

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 5514 - L2 Version 002
Chandra X-Ray Center

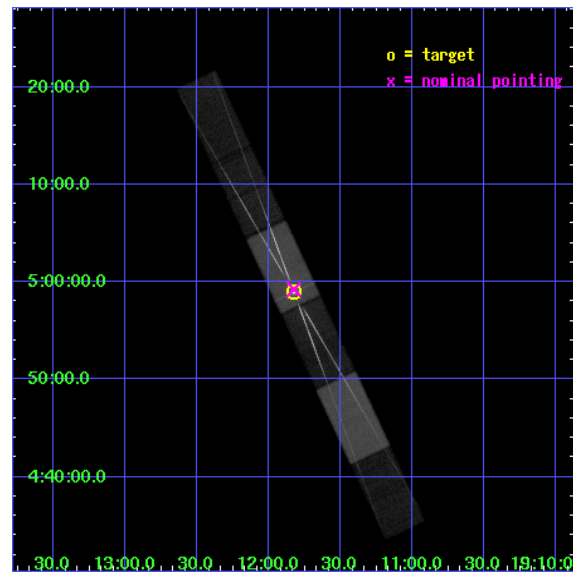
L2 Processing Date : Mar 19 2006

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

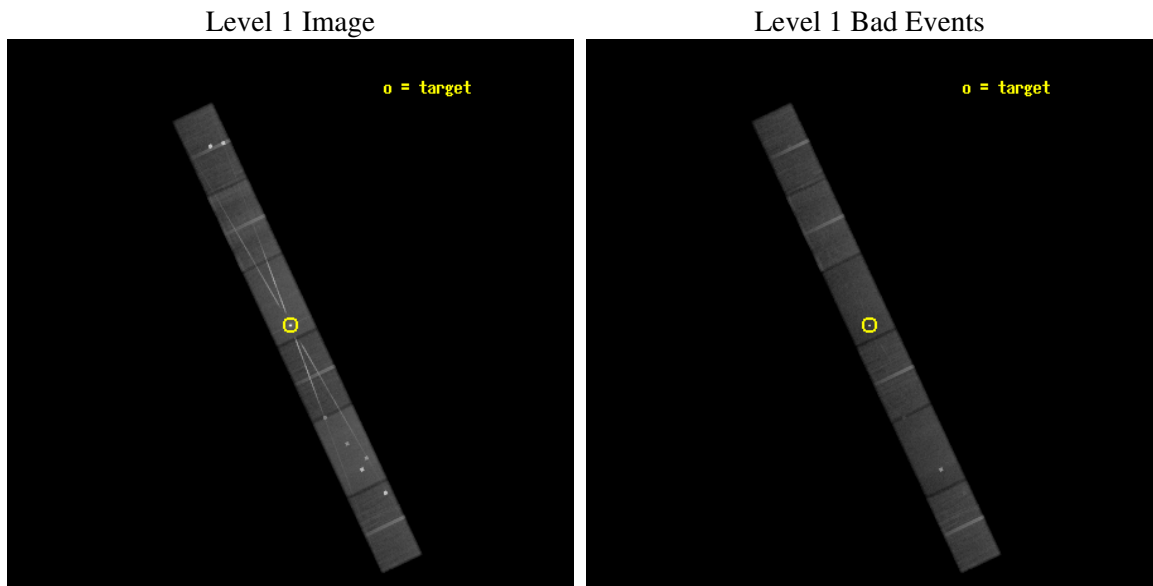
seq_num	400444
obs_id	5514
title	Detailed Studies of the Jets in SS 433
observer	Dr. Claude Canizares
object	SS 433
dtcycle	0
cycle	P
ra_targ	287.95625
dec_targ	4.982778
ra_nom	287.95660197829
dec_nom	4.9873943180327
roll_nom	244.75659625336
revision	2
ontime	74752.200495064
livetime	73085.843268542
ontime4	74752.200495064
ontime5	74752.200495064
ontime6	74752.200495064
ontime7	74752.200495064
ontime8	74752.200495064
ontime9	74750.359474987
l2events	734613



2 OBI

2.1 OBI

2.1.1 Images

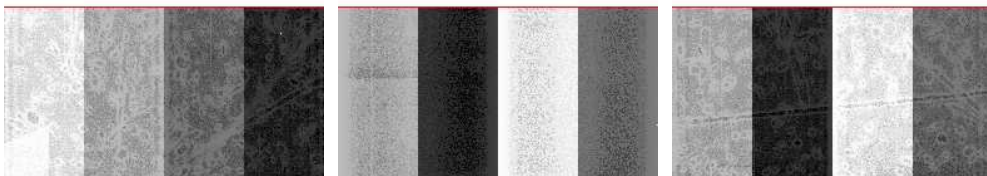


2.1.2 Bias

Chip 4

Chip 5

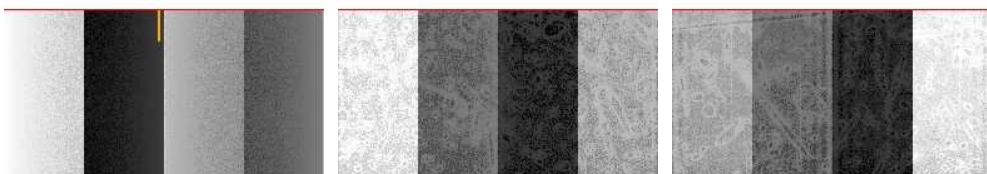
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-03-19T11:32:50
revision	2

sched_exp_time	74641.799000
ontime	74754.820929319
ontime4	74754.820929319
ontime5	74754.820929319
ontime6	74754.820929319
ontime7	74754.820929319
ontime8	74754.820929319
ontime9	74752.979909241
l1events	2640519

2.1.4 Events

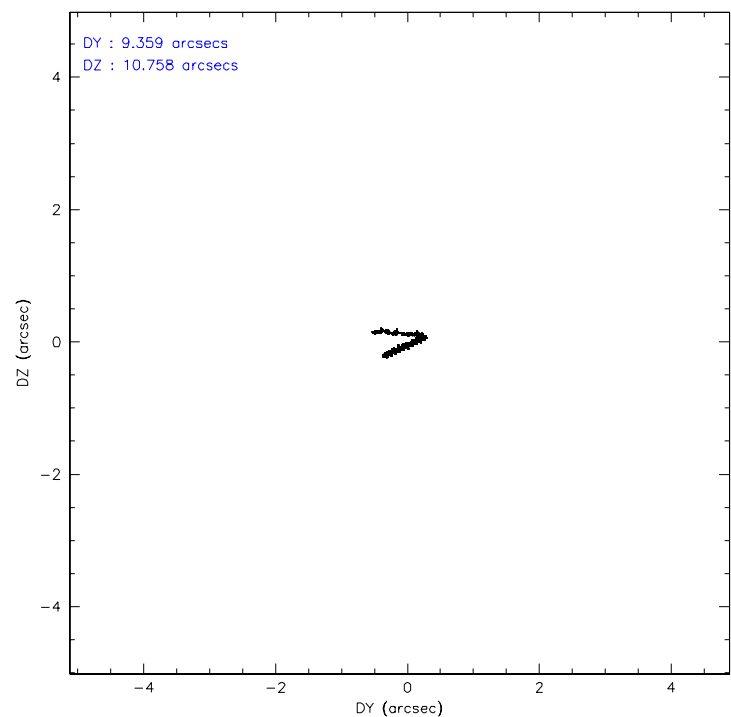
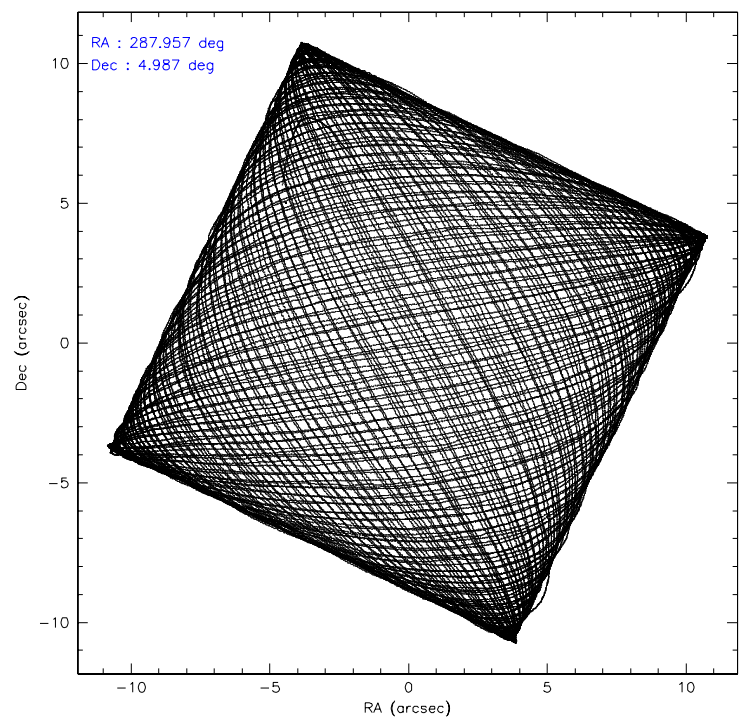
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	380504	503606	398124	554166	416085	388034
rejected events	299691	257935	272747	264882	307306	265985
rejected %	78%	51%	68%	47%	73%	68%

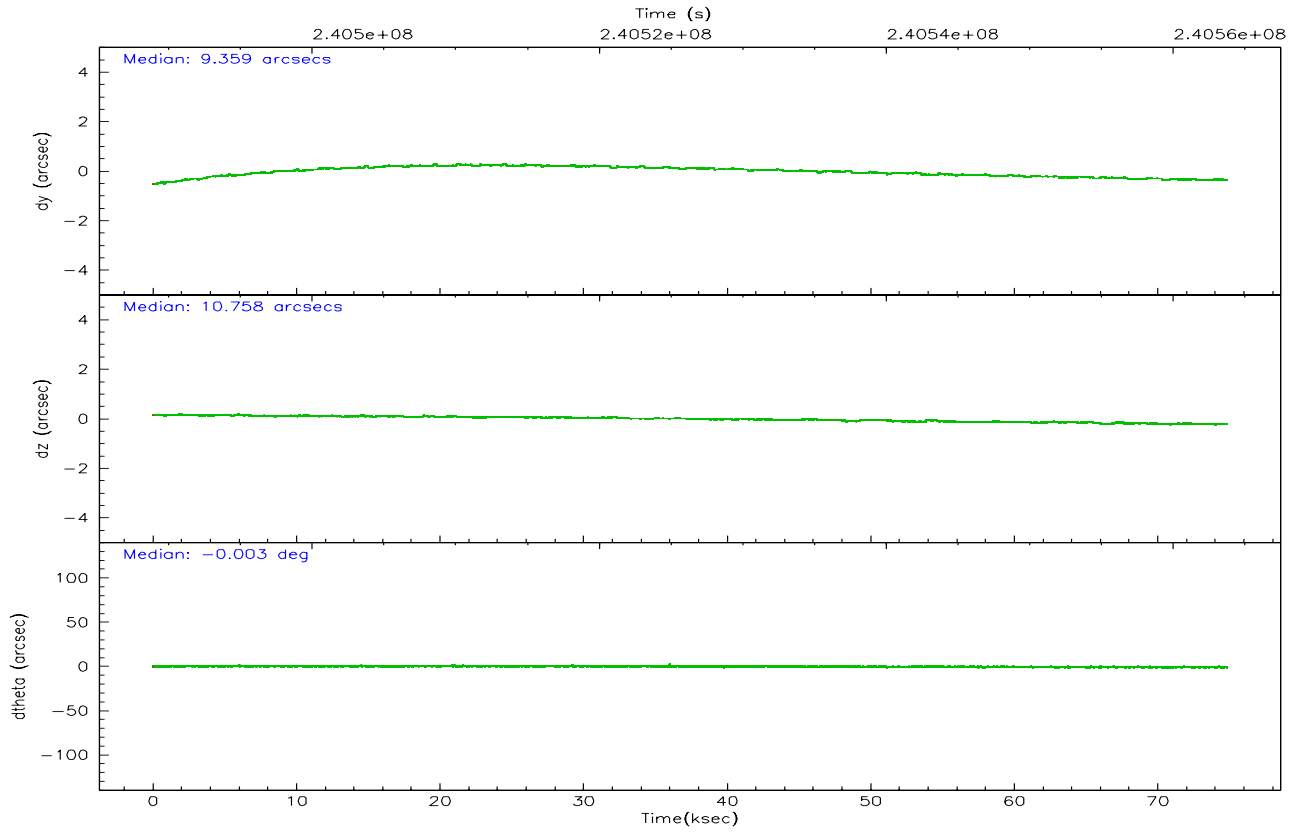
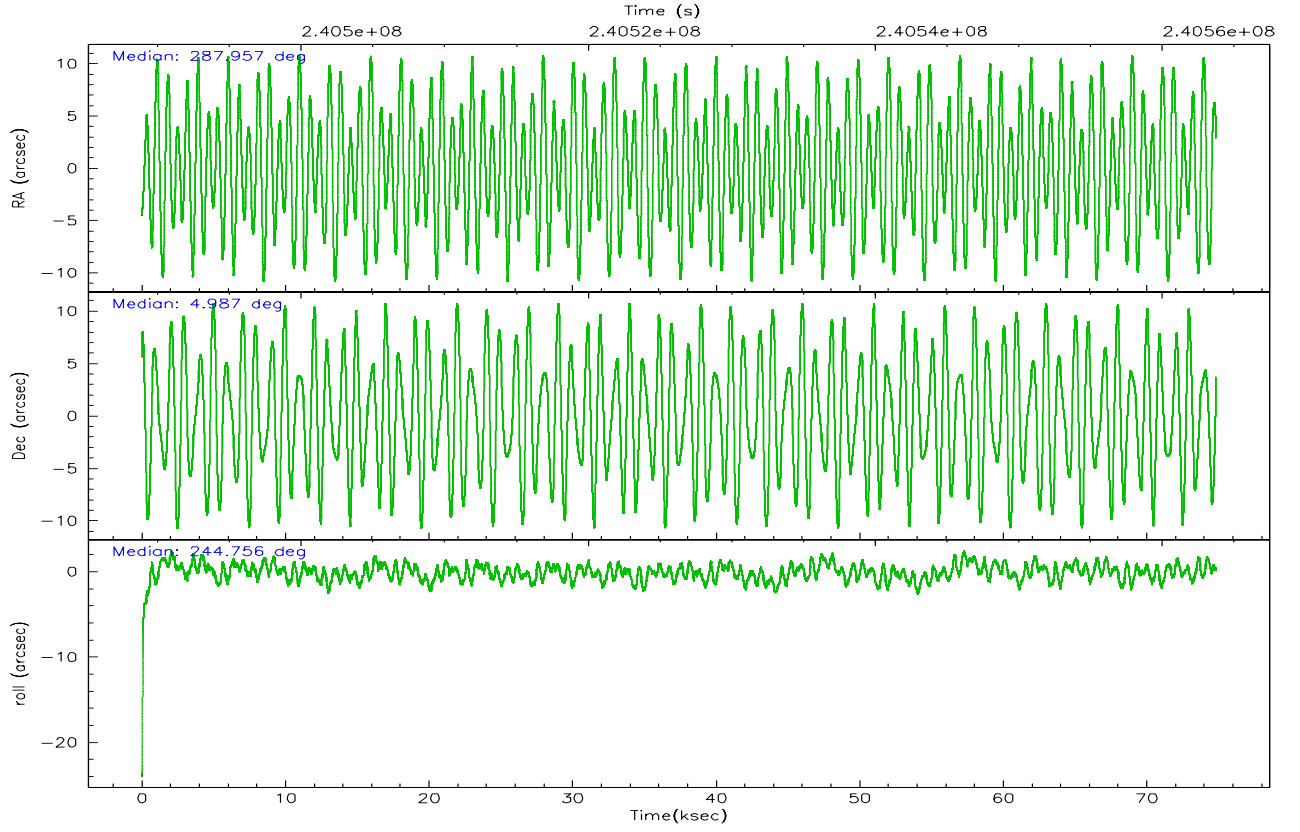
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	56332	43083	77665	32654	44753	58248
	14%	8%	19%	5%	10%	15%
grade 1 events	358	8520	350	1062	233	317
	0%	1%	0%	0%	0%	0%
grade 2 events	8915	71751	18873	70413	20882	46891
	2%	14%	4%	12%	5%	12%
grade 3 events	4682	7529	7962	22741	10035	4734
	1%	1%	1%	4%	2%	1%
grade 4 events	4339	7252	7954	22309	9598	4481
	1%	1%	1%	4%	2%	1%
grade 5 events	12716	24115	13730	34981	17739	14473
	3%	4%	3%	6%	4%	3%
grade 6 events	6548	116069	12931	141186	23531	7701
	1%	23%	3%	25%	5%	1%
grade 7 events	286614	225287	258659	228820	289314	251189
	75%	44%	64%	41%	69%	64%

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	287.953957	287.956601978293	Subarray start row	1	1
Pointing Dec	5.014495	4.987394318032739	Subarray row count	542	542
Pointing Roll	244.600205	244.7565962533563	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.8
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-184.532523	-184.5306286120915			
SIM translation stage offset (mm)	-5.6	-5.601893970916279			
Phase constraints	Y	Y			
Phase period	13.082110	13.082110			
Phase epoch	52377.900000	52377.900000			
Phase start	0.200000	0.200000			
Phase end	0.800000	0.800000			
Phase start error	0.050000	0.050000			
Phase end error	0.050000	0.050000			
Observation start time	240489105.184000	240488132.92666			
Observation start date	2005-08-15T10:30:41	2005-08-15T10:15:32			
Observation end time	240563746.184000	240563962.43014			
Observation end date	2005-08-16T07:14:42	2005-08-16T07:19:22			
Read mode	TIMED	TIMED			

2.3 Aspect



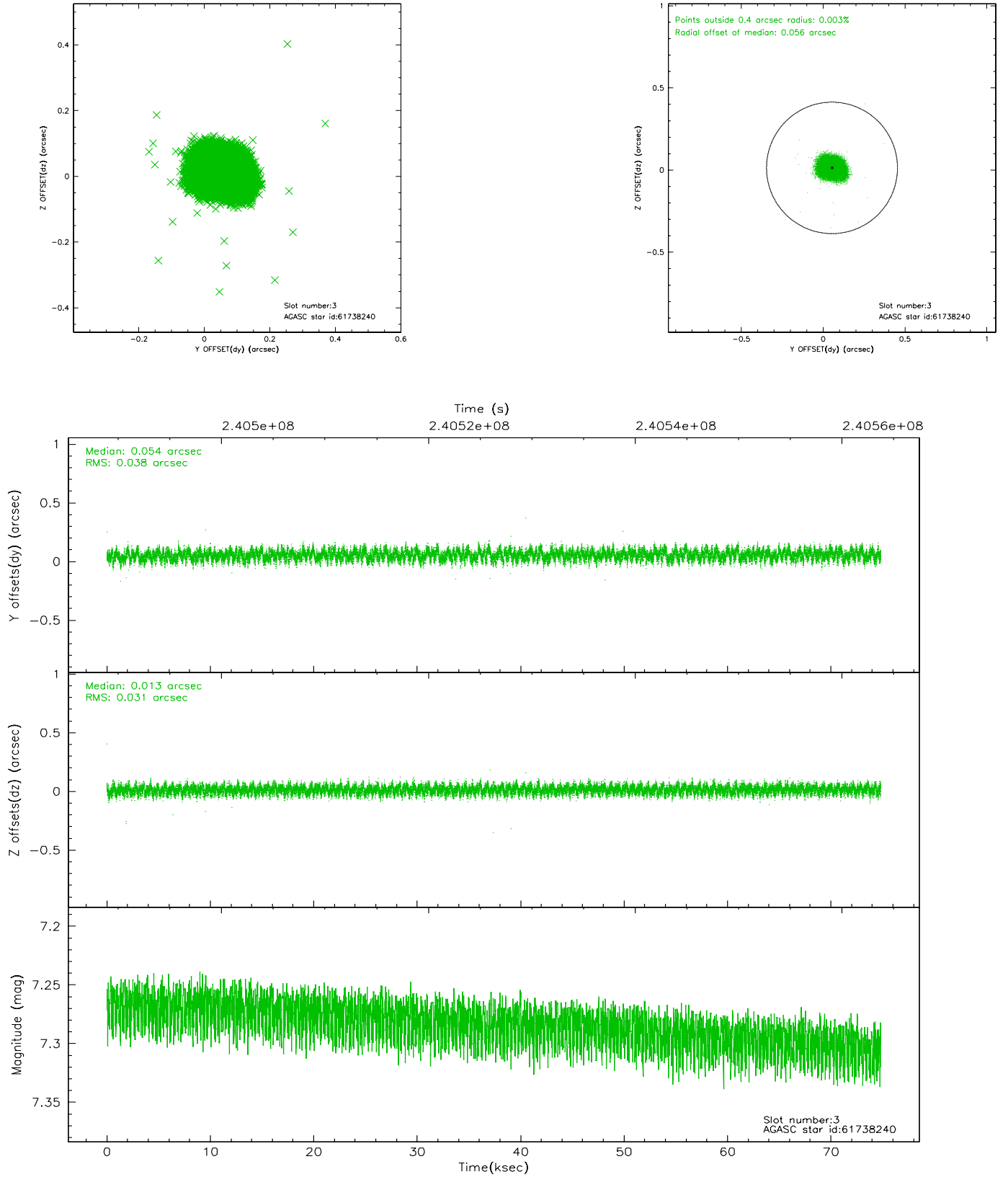


Slot Statistics

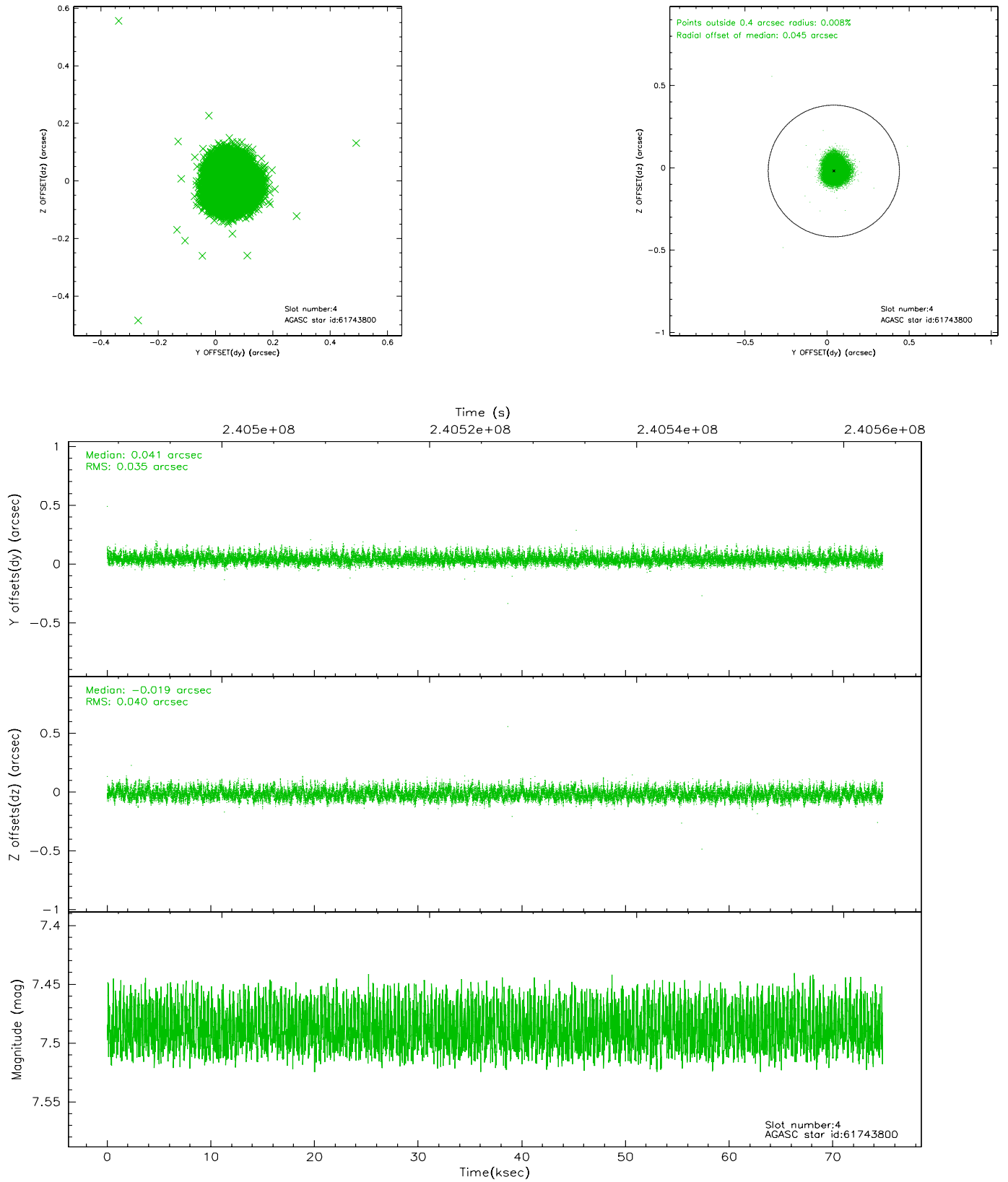
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	18251	-0.048	-0.119	0.011	0.018	0.000000	0.000000	-761.82	-1847.61
1	FID	ACIS-S-4	7.19	18252	0.126	0.055	0.012	0.022	0.000000	0.000000	2151.68	61.06
2	FID	ACIS-S-5	7.23	18251	-0.110	0.072	0.011	0.018	0.000000	0.000000	-1814.79	54.73
3	GUIDE	61738240	7.28	36496	0.054	0.013	0.053	0.084	287.996556	4.354861	2079.63	1156.87
4	GUIDE	61743800	7.49	36500	0.041	-0.019	0.056	0.092	287.776811	5.274666	-573.66	-975.32
5	GUIDE	61744976	7.59	36501	-0.022	0.097	0.049	0.078	288.430364	5.306675	-1683.28	1091.39
6	GUIDE	61745024	7.61	36499	-0.253	-0.165	0.065	0.103	288.156168	5.297362	-1231.18	217.91
7	GUIDE	61745016	8.64	36489	0.176	0.072	0.056	0.090	288.113628	4.368816	1854.09	1515.23

2.4 Star Slots

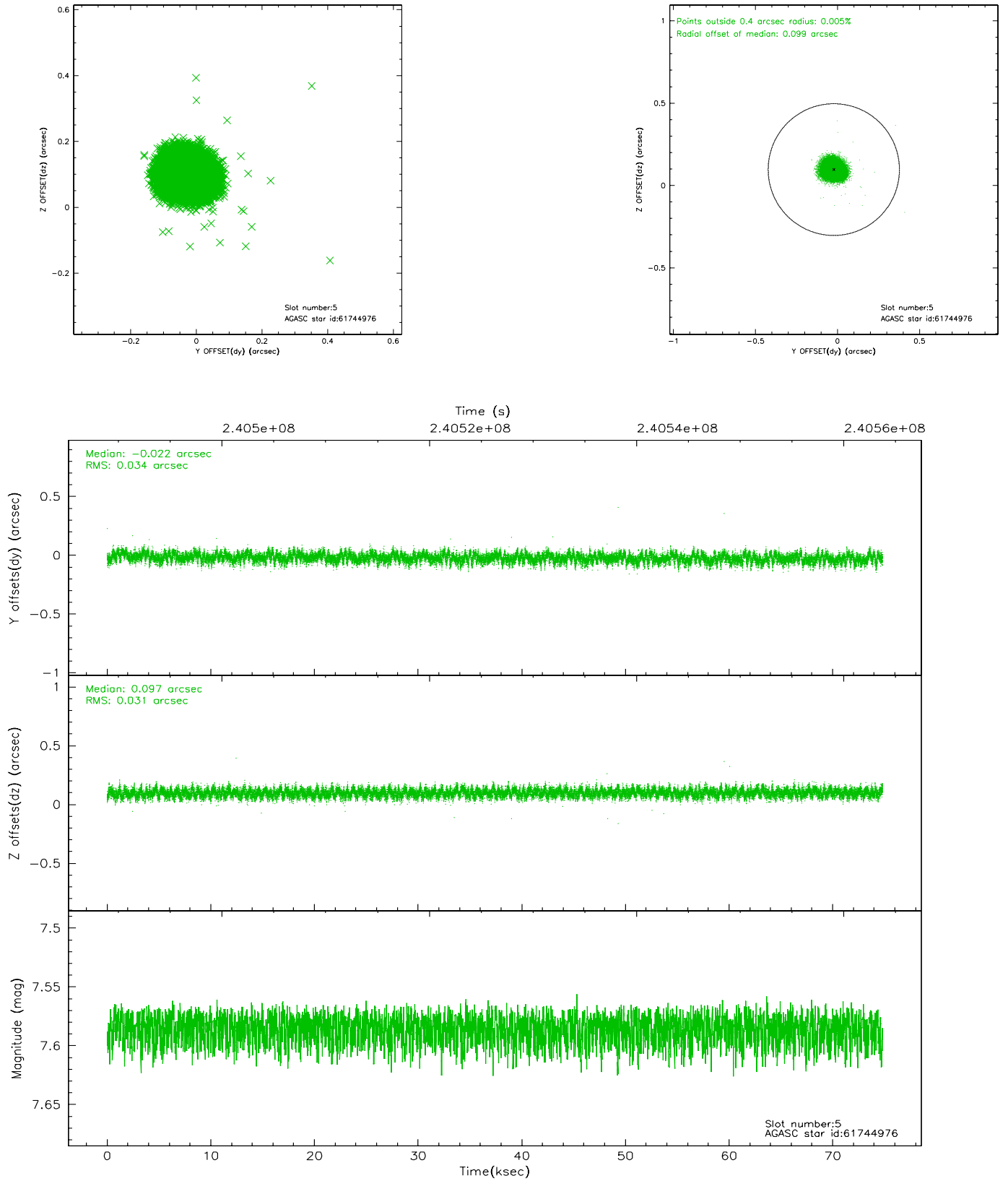
2.4.1 Slot 3



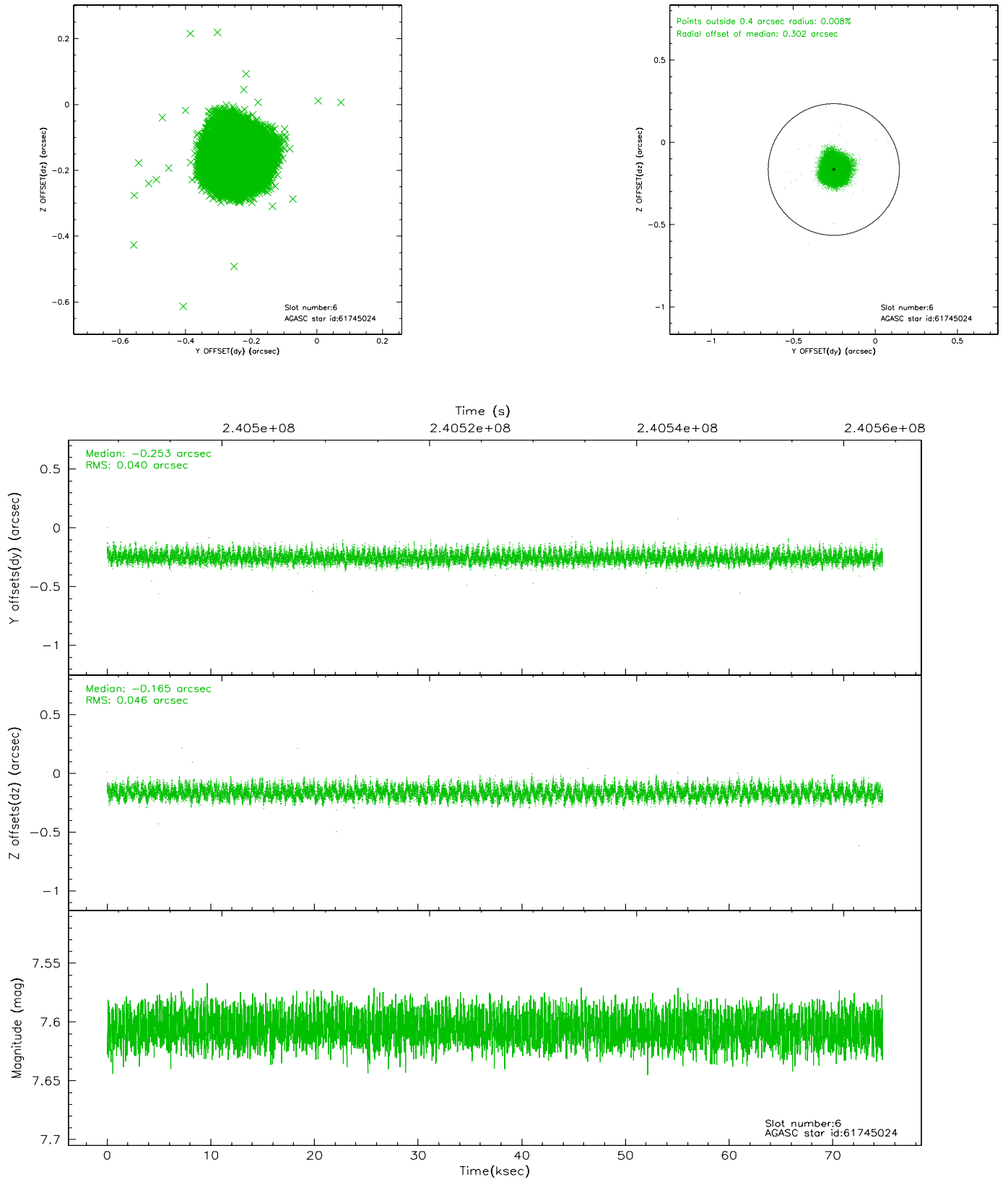
2.4.2 Slot 4



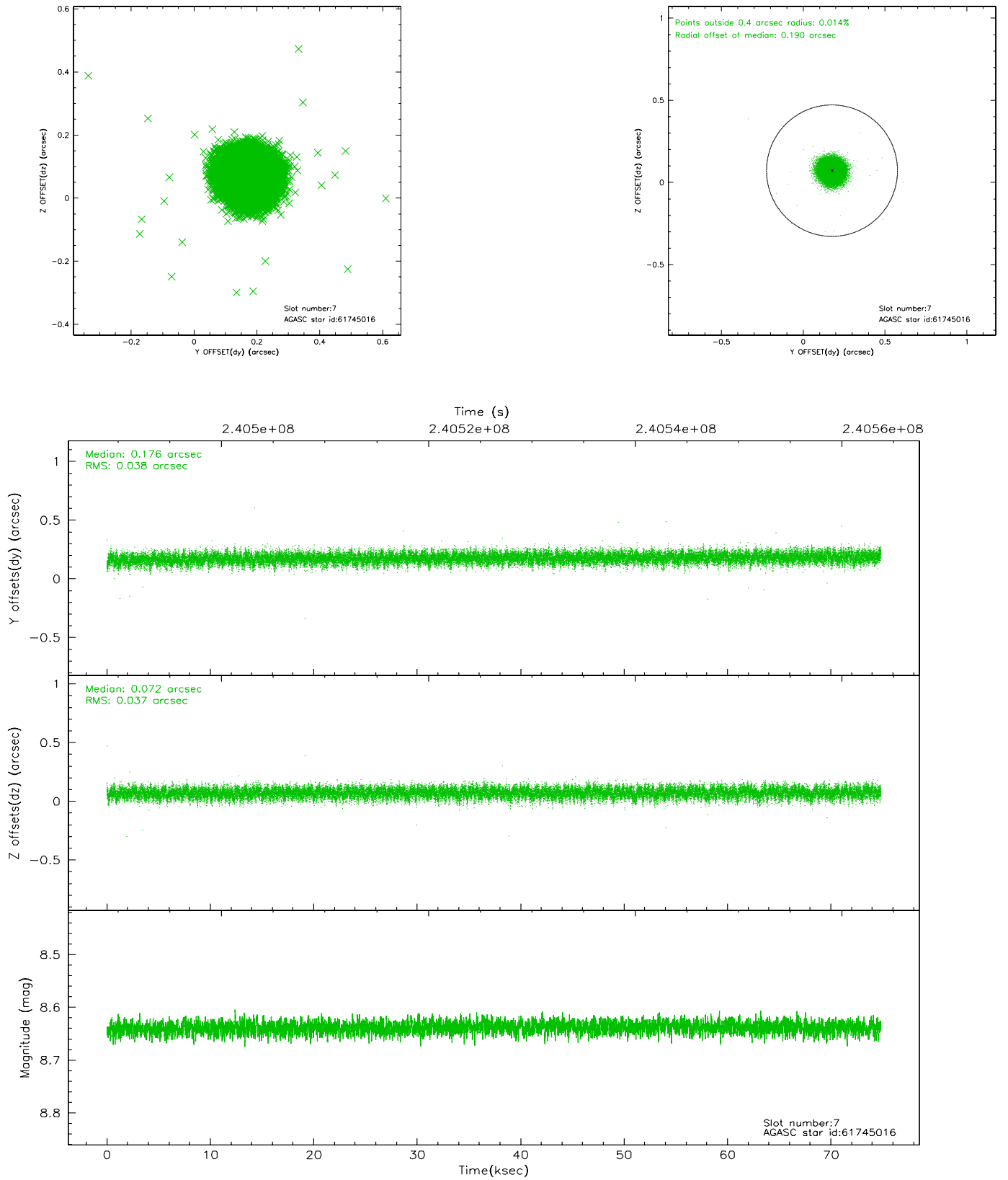
2.4.3 Slot 5



2.4.4 Slot 6

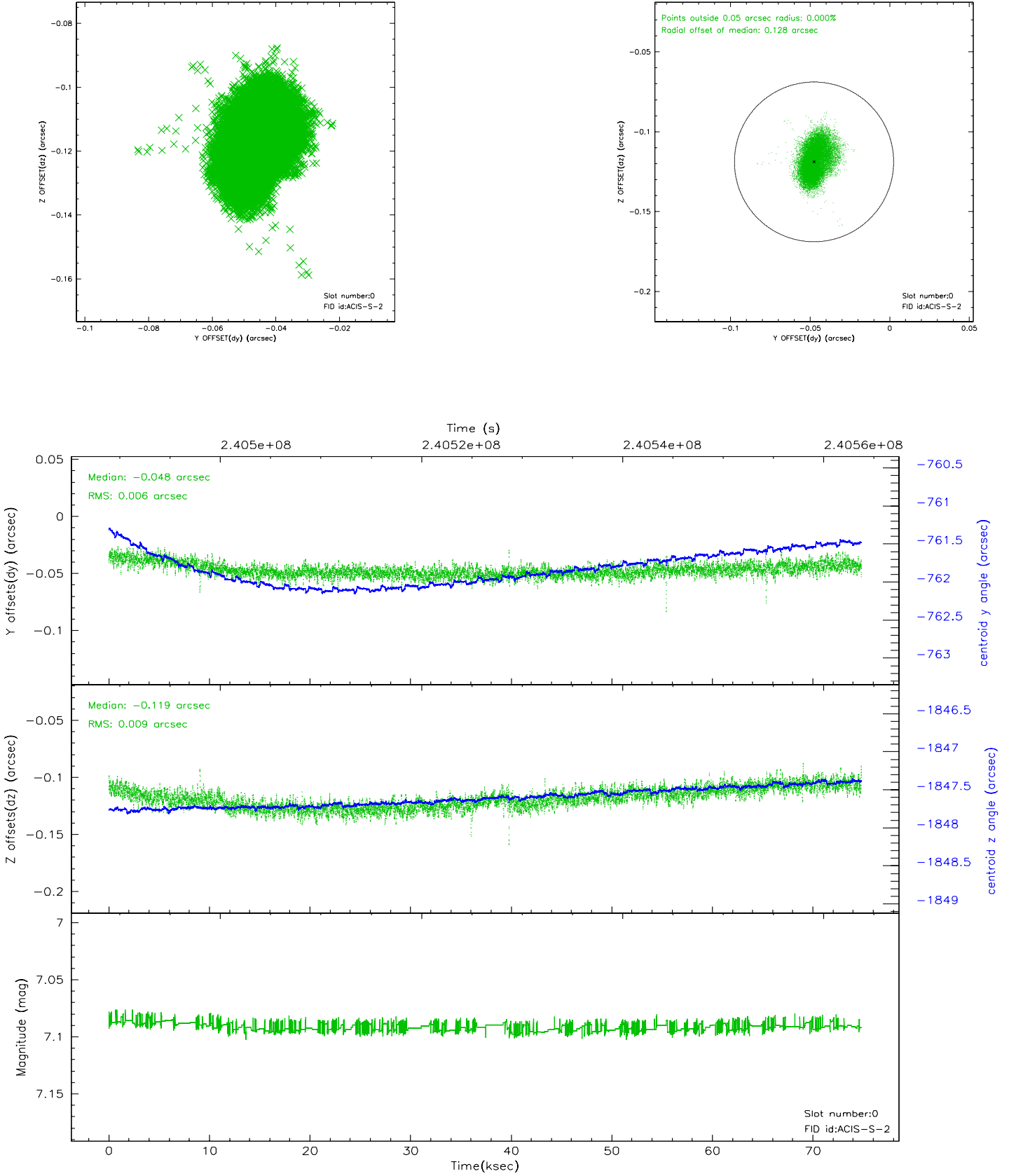


2.4.5 Slot 7

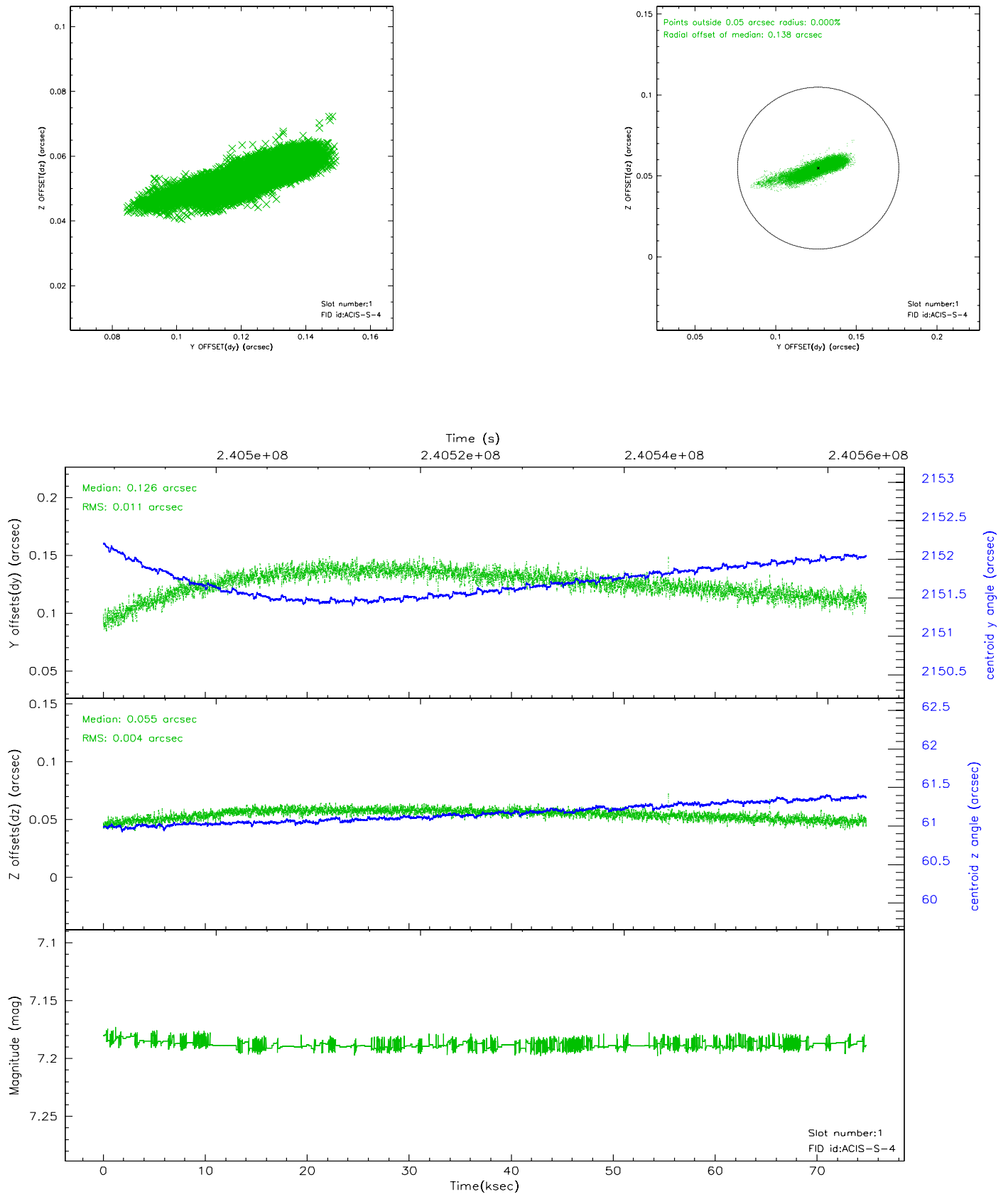


2.5 FID Slots

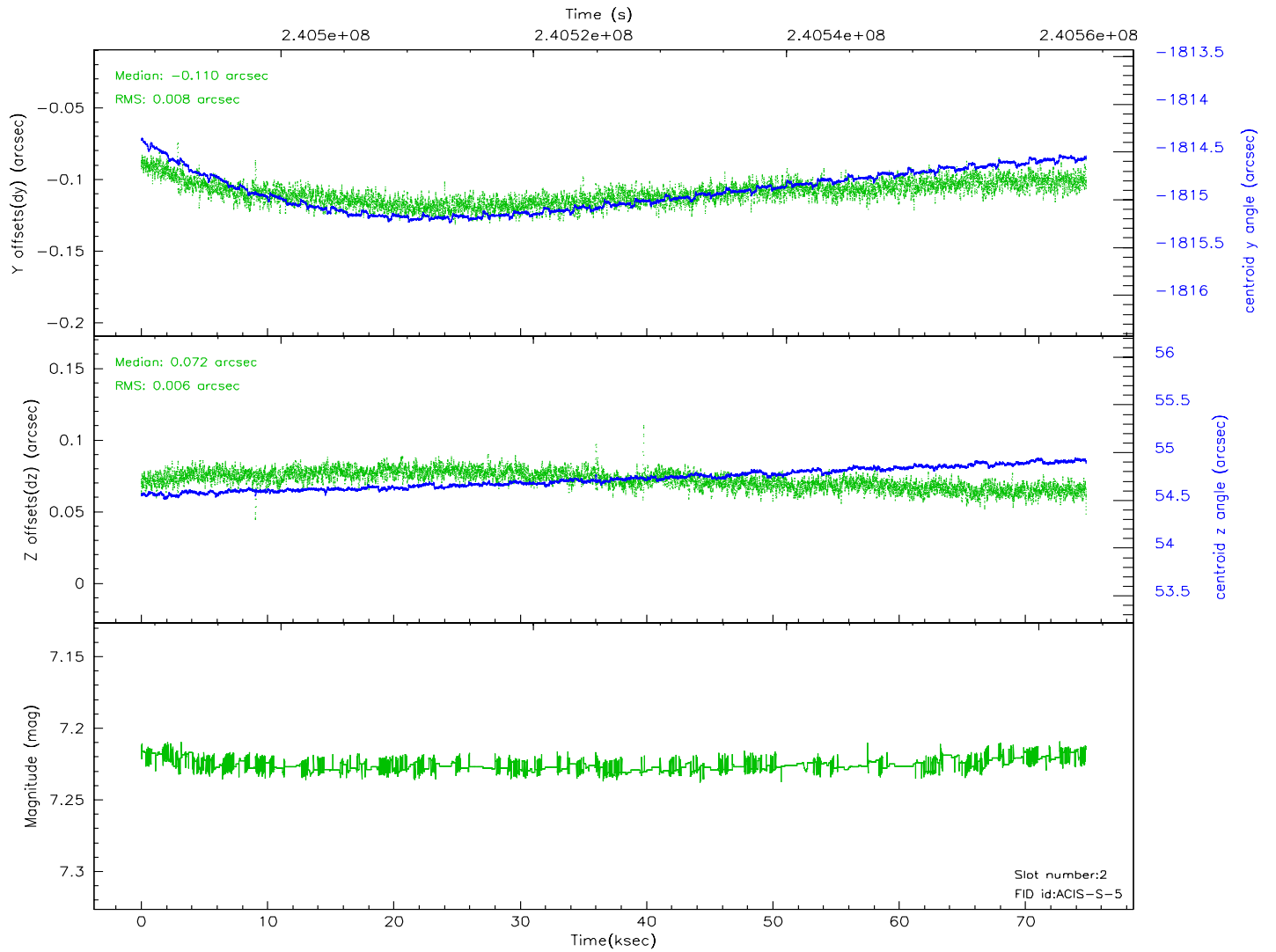
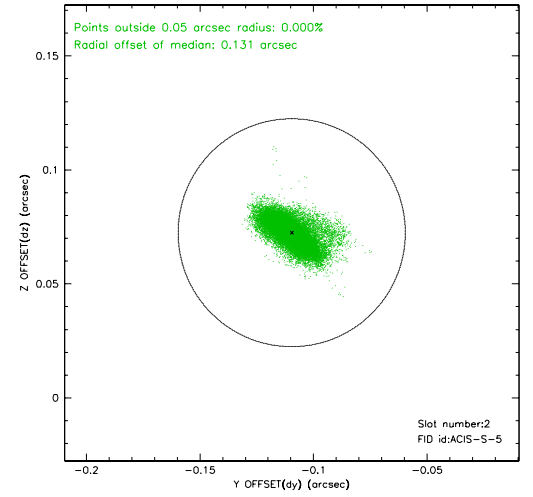
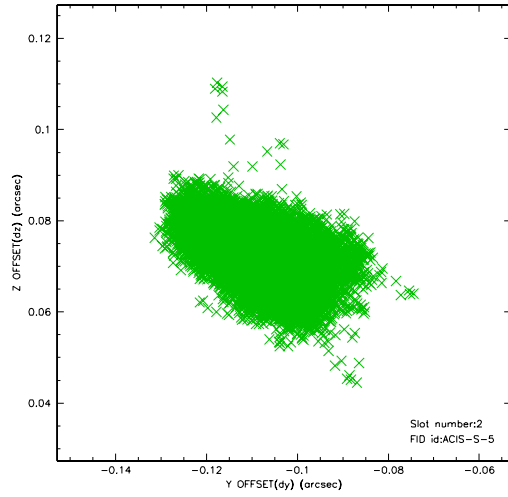
2.5.1 Slot 0



2.5.2 Slot 1

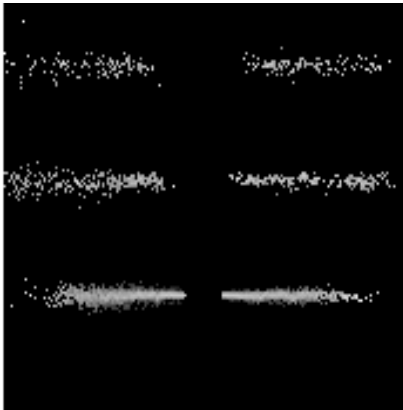


2.5.3 Slot 2

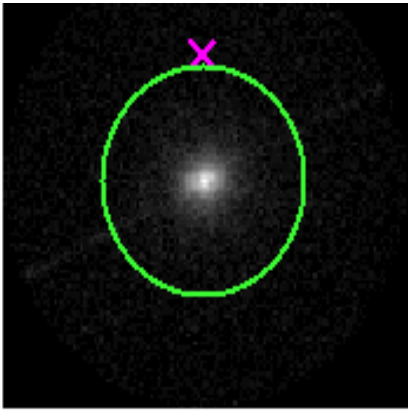


3 Gratings

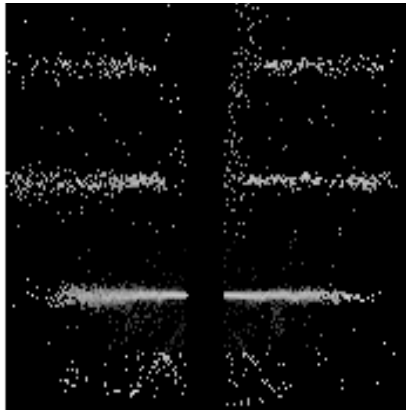
3.1 HEG Arm



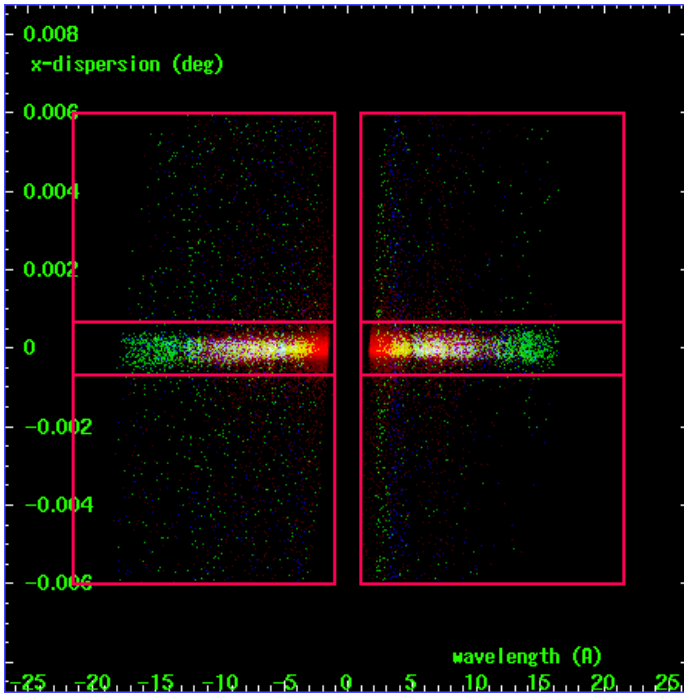
HEG Order Sort 123



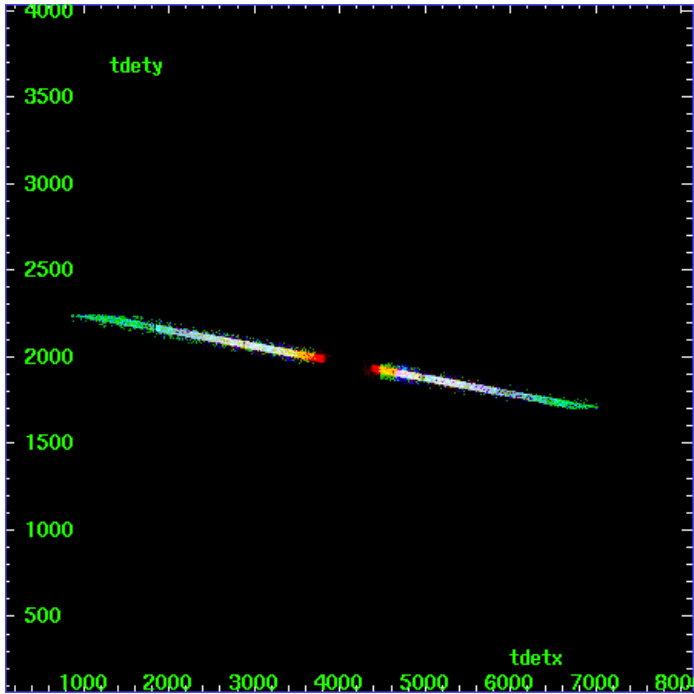
HEG Zero Order



HEG Order Sort ALL

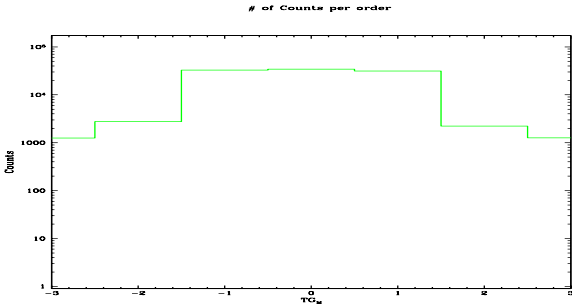


Spot Image HEG

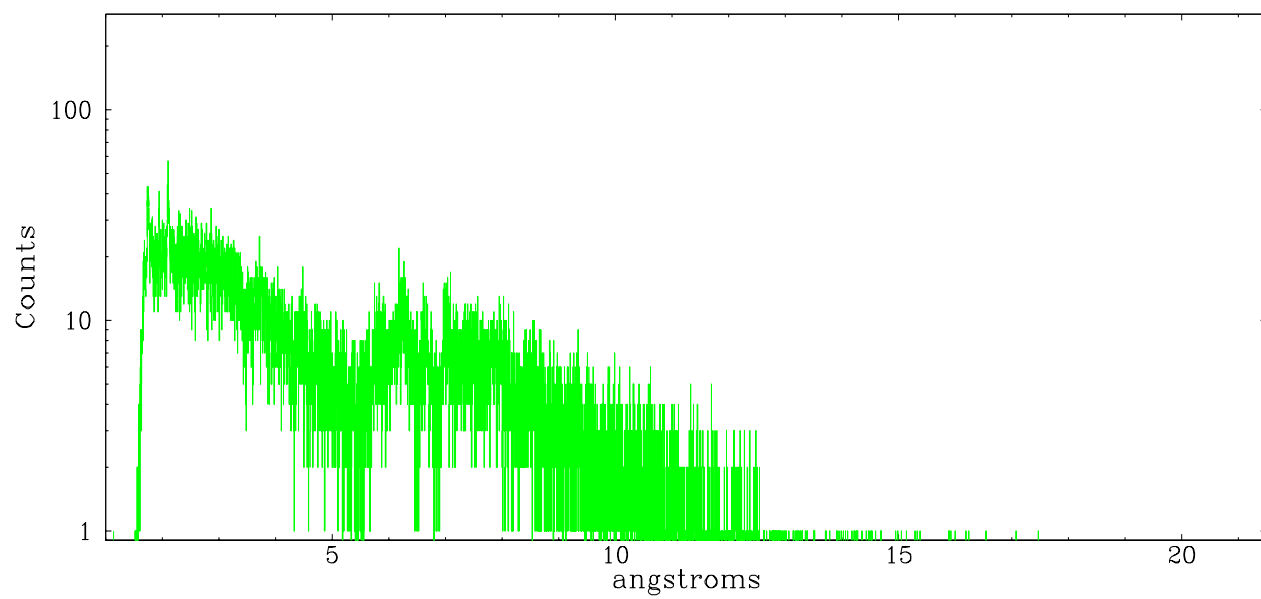


Full Detector HEG

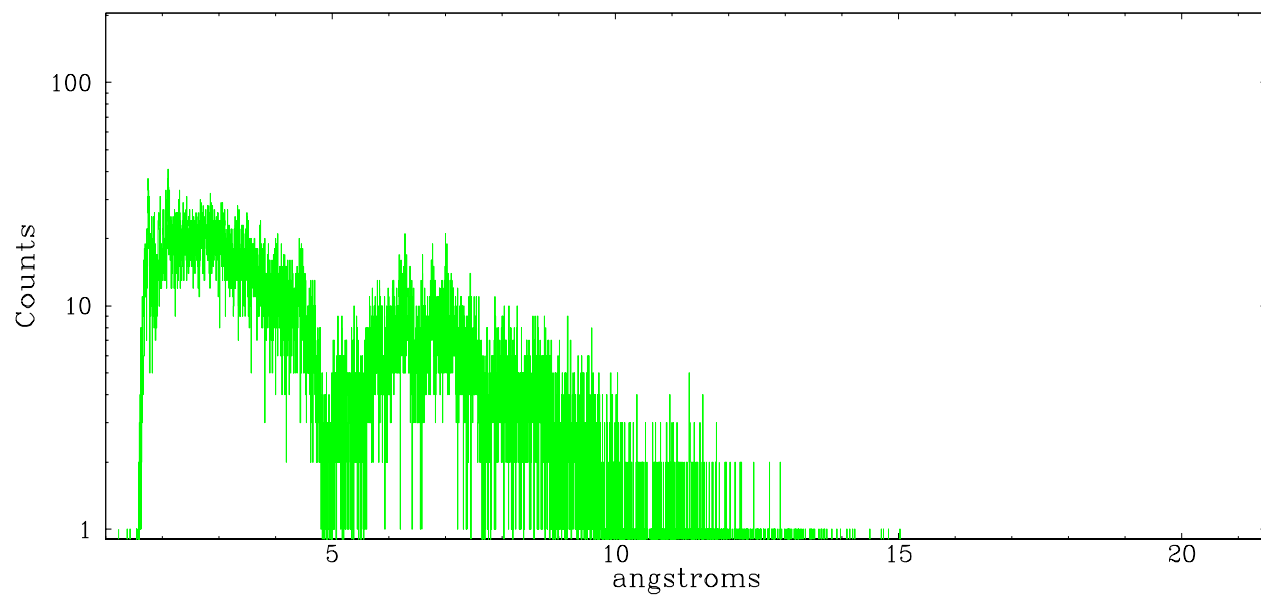
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1249	2745	32859	34324	31281	2213	1262



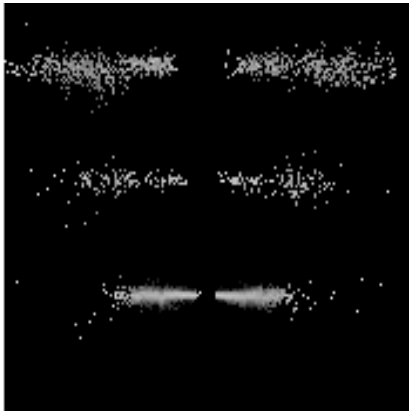
heg order -1



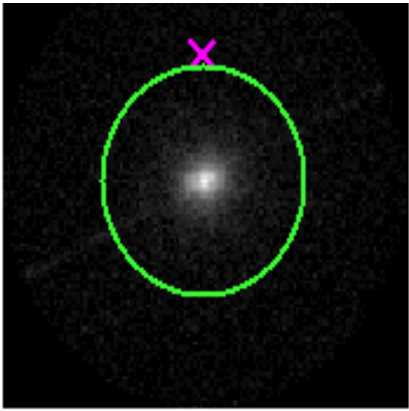
heg order +1



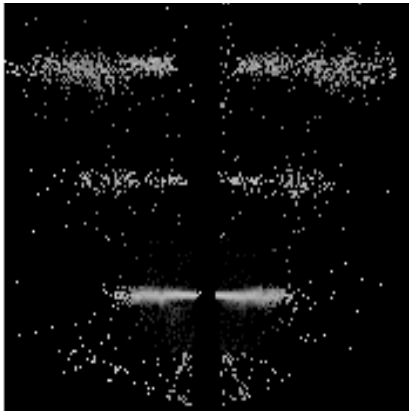
3.2 MEG Arm



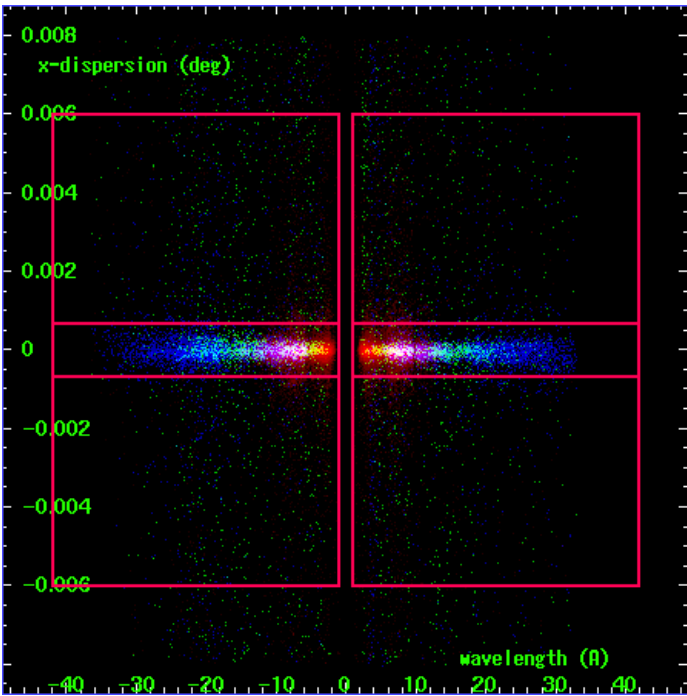
MEG Order Sort 123



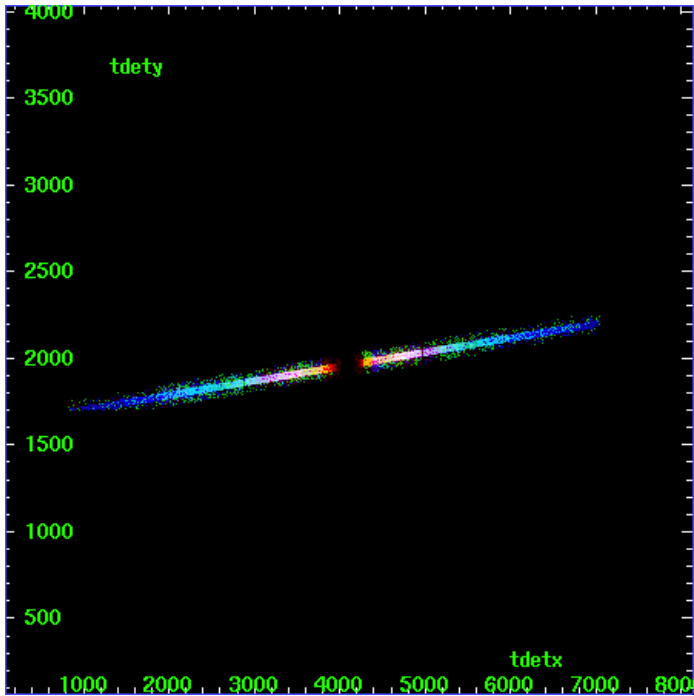
MEG Zero Order



MEG Order Sort ALL

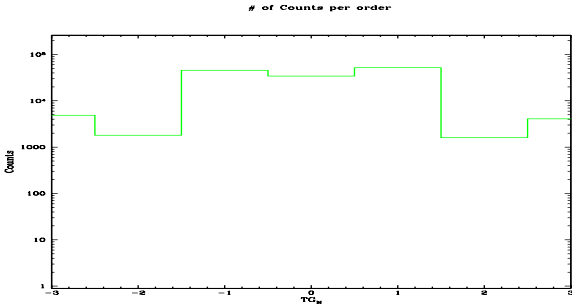


Spot Image MEG

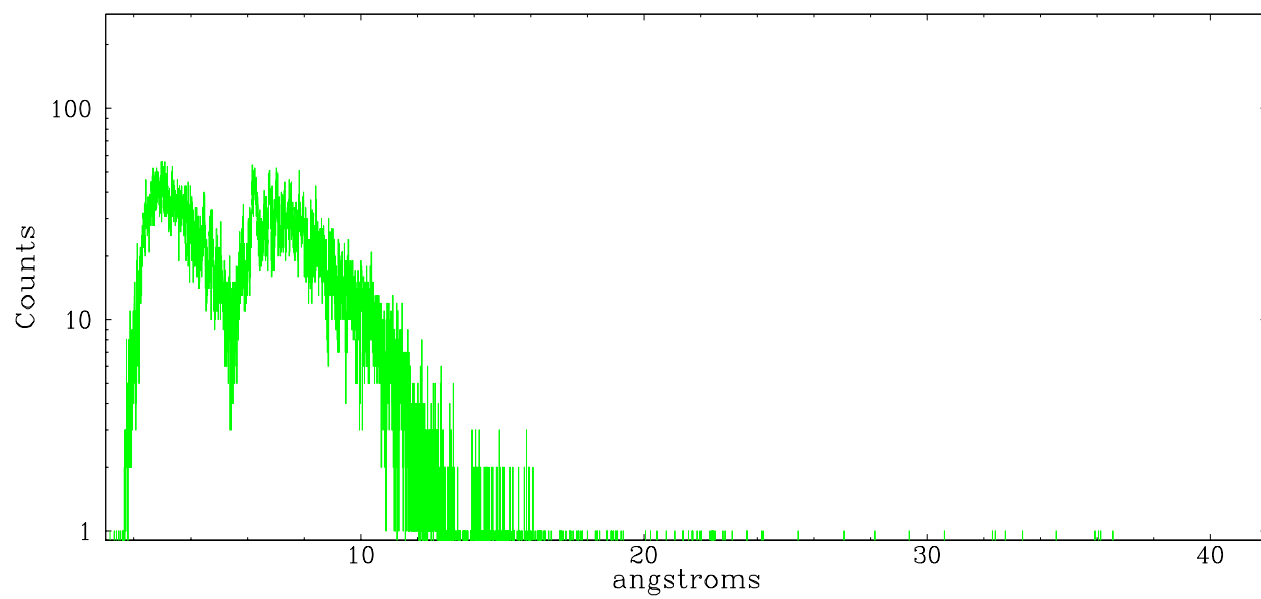


Full Detector MEG

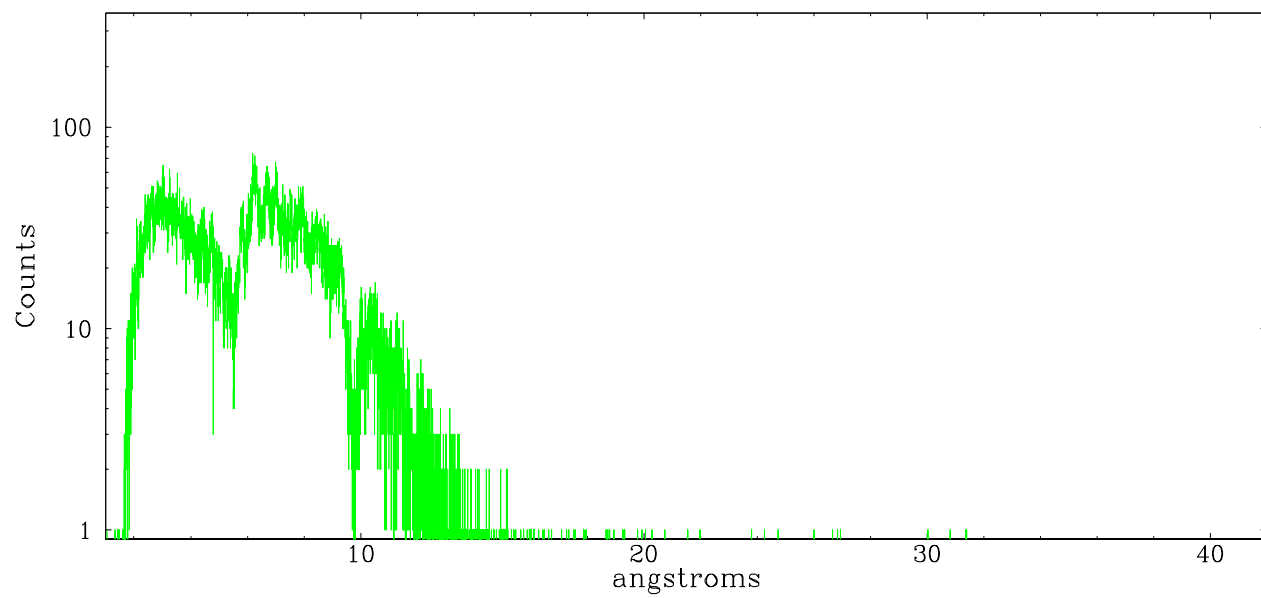
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	4883	1812	45412	34324	51916	1594	4079



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.03.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	74.7522

A.2 Comments

Phase constraint met. Hot pixel on MEG +1 arm near chip boundary between S1 and S2.