

V&V Reference Report

L2 ASCDS Version : 7.6.8

Observation 3746 - L2 Version 001
Chandra X-Ray Center

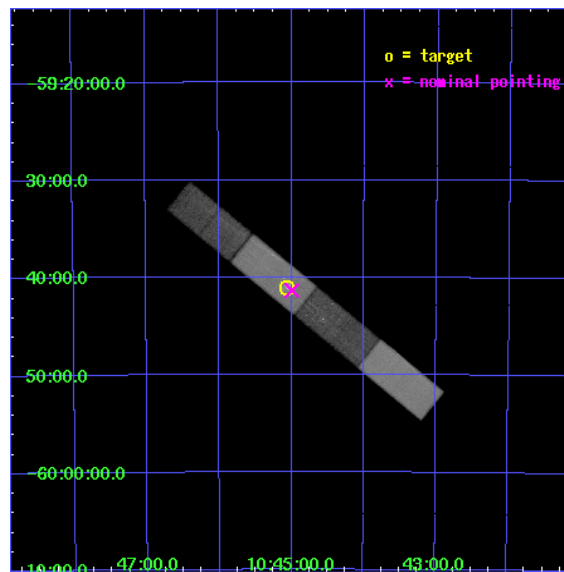
L2 Processing Date : Jul 14 2006

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1 Front

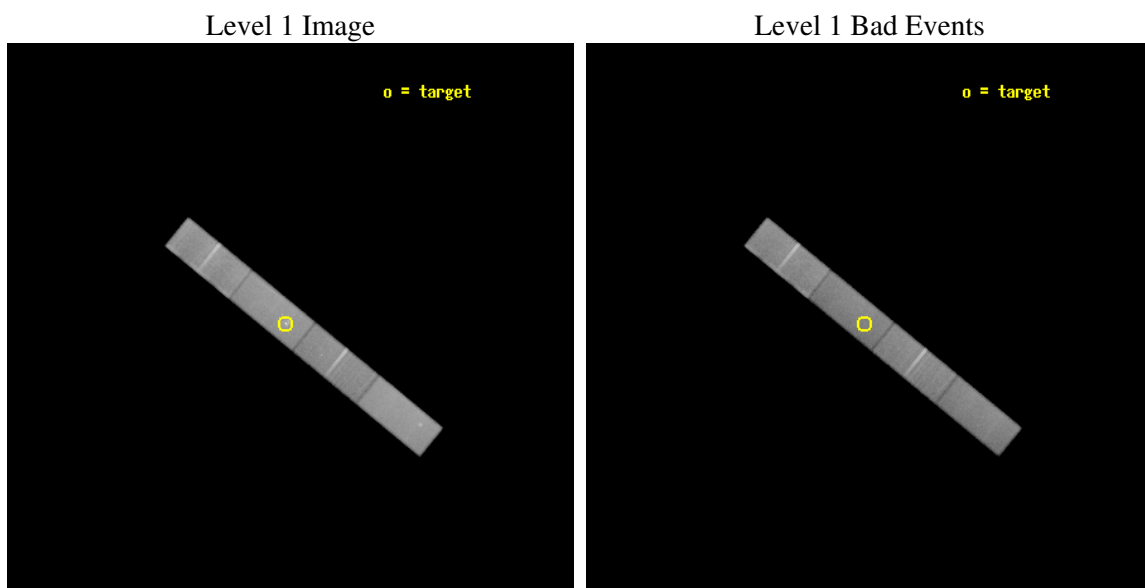
seq_num	200216
obs_id	3746
title	UNVEILING ETA CAR: CHANDRA OBSERVATIONS DURING THE 2003.5 EVENT
observer	Dr Michael Corcoran
object	ETA CARINAE
dtcycle	0
cycle	P
ra_targ	161.265
dec_targ	-59.684528
ra_nom	161.24829290451
dec_nom	-59.689219576789
roll_nom	219.20448549176
revision	2
ontime	92958.313285083
livetime	90310.913367509
ontime5	92953.032372564
ontime6	92954.514412642
ontime7	92958.313285083
ontime8	92953.990234733
l2events	395127



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 5

Chip 6

Chip 7



Chip 8



2.1.3 Parameters

obi_num	0
ascdsver	7.6.8
caldbver	3.2.2
date	2006-07-14T13:28:52
revision	2

sched_exp_time	93000.000000
ontime	93621.789351434
ontime5	93613.143240988
ontime6	93549.737520754
ontime7	93621.789351434
ontime8	93532.445070595
l1events	1405156

2.1.4 Events

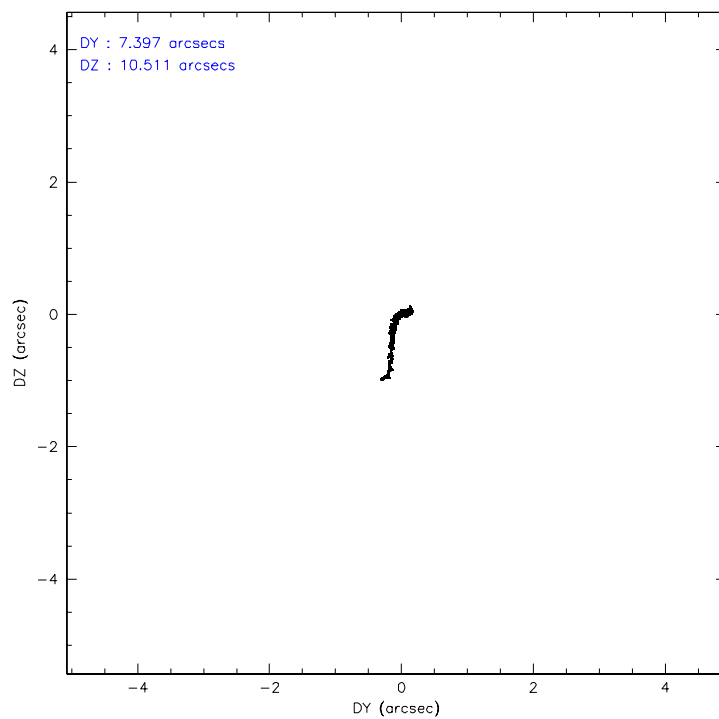
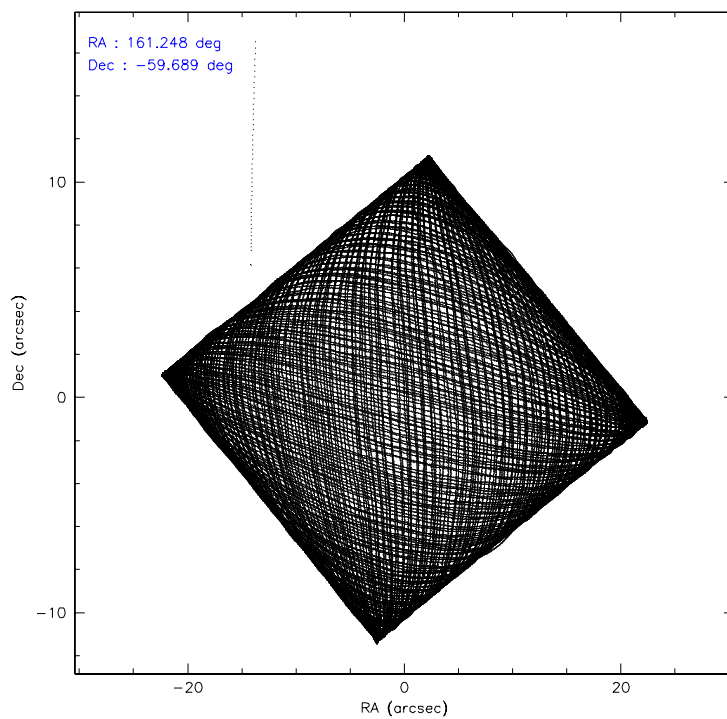
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	382711	295740	360779	365926
rejected events	210194	250912	204866	290068
rejected %	54%	84%	56%	79%

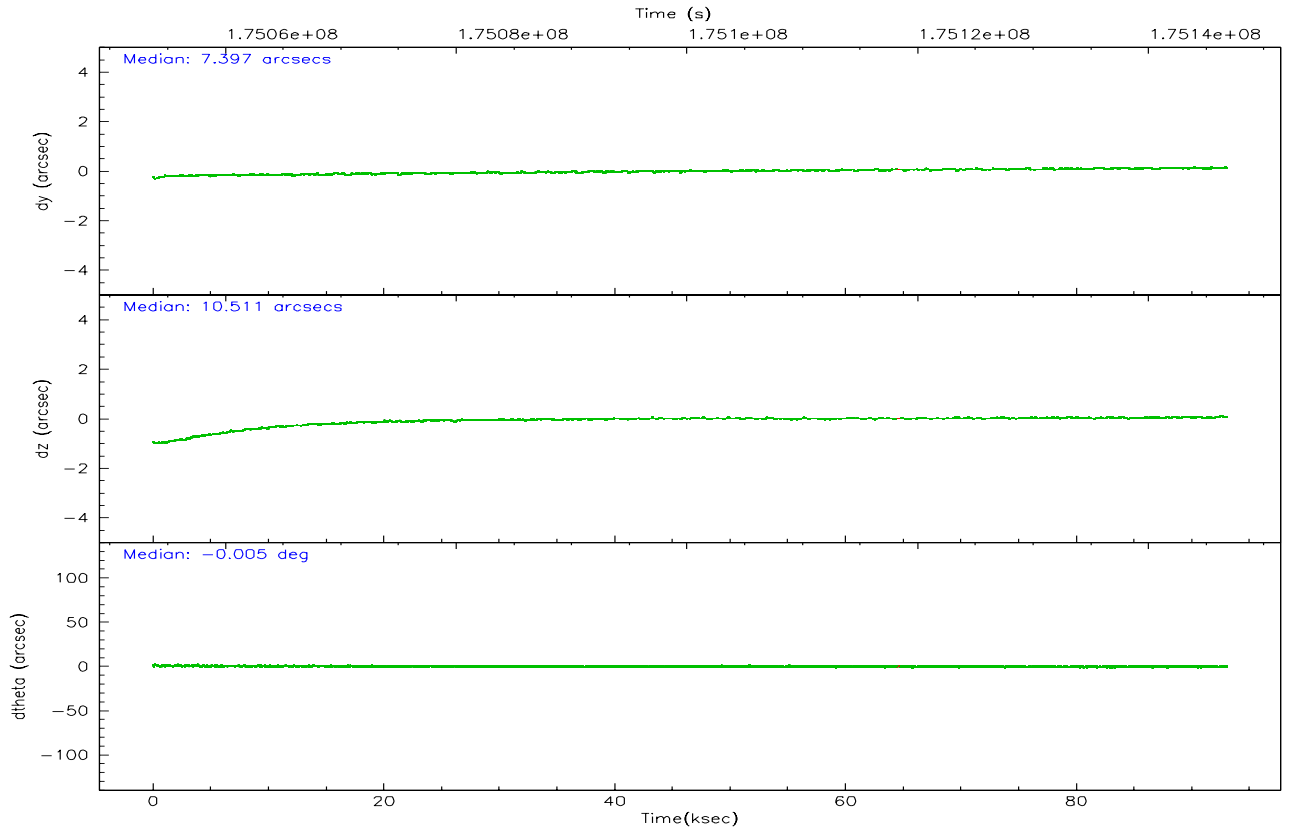
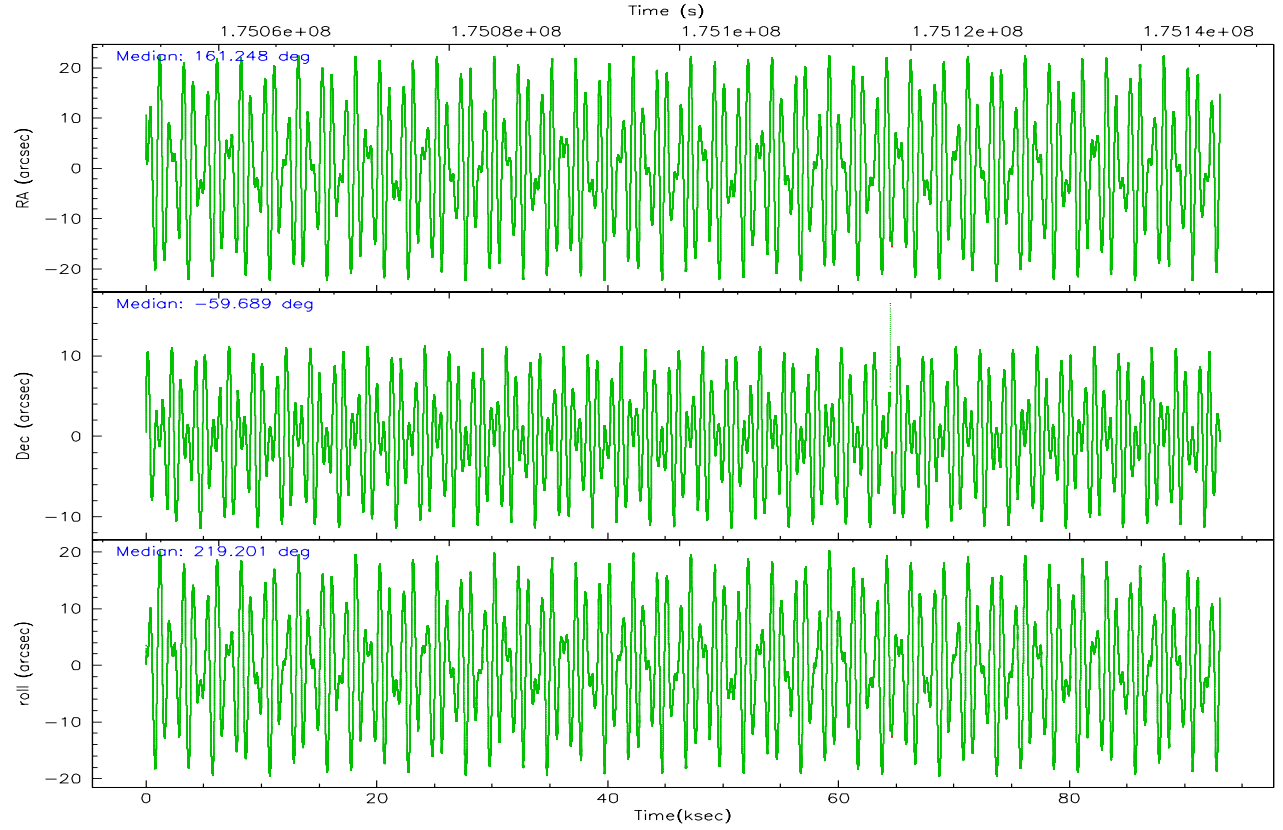
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	14328	23614	14989	26454
	3%	7%	4%	7%
grade 1 events	270	106	228	141
	0%	0%	0%	0%
grade 2 events	52134	7666	36807	15754
	13%	2%	10%	4%
grade 3 events	7452	4632	12968	8645
	1%	1%	3%	2%
grade 4 events	7247	4538	12823	8125
	1%	1%	3%	2%
grade 5 events	20622	10967	26056	14179
	5%	3%	7%	3%
grade 6 events	94397	6640	81326	19425
	24%	2%	22%	5%
grade 7 events	186261	237577	175582	273203
	48%	80%	48%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	CUSTOM
Pointing RA	161.266713	161.2482929045091	Subarray start row	15	15
Pointing Dec	-59.663634	-59.68921957678887	Subarray row count	440	440
Pointing Roll	219.063759	219.2044854917645	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.4
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-183.332523	-183.3212429520412			
SIM translation stage offset (mm)	-6.8	-6.811279630966652			
Phase constraints	Y	Y			
Phase period	2016.000000	2016.000000			
Phase epoch	50794.000000	50794.000000			
Phase start	0.000000	0.000000			
Phase end	0.030000	0.030000			
Phase start error	0.001000	0.001000			
Phase end error	0.001000	0.001000			
Observation start time	175053811.184000	175052846.49706			
Observation start date	2003-07-20T02:02:27	2003-07-20T01:47:26			
Observation end time	175146811.184000	175147656.4386			
Observation end date	2003-07-21T03:52:27	2003-07-21T04:07:36			
Read mode	TIMED	TIMED			

2.3 Aspect



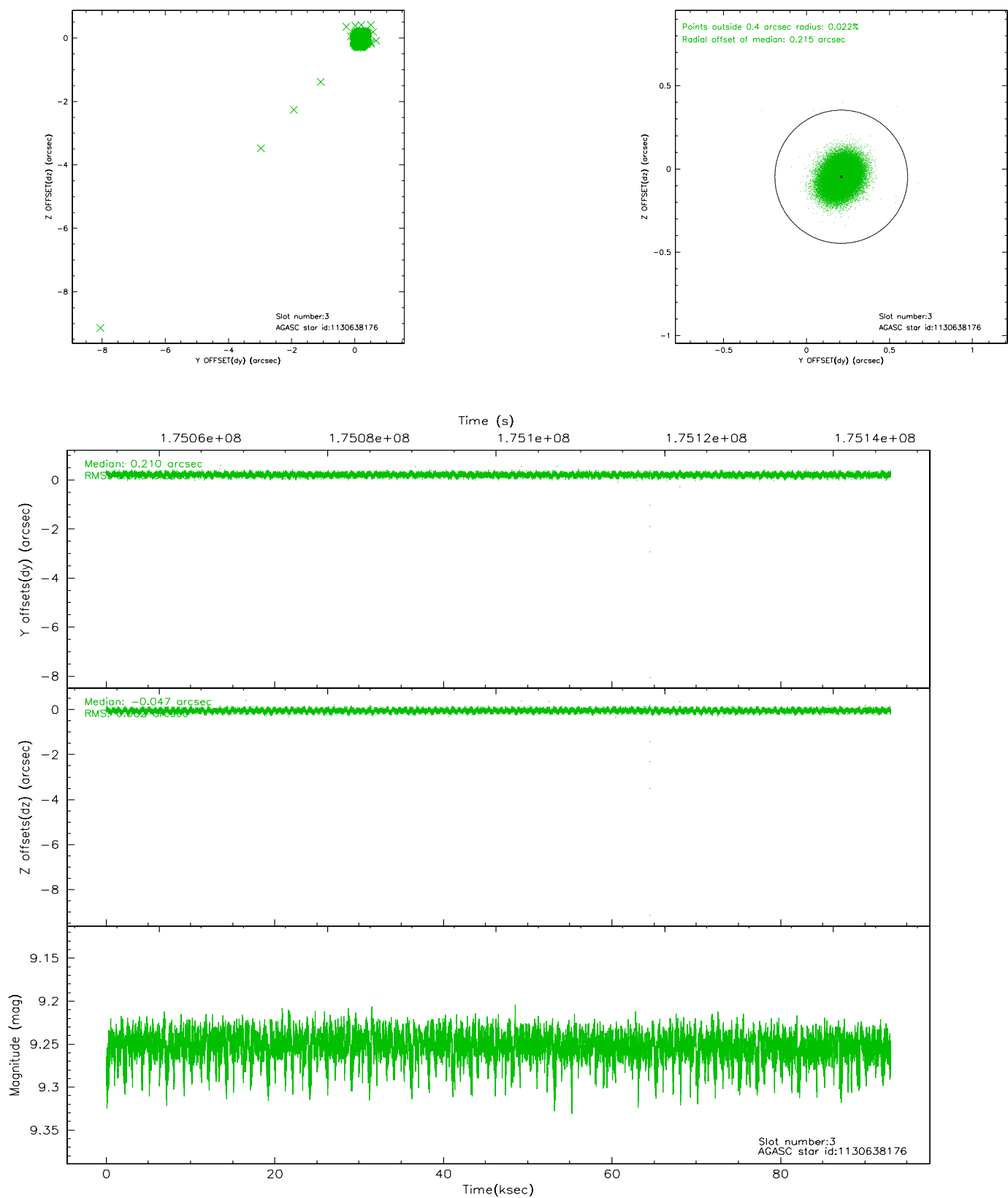


Slot Statistics

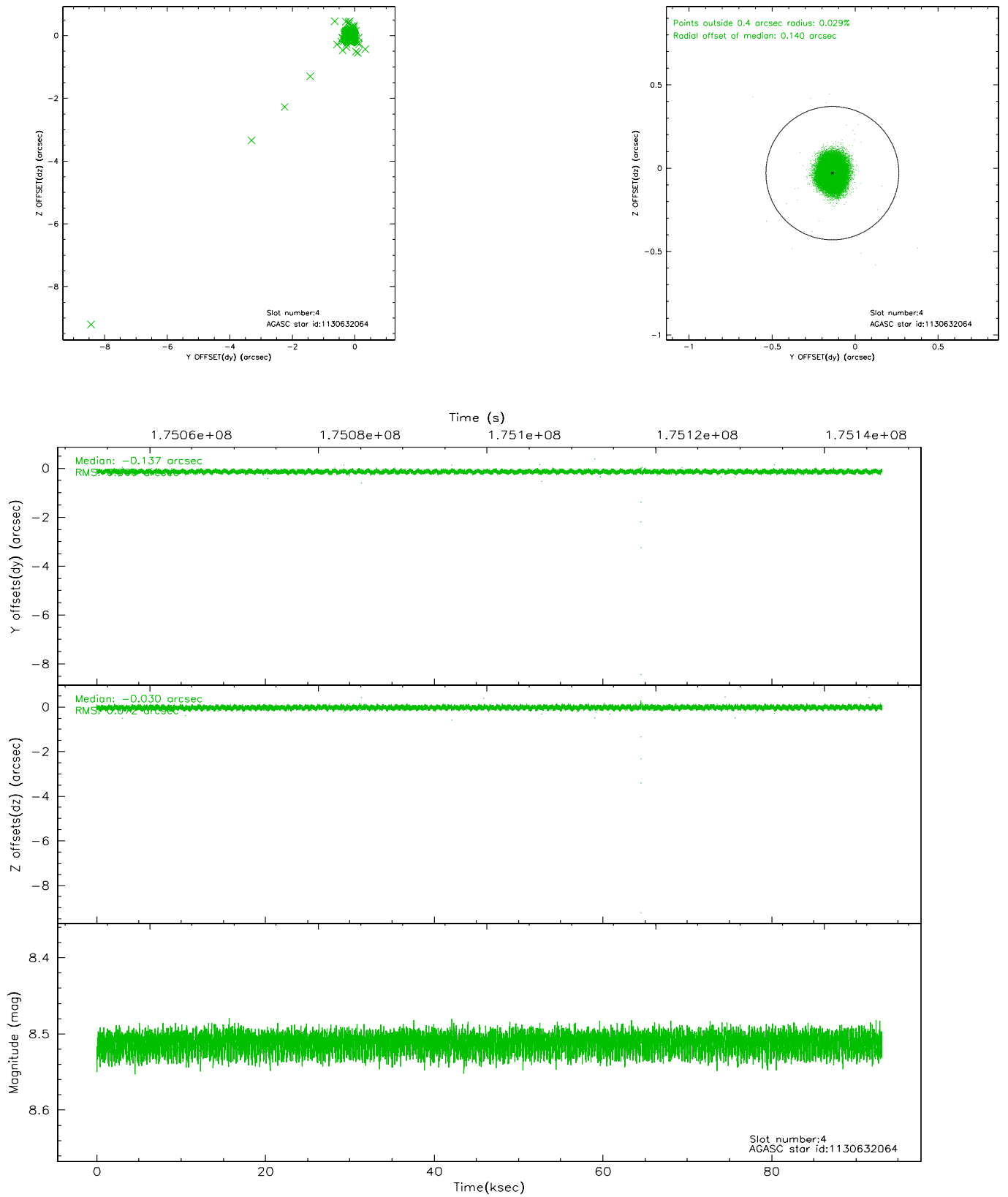
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	22665	0.027	0.124	0.009	0.018	0.000000	0.000000	936.39	-1867.55
1	FID	ACIS-S-2	7.08	22665	-0.089	-0.084	0.006	0.010	0.000000	0.000000	-759.67	-1872.22
2	FID	ACIS-S-4	7.17	22664	0.036	-0.035	0.007	0.013	0.000000	0.000000	2153.69	36.51
3	GUIDE	1130638176	9.25	45308	0.210	-0.047	0.097	0.156	160.132137	-59.778862	1869.08	-959.43
4	GUIDE	1130632064	8.51	45329	-0.137	-0.030	0.073	0.115	160.452382	-59.130948	-34.64	-2429.44
5	GUIDE	1130645296	9.06	45313	-0.020	-0.017	0.084	0.138	162.541185	-59.548371	-2052.80	1160.55
6	GUIDE	1130646496	9.41	45312	-0.113	0.040	0.096	0.159	162.993246	-59.693327	-2342.26	2091.34
7	GUIDE	1174021440	8.40	45329	0.066	0.052	0.124	0.171	160.869011	-60.314711	2029.04	1375.13

2.4 Star Slots

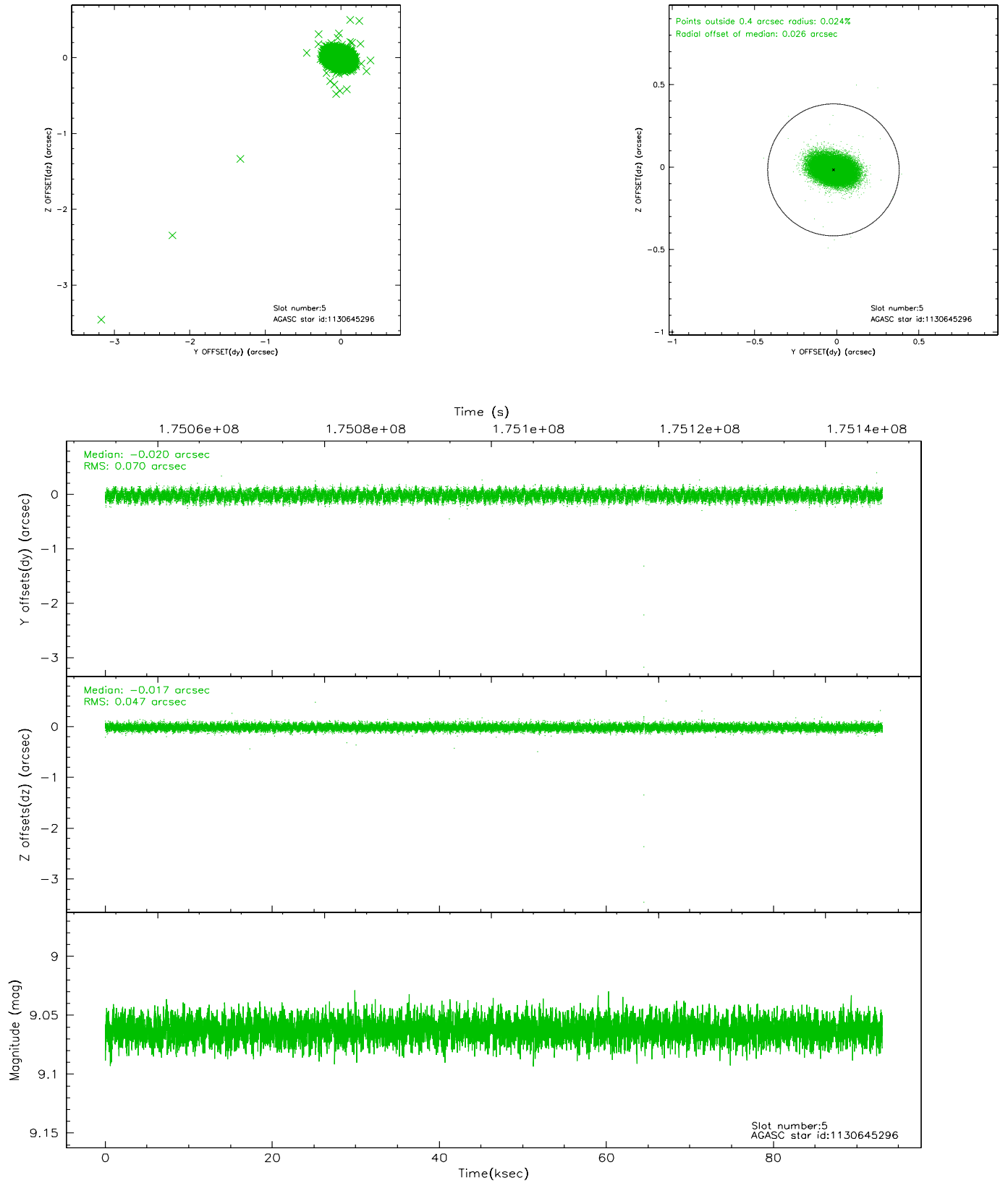
2.4.1 Slot 3



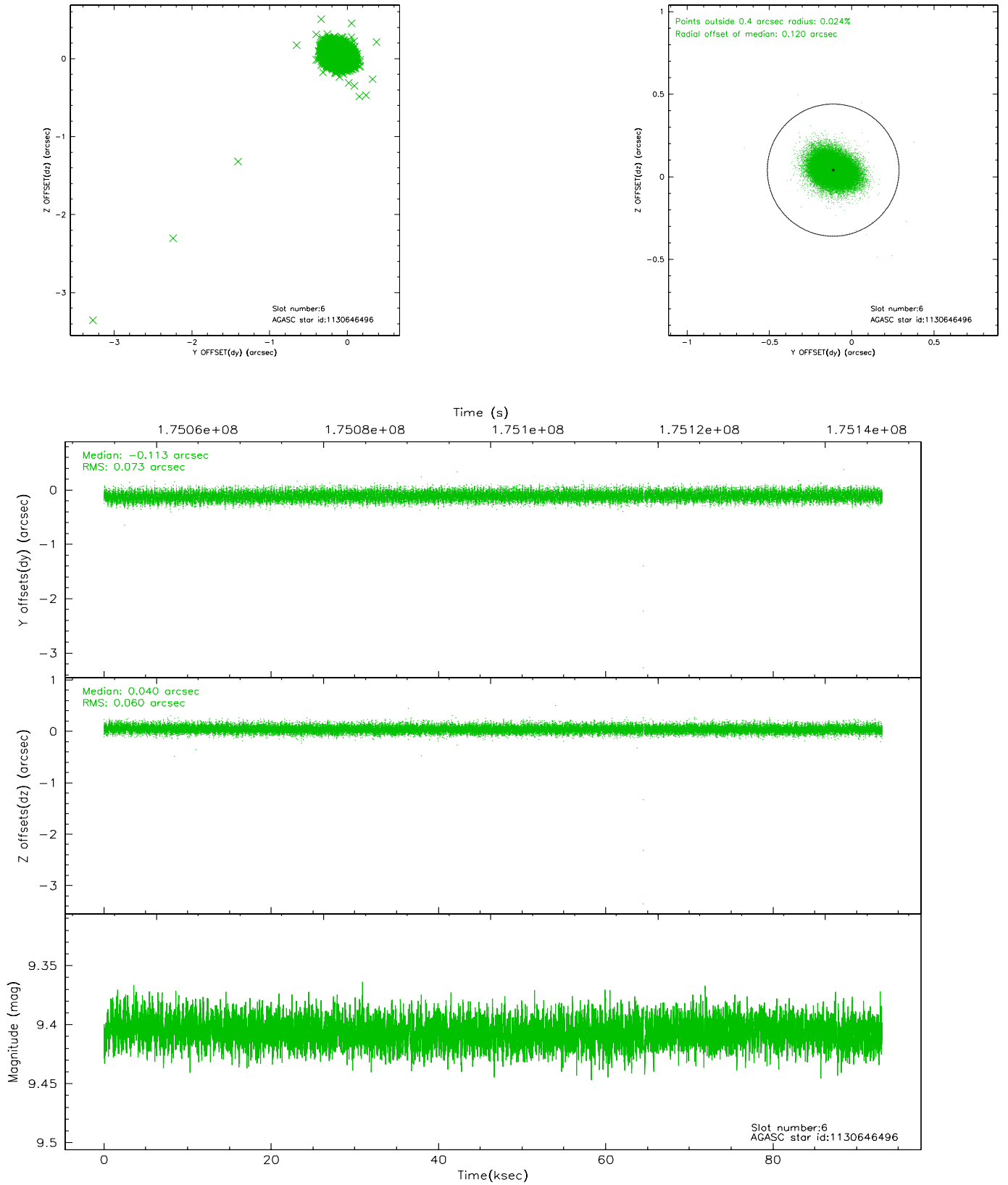
2.4.2 Slot 4



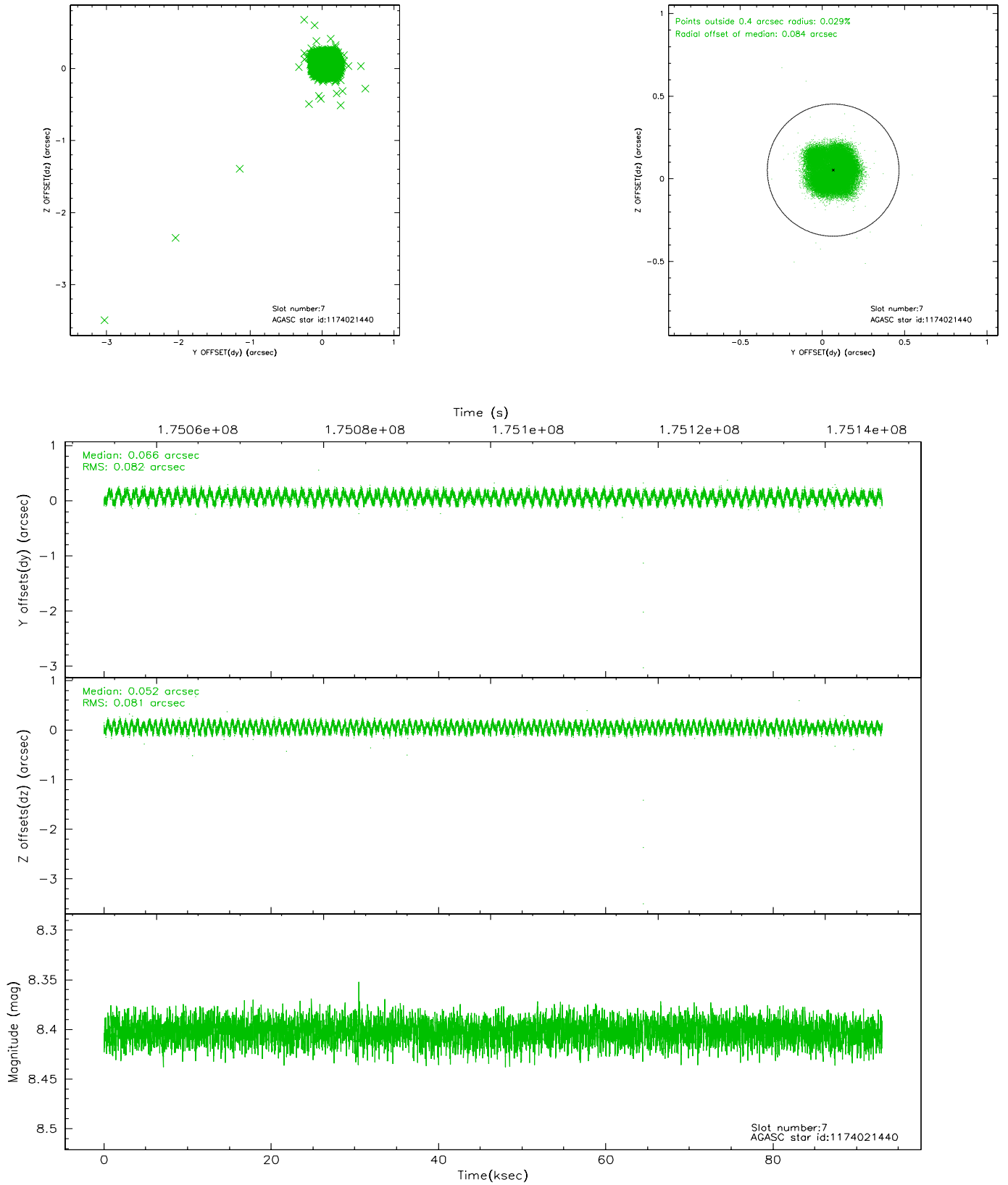
2.4.3 Slot 5



2.4.4 Slot 6

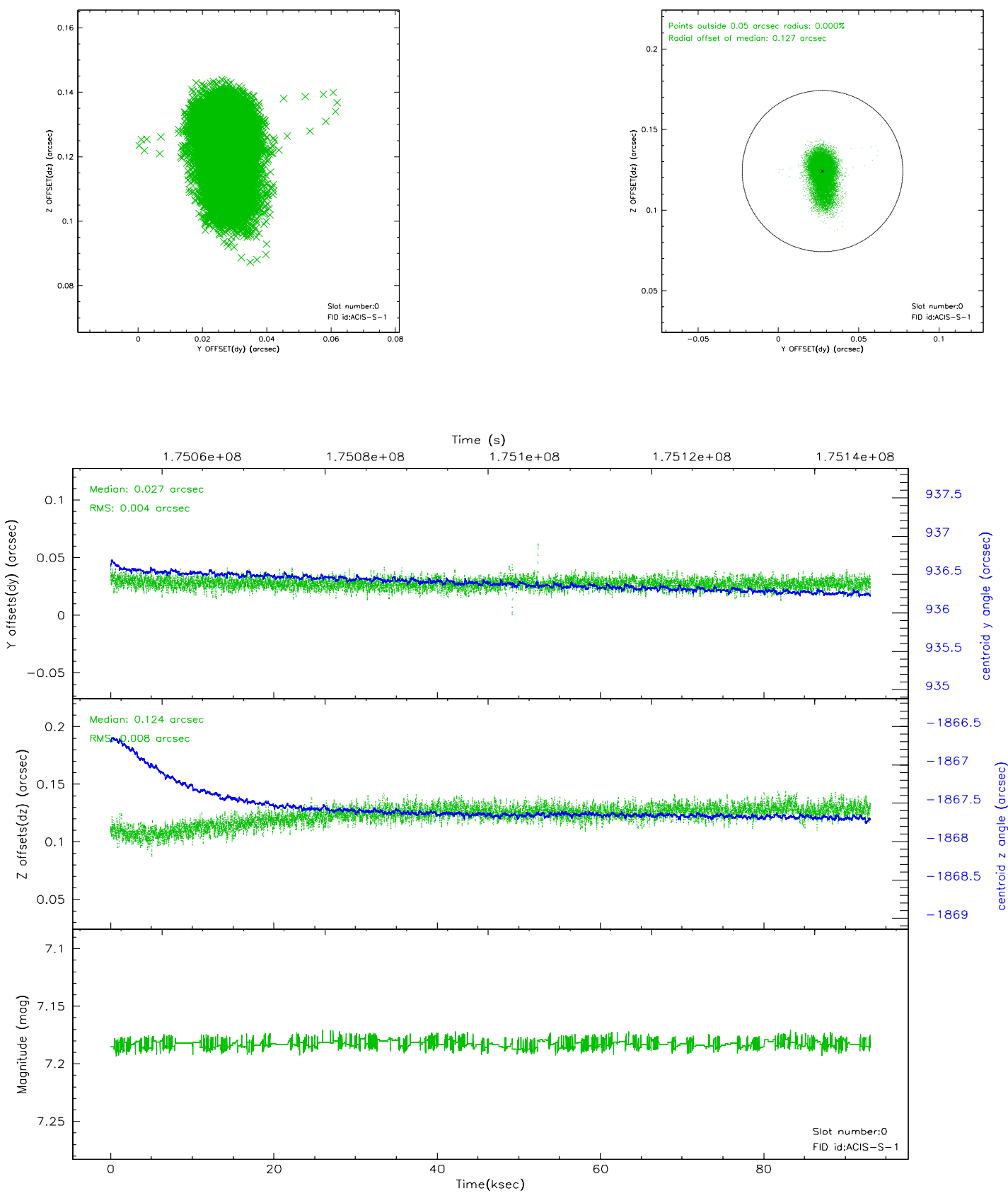


2.4.5 Slot 7

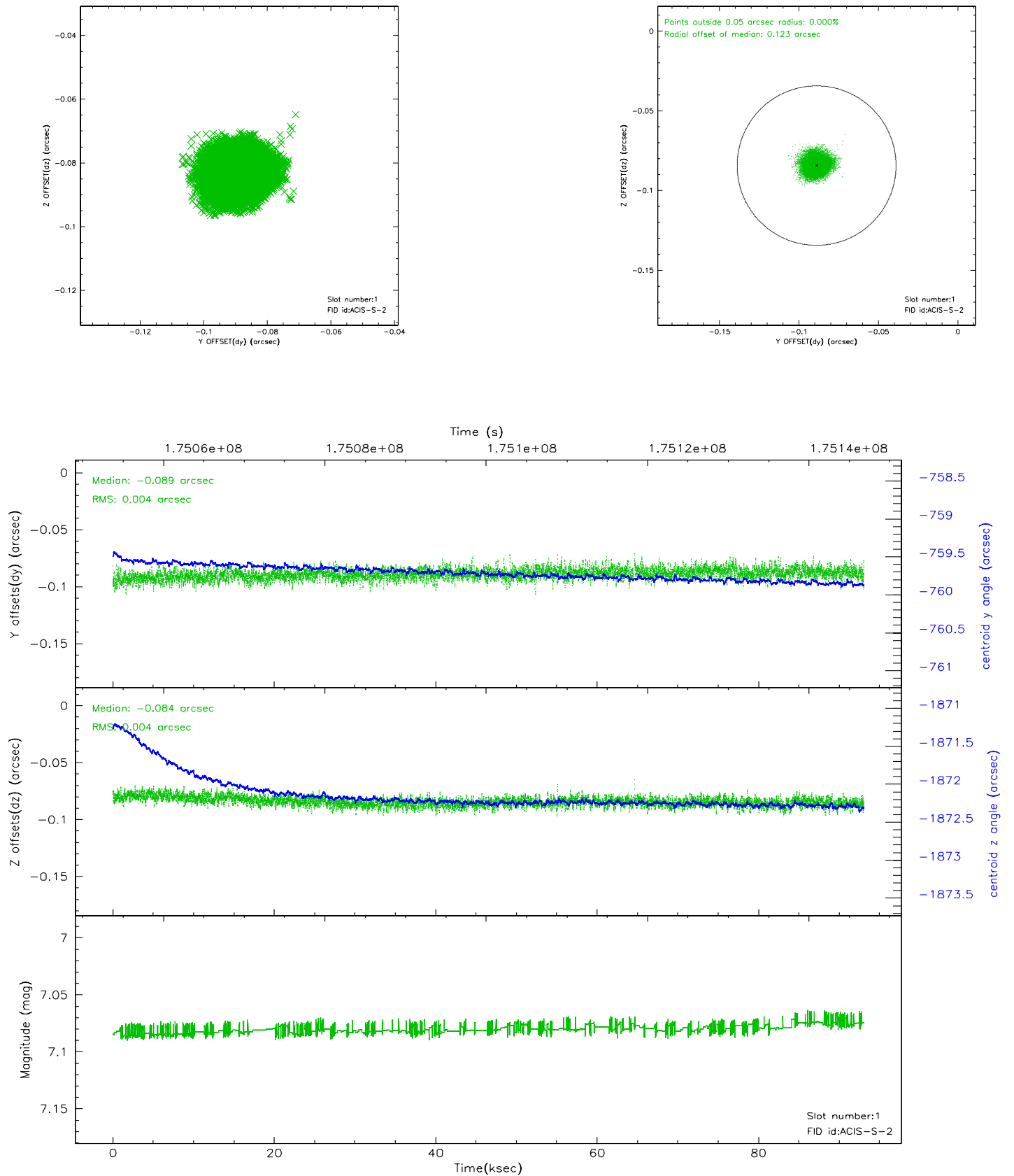


2.5 FID Slots

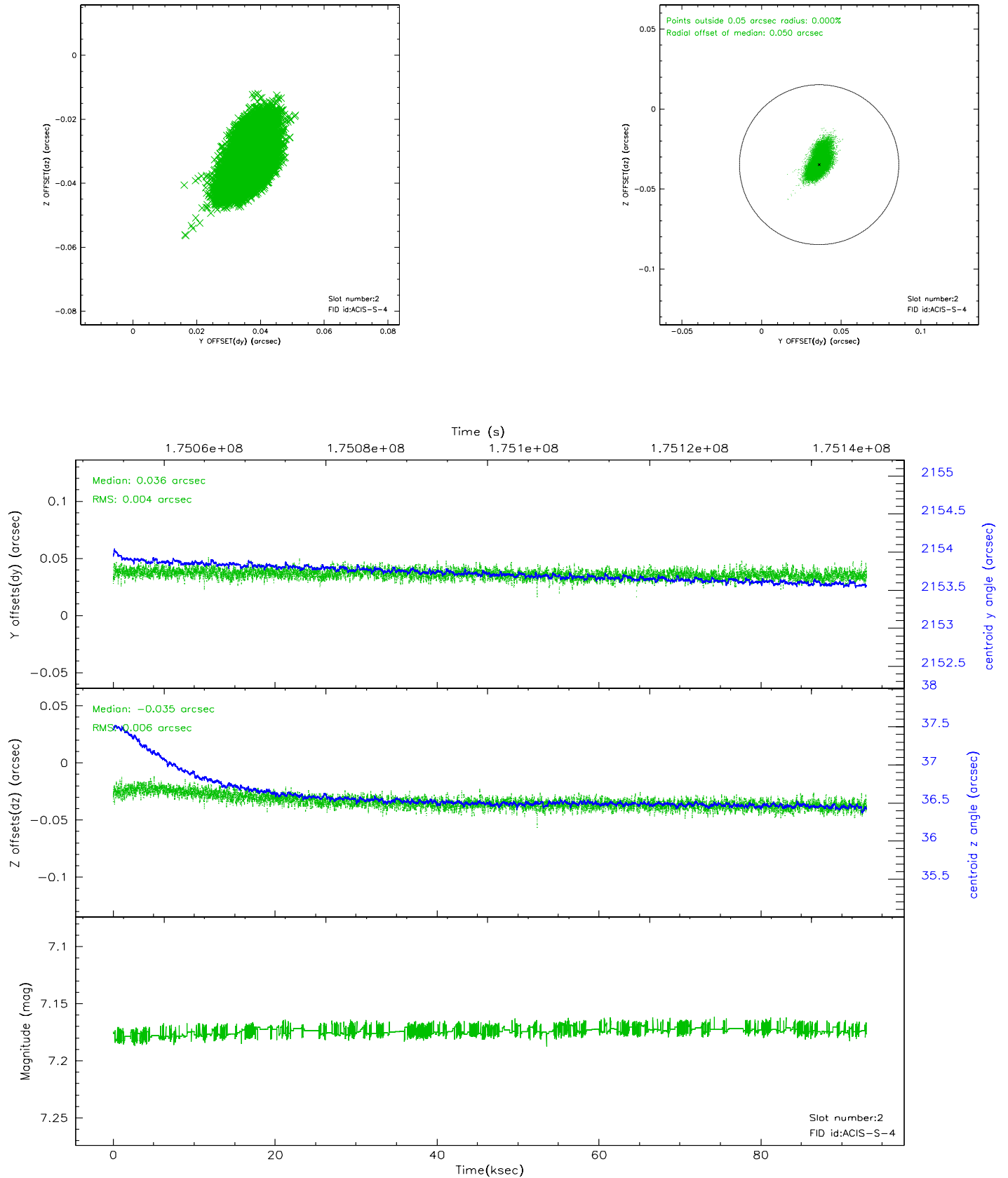
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

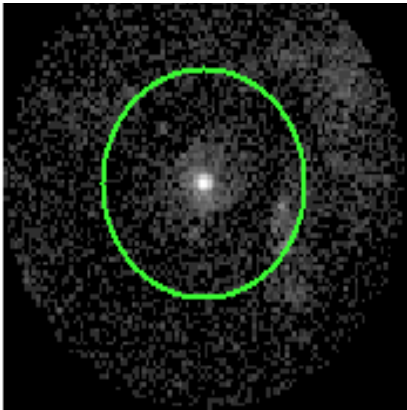


3 Gratings

3.1 HEG Arm



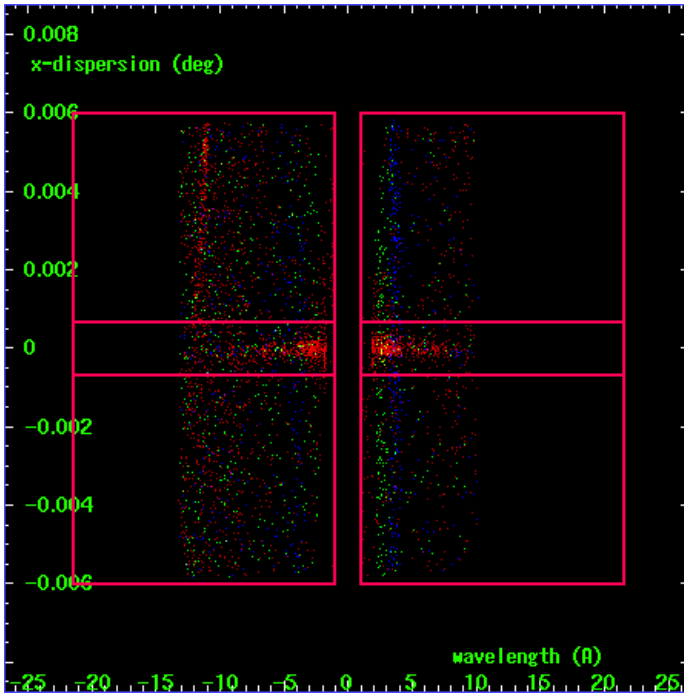
HEG Order Sort 123



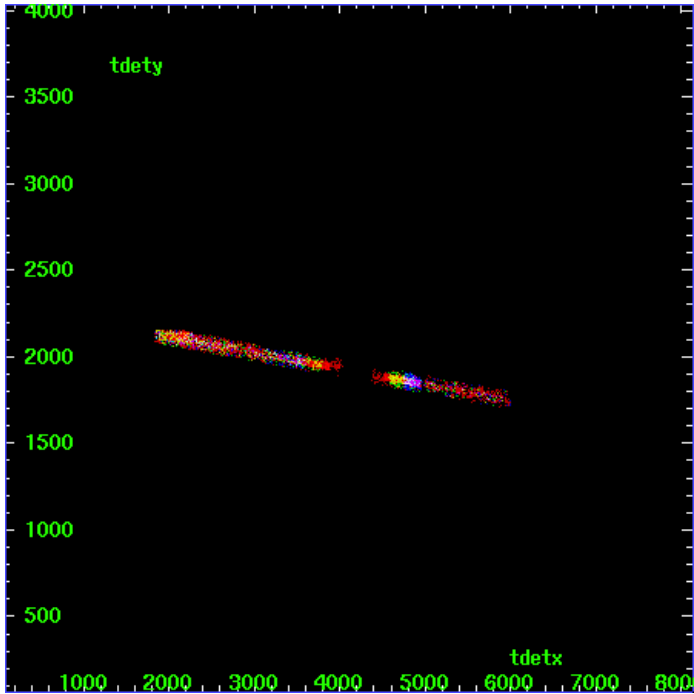
HEG Zero Order



HEG Order Sort ALL

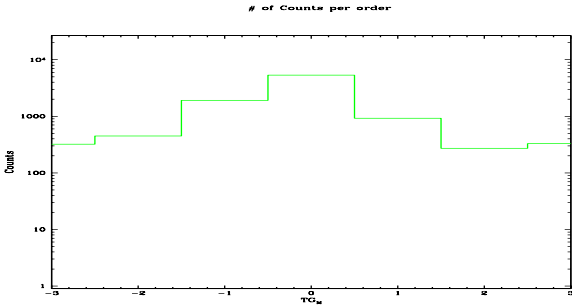


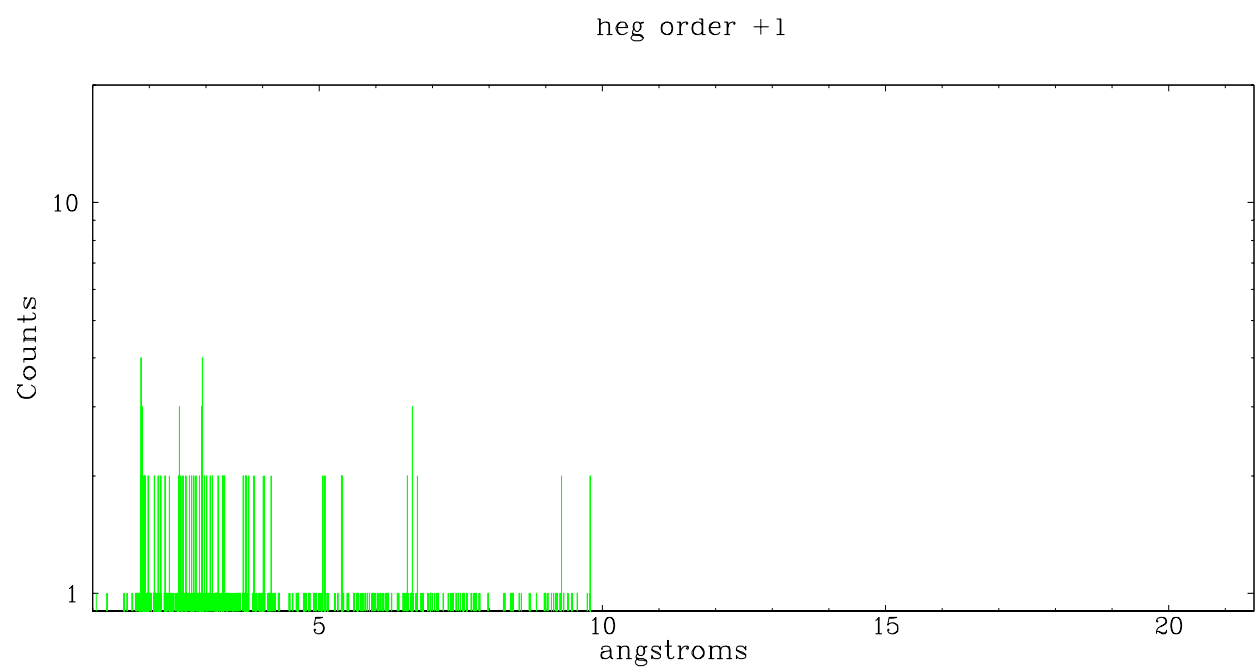
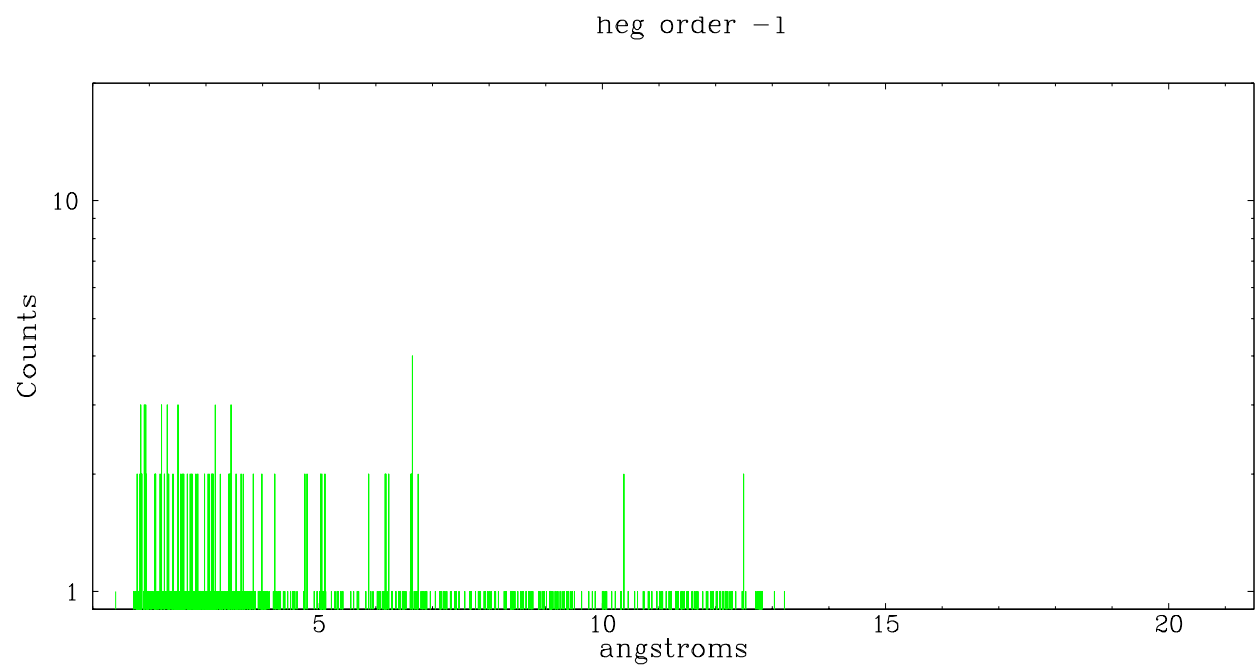
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	321	450	1918	5329	921	271	328

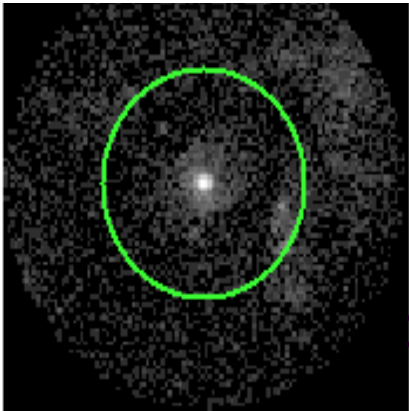




3.2 MEG Arm



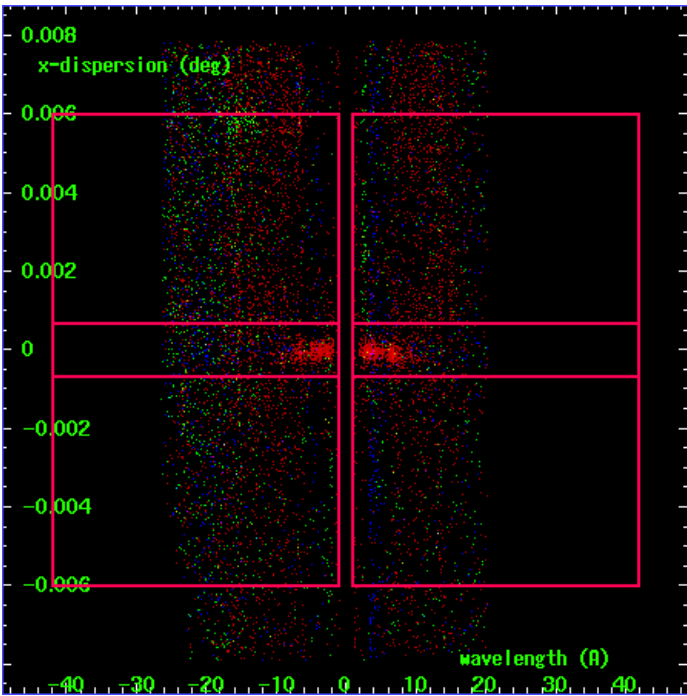
MEG Order Sort 123



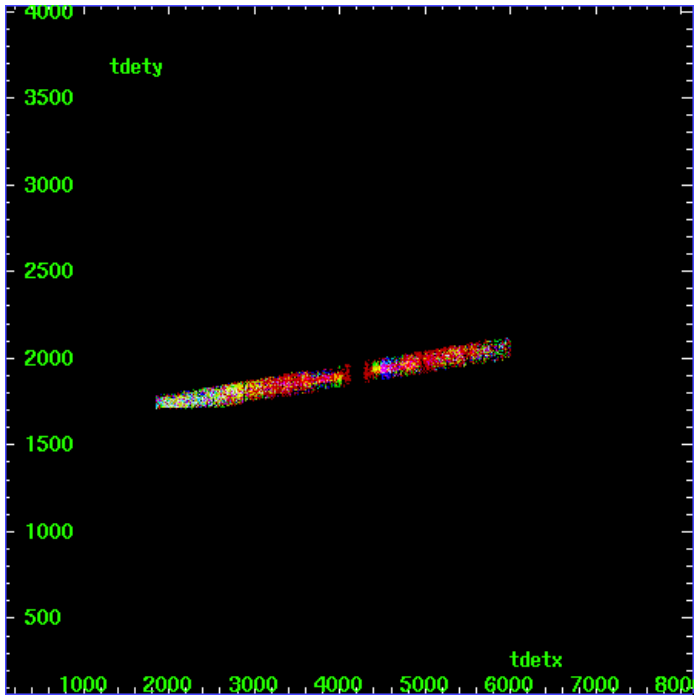
MEG Zero Order



MEG Order Sort ALL

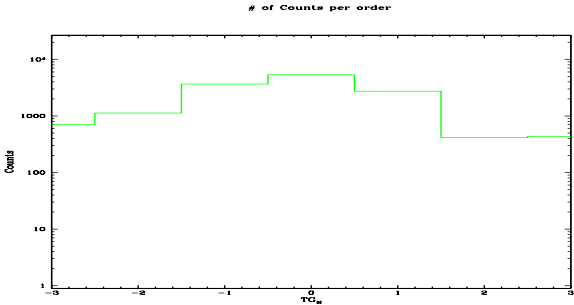


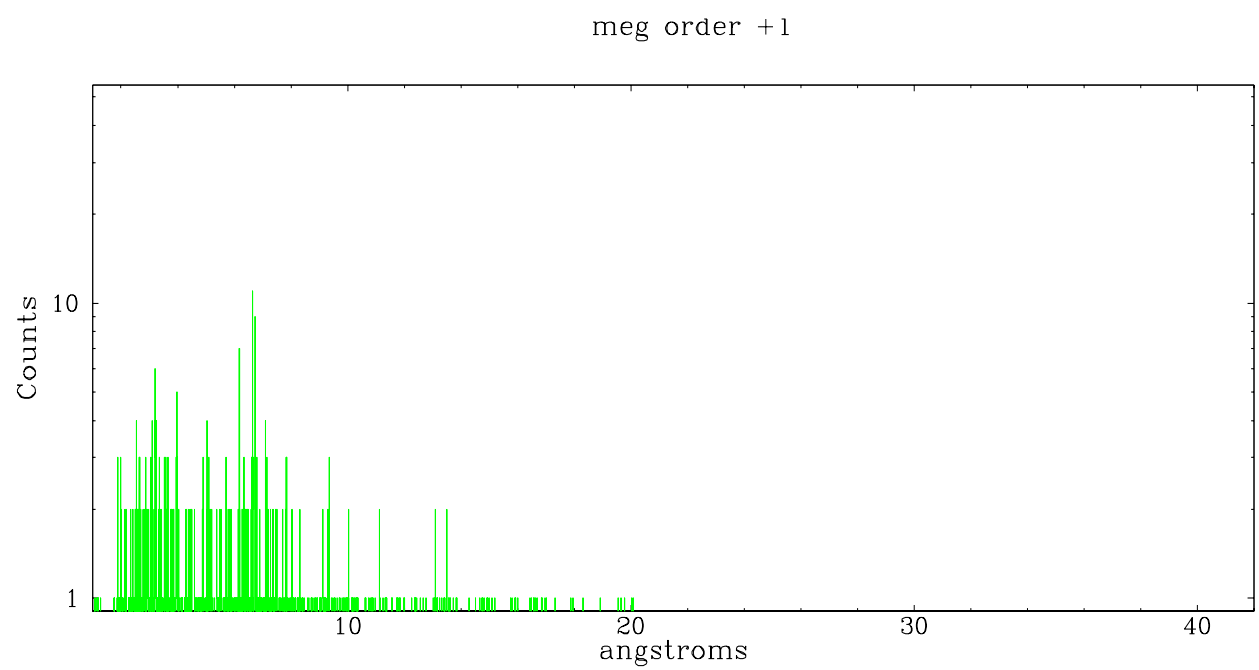
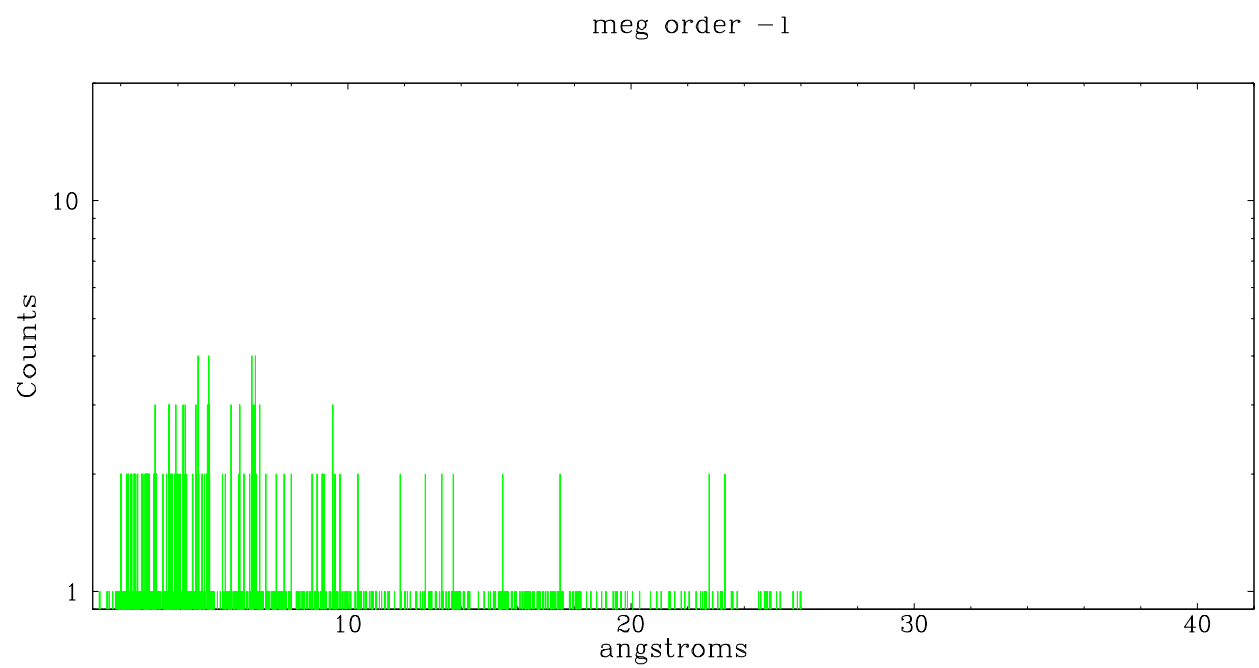
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	708	1129	3648	5329	2730	415	436





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.07.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	92.924

A.2 Comments

This observation is intended to provide a zeroth order image of eta Car during the eclipse, as well as a low S/N dispersed spectrum.

Focal plane temperature is warmer than -118.7 degrees C during first approximately 8 ksec of observation. Temperatures warmer than -118.7 degrees are outside the well-calibrated range for the front-illuminated chips.

The back-illuminated chips are not affected at this temperature range.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C for the front-illuminated chips. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.