

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 3225 - L2 Version 001
Chandra X-Ray Center

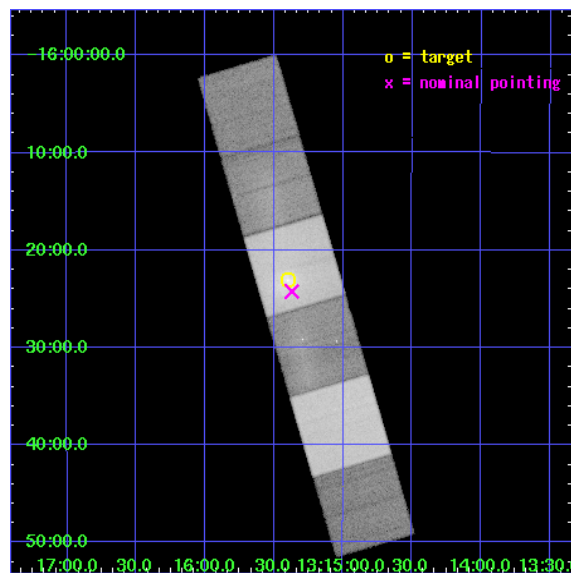
L2 Processing Date : Sep 19 2006

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
3	Gratings	16
3.1	HEG Arm	16
3.2	MEG Arm	18
A	Summary	20
A.1	Status	20
A.2	Comments	20

1 Front

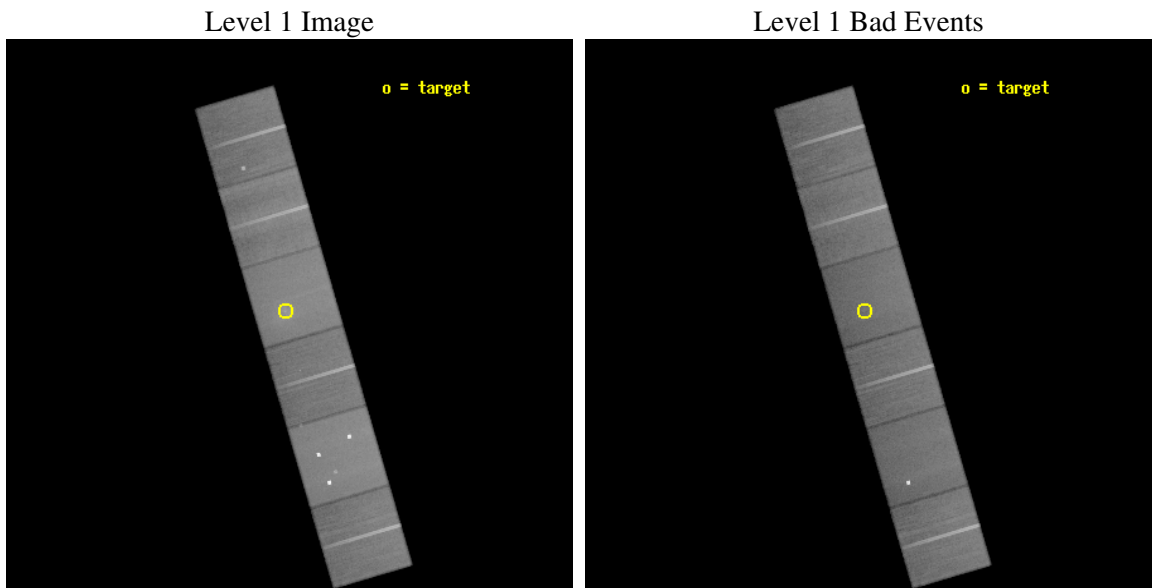
seq_num	800225
obs_id	3225
title	ANATOMY OF THE X-RAY GROUP NGC 5044
observer	PROF. STEVEN KAHN
object	NGC 5044
dtcycle	0
cycle	P
ra_targ	198.850417
dec_targ	-16.385
ra_nom	198.84258882317
dec_nom	-16.404380439246
roll_nom	253.62473063842
revision	2
ontime	84207.999686301
livetime	83141.707290303
ontime4	84191.794904649
ontime5	84204.758686095
ontime6	84204.7588256
ontime7	84207.999686301
ontime8	84201.517715871
ontime9	84201.517835438
l2events	903507



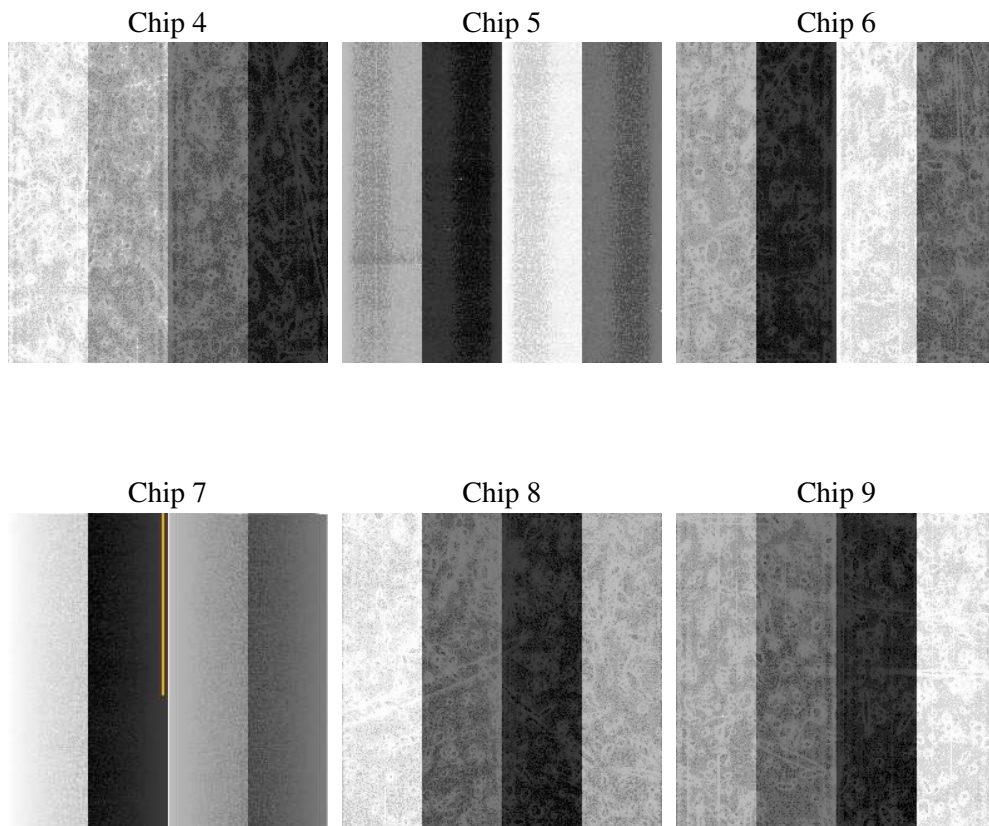
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.3
date	2006-09-19T11:14:09
revision	2

sched_exp_time	84180.000000
ontime	84256.376145035
ontime4	84240.171333462
ontime5	84253.13514483
ontime6	84253.135254413
ontime7	84256.376145035
ontime8	84249.894144684
ontime9	84249.894264251
l1events	4002287

2.1.4 Events

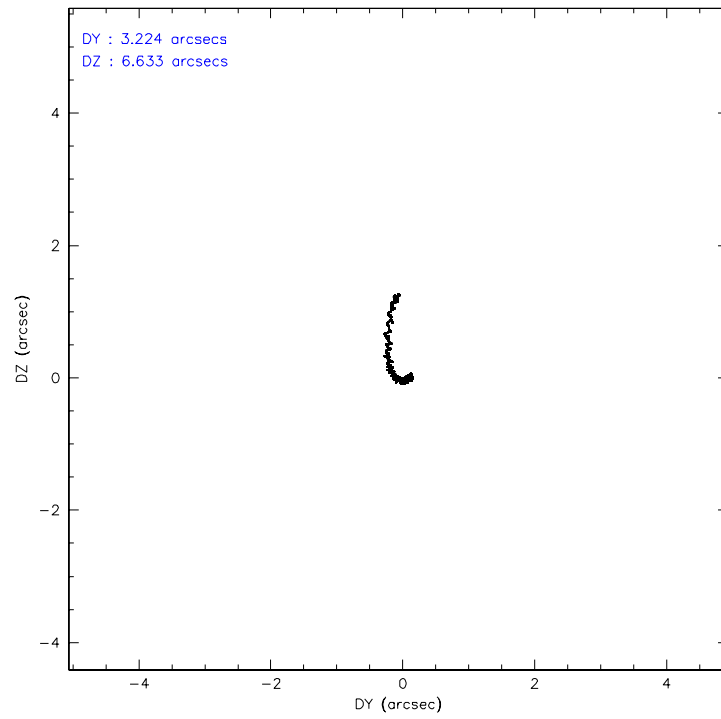
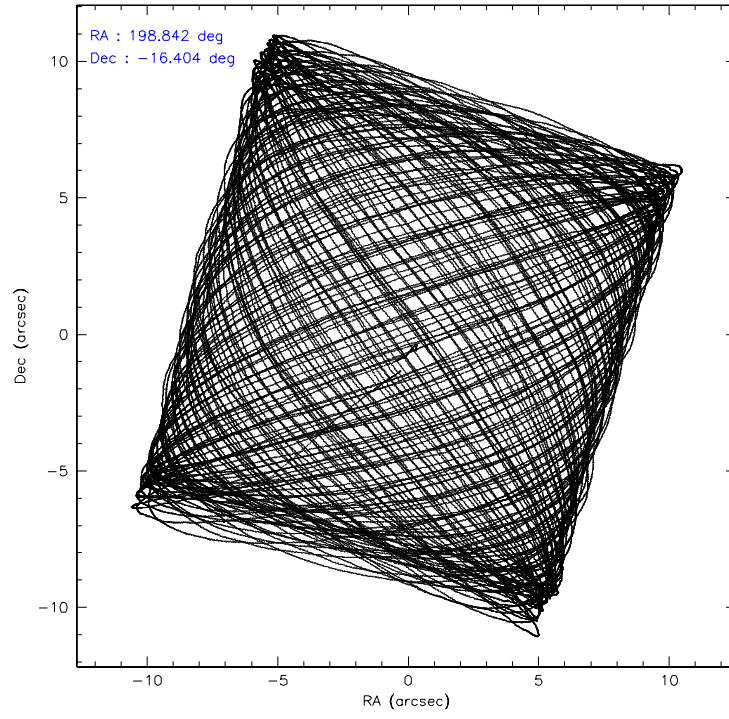
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	596549	839824	567588	753652	696324	548350
rejected events	529149	451681	481961	437267	539657	475777
rejected %	88%	53%	84%	58%	77%	86%

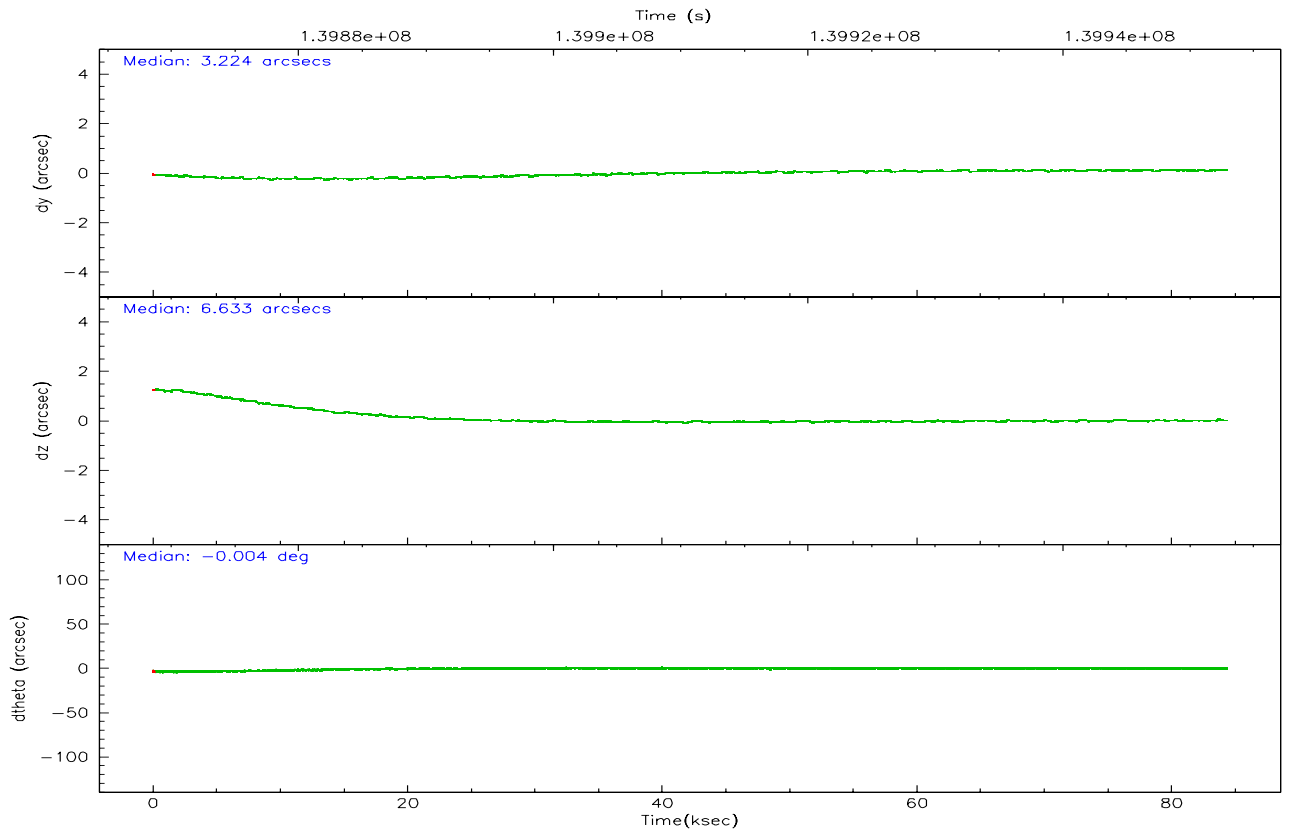
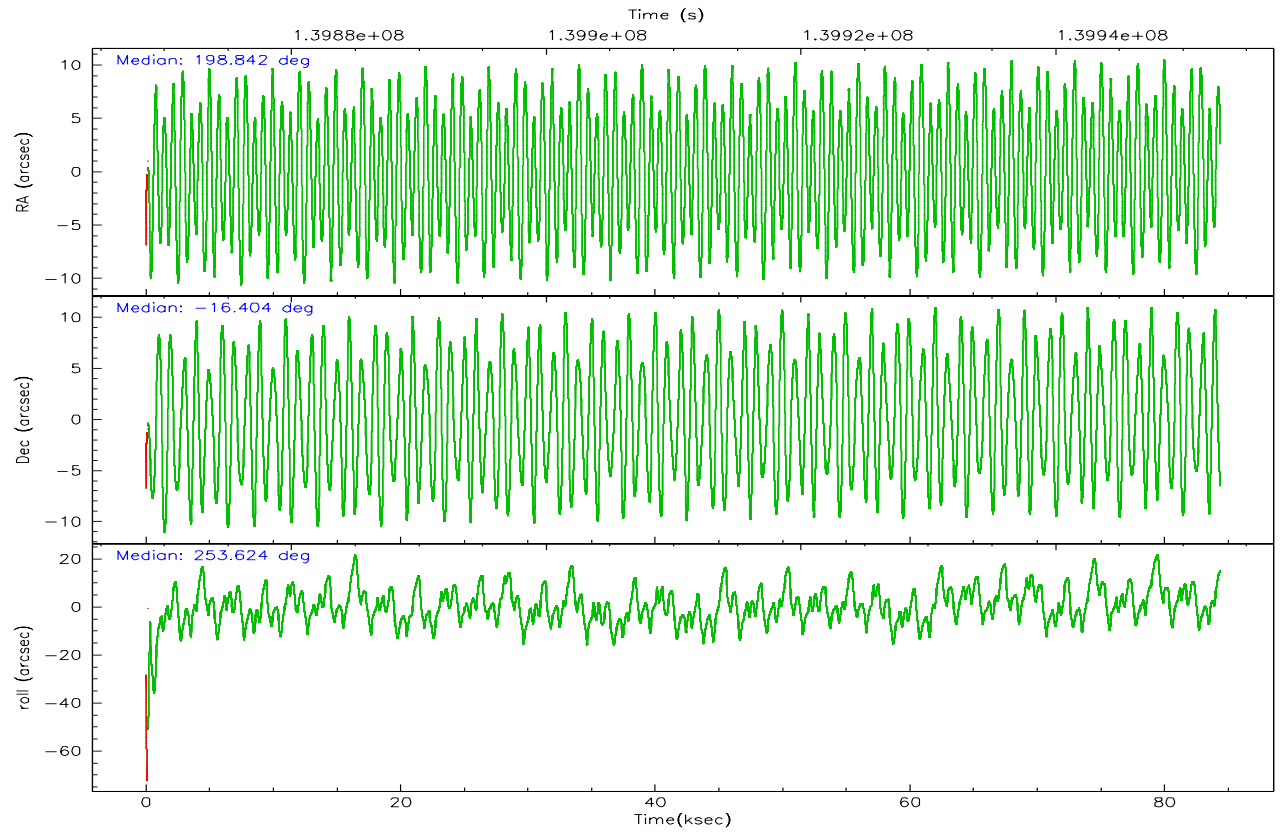
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	27202	66633	44290	28353	59941	33129
	4%	7%	7%	3%	8%	6%
grade 1 events	283	662	315	401	447	237
	0%	0%	0%	0%	0%	0%
grade 2 events	16609	111620	14894	79999	31768	13964
	2%	13%	2%	10%	4%	2%
grade 3 events	6033	8093	6844	19429	15017	6487
	1%	0%	1%	2%	2%	1%
grade 4 events	5841	7822	6802	18795	13903	6136
	0%	0%	1%	2%	1%	1%
grade 5 events	20387	37940	23436	47023	30111	24113
	3%	4%	4%	6%	4%	4%
grade 6 events	11755	194197	12853	169987	36111	12890
	1%	23%	2%	22%	5%	2%
grade 7 events	508439	412857	458154	389665	509026	451394
	85%	49%	80%	51%	73%	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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	198.835556	198.8425888231695	Subarray requested	NONE	NONE
Pointing Dec	-16.377984	-16.404380439246	Alternating exposures requested	N	N
Pointing Roll	253.466117	253.6247306384186	Primary exposure time	0.000000	3.2
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	139868750.184000	139867733.57704			
Observation start date	2002-06-07T20:24:46	2002-06-07T20:08:53			
Observation end time	139952930.184000	139953485.59305			
Observation end date	2002-06-08T19:47:46	2002-06-08T19:58:05			
Read mode	TIMED	TIMED			

2.3 Aspect



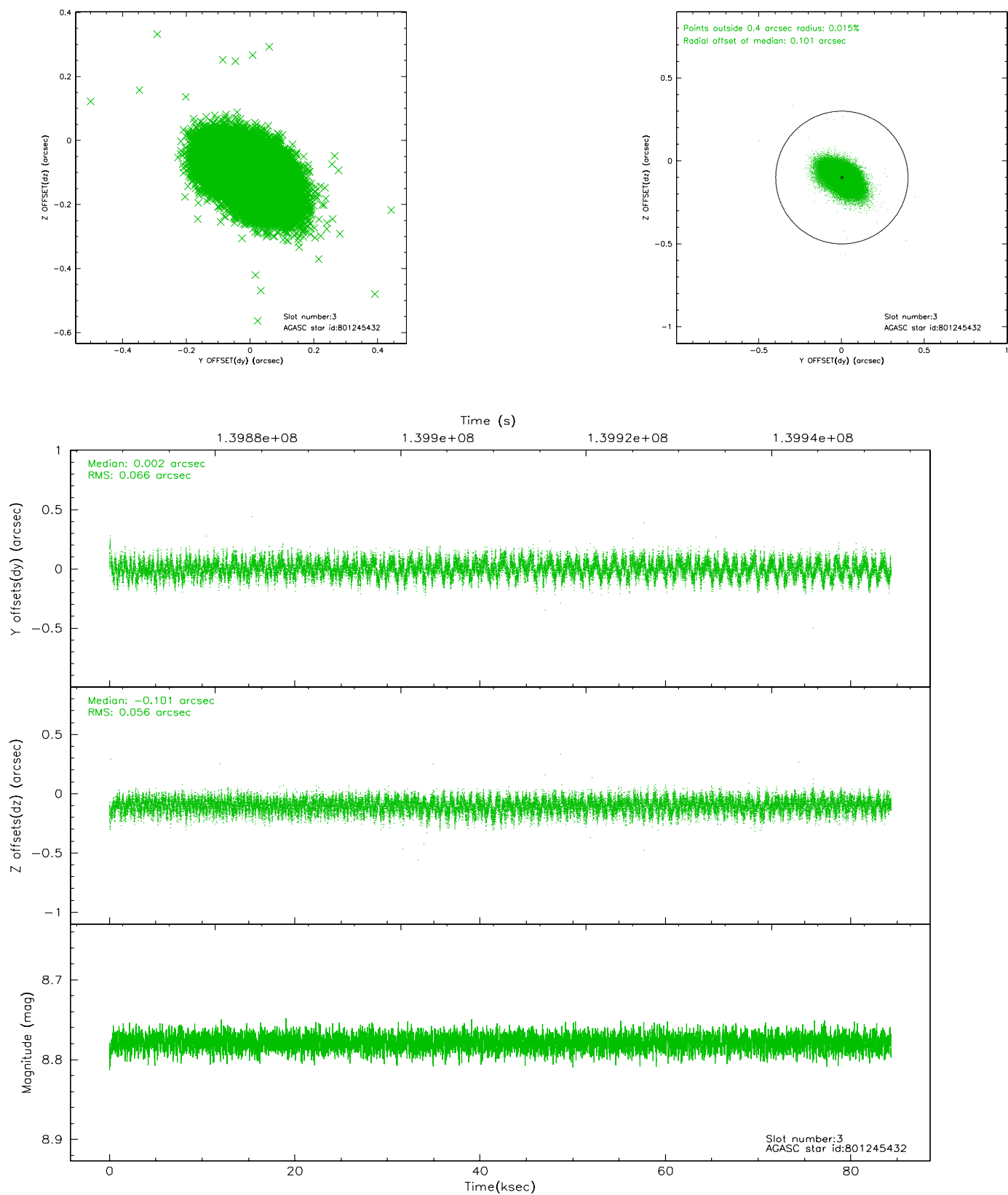


Slot Statistics

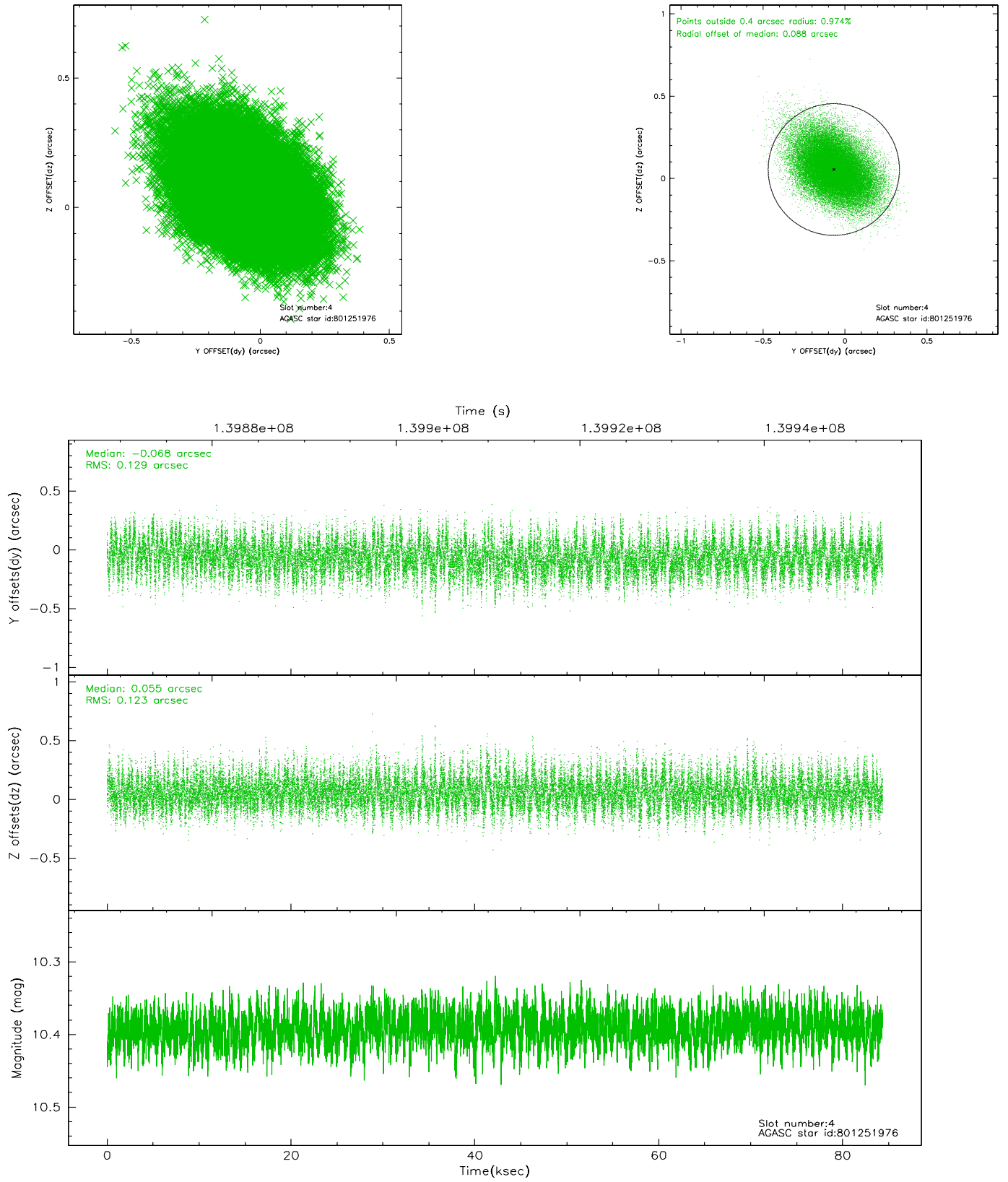
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	20562	-0.028	-0.032	0.010	0.034	0.000000	0.000000	-755.65	-1790.12
1	FID	ACIS-S-4	7.20	20561	-0.024	0.022	0.008	0.014	0.000000	0.000000	2157.65	118.51
2	FID	ACIS-S-5	7.23	20561	0.019	0.019	0.011	0.037	0.000000	0.000000	-1808.55	112.06
3	GUIDE	801245432	8.78	41110	0.002	-0.101	0.092	0.152	198.949872	-16.275389	-466.53	274.16
4	GUIDE	801251976	10.39	41055	-0.068	0.055	0.188	0.311	199.489404	-15.954989	-2100.73	1738.09
5	GUIDE	801255952	9.37	41111	0.053	0.038	0.105	0.172	199.159726	-16.764729	1017.33	1468.57
6	GUIDE	801252224	9.47	41101	0.012	0.009	0.096	0.155	198.949290	-17.046136	2194.39	1060.72
7	MONITOR		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

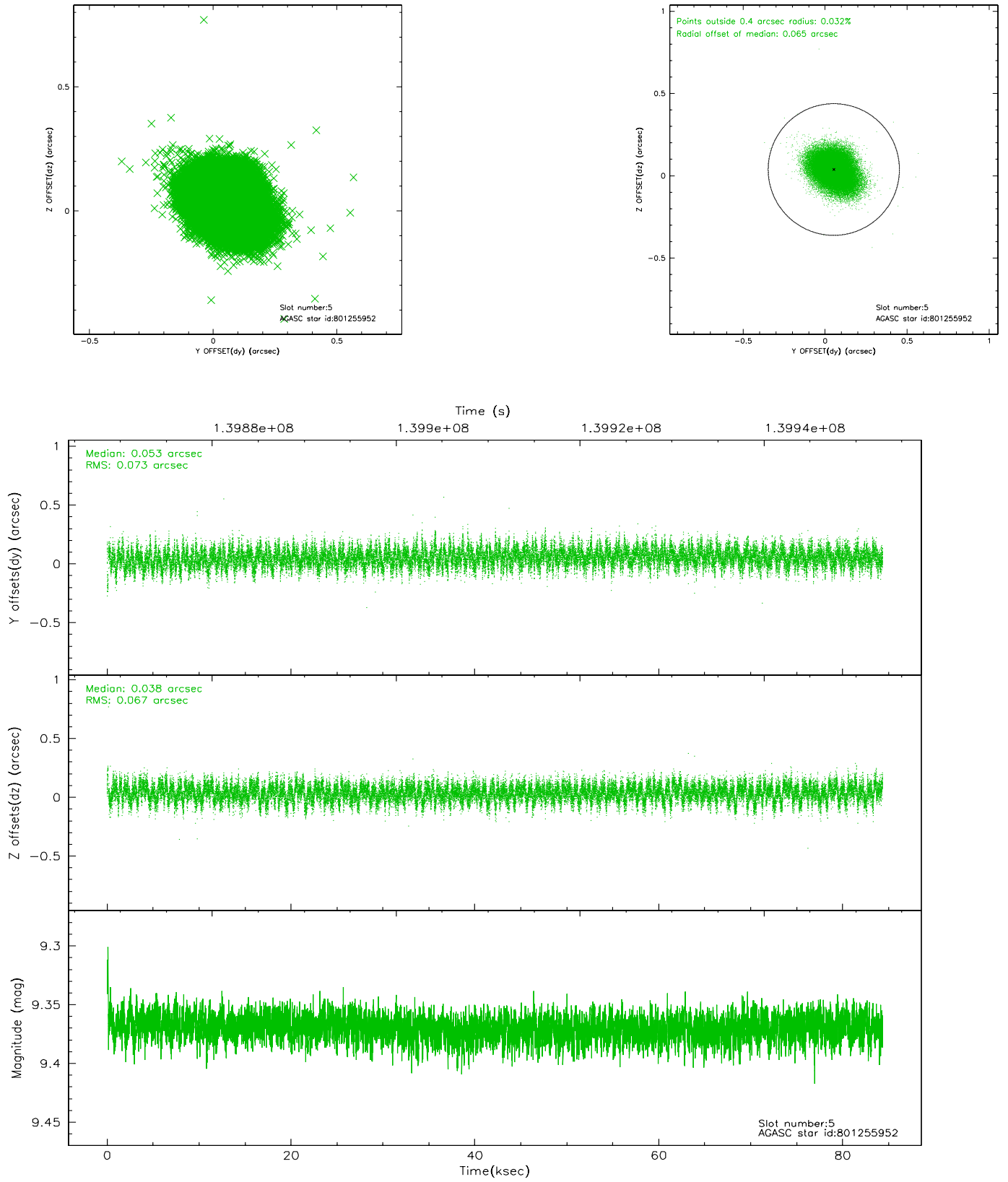
2.4.1 Slot 3



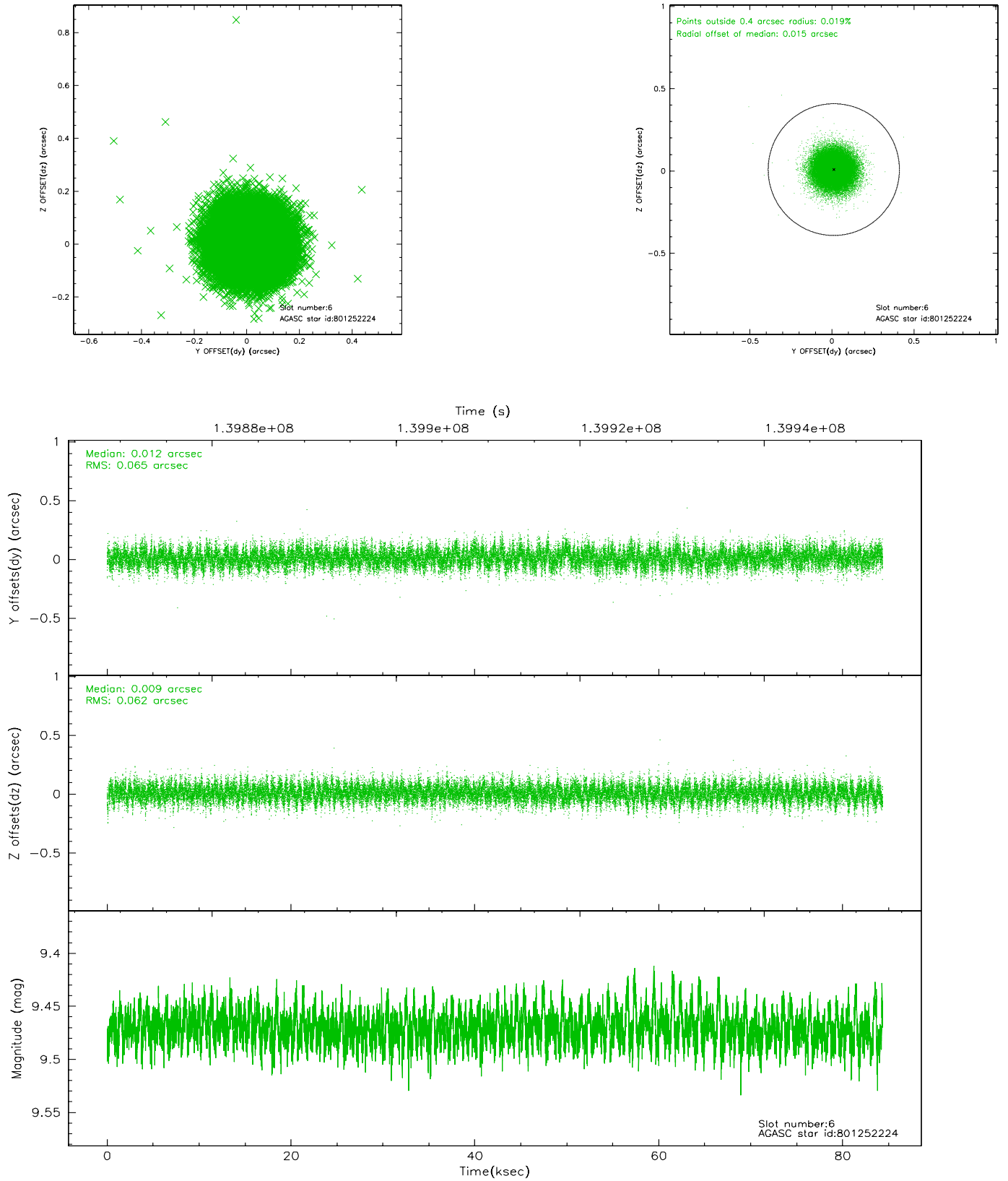
2.4.2 Slot 4



2.4.3 Slot 5

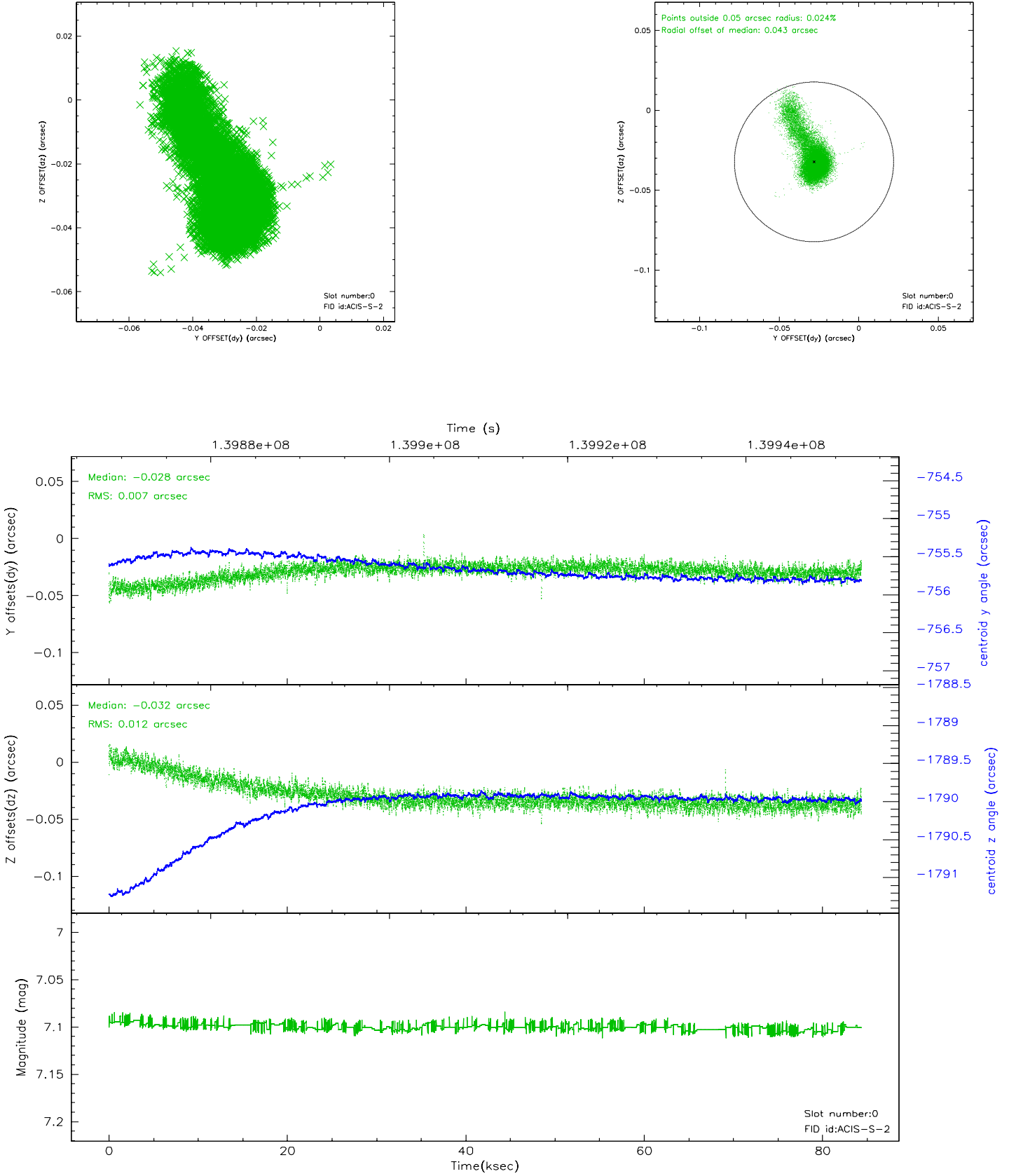


2.4.4 Slot 6

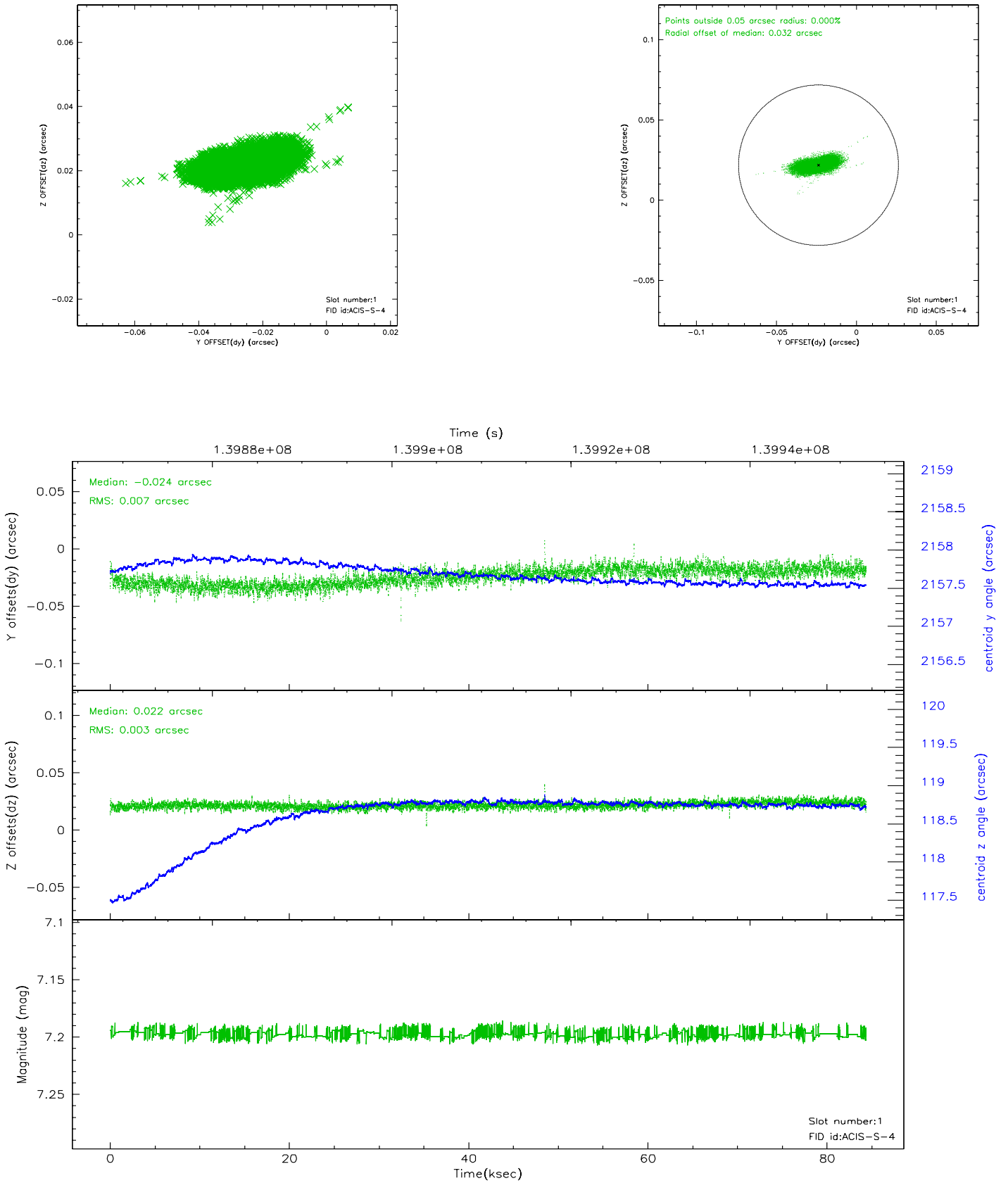


2.5 FID Slots

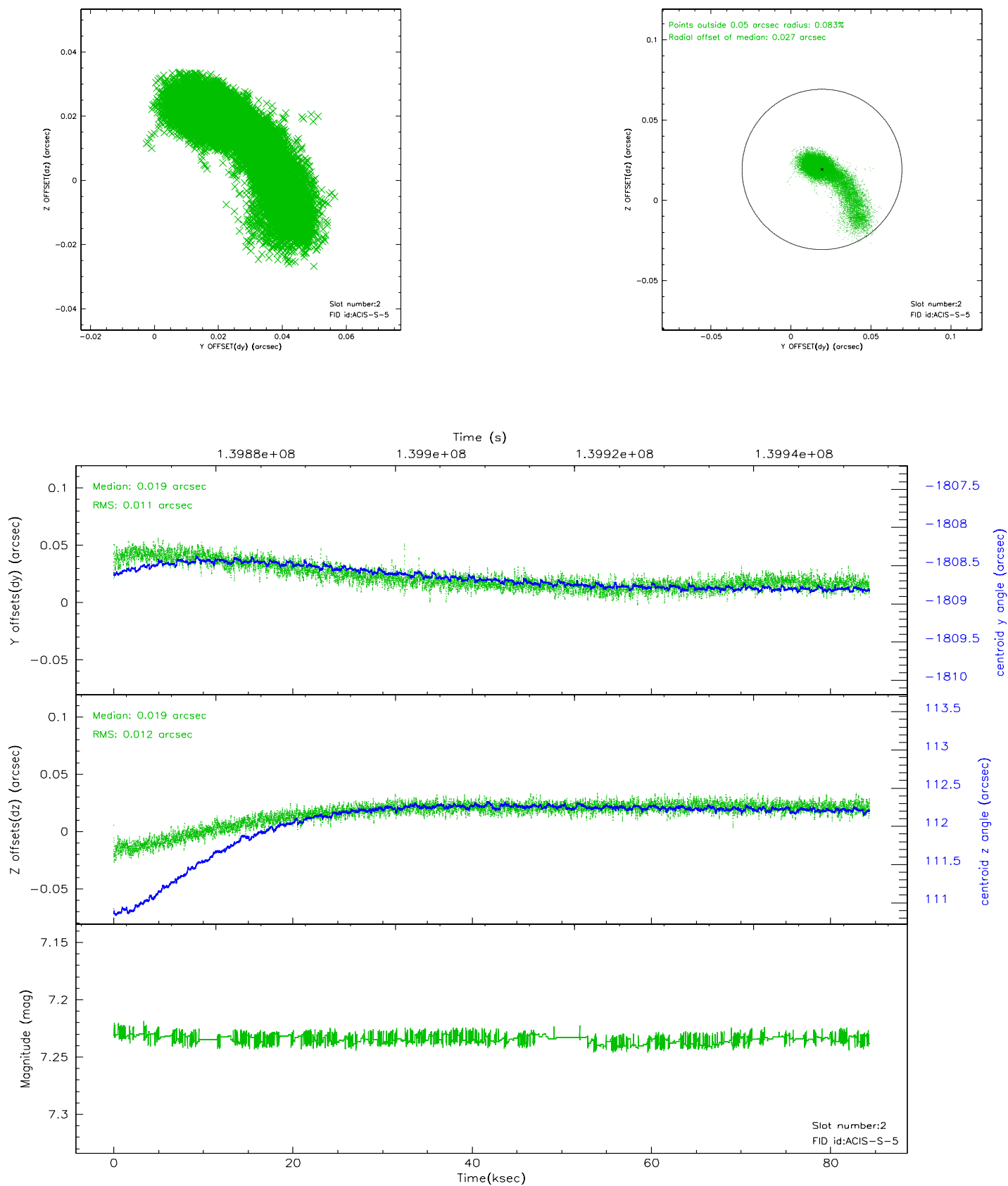
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

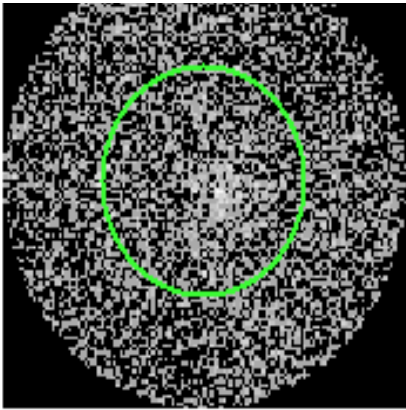


3 Gratings

3.1 HEG Arm



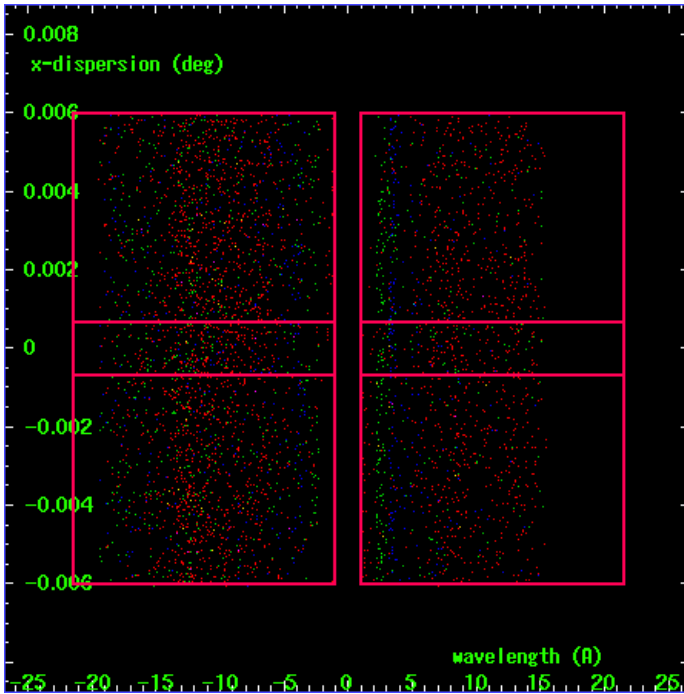
HEG Order Sort 123



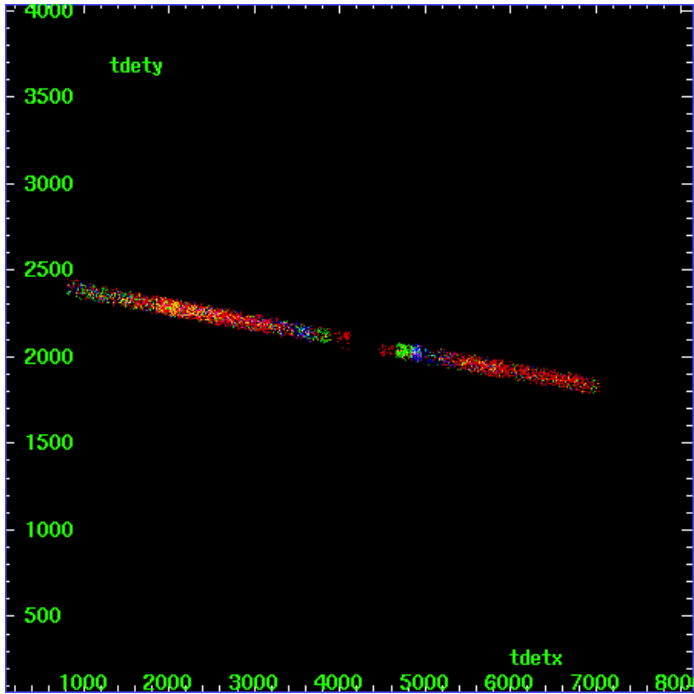
HEG Zero Order



HEG Order Sort ALL

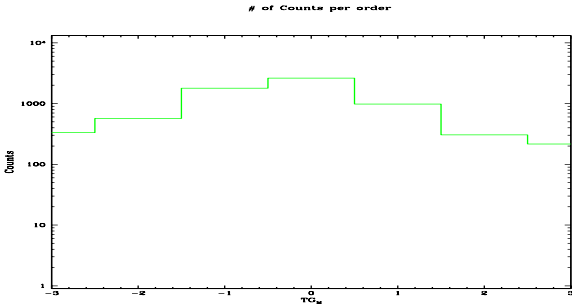


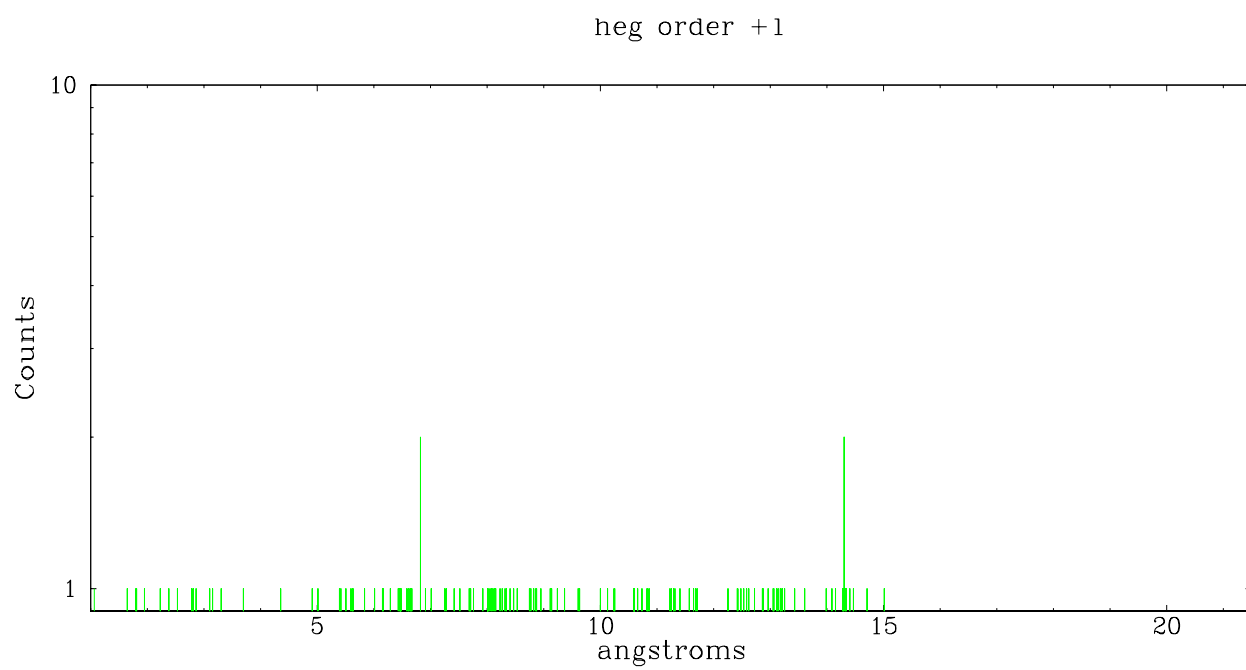
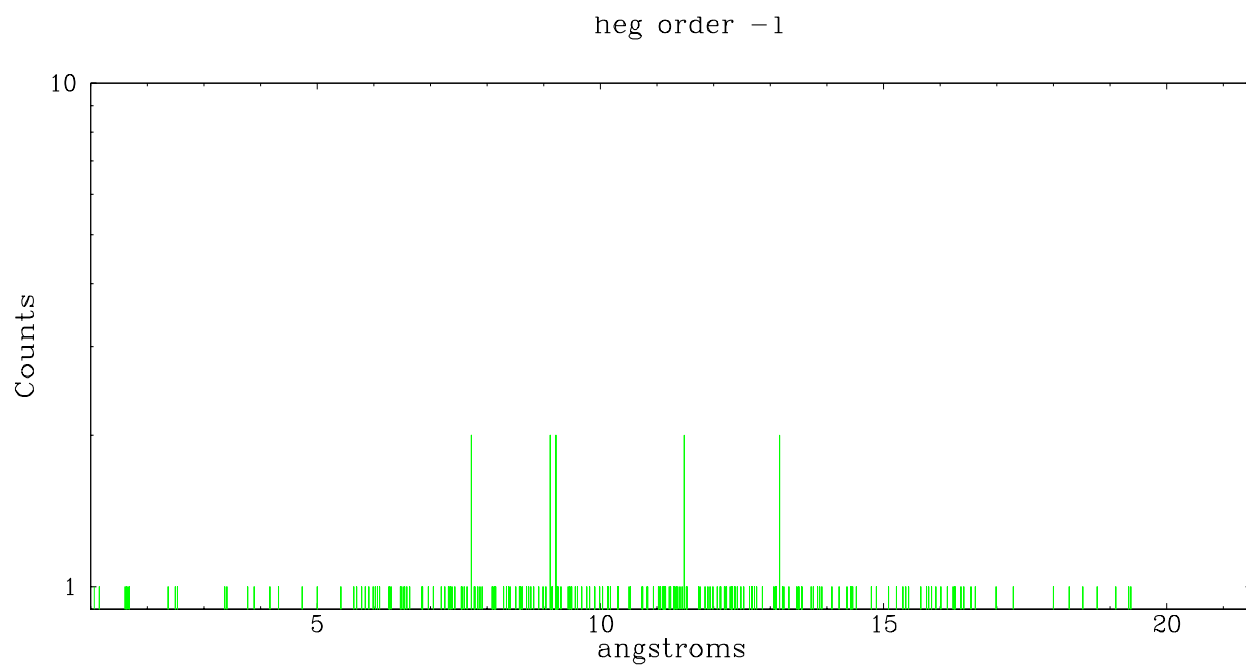
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	333	569	1786	2619	981	304	216

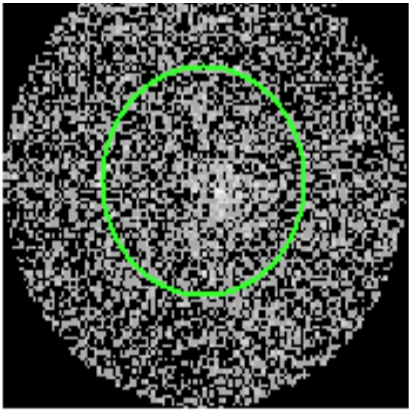




3.2 MEG Arm



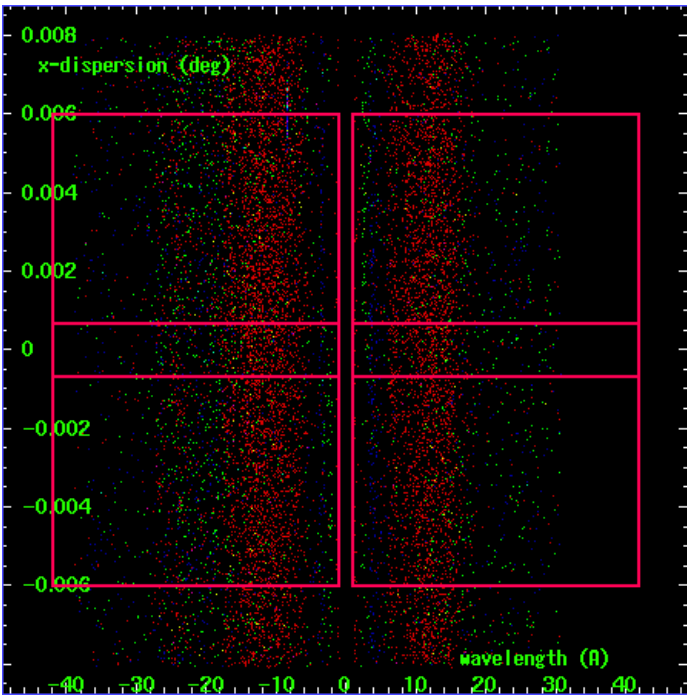
MEG Order Sort 123



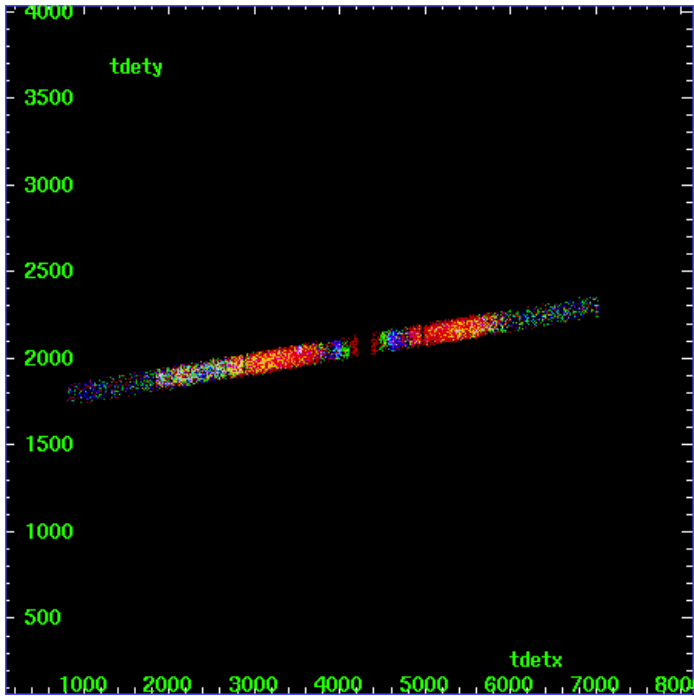
MEG Zero Order



MEG Order Sort ALL

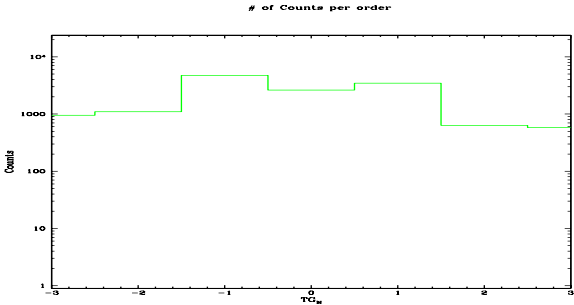


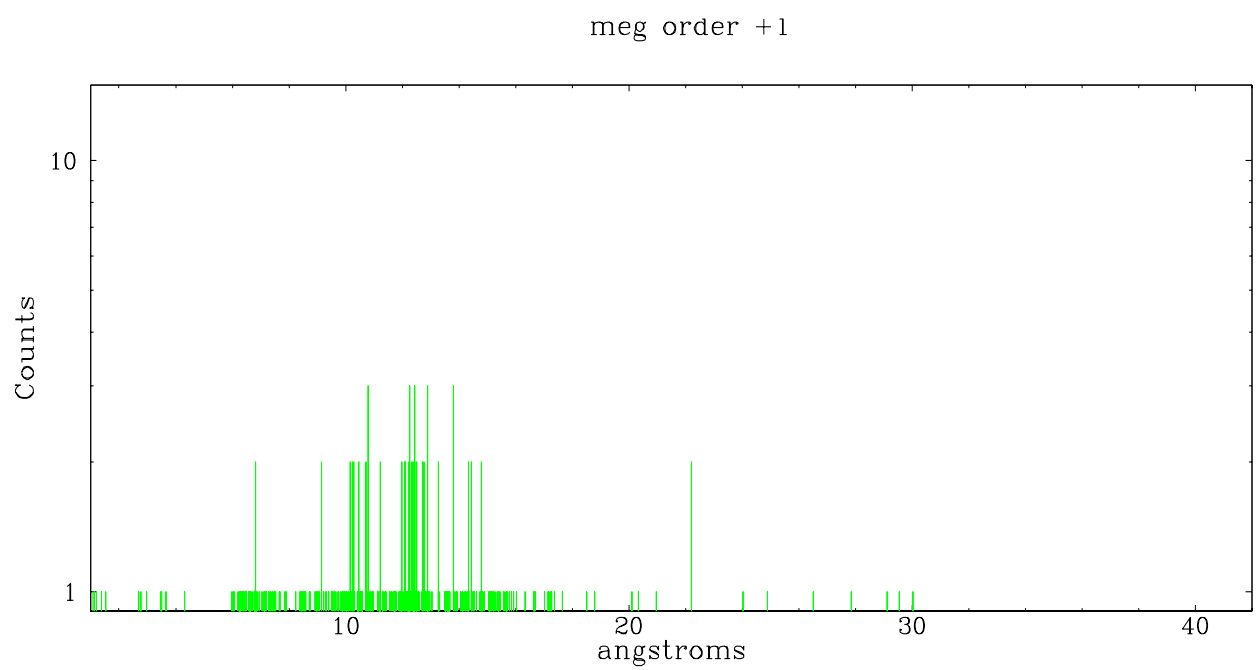
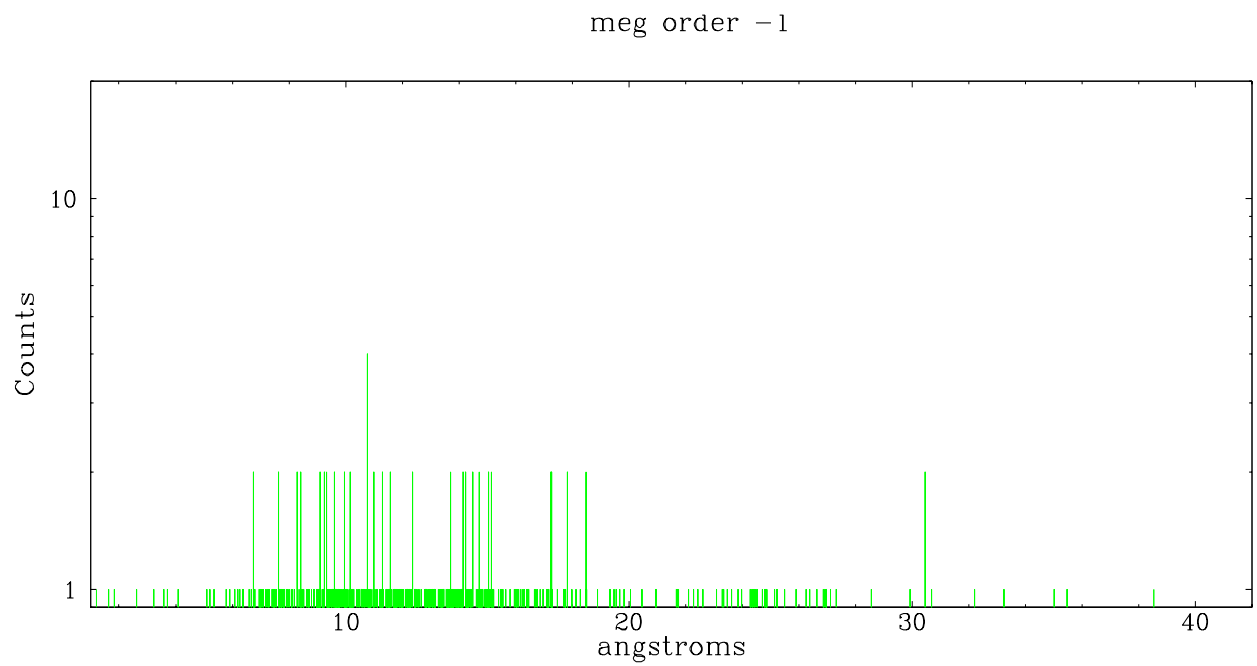
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	950	1098	4764	2619	3465	632	581





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	84.207

A.2 Comments