

V&V Reference Report

L2 ASCDS Version : 7.6.8

Observation 3769 - L2 Version 001
Chandra X-Ray Center

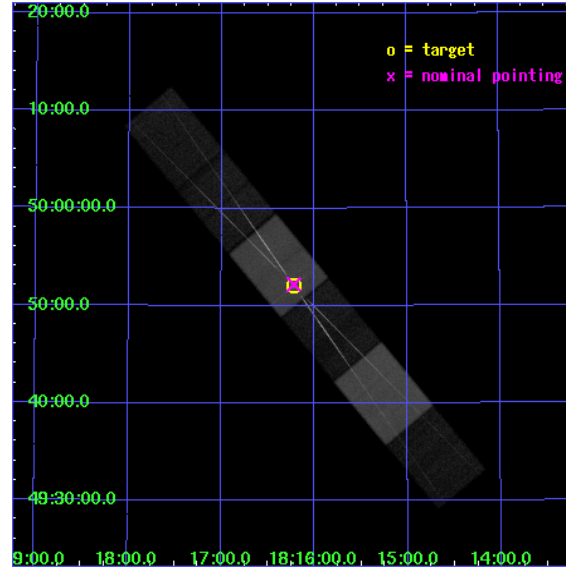
L2 Processing Date : Jul 11 2006

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1 Front

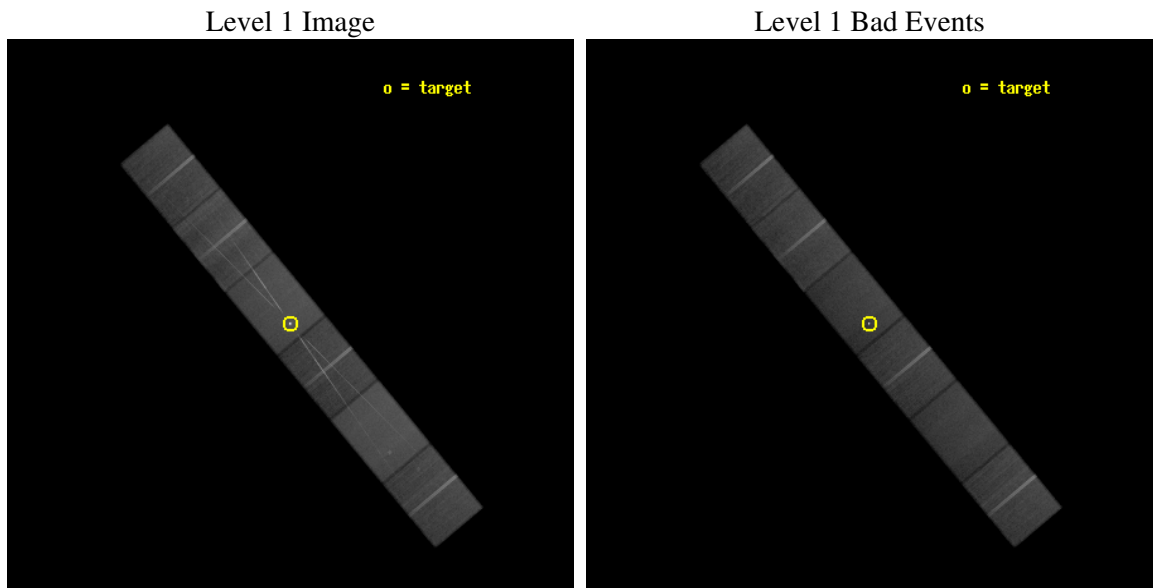
seq_num	300094
obs_id	3769
title	THE HIGH RESOLUTION X-RAY SPECTRUM OF AM HERCULIS: PROBING THE ACCRETION PROCESS
observer	Dr KOJI MUKAI
object	AM HERCULIS
dtcycle	0
cycle	P
ra_targ	274.055417
dec_targ	49.867833
ra_nom	274.05492111233
dec_nom	49.870053124222
roll_nom	230.17002022989
revision	3
ontime	92965.983463109
livetime	91464.502195074
ontime4	92846.55707413
ontime5	92958.360472769
ontime6	92864.344055265
ontime7	92965.983463109
ontime8	92821.147132844
ontime9	92831.311153352
l2events	780510



2 OBI

2.1 OBI

2.1.1 Images

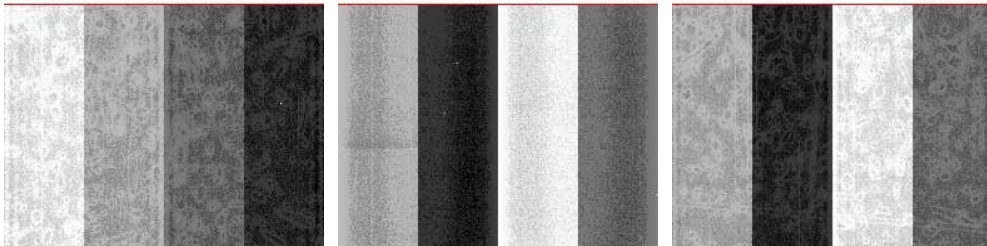


2.1.2 Bias

Chip 4

Chip 5

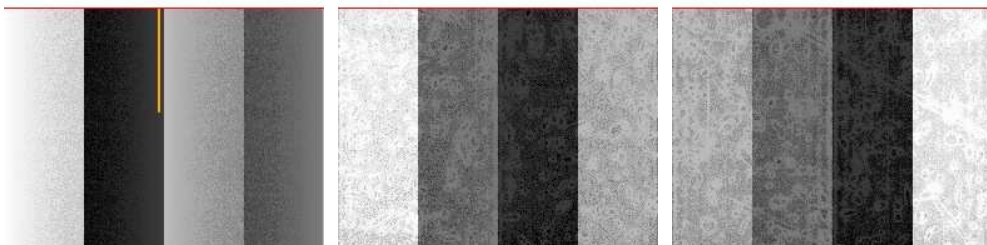
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.8
caldsver	3.2.2
date	2006-07-11T08:50:48
revision	3

sched_exp_time	93000.000000
ontime	94500.163608044
ontime4	93951.307365656
ontime5	94492.540647596
ontime6	94058.029212892
ontime7	94500.163608044
ontime8	94035.160182029
ontime9	94030.078331202
l1events	3496119

2.1.4 Events

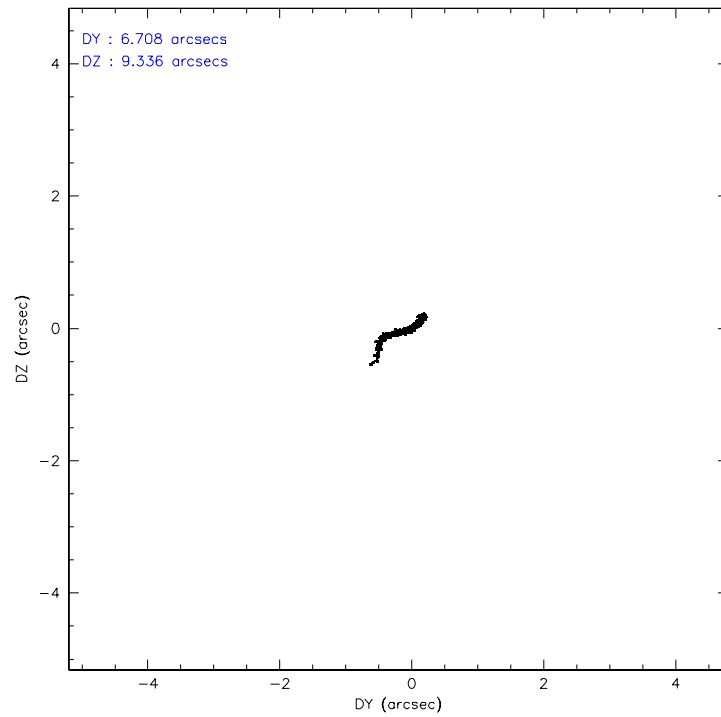
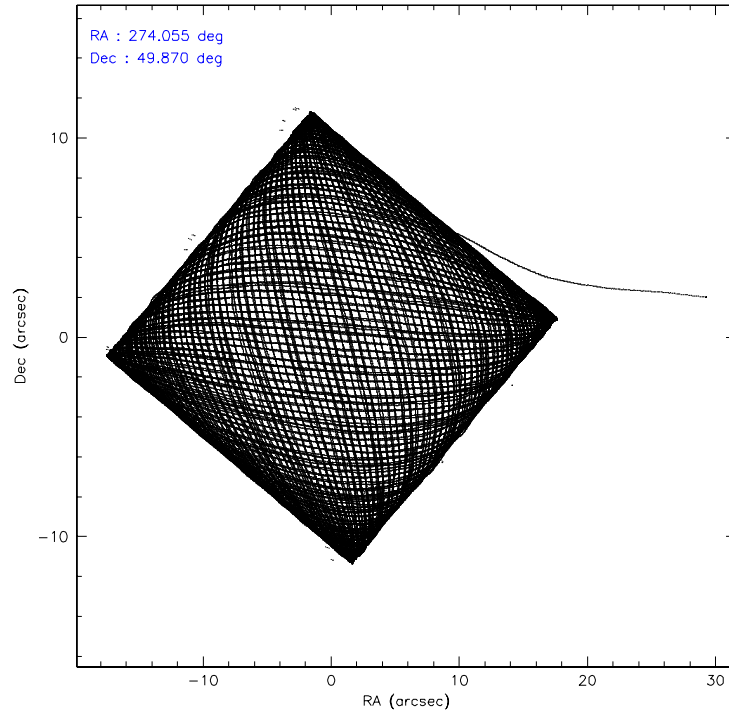
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	528413	670565	516870	690161	606804	483306
rejected events	471913	394124	431922	407480	479745	426710
rejected %	89%	58%	83%	59%	79%	88%

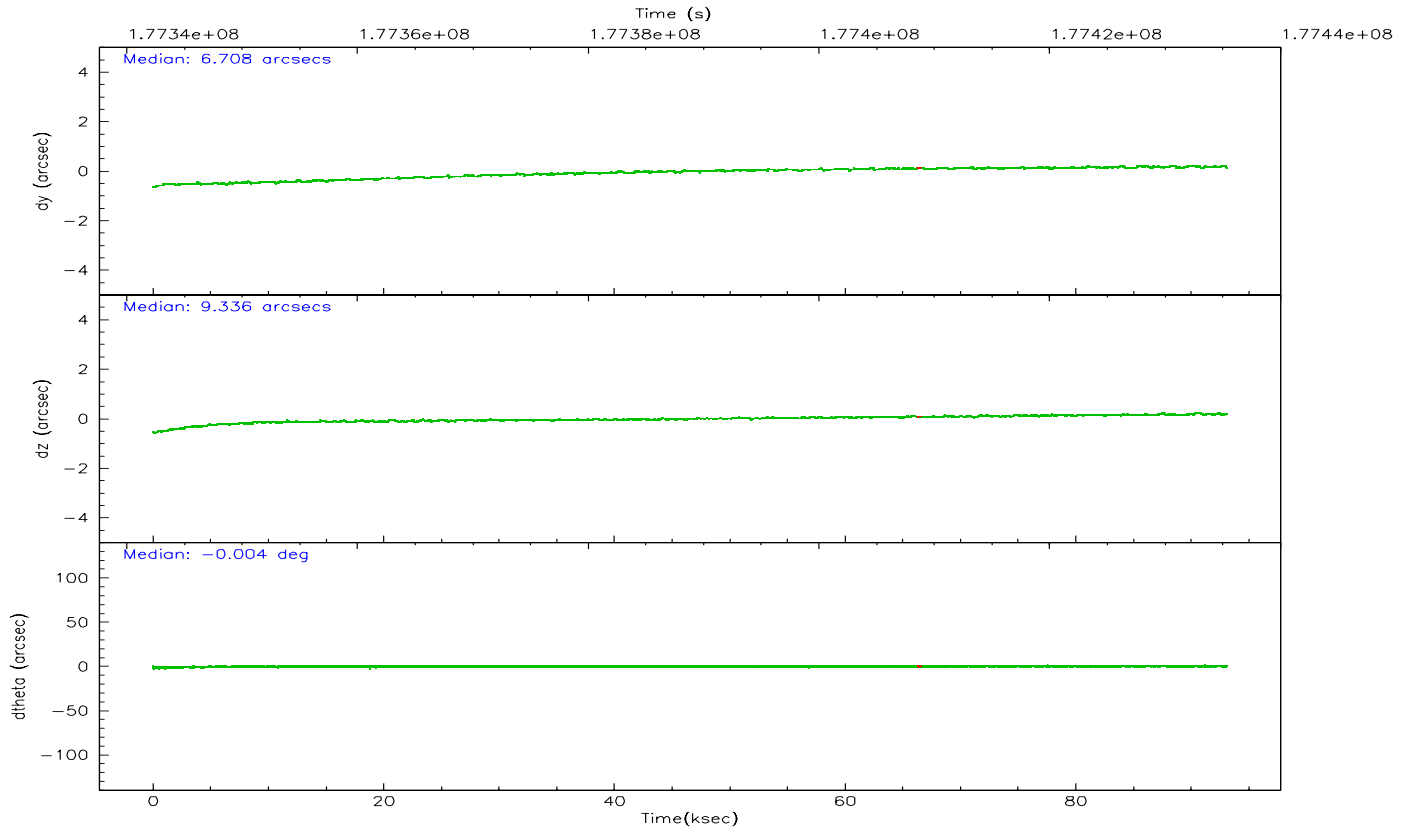
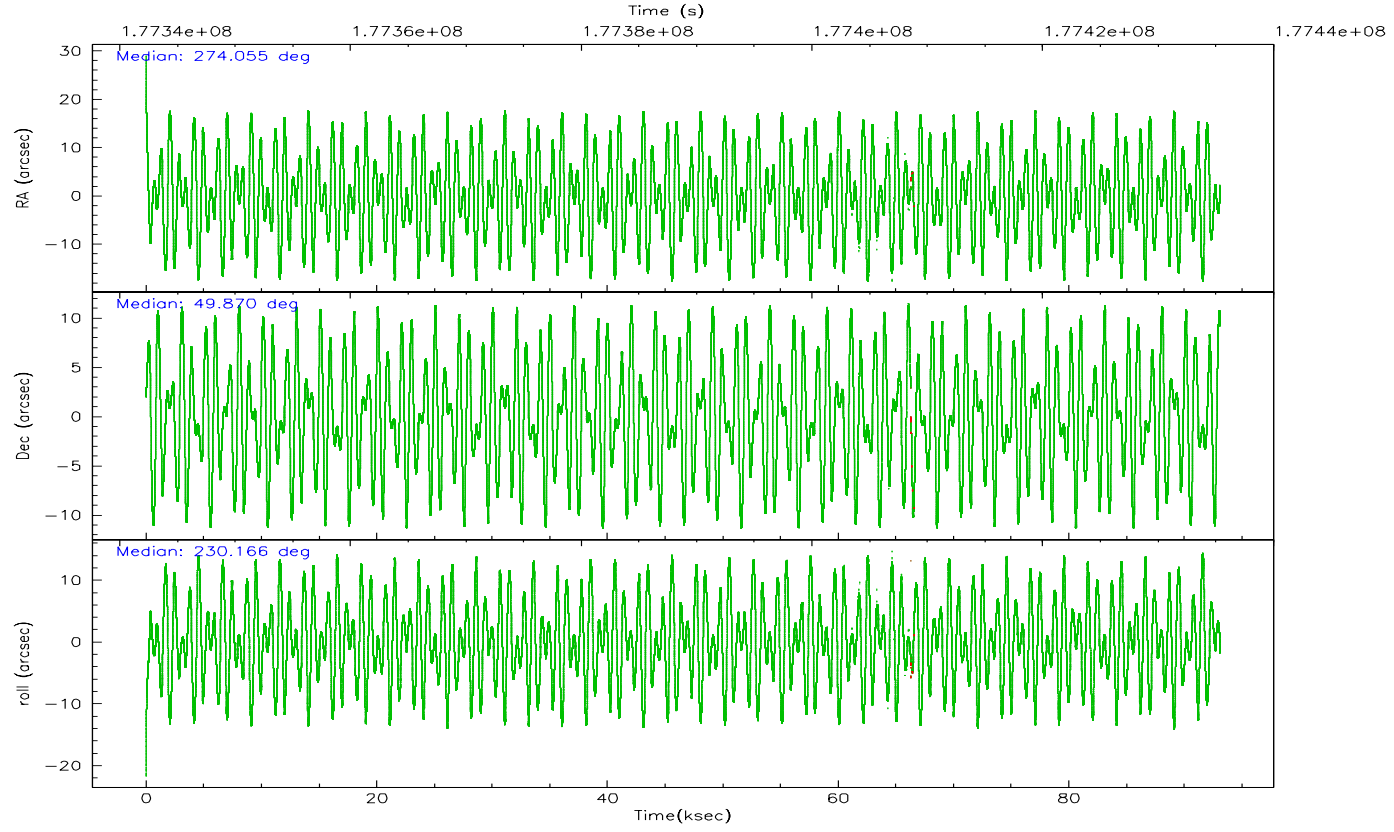
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	39826	17710	60966	31828	62810	39878
	7%	2%	11%	4%	10%	8%
grade 1 events	409	655	328	991	421	320
	0%	0%	0%	0%	0%	0%
grade 2 events	15884	98216	20200	76695	31071	15721
	3%	14%	3%	11%	5%	3%
grade 3 events	7618	8945	8769	20896	15084	7736
	1%	1%	1%	3%	2%	1%
grade 4 events	7423	8581	8400	20046	14632	7597
	1%	1%	1%	2%	2%	1%
grade 5 events	18725	33040	19823	45942	25680	21392
	3%	4%	3%	6%	4%	4%
grade 6 events	12098	171526	16822	164907	34651	14615
	2%	25%	3%	23%	5%	3%
grade 7 events	426430	331892	381562	328856	422455	376047
	80%	49%	73%	47%	69%	77%

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	274.061553	274.0549211123295	Subarray start row	1	1
Pointing Dec	49.896929	49.87005312422163	Subarray row count	774	774
Pointing Roll	230.008324	230.1700202298855	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	2.5
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	177342396.184000	177340751.1447			
Observation start date	2003-08-15T13:45:32	2003-08-15T13:19:11			
Observation end time	177435396.184000	177436626.0613			
Observation end date	2003-08-16T15:35:32	2003-08-16T15:57:06			
Read mode	TIMED	TIMED			

2.3 Aspect



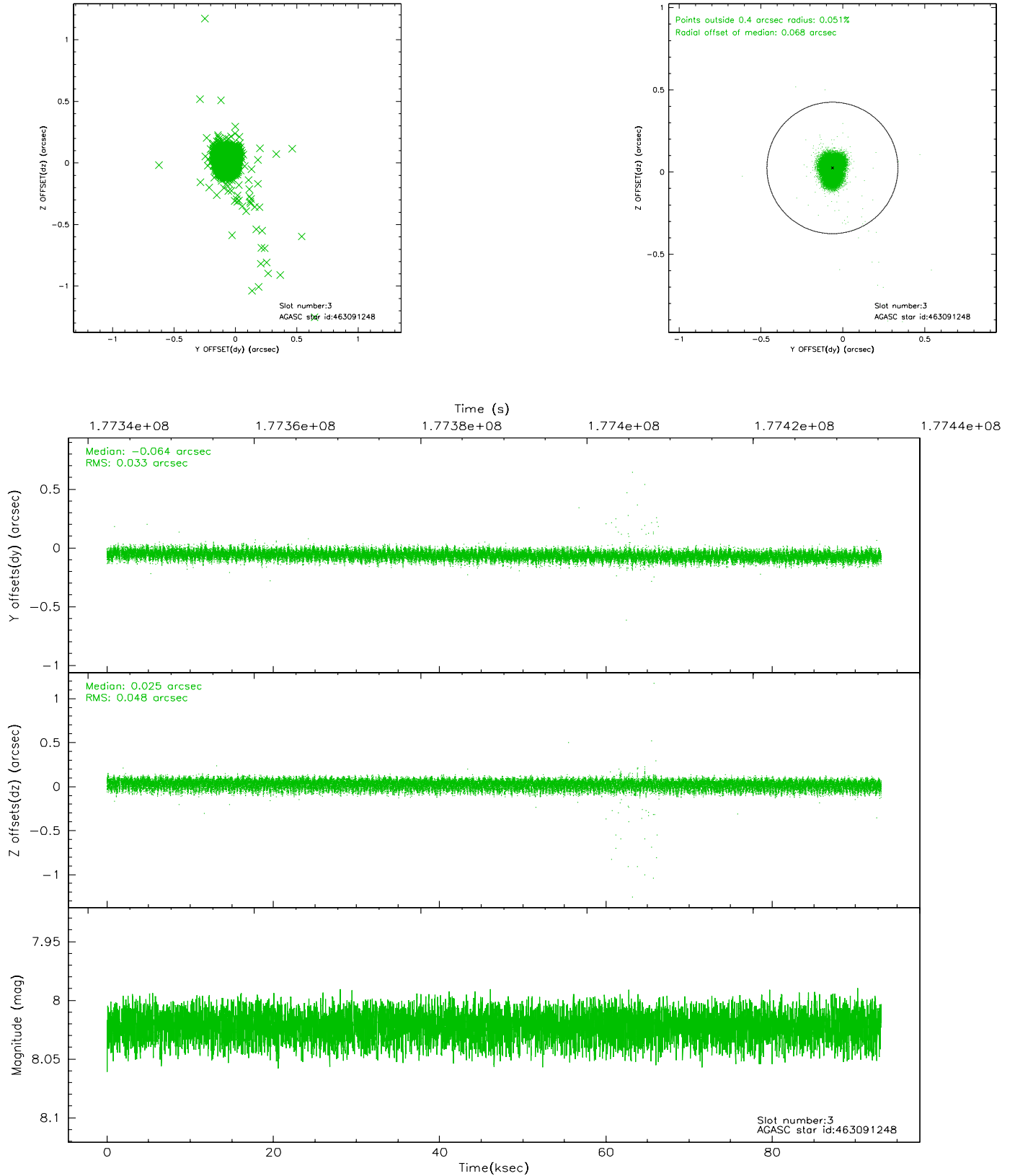


Slot Statistics

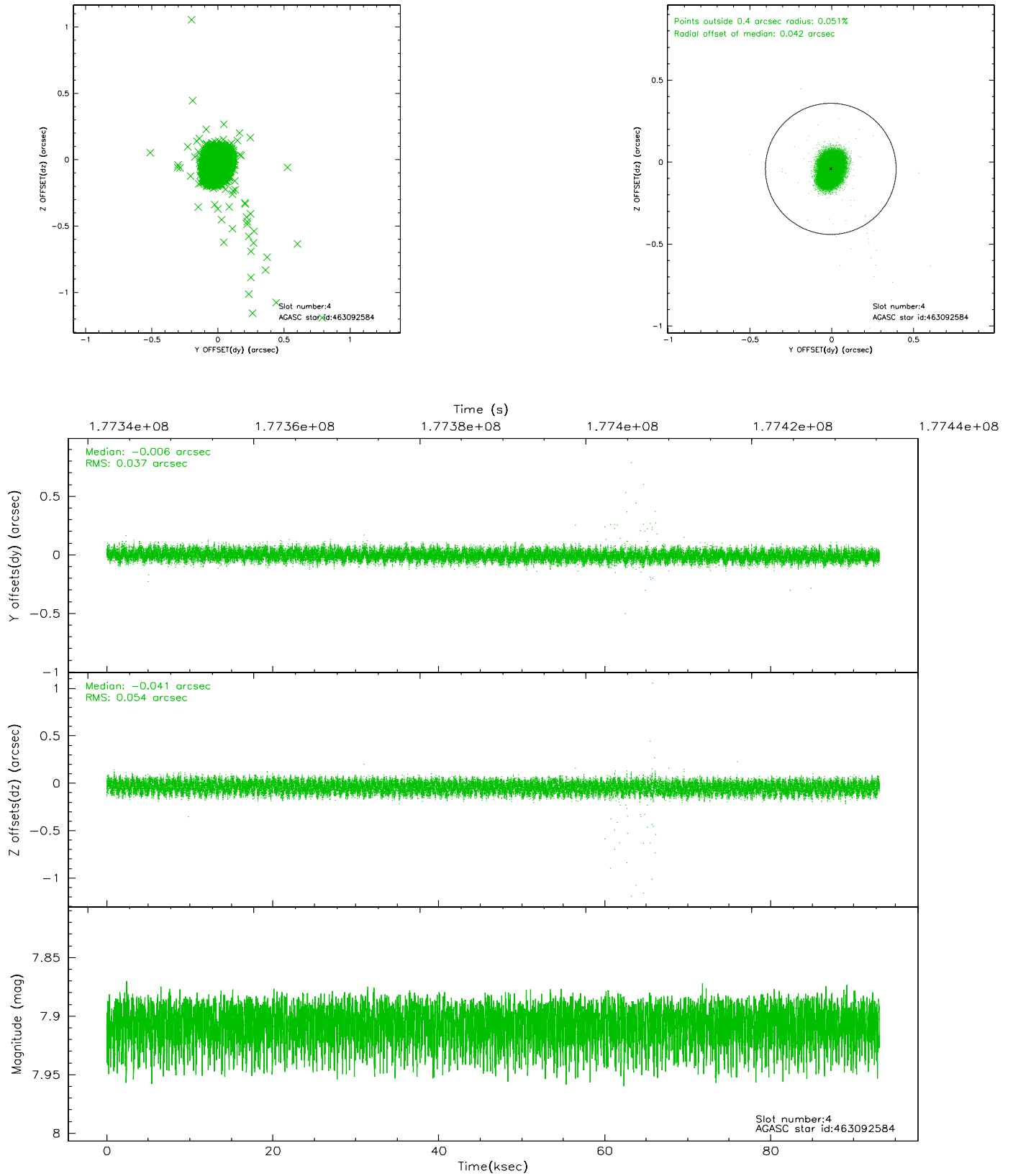
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	22504	-0.056	-0.033	0.010	0.016	0.000000	0.000000	-759.23	-1792.72
1	FID	ACIS-S-4	7.19	22463	0.049	0.036	0.005	0.011	0.000000	0.000000	2154.20	115.89
2	FID	ACIS-S-5	7.23	22496	-0.025	0.006	0.009	0.015	0.000000	0.000000	-1812.13	109.46
3	GUIDE	463091248	8.02	45045	-0.064	0.025	0.058	0.095	274.115888	50.616558	-2064.42	-1569.84
4	GUIDE	463092584	7.91	45119	-0.006	-0.041	0.068	0.107	274.013753	50.532643	-1682.88	-1554.50
5	GUIDE	463095992	7.13	45101	-0.012	-0.037	0.060	0.094	274.225415	49.094564	1964.43	2152.44
6	GUIDE	463084696	9.05	45080	0.073	0.050	0.085	0.136	273.211558	49.626674	2011.01	-900.01
7	GUIDE	463090672	8.76	45085	0.006	0.010	0.069	0.112	275.272036	50.061124	-2268.00	1748.96

2.4 Star Slots

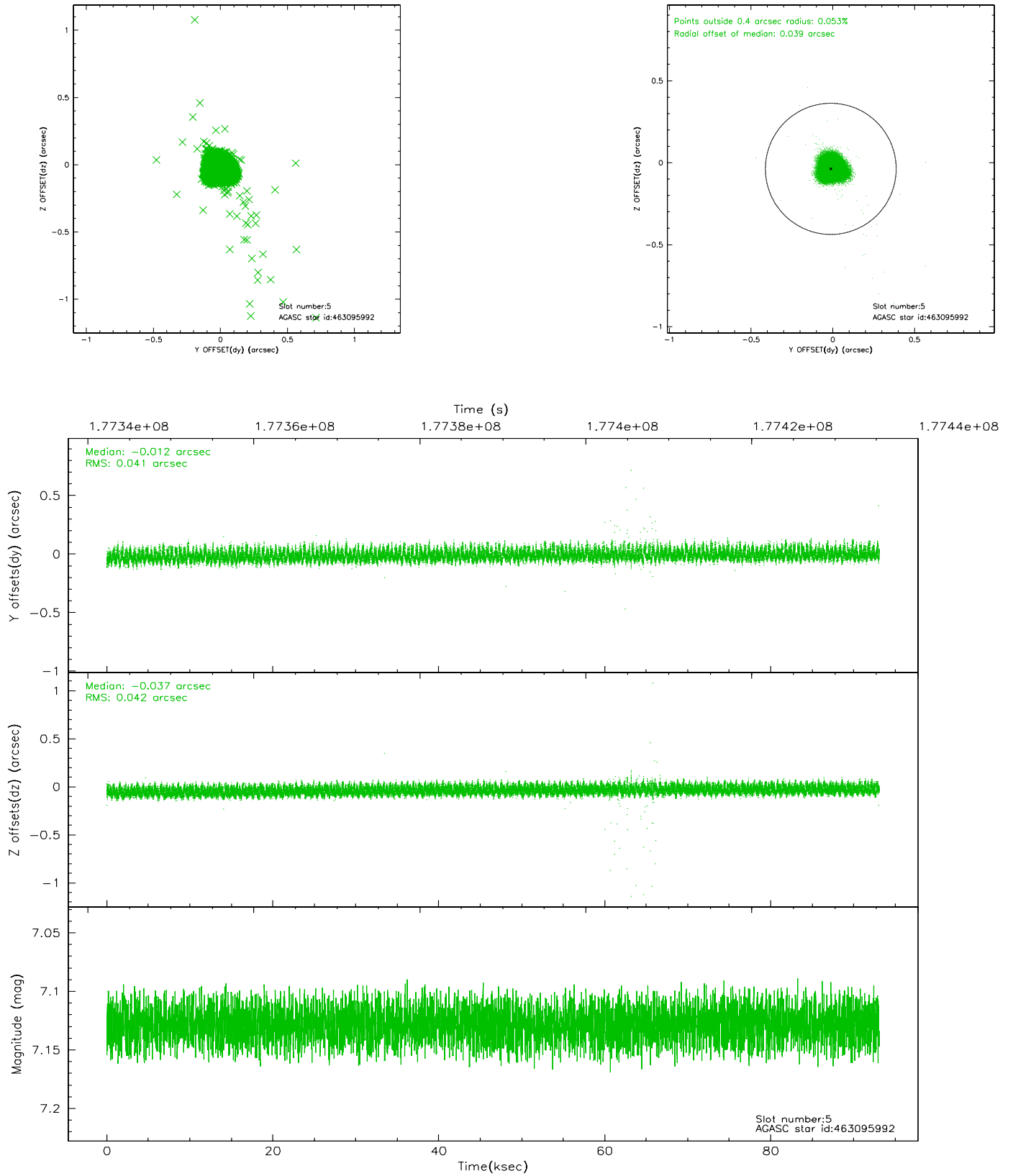
2.4.1 Slot 3



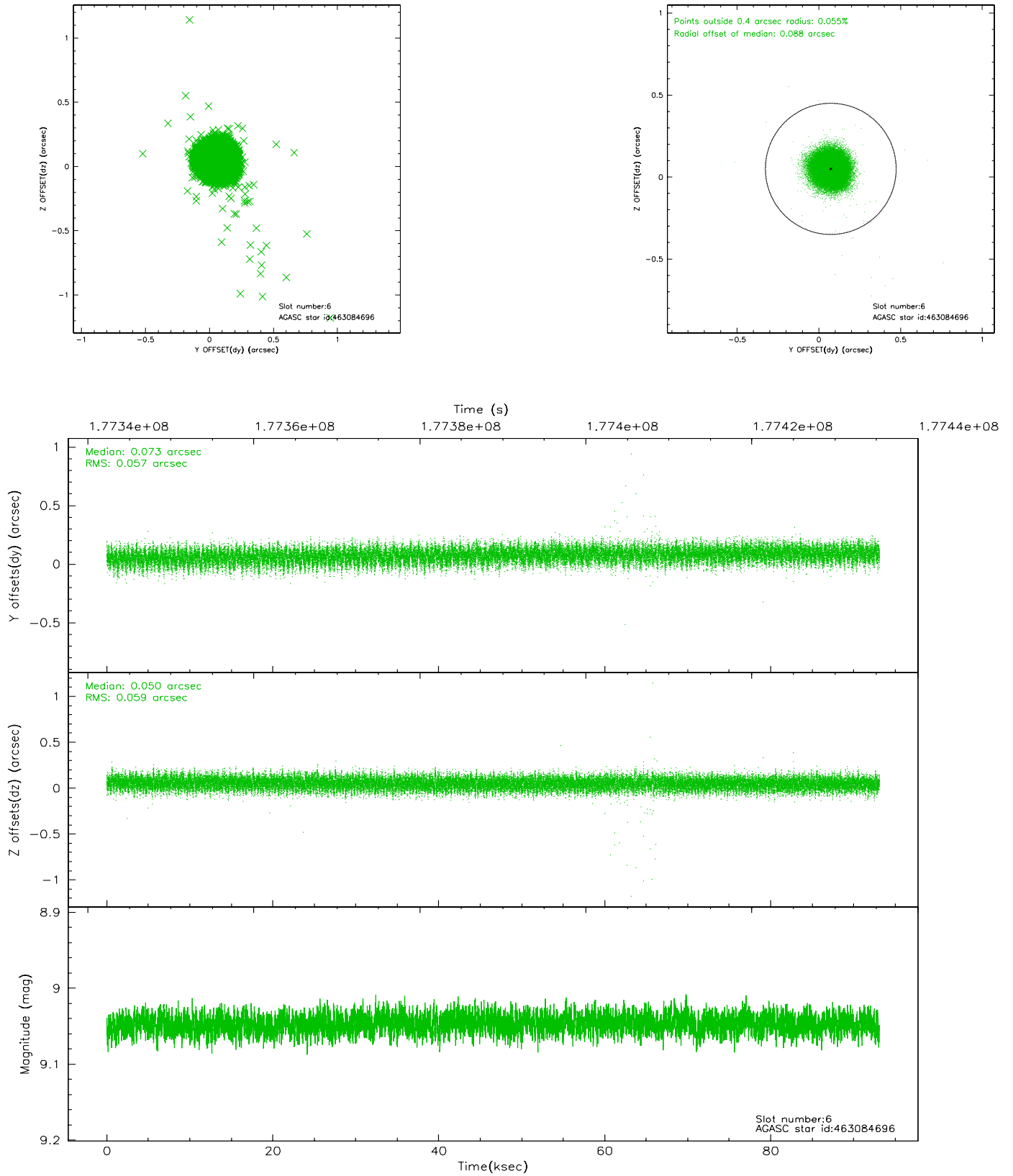
2.4.2 Slot 4



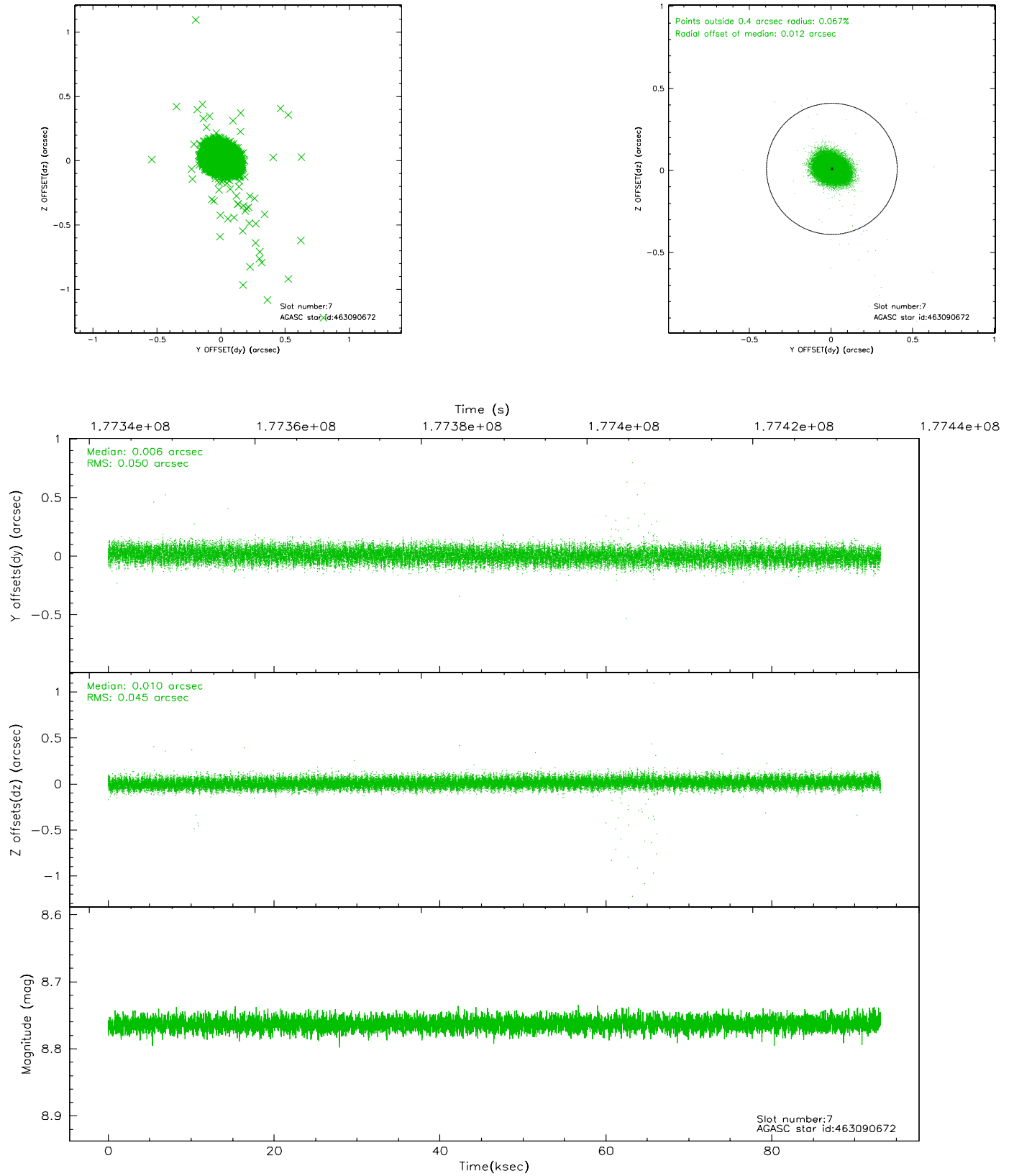
2.4.3 Slot 5



2.4.4 Slot 6

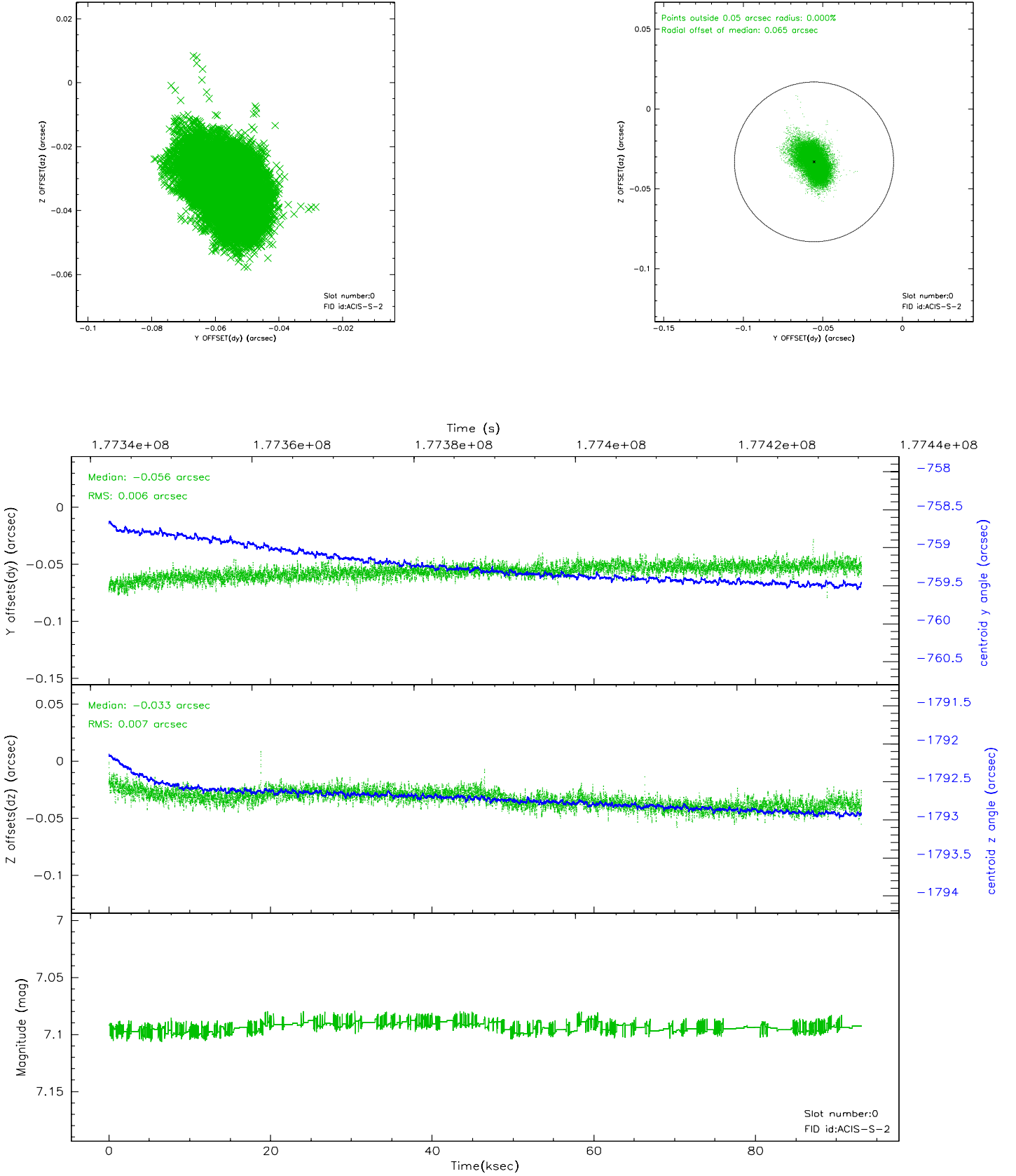


2.4.5 Slot 7

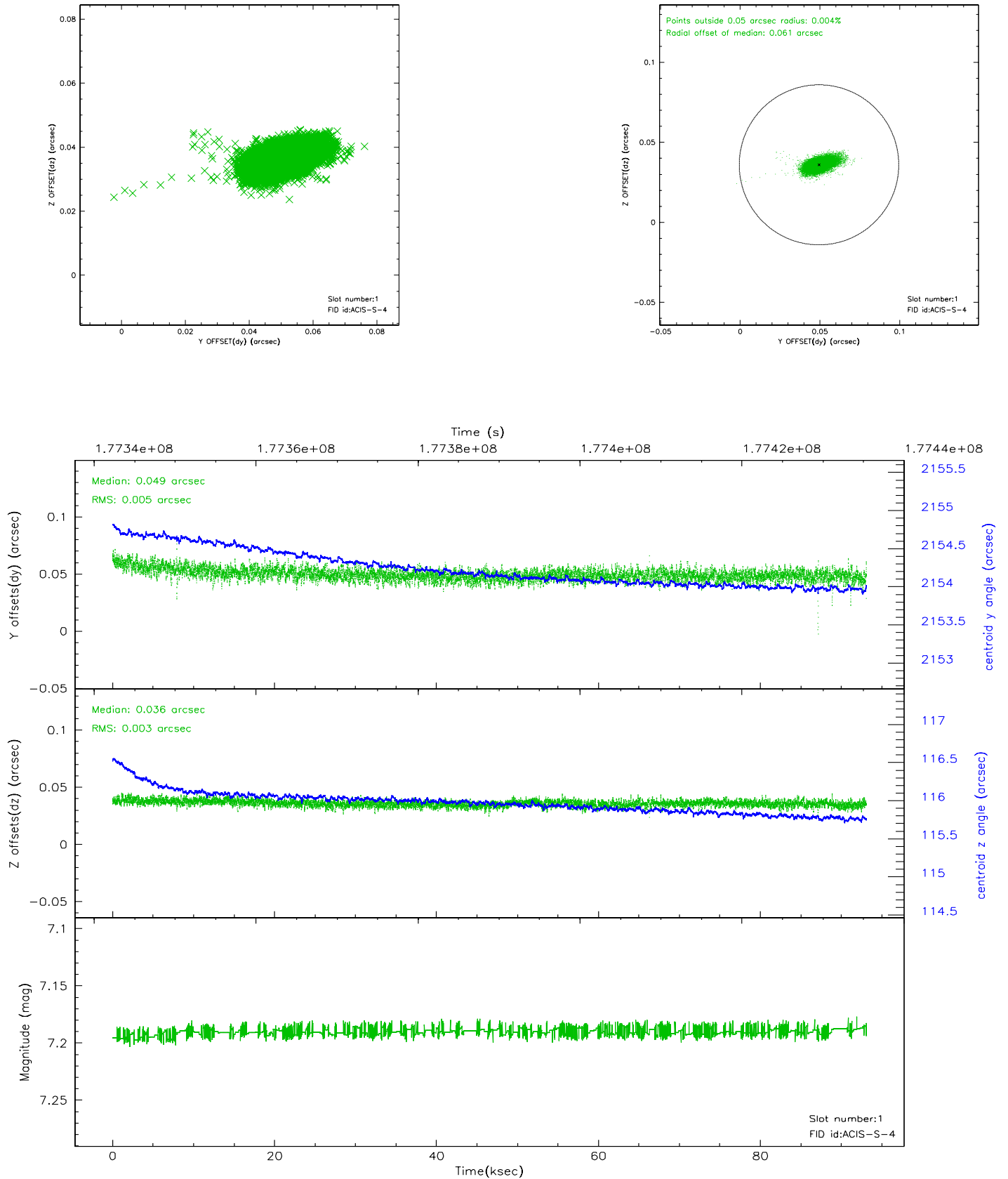


2.5 FID Slots

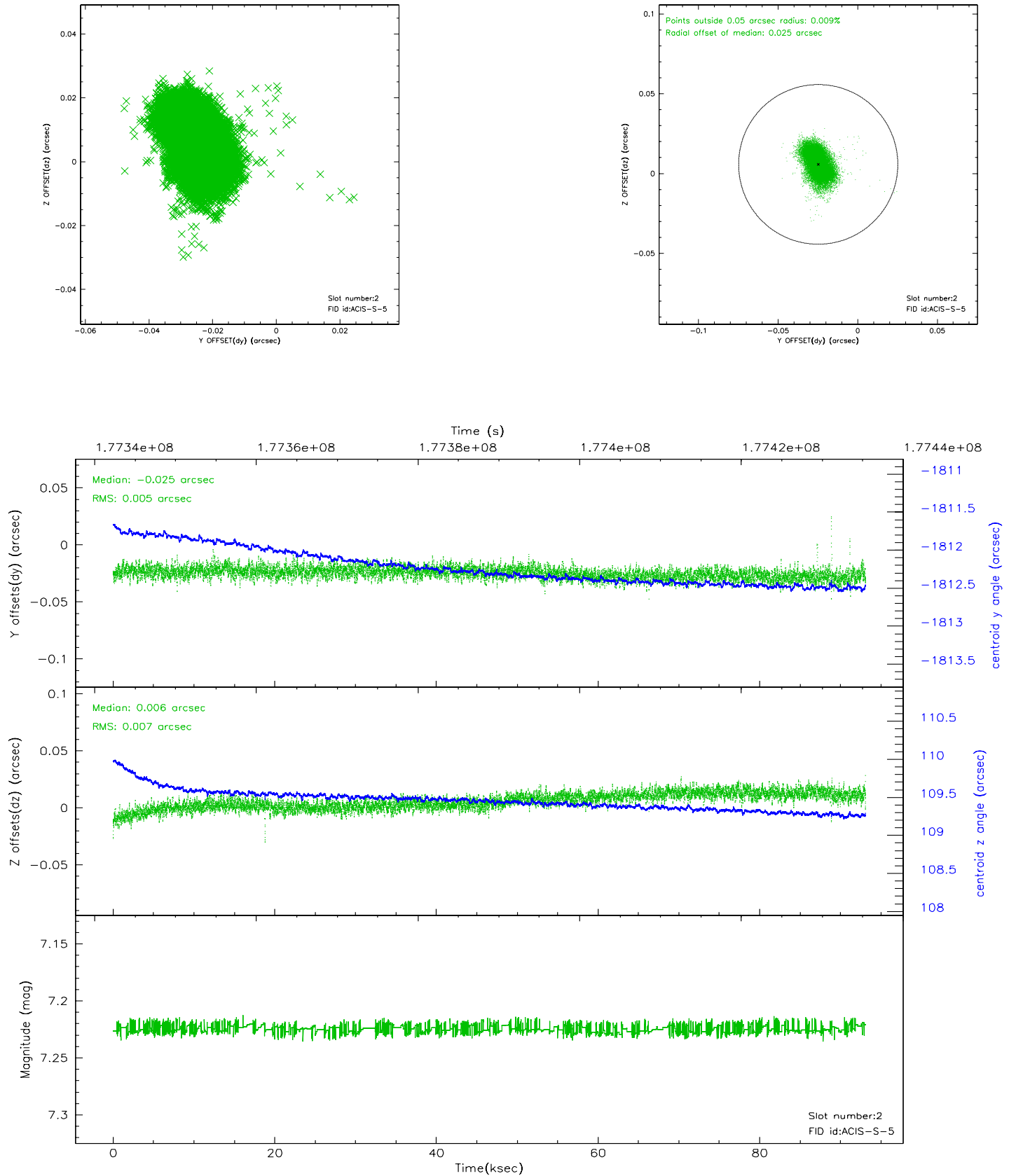
2.5.1 Slot 0



2.5.2 Slot 1

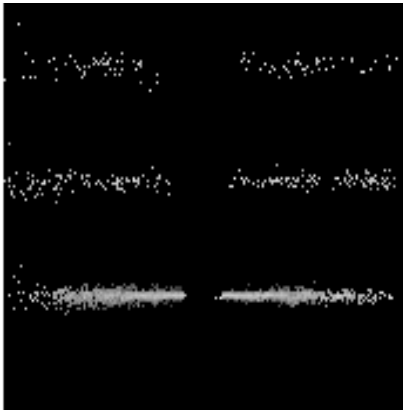


2.5.3 Slot 2

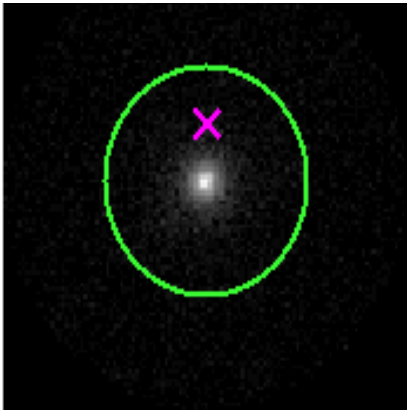


3 Gratings

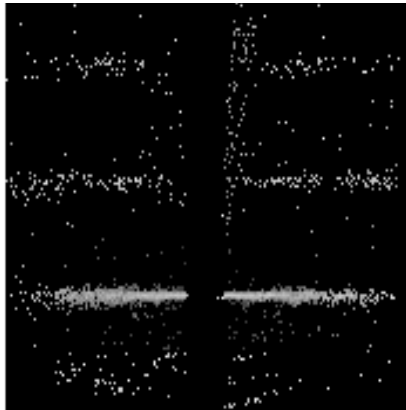
3.1 HEG Arm



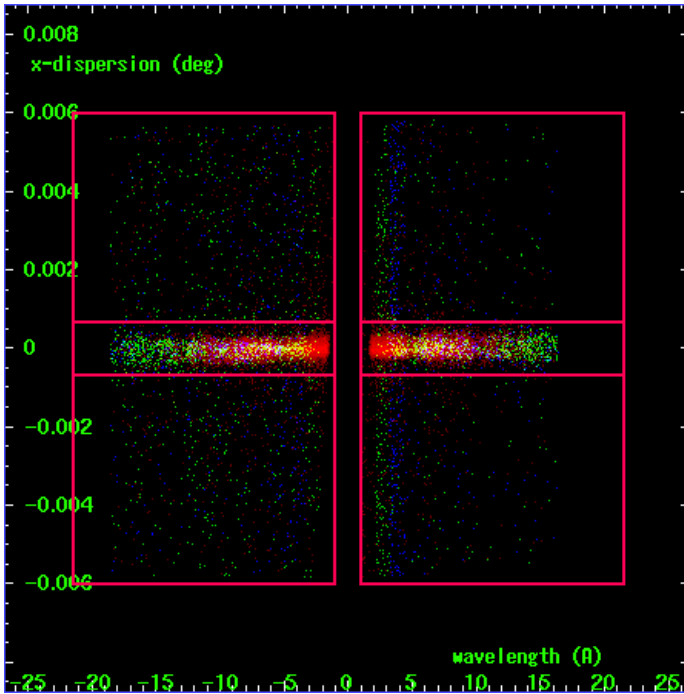
HEG Order Sort 123



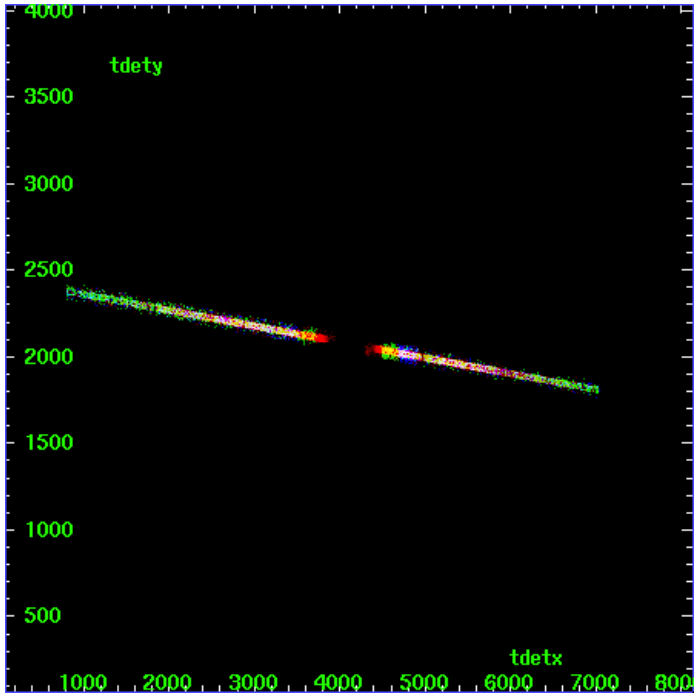
HEG Zero Order



HEG Order Sort ALL

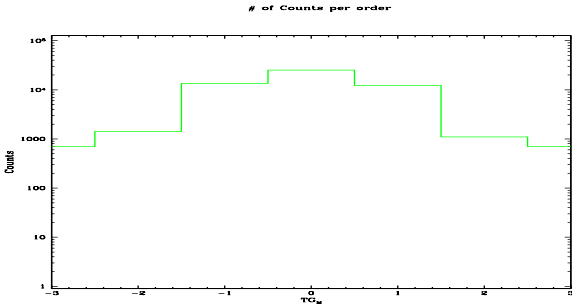


Spot Image HEG

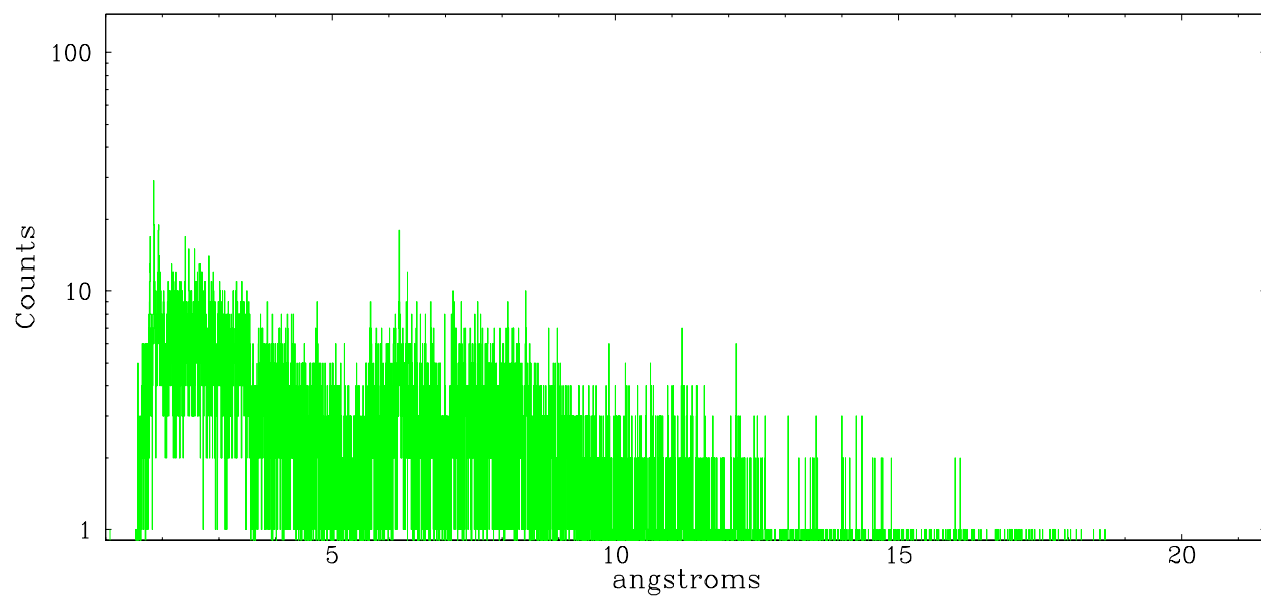


Full Detector HEG

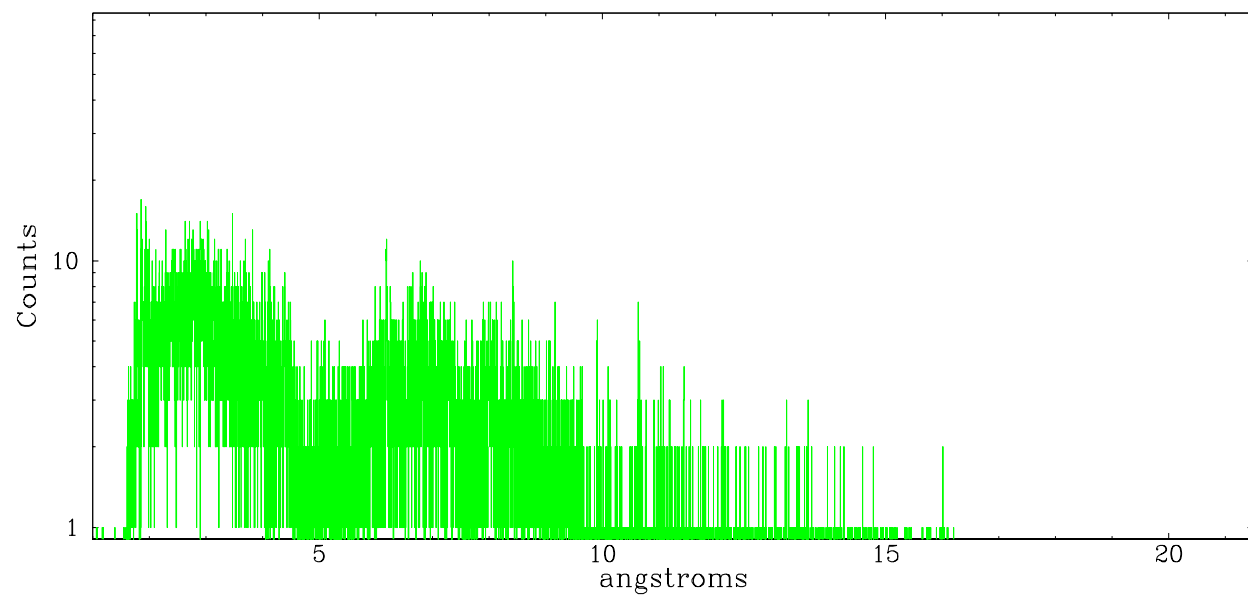
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	697	1419	13367	25308	12303	1098	696



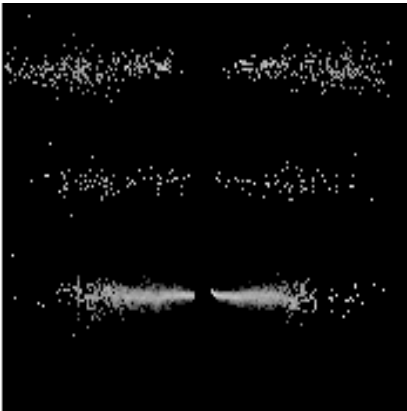
heg order -1



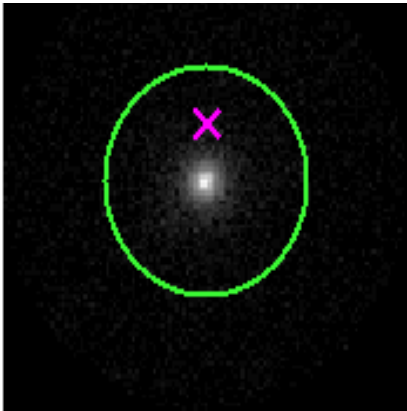
heg order +1



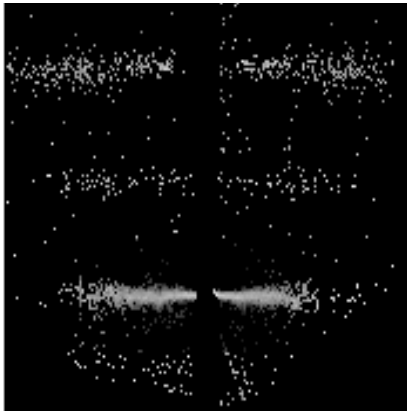
3.2 MEG Arm



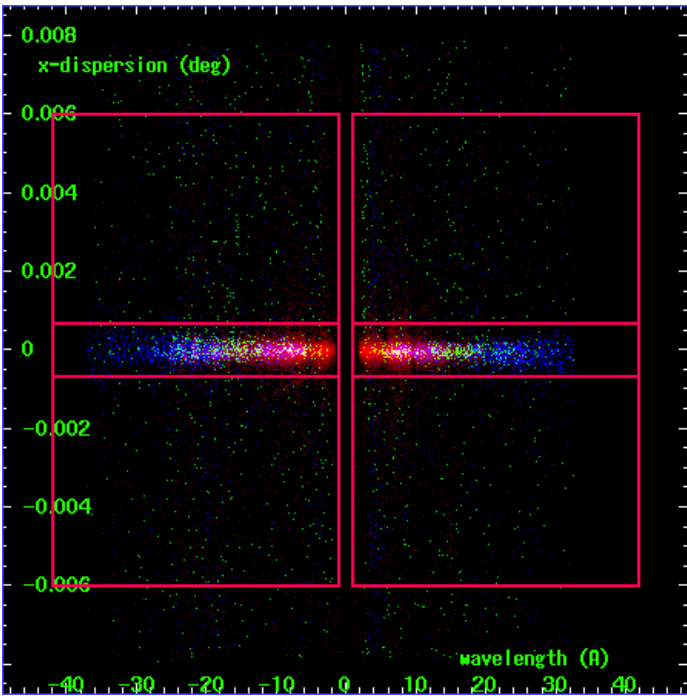
MEG Order Sort 123



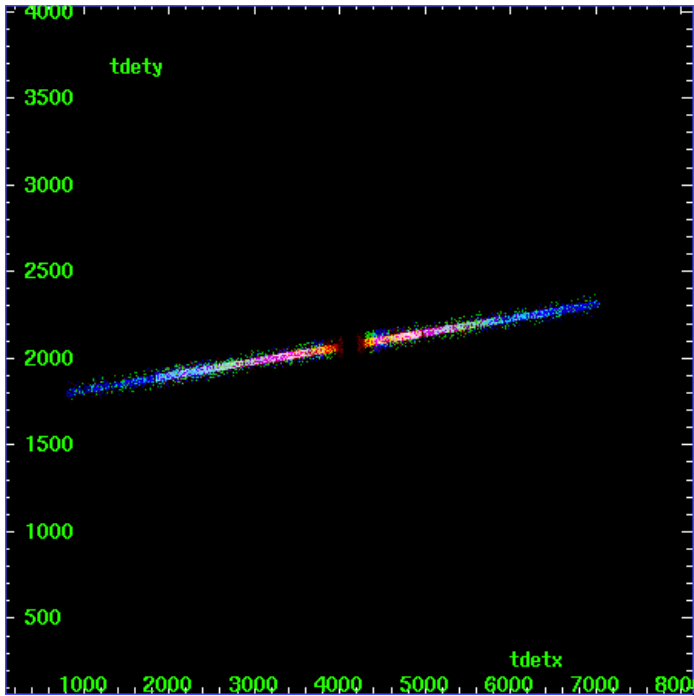
MEG Zero Order



MEG Order Sort ALL

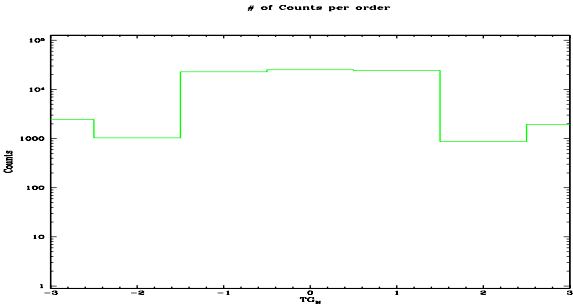


Spot Image MEG

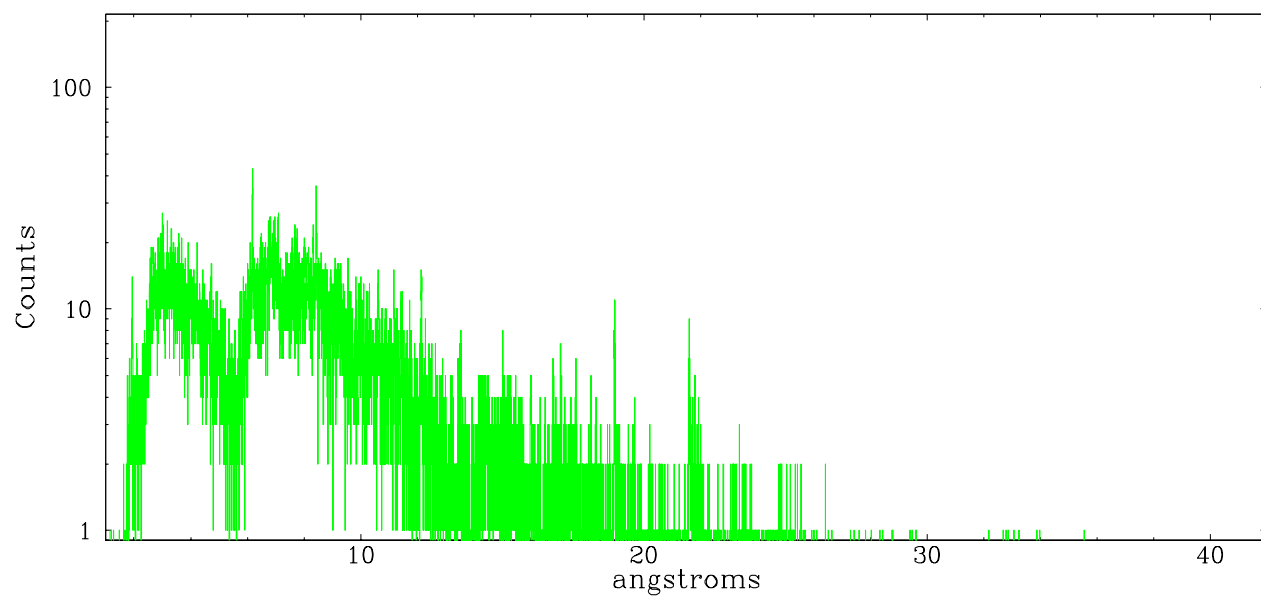


Full Detector MEG

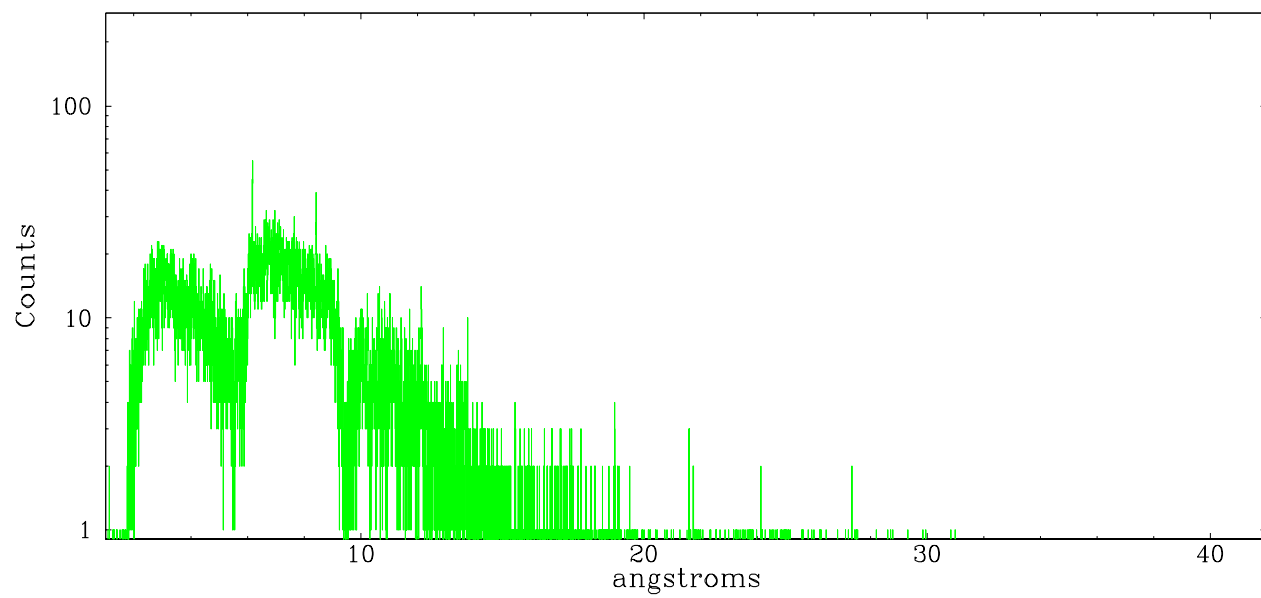
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2437	1036	22912	25308	24403	871	1946



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.07.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	92.968

A.2 Comments

Focal plane temperature is warmer than -118 degrees during initial ~10 ksec of observation. The ACIS calibrations are not verified or necessarily applicable for focal plane temperatures warmer than -118 degrees.