

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2091 - L2 Version 001
Chandra X-Ray Center

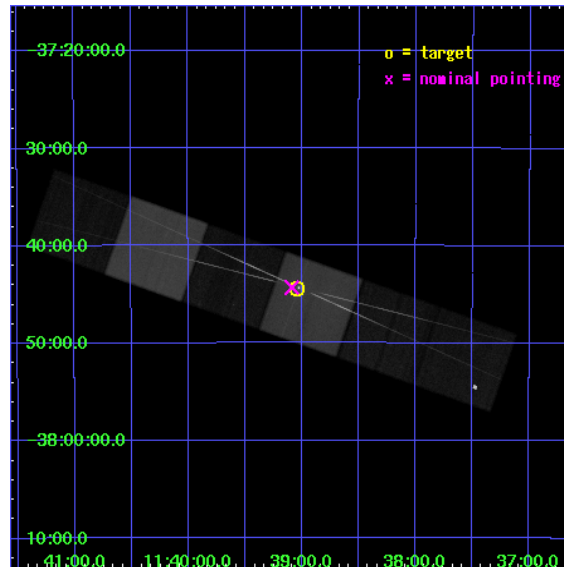
L2 Processing Date : Nov 13 2006

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1 Front

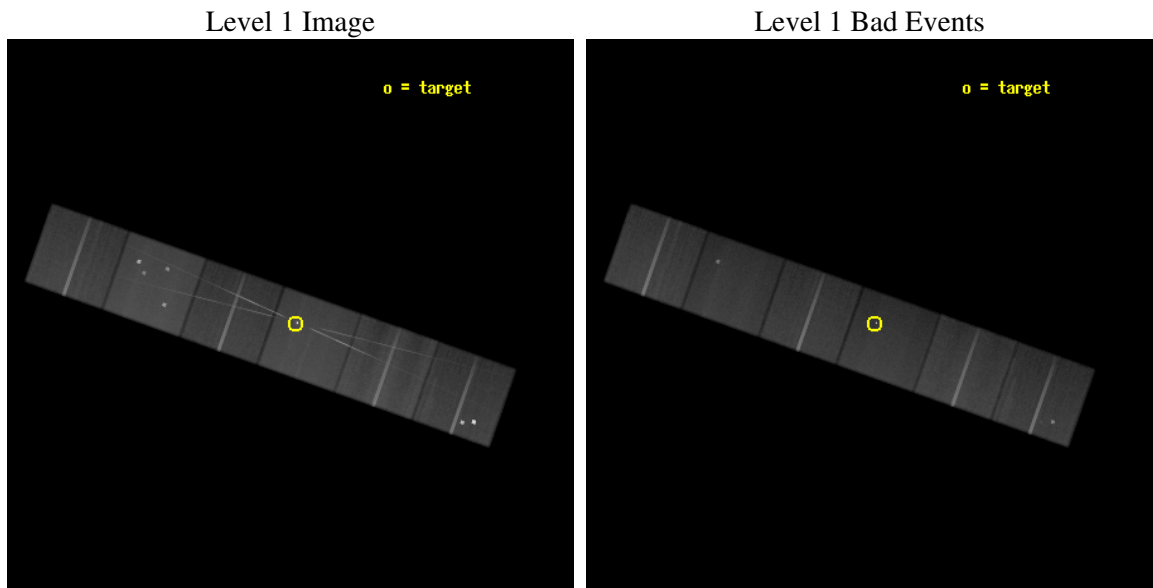
seq_num	700281
obs_id	2091
title	DETERMINING THE NATURE OF THE VARIABLE ABSORPTION IN NGC 3783 WITH CHANDRA/HST
observer	Dr. Ian George
object	NGC 3783
dtcycle	0
cycle	P
ra_targ	174.76
dec_targ	-37.74
ra_nom	174.77225641719
dec_nom	-37.738457564173
roll_nom	19.386299889245
revision	2
ontime	171017.60015927
livetime	168852.07233162
ontime4	171014.35918905
ontime5	171017.60015927
ontime6	171014.35918902
ontime7	171017.60015927
ontime8	171017.60015927
ontime9	171017.60015927
l2events	1840947



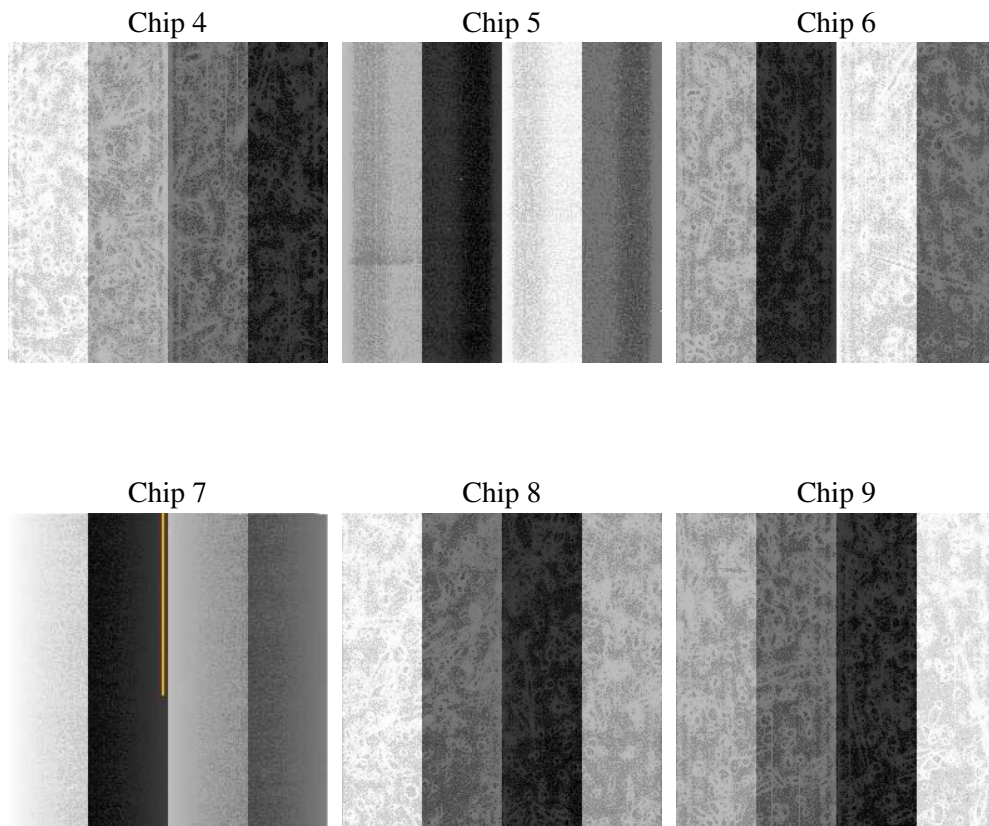
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-11-09T16:00:50
revision	2

sched_exp_time	170870.955000
ontime	171128.22293633
ontime4	171124.98196611
ontime5	171128.22296627
ontime6	171124.98196608
ontime7	171128.22293633
ontime8	171131.46395642
ontime9	171131.46395642
l1events	8261462

2.1.4 Events

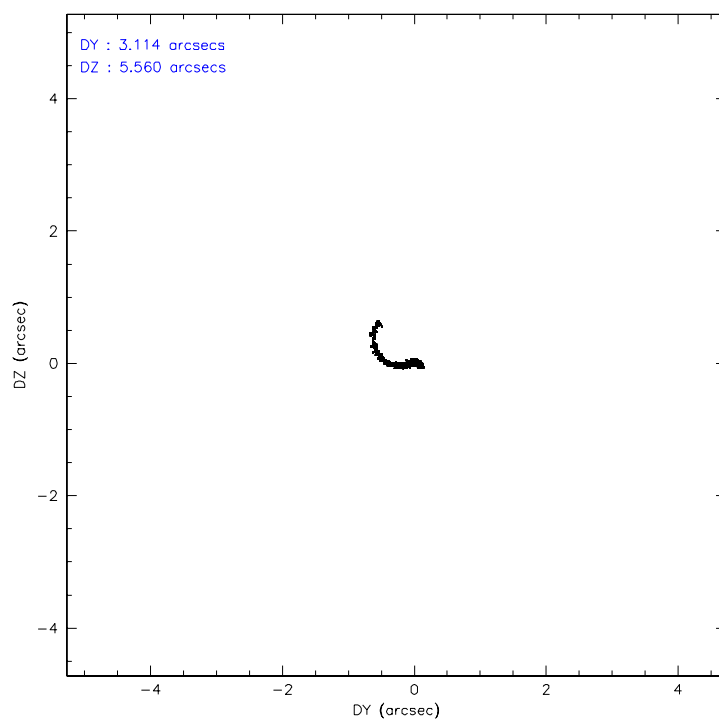
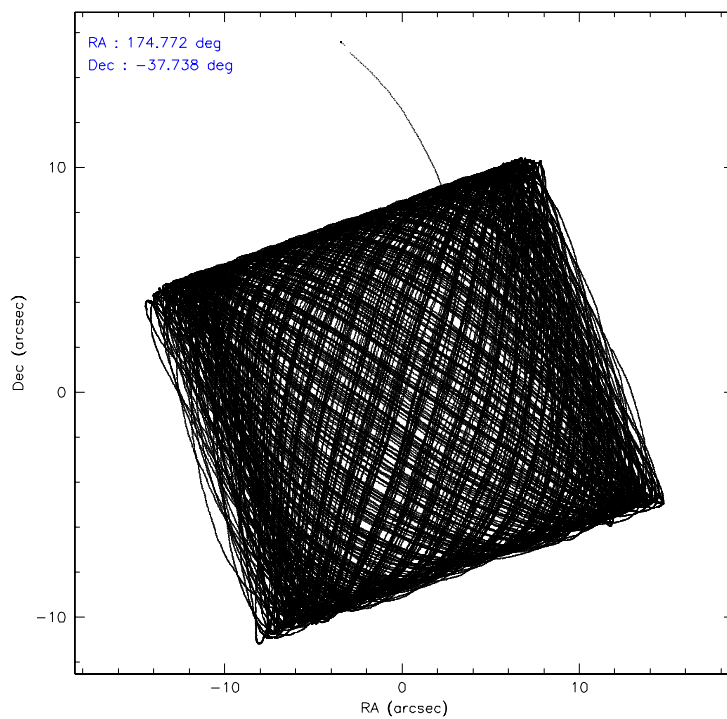
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	1222801	1585762	1189772	1525320	1432002	1305805
rejected events	1091443	867006	1002832	891527	1126601	979073
rejected %	89%	54%	84%	58%	78%	74%

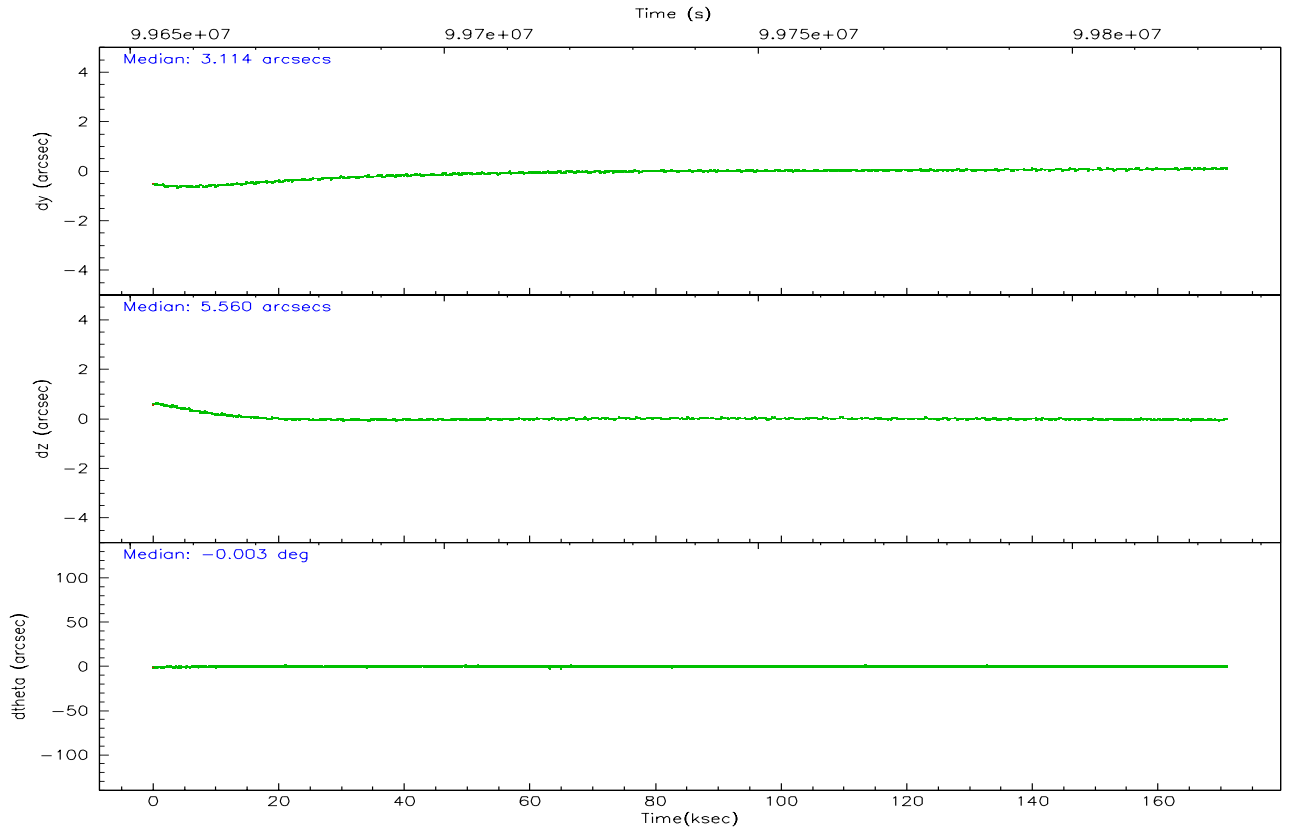
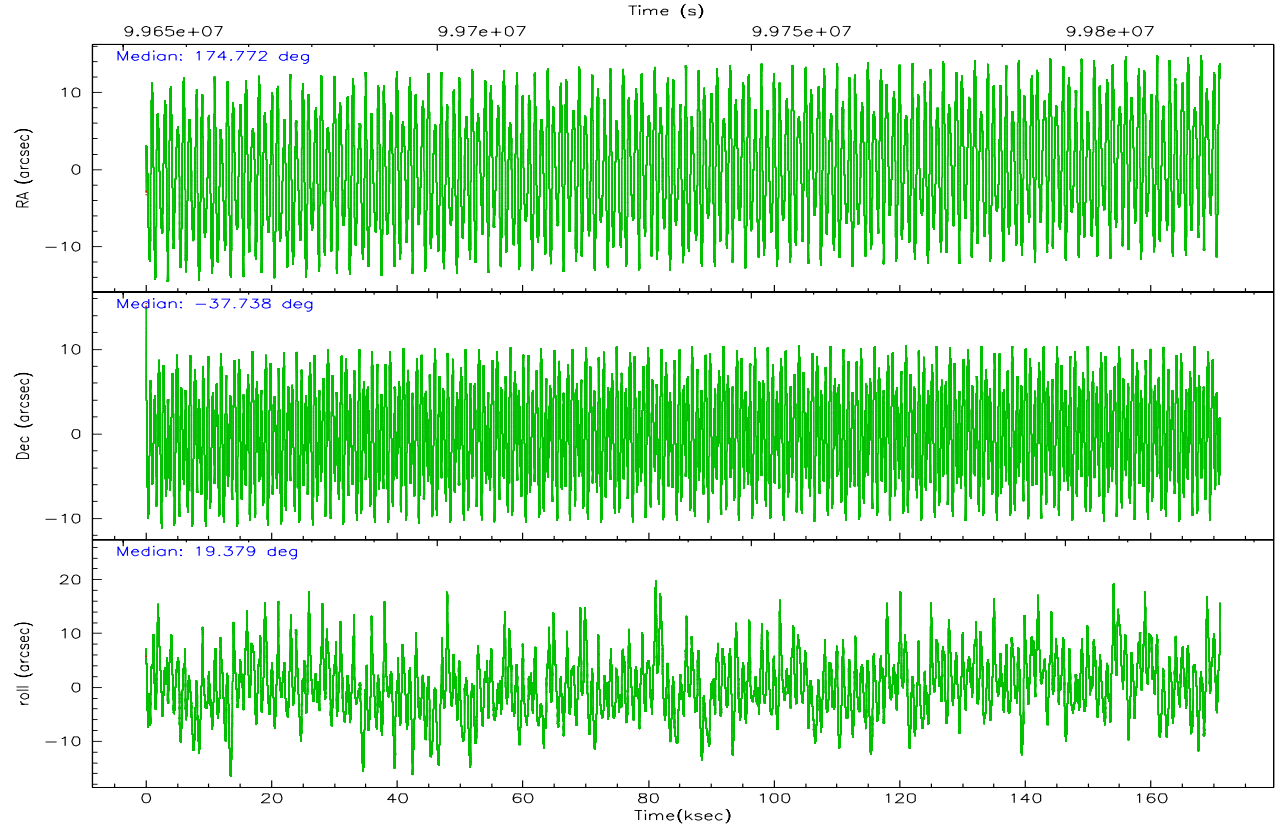
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	53427	77888	98024	47276	110015	23064
	4%	4%	8%	3%	7%	17%
grade 1 events	600	1160	724	1777	931	6346
	0%	0%	0%	0%	0%	0%
grade 2 events	31288	226897	32323	154884	62818	26742
	2%	14%	2%	10%	4%	2%
grade 3 events	12406	16396	14990	38016	30811	13481
	1%	1%	1%	2%	2%	1%
grade 4 events	11682	15399	14953	36873	28713	29525
	0%	0%	1%	2%	2%	2%
grade 5 events	39592	78987	46795	102187	59587	50286
	3%	4%	3%	6%	4%	3%
grade 6 events	22646	382603	26763	357163	73215	26557
	1%	24%	2%	23%	5%	2%
grade 7 events	1051160	786432	955200	787144	1065912	92221
	85%	49%	80%	51%	74%	70%

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	174.750010	174.7722564171883	Subarray requested	NONE	NONE
Pointing Dec	-37.759345	-37.73845756417334	Alternating exposures requested	N	N
Pointing Roll	19.216057	19.38629988924498	Primary exposure time	0.000000	3.2
Window start time	99612440.184000	99612440.184000			
Window stop time	99878464.184000	99878464.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	99653799.184000	99652671.342034			
Observation start date	2001-02-27T09:35:35	2001-02-27T09:17:51			
Observation end time	99824670.184000	99824985.123686			
Observation end date	2001-03-01T09:03:26	2001-03-01T09:09:45			
Read mode	TIMED	TIMED			

2.3 Aspect



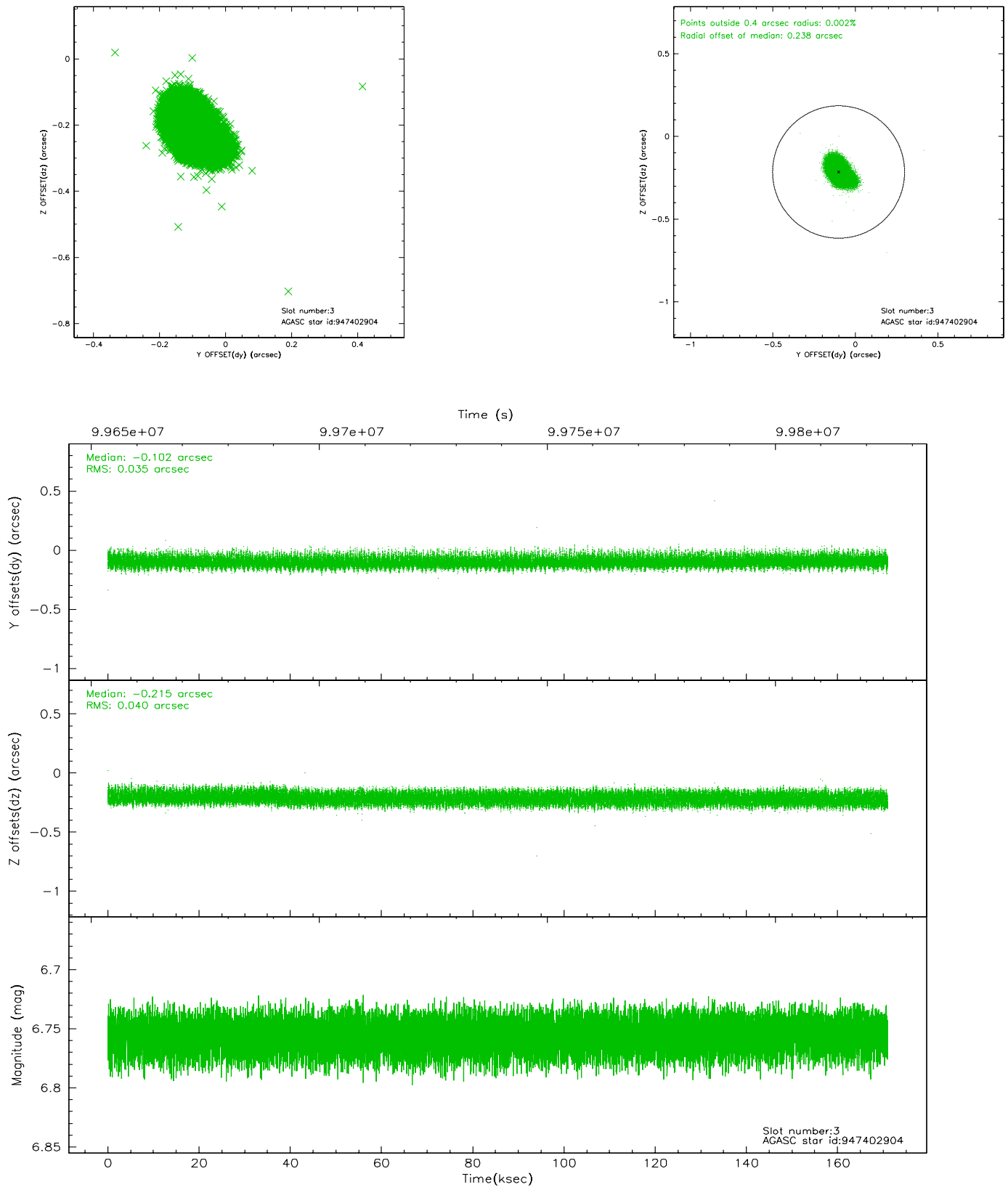


Slot Statistics

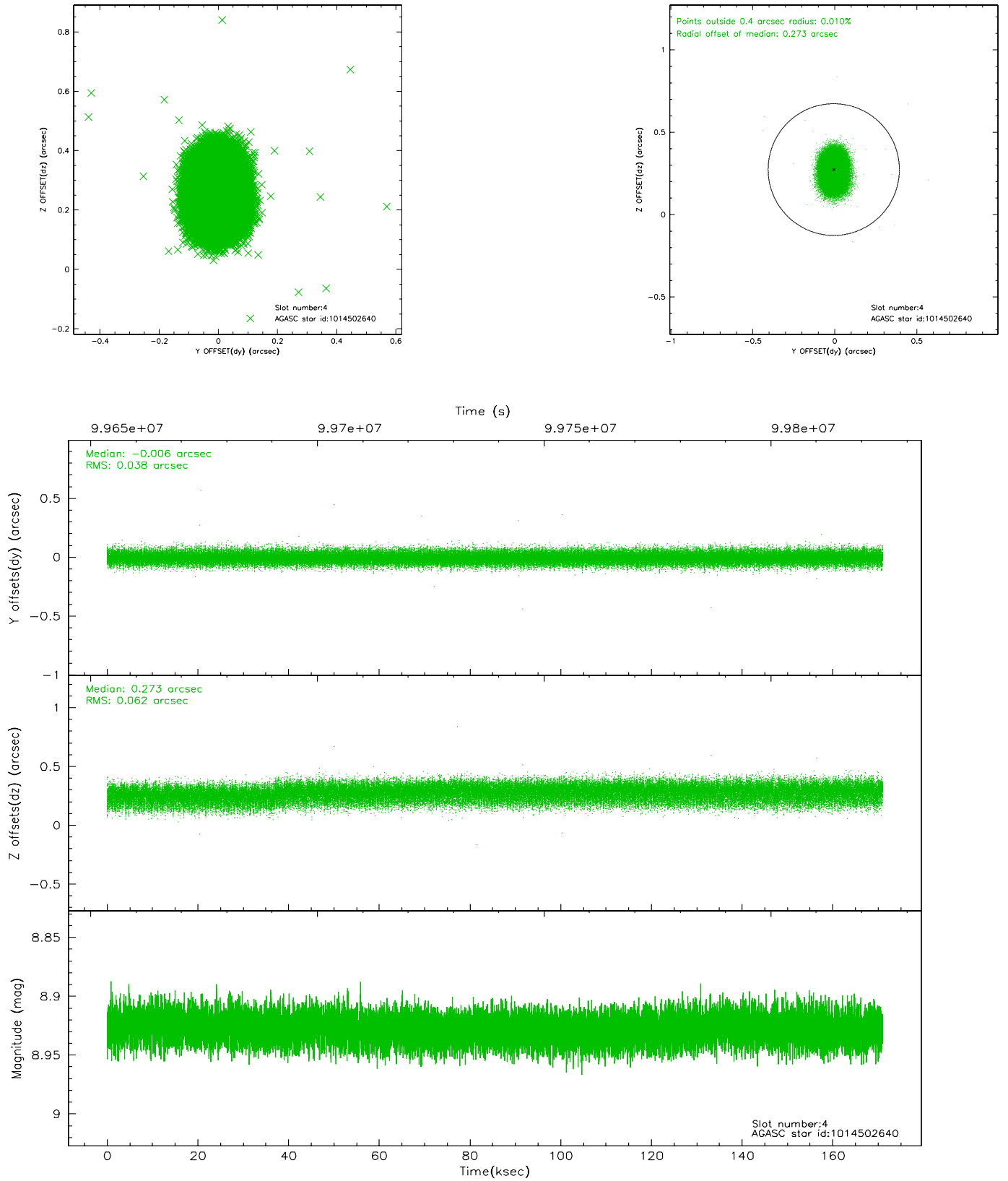
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	41710	-0.002	-0.023	0.009	0.022	0.000000	0.000000	-755.49	-1788.86
1	FID	ACIS-S-4	7.19	41710	-0.065	0.007	0.009	0.022	0.000000	0.000000	2157.80	119.73
2	FID	ACIS-S-5	7.24	41711	0.036	0.024	0.008	0.014	0.000000	0.000000	-1808.42	113.34
3	GUIDE	947402904	6.76	83423	-0.102	-0.215	0.057	0.092	174.169681	-37.237184	-953.89	2317.06
4	GUIDE	1014502640	8.93	83409	-0.006	0.273	0.076	0.127	174.596525	-38.477729	-1259.37	-2300.20
5	GUIDE	947388944	9.16	83319	0.106	-0.057	0.083	0.134	173.946026	-37.468256	-1827.59	1735.80
6	BAD	1014497968	9.98	82594	0.119	0.163	0.133	0.213	174.377296	-37.990619	-1272.96	-440.39
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

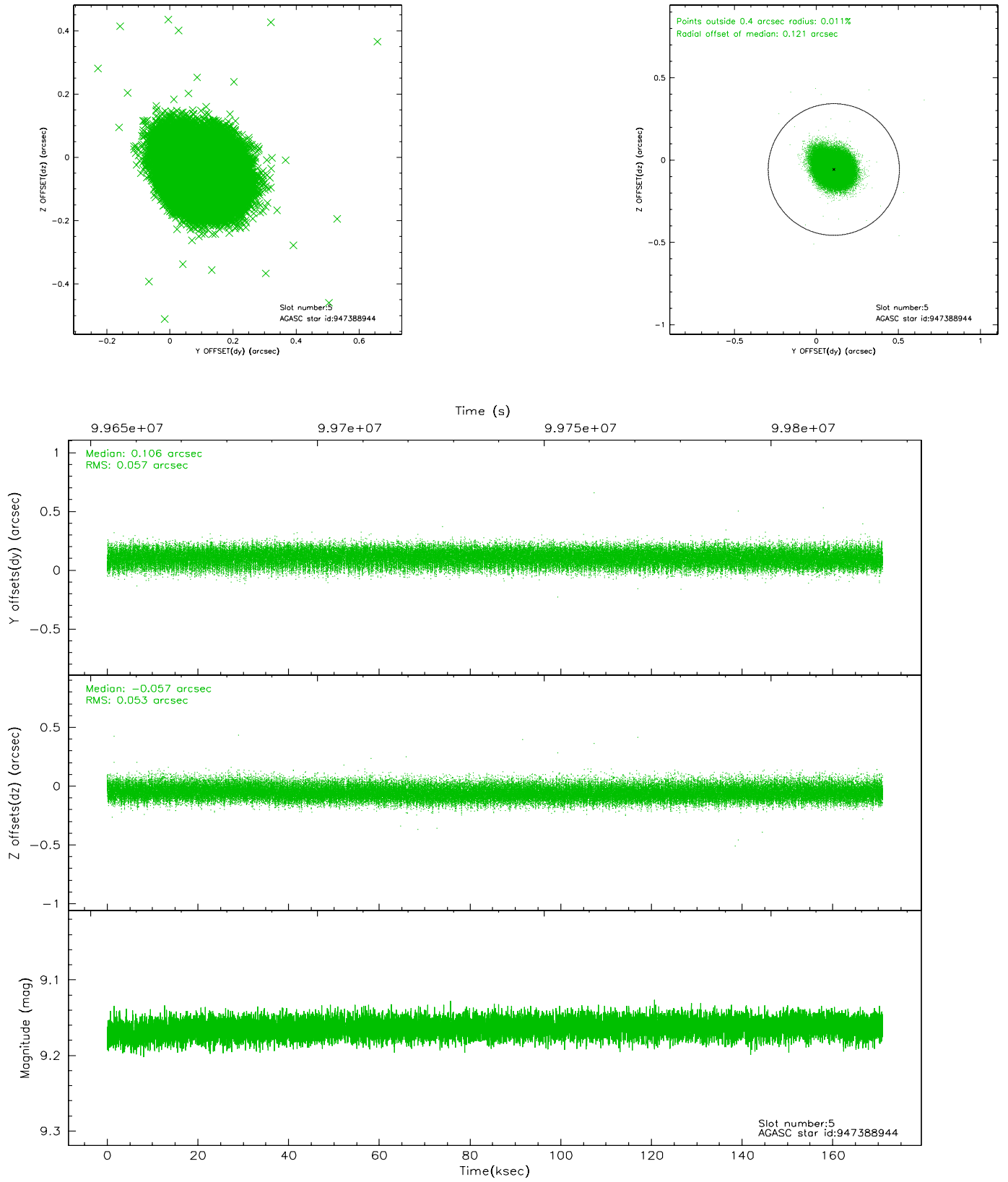
2.4.1 Slot 3



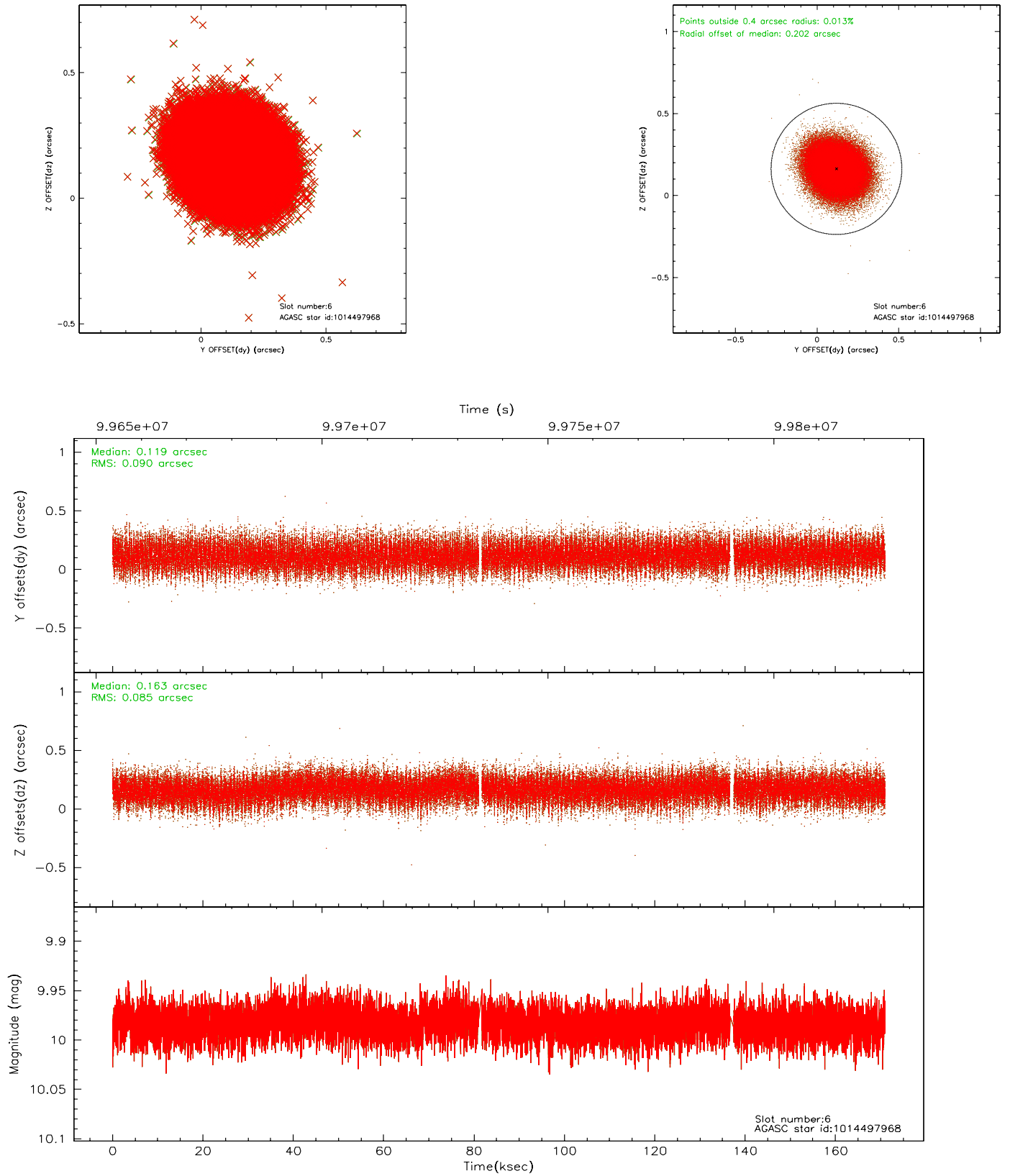
2.4.2 Slot 4



2.4.3 Slot 5

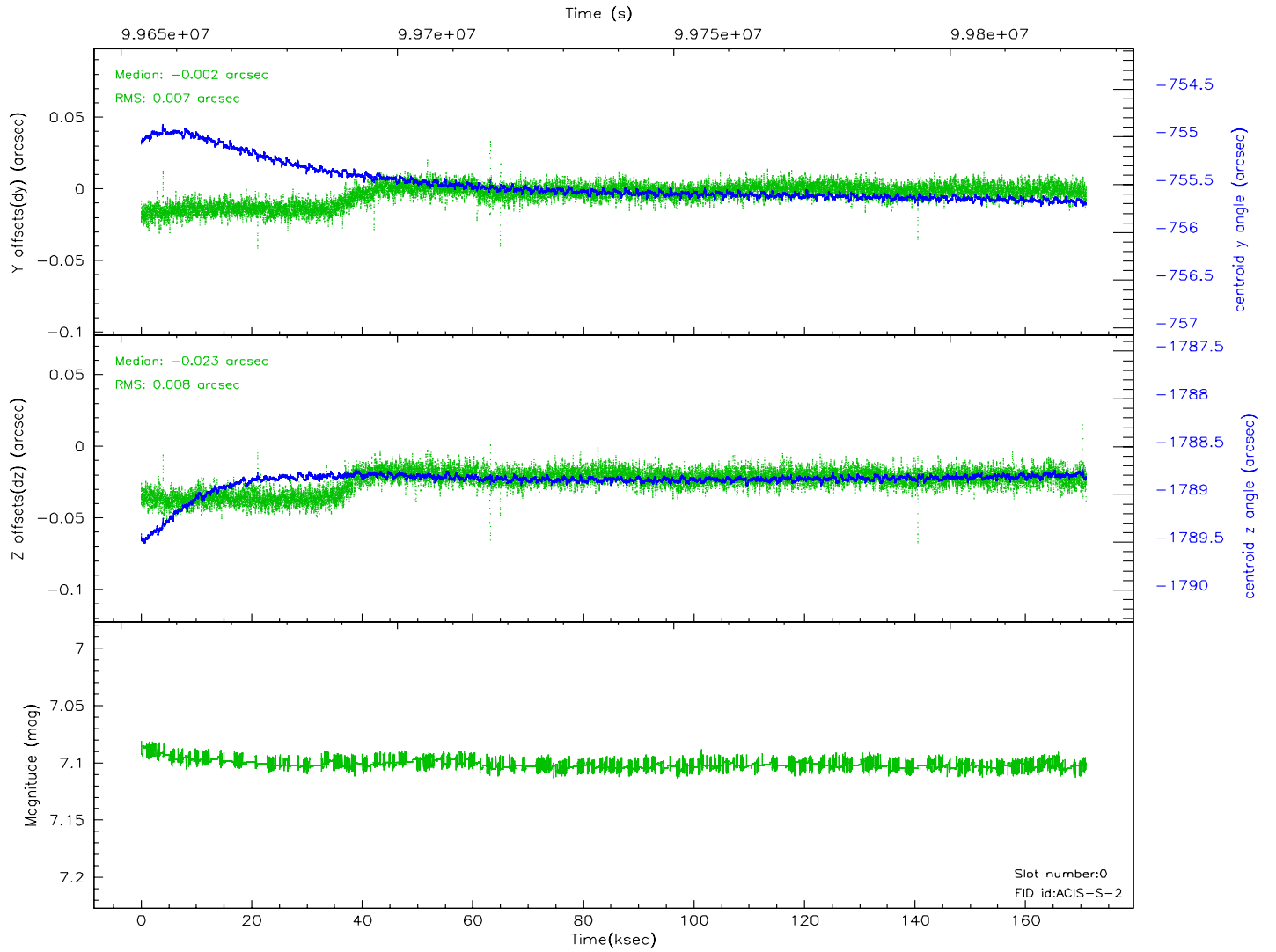
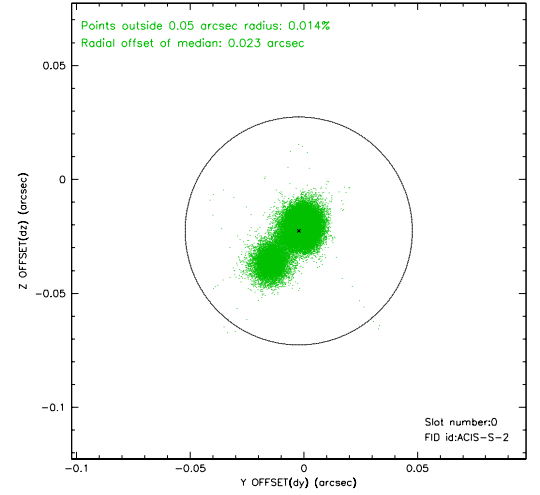
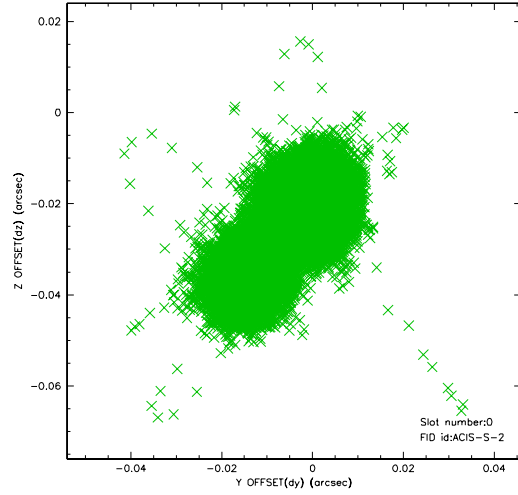


2.4.4 Slot 6

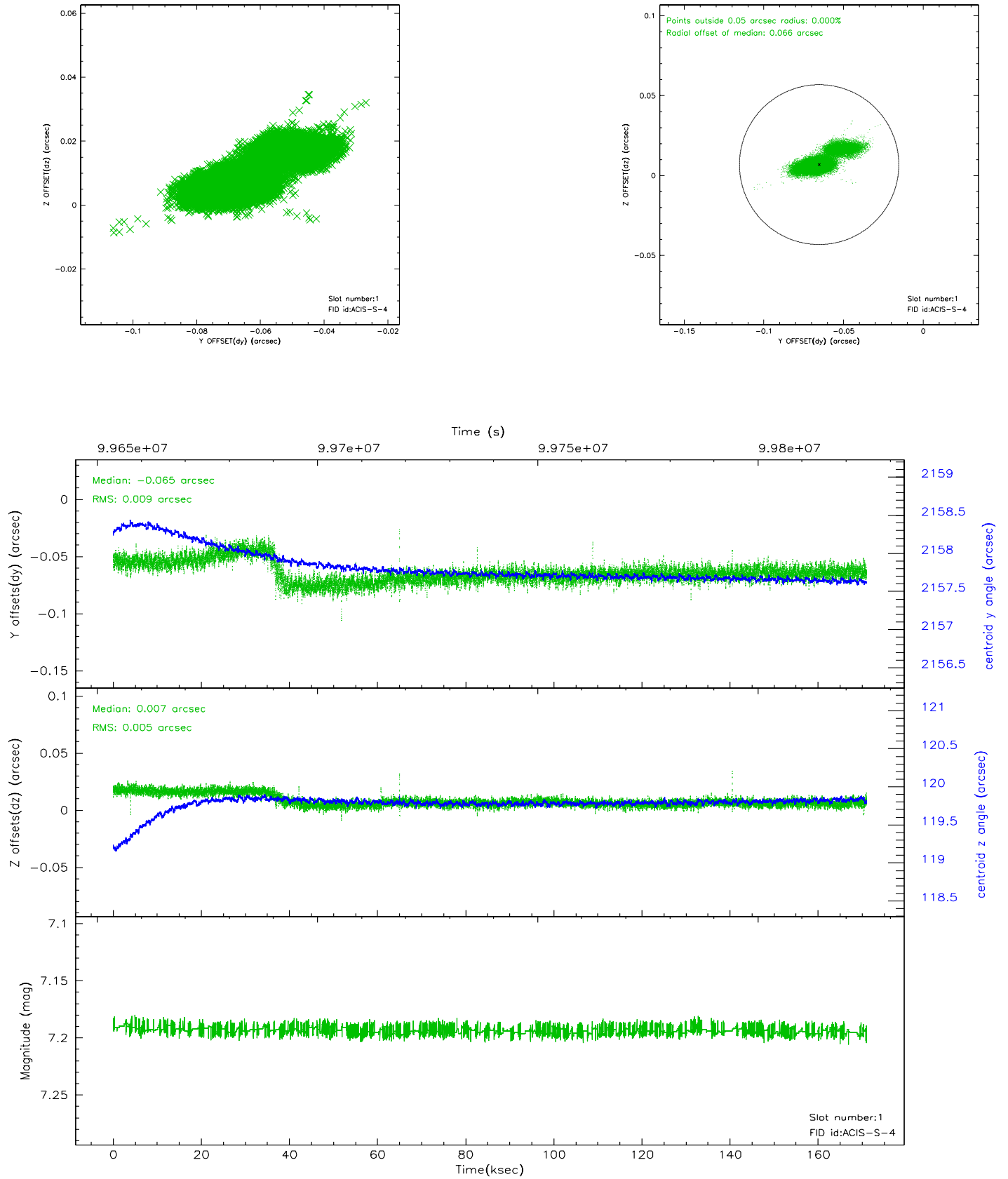


2.5 FID Slots

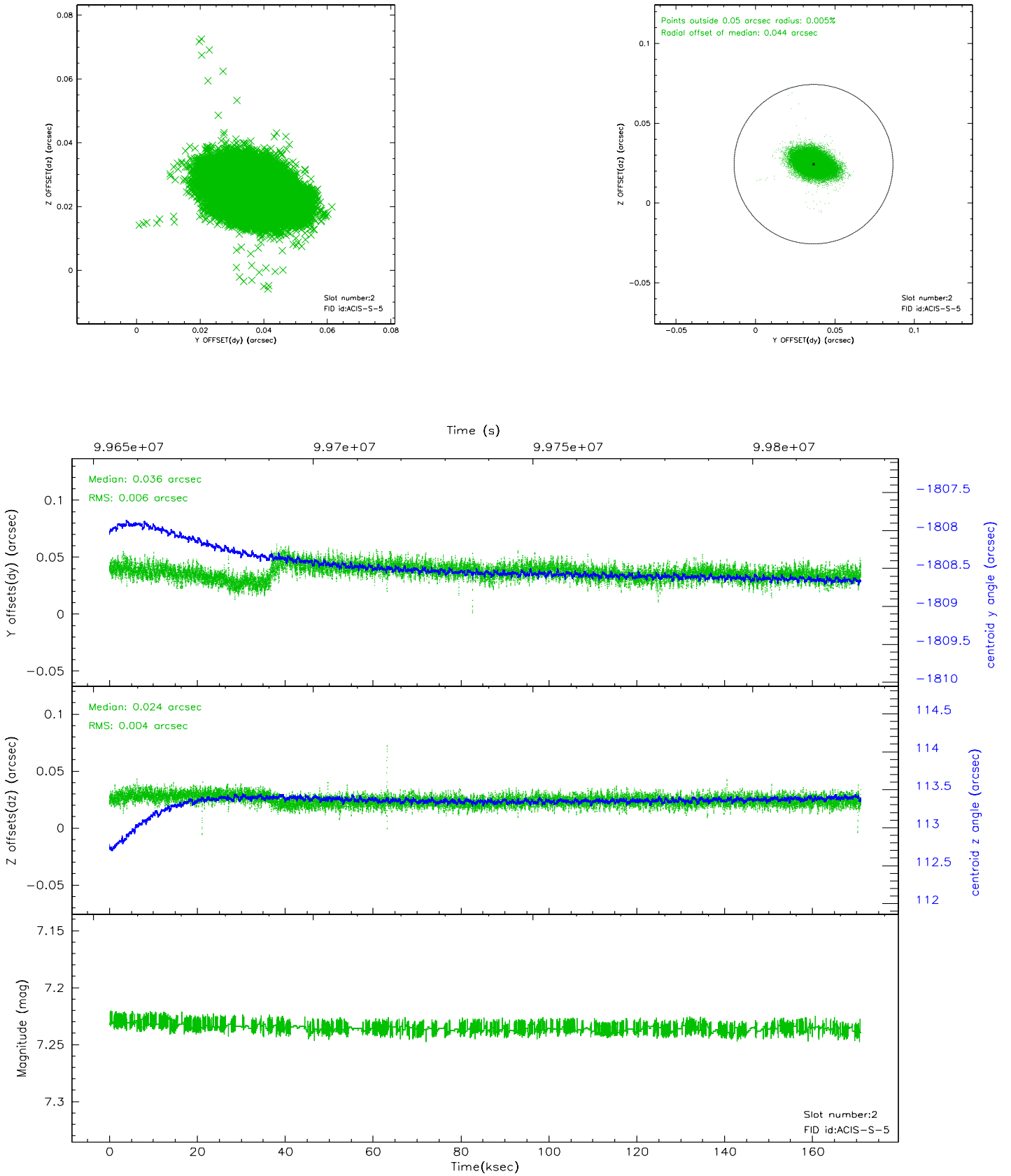
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

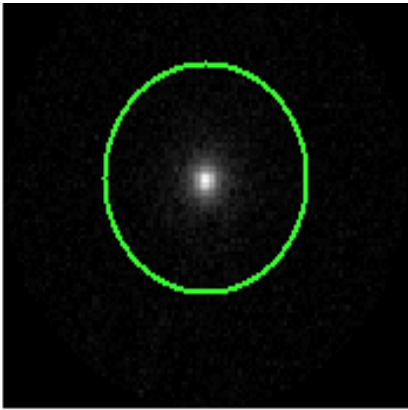


3 Gratings

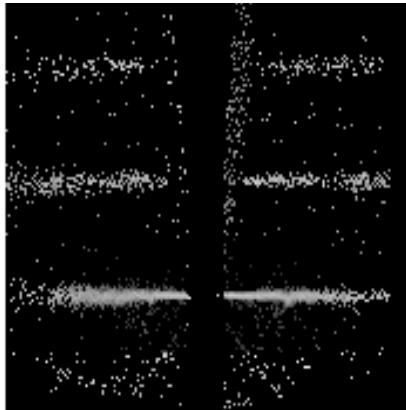
3.1 HEG Arm



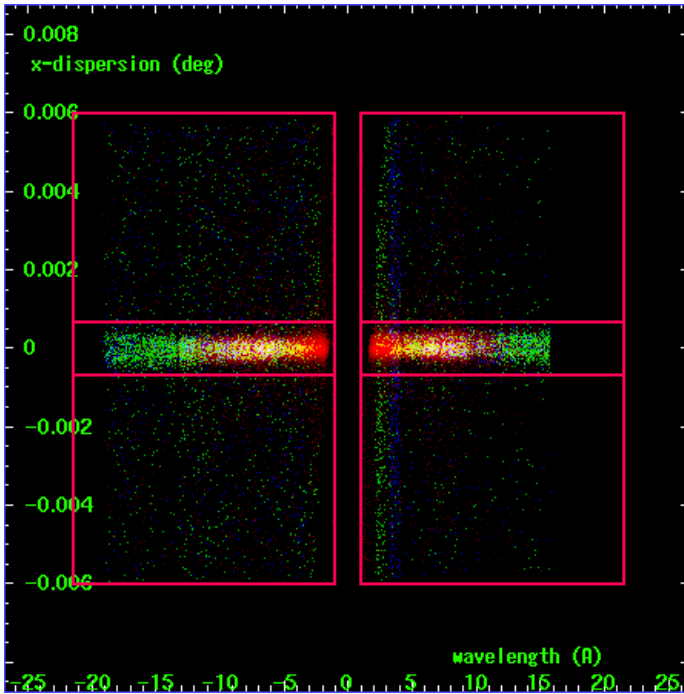
HEG Order Sort 123



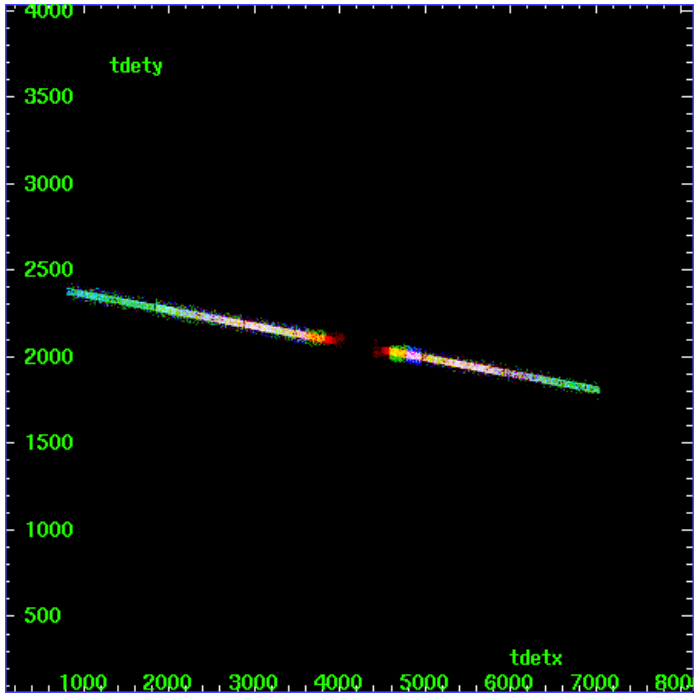
HEG Zero Order



HEG Order Sort ALL

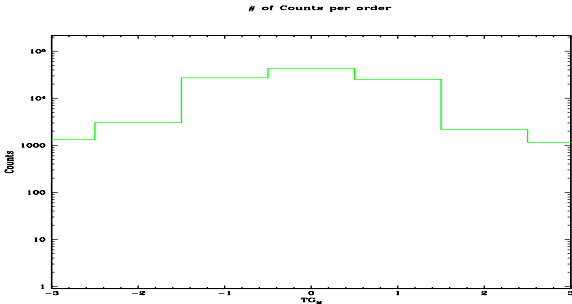


Spot Image HEG

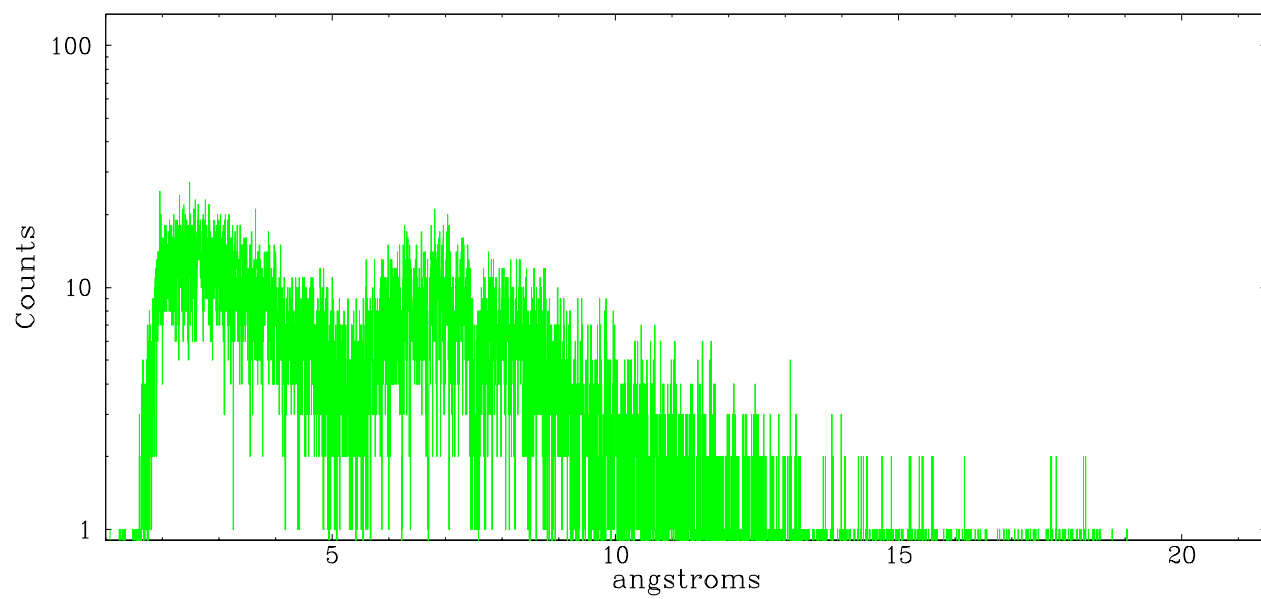


Full Detector HEG

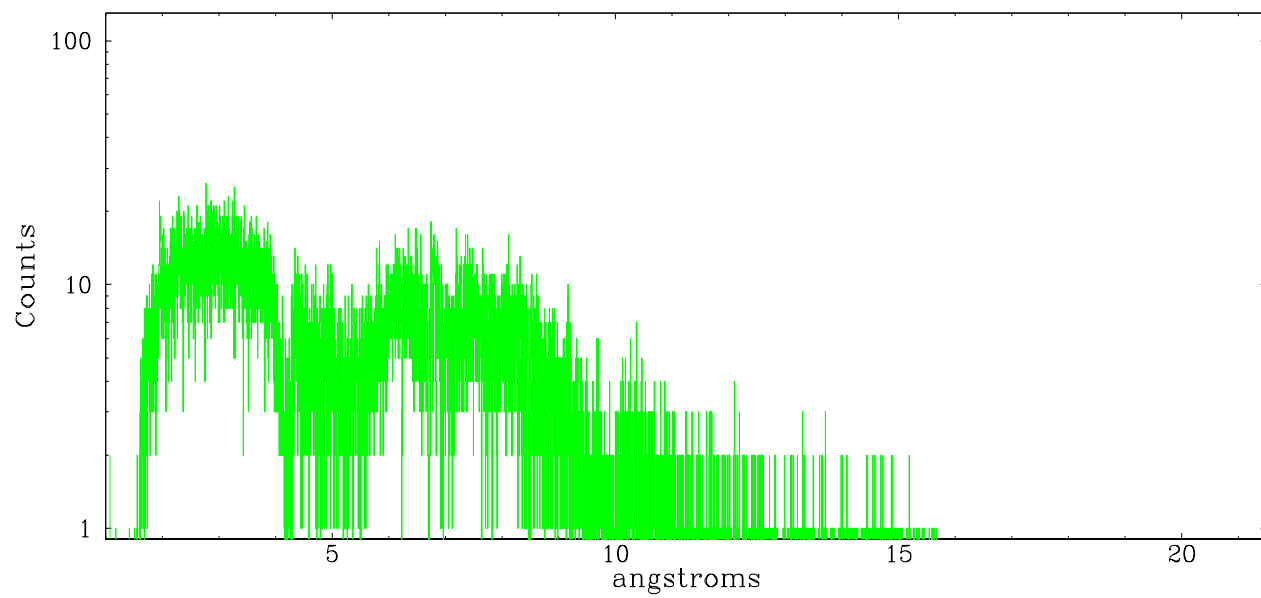
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1331	3054	27251	42954	25164	2153	1162



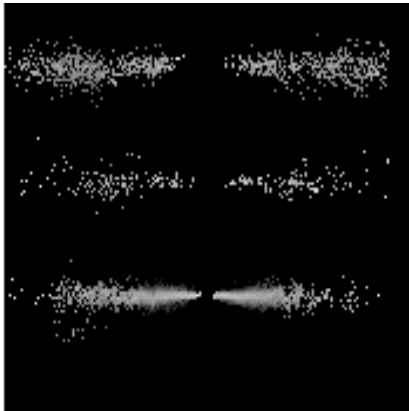
heg order -1



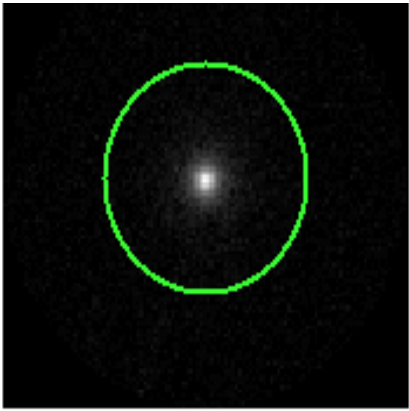
heg order +1



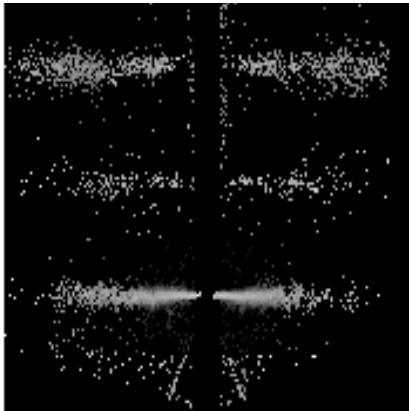
3.2 MEG Arm



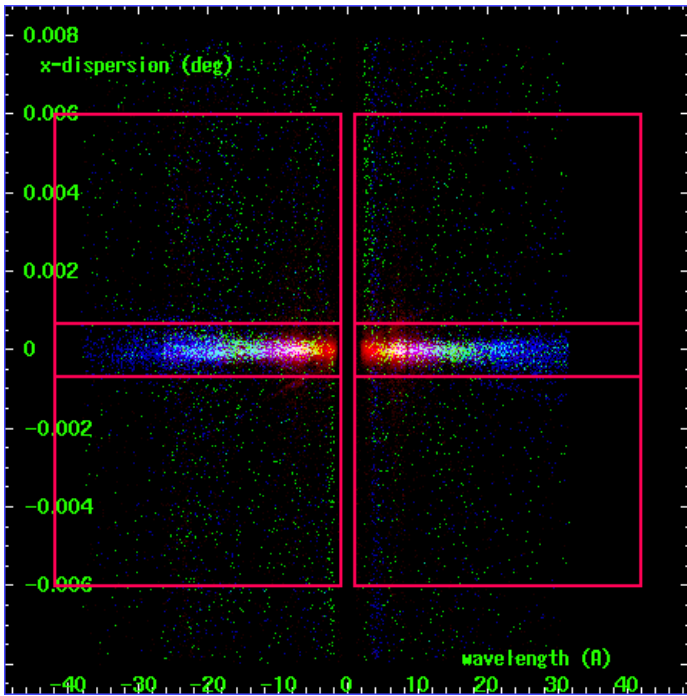
MEG Order Sort 123



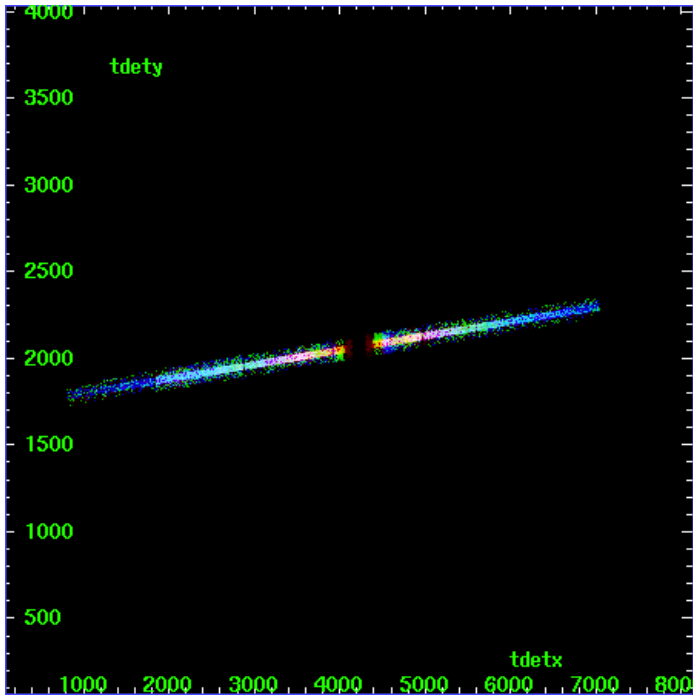
MEG Zero Order



MEG Order Sort ALL

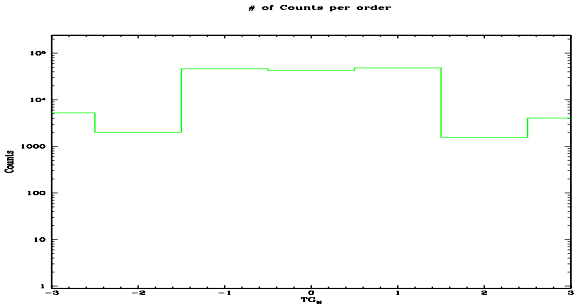


Spot Image MEG

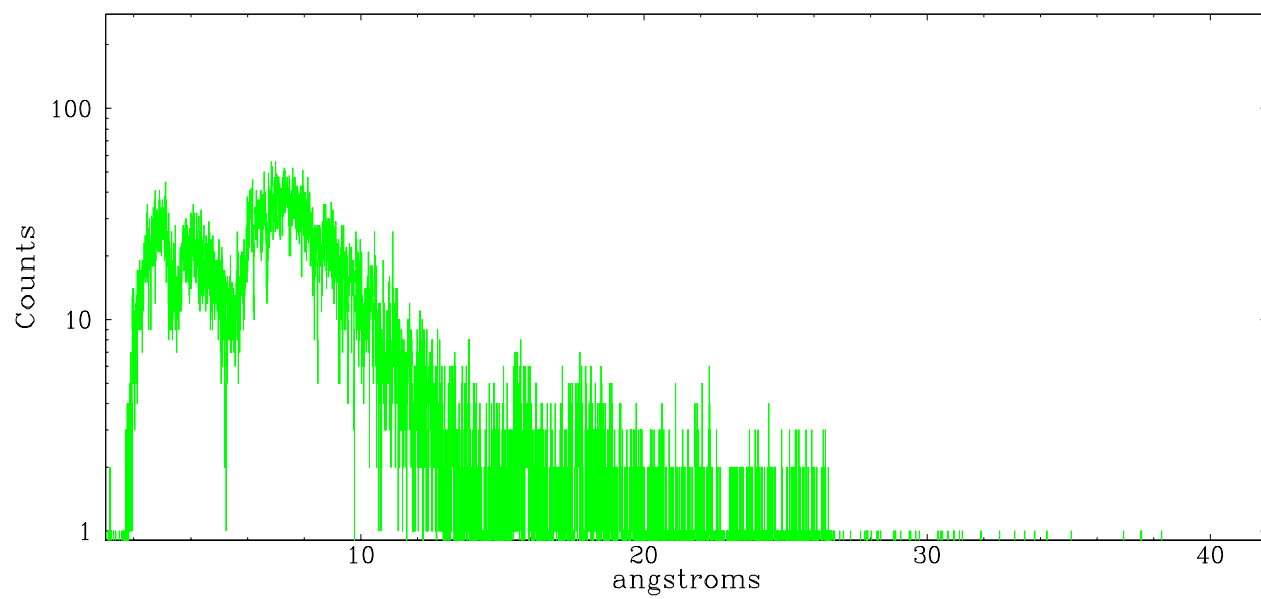


Full Detector MEG

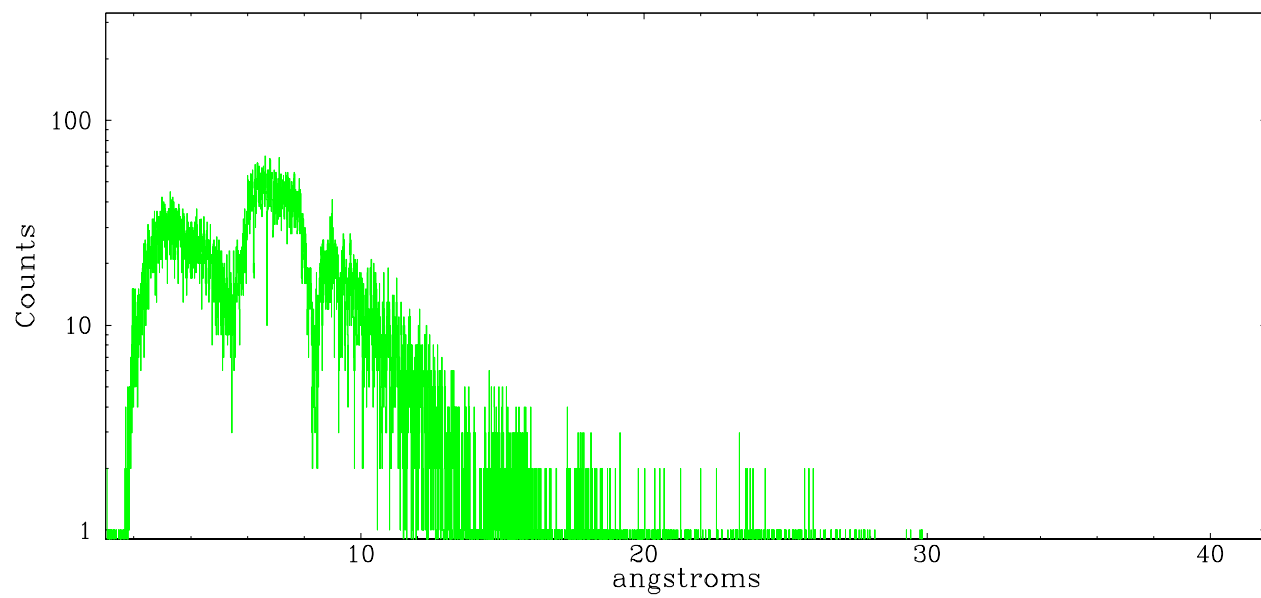
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	5264	2014	46108	42954	48498	1569	4048



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	171.014

A.2 Comments

Coordinated with HST.

Observer provided the coordinates ra=11:39:02.40, dec=-37:44:24.00.

X-ray

source is actually at ra=11:39:01.7, dec=37:44:18.9. The correct position was found by the software for the zeroth order.

The guide stars in slots 6 and 7 was removed from the aspect solution due to

poor data quality. The aspect solution is not expected to be degraded by

removing these 2 guide stars from the solution.