

V&V Reference Report

L2 ASCDS Version : 7.6.7.2

Observation 4551 - L2 Version 3
Chandra X-Ray Center

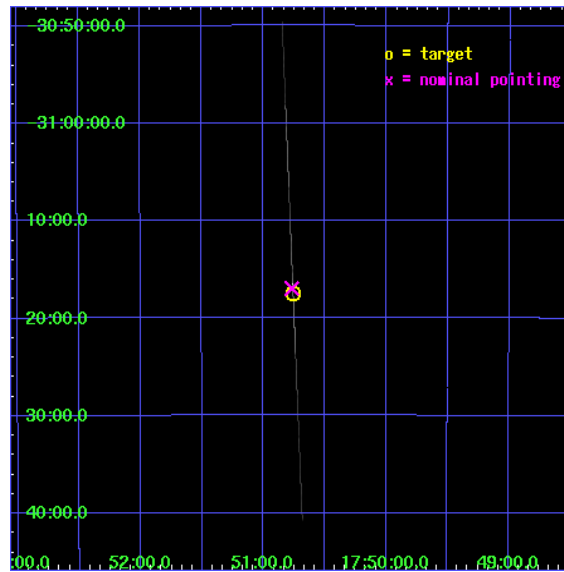
L2 Processing Date : Apr 23 2008

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1 Front

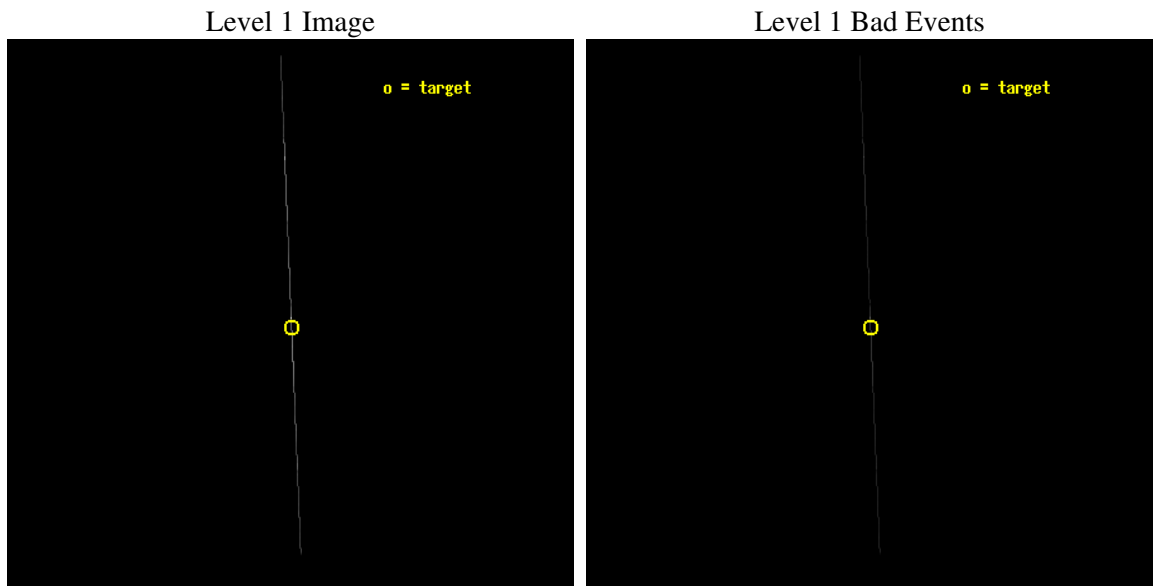
seq_num	400334
obs_id	4551
title	High inclination X-ray binaries
observer	Dr Mariano Mendez
object	GRS 1747-312
ra_targ	267.689583
dec_targ	-31.292222
ra_nom	267.69202963417
dec_nom	-31.282807152412
roll_nom	87.61772381462
revision	3
ontime	45208.25
livetime	45031.655273438
ontime4	45208.25
ontime5	45208.25
ontime6	45208.25
ontime7	45208.25
ontime8	45208.25
ontime9	45208.25
l2events	1057466



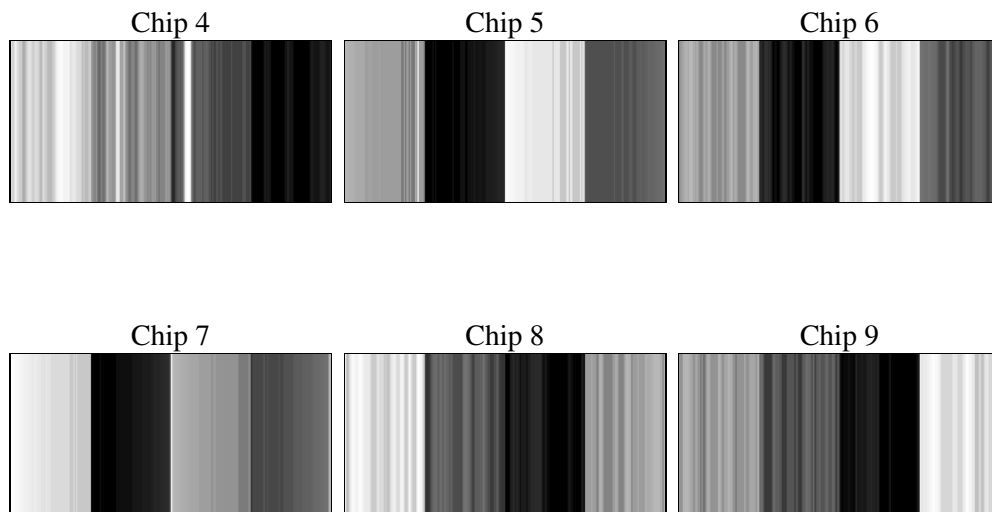
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.6
caldsver	3.4.4
date	2008-04-11T18:05:37
revision	3

sched_exp_time	45000.000000
ontime	45208.25
ontime4	45208.25
ontime5	45208.25
ontime6	45208.25
ontime7	45208.25
ontime8	45208.25
ontime9	45208.25
l1events	1423521

2.1.4 Events

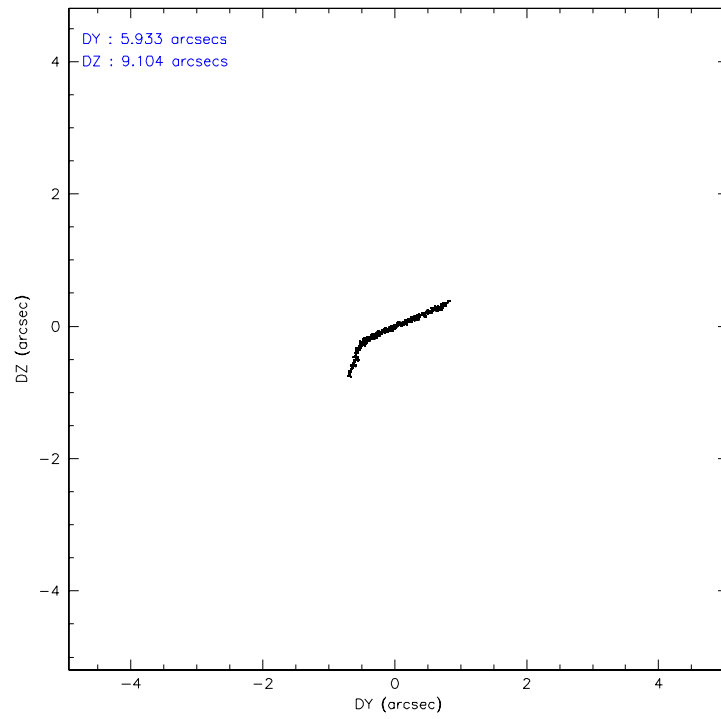
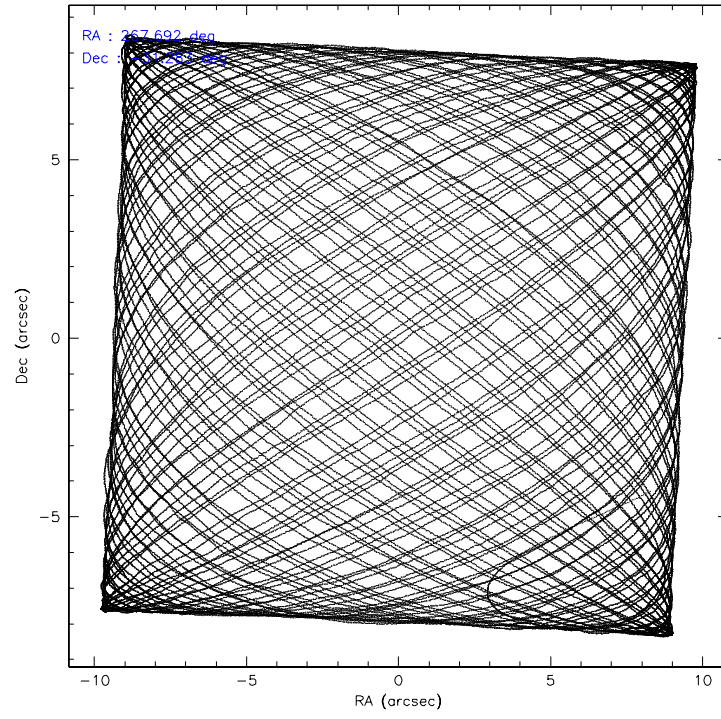
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	80162	326189	184372	586376	163148	83274
rejected events	21209	42499	24828	52913	29425	23768
rejected %	26%	13%	13%	9%	18%	28%

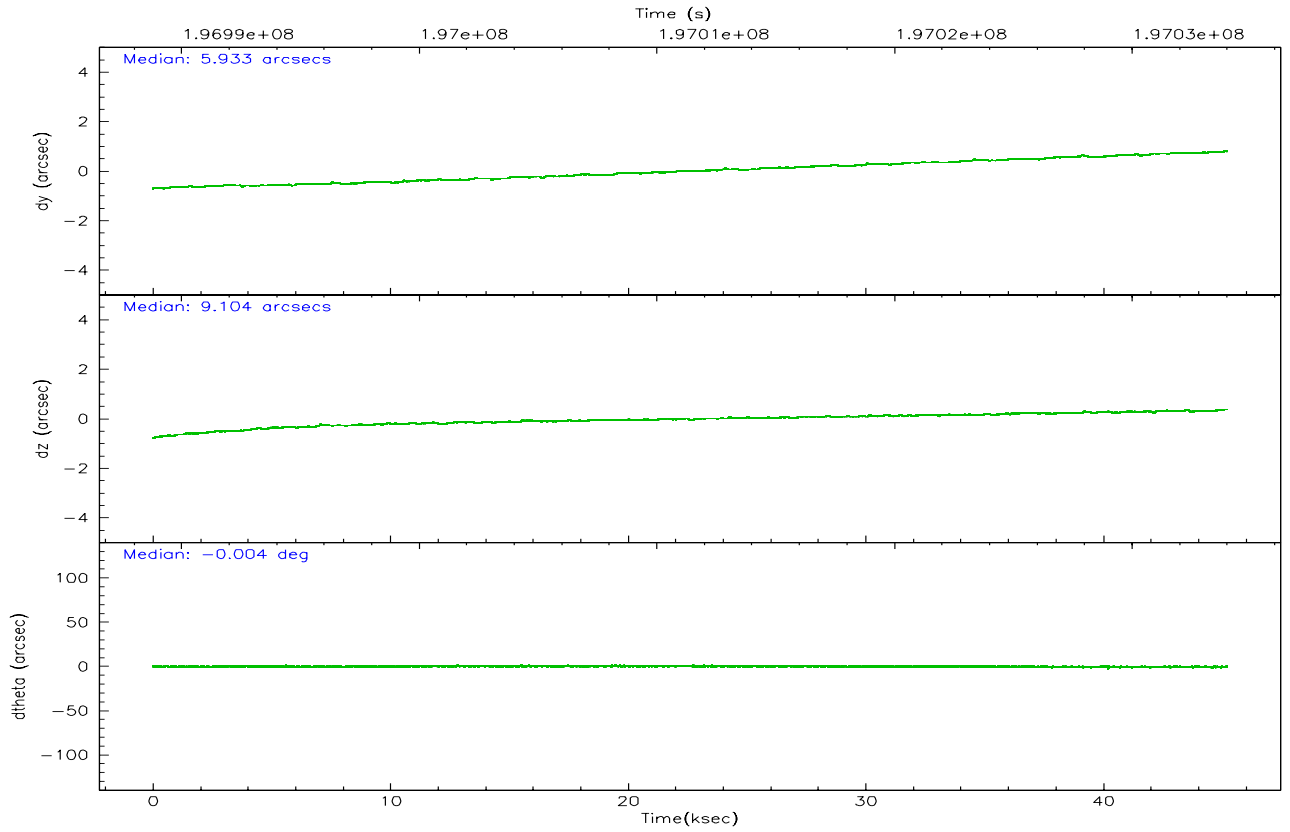
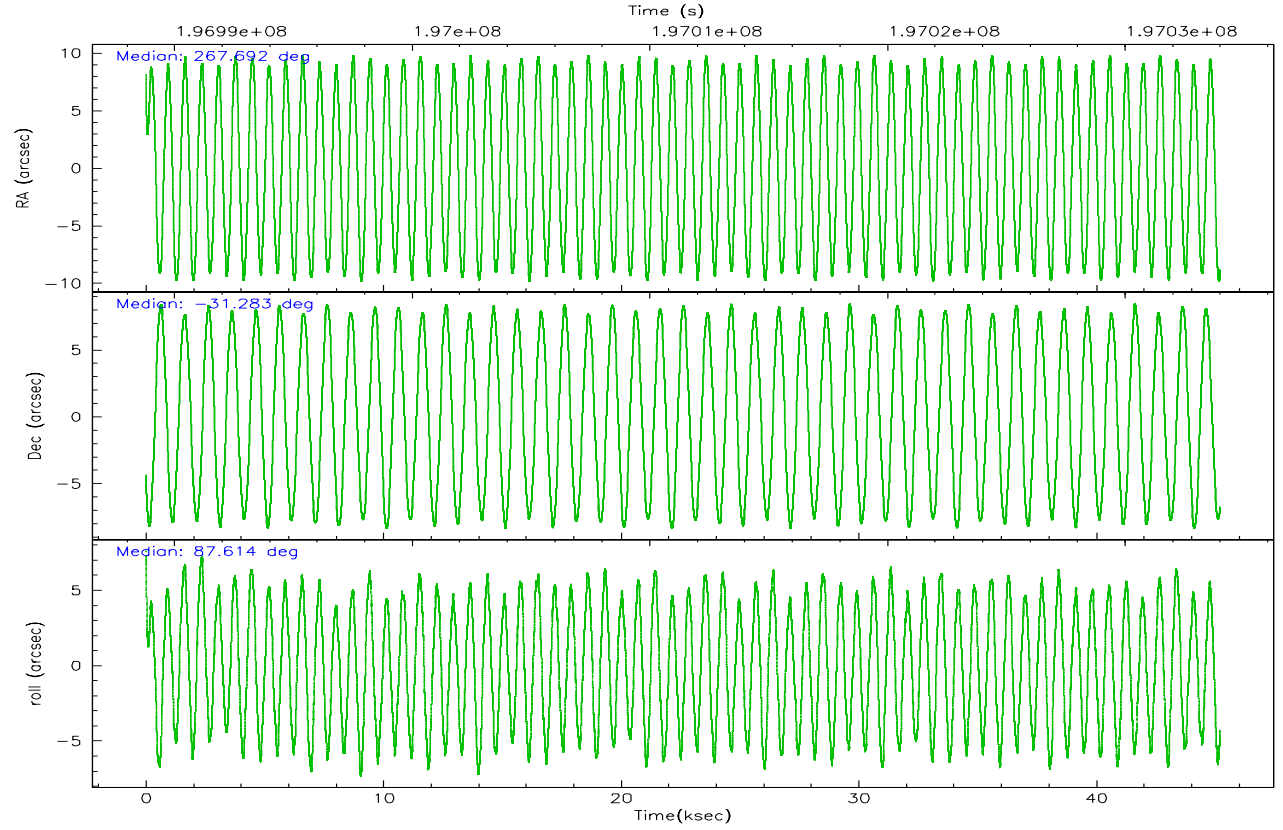
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	8956	63768	21450	87824	35414	9547
	11%	19%	11%	14%	21%	11%
grade 1 events	255	381	352	922	478	224
	0%	0%	0%	0%	0%	0%
grade 2 events	30192	87244	106696	139644	49732	29419
	37%	26%	57%	23%	30%	35%
grade 3 events	7494	6753	7662	50476	13201	6611
	9%	2%	4%	8%	8%	7%
grade 4 events	7899	6581	7257	50418	12946	7227
	9%	2%	3%	8%	7%	8%
grade 5 events	11562	29043	13885	38299	17872	13789
	14%	8%	7%	6%	10%	16%
grade 6 events	13804	132419	27070	218793	33505	16457
	17%	40%	14%	37%	20%	19%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

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	CC33_FAINT	CC33_FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	267.707184	267.6920296341715	Alternating exposures requested	N	N
Pointing Dec	-31.306741	-31.2828071524121	Primary exposure time	0.000000	0
Pointing Roll	87.468970	87.61772381462048			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
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	196989005.184000	196988028.35911			
Observation start date	2004-03-29T23:09:01	2004-03-29T22:53:48			
Observation end time	197034005.184000	197034662.27366			
Observation end date	2004-03-30T11:39:01	2004-03-30T11:51:02			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



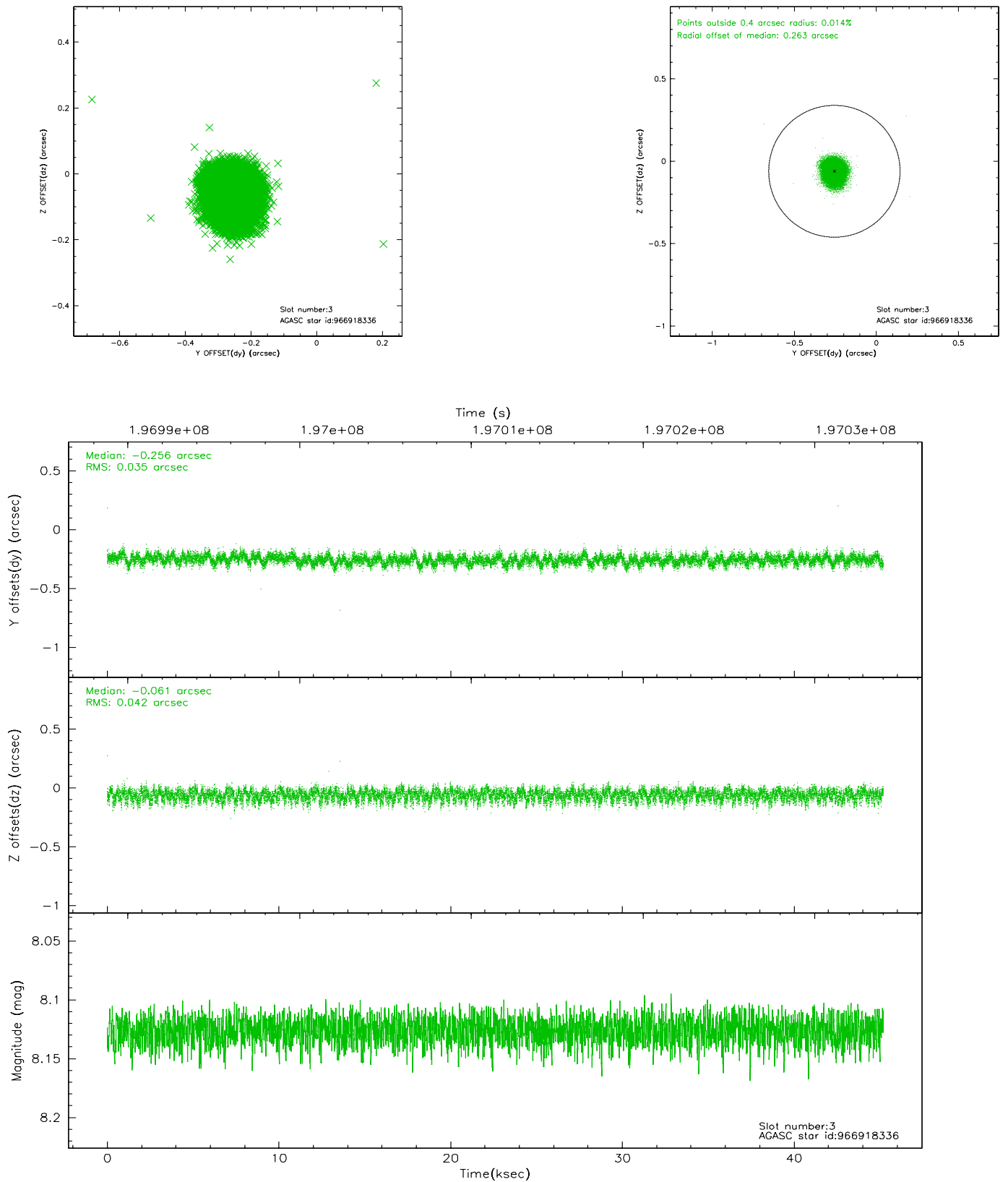


Slot Statistics

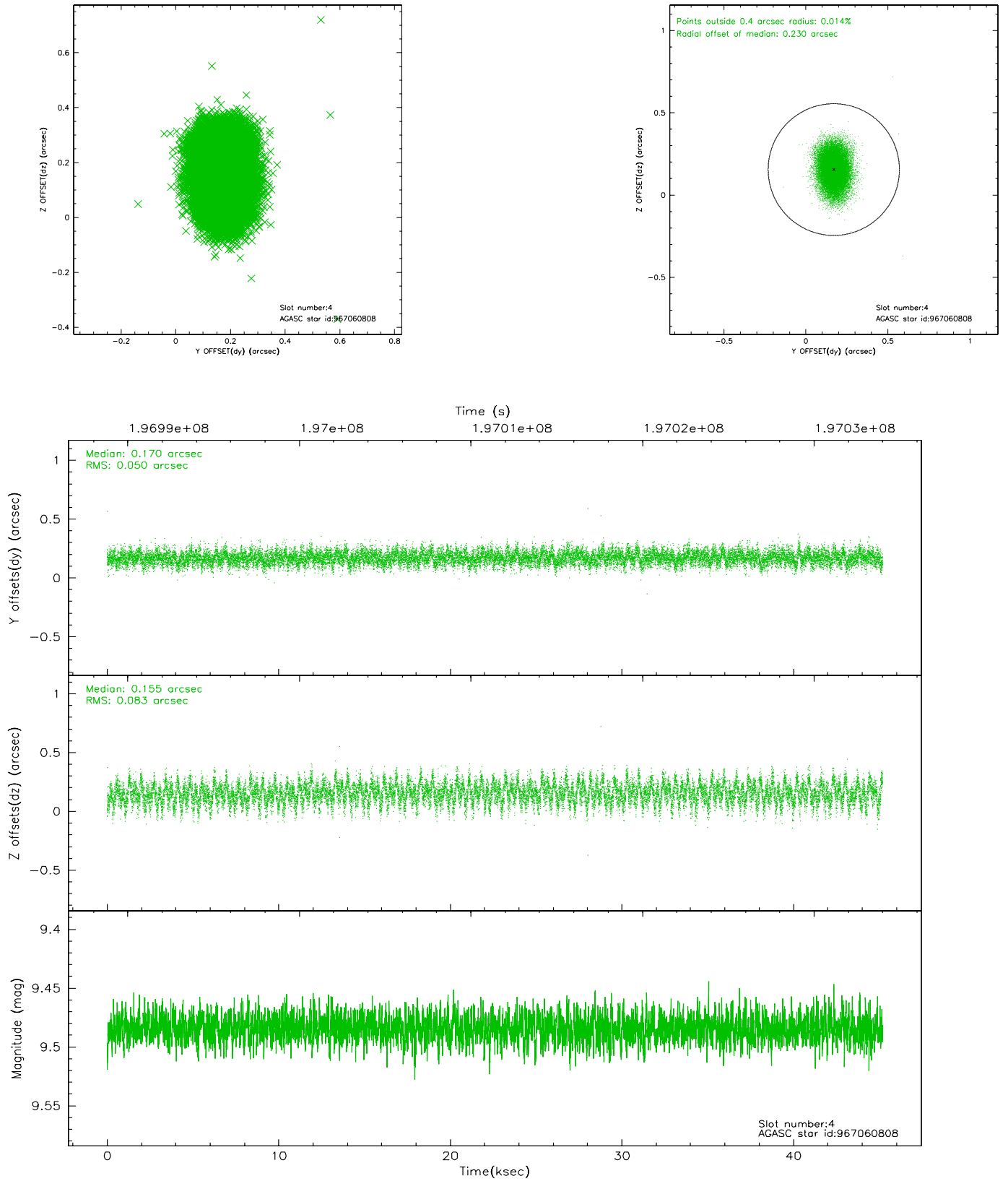
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	11027	-0.092	-0.055	0.010	0.025	0.000000	0.000000	-758.34	-1857.05
1	FID	ACIS-S-4	7.18	11027	0.041	0.074	0.011	0.025	0.000000	0.000000	2155.09	51.53
2	FID	ACIS-S-6	7.40	11028	0.024	-0.011	0.009	0.015	0.000000	0.000000	403.77	688.85
3	GUIDE	966918336	8.13	22053	-0.256	-0.061	0.058	0.092	267.709998	-30.955430	1263.80	47.35
4	GUIDE	967060808	9.48	22038	0.170	0.155	0.102	0.171	268.200929	-31.521310	-707.67	-1547.73
5	GUIDE	966924408	8.94	22038	-0.205	-0.205	0.098	0.154	266.982893	-30.897884	1364.18	2299.92
6	GUIDE	967060832	9.32	21982	0.108	0.171	0.080	0.128	267.800373	-31.675183	-1312.21	-343.48
7	GUIDE	967451816	9.26	21969	0.189	-0.062	0.090	0.148	267.266669	-31.901374	-2200.74	1250.32

2.4 Star Slots

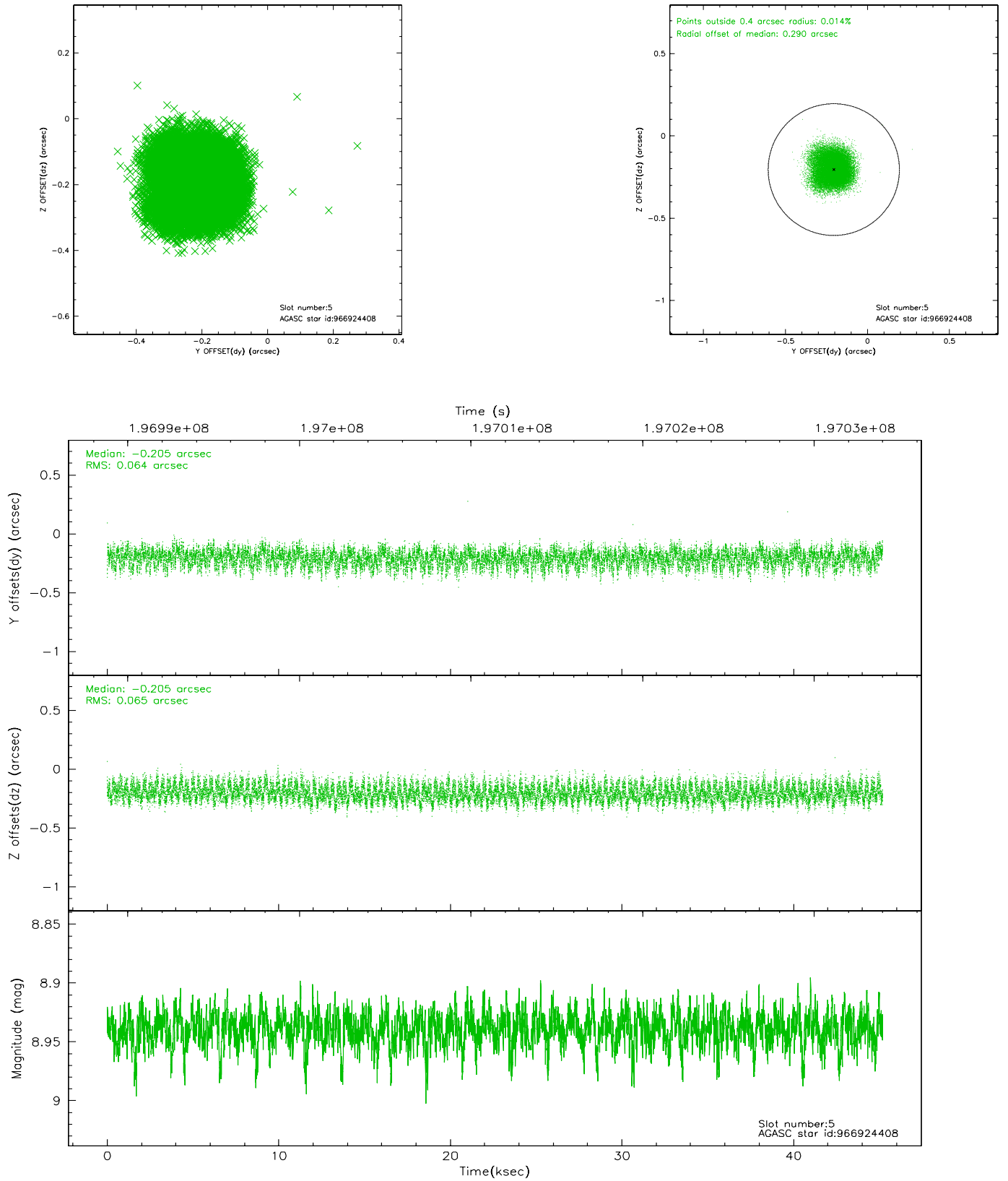
2.4.1 Slot 3



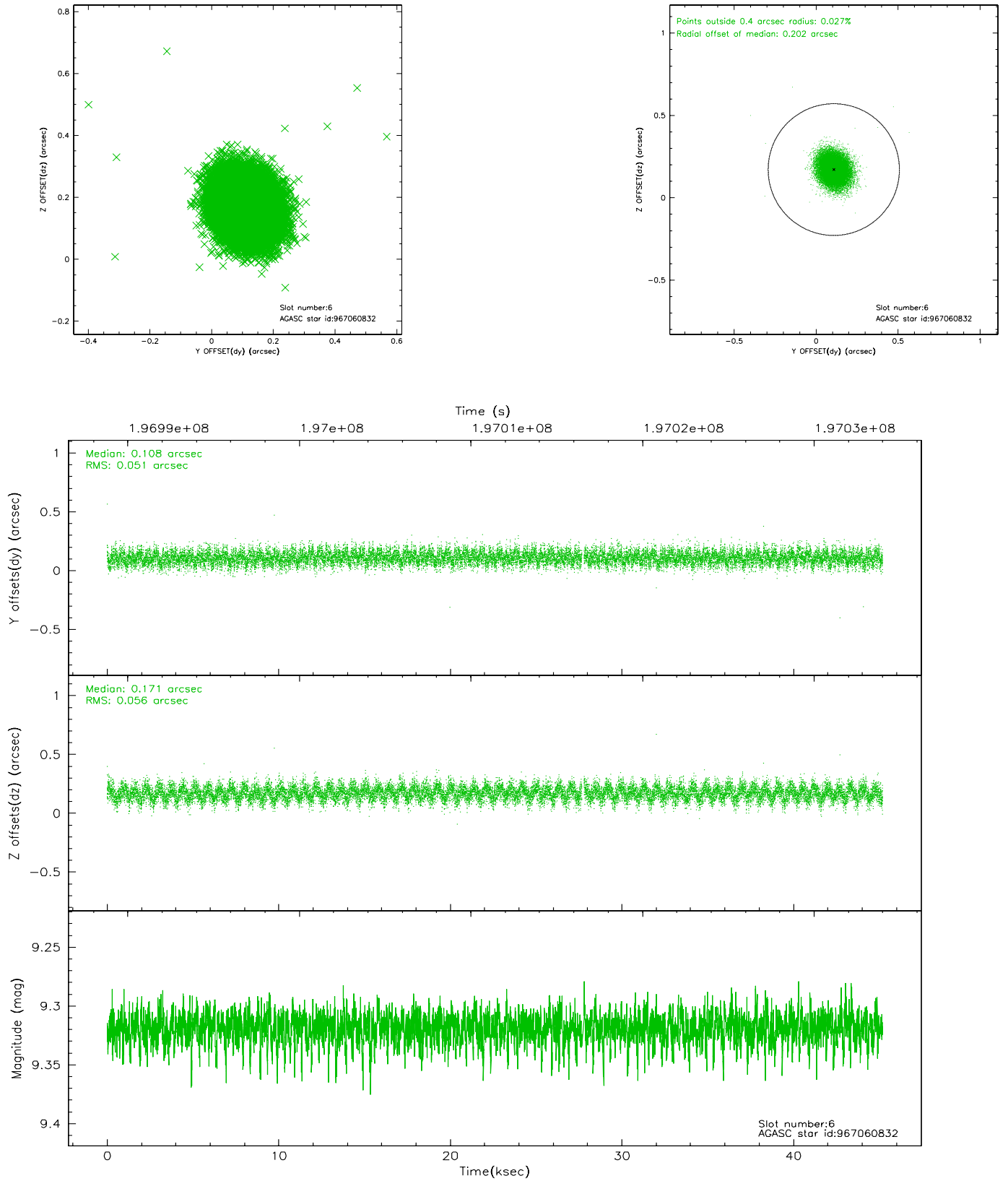
2.4.2 Slot 4



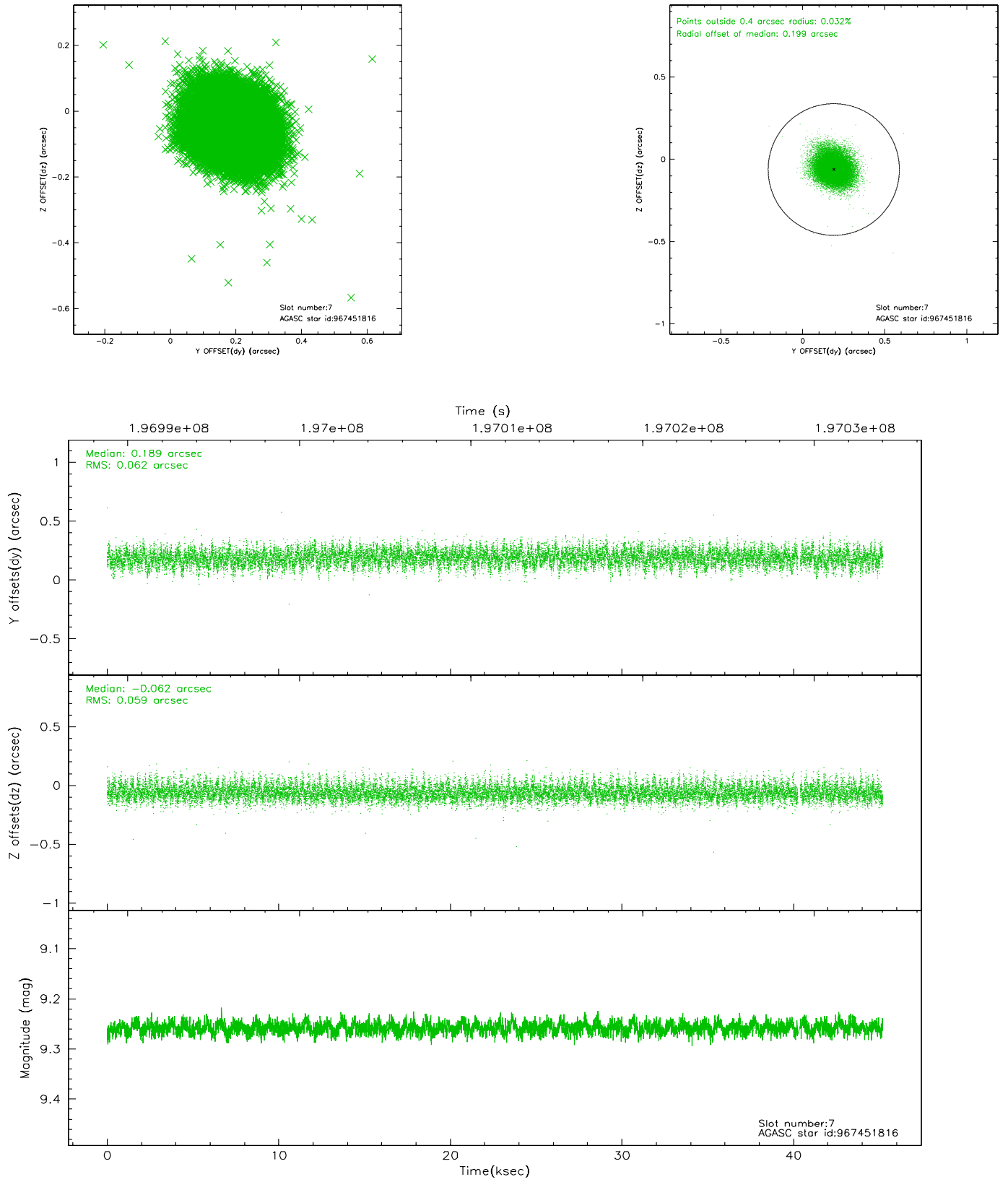
2.4.3 Slot 5



2.4.4 Slot 6

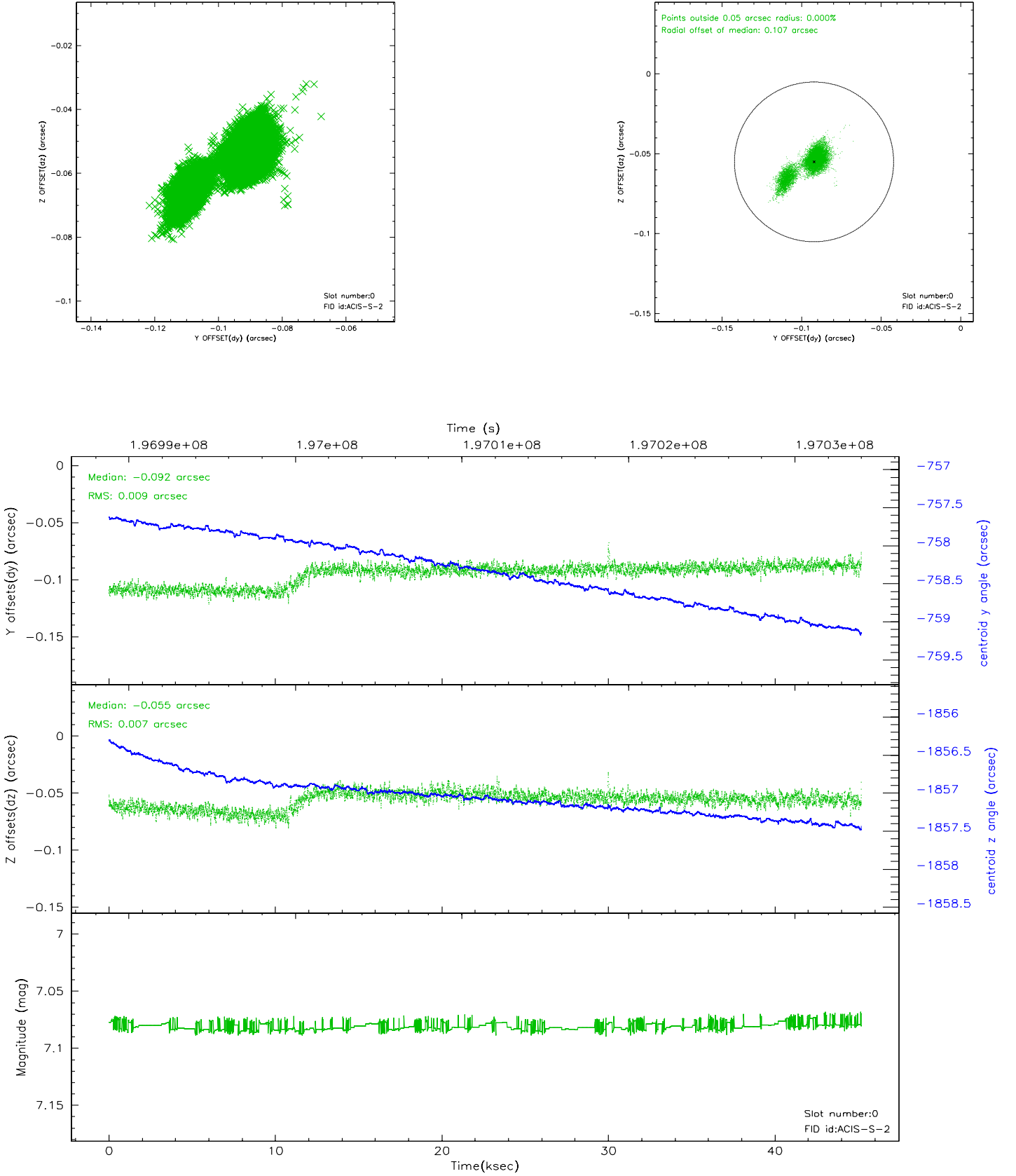


2.4.5 Slot 7

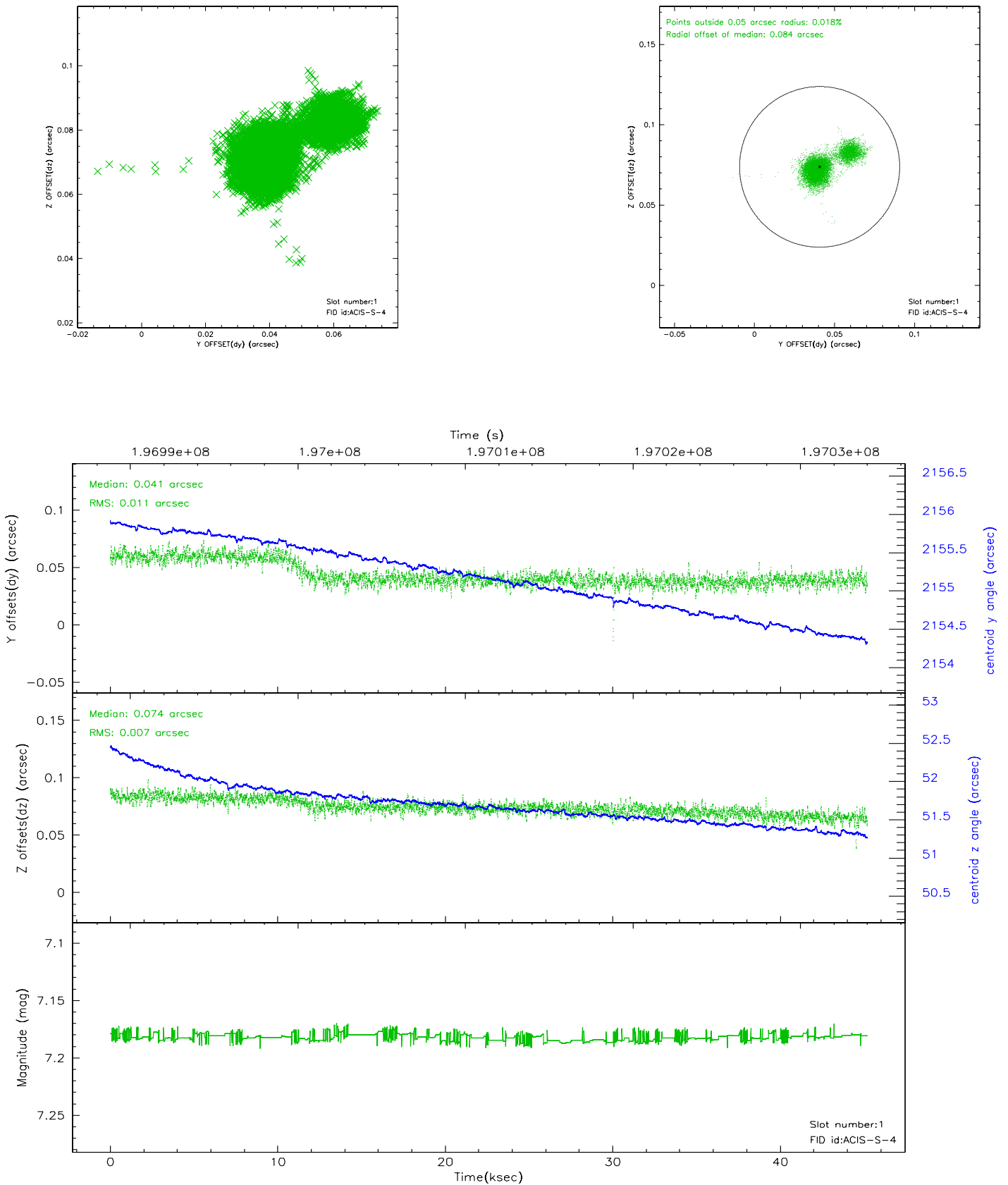


2.5 FID Slots

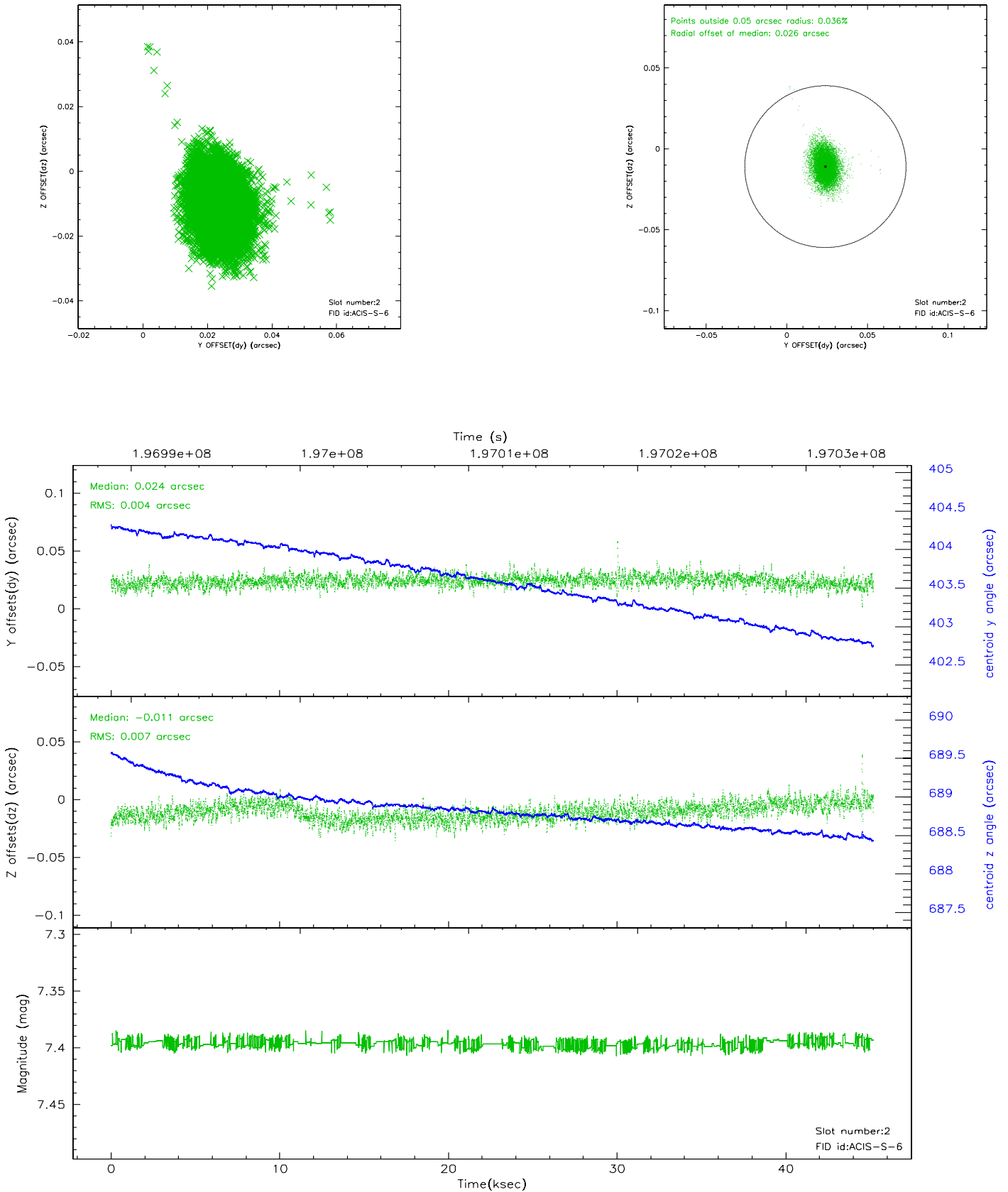
2.5.1 Slot 0



2.5.2 Slot 1

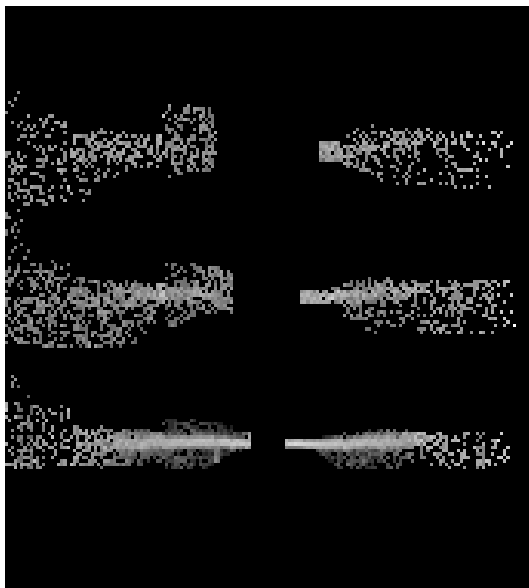


2.5.3 Slot 2

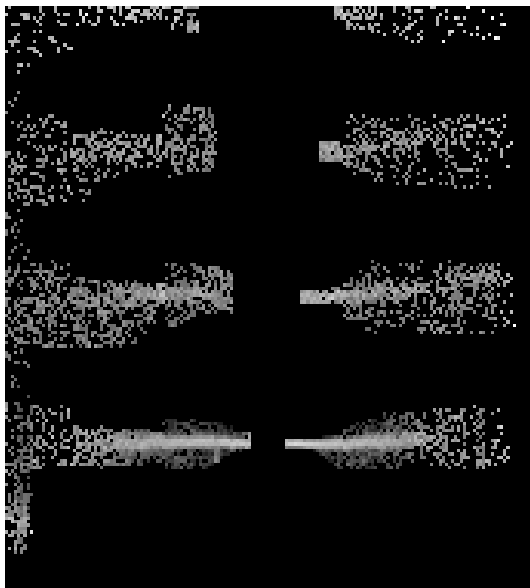


3 Gratings

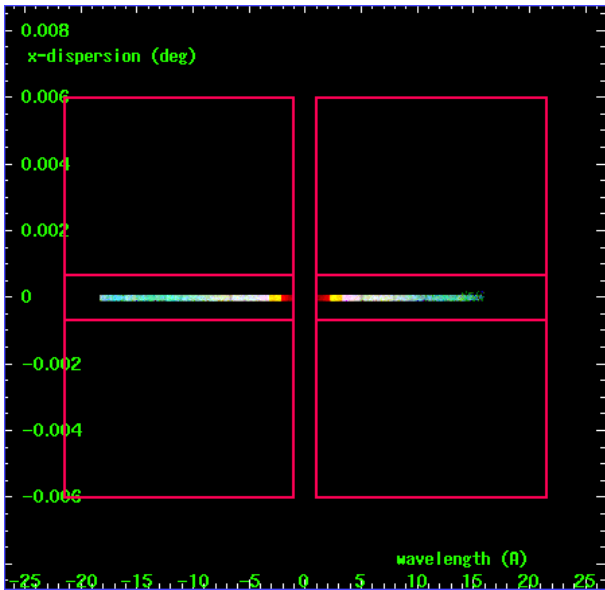
3.1 HEG Arm



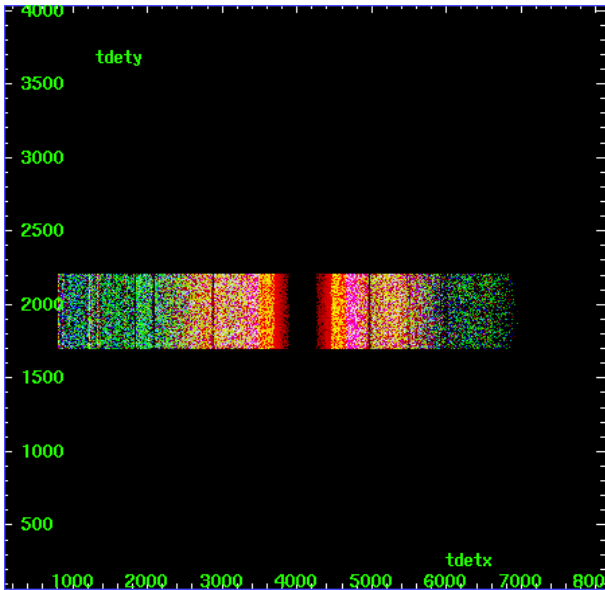
HEG Order Sort 123



HEG Order Sort ALL

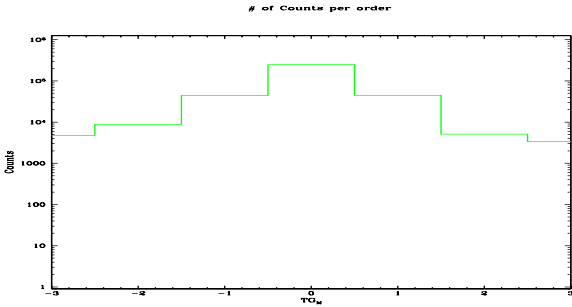


Spot Image HEG

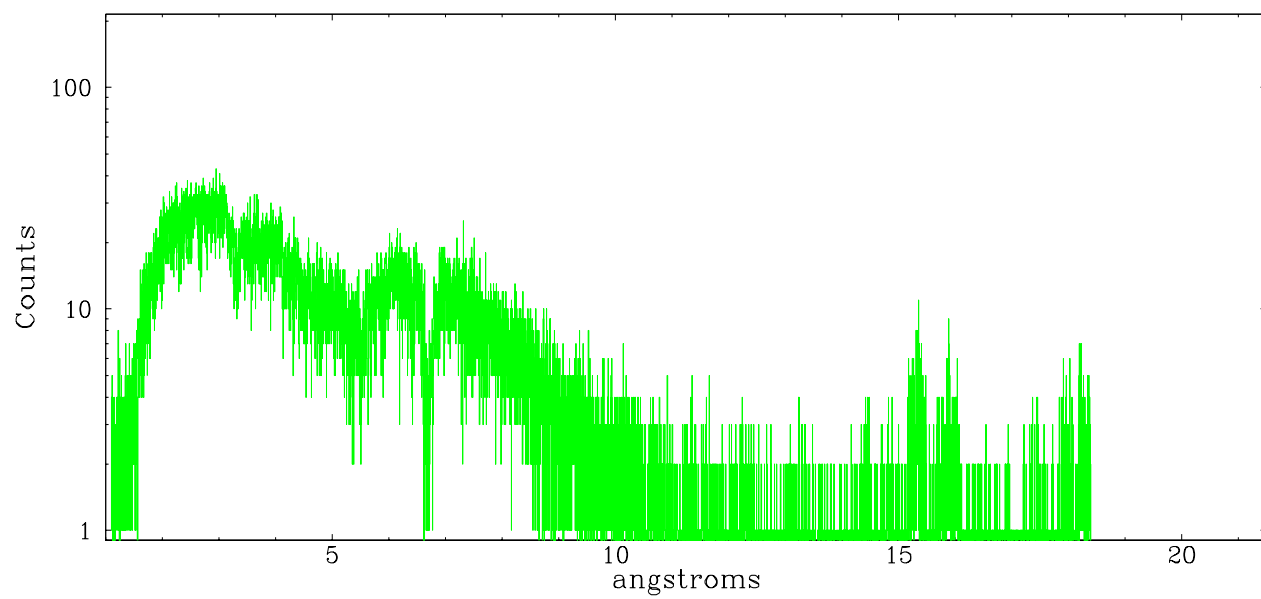


Full Detector HEG

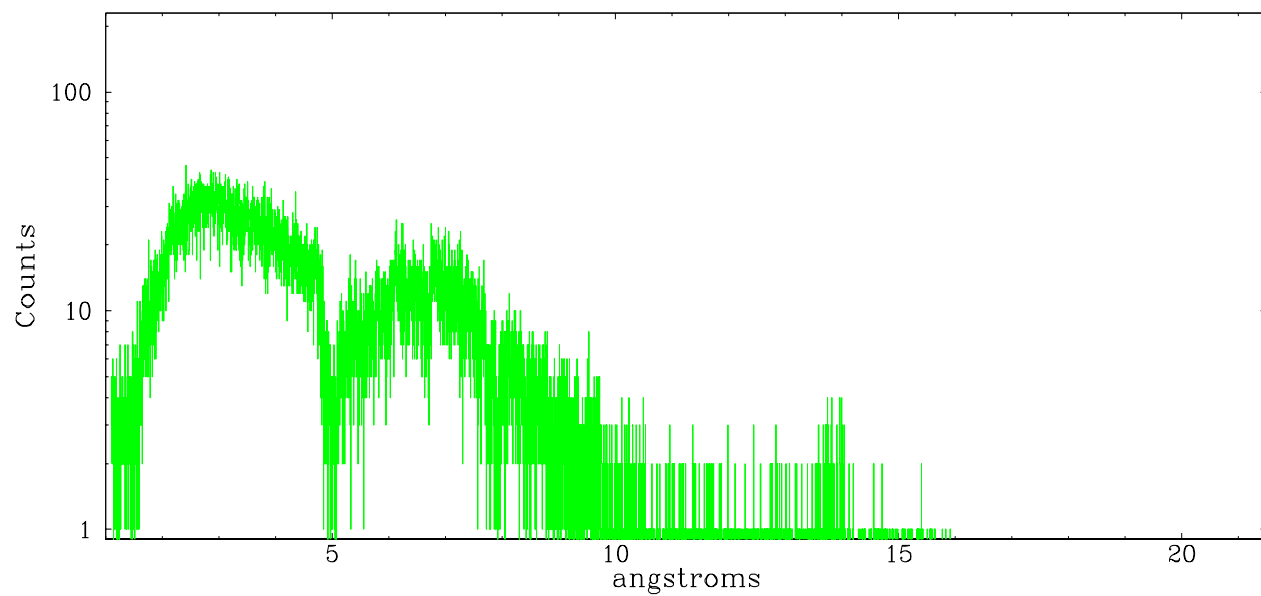
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	4747	8777	44430	248143	44787	5119	3359



heg order -1



heg order +1



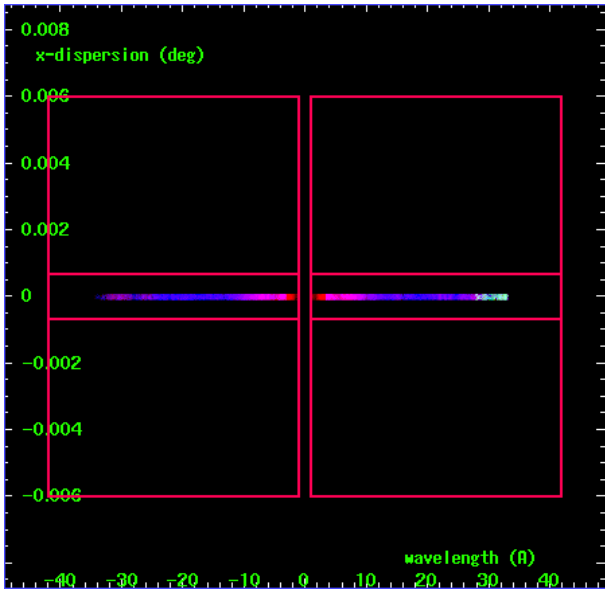
3.2 MEG Arm



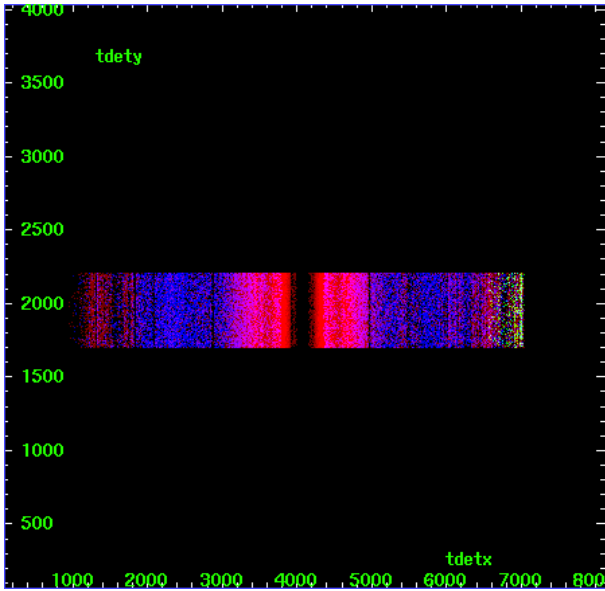
MEG Order Sort 123



MEG Order Sort ALL

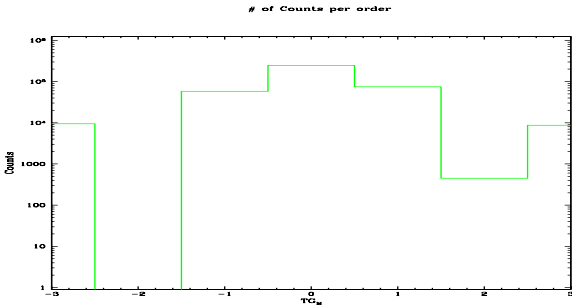


Spot Image MEG

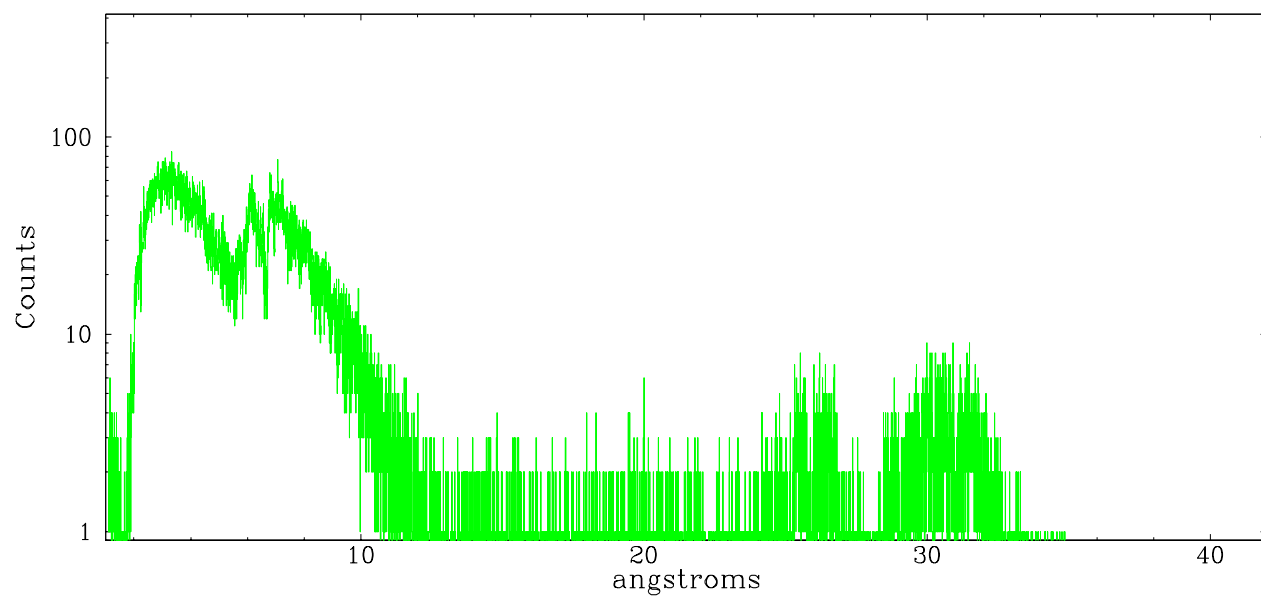


Full Detector MEG

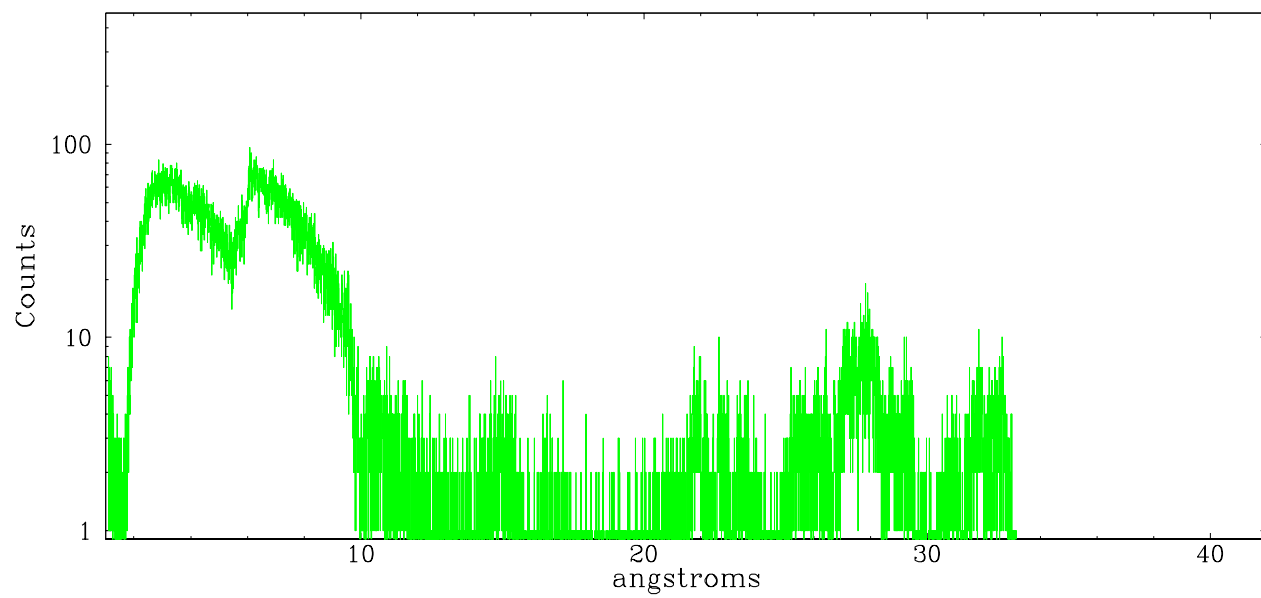
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	9435	0	57817	248143	74486	449	8711



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2008.04.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.211

A.2 Comments

Gain and CTI correction are not well calibrated in CC-mode.
Default order sorting can clip some regions, particularly in high orders. User-specified custom processing parameters may be required in `tg_resolve_events` (`osipfile=None`, `osort_lo`, `osort_hi` ~0.3) though this can allow more zeroth order background at short wavelengths.=====

For ACIS/CC-mode w/ HETG, there are no MEG even order counts. MEG even orders overlap with HEG orders in energy, but MEG even order efficiencies are very low. Since HEG and MEG cannot be spatially separated, events are preferentially assigned to HEG. (MEG odd orders can be resolved.)