

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2739 - L2 Version 002
Chandra X-Ray Center

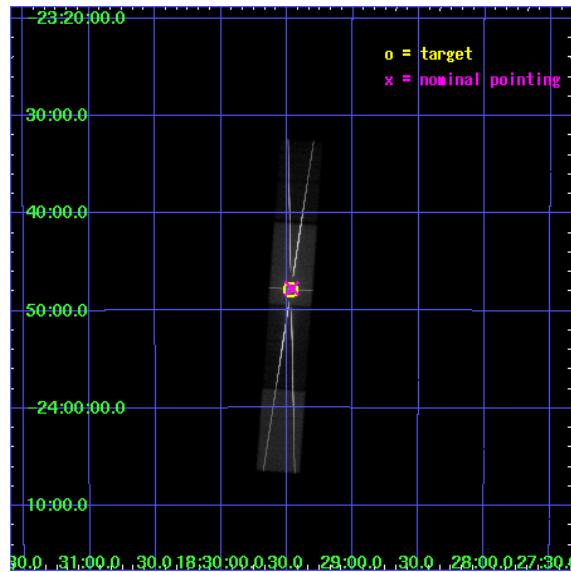
L2 Processing Date : Oct 11 2006

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1 Front

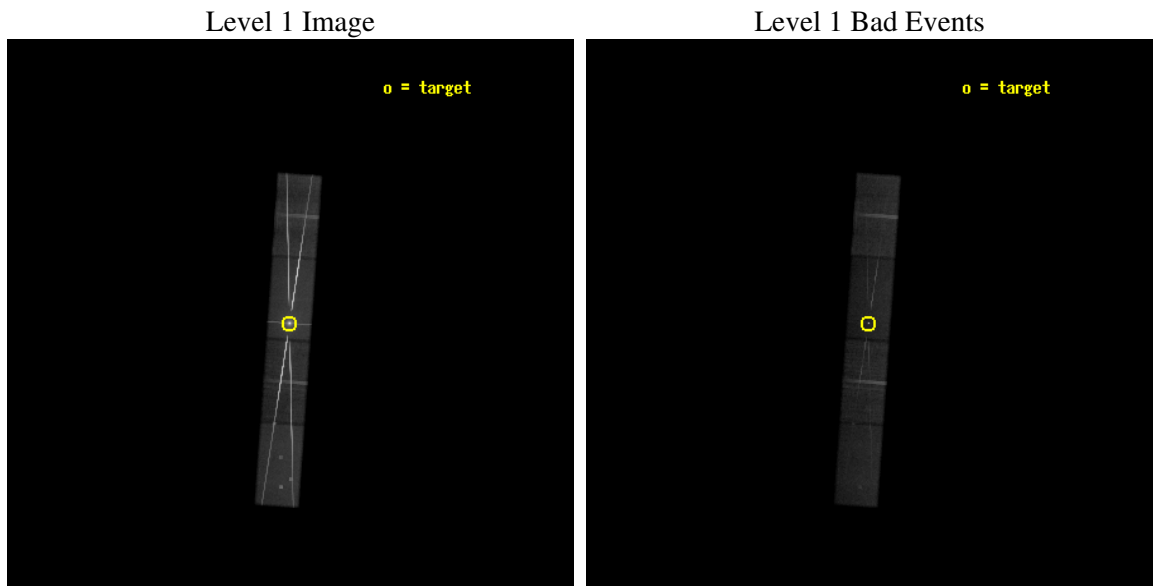
seq_num	400219
obs_id	2739
title	MEASURING THE ABSOLUTE DISTANCE TO THE BURSTER GS 1826-238
observer	Dr. Richard Rothschild
object	GS 1826-238
dtcycle	0
cycle	P
ra_targ	277.3675
dec_targ	-23.796978
ra_nom	277.36555420798
dec_nom	-23.795645123956
roll_nom	274.06978072507
revision	3
ontime	69873.399510026
livetime	68226.335504666
ontime5	69873.399510026
ontime6	69873.399510026
ontime7	69873.399510026
ontime8	69873.399510026
l2events	1608539



2 OBI

2.1 OBI

2.1.1 Images

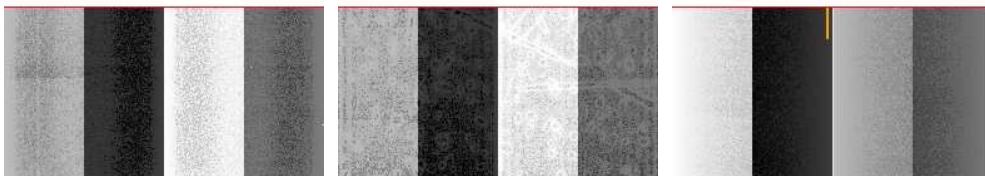


2.1.2 Bias

Chip 5

Chip 6

Chip 7



Chip 8



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.3
date	2006-09-26T18:29:28
revision	2

sched_exp_time	69689.606000
ontime	70568.841582417
ontime5	70570.582602471
ontime6	70506.167141557
ontime7	70568.841582417
ontime8	70495.717882454
l1events	2538385

2.1.4 Events

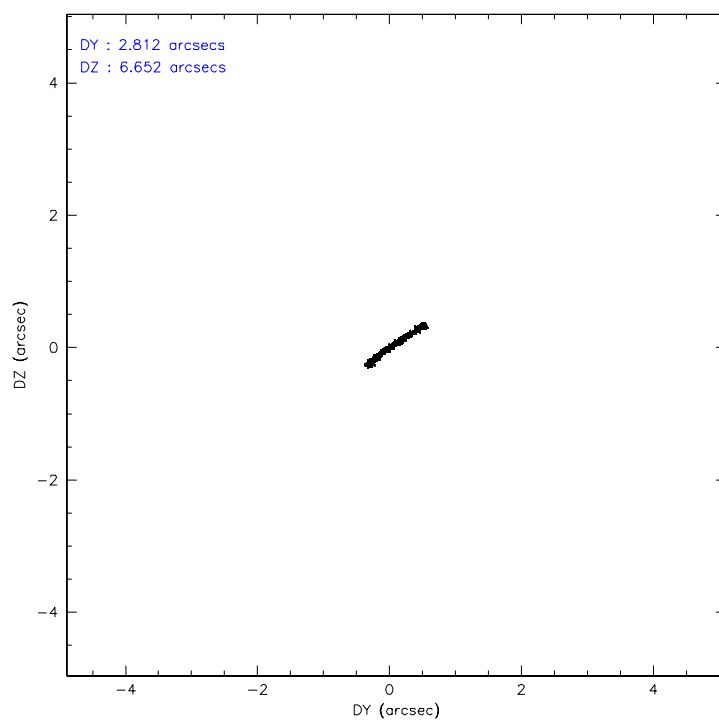
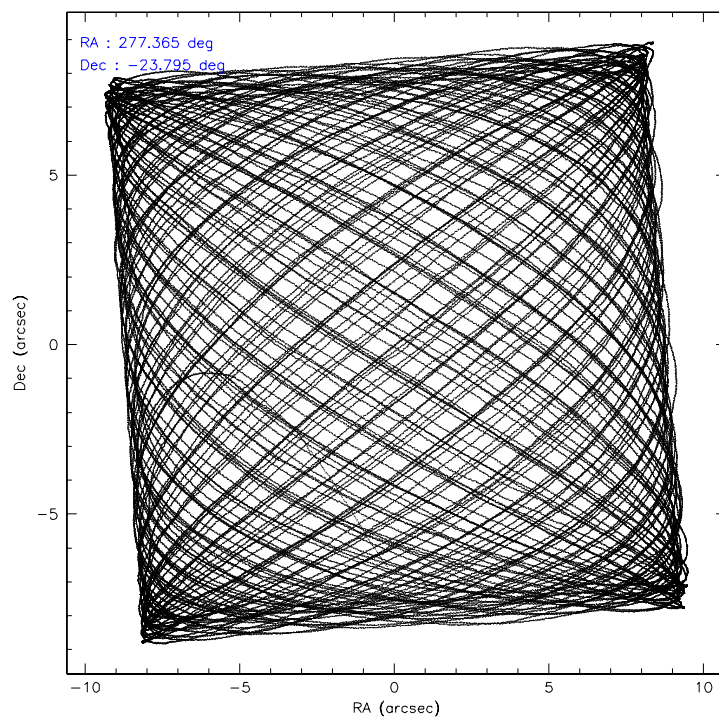
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	419738	746210	892907	479530
rejected events	177422	209282	193403	235353
rejected %	42%	28%	21%	49%

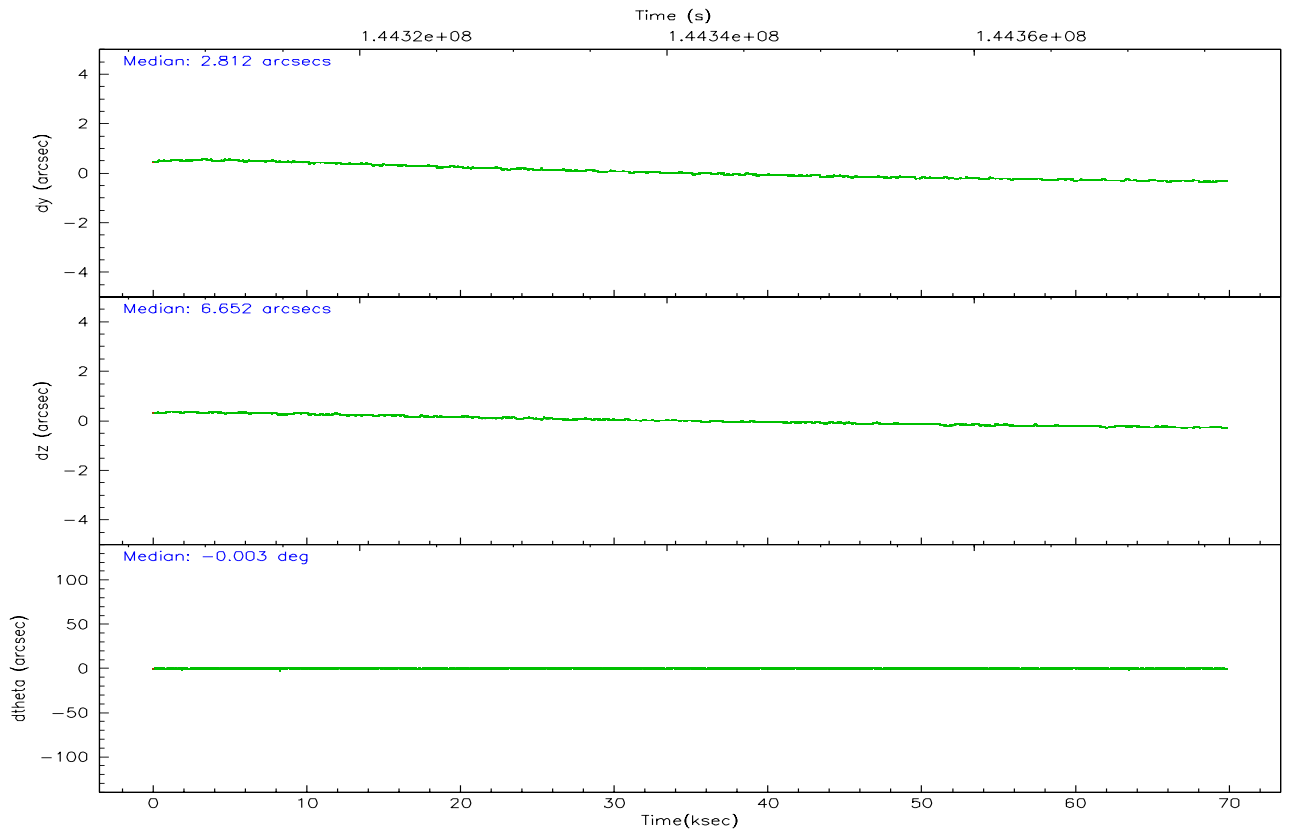
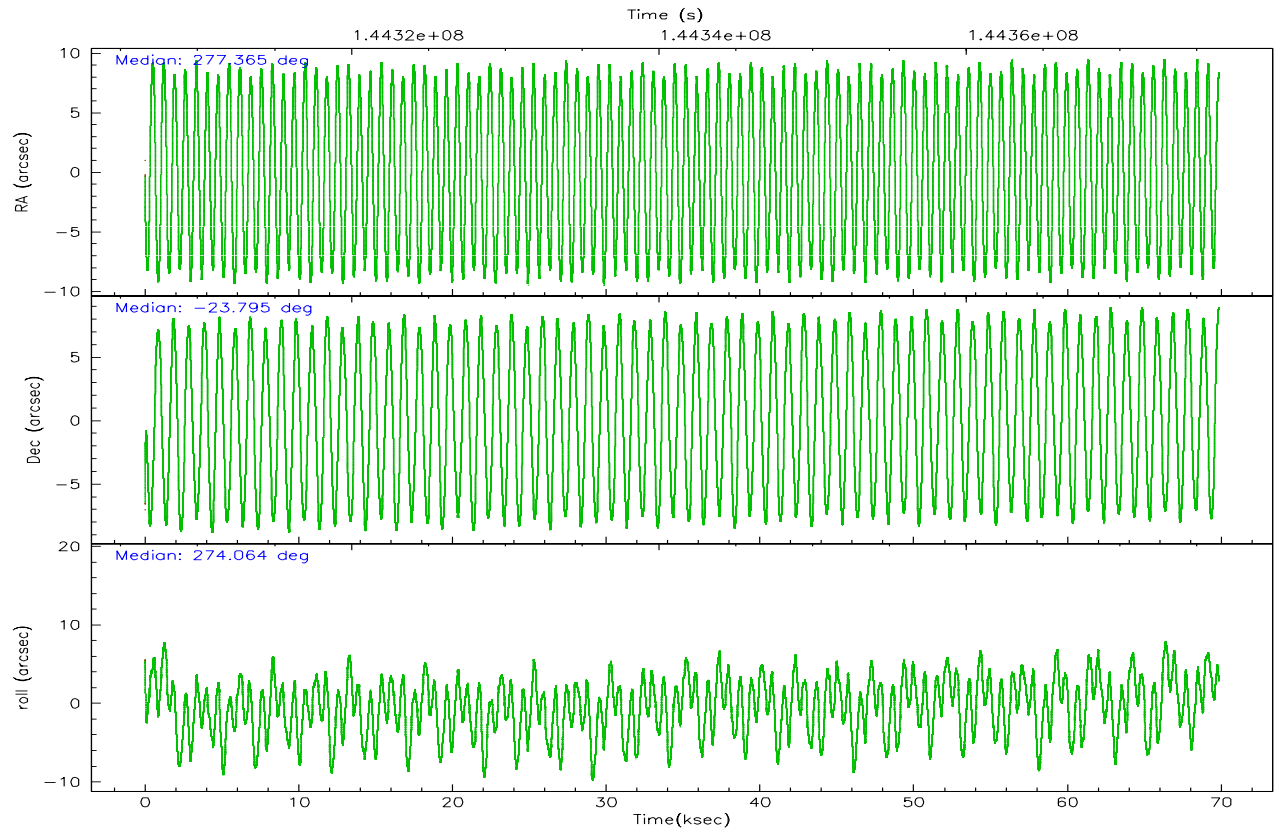
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	43502	391232	124467	162352
	10%	52%	13%	33%
grade 1 events	442	2739	1799	647
	0%	0%	0%	0%
grade 2 events	79768	68756	182869	32111
	19%	9%	20%	6%
grade 3 events	13081	24410	67720	14698
	3%	3%	7%	3%
grade 4 events	12447	24277	67822	13906
	2%	3%	7%	2%
grade 5 events	17916	11527	30564	11745
	4%	1%	3%	2%
grade 6 events	95450	29072	259251	22772
	22%	3%	29%	4%
grade 7 events	157132	194197	158415	221299
	37%	26%	17%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-5678	ACIS-5678	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	277.348560	277.365554207983	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	-23.773272	-23.79564512395559	Subarray start row	1	1
Pointing Roll	273.906300	274.0697807250723	Subarray row count	542	542
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	1.7
SIM translation stage pos (mm)	-184.532523	-184.52811429679			
SIM translation stage offset (mm)	-5.6	-5.604408286217847			
Observation start time	144306759.184000	144305619.88405			
Observation start date	2002-07-29T05:11:35	2002-07-29T04:53:39			
Observation end time	144376448.184000	144376763.59948			
Observation end date	2002-07-30T00:33:04	2002-07-30T00:39:23			
Read mode	TIMED	TIMED			

2.3 Aspect



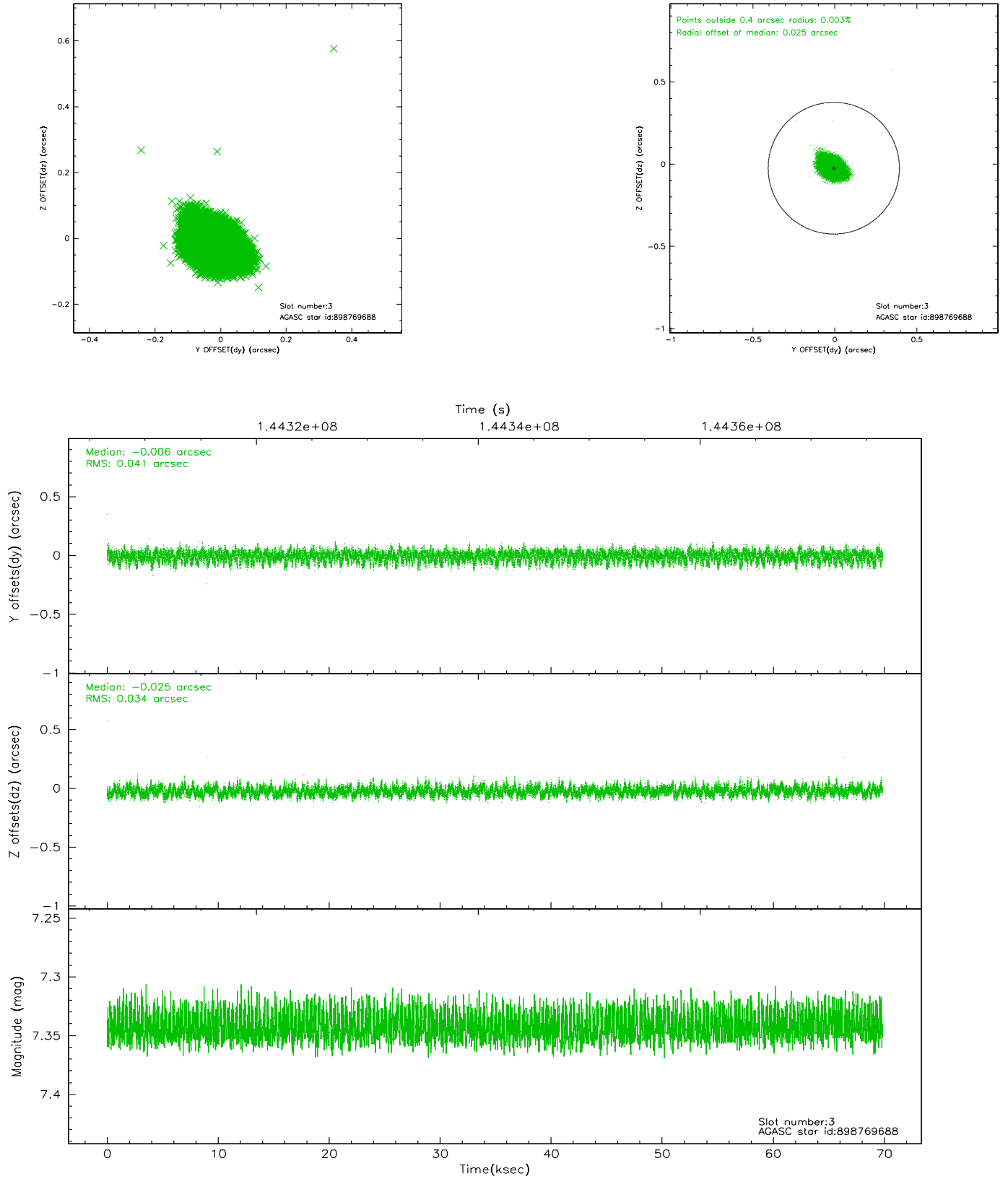


Slot Statistics

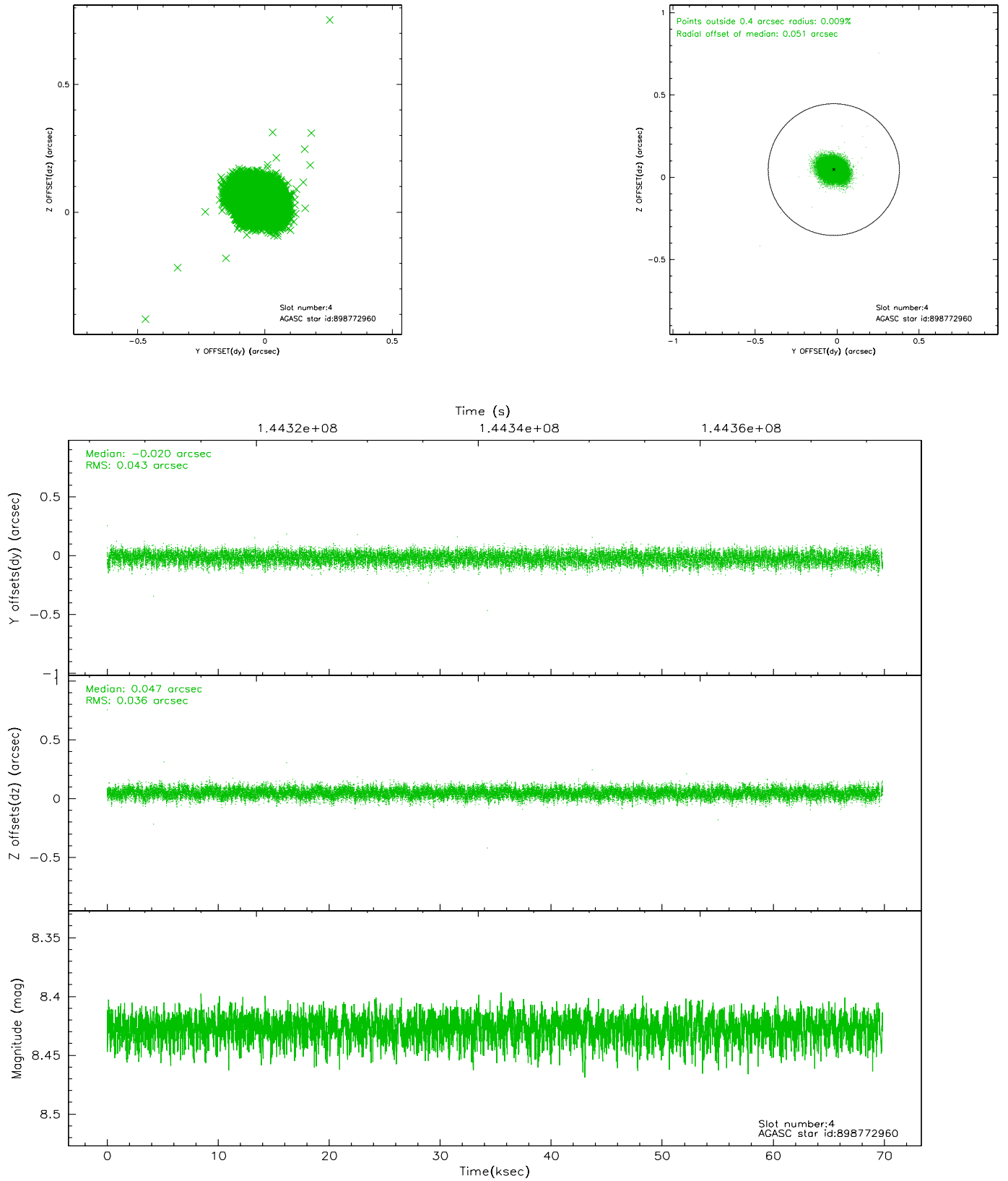
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	17043	-0.017	-0.078	0.011	0.017	0.000000	0.000000	-755.15	-1843.43
1	FID	ACIS-S-4	7.19	17043	-0.049	0.029	0.007	0.015	0.000000	0.000000	2158.15	65.17
2	FID	ACIS-S-5	7.23	17044	0.035	0.058	0.014	0.023	0.000000	0.000000	-1807.99	58.85
3	GUIDE	898769688	7.34	34083	-0.006	-0.025	0.056	0.093	277.835235	-23.315677	-1530.37	1717.70
4	GUIDE	898772960	8.43	34015	-0.020	0.047	0.059	0.095	277.658586	-23.887765	482.70	990.68
5	GUIDE	898769088	8.30	34079	-0.018	-0.070	0.085	0.135	276.673793	-23.435649	-1358.04	-2140.79
6	GUIDE	898767704	9.33	34047	0.139	0.113	0.098	0.154	277.888770	-24.163443	1526.60	1675.13
7	GUIDE	898777808	9.55	34066	-0.088	-0.068	0.127	0.210	276.633561	-23.345969	-1688.70	-2253.05

2.4 Star Slots

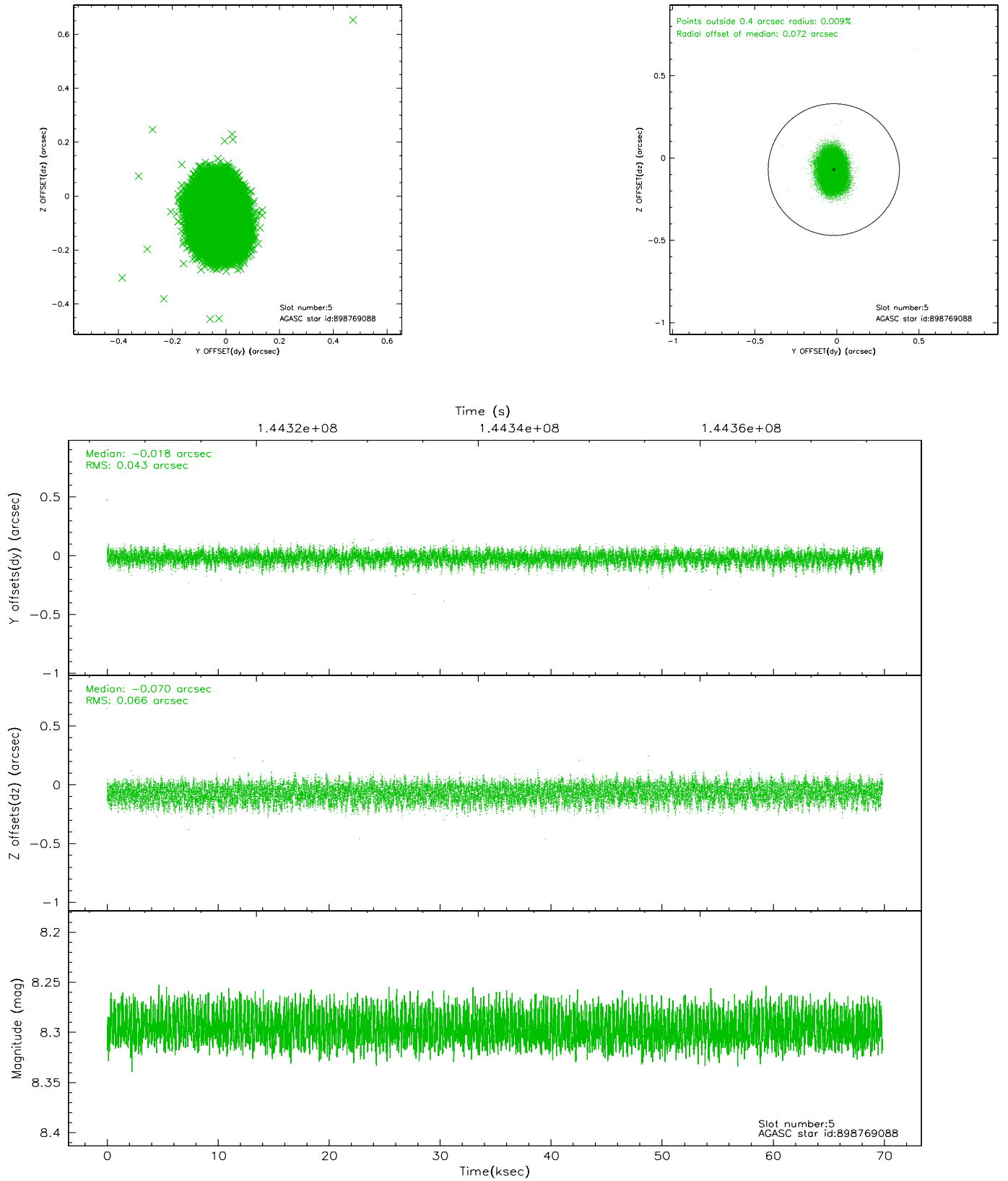
2.4.1 Slot 3



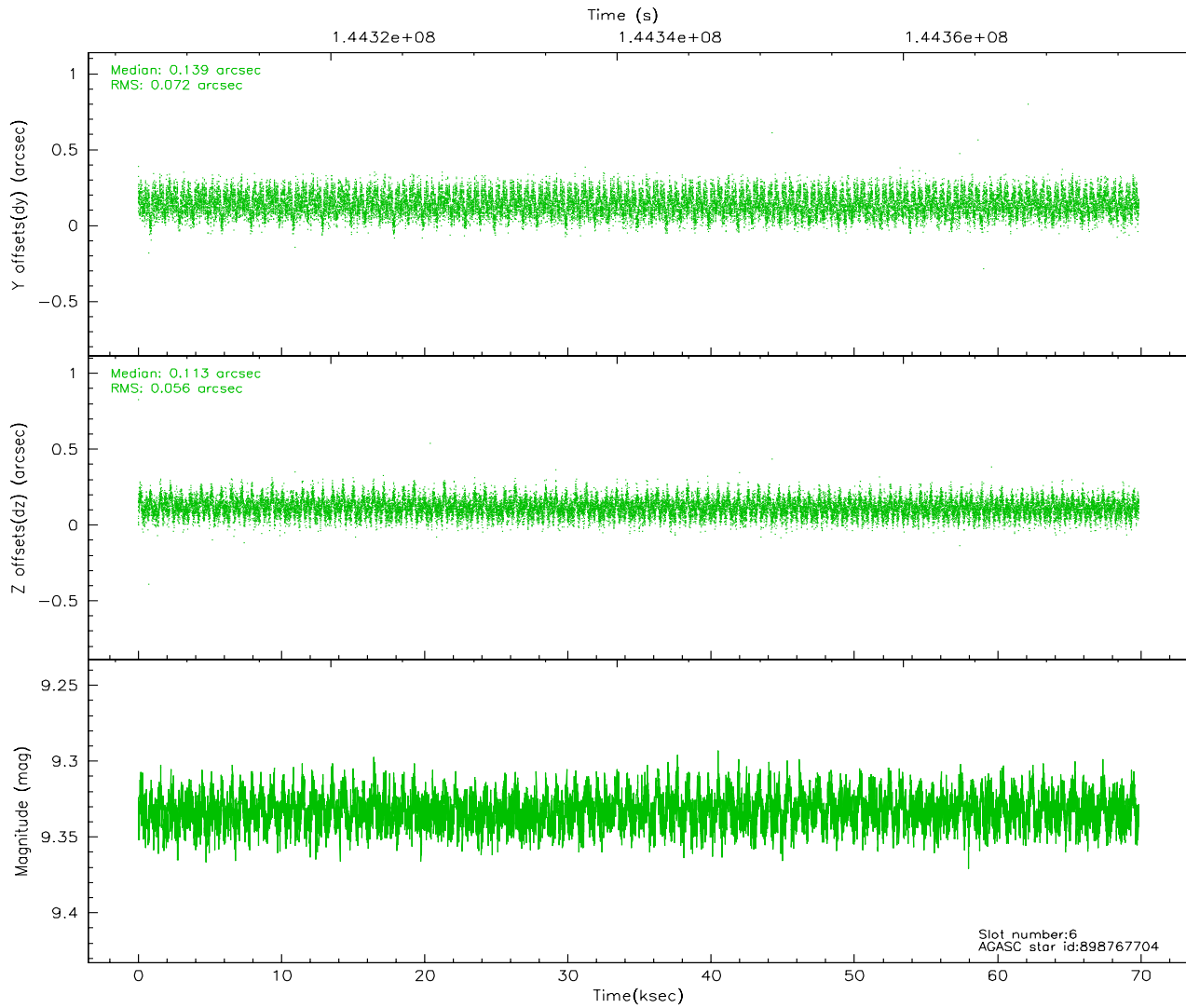
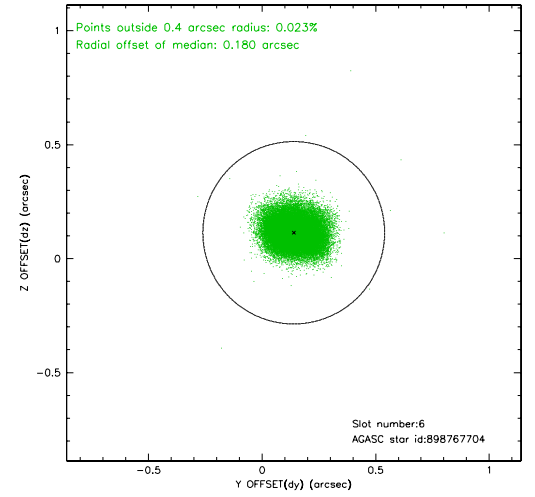
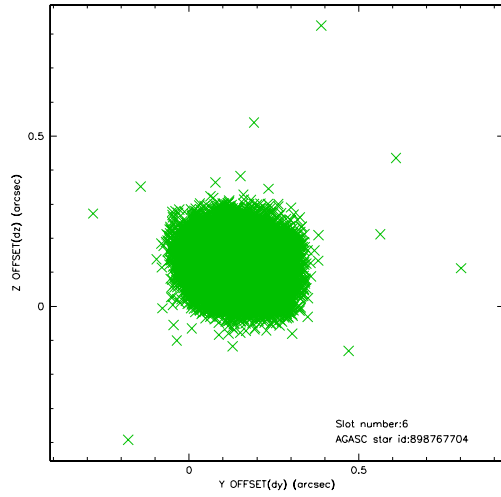
2.4.2 Slot 4



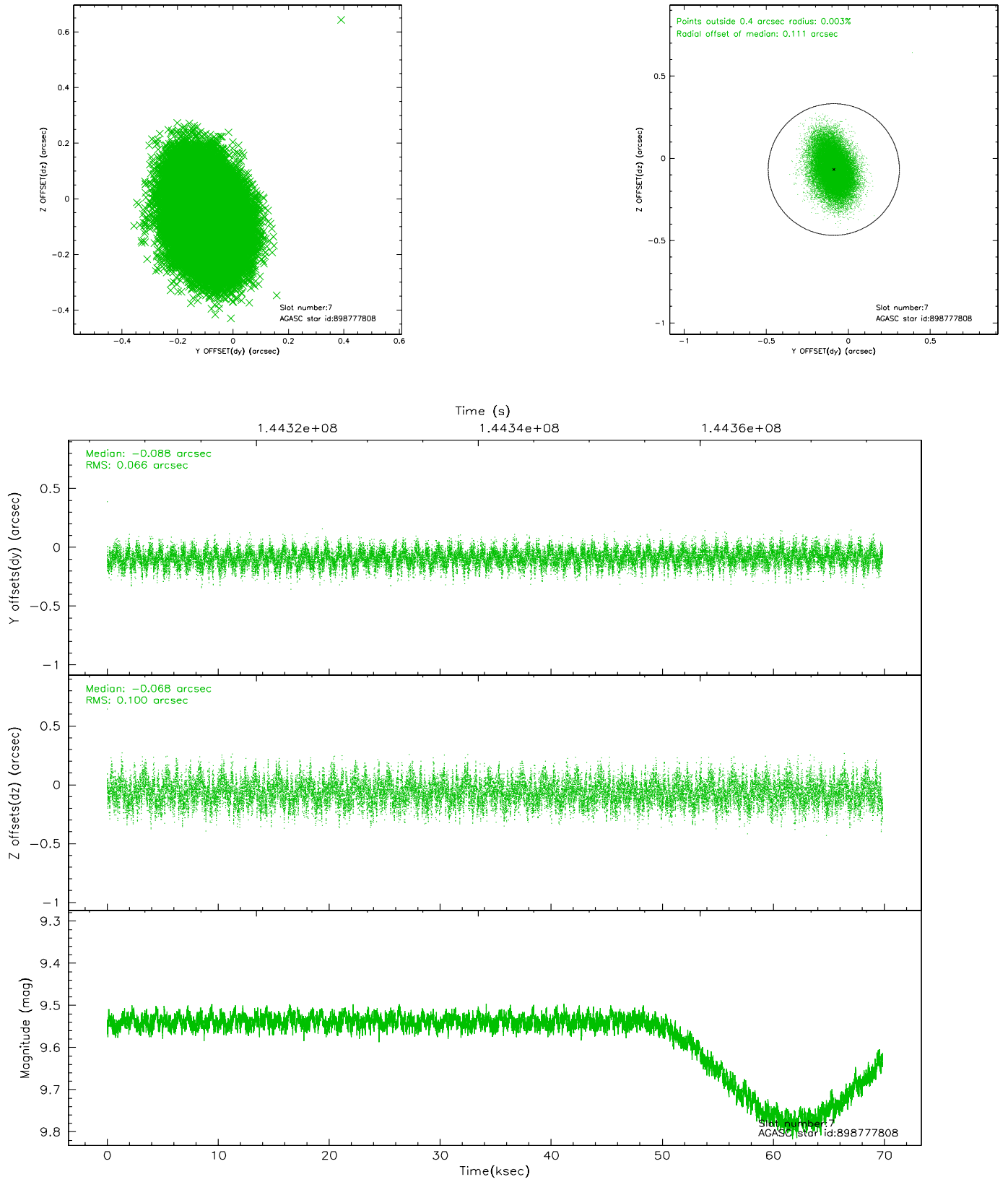
2.4.3 Slot 5



2.4.4 Slot 6

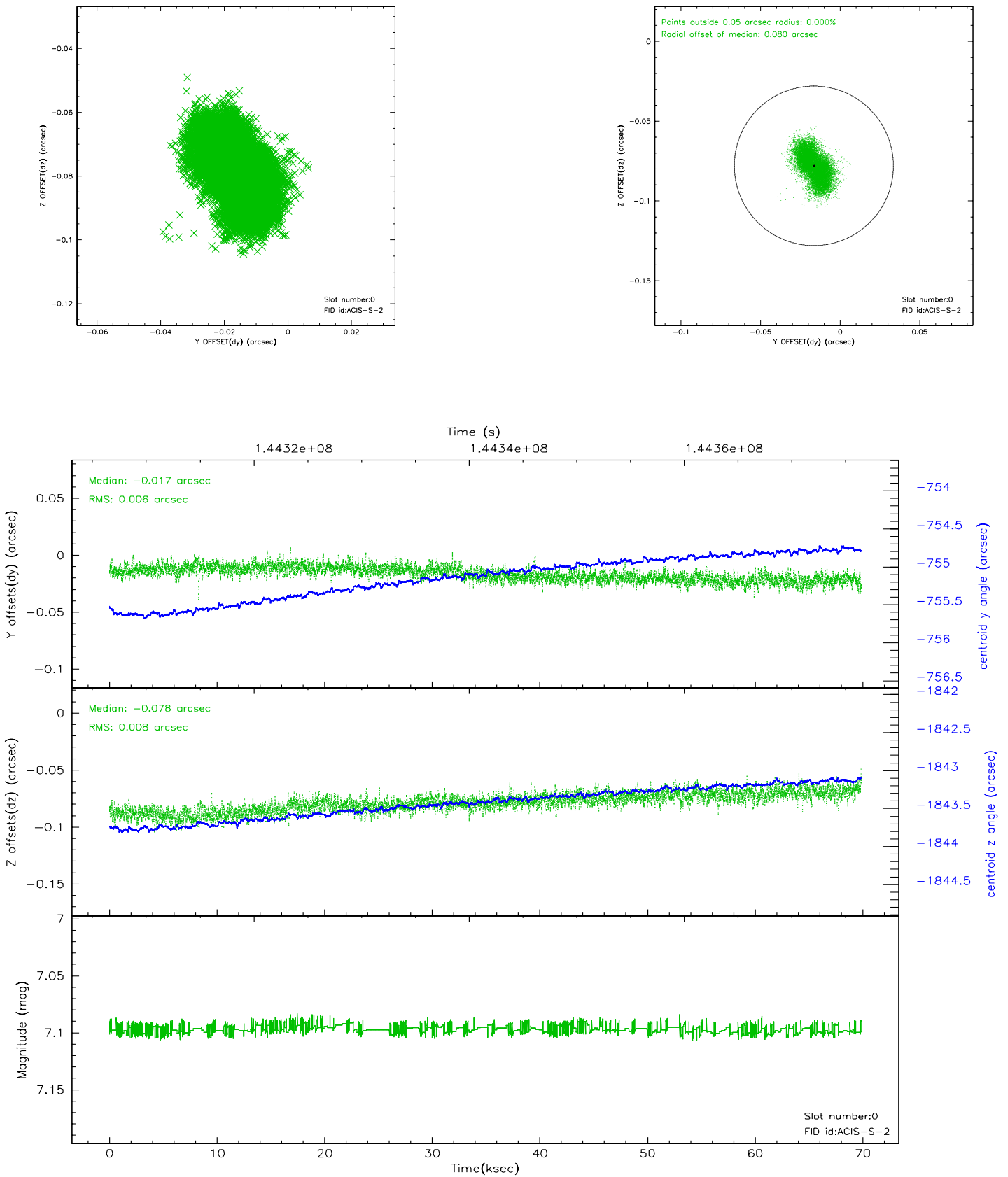


2.4.5 Slot 7

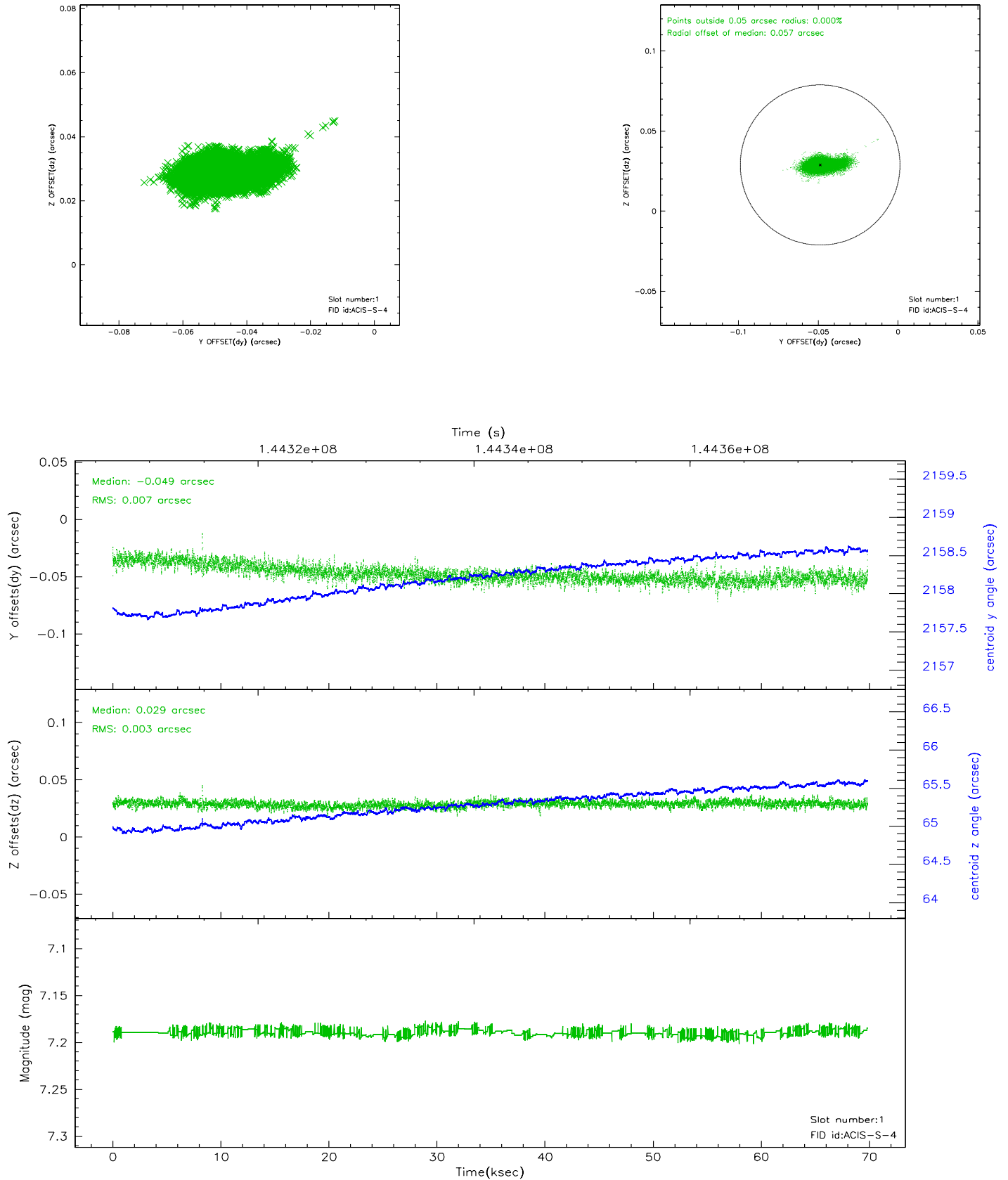


2.5 FID Slots

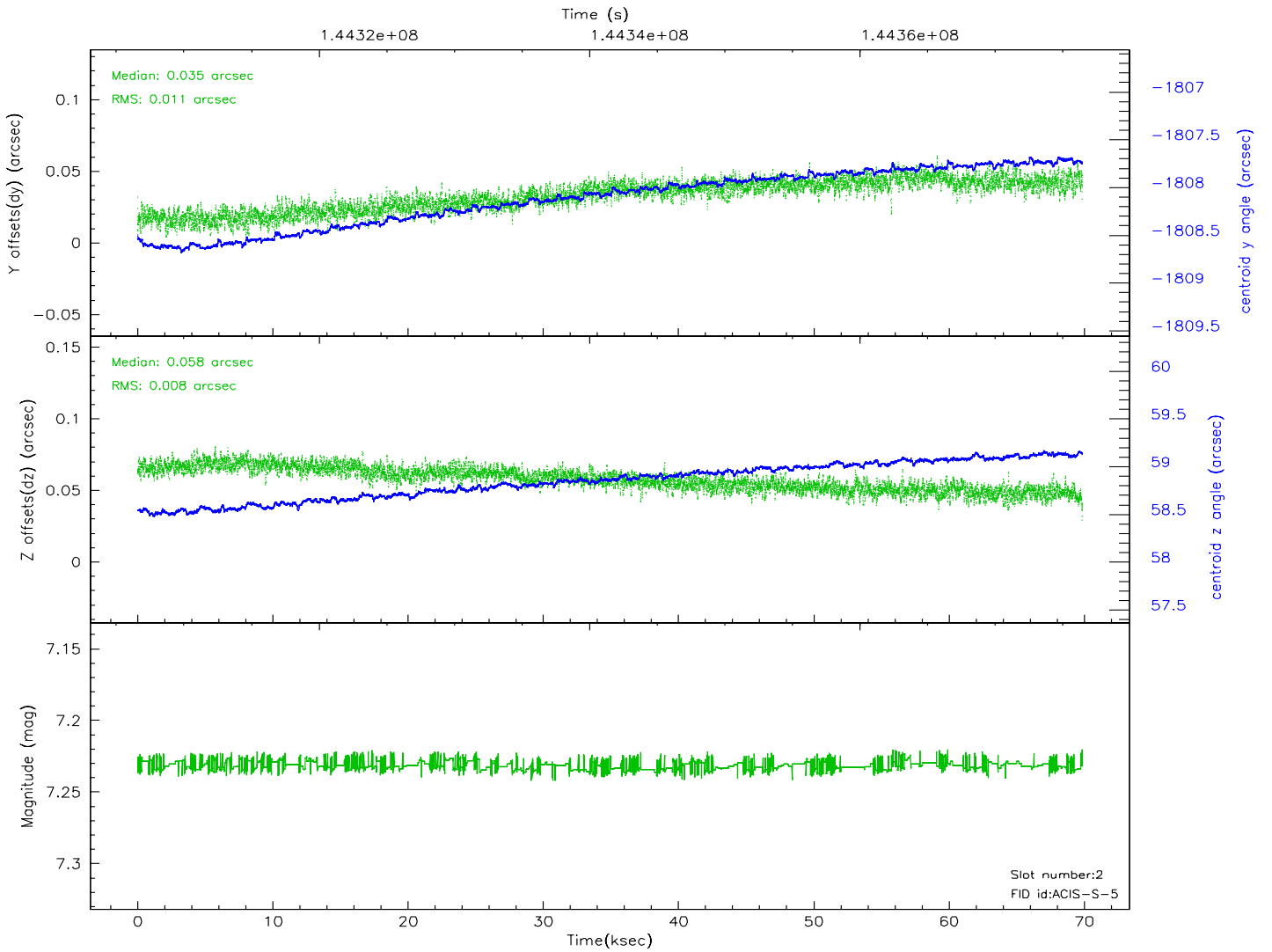
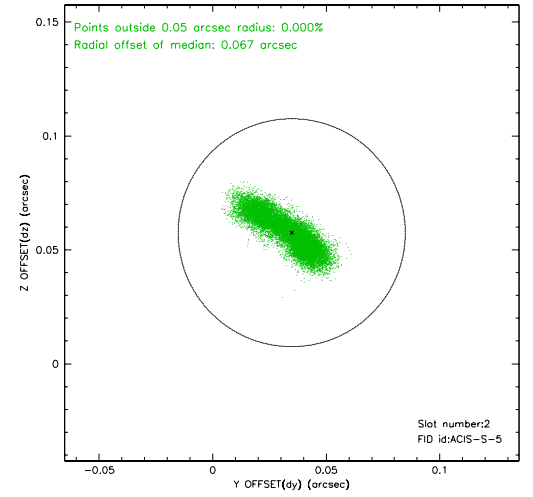
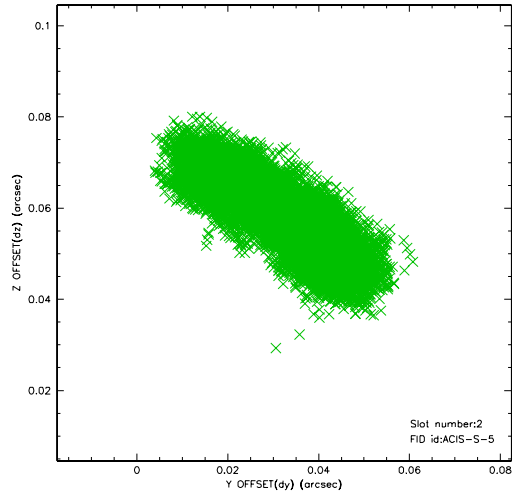
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

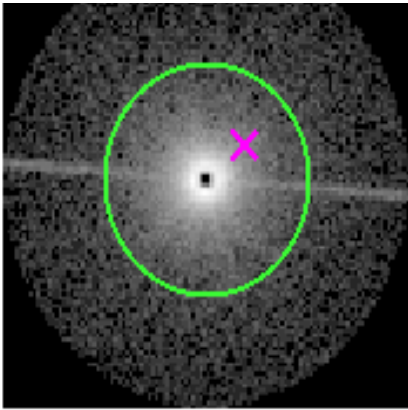


3 Gratings

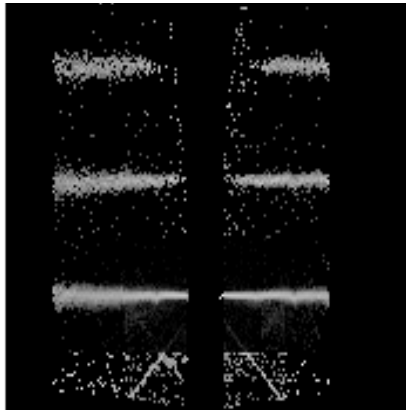
3.1 HEG Arm



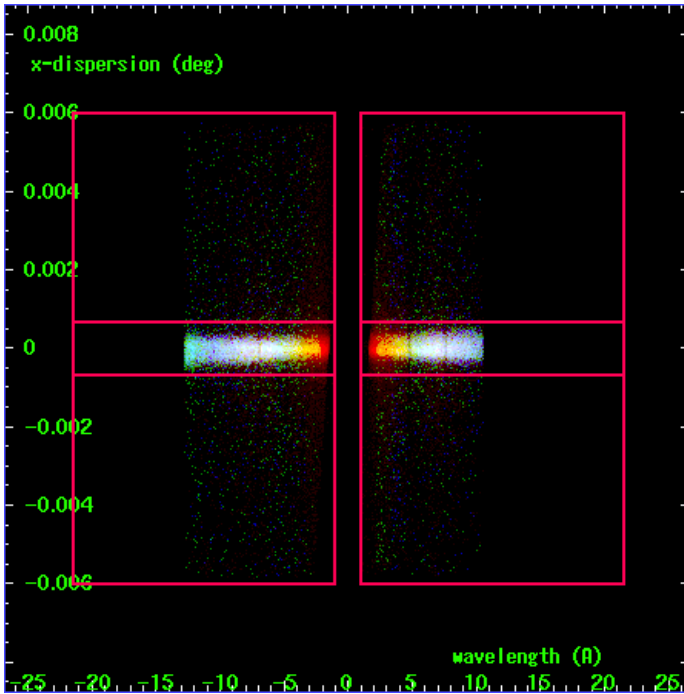
HEG Order Sort 123



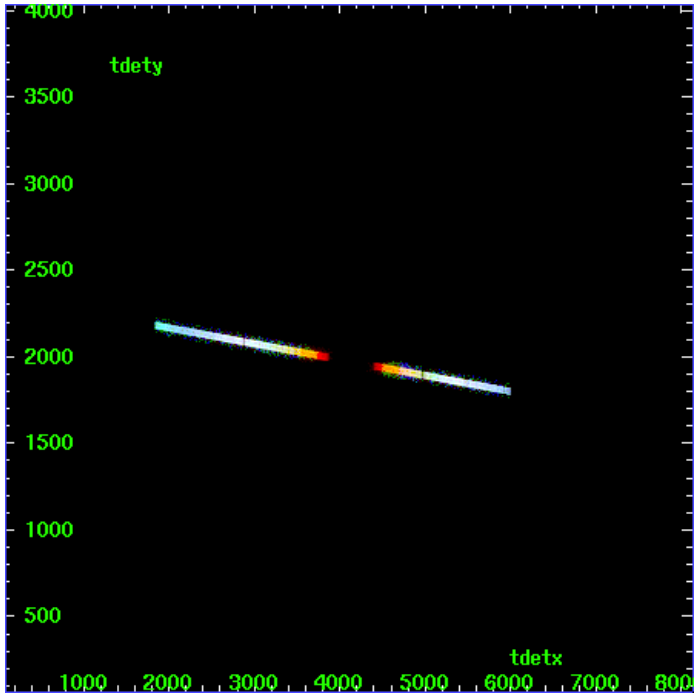
HEG Zero Order



HEG Order Sort ALL

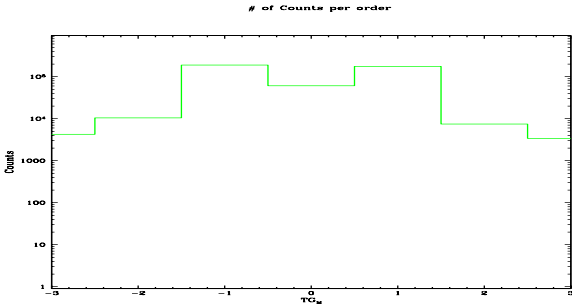


Spot Image HEG

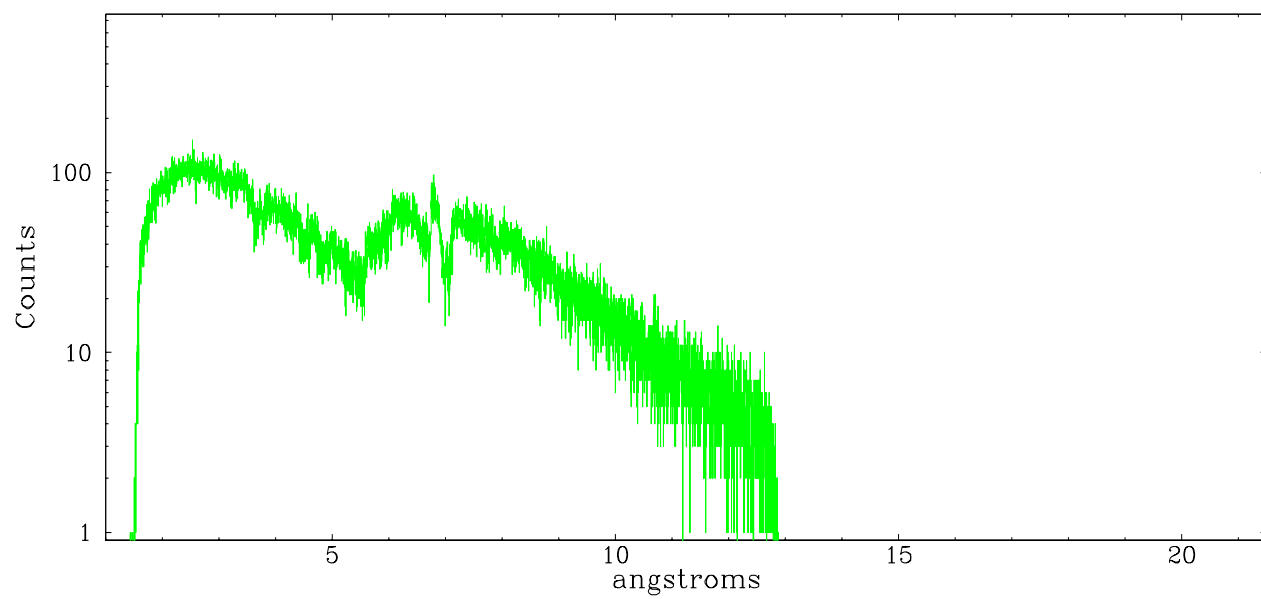


Full Detector HEG

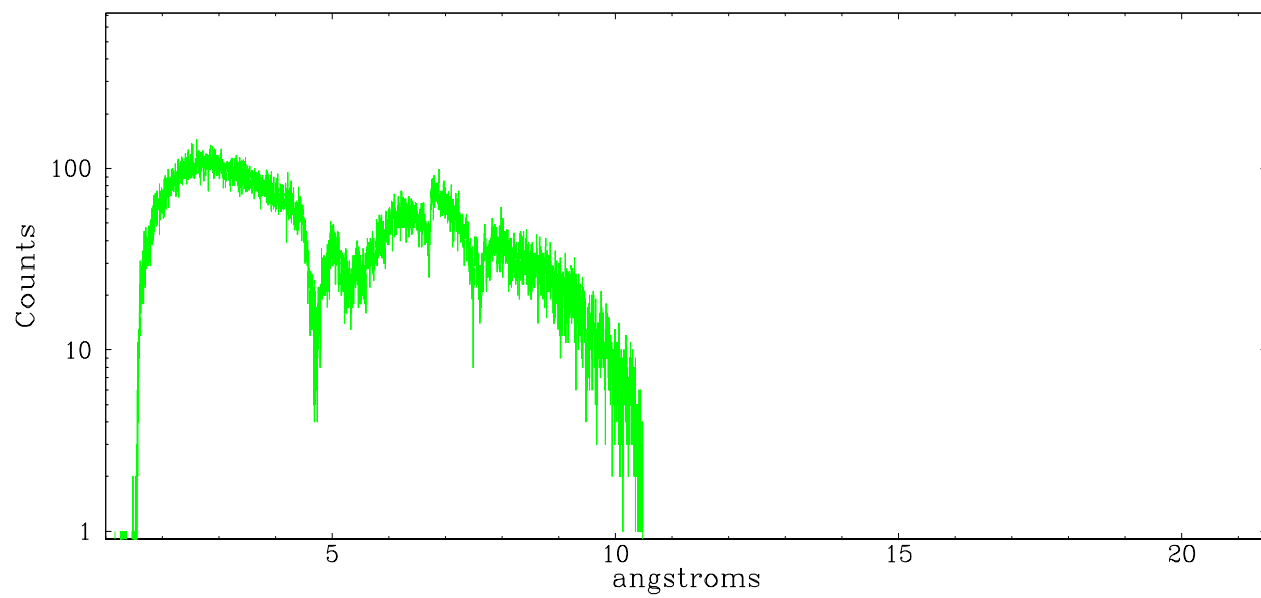
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	4250	10416	189802	60582	175743	7440	3397



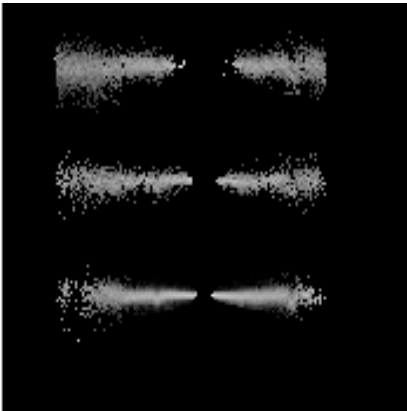
heg order -1



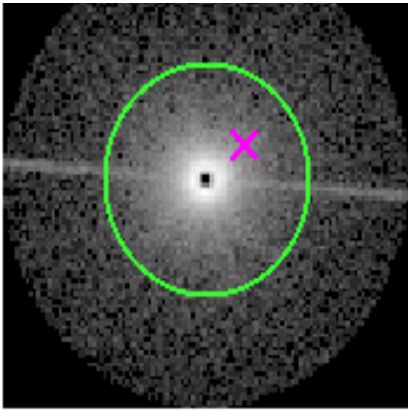
heg order +1



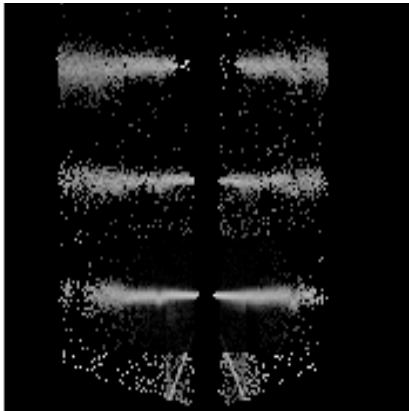
3.2 MEG Arm



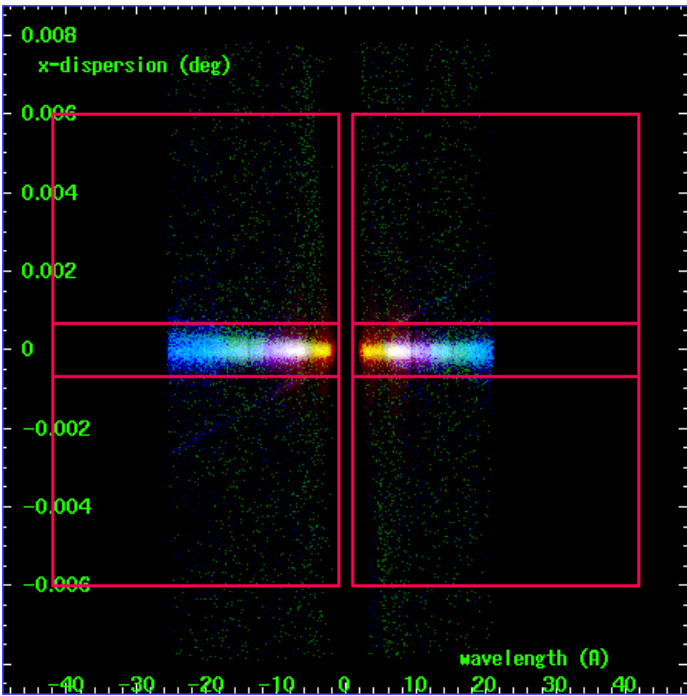
MEG Order Sort 123



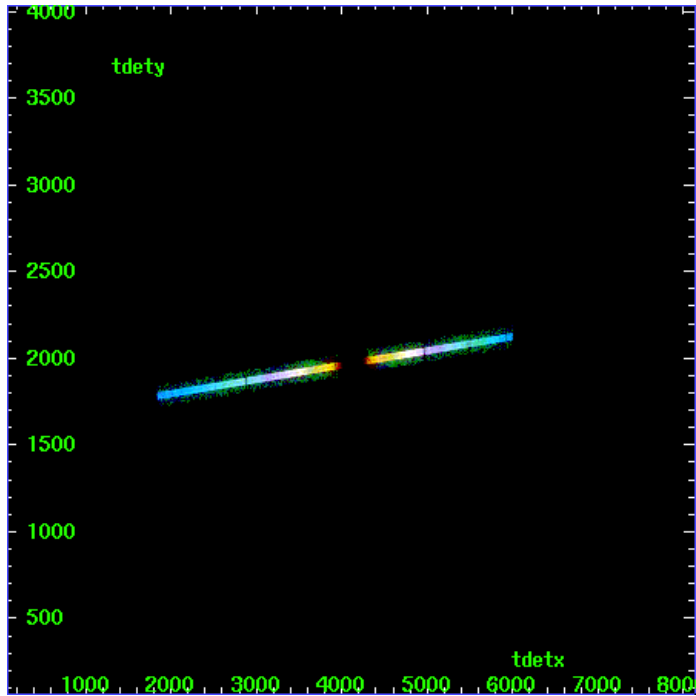
MEG Zero Order



MEG Order Sort ALL

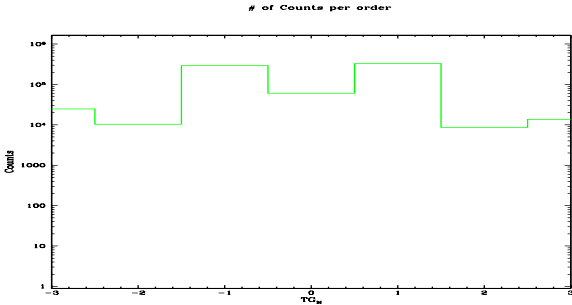


Spot Image MEG

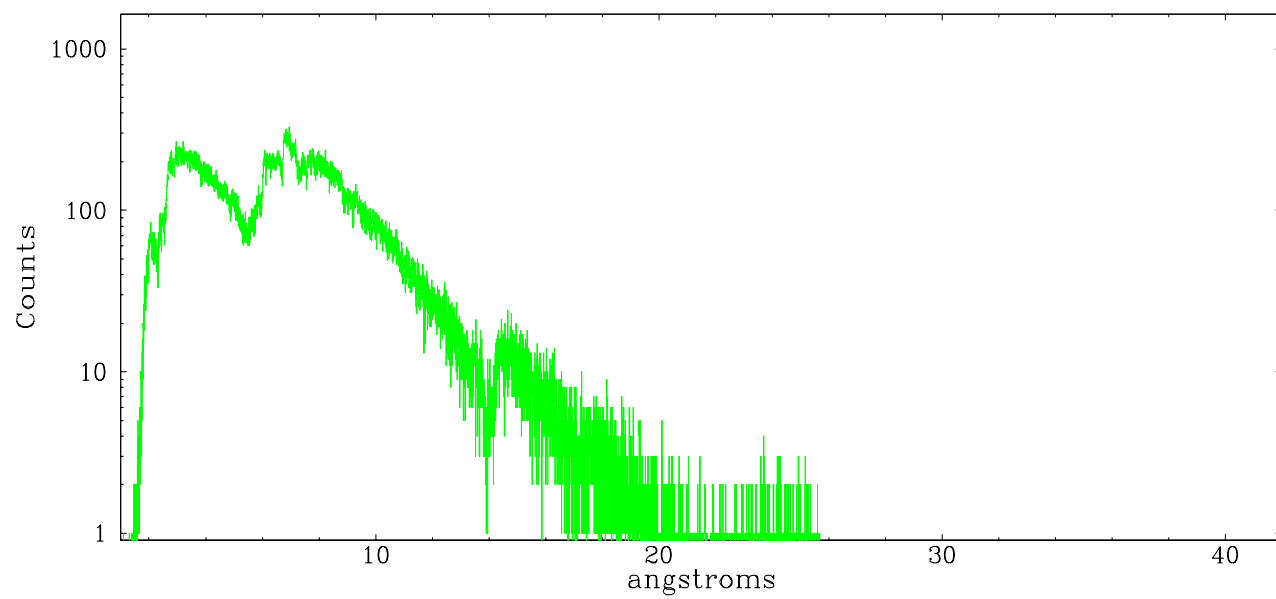


Full Detector MEG

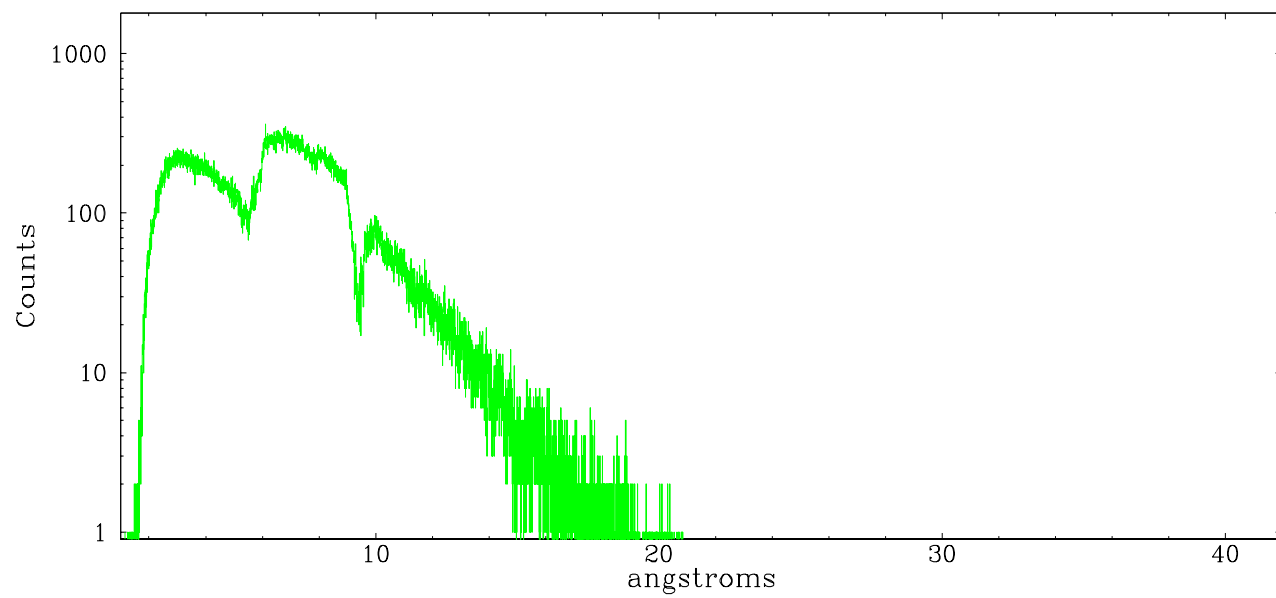
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	24867	10323	291899	60582	329755	8613	13708



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2006.11.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	69.873

A.2 Comments

processed with corrected zeroth order position of $x=4085.84, 4076.78$.

Faint grating spectra can be seen in an image of bad events. This is probably due to pileup in the spectrum, causing migration to bad grades.

This should be considered in analysis.