

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 3148 - L2 Version 001
Chandra X-Ray Center

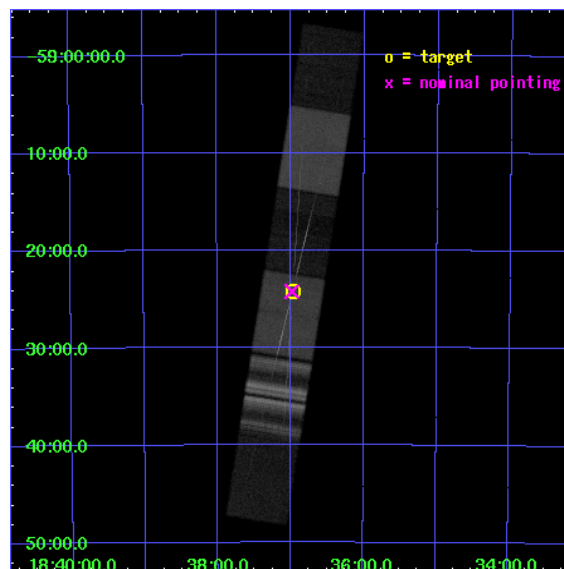
L2 Processing Date : Sep 8 2006

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

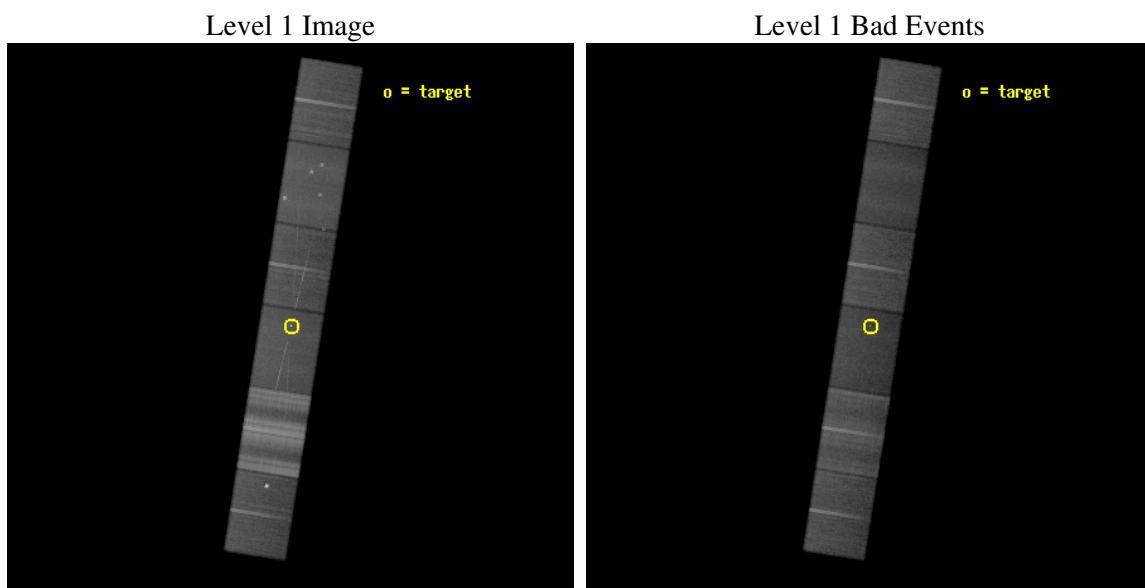
seq_num	700587
obs_id	3148
title	CHANDRA HETG OBSERVATION OF THE SEYFERT 2 GALAXY IRAS 18325-5926
observer	Prof. Claude Canizares
object	IRAS 18325-5926
dtcycle	0
cycle	P
ra_targ	279.241667
dec_targ	-59.402778
ra_nom	279.24538337751
dec_nom	-59.403932911797
roll_nom	99.019978585353
revision	2
ontime	56894.959009841
livetime	55976.056073341
ontime4	56892.418019667
ontime5	56897.5
ontime6	56897.5
ontime7	56894.959009841
ontime8	56897.5
ontime9	56897.5
l2events	618655



2 OBI

2.1 OBI

2.1.1 Images

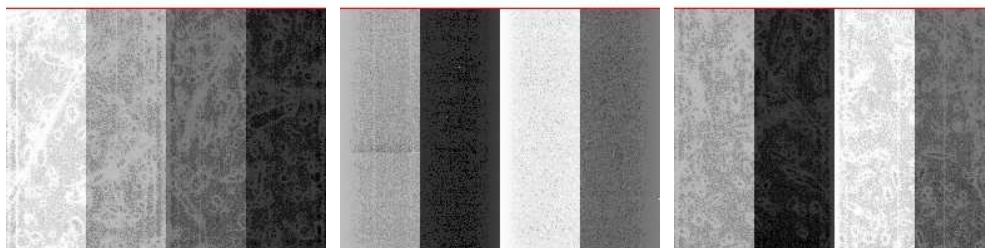


2.1.2 Bias

Chip 4

Chip 5

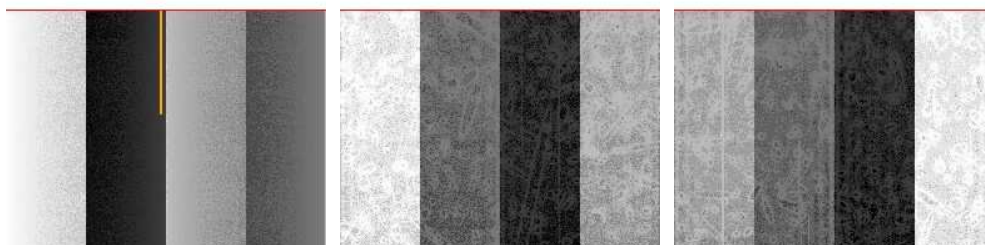
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	1
ascdsver	7.6.8.1
caldsver	3.2.3
date	2006-09-08T09:49:11
revision	2

sched_exp_time	57000.000000
ontime	56898.257195055
ontime4	56895.71617496
ontime5	56900.798185214
ontime6	56900.798185214
ontime7	56898.257195055
ontime8	56900.798155293
ontime9	56900.798155293
l1events	2597302

2.1.4 Events

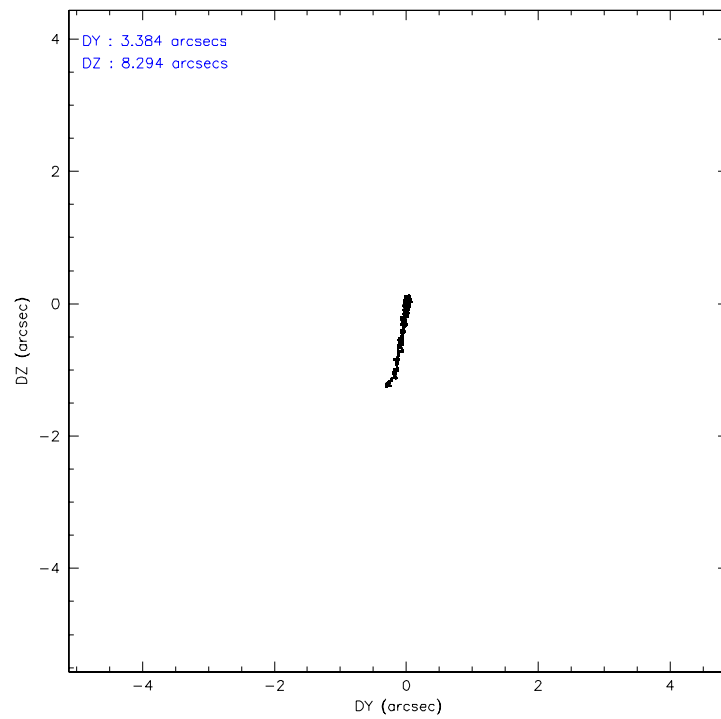
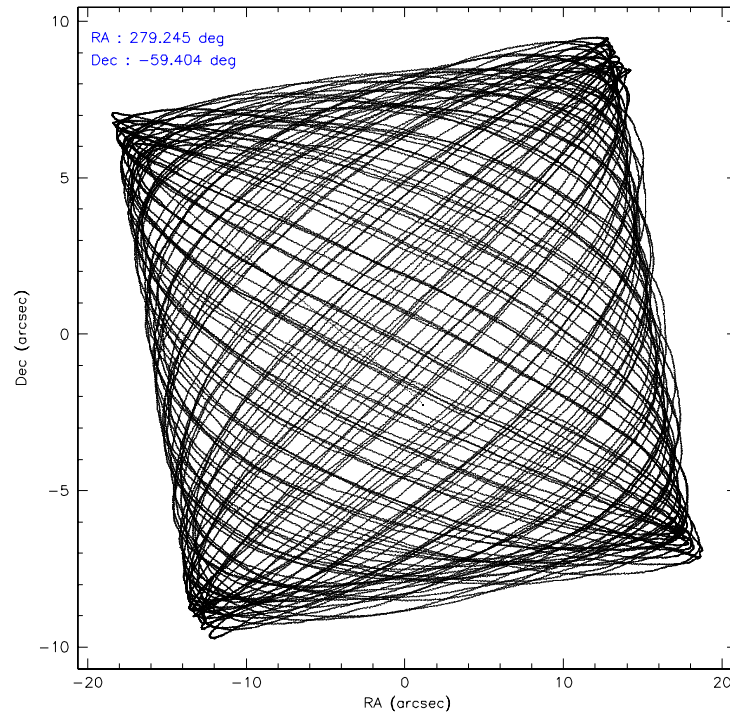
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	370055	408376	348291	375421	761945	333214
rejected events	310191	225008	295557	214603	356335	275730
rejected %	83%	55%	84%	57%	46%	82%

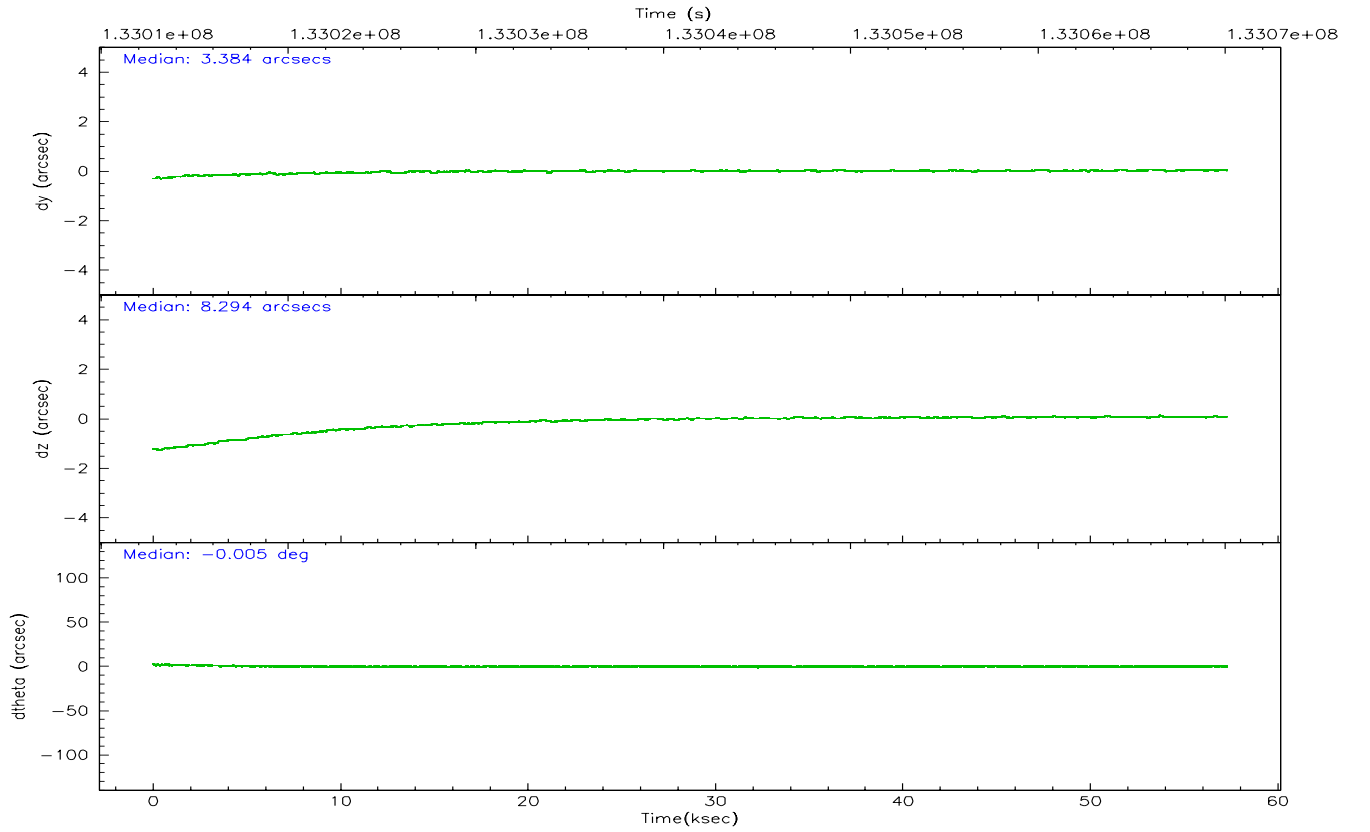
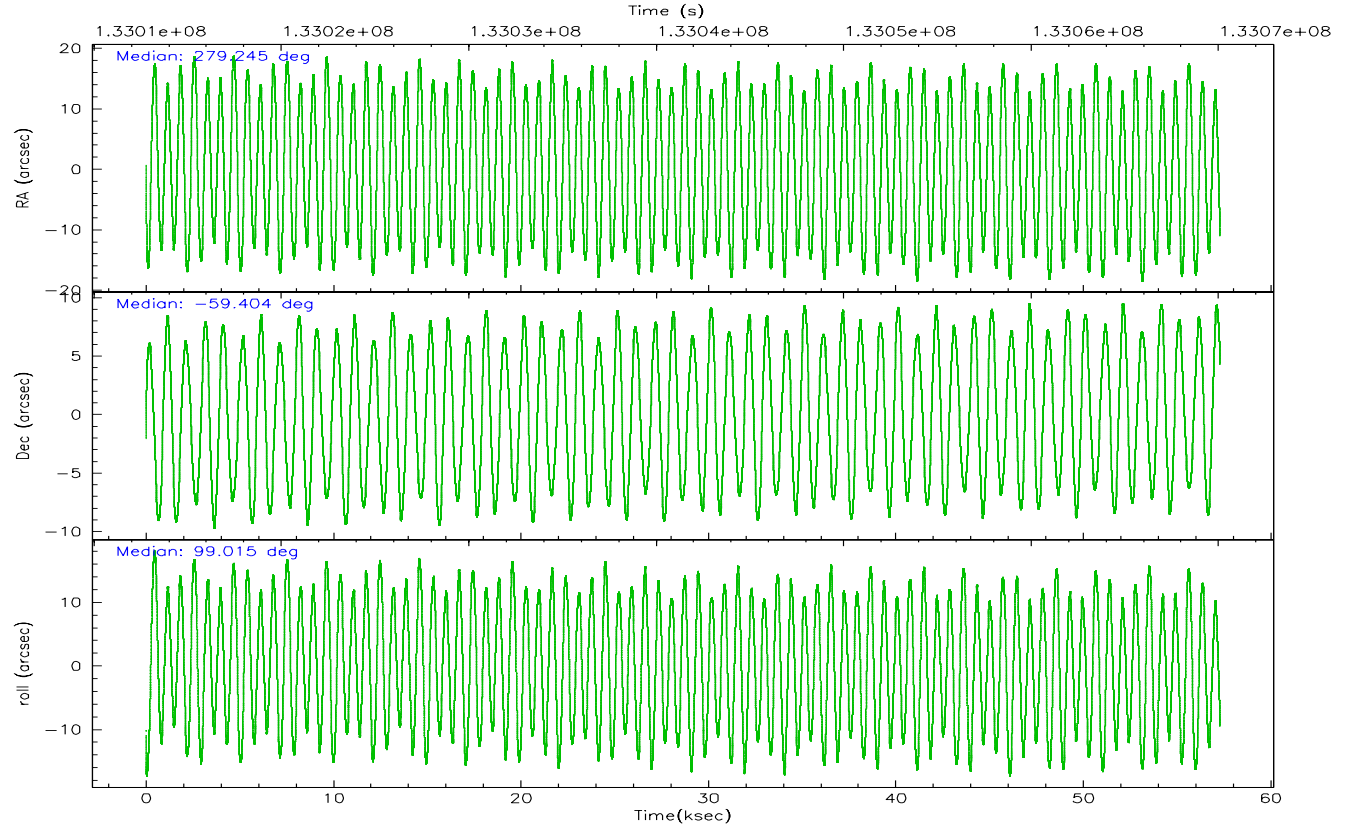
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	24081	21780	23532	12741	117336	29625
	6%	5%	6%	3%	15%	8%
grade 1 events	248	538	143	379	960	165
	0%	0%	0%	0%	0%	0%
grade 2 events	18887	53948	13299	41366	56224	11970
	5%	13%	3%	11%	7%	3%
grade 3 events	3739	6595	3613	11212	75891	3560
	1%	1%	1%	2%	9%	1%
grade 4 events	3831	6143	3662	10568	65896	3354
	1%	1%	1%	2%	8%	1%
grade 5 events	9983	19910	11346	25752	18887	11303
	2%	4%	3%	6%	2%	3%
grade 6 events	9332	94908	8629	84948	90266	8976
	2%	23%	2%	22%	11%	2%
grade 7 events	299954	204554	284067	188455	336485	264261
	81%	50%	81%	50%	44%	79%

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	279.279619	279.2453833775141	Subarray start row	1	1
Pointing Dec	-59.424901	-59.40393291179693	Subarray row count	774	774
Pointing Roll	98.892828	99.01997858535259	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	133013087.184000	133012068.97295			
Observation start date	2002-03-20T12:03:43	2002-03-20T11:47:48			
Observation end time	133070087.184000	133071547.16286			
Observation end date	2002-03-21T03:53:43	2002-03-21T04:19:07			
Read mode	TIMED	TIMED			

2.3 Aspect



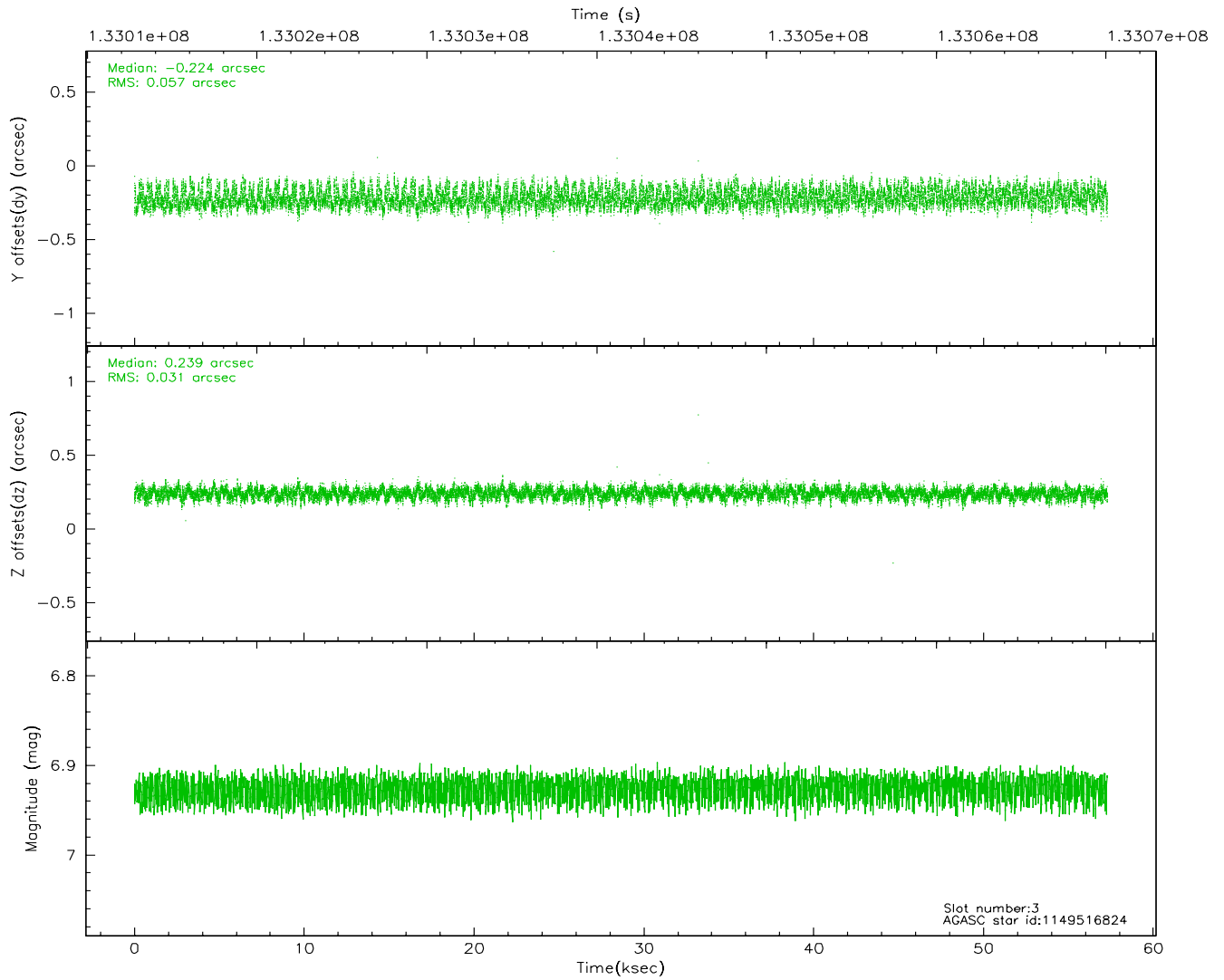
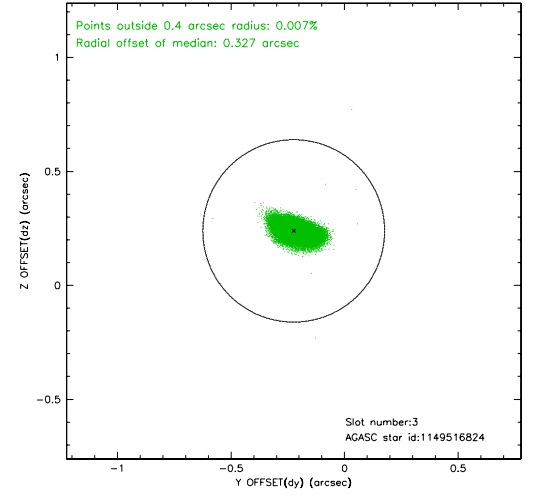
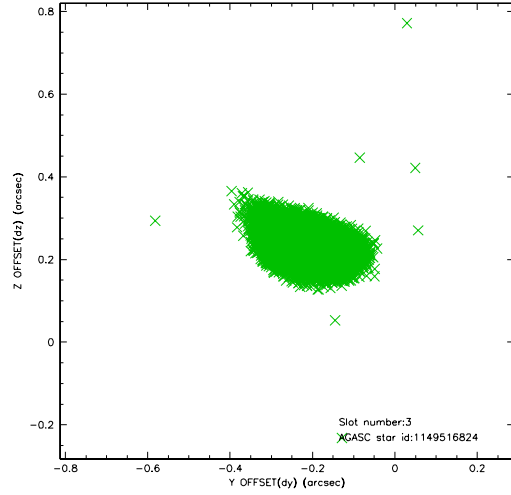


Slot Statistics

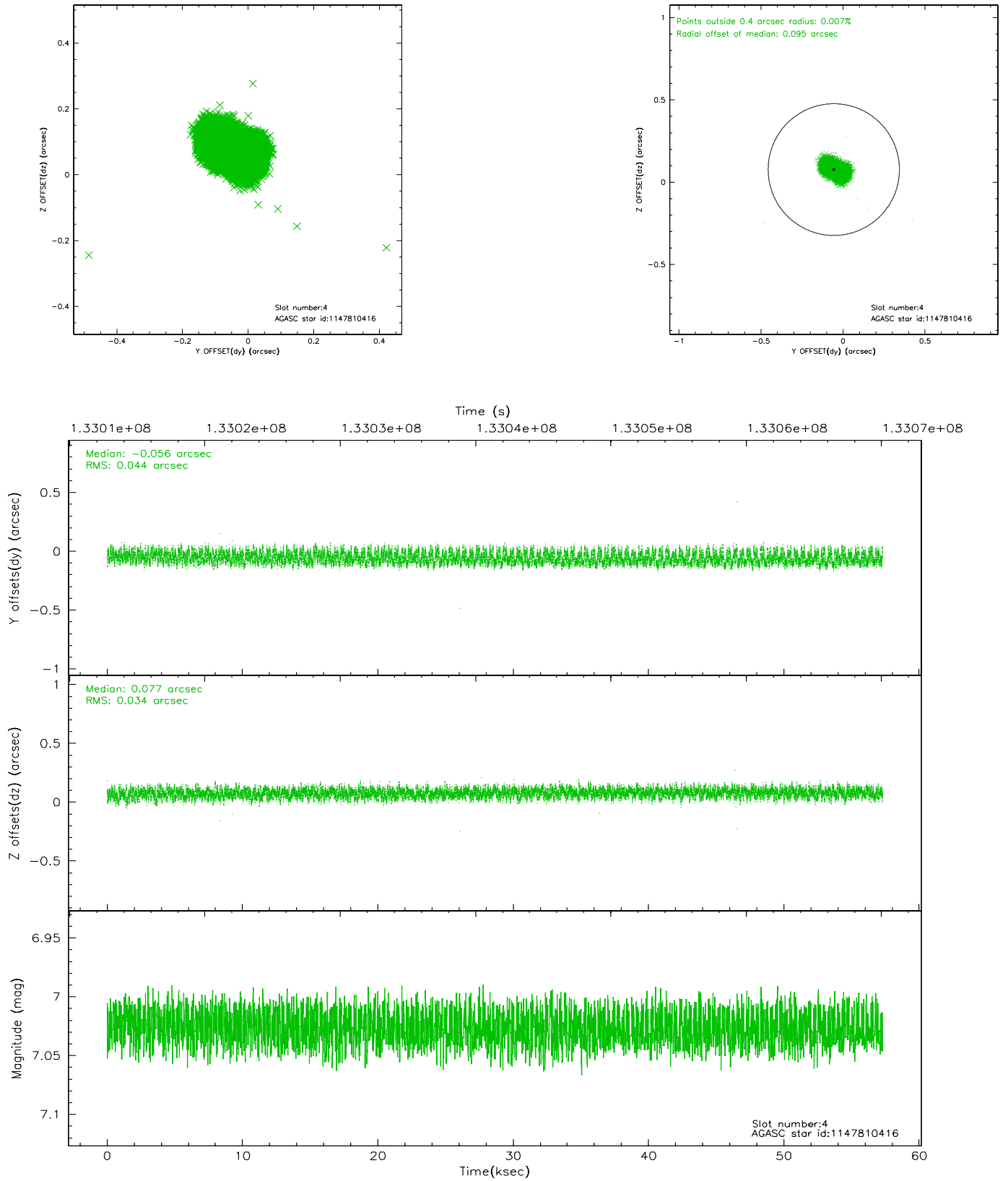
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	13977	-0.041	0.002	0.008	0.018	0.000000	0.000000	-755.81	-1791.47
1	FID	ACIS-S-4	7.20	13977	-0.021	0.020	0.006	0.010	0.000000	0.000000	2157.46	117.11
2	FID	ACIS-S-5	7.23	13977	0.031	-0.013	0.007	0.016	0.000000	0.000000	-1808.67	110.63
3	GUIDE	1149516824	6.93	27953	-0.224	0.239	0.068	0.114	280.087590	-58.779899	2053.21	-1846.84
4	GUIDE	1147810416	7.03	27954	-0.056	0.077	0.061	0.093	279.820613	-59.121800	920.65	-1155.53
5	GUIDE	1149514016	7.69	27952	0.120	0.092	0.051	0.087	280.111504	-59.726541	-1314.11	-1322.48
6	GUIDE	1188567688	9.03	27945	0.273	-0.223	0.091	0.145	278.293322	-60.146121	-2303.81	2149.06
7	GUIDE	1147807520	9.27	27944	-0.120	-0.179	0.086	0.143	278.003382	-59.016072	1798.16	2112.60

2.4 Star Slots

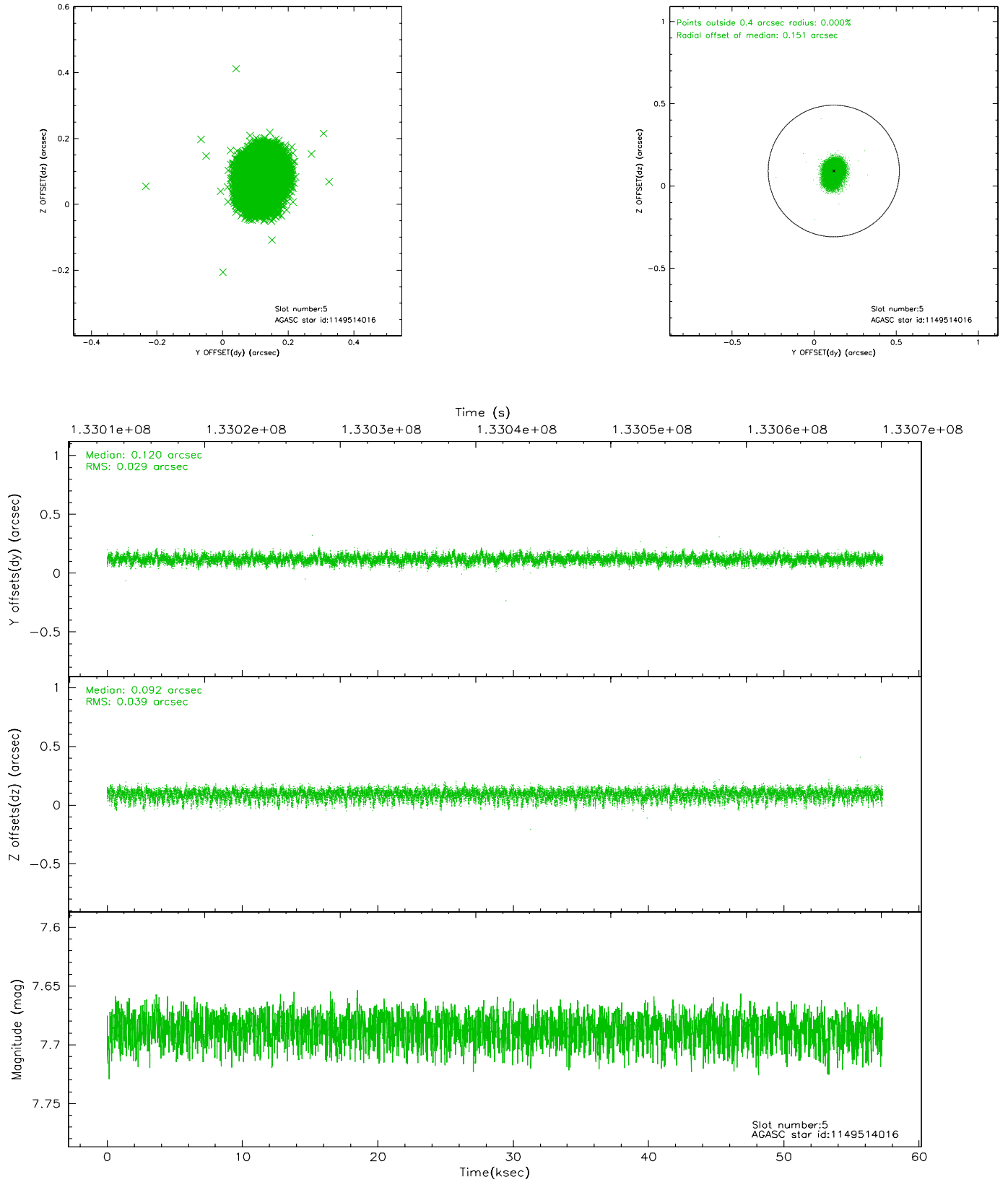
2.4.1 Slot 3



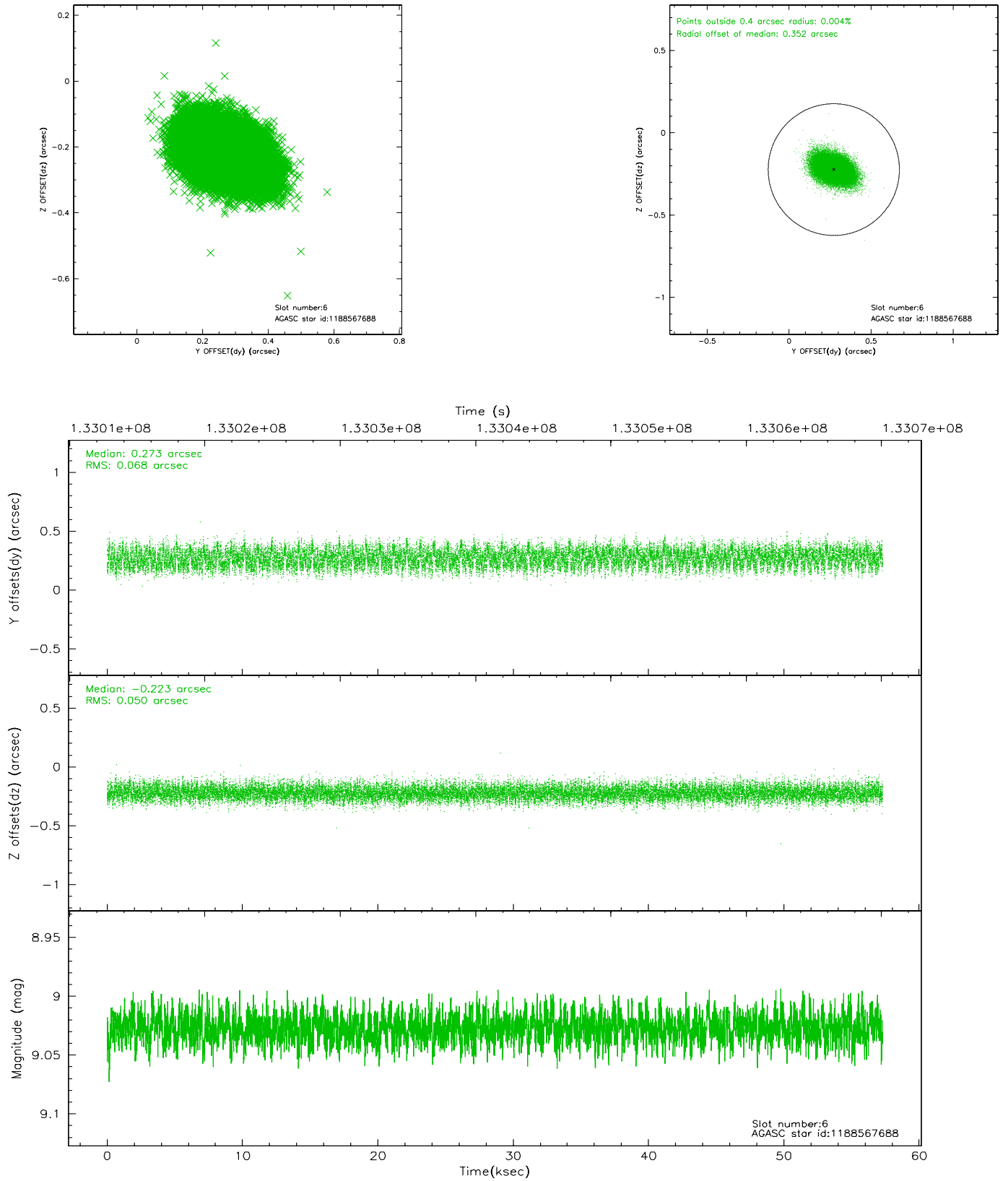
2.4.2 Slot 4



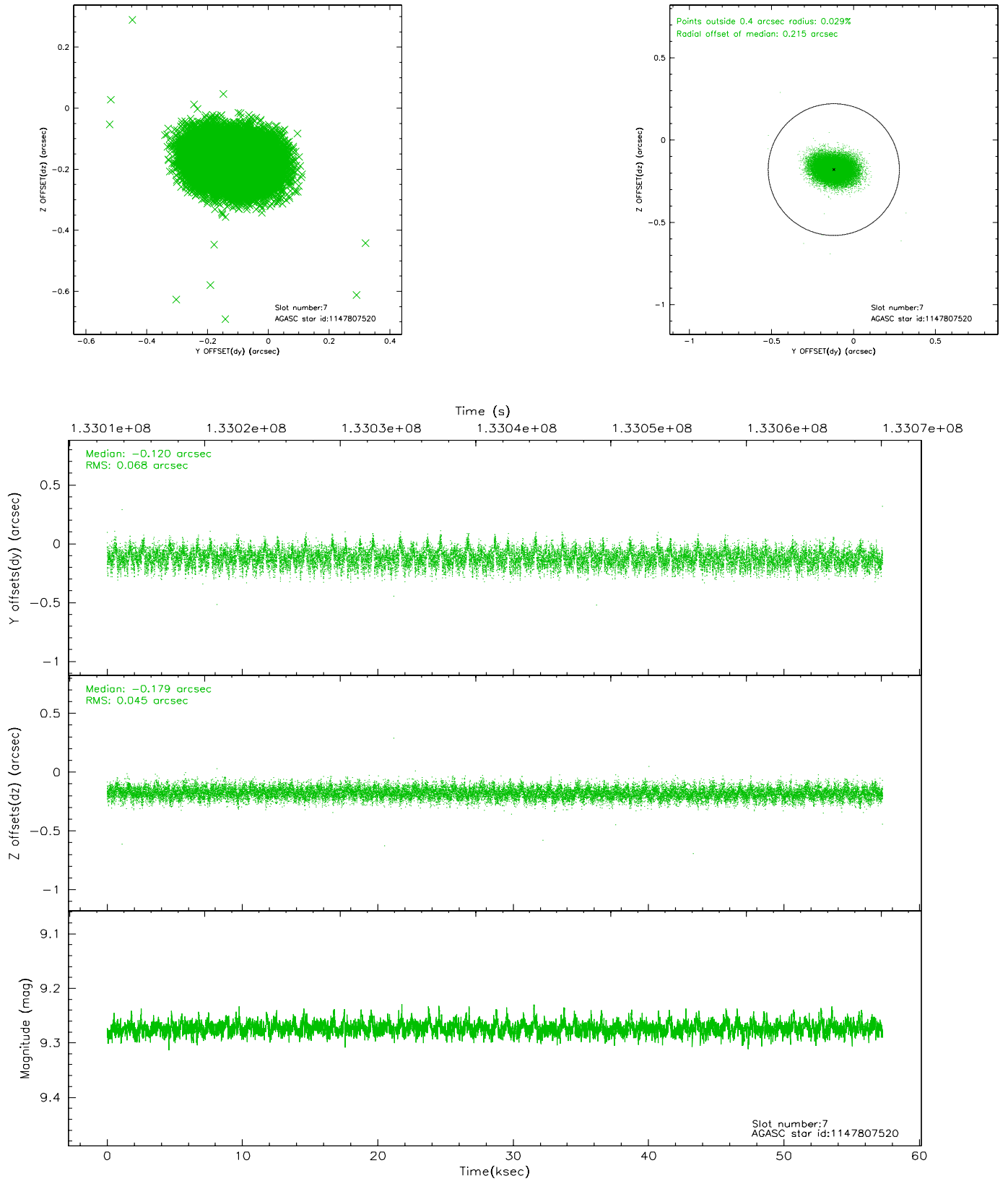
2.4.3 Slot 5



2.4.4 Slot 6

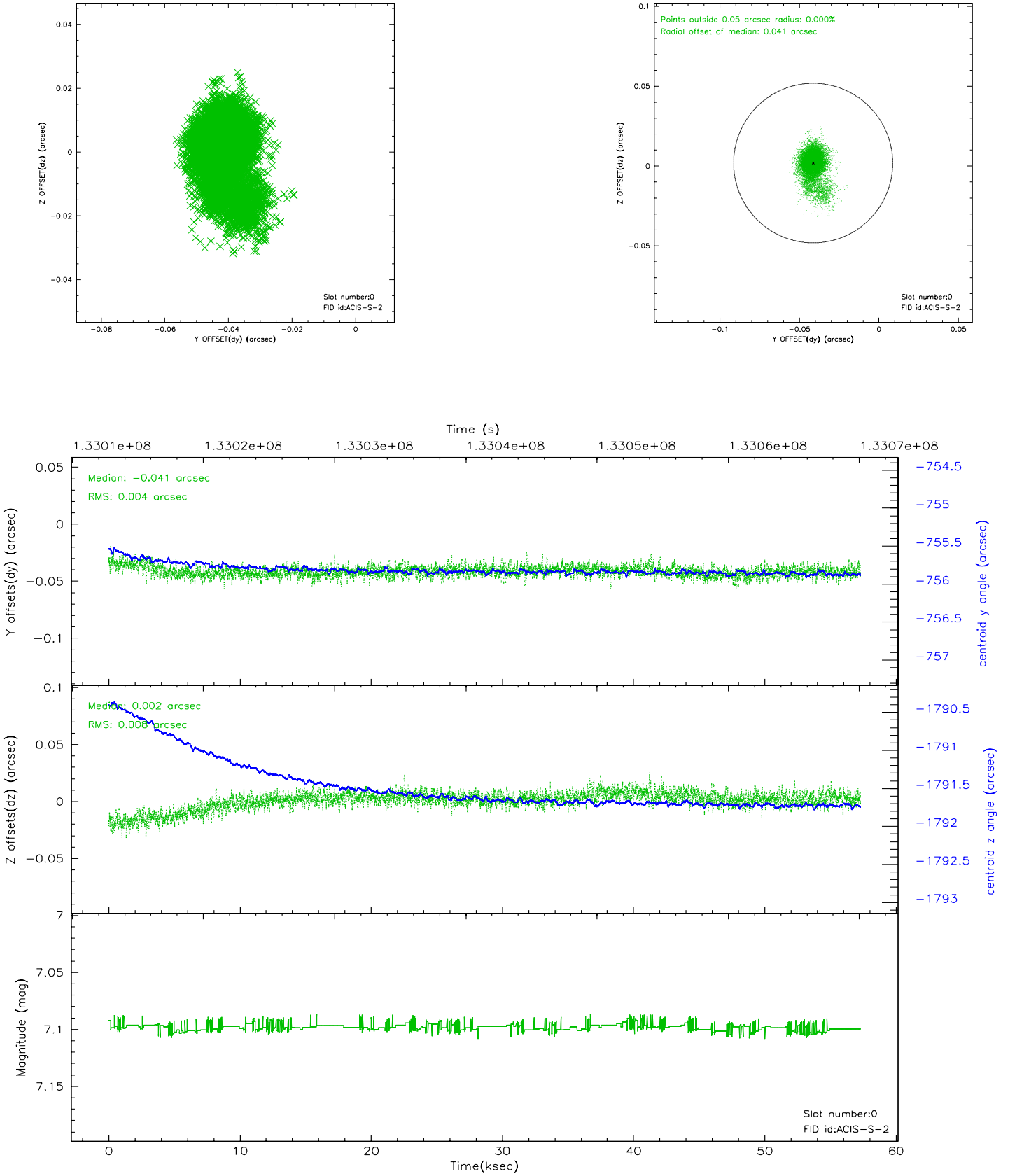


2.4.5 Slot 7

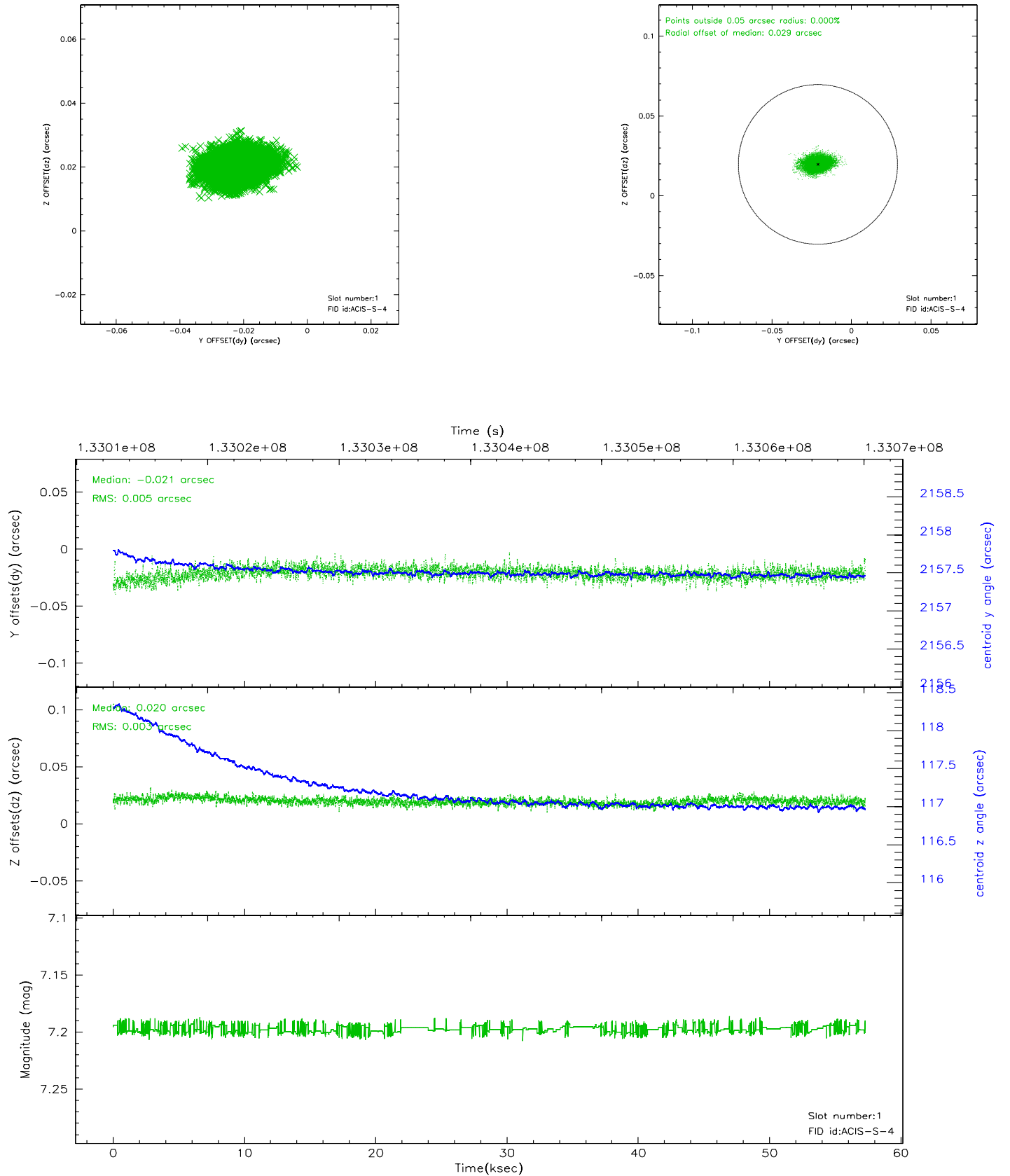


2.5 FID Slots

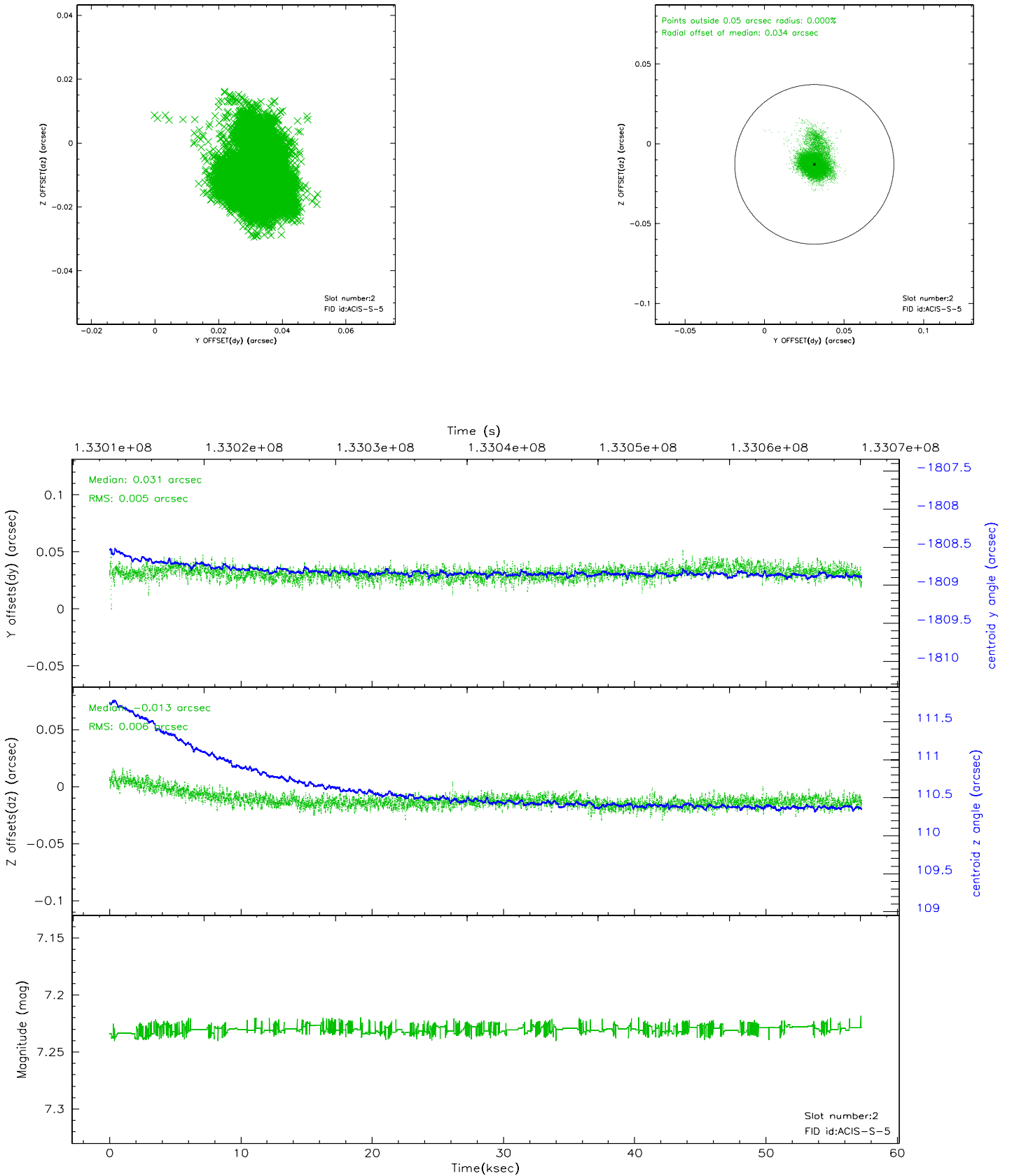
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

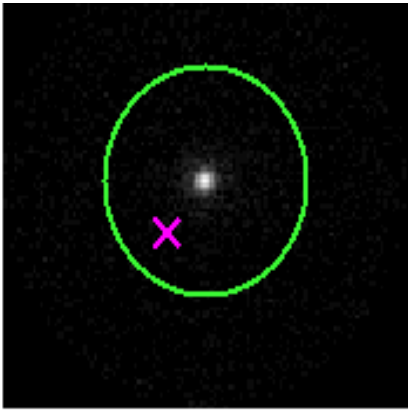


3 Gratings

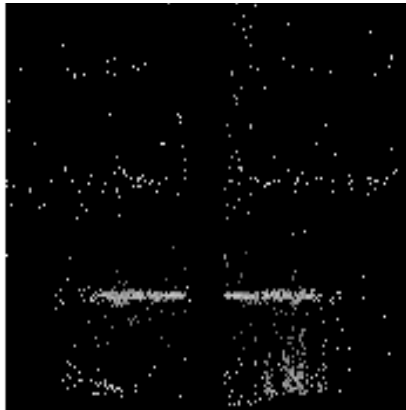
3.1 HEG Arm



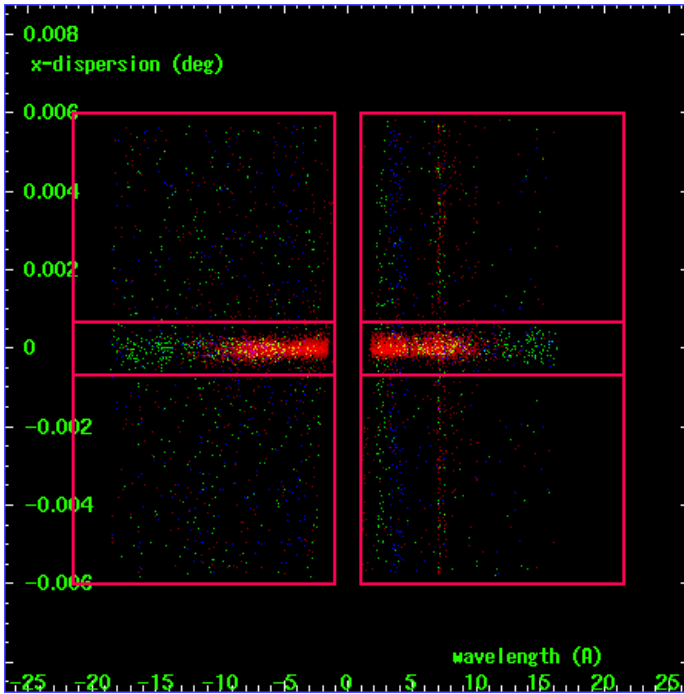
HEG Order Sort 123



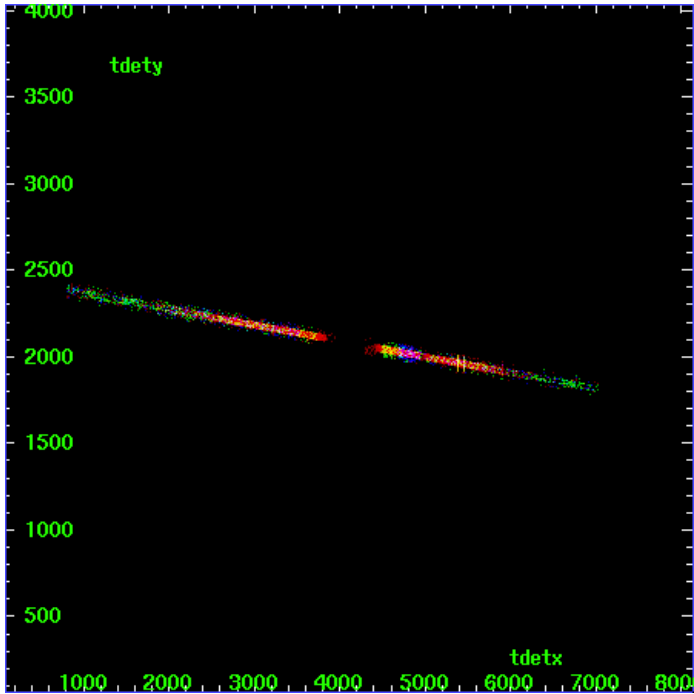
HEG Zero Order



HEG Order Sort ALL

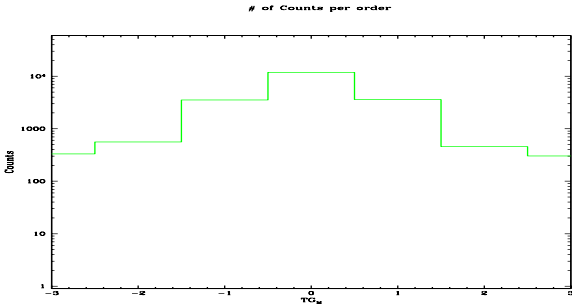


Spot Image HEG

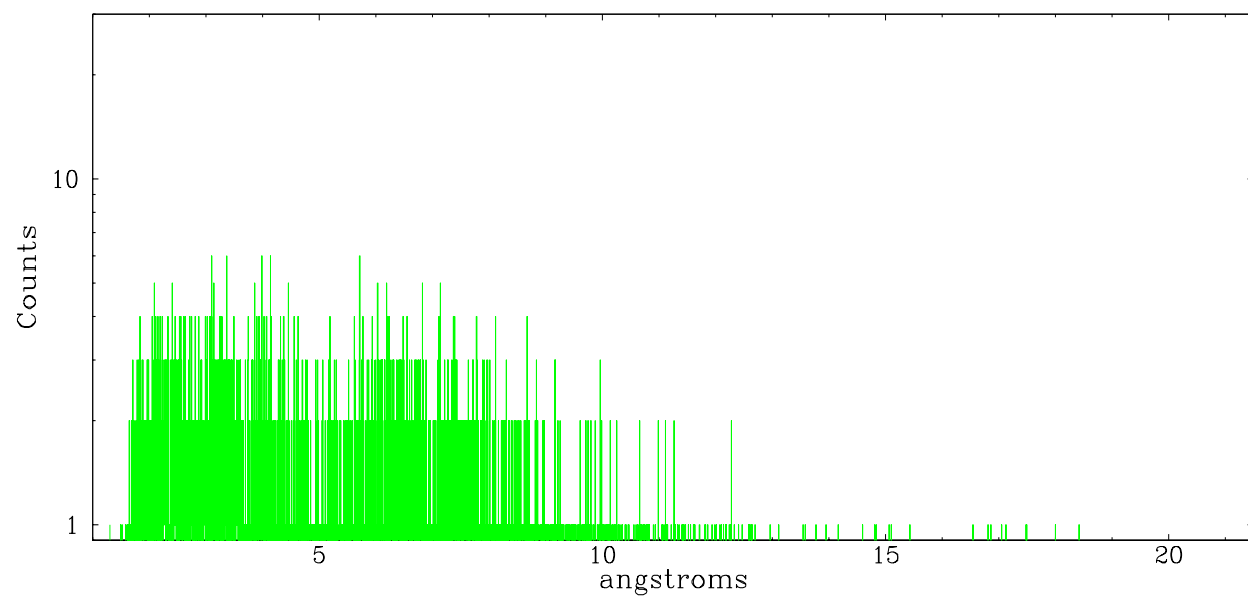


Full Detector HEG

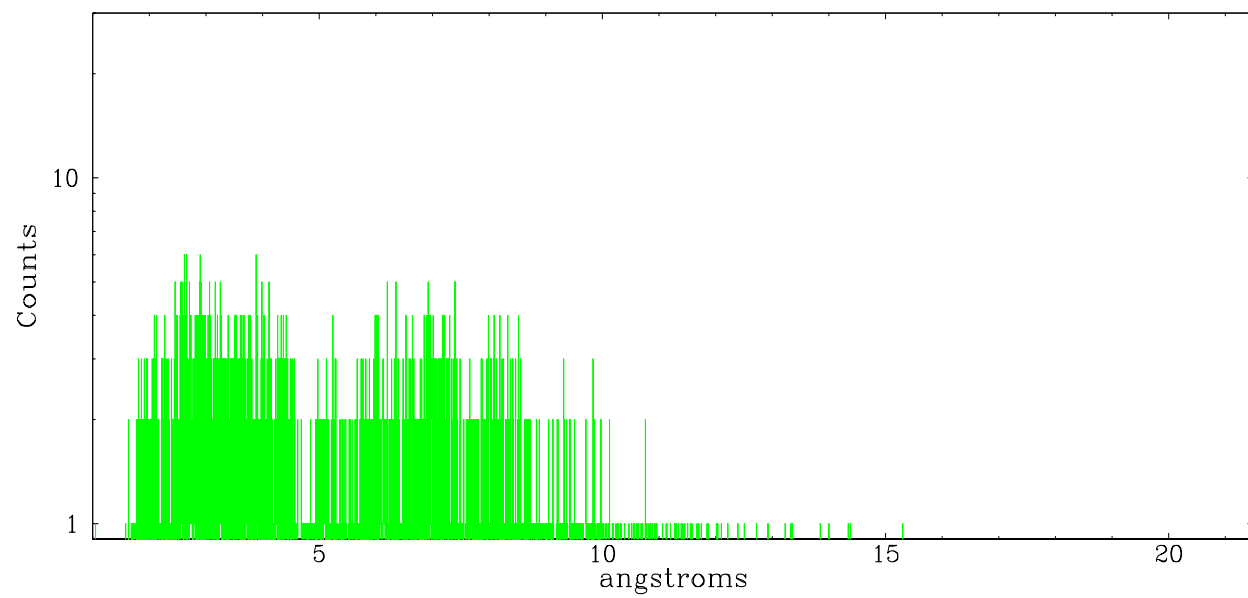
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	331	561	3542	11859	3588	457	302



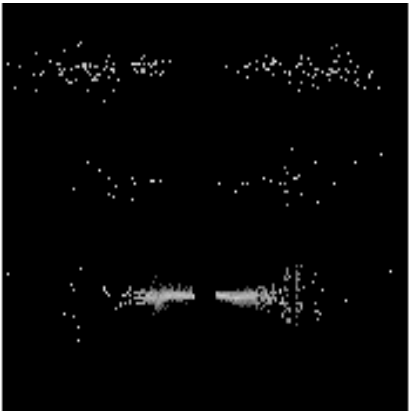
heg order -1



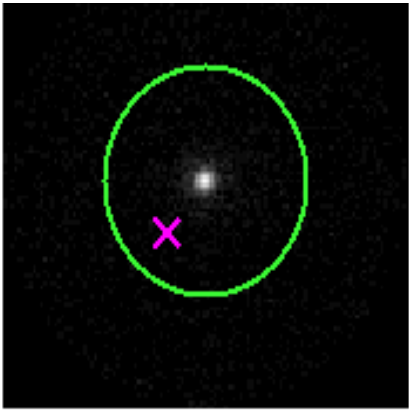
heg order +1



3.2 MEG Arm



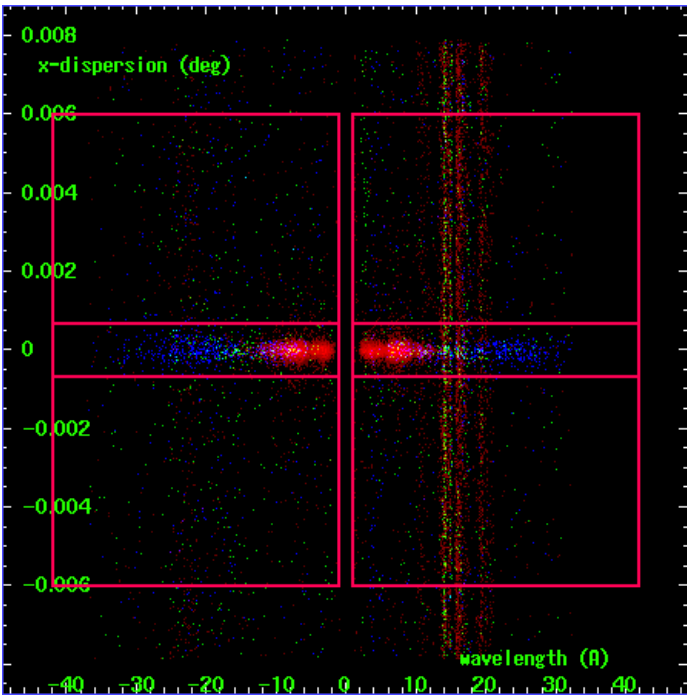
MEG Order Sort 123



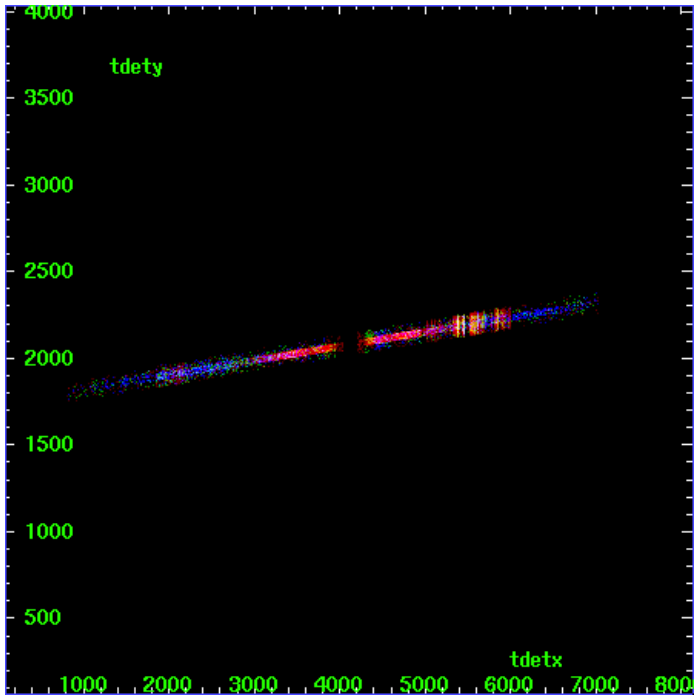
MEG Zero Order



MEG Order Sort ALL

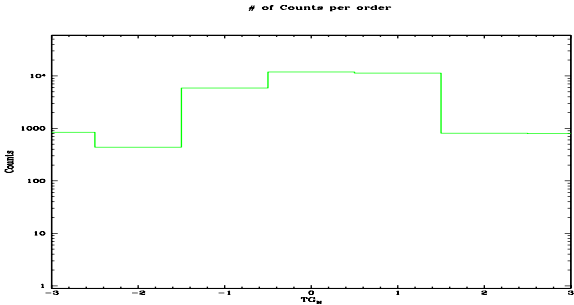


Spot Image MEG

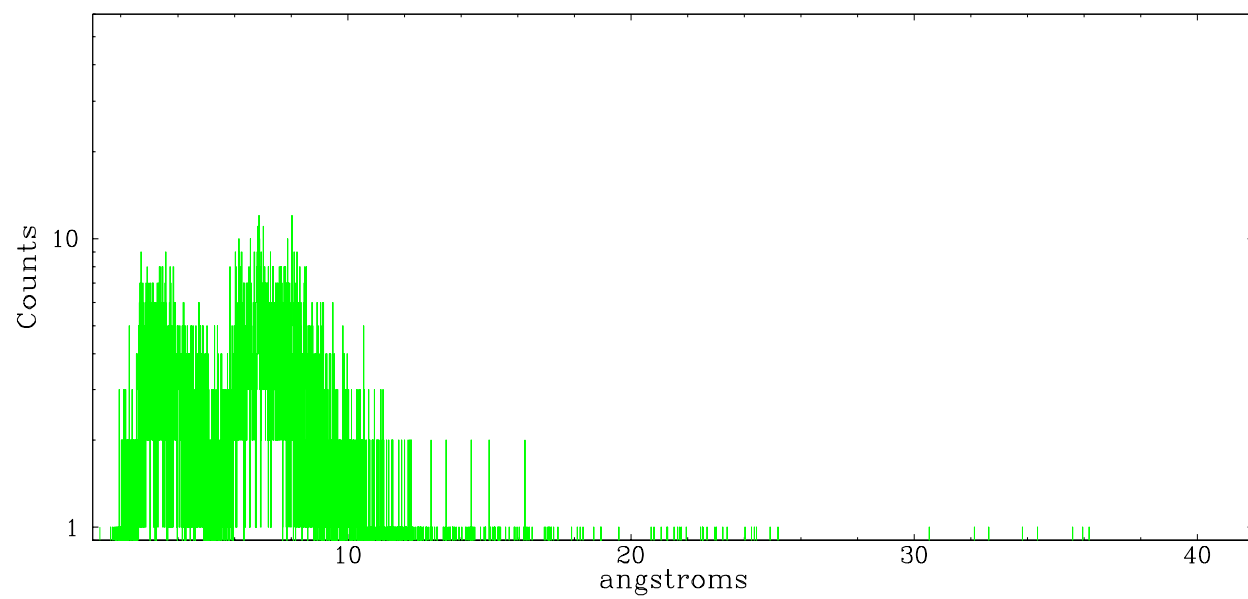


Full Detector MEG

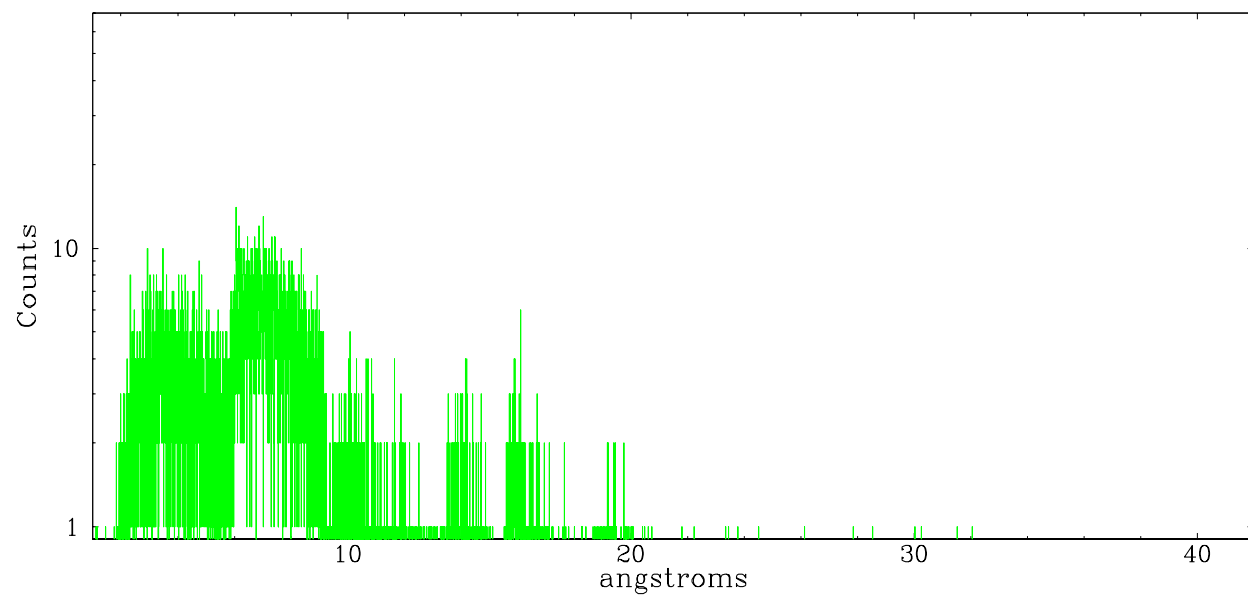
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	840	439	5855	11859	11261	811	797



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.09.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	56.897

A.2 Comments

CCD Chip S4 has significant streaking and large column-to-column variations that are still present in Level 2 files.

High radiation spike about 14 ksec into the observation causes slight elevation in count rate and number of events sent.