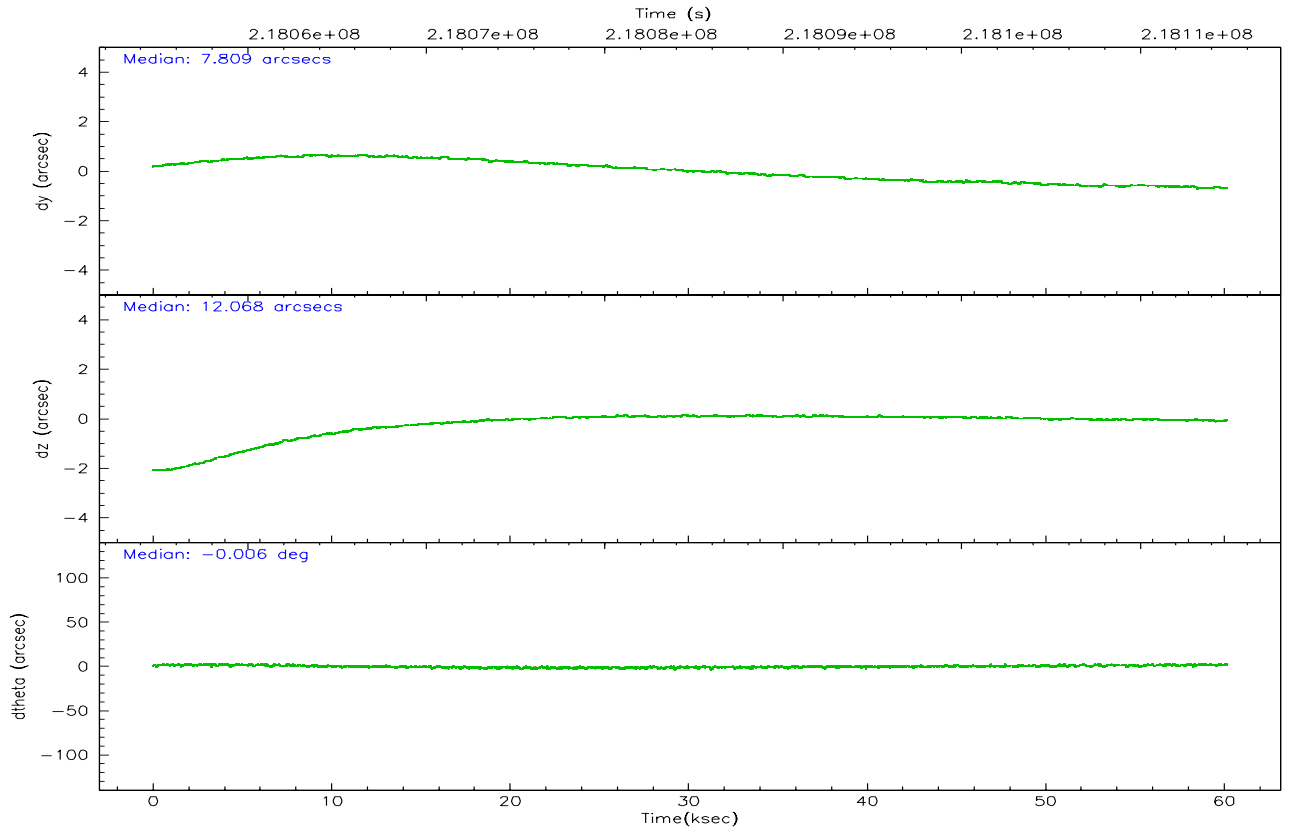
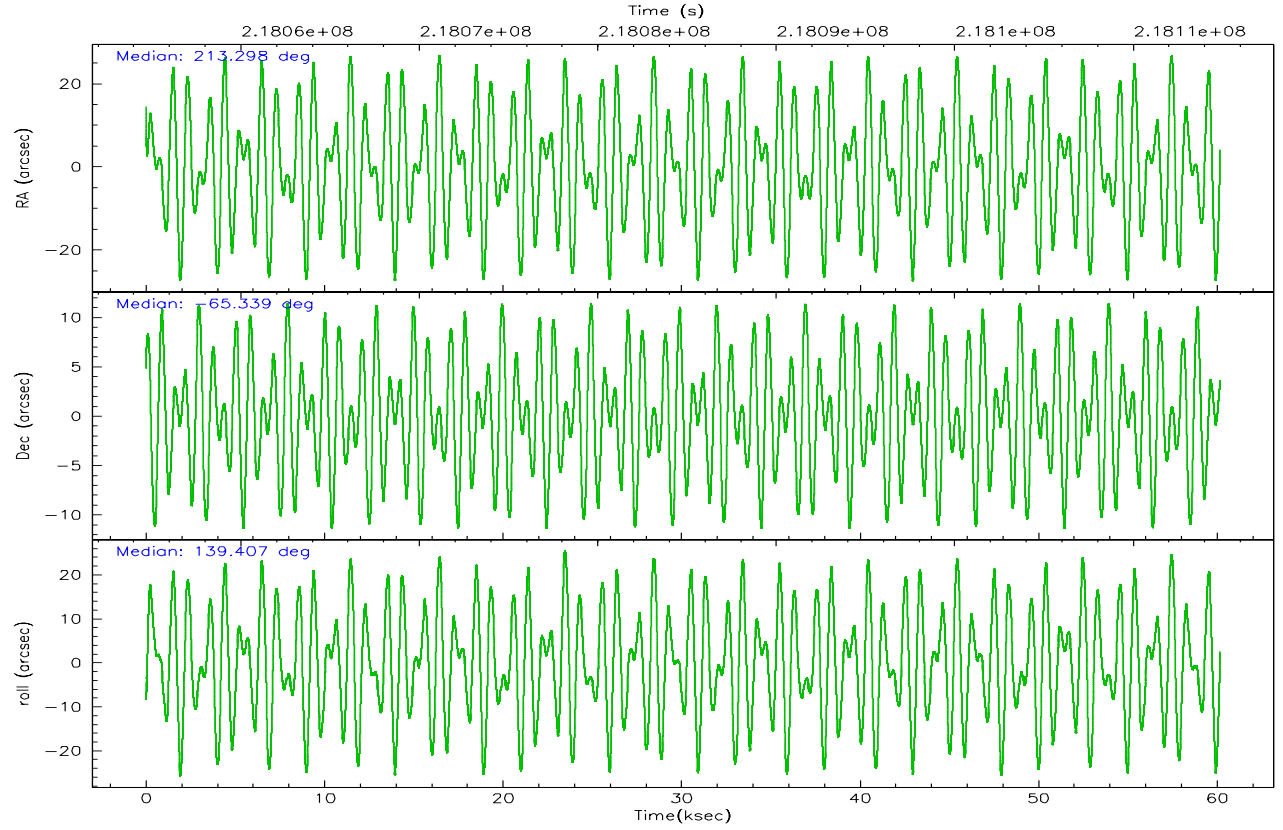
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	39925	13770	15693	11943	24316	14175
	11%	3%	5%	3%	6%	5%
grade 1 events	262	658	122	321	203	144
	0%	0%	0%	0%	0%	0%
grade 2 events	7874	55391	7492	39689	17825	6729
	2%	13%	2%	10%	4%	2%
grade 3 events	4116	5687	4012	11353	8815	4069
	1%	1%	1%	2%	2%	1%
grade 4 events	3941	5276	3981	11164	8297	3731
	1%	1%	1%	2%	2%	1%
grade 5 events	11838	22320	12352	28186	16172	13305
	3%	5%	4%	7%	4%	4%
grade 6 events	5700	105189	6923	91073	21831	6518
	1%	25%	2%	23%	5%	2%
grade 7 events	273715	206794	244158	196897	273947	233310
	78%	49%	82%	50%	73%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	CUSTOM
Pointing RA	213.362124	213.2978180667743	Subarray start row	1	1
Pointing Dec	-65.343447	-65.33881906236074	Subarray row count	600	600
Pointing Roll	139.316059	139.4142344226087	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	2
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-185.052523	-185.053606194816			
SIM translation stage offset (mm)	-5.08	-5.0789163881918			
Observation start time	218054861.184000	218053656.58277			
Observation start date	2004-11-28T18:46:37	2004-11-28T18:27:36			
Observation end time	218114861.184000	218115463.57305			
Observation end date	2004-11-29T11:26:37	2004-11-29T11:37:43			
Read mode	TIMED	TIMED			

2.3 Aspect



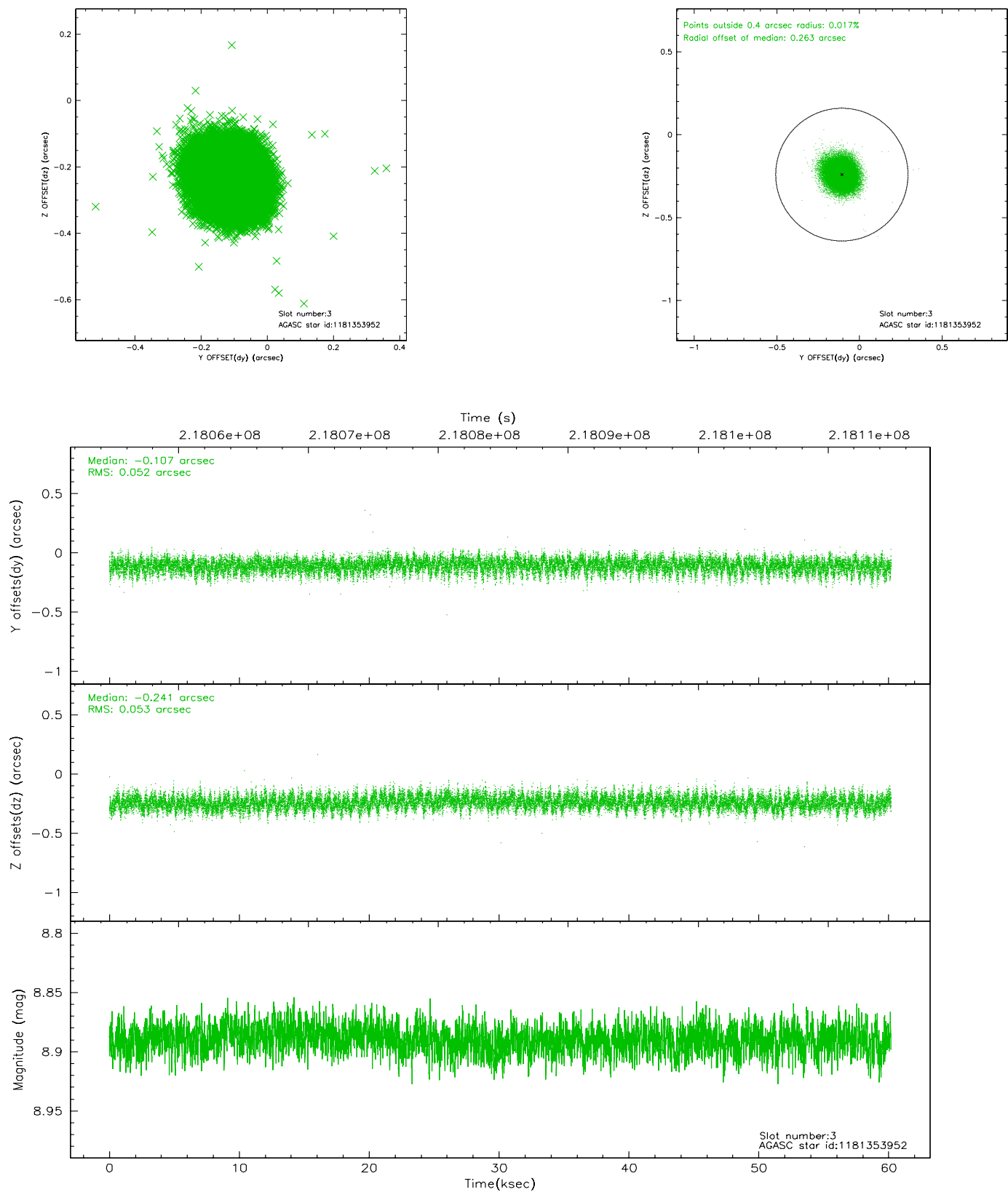


Slot Statistics

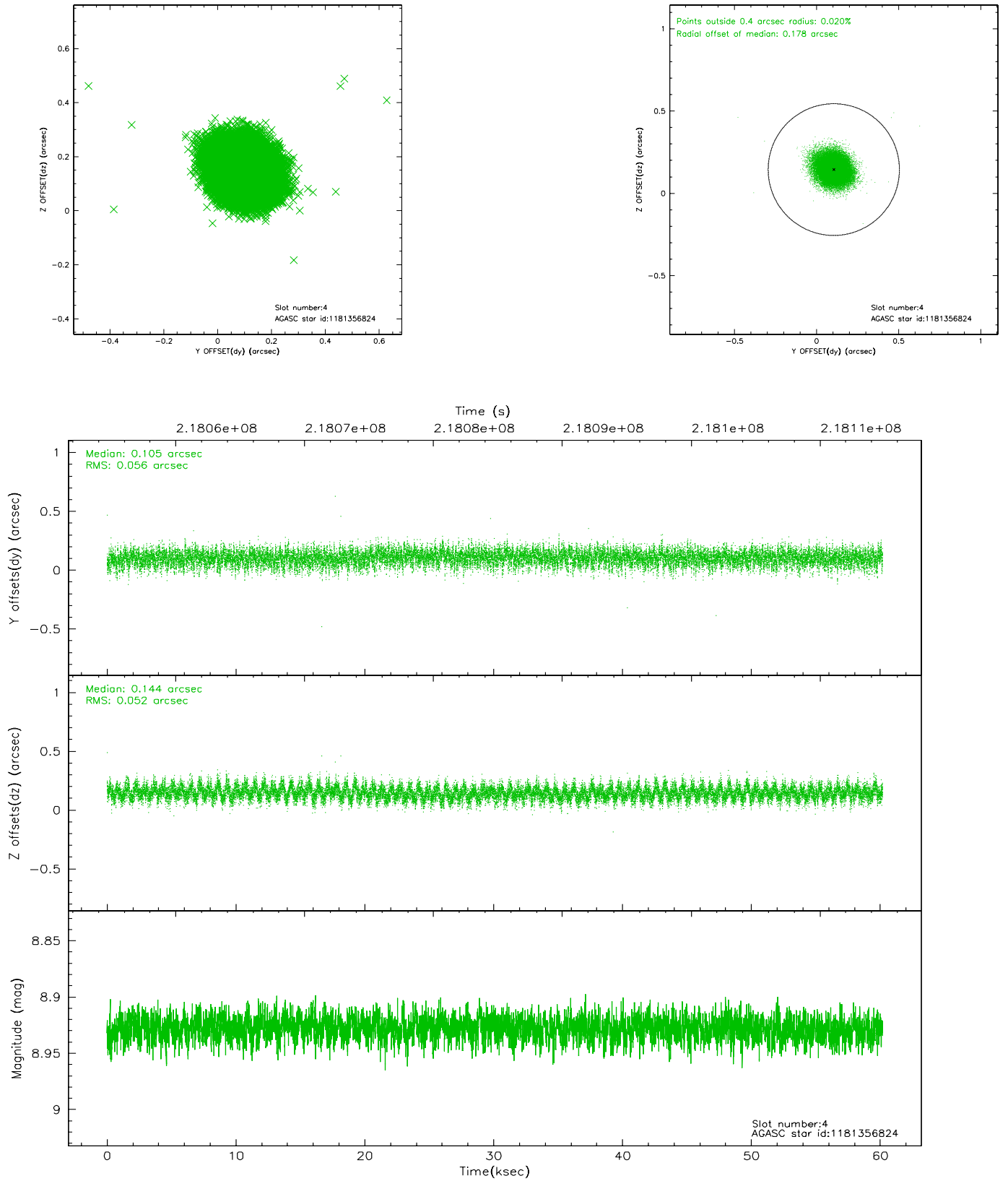
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	14679	0.037	0.095	0.014	0.040	0.000000	0.000000	935.85	-1833.39
1	FID	ACIS-S-2	7.09	14679	-0.098	-0.068	0.013	0.032	0.000000	0.000000	-760.21	-1838.07
2	FID	ACIS-S-6	7.37	14678	0.043	-0.023	0.014	0.026	0.000000	0.000000	401.52	707.86
3	GUIDE	1181353952	8.89	29337	-0.107	-0.241	0.079	0.126	211.658427	-65.506998	1521.64	2130.36
4	GUIDE	1181356824	8.93	29345	0.105	0.144	0.082	0.132	213.100076	-64.682630	1856.76	-1539.53
5	GUIDE	1181492072	9.21	29305	0.055	0.059	0.078	0.127	214.479575	-65.592809	-1854.94	-391.46
6	GUIDE	1181490256	9.46	29328	-0.080	0.167	0.124	0.195	215.201445	-65.114639	-1601.89	-2409.64
7	GUIDE	1181880992	9.07	29333	0.028	-0.129	0.097	0.158	213.720648	-66.170562	-2337.57	1919.33

2.4 Star Slots

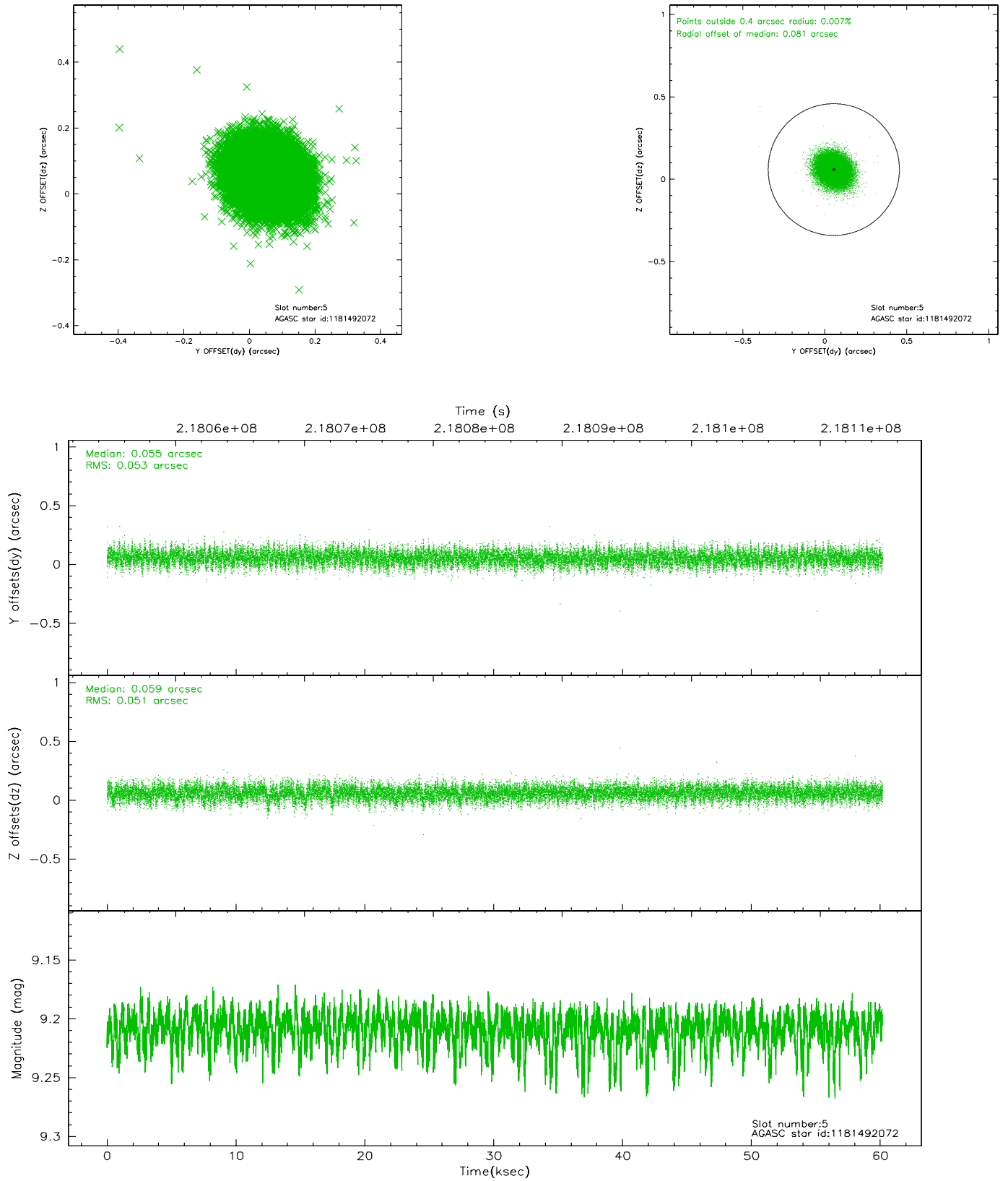
2.4.1 Slot 3



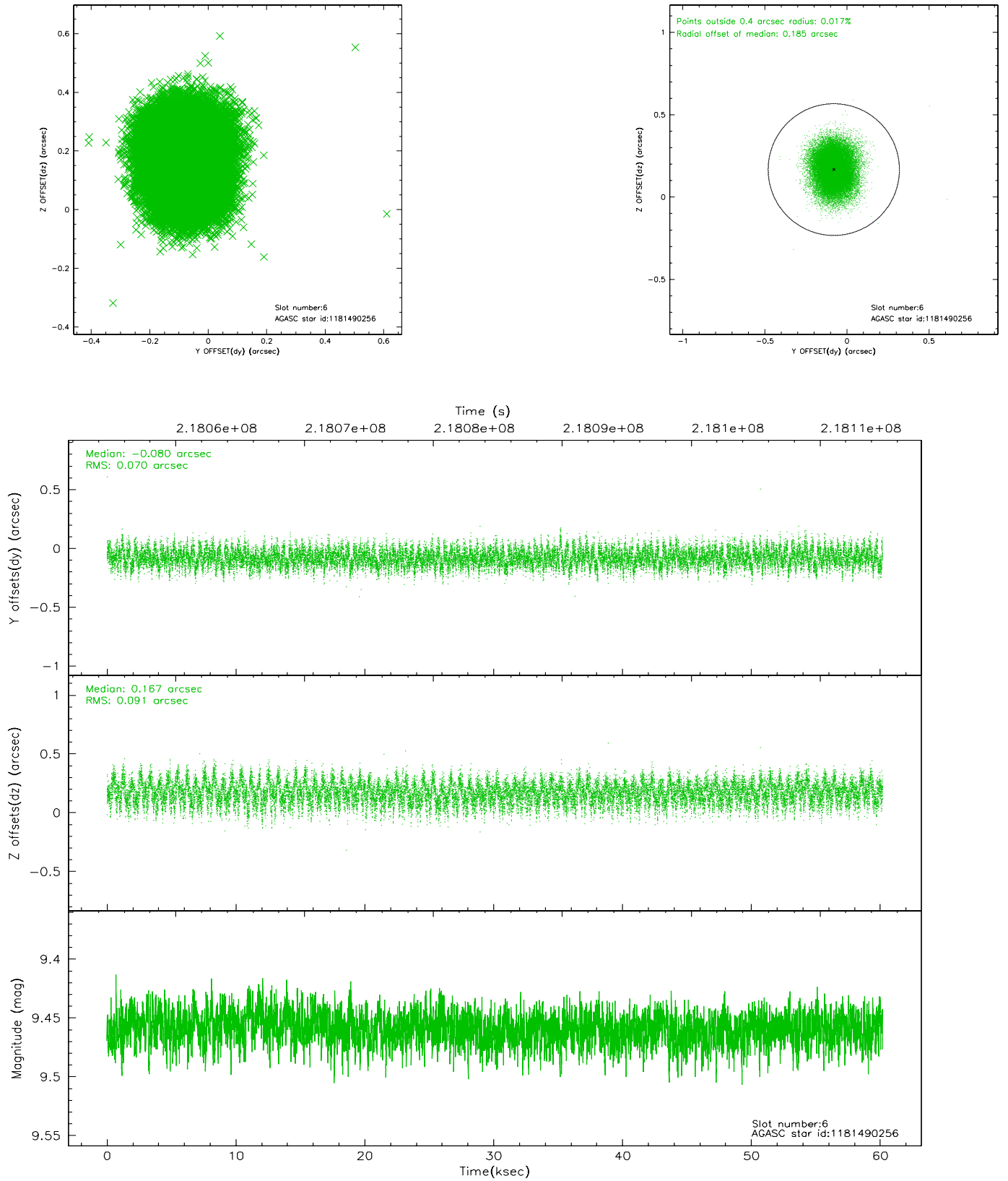
2.4.2 Slot 4



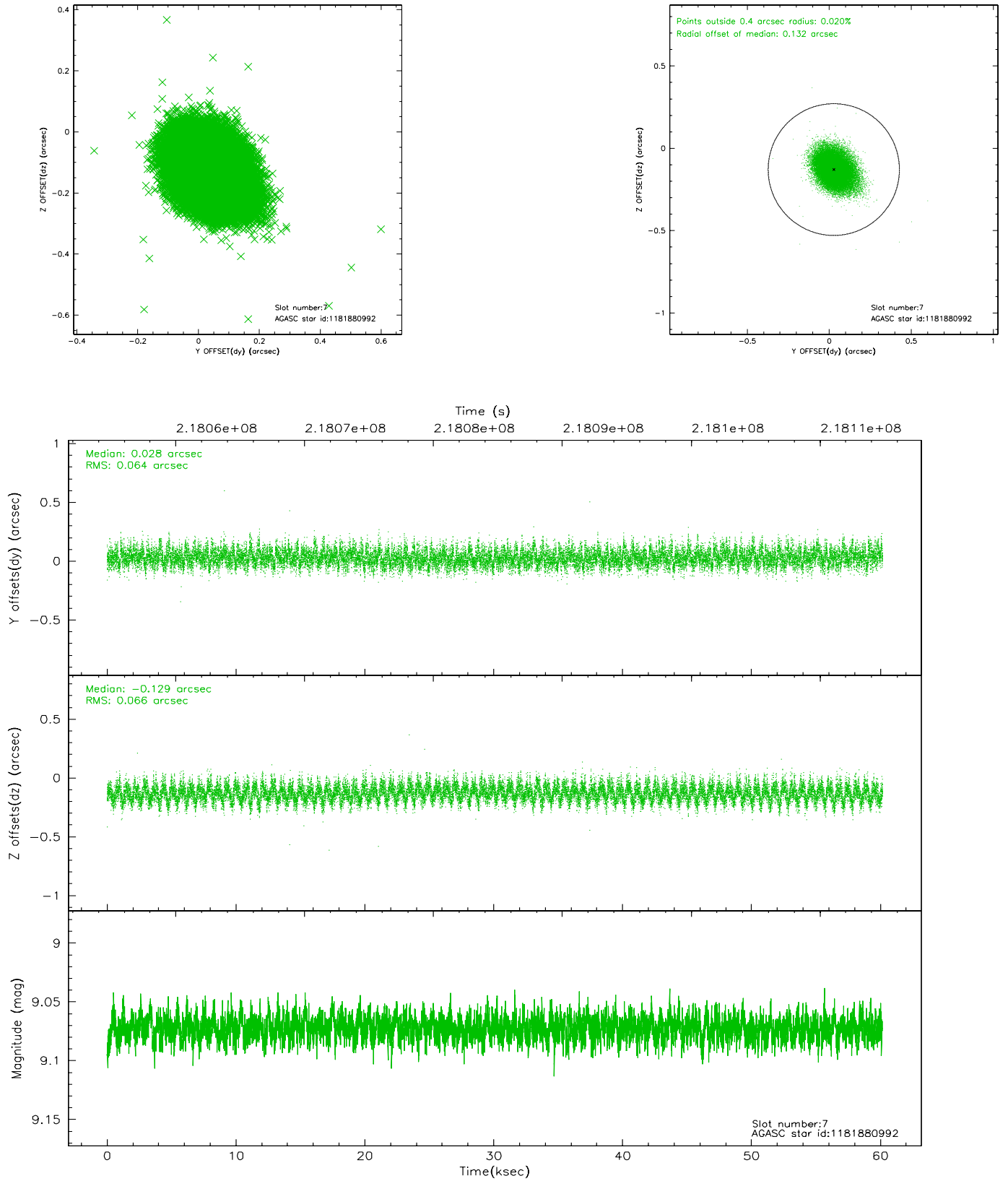
2.4.3 Slot 5



2.4.4 Slot 6

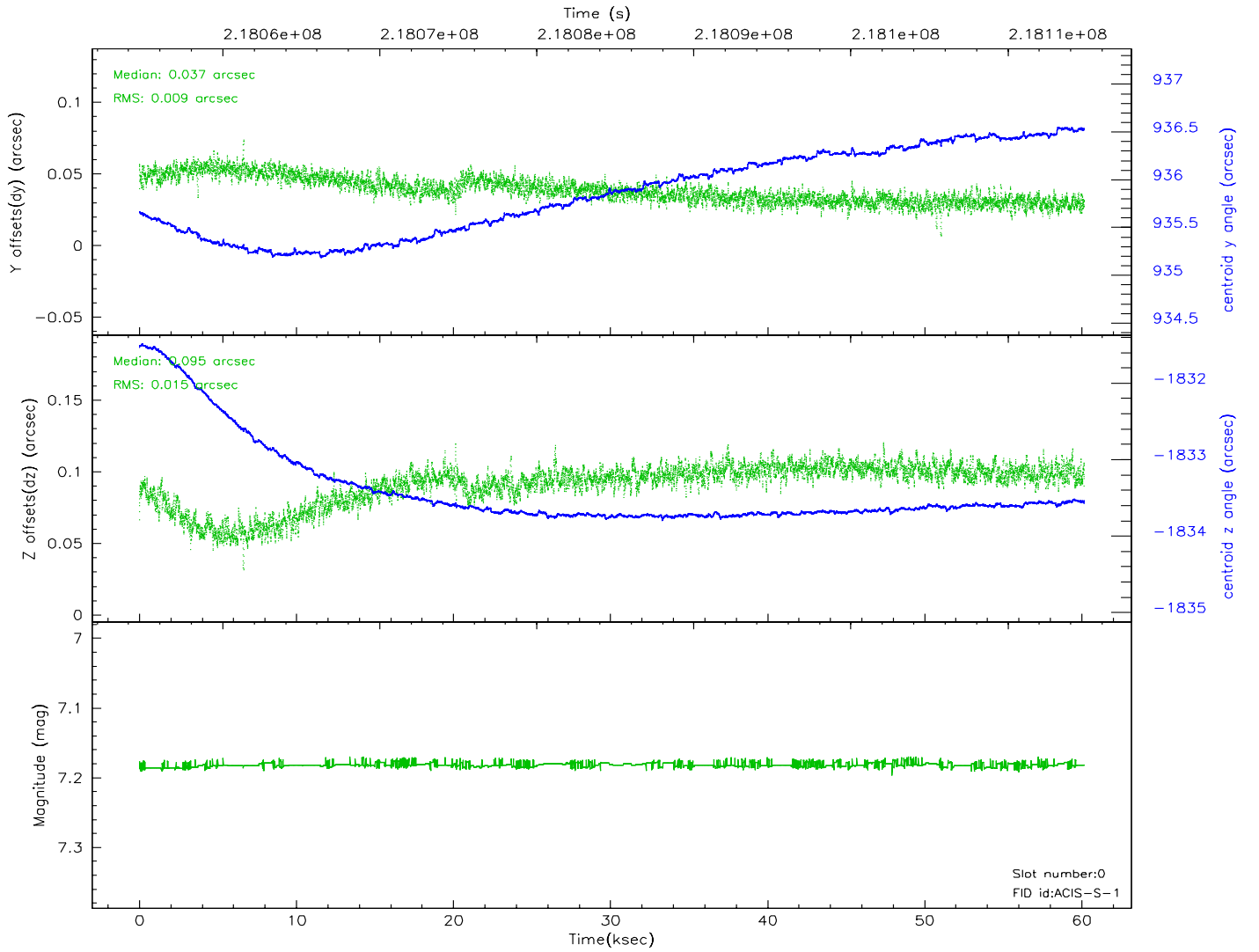
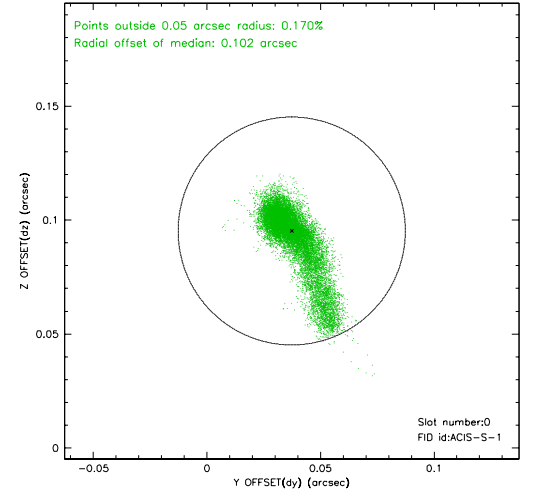
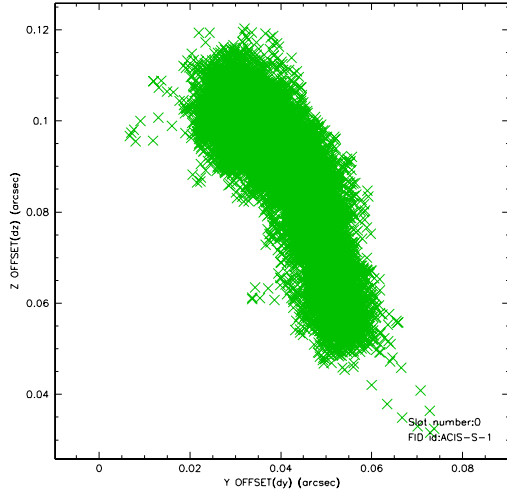


2.4.5 Slot 7

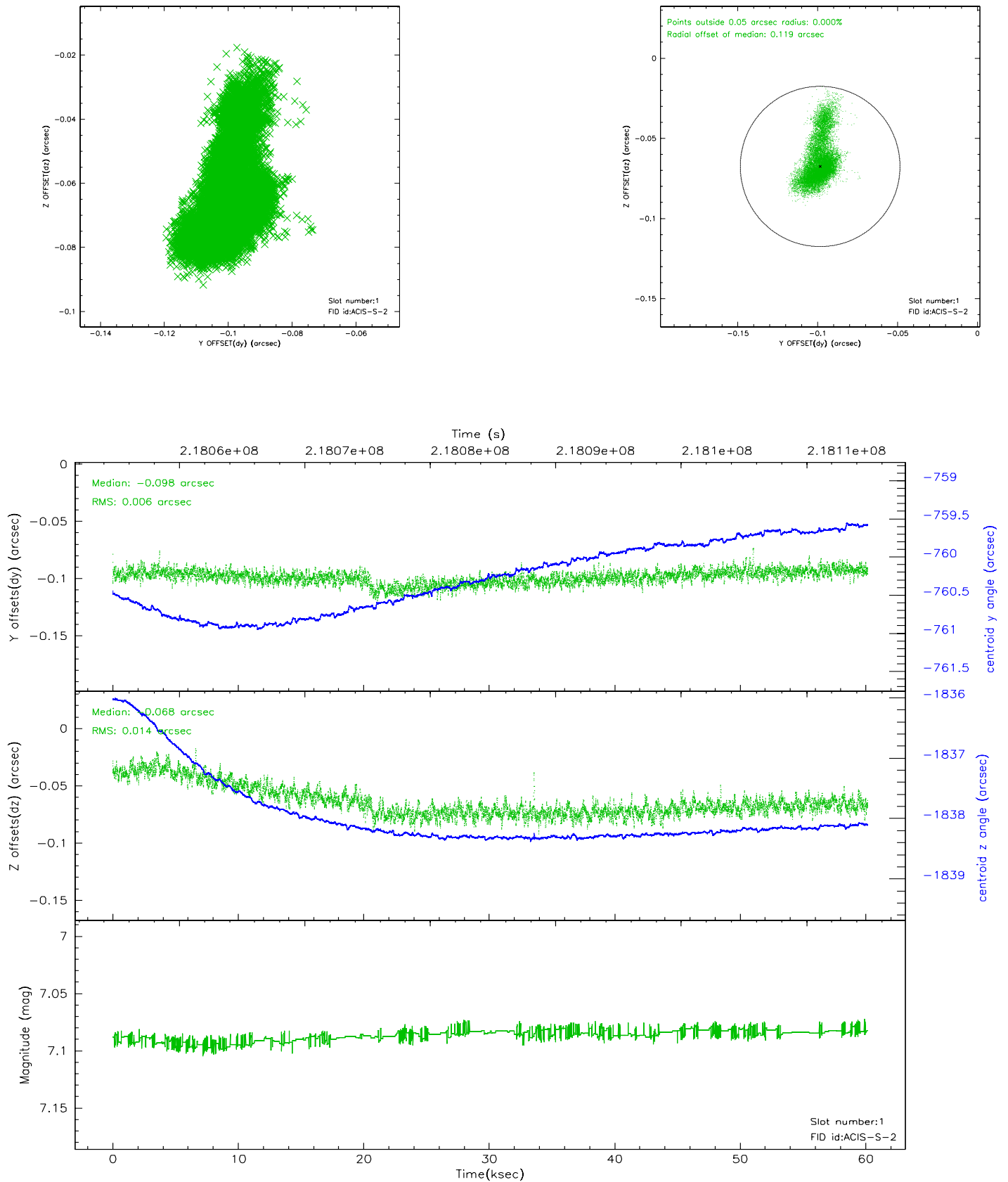


2.5 FID Slots

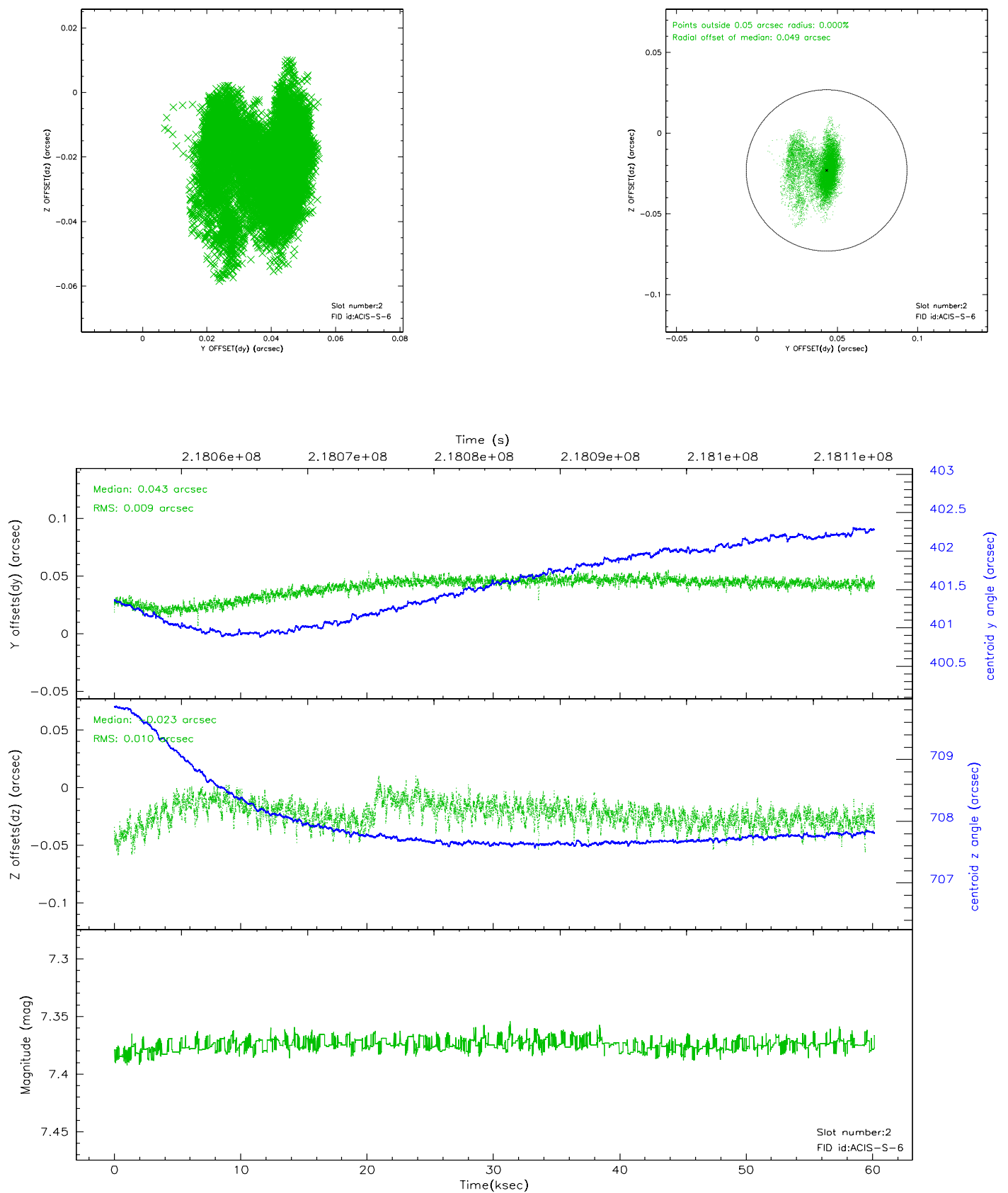
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

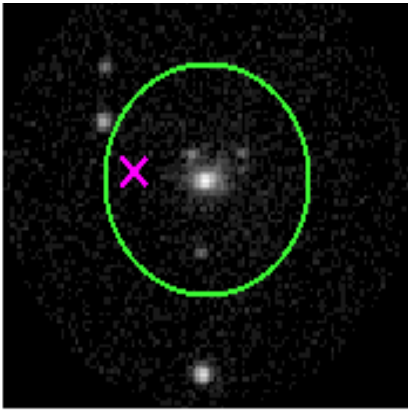


3 Gratings

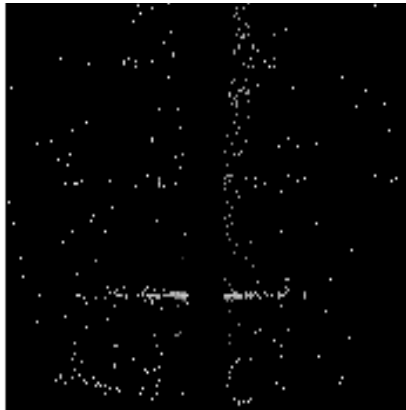
3.1 HEG Arm



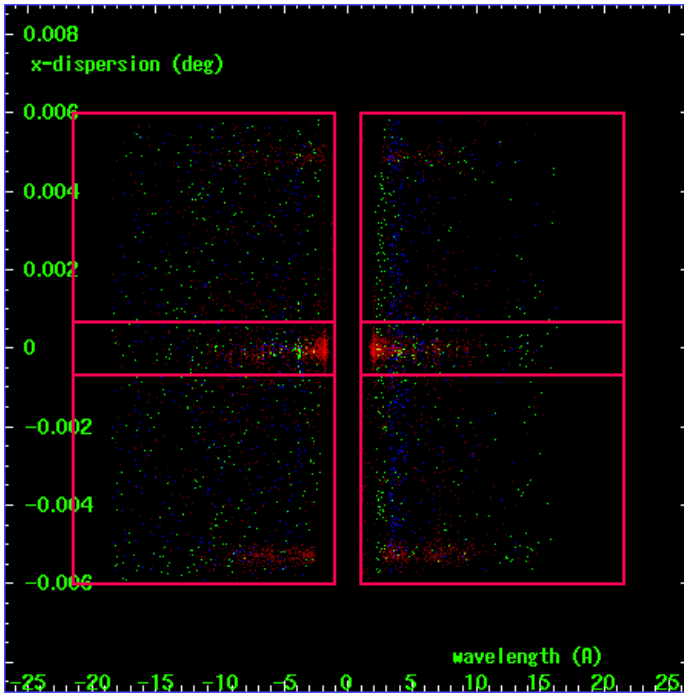
HEG Order Sort 123



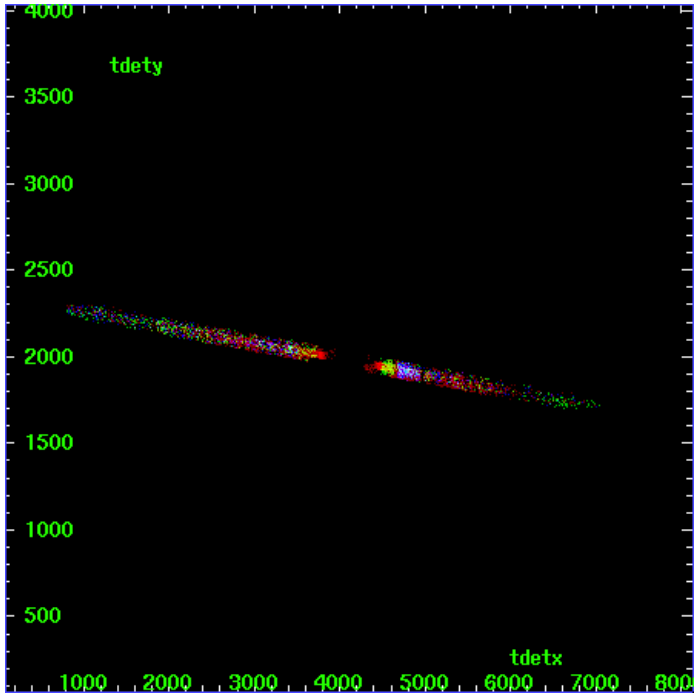
HEG Zero Order



HEG Order Sort ALL

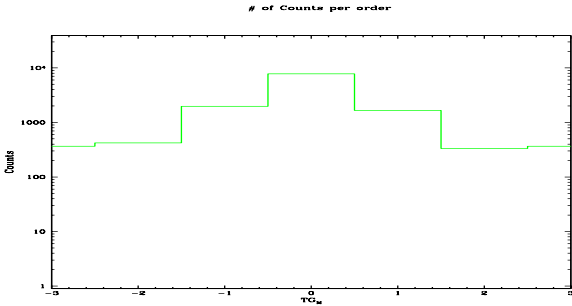


Spot Image HEG

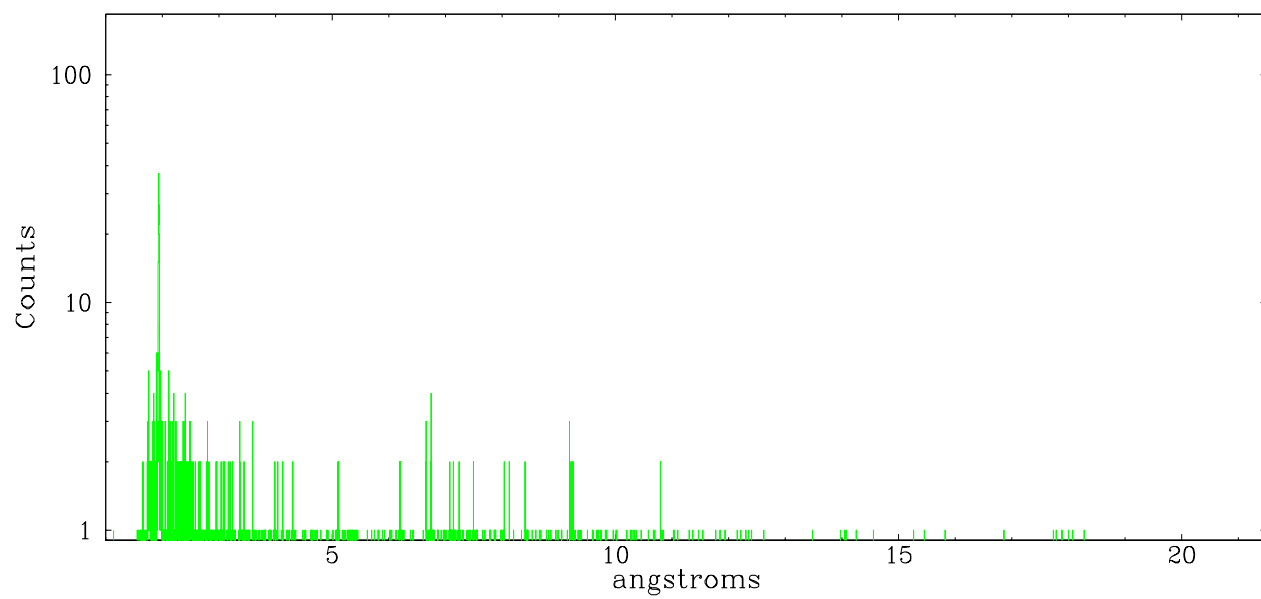


Full Detector HEG

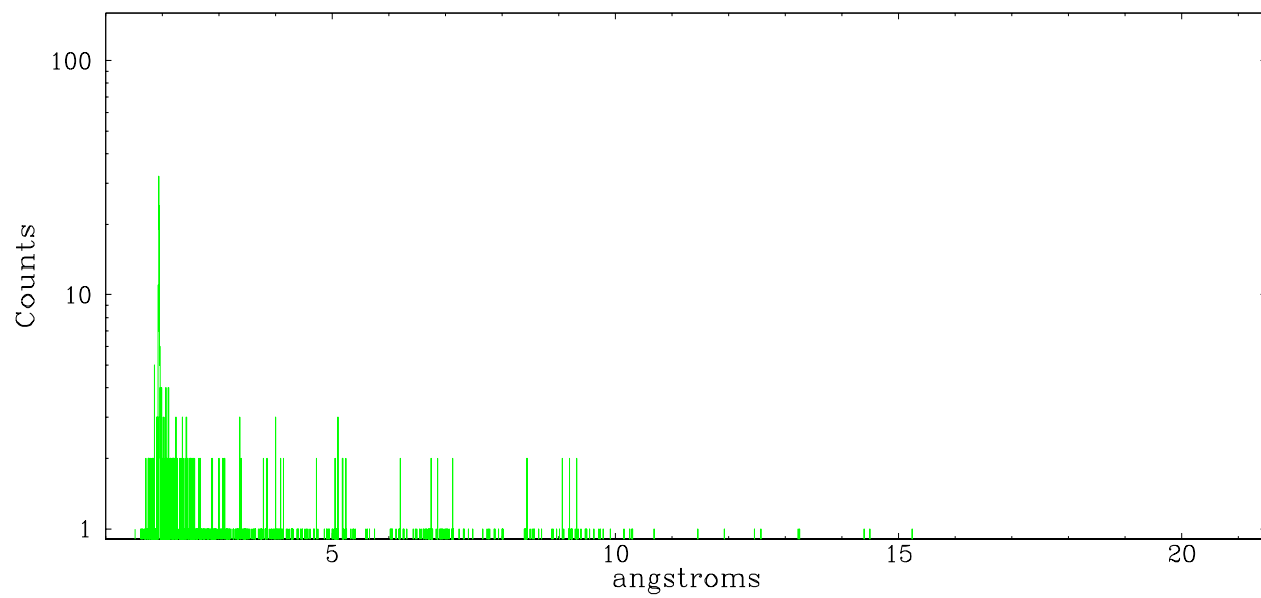
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	366	421	1970	7798	1661	334	367



heg order -1



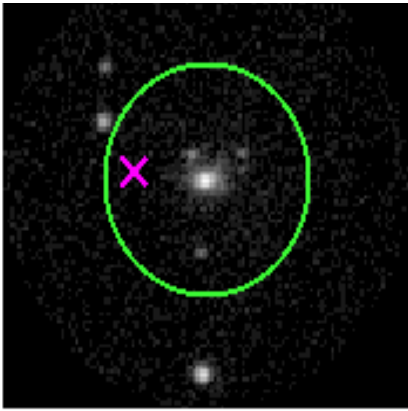
heg order +1



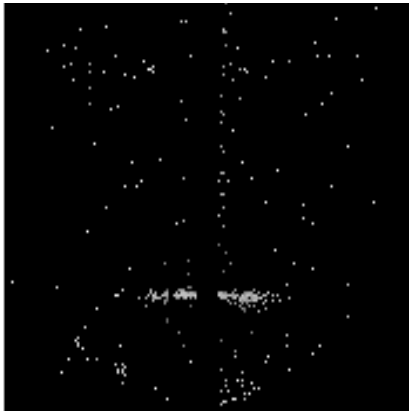
3.2 MEG Arm



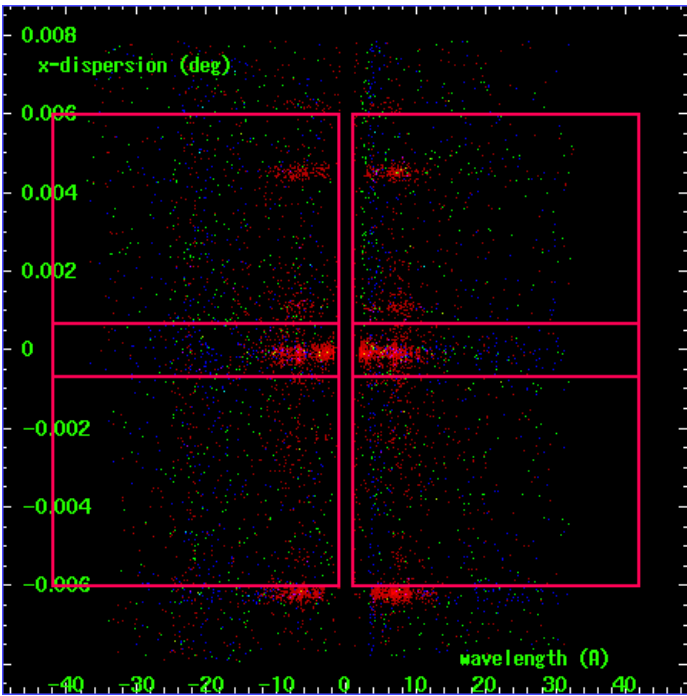
MEG Order Sort 123



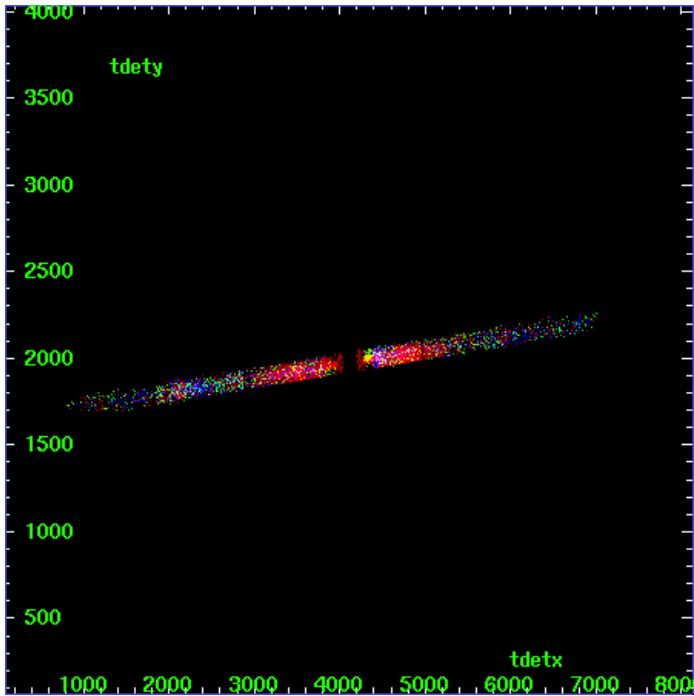
MEG Zero Order



MEG Order Sort ALL

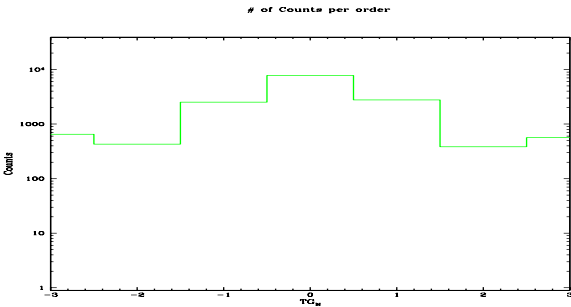


Spot Image MEG

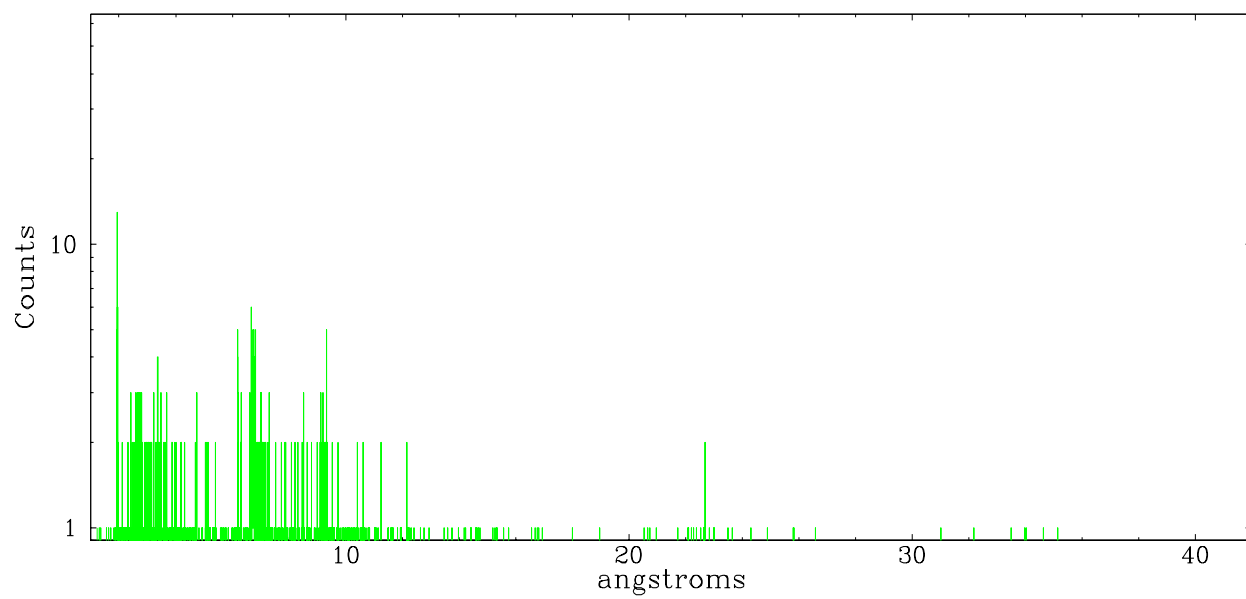


Full Detector MEG

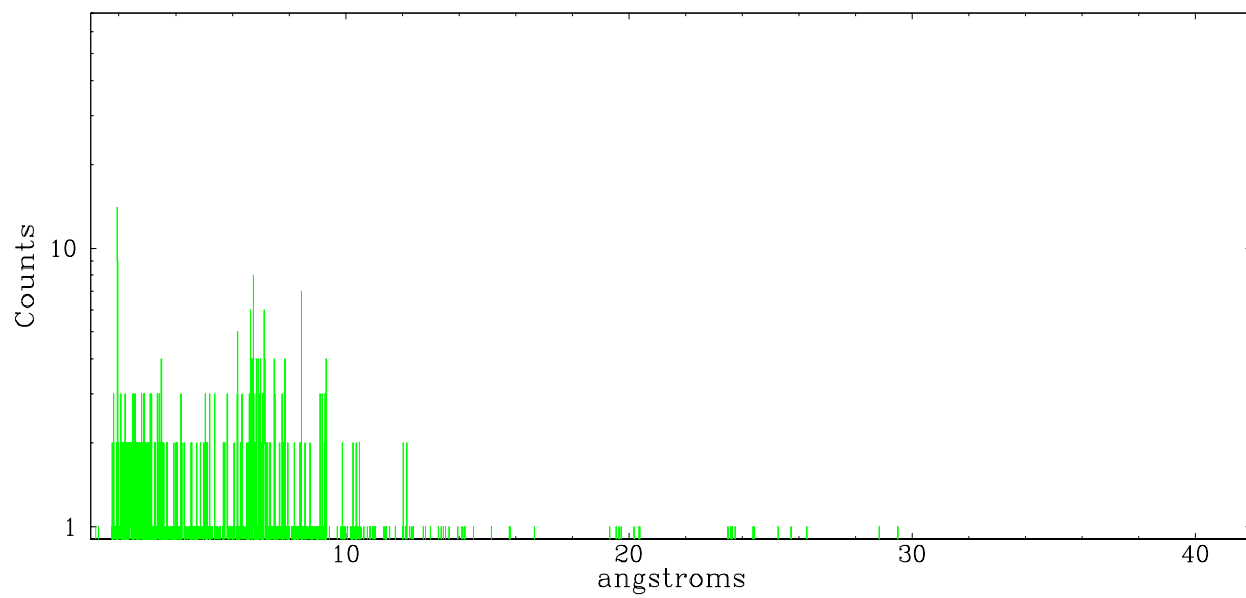
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	650	430	2519	7798	2769	384	566



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	60.178

A.2 Comments

Roll preference met. Monitor constraint met. Multiple sources are contained within the zeroth order and gratings traces. Manual extraction of the spectrum will be necessary.