

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 3456 - L2 Version 001
Chandra X-Ray Center

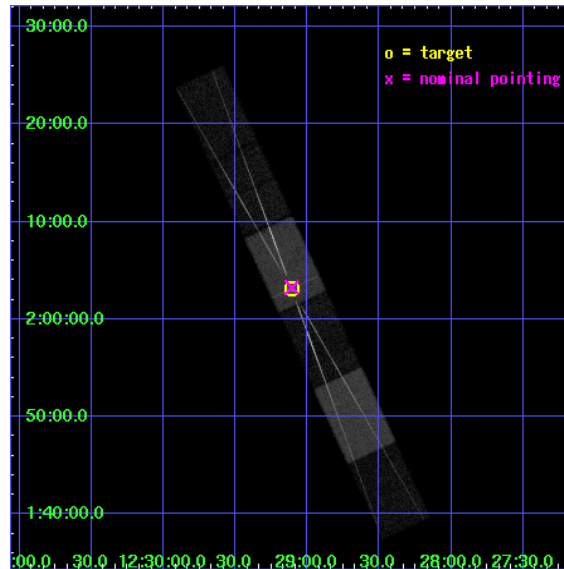
L2 Processing Date : Sep 18 2006

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1 Front

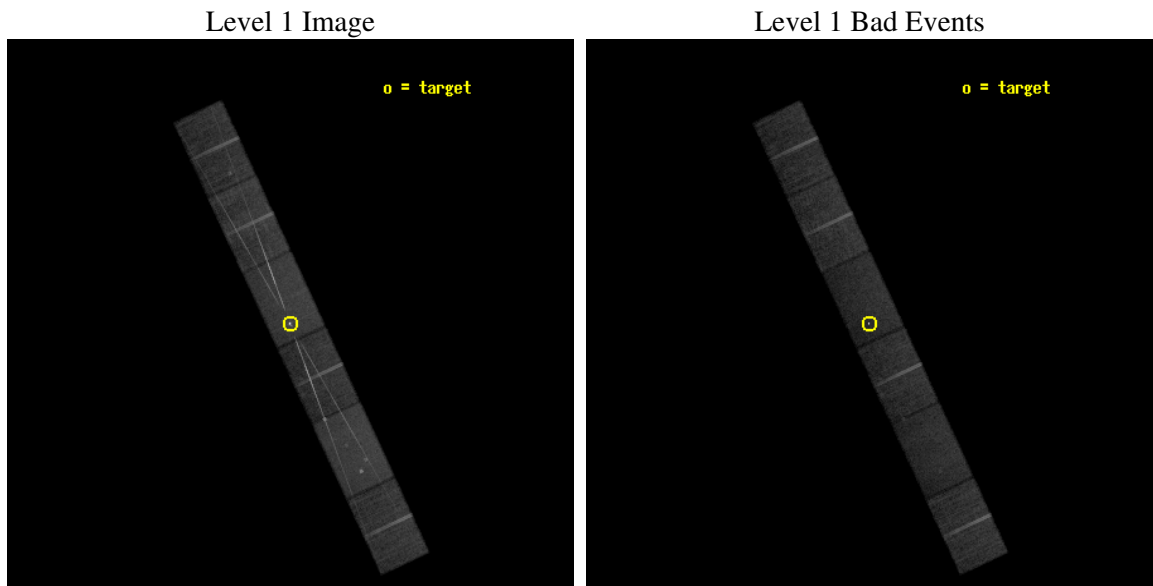
seq_num	790074
obs_id	3456
title	MEASURING THE QE MAP FOR HETG/ACIS-S OBSERVATION AT DIFFERENT SIM_Z OFFSETS
observer	Dr. CXC Calibration
object	3C273
dtcycle	0
cycle	P
ra_targ	187.277917
dec_targ	2.052389
ra_nom	187.27702492046
dec_nom	2.0544079764284
roll_nom	244.99344410201
revision	2
ontime	25006.799929023
livetime	24527.463219252
ontime4	25006.799929023
ontime5	25006.799929023
ontime6	25006.799929023
ontime7	25006.799929023
ontime8	25006.799929023
ontime9	25006.799929023
l2events	236468



2 OBI

2.1 OBI

2.1.1 Images

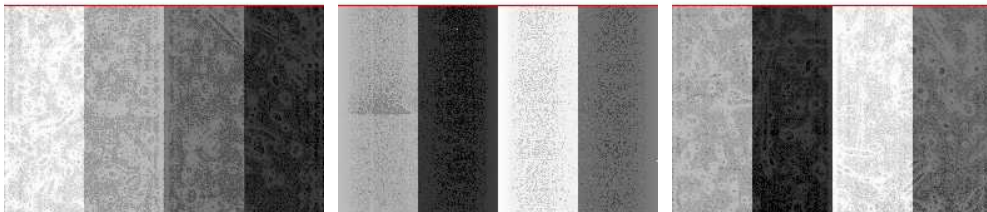


2.1.2 Bias

Chip 4

Chip 5

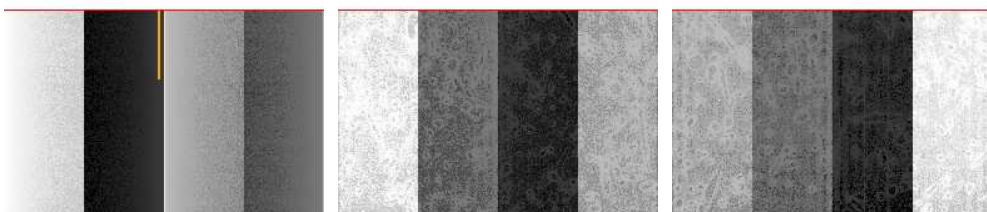
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldsver	3.2.3
date	2006-09-18T07:06:35
revision	2

sched_exp_time	25000.000000
ontime	25009.196092337
ontime4	25009.196092337
ontime5	25009.196092337
ontime6	25009.196092337
ontime7	25009.196092337
ontime8	25009.196092337
ontime9	25009.196092337
l1events	852304

2.1.4 Events

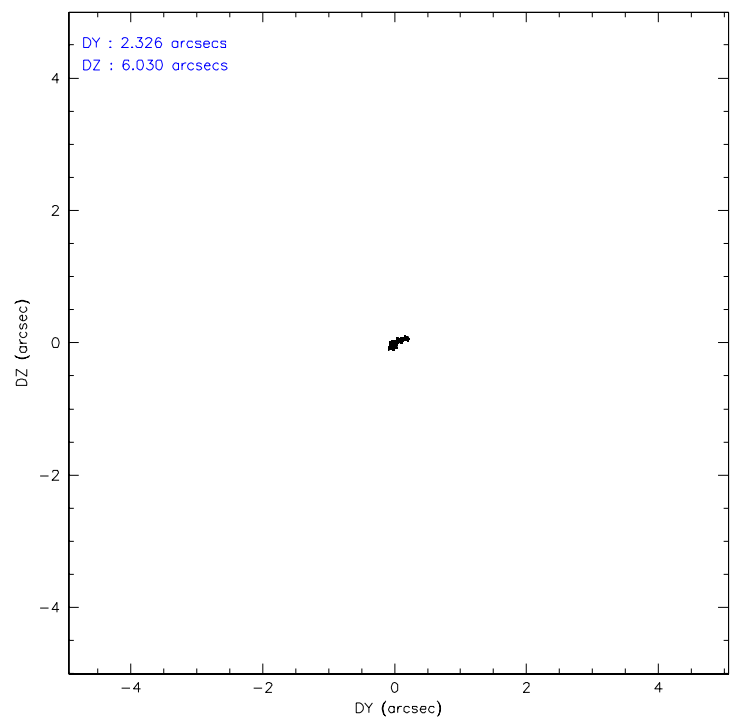
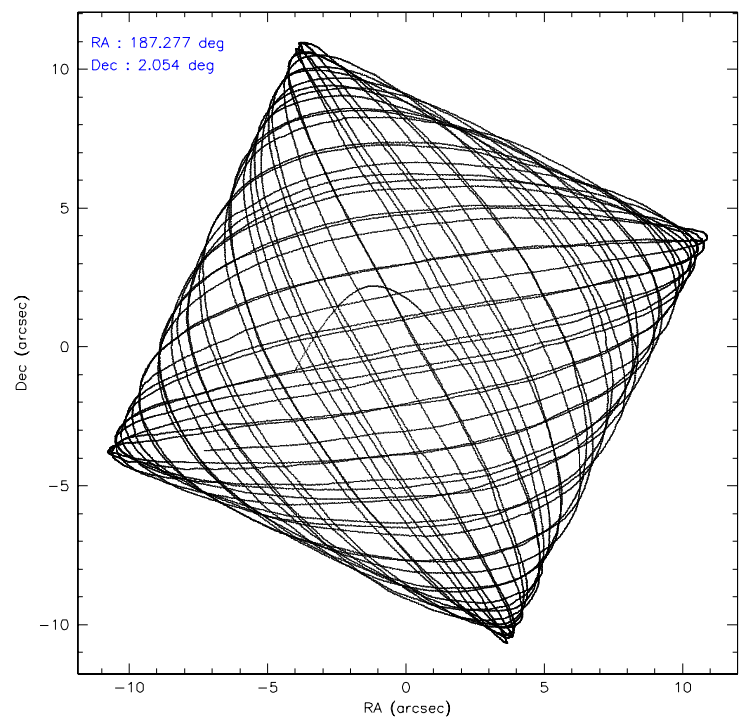
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	122101	160902	135510	175279	149138	109374
rejected events	106954	84759	98388	91110	109651	93531
rejected %	87%	52%	72%	51%	73%	85%

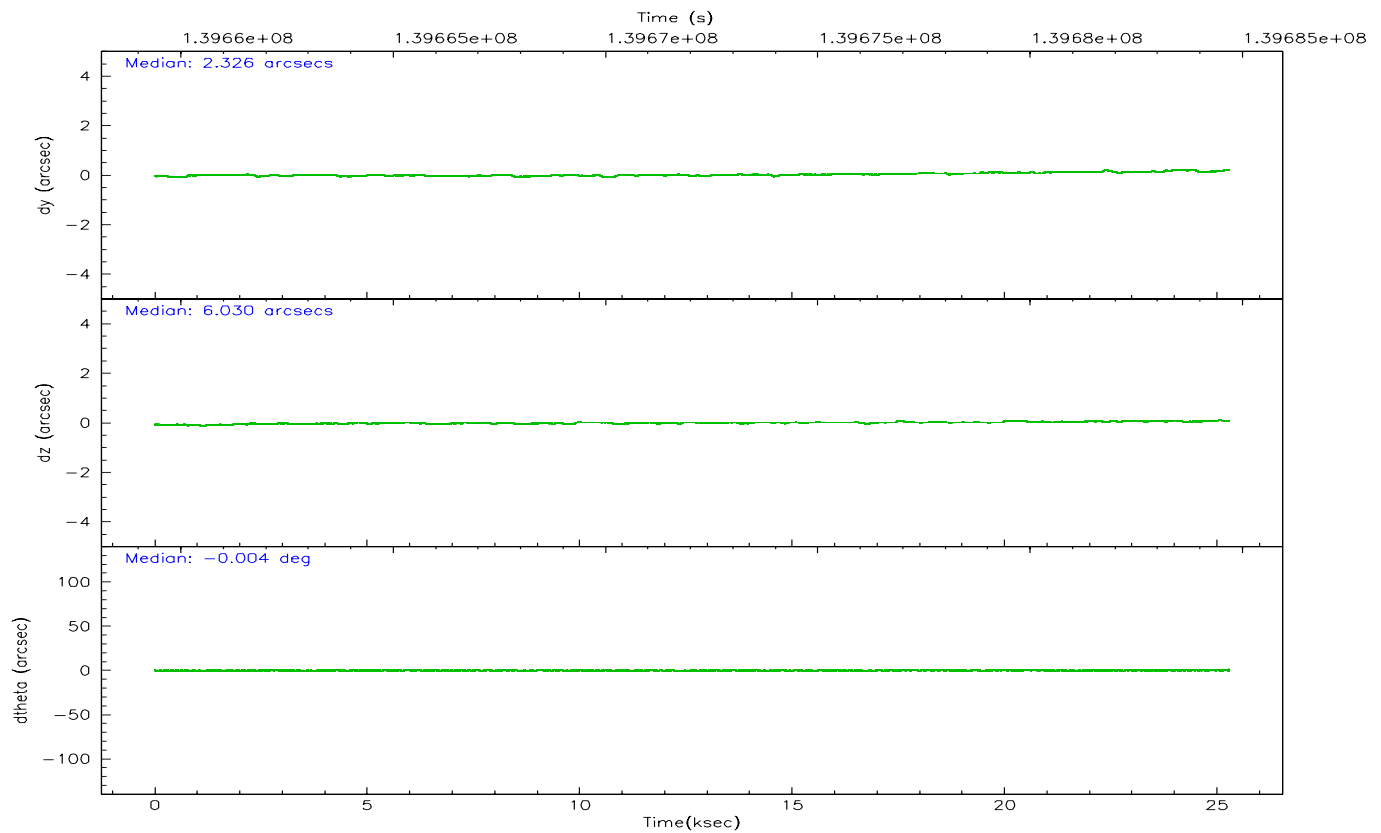
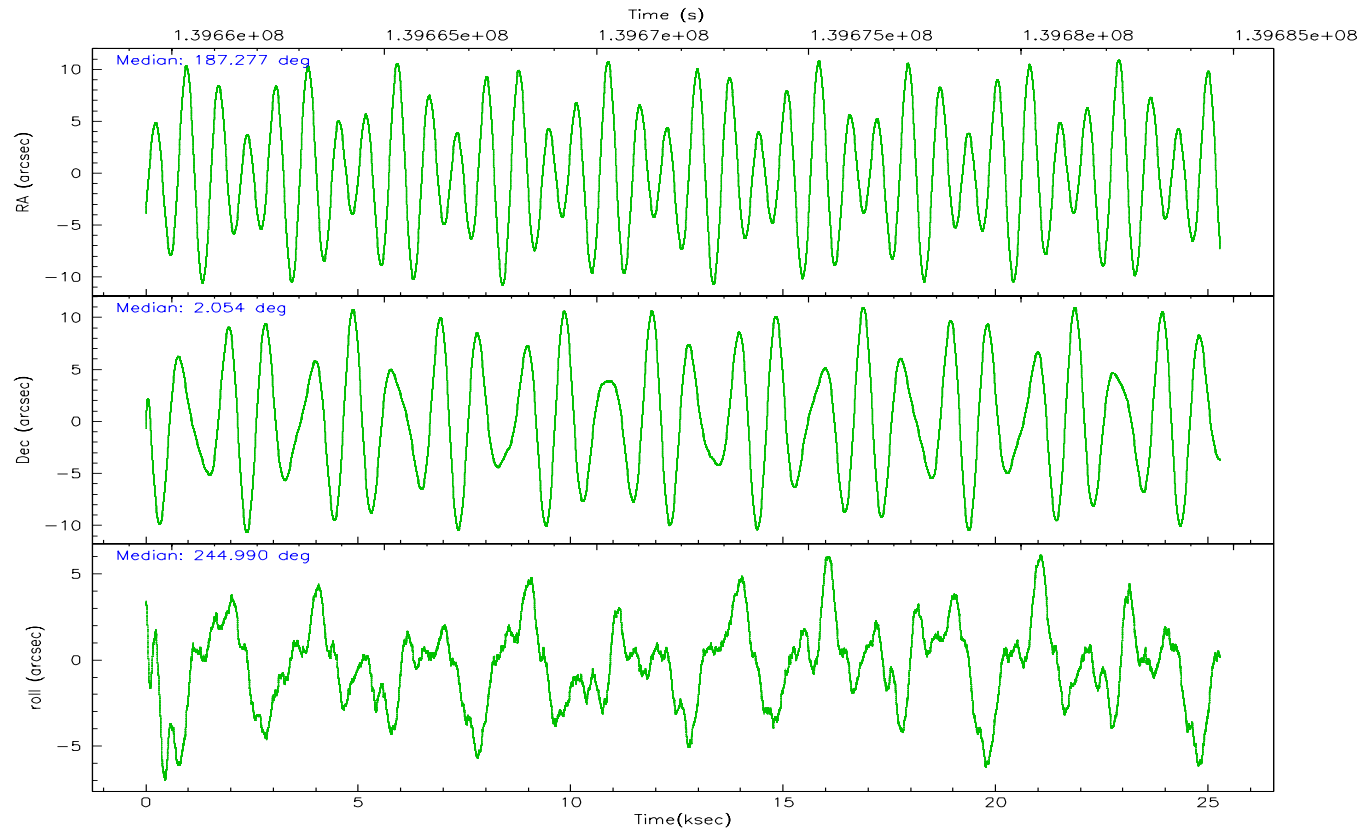
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	6750	8566	24002	9133	18703	7567
	5%	5%	17%	5%	12%	6%
grade 1 events	53	241	115	334	98	44
	0%	0%	0%	0%	0%	0%
grade 2 events	3415	23030	5390	20191	7018	2808
	2%	14%	3%	11%	4%	2%
grade 3 events	1399	3055	2248	6354	3401	1494
	1%	1%	1%	3%	2%	1%
grade 4 events	1366	2767	2209	6249	3152	1446
	1%	1%	1%	3%	2%	1%
grade 5 events	3888	8244	4527	11247	5769	4571
	3%	5%	3%	6%	3%	4%
grade 6 events	2218	38728	3276	42253	7246	2528
	1%	24%	2%	24%	4%	2%
grade 7 events	103012	76271	93743	79518	103751	88916
	84%	47%	69%	45%	69%	81%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	187.274294	187.2770249204622	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	2.081533	2.054407976428357	Subarray start row	1	1
Pointing Roll	244.836914	244.9934441020061	Subarray row count	660	660
Window start time	139276864.184000	139276864.184000	Alternating exposures requested	N	N
Window stop time	141782464.184000	141782464.184000	Primary exposure time	0.000000	2.1
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-184.532523	-184.5306286120915			
SIM translation stage offset (mm)	-5.6	-5.601893970916279			
Observation start time	139659681.184000	139658656.11849			
Observation start date	2002-06-05T10:20:17	2002-06-05T10:04:16			
Observation end time	139684681.184000	139684815.65706			
Observation end date	2002-06-05T17:16:57	2002-06-05T17:20:15			
Read mode	TIMED	TIMED			

2.3 Aspect



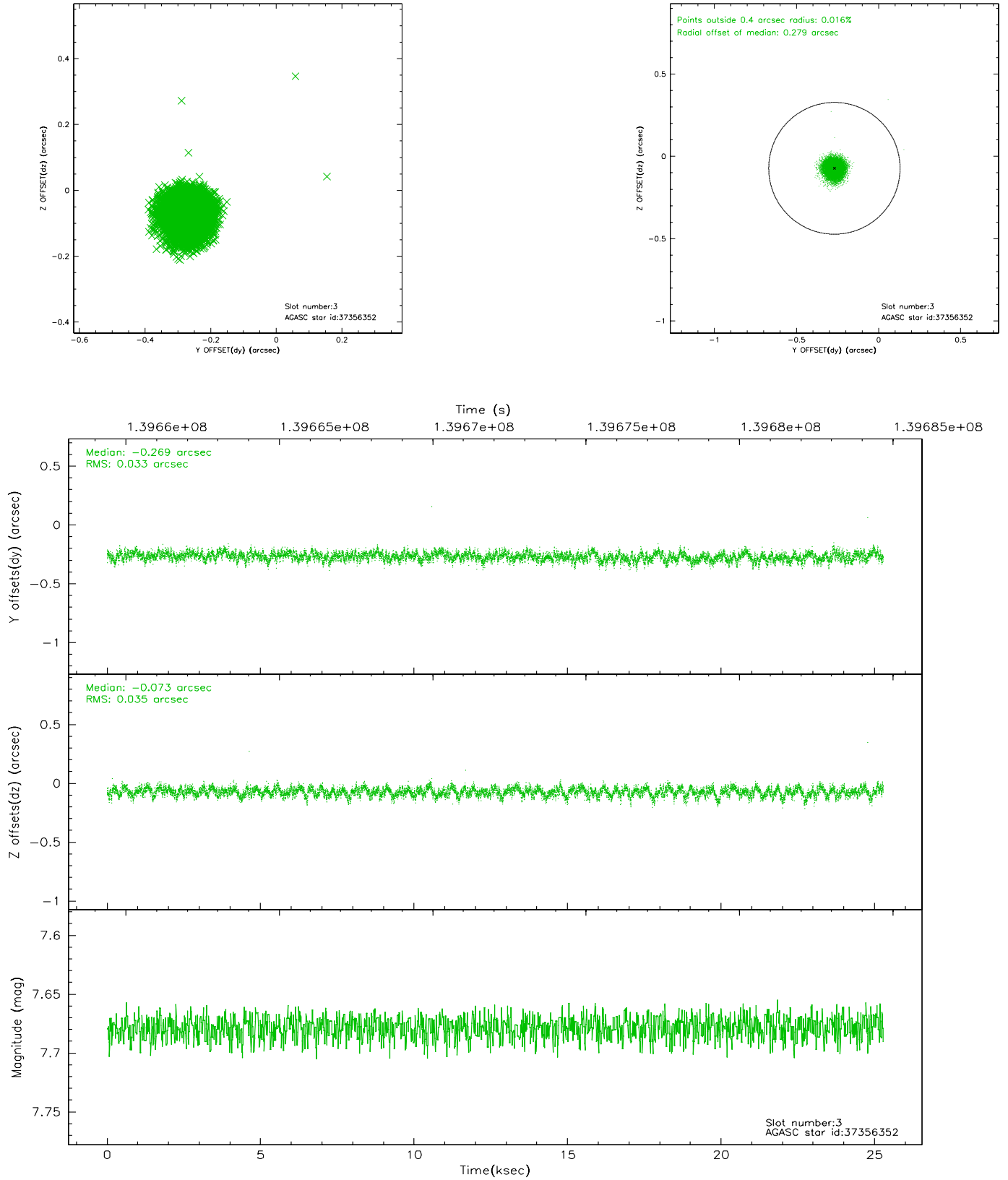


Slot Statistics

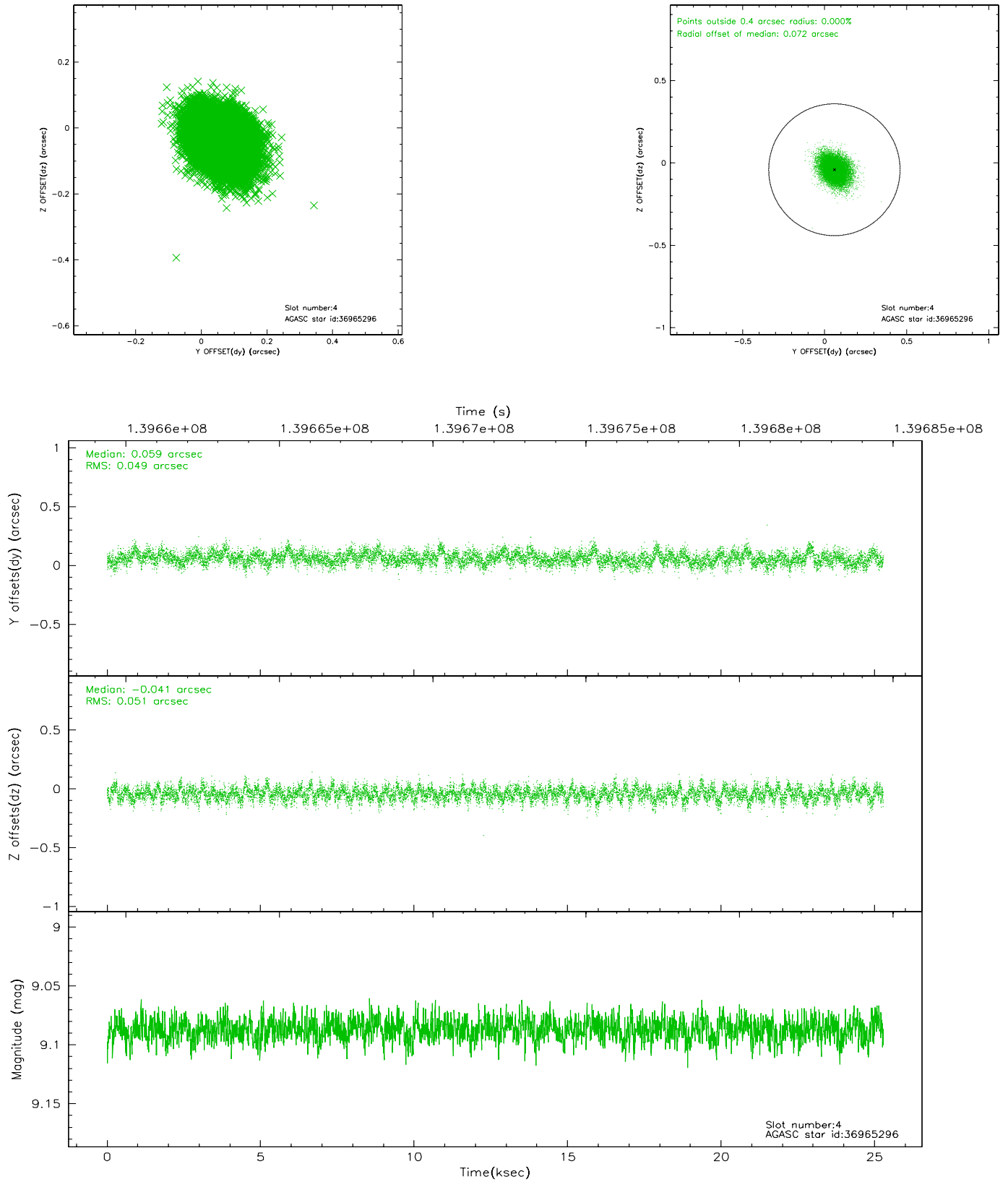
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6166	-0.039	-0.065	0.007	0.013	0.000000	0.000000	-754.63	-1842.72
1	FID	ACIS-S-4	7.19	6166	-0.024	0.036	0.005	0.013	0.000000	0.000000	2158.62	65.71
2	FID	ACIS-S-5	7.23	6167	0.032	0.037	0.007	0.013	0.000000	0.000000	-1807.24	59.53
3	GUIDE	37356352	7.68	12335	-0.269	-0.073	0.051	0.081	187.433784	2.618460	-1994.19	-302.13
4	GUIDE	36965296	9.09	12332	0.059	-0.041	0.075	0.122	186.926292	1.837429	1327.10	-758.98
5	GUIDE	36965816	9.27	12330	0.020	-0.032	0.079	0.134	186.823353	1.771455	1699.75	-993.28
6	GUIDE	37879824	10.48	12319	-0.123	-0.062	0.161	0.256	187.728661	2.497183	-2049.98	843.34
7	GUIDE	37883040	10.02	12317	0.311	0.209	0.137	0.221	187.575516	1.280402	2148.95	2208.84

2.4 Star Slots

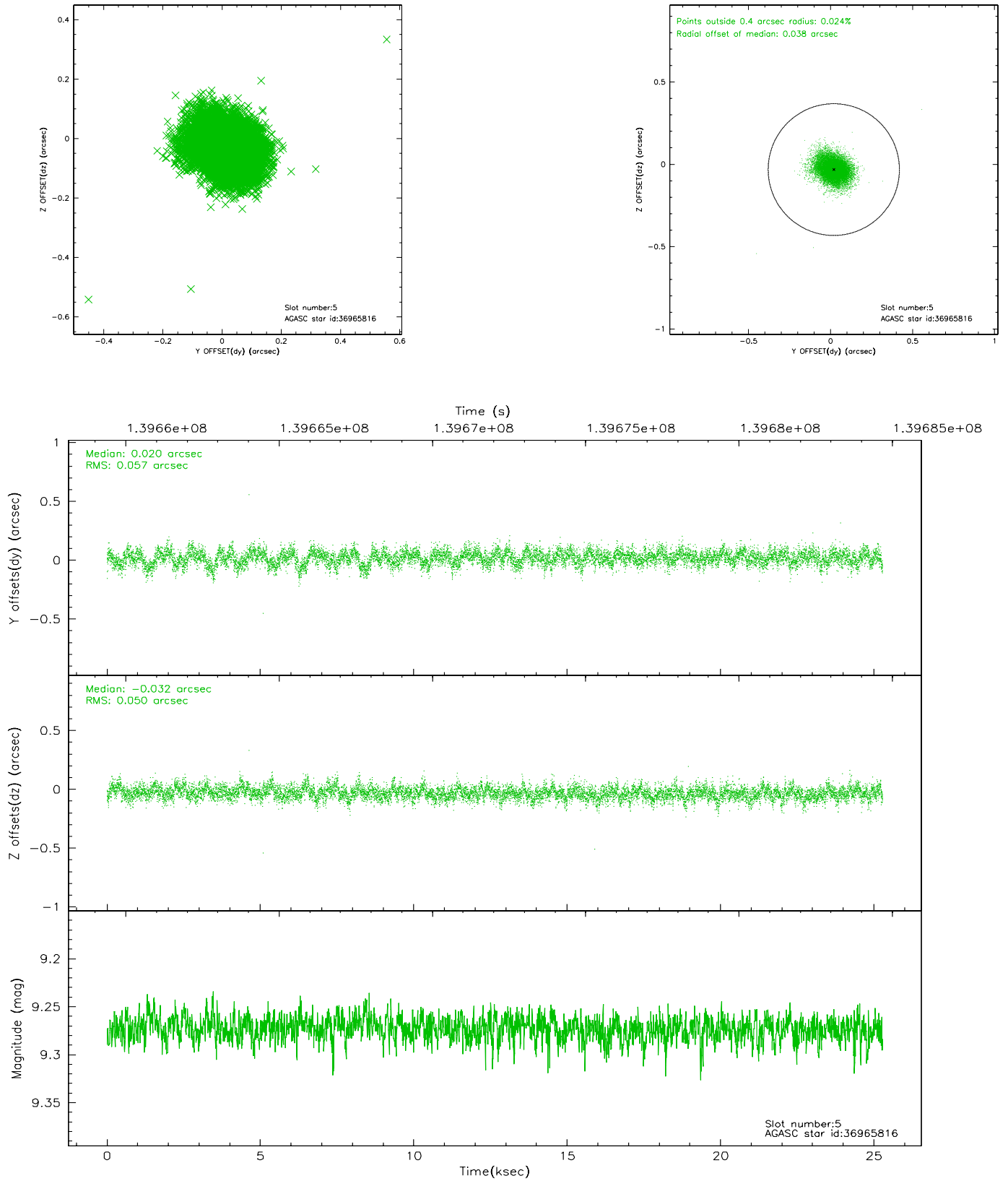
2.4.1 Slot 3



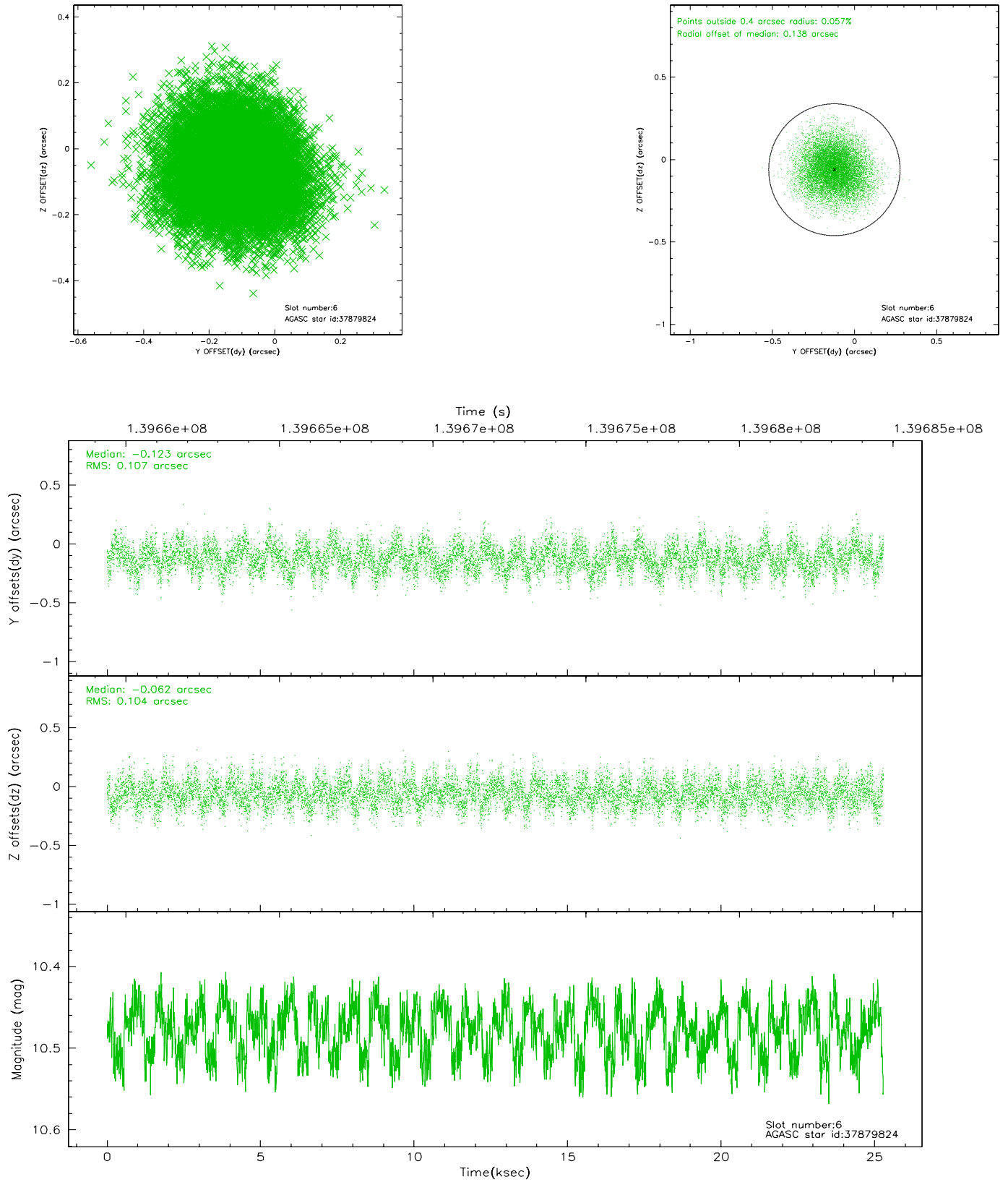
2.4.2 Slot 4



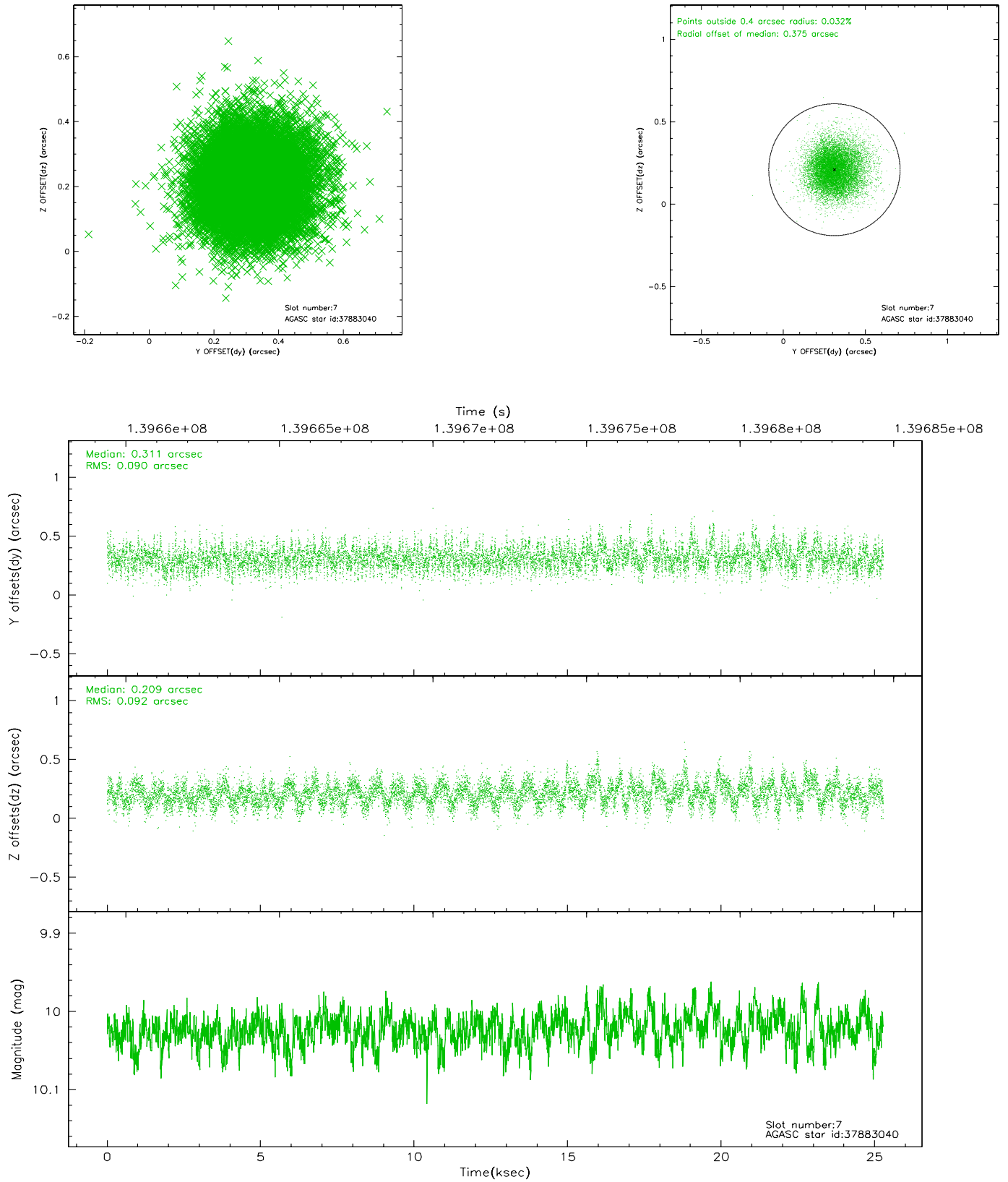
2.4.3 Slot 5



2.4.4 Slot 6

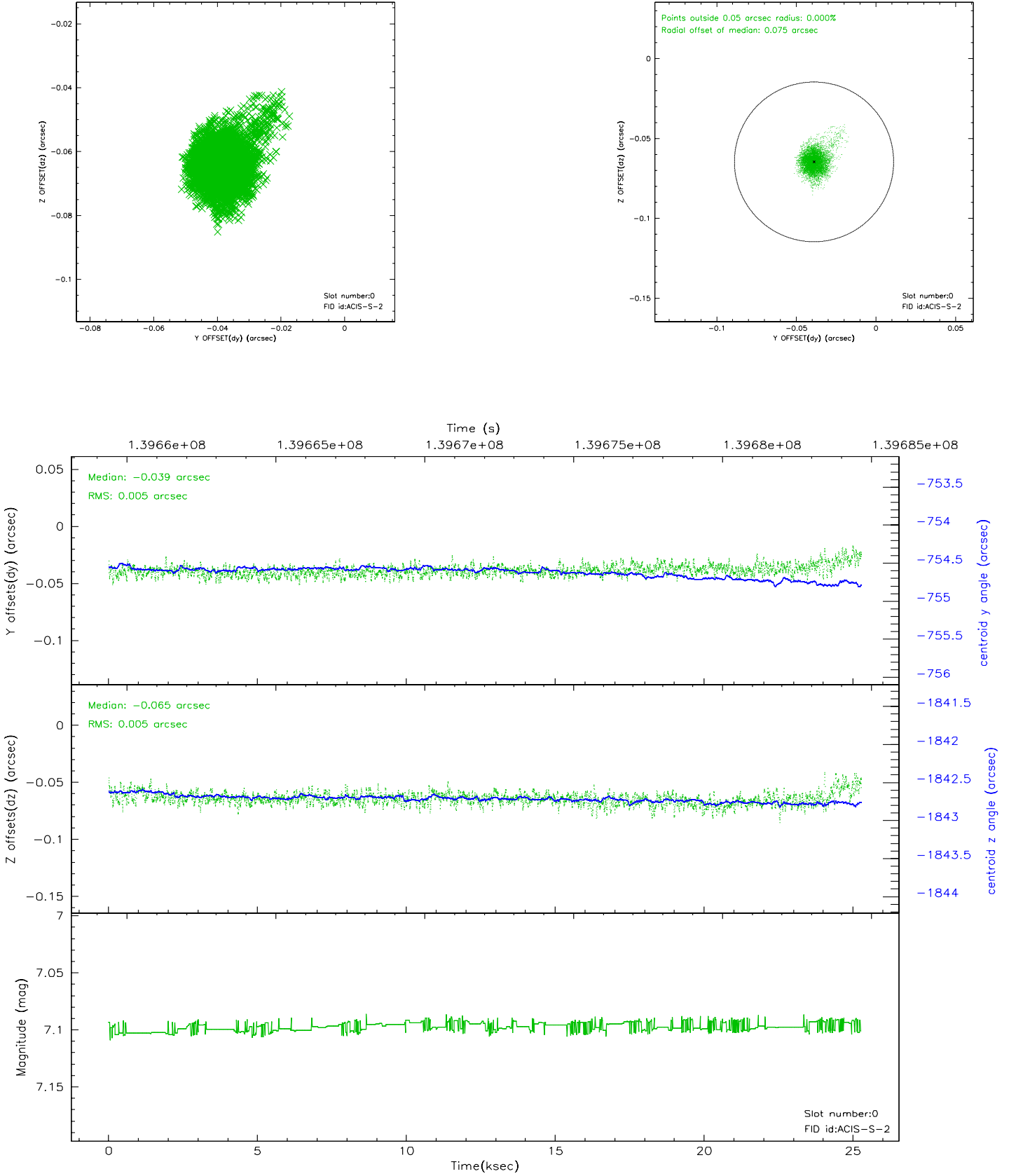


2.4.5 Slot 7

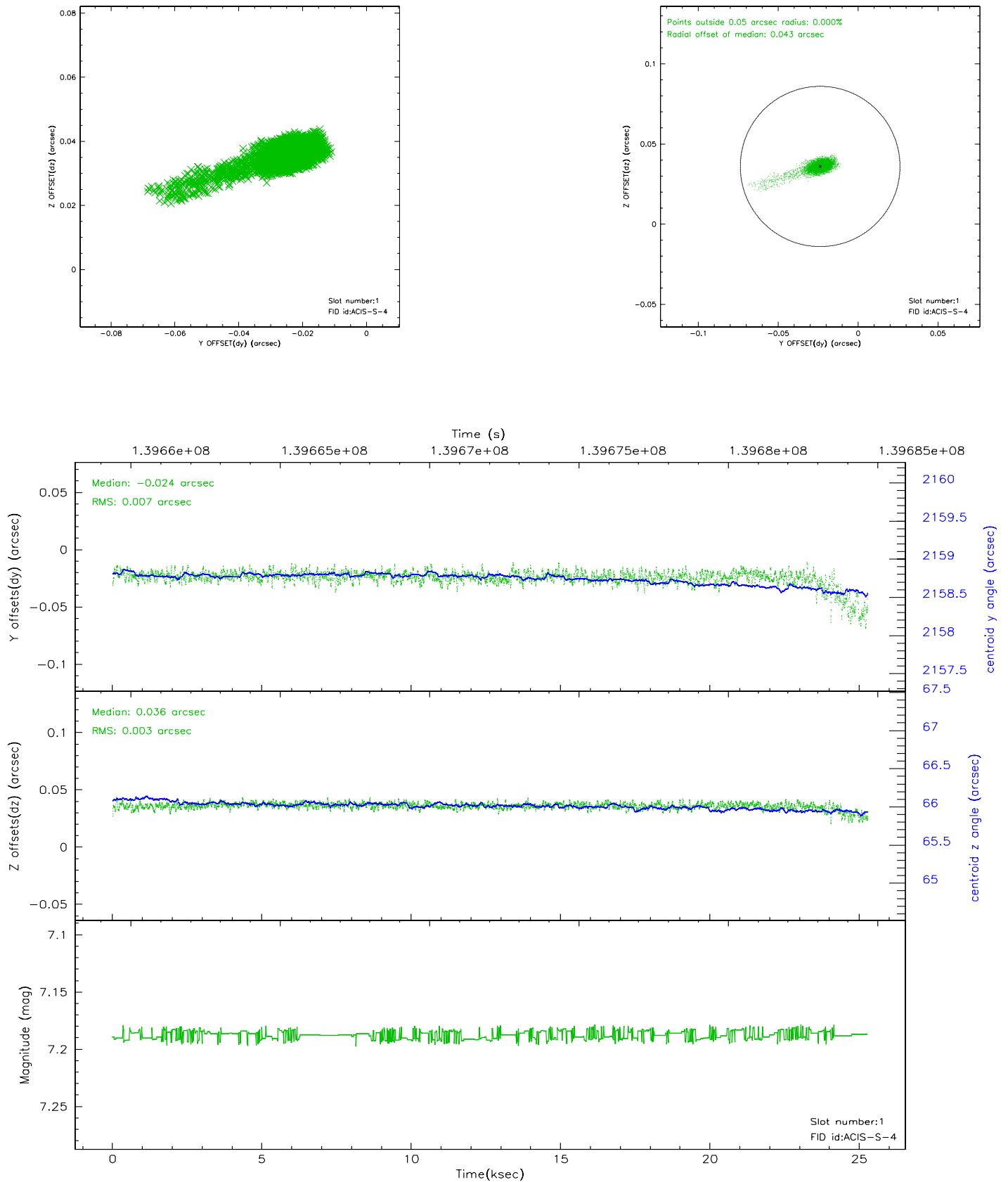


2.5 FID Slots

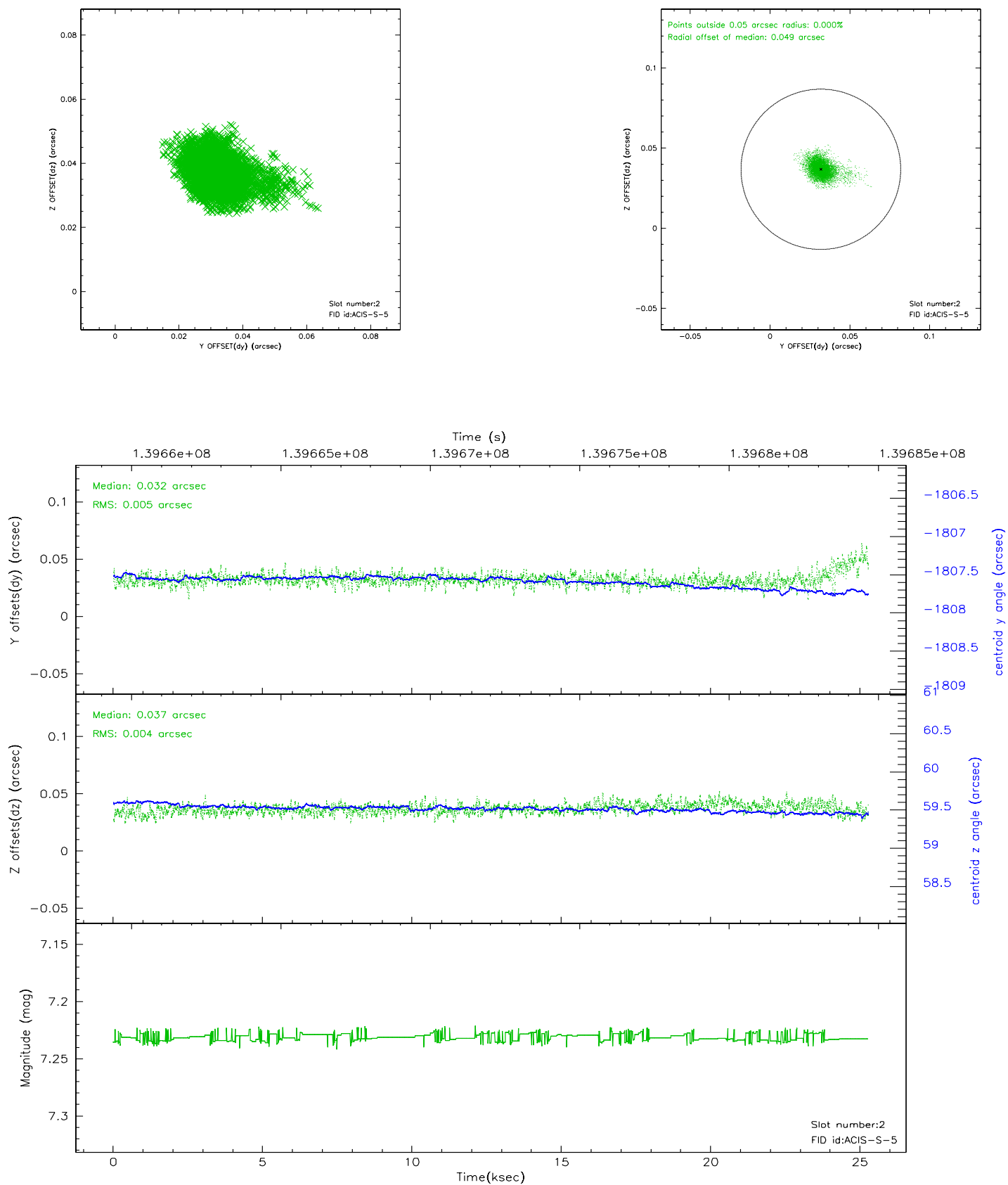
2.5.1 Slot 0



2.5.2 Slot 1

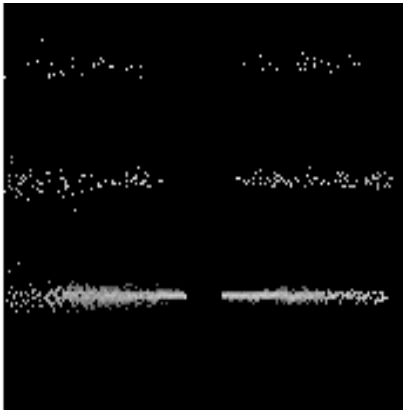


2.5.3 Slot 2

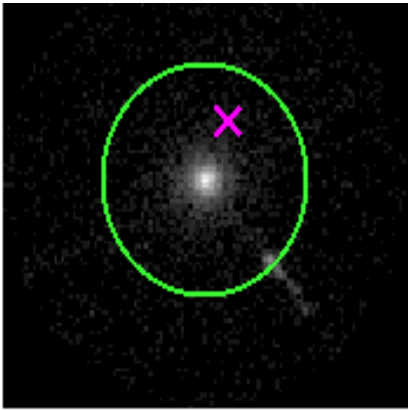


3 Gratings

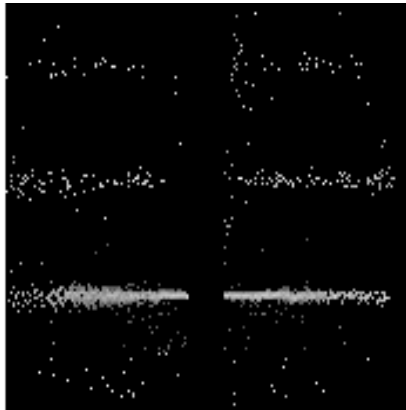
3.1 HEG Arm



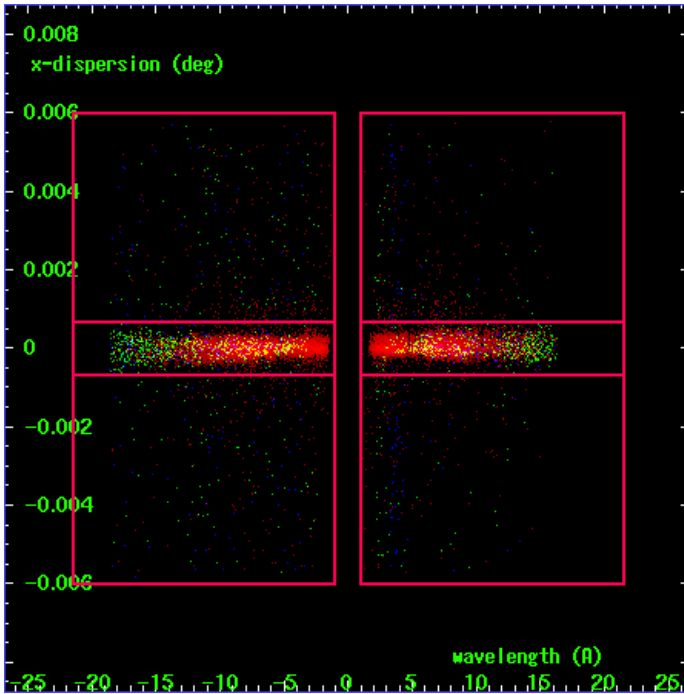
HEG Order Sort 123



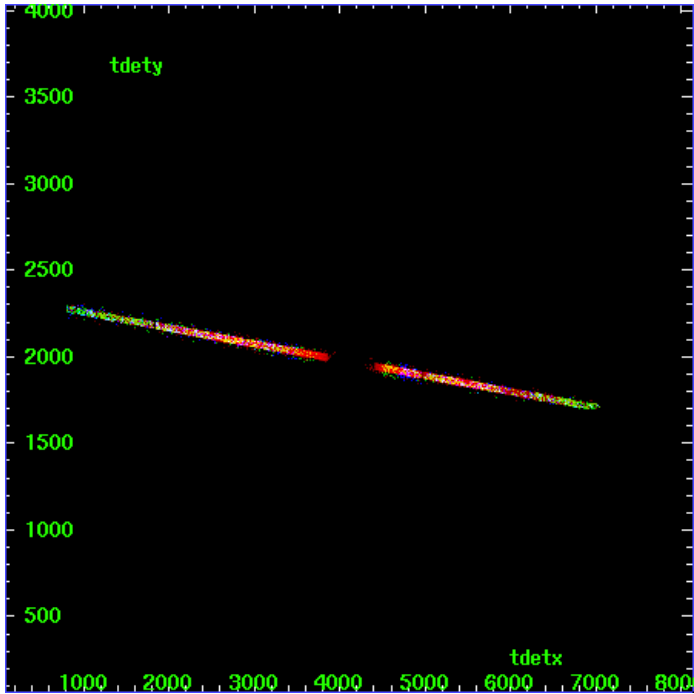
HEG Zero Order



HEG Order Sort ALL

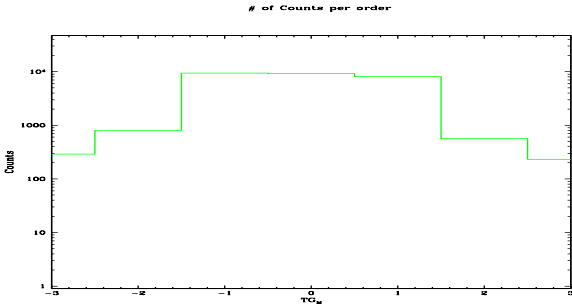


Spot Image HEG

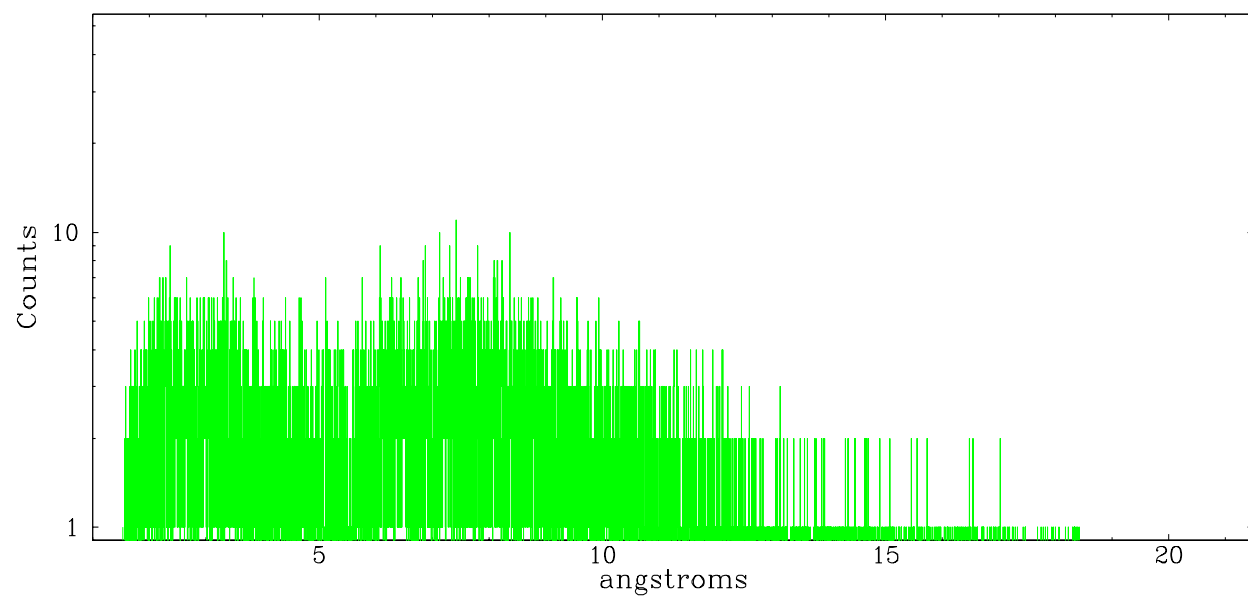


Full Detector HEG

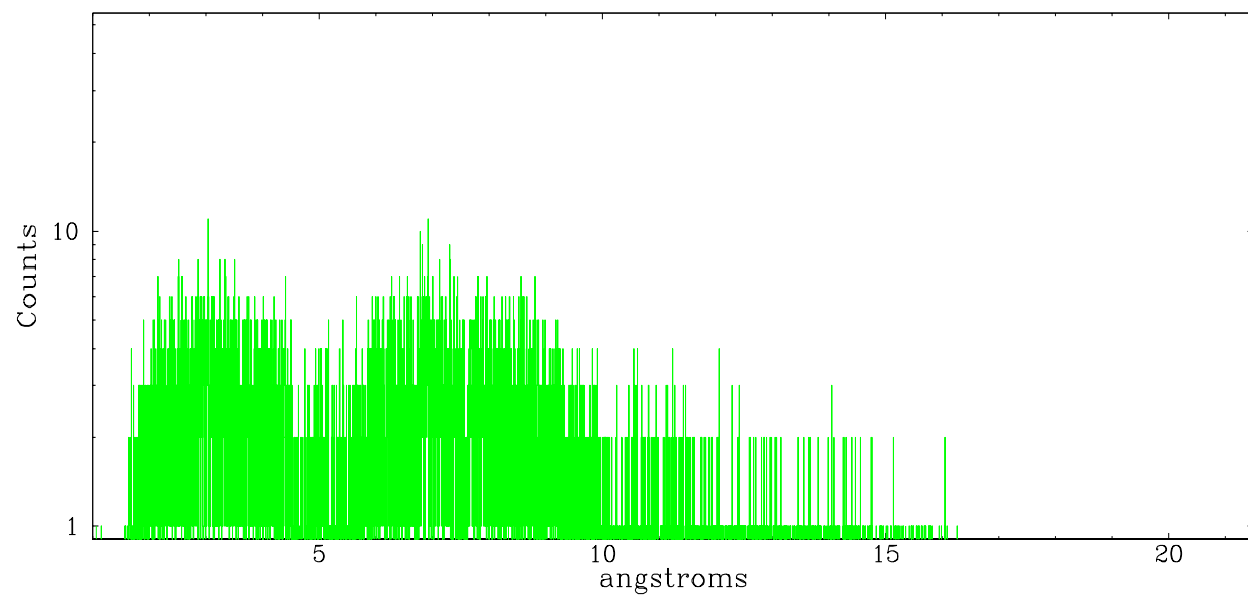
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	290	804	9386	9185	8073	563	232



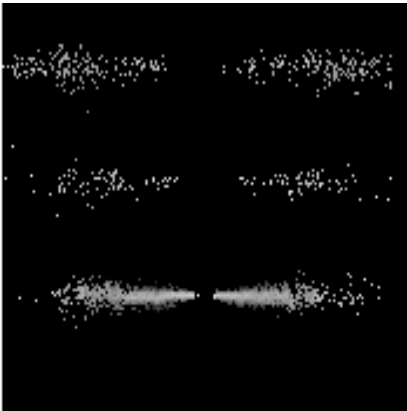
heg order -1



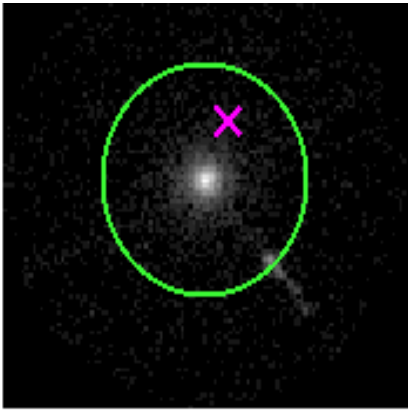
heg order +1



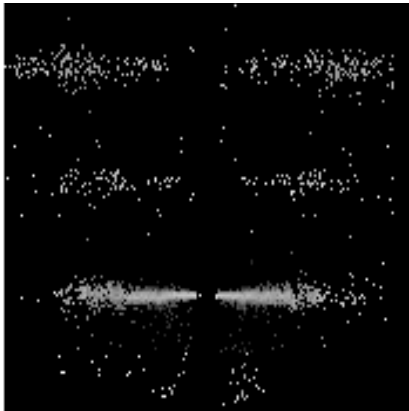
3.2 MEG Arm



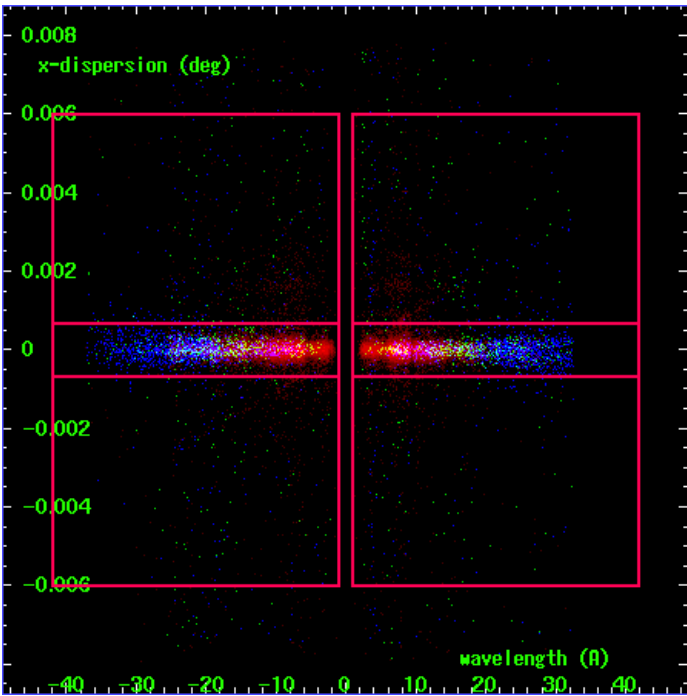
MEG Order Sort 123



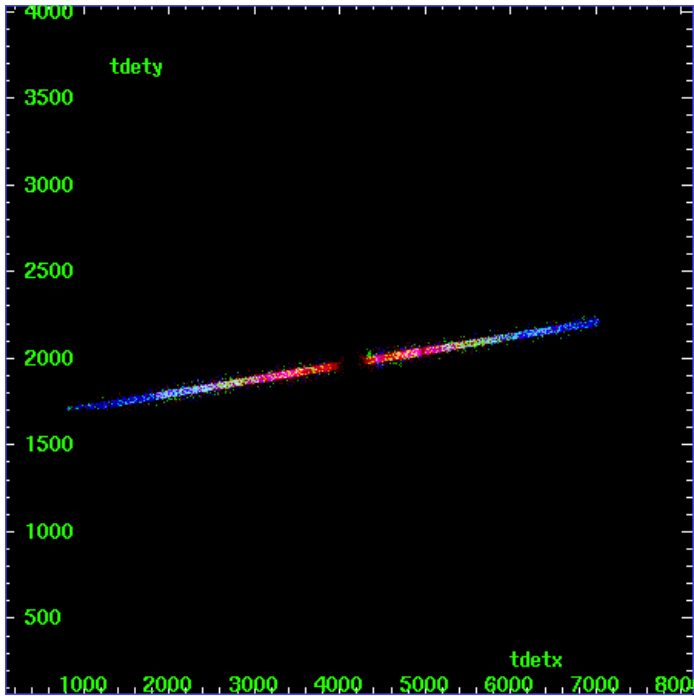
MEG Zero Order



MEG Order Sort ALL

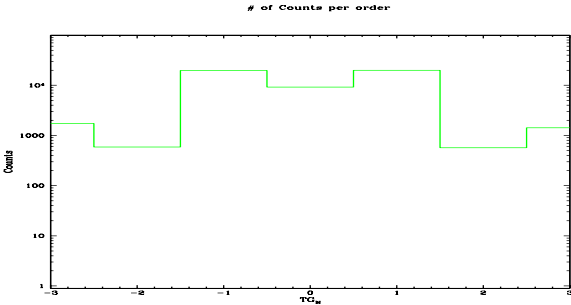


Spot Image MEG

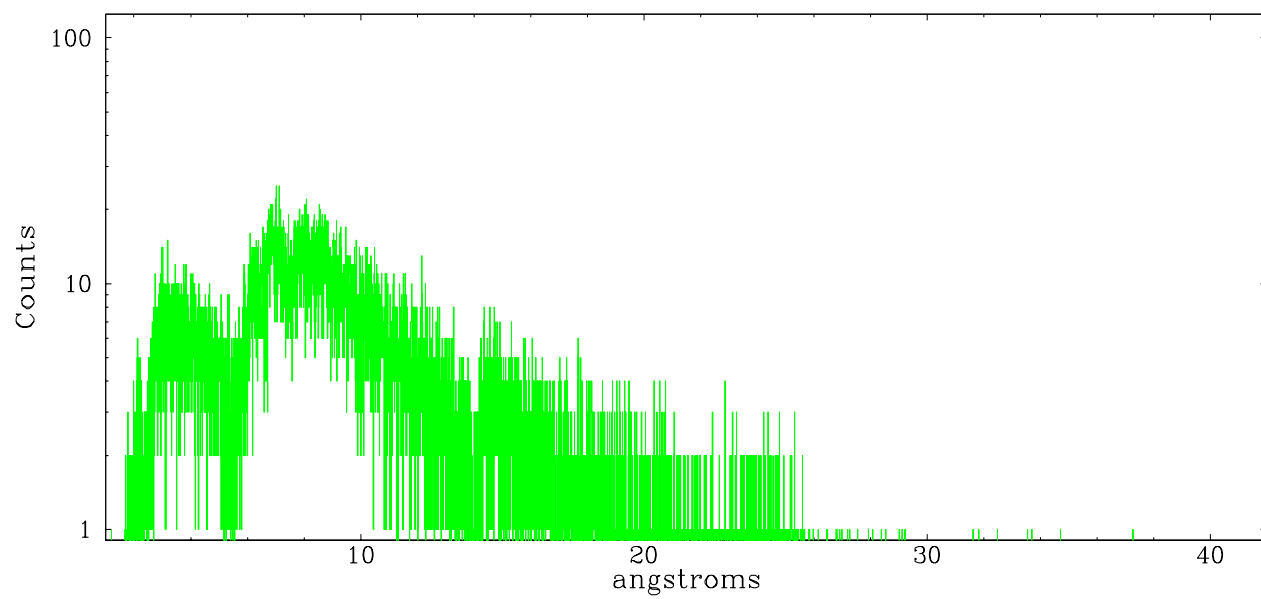


Full Detector MEG

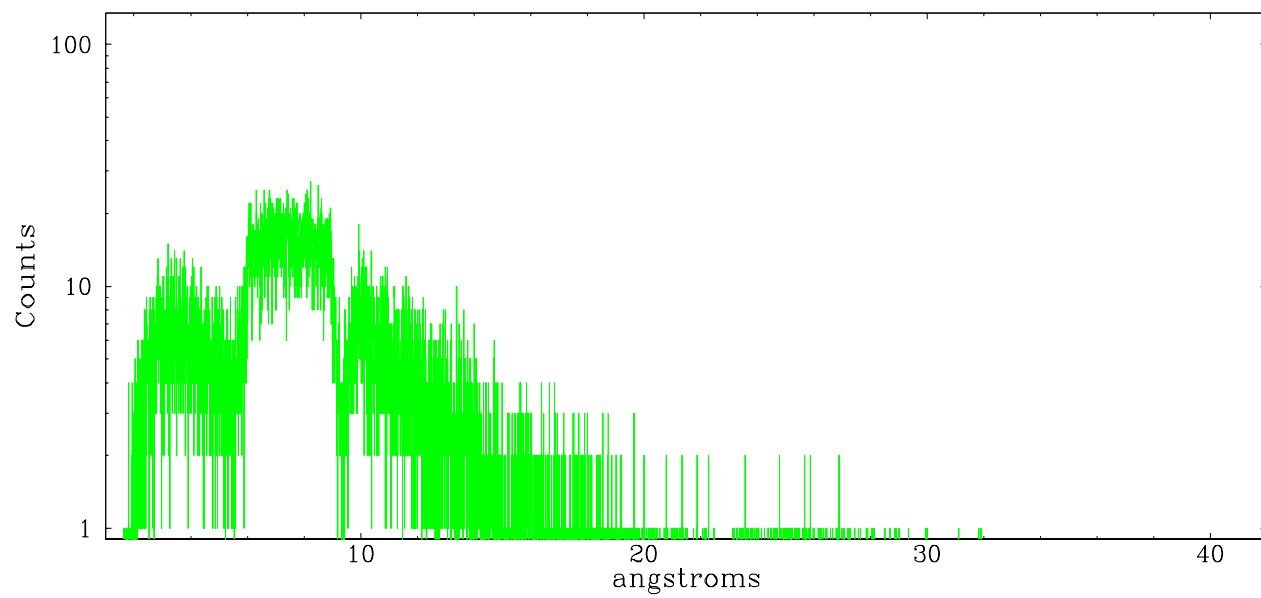
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1736	587	19826	9185	19861	571	1418



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.09.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.004

A.2 Comments

Source is slightly off-center of the subarray, so the MEG -1 arm and the HEG +1 arm are truncated by a small amount at low energies.