

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1926 - L2 Version 001
Chandra X-Ray Center

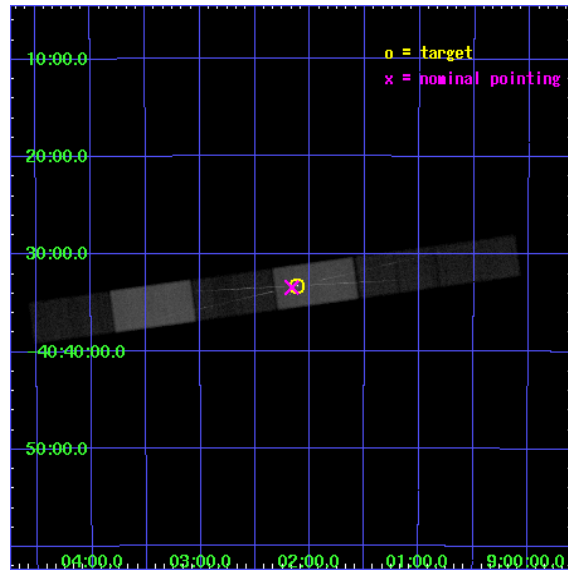
L2 Processing Date : Nov 7 2006

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1 Front

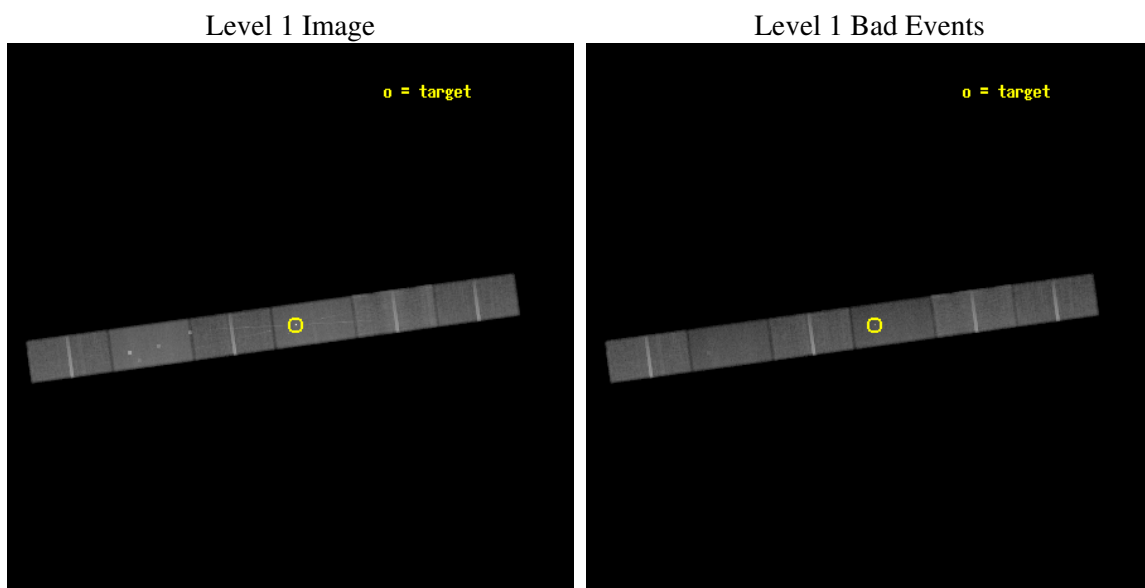
seq_num	400139
obs_id	1926
title	DYNAMICS OF THE IONIZED STELLAR WIND IN VELA X-1
observer	PROF. STEVEN KAHN
object	VELA X-1
dtcycle	0
cycle	P
ra_targ	135.52875
dec_targ	-40.554694
ra_nom	135.54102667804
dec_nom	-40.557756439318
roll_nom	352.16450588669
revision	2
ontime	85156.318129048
livetime	83149.003365449
ontime4	85154.577108949
ontime5	85158.059129208
ontime6	85158.059129208
ontime7	85156.318129048
ontime8	85158.059129193
ontime9	85159.800149292
l2events	416484



2 OBI

2.1 OBI

2.1.1 Images

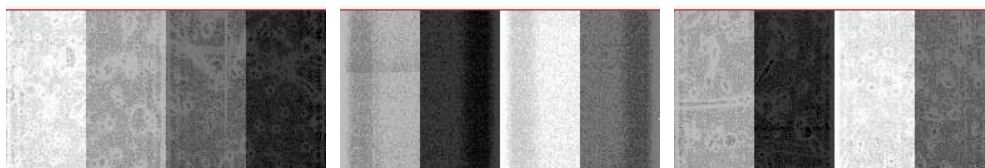


2.1.2 Bias

Chip 4

Chip 5

Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-11-06T21:16:21
revision	2

sched_exp_time	85000.000000
ontime	86321.545235887
ontime4	86318.063175797
ontime5	86323.286236048
ontime6	86323.286236048
ontime7	86321.545235887
ontime8	86323.286236033
ontime9	86325.027256131
l1events	2014052

2.1.4 Events

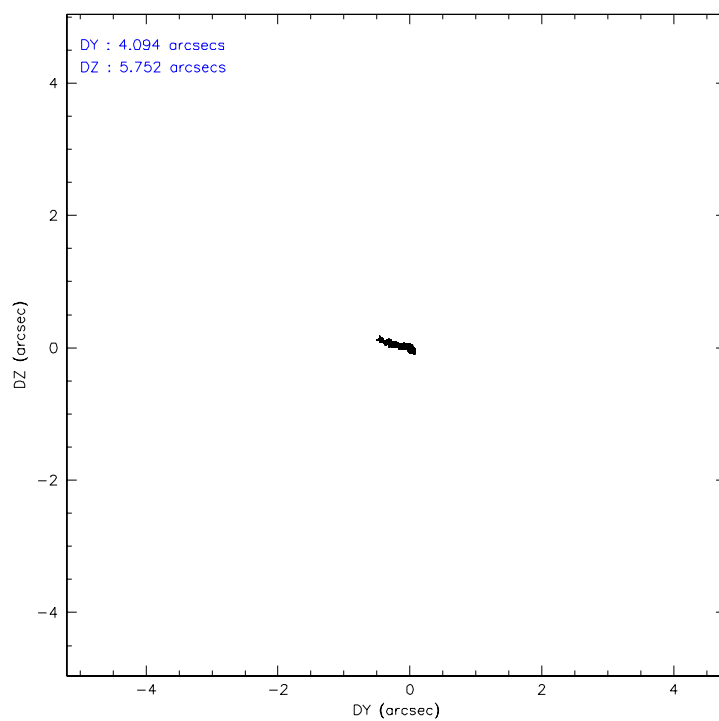
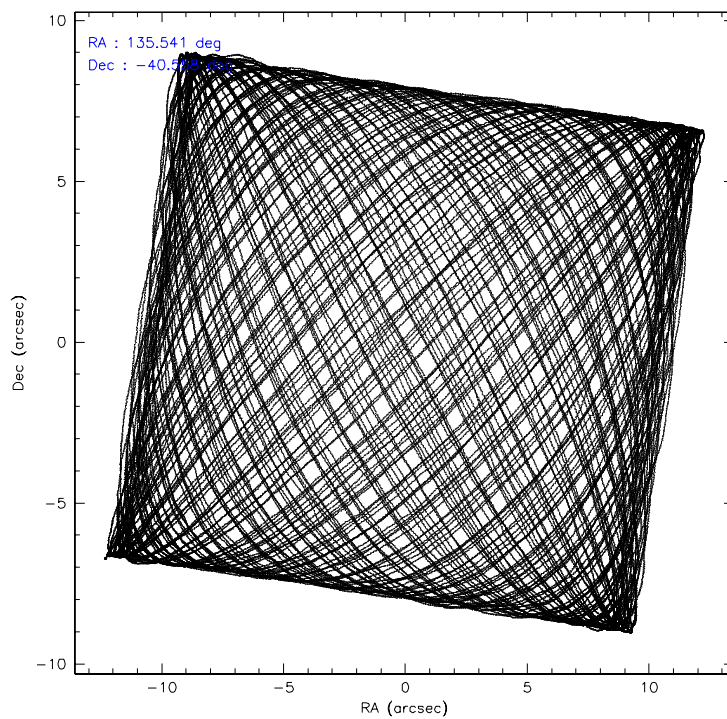
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	322206	380960	300323	355415	373653	281495
rejected events	288659	211987	263996	206200	298955	248903
rejected %	89%	55%	87%	58%	80%	88%

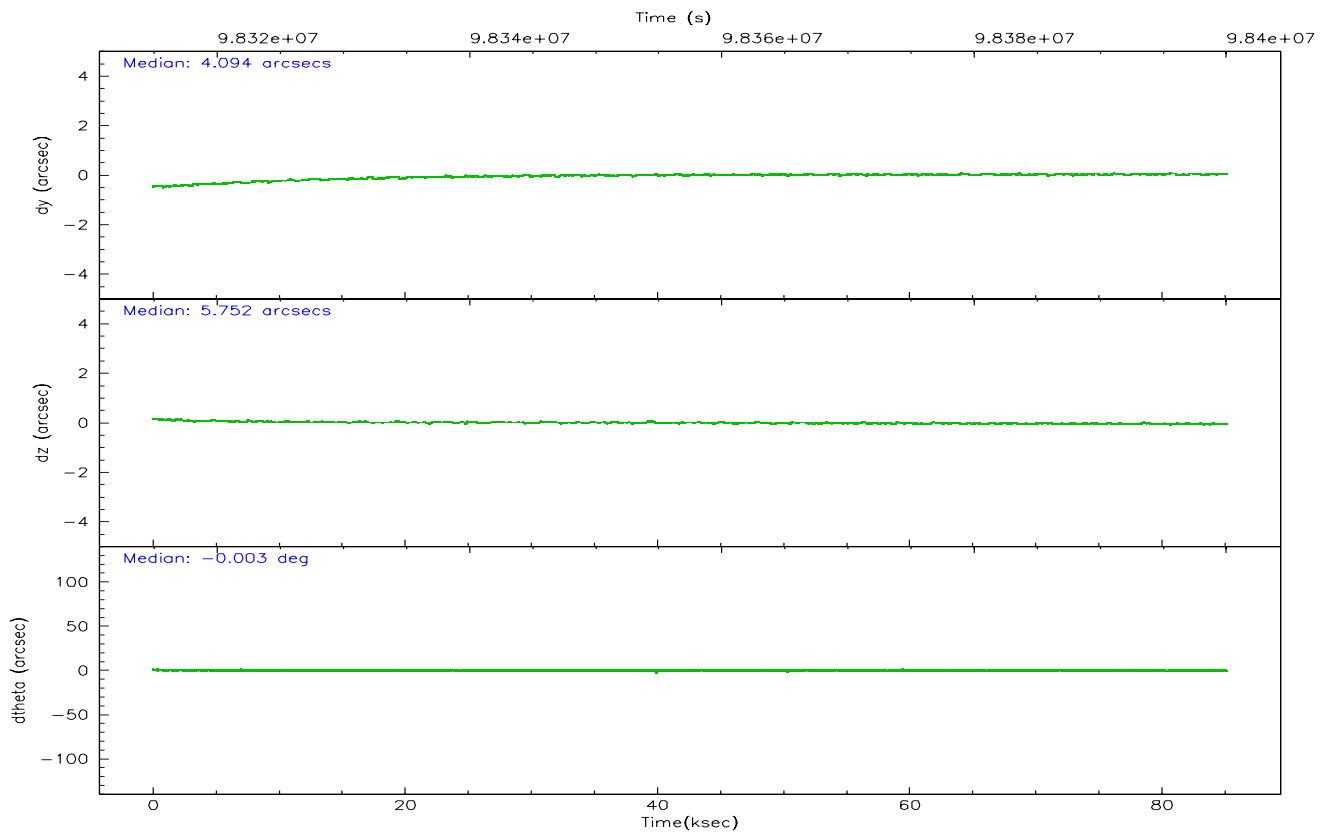
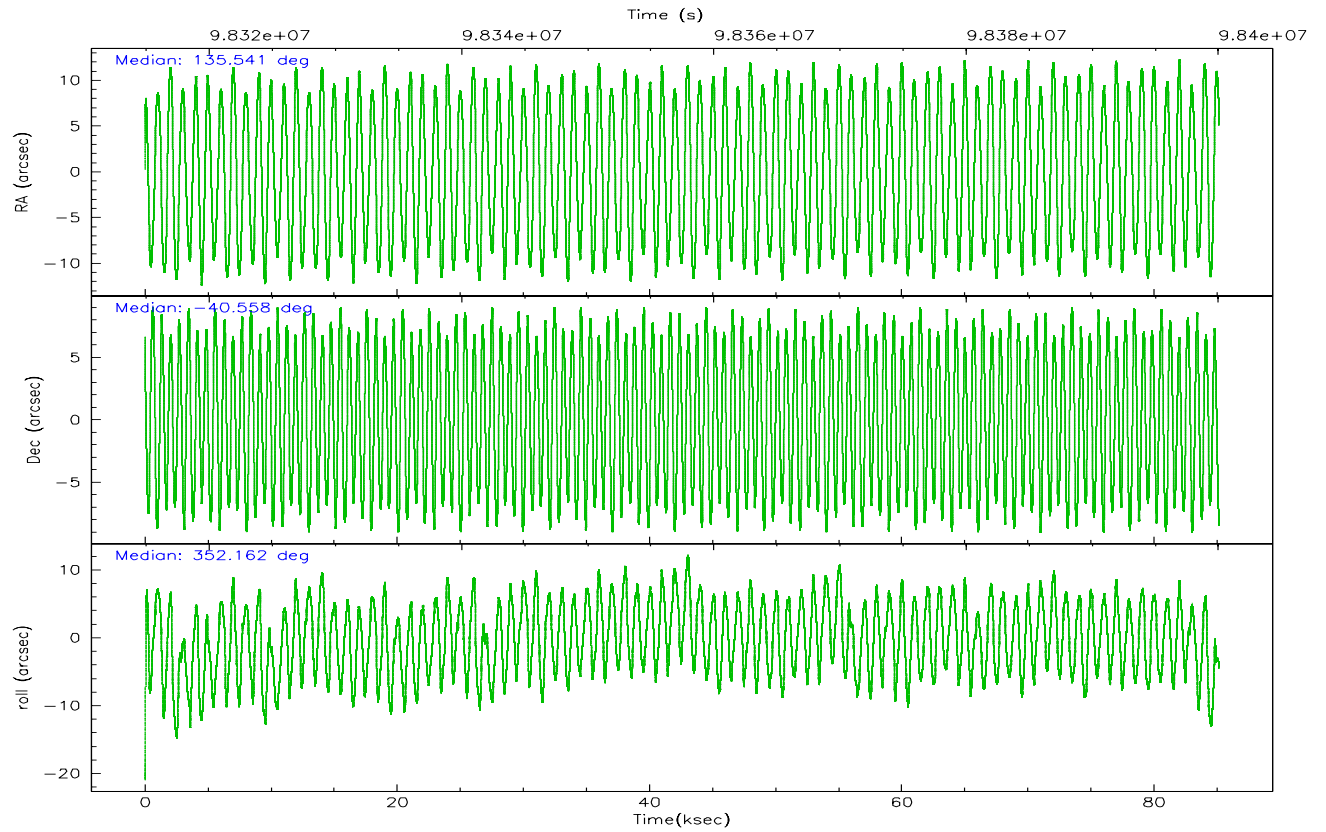
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	13249	19029	15053	12251	23343	12515
	4%	4%	5%	3%	6%	4%
grade 1 events	111	892	118	294	159	103
	0%	0%	0%	0%	0%	0%
grade 2 events	7449	47595	6887	34533	14749	6353
	2%	12%	2%	9%	3%	2%
grade 3 events	3936	6176	4171	11692	9424	3994
	1%	1%	1%	3%	2%	1%
grade 4 events	3678	5930	4027	11098	8803	3853
	1%	1%	1%	3%	2%	1%
grade 5 events	9153	20539	10722	26494	13650	10970
	2%	5%	3%	7%	3%	3%
grade 6 events	5689	92823	6642	81481	19352	6312
	1%	24%	2%	22%	5%	2%
grade 7 events	278941	187976	252703	177572	284173	237395
	86%	49%	84%	49%	76%	84%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	135.507846	135.5410266780399	Subarray requested	CUSTOM	1/2
Pointing Dec	-40.568283	-40.55775643931843	Subarray start row	1	1
Pointing Roll	351.986299	352.1645058866907	Subarray row count	512	512
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)	-184.032523	-184.0277655517795			
SIM translation stage offset (mm)	-6.1	-6.104757031228274			
Phase constraints	Y	Y			
Phase period	8.964416	8.964416			
Phase epoch	50132.313800	50132.313800			
Phase start	0.970000	0.970000			
Phase end	0.080000	0.080000			
Phase start error	0.010000	0.010000			
Phase end error	0.010000	0.010000			
Observation start time	98315055.184000	98313617.440394			
Observation start date	2001-02-11T21:43:11	2001-02-11T21:20:17			
Observation end time	98400055.184000	98401021.243761			
Observation end date	2001-02-12T21:19:51	2001-02-12T21:37:01			
Read mode	TIMED	TIMED			

2.3 Aspect



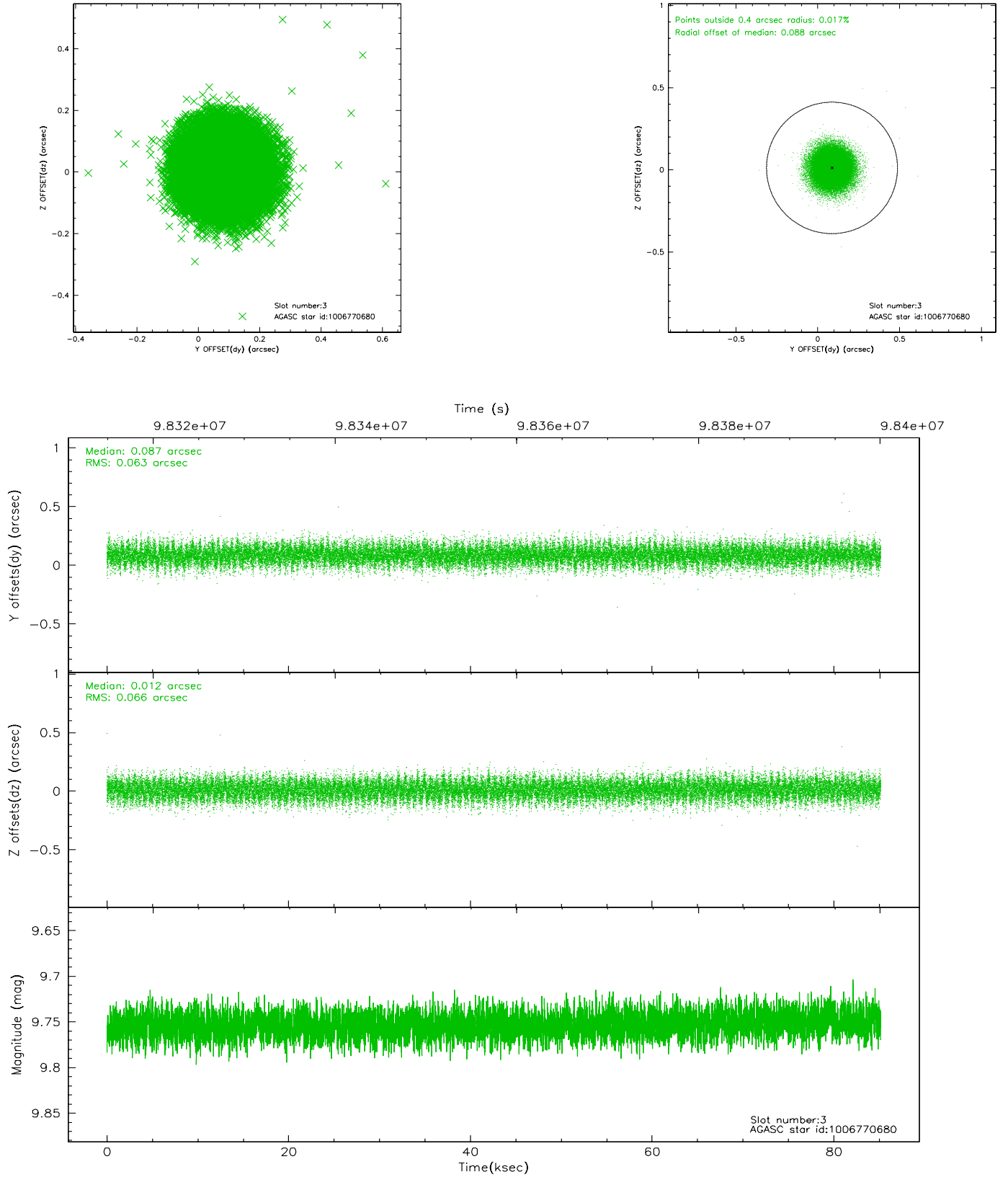


Slot Statistics

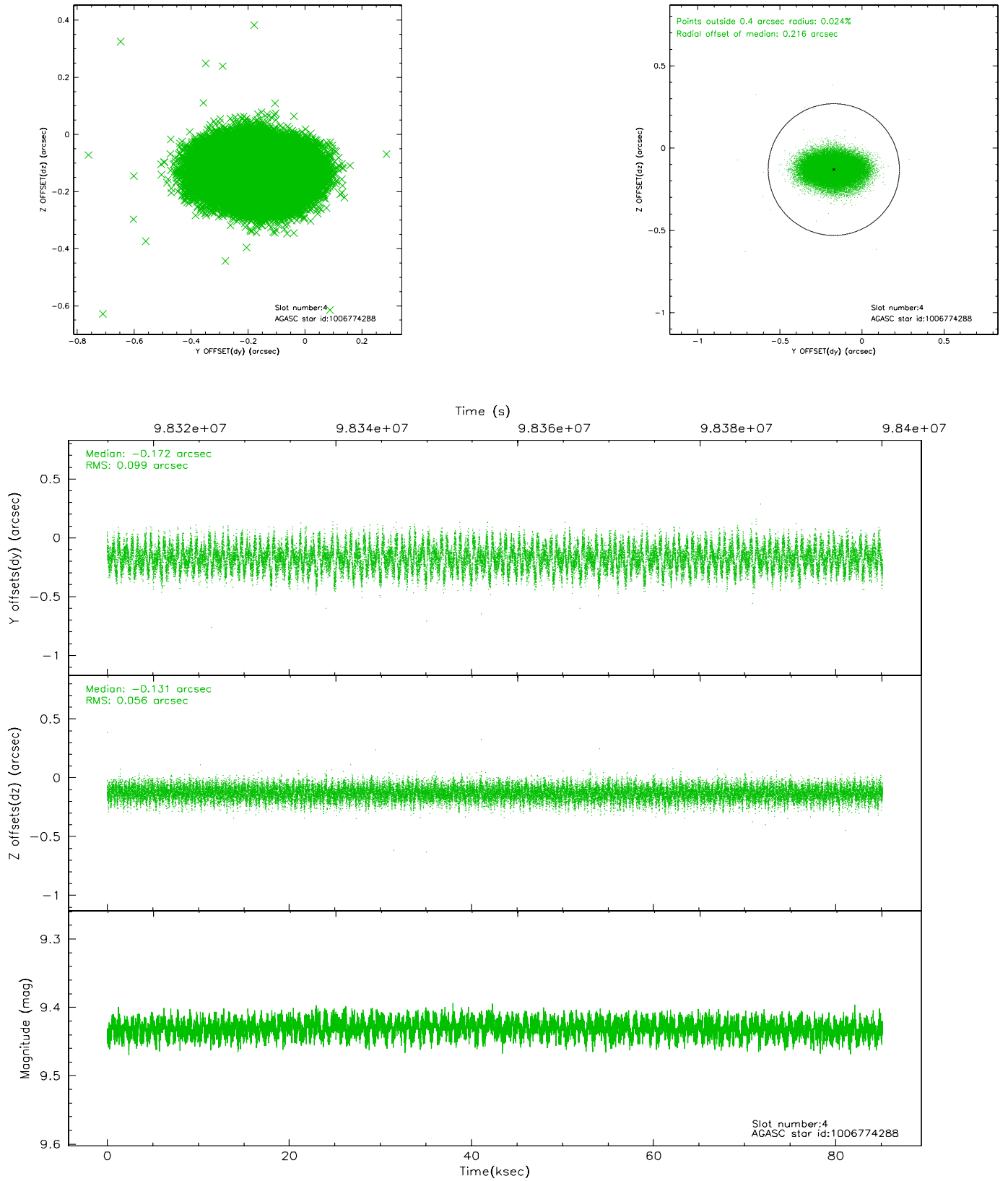
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	20772	-0.029	-0.059	0.007	0.011	0.000000	0.000000	-756.33	-1852.77
1	FID	ACIS-S-4	7.19	20768	-0.032	0.030	0.006	0.016	0.000000	0.000000	2157.00	55.83
2	FID	ACIS-S-5	7.23	20771	0.030	0.037	0.007	0.013	0.000000	0.000000	-1809.19	49.47
3	GUIDE	1006770680	9.75	41335	0.087	0.012	0.097	0.156	136.066277	-40.835914	1641.56	-747.01
4	GUIDE	1006774288	9.43	41534	-0.172	-0.131	0.122	0.195	136.151715	-40.161117	1550.80	1691.70
5	GUIDE	1006784024	9.65	41517	0.055	-0.086	0.112	0.185	135.140125	-40.518811	-1020.68	33.59
6	GUIDE	1006646160	10.41	41424	0.045	0.163	0.132	0.216	134.960399	-40.683654	-1421.04	-624.44
7	GUIDE	1006767392	9.85	41520	-0.010	0.045	0.118	0.188	135.128758	-40.847245	-881.67	-1140.91

2.4 Star Slots

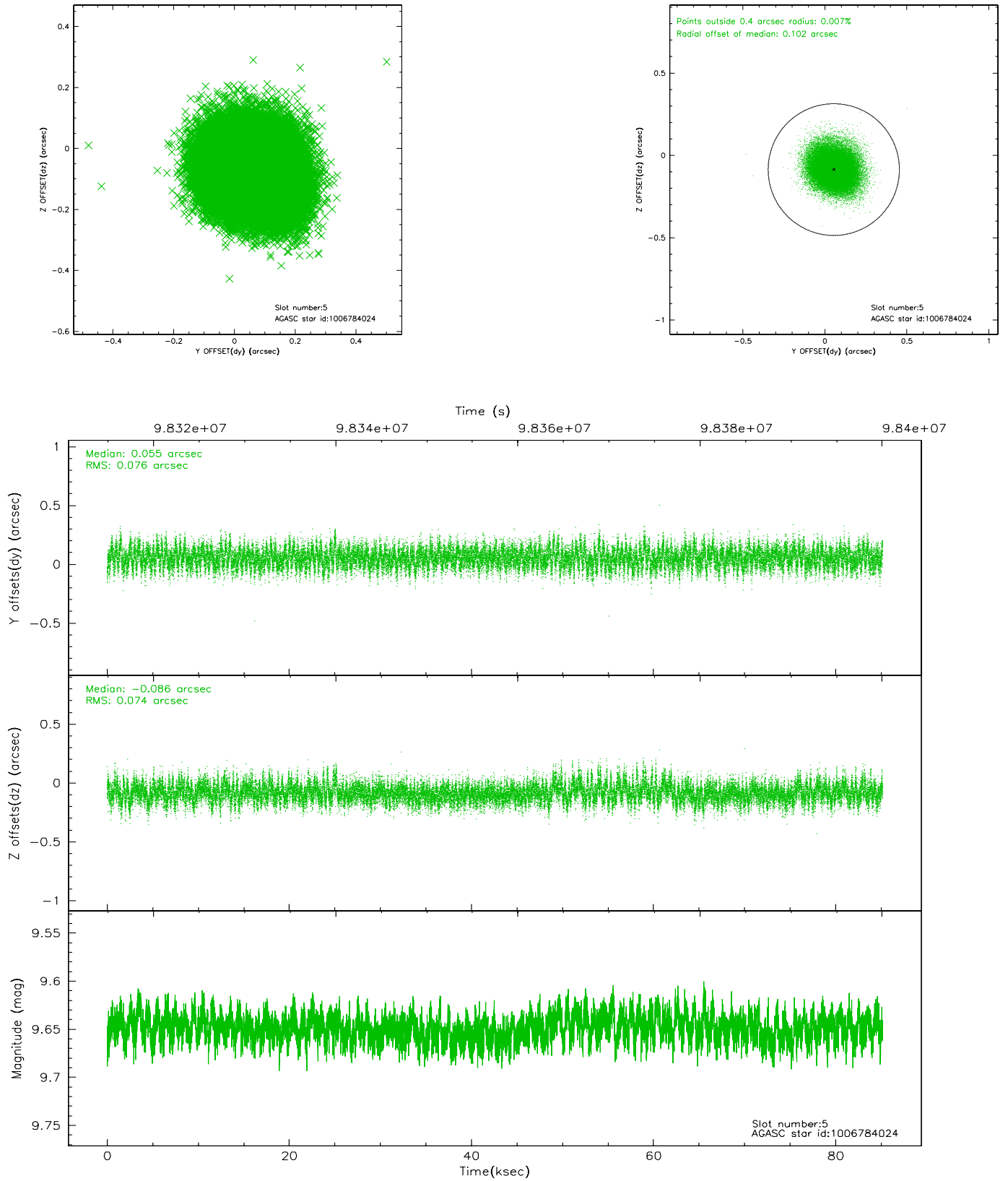
2.4.1 Slot 3



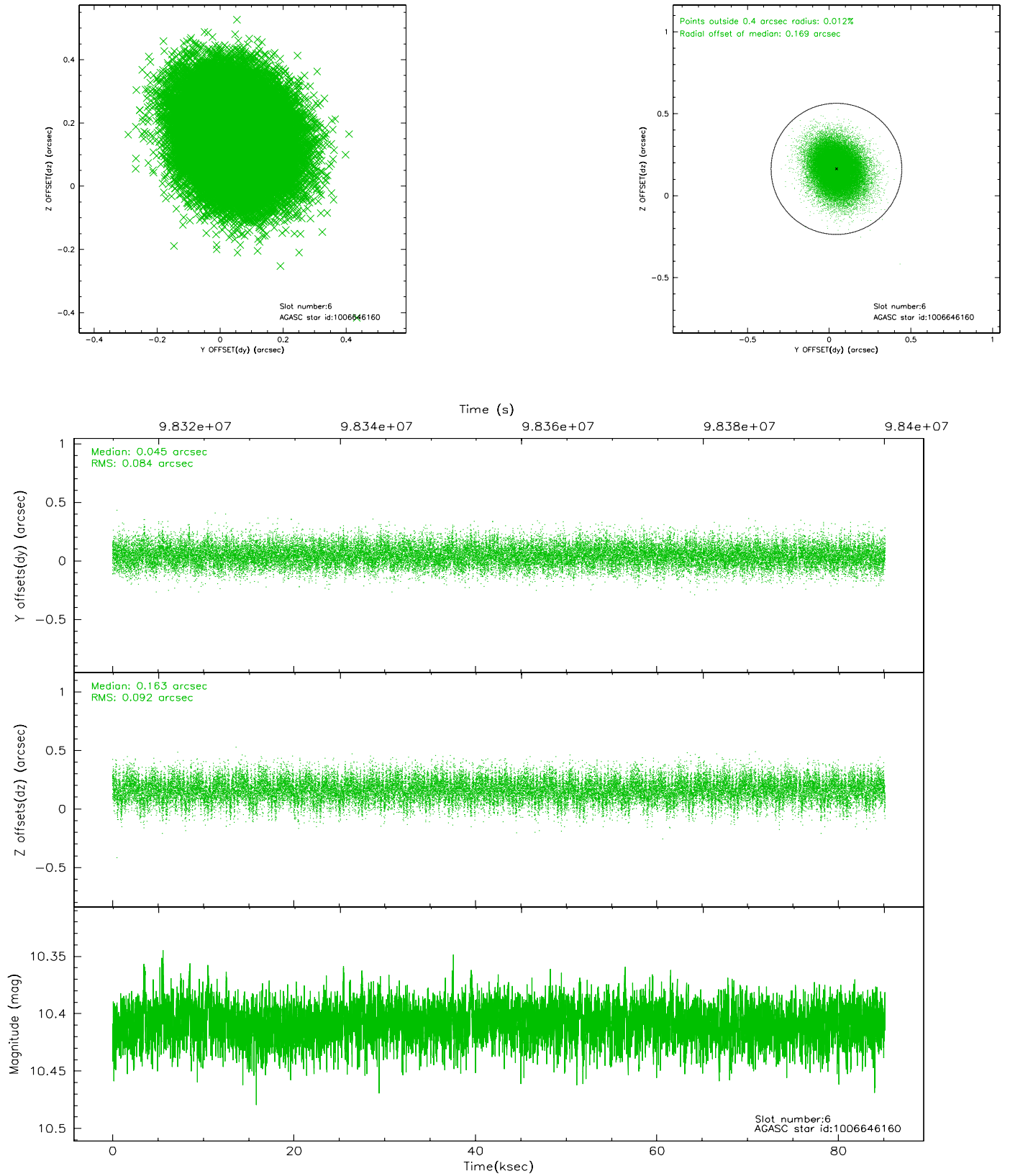
2.4.2 Slot 4



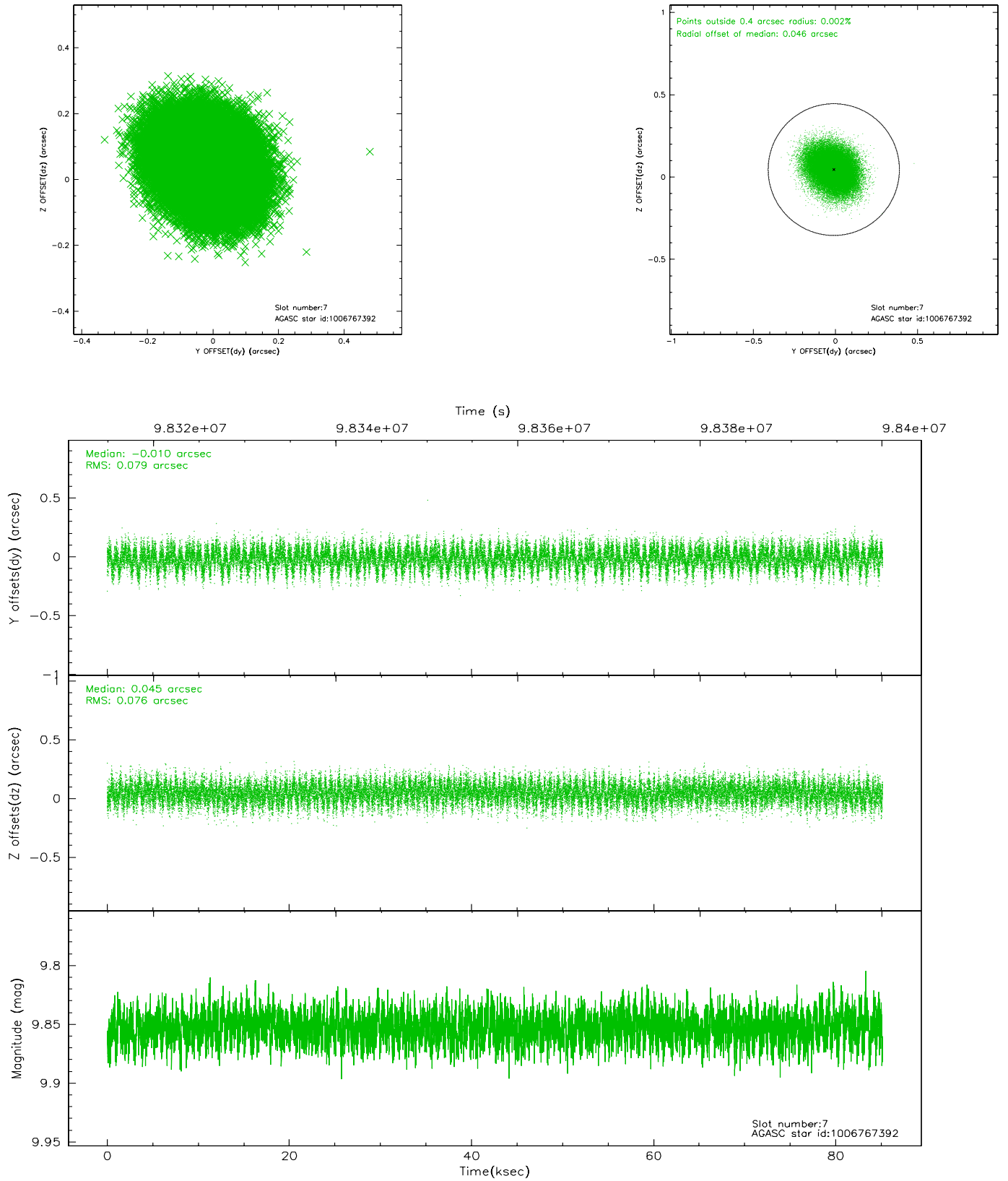
2.4.3 Slot 5



2.4.4 Slot 6

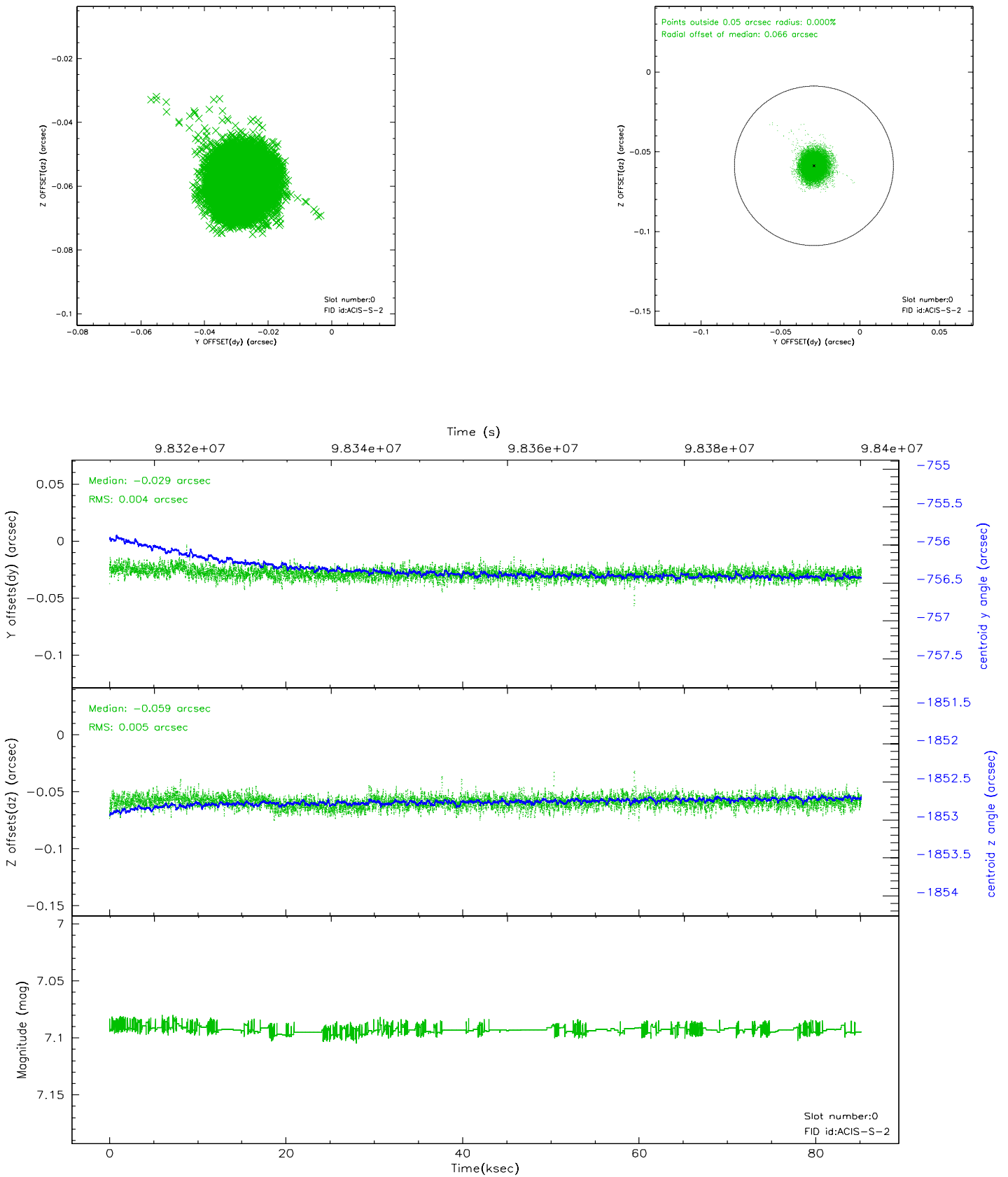


2.4.5 Slot 7

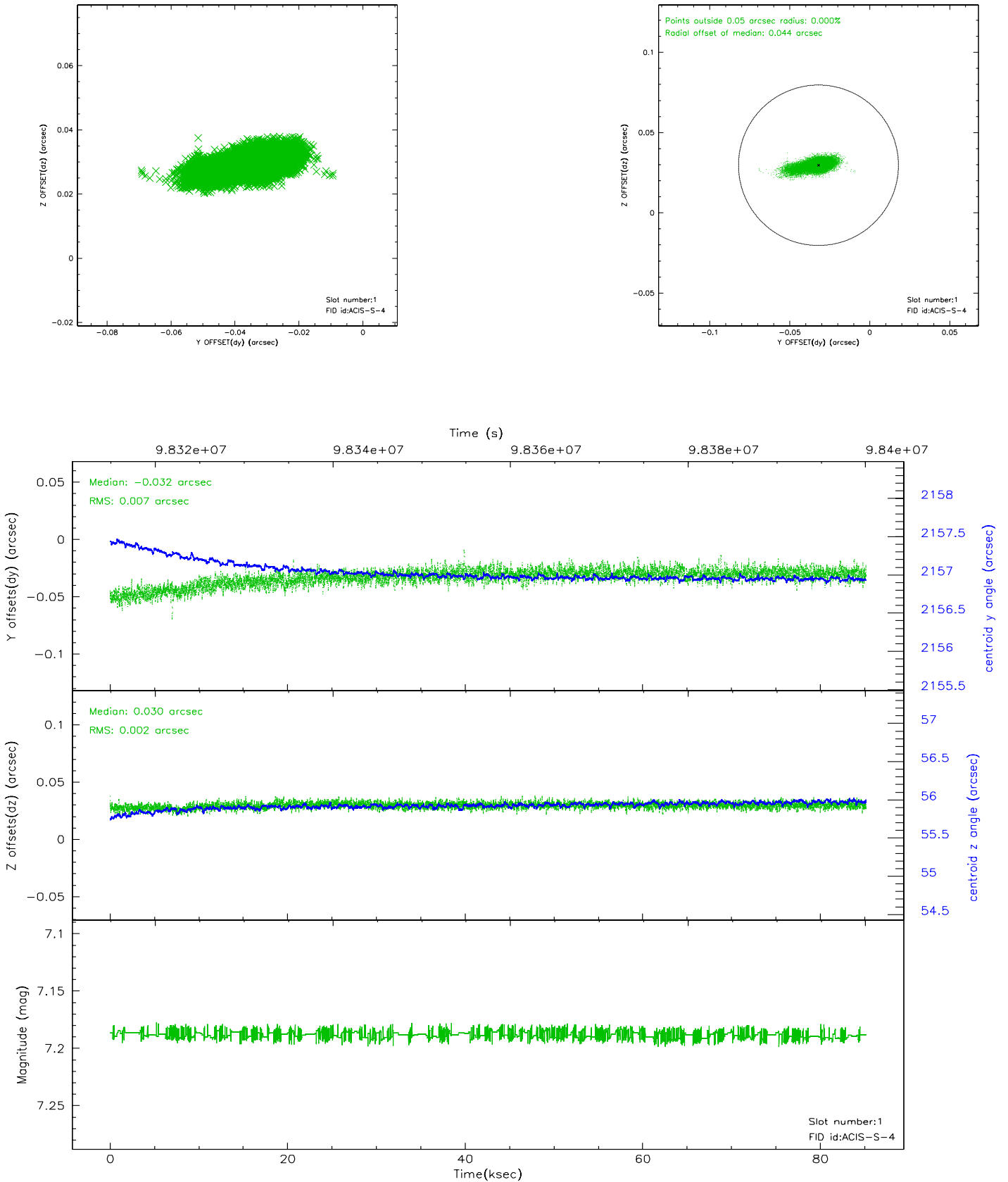


2.5 FID Slots

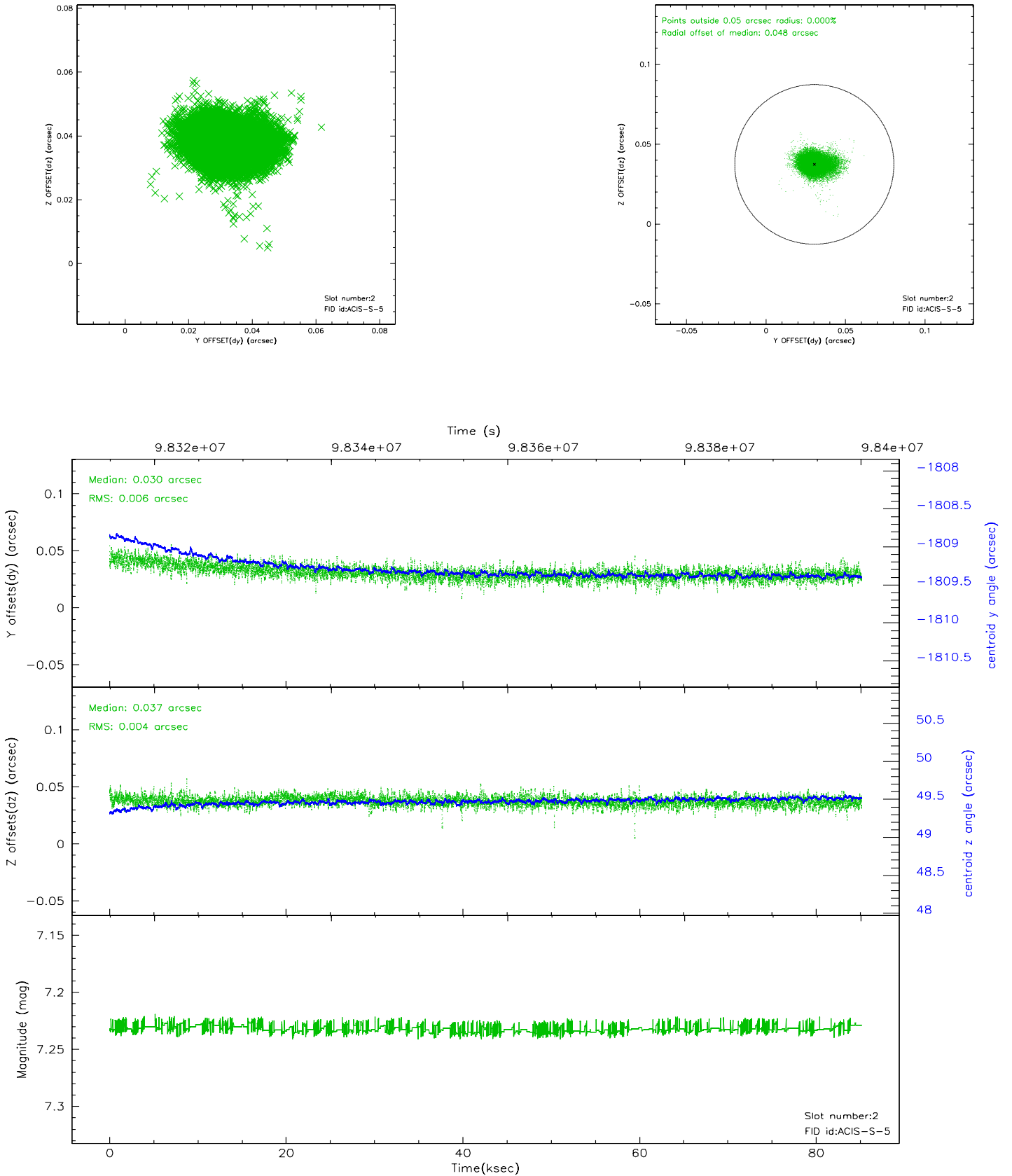
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

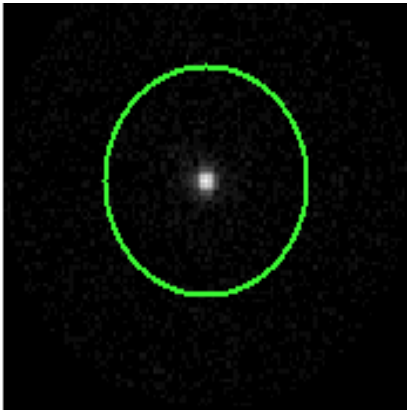


3 Gratings

3.1 HEG Arm



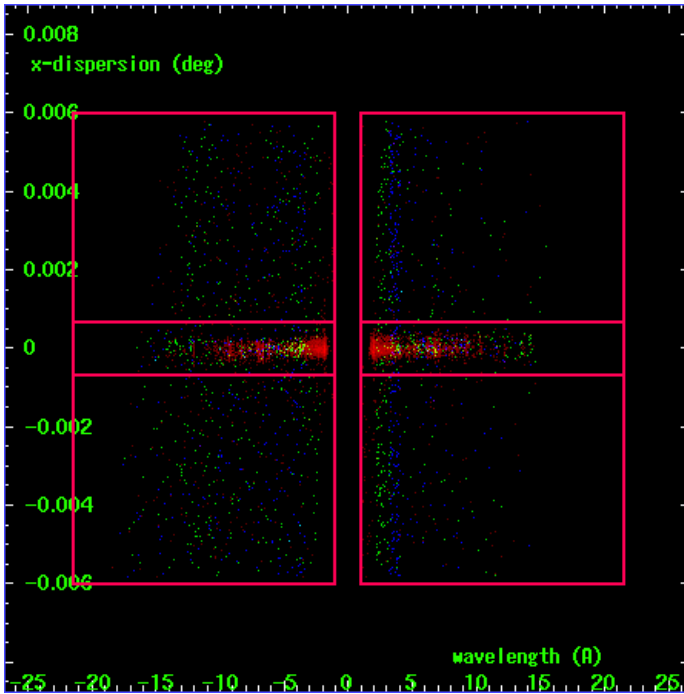
HEG Order Sort 123



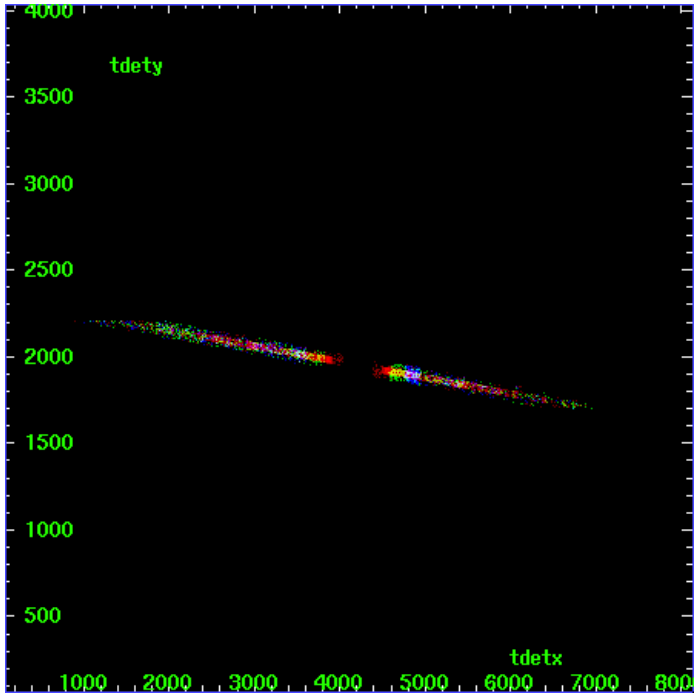
HEG Zero Order



HEG Order Sort ALL

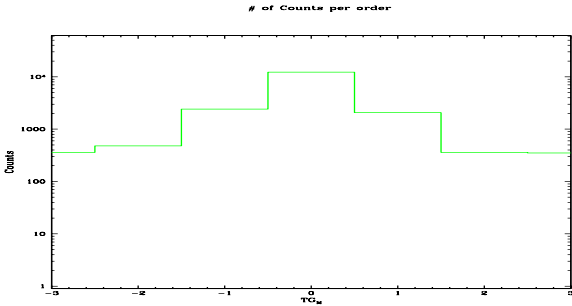


Spot Image HEG

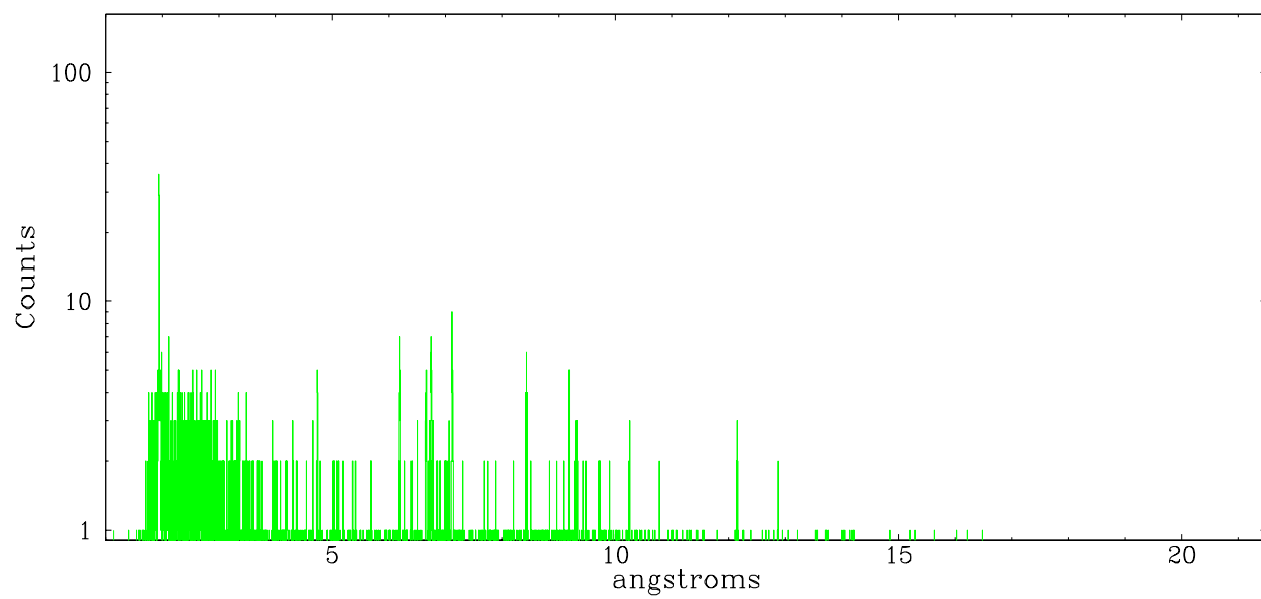


Full Detector HEG

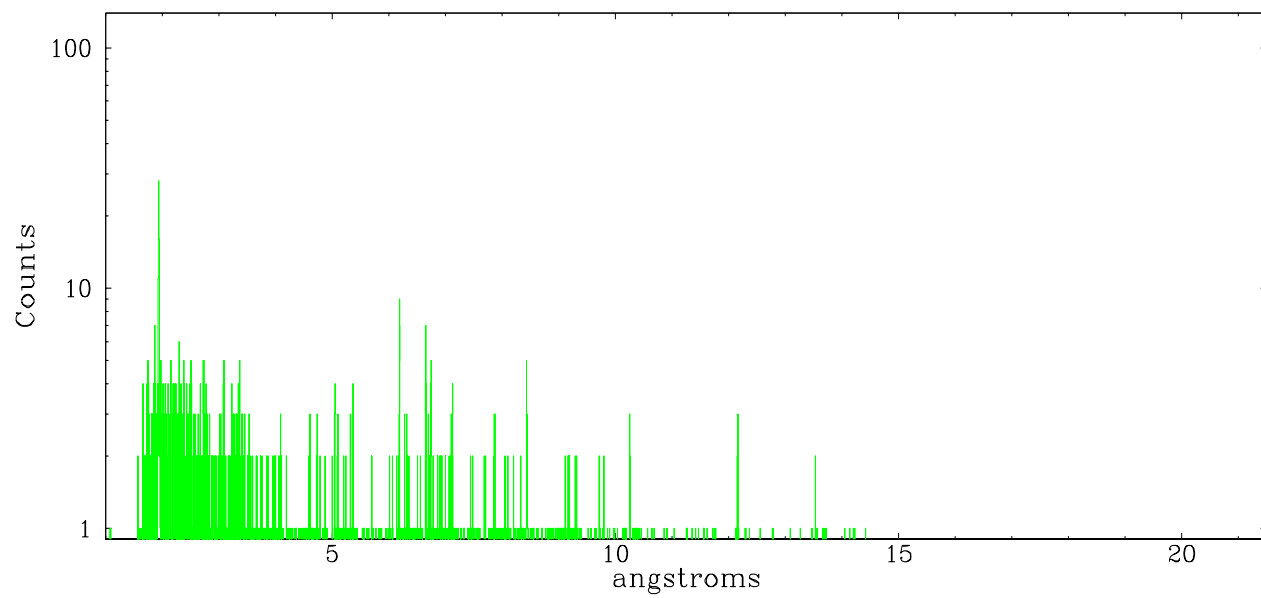
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	360	478	2425	12225	2062	361	351



heg order -1



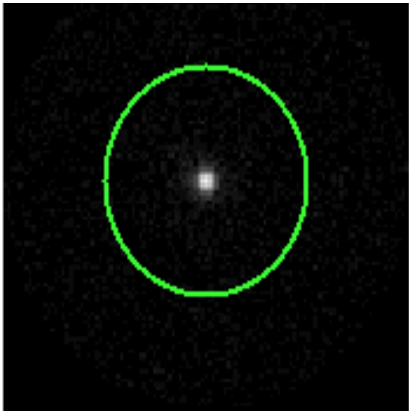
heg order +1



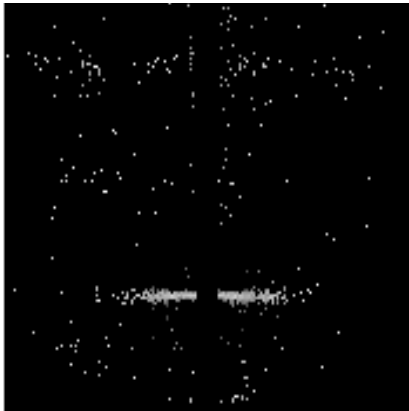
3.2 MEG Arm



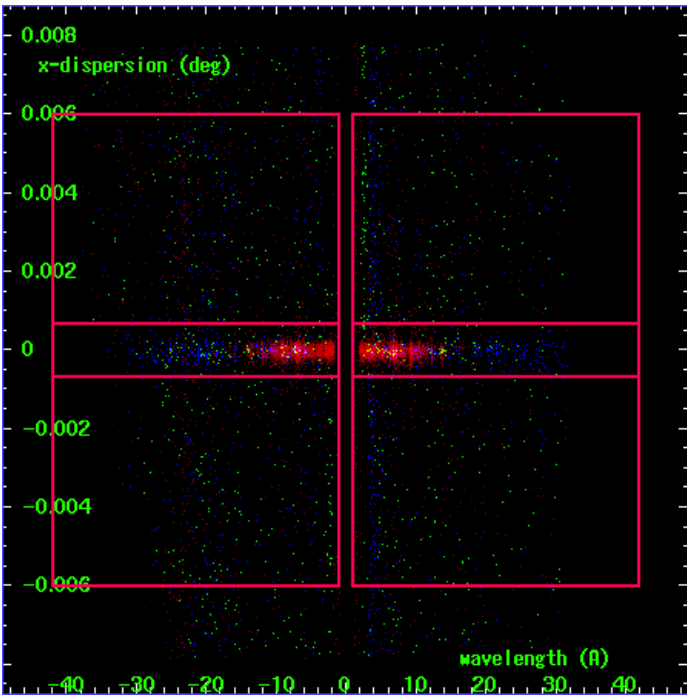
MEG Order Sort 123



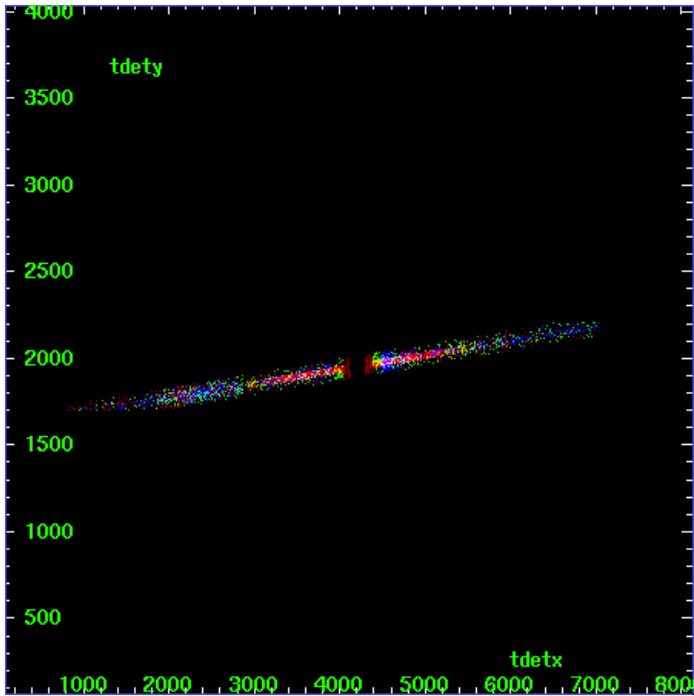
MEG Zero Order



MEG Order Sort ALL

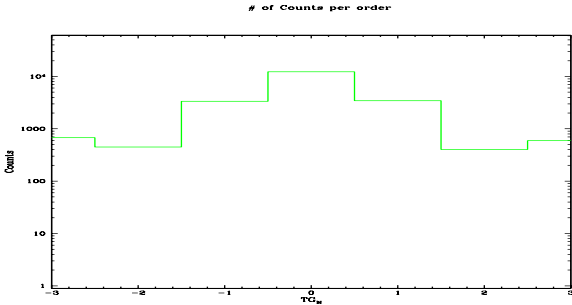


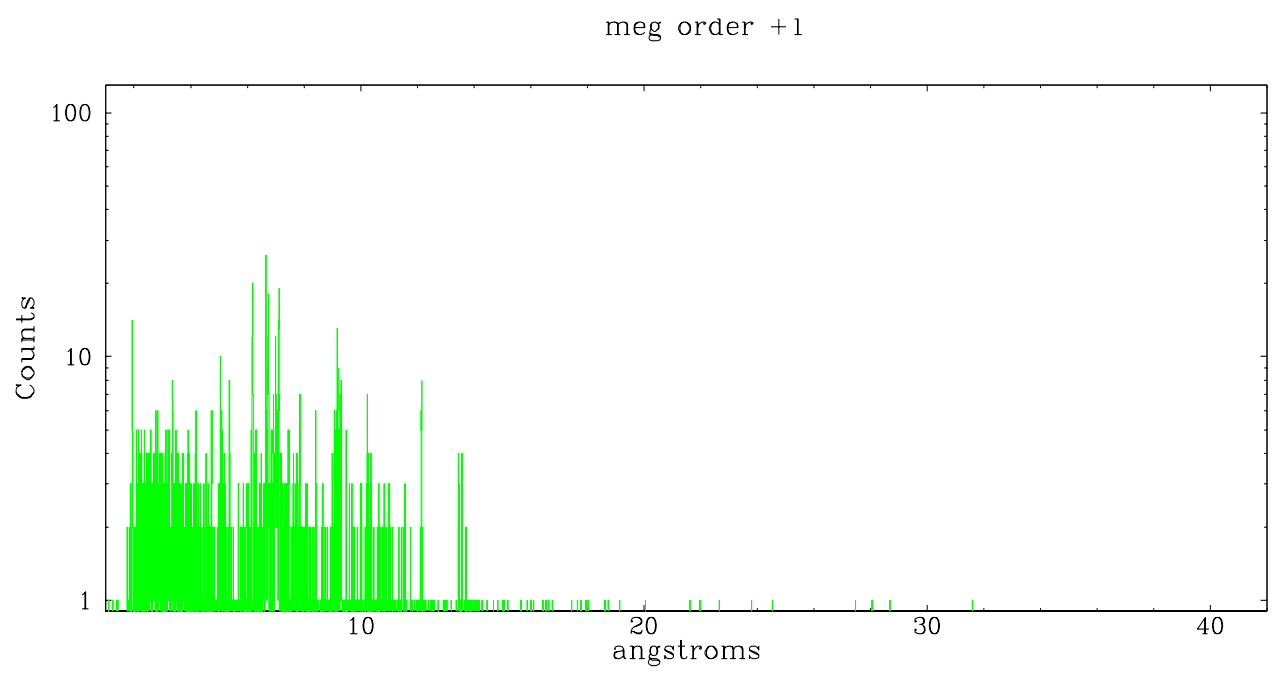
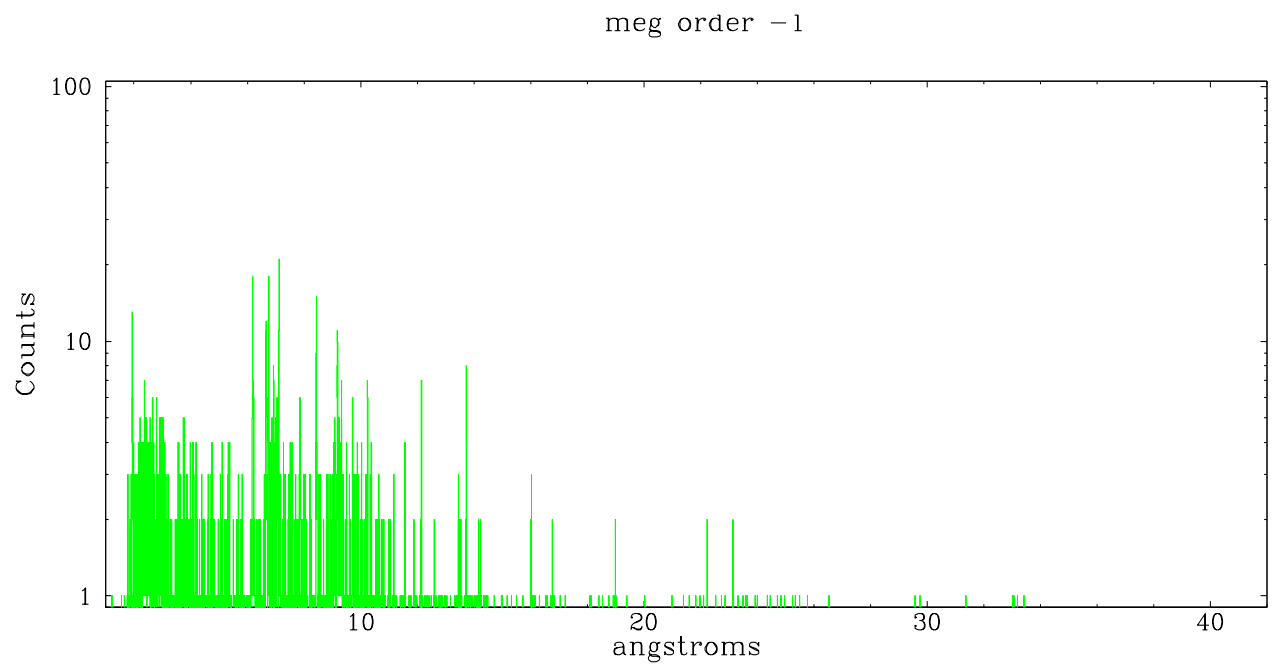
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	679	450	3345	12225	3432	402	594





A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.11.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	85.156

A.2 Comments

Phase constraint OK per earlier V&V report.