

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 3457 - L2 Version 001
Chandra X-Ray Center

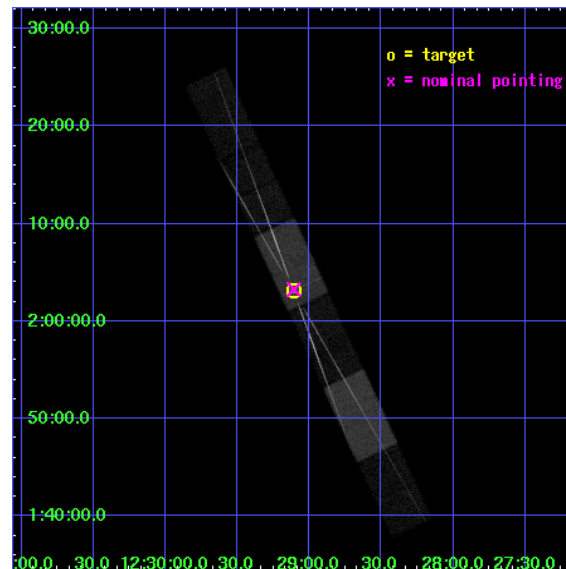
L2 Processing Date : Sep 18 2006

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1 Front

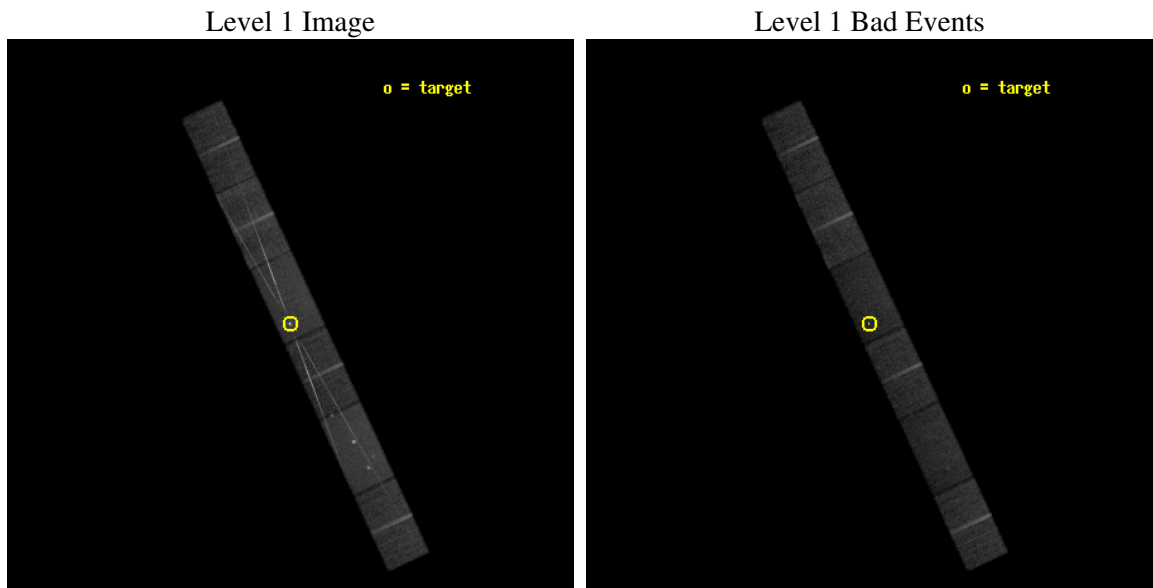
seq_num	790075
obs_id	3457
title	MEASURING THE QE MAP FOR HETG/ACIS-S OBSERVATION AT DIFFERENT SIM_Z OFFSETS
observer	Dr. CXC Calibration
object	3C273
dtcycle	0
cycle	P
ra_targ	187.277917
dec_targ	2.052389
ra_nom	187.277030919
dec_nom	2.0544308663228
roll_nom	245.03214256989
revision	2
ontime	25382.100079626
livetime	24845.438605742
ontime4	25380.159089446
ontime5	25382.100079626
ontime6	25380.159089446
ontime7	25382.100079626
ontime8	25382.100079626
ontime9	25382.100079626
l2events	212138



2 OBI

2.1 OBI

2.1.1 Images

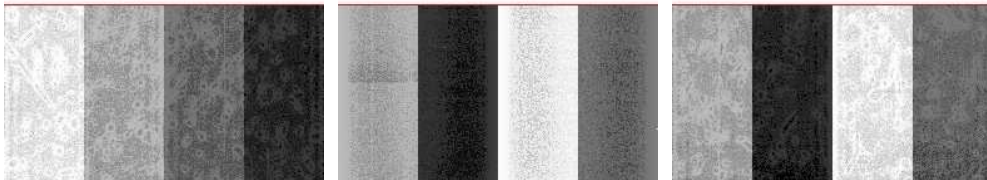


2.1.2 Bias

Chip 4

Chip 5

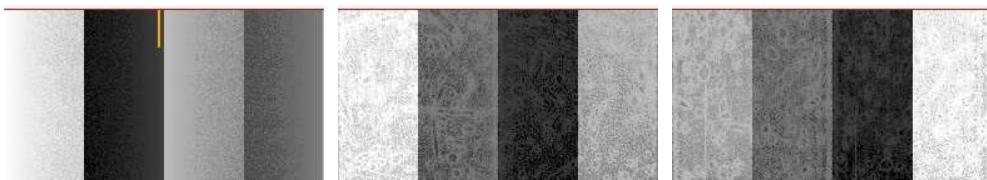
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.3
date	2006-09-18T07:12:09
revision	2

sched_exp_time	25000.000000
ontime	25384.613927633
ontime4	25382.672937453
ontime5	25384.613927633
ontime6	25382.672937453
ontime7	25384.613927633
ontime8	25384.613927633
ontime9	25384.613927633
l1events	751357

2.1.4 Events

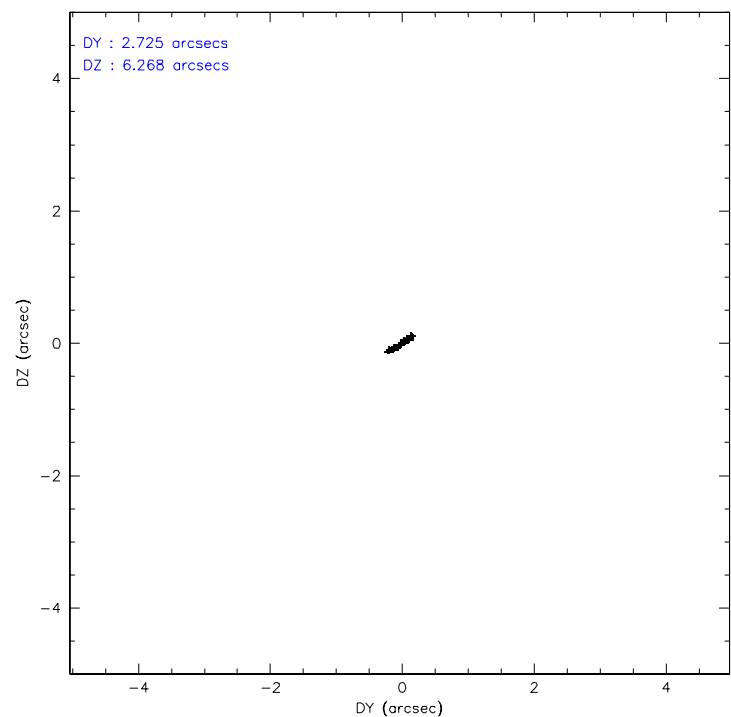
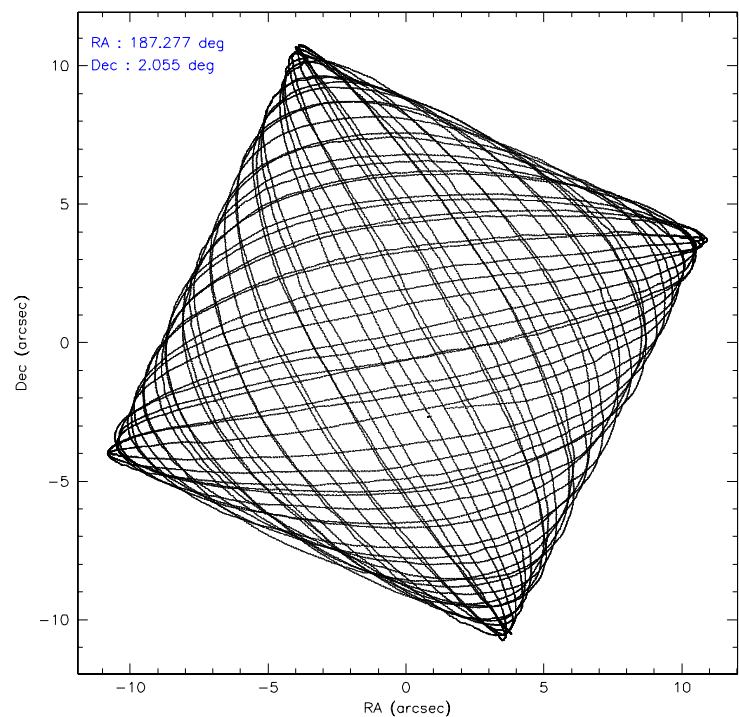
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	107185	140700	119129	156069	133682	94592
rejected events	94514	71501	84513	78196	97295	81937
rejected %	88%	50%	70%	50%	72%	86%

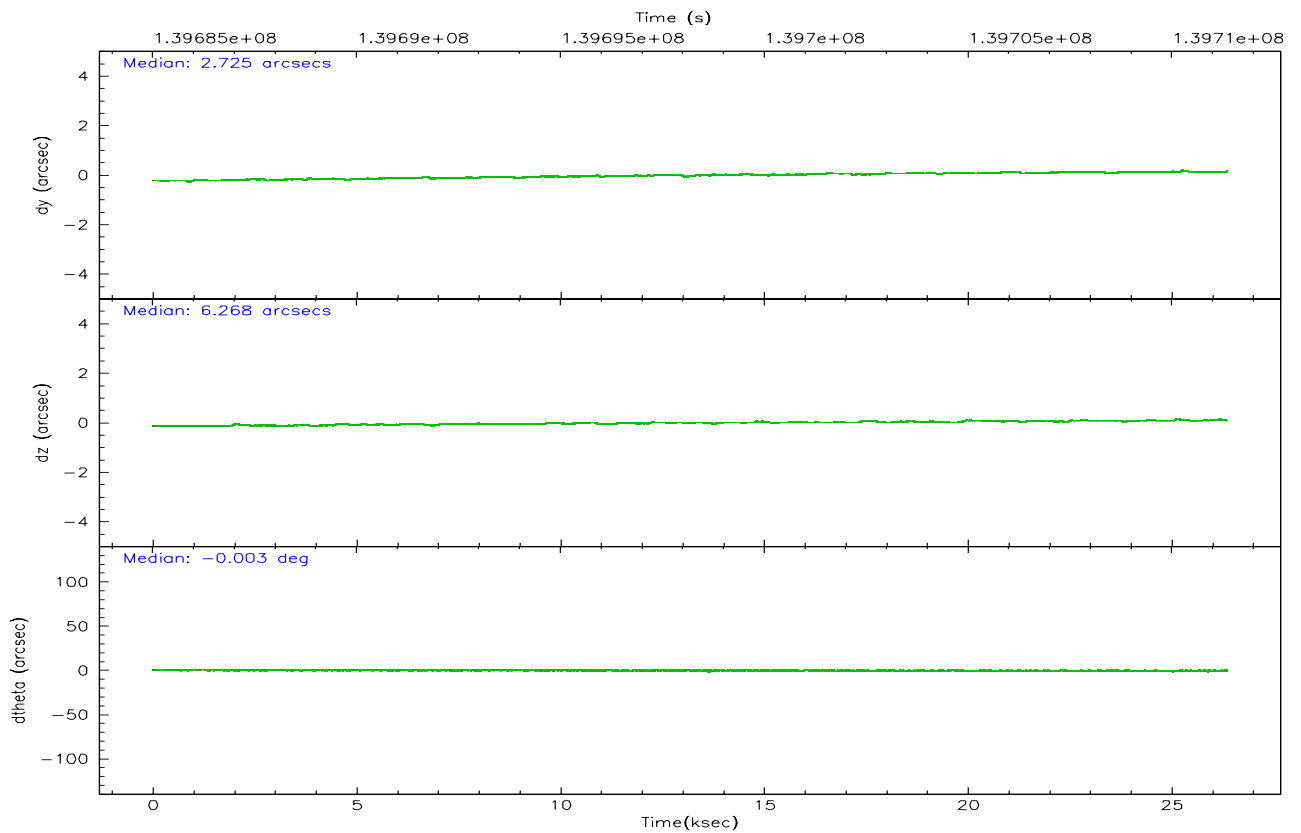
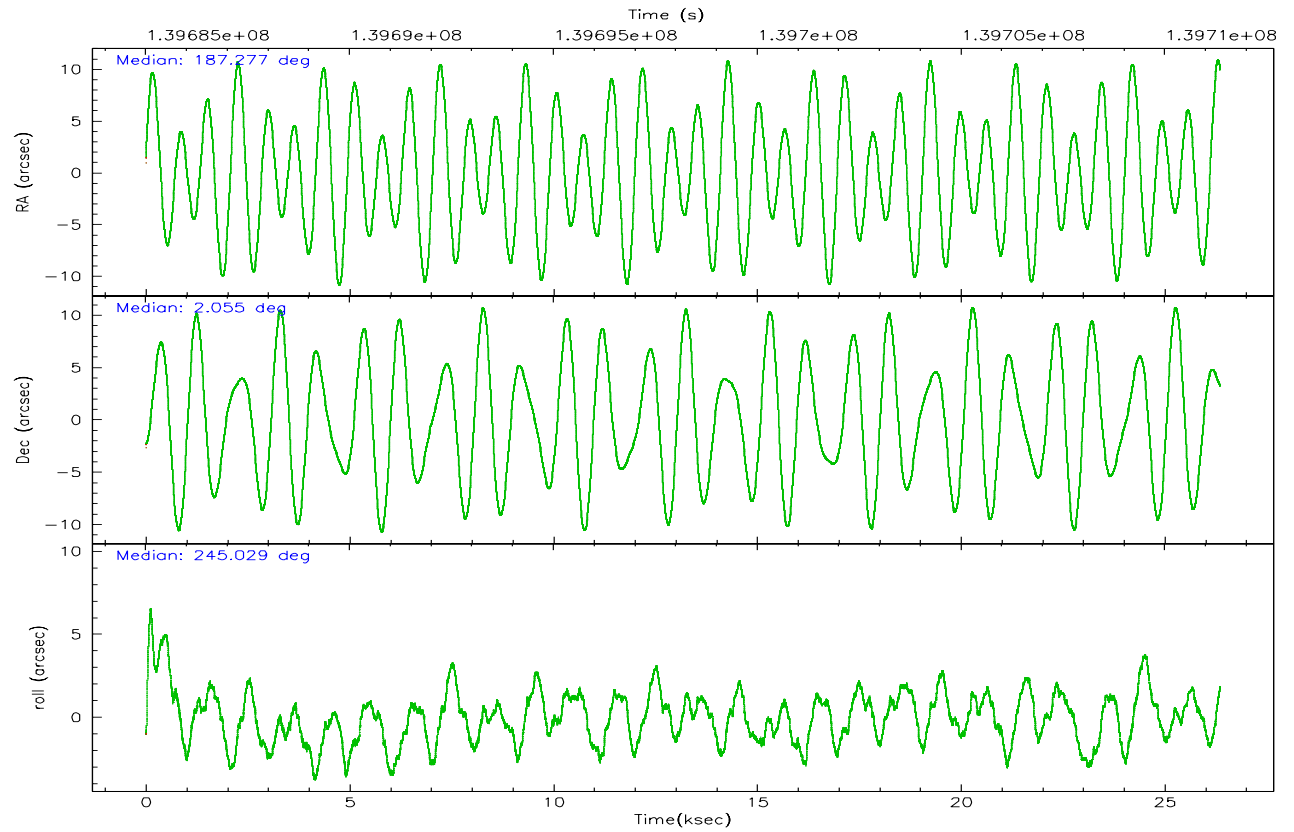
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	5449	11404	22502	8799	17068	5474
	5%	8%	18%	5%	12%	5%
grade 1 events	44	374	76	351	71	28
	0%	0%	0%	0%	0%	0%
grade 2 events	2737	19445	5015	18370	6347	2334
	2%	13%	4%	11%	4%	2%
grade 3 events	1281	2549	2145	6270	3168	1309
	1%	1%	1%	4%	2%	1%
grade 4 events	1214	2455	2056	6225	3003	1294
	1%	1%	1%	3%	2%	1%
grade 5 events	3327	7057	3882	10697	4968	4040
	3%	5%	3%	6%	3%	4%
grade 6 events	1991	33351	2902	38216	6805	2245
	1%	23%	2%	24%	5%	2%
grade 7 events	91142	64065	80551	67141	92252	77868
	85%	45%	67%	43%	69%	82%

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	187.274273	187.2770309189989	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	2.081528	2.054430866322792	Subarray start row	1	1
Pointing Roll	244.875616	245.0321425698944	Subarray row count	560	560
Window start time	139276864.184000	139276864.184000	Alternating exposures requested	N	N
Window stop time	141782464.184000	141782464.184000	Primary exposure time	0.000000	1.9
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.032523	-182.036427832944			
SIM translation stage offset (mm)	-8.1	-8.096094750063799			
Observation start time	139686361.184000	139684815.65706			
Observation start date	2002-06-05T17:44:57	2002-06-05T17:20:15			
Observation end time	139711361.184000	139711495.38315			
Observation end date	2002-06-06T00:41:37	2002-06-06T00:44:55			
Read mode	TIMED	TIMED			

2.3 Aspect



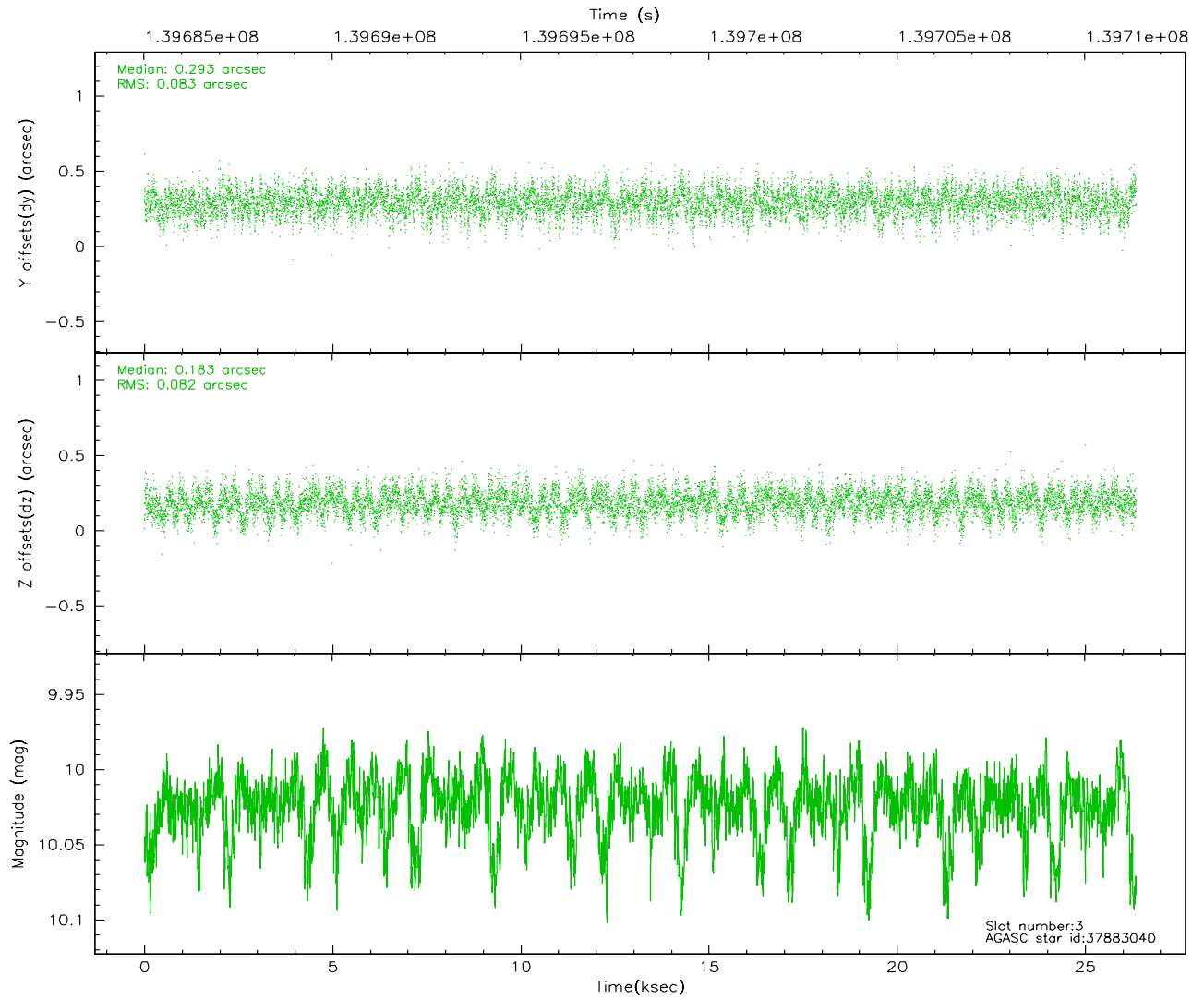
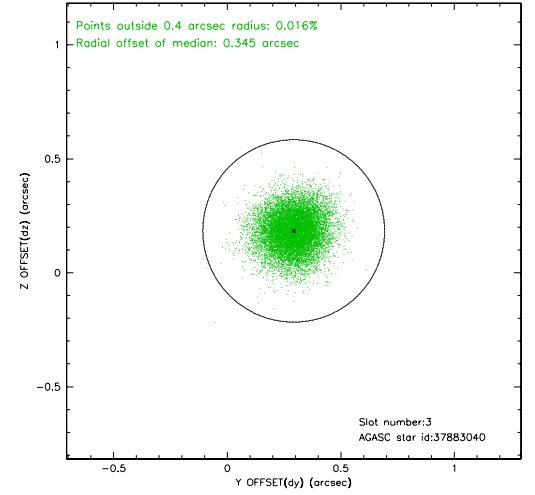
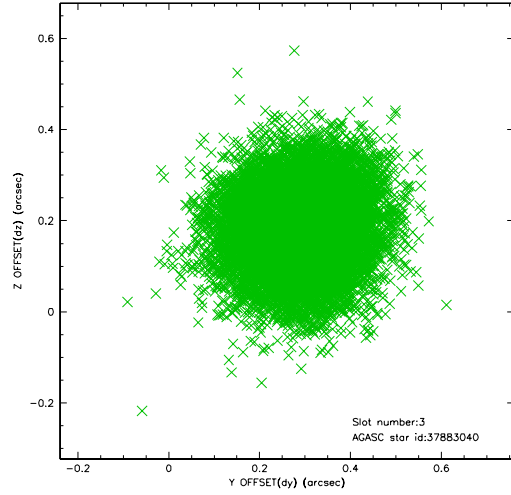


Slot Statistics

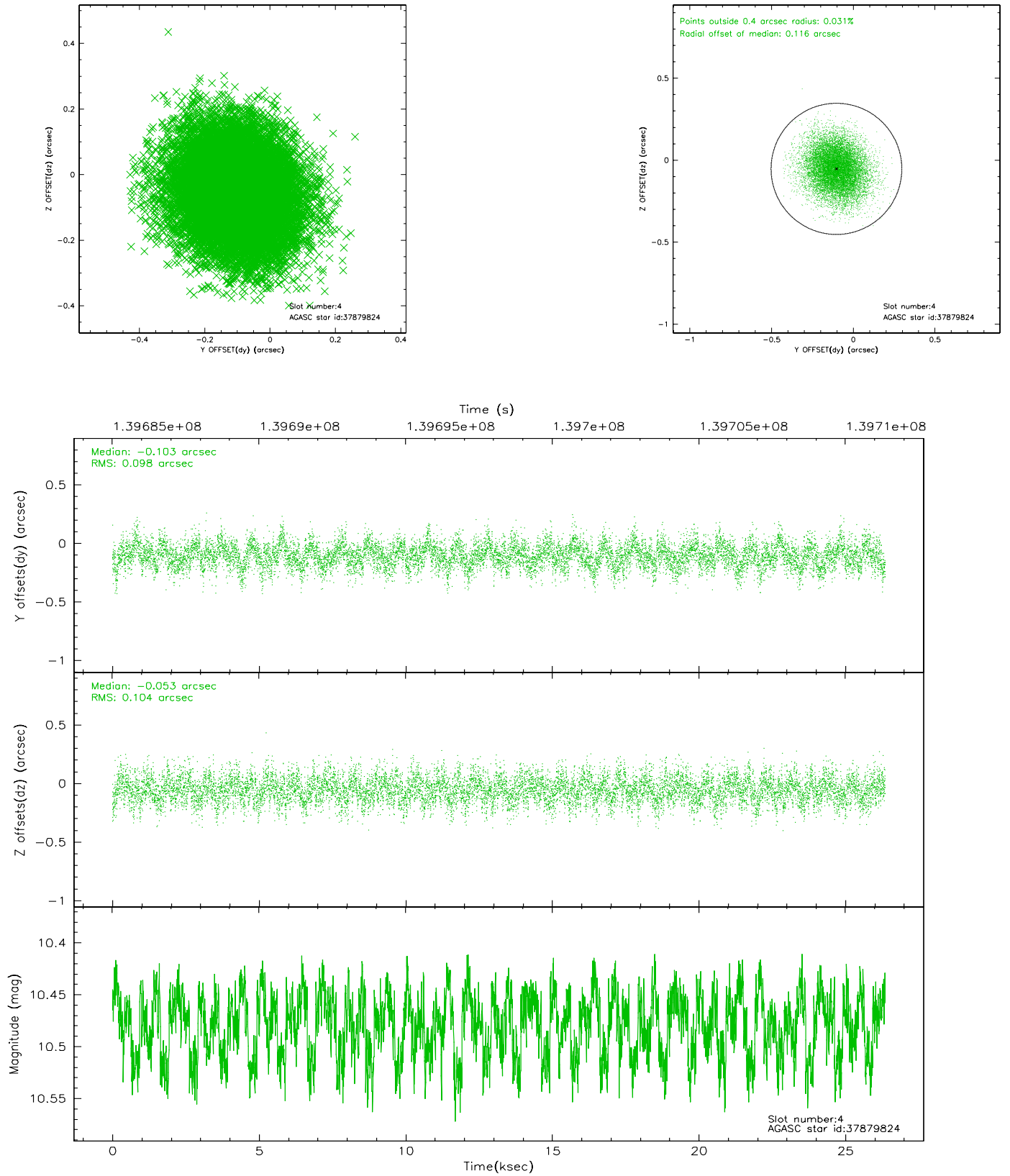
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	6430	-0.014	-0.092	0.007	0.012	0.000000	0.000000	-754.80	-1894.27
1	FID	ACIS-S-4	7.18	6430	-0.002	0.032	0.005	0.009	0.000000	0.000000	2158.47	14.15
2	FID	ACIS-S-5	7.23	6430	-0.015	0.068	0.006	0.011	0.000000	0.000000	-1807.48	8.03
3	GUIDE	37883040	10.02	12838	0.293	0.183	0.124	0.200	187.575516	1.280402	2151.08	2207.17
4	GUIDE	37879824	10.48	12847	-0.103	-0.053	0.153	0.246	187.728661	2.497183	-2048.88	844.91
5	GUIDE	36965296	9.09	12856	0.054	-0.045	0.068	0.115	186.926292	1.837429	1327.05	-759.91
6	GUIDE	36965816	9.27	12852	0.013	-0.011	0.082	0.131	186.823353	1.771455	1699.53	-994.53
7	GUIDE	37356352	7.68	12856	-0.253	-0.073	0.058	0.089	187.433784	2.618460	-1993.78	-300.94

2.4 Star Slots

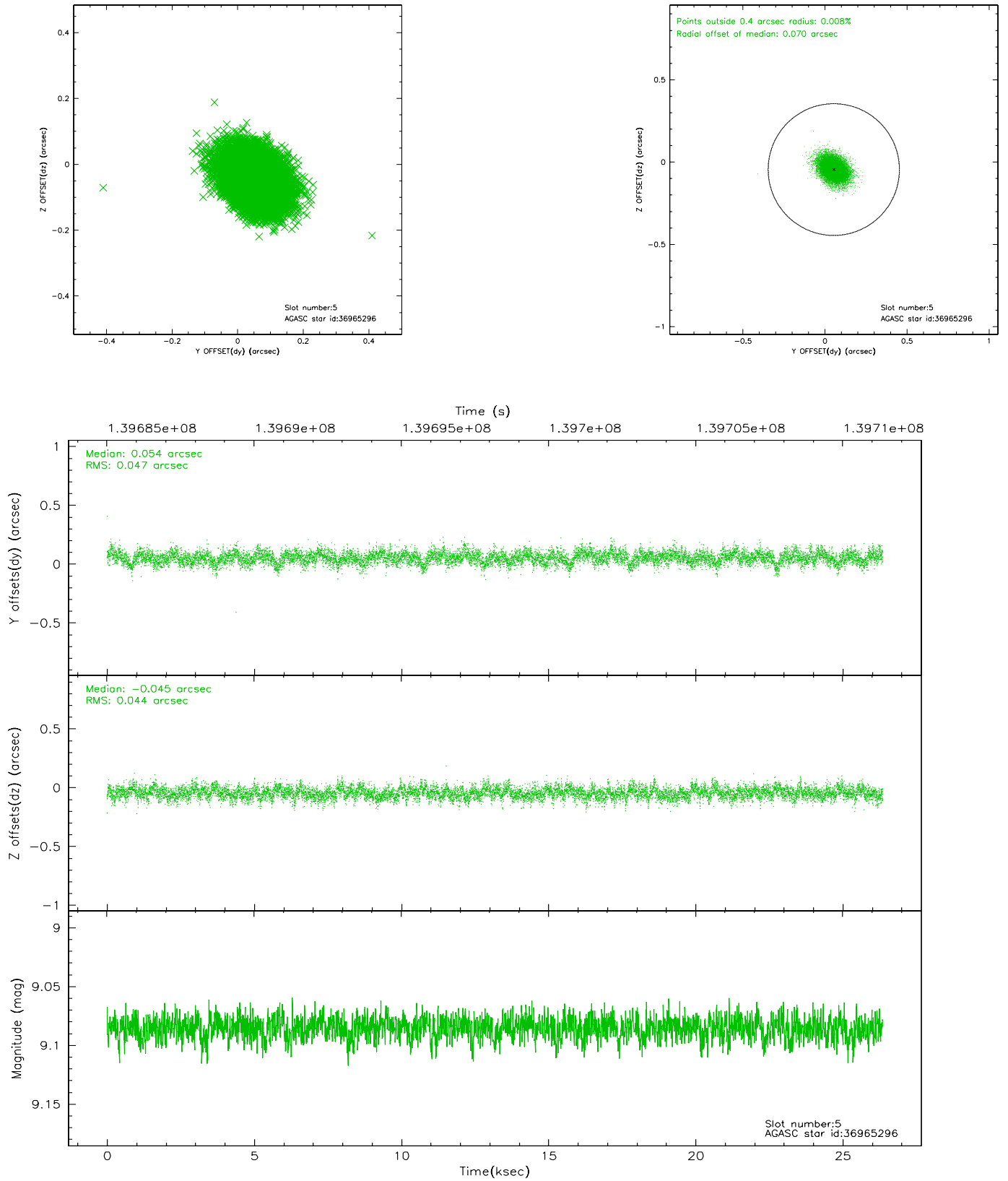
2.4.1 Slot 3



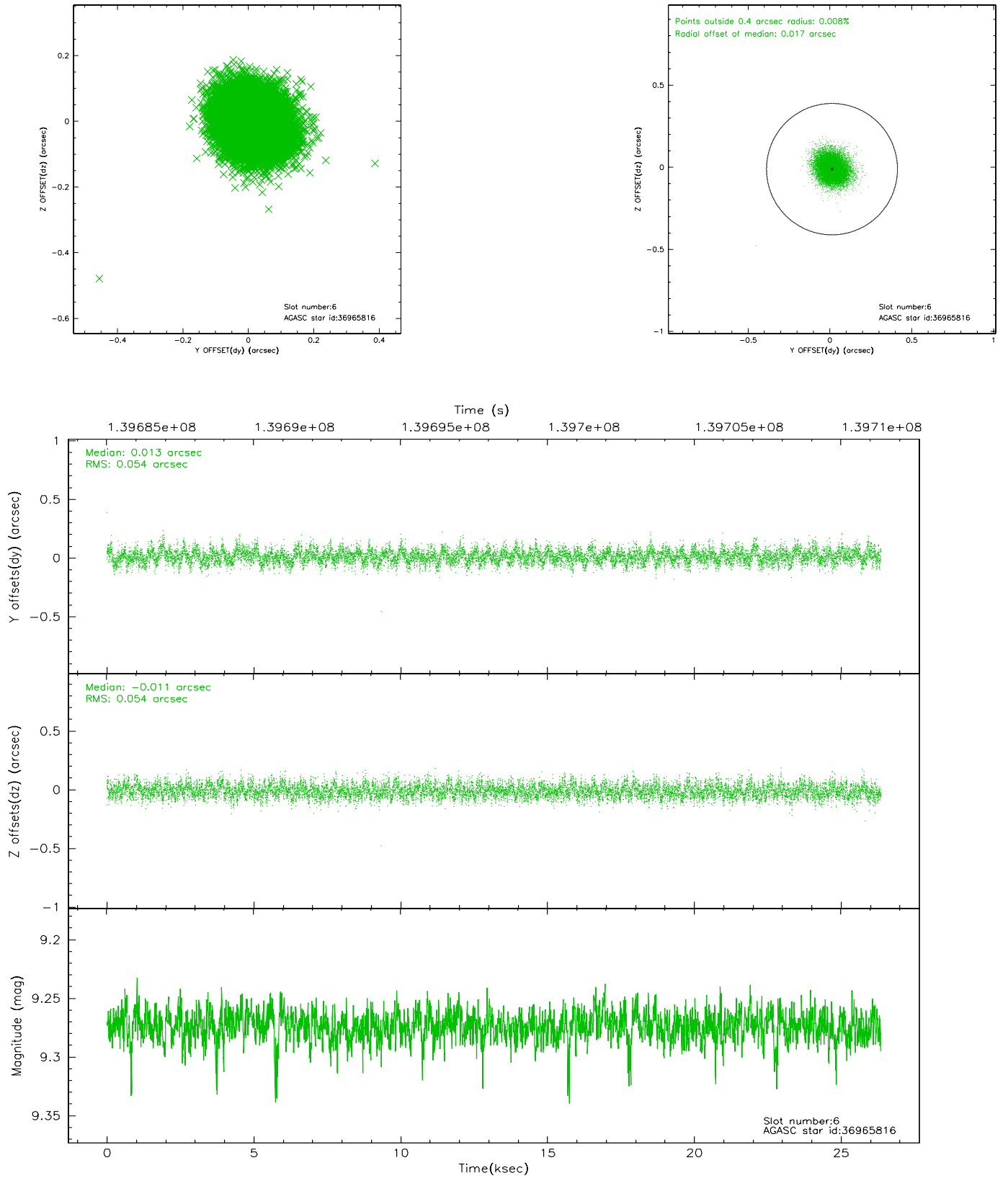
2.4.2 Slot 4



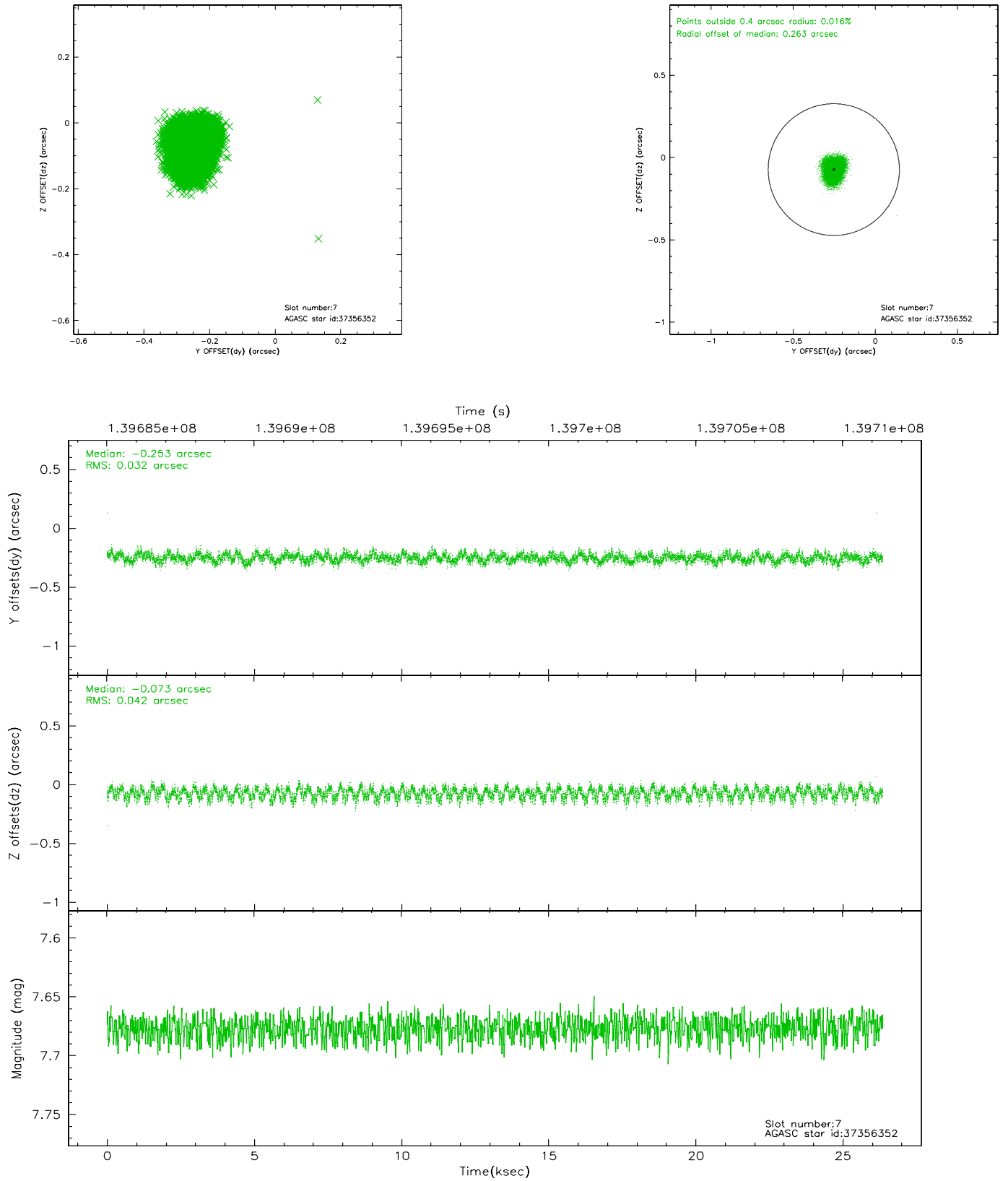
2.4.3 Slot 5



2.4.4 Slot 6

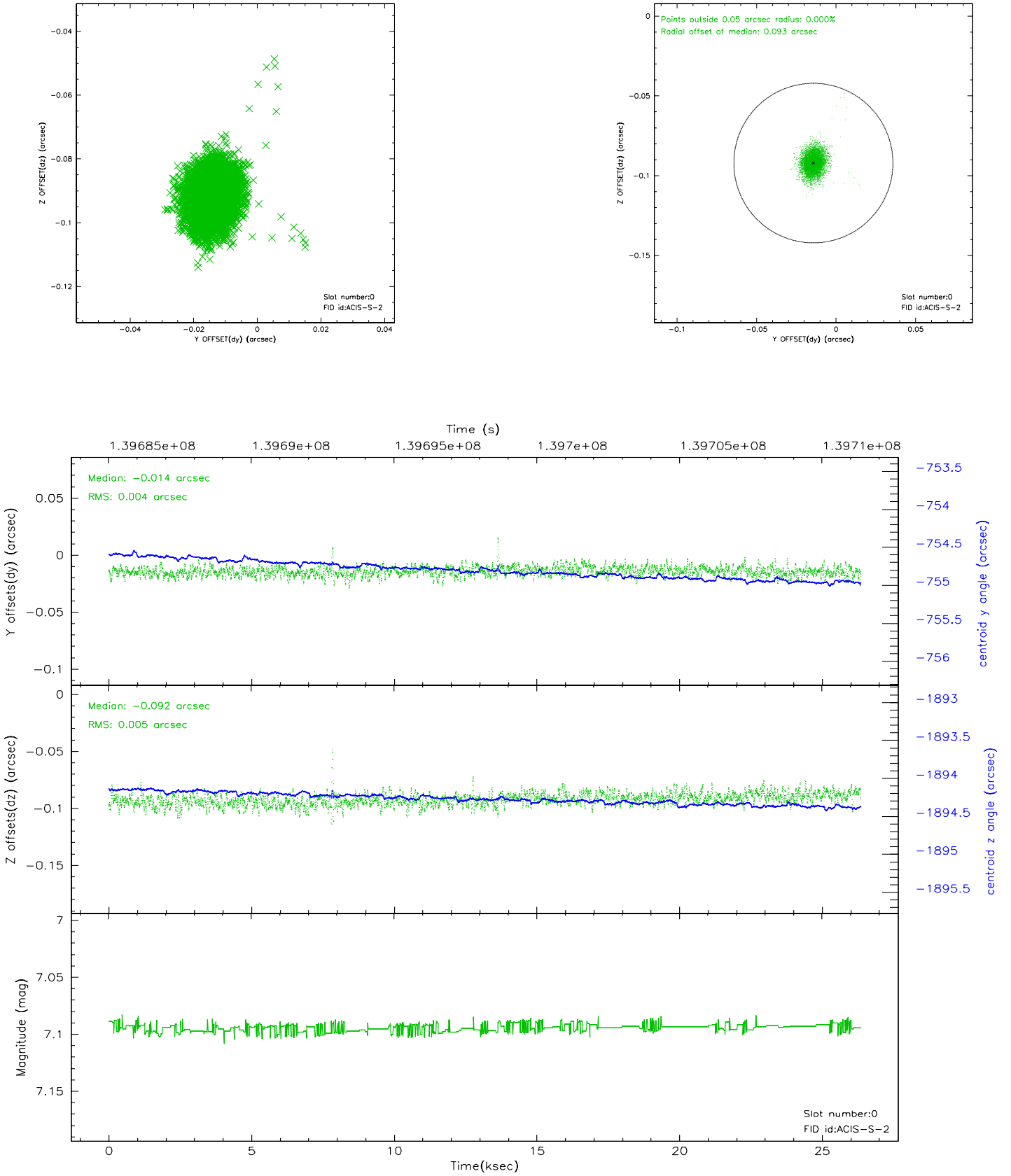


2.4.5 Slot 7

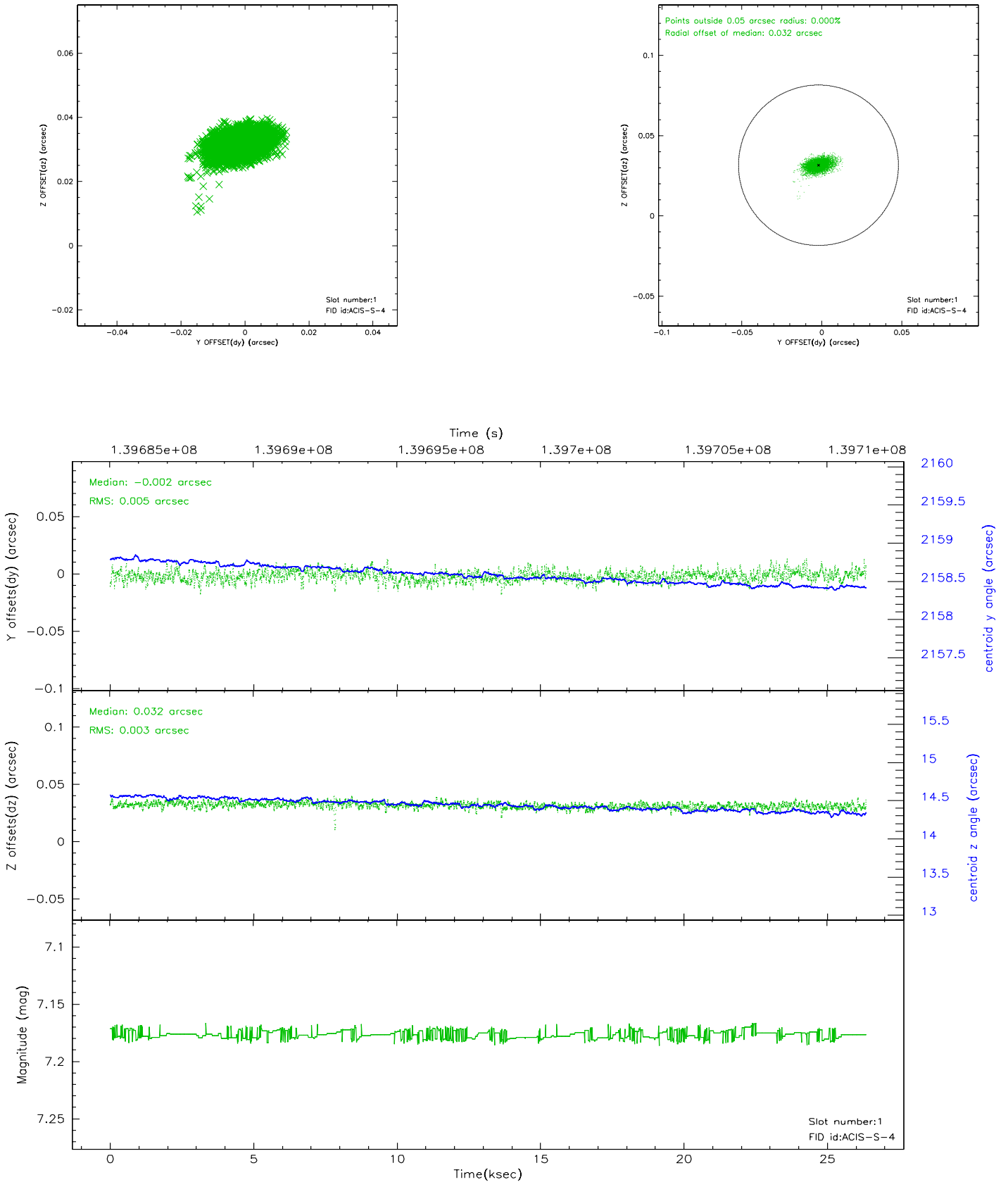


2.5 FID Slots

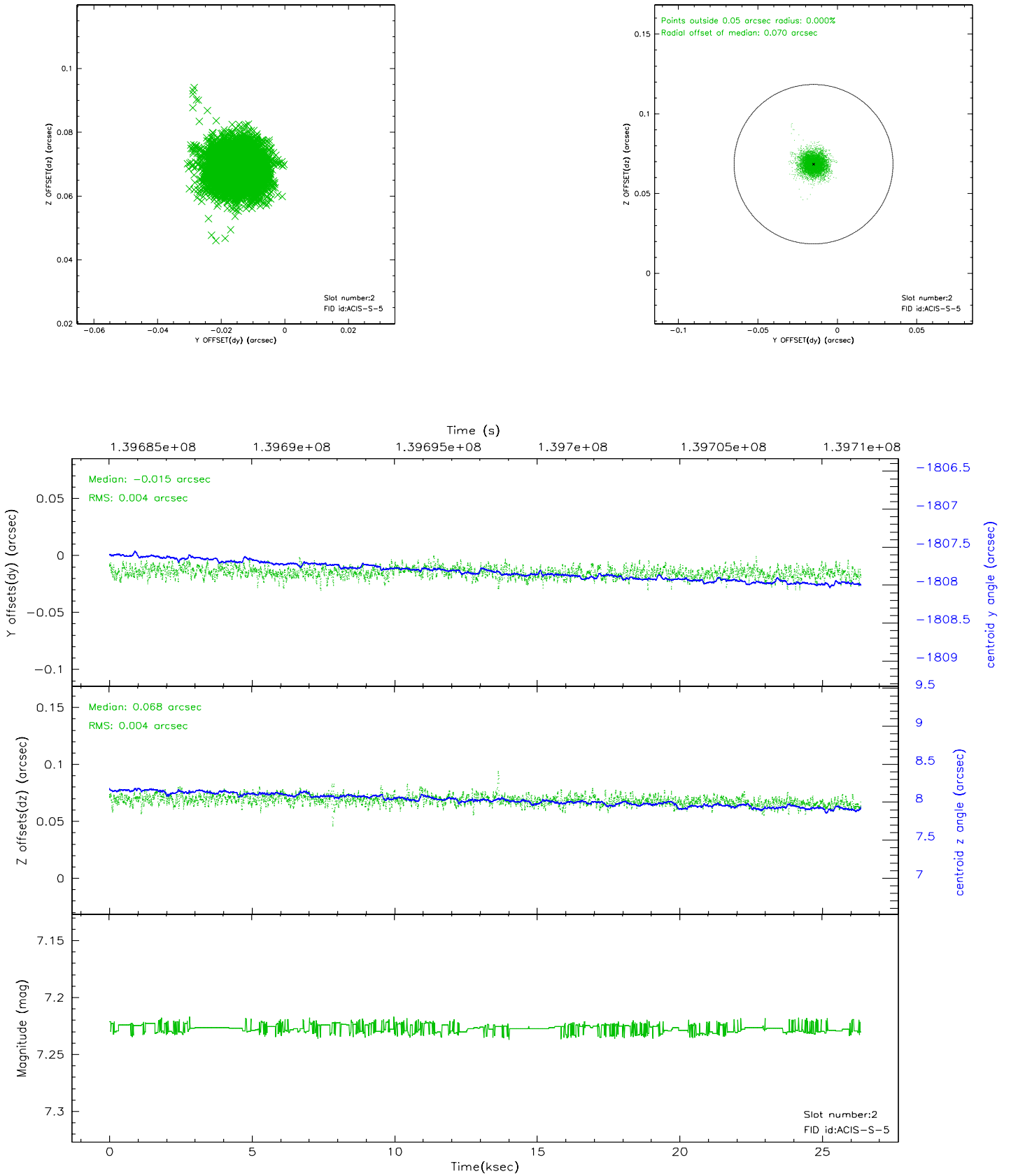
2.5.1 Slot 0



2.5.2 Slot 1

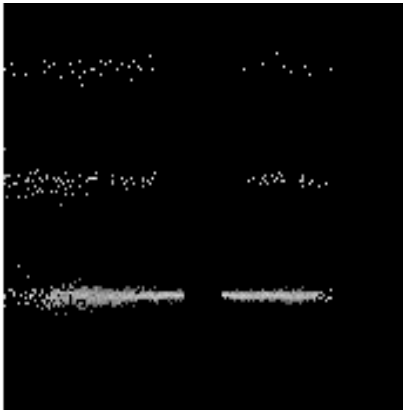


2.5.3 Slot 2

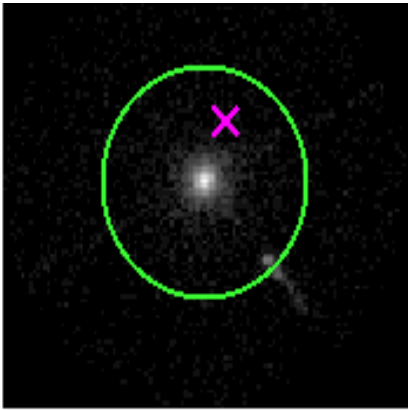


3 Gratings

3.1 HEG Arm



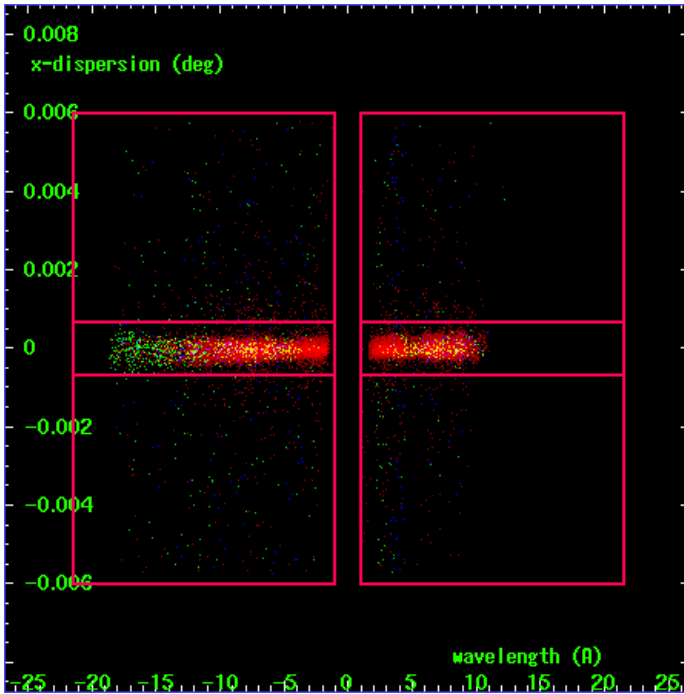
HEG Order Sort 123



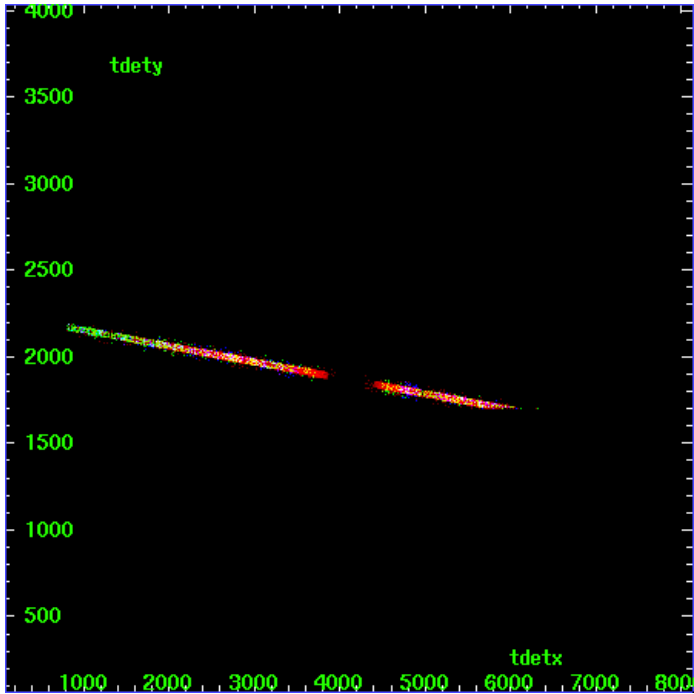
HEG Zero Order



HEG Order Sort ALL

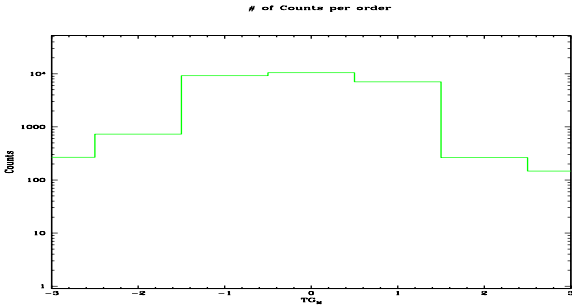


Spot Image HEG

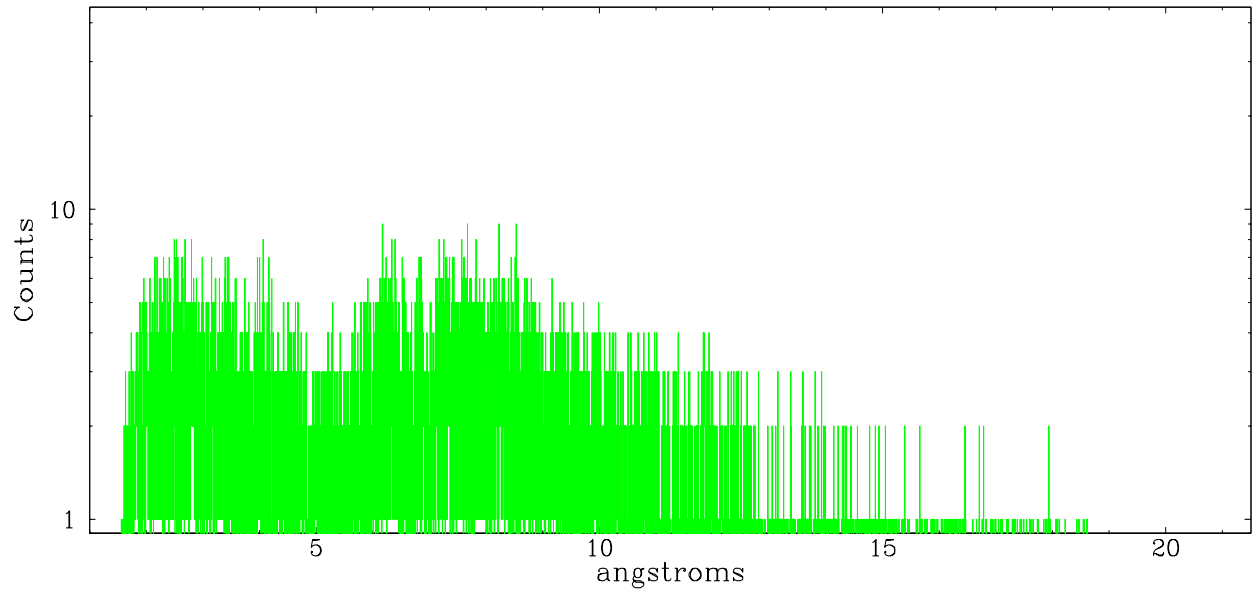


Full Detector HEG

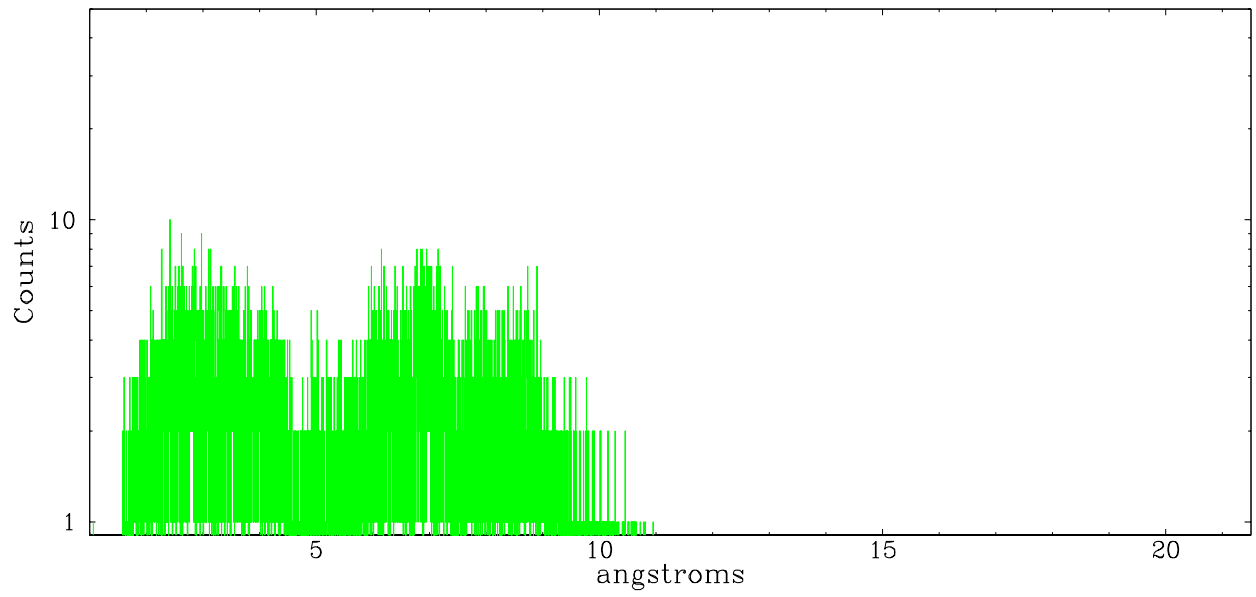
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	268	728	9221	10454	7037	264	147



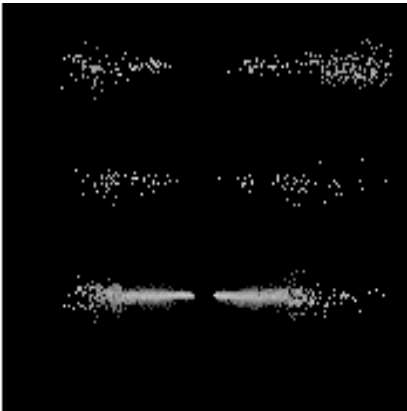
neg order -1



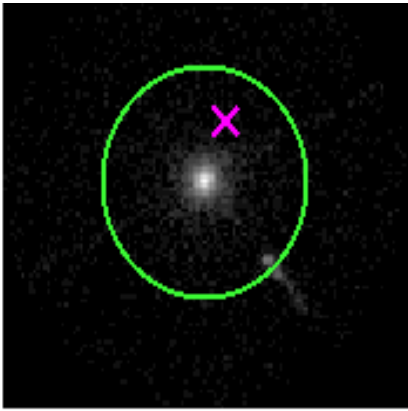
neg order +1



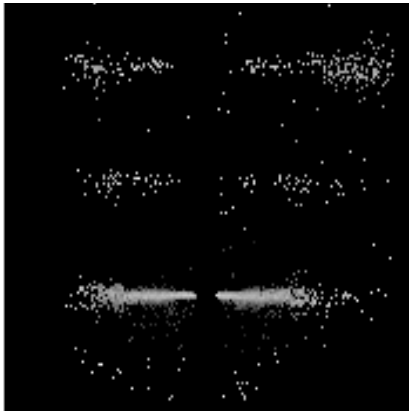
3.2 MEG Arm



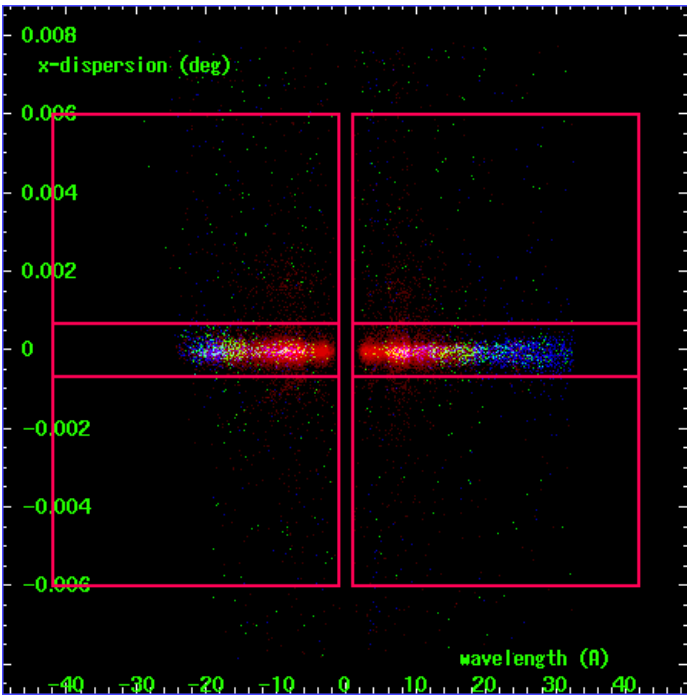
MEG Order Sort 123



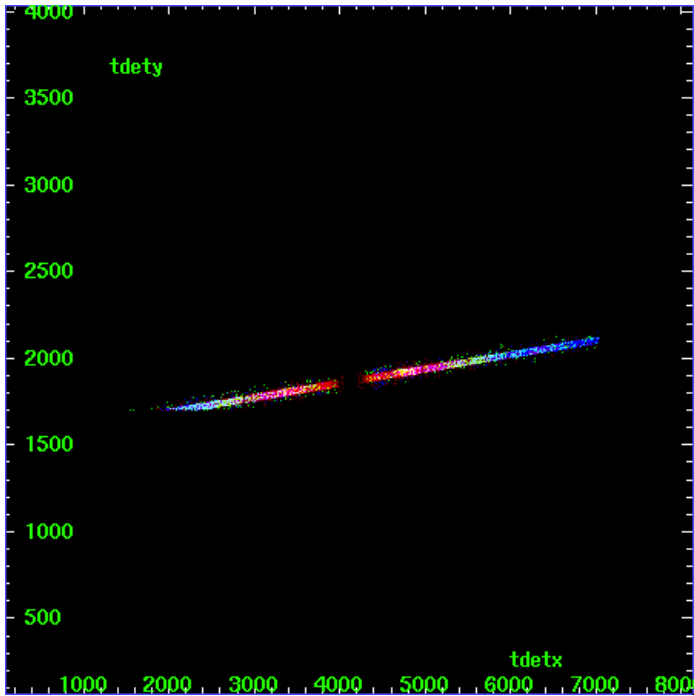
MEG Zero Order



MEG Order Sort ALL

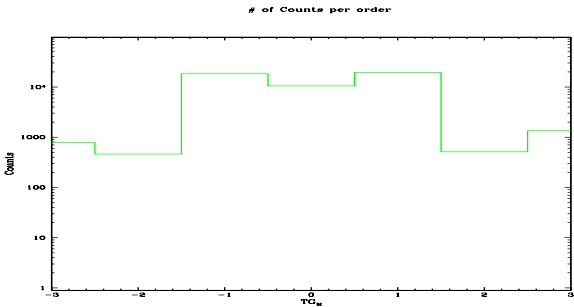


Spot Image MEG

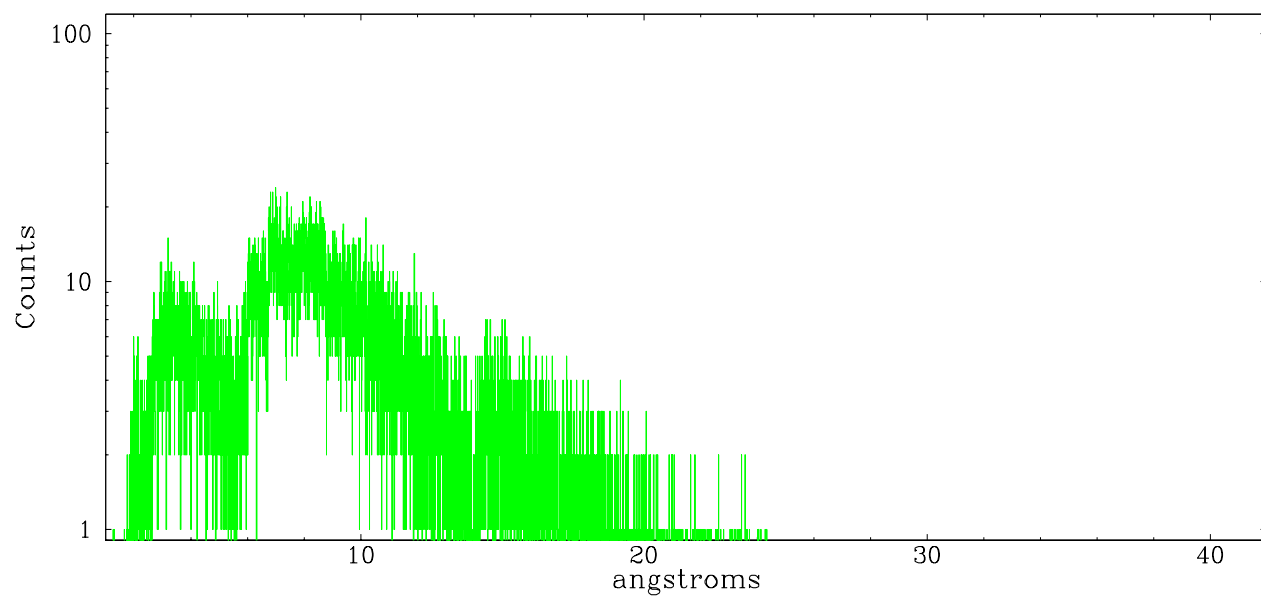


Full Detector MEG

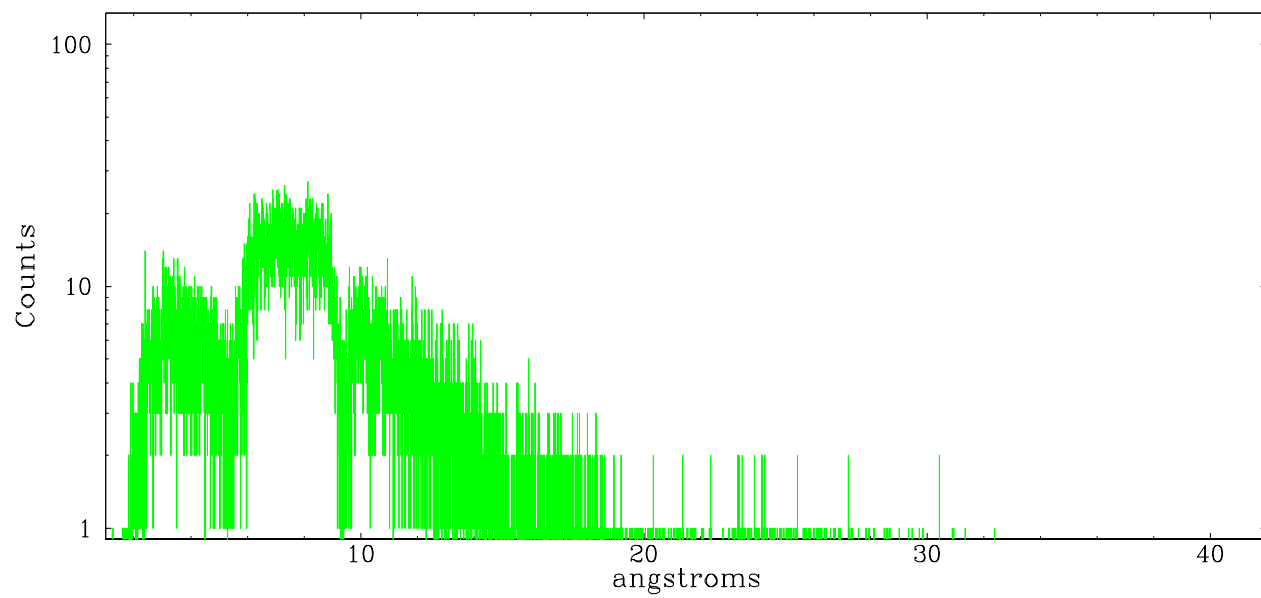
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	782	463	18223	10454	19473	511	1351



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.09.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.38

A.2 Comments