

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1923 - L2 Version 002
Chandra X-Ray Center

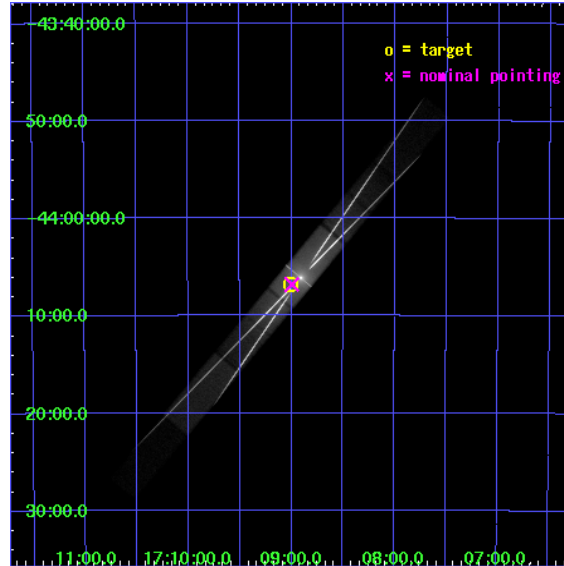
L2 Processing Date : Apr 2 2007

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1 Front

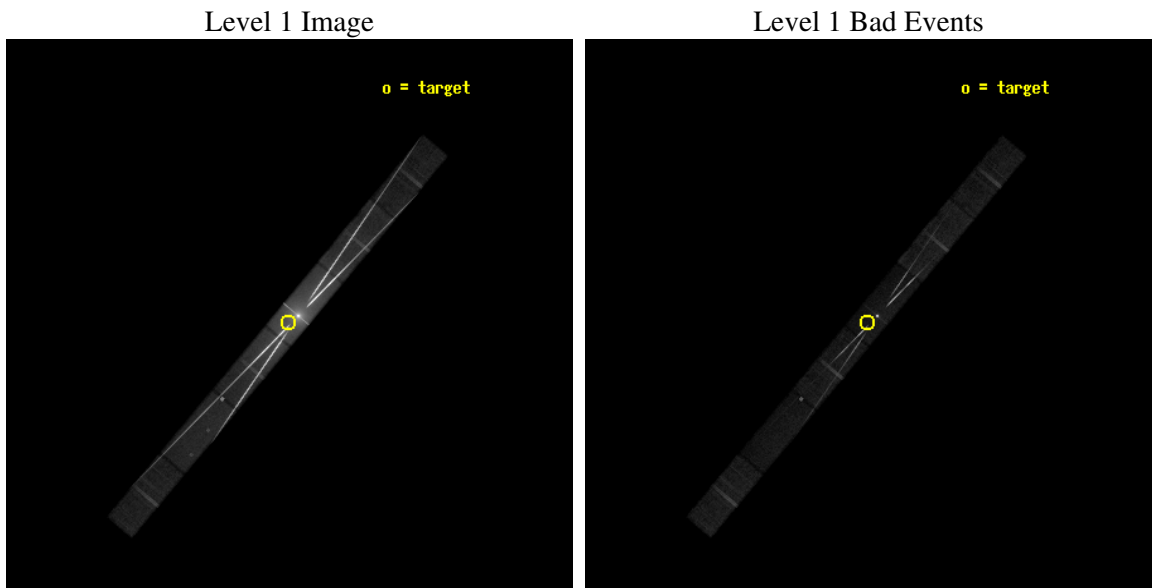
seq_num	400136
obs_id	1923
title	DETAILED STUDY OF THE IRON LINE AND LOW ENERGY FEATURES IN Z AND ATOLL SOURCES
observer	Prof. Natale Robba
object	4U1705-44
dtcycle	0
cycle	P
ra_targ	257.251667
dec_targ	-44.113333
ra_nom	257.24860008286
dec_nom	-44.113371014014
roll_nom	309.95908025496
revision	5
ontime	25127.200106978
livetime	24411.5917322
ontime4	25127.200106978
ontime5	25127.200106978
ontime6	25127.200106978
ontime7	25127.200106978
ontime8	25127.200106978
ontime9	25127.200106978
l2events	2847654



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-12-11T12:25:16
revision	3

sched_exp_time	25000.000000
ontime	25127.200106978
ontime4	25127.200106978
ontime5	25127.200106978
ontime6	25127.200106978
ontime7	25127.200106978
ontime8	25127.200106978
ontime9	25127.200106978
l1events	3590756

2.1.3 Events

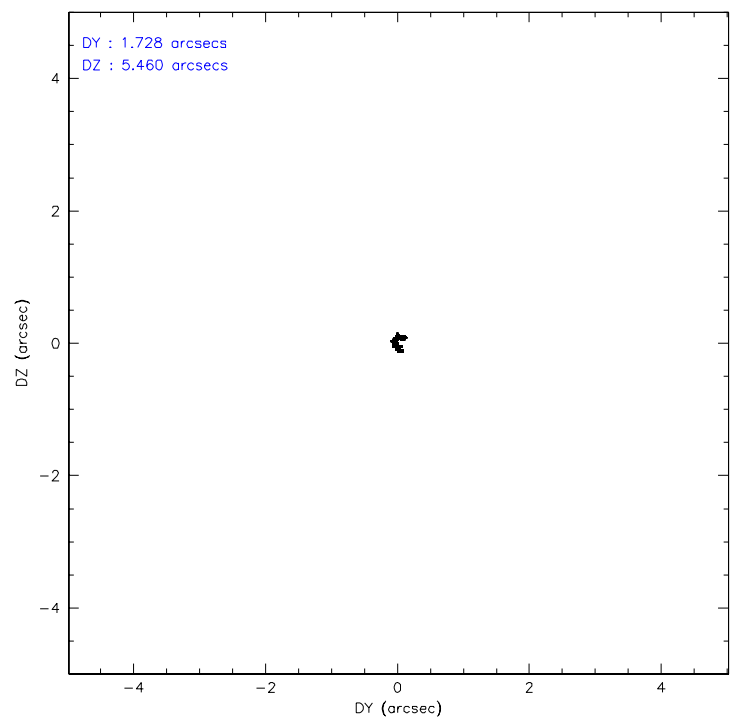
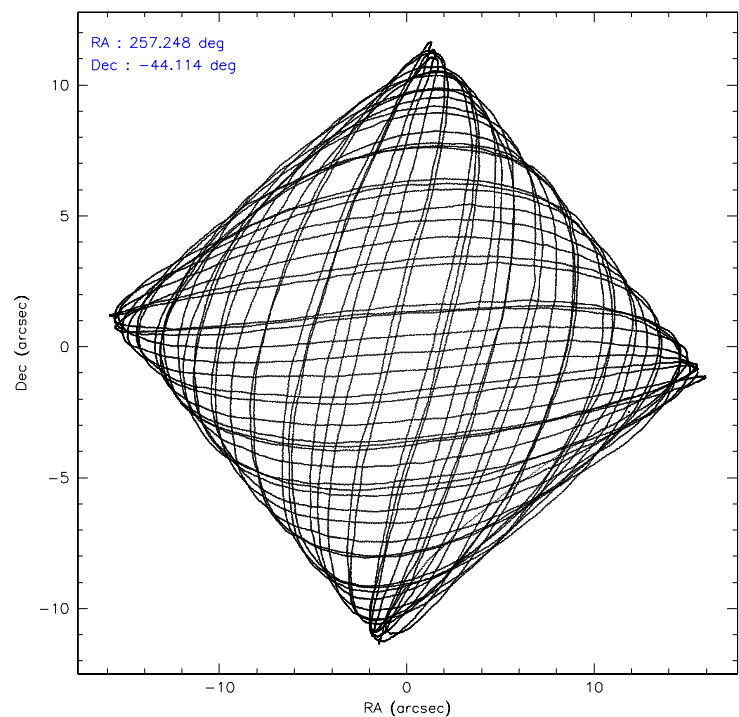
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	105142	201859	969155	1675695	514299	124606
rejected events	87288	68255	111182	182542	101797	76790
rejected %	83%	33%	11%	10%	19%	61%

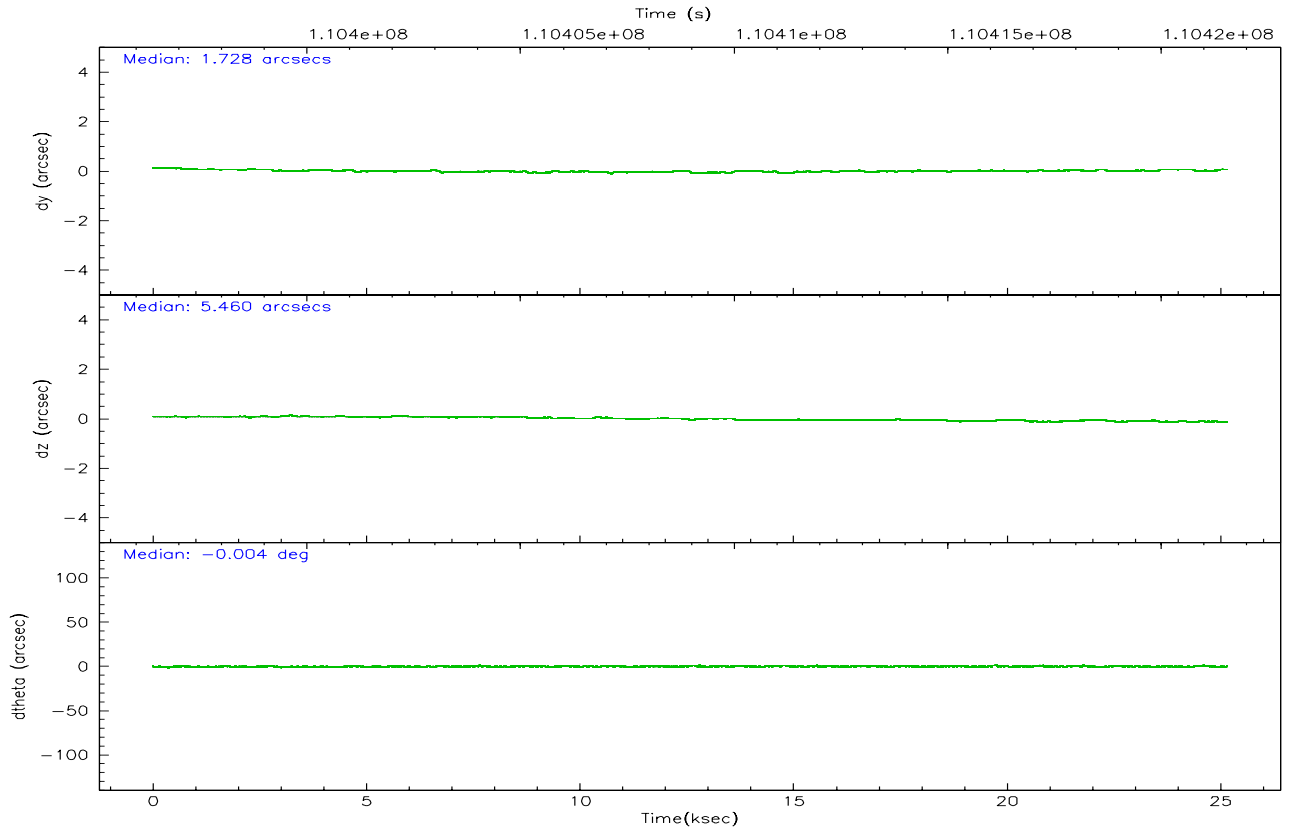
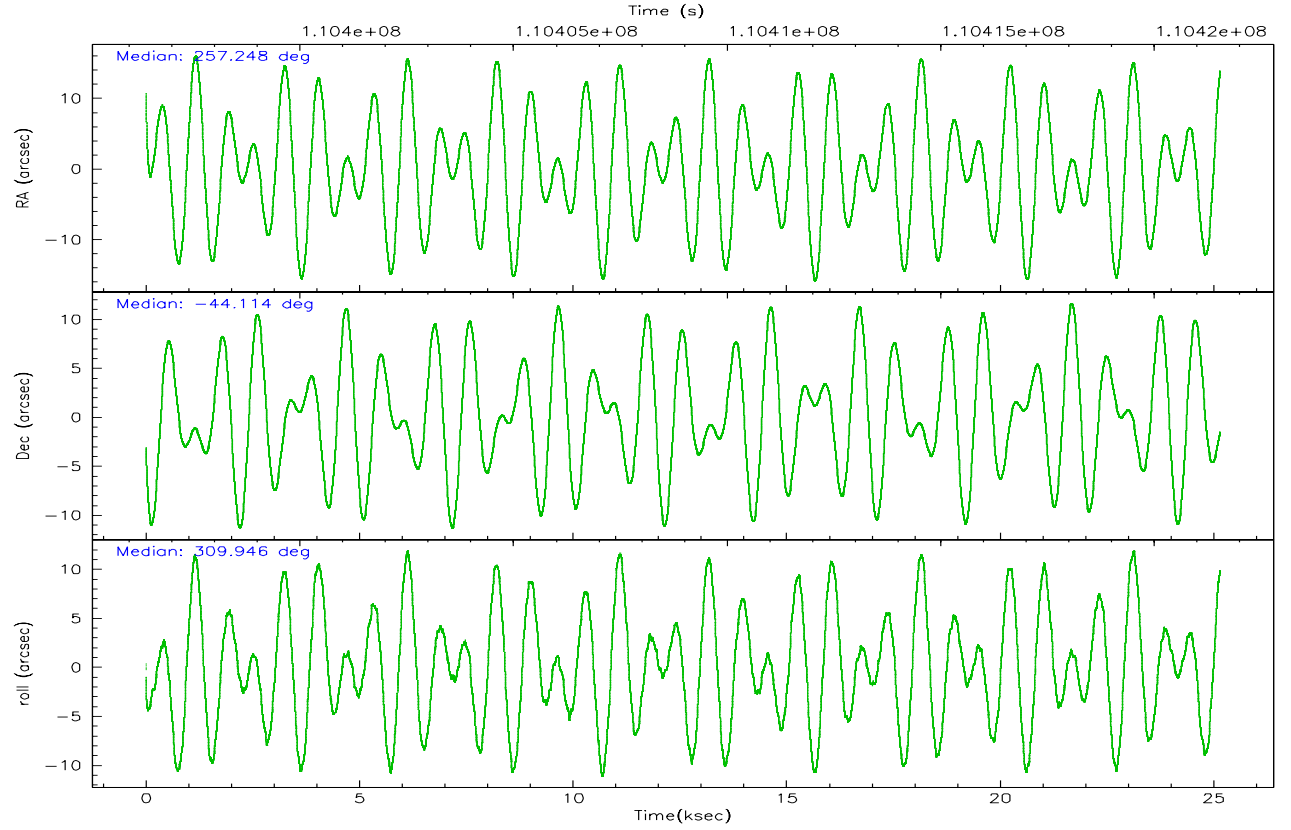
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	15150	31845	634639	250173	318426	38652
	14%	15%	65%	14%	61%	31%
grade 1 events	68	1892	11018	6779	2779	107
	0%	0%	1%	0%	0%	0%
grade 2 events	4988	45923	115789	384209	52422	8119
	4%	22%	11%	22%	10%	6%
grade 3 events	1913	10043	39510	143899	17911	3179
	1%	4%	4%	8%	3%	2%
grade 4 events	1790	10402	39233	141538	17845	3241
	1%	5%	4%	8%	3%	2%
grade 5 events	2249	7739	11313	42899	5327	2611
	2%	3%	1%	2%	1%	2%
grade 6 events	3087	45239	43560	594091	18863	4517
	2%	22%	4%	35%	3%	3%
grade 7 events	75897	48776	74093	112107	80726	64180
	72%	24%	7%	6%	15%	51%

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	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	257.212762	257.2486000828623	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	-44.104289	-44.11337101401397	Subarray start row	1	1
Pointing Roll	309.777514	309.9590802549595	Subarray row count	400	400
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	1.4
SIM translation stage pos (mm)	-182.642523	-182.6373491900168			
SIM translation stage offset (mm)	-7.49	-7.495173392990978			
Observation start time	110396521.184000	110395292.39661			
Observation start date	2001-07-01T17:40:57	2001-07-01T17:21:32			
Observation end time	110421521.184000	110422805.96018			
Observation end date	2001-07-02T00:37:37	2001-07-02T01:00:05			
Read mode	TIMED	TIMED			

2.3 Aspect



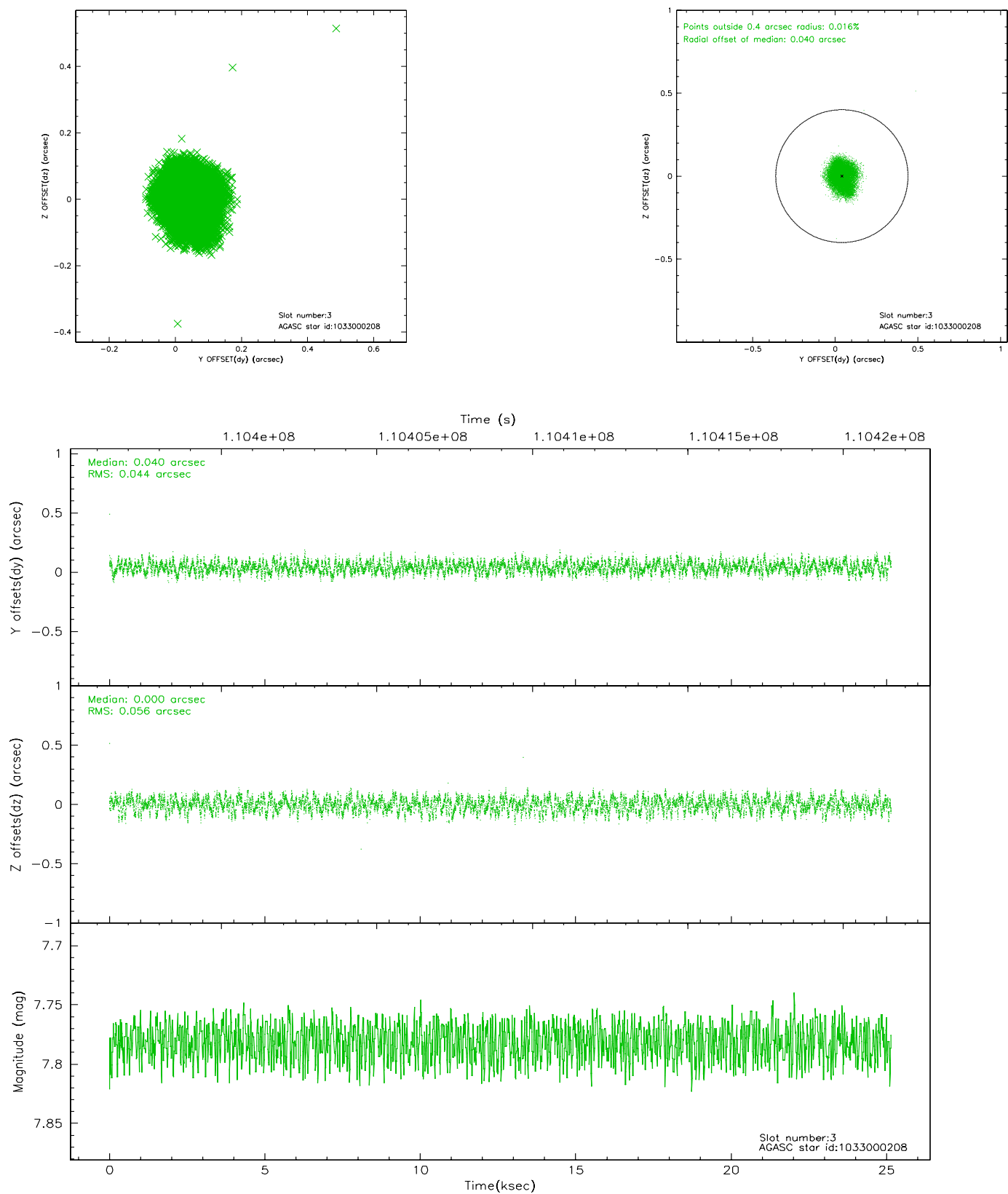


Slot Statistics

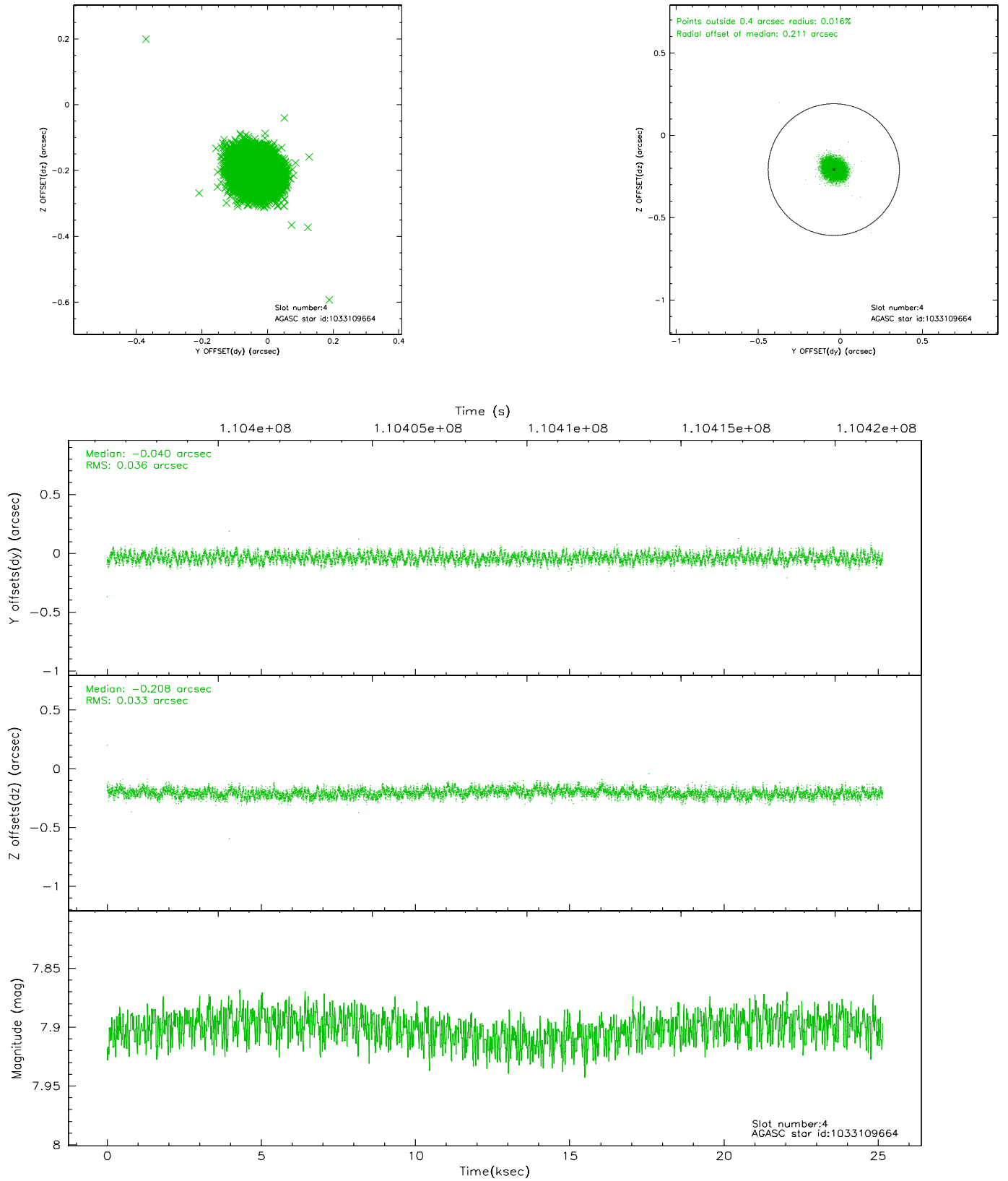
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6135	-0.051	-0.019	0.006	0.011	0.000000	0.000000	-753.85	-1881.03
1	FID	ACIS-S-4	7.18	6133	-0.002	0.051	0.006	0.010	0.000000	0.000000	2159.42	27.37
2	FID	ACIS-S-6	7.41	6134	0.025	-0.024	0.007	0.012	0.000000	0.000000	408.35	664.82
3	GUIDE	1033000208	7.78	12266	0.040	0.000	0.077	0.115	256.502750	-44.372681	-420.17	-2025.96
4	GUIDE	1033109664	7.90	12270	-0.040	-0.208	0.053	0.082	257.645718	-43.523560	-882.21	2205.20
5	GUIDE	1032985488	8.41	12269	-0.042	0.065	0.081	0.121	256.341779	-44.392959	-625.59	-2392.79
6	GUIDE	1032980048	8.61	12269	0.002	0.057	0.071	0.115	256.605534	-44.572067	302.46	-2276.47
7	GUIDE	1032979296	8.75	12267	0.036	0.094	0.082	0.139	257.257446	-43.353483	-2003.10	1820.28

2.4 Star Slots

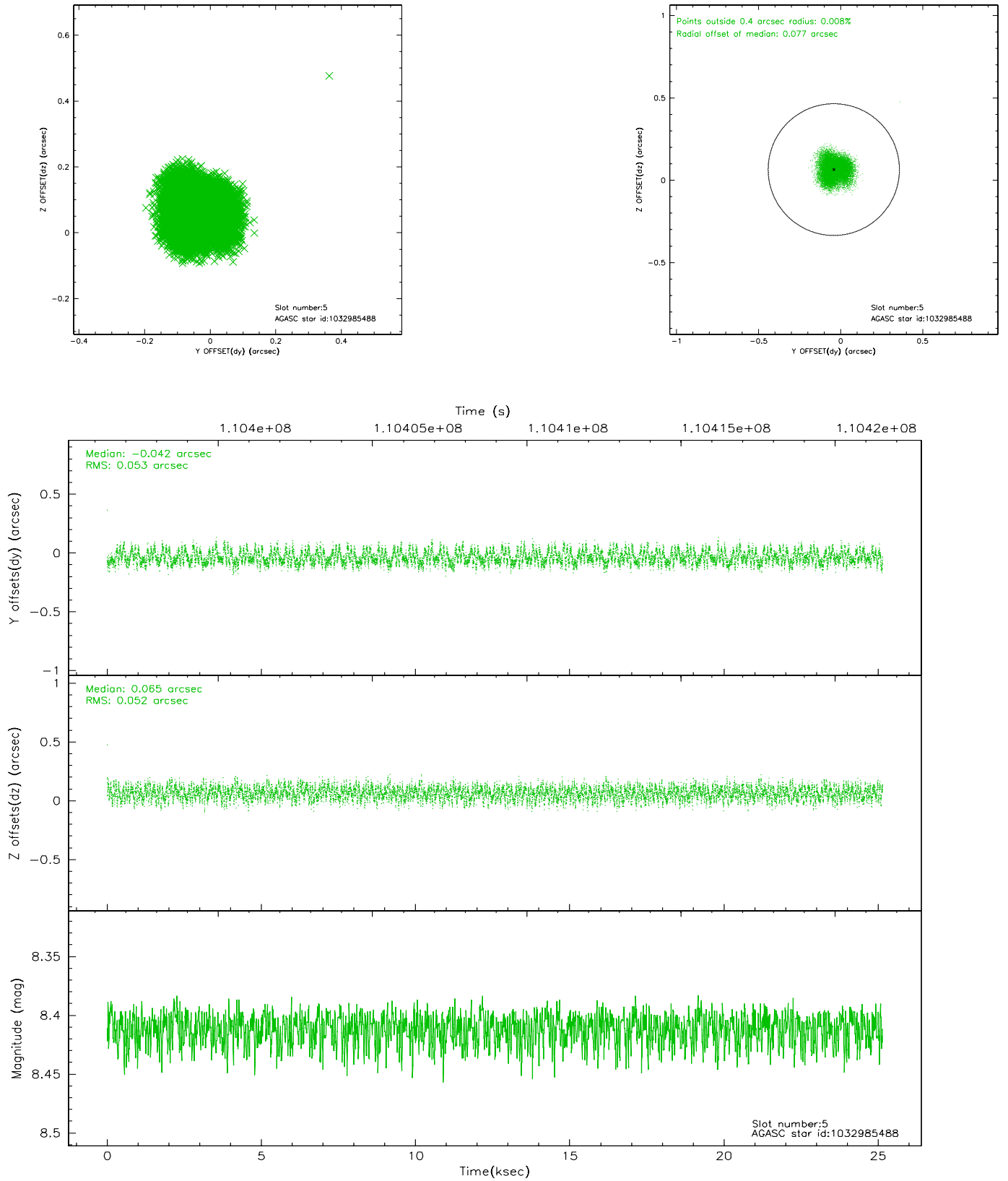
2.4.1 Slot 3



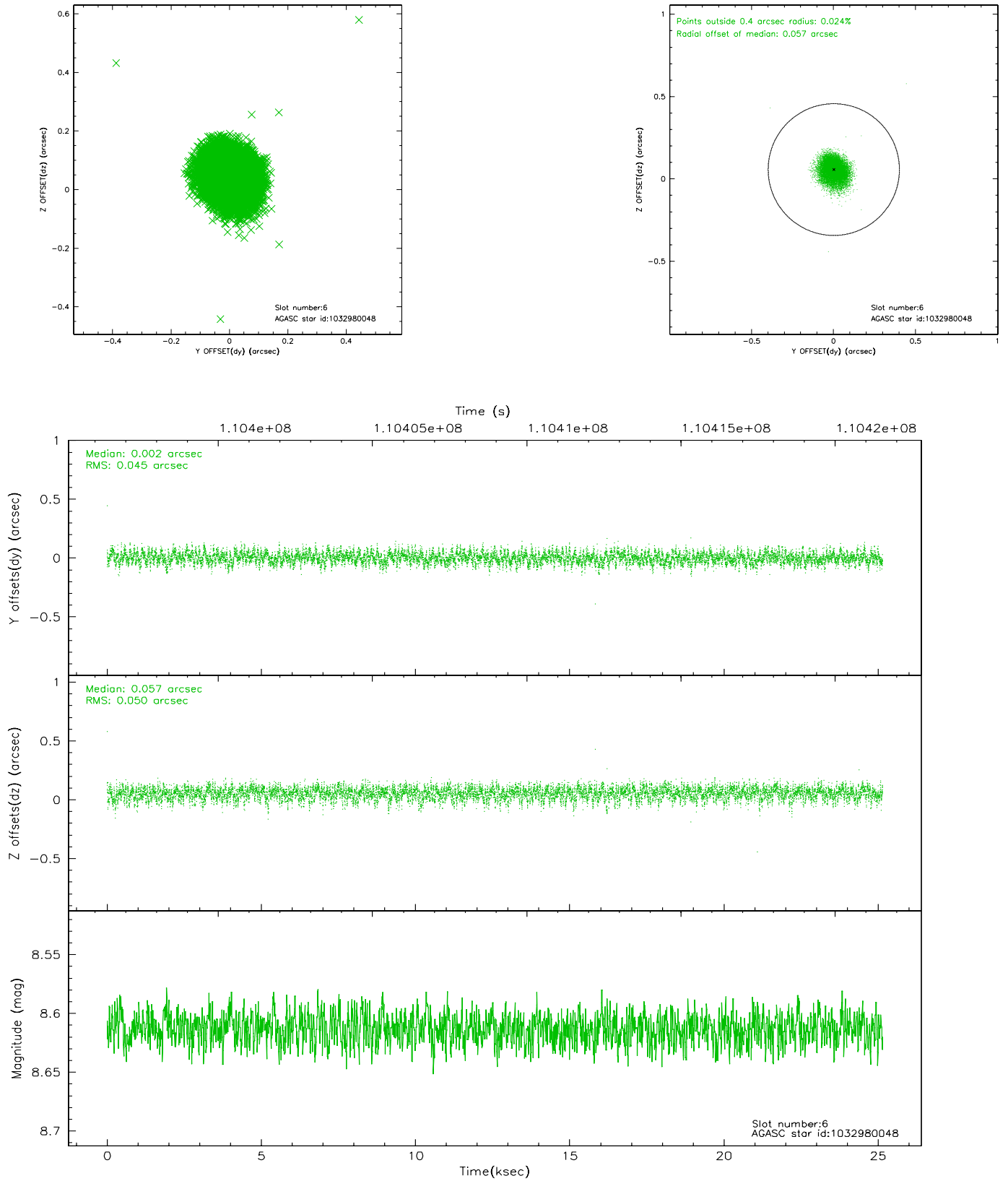
2.4.2 Slot 4



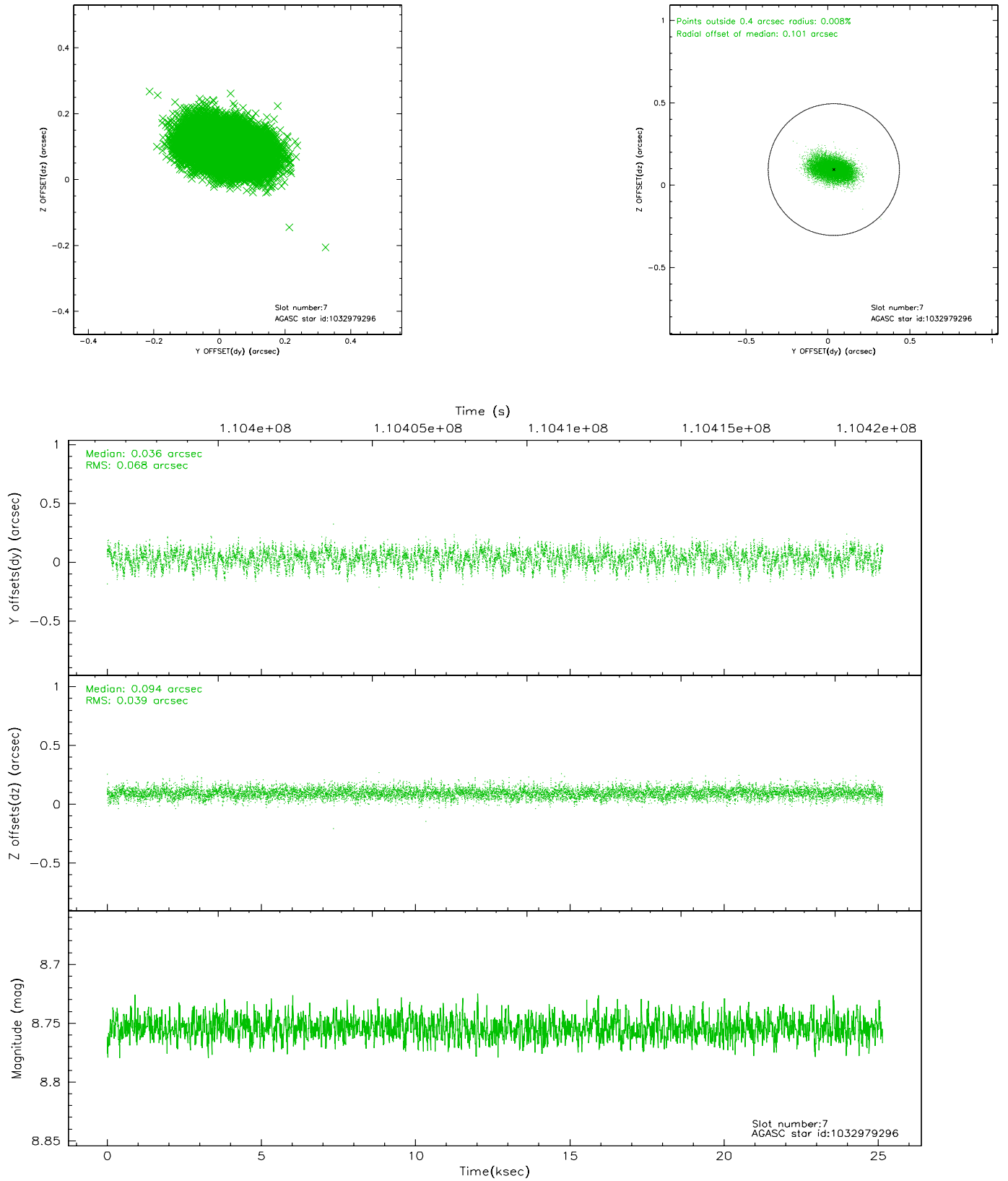
2.4.3 Slot 5



2.4.4 Slot 6

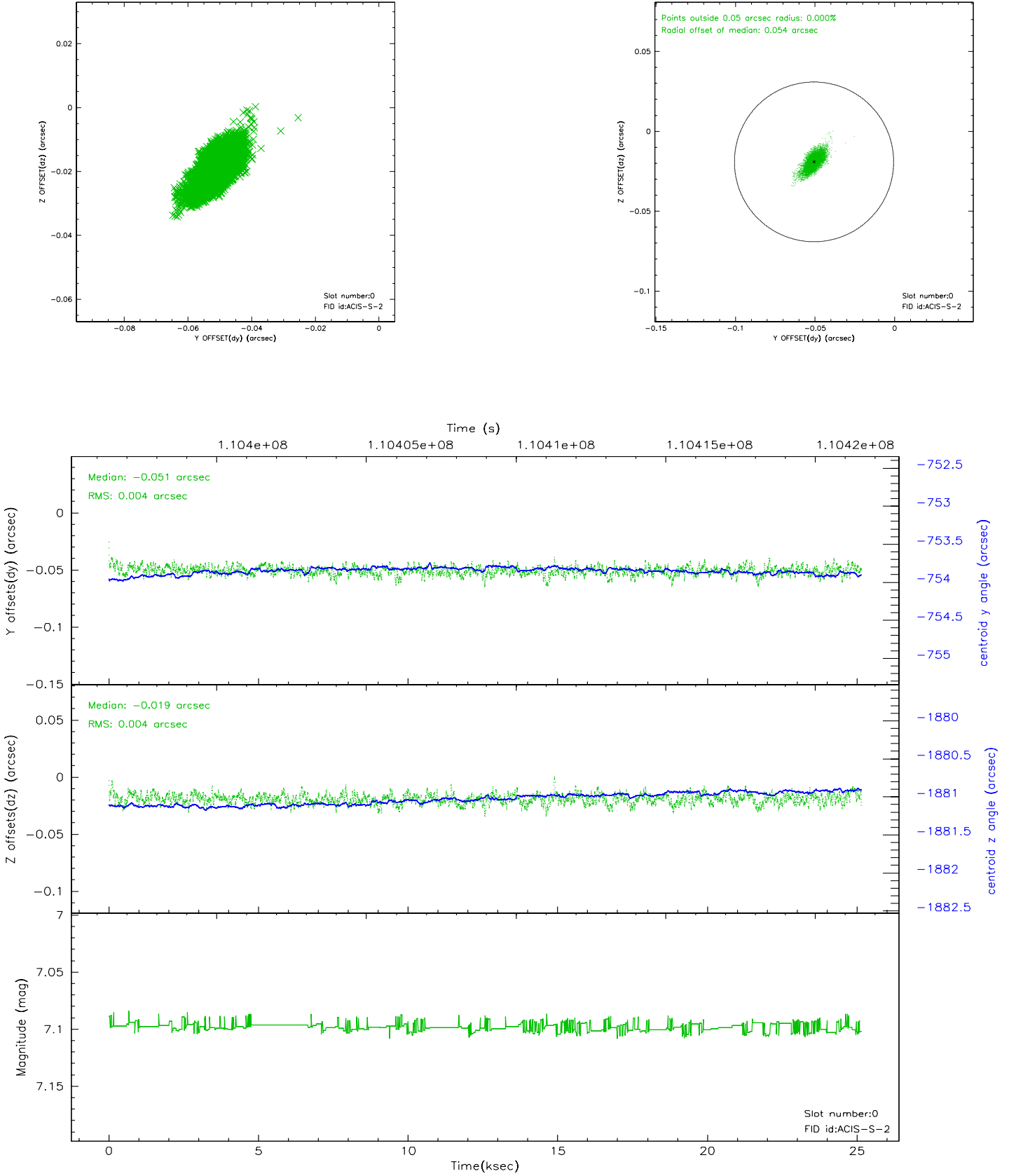


2.4.5 Slot 7

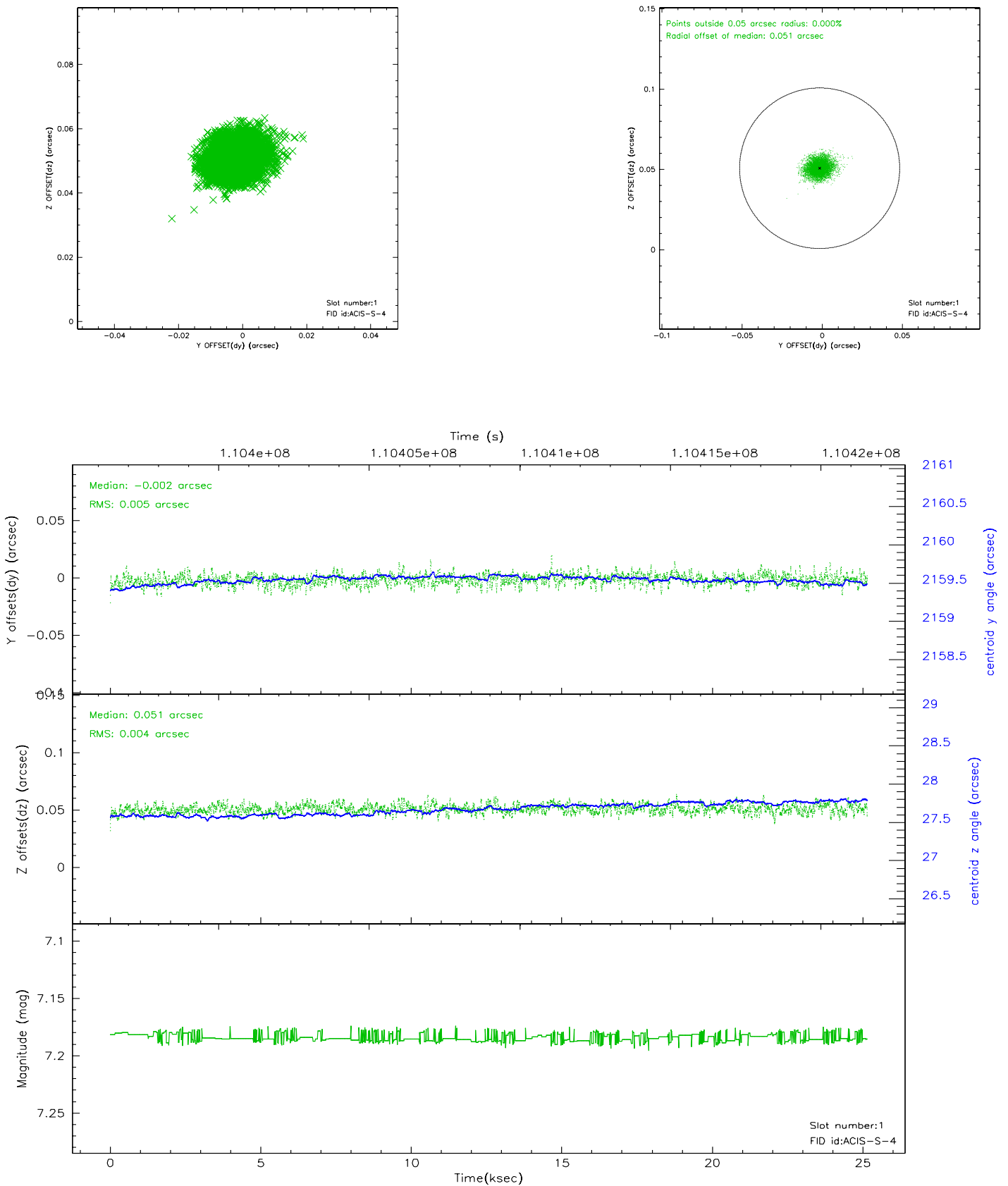


2.5 FID Slots

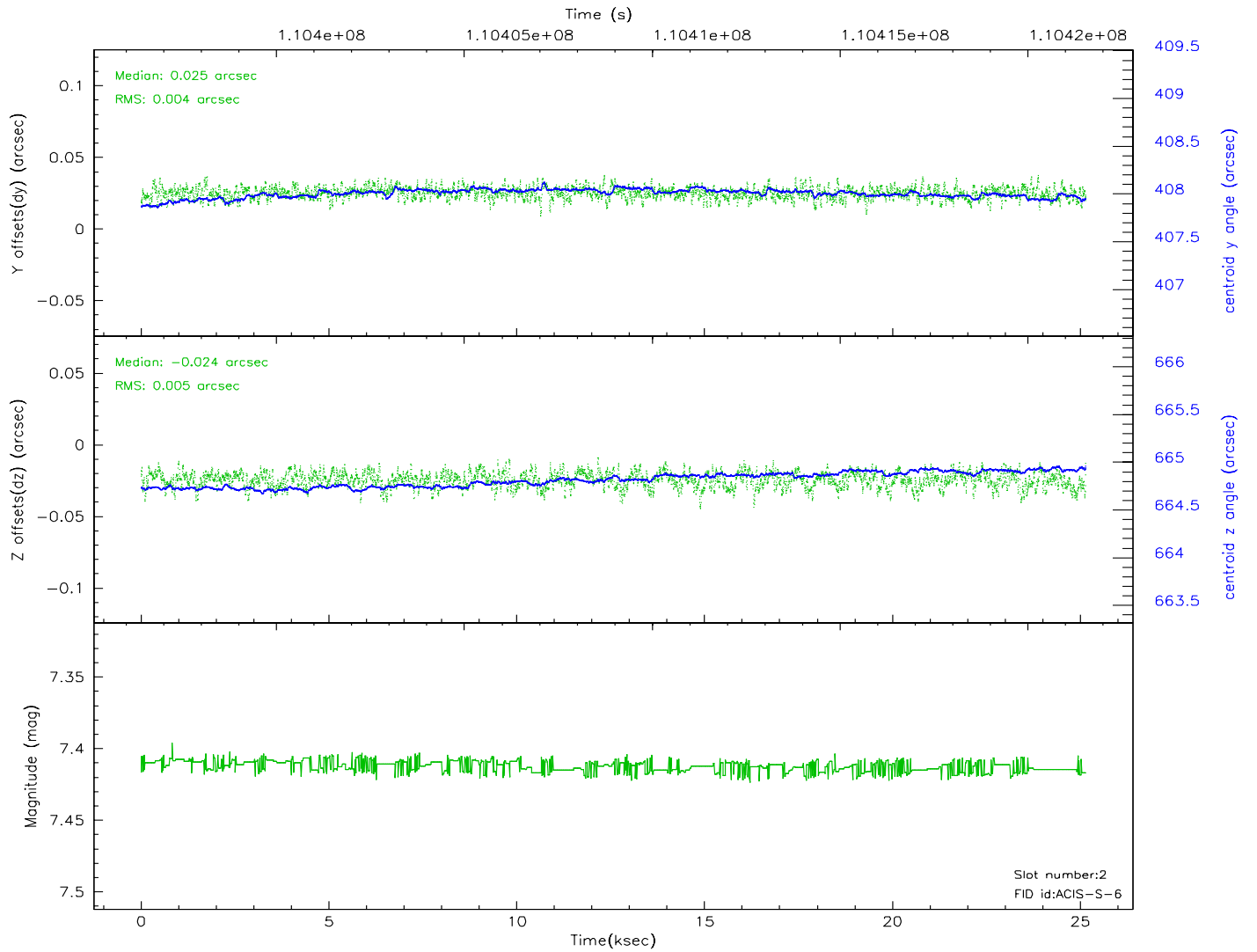
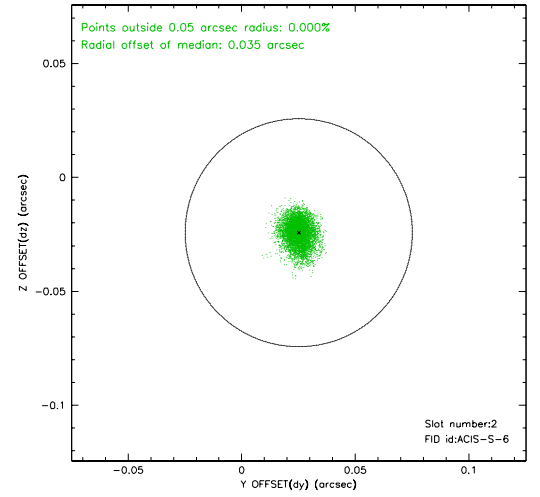
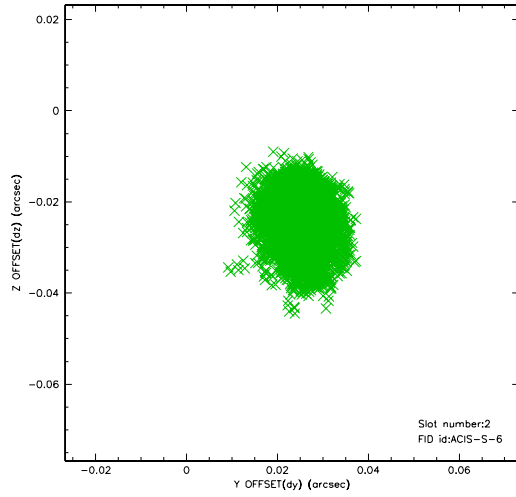
2.5.1 Slot 0



2.5.2 Slot 1

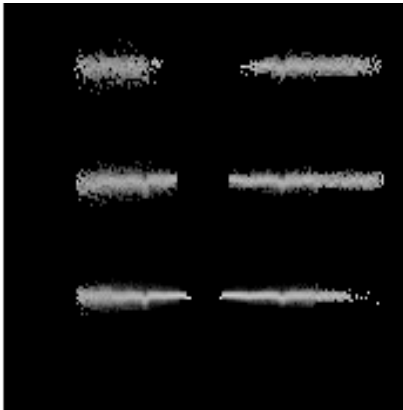


2.5.3 Slot 2

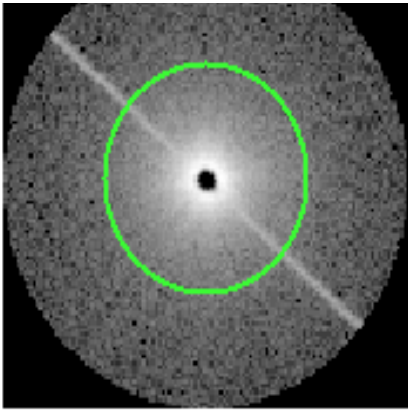


3 Gratings

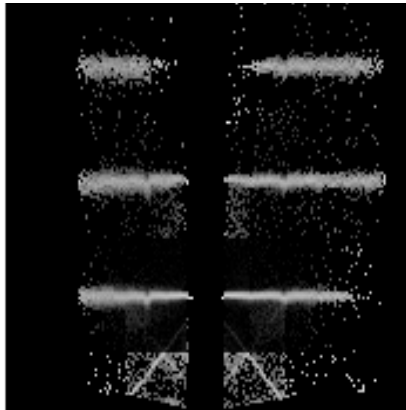
3.1 HEG Arm



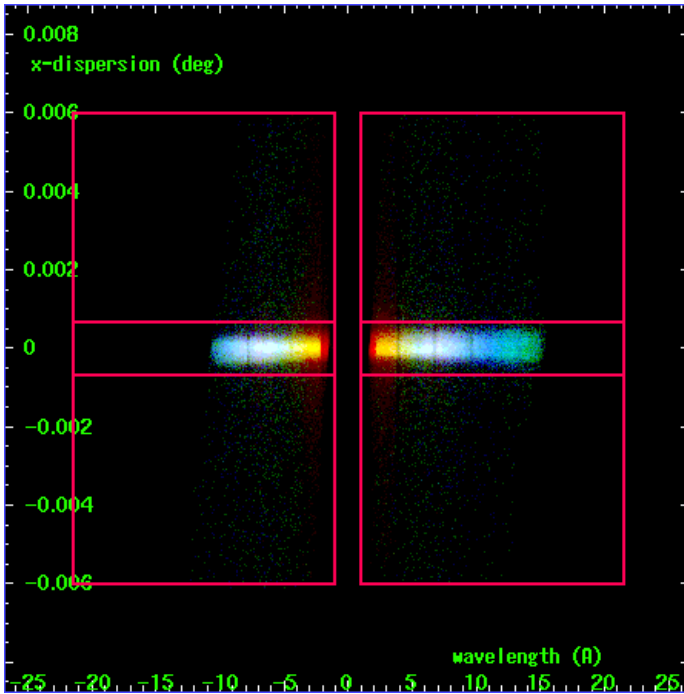
HEG Order Sort 123



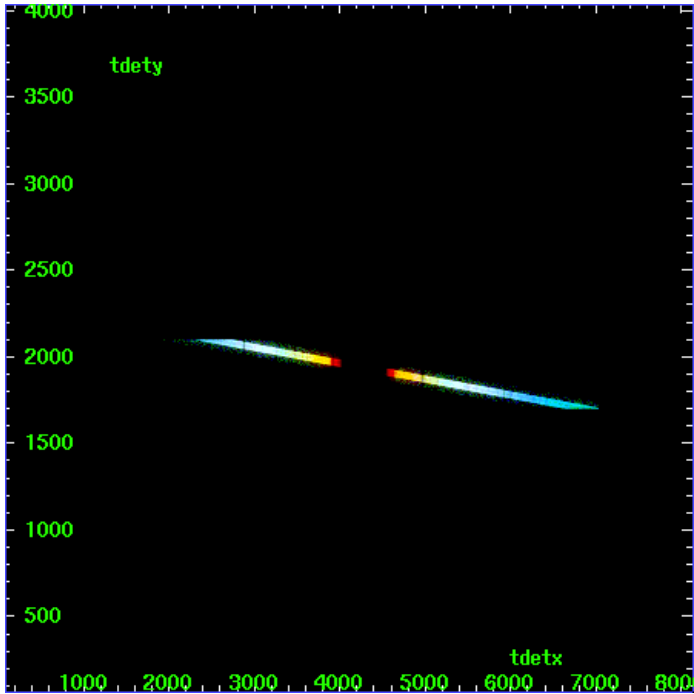
HEG Zero Order



HEG Order Sort ALL

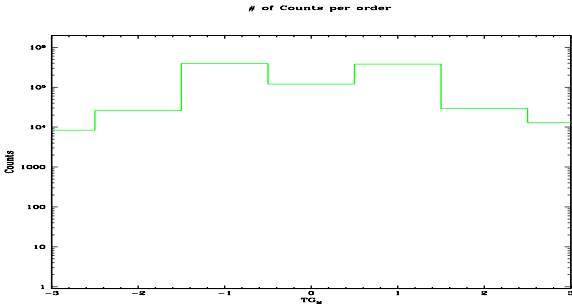


Spot Image HEG

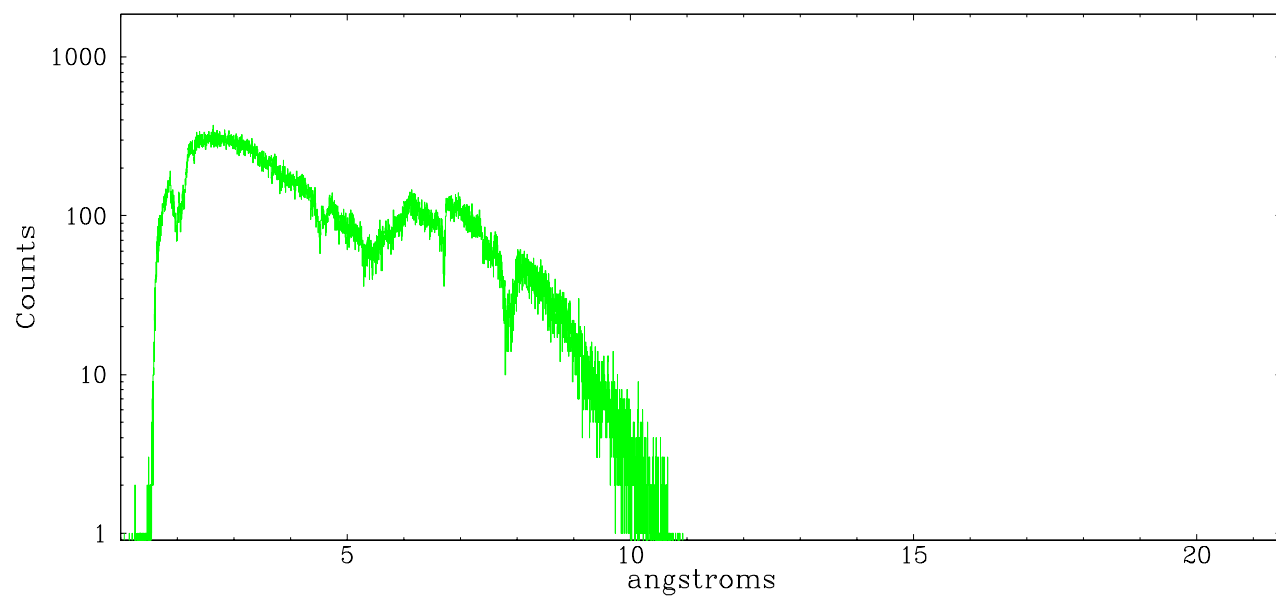


Full Detector HEG

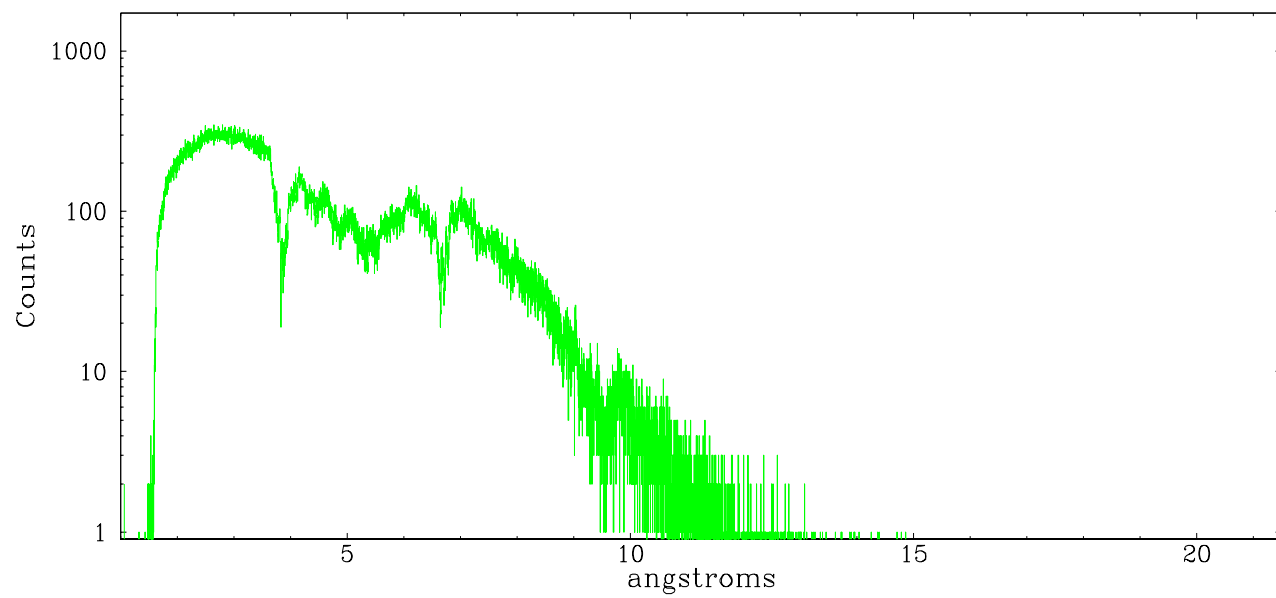
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	8368	25851	390960	119891	380104	29064	13004



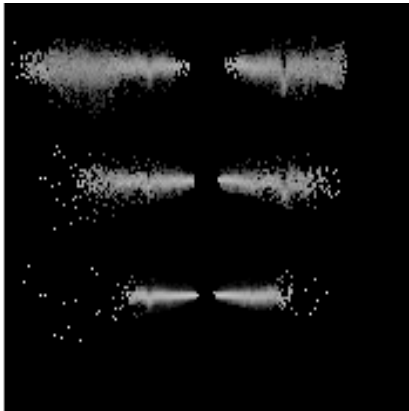
heg order -1



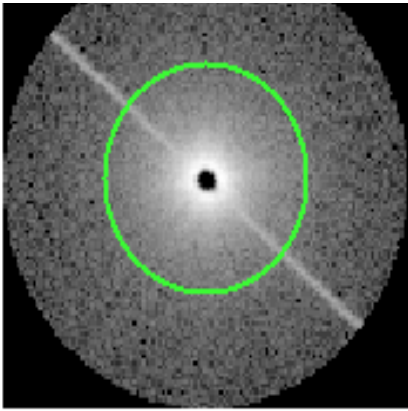
heg order +1



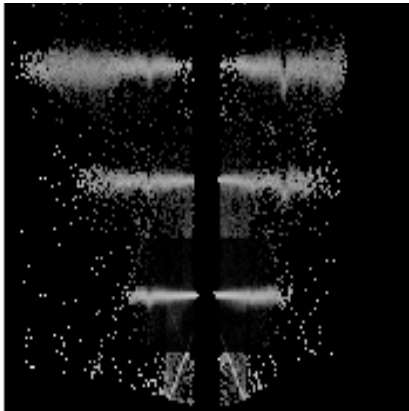
3.2 MEG Arm



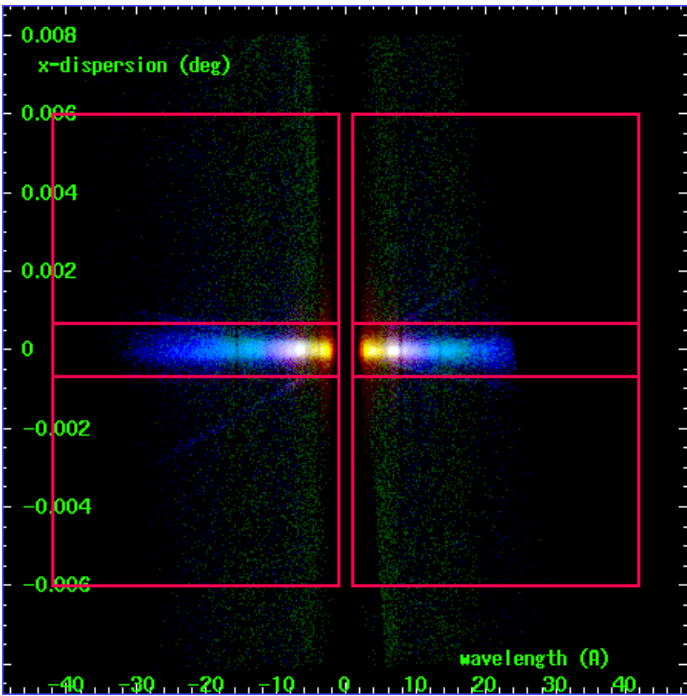
MEG Order Sort 123



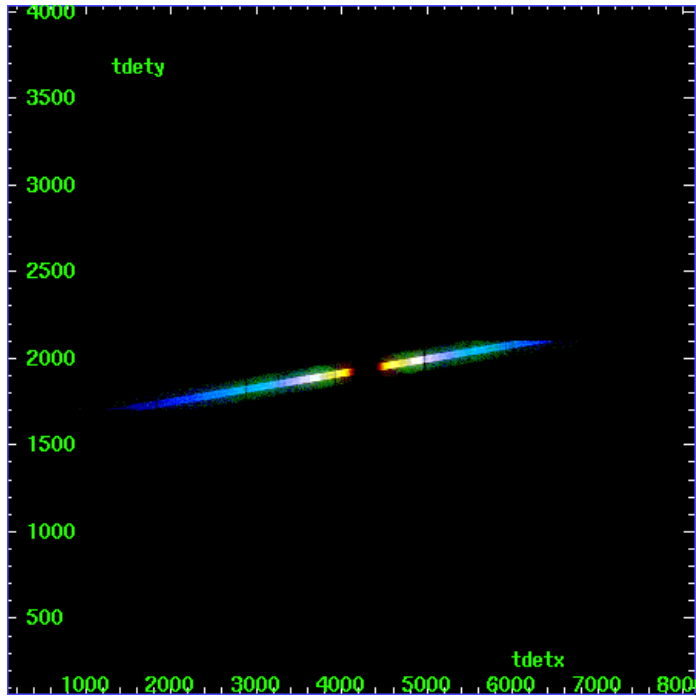
MEG Zero Order



MEG Order Sort ALL

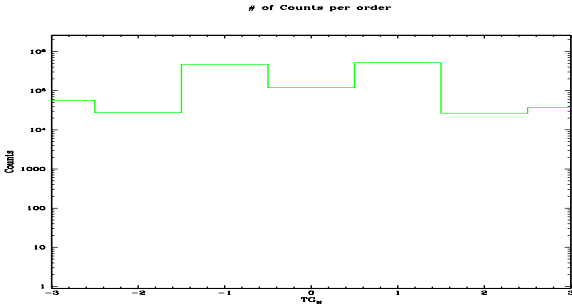


Spot Image MEG

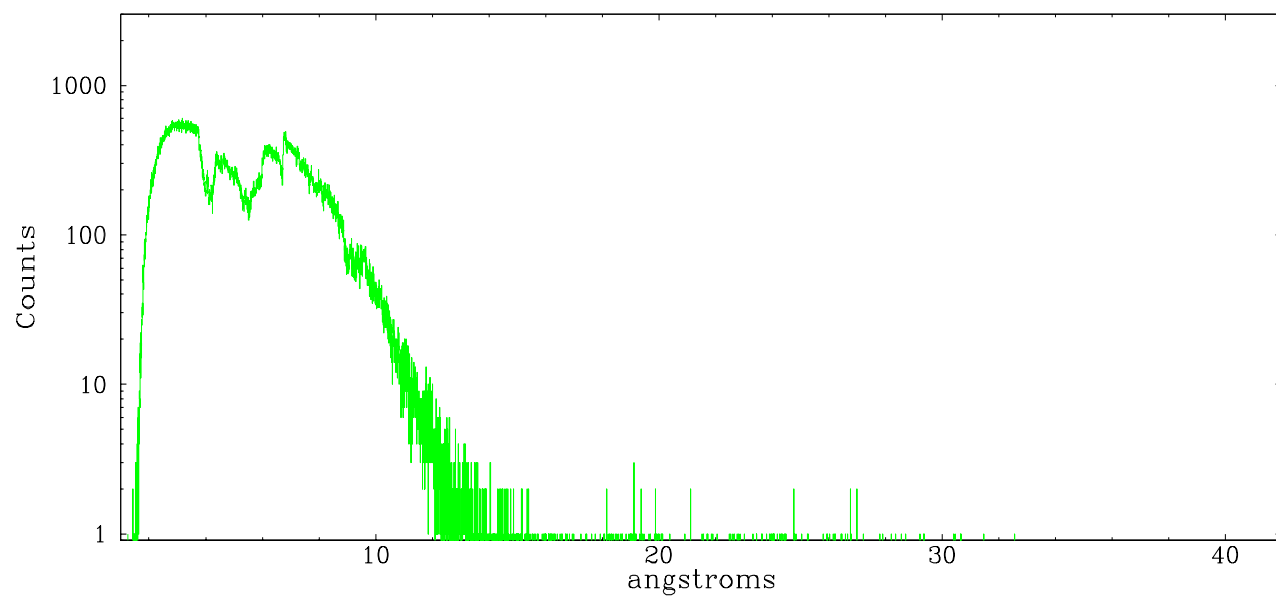


Full Detector MEG

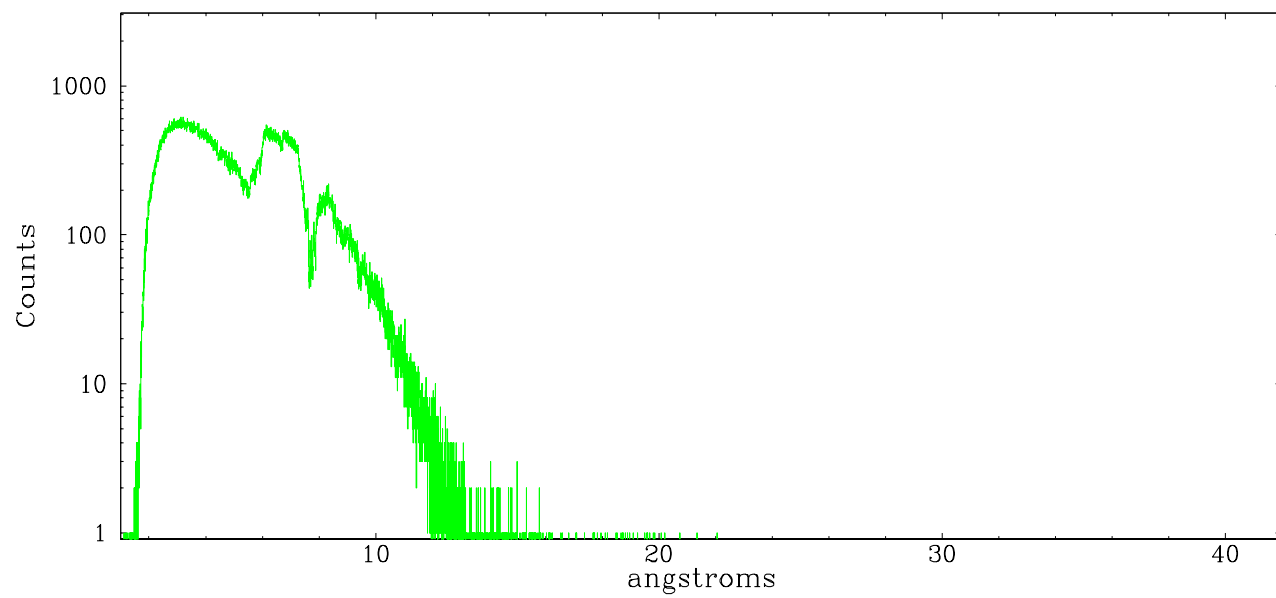
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	56274	27509	473151	119891	519969	26519	36774



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.04.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.127

A.2 Comments

Source is piled up and standard software processing technique using the tool

tgdetect did not give an accurate position for the zeroth order. Zeroth order position for this observation has been determined using the known angle between the readout streak and the meg spectral arm. The newly determined

zeroth order coordinates (sky coordinates x=4209.83; y=4179.60; ra=17:08:54.487, dec=-44:06:07.25) have been placed in the *src1a.fits file,
replacing the coordinates determined by tgdetect.

Observer supplied incorrect coordinates. Observer coordinates off by 1.81 arcmin.