

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2222 - L2 Version 001
Chandra X-Ray Center

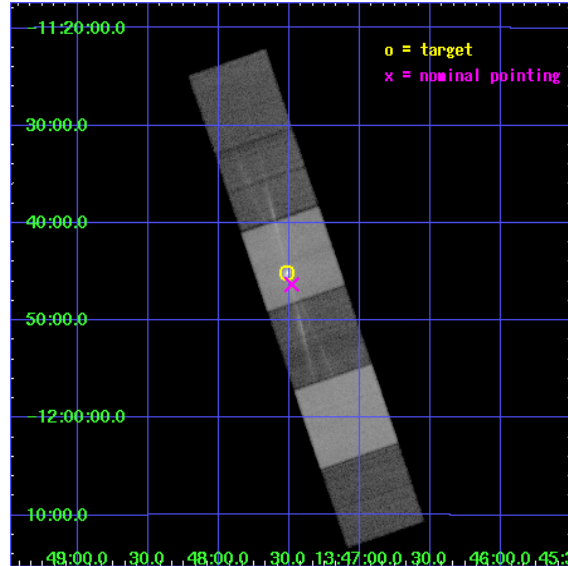
L2 Processing Date : Dec 8 2006

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1 Front

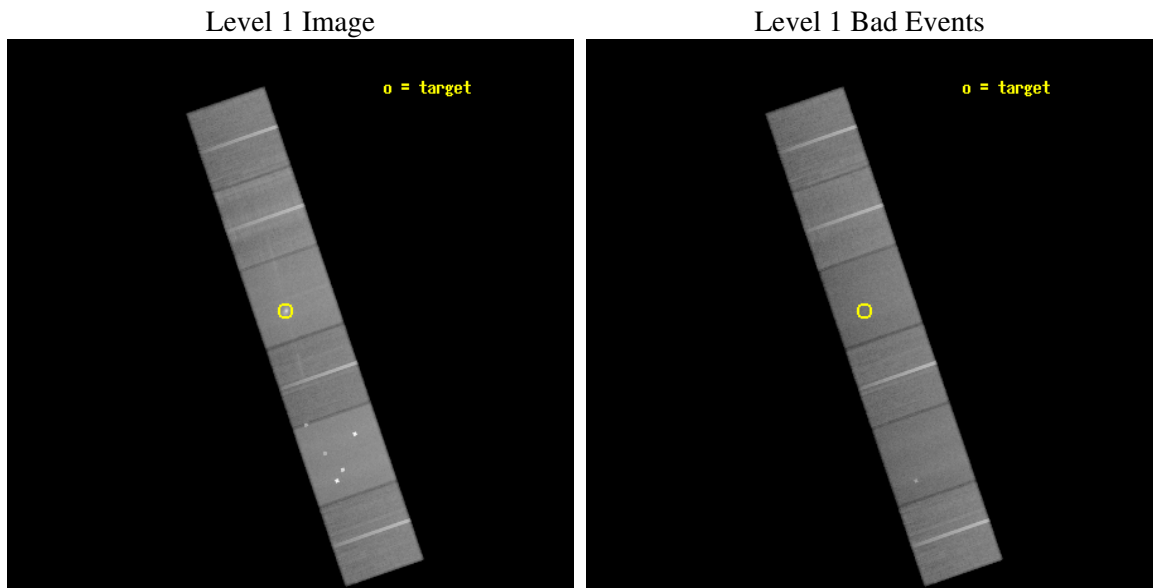
seq_num	800161
obs_id	2222
title	SPECTRAL-SPATIAL DIAGNOSTICS OF THE MOST LUMINOUS X-RAY CLUSTER OF GALAXIES WITH THE HETG
observer	PROF. STEVEN KAHN
object	RXJ 1347.5-1145
dtcycle	0
cycle	P
ra_targ	206.879167
dec_targ	-11.753056
ra_nom	206.87057677698
dec_nom	-11.772146745874
roll_nom	251.10770244689
revision	2
ontime	93900.800087452
livetime	92711.771616471
ontime4	93897.55909729
ontime5	93900.800087452
ontime6	93900.800087452
ontime7	93900.800087452
ontime8	93900.800087452
ontime9	93884.595266148
l2events	920614



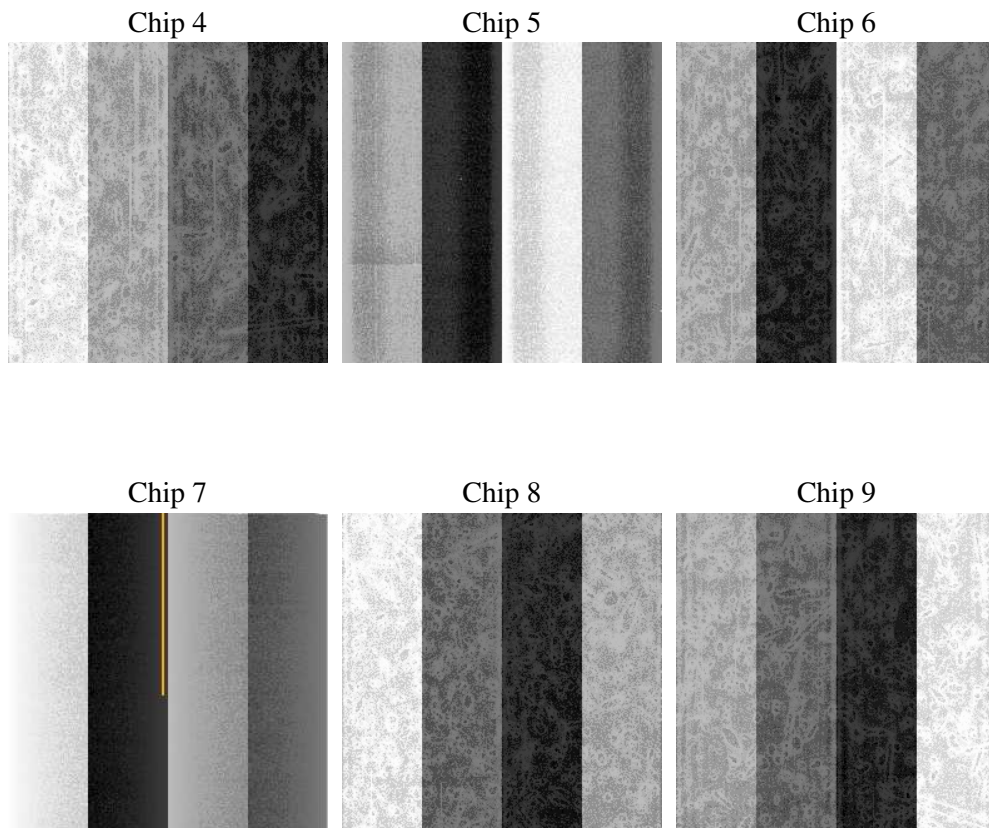
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-11-21T17:04:00
revision	2

sched_exp_time	93727.831000
ontime	95820.256430402
ontime4	95817.015410334
ontime5	95820.25645034
ontime6	95820.256420434
ontime7	95820.256430402
ontime8	95820.256420434
ontime9	95804.051579192
l1events	4469249

2.1.4 Events

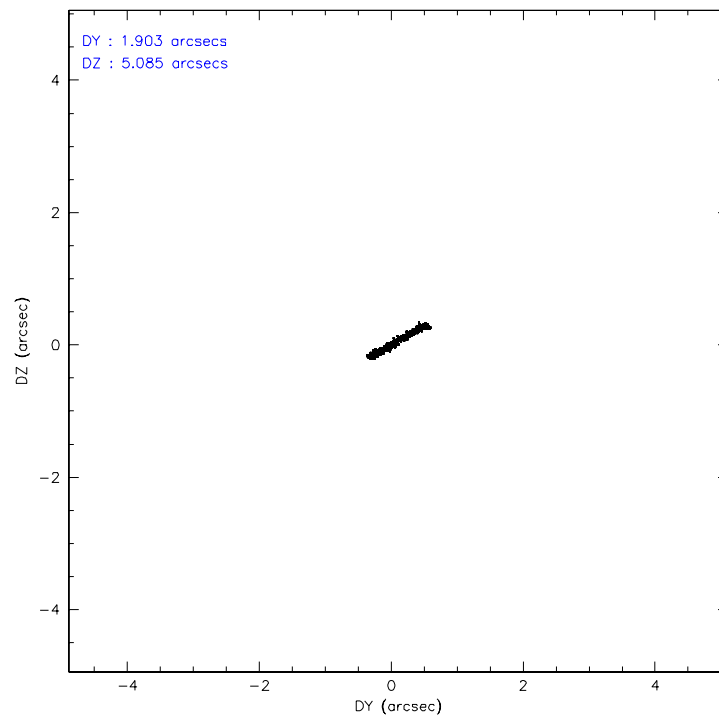
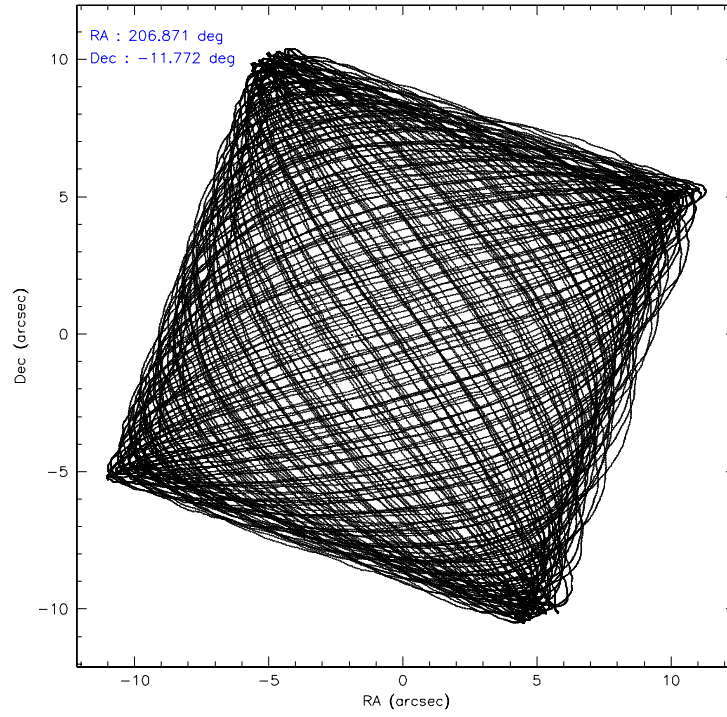
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	684722	912768	636504	810240	799120	625895
rejected events	611364	495141	557929	492883	634224	553181
rejected %	89%	54%	87%	60%	79%	88%

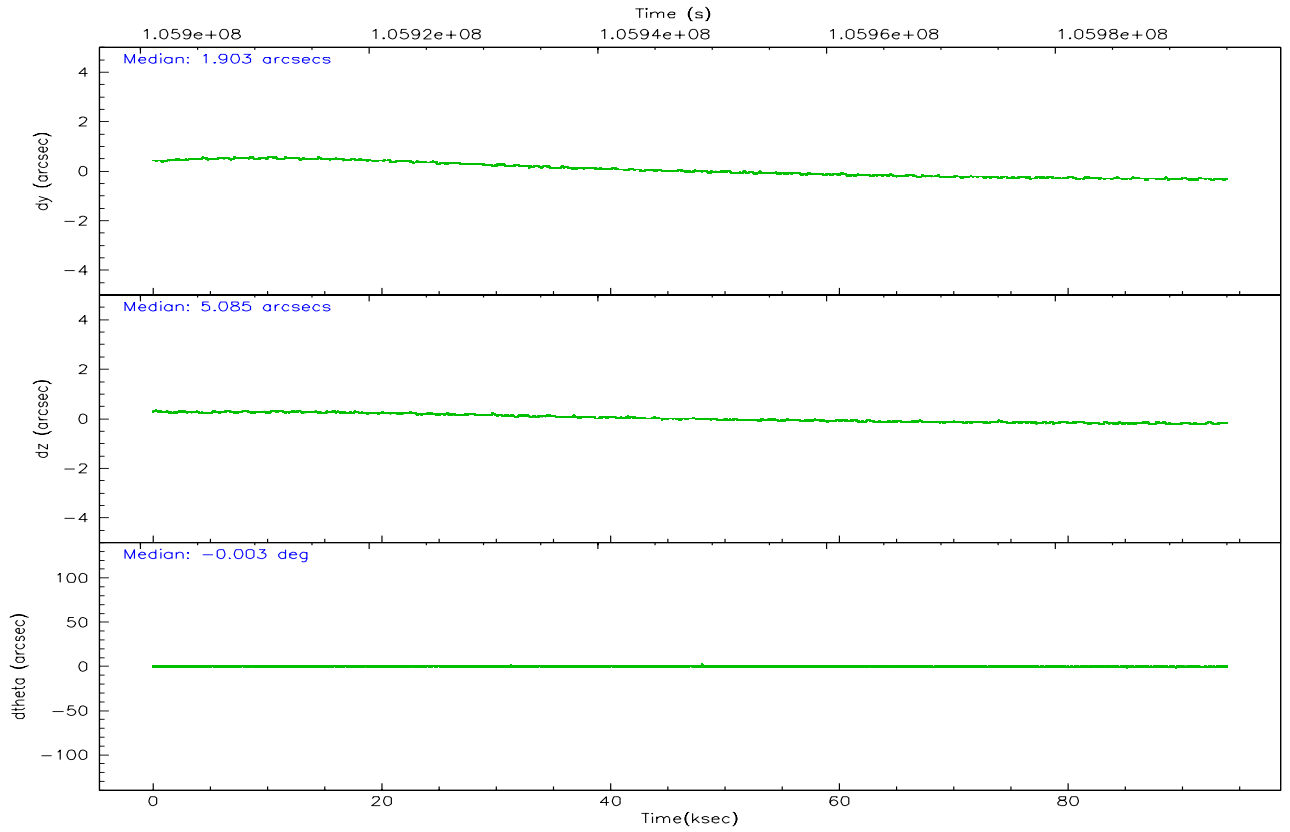
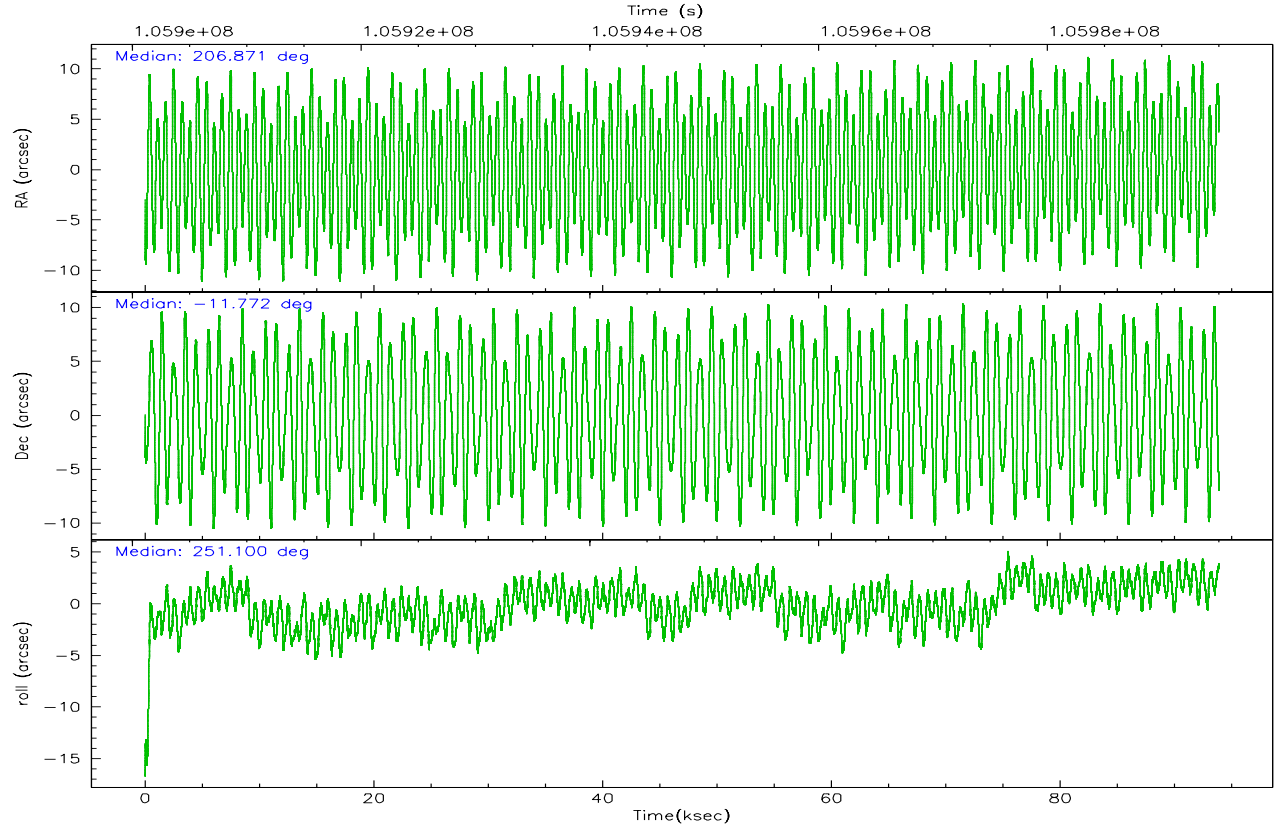
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	29899	72692	34980	22196	55395	30112
	4%	7%	5%	2%	6%	4%
grade 1 events	353	2492	316	470	486	260
	0%	0%	0%	0%	0%	0%
grade 2 events	18139	121708	15344	79742	35141	15063
	2%	13%	2%	9%	4%	2%
grade 3 events	6939	8752	7548	18231	18204	7201
	1%	0%	1%	2%	2%	1%
grade 4 events	6694	8388	7361	17882	16864	6815
	0%	0%	1%	2%	2%	1%
grade 5 events	22063	41556	26177	52804	33990	26748
	3%	4%	4%	6%	4%	4%
grade 6 events	13107	214918	14697	185403	42067	14860
	1%	23%	2%	22%	5%	2%
grade 7 events	587528	442262	530081	433512	596973	524836
	85%	48%	83%	53%	74%	83%

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	206.864929	206.8705767769848	Subarray requested	NONE	NONE
Pointing Dec	-11.745424	-11.77214674587371	Alternating exposures requested	N	N
Pointing Roll	250.949926	251.10770244689	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	105901276.184000	105899184.04648			
Observation start date	2001-05-10T17:00:12	2001-05-10T16:26:24			
Observation end time	105995004.184000	105995318.80021			
Observation end date	2001-05-11T19:02:20	2001-05-11T19:08:38			
Read mode	TIMED	TIMED			

2.3 Aspect



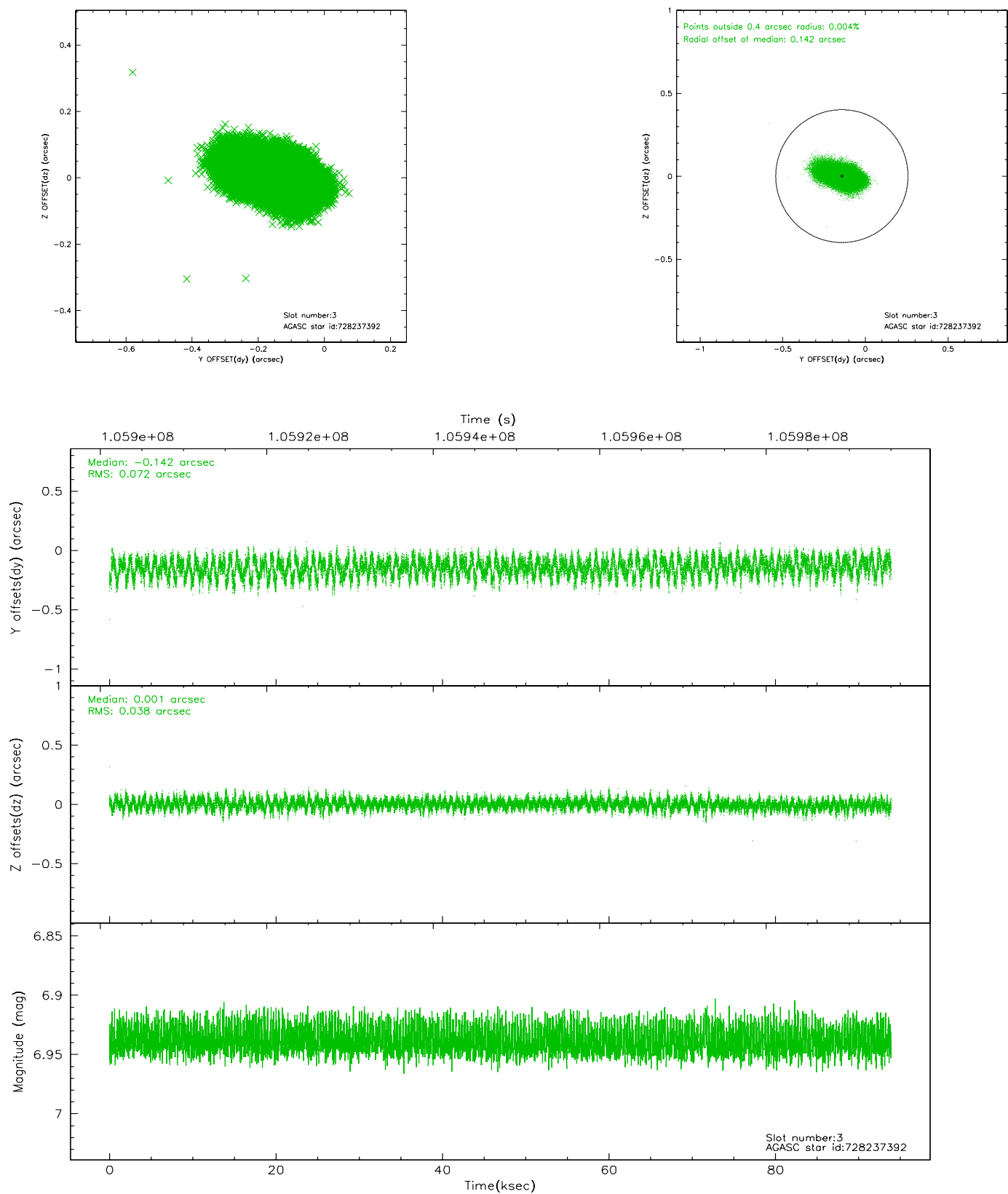


Slot Statistics

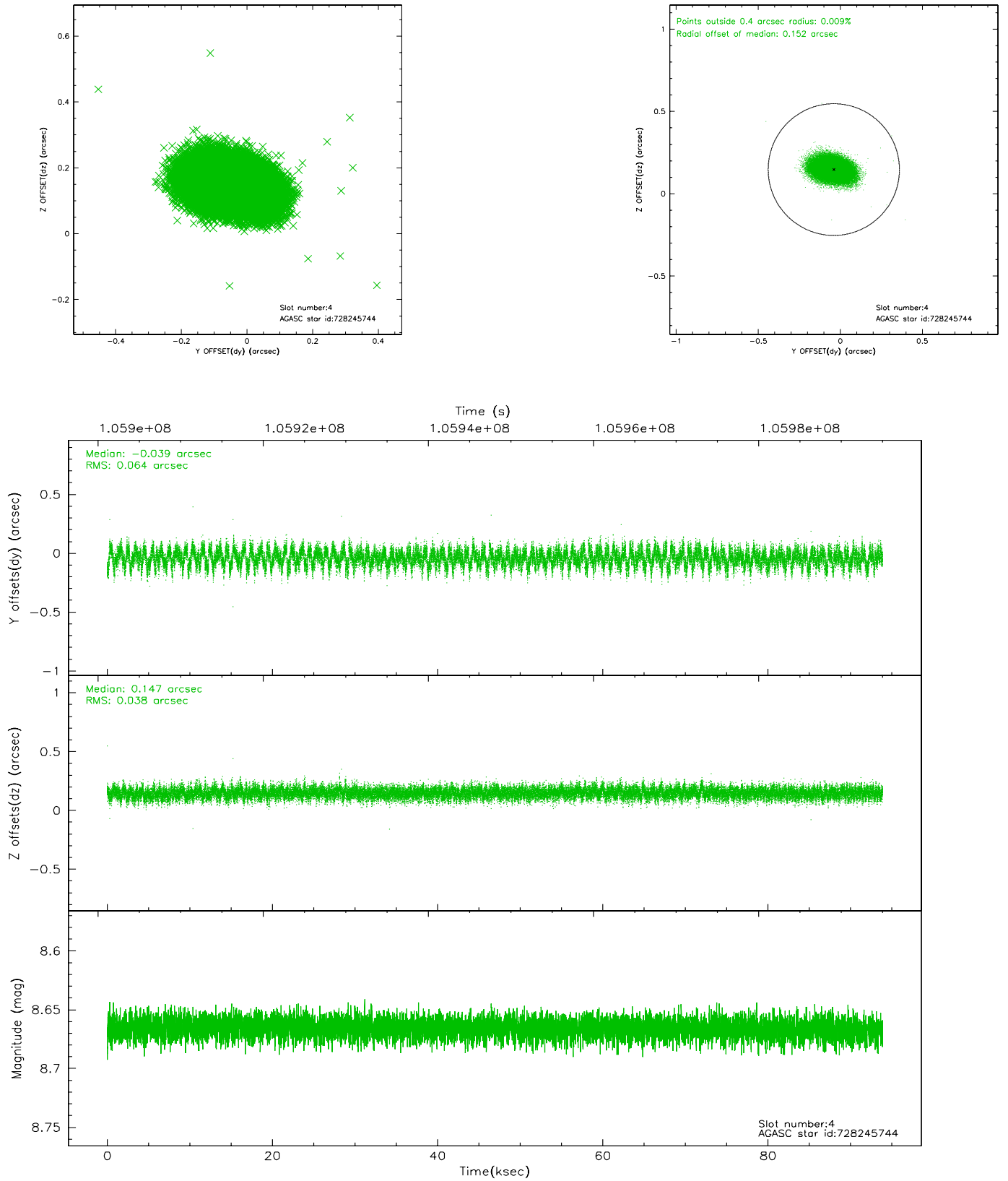
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	22903	-0.020	-0.023	0.009	0.014	0.000000	0.000000	-754.41	-1788.38
1	FID	ACIS-S-4	7.20	22903	-0.060	0.015	0.005	0.009	0.000000	0.000000	2158.88	120.19
2	FID	ACIS-S-5	7.23	22901	0.048	0.016	0.010	0.016	0.000000	0.000000	-1807.27	113.80
3	GUIDE	728237392	6.94	45806	-0.142	0.001	0.087	0.143	207.704489	-11.358782	-2278.44	2348.20
4	GUIDE	728245744	8.67	45790	-0.039	0.147	0.078	0.131	206.959040	-11.284446	-1676.22	-227.29
5	GUIDE	727327544	9.57	45778	-0.004	-0.043	0.113	0.182	206.398747	-11.483258	-352.98	-1861.96
6	GUIDE	727321472	9.86	45781	0.146	0.032	0.138	0.235	206.729745	-11.411859	-978.10	-842.65
7	GUIDE	728236632	9.65	45768	0.039	-0.127	0.144	0.264	206.842205	-12.122561	1310.25	367.90

2.4 Star Slots

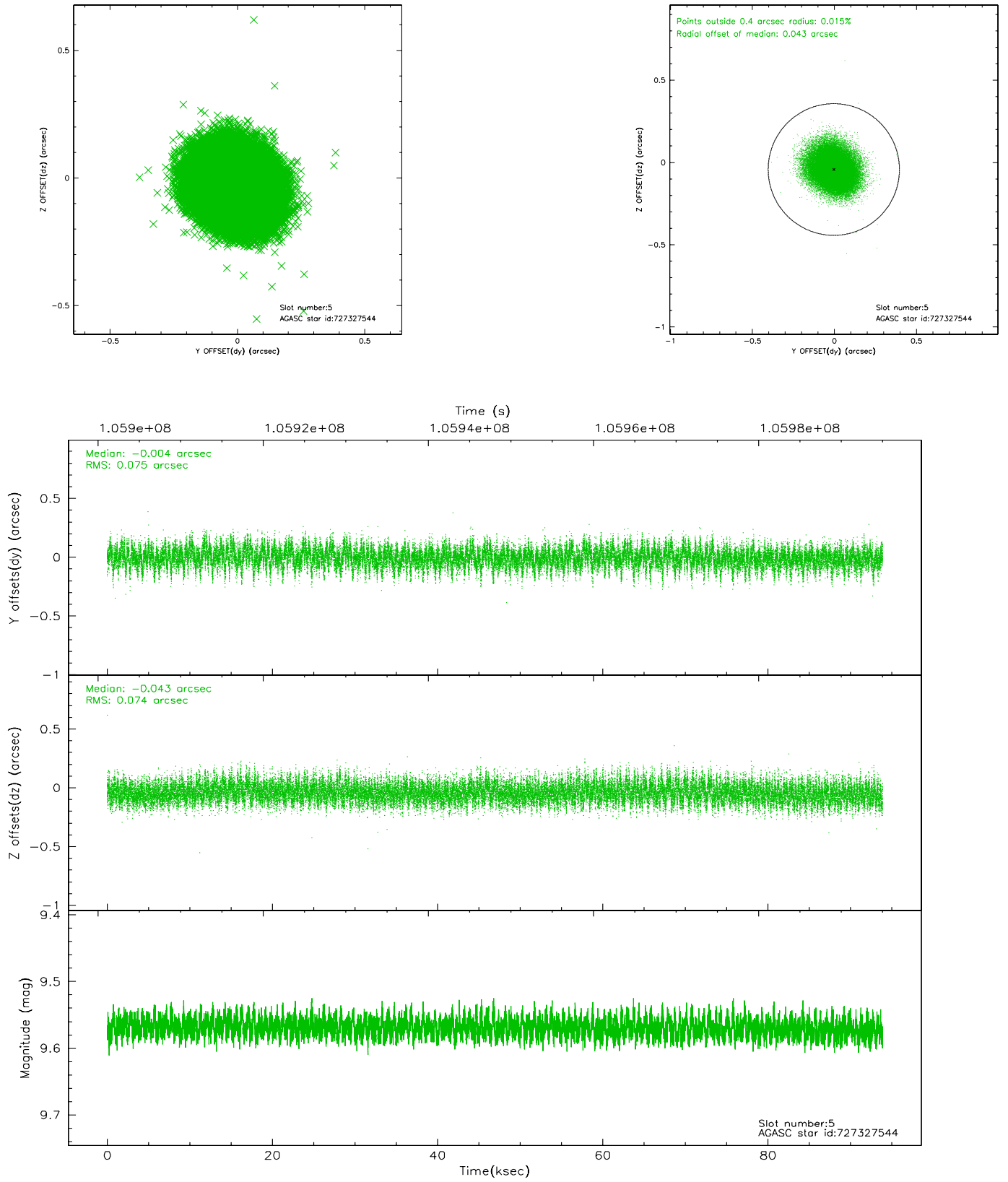
2.4.1 Slot 3



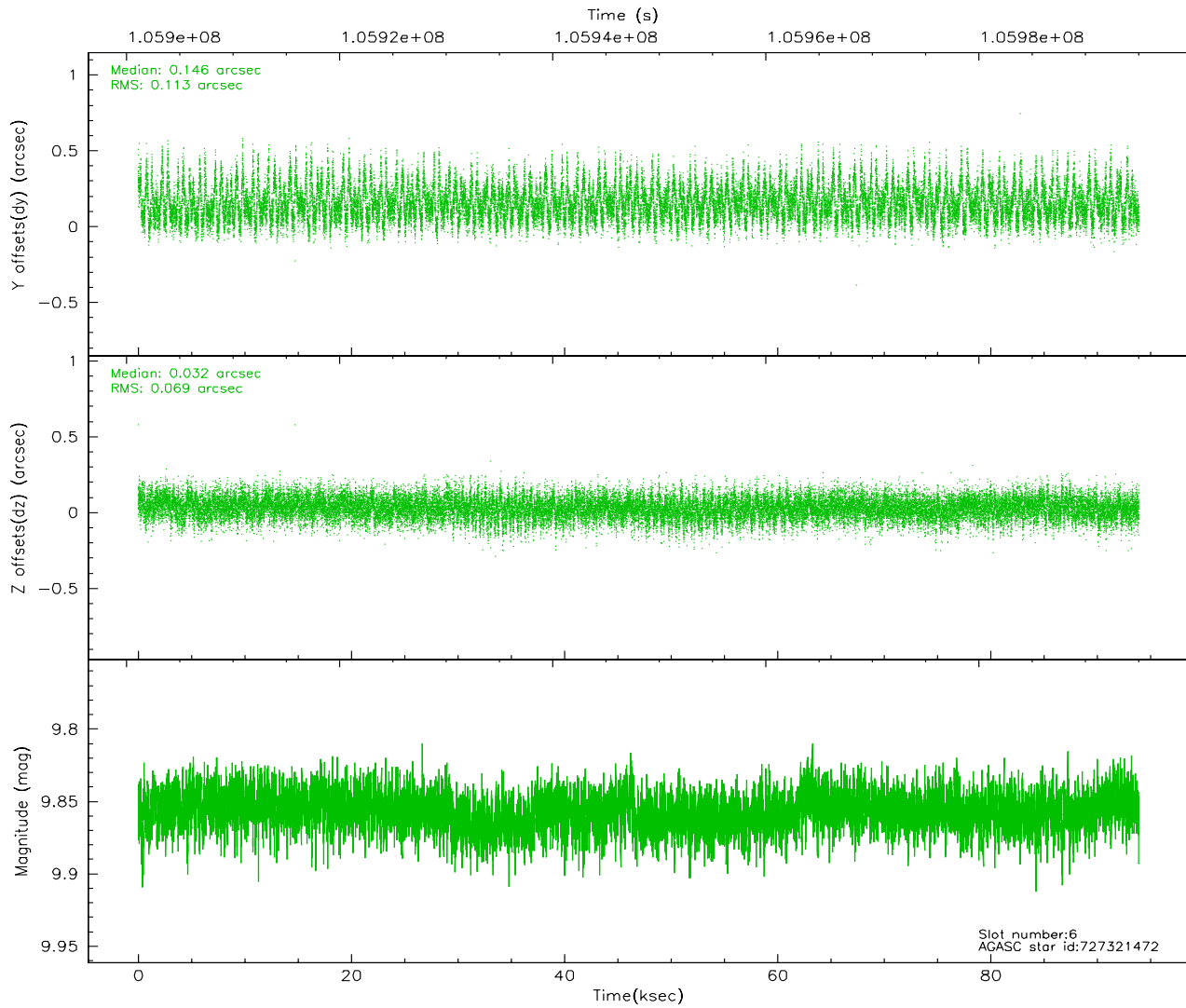
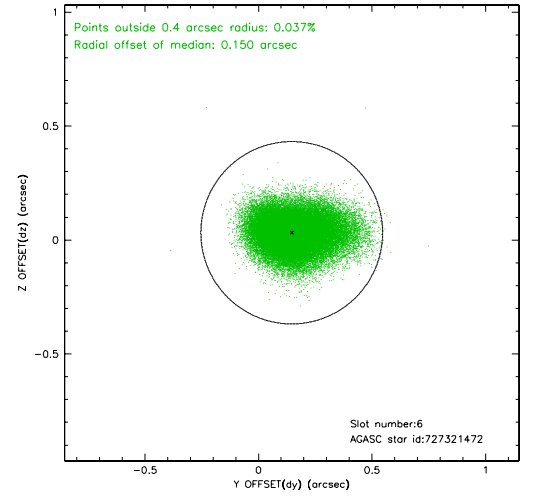
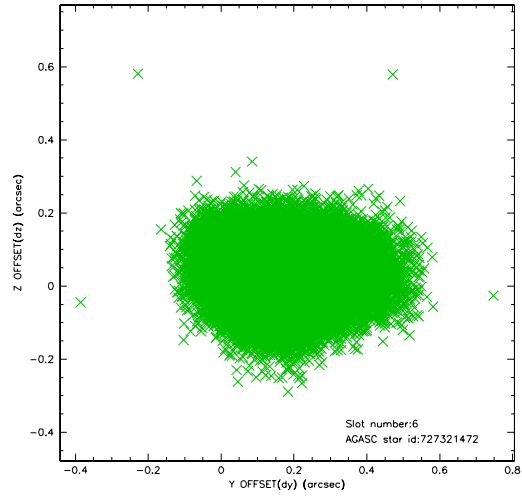
2.4.2 Slot 4



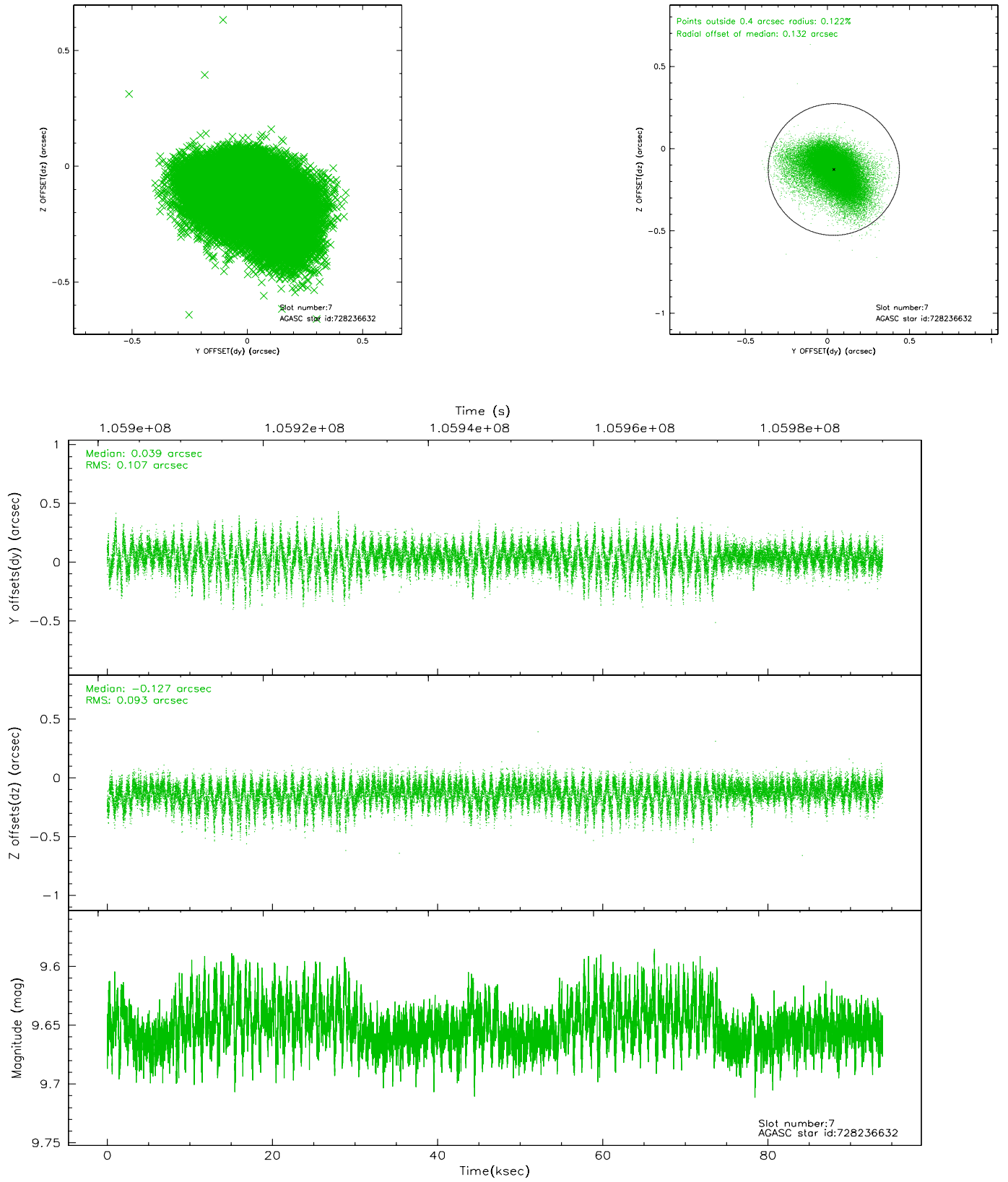
2.4.3 Slot 5



2.4.4 Slot 6

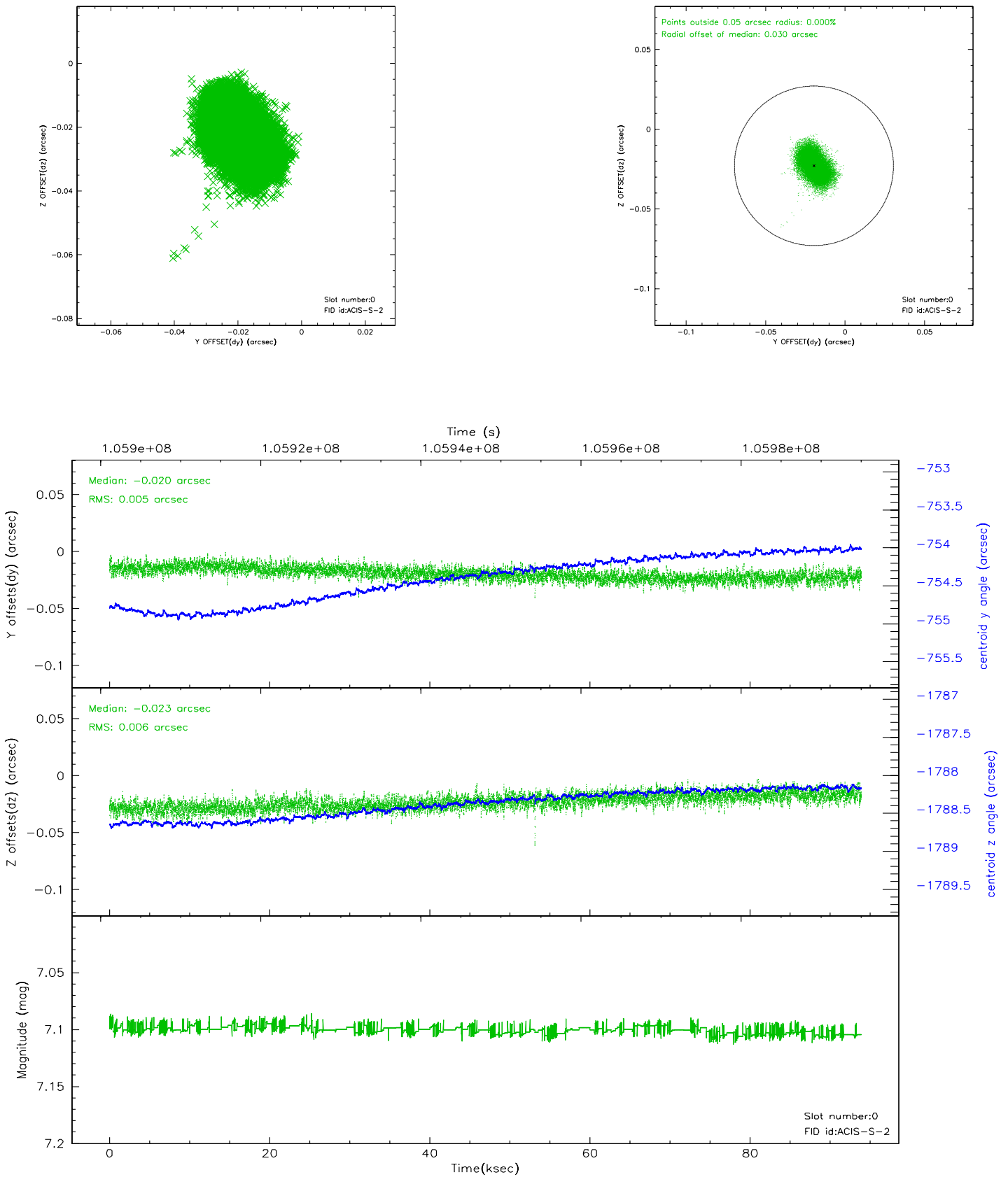


2.4.5 Slot 7

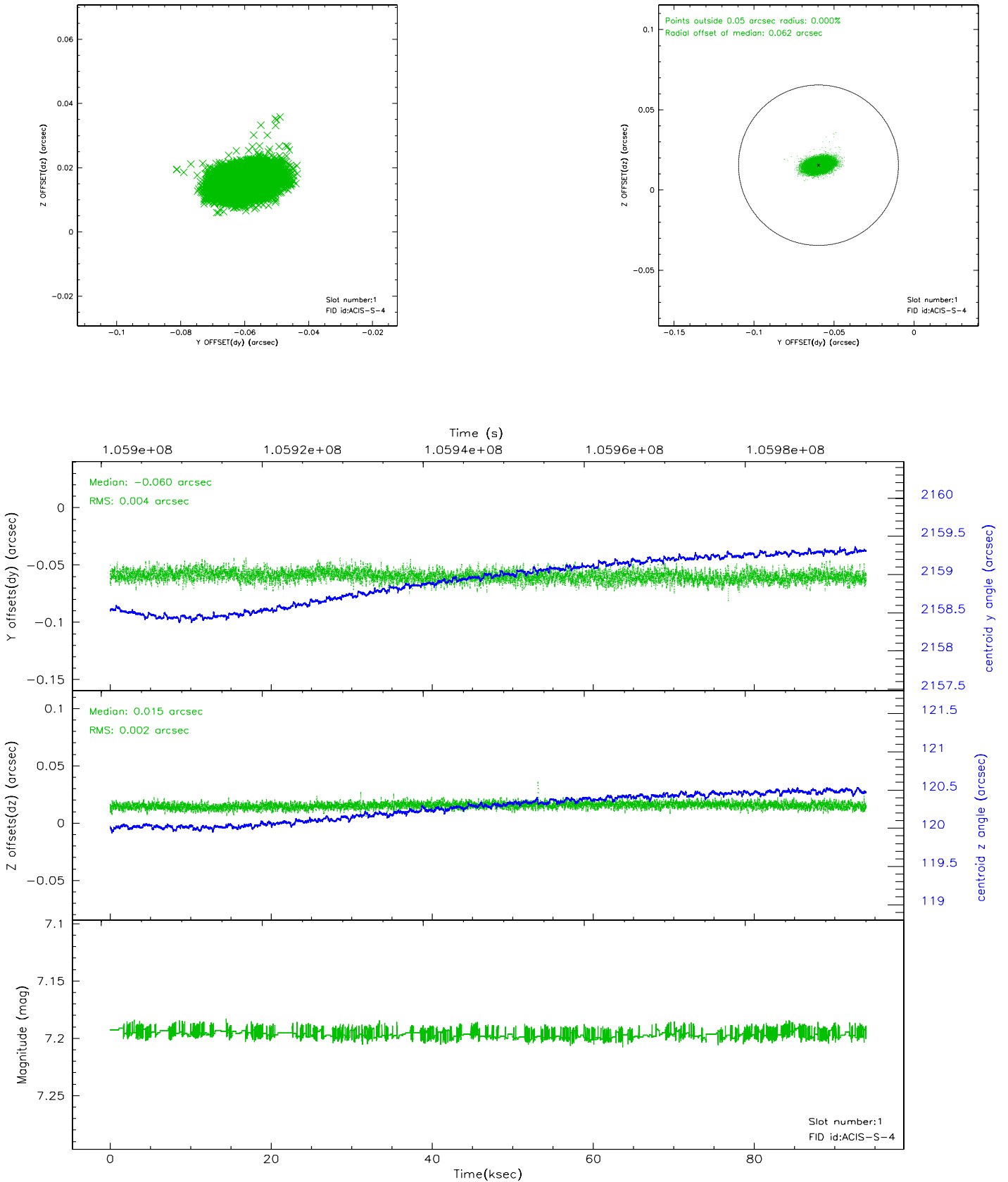


2.5 FID Slots

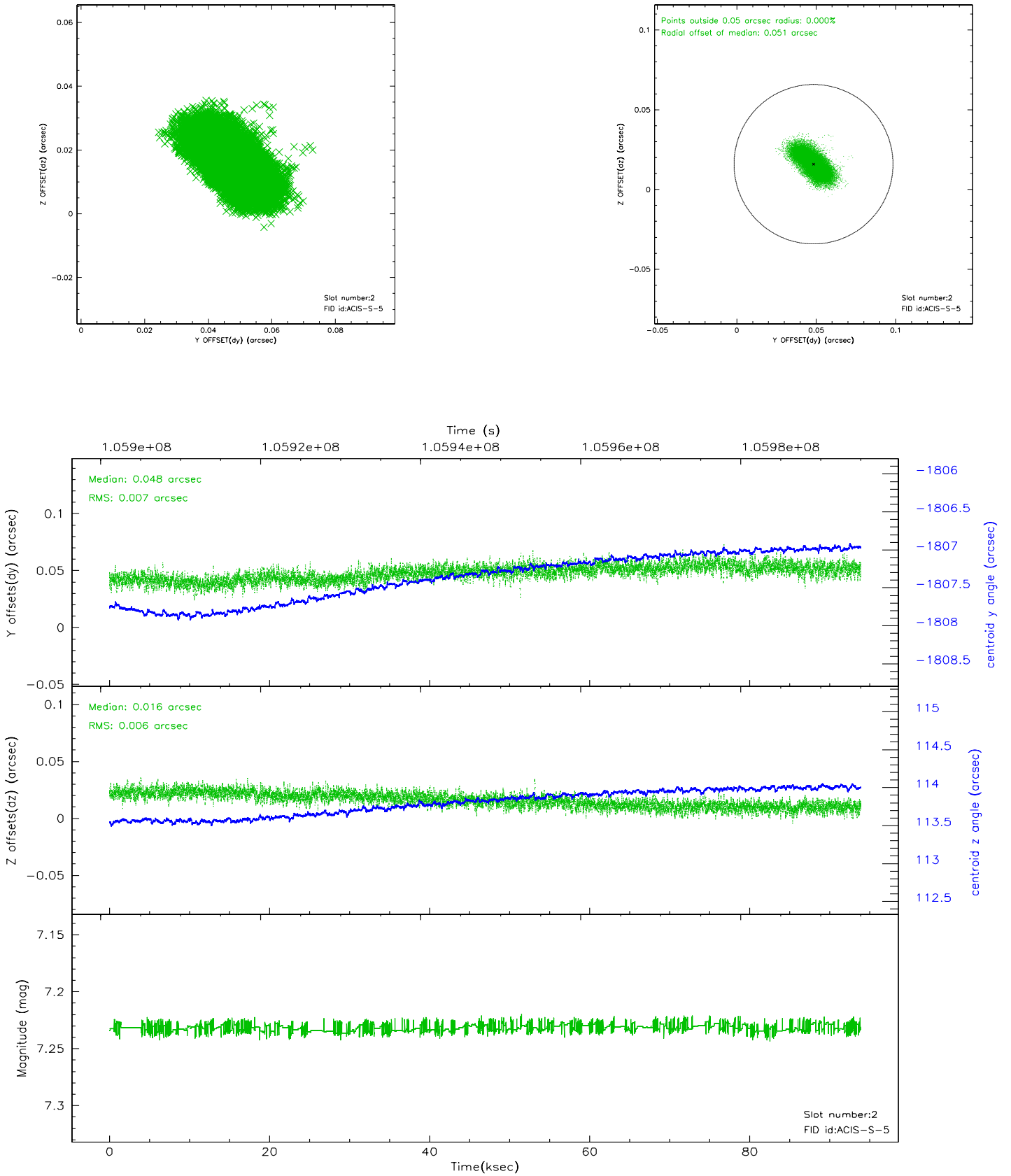
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

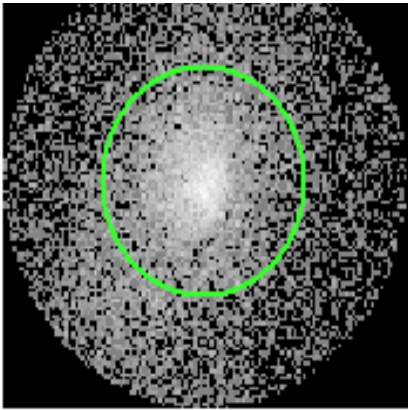


3 Gratings

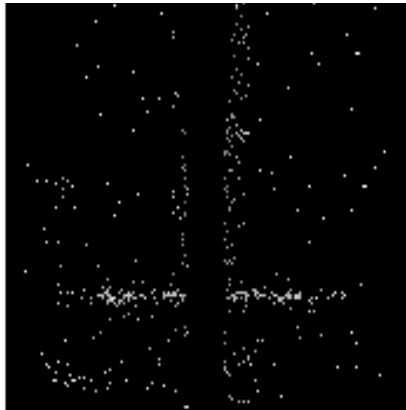
3.1 HEG Arm



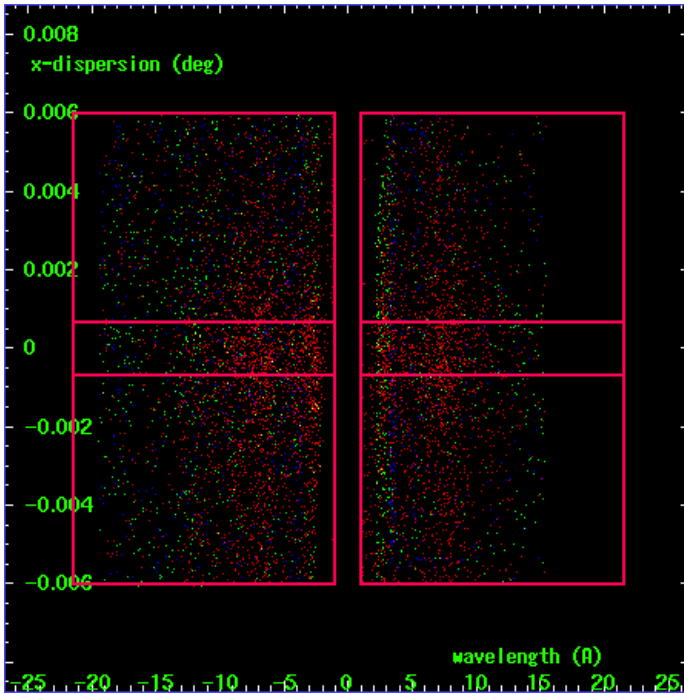
HEG Order Sort 123



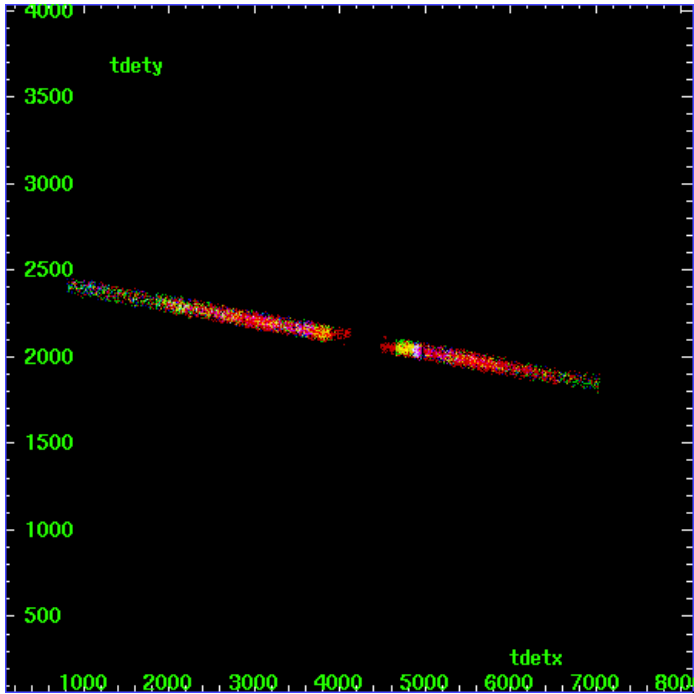
HEG Zero Order



HEG Order Sort ALL

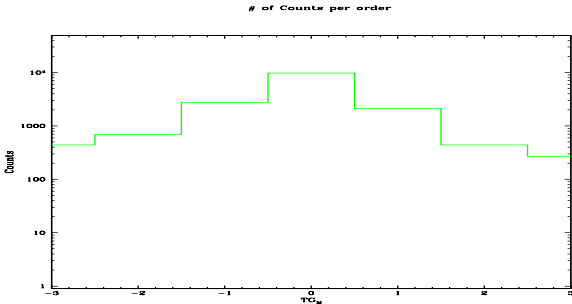


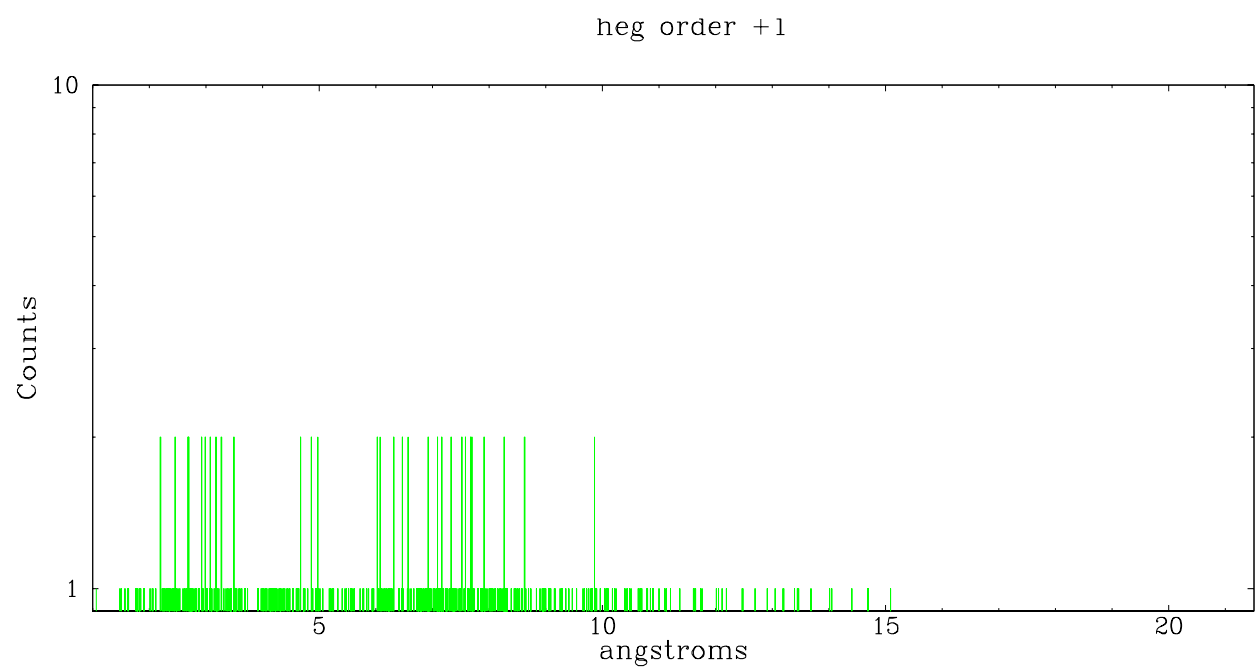
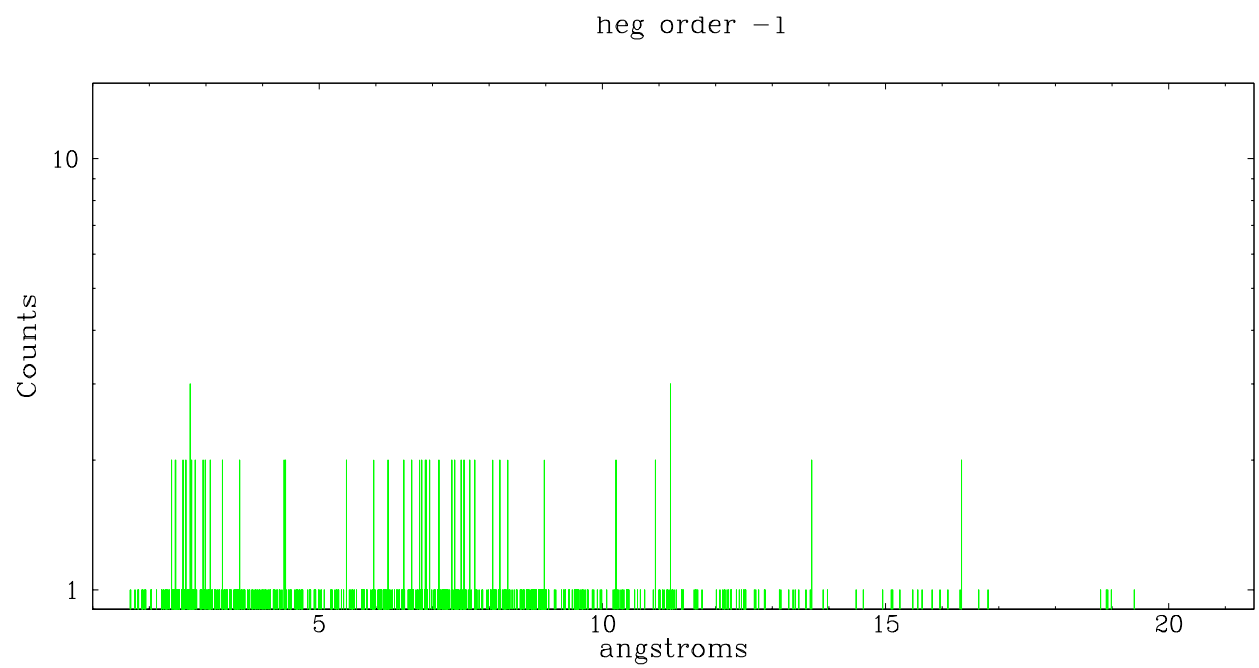
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	441	692	2748	9789	2128	442	269

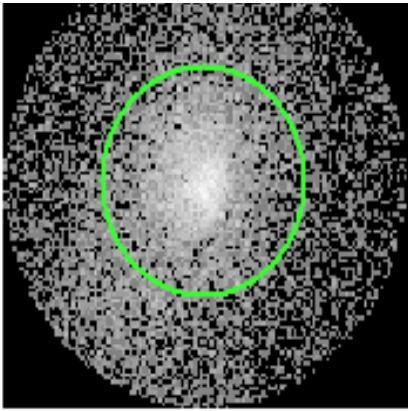




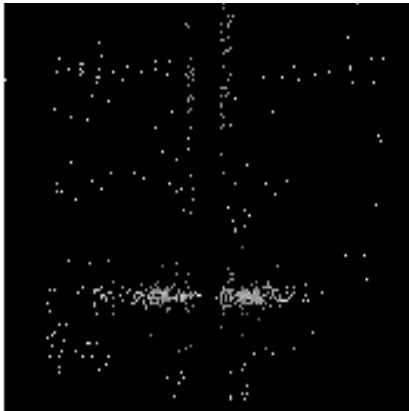
3.2 MEG Arm



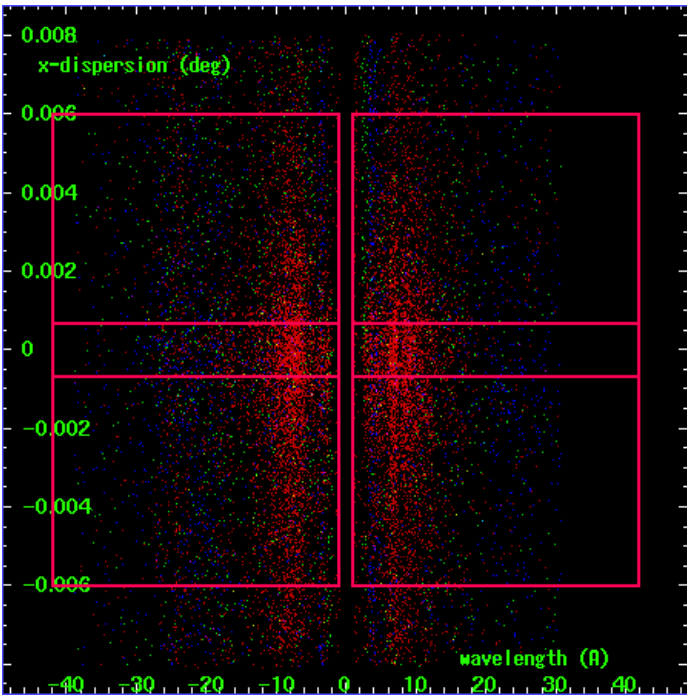
MEG Order Sort 123



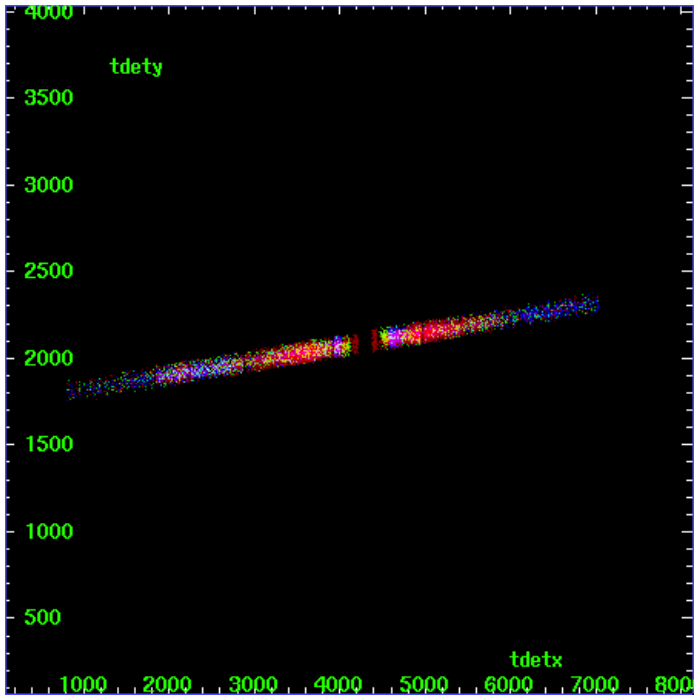
MEG Zero Order



MEG Order Sort ALL

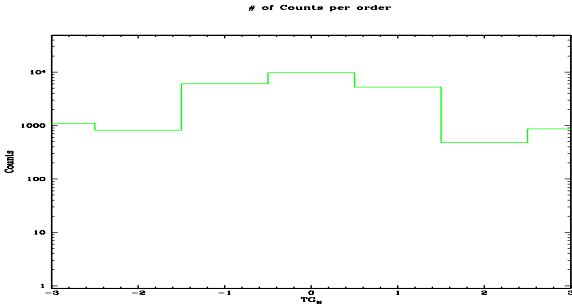


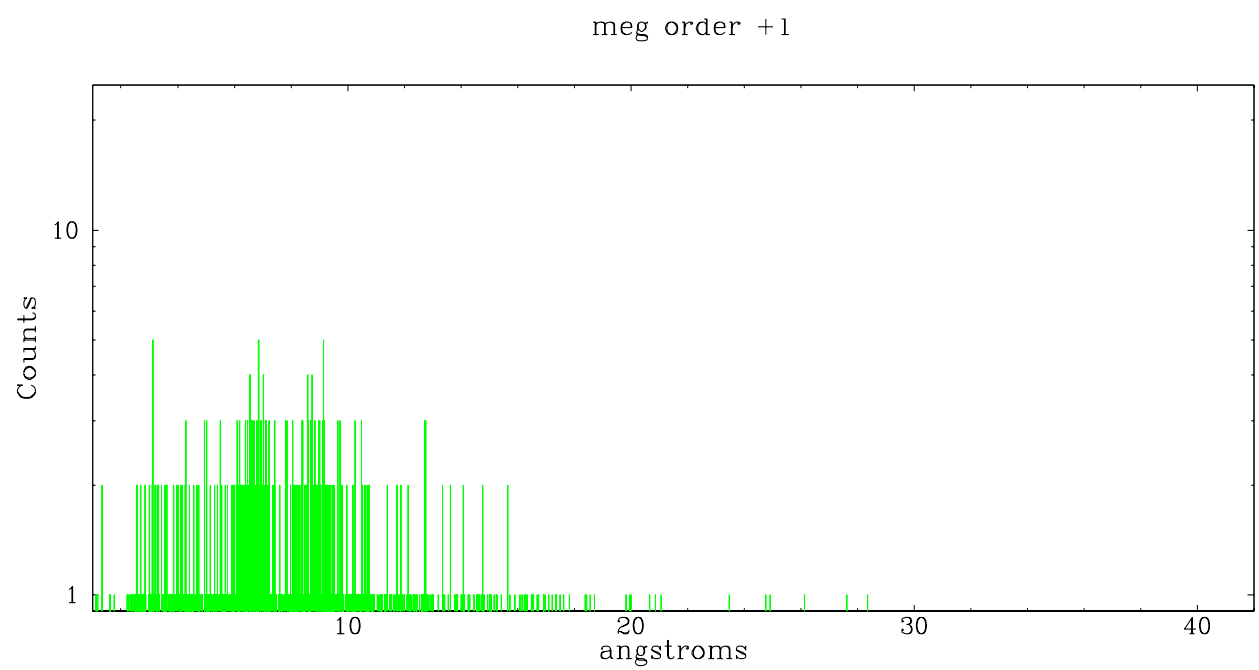
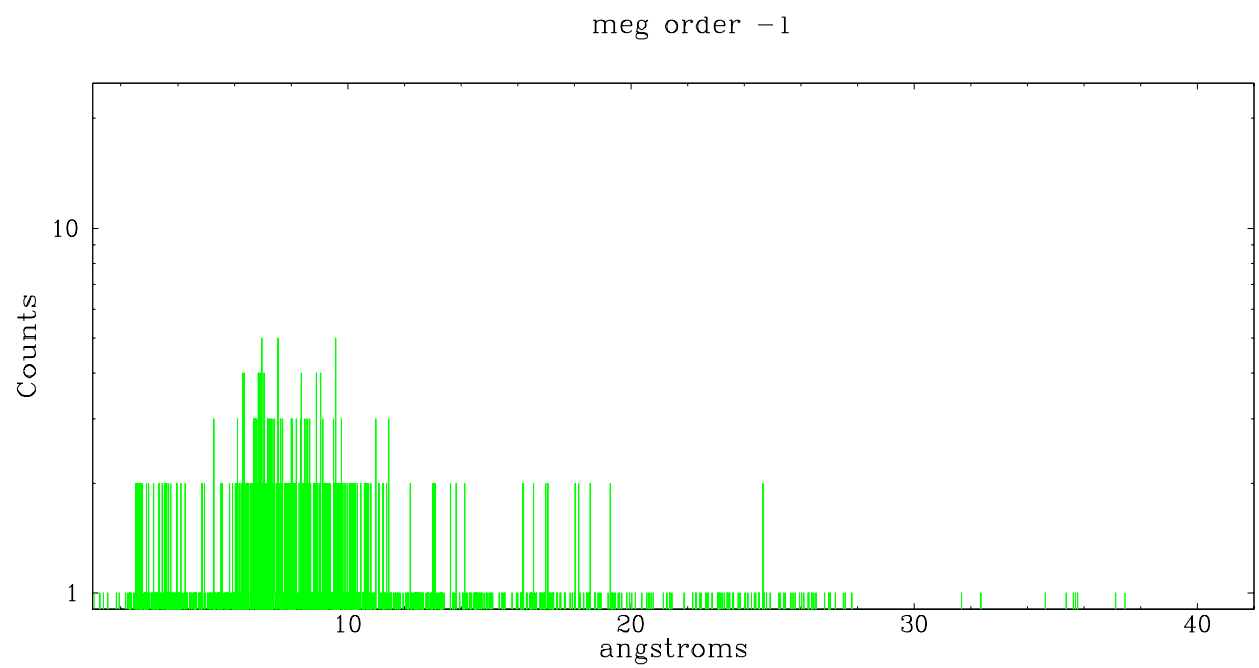
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1094	818	6047	9789	5258	484	863





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2006.12.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	93.9

A.2 Comments

This is an extended source and will require custom analysis based on subjective scientific criteria. The default spectral cross-dispersio

binning region is smaller than the source extent. The wavelength scale also depends upon the zero order reference, and any structure in the zero order may require multiple extractions with a different reference used in the ciao tool, `tg_create_mask`. Cross-dispersion regions can be selected in the ciao tool, `tgextract`.