

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 3504 - L2 Version 001
Chandra X-Ray Center

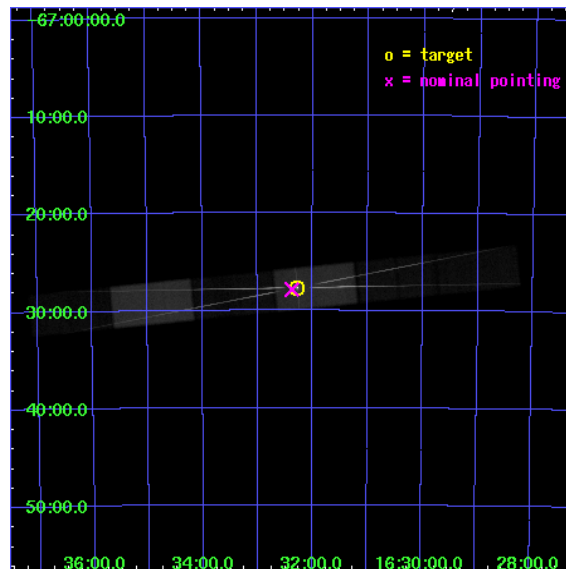
L2 Processing Date : Aug 7 2006

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

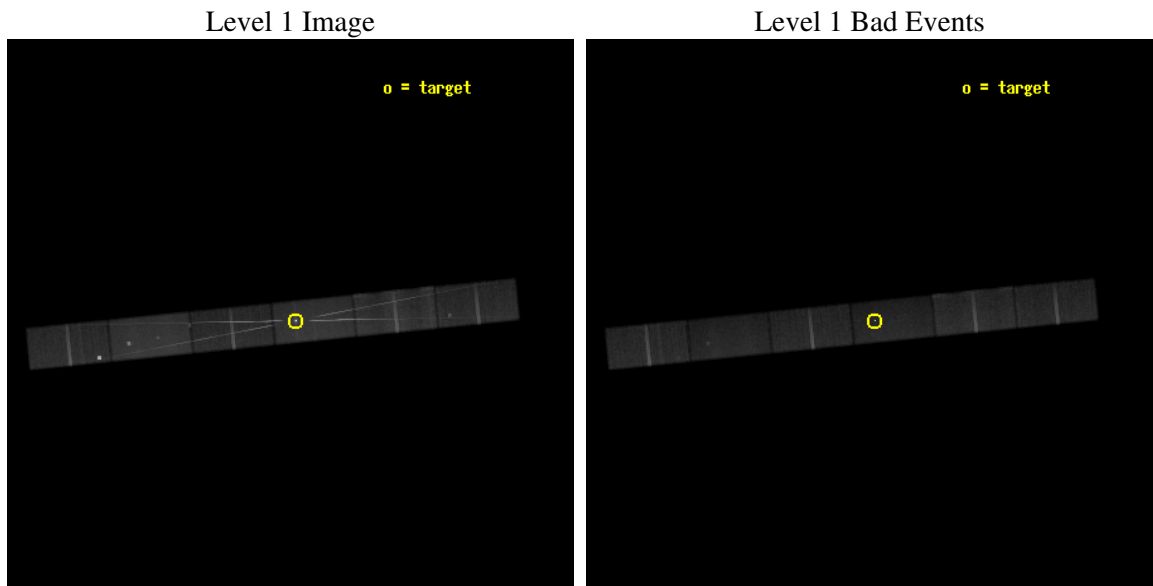
seq_num	400257
obs_id	3504
title	VARIABILITY IN THE LINE EMISSION OF THE X-RAY PULSAR 4U 1626-67
observer	Prof. Claude Canizares
object	4U 1626-67
dtcycle	0
cycle	P
ra_targ	248.069583
dec_targ	-67.461667
ra_nom	248.09379033969
dec_nom	-67.464315695487
roll_nom	354.2105594518
revision	2
ontime	97097.996707588
livetime	94809.191289632
ontime4	97101.478777558
ontime5	97099.73774758
ontime6	97101.478787601
ontime7	97097.996707588
ontime8	97101.478787571
ontime9	97104.960827768
l2events	717666



2 OBI

2.1 OBI

2.1.1 Images

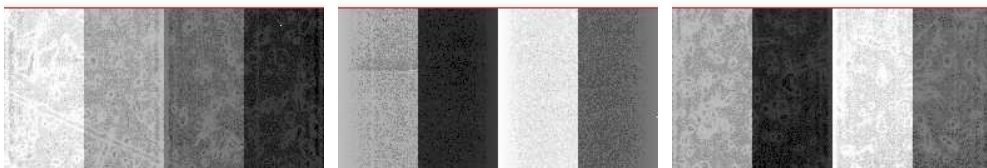


2.1.2 Bias

Chip 4

Chip 5

Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	2
ascdsver	7.6.8.1
caldsver	3.2.2
date	2006-08-07T00:03:16
revision	2

sched_exp_time	97000.000000
ontime	97105.582820445
ontime4	97109.064890414
ontime5	97107.323860437
ontime6	97109.064900458
ontime7	97105.582820445
ontime8	97109.064900428
ontime9	97112.546940625
l1events	2567214

2.1.4 Events

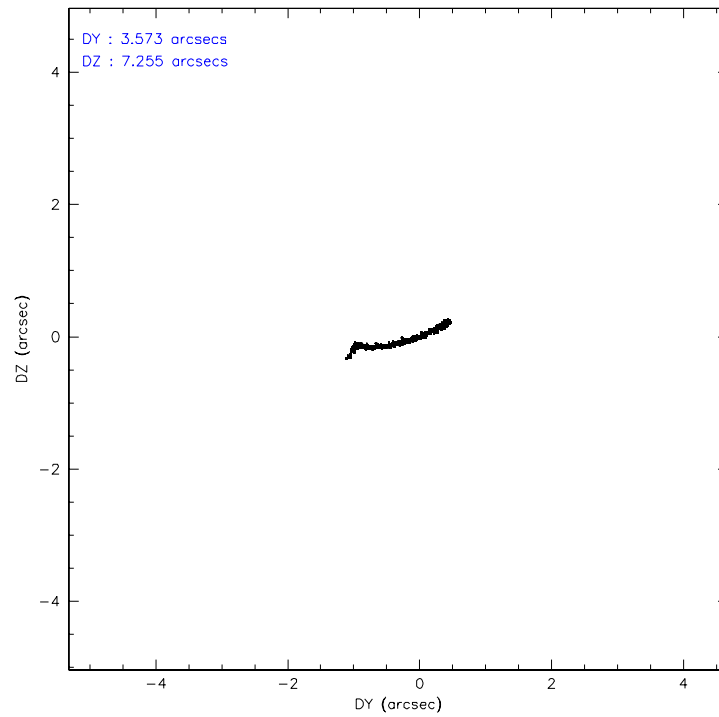
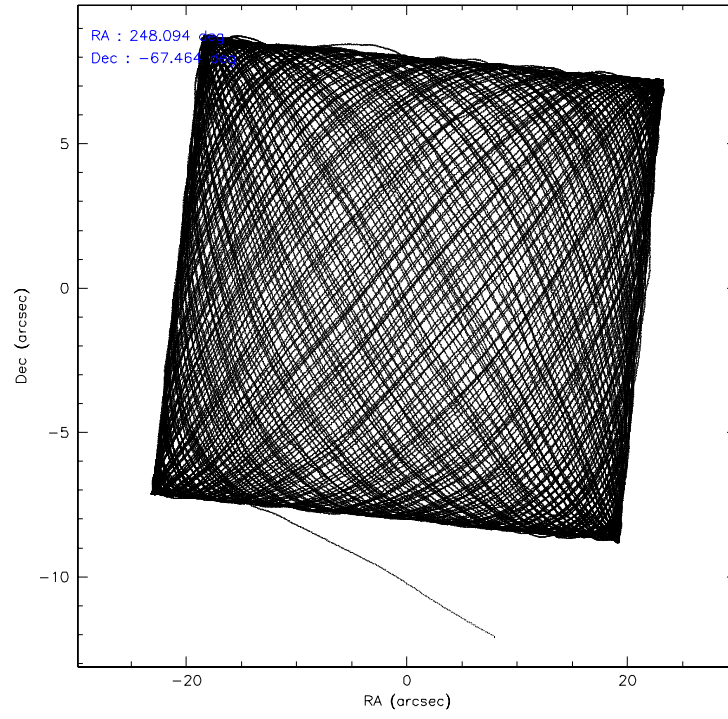
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	399377	460113	396507	545705	444891	320621
rejected events	307130	245365	284528	265850	324519	274053
rejected %	76%	53%	71%	48%	72%	85%

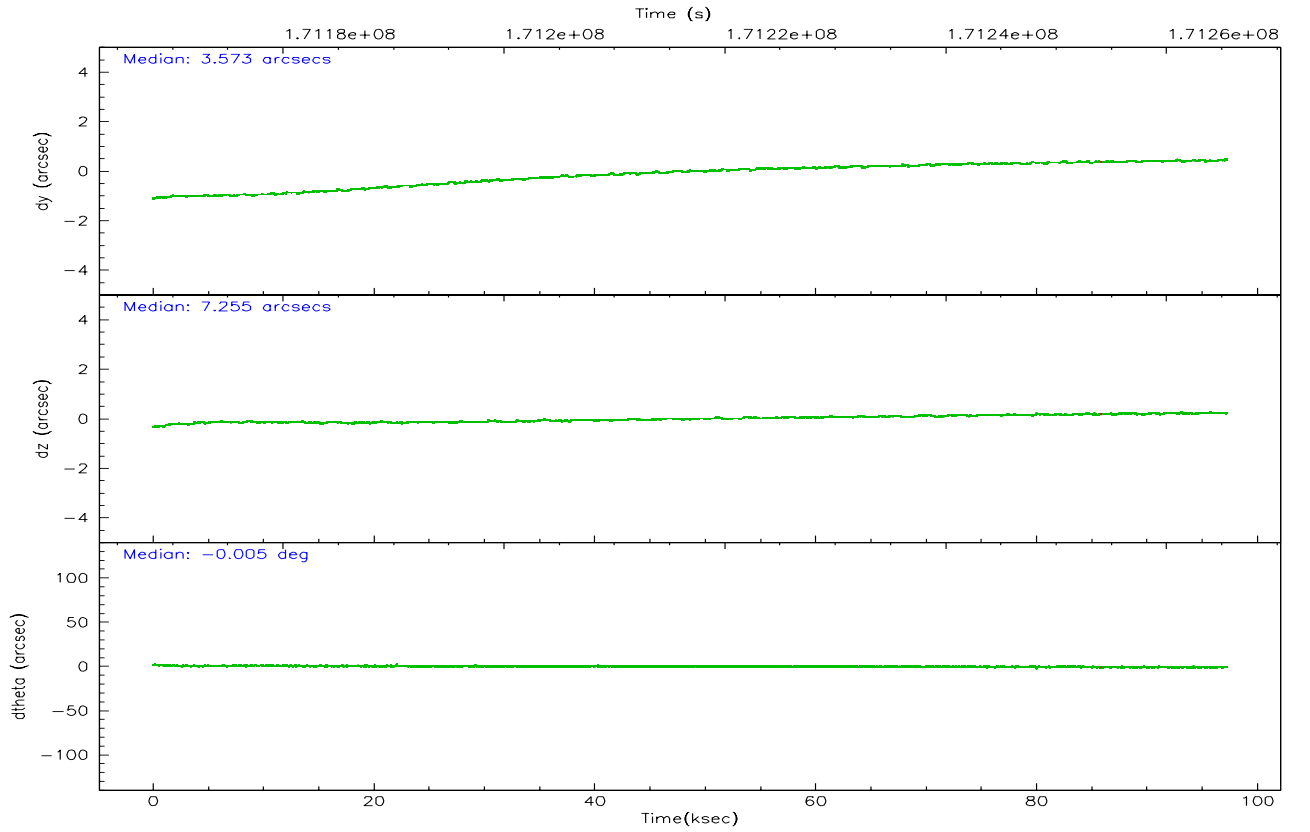
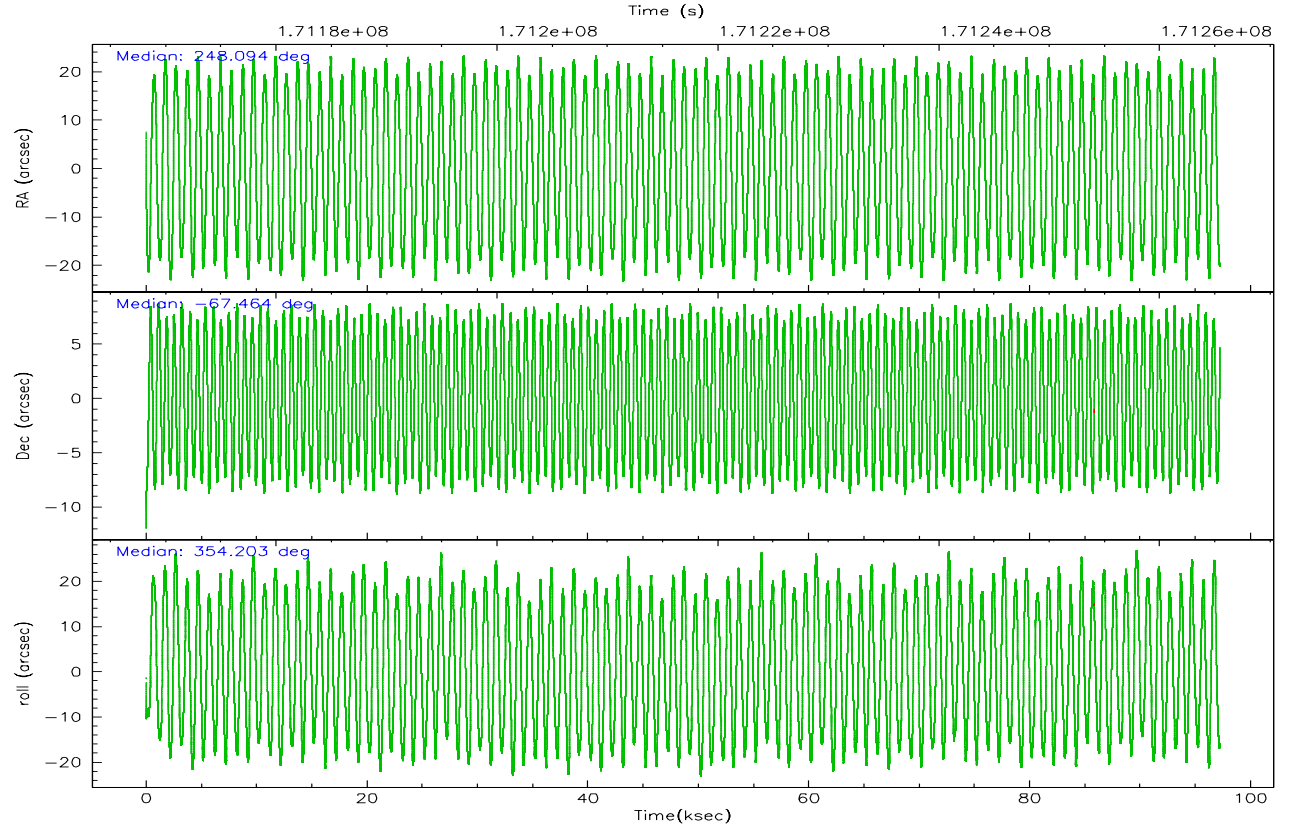
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	68245	25086	70592	31387	54947	22212
	17%	5%	17%	5%	12%	6%
grade 1 events	312	1275	262	1316	254	175
	0%	0%	0%	0%	0%	0%
grade 2 events	8558	62213	16195	66111	20868	7984
	2%	13%	4%	12%	4%	2%
grade 3 events	4621	8310	7368	22666	10905	4685
	1%	1%	1%	4%	2%	1%
grade 4 events	4481	7988	7297	21820	10557	4441
	1%	1%	1%	3%	2%	1%
grade 5 events	11804	24300	13125	37230	17258	13727
	2%	5%	3%	6%	3%	4%
grade 6 events	6355	111165	10536	137892	23102	7251
	1%	24%	2%	25%	5%	2%
grade 7 events	295001	219776	271132	227283	307000	260146
	73%	47%	68%	41%	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	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	1/2
Pointing RA	248.029423	248.0937903396922	Subarray start row	1	1
Pointing Dec	-67.475800	-67.46431569548731	Subarray row count	512	512
Pointing Roll	353.994476	354.2105594517954	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.7
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-183.992523	-183.985022191653			
SIM translation stage offset (mm)	-6.14	-6.147500391354811			
Observation start time	171168489.184000	171167484.91931			
Observation start date	2003-06-05T02:47:05	2003-06-05T02:31:24			
Observation end time	171265489.184000	171266389.2235			
Observation end date	2003-06-06T05:43:45	2003-06-06T05:59:49			
Read mode	TIMED	TIMED			

2.3 Aspect



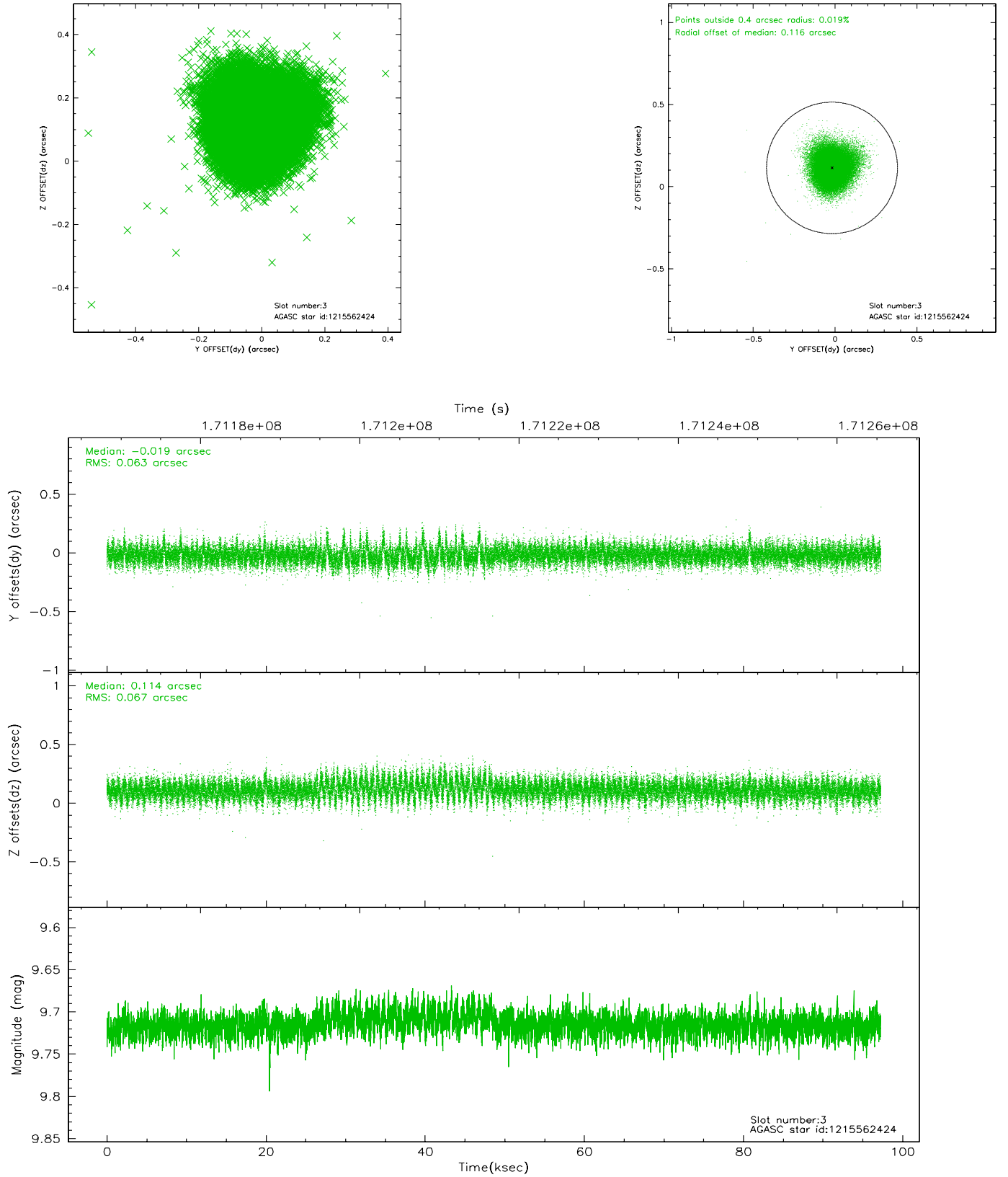


Slot Statistics

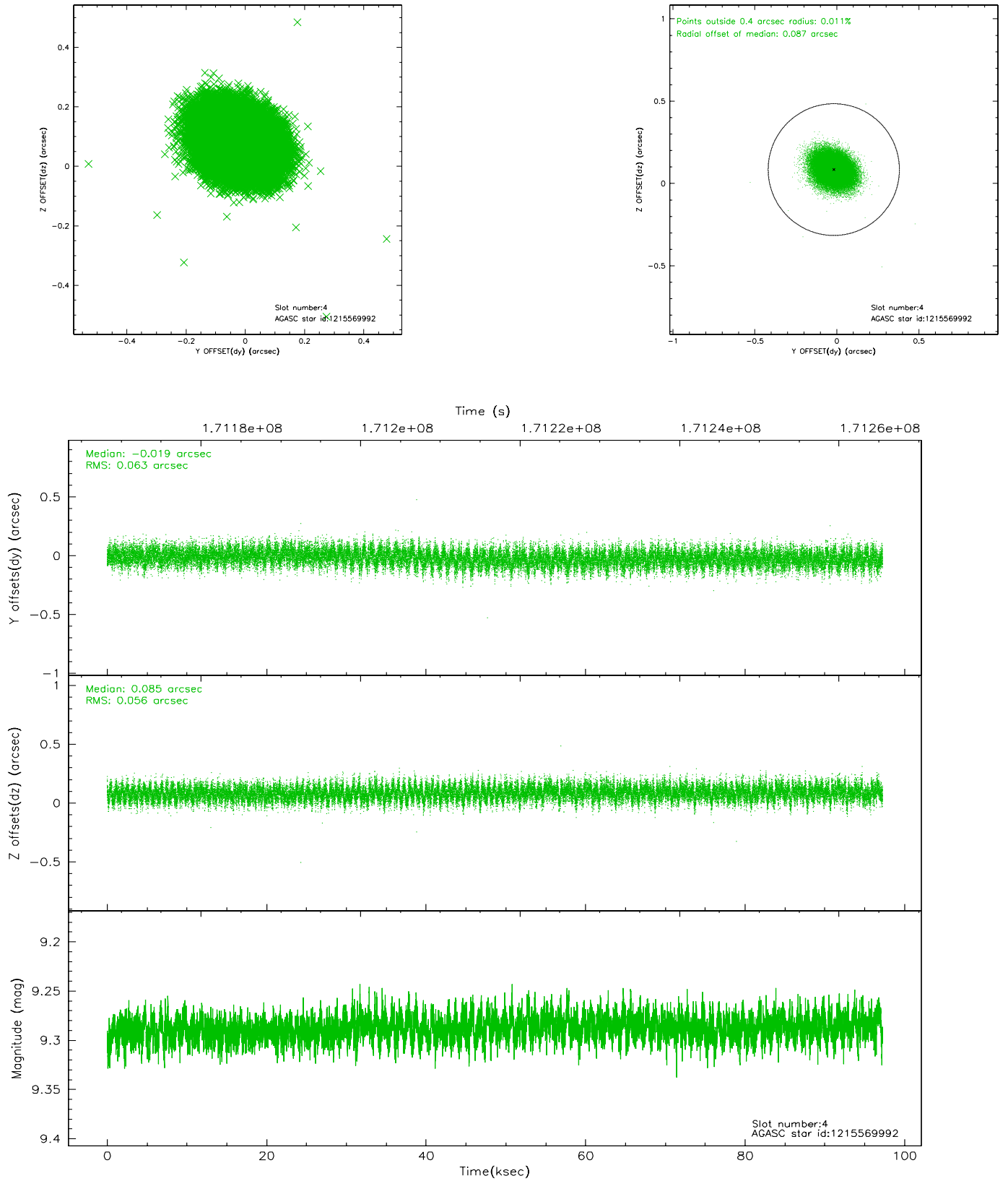
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	23707	-0.052	-0.061	0.016	0.024	0.000000	0.000000	-755.68	-1855.21
1	FID	ACIS-S-4	7.18	23702	0.024	0.041	0.014	0.020	0.000000	0.000000	2157.69	53.48
2	FID	ACIS-S-5	7.23	23700	-0.004	0.030	0.016	0.023	0.000000	0.000000	-1808.60	47.00
3	GUIDE	1215562424	9.71	47380	-0.019	0.114	0.096	0.162	246.673825	-67.593216	-1803.15	-635.27
4	GUIDE	1215569992	9.29	47385	-0.019	0.085	0.089	0.146	249.398538	-67.627995	1925.40	-368.78
5	GUIDE	1215570568	8.41	47334	-0.031	0.040	0.072	0.117	246.859352	-67.889721	-1418.67	-1662.86
6	GUIDE	1186083480	9.53	47384	0.012	-0.222	0.113	0.188	247.492705	-66.784412	-1017.52	2392.18
7	GUIDE	1186071656	9.41	47381	0.054	-0.011	0.095	0.152	247.561655	-67.321127	-703.49	483.25

2.4 Star Slots

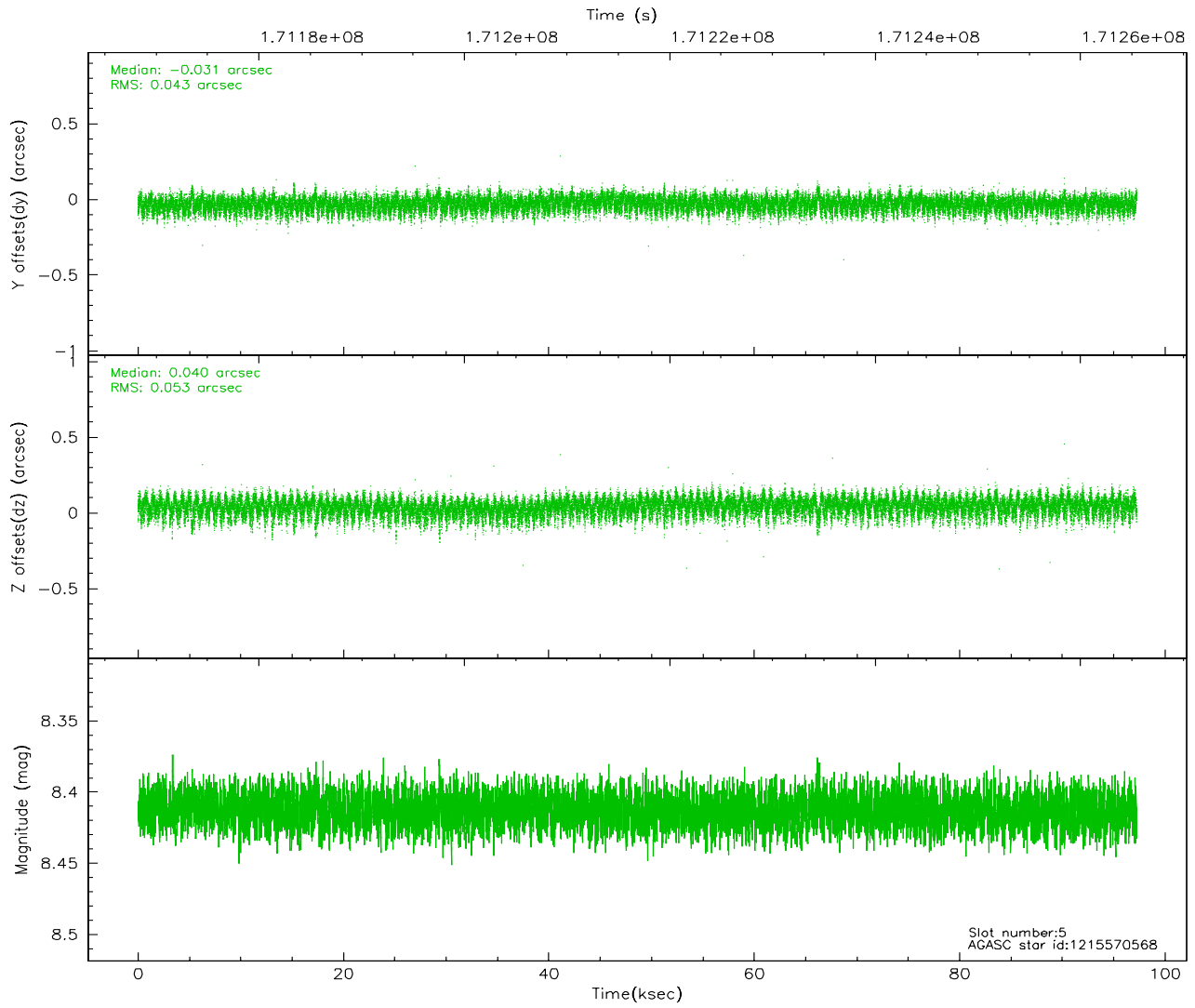
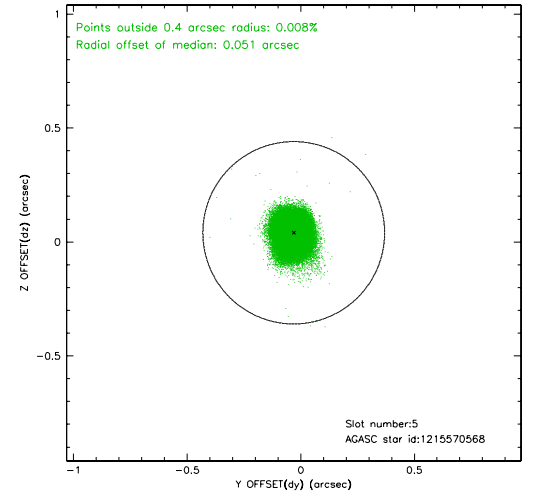
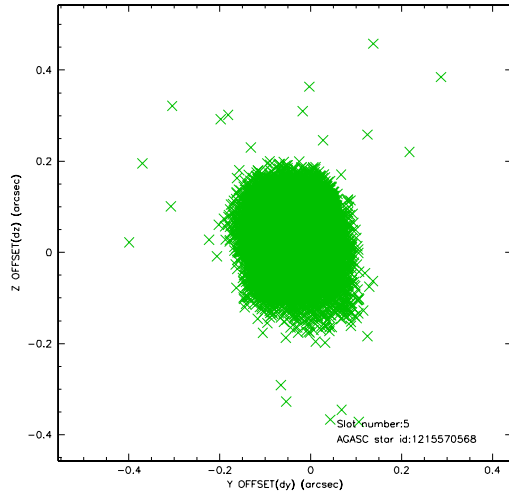
2.4.1 Slot 3



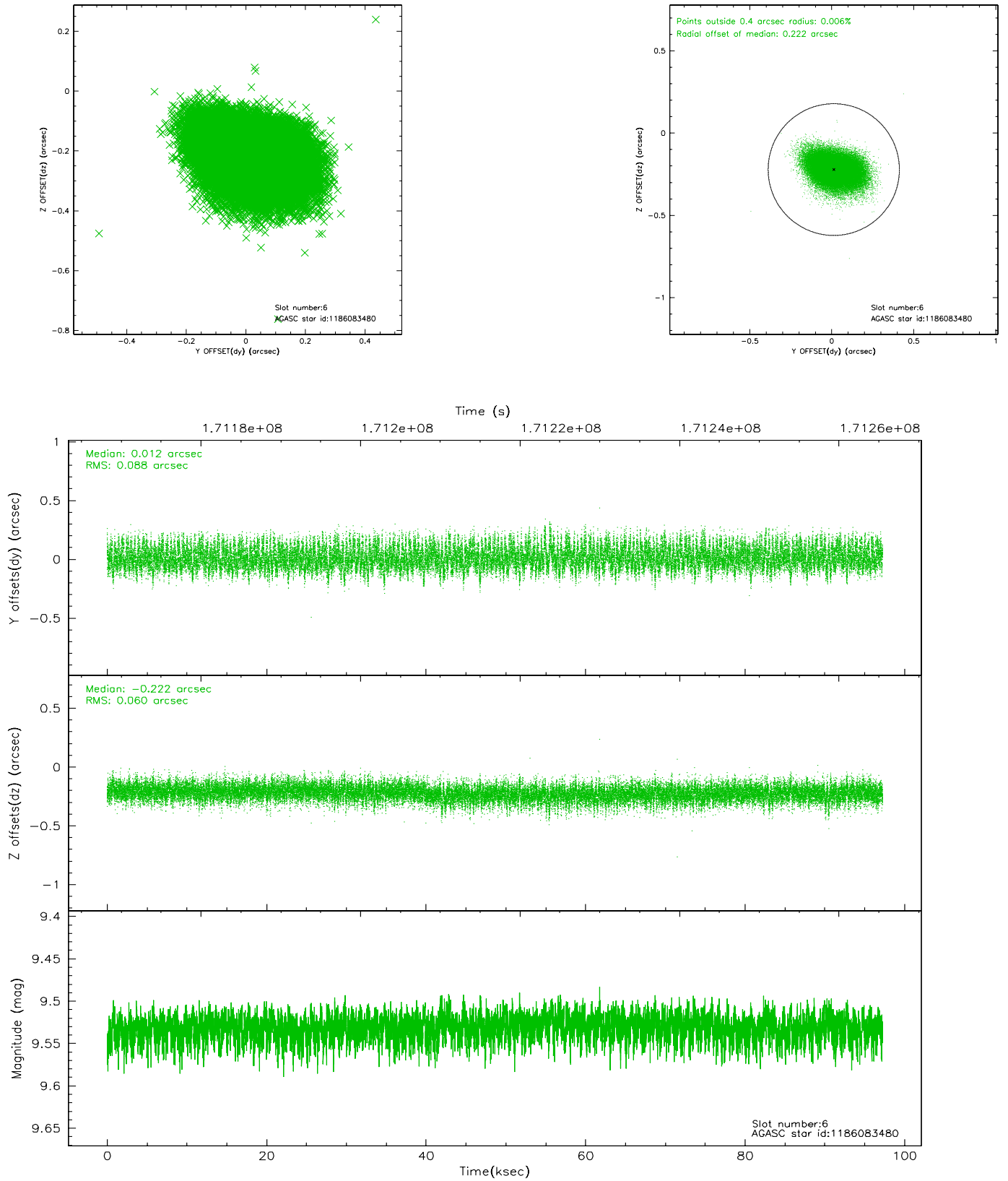
2.4.2 Slot 4



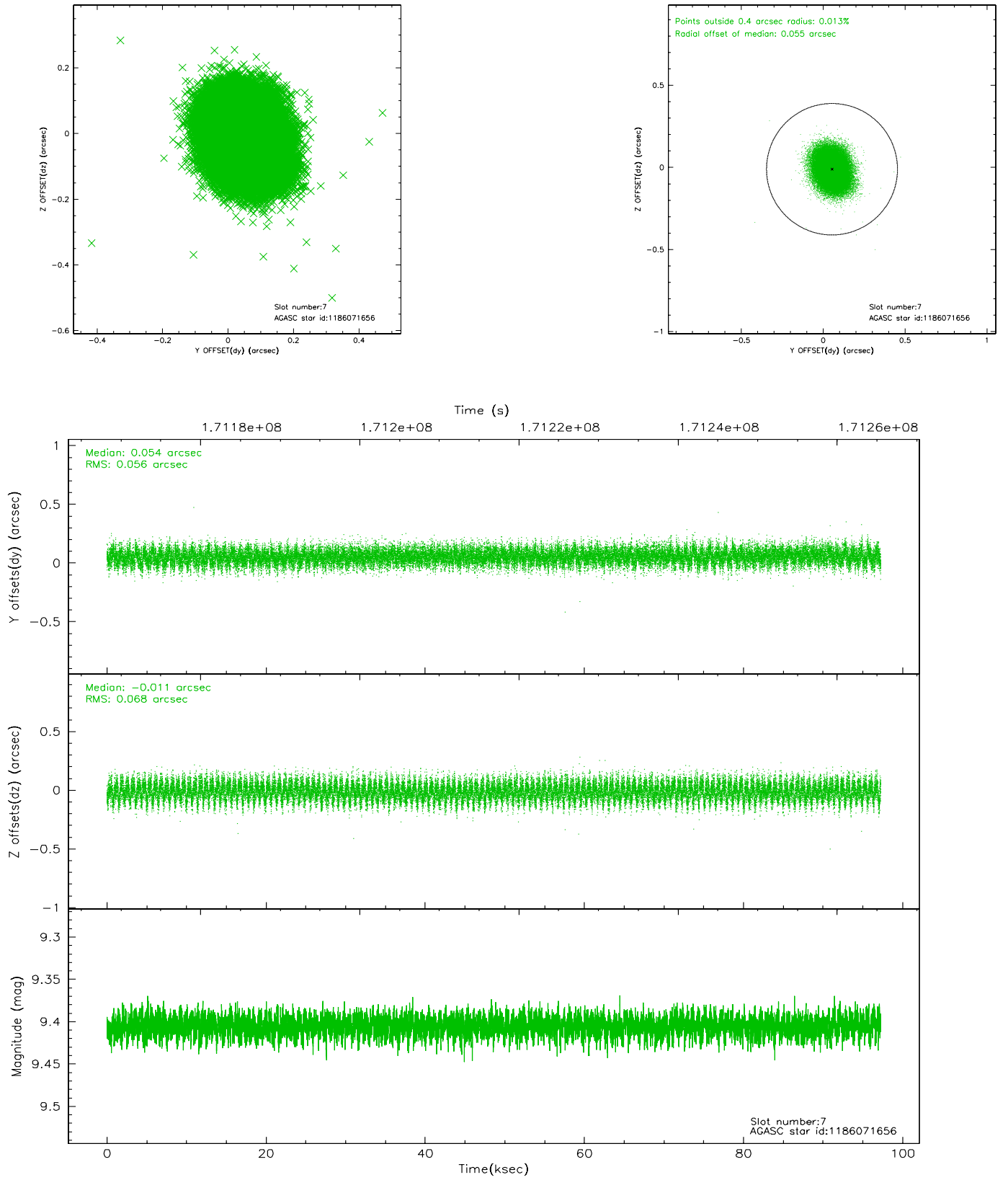
2.4.3 Slot 5



2.4.4 Slot 6

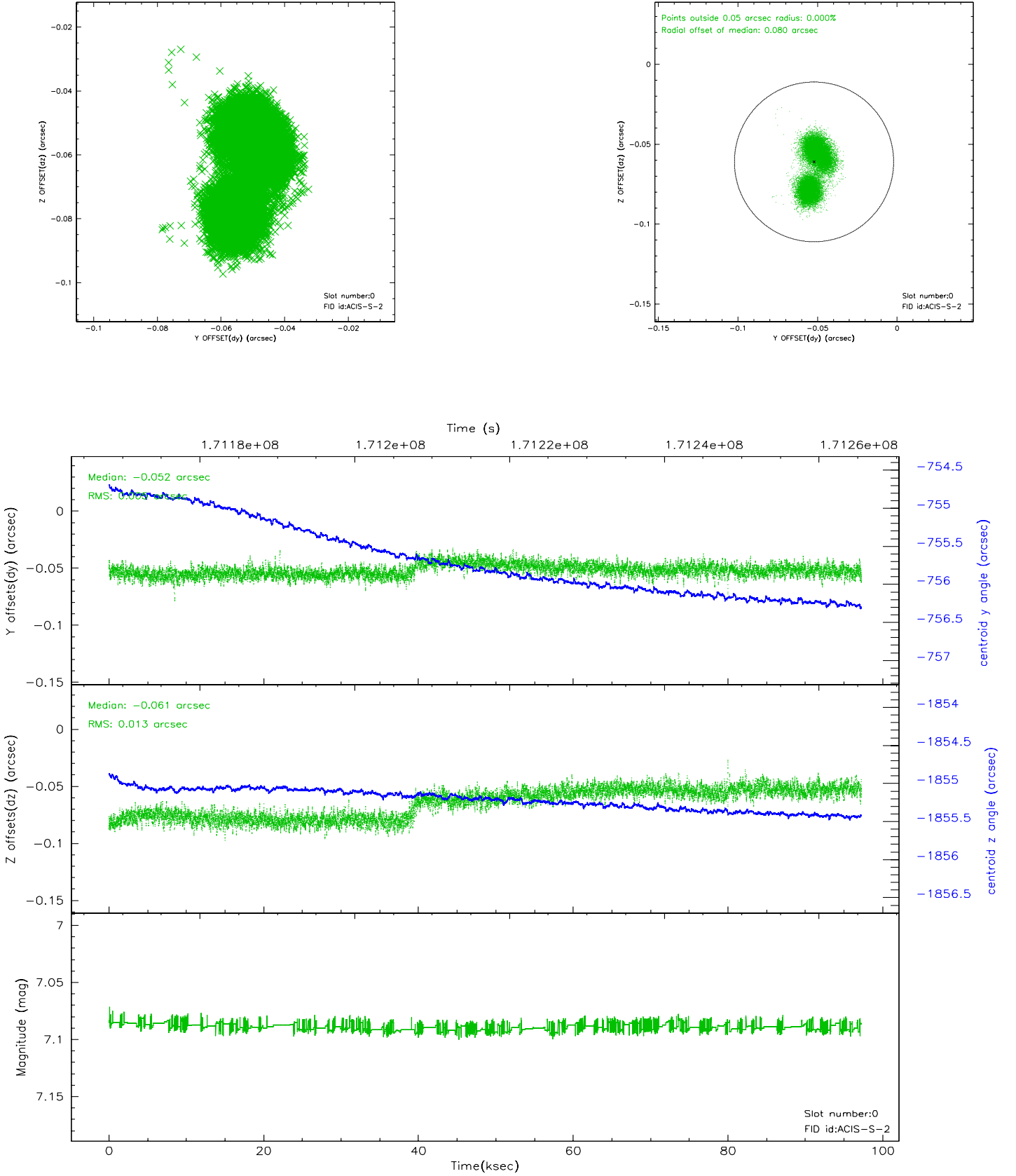


2.4.5 Slot 7

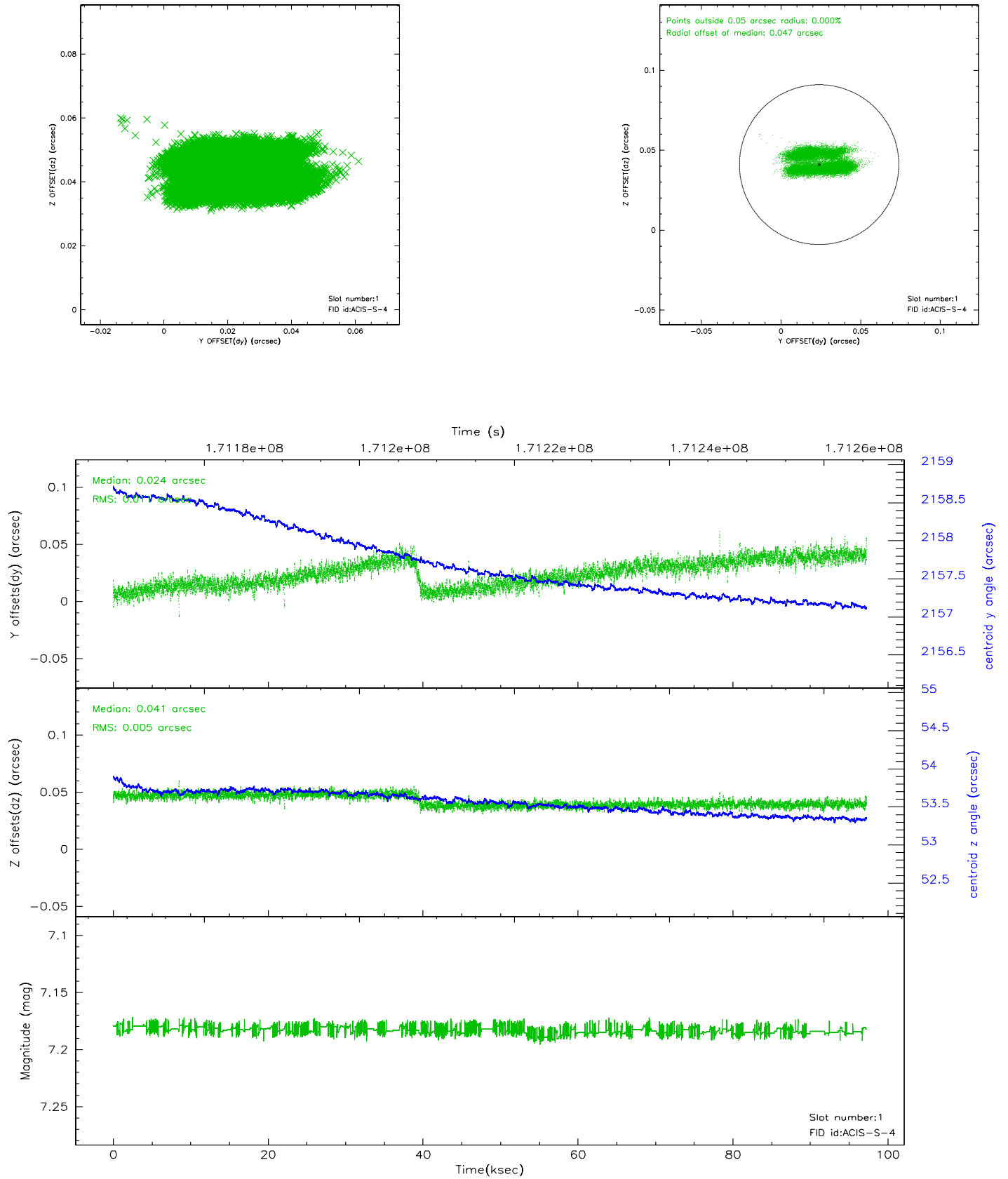


2.5 FID Slots

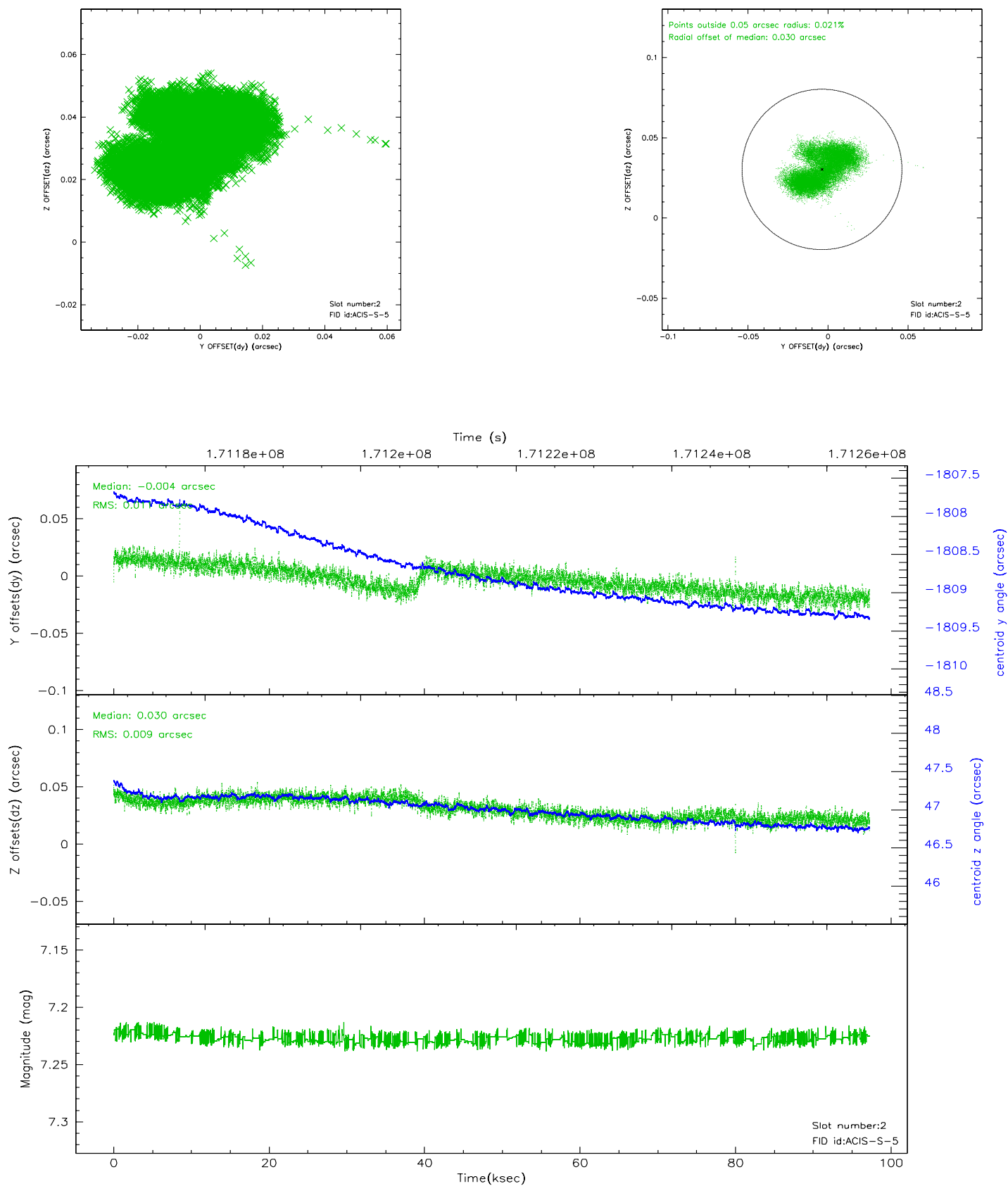
2.5.1 Slot 0



2.5.2 Slot 1

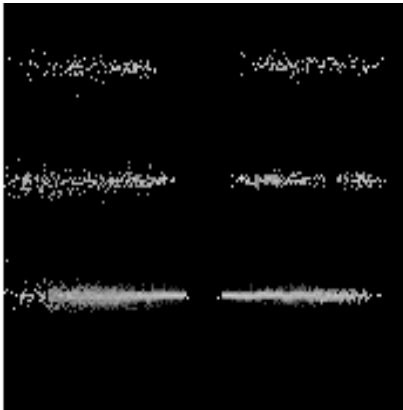


2.5.3 Slot 2

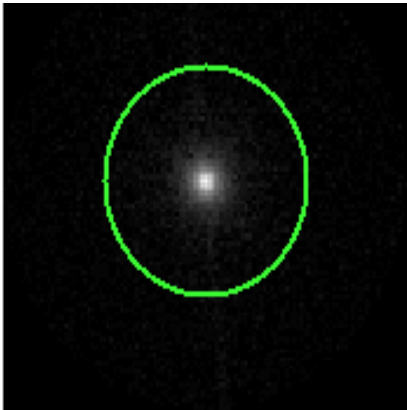


3 Gratings

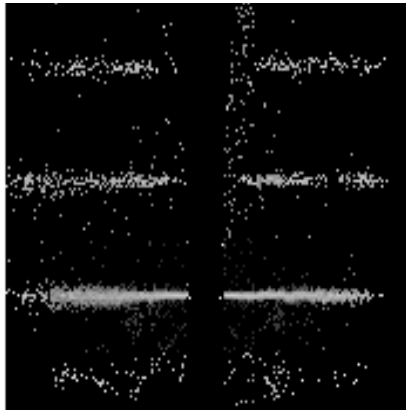
3.1 HEG Arm



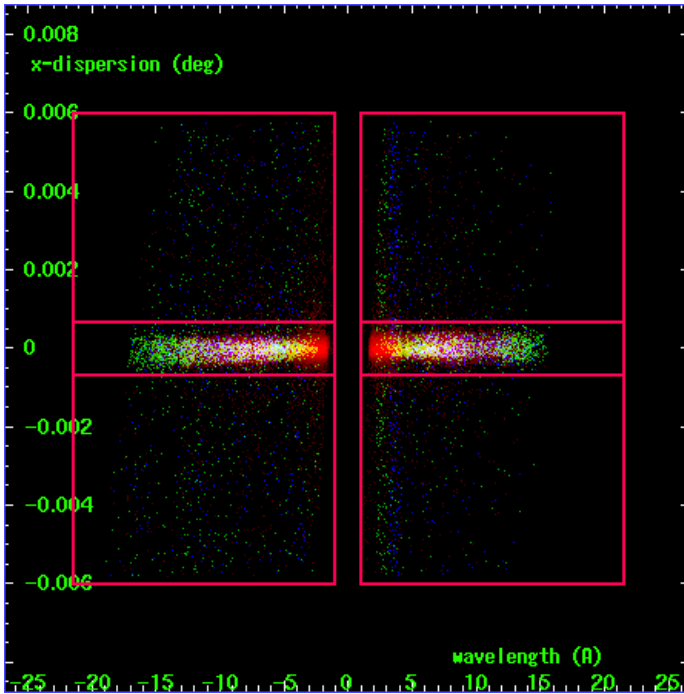
HEG Order Sort 123



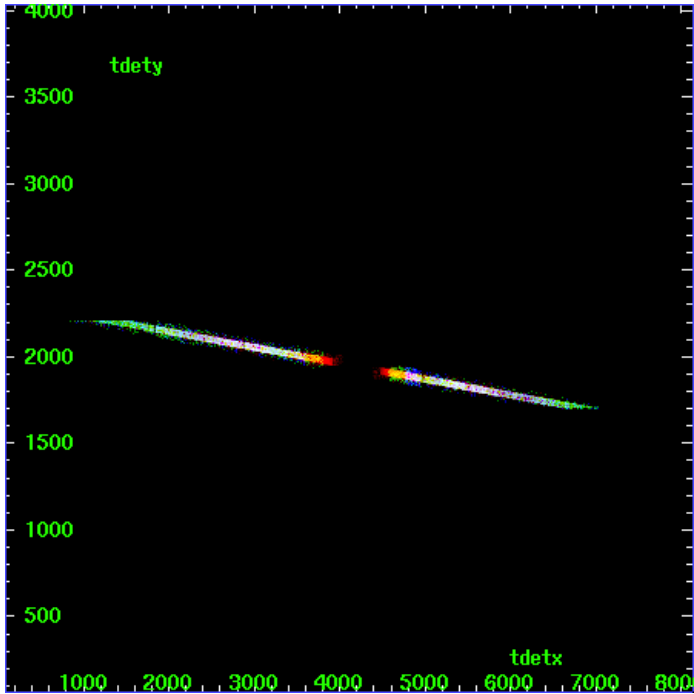
HEG Zero Order



HEG Order Sort ALL

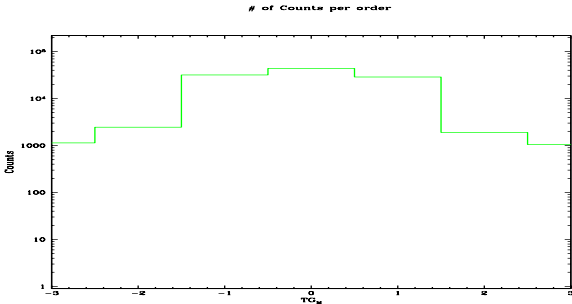


Spot Image HEG

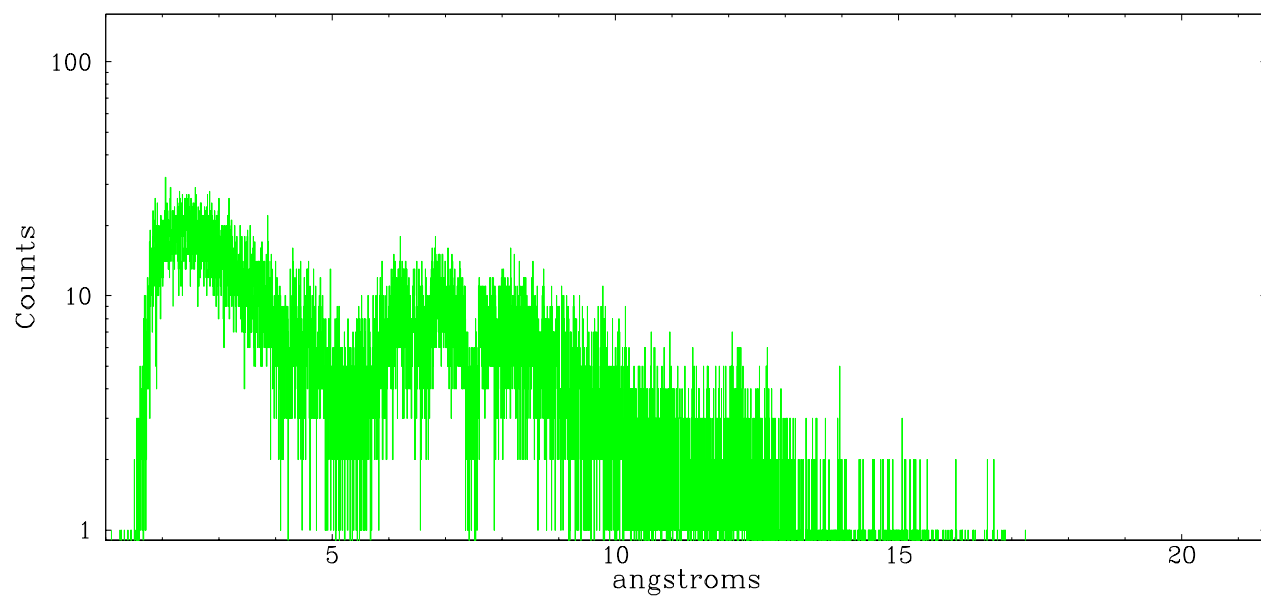


Full Detector HEG

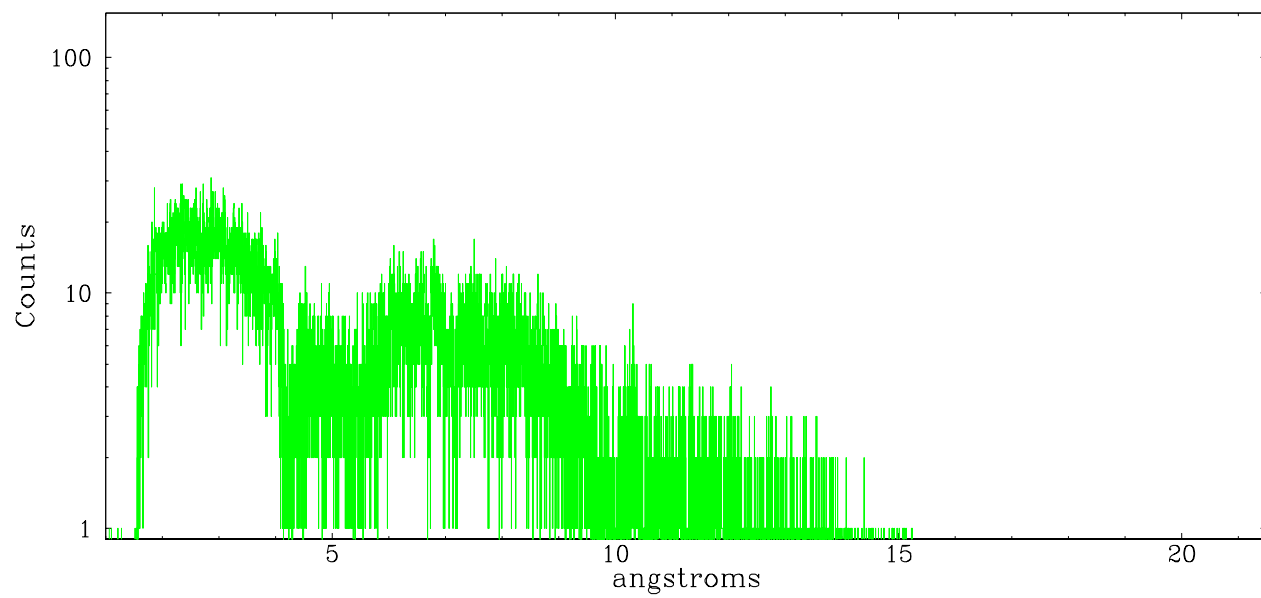
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1135	2446	31927	43654	28675	1896	1044



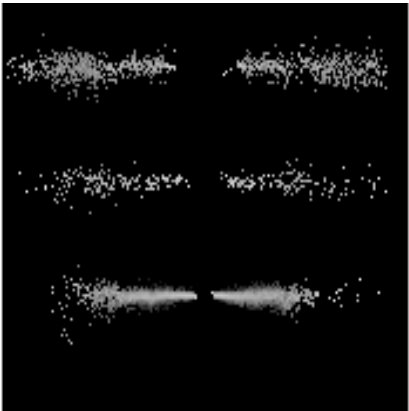
heg order -1



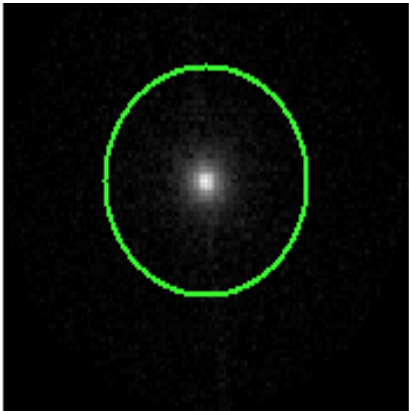
heg order +1



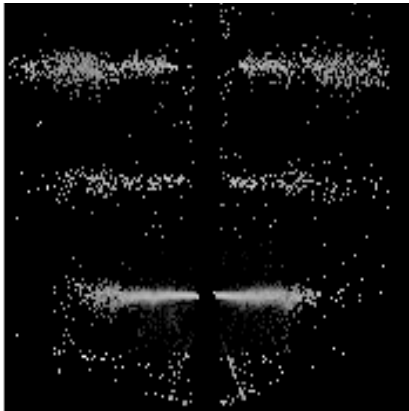
3.2 MEG Arm



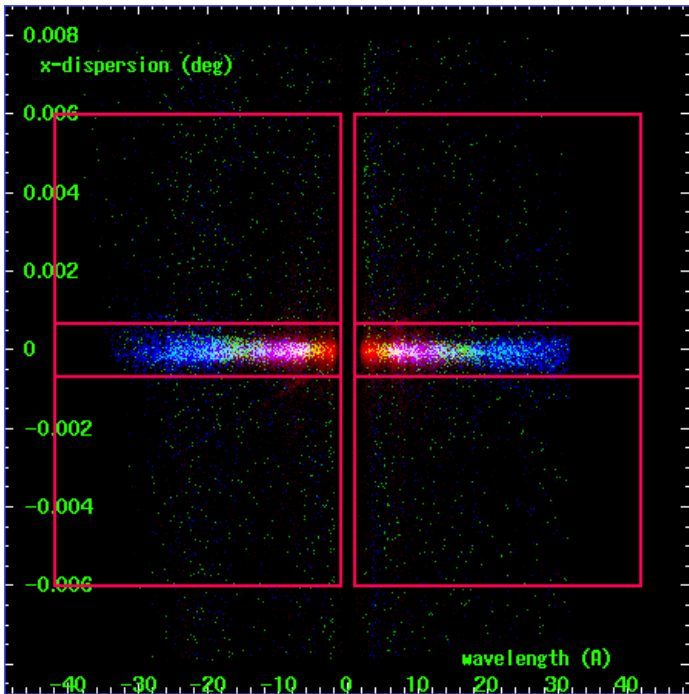
MEG Order Sort 123



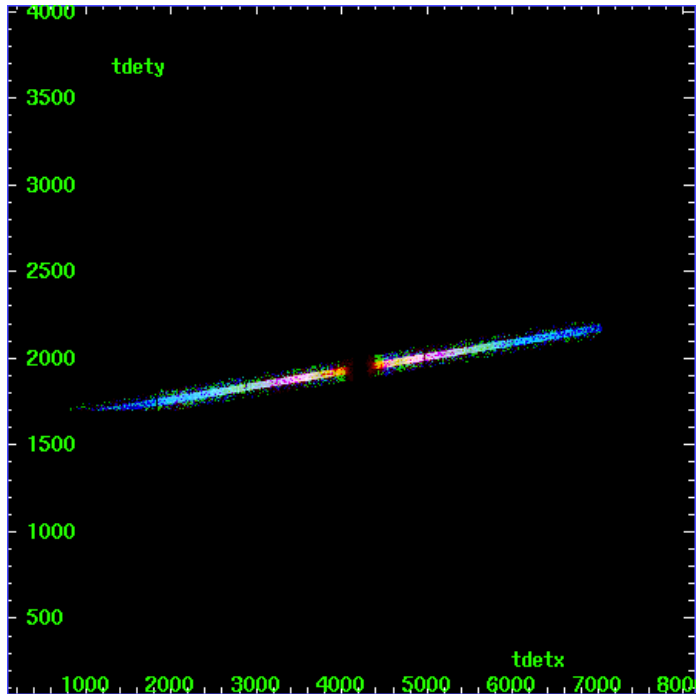
MEG Zero Order



MEG Order Sort ALL

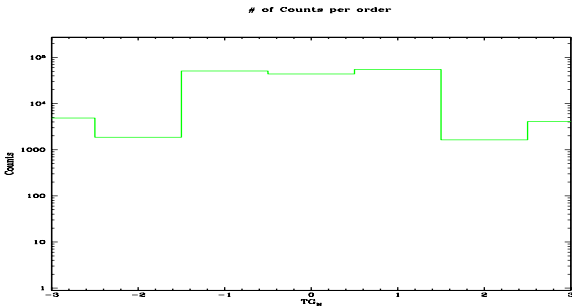


Spot Image MEG

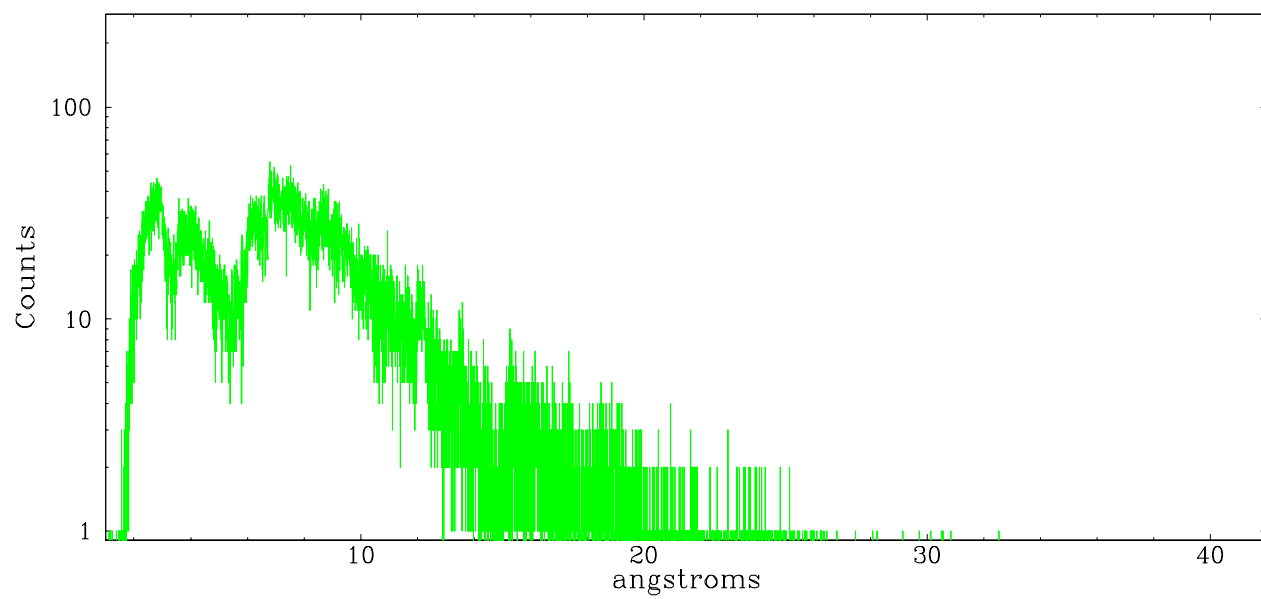


Full Detector MEG

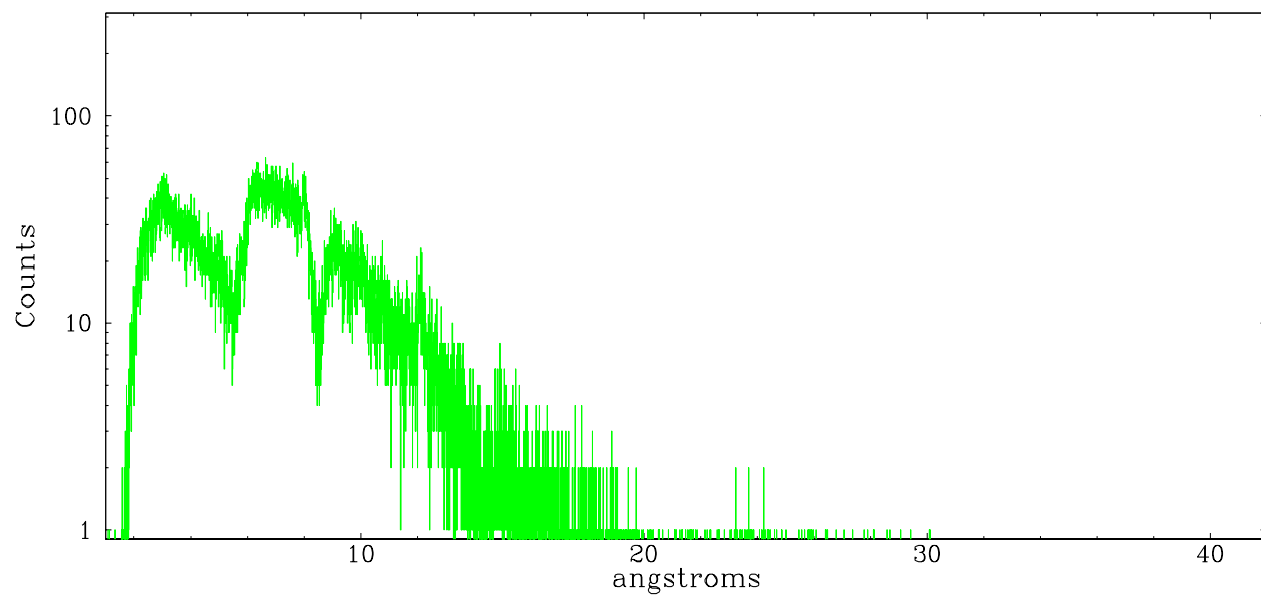
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	4868	1855	50713	43654	54599	1631	4052



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.08.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	97.083

A.2 Comments