

V&V Reference Report

L2 ASCDS Version : 7.6.7.2

Observation 4819 - L2 Version 001
Chandra X-Ray Center

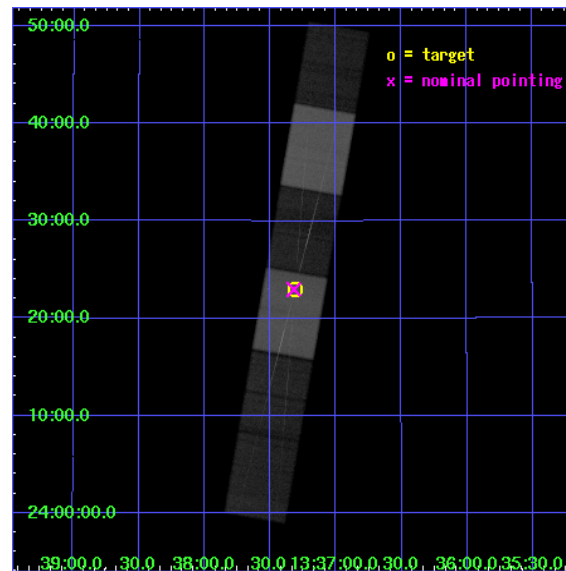
L2 Processing Date : Jun 3 2006

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1 Front

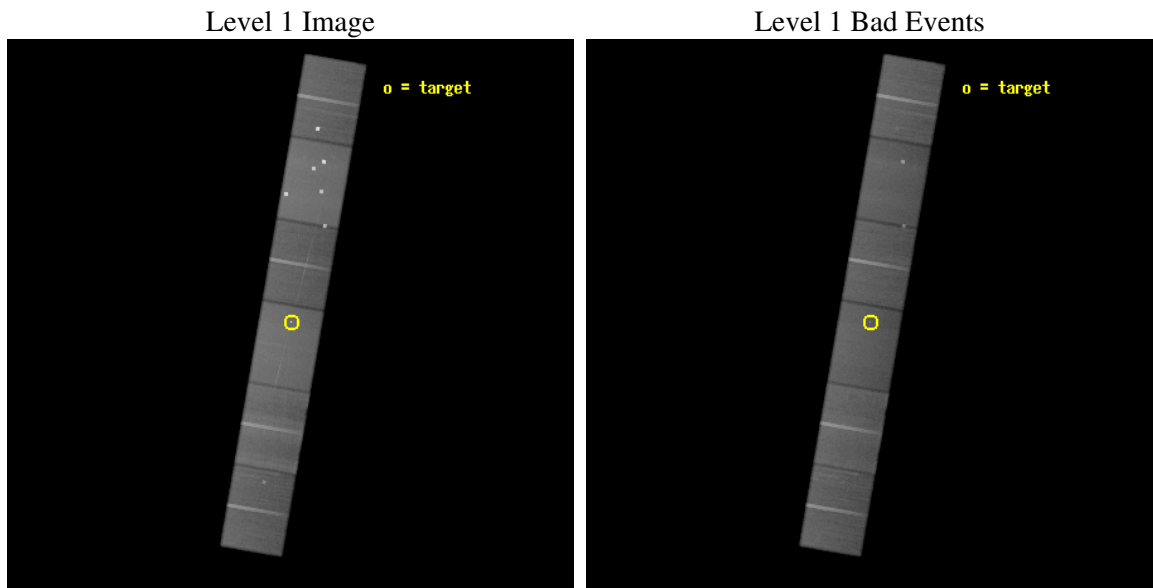
seq_num	700902
obs_id	4819
title	A Chandra HETGS & HST view of the Warm and Lukewarm absorbers in IRAS 13349+2438
observer	Prof Julia Lee
object	IRAS 13349+2438
dtcycle	0
cycle	P
ra_targ	204.327917
dec_targ	24.384167
ra_nom	204.33000172425
dec_nom	24.382973943016
roll_nom	99.869690698697
revision	2
ontime	161900.0
livetime	159285.17457419
ontime4	161889.83600923
ontime5	161900.0
ontime6	161897.45899981
ontime7	161900.0
ontime8	161897.45901972
ontime9	161900.0
l2events	1291606



2 OBI

2.1 OBI

2.1.1 Images

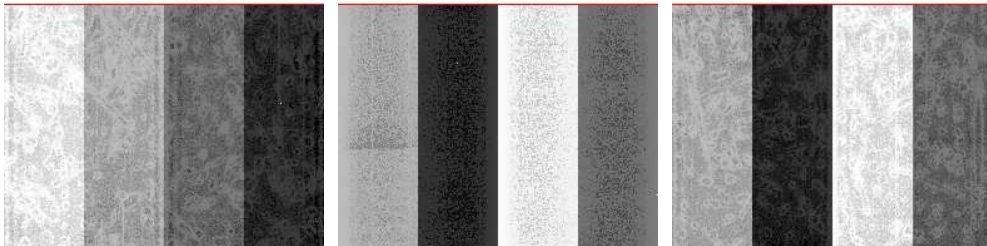


2.1.2 Bias

Chip 4

Chip 5

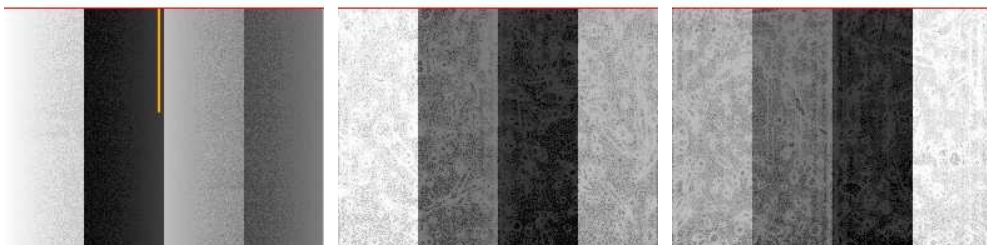
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.2
caldbver	3.2.2
date	2006-06-02T22:18:34
revision	2

sched_exp_time	161790.854000
ontime	161916.09624025
ontime4	161905.93224949
ontime5	161916.09624025
ontime6	161913.55524006
ontime7	161916.09624025
ontime8	161913.55525997
ontime9	161916.09624025
l1events	6163090

2.1.4 Events

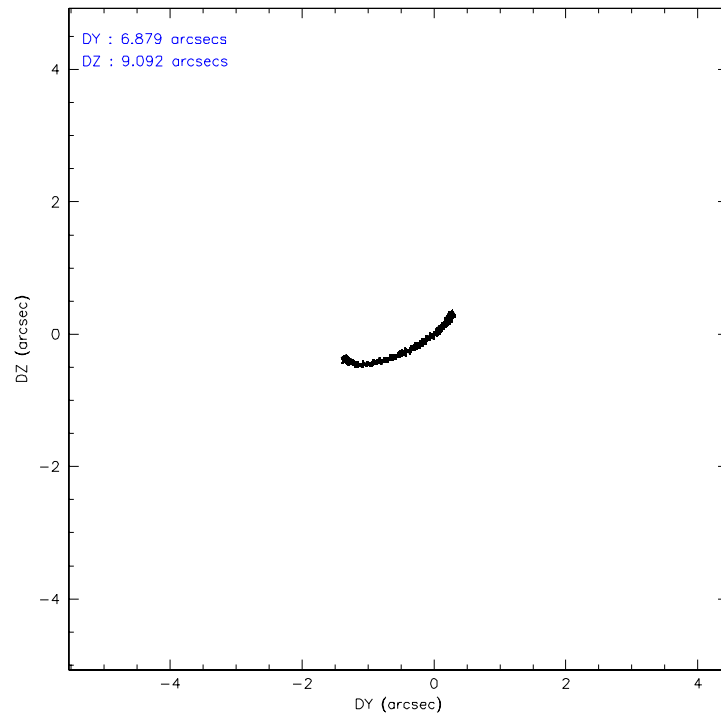
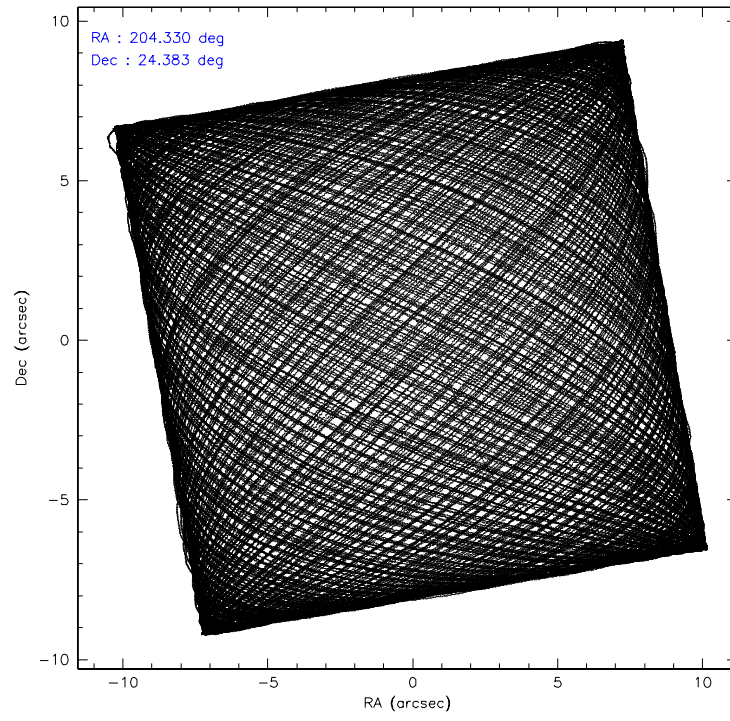
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	970709	1378678	831226	1122959	1046509	813009
rejected events	807335	691730	727442	677236	826180	709255
rejected %	83%	50%	87%	60%	78%	87%

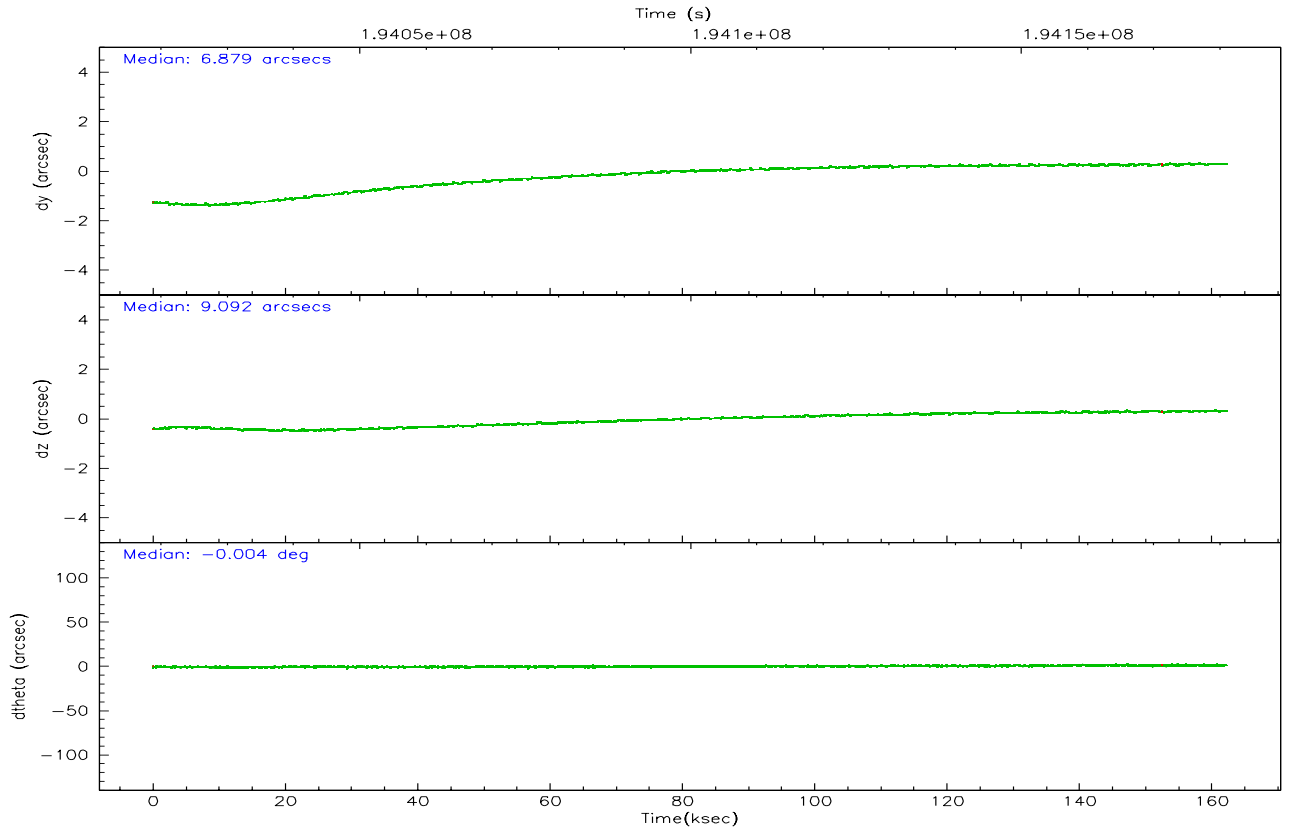
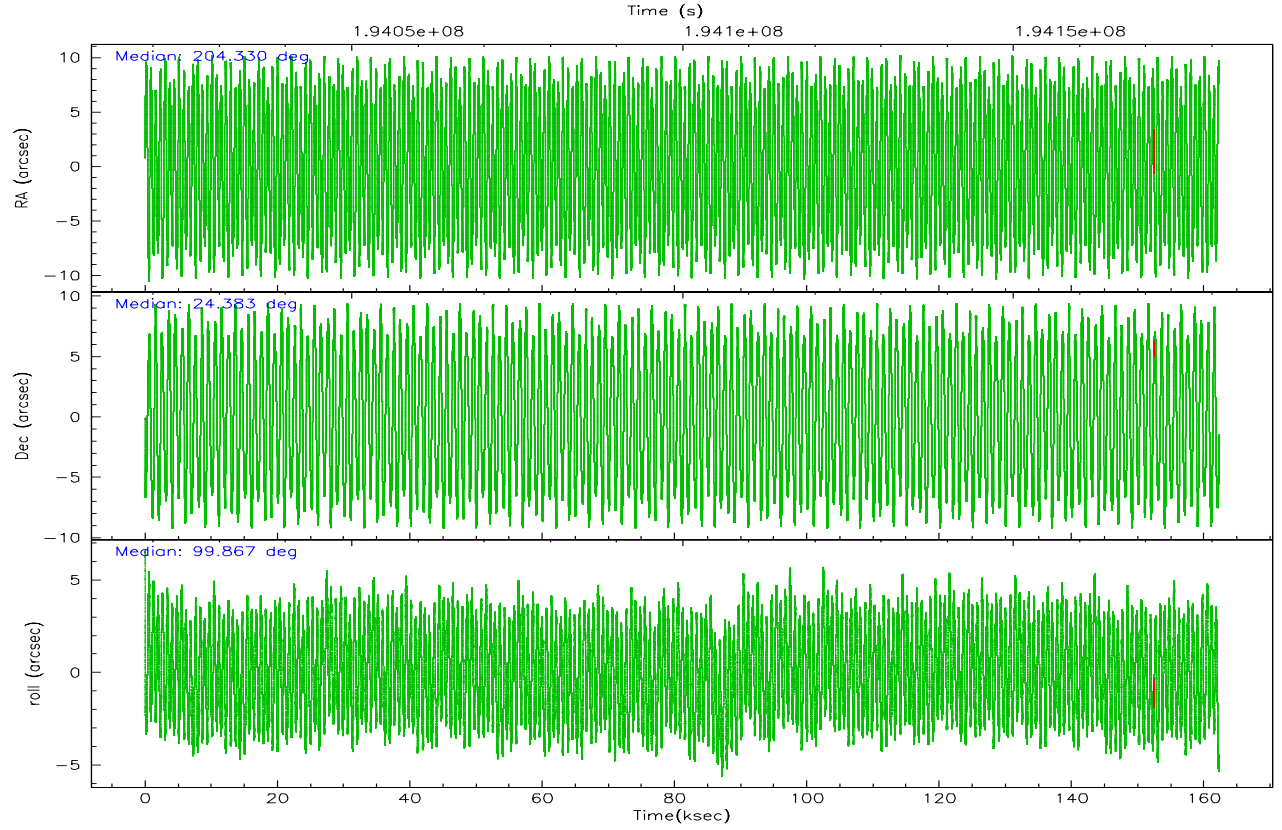
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	104049	164071	42217	30399	68653	43450
	10%	11%	5%	2%	6%	5%
grade 1 events	903	9584	304	752	598	421
	0%	0%	0%	0%	0%	0%
grade 2 events	21639	179974	20718	107277	47775	19422
	2%	13%	2%	9%	4%	2%
grade 3 events	10855	16533	10493	26711	23776	10912
	1%	1%	1%	2%	2%	1%
grade 4 events	10430	15015	10269	26121	22205	10342
	1%	1%	1%	2%	2%	1%
grade 5 events	35039	61911	37181	78602	48359	39325
	3%	4%	4%	6%	4%	4%
grade 6 events	16415	311423	20097	255252	57936	19640
	1%	22%	2%	22%	5%	2%
grade 7 events	771379	620167	689947	597845	777207	669497
	79%	44%	83%	53%	74%	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	204.349469	204.3300017242451	Subarray start row	1	1
Pointing Dec	24.362329	24.38297394301603	Subarray row count	774	774
Pointing Roll	99.705024	99.86969069869654	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	194019296.184000	194018160.42882			
Observation start date	2004-02-24T14:13:52	2004-02-24T13:56:00			
Observation end time	194181087.184000	194181401.93596			
Observation end date	2004-02-26T11:10:23	2004-02-26T11:16:41			
Read mode	TIMED	TIMED			

2.3 Aspect



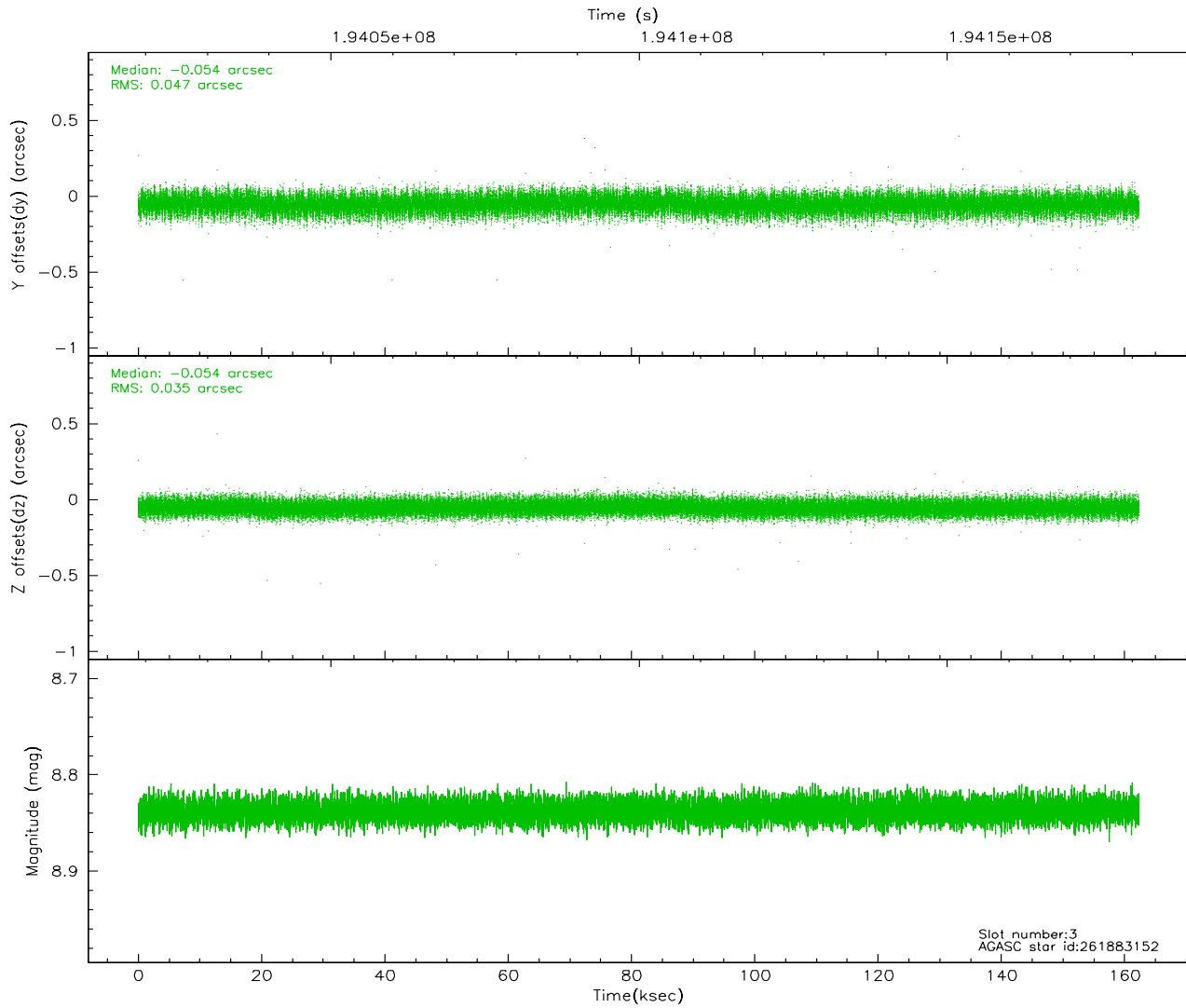
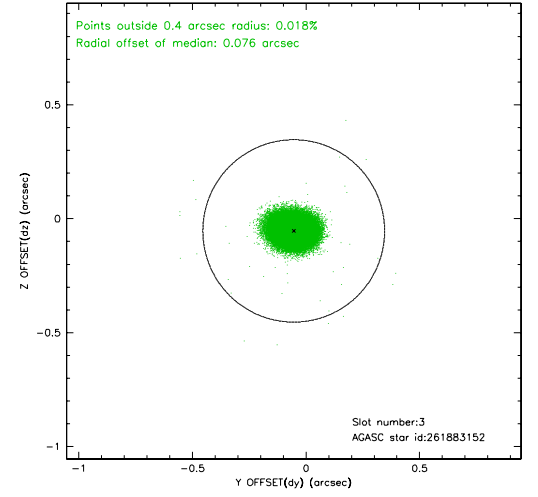
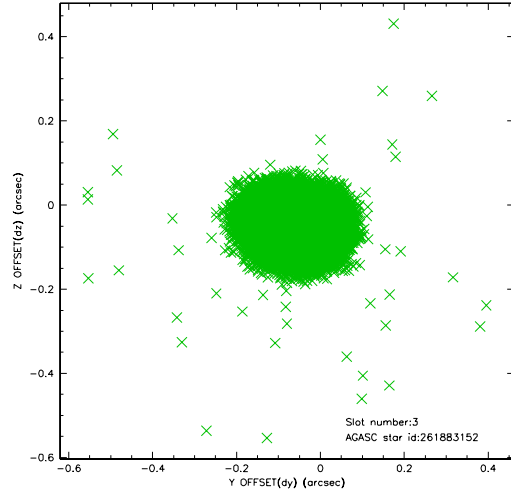


Slot Statistics

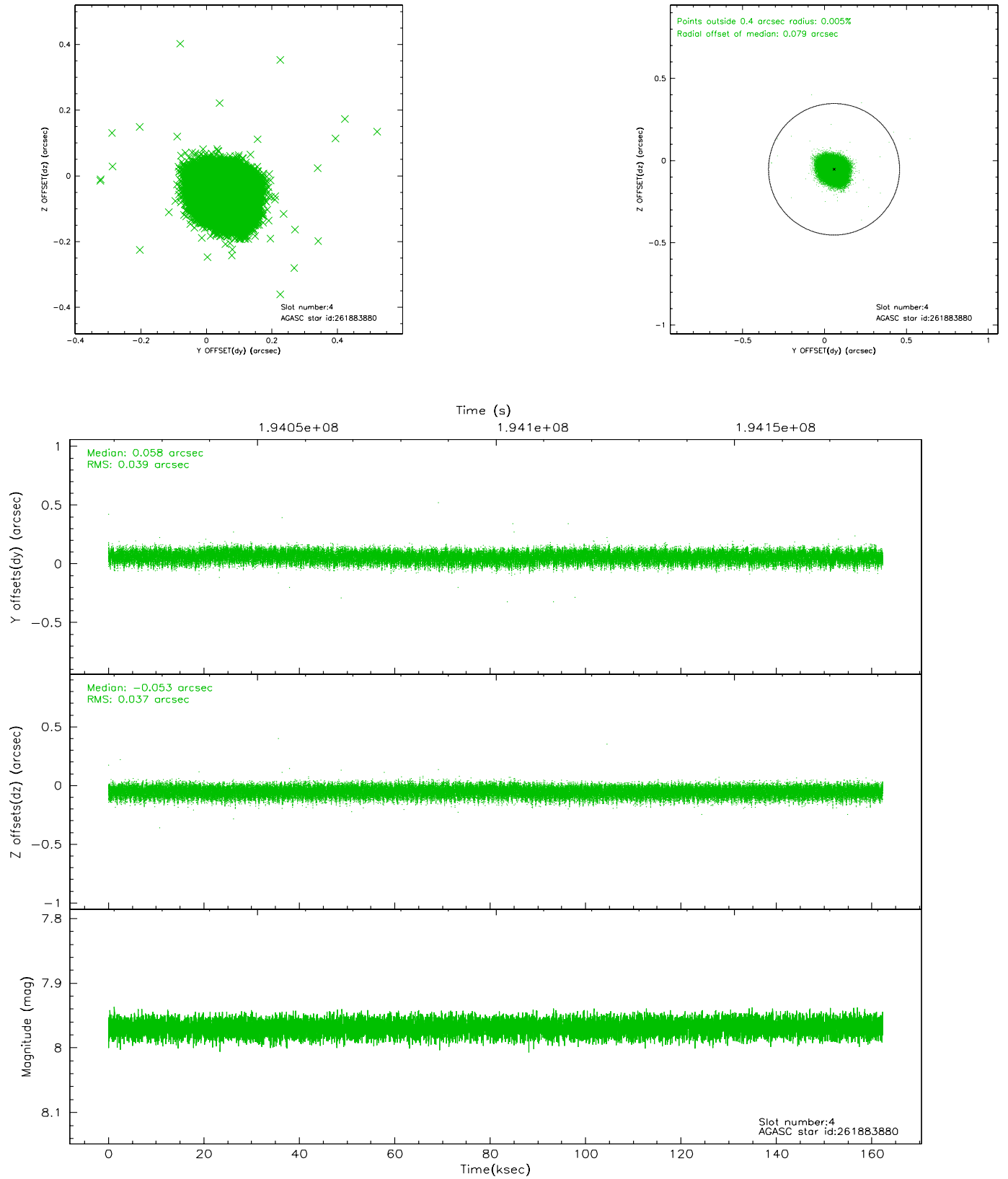
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	39579	-0.064	-0.029	0.017	0.024	0.000000	0.000000	-759.24	-1792.43
1	FID	ACIS-S-4	7.20	39579	0.065	0.039	0.025	0.044	0.000000	0.000000	2154.21	116.23
2	FID	ACIS-S-5	7.23	39579	-0.028	0.000	0.012	0.028	0.000000	0.000000	-1812.19	109.73
3	GUIDE	261883152	8.84	79129	-0.054	-0.054	0.061	0.102	203.788287	24.806639	1889.66	1537.67
4	GUIDE	261883880	7.97	79141	0.058	-0.053	0.058	0.092	204.025503	23.933947	-1339.03	1310.53
5	GUIDE	261884240	8.09	79149	-0.013	0.106	0.058	0.099	204.721443	24.250625	-600.29	-1135.73
6	GUIDE	261885848	7.99	79146	0.066	0.030	0.056	0.093	204.737886	24.131748	-1031.36	-1118.21
7	GUIDE	261752064	9.54	79065	-0.056	-0.026	0.099	0.161	203.623563	24.917606	2376.08	1998.43

2.4 Star Slots

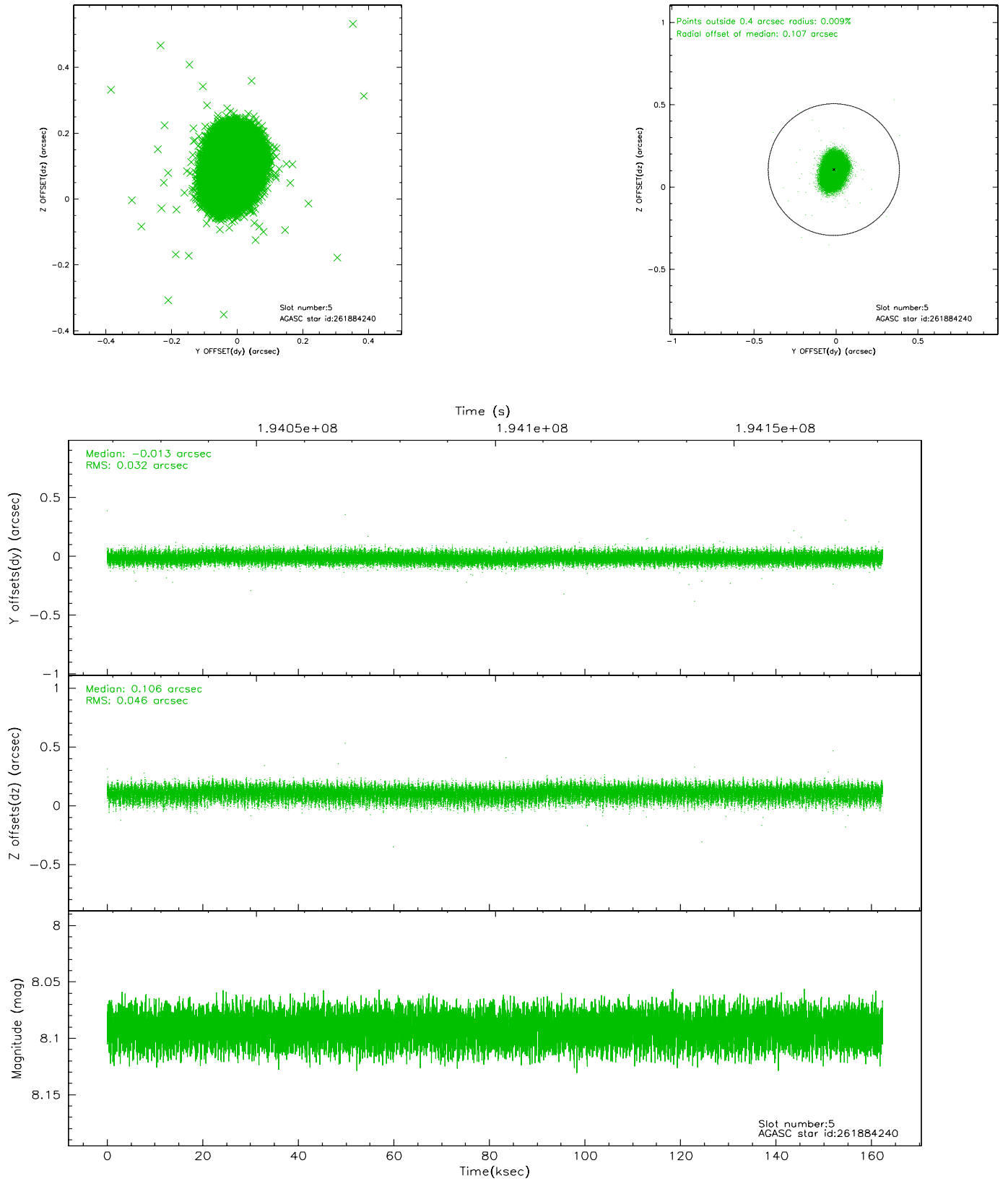
2.4.1 Slot 3



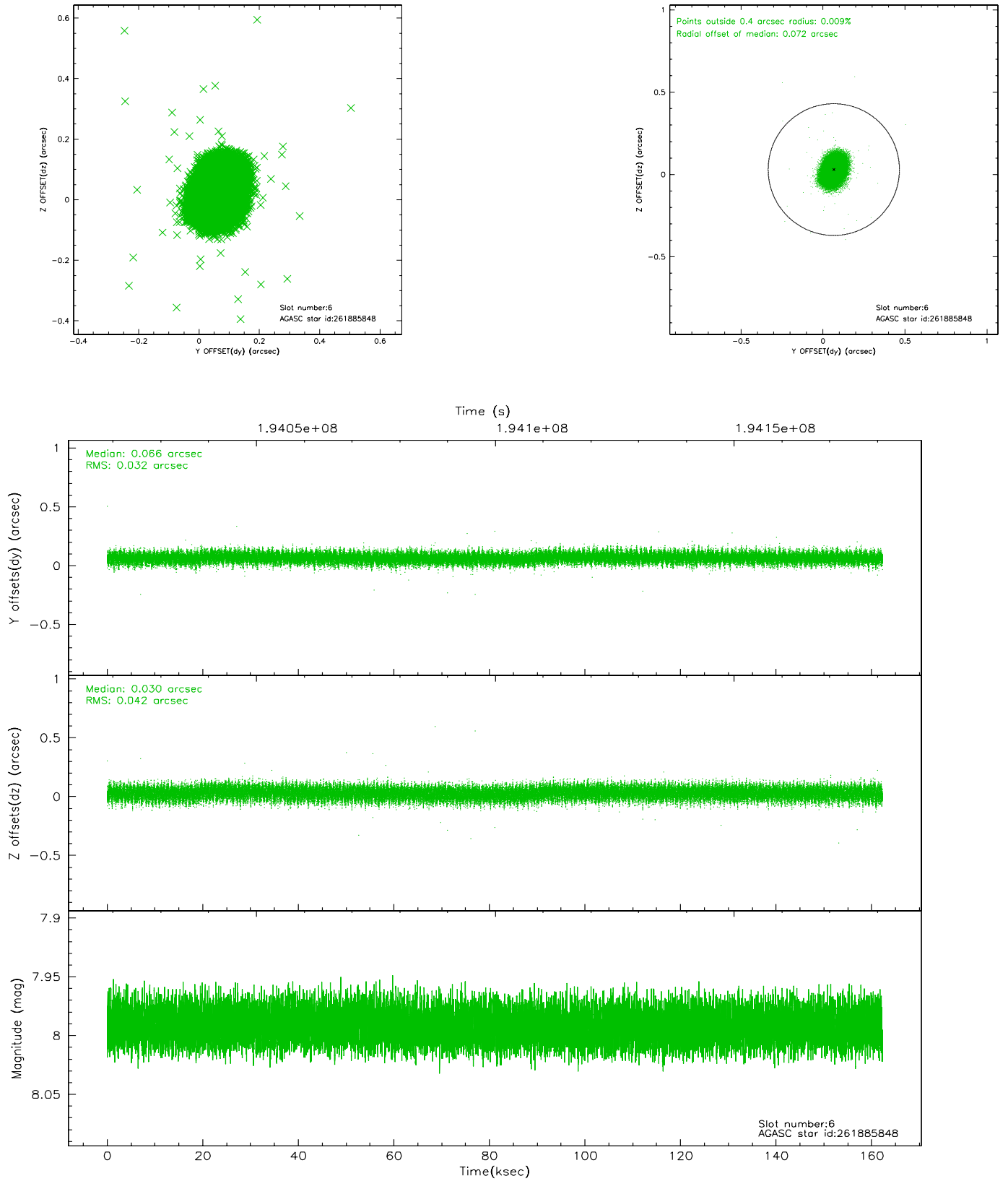
2.4.2 Slot 4



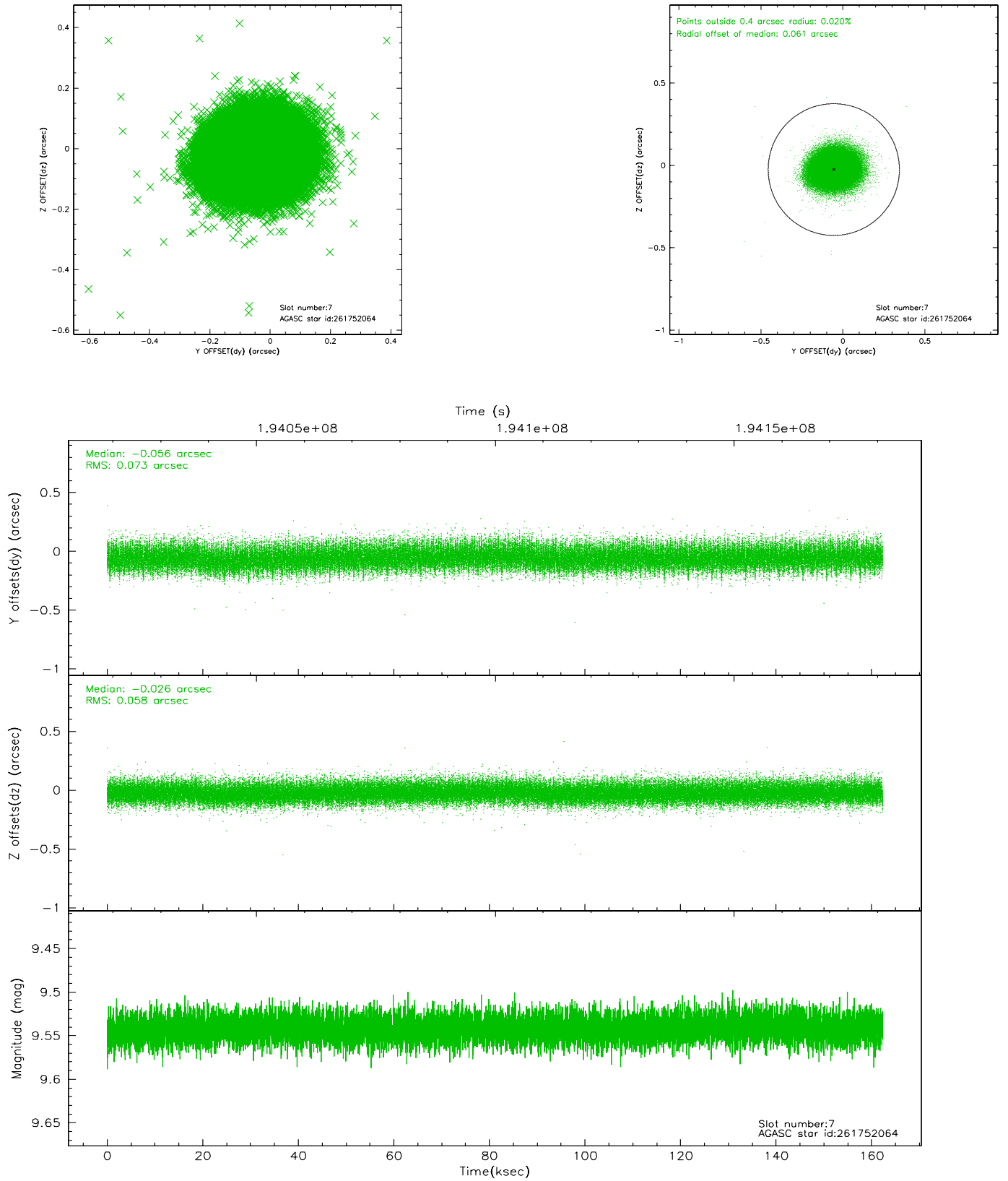
2.4.3 Slot 5



2.4.4 Slot 6

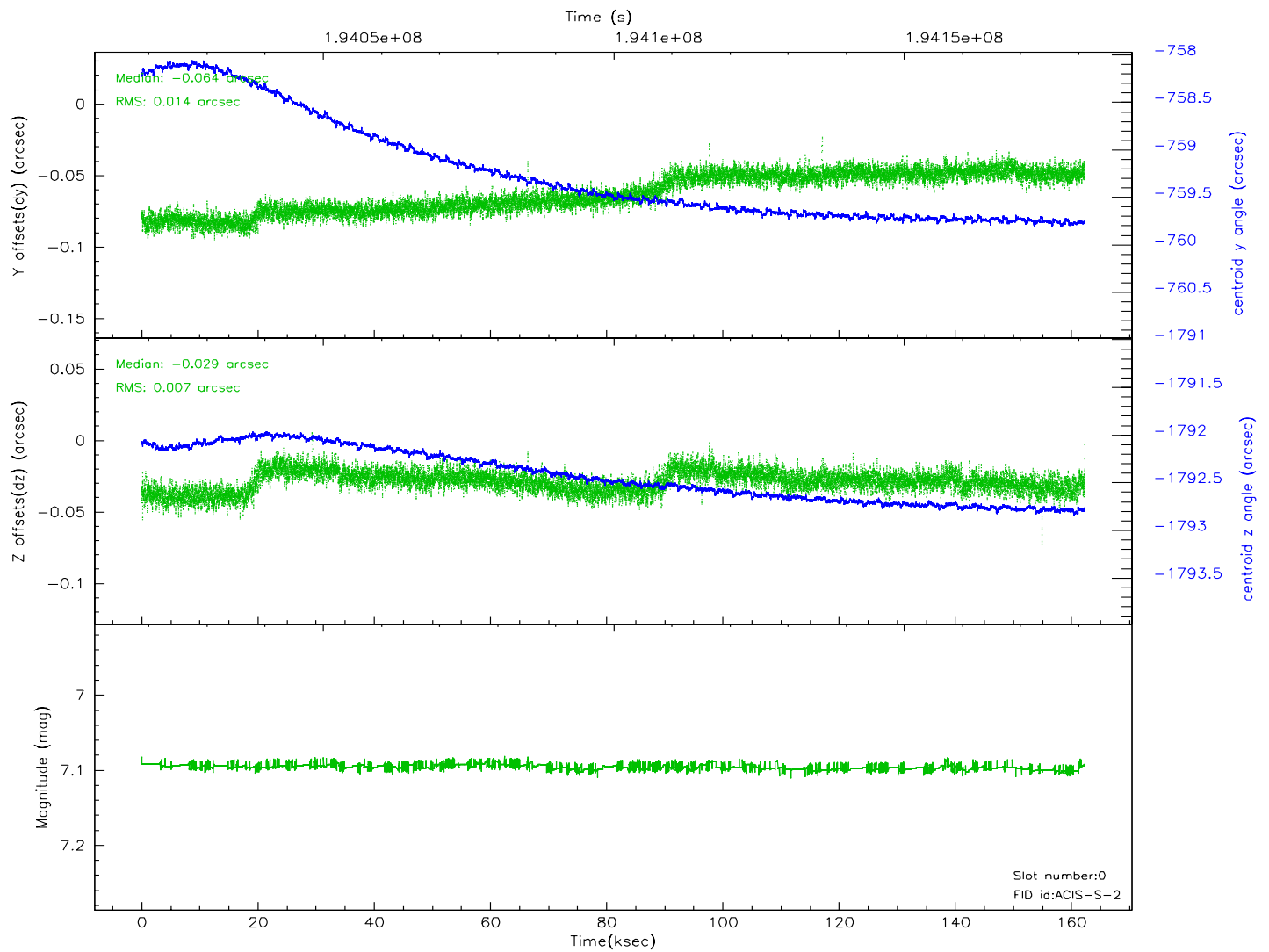
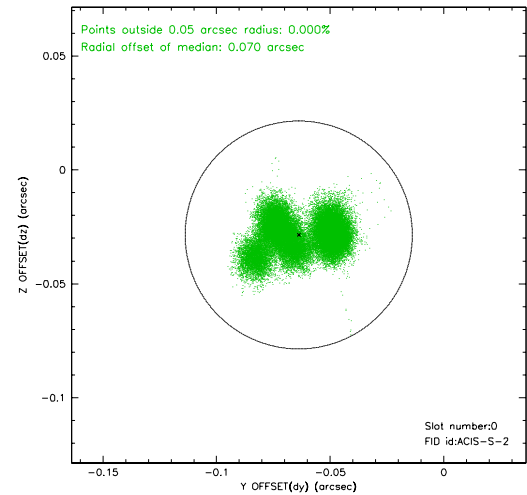
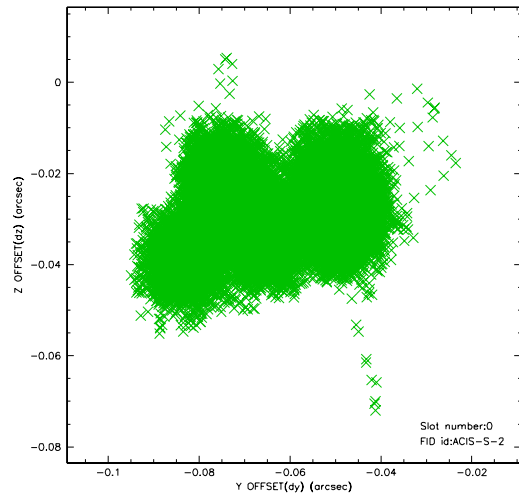


2.4.5 Slot 7

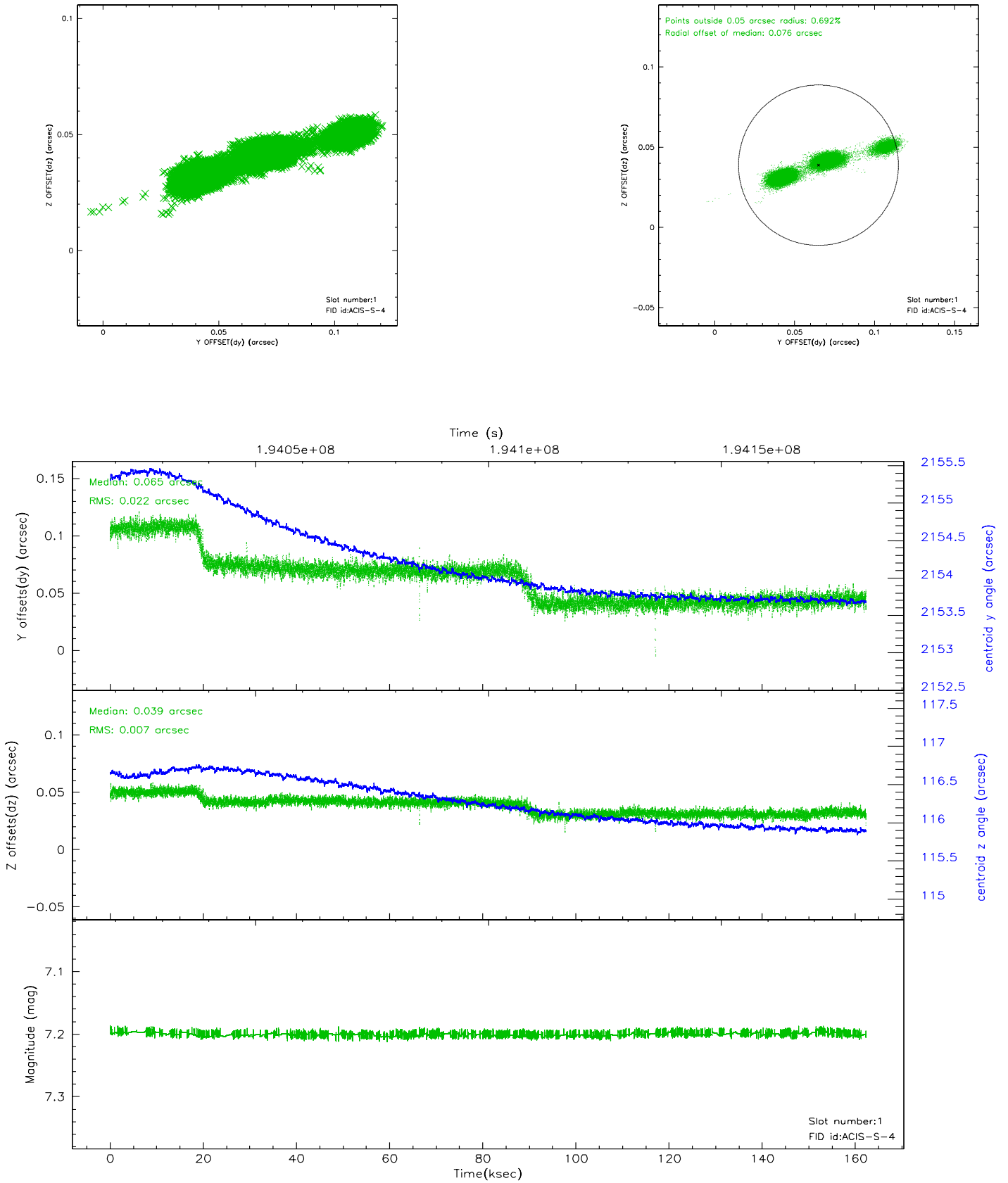


2.5 FID Slots

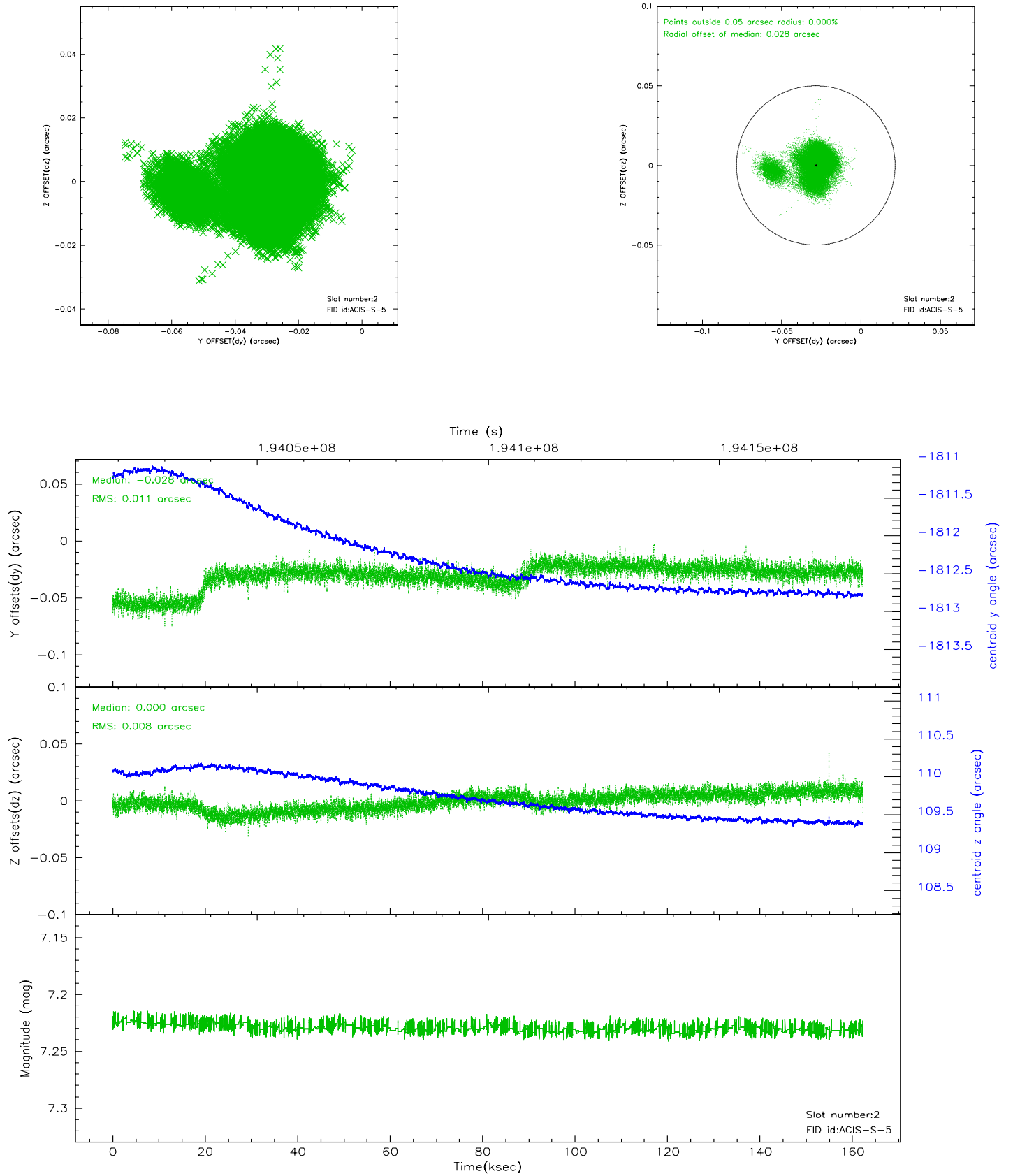
2.5.1 Slot 0



2.5.2 Slot 1

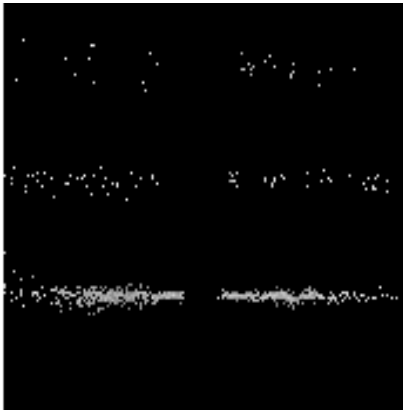


2.5.3 Slot 2

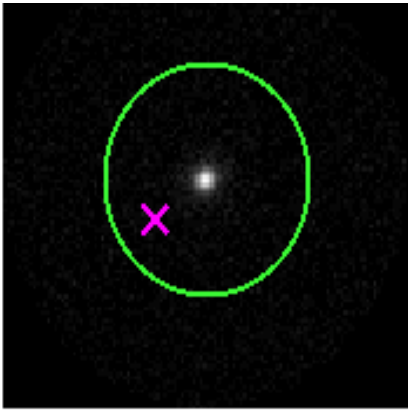


3 Gratings

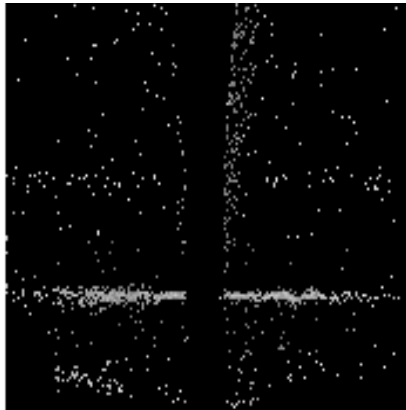
3.1 HEG Arm



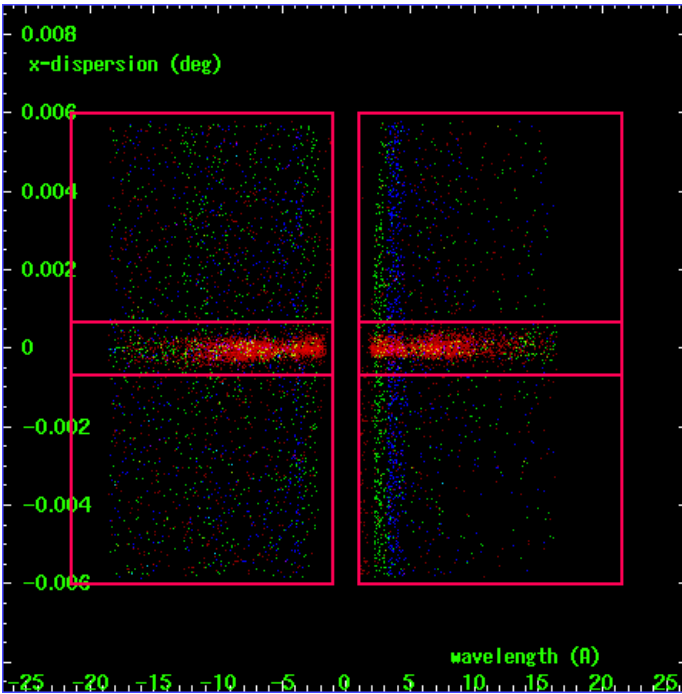
HEG Order Sort 123



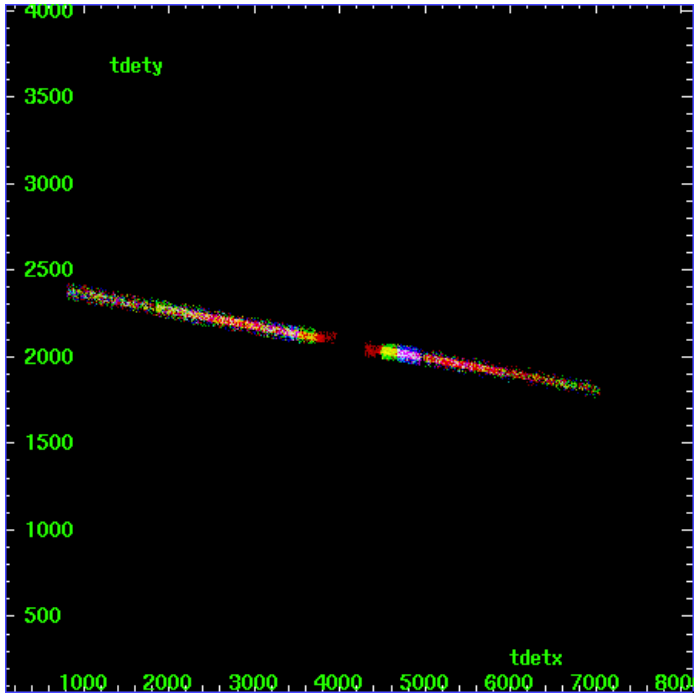
HEG Zero Order



HEG Order Sort ALL

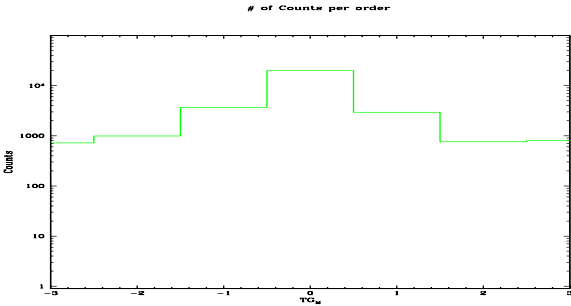


Spot Image HEG

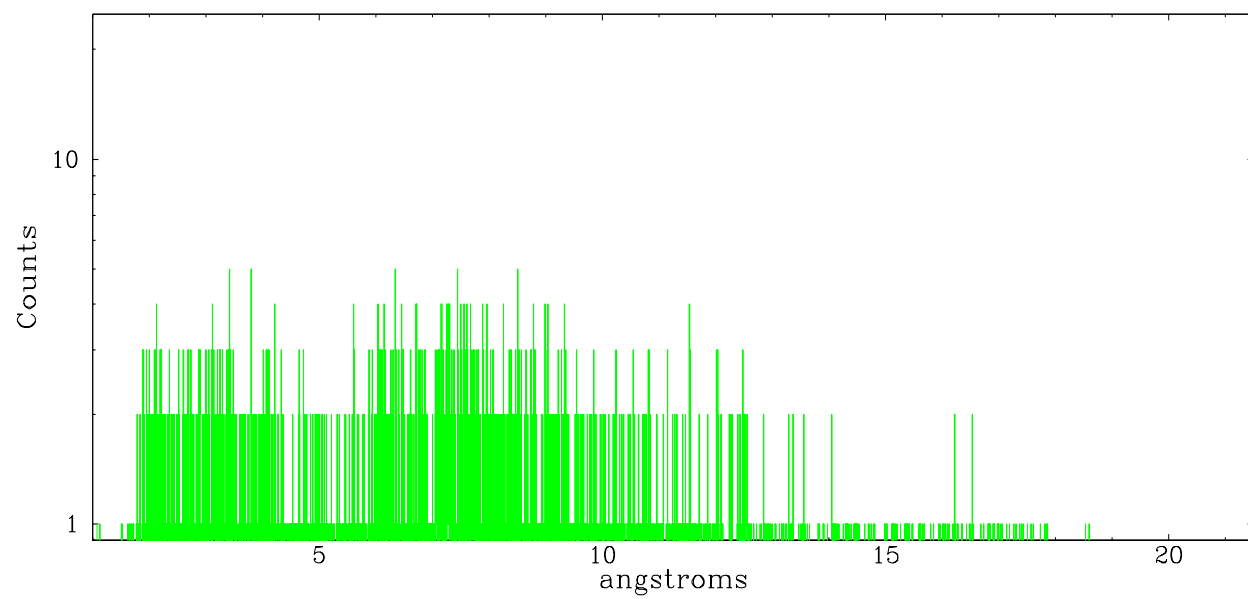


Full Detector HEG

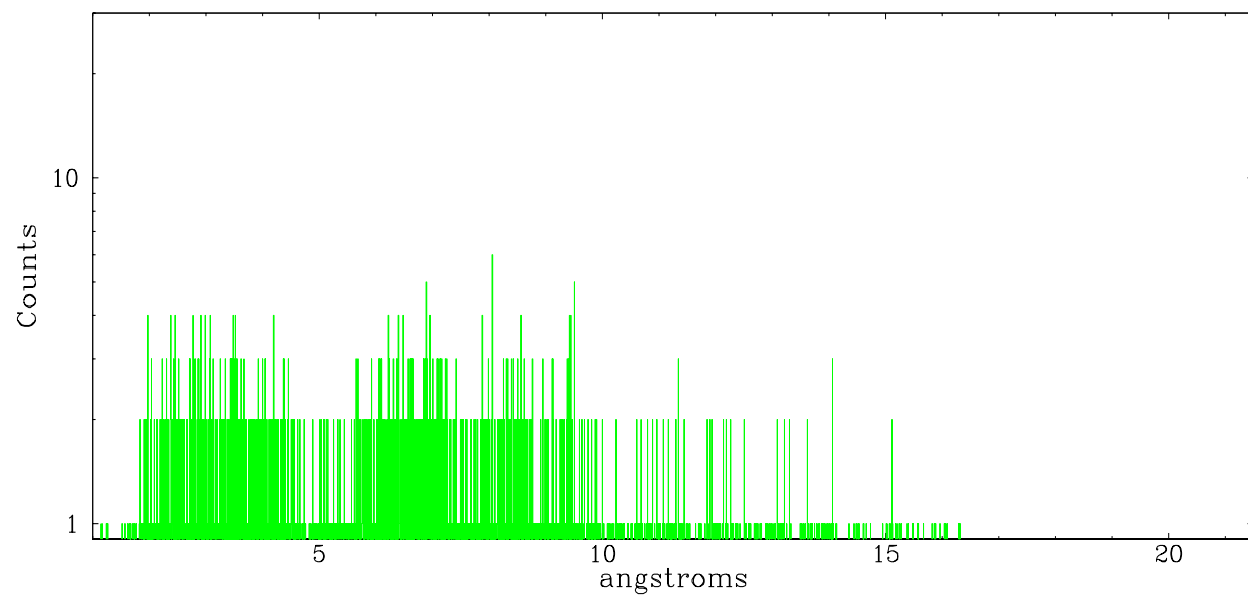
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	722	992	3669	19778	2941	760	801



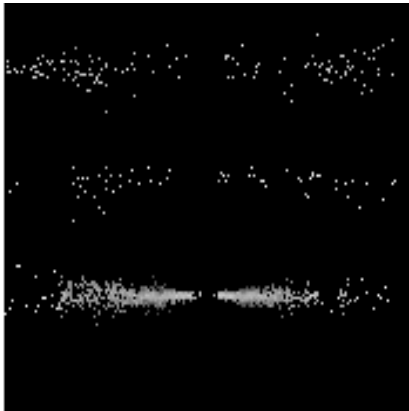
heg order -1



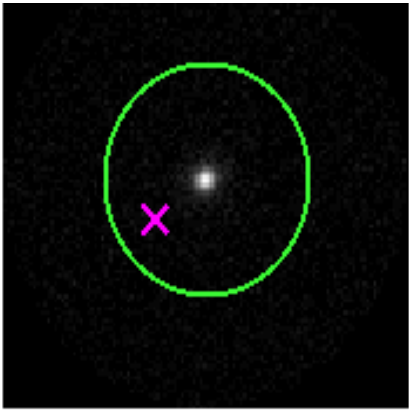
heg order +1



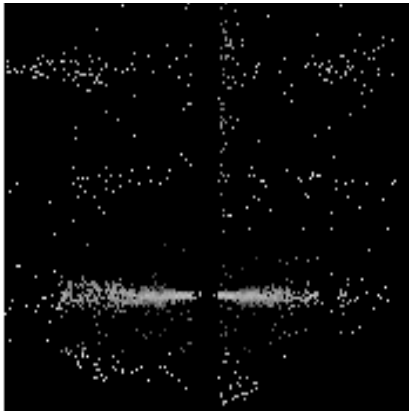
3.2 MEG Arm



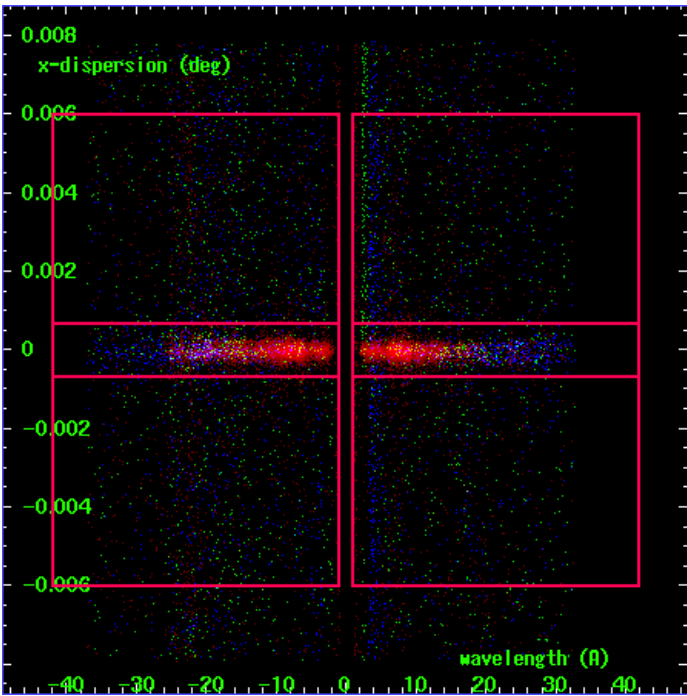
MEG Order Sort 123



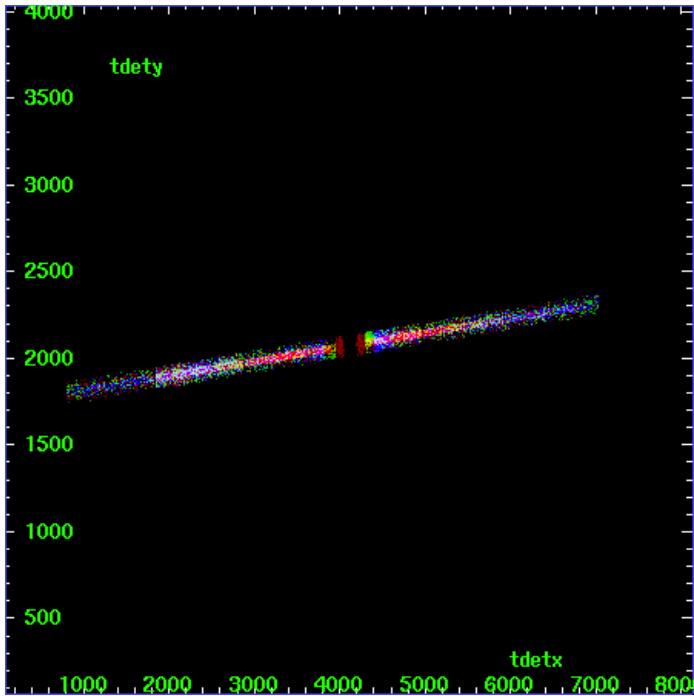
MEG Zero Order



MEG Order Sort ALL

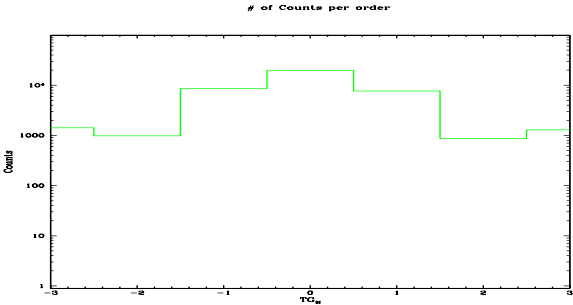


Spot Image MEG

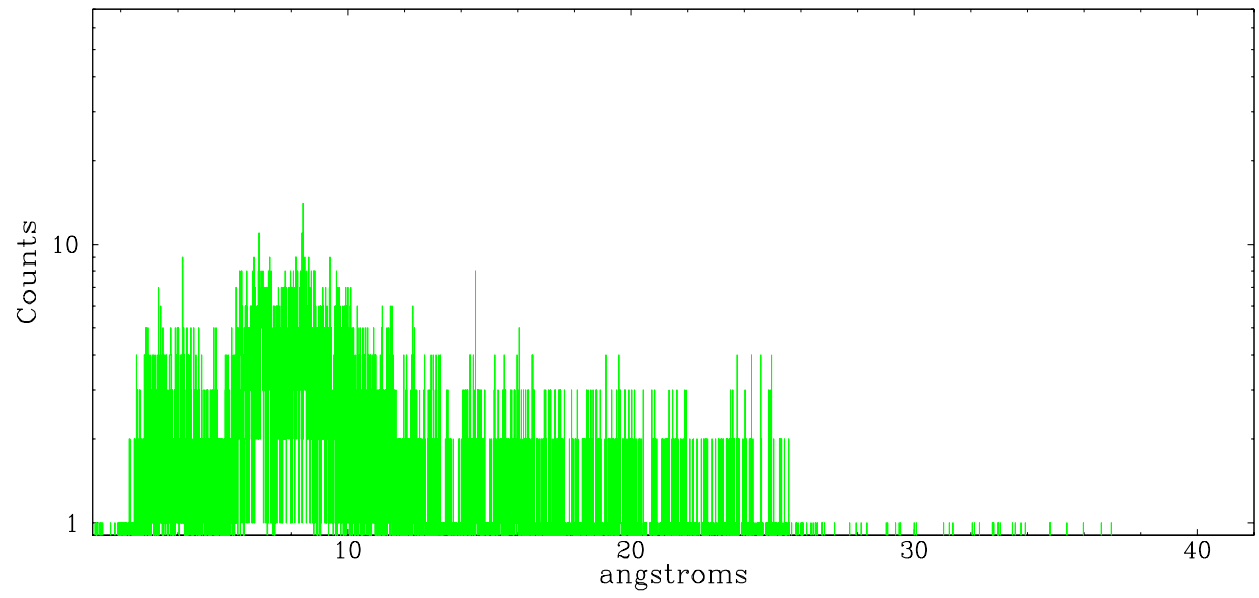


Full Detector MEG

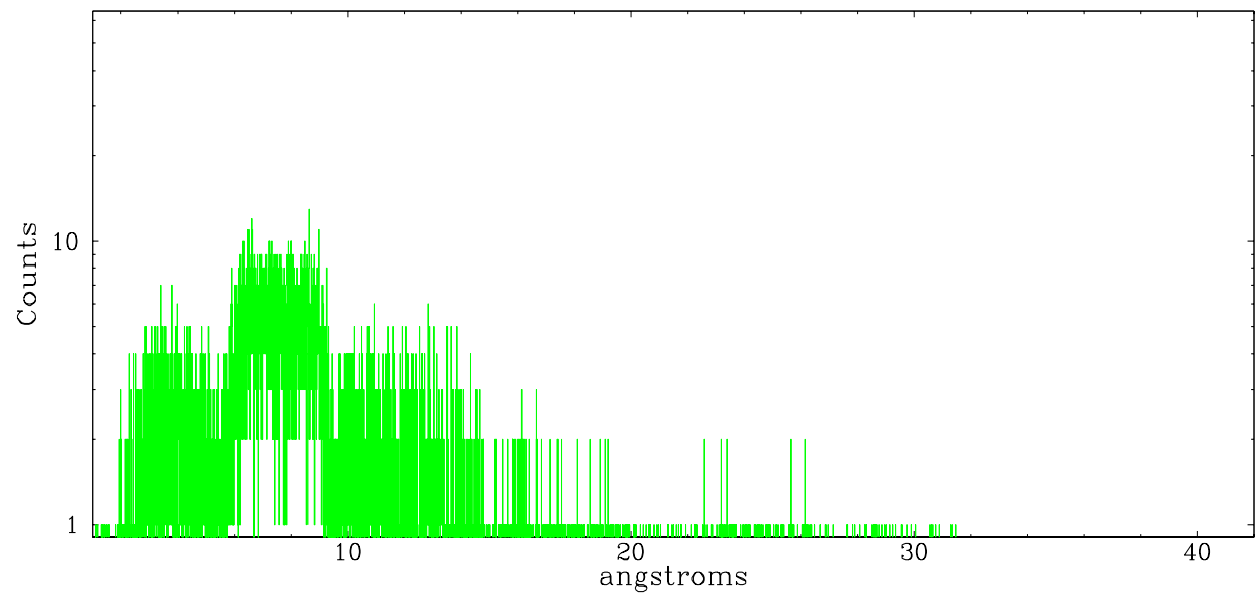
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1424	981	8604	19778	7654	862	1291



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	161.902

A.2 Comments

The ACIS focal plane temperature increased by more than a degree during the observation, and was above ACIS calibration limits for the last 5 ksec.