

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1016 - L2 Version 001
Chandra X-Ray Center

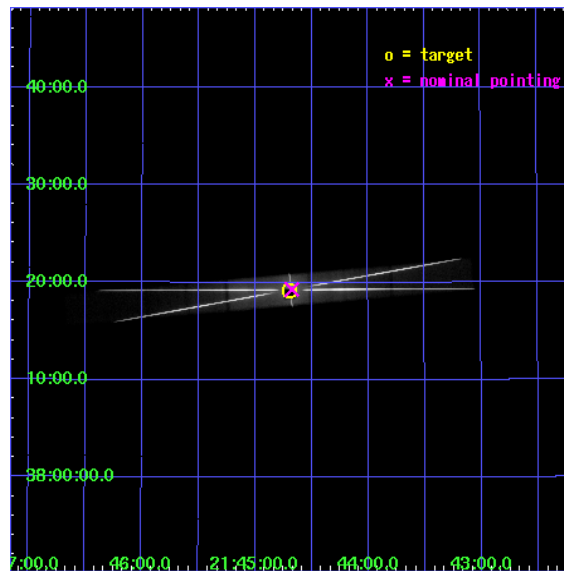
L2 Processing Date : Dec 27 2006

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1 Front

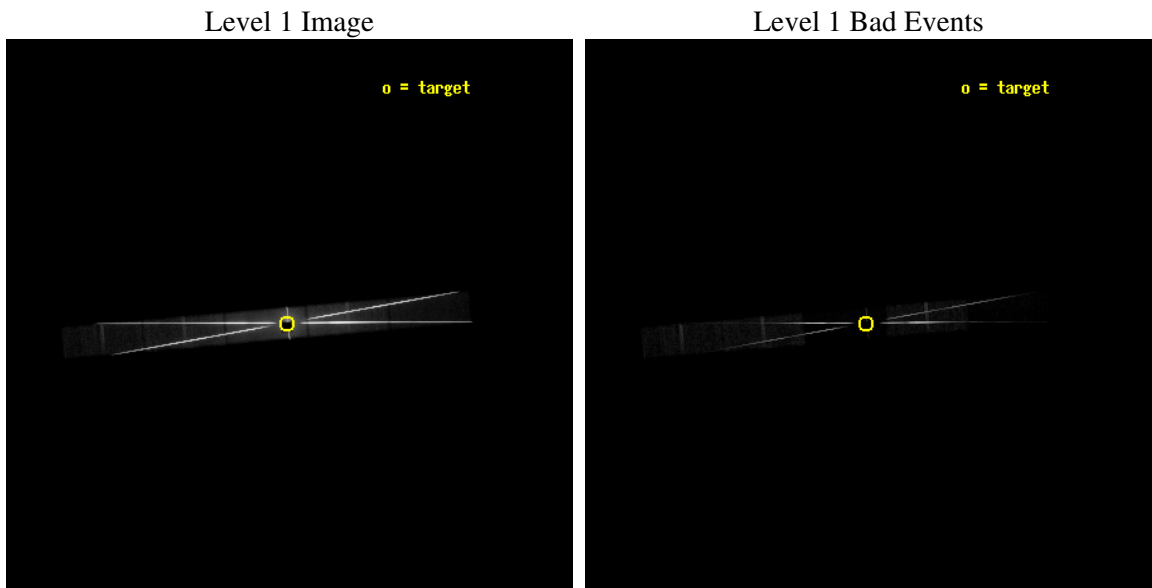
seq_num	400094
obs_id	1016
title	PHOTOIONIZED X-RAY EMISSION IN CYG X-2
observer	Prof. Claude Canizares
object	CYG X-2
dtcycle	0
cycle	P
ra_targ	326.17375
dec_targ	38.319611
ra_nom	326.16876672988
dec_nom	38.321698445944
roll_nom	174.99446462681
revision	4
ontime	15126.799965322
livetime	14663.872781512
ontime5	15126.799965322
ontime6	15126.799965322
ontime7	15126.799965322
ontime8	15125.458925307
ontime9	15126.799965322
l2events	4106040



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	2006-12-19T14:54:37
revision	3

sched_exp_time	14570.132000
ontime	15140.153746426
ontime5	15140.153746426
ontime6	15140.153746426
ontime7	15140.153746426
ontime8	15138.812706411
ontime9	15140.153746426
l1events	4788727

2.1.3 Events

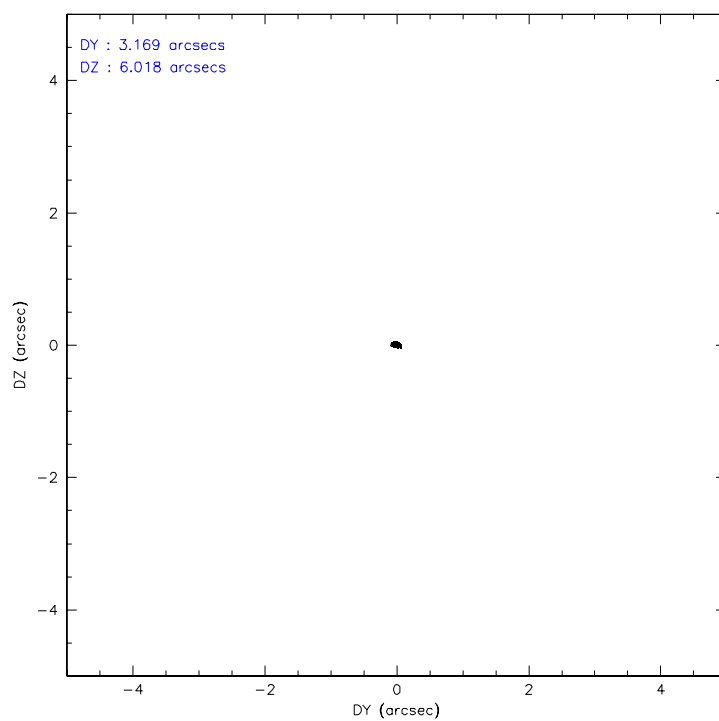
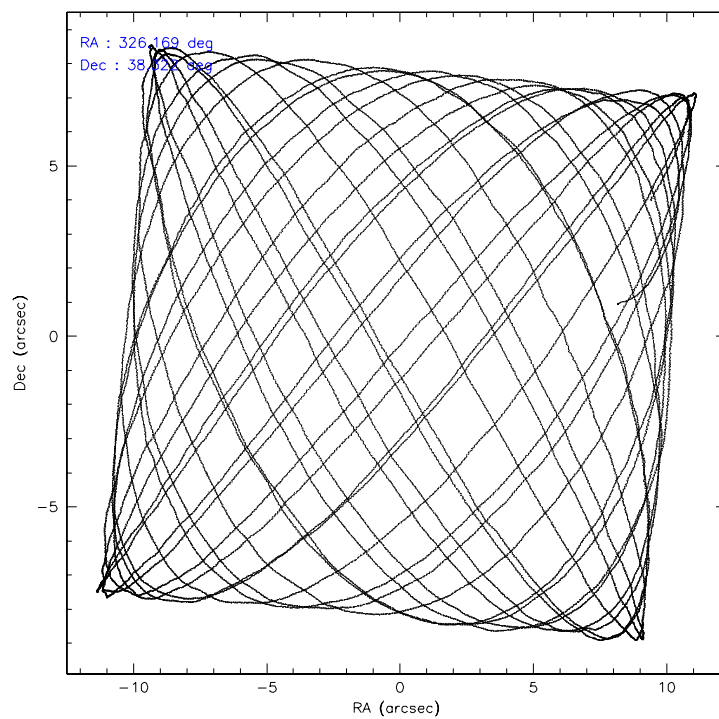
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	416716	1816630	1575697	877799	101885
rejected events	21570	164886	208962	66196	29059
rejected %	5%	9%	13%	7%	28%

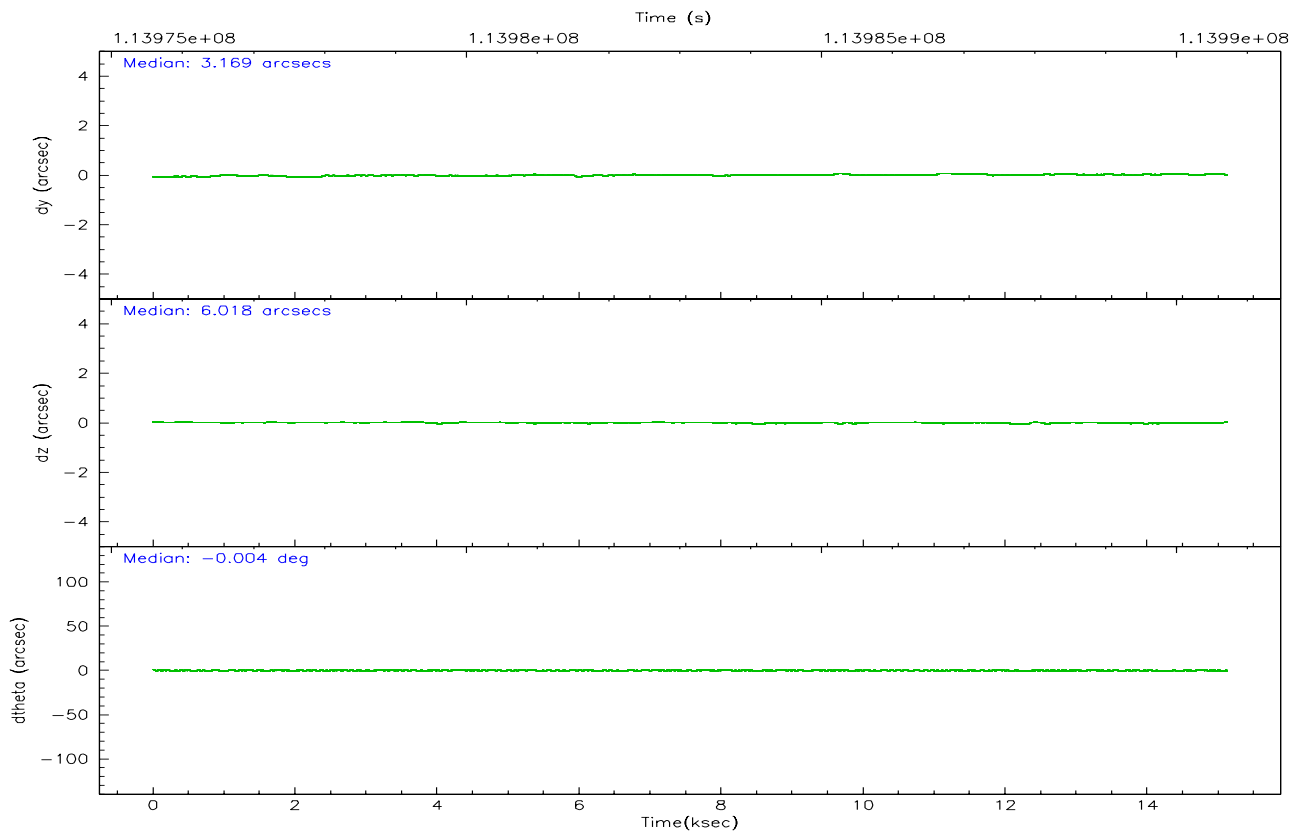
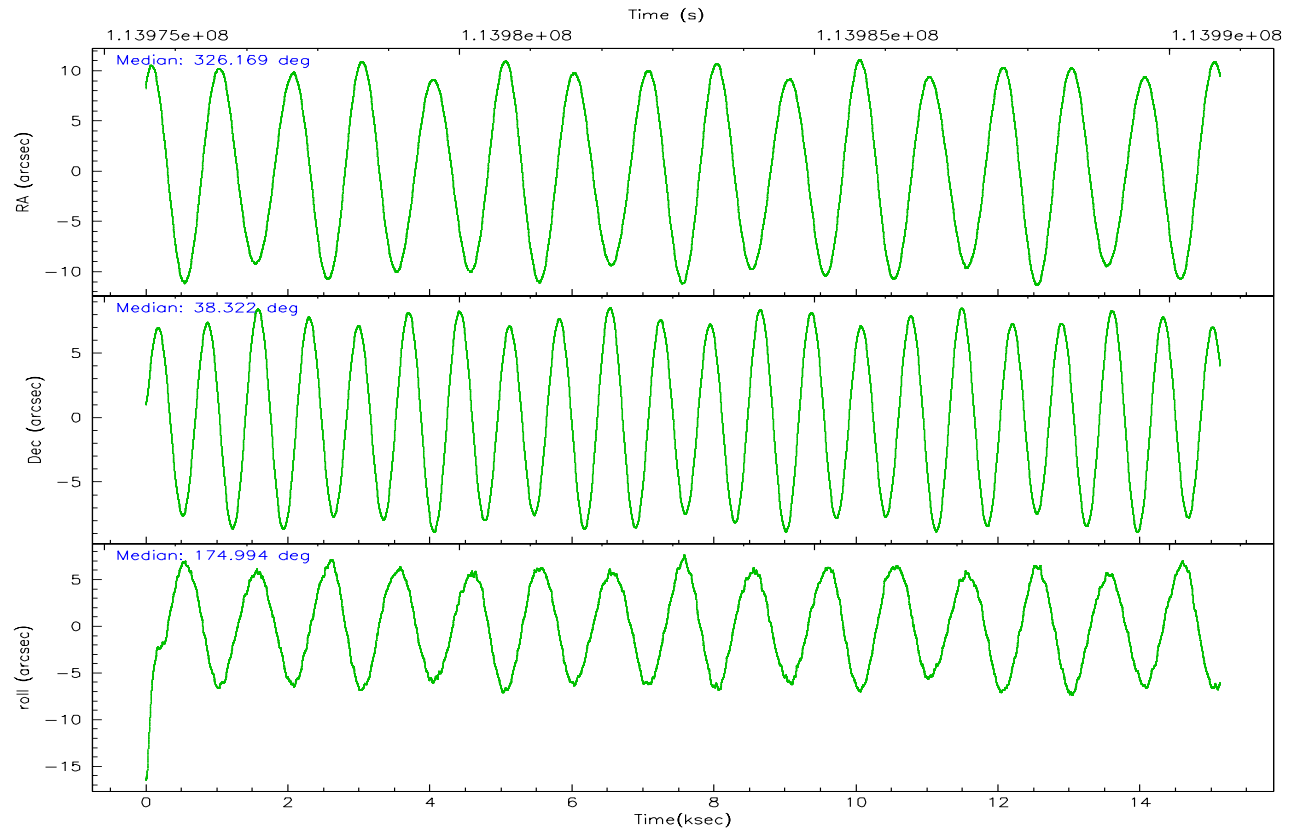
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	124199	1193546	234111	645451	57070
	29%	65%	14%	73%	56%
grade 1 events	1575	67711	16264	17192	283
	0%	3%	1%	1%	0%
grade 2 events	130382	220147	346860	88344	8379
	31%	12%	22%	10%	8%
grade 3 events	34708	84767	138565	29639	2748
	8%	4%	8%	3%	2%
grade 4 events	34640	81750	138428	29717	2701
	8%	4%	8%	3%	2%
grade 5 events	7637	44635	73044	8786	563
	1%	2%	4%	1%	0%
grade 6 events	71603	73014	510023	19183	1981
	17%	4%	32%	2%	1%
grade 7 events	11972	51060	118402	39487	28160
	2%	2%	7%	4%	27%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-56789	ACIS-56789	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	326.200097	326.1687667298849	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	38.333474	38.32169844594362	Subarray start row	1	1
Pointing Roll	174.818412	174.9944646268078	Subarray row count	380	380
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	1.3
SIM translation stage pos (mm)	-182.404523	-182.3984892363686			
SIM translation stage offset (mm)	-7.728	-7.734033346639166			
Observation start time	113976143.184000	113974994.33701			
Observation start date	2001-08-12T04:01:19	2001-08-12T03:43:14			
Observation end time	113990713.184000	113991028.41264			
Observation end date	2001-08-12T08:04:09	2001-08-12T08:10:28			
Read mode	TIMED	TIMED			

2.3 Aspect



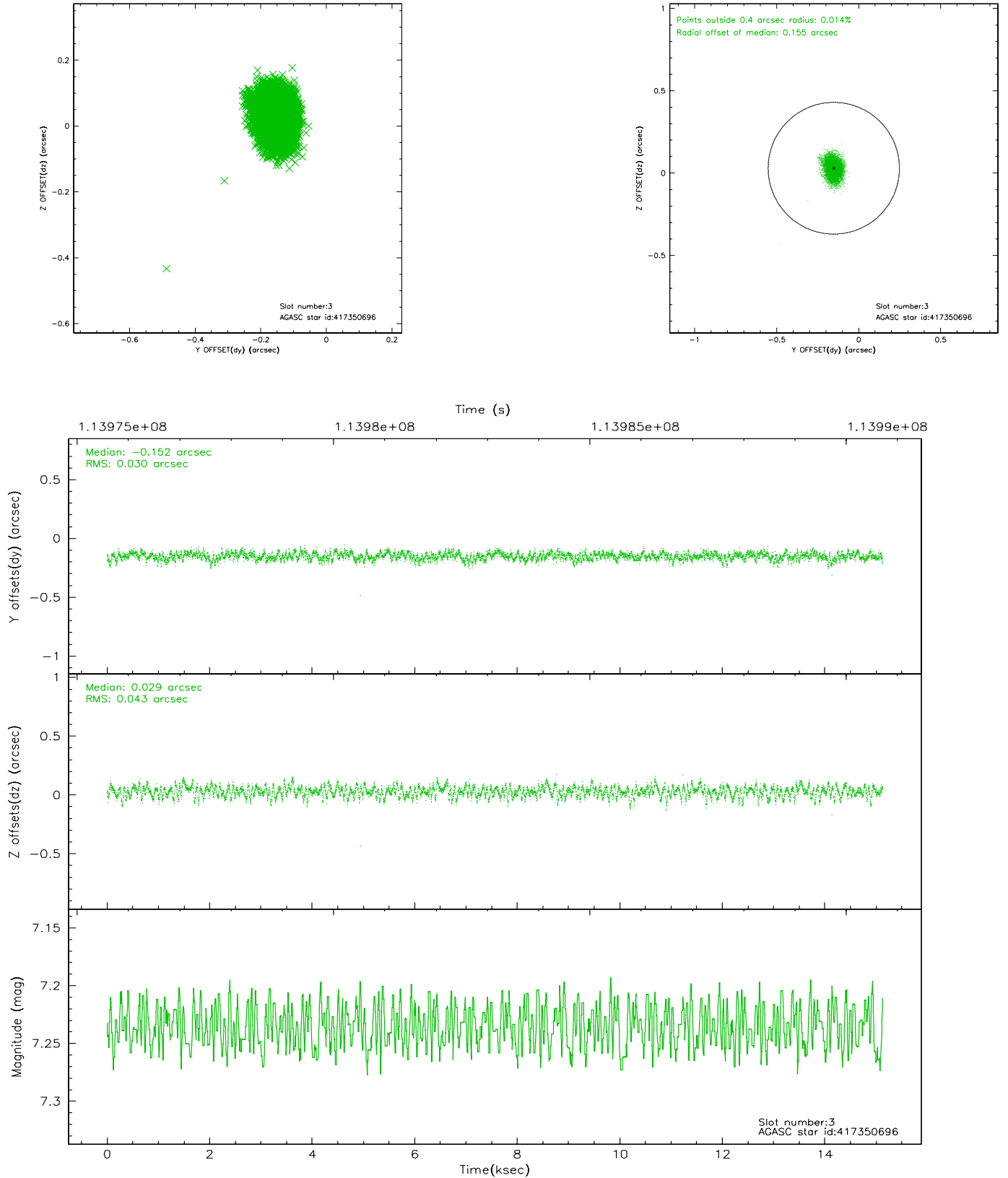


Slot Statistics

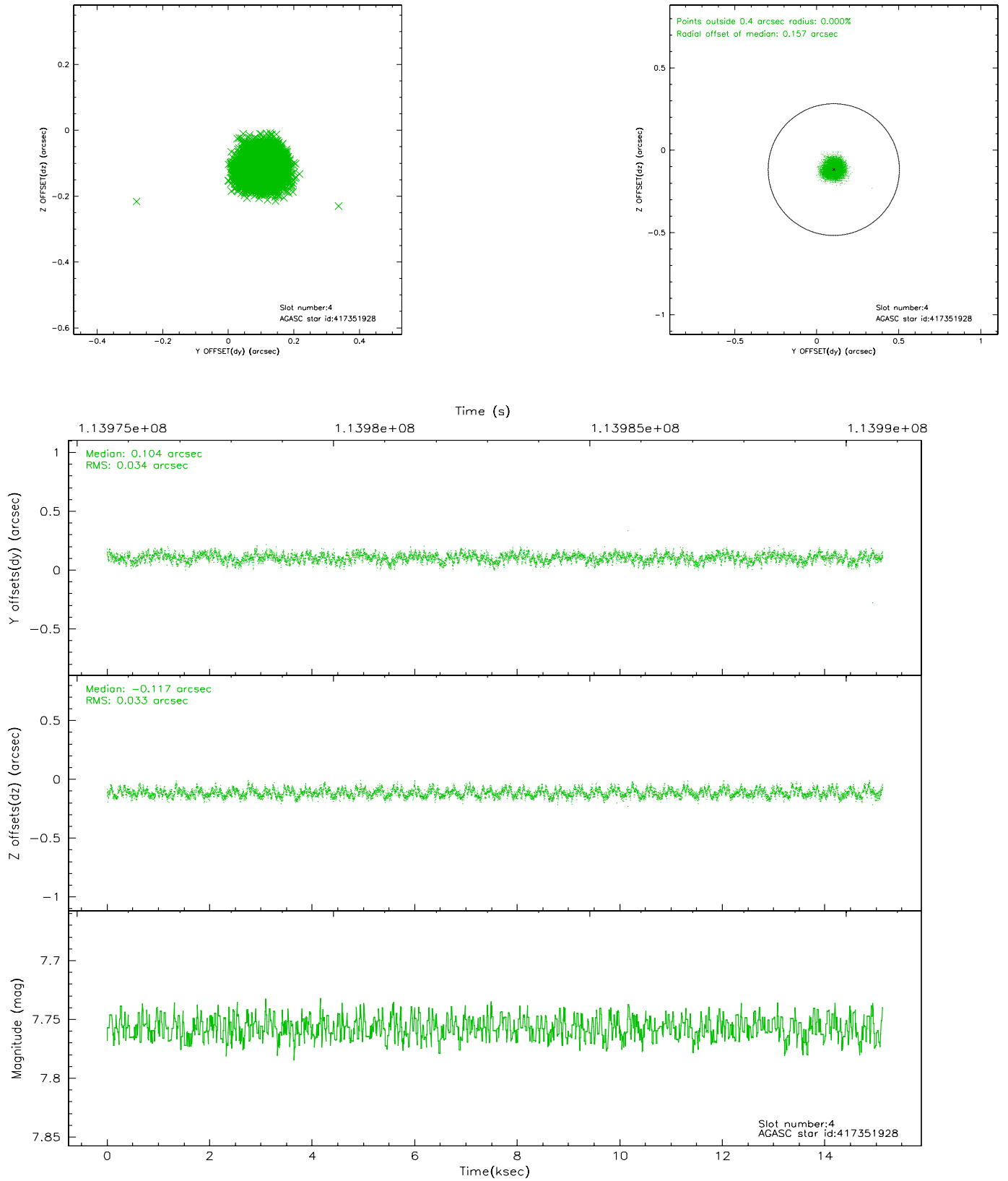
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3690	-0.038	-0.036	0.006	0.011	0.000000	0.000000	-755.30	-1886.53
1	FID	ACIS-S-4	7.18	3690	-0.030	0.028	0.005	0.009	0.000000	0.000000	2157.85	21.65
2	FID	ACIS-S-5	7.23	3690	0.037	0.016	0.006	0.010	0.000000	0.000000	-1807.68	15.65
3	GUIDE	417350696	7.24	7380	-0.152	0.029	0.055	0.091	327.076779	38.956124	-2241.63	-2465.48
4	GUIDE	417351928	7.76	7381	0.104	-0.117	0.052	0.079	326.969486	38.210974	-2207.30	233.48
5	GUIDE	417339000	7.78	7379	-0.045	0.013	0.060	0.099	325.733777	37.904925	1179.08	1653.11
6	GUIDE	417348376	8.21	7381	0.022	-0.058	0.056	0.090	325.737694	38.184491	1254.57	649.64
7	GUIDE	417341096	8.76	7380	0.070	0.140	0.054	0.089	325.689531	38.411650	1459.64	-153.63

2.4 Star Slots

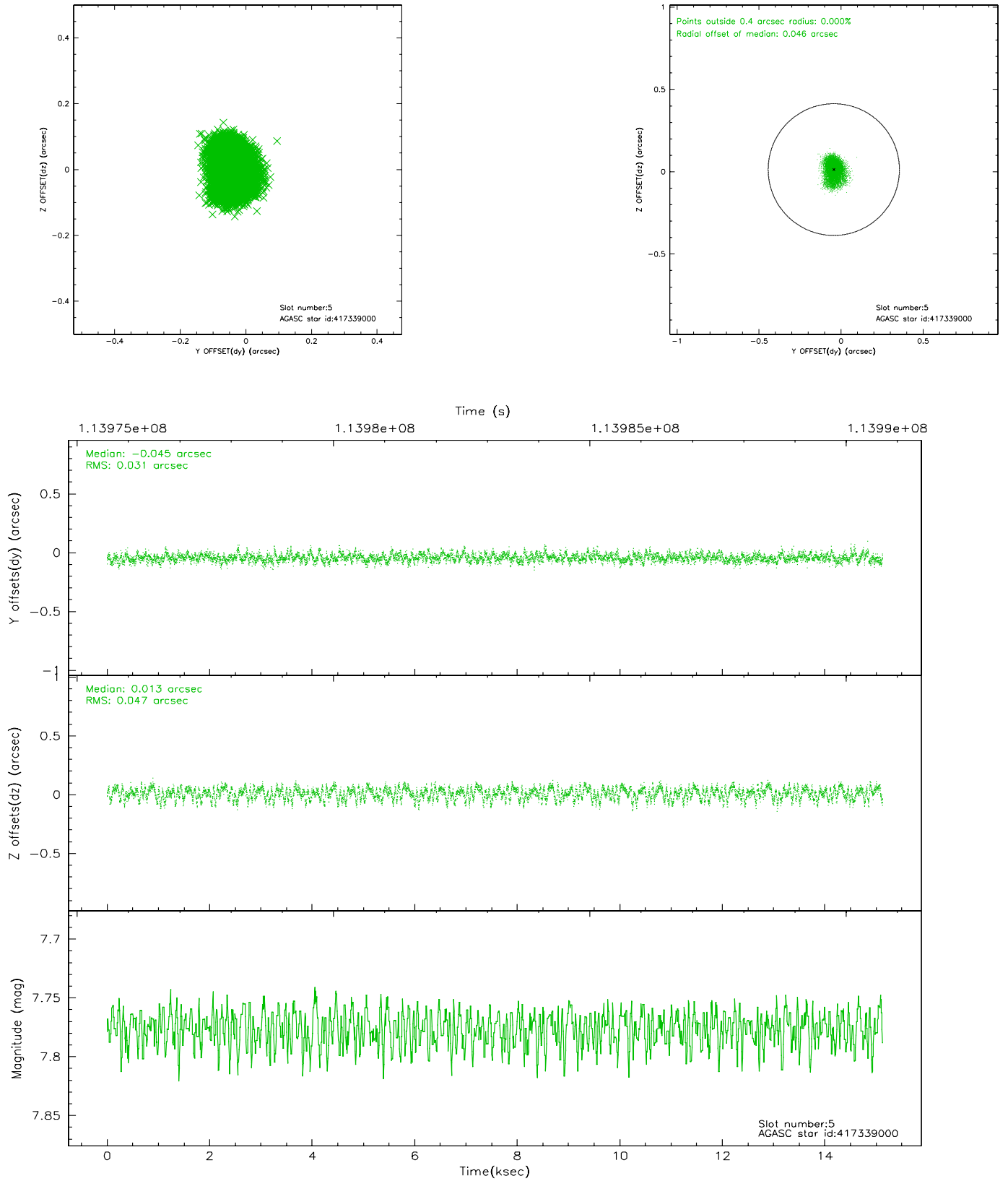
2.4.1 Slot 3



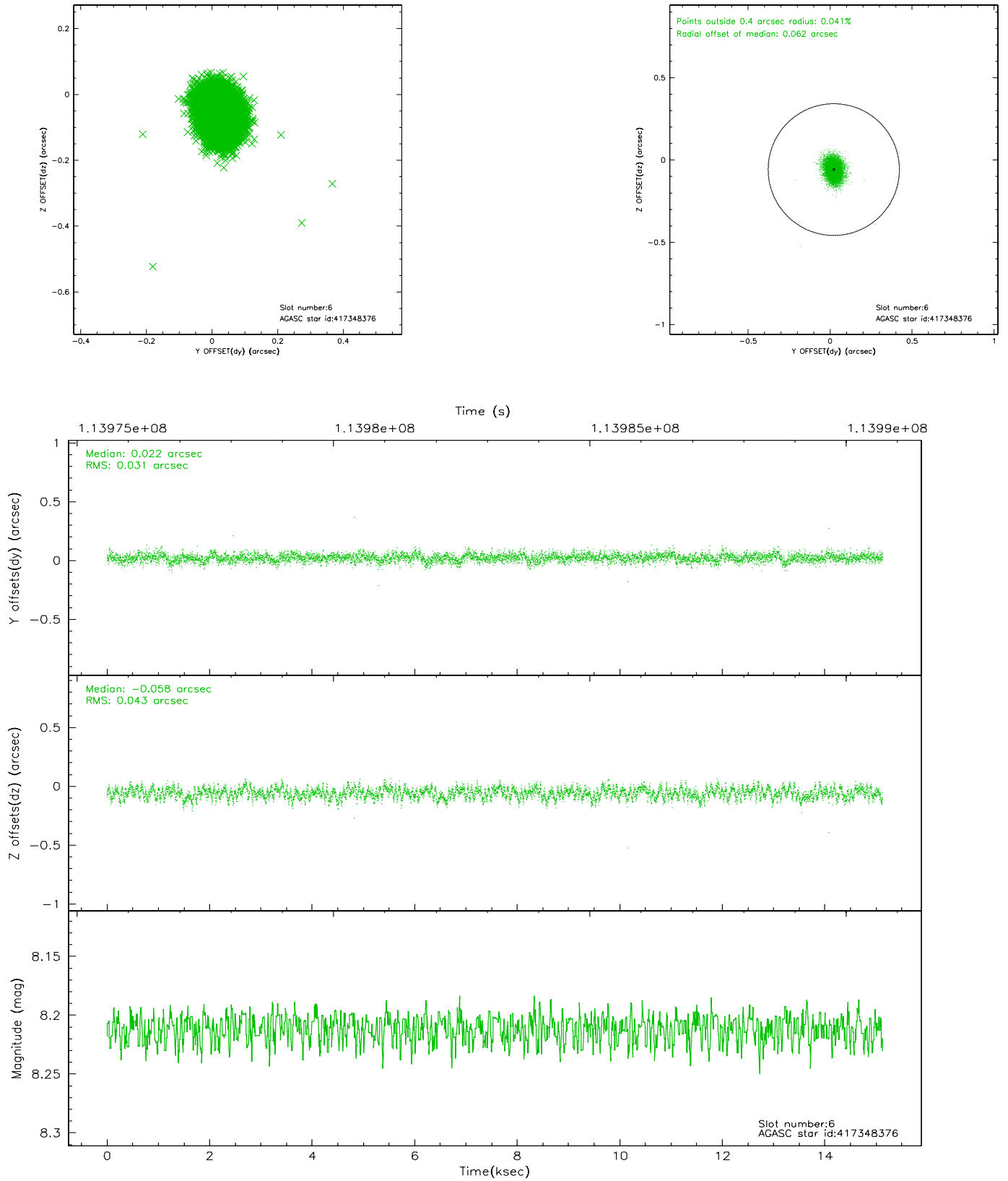
2.4.2 Slot 4



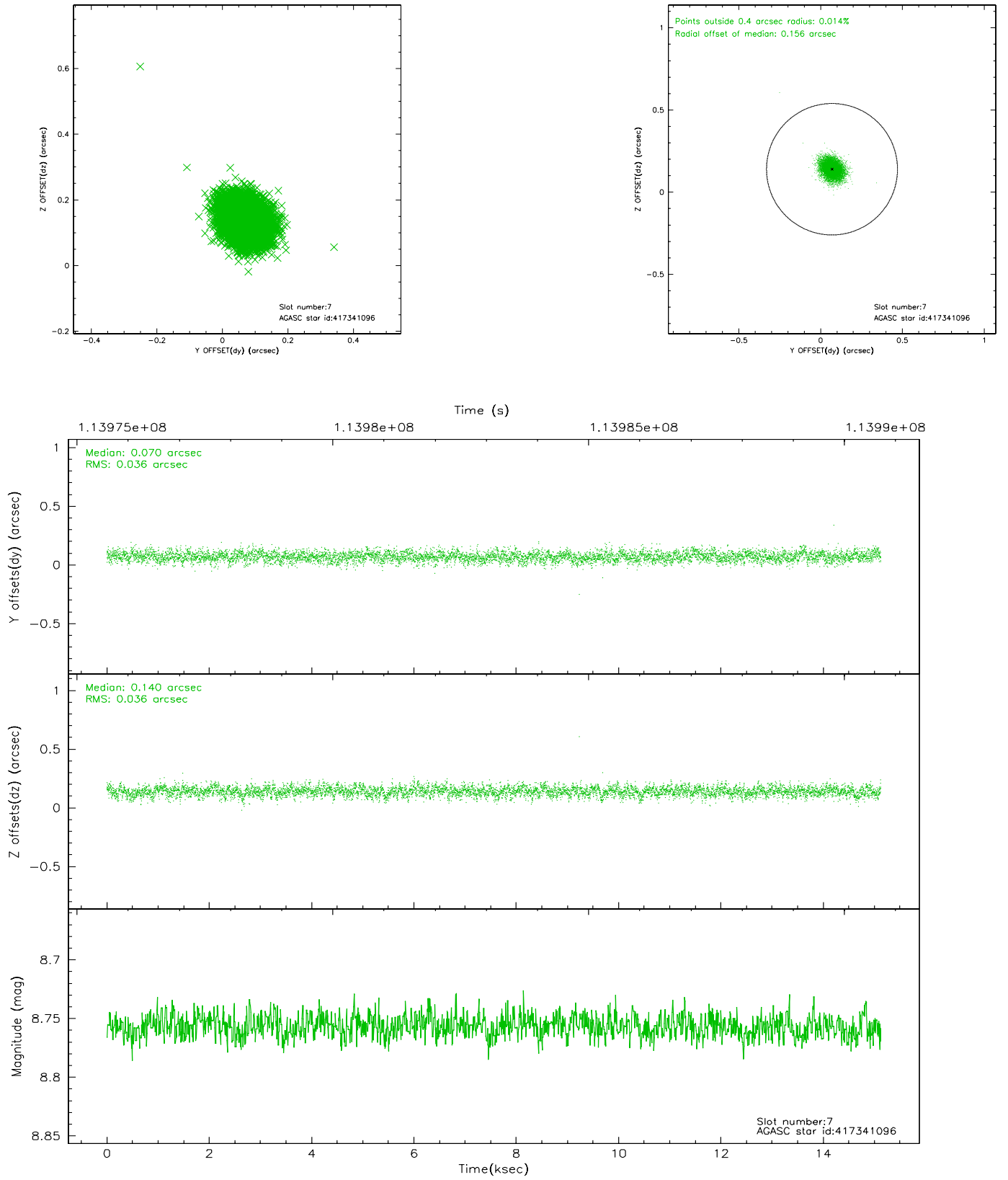
2.4.3 Slot 5



2.4.4 Slot 6

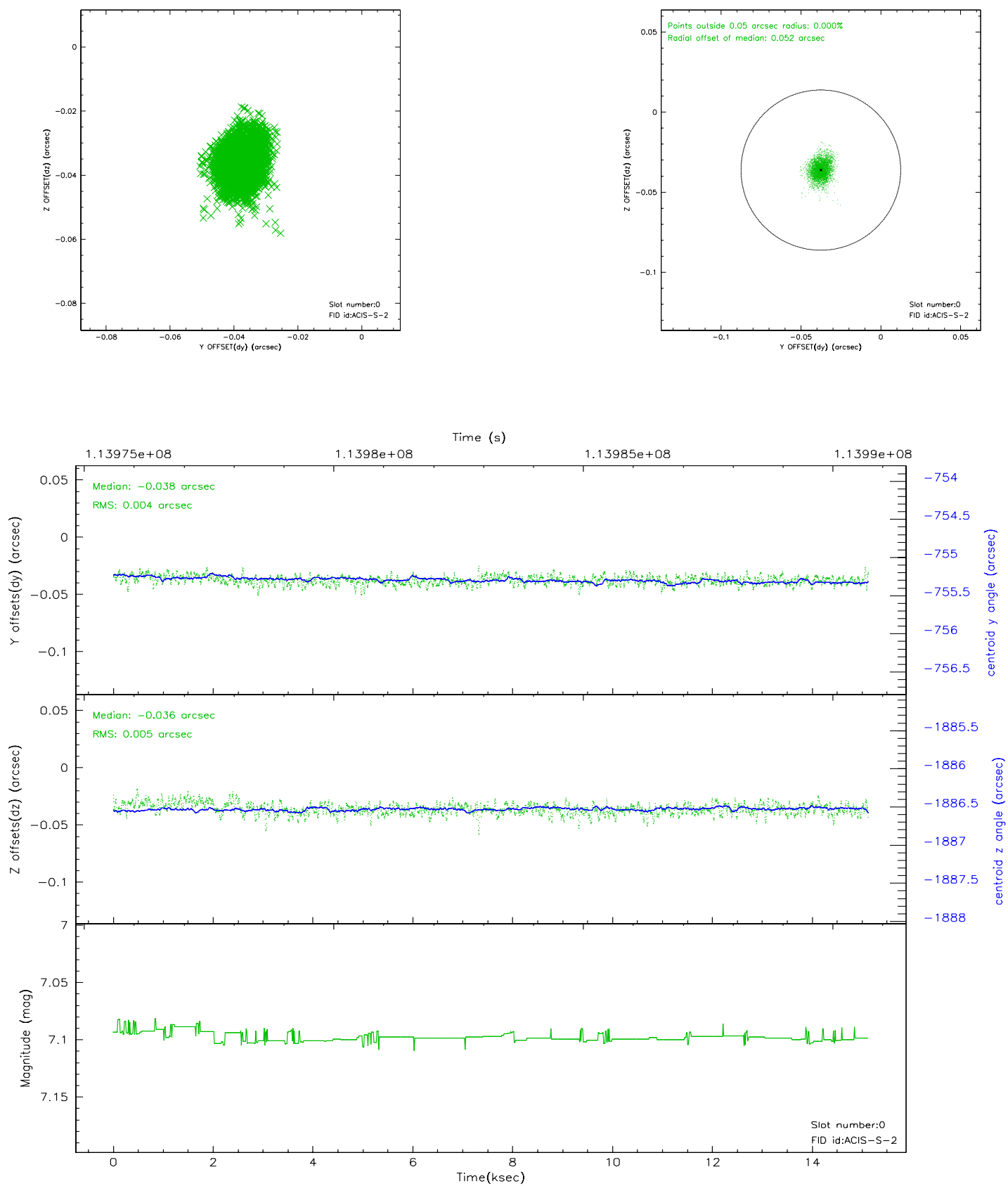


2.4.5 Slot 7

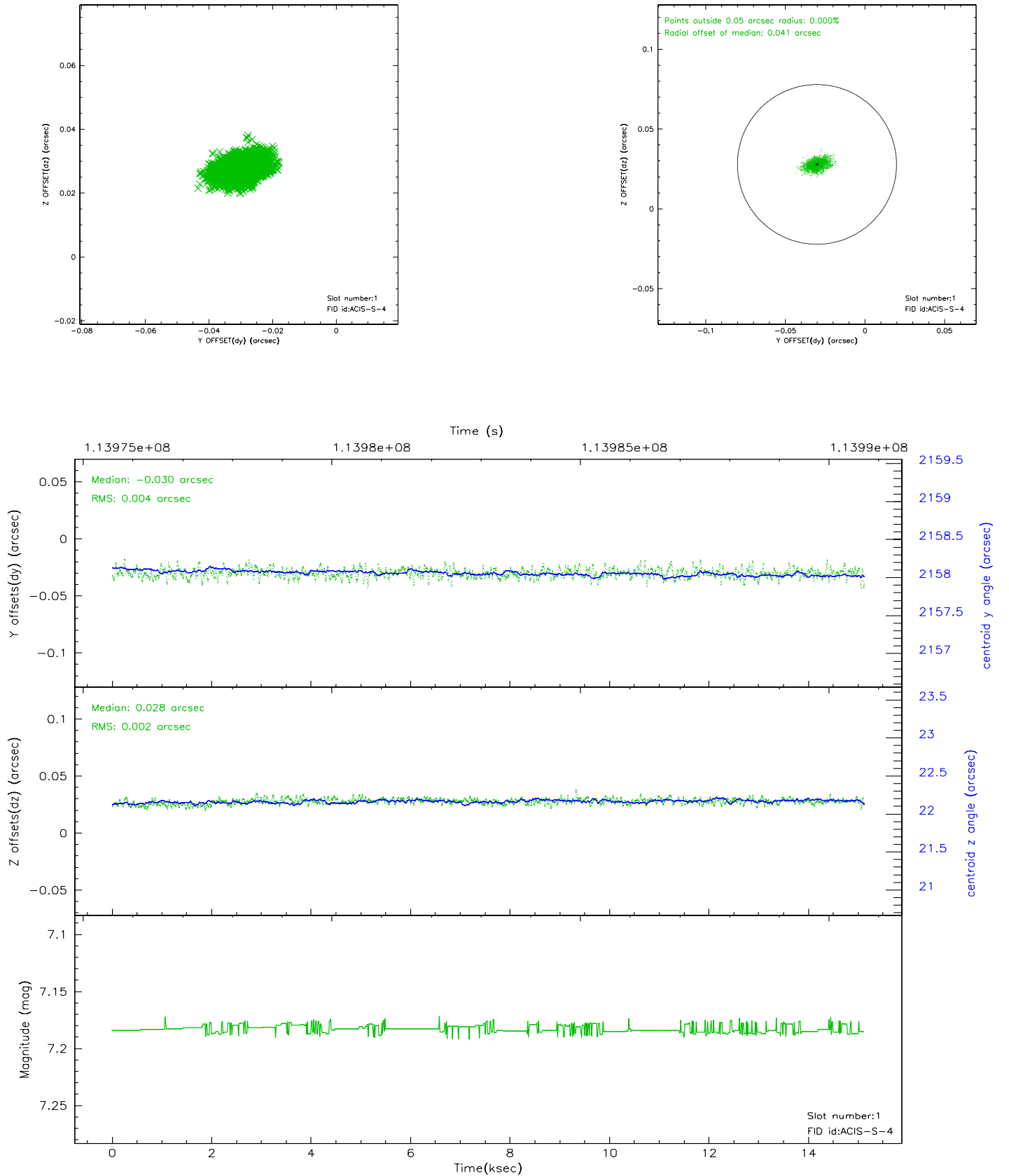


2.5 FID Slots

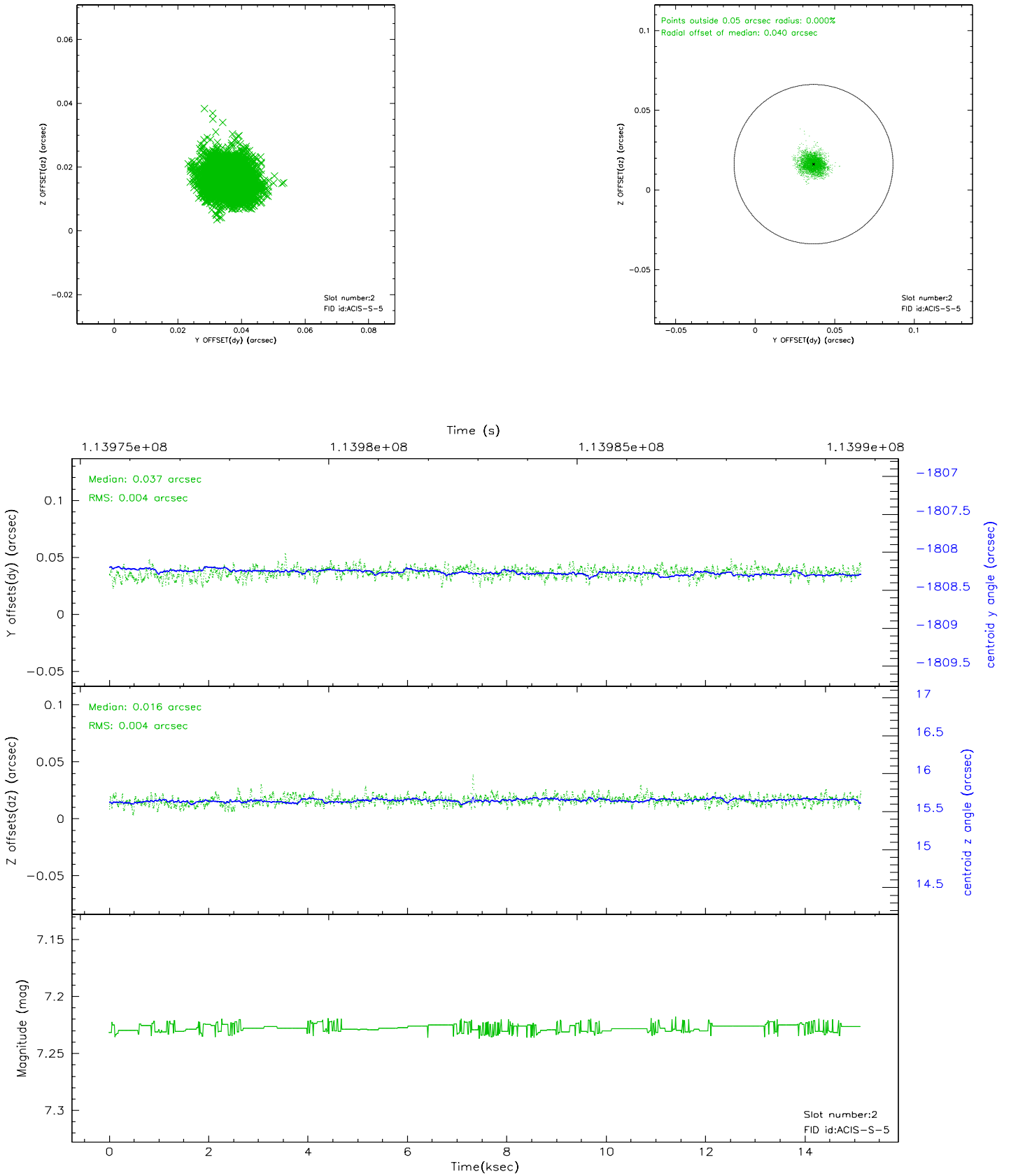
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

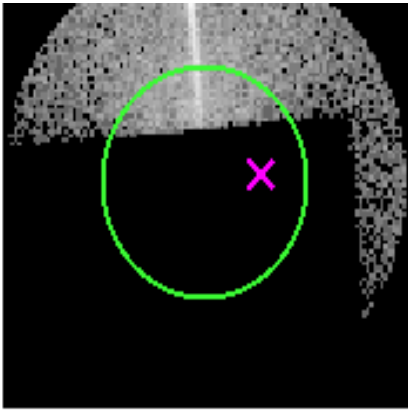


3 Gratings

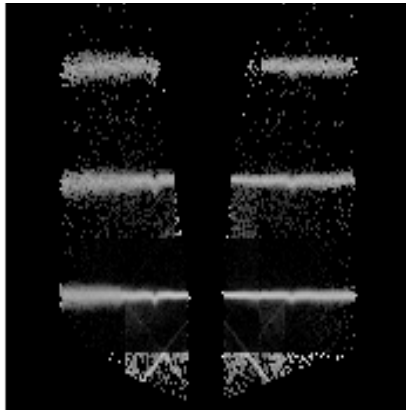
3.1 HEG Arm



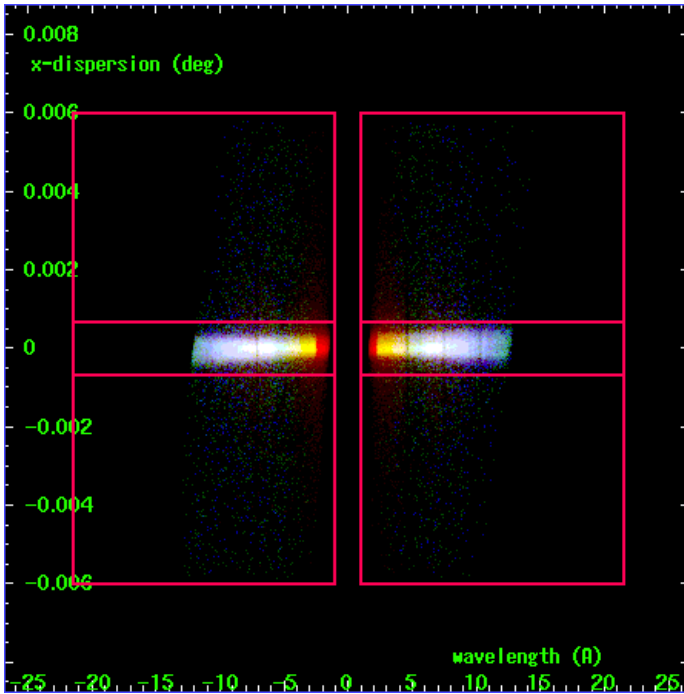
HEG Order Sort 123



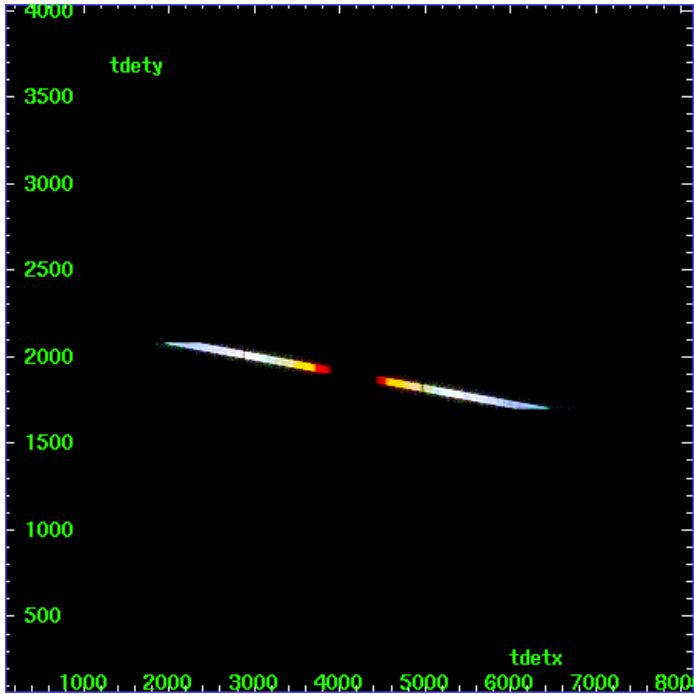
HEG Zero Order



HEG Order Sort ALL

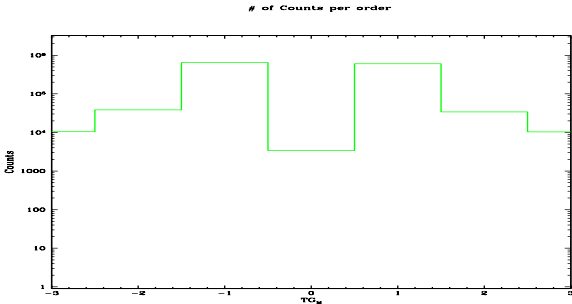


Spot Image HEG

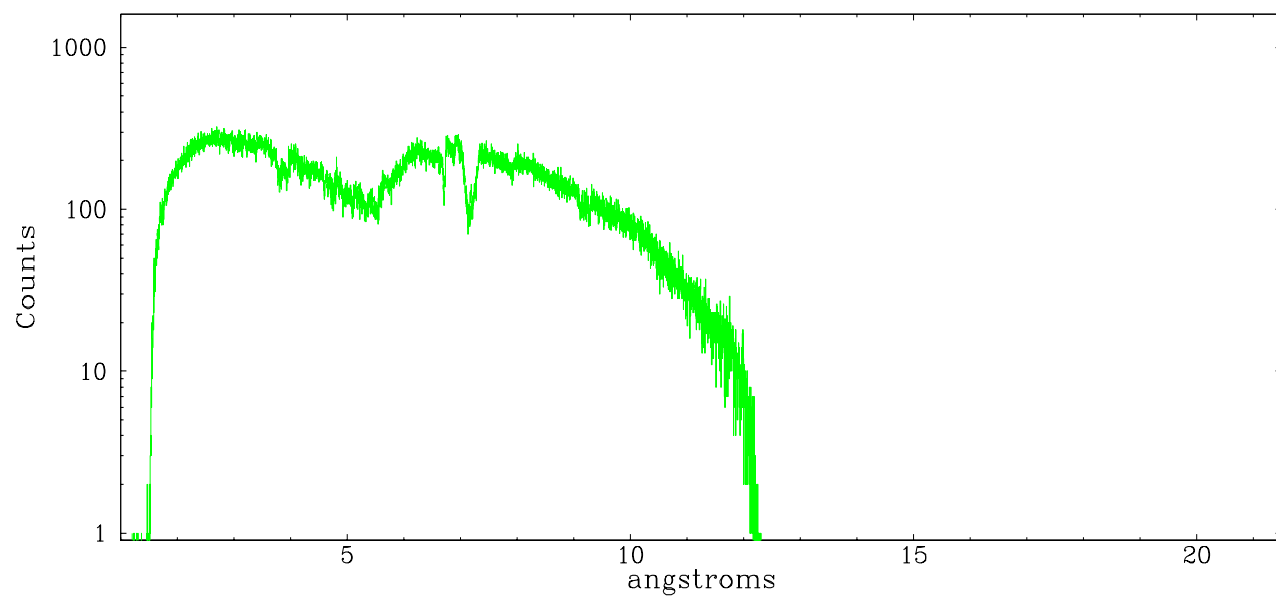


Full Detector HEG

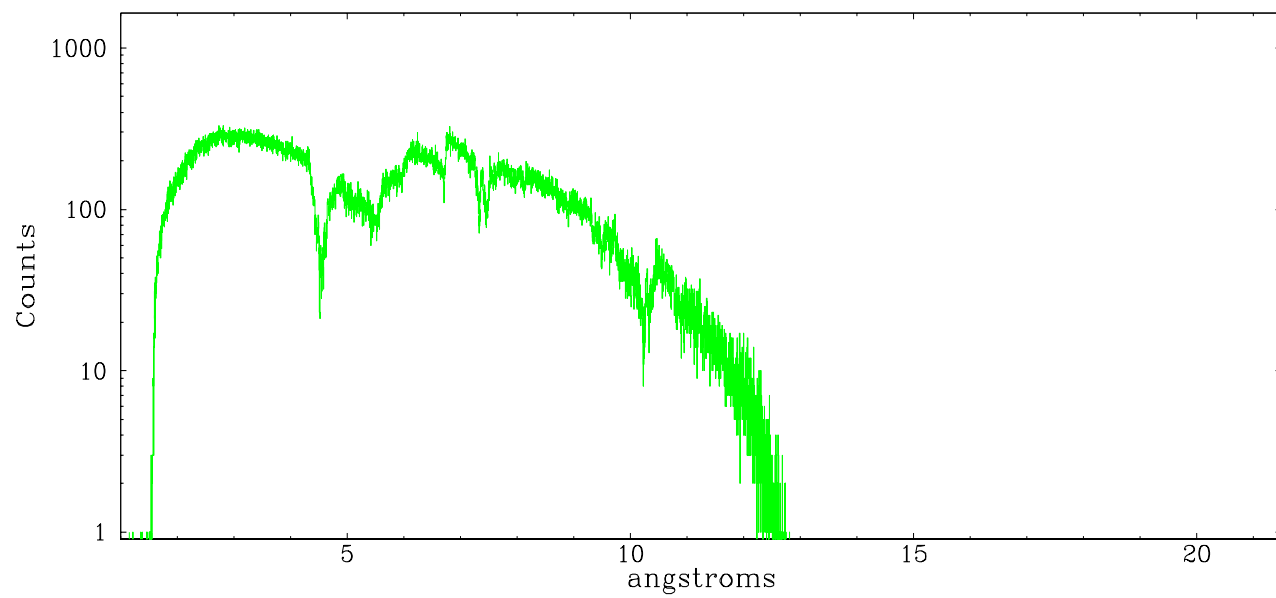
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	10455	38471	644034	3405	603039	34001	10384



heg order -1



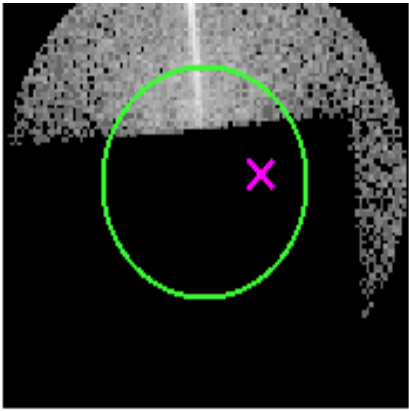
heg order +1



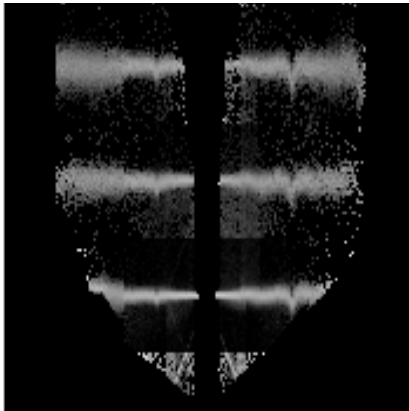
3.2 MEG Arm



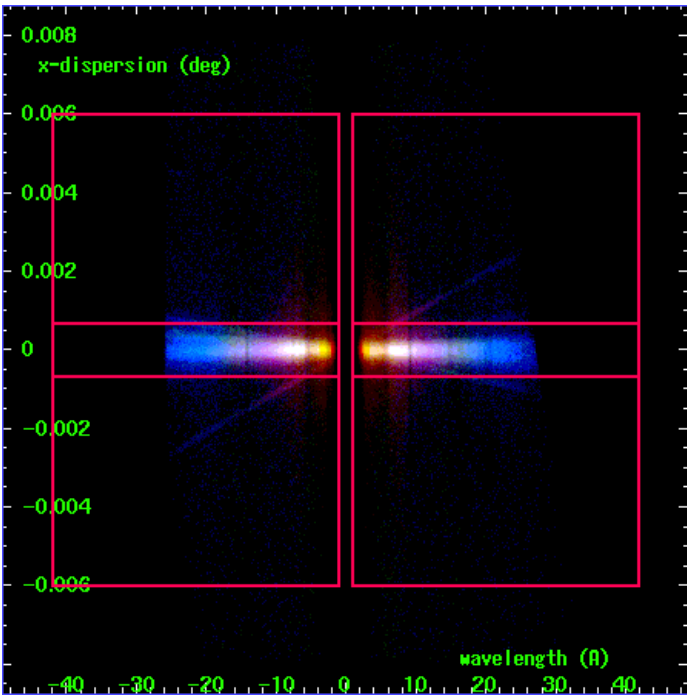
MEG Order Sort 123



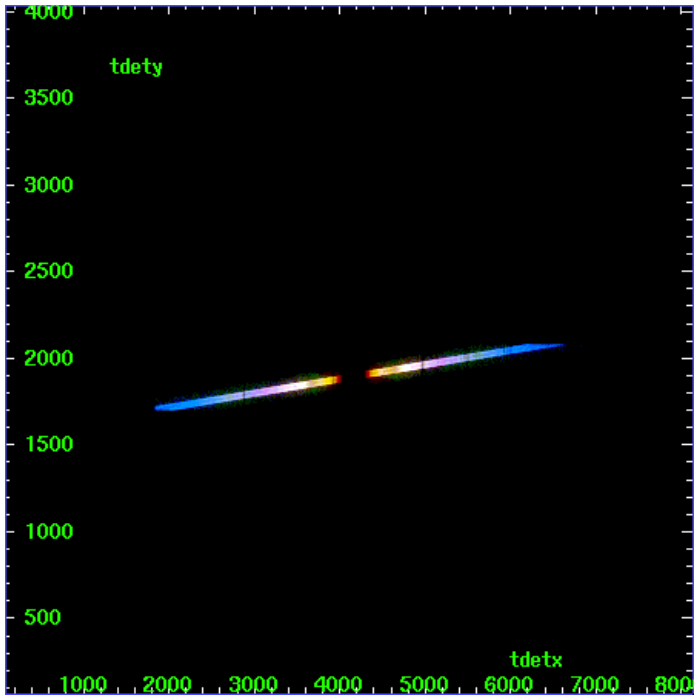
MEG Zero Order



MEG Order Sort ALL

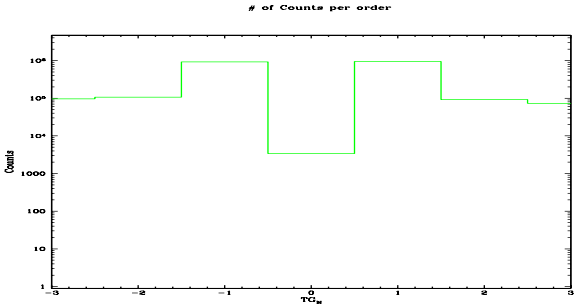


Spot Image MEG

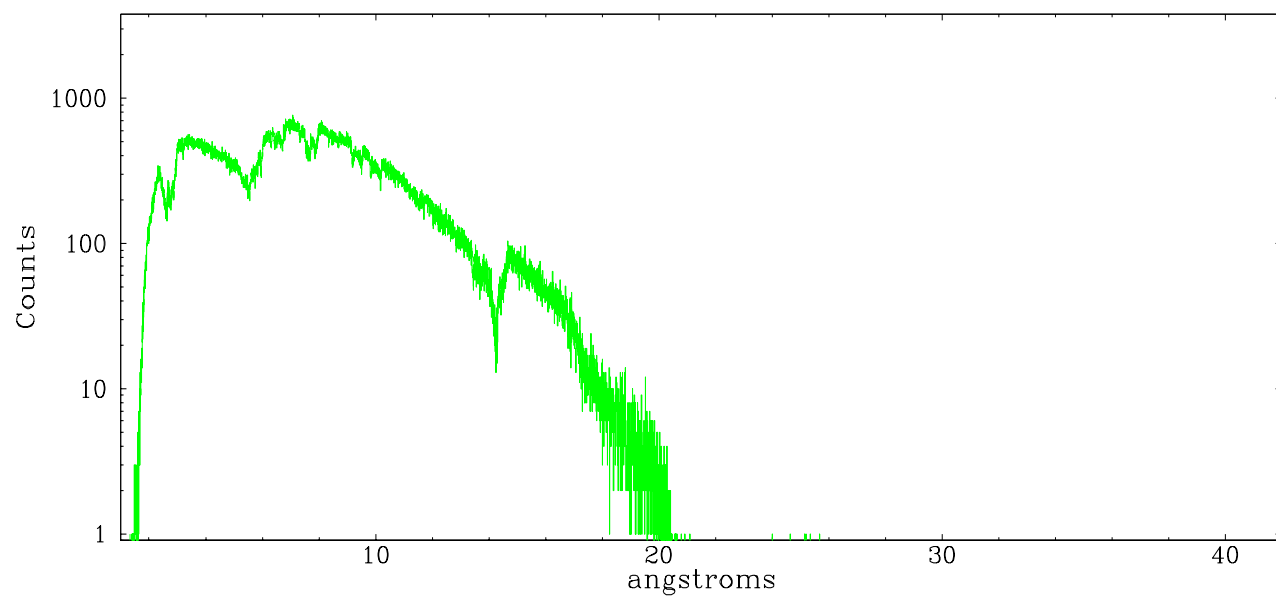


Full Detector MEG

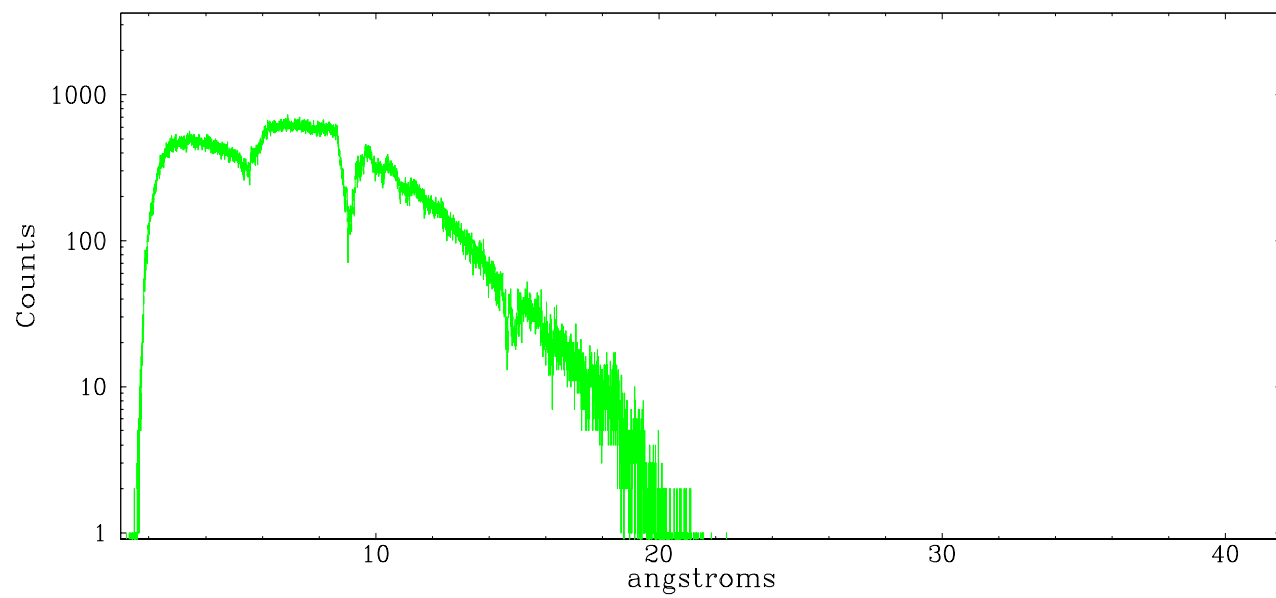
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	95899	106738	926166	3405	938570	91467	73042



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2006.12.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.126

A.2 Comments

Due to a blocked zeroth order, tgdetect cannot give the correct position. Findzero results for meg of x0=4080.86; y0=4094.24 were used as the zeroth order position.

The grating spectra show in a bad-events image; this probably means that the spectra (both HEG and MEG) are piled.