

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1010 - L2 Version 001
Chandra X-Ray Center

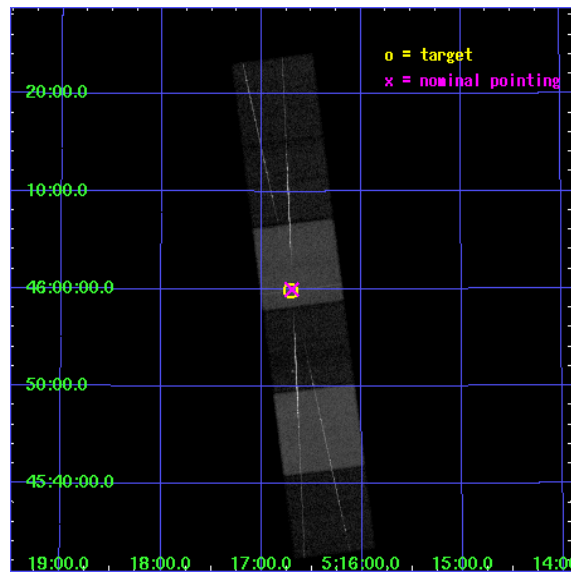
L2 Processing Date : Nov 7 2006

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1 Front

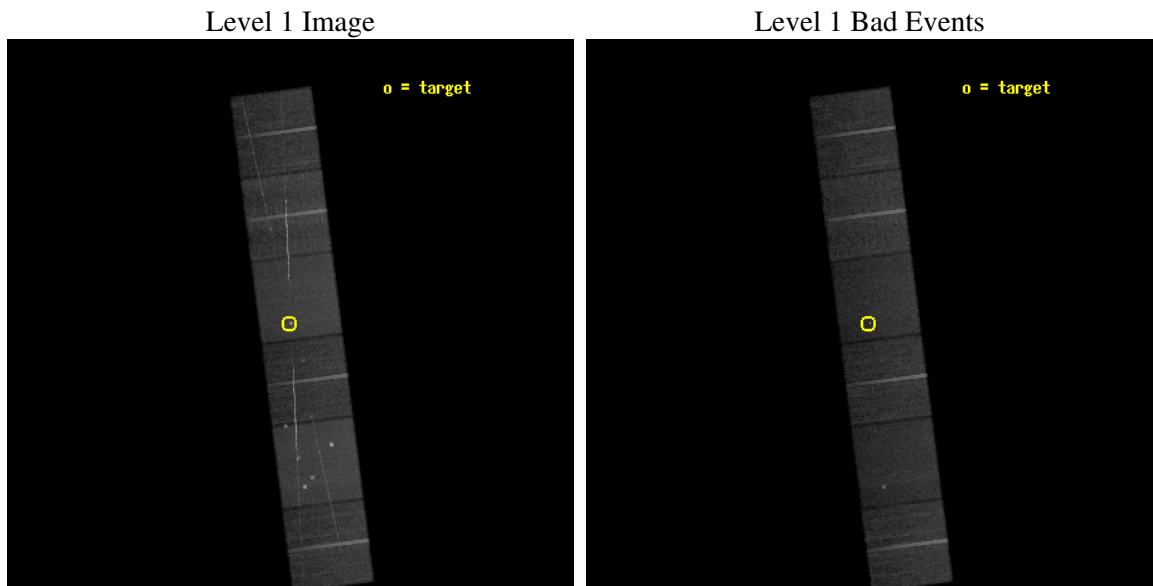
seq_num	390002
obs_id	1010
title	GRATINGS CALIBRATION OBSERVATIONS OF HZ43 AND CAPELLA
observer	Dr. CXC Calibration
object	CAPELLA
dtcycle	0
cycle	P
ra_targ	79.17625
dec_targ	45.997889
ra_nom	79.17403684045
dec_nom	45.999450807943
roll_nom	262.6519425892
revision	2
ontime	29916.800027862
livetime	29537.975492175
ontime4	29916.800027862
ontime5	29916.800027862
ontime6	29913.559067637
ontime7	29916.800027862
ontime8	29916.800027862
ontime9	29916.800027862
l2events	328468



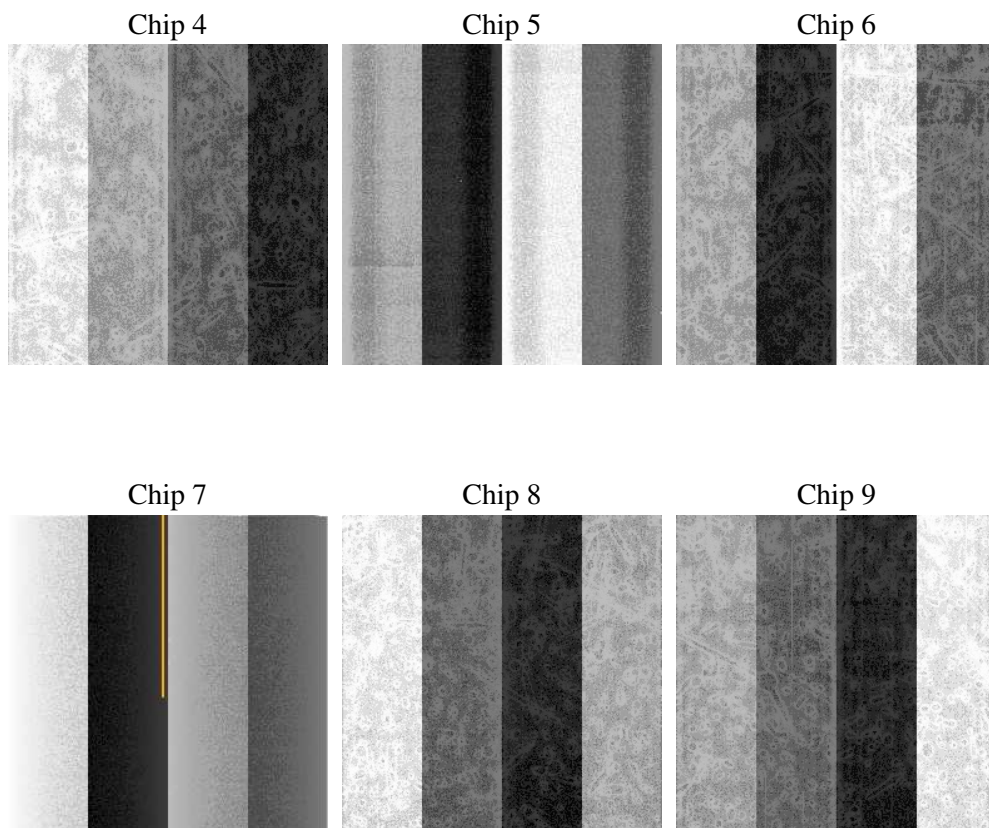
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-11-06T17:58:00
revision	2

sched_exp_time	30000.000000
ontime	29924.139842972
ontime4	29924.139842972
ontime5	29924.139842972
ontime6	29920.898882747
ontime7	29924.139842972
ontime8	29924.139842972
ontime9	29924.139842972
l1events	1375572

2.1.4 Events

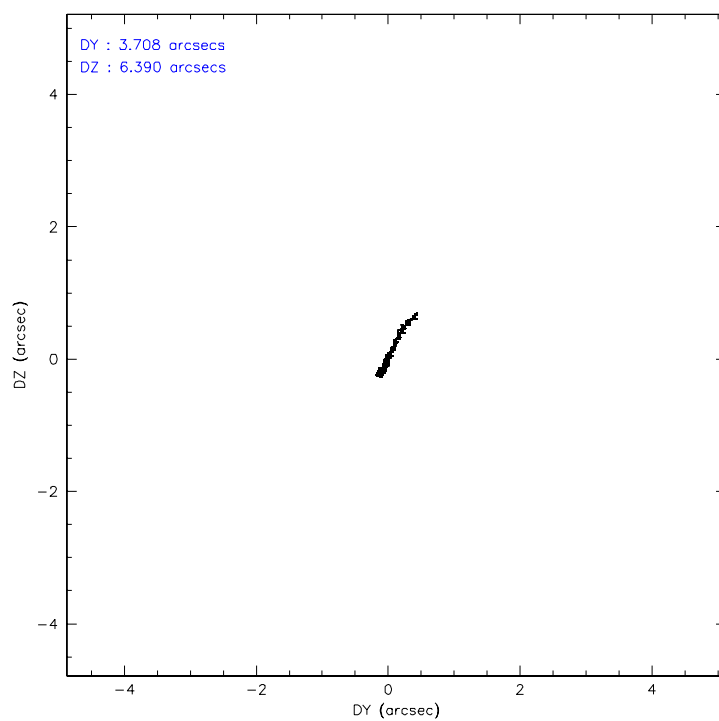
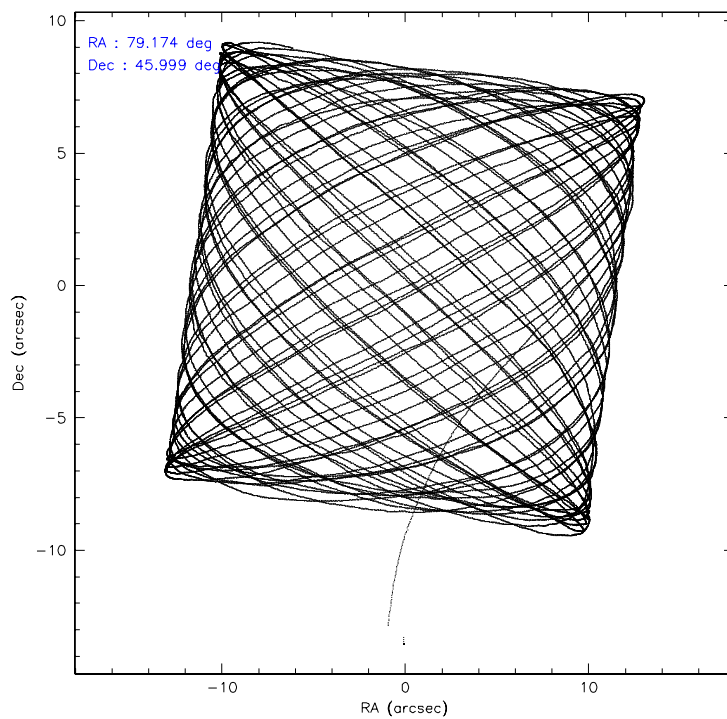
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	206107	280182	200752	253271	250507	184753
rejected events	181064	143903	165444	153447	187600	159355
rejected %	87%	51%	82%	60%	74%	86%

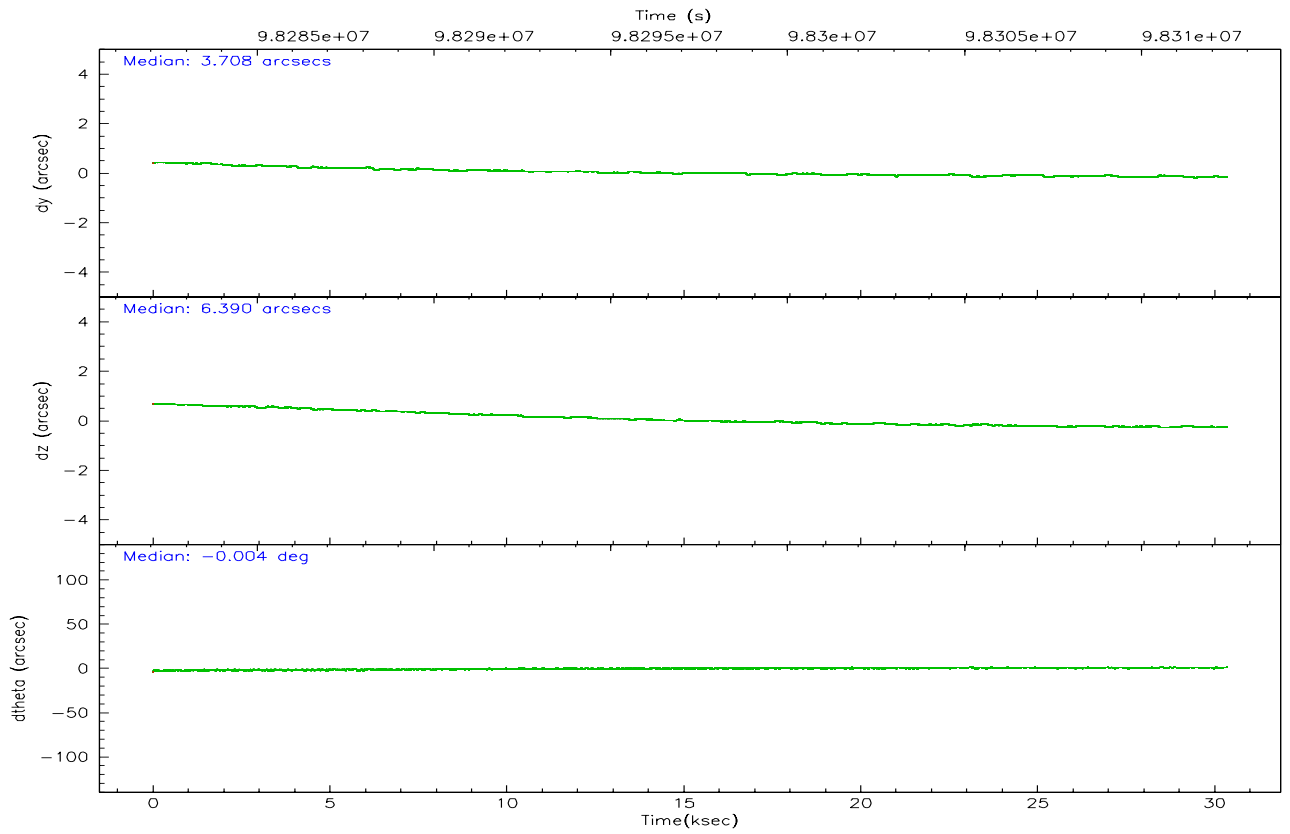
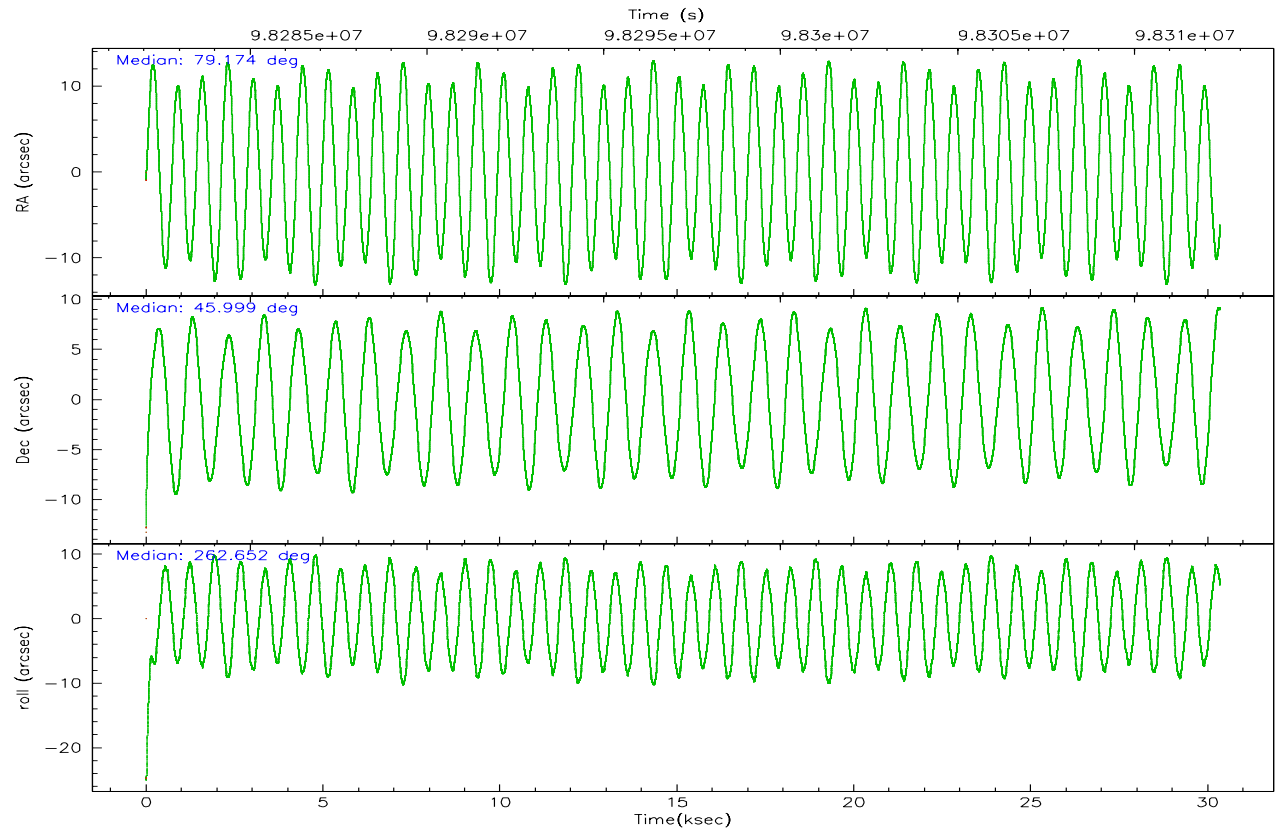
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	11716	22638	20855	7526	29934	12021
	5%	8%	10%	2%	11%	6%
grade 1 events	103	204	148	261	227	84
	0%	0%	0%	0%	0%	0%
grade 2 events	5386	40295	5361	24264	11016	4739
	2%	14%	2%	9%	4%	2%
grade 3 events	2095	4261	2434	5895	5099	2224
	1%	1%	1%	2%	2%	1%
grade 4 events	2010	4080	2401	5775	4717	2127
	0%	1%	1%	2%	1%	1%
grade 5 events	6629	12674	7853	16918	9703	7784
	3%	4%	3%	6%	3%	4%
grade 6 events	3840	65029	4264	56385	12151	4292
	1%	23%	2%	22%	4%	2%
grade 7 events	174328	131001	157436	136247	177660	151482
	84%	46%	78%	53%	70%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	79.158551	79.17403684045036	Subarray requested	NONE	NONE
Pointing Dec	46.024546	45.9994508079435	Alternating exposures requested	N	N
Pointing Roll	262.506466	262.6519425891988	Primary exposure time	0.000000	3.2
Window start time	97372864.184000	97372864.184000			
Window stop time	99705664.184000	99705664.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
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	98282421.184000	98281369.914151			
Observation start date	2001-02-11T12:39:17	2001-02-11T12:22:49			
Observation end time	98312421.184000	98313617.440394			
Observation end date	2001-02-11T20:59:17	2001-02-11T21:20:17			
Read mode	TIMED	TIMED			

2.3 Aspect



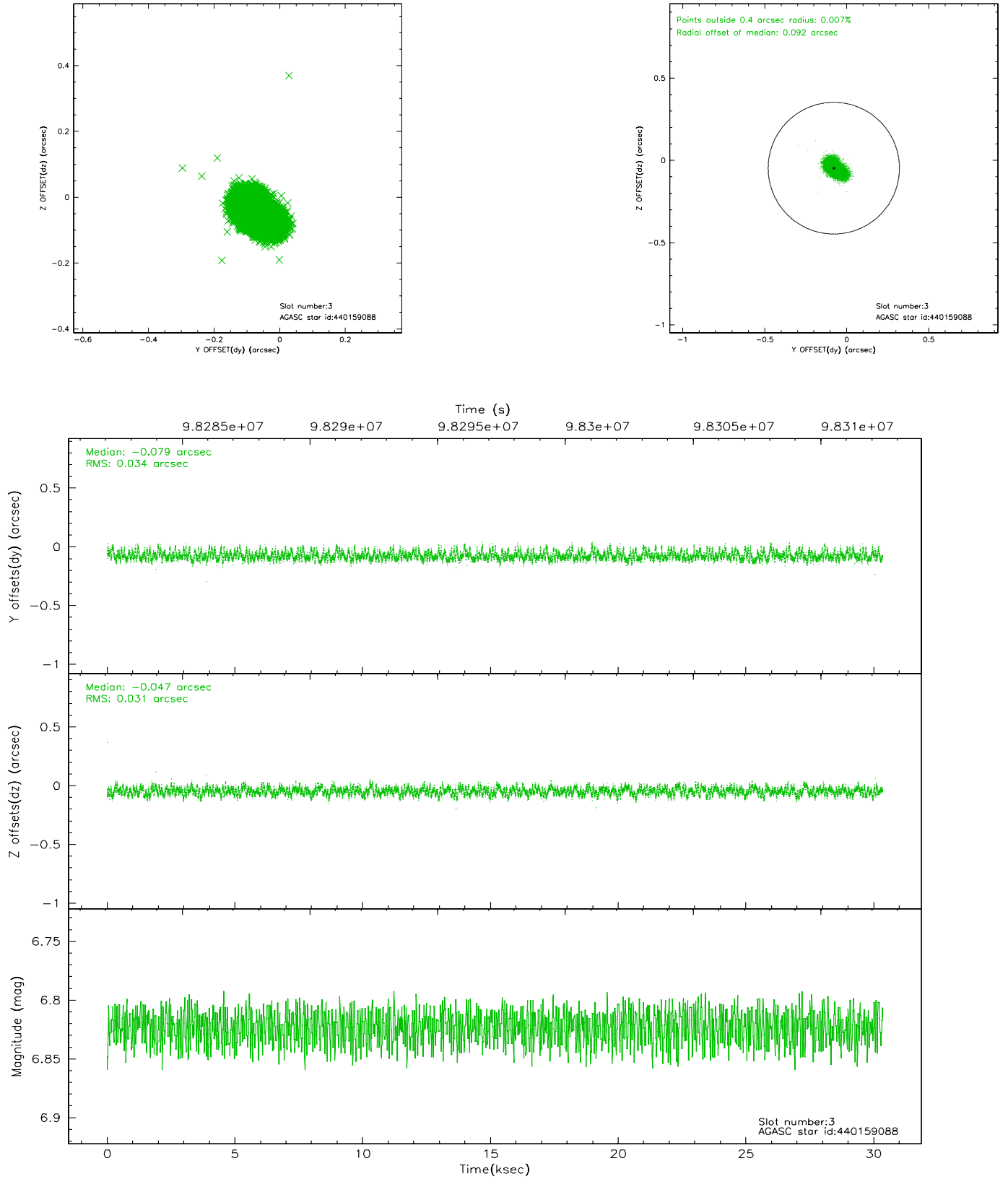


Slot Statistics

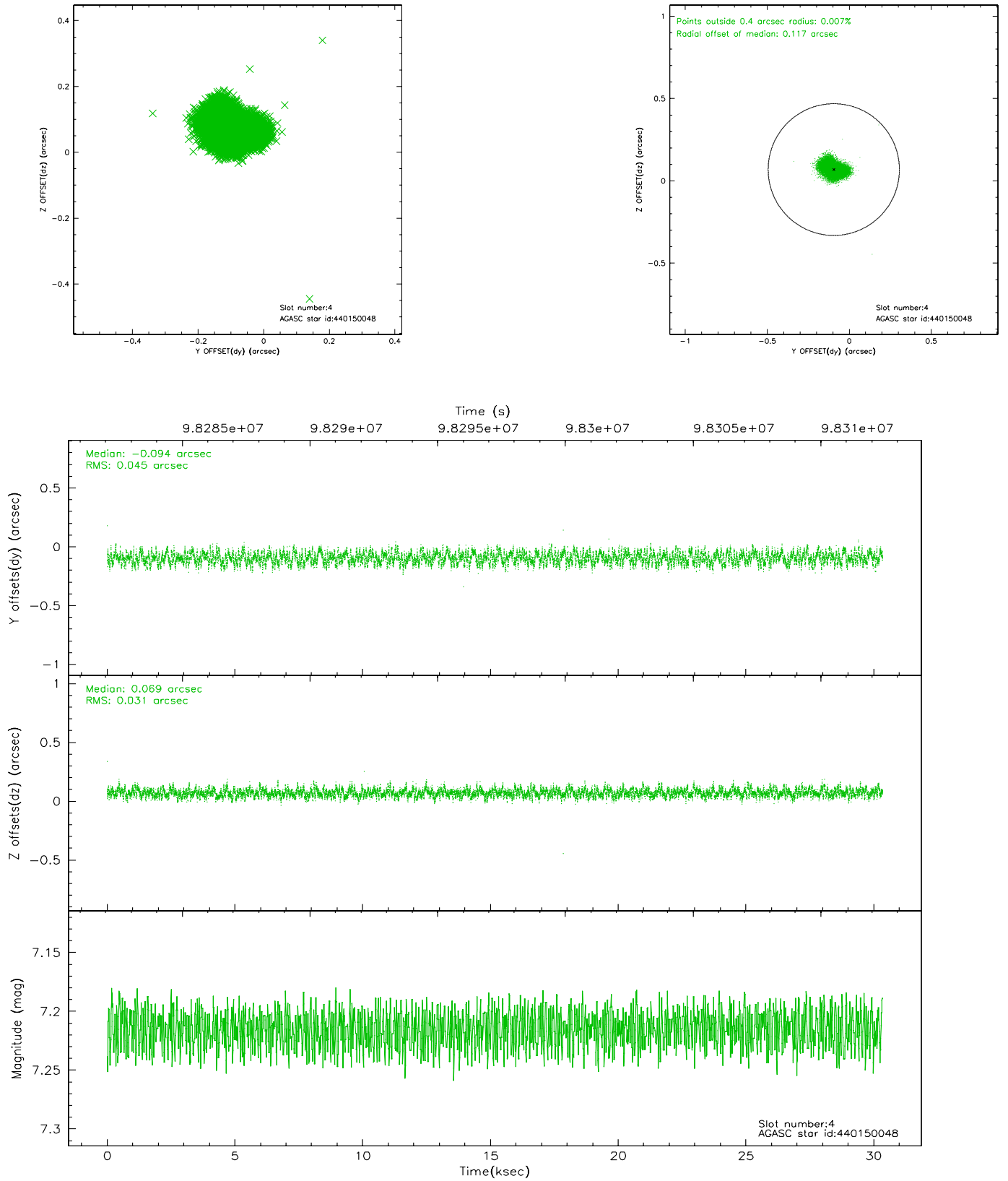
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7405	-0.021	-0.036	0.012	0.020	0.000000	0.000000	-756.24	-1789.80
1	FID	ACIS-S-4	7.20	7405	-0.022	0.020	0.013	0.024	0.000000	0.000000	2157.02	118.63
2	FID	ACIS-S-5	7.23	7405	0.011	0.025	0.009	0.016	0.000000	0.000000	-1808.95	112.41
3	GUIDE	440159088	6.82	14806	-0.079	-0.047	0.048	0.081	79.453034	46.128063	-467.52	679.11
4	GUIDE	440150048	7.21	14806	-0.094	0.069	0.059	0.091	79.112838	46.416060	-1383.57	-296.71
5	GUIDE	440158344	7.94	14805	0.113	0.024	0.051	0.081	79.344888	45.394991	2184.36	762.11
6	GUIDE	440164960	8.30	14805	0.080	0.049	0.051	0.085	79.132526	46.140947	-407.52	-119.41
7	GUIDE	440149808	8.43	14803	-0.024	-0.089	0.054	0.092	78.873930	46.405955	-1271.31	-880.37

2.4 Star Slots

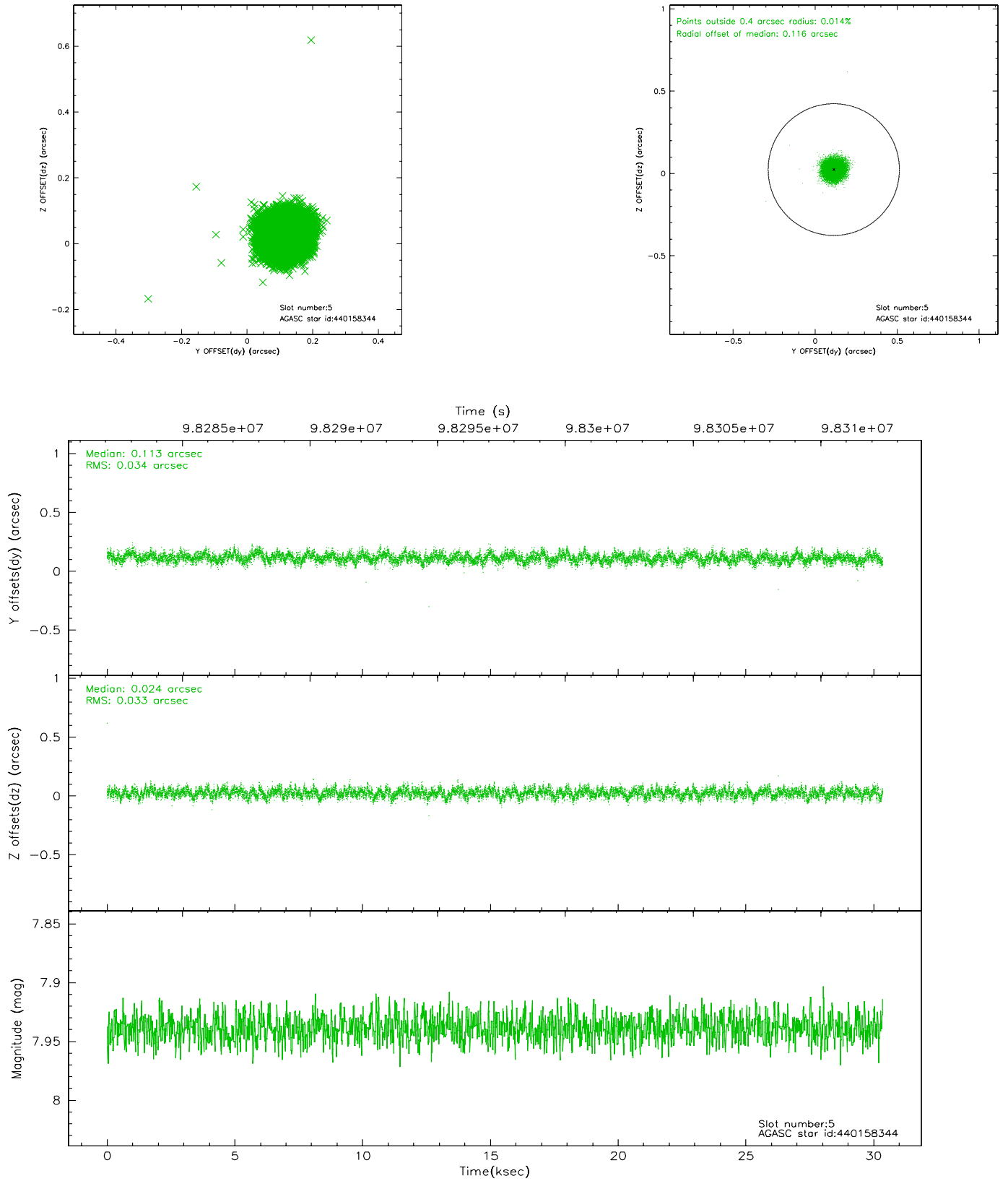
2.4.1 Slot 3



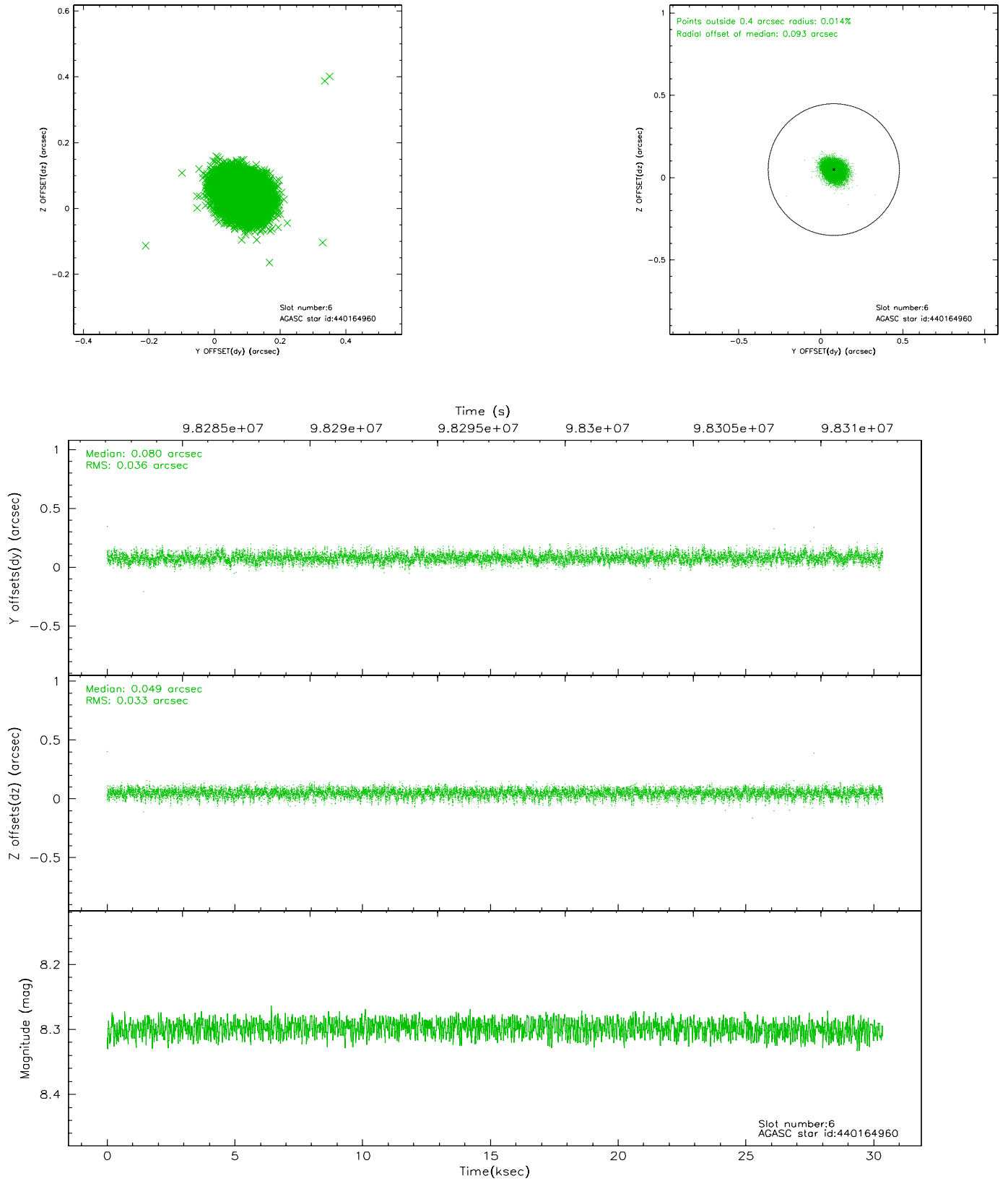
2.4.2 Slot 4



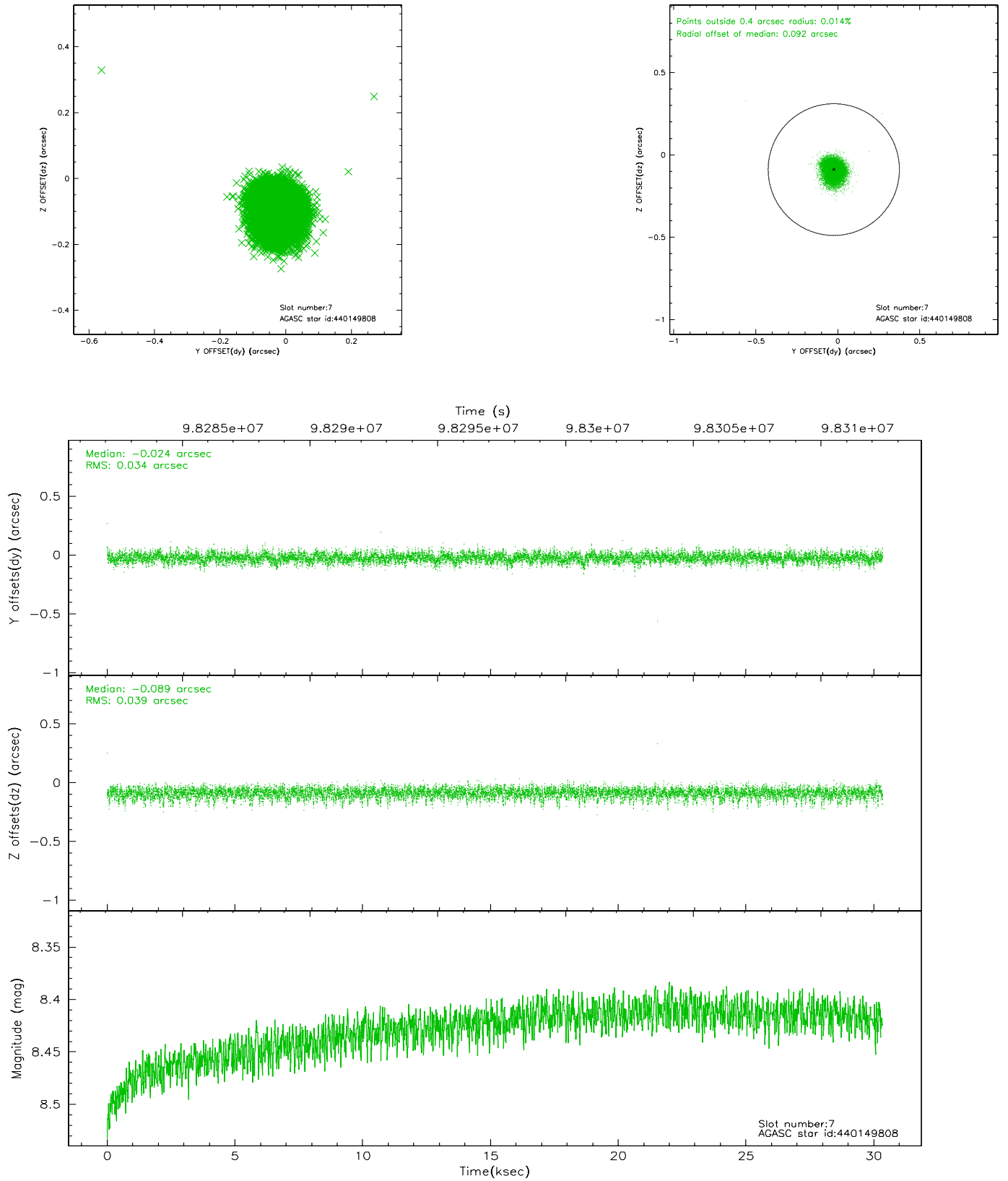
2.4.3 Slot 5



2.4.4 Slot 6

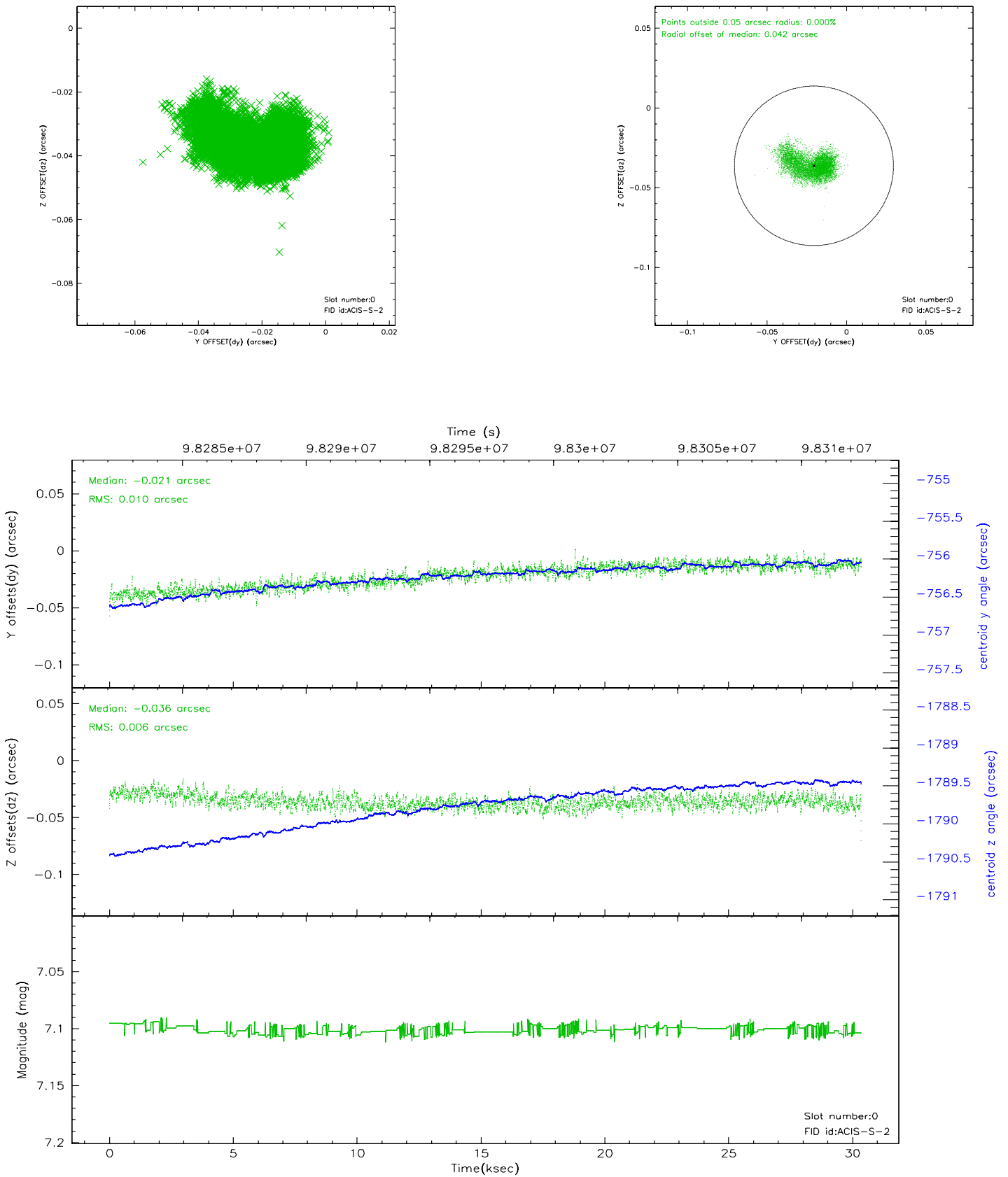


2.4.5 Slot 7

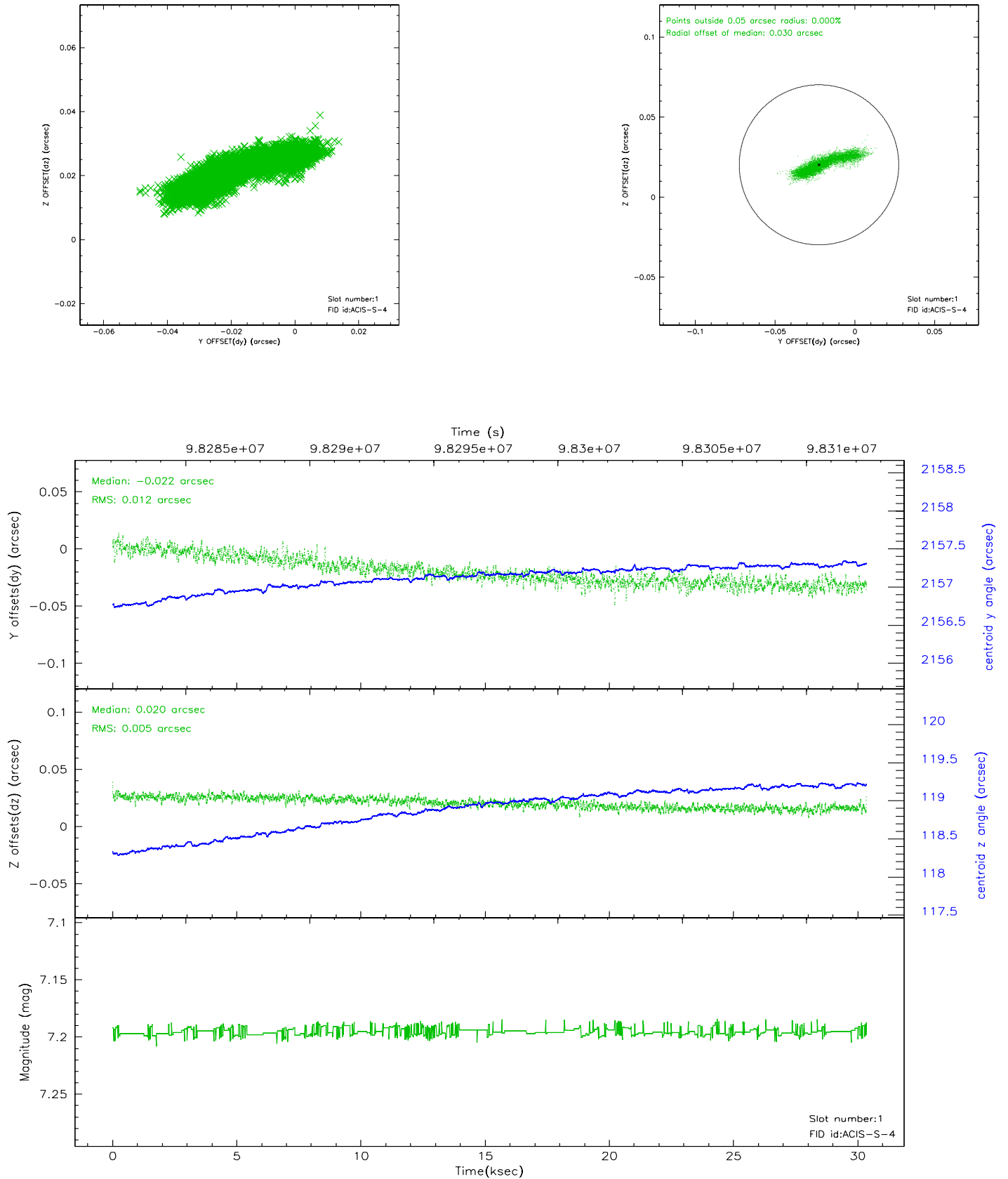


2.5 FID Slots

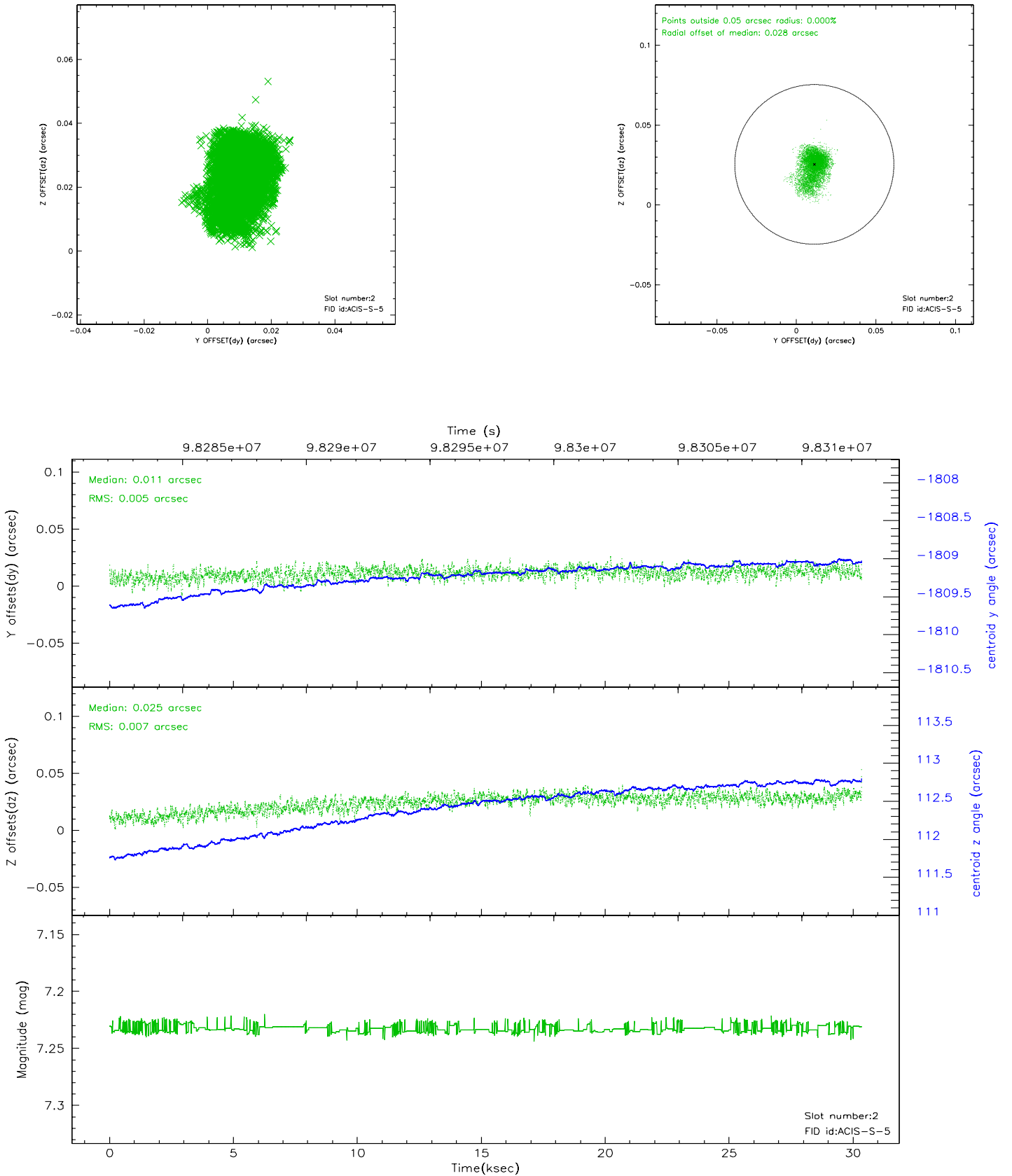
2.5.1 Slot 0



2.5.2 Slot 1

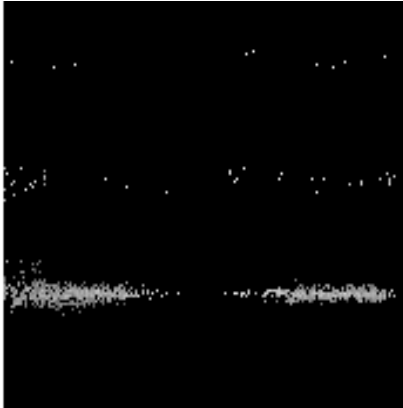


2.5.3 Slot 2

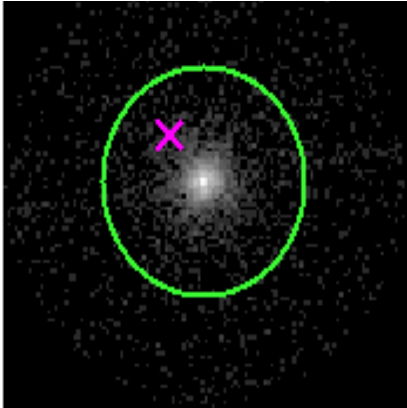


3 Gratings

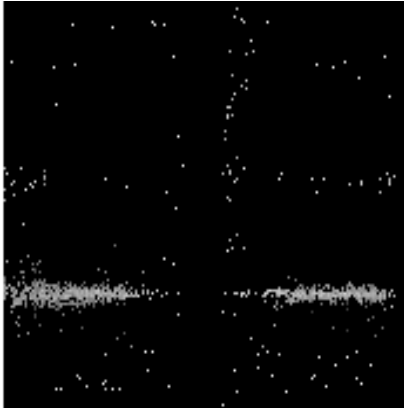
3.1 HEG Arm



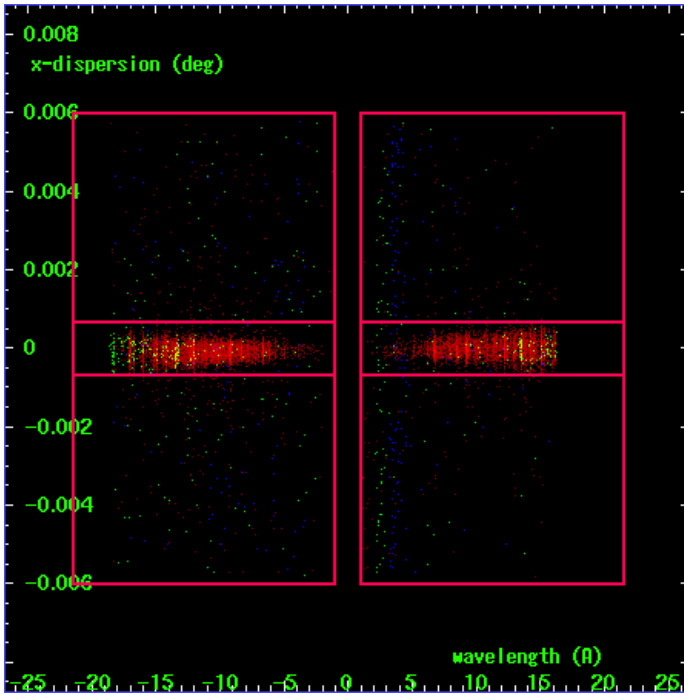
HEG Order Sort 123



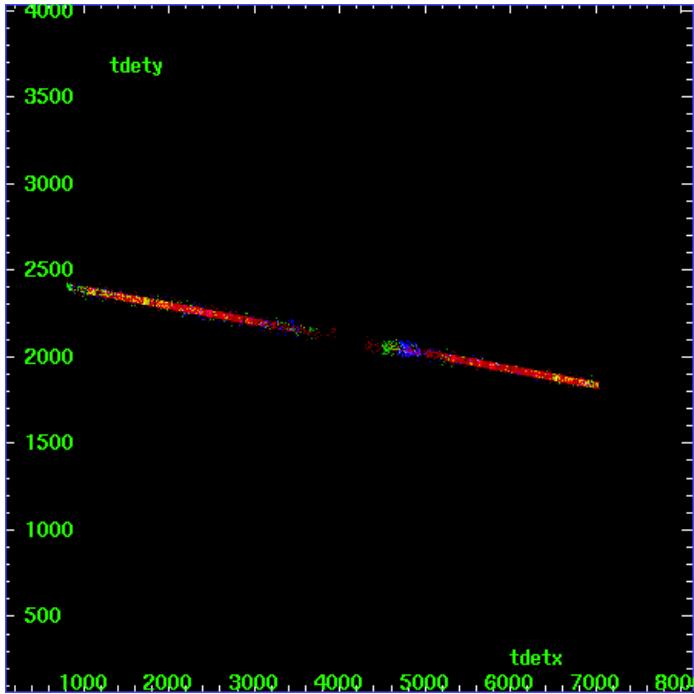
HEG Zero Order



HEG Order Sort ALL

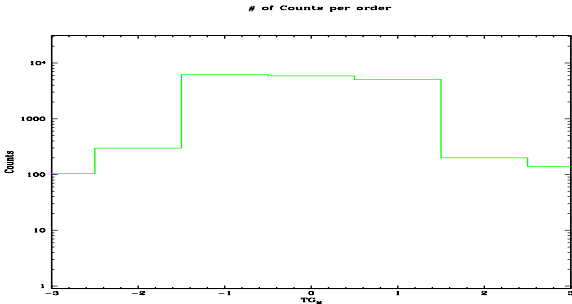


Spot Image HEG

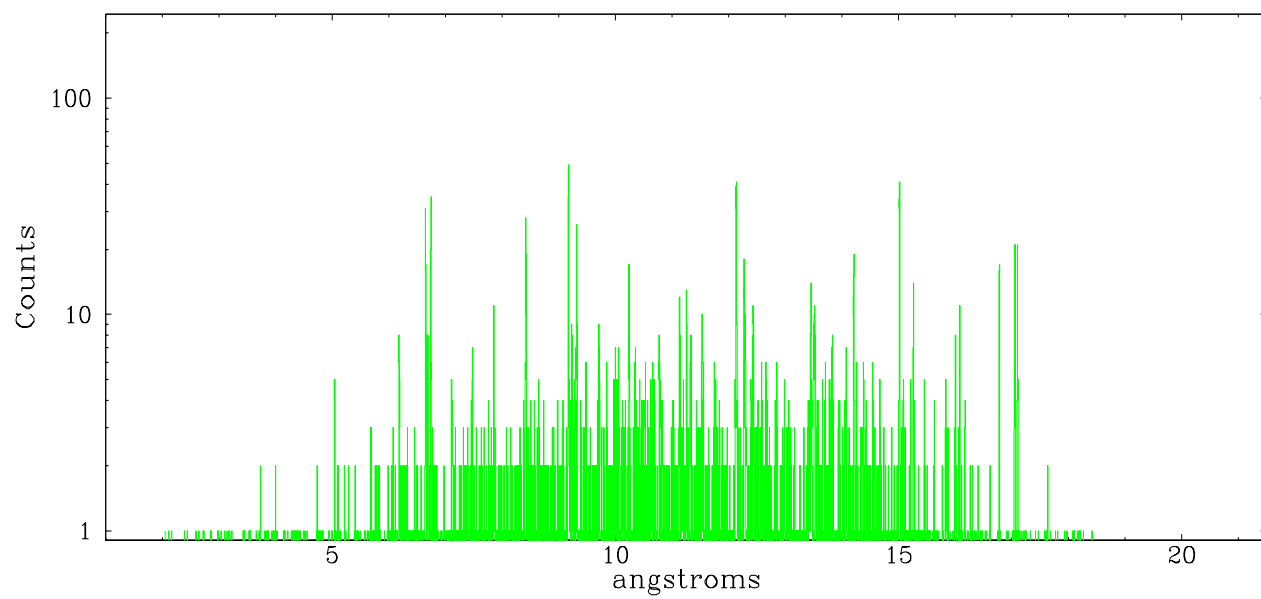


Full Detector HEG

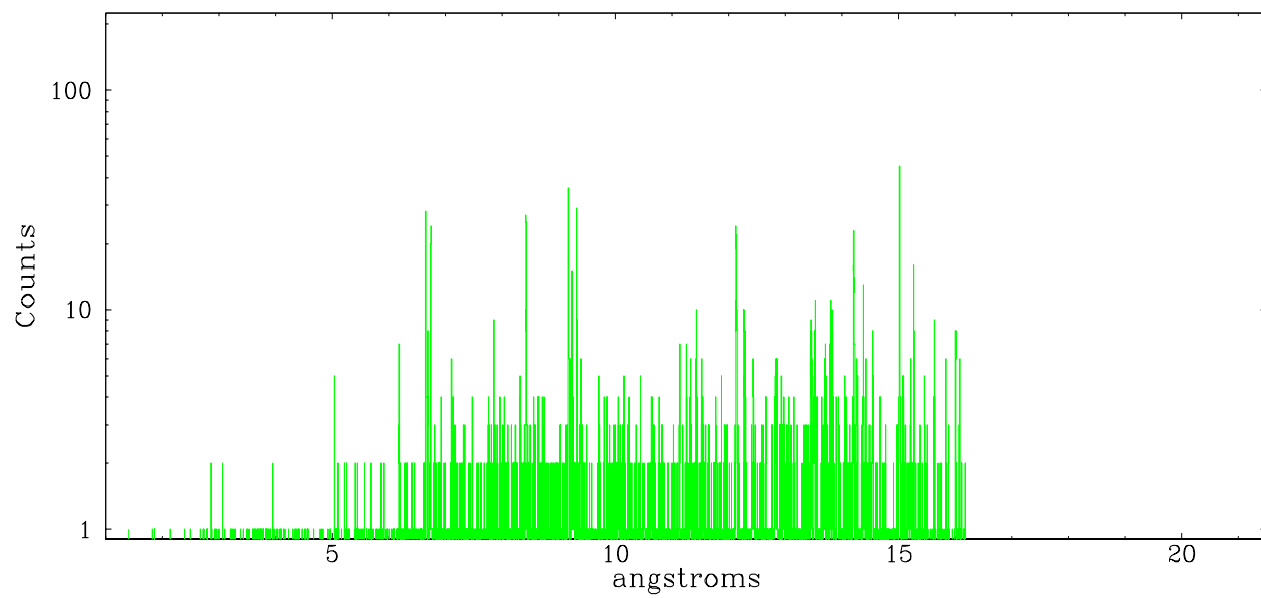
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	104	297	6198	5867	5027	199	140



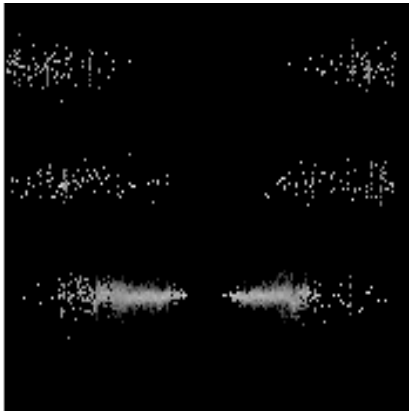
heg order -1



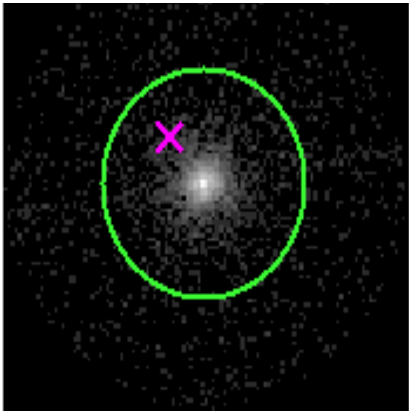
heg order +1



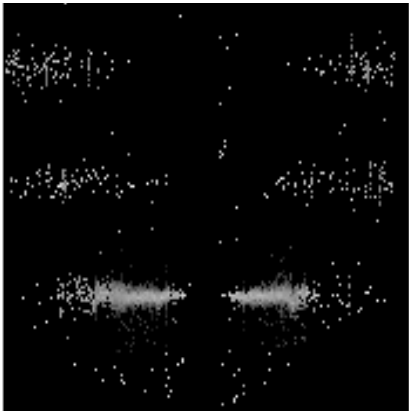
3.2 MEG Arm



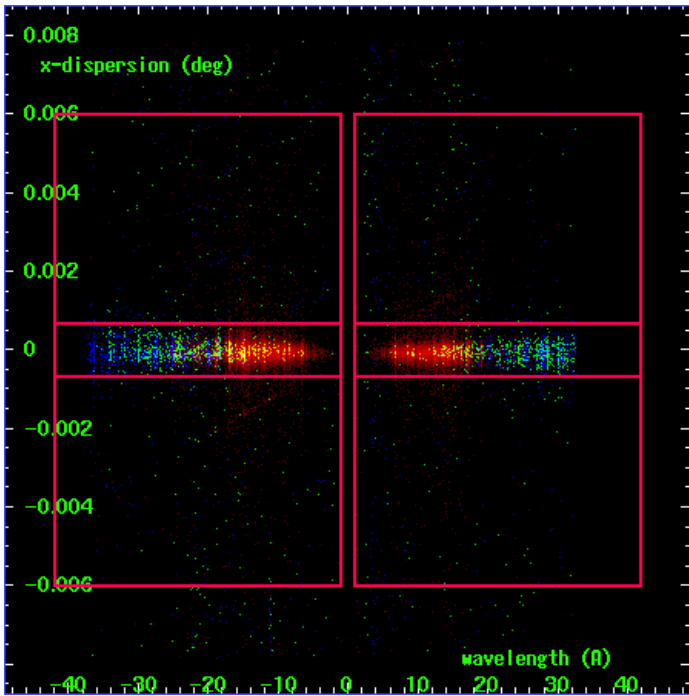
MEG Order Sort 123



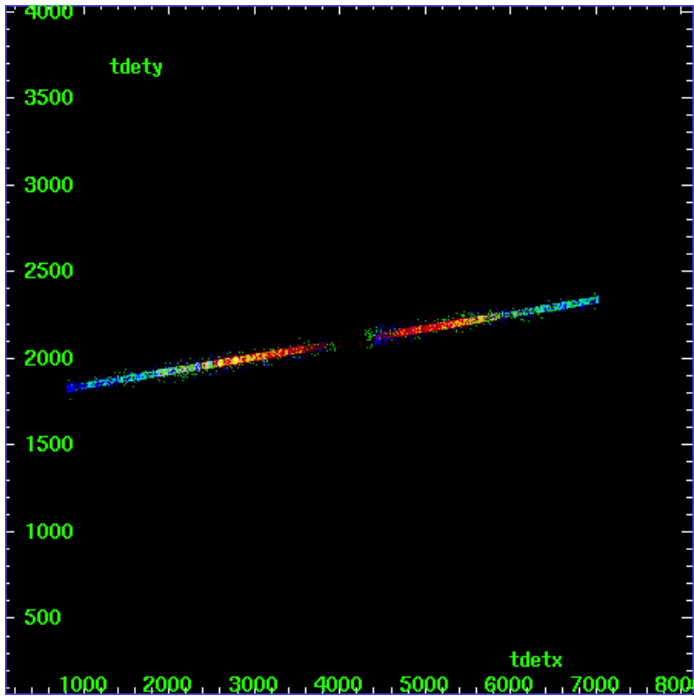
MEG Zero Order



MEG Order Sort ALL

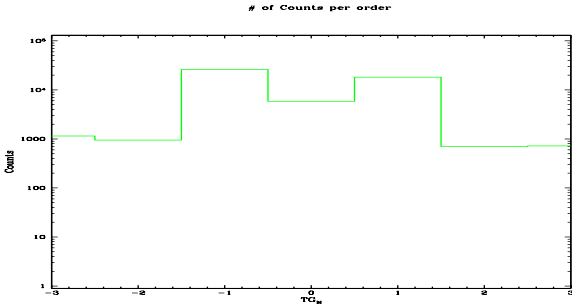


Spot Image MEG

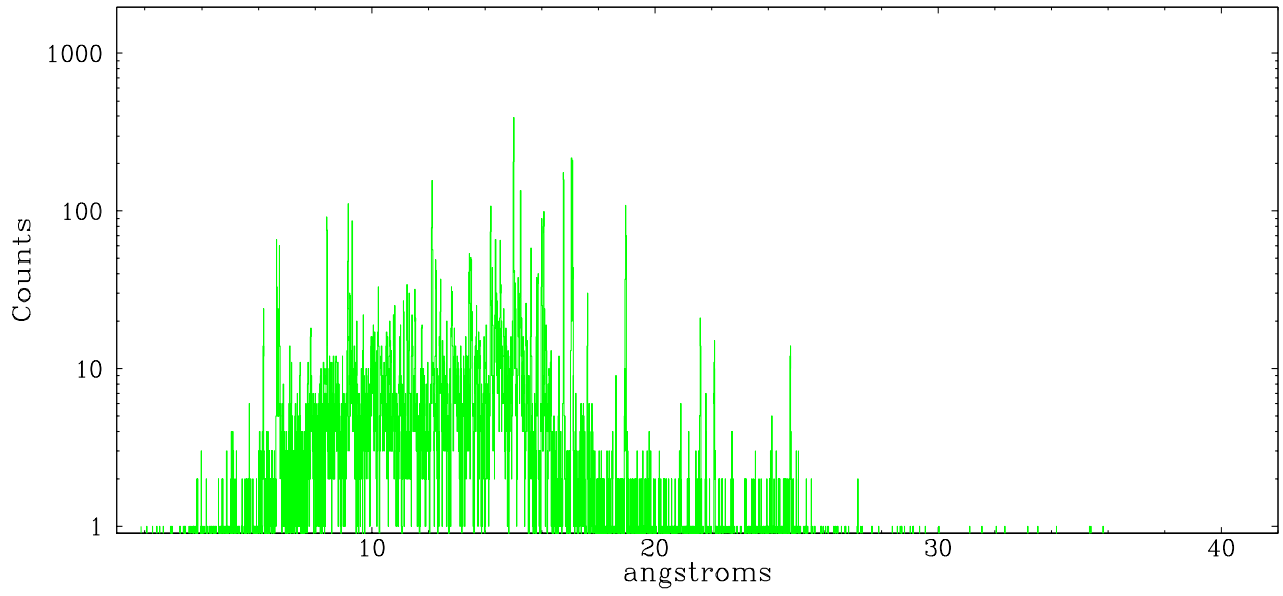


Full Detector MEG

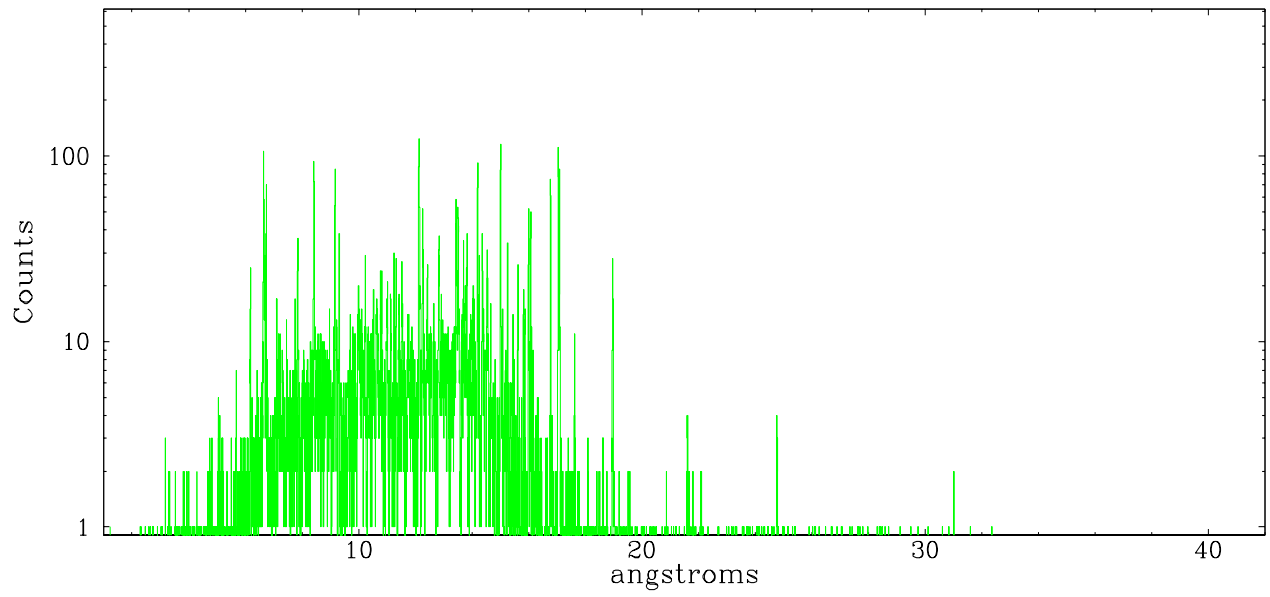
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1144	948	25992	5867	18189	704	719



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.11.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.92

A.2 Comments