

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 3719 - L2 Version 001
Chandra X-Ray Center

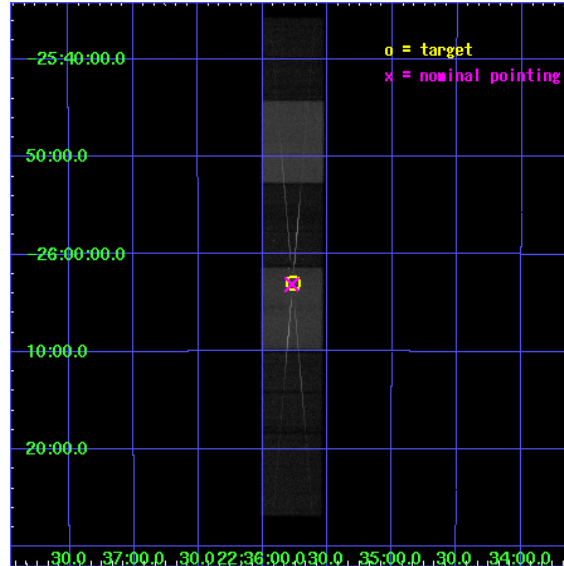
L2 Processing Date : Sep 26 2006

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

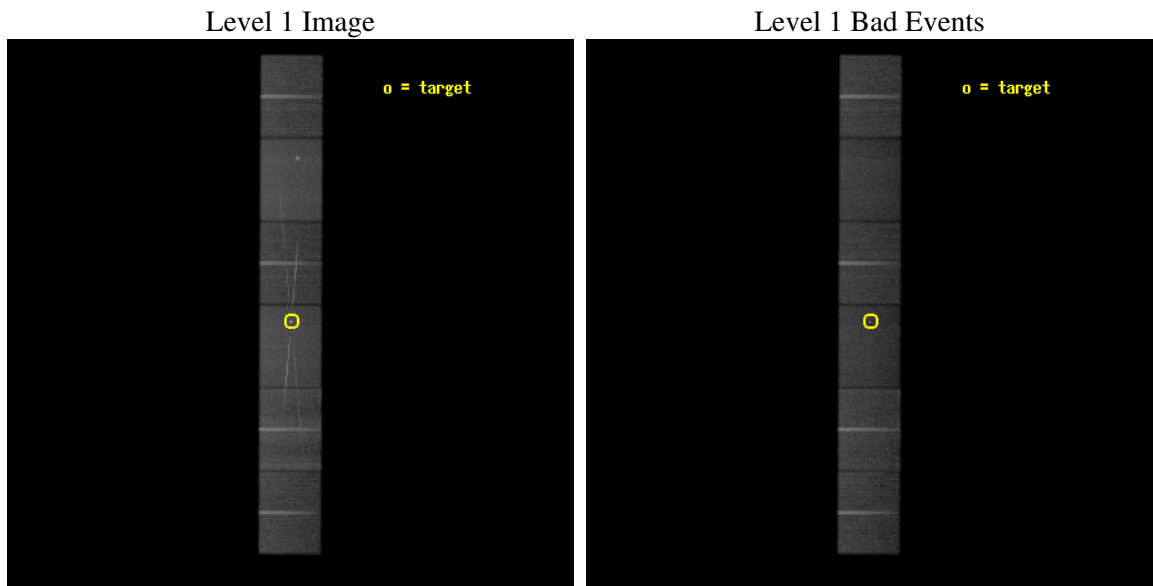
seq_num	700455
obs_id	3719
title	DECONVOLUTION OF THE RELATIVISTIC FE-K LINES IN ACTIVE GALAXIES AND PHYSICS FROM THE NARROW EMISSION COMPONENT
observer	Dr. Tahir Yaqoob
object	NGC 7314
dtcycle	0
cycle	P
ra_targ	338.942083
dec_targ	-26.050611
ra_nom	338.94395528779
dec_nom	-26.052066389104
roll_nom	90.202269013352
revision	2
ontime	68367.45901978
livetime	67263.265257316
ontime4	68367.45901978
ontime5	68367.45901978
ontime6	68367.45901978
ontime7	68367.45901978
ontime8	68367.45901978
ontime9	68367.458999813
l2events	616609



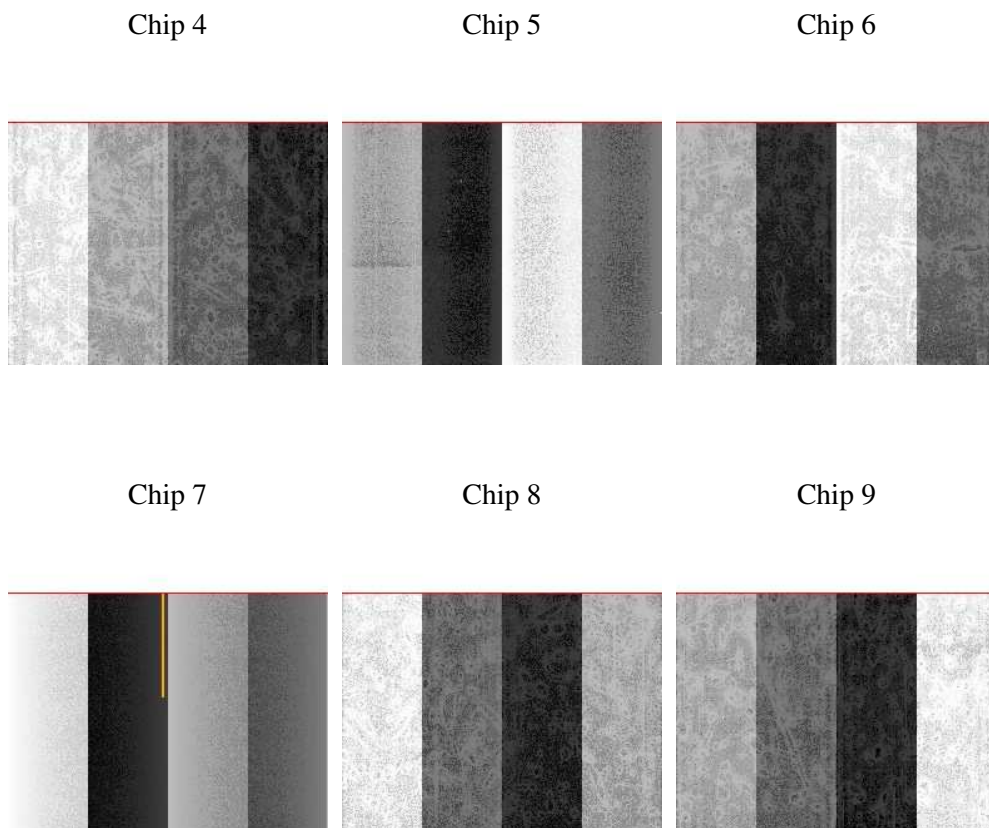
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldsver	3.2.3
date	2006-09-26T11:02:12
revision	2

sched_exp_time	68200.000000
ontime	68373.612830192
ontime4	68373.612830192
ontime5	68373.612830192
ontime6	68373.612830192
ontime7	68373.612830192
ontime8	68373.612810254
ontime9	68373.612790287
l1events	2472061

2.1.4 Events

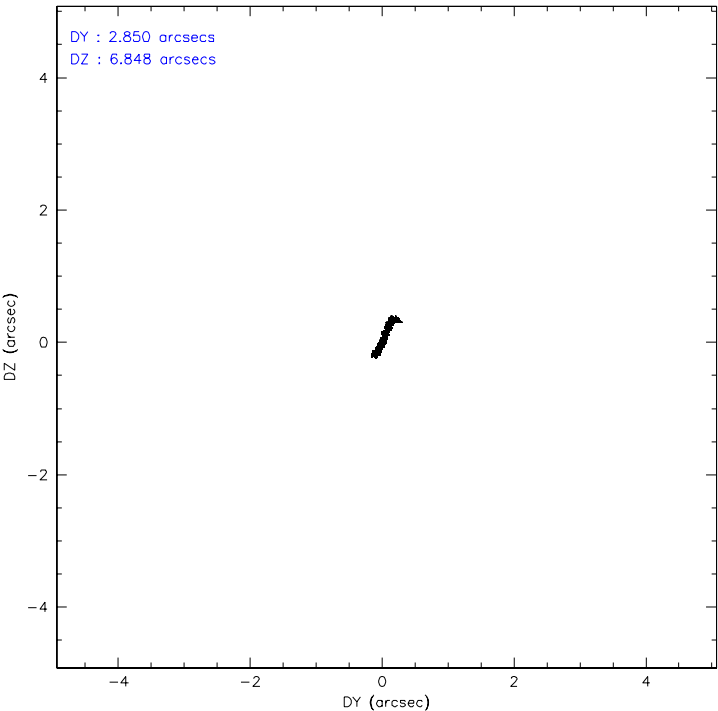
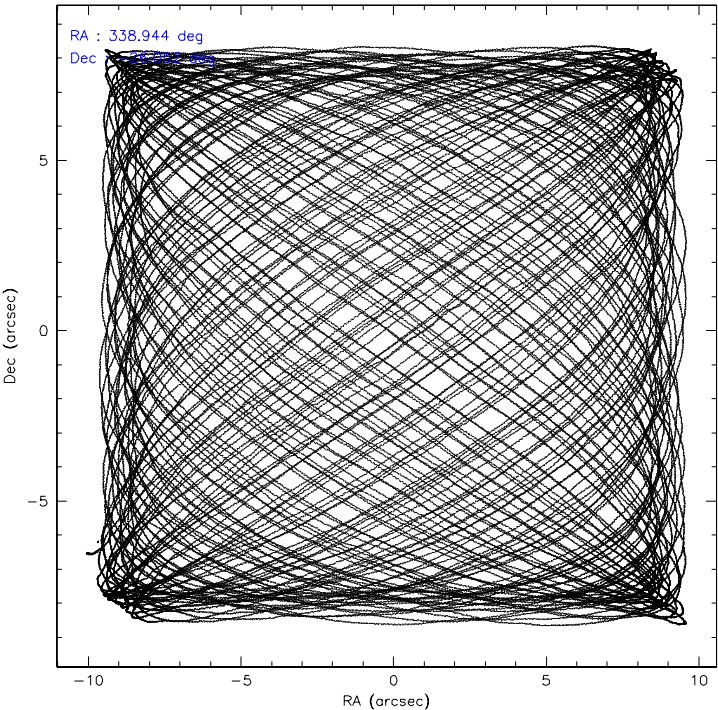
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	372524	467907	363964	469611	455941	342114
rejected events	319496	256645	295346	258275	334923	289625
rejected %	85%	54%	81%	54%	73%	84%

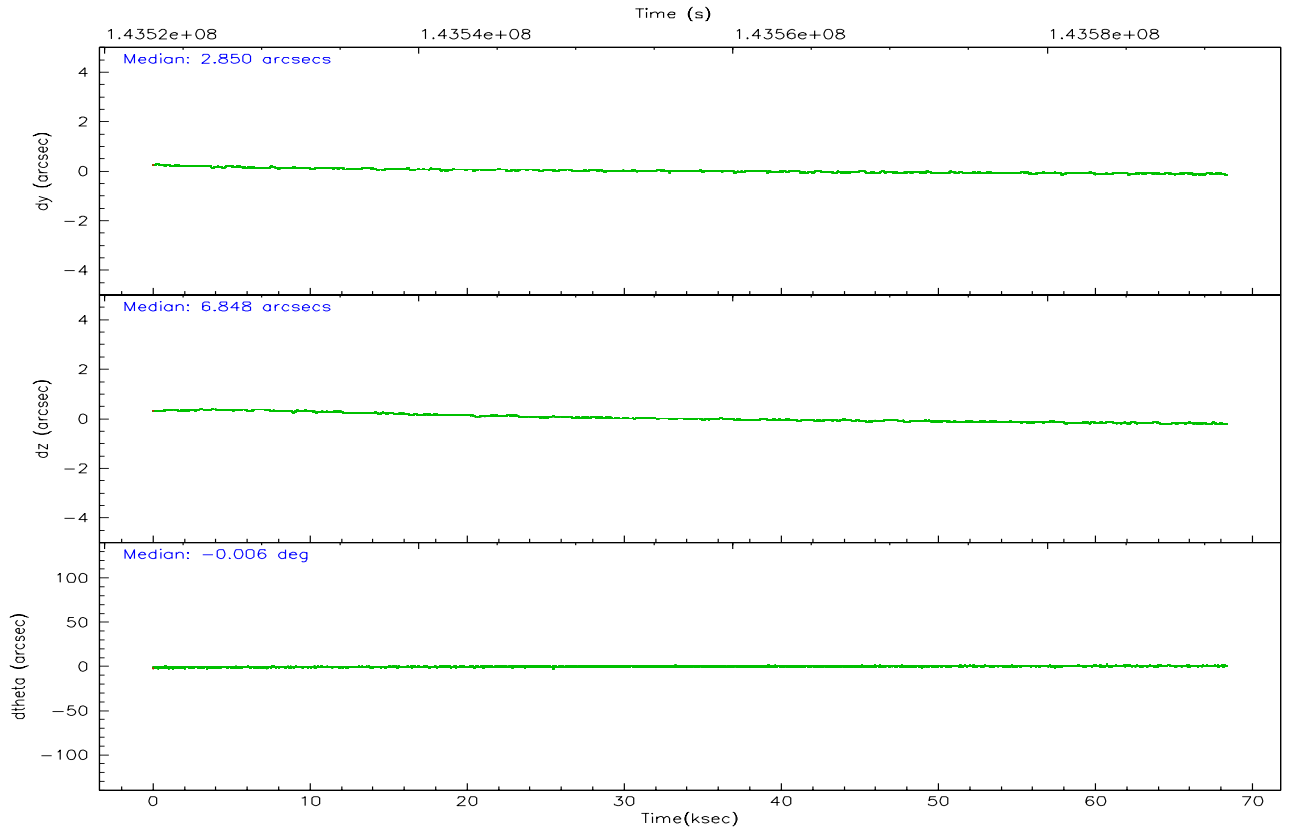
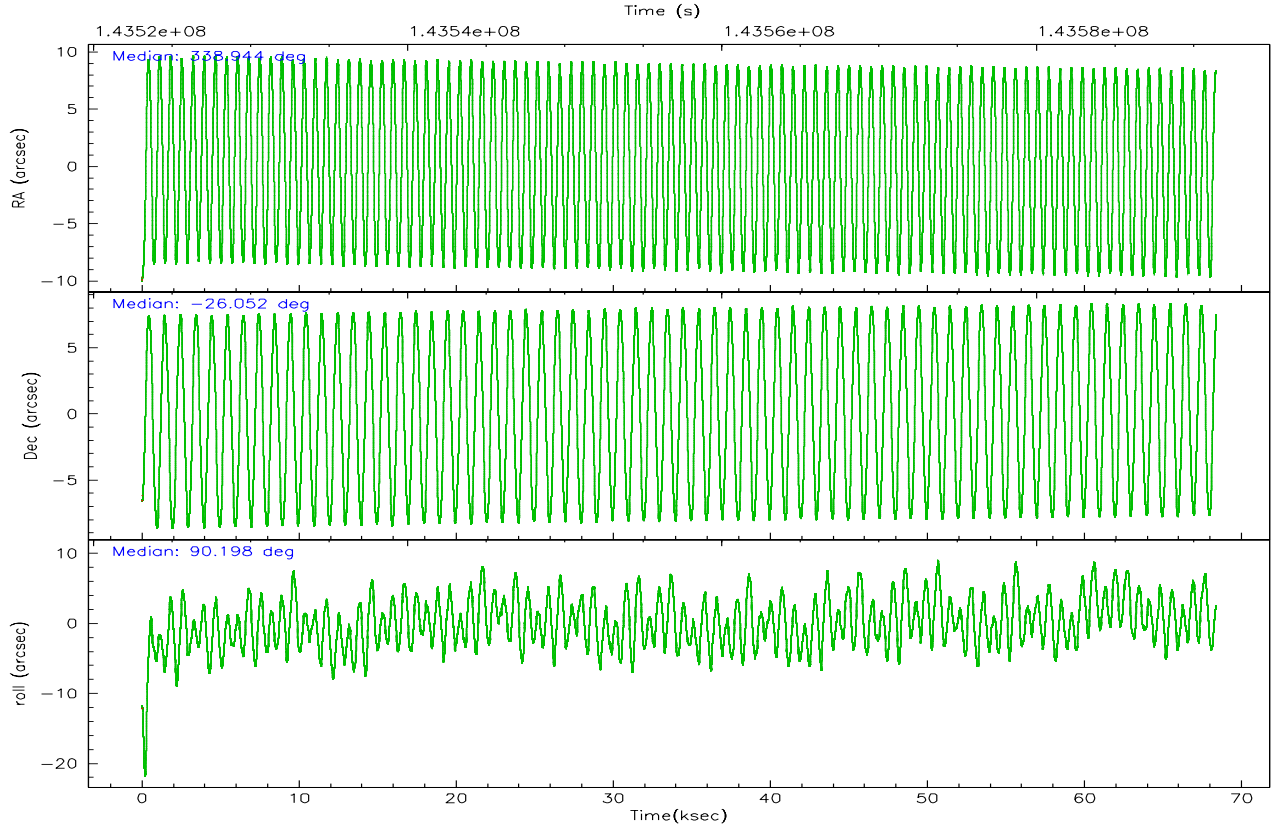
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	21270	11646	32896	17625	40922	20777
	5%	2%	9%	3%	8%	6%
grade 1 events	158	354	175	471	262	157
	0%	0%	0%	0%	0%	0%
grade 2 events	12284	67144	12153	52287	23080	10375
	3%	14%	3%	11%	5%	3%
grade 3 events	4662	6025	5446	14019	13931	4834
	1%	1%	1%	2%	3%	1%
grade 4 events	4492	5961	5370	13486	12918	4710
	1%	1%	1%	2%	2%	1%
grade 5 events	11735	23444	13827	31670	17736	14206
	3%	5%	3%	6%	3%	4%
grade 6 events	10322	120501	12761	113931	30175	11799
	2%	25%	3%	24%	6%	3%
grade 7 events	307601	232832	281336	226122	316917	275256
	82%	49%	77%	48%	69%	80%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	338.959545	338.9439552877919	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	-26.075430	-26.05206638910383	Subarray start row	1	1
Pointing Roll	90.052492	90.20226901335188	Subarray row count	774	774
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	2.5
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	143523262.184000	143522296.40185			
Observation start date	2002-07-20T03:33:18	2002-07-20T03:18:16			
Observation end time	143591462.184000	143592139.90472			
Observation end date	2002-07-20T22:29:58	2002-07-20T22:42:19			
Read mode	TIMED	TIMED			

2.3 Aspect



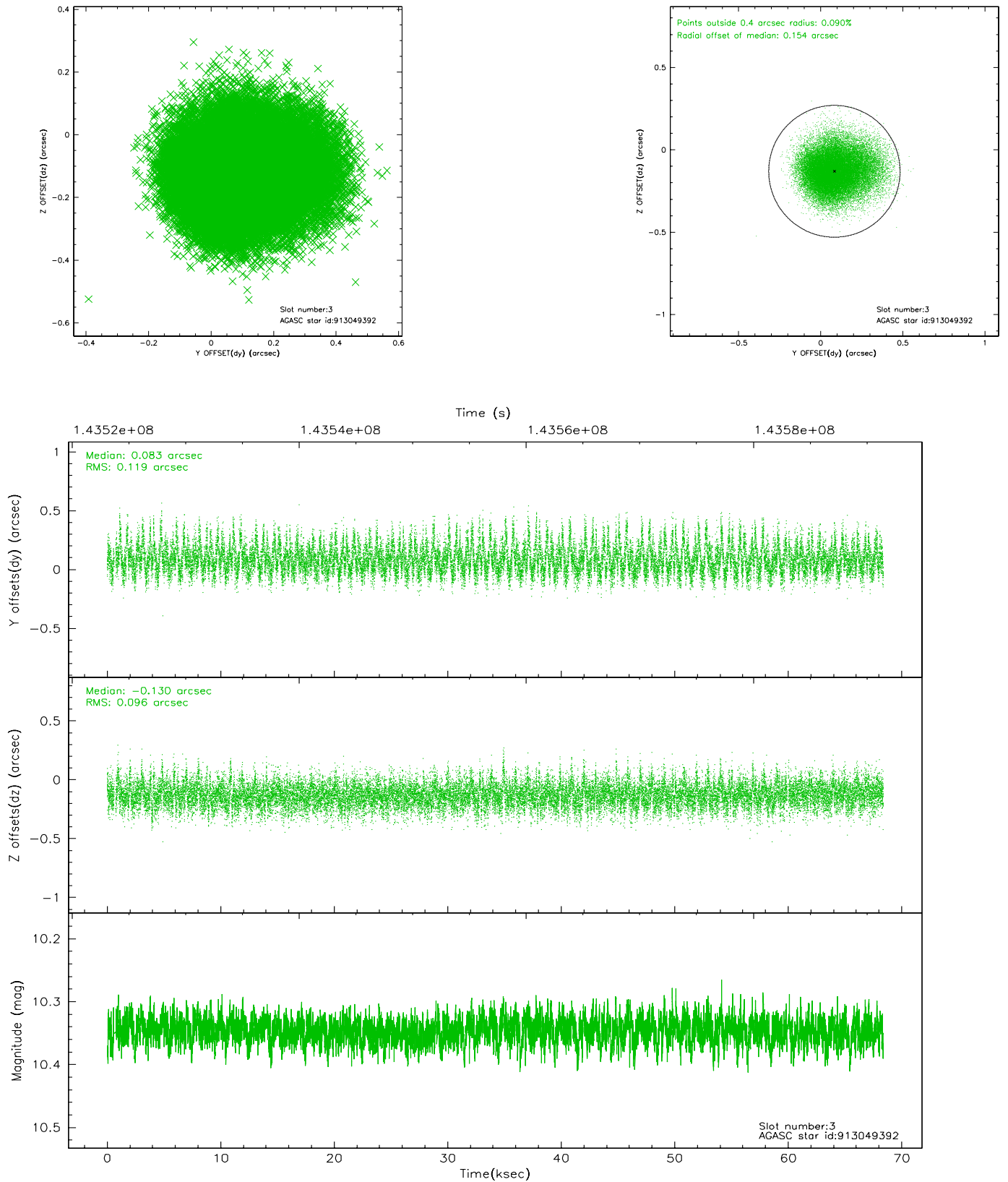


Slot Statistics

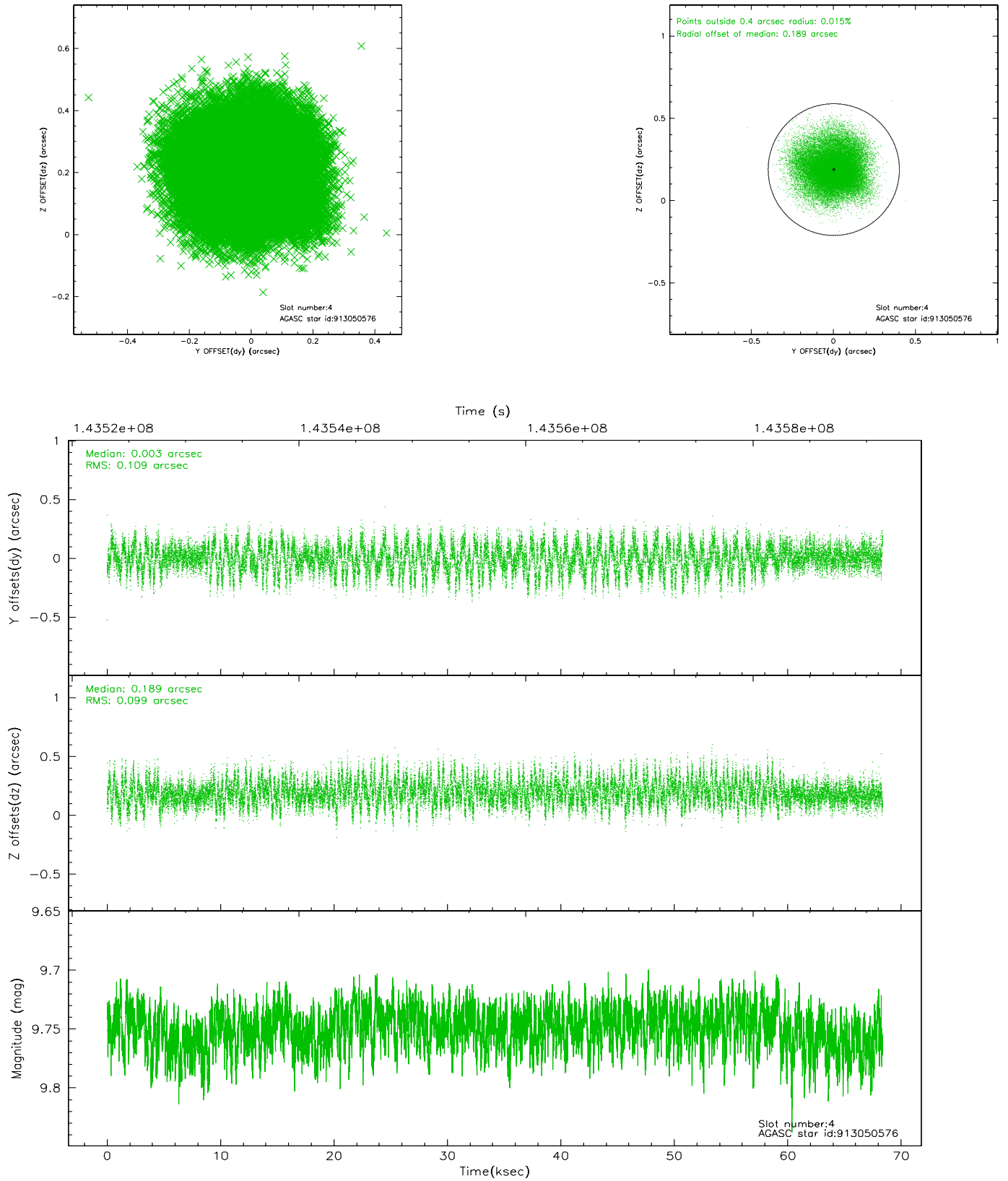
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	16678	-0.019	0.087	0.007	0.012	0.000000	0.000000	940.74	-1785.72
1	FID	ACIS-S-5	7.24	16677	0.016	0.017	0.008	0.012	0.000000	0.000000	-1808.27	111.79
2	FID	ACIS-S-6	7.38	16678	-0.018	-0.093	0.011	0.019	0.000000	0.000000	406.34	755.60
3	GUIDE	913049392	10.35	33210	0.083	-0.130	0.162	0.266	338.305127	-26.229898	-558.87	2114.58
4	GUIDE	913050576	9.75	33326	0.003	0.189	0.160	0.254	339.398805	-25.857774	780.68	-1422.54
5	GUIDE	913055744	9.71	33338	0.157	0.048	0.110	0.176	339.034663	-26.334108	-930.65	-240.65
6	GUIDE	913051736	9.91	33337	-0.034	-0.119	0.158	0.251	338.239401	-25.803806	974.05	2334.01
7	GUIDE	913047808	9.41	33331	-0.220	0.006	0.103	0.169	338.934868	-25.449672	2253.28	79.32

2.4 Star Slots

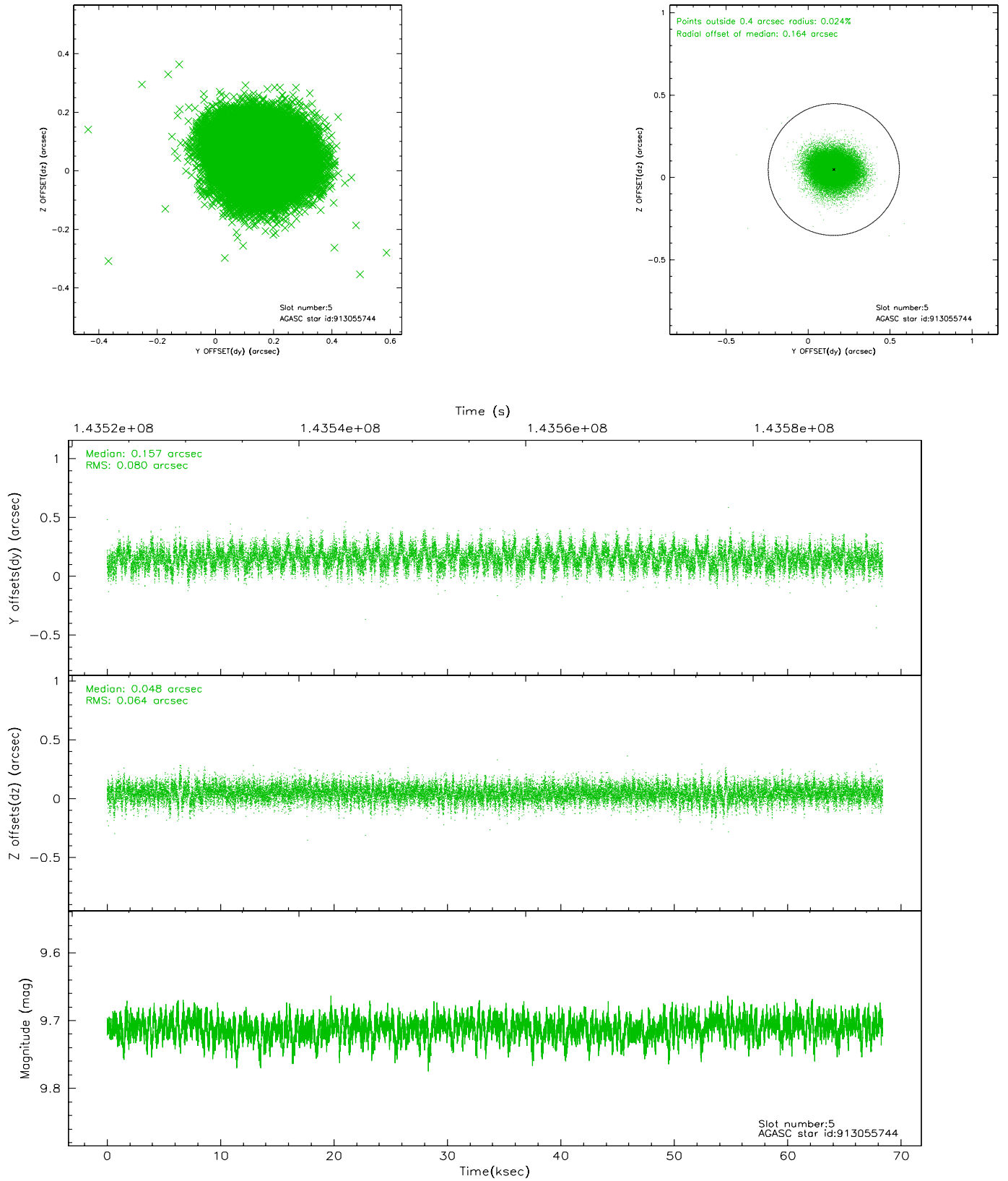
2.4.1 Slot 3



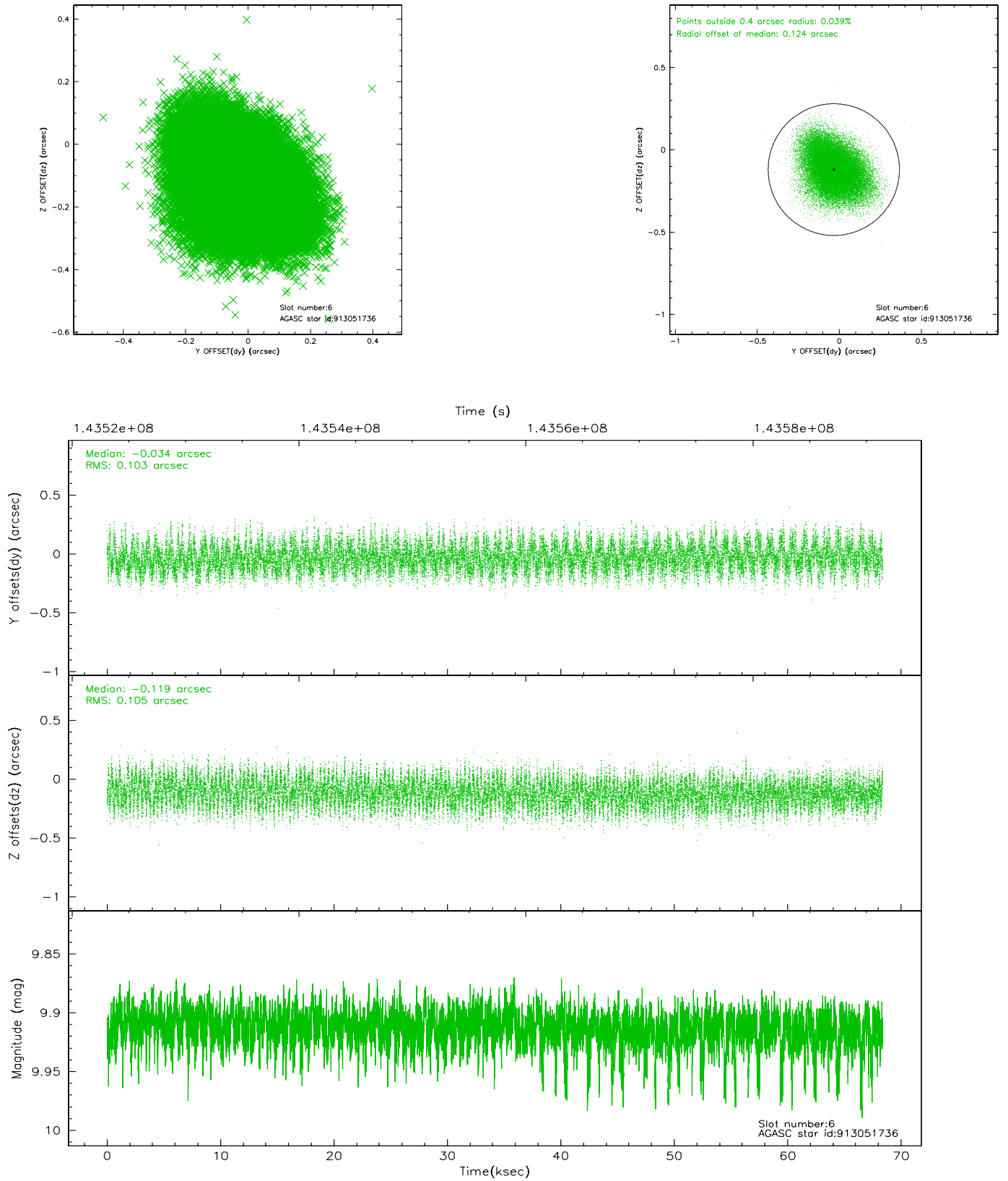
2.4.2 Slot 4



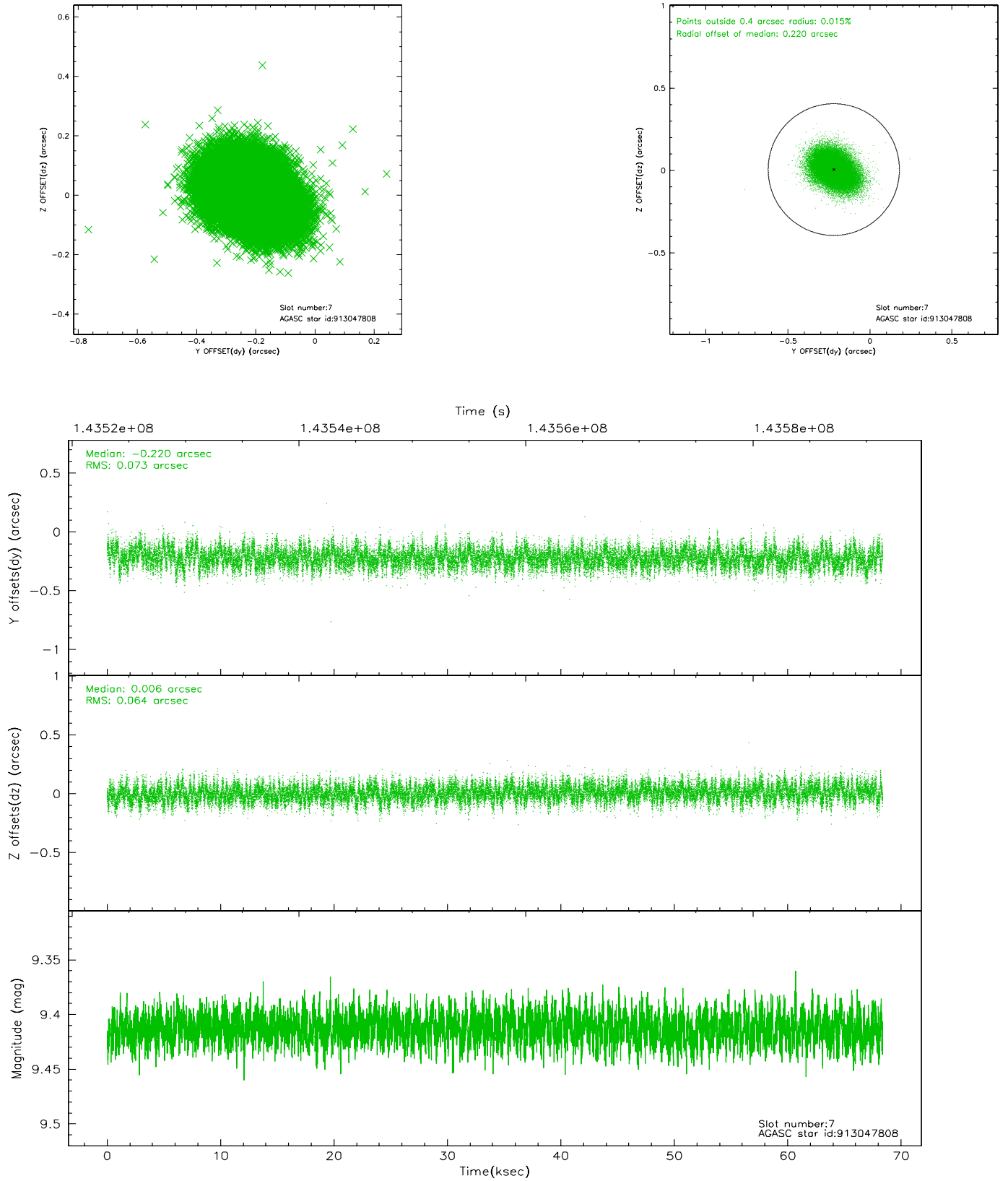
2.4.3 Slot 5



2.4.4 Slot 6

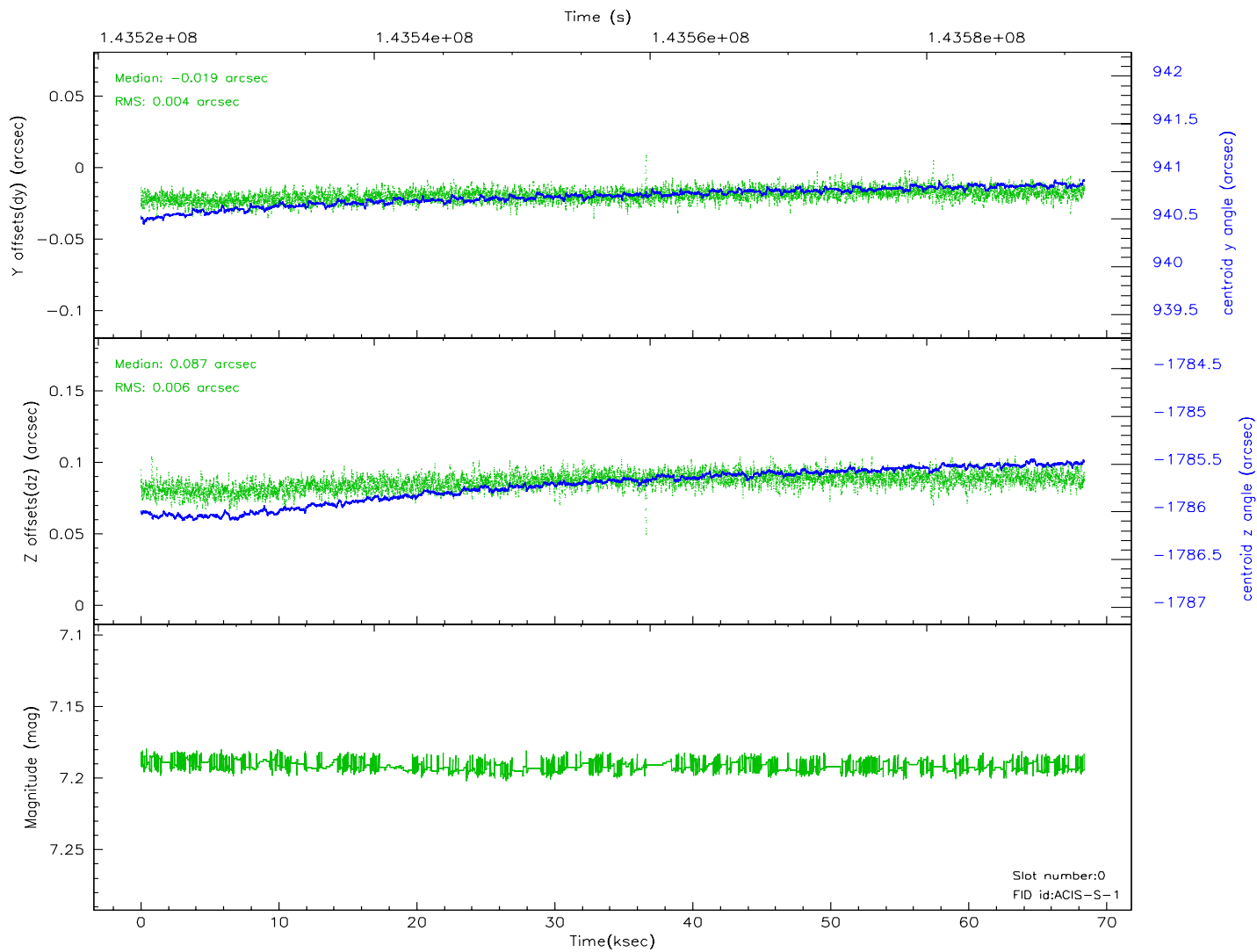
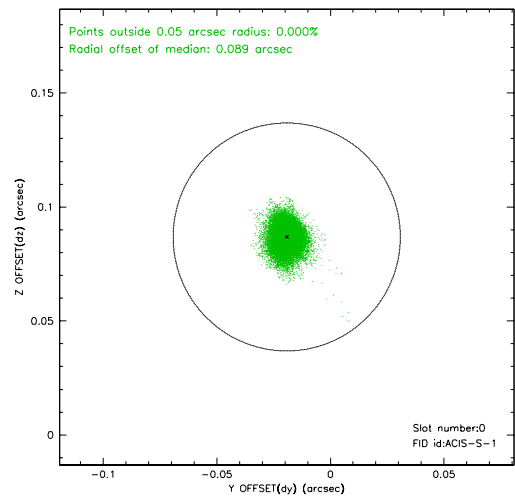
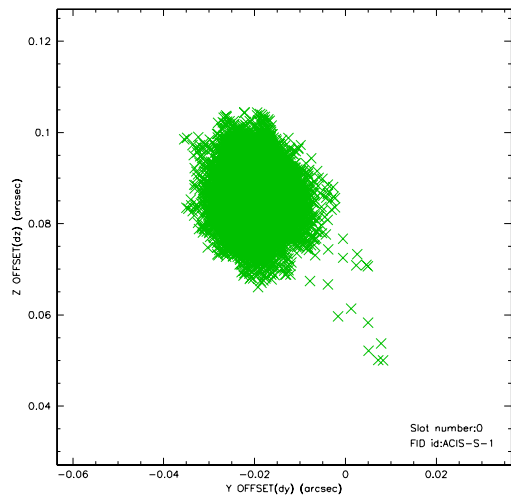


2.4.5 Slot 7

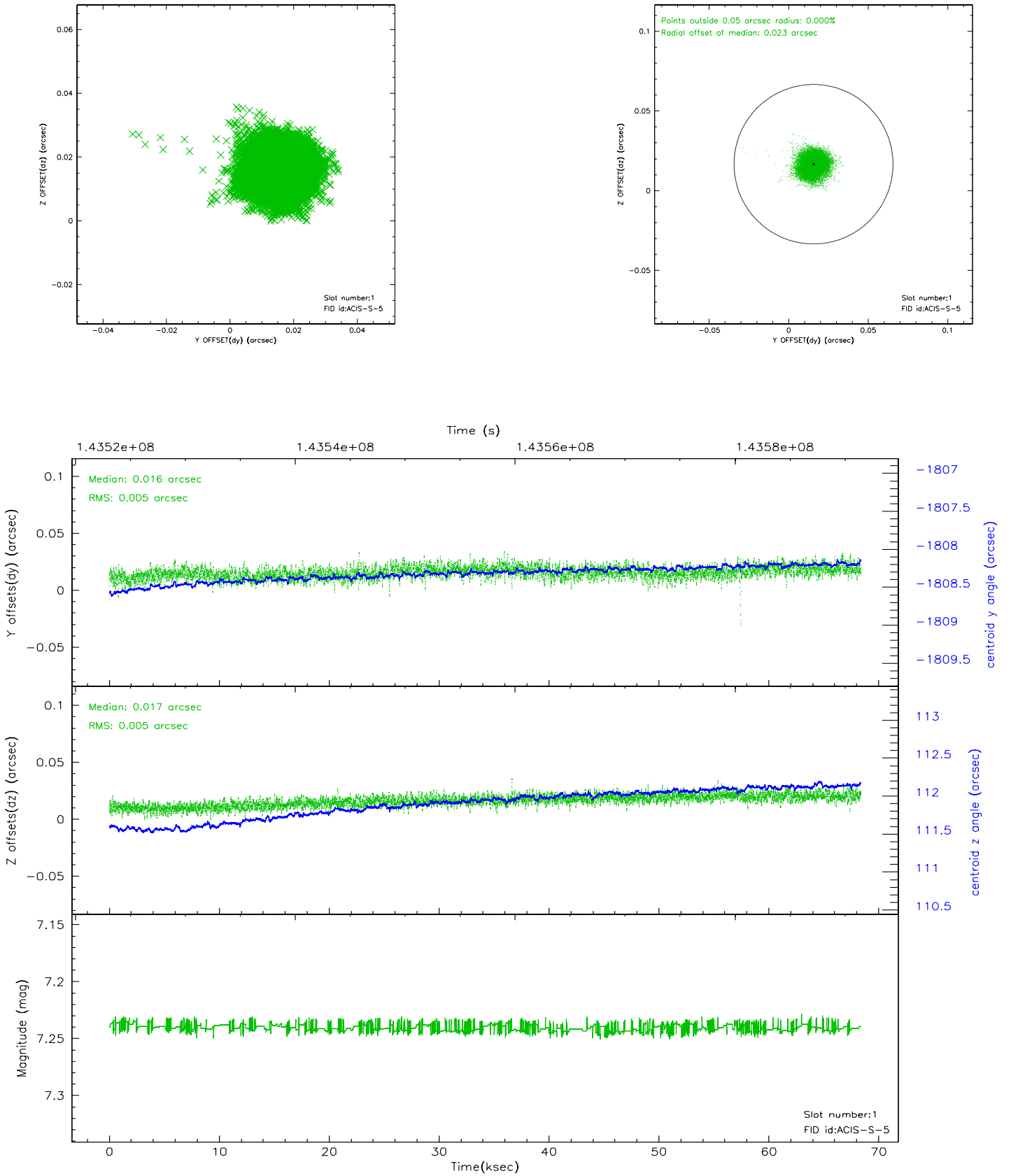


2.5 FID Slots

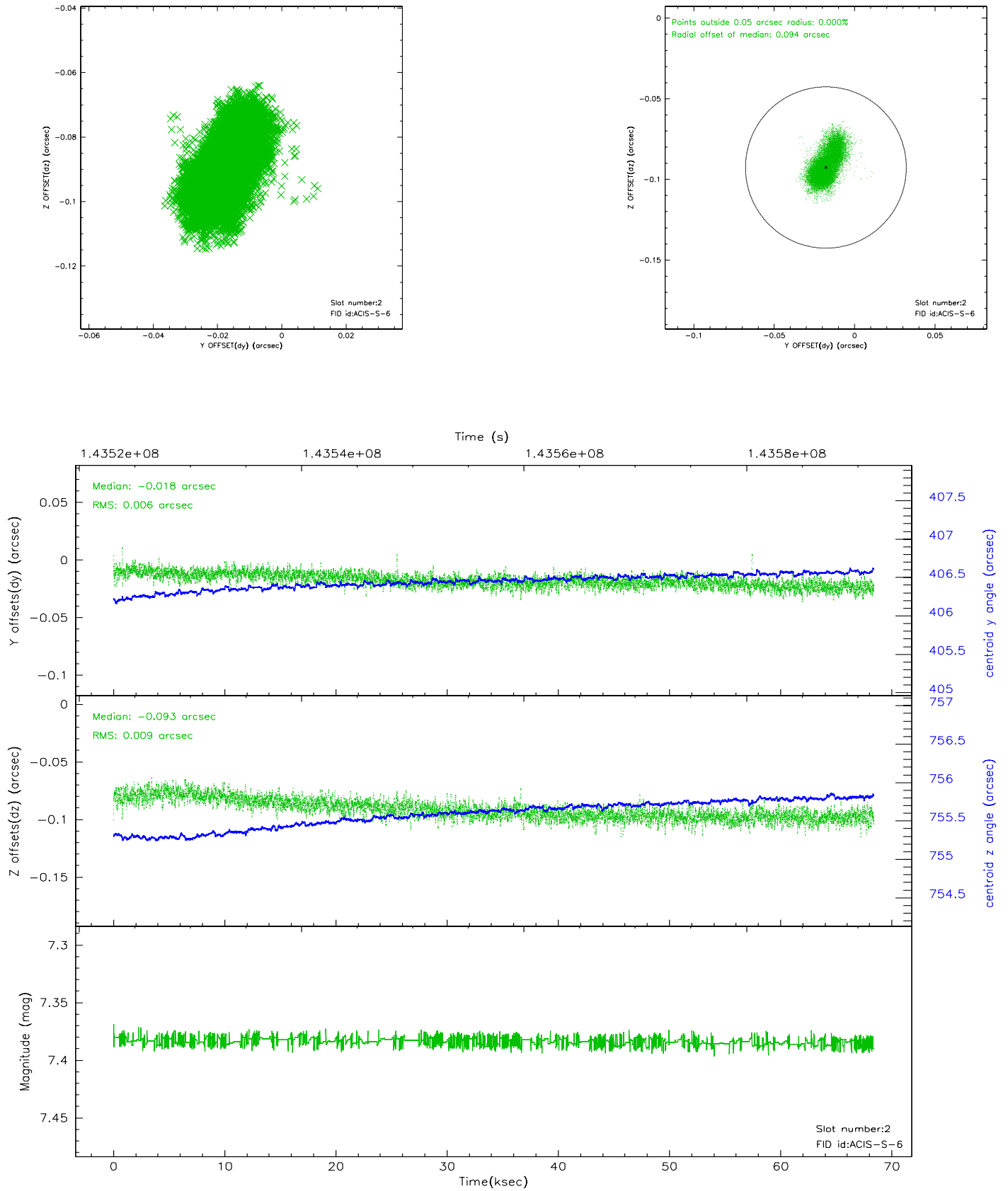
2.5.1 Slot 0



2.5.2 Slot 1

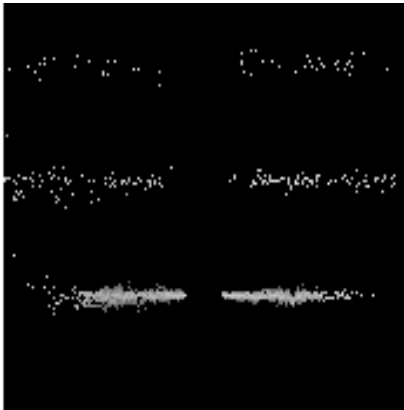


2.5.3 Slot 2

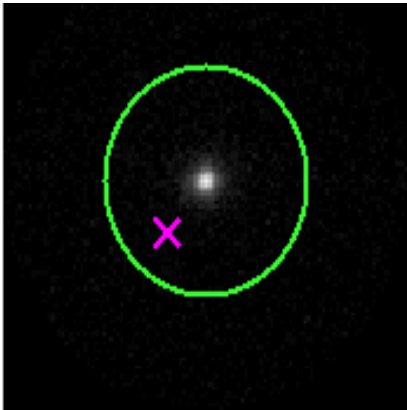


3 Gratings

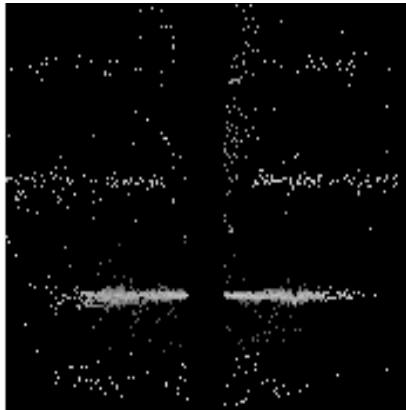
3.1 HEG Arm



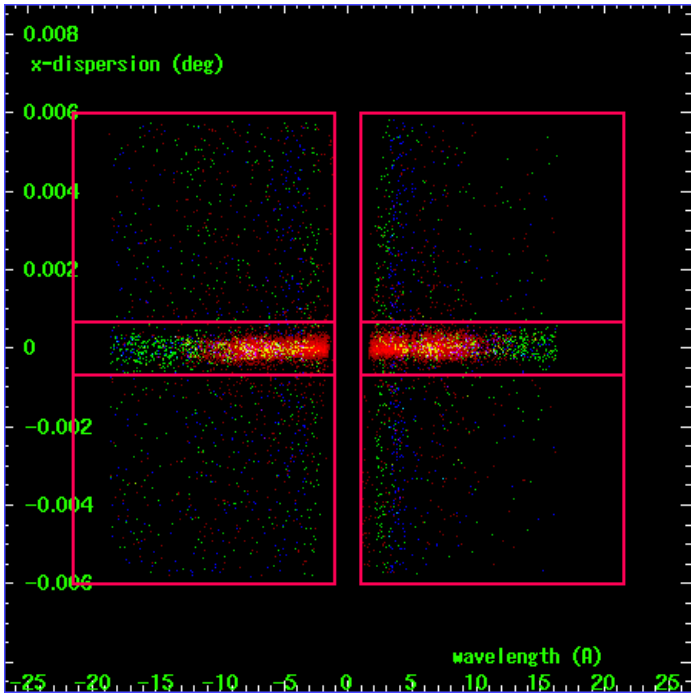
HEG Order Sort 123



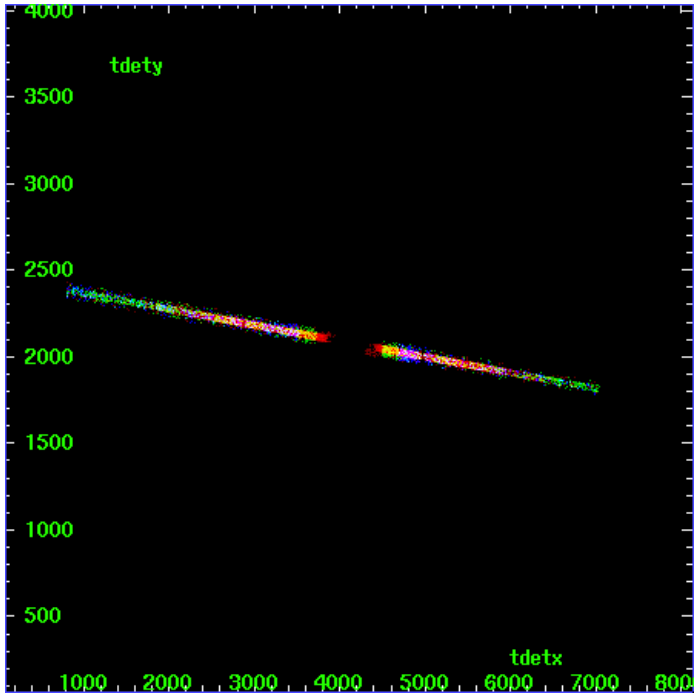
HEG Zero Order



HEG Order Sort ALL

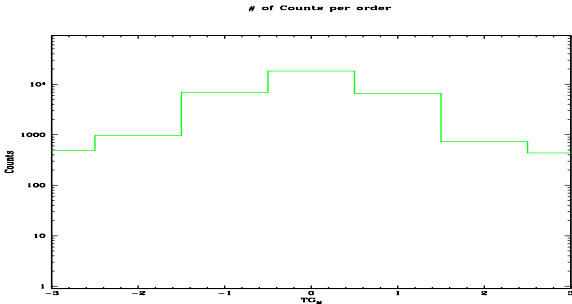


Spot Image HEG

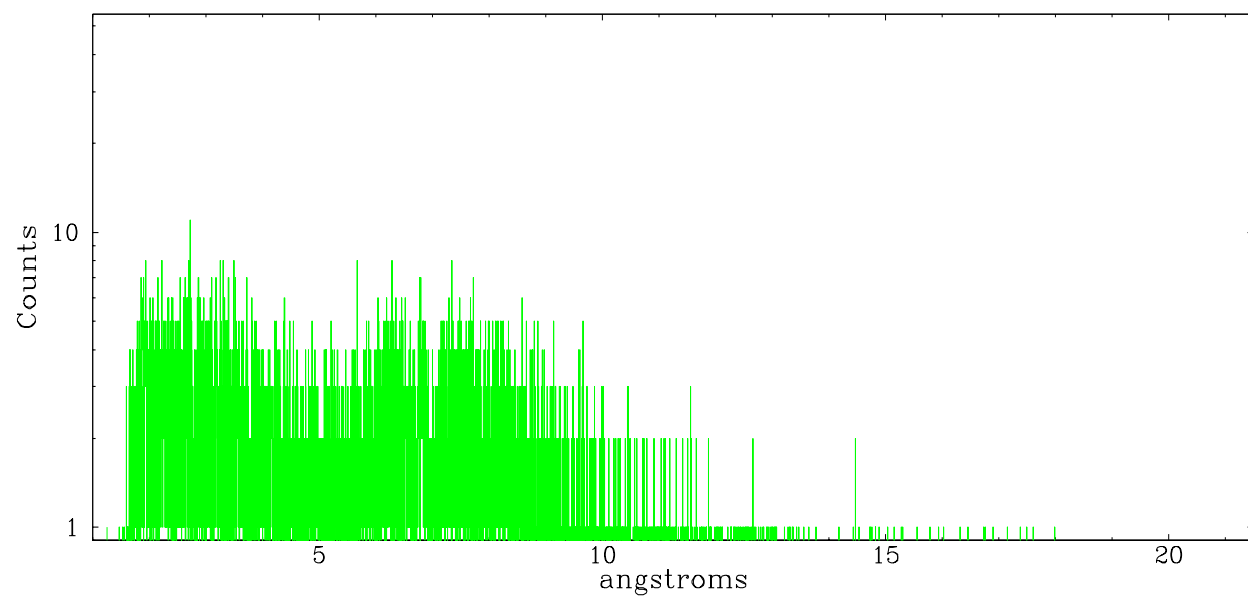


Full Detector HEG

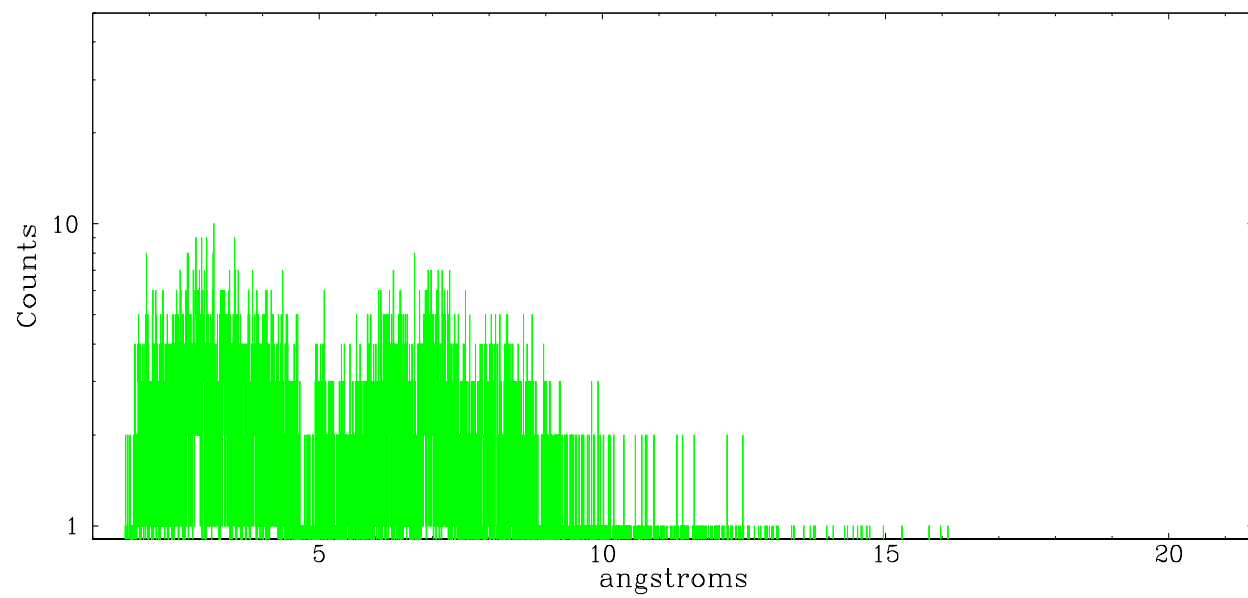
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	489	968	6890	18298	6586	733	436



heg order -1



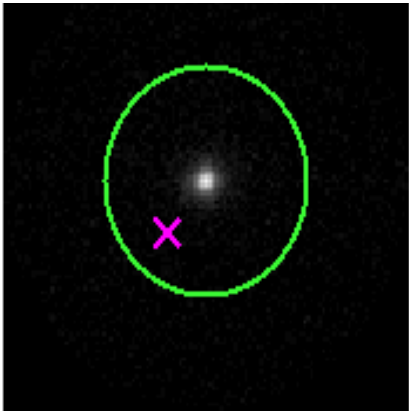
heg order +1



3.2 MEG Arm



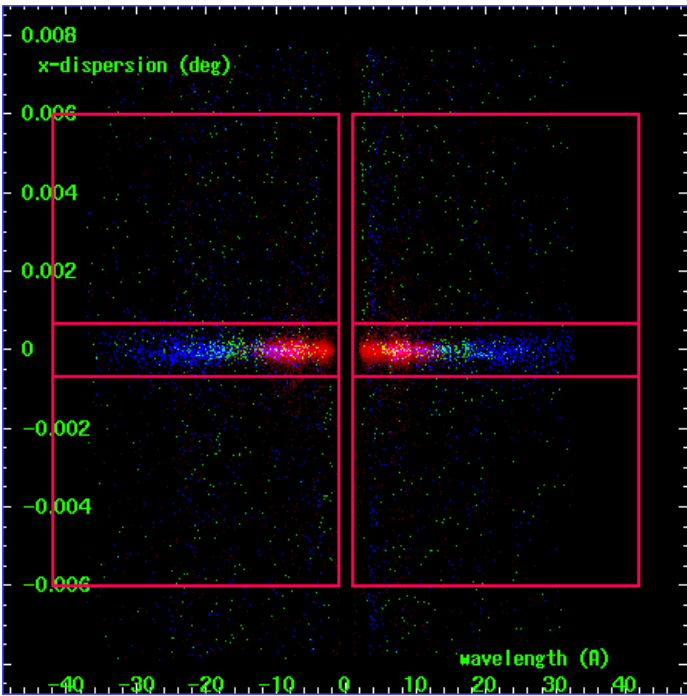
MEG Order Sort 123



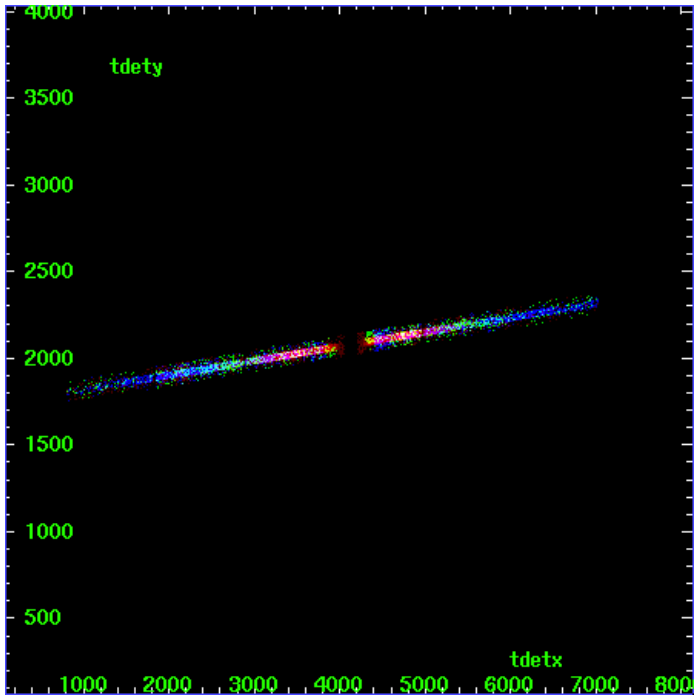
MEG Zero Order



MEG Order Sort ALL

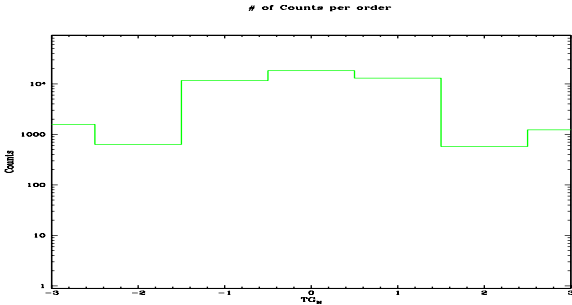


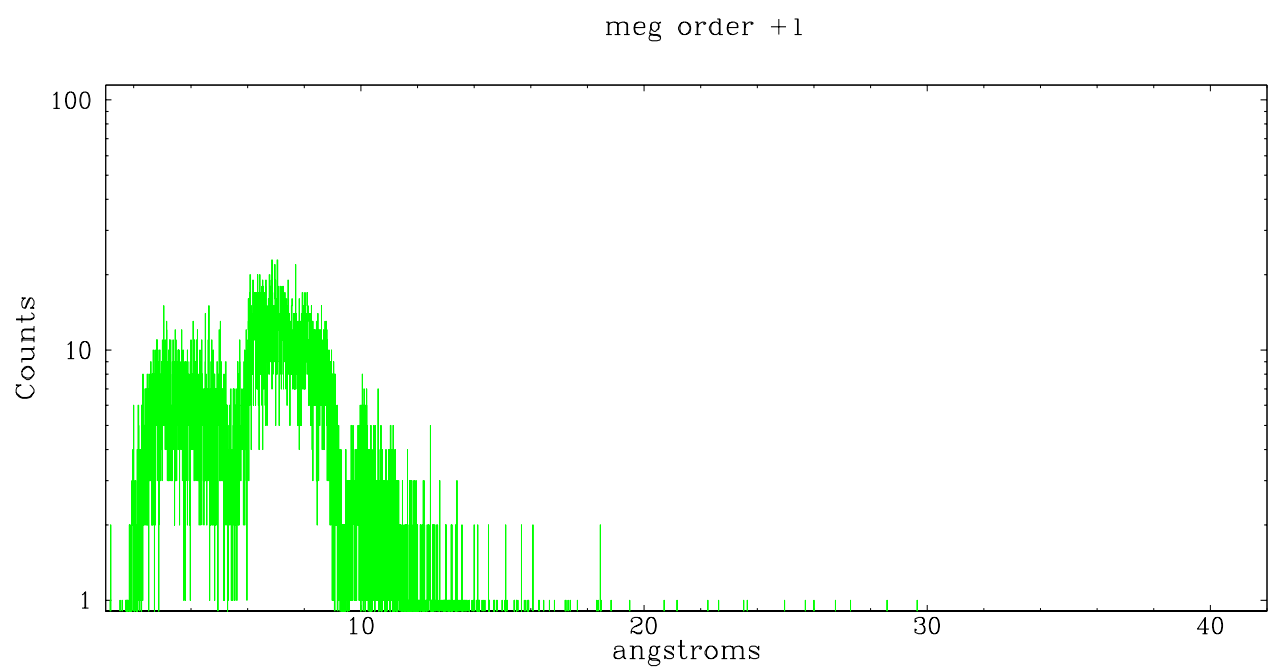
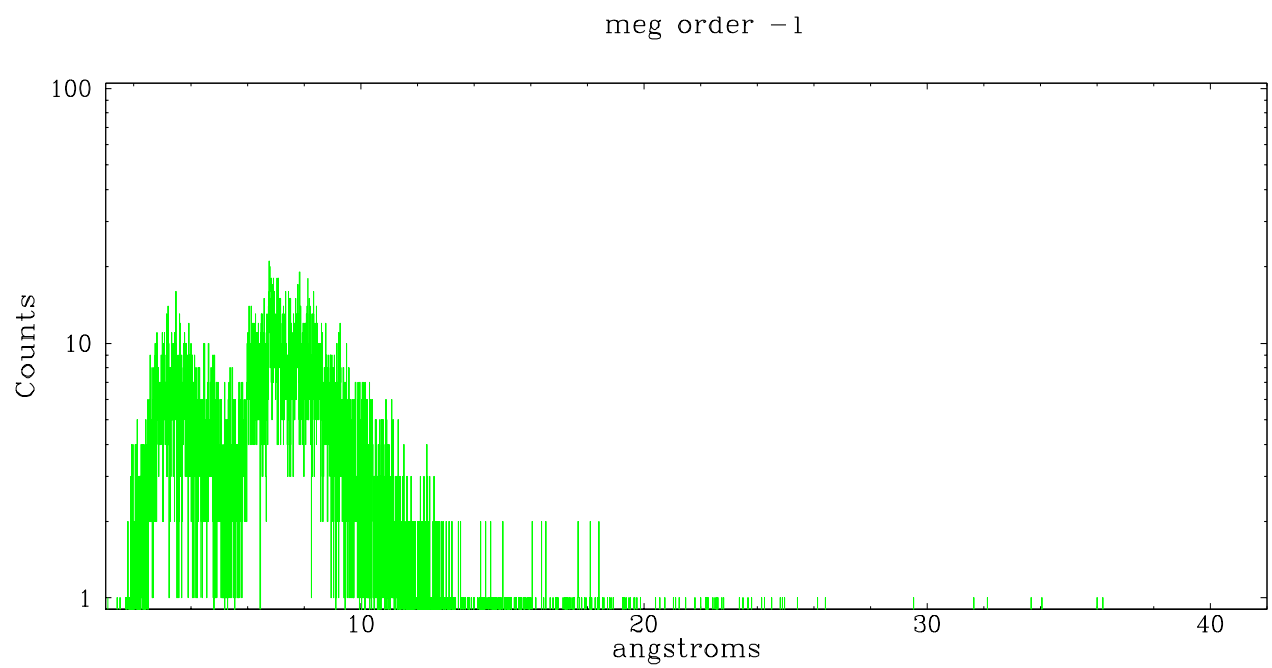
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1575	634	11588	18298	12968	575	1227





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.09.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	68.369

A.2 Comments

A spike in the number of events sent from the instrument and in the count rate occurs about 64 ksec into the observation. The cause appears to be a high radiation.