

V&V Reference Report

L2 ASCDS Version : 7.6.7.2

Observation 4588 - L2 Version 3
Chandra X-Ray Center

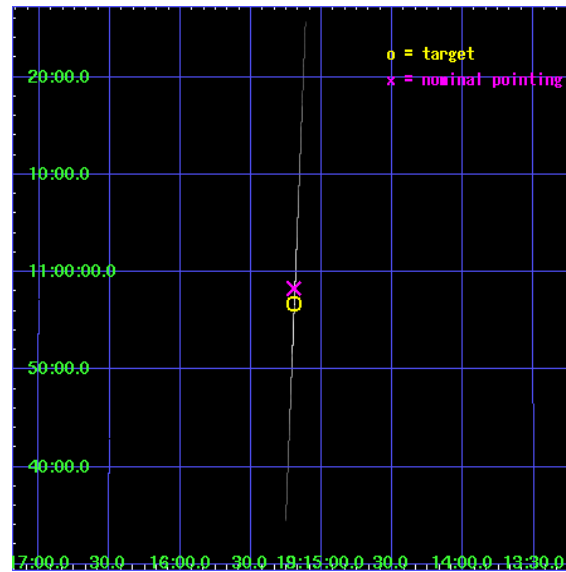
L2 Processing Date : Apr 23 2008

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1 Front

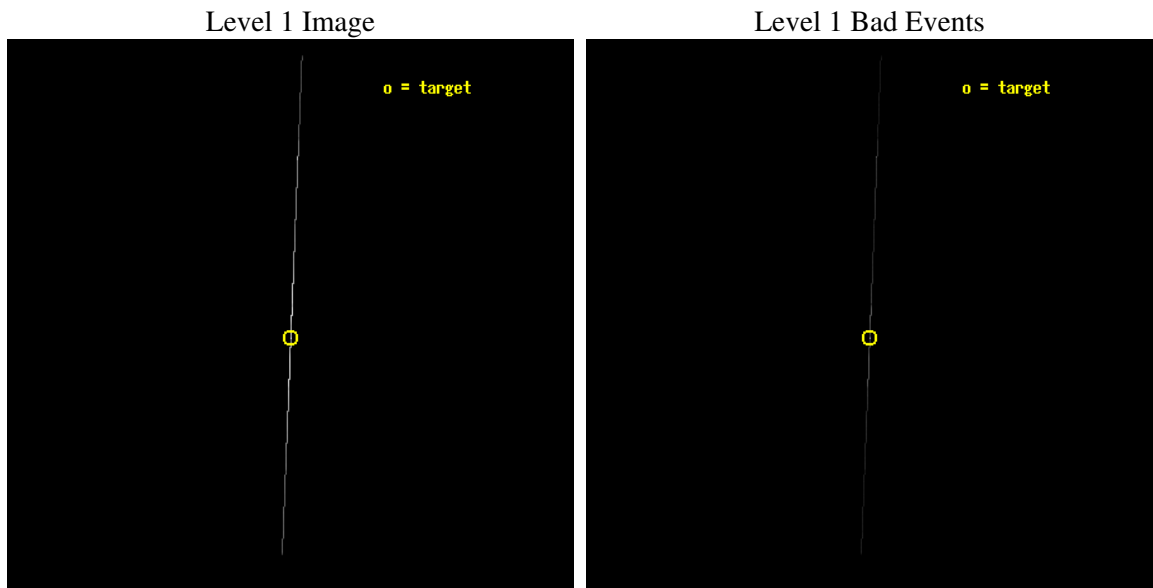
seq_num	400370
obs_id	4588
title	Probe the relativistic Out-flow in the microquasar GRS1915+105 with HETG/Chandra
observer	Dr. Yuxin Feng
object	GRS 1915+105
ra_targ	288.798333
dec_targ	10.945806
ra_nom	288.79905698409
dec_nom	10.972042713504
roll_nom	92.2634085965
revision	3
ontime	27281.25
livetime	27174.682617188
ontime4	27281.25
ontime5	27281.25
ontime6	27281.25
ontime7	27281.25
ontime8	27281.25
ontime9	27281.25
l2events	3579718



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0
ascdsver	7.6.11.6
caldsver	3.4.4
date	2008-04-11T18:05:25
revision	3

sched_exp_time	27000.000000
ontime	27281.25
ontime4	27281.25
ontime5	27281.25
ontime6	27281.25
ontime7	27281.25
ontime8	27281.25
ontime9	27281.25
l1events	3951763

2.1.3 Events

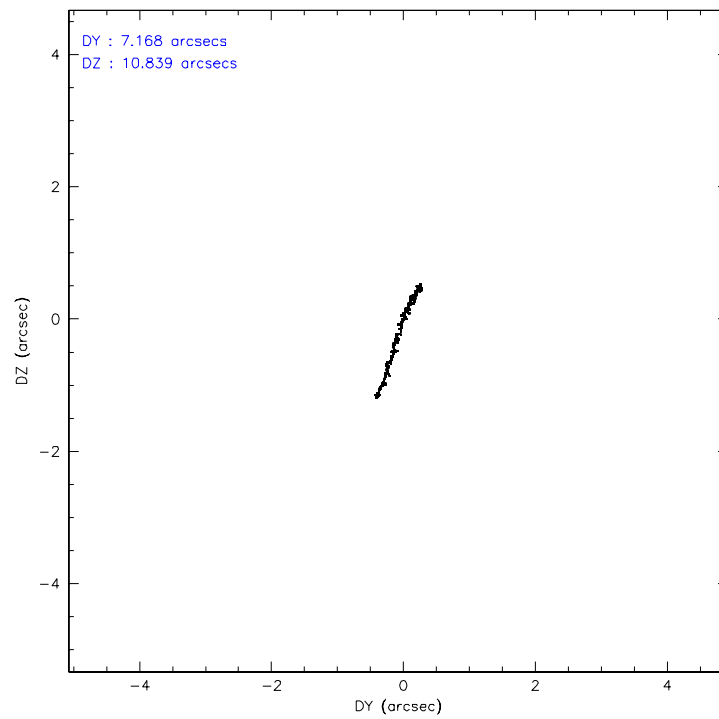
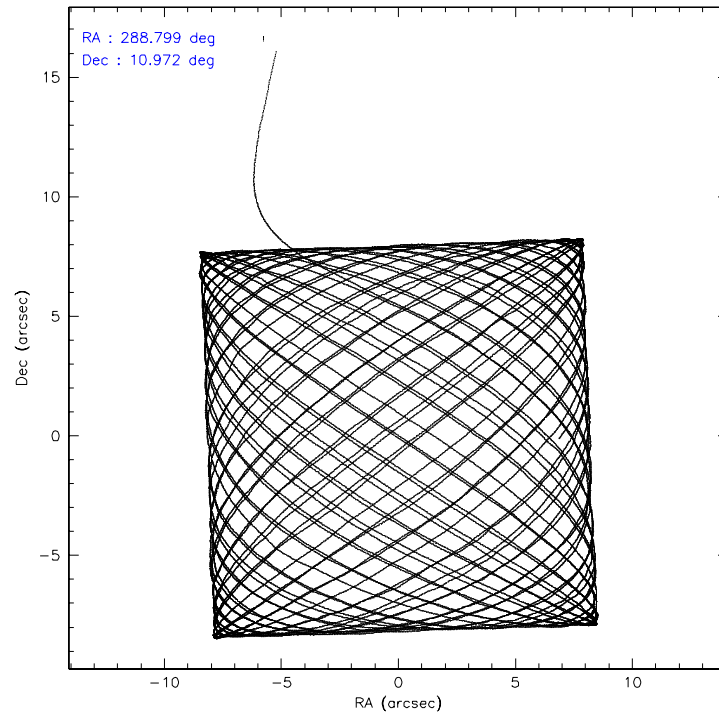
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	68016	268384	829142	2201471	478789	105961
rejected events	8192	22475	20535	73936	16782	9679
rejected %	12%	8%	2%	3%	3%	9%

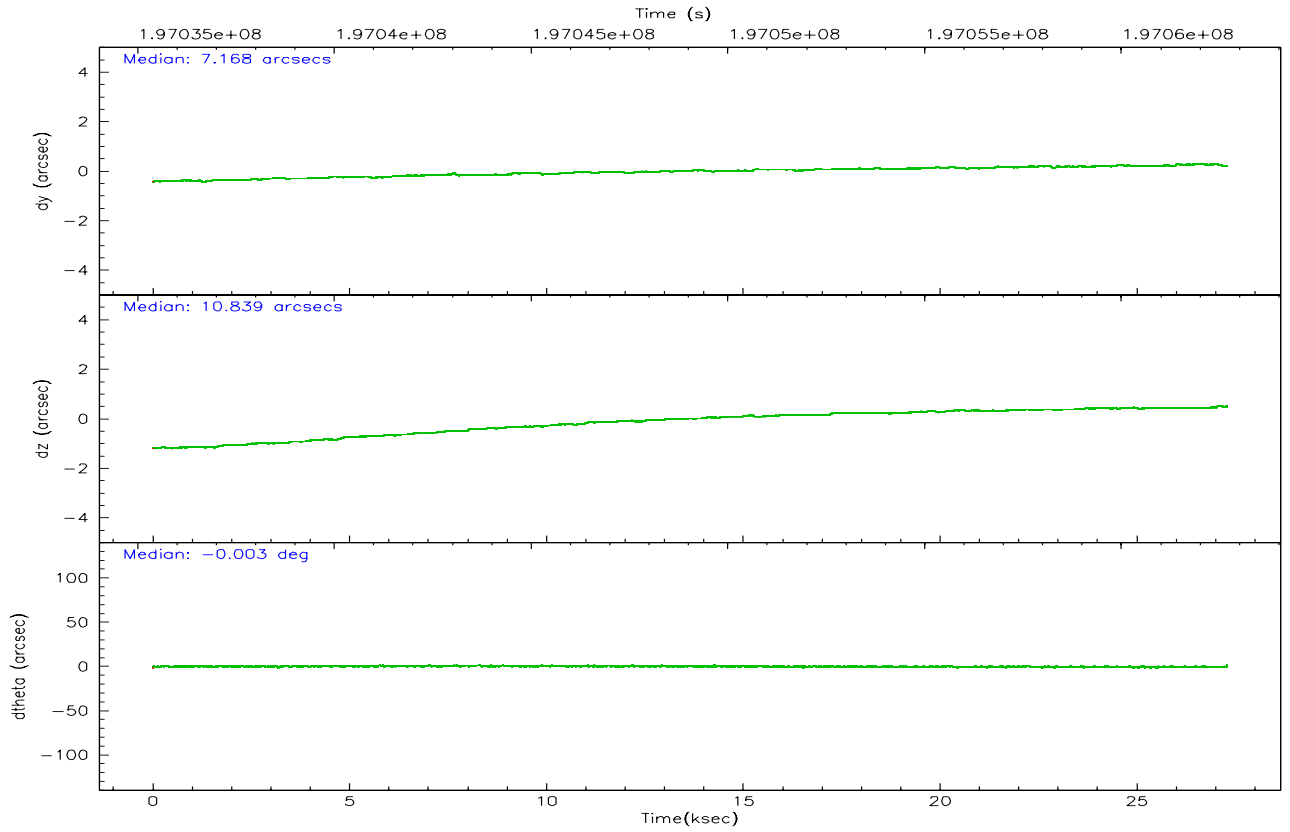
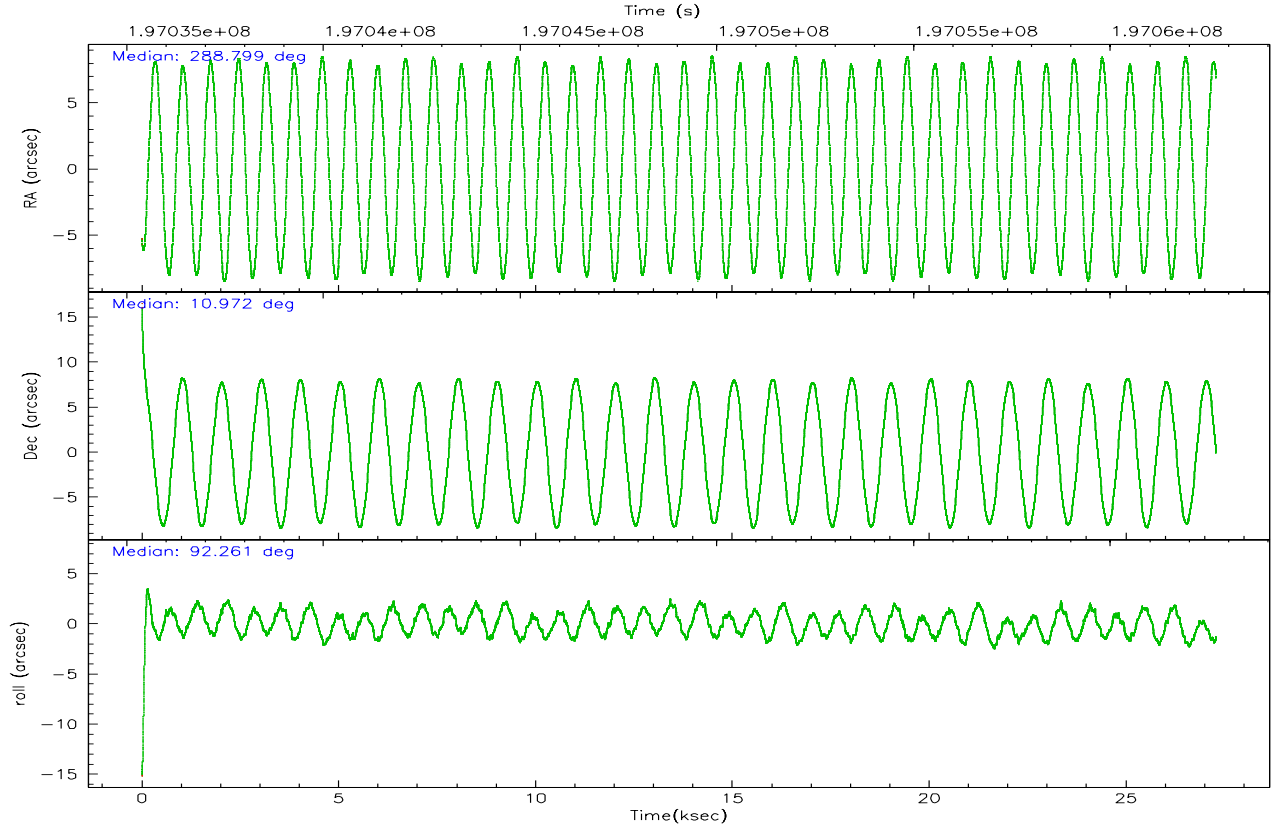
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	4192	39467	10306	176581	23299	6208
	6%	14%	1%	8%	4%	5%
grade 1 events	105	206	137	1814	289	142
	0%	0%	0%	0%	0%	0%
grade 2 events	37555	91732	704022	820755	372437	67549
	55%	34%	84%	37%	77%	63%
grade 3 events	4646	4147	4445	101161	7930	4123
	6%	1%	0%	4%	1%	3%
grade 4 events	4837	4127	4241	100445	7744	4418
	7%	1%	0%	4%	1%	4%
grade 5 events	6941	16335	11155	56026	12133	8276
	10%	6%	1%	2%	2%	7%
grade 6 events	9740	112370	94836	944689	54957	15245
	14%	41%	11%	42%	11%	14%
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_GRADED	CC33_GRADED	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	288.814168	288.7990569840895	Alternating exposures requested	N	N
Pointing Dec	10.949213	10.97204271350402	Primary exposure time	0.000000	0
Pointing Roll	92.103917	92.26340859649974			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-194.132523	-194.1227414875429			
SIM translation stage offset (mm)	4	3.990218904535112			
Observation start time	197035685.184000	197034662.27366			
Observation start date	2004-03-30T12:07:01	2004-03-30T11:51:02			
Observation end time	197062685.184000	197064095.66245			
Observation end date	2004-03-30T19:37:01	2004-03-30T20:01:35			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



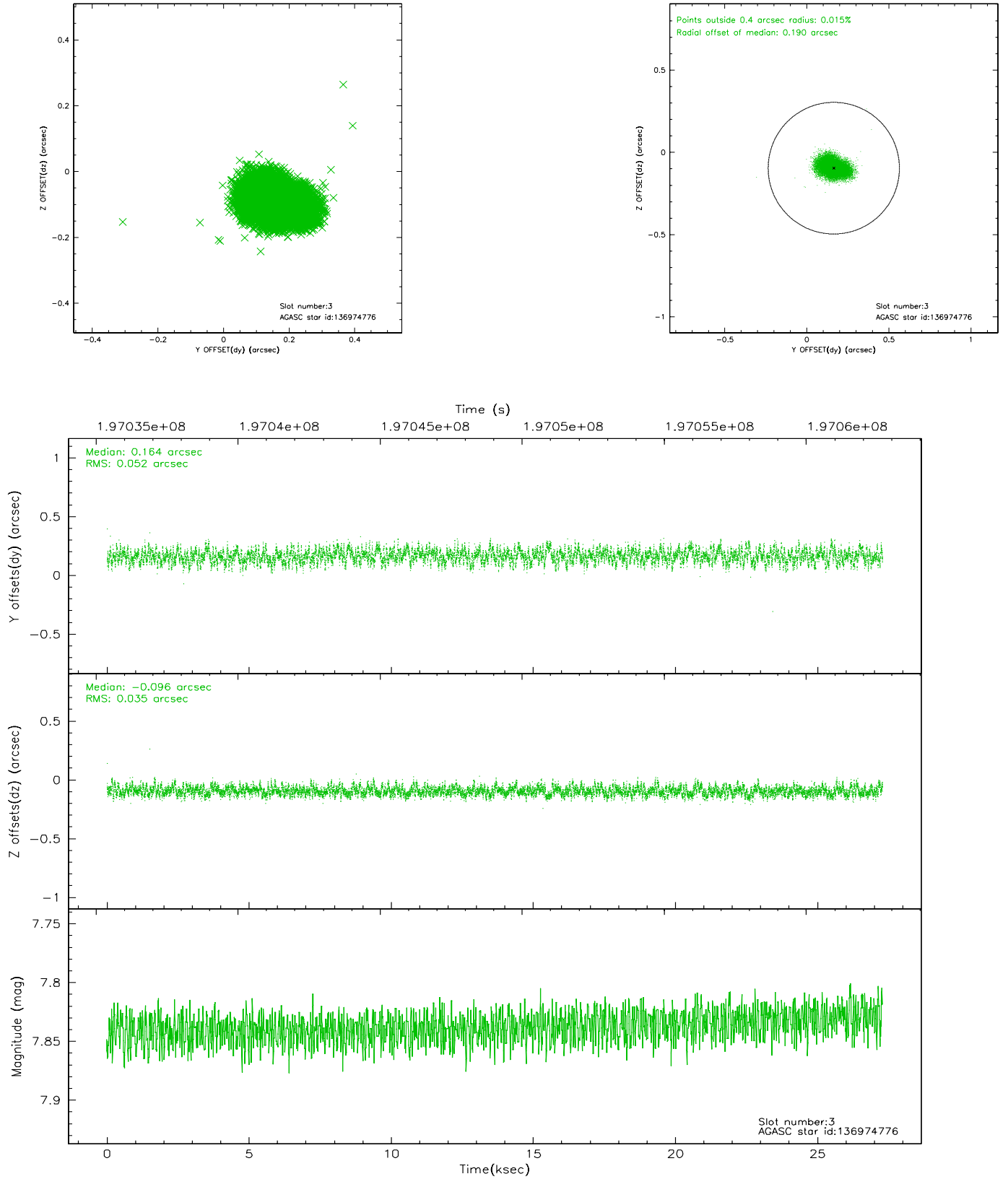


Slot Statistics

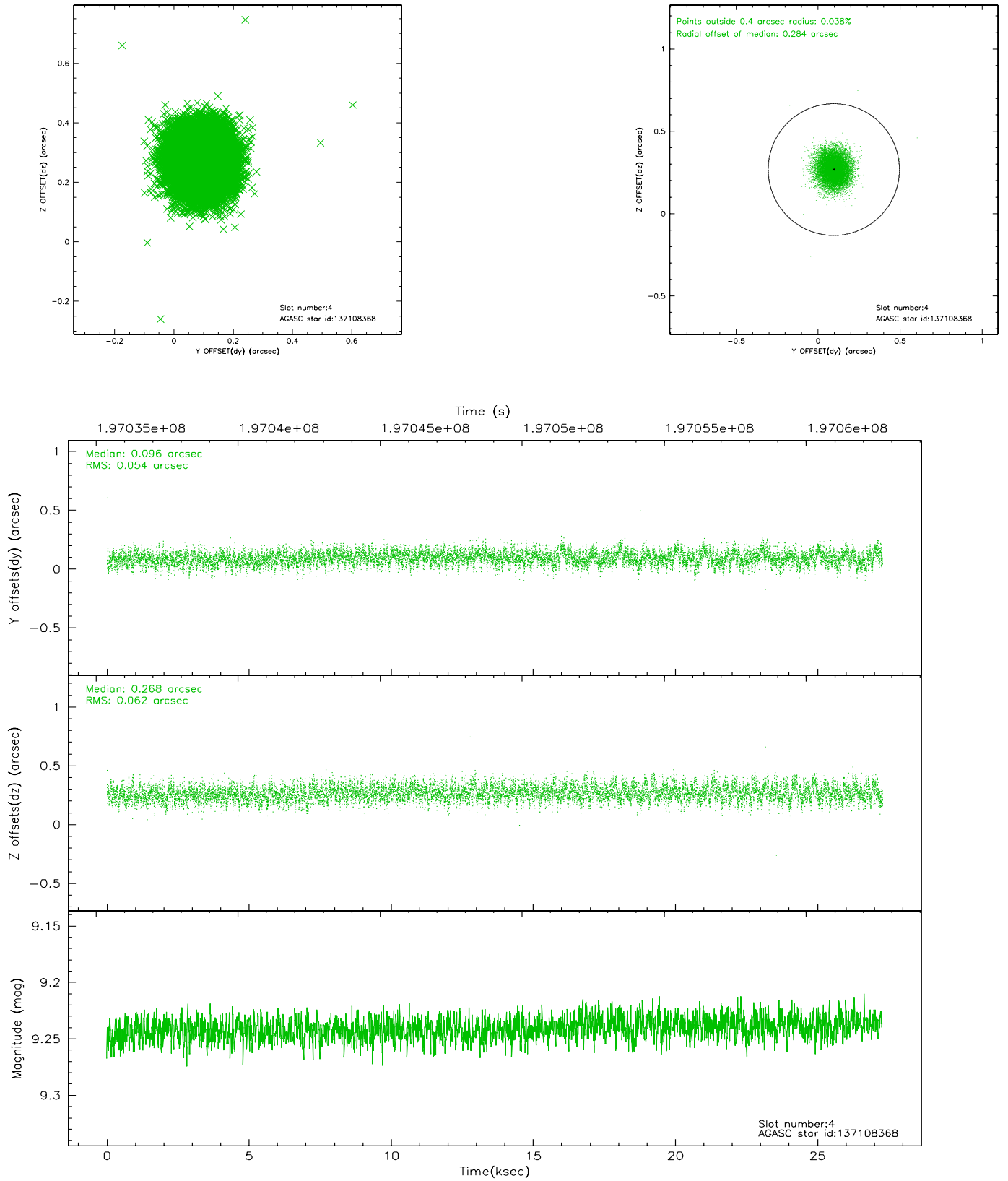
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	6655	0.029	0.055	0.014	0.034	0.000000	0.000000	-760.15	-1649.79
1	FID	ACIS-S-4	7.20	6656	0.012	-0.022	0.010	0.027	0.000000	0.000000	2153.11	258.48
2	FID	ACIS-S-6	7.32	6656	-0.070	-0.025	0.011	0.027	0.000000	0.000000	401.90	896.02
3	GUIDE	136974776	7.84	13312	0.164	-0.096	0.067	0.108	288.742109	10.409402	-1932.46	326.37
4	GUIDE	137108368	9.24	13306	0.096	0.268	0.088	0.140	289.421925	10.352056	-2225.25	-2071.71
5	GUIDE	137497048	7.99	13310	-0.231	0.136	0.062	0.097	288.896055	11.554718	2166.65	-369.16
6	GUIDE	136977584	8.41	13309	0.171	-0.111	0.065	0.103	288.635599	10.555283	-1393.50	683.64
7	GUIDE	137498872	7.05	13310	-0.203	-0.198	0.050	0.083	288.350862	11.344926	1484.47	1581.97

2.4 Star Slots

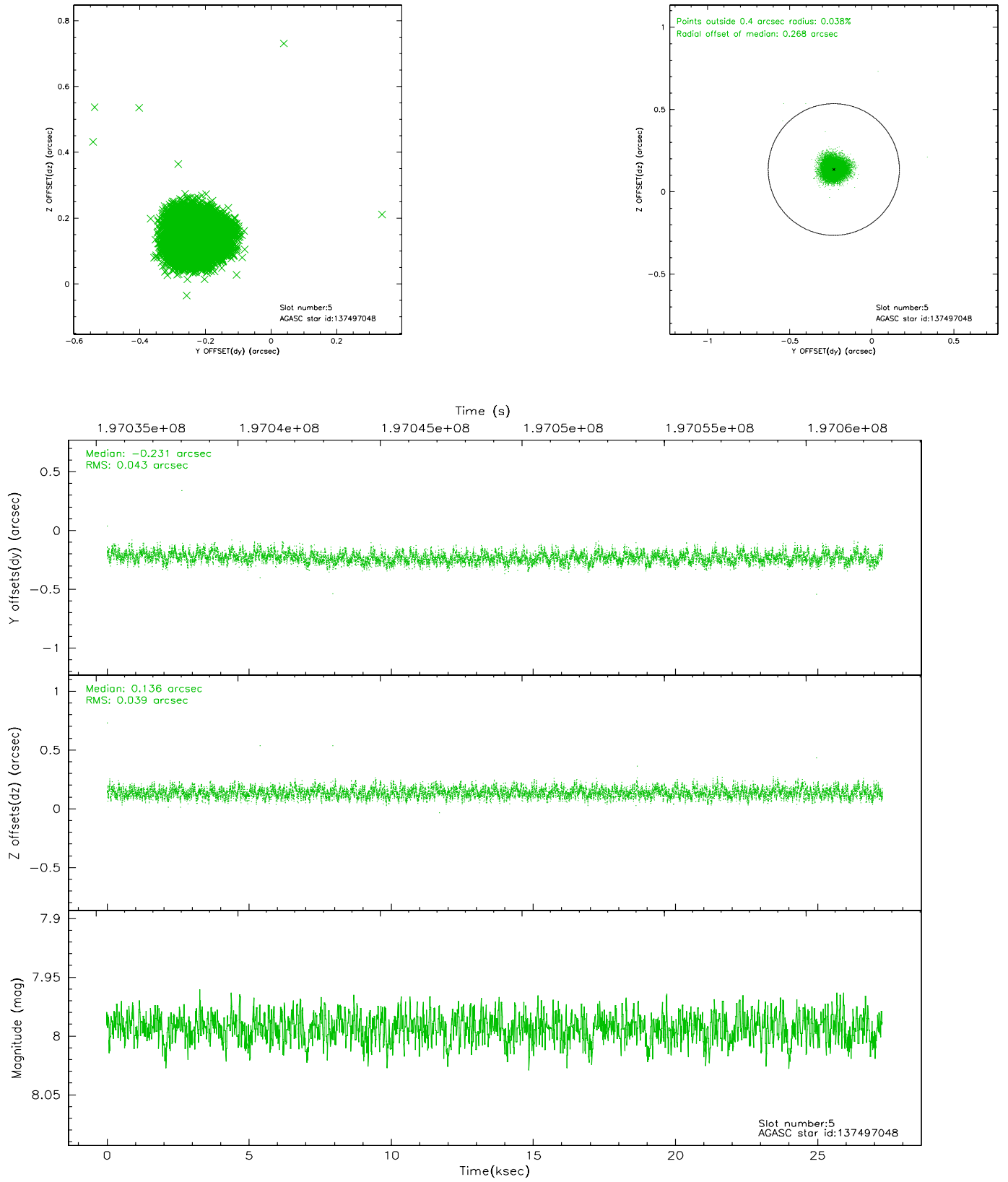
2.4.1 Slot 3



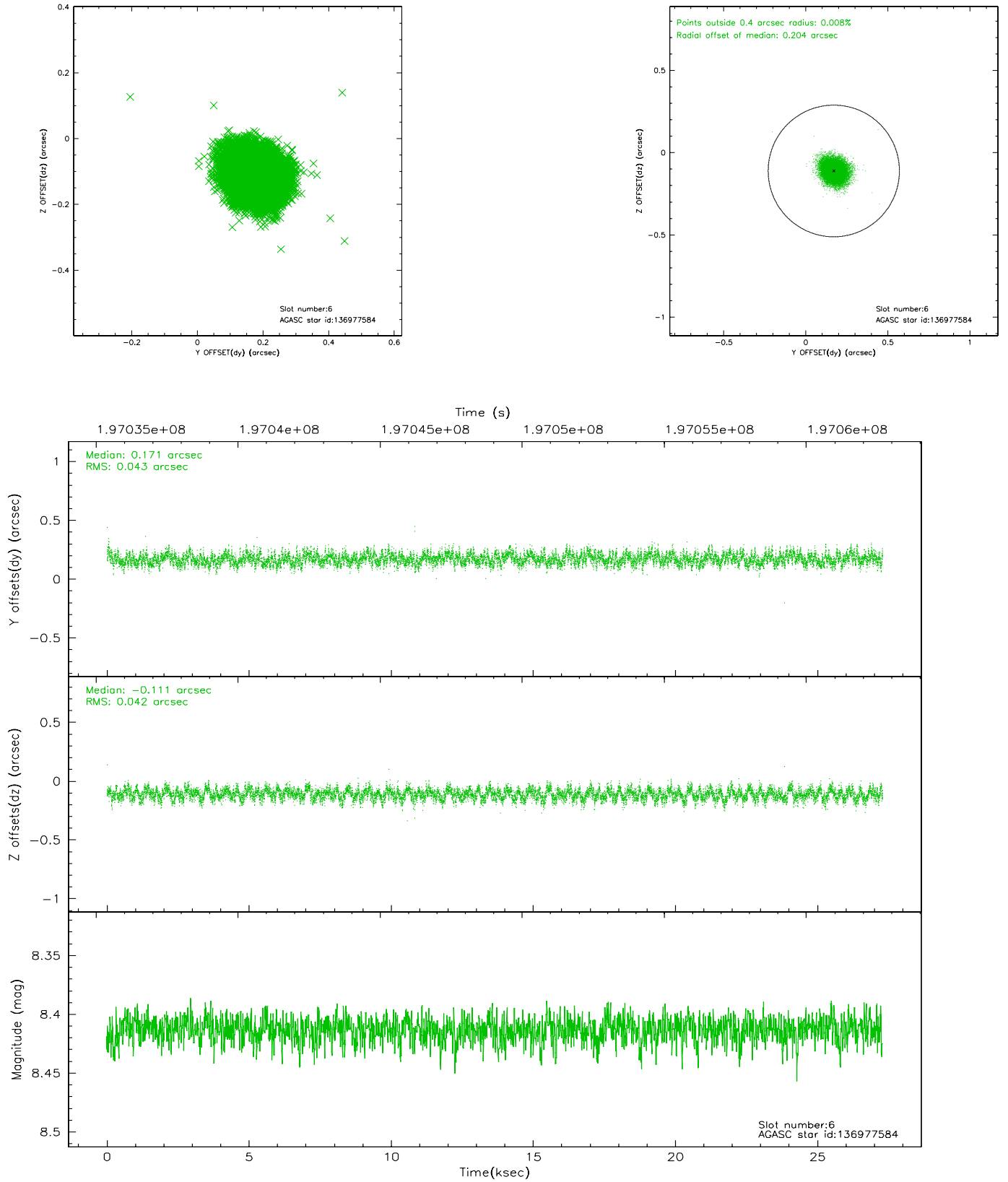
2.4.2 Slot 4



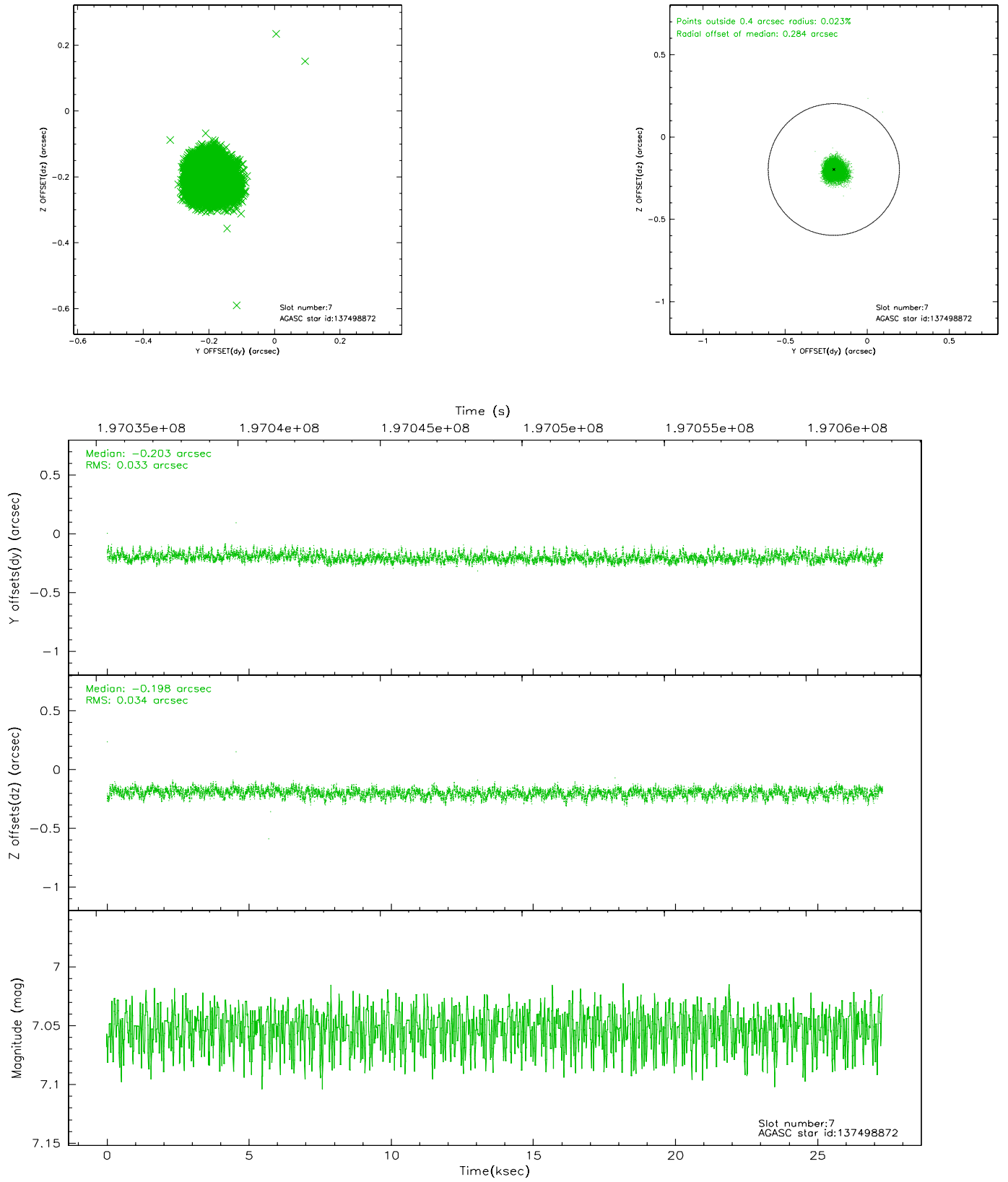
2.4.3 Slot 5



2.4.4 Slot 6

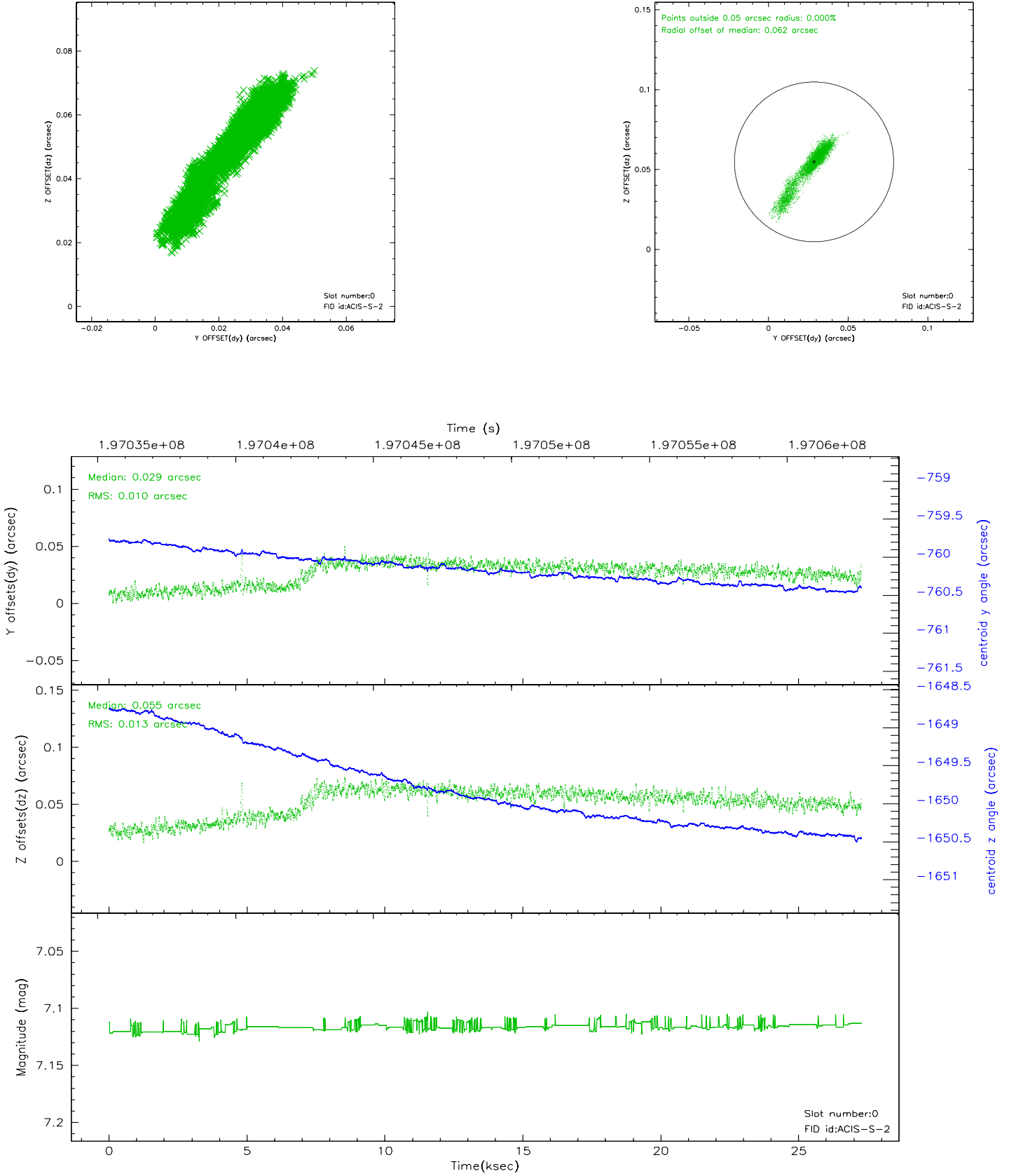


2.4.5 Slot 7

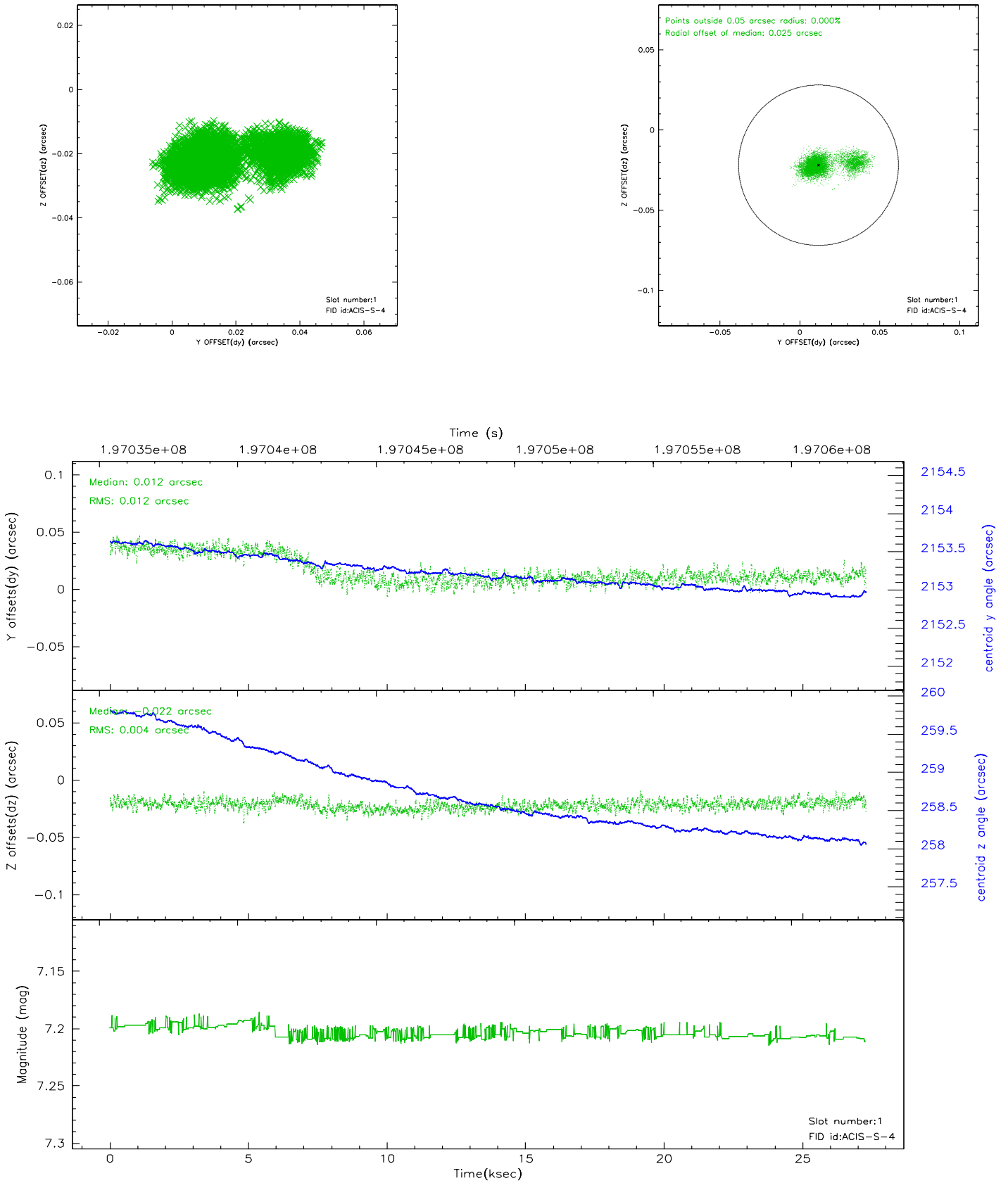


2.5 FID Slots

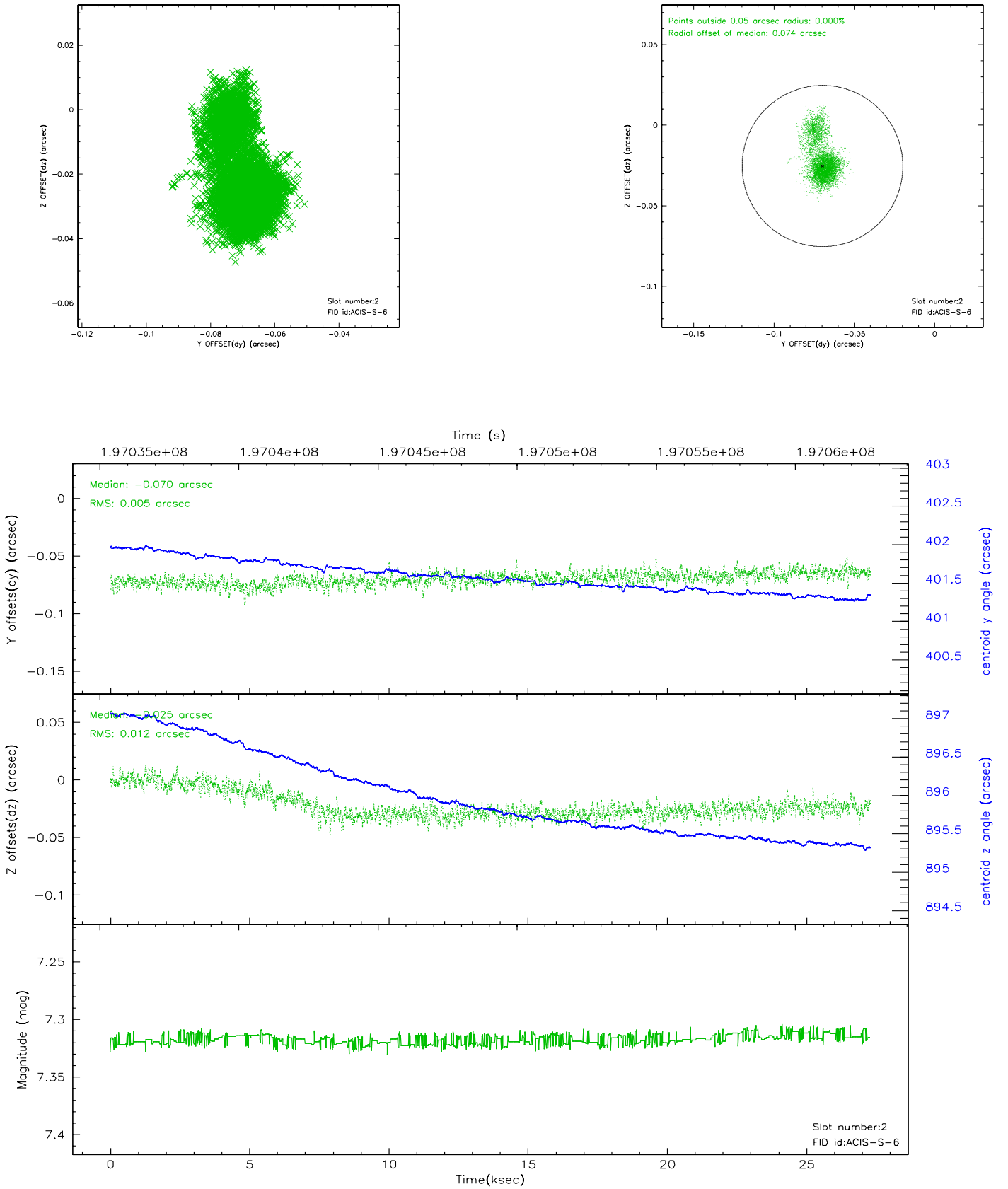
2.5.1 Slot 0



2.5.2 Slot 1

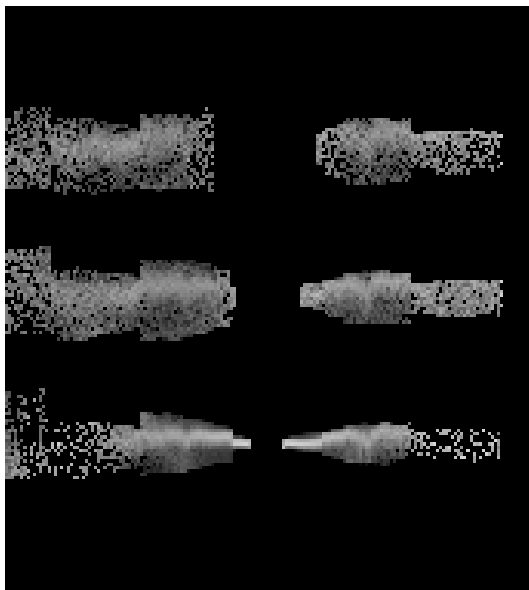


2.5.3 Slot 2

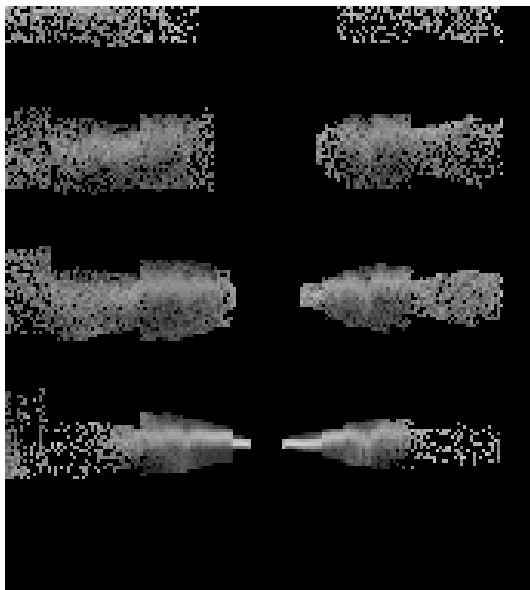


3 Gratings

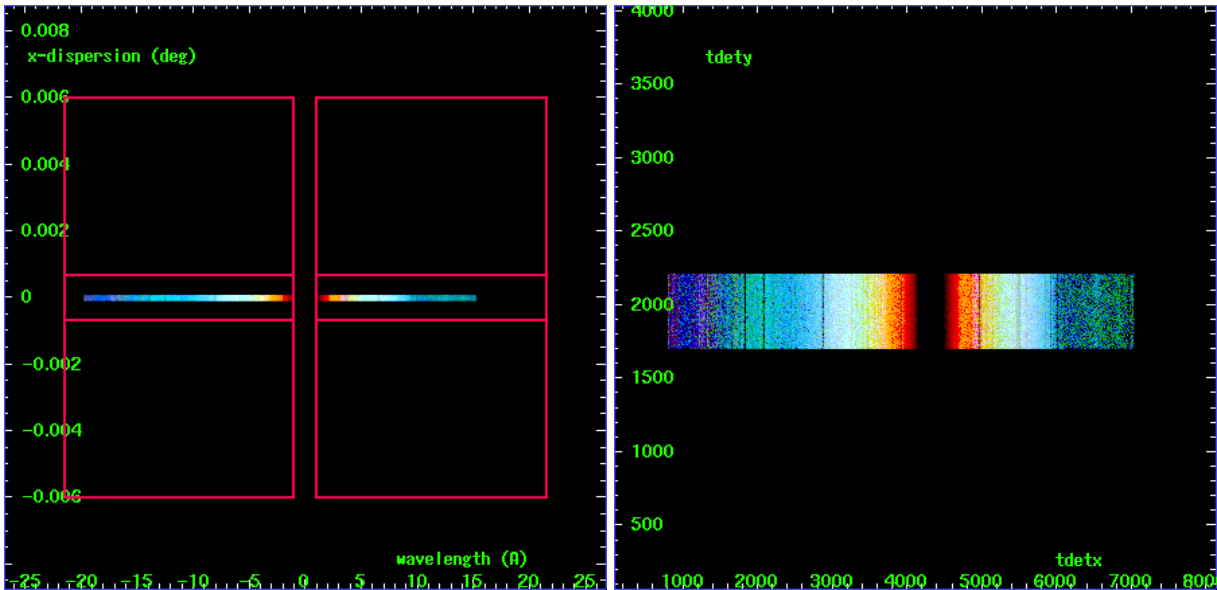
3.1 HEG Arm



HEG Order Sort 123



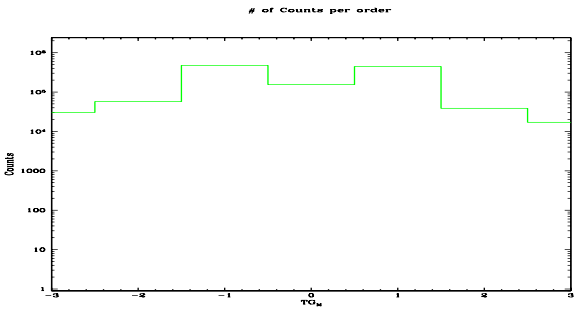
HEG Order Sort ALL



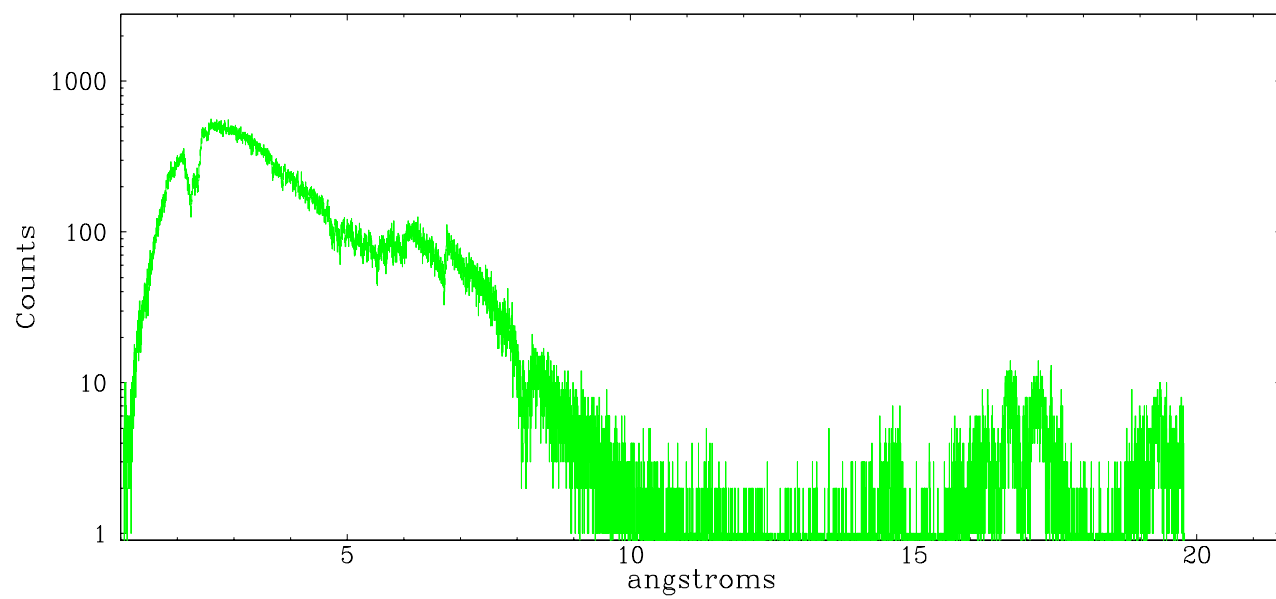
Spot Image HEG

Full Detector HEG

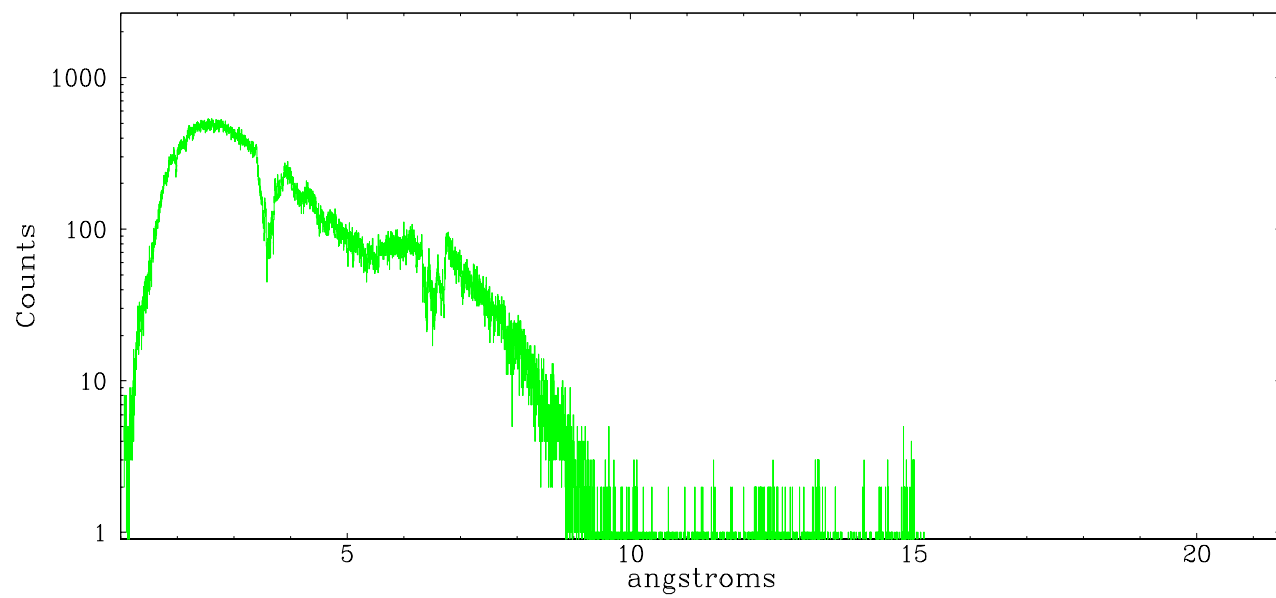
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	30422	57553	475537	153837	446936	38668	17069



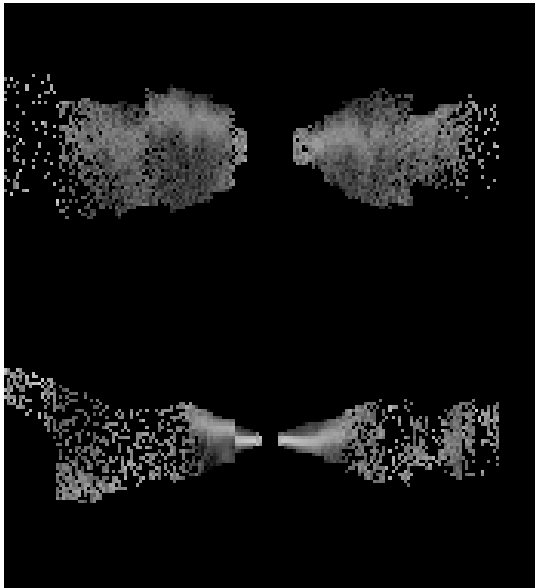
heg order -1



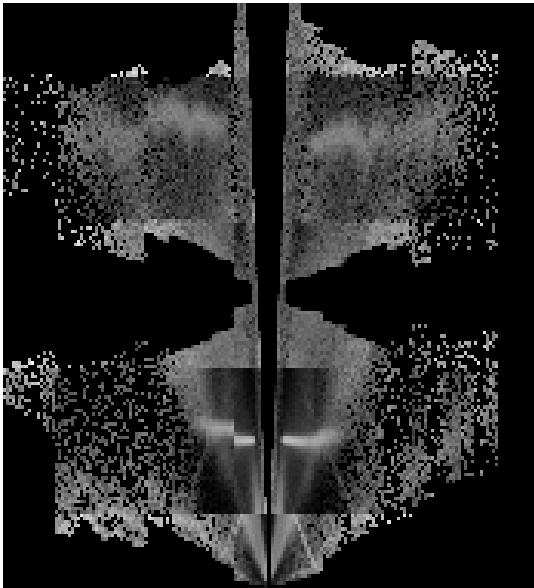
heg order +1



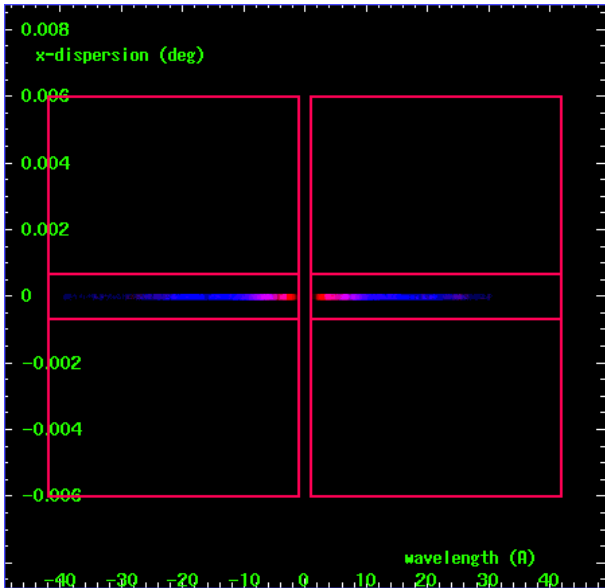
3.2 MEG Arm



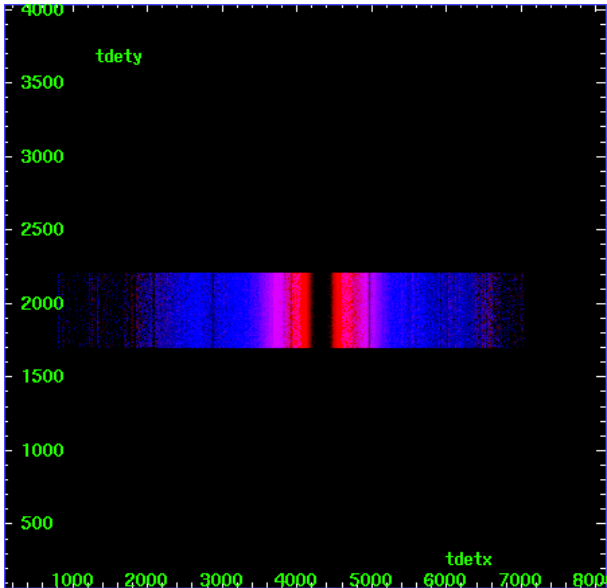
MEG Order Sort 123



MEG Order Sort ALL

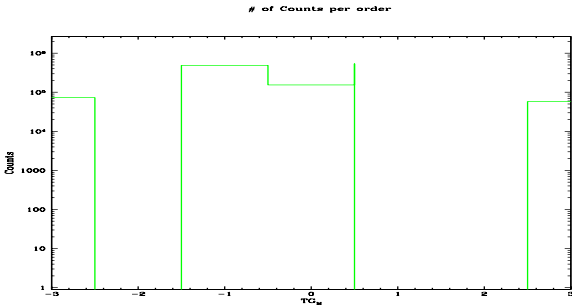


Spot Image MEG

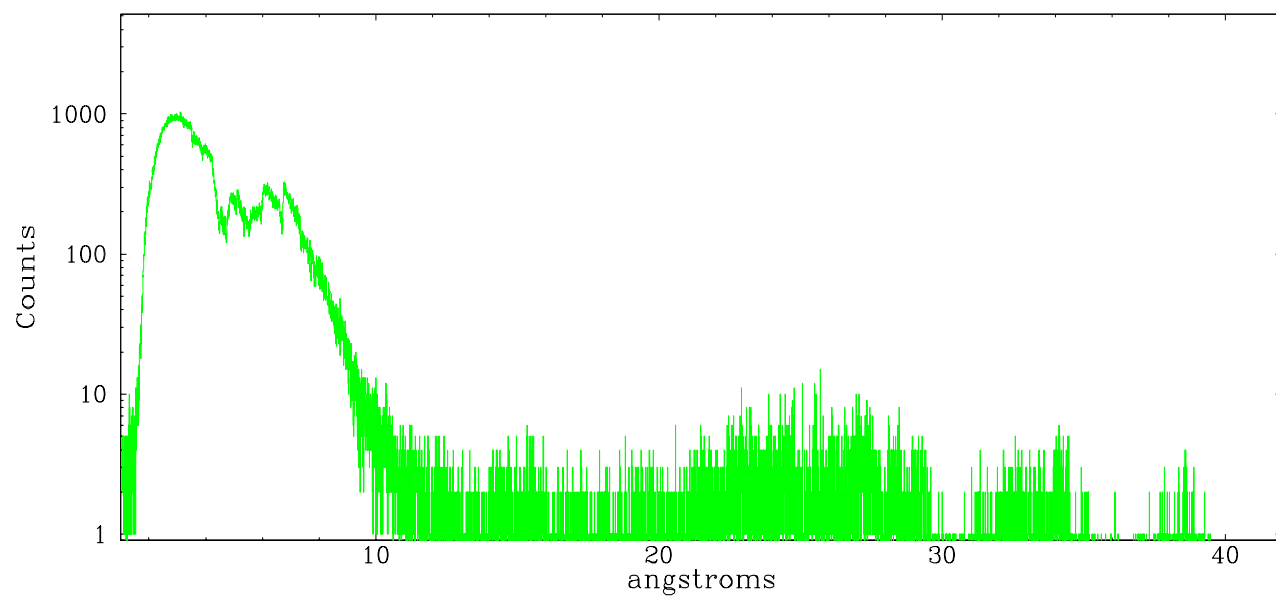


Full Detector MEG

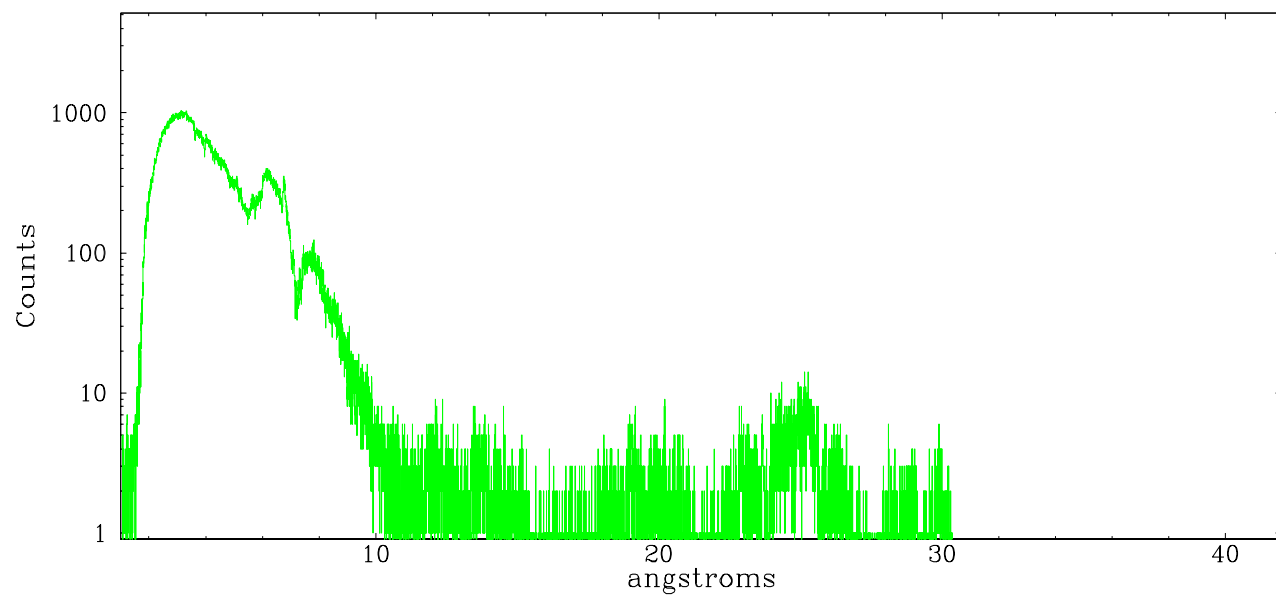
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	73299	0	491168	153837	536441	0	57981



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2008.04.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.285

A.2 Comments