

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 240 - L2 Version 001
Chandra X-Ray Center

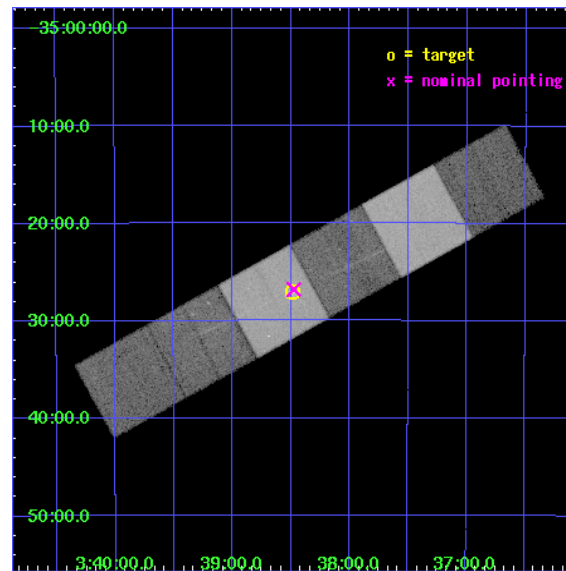
L2 Processing Date : May 25 2007

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1 Front

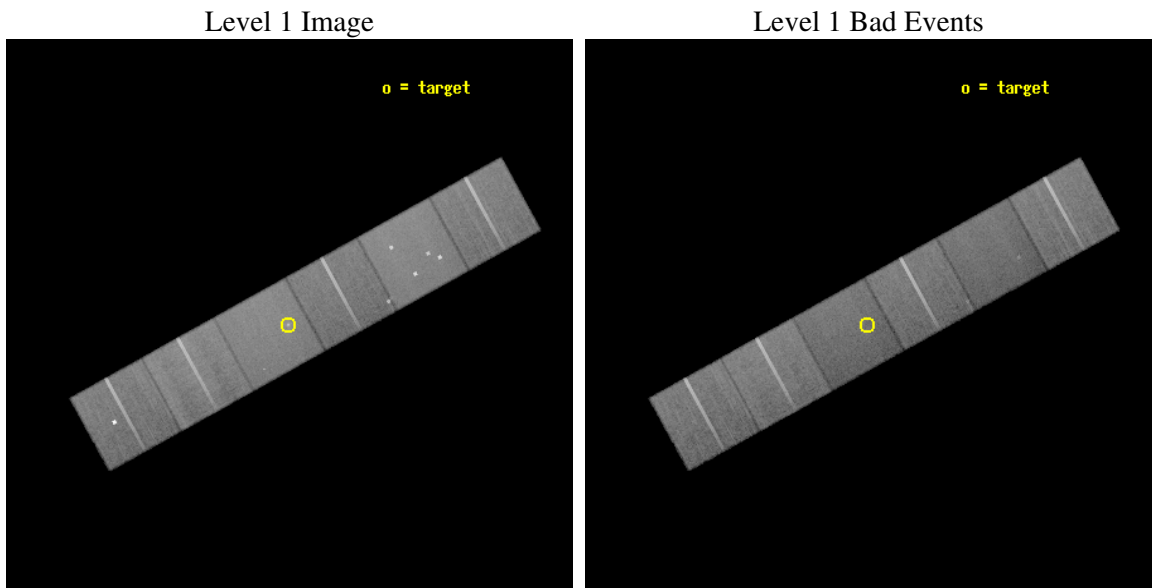
seq_num	600000
obs_id	240
title	THE DETAILED X-RAY SPECTRA OF ELLIPTICAL GALAXIES
observer	Prof. Claude Canizares
object	NGC 1399
dtcycle	0
cycle	P
ra_targ	54.622083
dec_targ	-35.450278
ra_nom	54.618524122813
dec_nom	-35.446616611384
roll_nom	151.10455945613
revision	3
ontime	44092.800041065
livetime	43534.470457448
ontime4	44092.800041065
ontime5	44092.800041065
ontime6	44089.559080824
ontime7	44092.800041065
ontime8	44092.800041065
ontime9	44092.800041065
l2events	441860



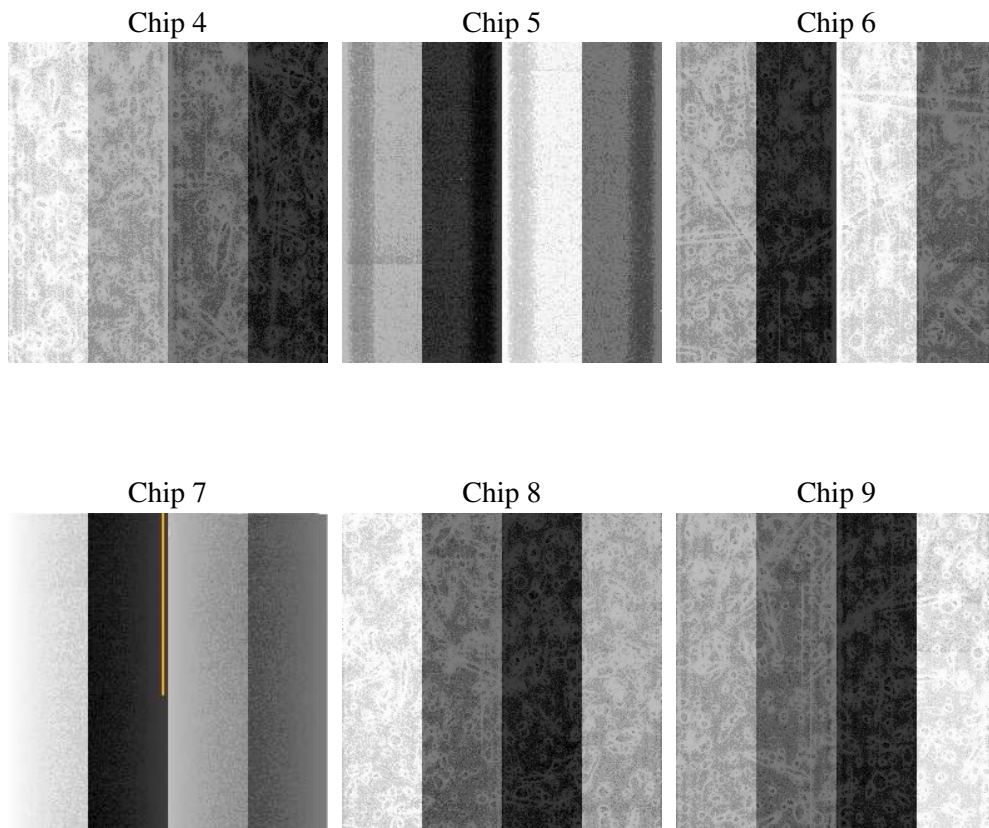
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldsver	3.4.0
date	2007-05-25T18:11:16
revision	3

sched_exp_time	44000.000000
ontime	44092.800041065
ontime4	44092.800041065
ontime5	44092.800041065
ontime6	44089.559080824
ontime7	44092.800041065
ontime8	44092.800041065
ontime9	44092.800041065
l1events	2008500

2.1.4 Events

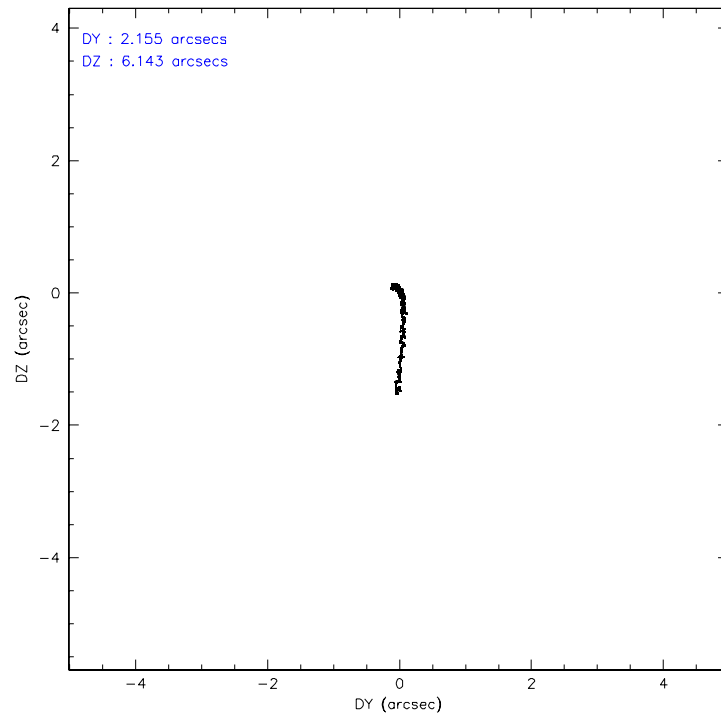
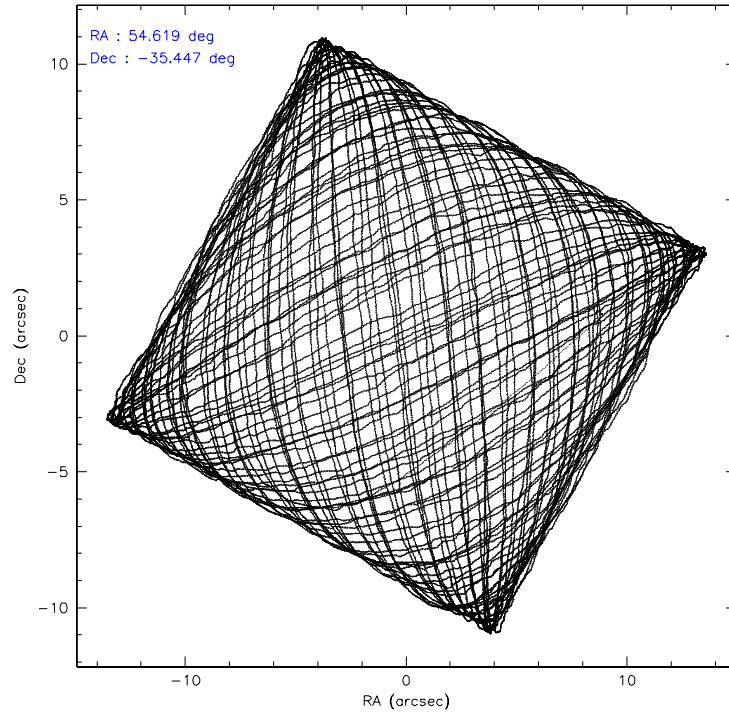
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	323502	381302	296746	349824	362477	294649
rejected events	289593	197611	255806	194836	287512	247719
rejected %	89%	51%	86%	55%	79%	84%

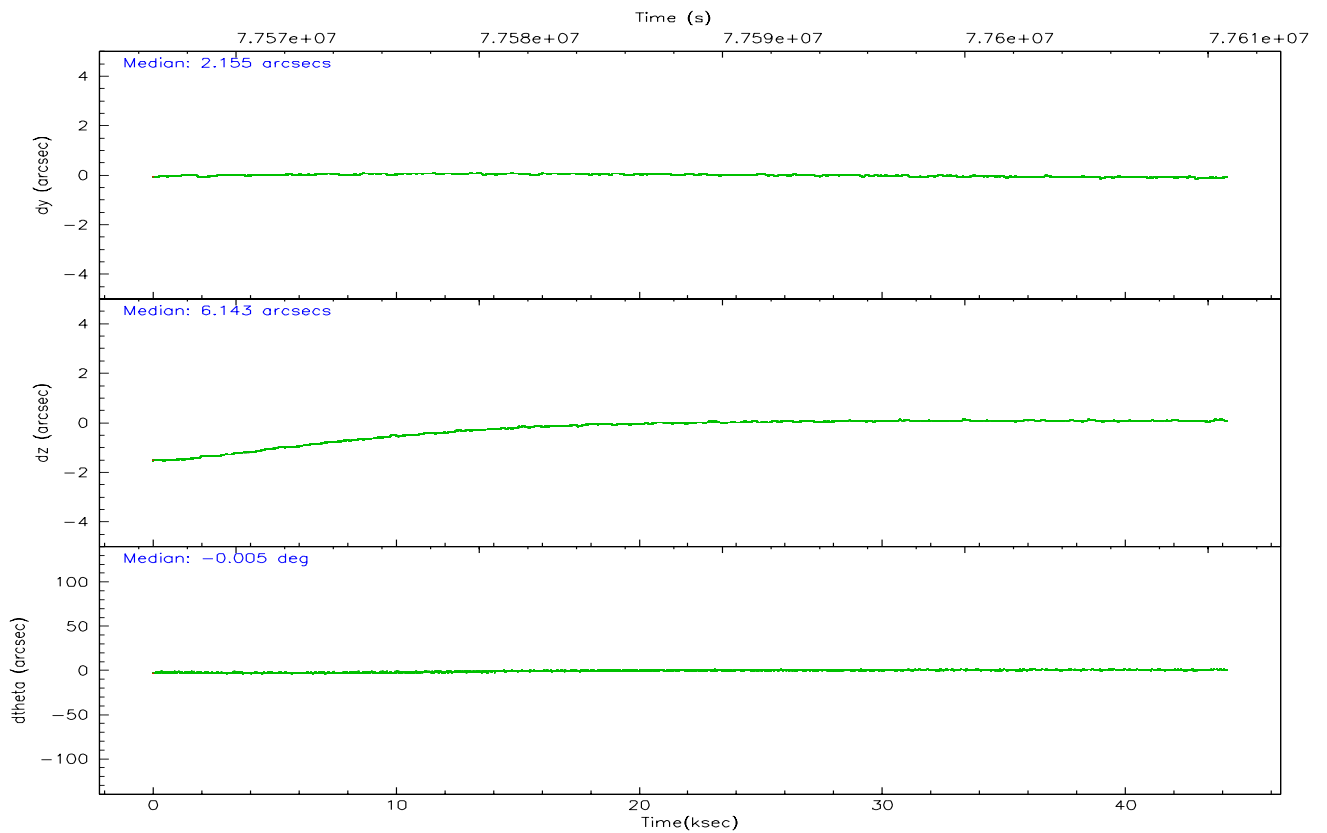
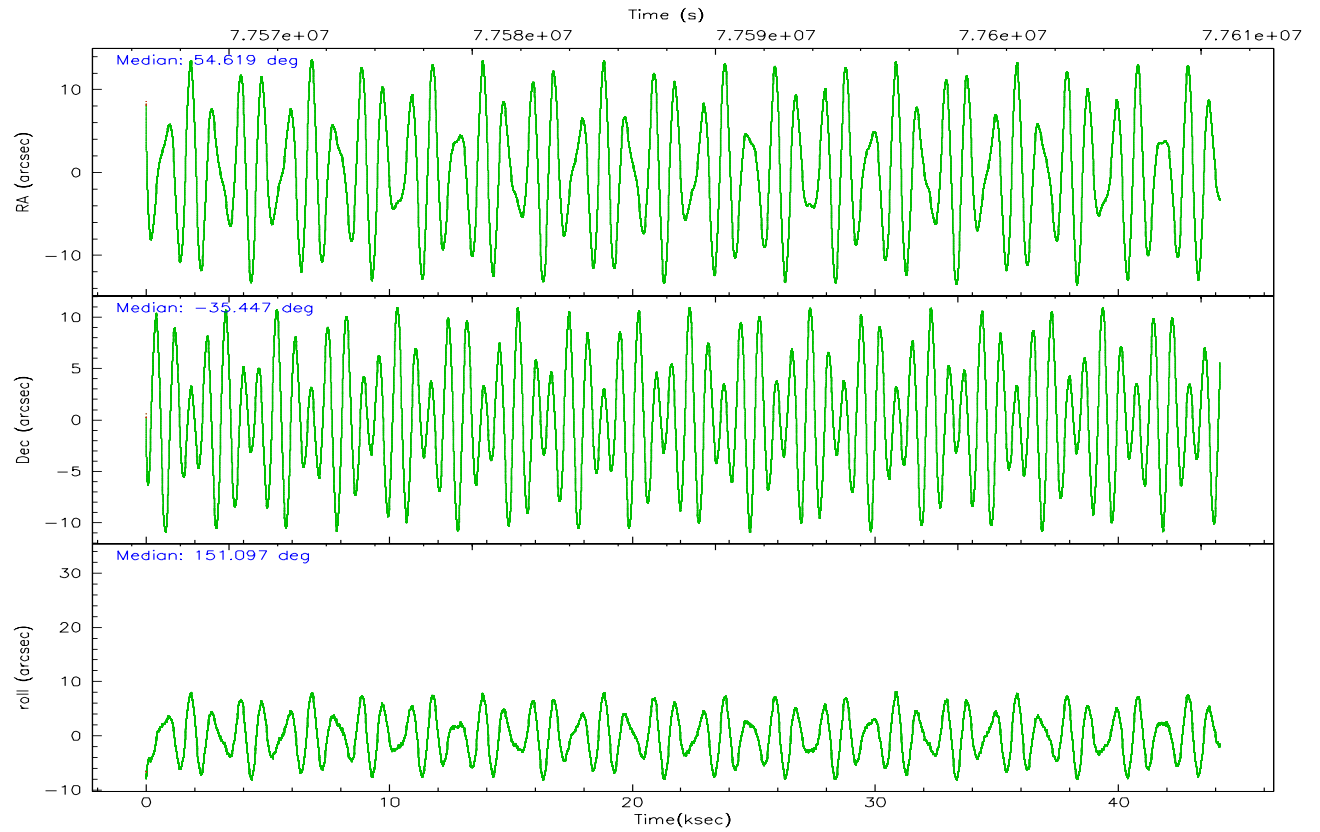
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	14592	30158	21174	17007	26404	14869
	4%	7%	7%	4%	7%	5%
grade 1 events	148	823	267	309	235	148
	0%	0%	0%	0%	0%	0%
grade 2 events	7662	49815	6802	31629	15531	19526
	2%	13%	2%	9%	4%	6%
grade 3 events	3089	8143	3395	14826	7591	3228
	0%	2%	1%	4%	2%	1%
grade 4 events	2977	7827	3410	14768	7138	3137
	0%	2%	1%	4%	1%	1%
grade 5 events	9161	28561	10855	32405	13809	11005
	2%	7%	3%	9%	3%	3%
grade 6 events	5590	87756	6161	76771	18303	6172
	1%	23%	2%	21%	5%	2%
grade 7 events	280283	168219	244682	162109	273466	236564
	86%	44%	82%	46%	75%	80%

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	54.652173	54.61852412281316	Subarray requested	NONE	NONE
Pointing Dec	-35.445961	-35.44661661138443	Alternating exposures requested	N	N
Pointing Roll	150.967451	151.1045594561282	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)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	77566777.184000	77565669.66936301			
Observation start date	2000-06-16T18:18:33	2000-06-16T18:01:09			
Observation end time	77610777.184000	77611776.73356199			
Observation end date	2000-06-17T06:31:53	2000-06-17T06:49:36			
Read mode	TIMED	TIMED			

2.3 Aspect



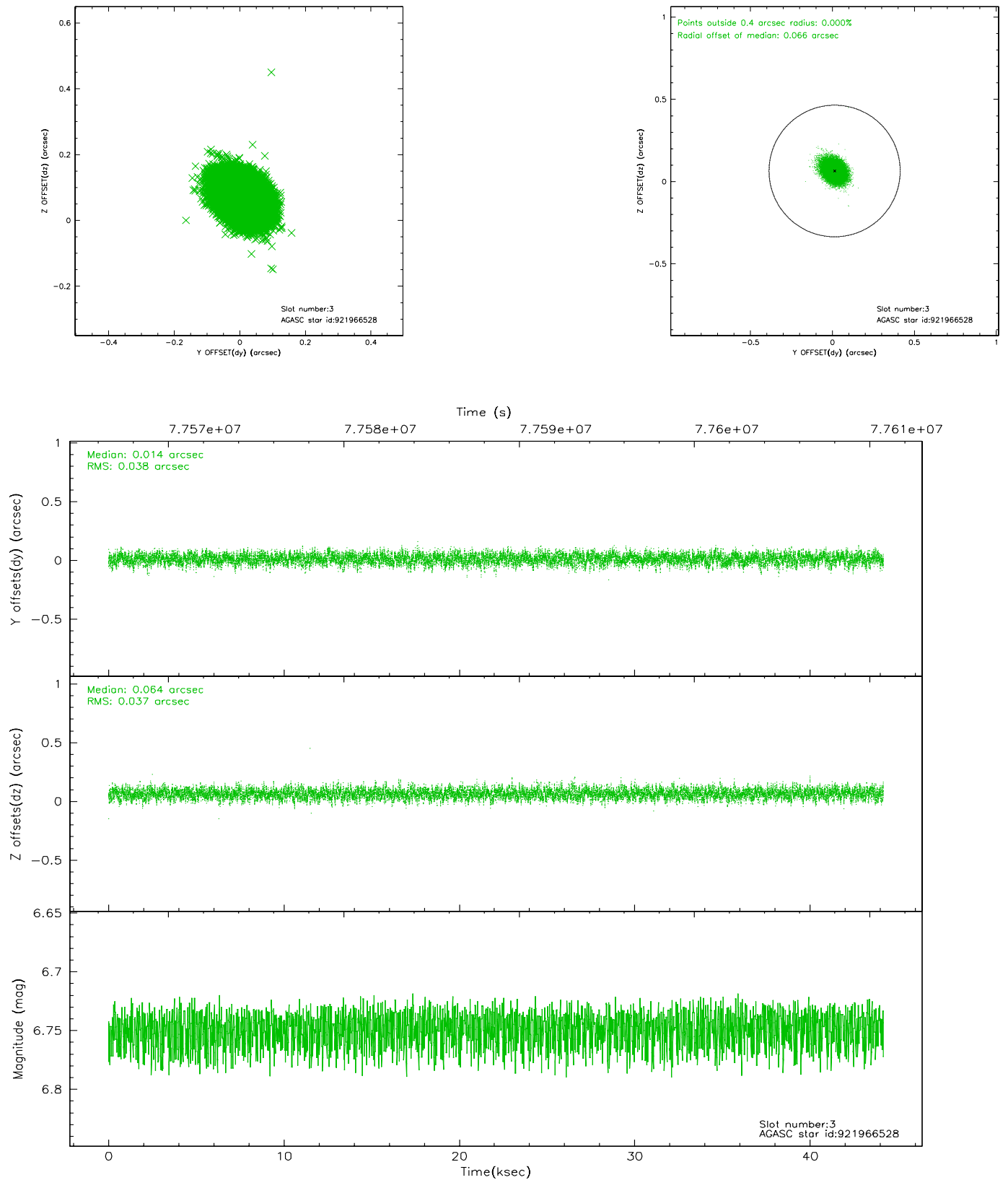


Slot Statistics

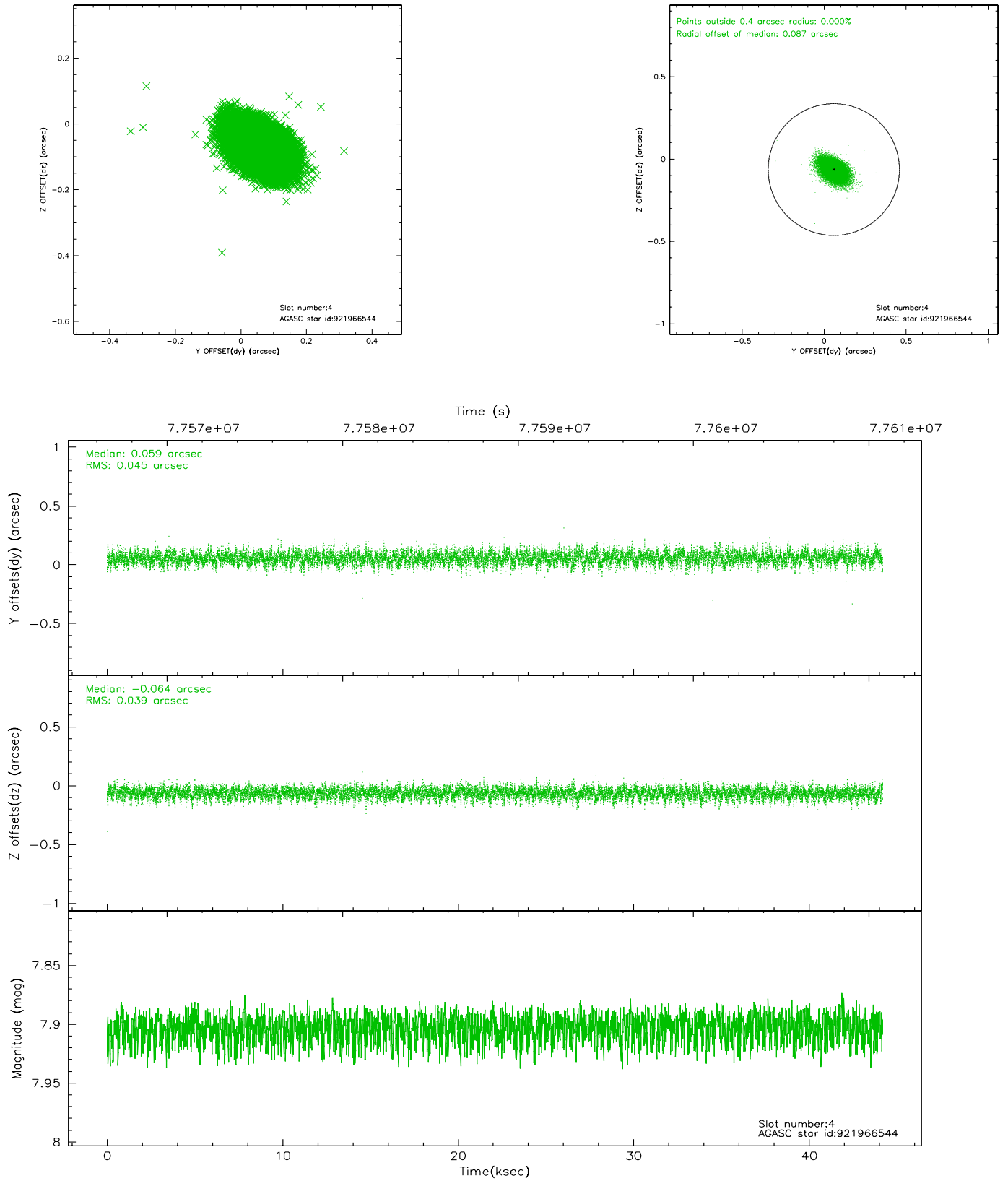
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	10777	-0.018	-0.023	0.014	0.058	0.000000	0.000000	941.24	-1722.67
1	FID	ACIS-S-5	7.24	10775	0.039	-0.000	0.008	0.015	0.000000	0.000000	-1807.69	174.91
2	FID	ACIS-S-6	7.35	10777	-0.044	0.034	0.014	0.064	0.000000	0.000000	406.79	818.89
3	GUIDE	921966528	6.75	21554	0.014	0.064	0.056	0.090	54.675841	-35.204254	362.02	-794.29
4	GUIDE	921966544	7.90	21549	0.059	-0.064	0.062	0.106	54.743508	-35.636012	-565.26	468.67
5	GUIDE	921575736	8.54	21546	-0.097	0.202	0.070	0.118	54.586331	-34.827401	1251.43	-1851.95
6	GUIDE	921965624	8.63	21481	0.078	-0.038	0.071	0.120	54.900706	-35.940077	-1496.66	1204.40
7	GUIDE	921048648	9.06	21545	-0.056	-0.166	0.101	0.157	53.884610	-35.870023	1212.76	2429.38

2.4 Star Slots

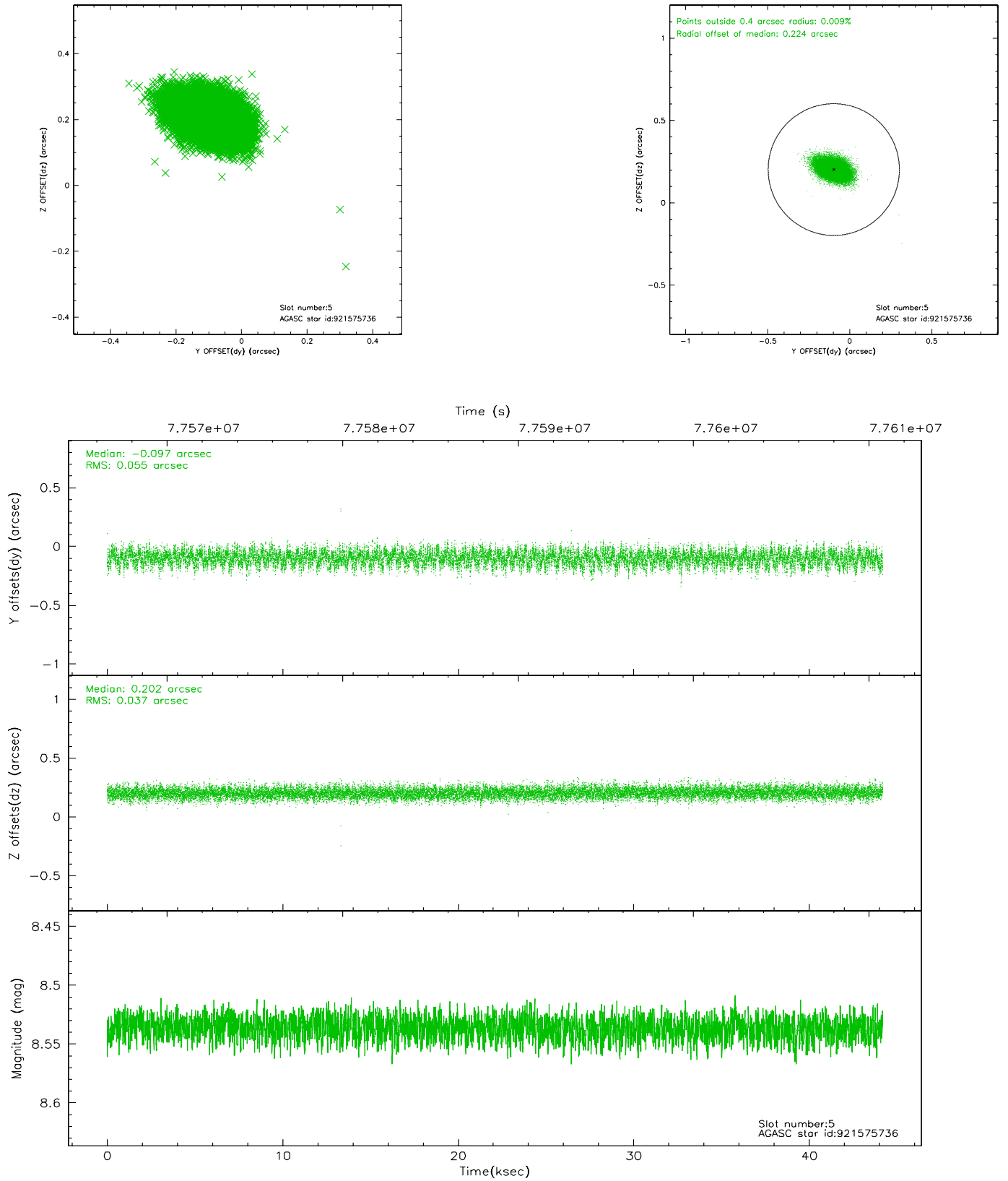
2.4.1 Slot 3



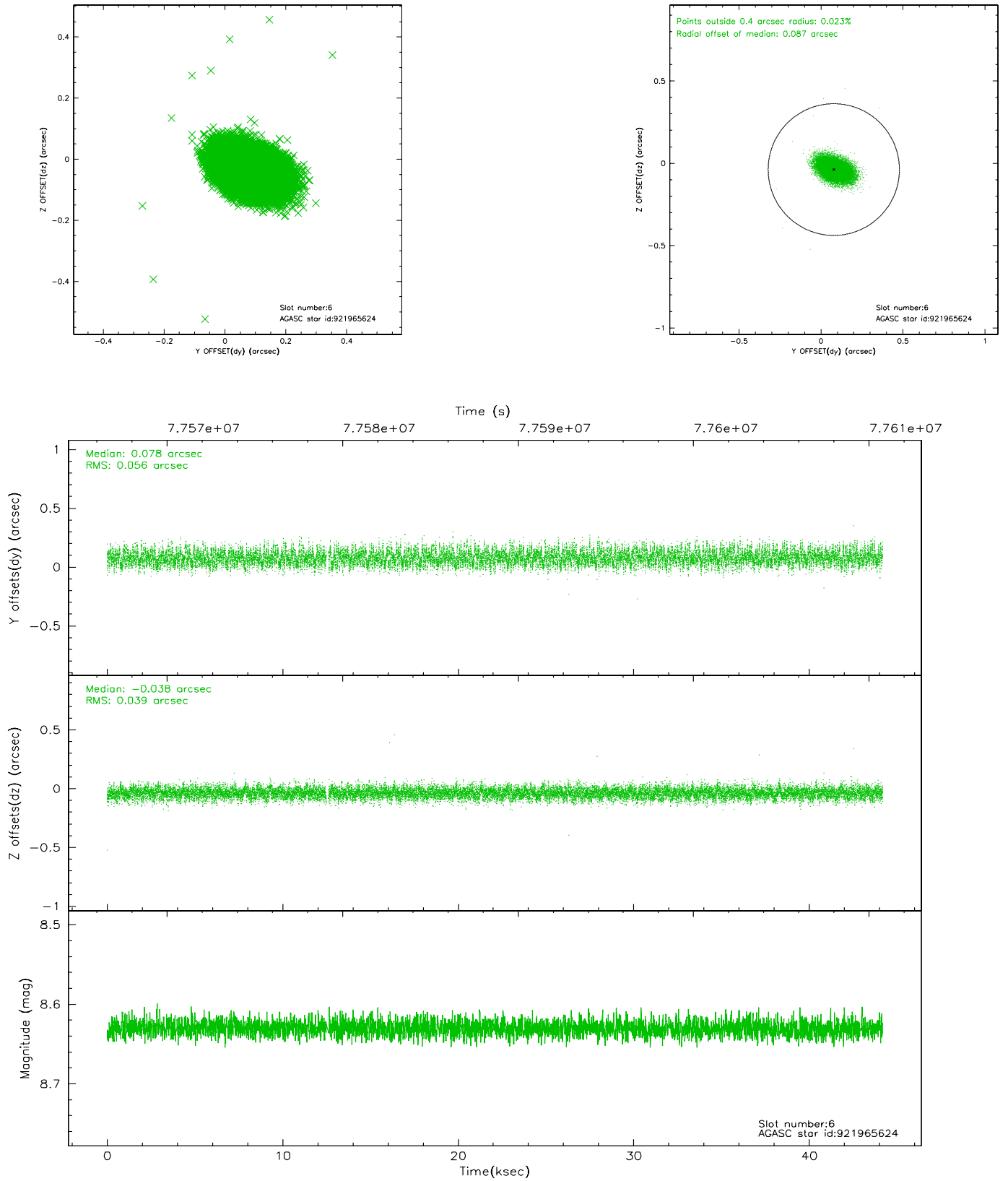
2.4.2 Slot 4



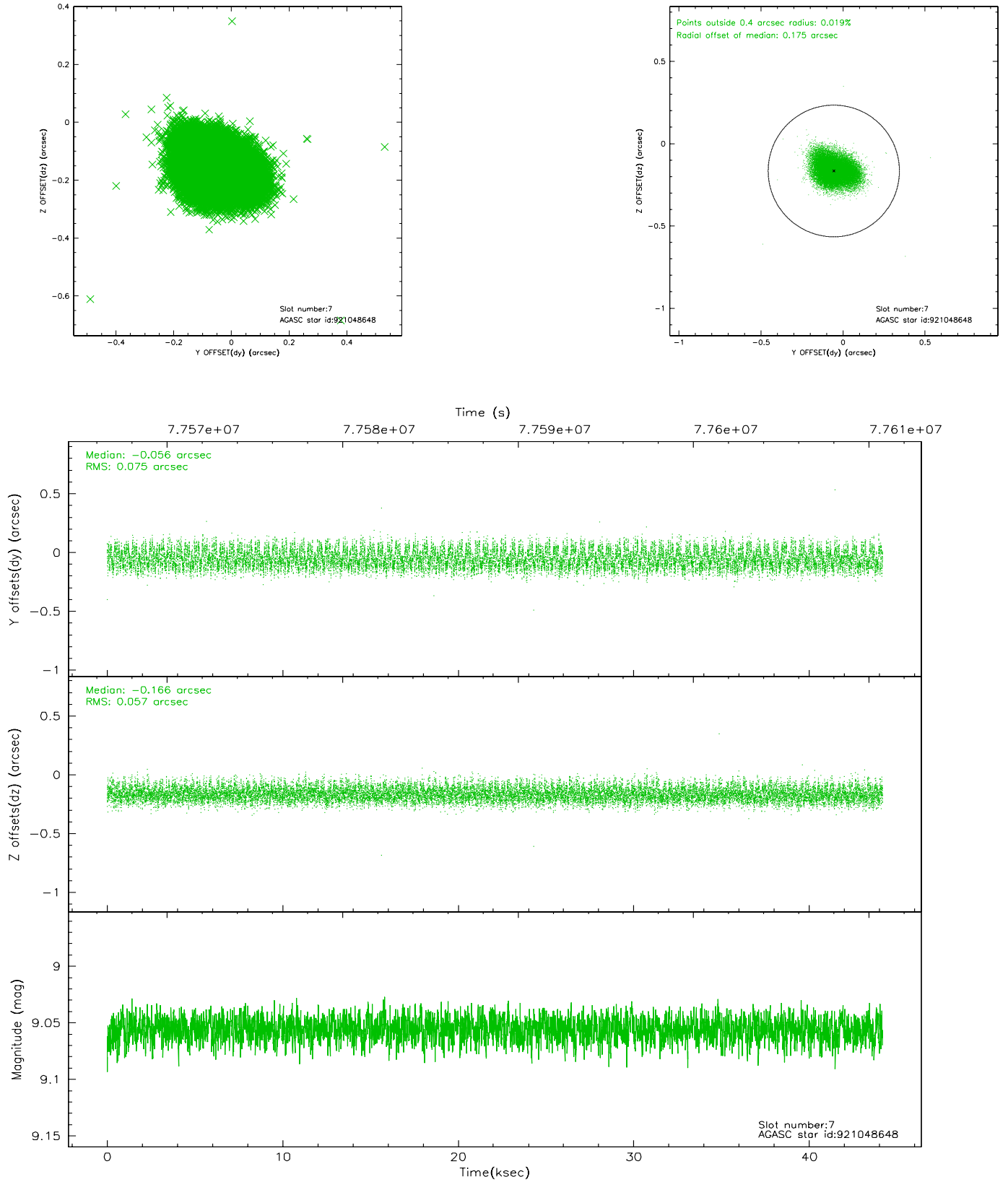
2.4.3 Slot 5



2.4.4 Slot 6

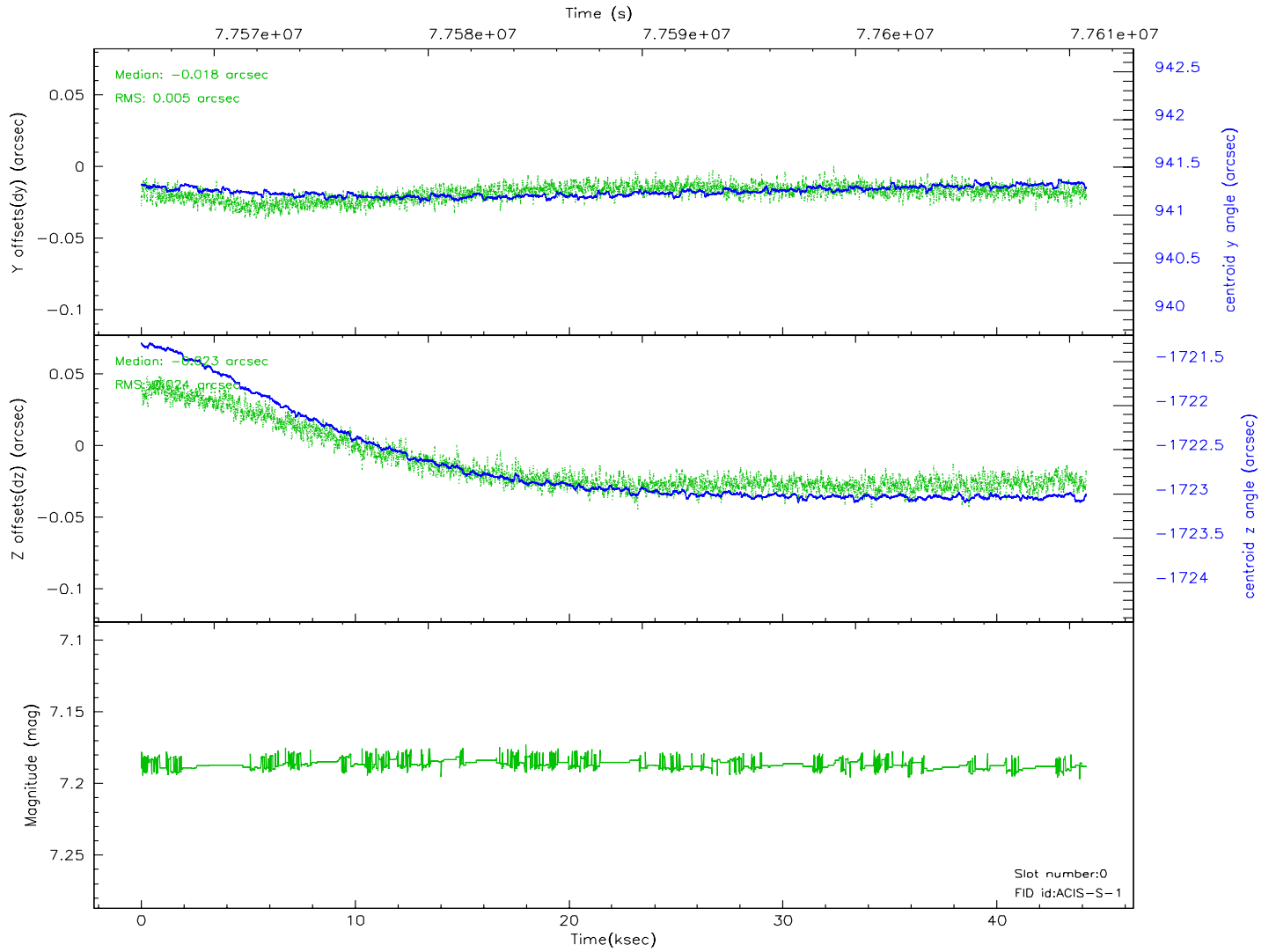
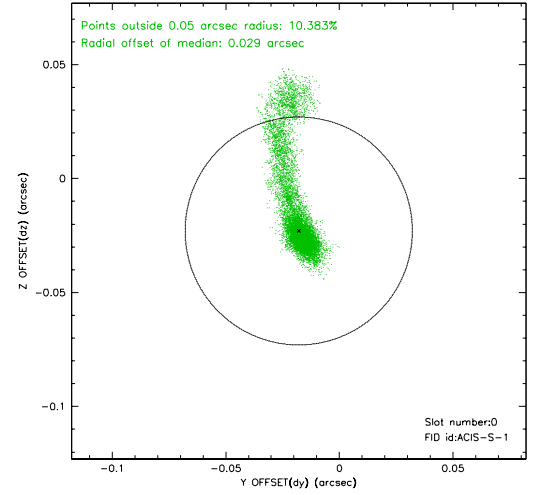
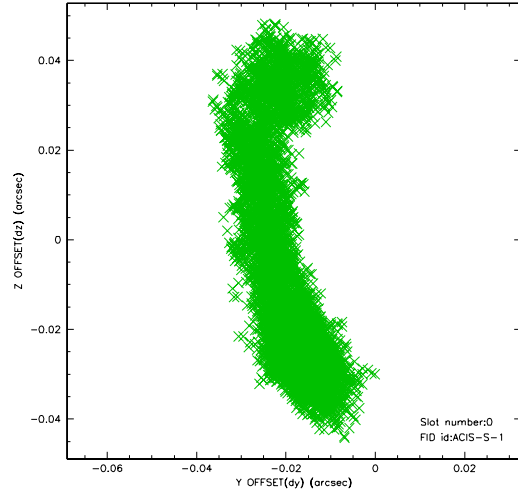


2.4.5 Slot 7

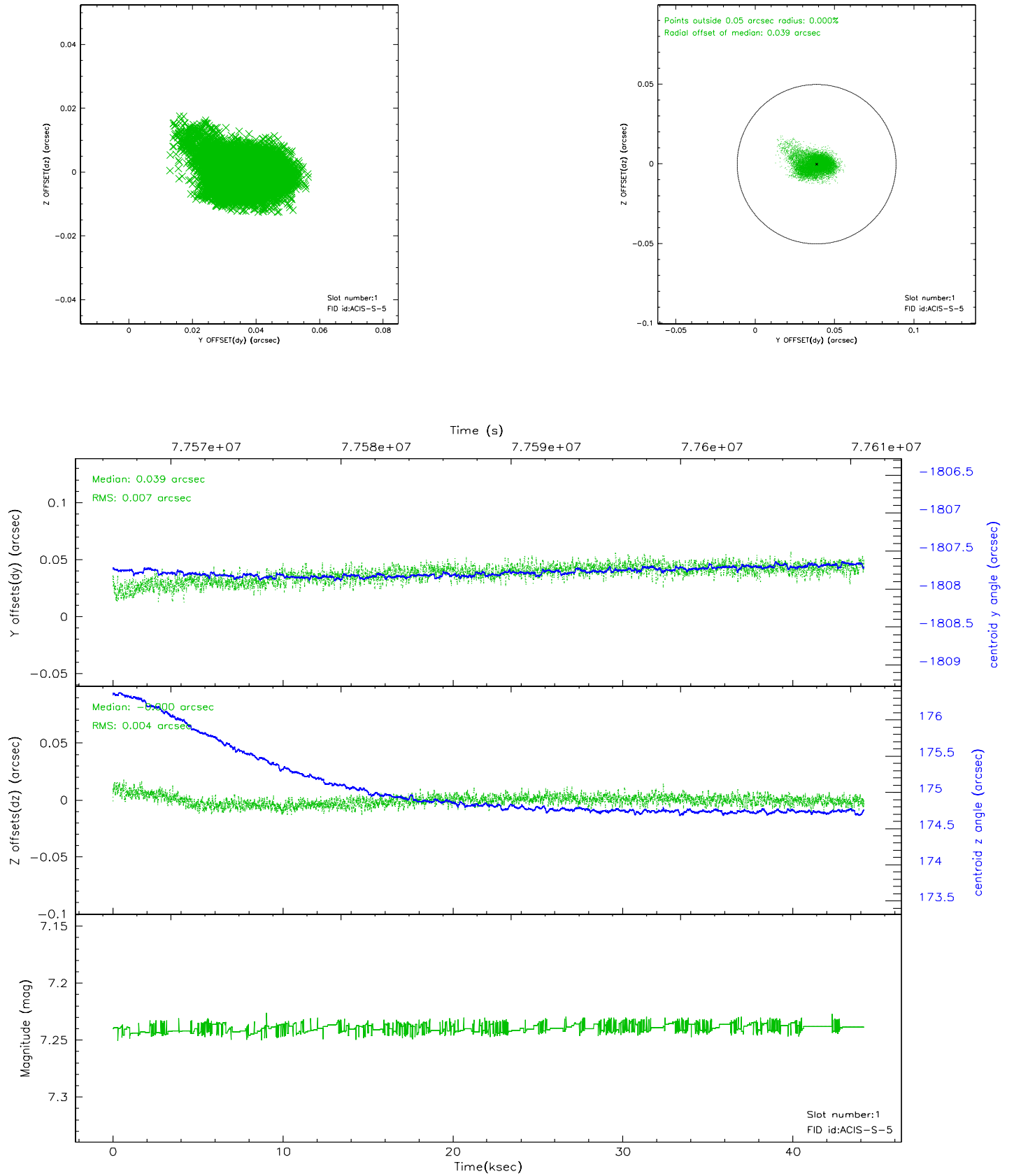


2.5 FID Slots

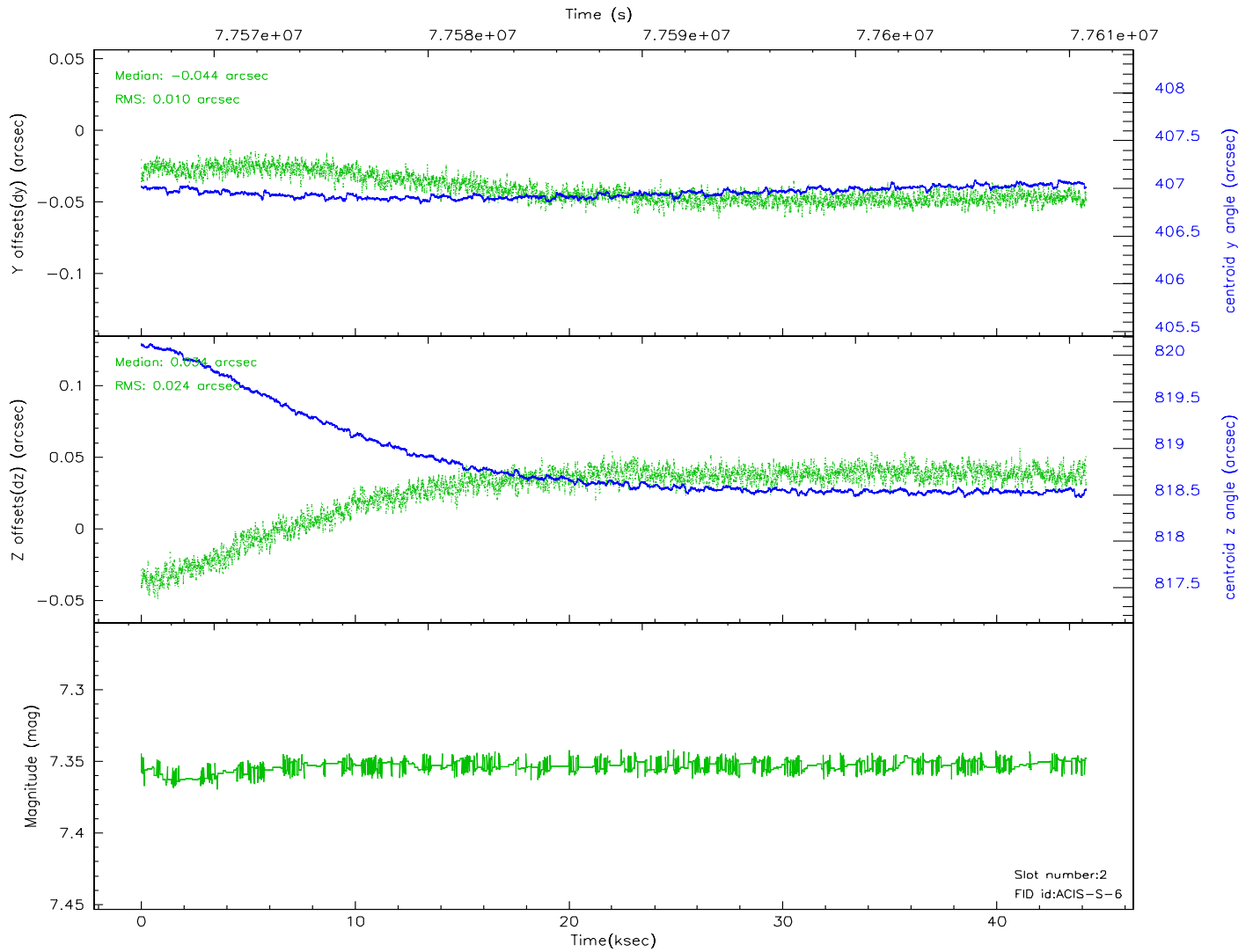
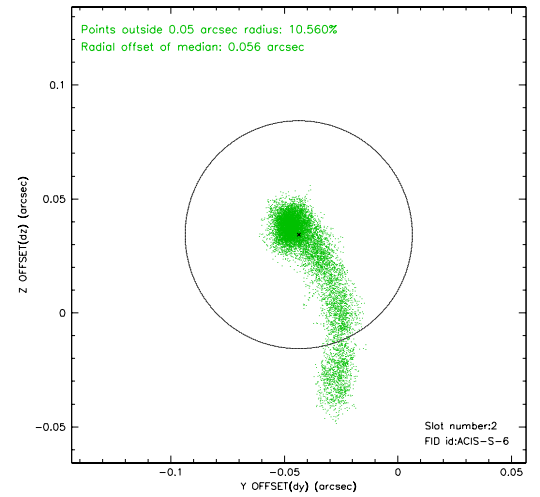
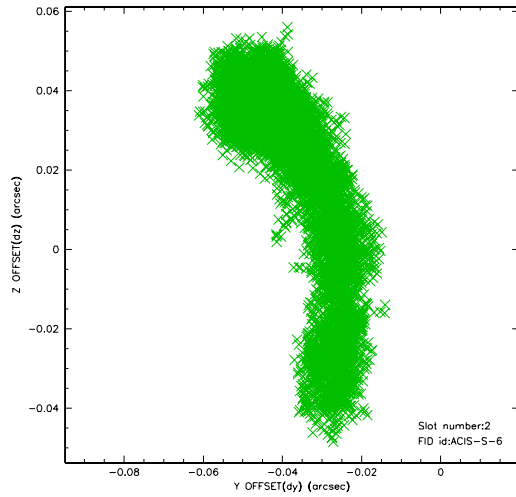
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

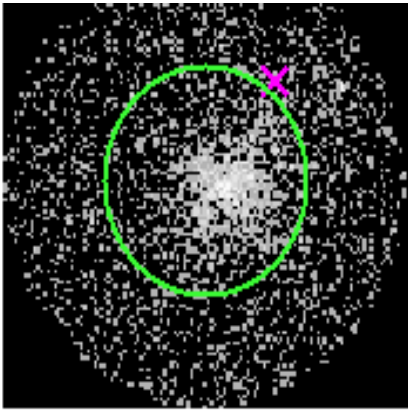


3 Gratings

3.1 HEG Arm



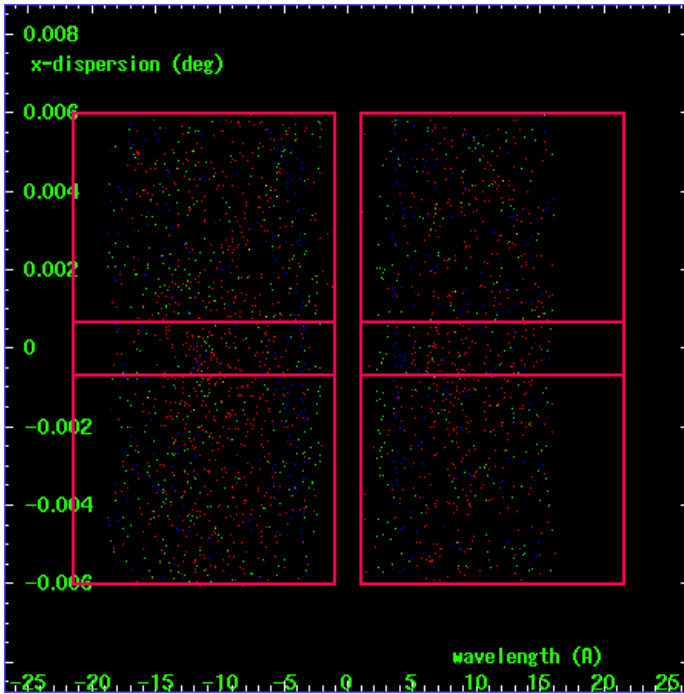
HEG Order Sort 123



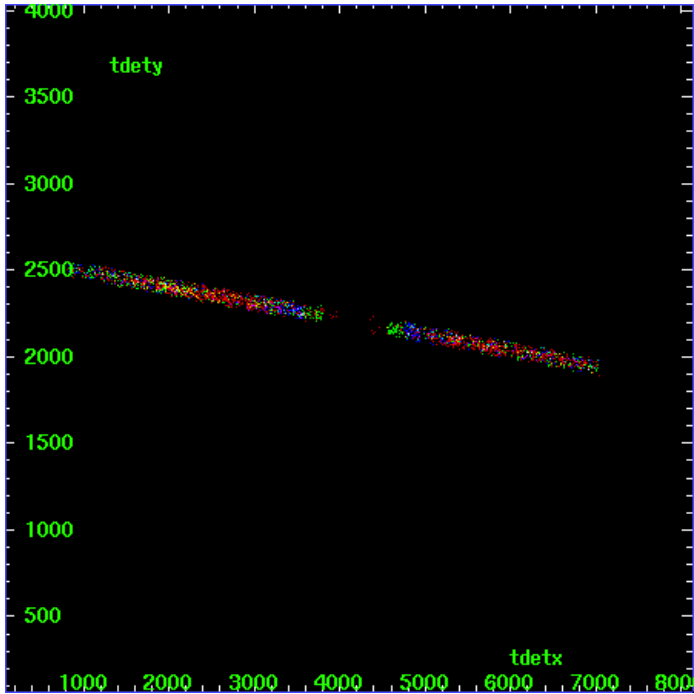
HEG Zero Order



HEG Order Sort ALL

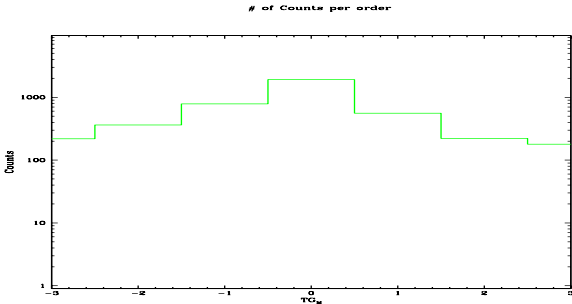


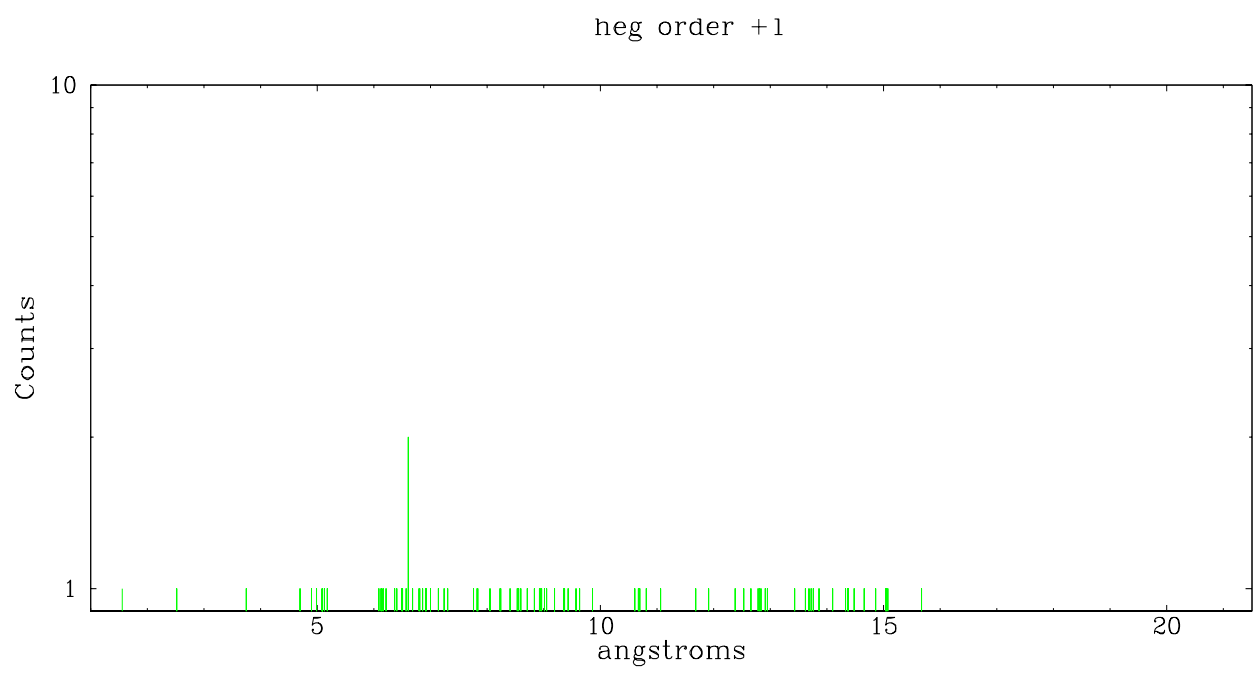
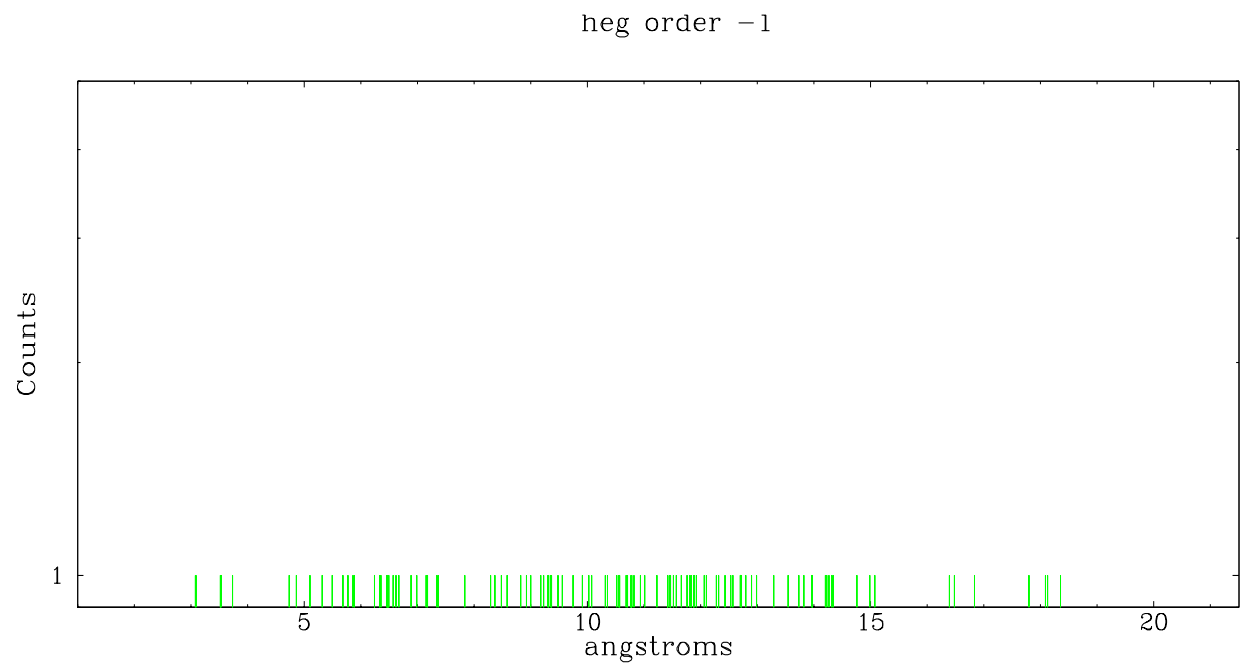
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	219	362	786	1915	556	222	179

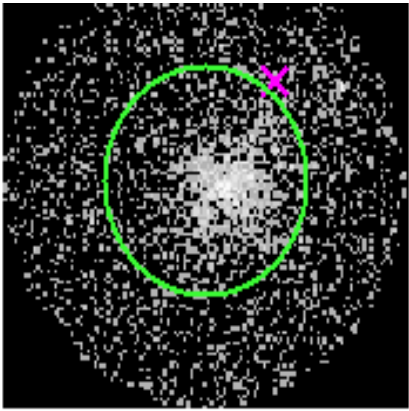




3.2 MEG Arm



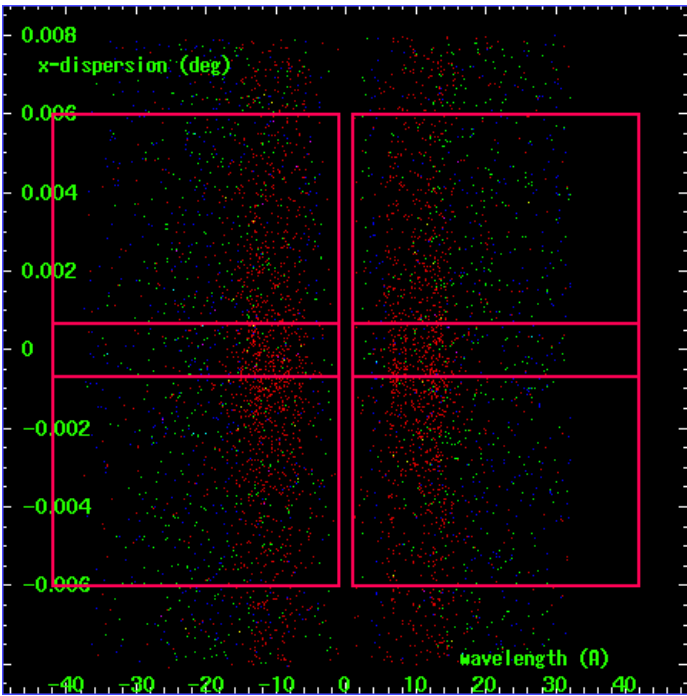
MEG Order Sort 123



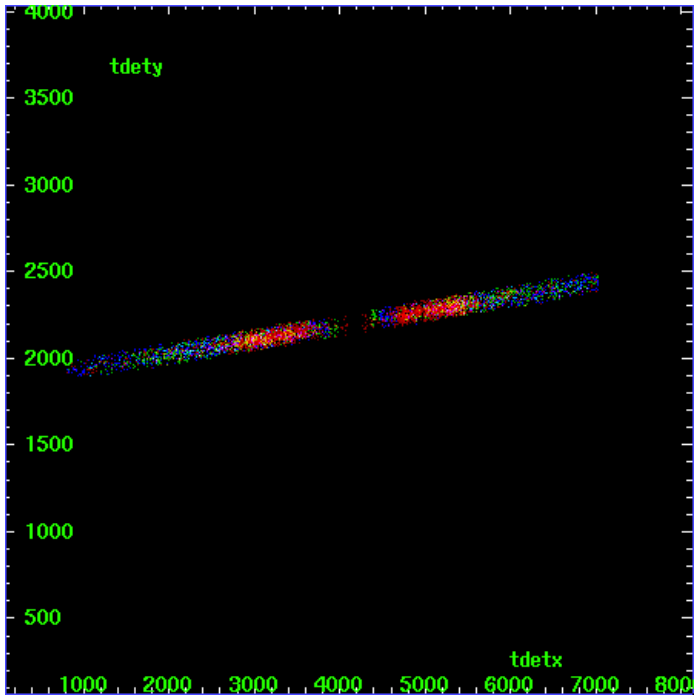
MEG Zero Order



MEG Order Sort ALL

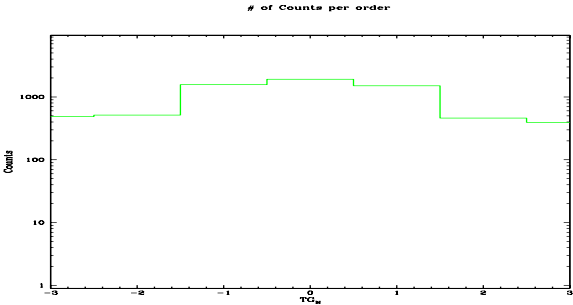


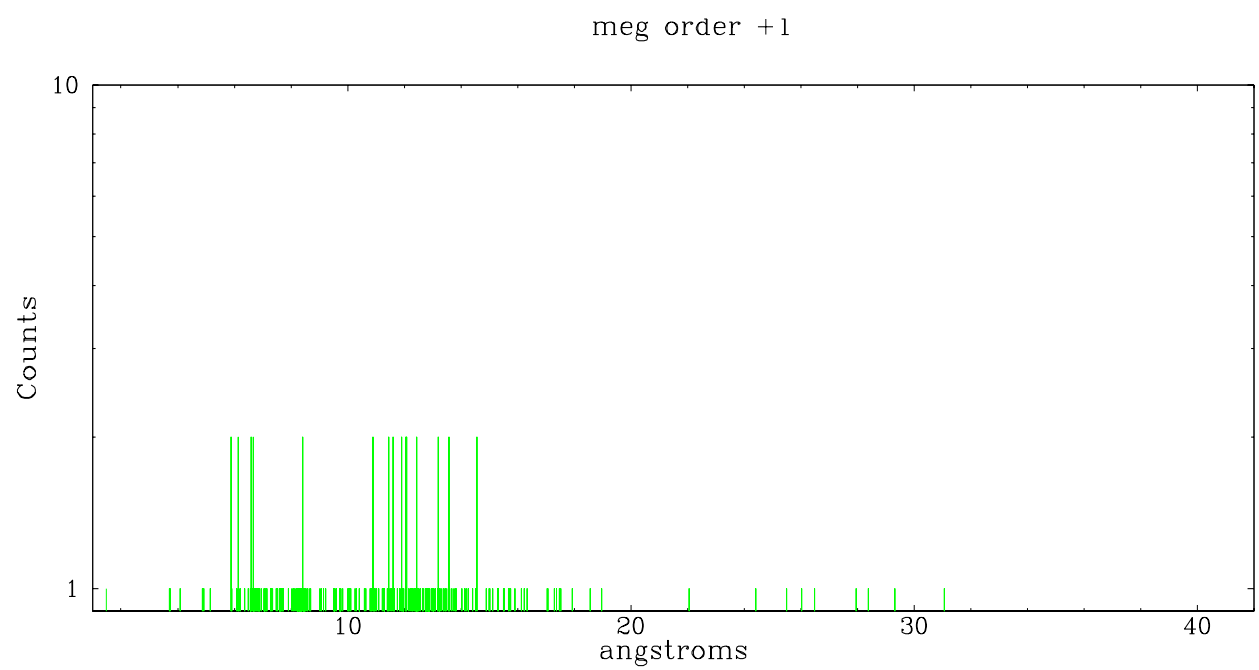
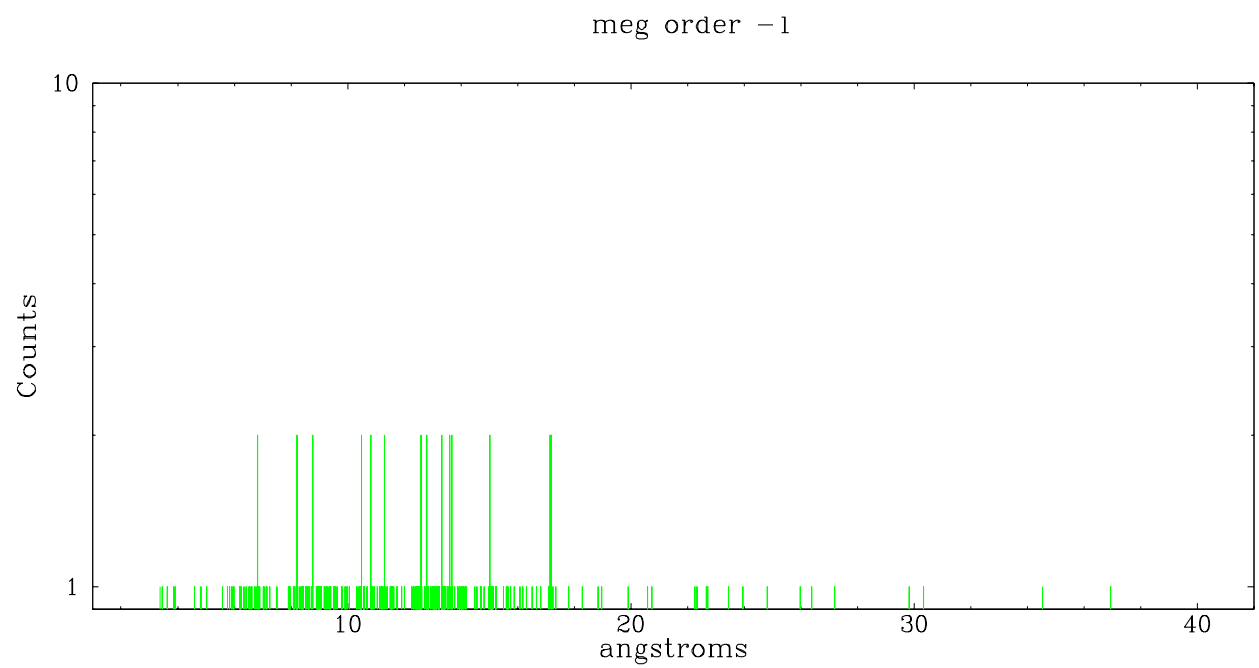
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	487	515	1564	1915	1502	459	393





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.08

A.2 Comments

Standard software processing technique using the tool `tgdetect` failed to determine an accurate position for the zeroth order for this observation. The source is extended and asymmetric. The processing software defaulted to the coordinates supplied by the user for the position of the zeroth order for the grating spectral extraction. For grating analysis of localized X-ray emission within the extended emission, the investigator will need to extract one or more dispersed spectra using user-defined zeroth order positions for all positions of interest. Coordinates used as zeroth order position for extracting dispersed spectra in this processing: `ra=03:38:29.3, dec=-35:27:01.0`.