

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7412 - L2 Version 2
Chandra X-Ray Center

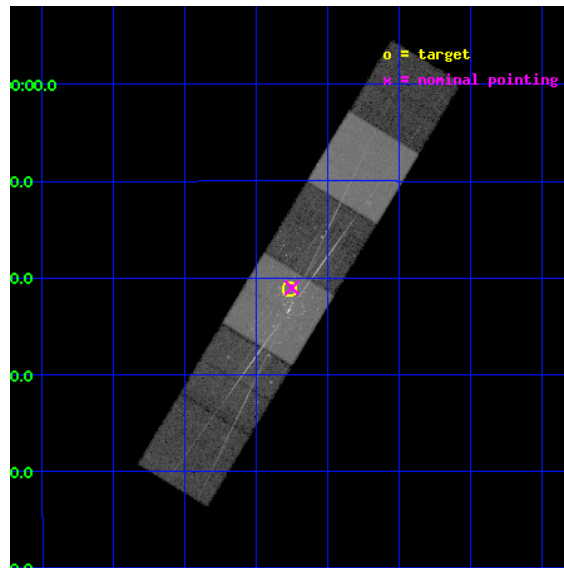
L2 Processing Date : Apr 30 2012

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1 Front

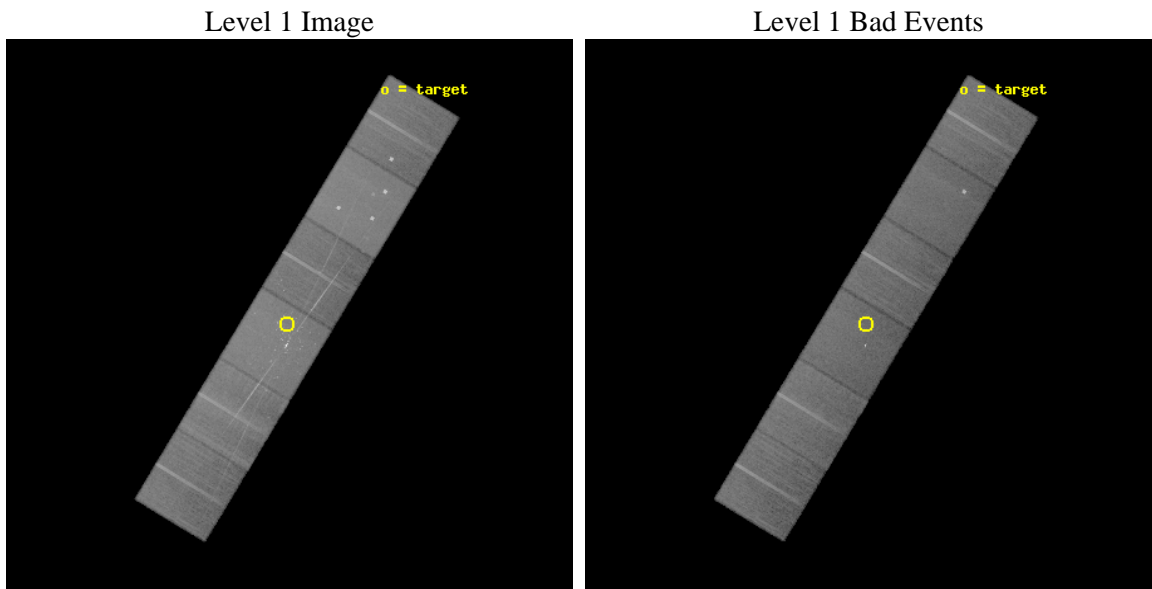
seq_num	200425	Sequence number
obs_id	7412	Observation id
title	High Resolution Studies of Pre-Main Sequence Stars in Orion	Propos
observer	Prof Claude Canizares	Principal investigator
object	Orion Trapezium Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.817083	Observer's specified target RA [deg]
dec_targ	-5.352639	Observer's specified target Dec [deg]
ra_nom	83.812742624589	Nominal RA [deg]
dec_nom	-5.3504433029089	Nominal Dec [deg]
roll_nom	121.20428034449	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25151.999906361	Sum of GTIs [s]
livetime	24833.510138831	Livetime [s]
ontime4	25151.999906361	Sum of GTIs [s]
ontime5	25151.999906361	Sum of GTIs [s]
ontime6	25151.999906361	Sum of GTIs [s]
ontime7	25151.999906361	Sum of GTIs [s]
ontime8	25151.999906361	Sum of GTIs [s]
ontime9	25151.999906361	Sum of GTIs [s]
l2events	490420	Number of level 2 events



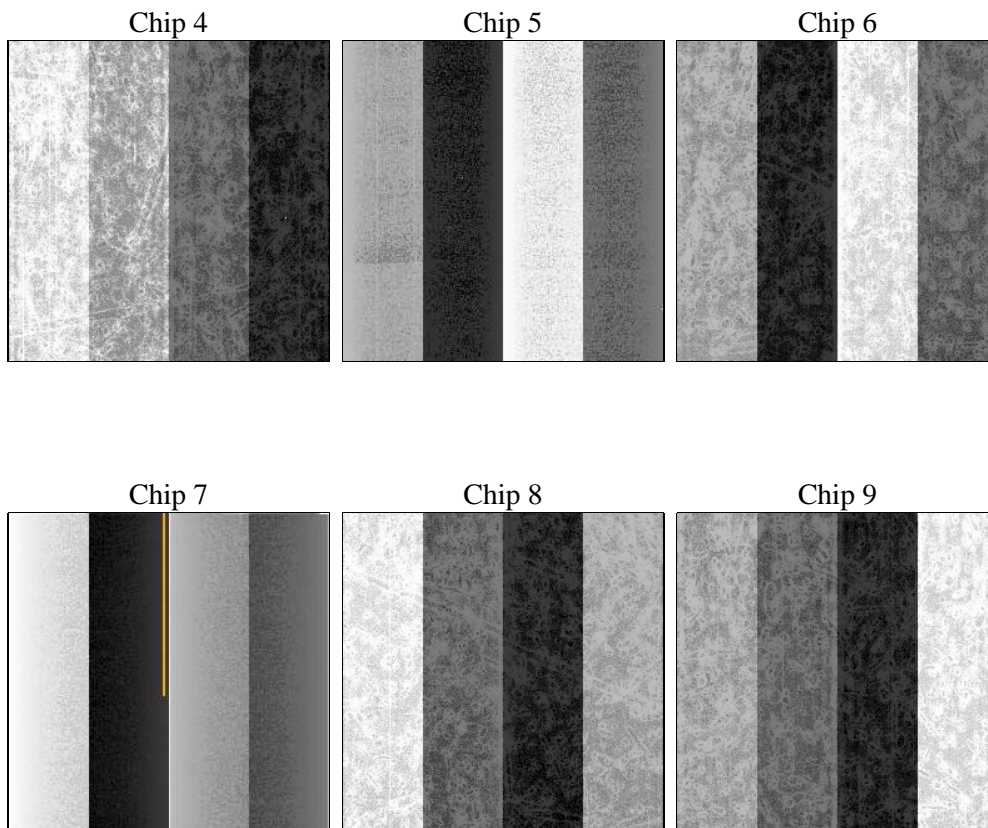
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	25000.601000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	25151.999906361	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	25151.999906361	Sum of GTIs [s]
date	2012-04-28T16:19:56	Date and time of file creation	ontime5	25151.999906361	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25151.999906361	Sum of GTIs [s]
			ontime7	25151.999906361	Sum of GTIs [s]
			ontime8	25151.999906361	Sum of GTIs [s]
			ontime9	25151.999906361	Sum of GTIs [s]
			l1events	1911518	Number of level 1 events

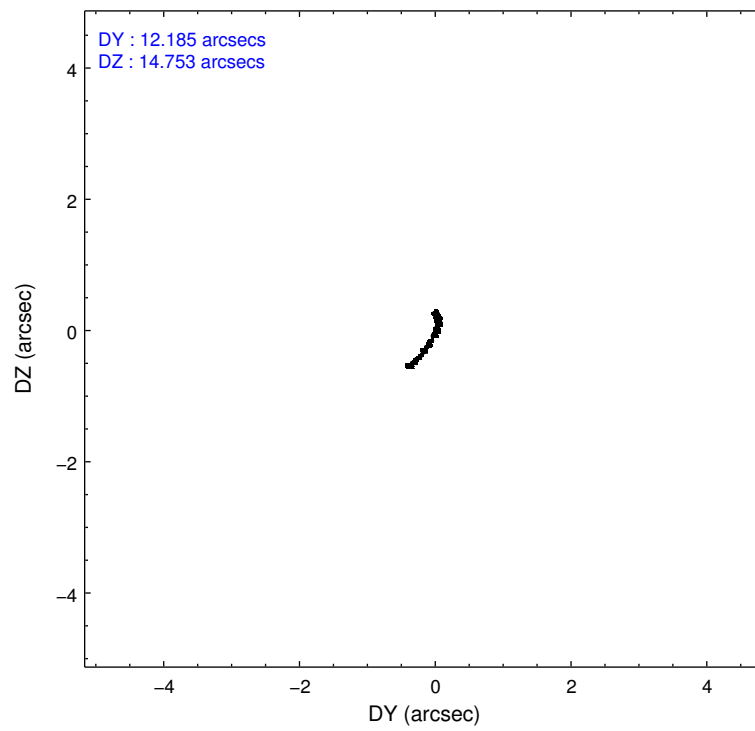
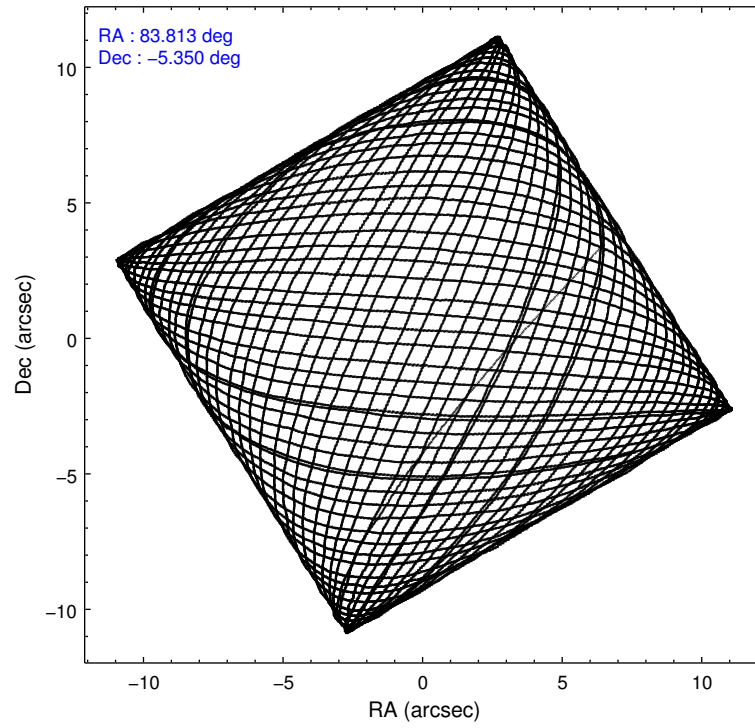
2.1.4 Events

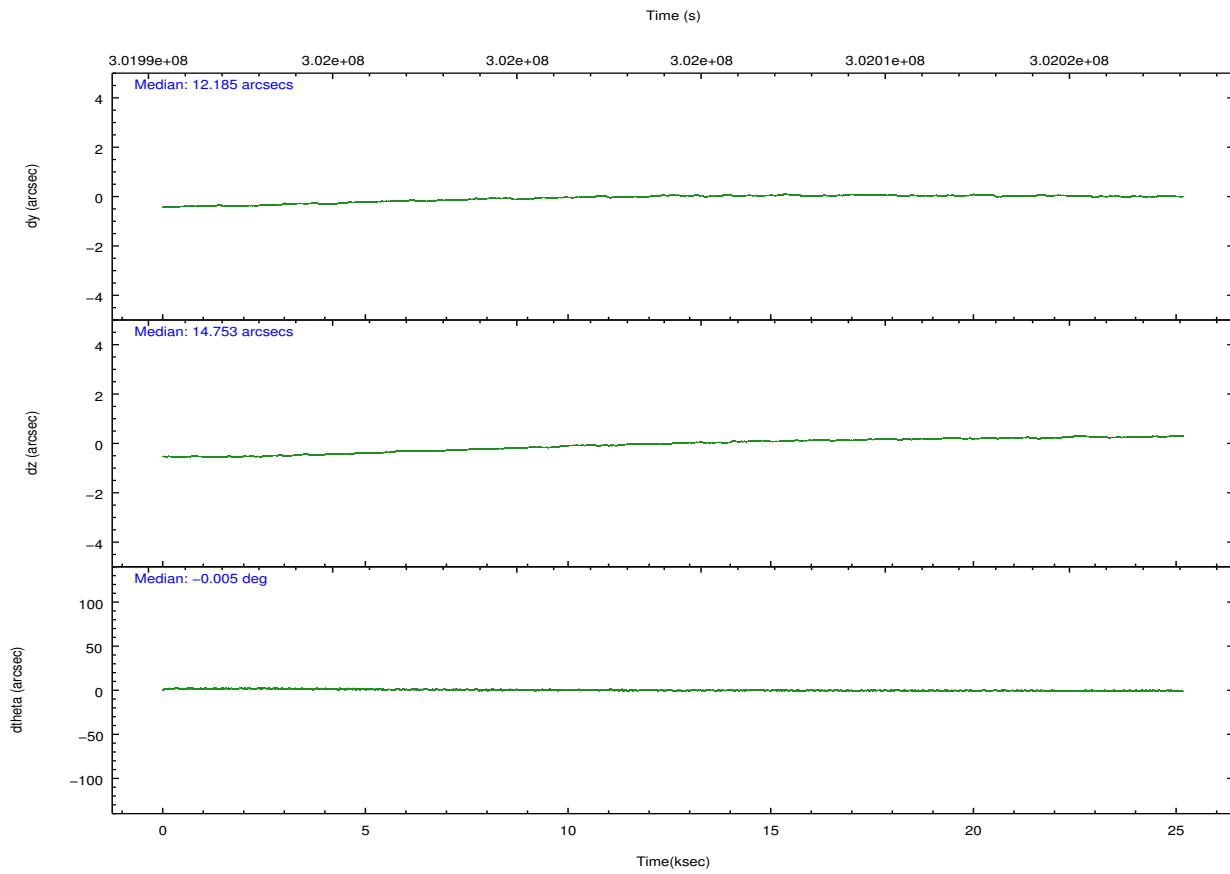
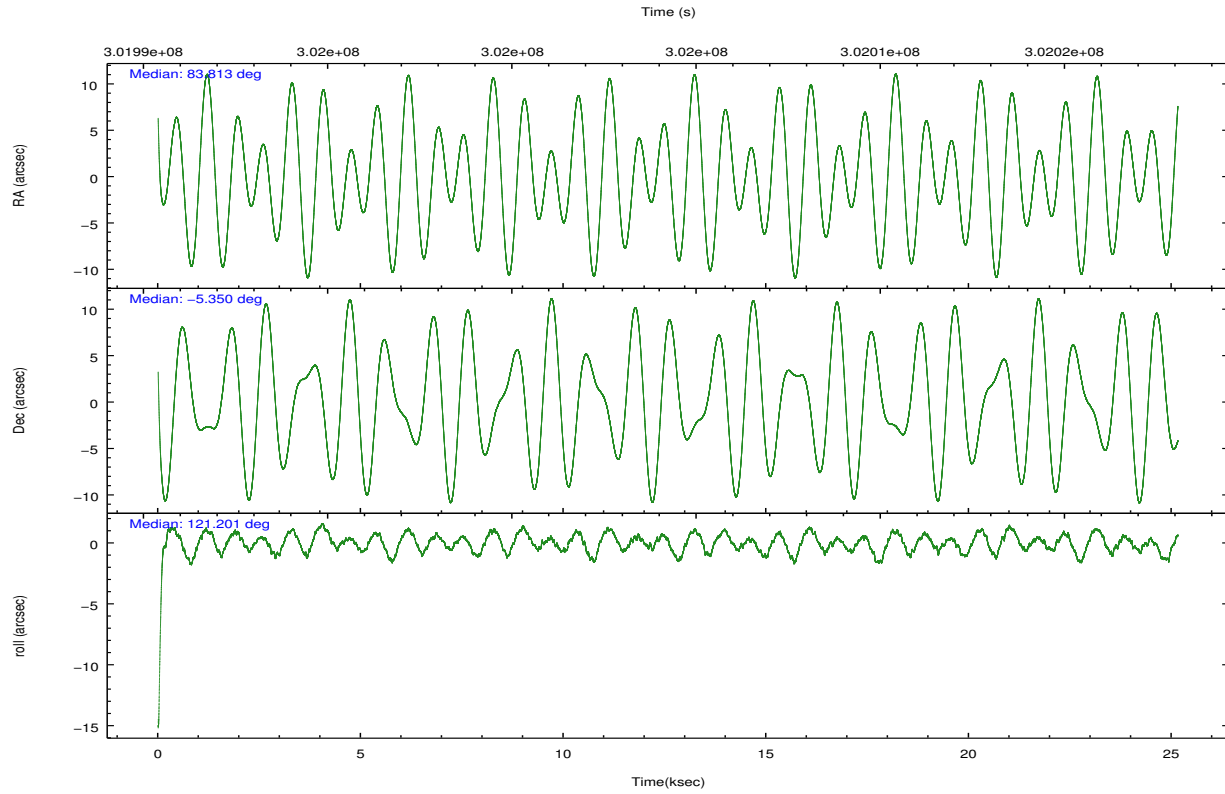
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	279751	397556	265944	383600	334202	250465	grade 0 events	21532	26617	28750	20815	36575	15939
rejected events	241070	209622	215661	204136	245960	216382		7%	6%	10%	5%	10%	6%
rejected %	86%	52%	81%	53%	73%	86%	grade 1 events	362	518	222	653	302	177
								0%	0%	0%	0%	0%	0%
							grade 2 events	6683	56984	8757	39001	17876	6487
								2%	14%	3%	10%	5%	2%
							grade 3 events	3158	6823	3485	16671	8019	3110
								1%	1%	1%	4%	2%	1%
							grade 4 events	3018	6658	3404	16449	7424	2975
								1%	1%	1%	4%	2%	1%
							grade 5 events	11214	27972	11487	32981	15489	12483
								4%	7%	4%	8%	4%	4%
							grade 6 events	4803	93640	6490	88899	19507	6042
								1%	23%	2%	23%	5%	2%
							grade 7 events	228981	178344	203349	168131	229010	203252
								81%	44%	76%	43%	68%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
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
[deg] Pointing RA	83.836992	83.81274262458862	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.363265	-5.3504433029089	Alternating exposures requested	N	N
[deg] Pointing Roll	121.049926	121.2042803444879	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	301991816.184000	301990569.16266			
Observation start date	2007-07-28T06:35:51	2007-07-28T06:16:09			
[s] Observation end time (MET)	302016817.184000	302017042.35143			
Observation end date	2007-07-28T13:32:32	2007-07-28T13:37:22			
Read mode	TIMED	TIMED			

2.3 Aspect



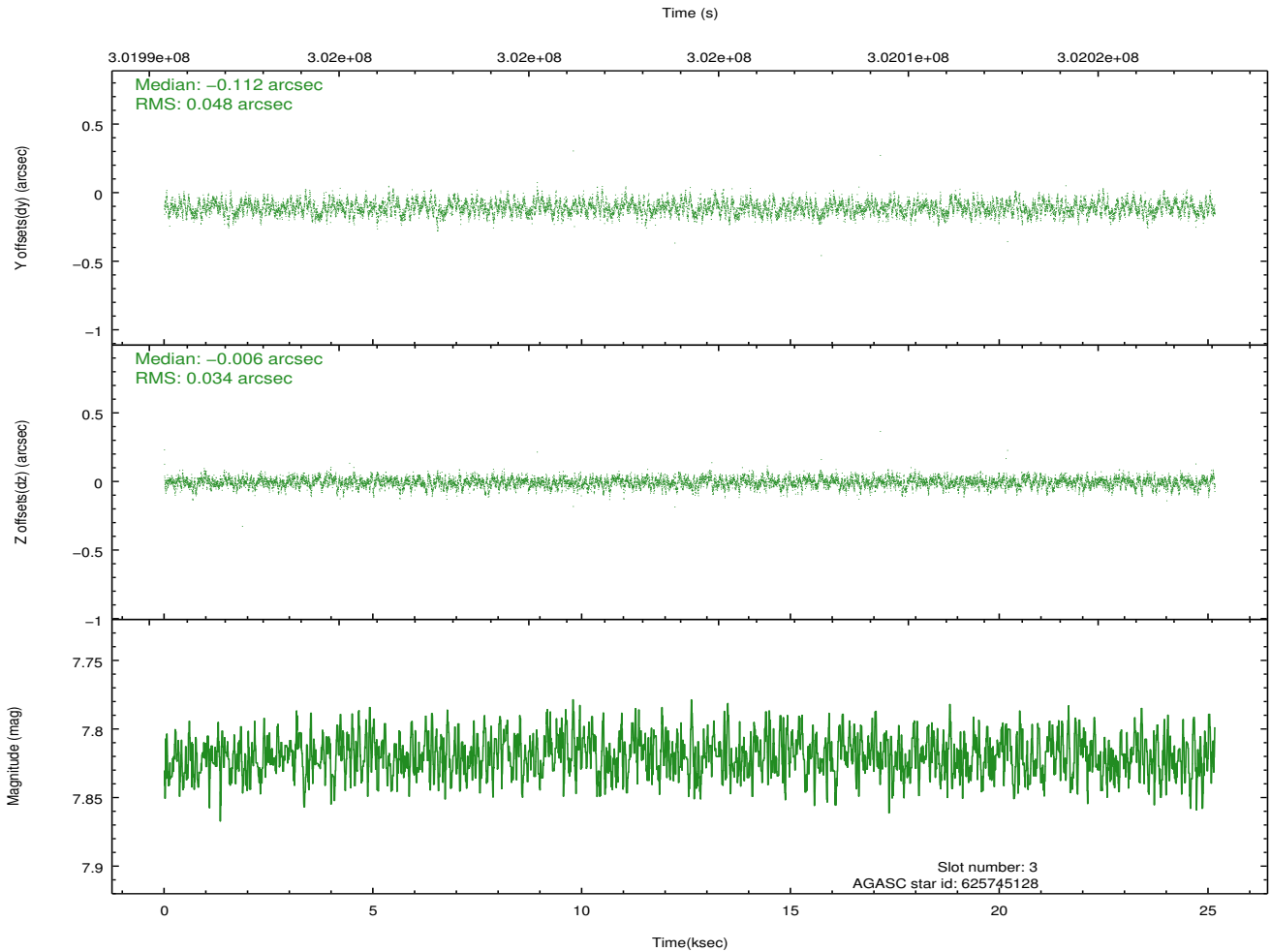
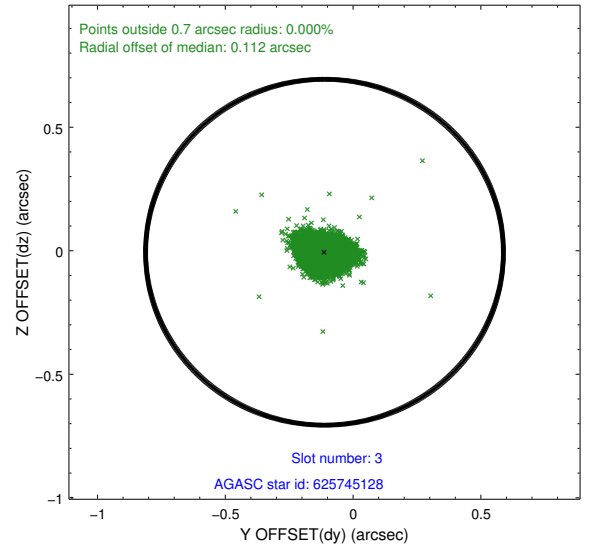
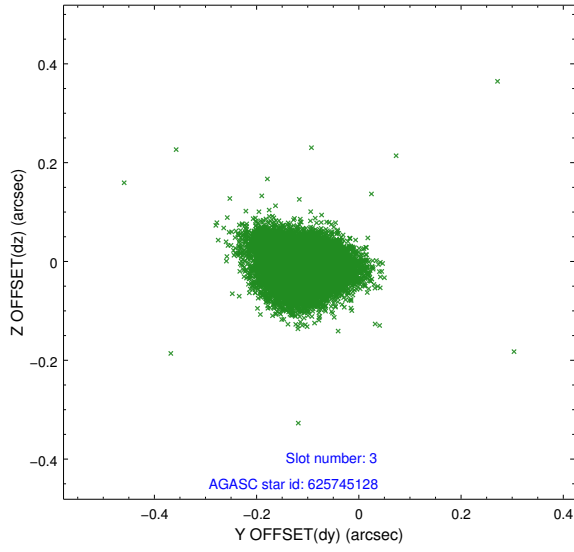


Slot Statistics

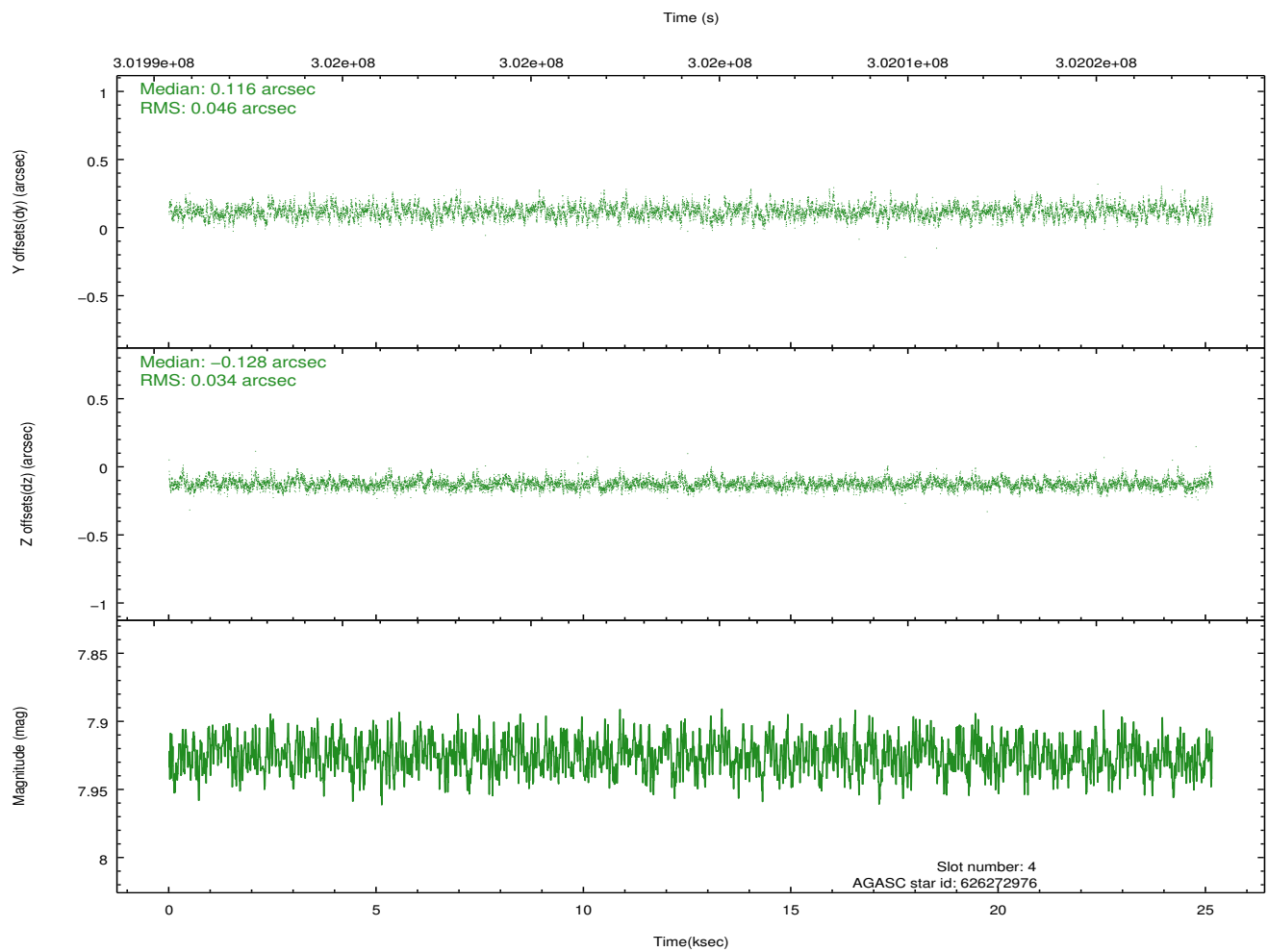
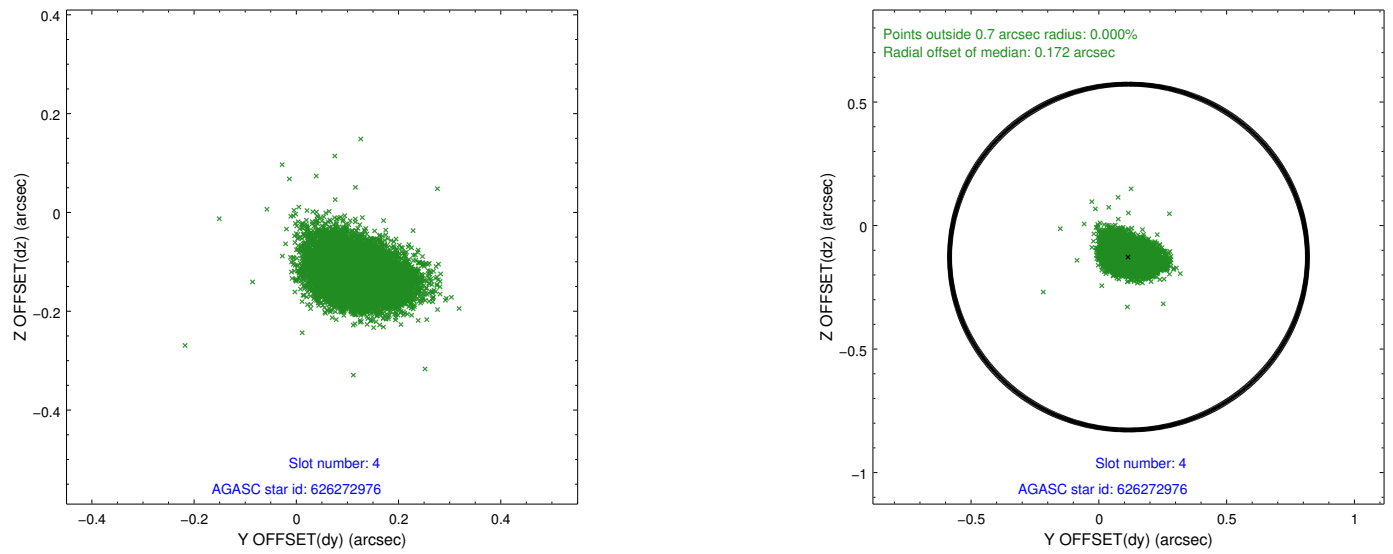
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	6136	-0.045	-0.040	0.009	0.015	0.000000	0.000000	-765.03	-1736.05
1	FID	ACIS-S-4	7.19	6135	0.145	0.033	0.007	0.013	0.000000	0.000000	2148.37	172.41
2	FID	ACIS-S-5	7.22	6136	-0.130	0.016	0.009	0.014	0.000000	0.000000	-1817.82	166.16
3	GUIDE	625745128	7.82	12269	-0.112	-0.006	0.062	0.100	83.769930	-4.731835	2071.65	-966.13
4	GUIDE	626272976	7.93	12264	0.116	-0.128	0.059	0.103	83.795875	-5.926912	-1662.12	1172.54
5	GUIDE	626273040	7.10	12272	-0.014	0.129	0.077	0.127	84.062610	-5.647920	-1294.95	-163.61
6	GUIDE	625745136	7.21	12269	-0.161	0.117	0.063	0.102	83.600341	-4.804339	2161.48	-310.22
7	GUIDE	626272880	7.65	12271	0.158	-0.110	0.087	0.137	83.815609	-6.032748	-2024.96	1308.57

2.4 Star Slots

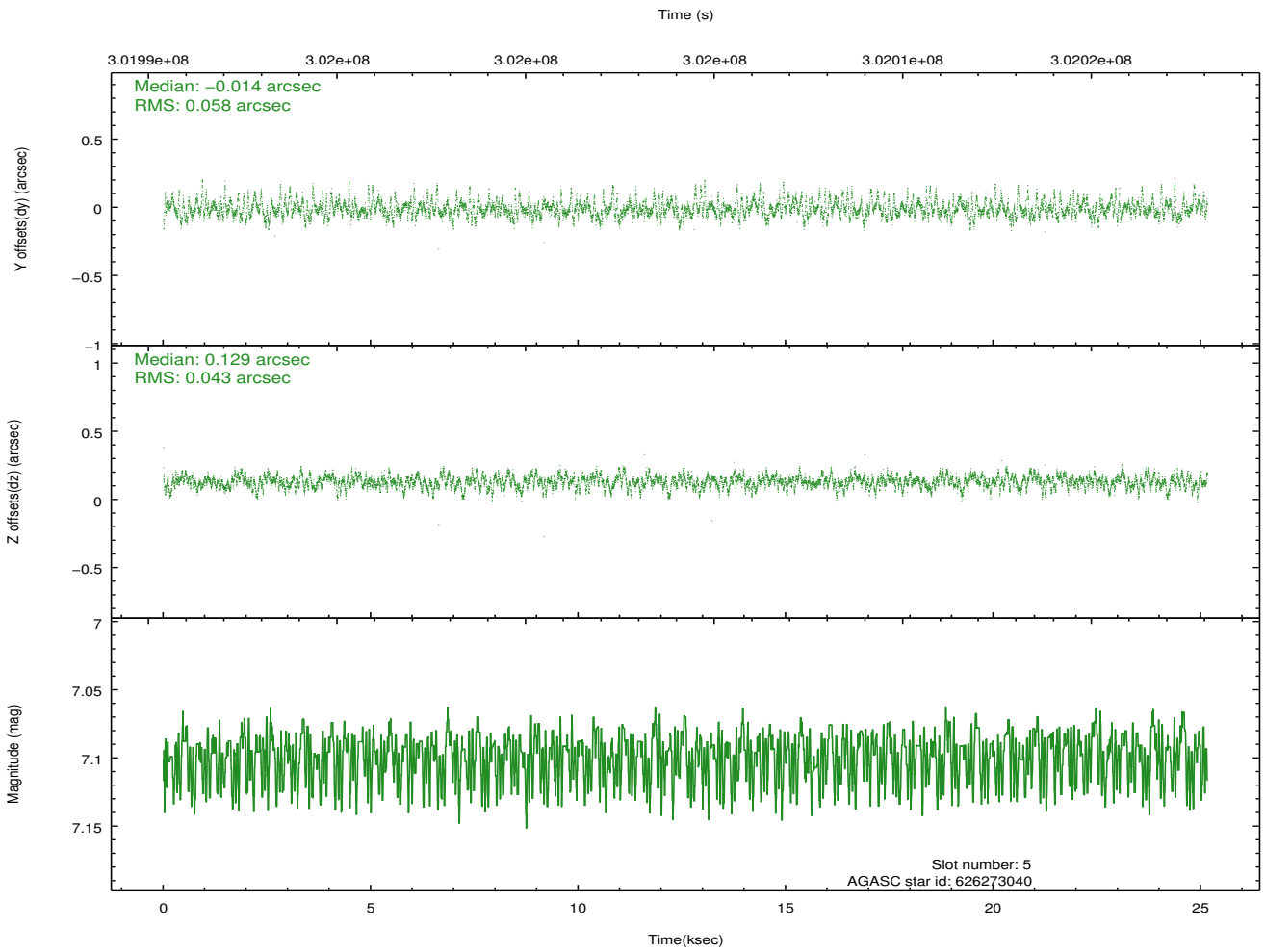
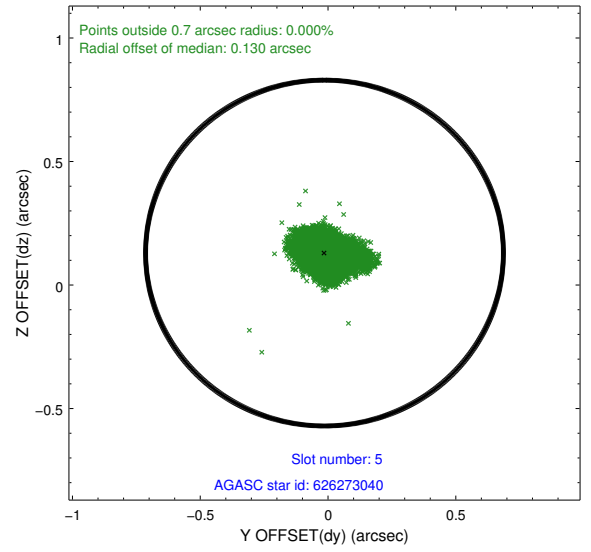
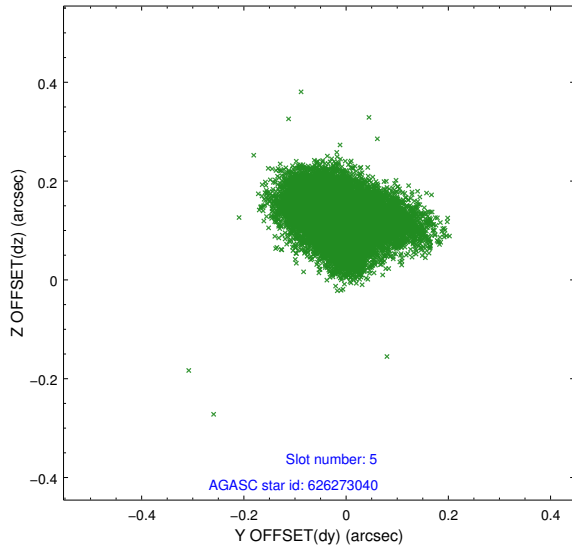
2.4.1 Slot 3



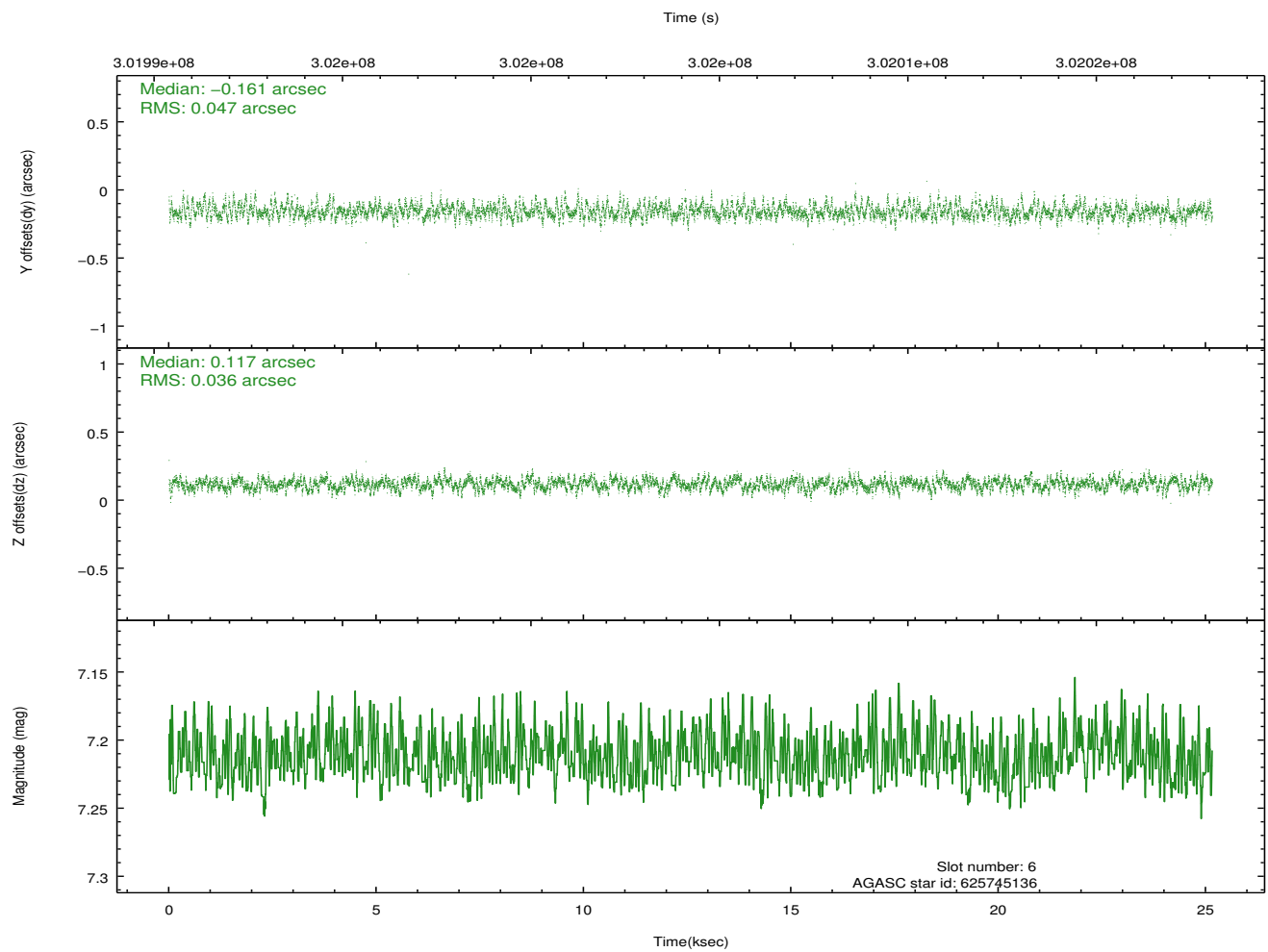
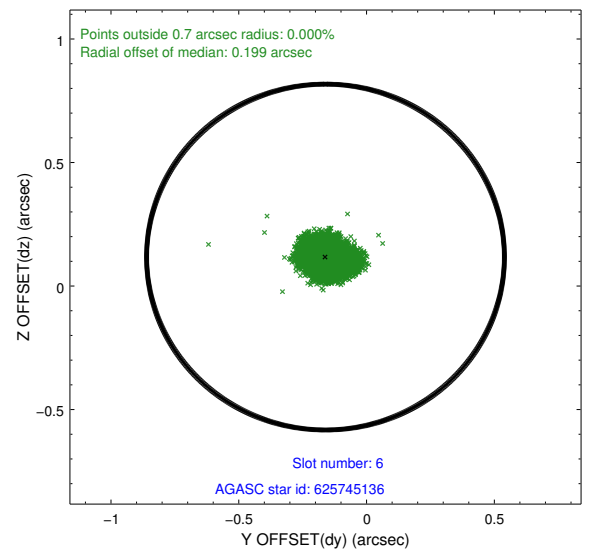
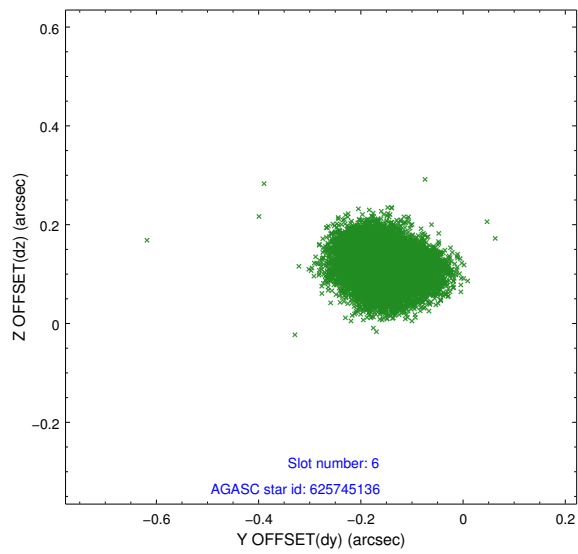
2.4.2 Slot 4



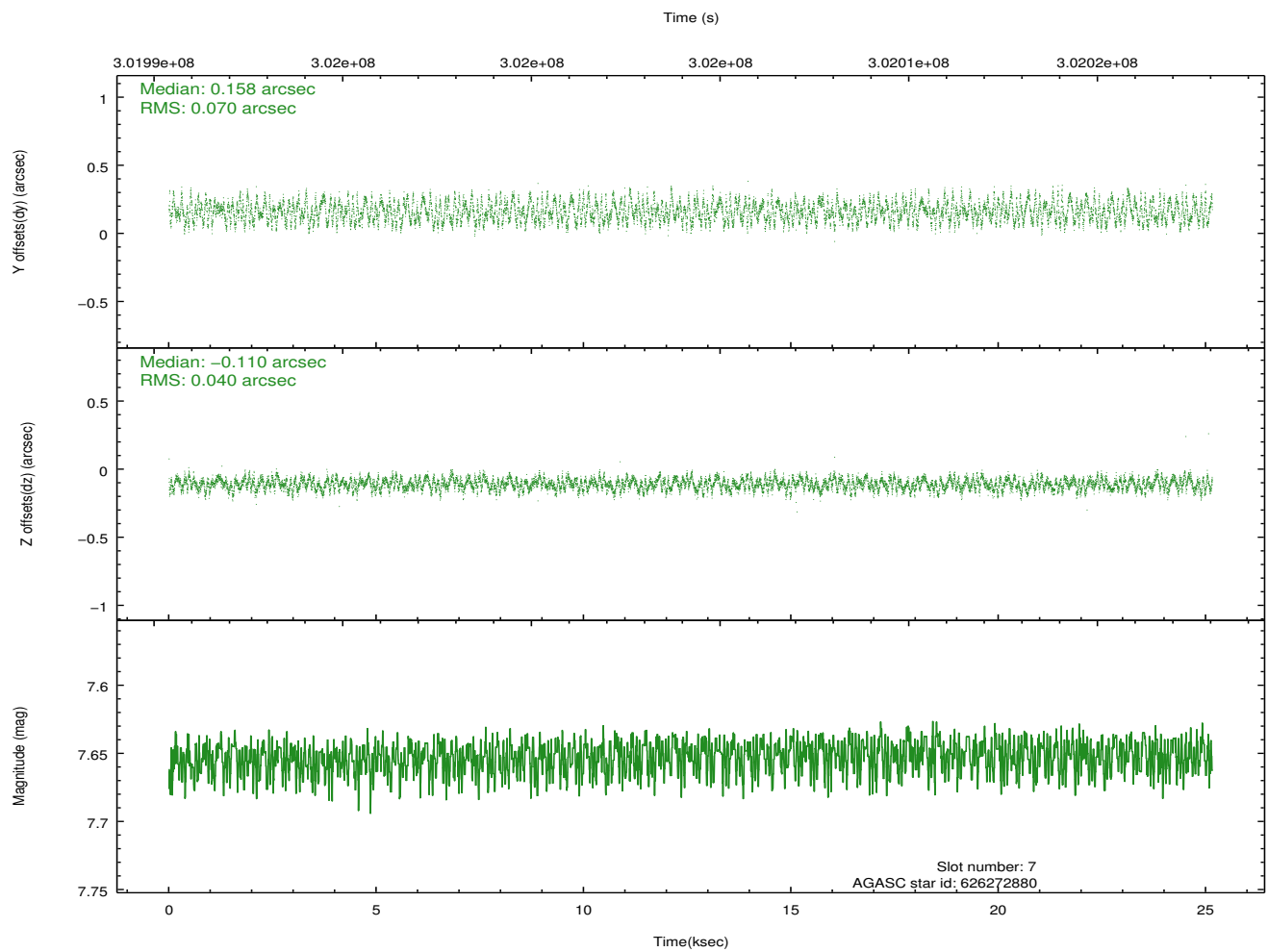
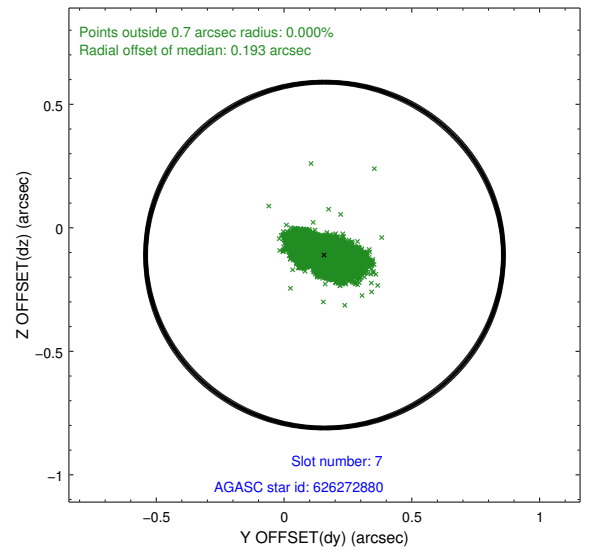
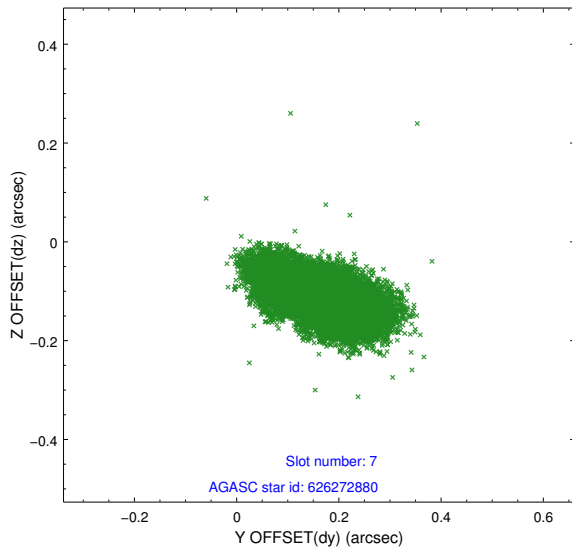
2.4.3 Slot 5



2.4.4 Slot 6

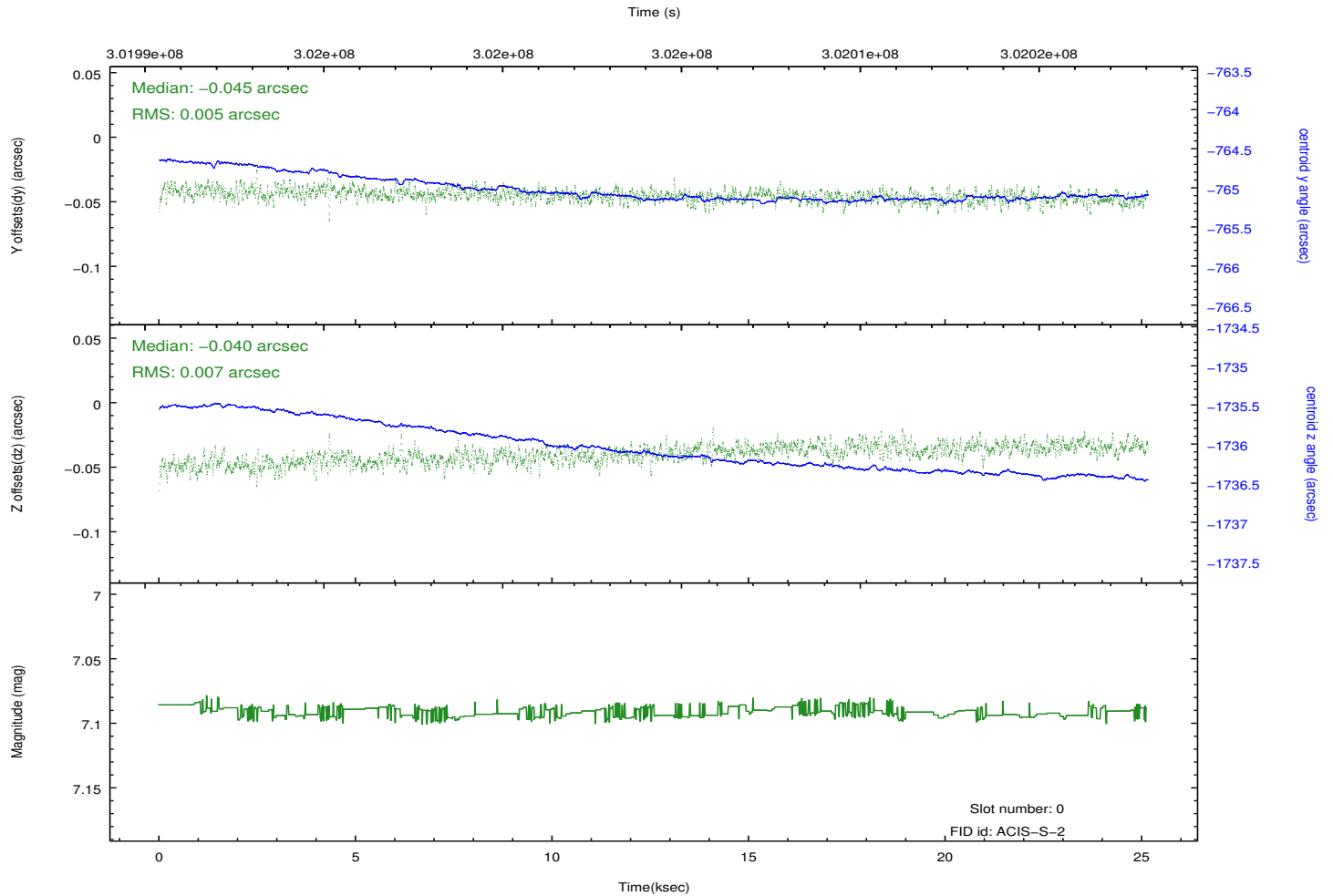
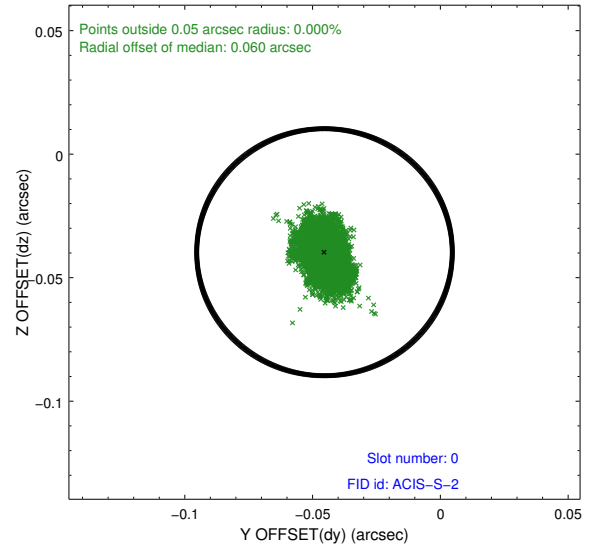
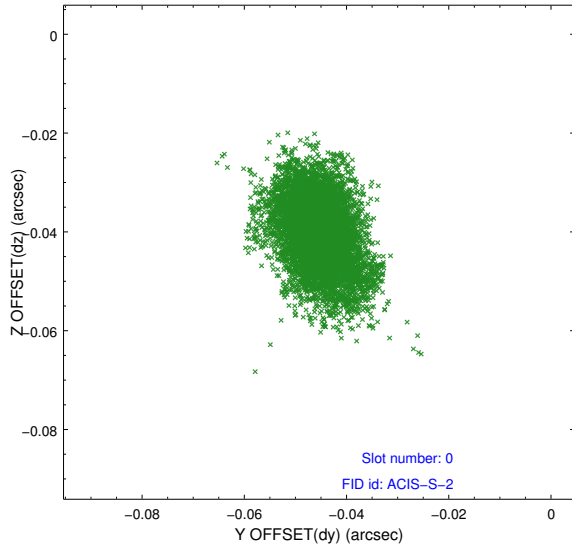


2.4.5 Slot 7

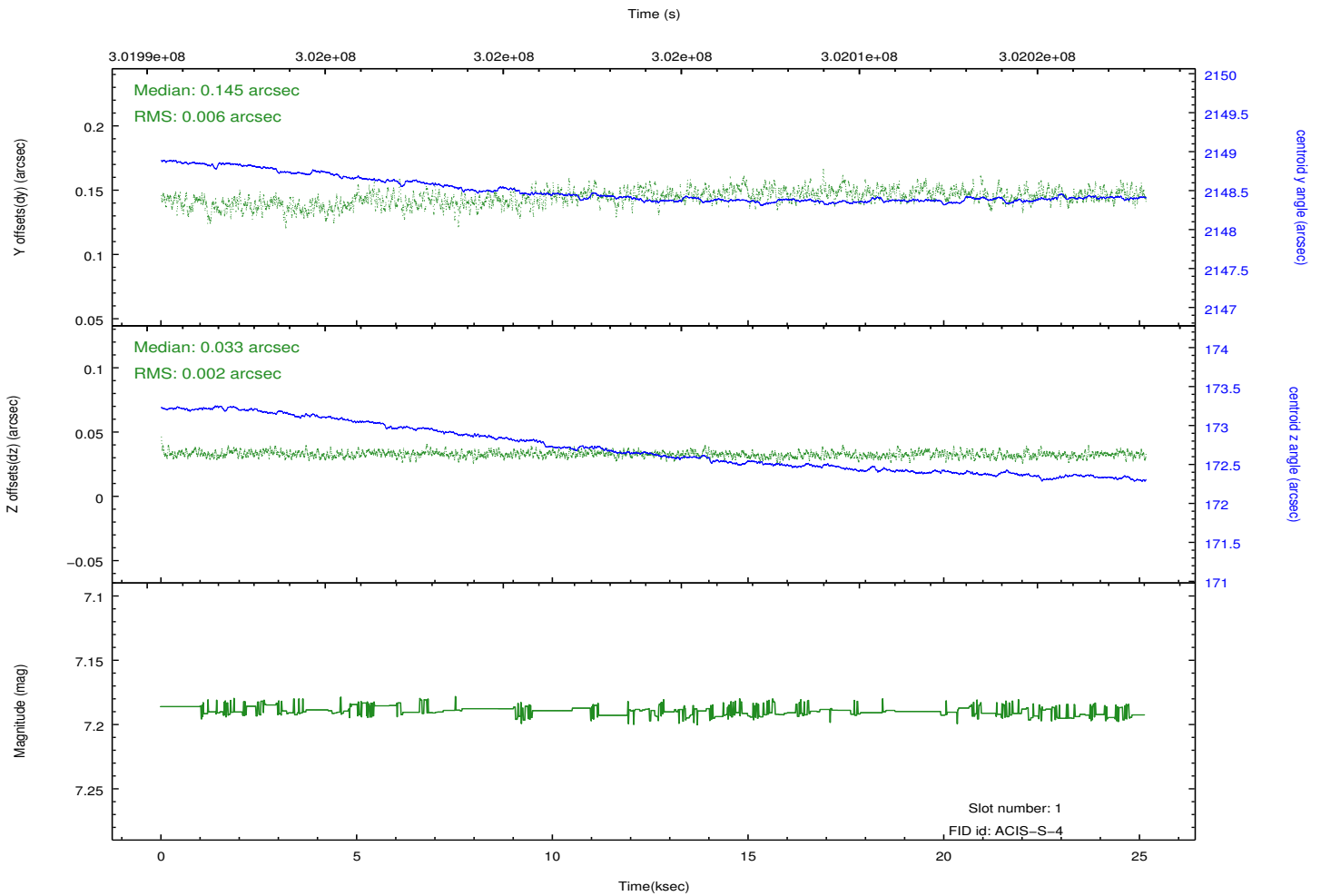
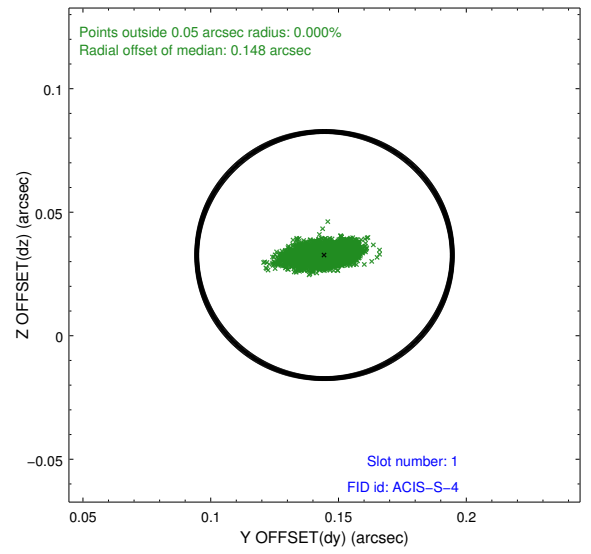
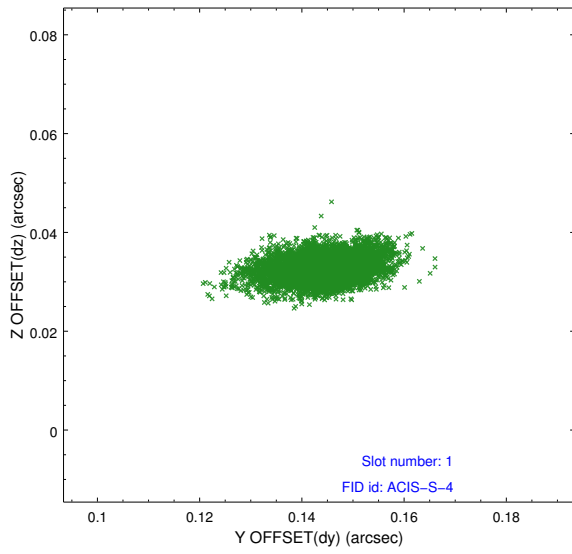


2.5 FID Slots

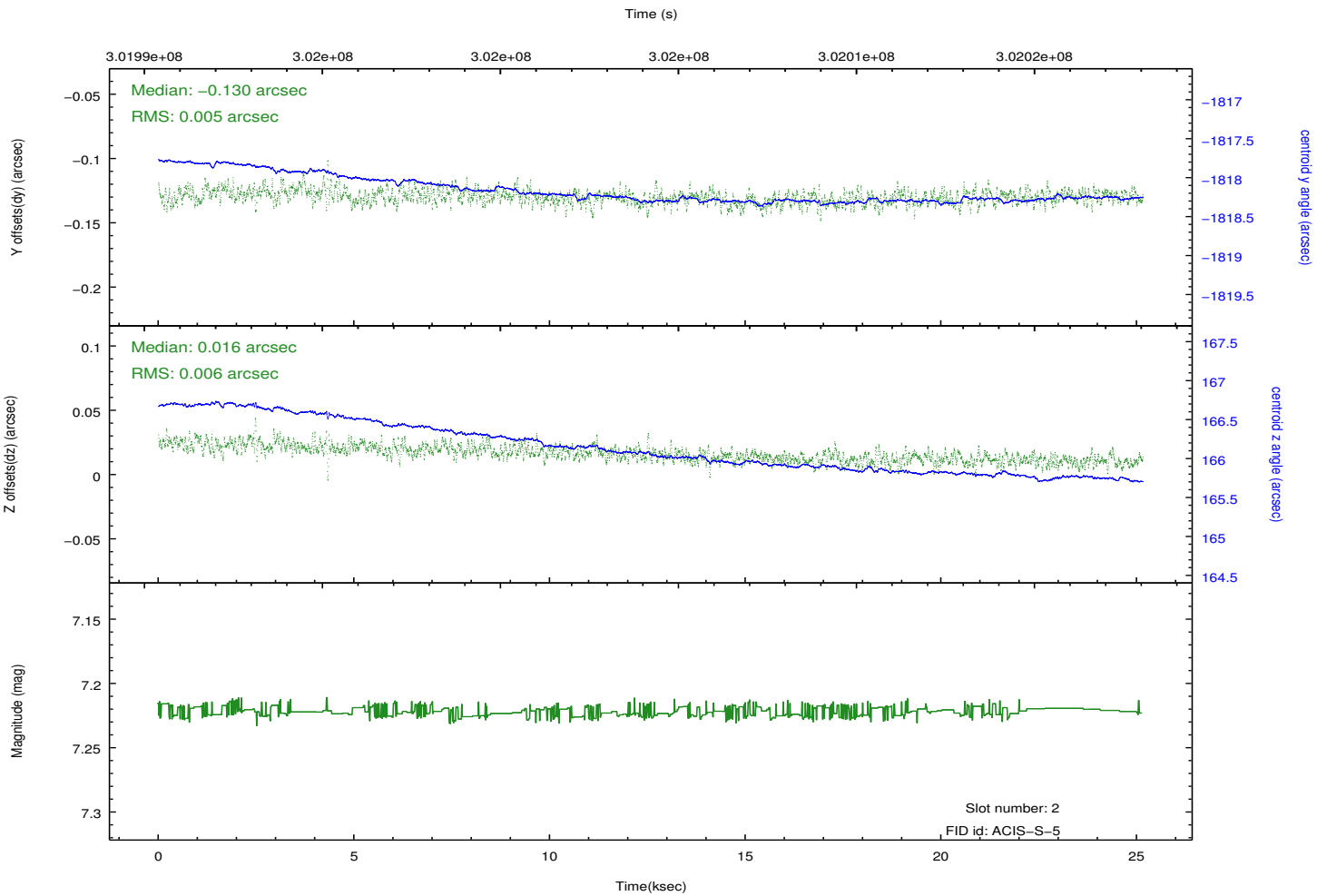
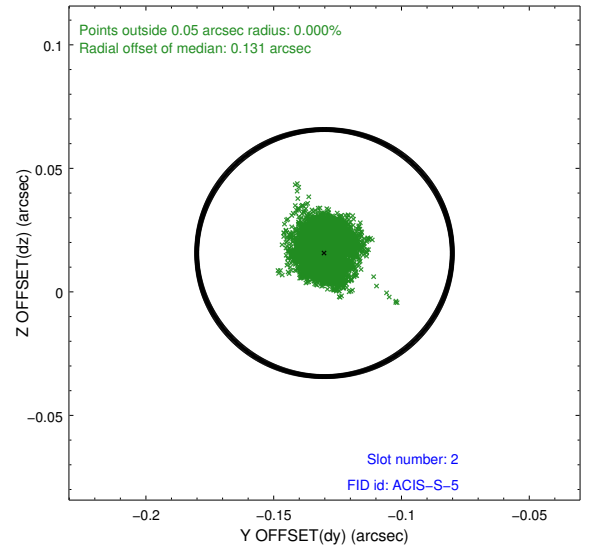
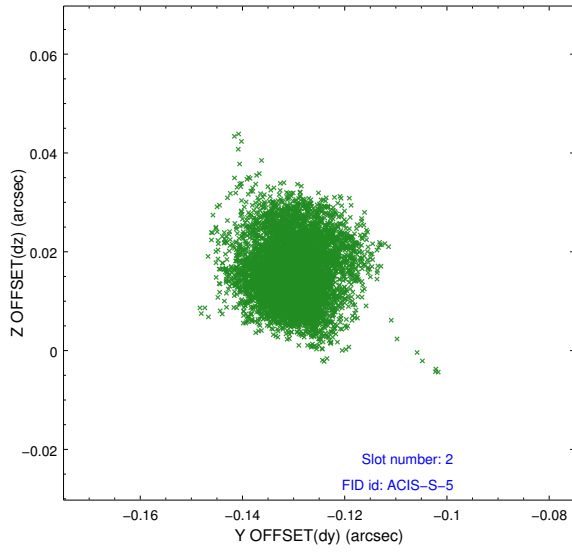
2.5.1 Slot 0



2.5.2 Slot 1

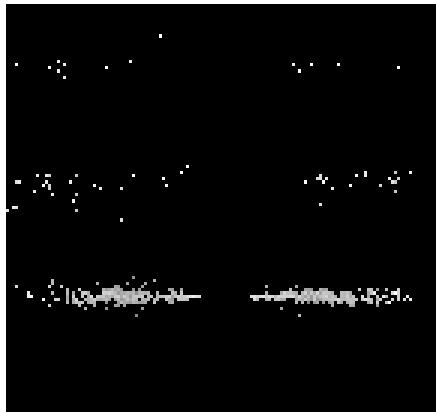


2.5.3 Slot 2

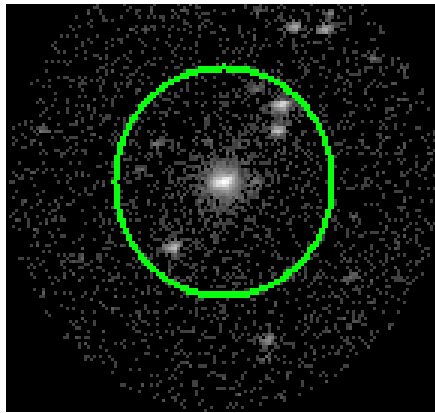


3 Gratings

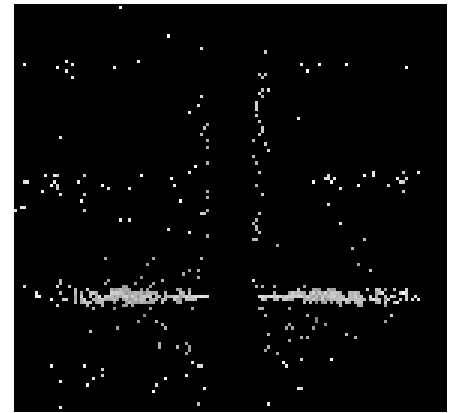
3.1 HEG Arm



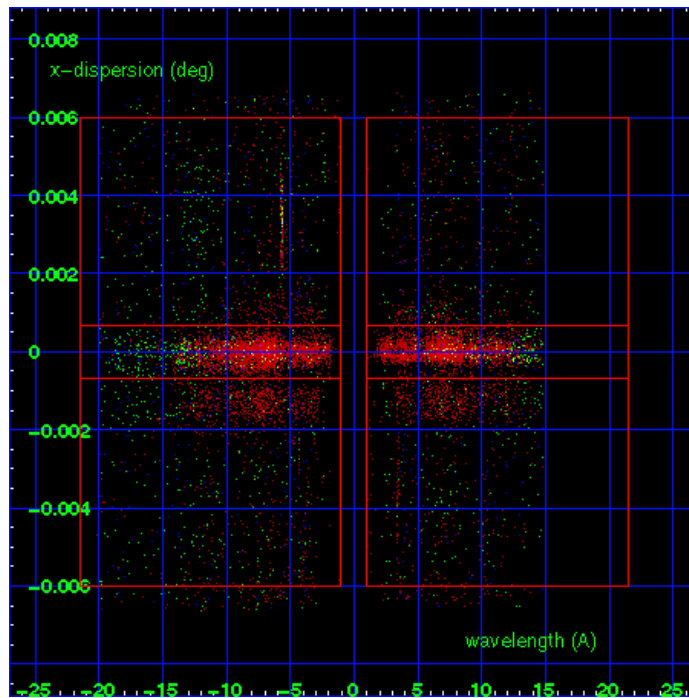
HEG Order Sort 123



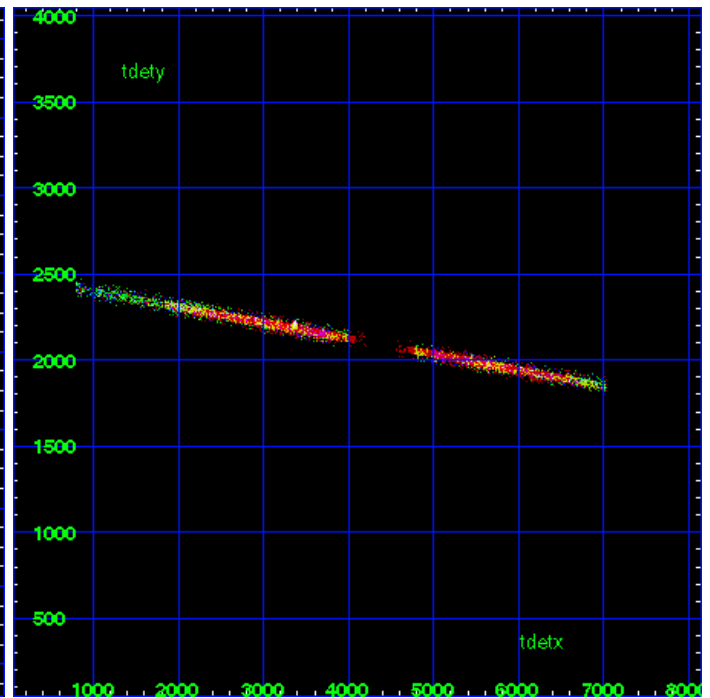
HEG Zero Order



HEG Order Sort ALL

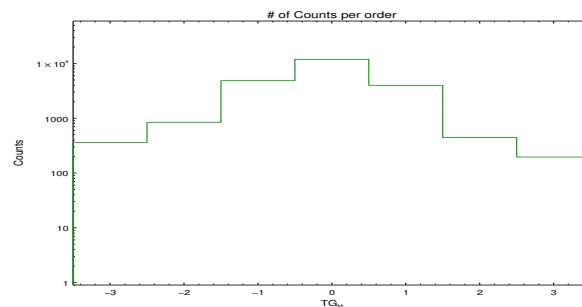


Spot Image HEG

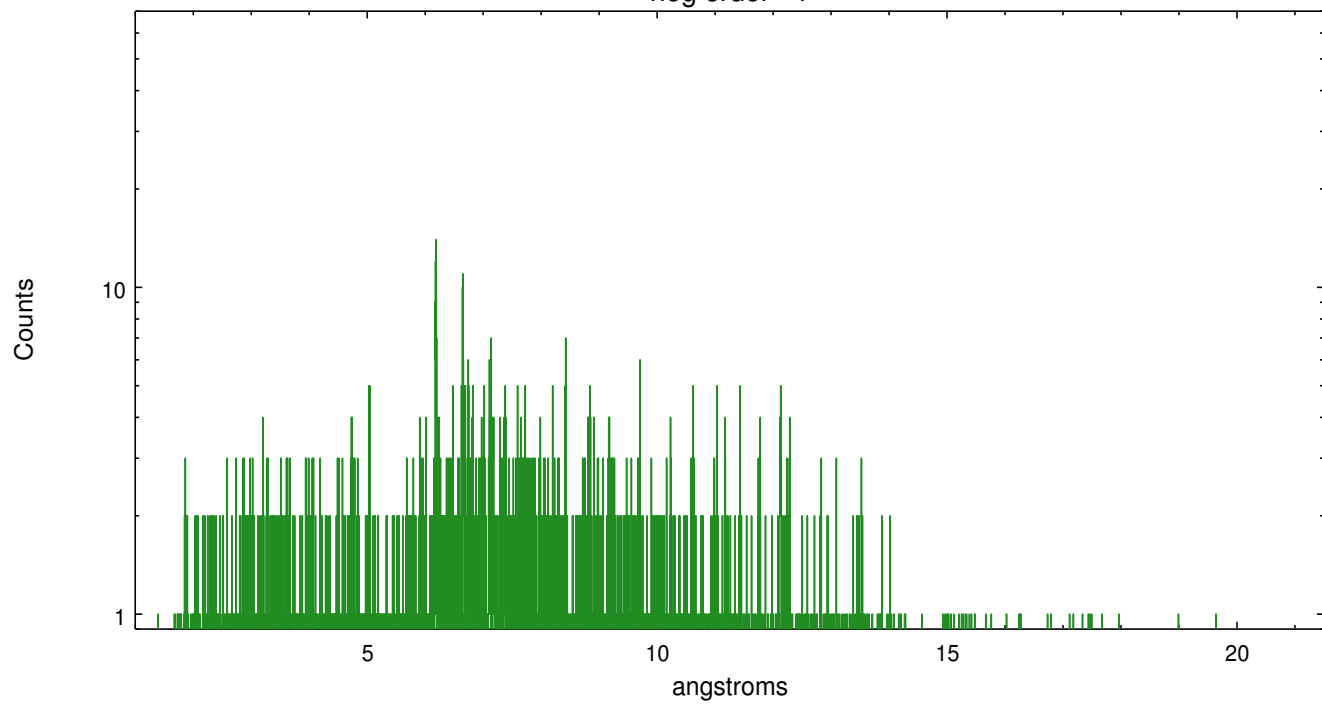


Full Detector HEG

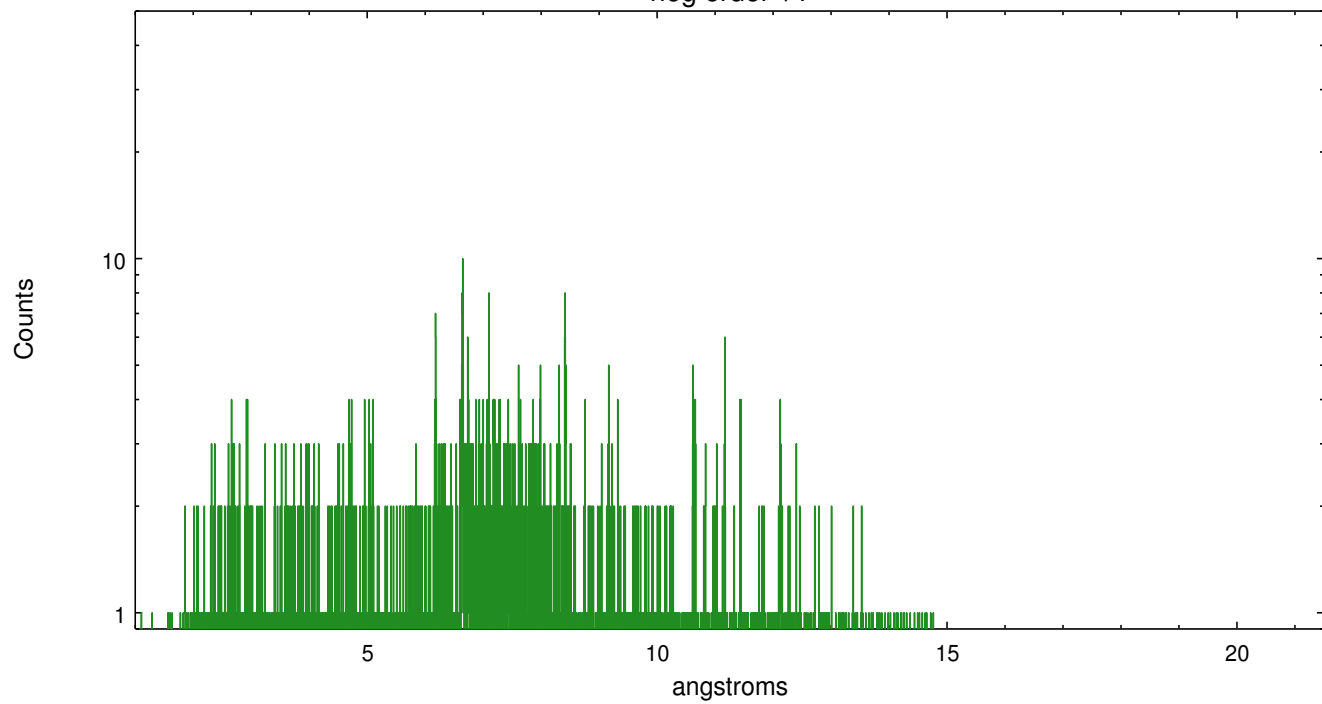
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	361	843	4858	11912	3988	443	196



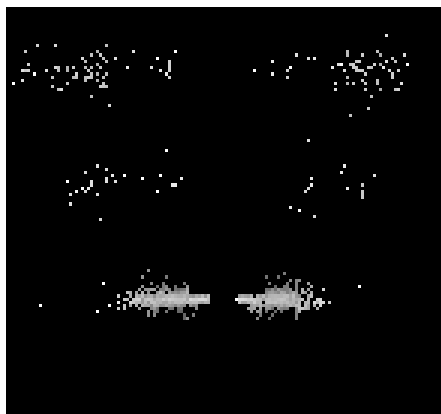
heg order -1



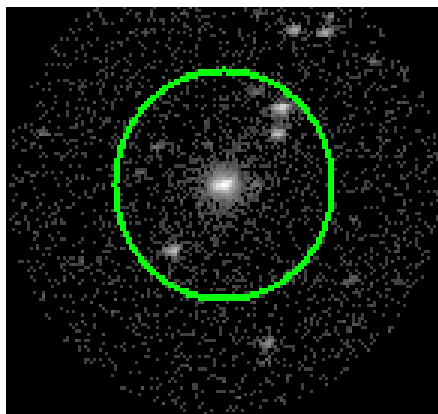
heg order +1



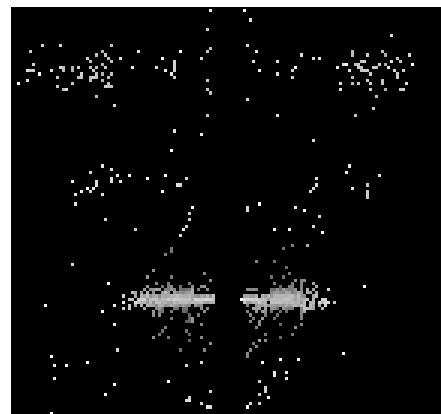
3.2 MEG Arm



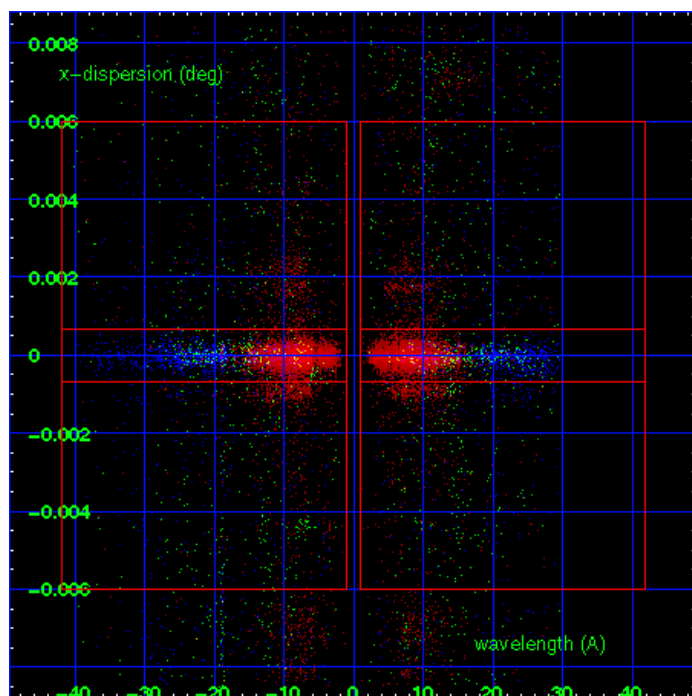
MEG Order Sort 123



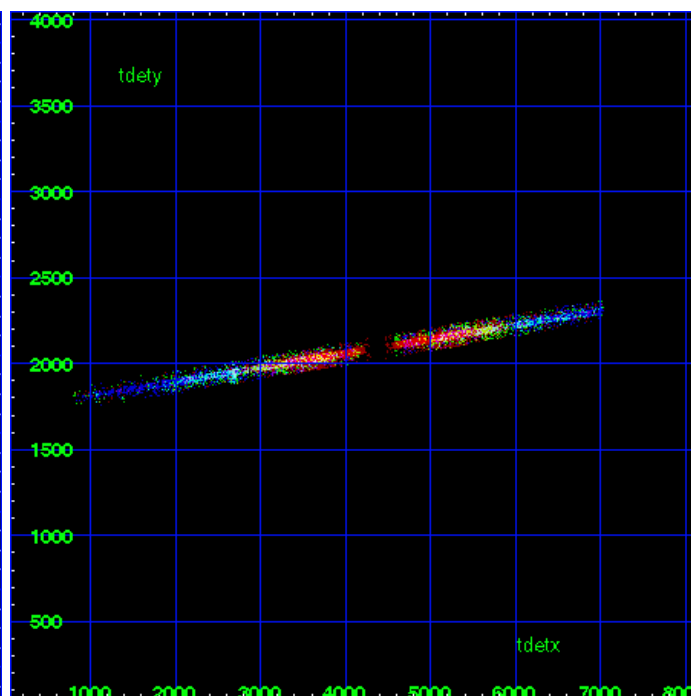
MEG Zero Order



MEG Order Sort ALL

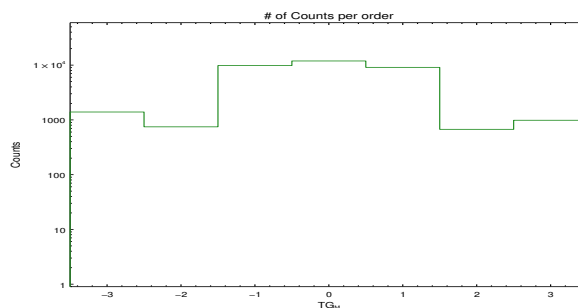


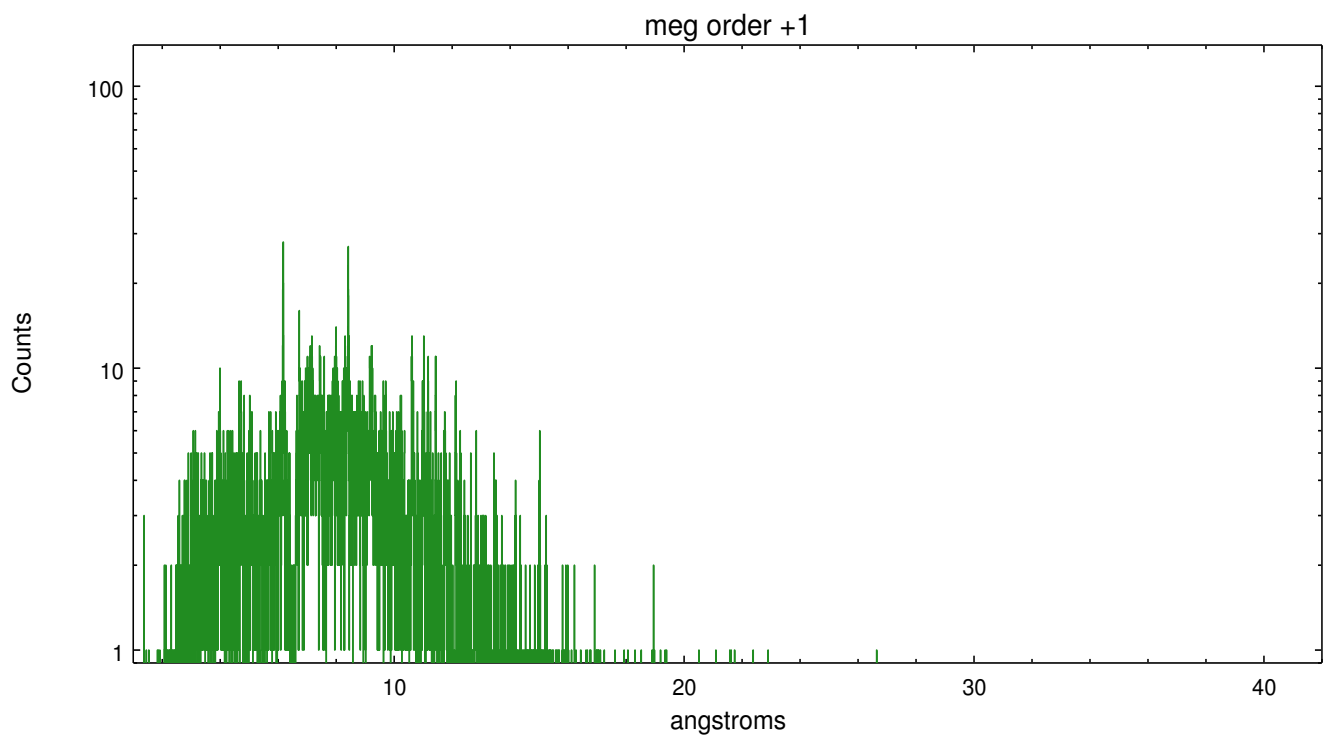
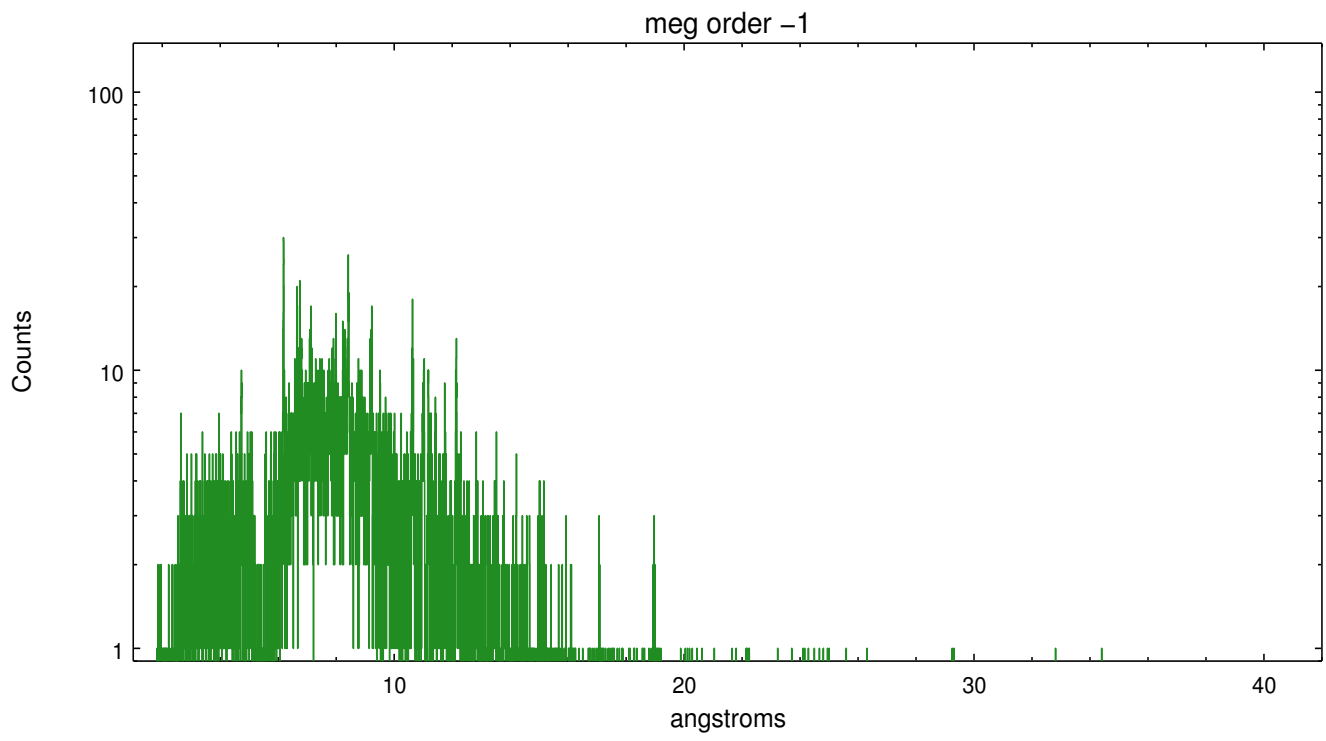
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1393	747	9809	11912	9098	672	984





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.1519999

A.2 Comments

Warning: theta 1 Ori C is 2.3 arcmin off-axis in this observation. ===
Warning: very crowded field; spectral contamination is likely.
Spectral extraction has been manually centered on theta 1 Ori C using
SIMBAD coordinates for this processing.

The newly determined zeroth order coordinates (x=4053.8416, y=3809.3983) have been placed in the *src1a.fits file, replacing the coordinates determined by tgdetect, which found a different source in the field. There are multiple dispersed spectra associated with different sources in this observation. Note that these corrected coordinates of the zeroth order cannot be reproduced by running tgdetect on the data. The spectral data supplied in this processing are only energy-calibrated for the particular source selected.