

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 8485 - L2 Version 3
Chandra X-Ray Center

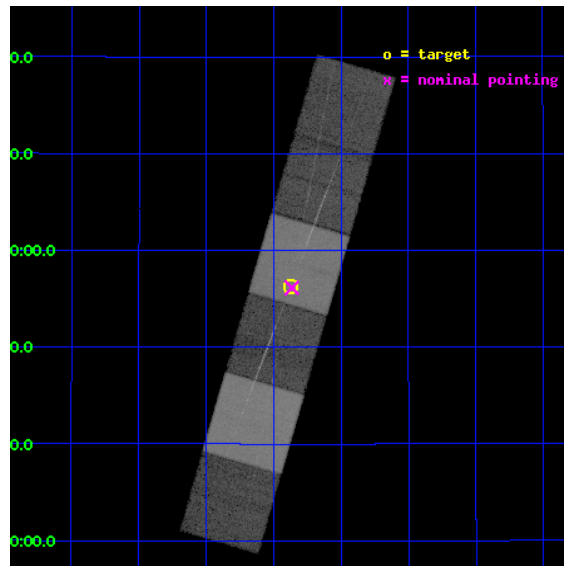
L2 Processing Date : Apr 26 2012

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1 Front

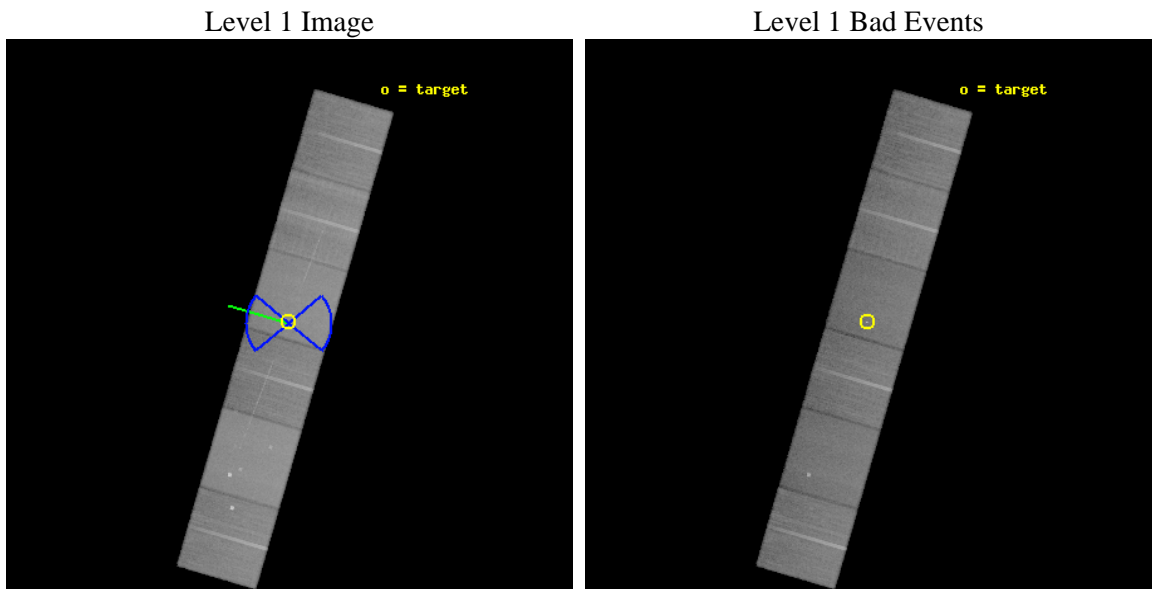
seq_num	200381	Sequence number
obs_id	8485	Observation id
title	Probing spectral changes in variable active M dwarfs	Proposal titl
observer	Dr. Jan-Uwe Ness	Principal investigator
object	EQ Peg	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	352.9675	Observer's specified target RA [deg]
dec_targ	19.93725	Observer's specified target Dec [deg]
ra_nom	352.96617994657	Nominal RA [deg]
dec_nom	19.935601976594	Nominal Dec [deg]
roll_nom	286.26708063551	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30943.999884784	Sum of GTIs [s]
livetime	30552.168326003	Livetime [s]
ontime4	30943.999884784	Sum of GTIs [s]
ontime5	30943.999884784	Sum of GTIs [s]
ontime6	30937.517884314	Sum of GTIs [s]
ontime7	30943.999884784	Sum of GTIs [s]
ontime8	30943.999884784	Sum of GTIs [s]
ontime9	30943.999884784	Sum of GTIs [s]
l2events	482835	Number of level 2 events



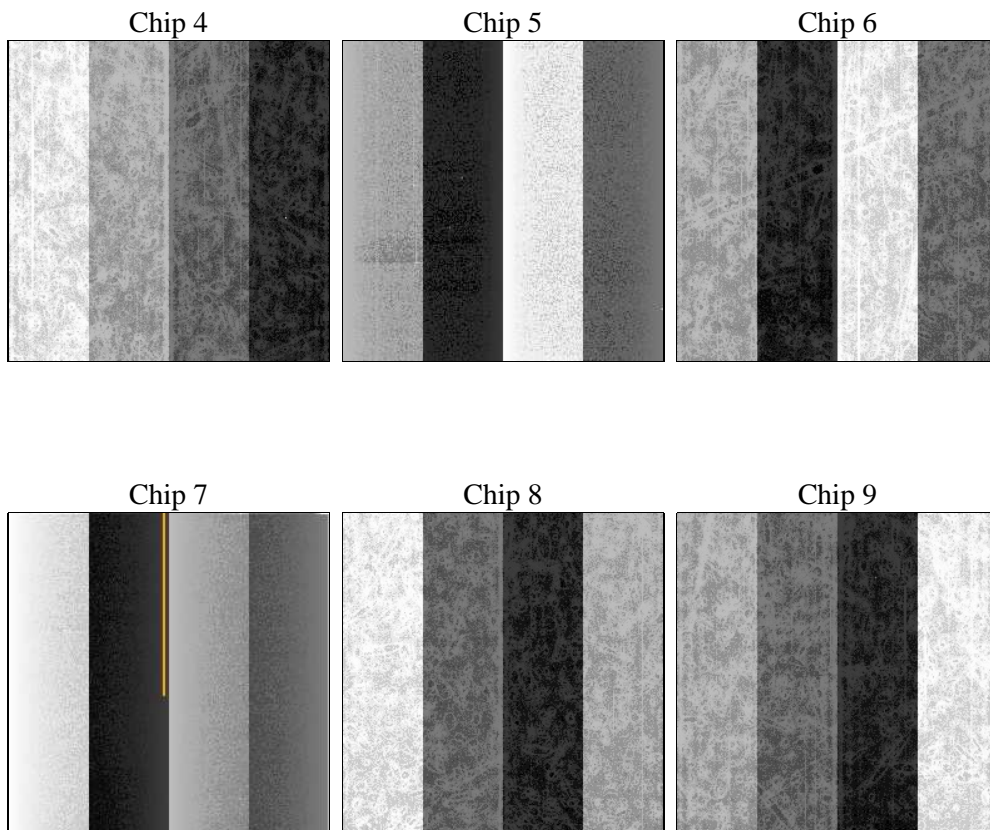
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	30943.999884784	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	30943.999884784	Sum of GTIs [s]
date	2012-04-14T17:38:04	Date and time of file creation	ontime5	30943.999884784	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	30937.517884314	Sum of GTIs [s]
			ontime7	30943.999884784	Sum of GTIs [s]
			ontime8	30943.999884784	Sum of GTIs [s]
			ontime9	30943.999884784	Sum of GTIs [s]
			l1events	2107964	Number of level 1 events

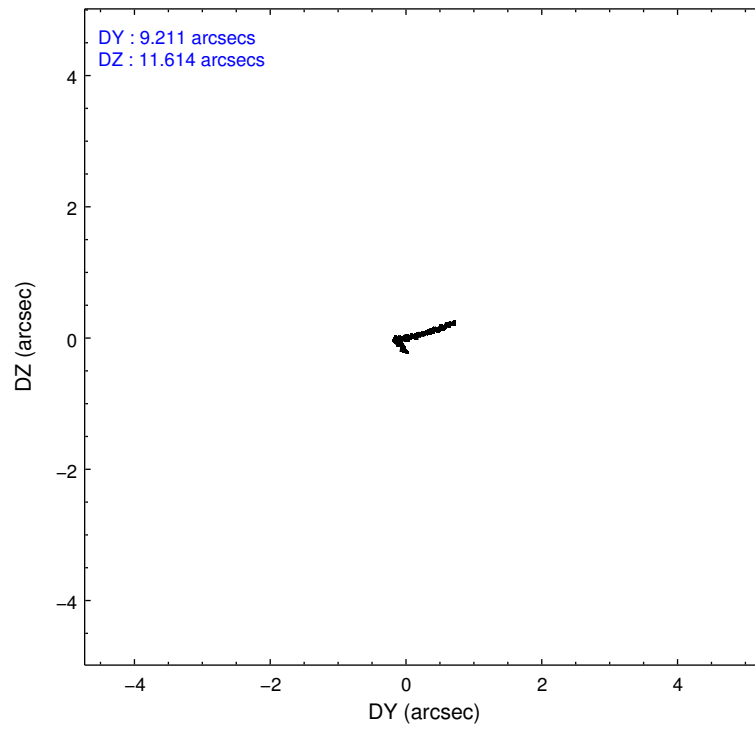
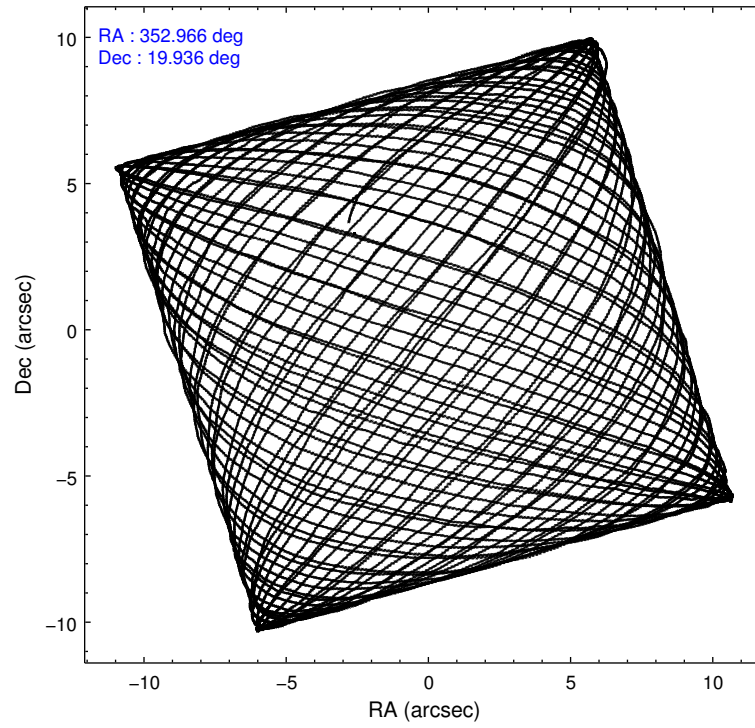
2.1.4 Events

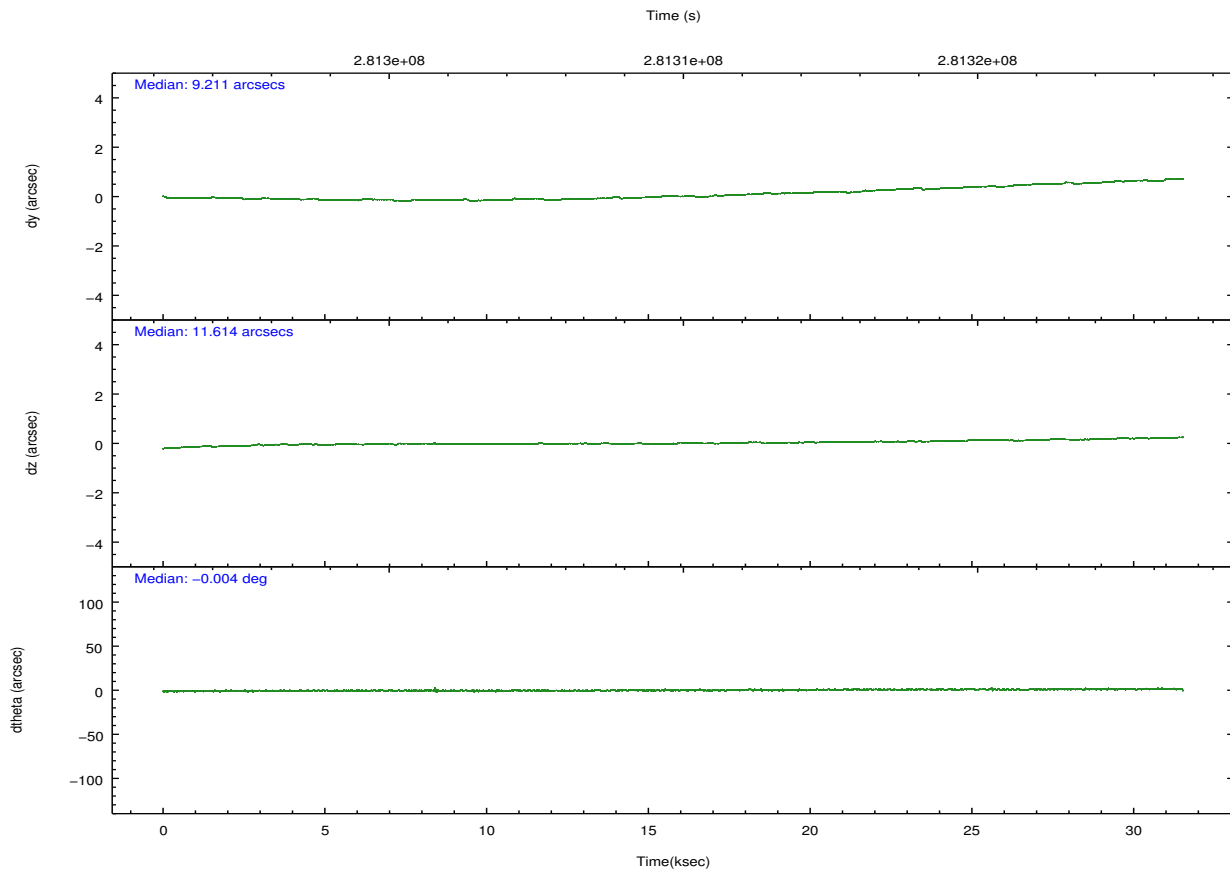
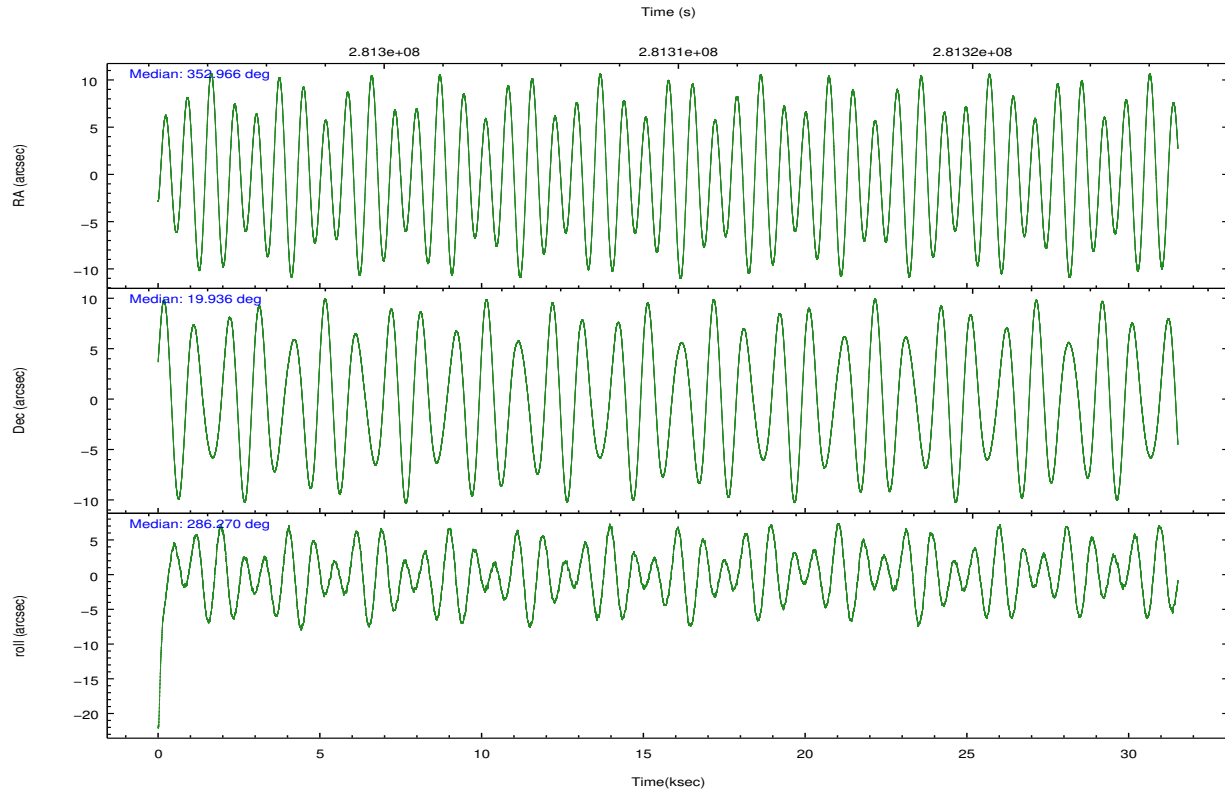
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	327726	433537	289667	396569	371251	289214	grade 0 events	21723	17345	15850	15951	27260	14738
rejected events	285780	234749	252479	227953	288108	253653		6%	4%	5%	4%	7%	5%
rejected %	87%	54%	87%	57%	77%	87%	grade 1 events	374	2624	139	481	253	200
								0%	0%	0%	0%	0%	0%
							grade 2 events	7710	60755	7652	34533	18246	7037
								2%	14%	2%	8%	4%	2%
							grade 3 events	3599	7797	3398	14833	8580	3511
								1%	1%	1%	3%	2%	1%
							grade 4 events	3362	7424	3302	14658	7889	3375
								1%	1%	1%	3%	2%	1%
							grade 5 events	12989	31817	13242	37671	17712	14624
								3%	7%	4%	9%	4%	5%
							grade 6 events	5561	105534	6997	88699	21201	6914
								1%	24%	2%	22%	5%	2%
							grade 7 events	272408	200241	239087	189743	270110	238815
								83%	46%	82%	47%	72%	82%

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	352.944961	352.9661799465653	Subarray requested	NONE	NONE
[deg] Pointing Dec	19.954148	19.93560197659367	Alternating exposures requested	N	N
[deg] Pointing Roll	286.117688	286.2670806355118	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	90.000000	90.000000			
[deg] Roll tolerance	40.000000	40.000000			
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	281294411.184000	281293228.51467			
Observation start date	2006-11-30T17:19:06	2006-11-30T17:00:28			
[s] Observation end time (MET)	281325411.184000	281326372.91624			
Observation end date	2006-12-01T01:55:46	2006-12-01T02:12:52			
Read mode	TIMED	TIMED			

2.3 Aspect



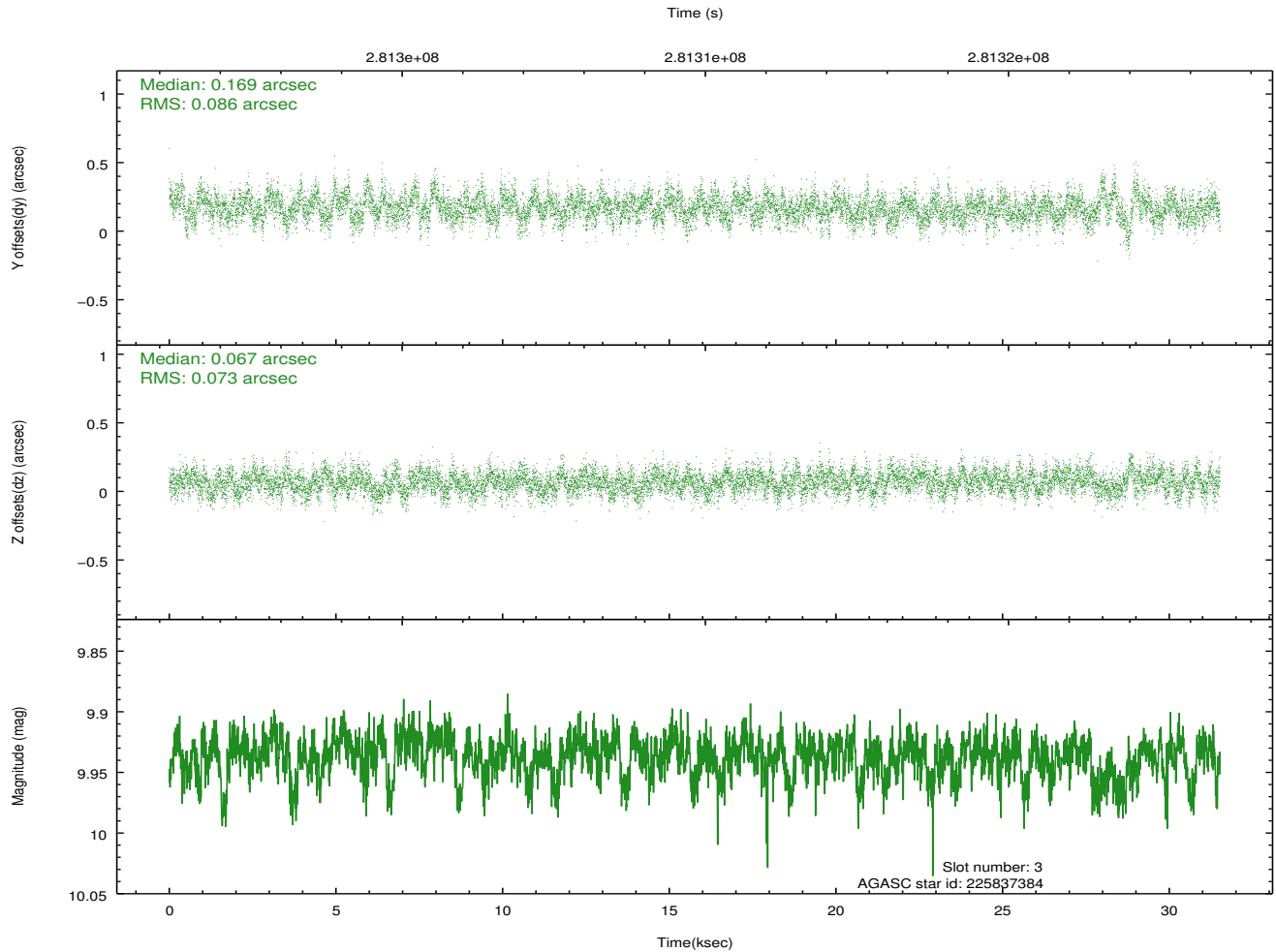
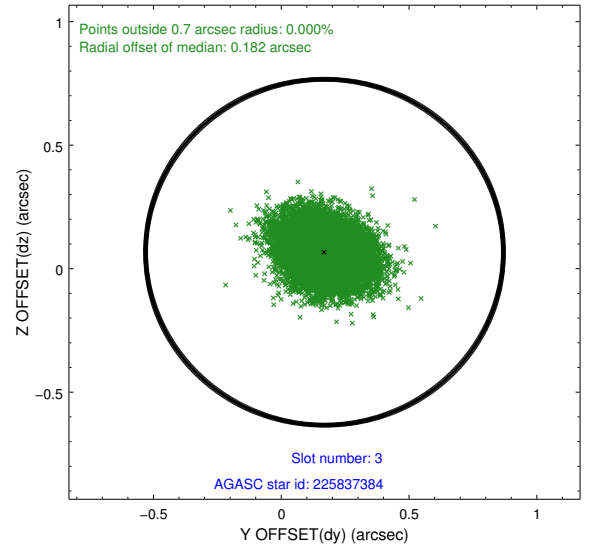
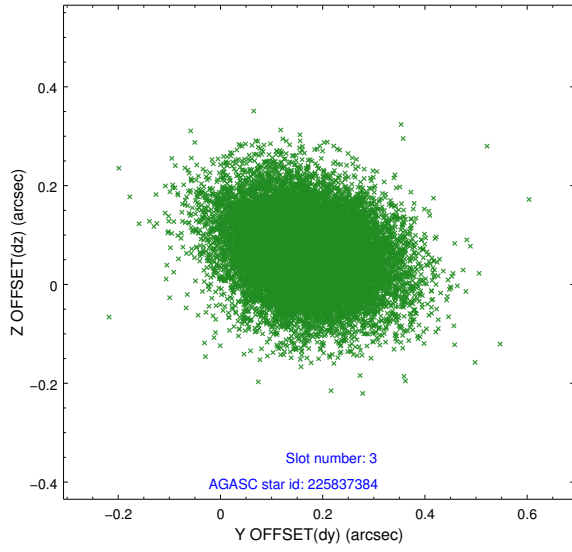


Slot Statistics

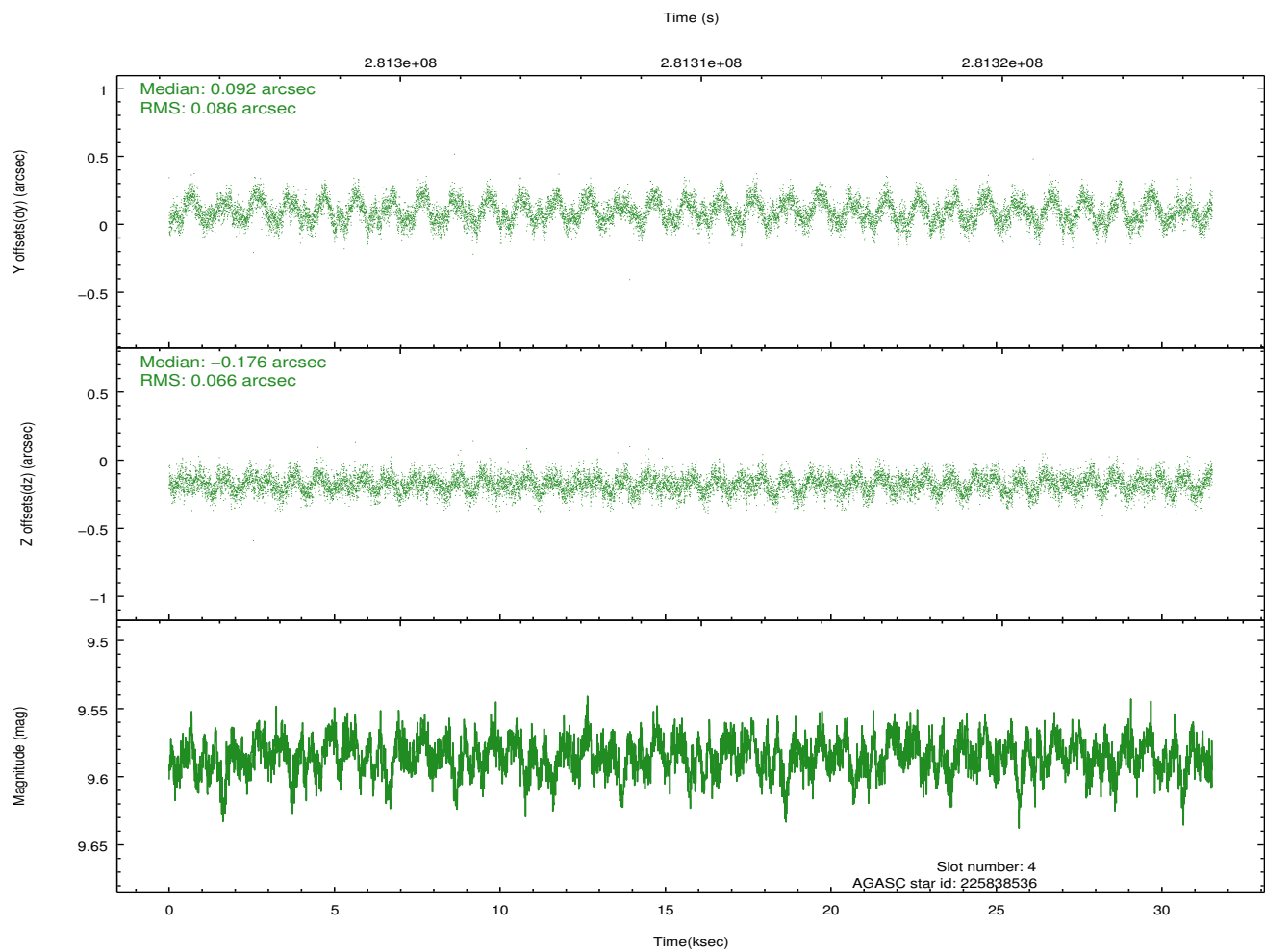
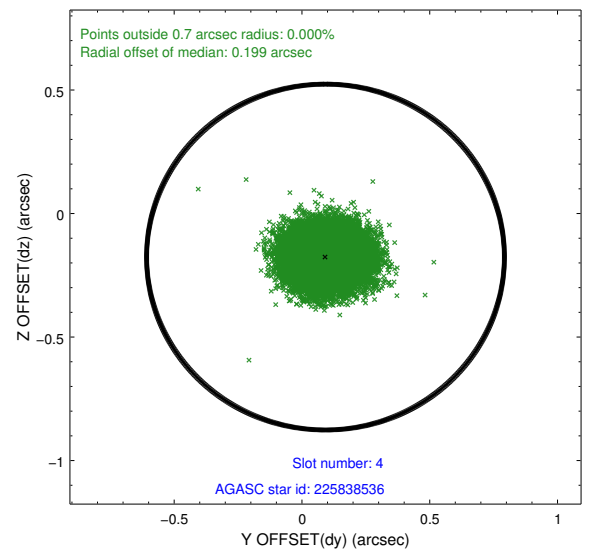
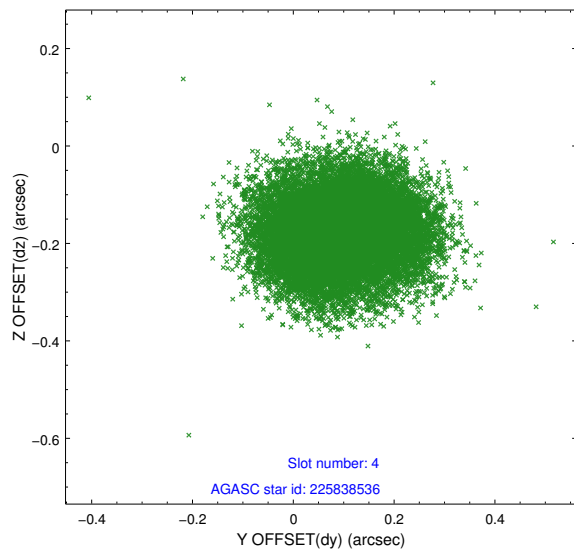
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	7687	-0.039	-0.038	0.009	0.015	0.000000	0.000000	-762.17	-1732.97
1	FID	ACIS-S-4	7.21	7687	0.172	0.029	0.013	0.022	0.000000	0.000000	2151.28	175.52
2	FID	ACIS-S-5	7.23	7687	-0.164	0.017	0.012	0.020	0.000000	0.000000	-1815.06	169.24
3	GUIDE	225837384	9.94	15361	0.169	0.067	0.119	0.196	352.987146	19.537840	1479.90	-278.60
4	GUIDE	225838536	9.59	15350	0.092	-0.176	0.117	0.181	353.052122	19.704878	963.23	99.55
5	GUIDE	225843792	9.26	15358	-0.029	0.041	0.093	0.147	353.581433	19.686286	1521.99	1806.02
6	GUIDE	226240768	8.89	15369	-0.082	0.063	0.098	0.146	353.030892	20.523748	-1889.34	847.86
7	GUIDE	226240232	8.83	15360	-0.154	0.005	0.070	0.115	352.730108	20.581655	-2371.97	-68.08

2.4 Star Slots

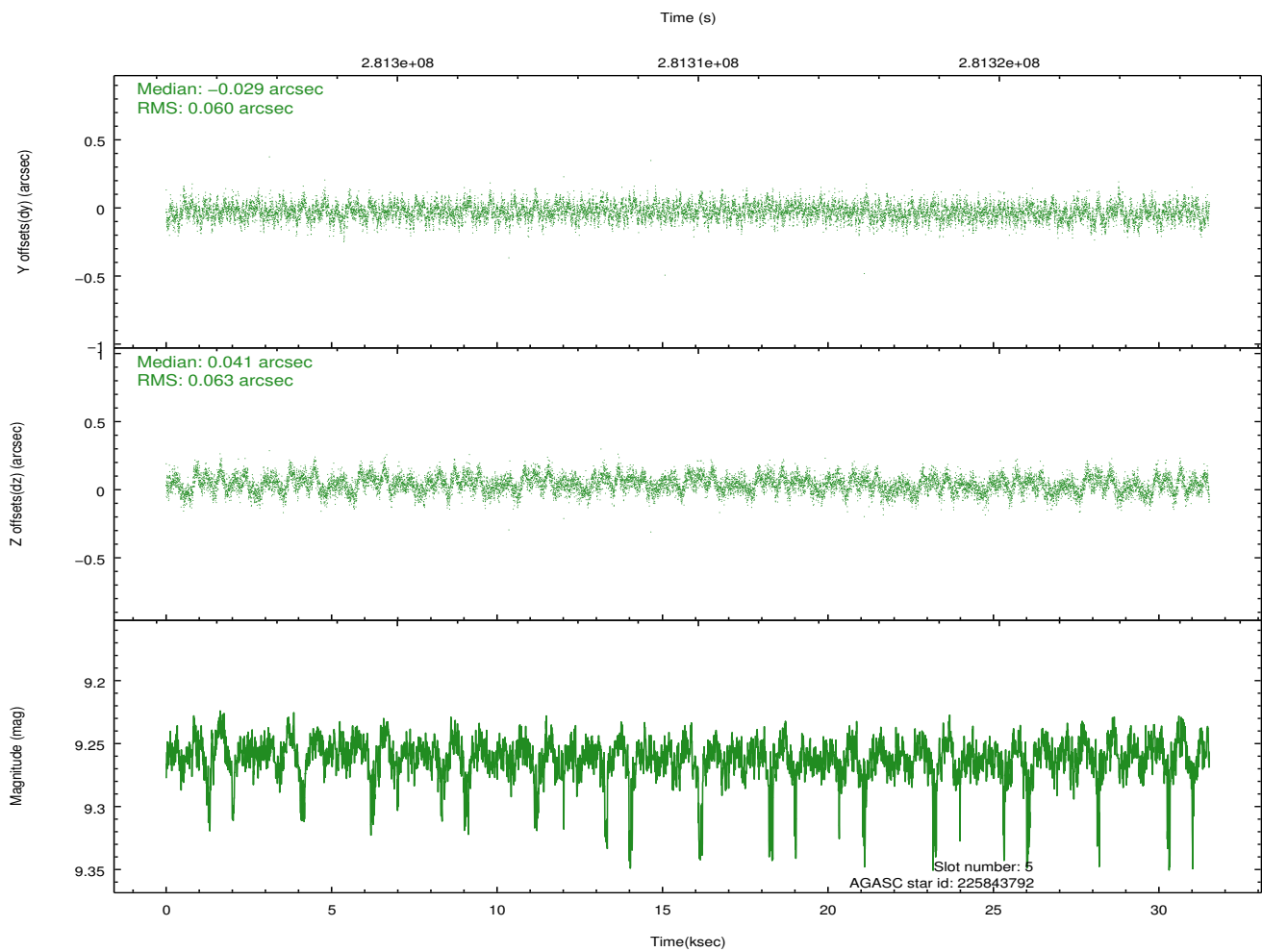
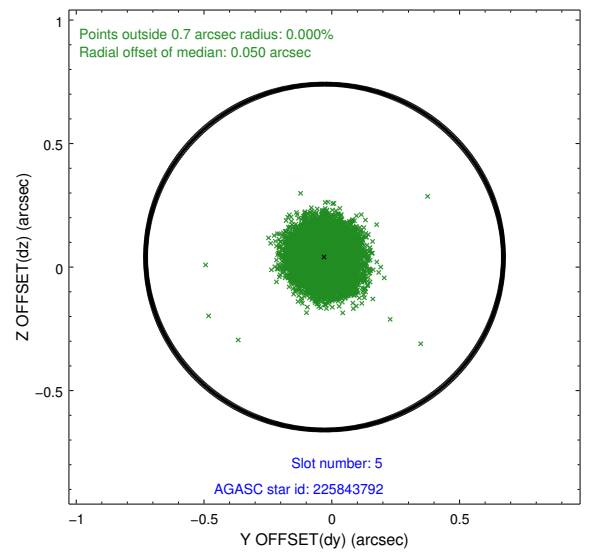
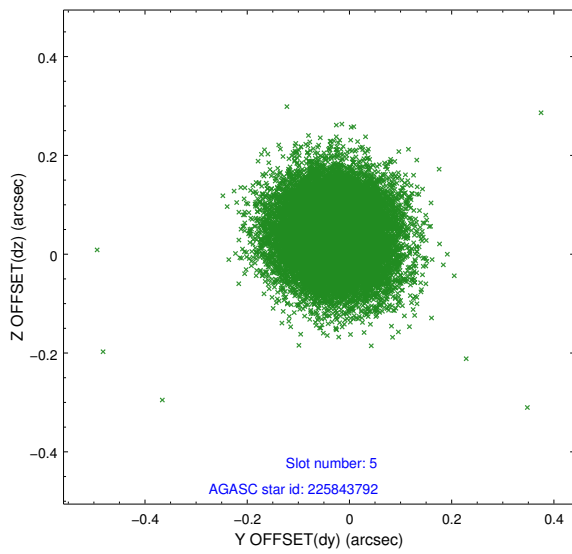
2.4.1 Slot 3



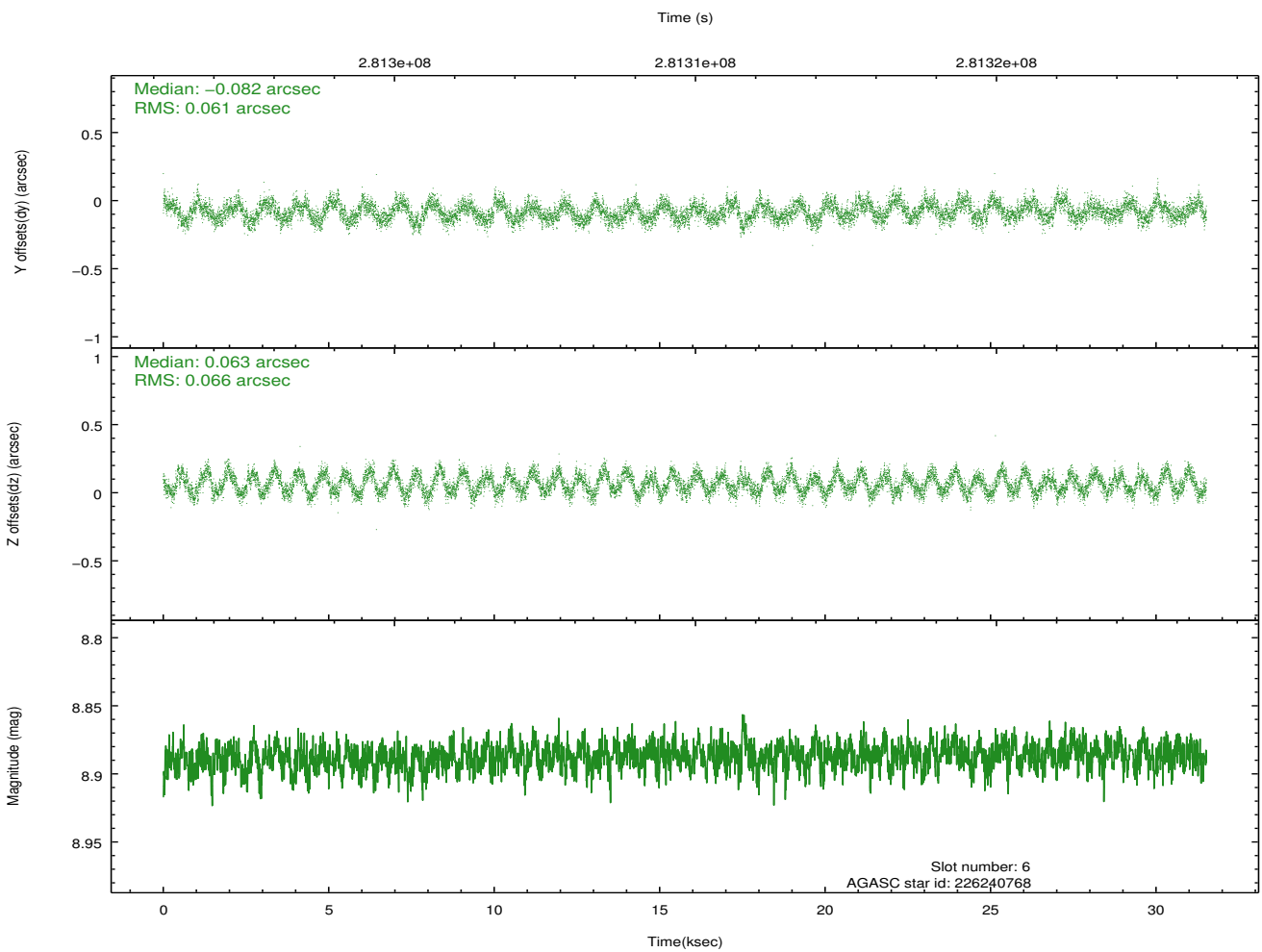
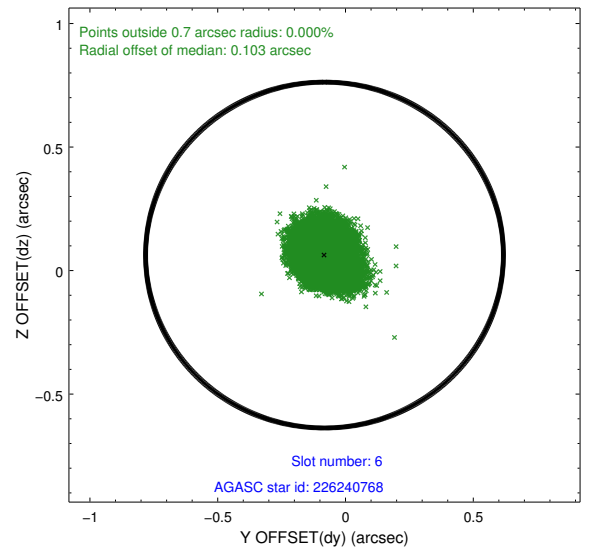
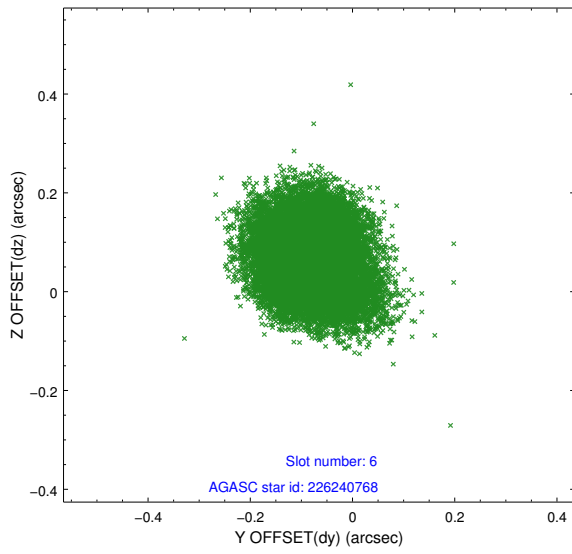
2.4.2 Slot 4



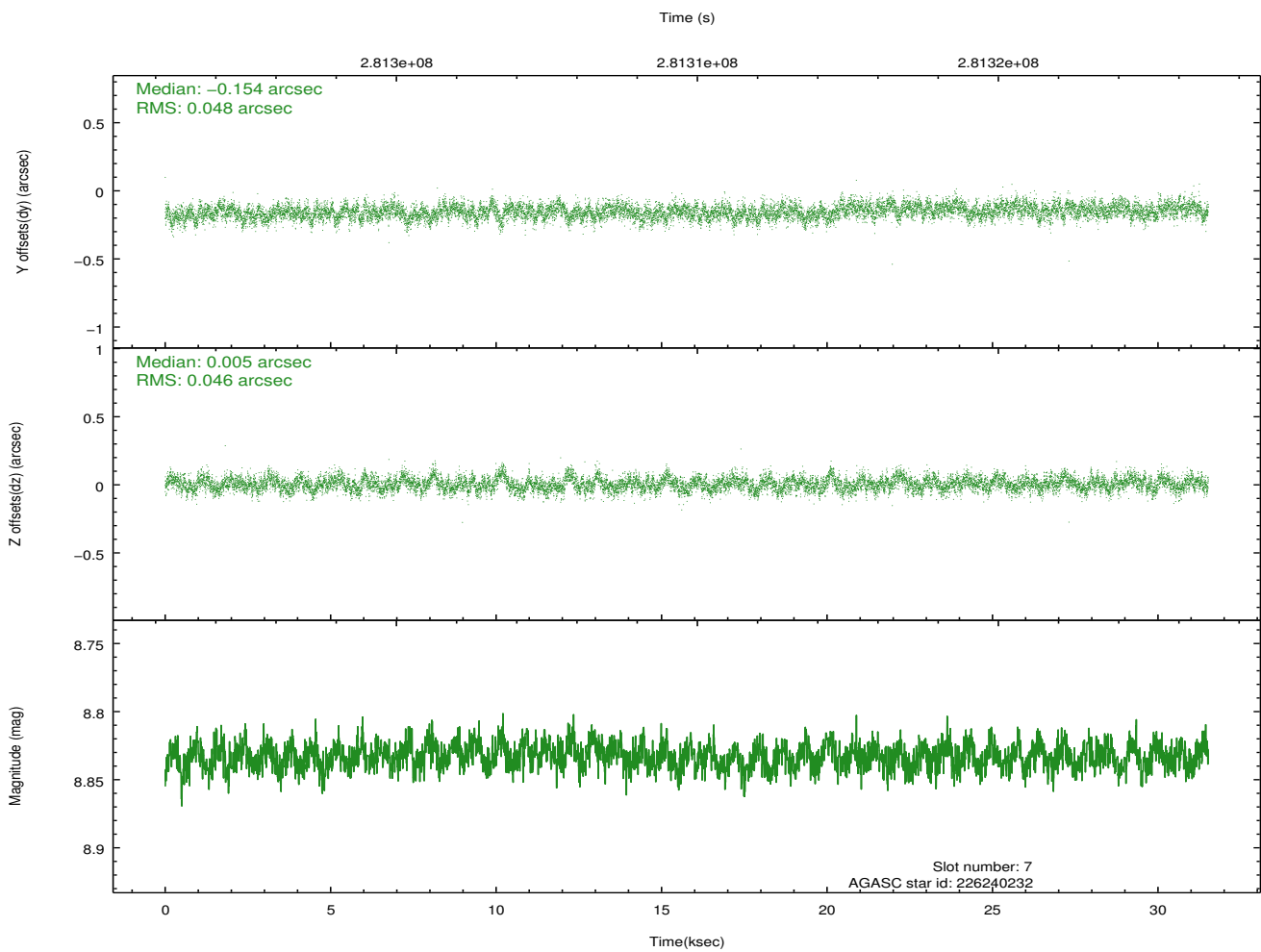
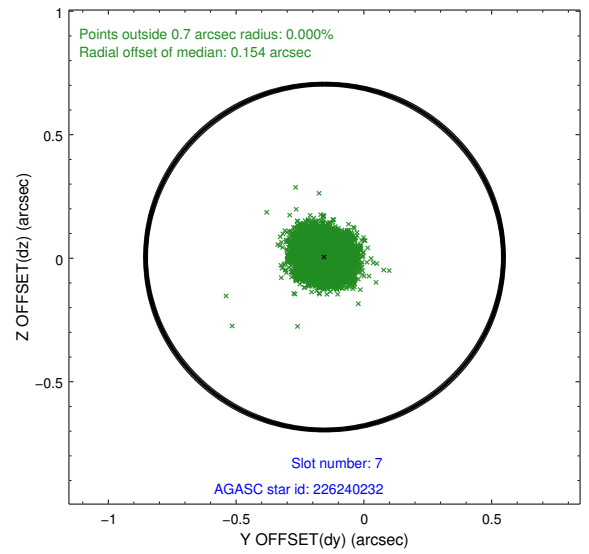
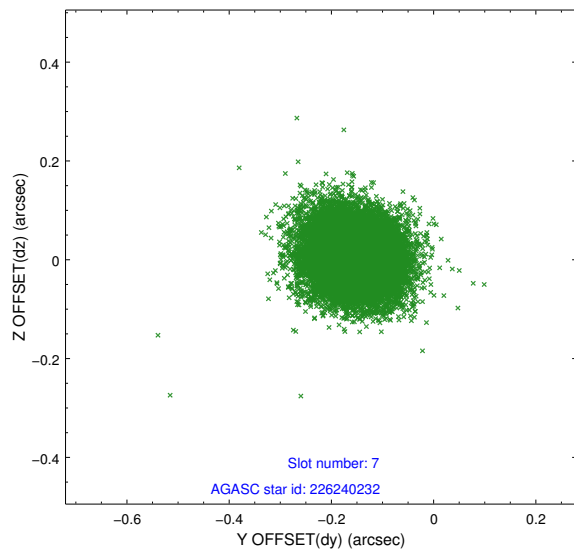
2.4.3 Slot 5



2.4.4 Slot 6

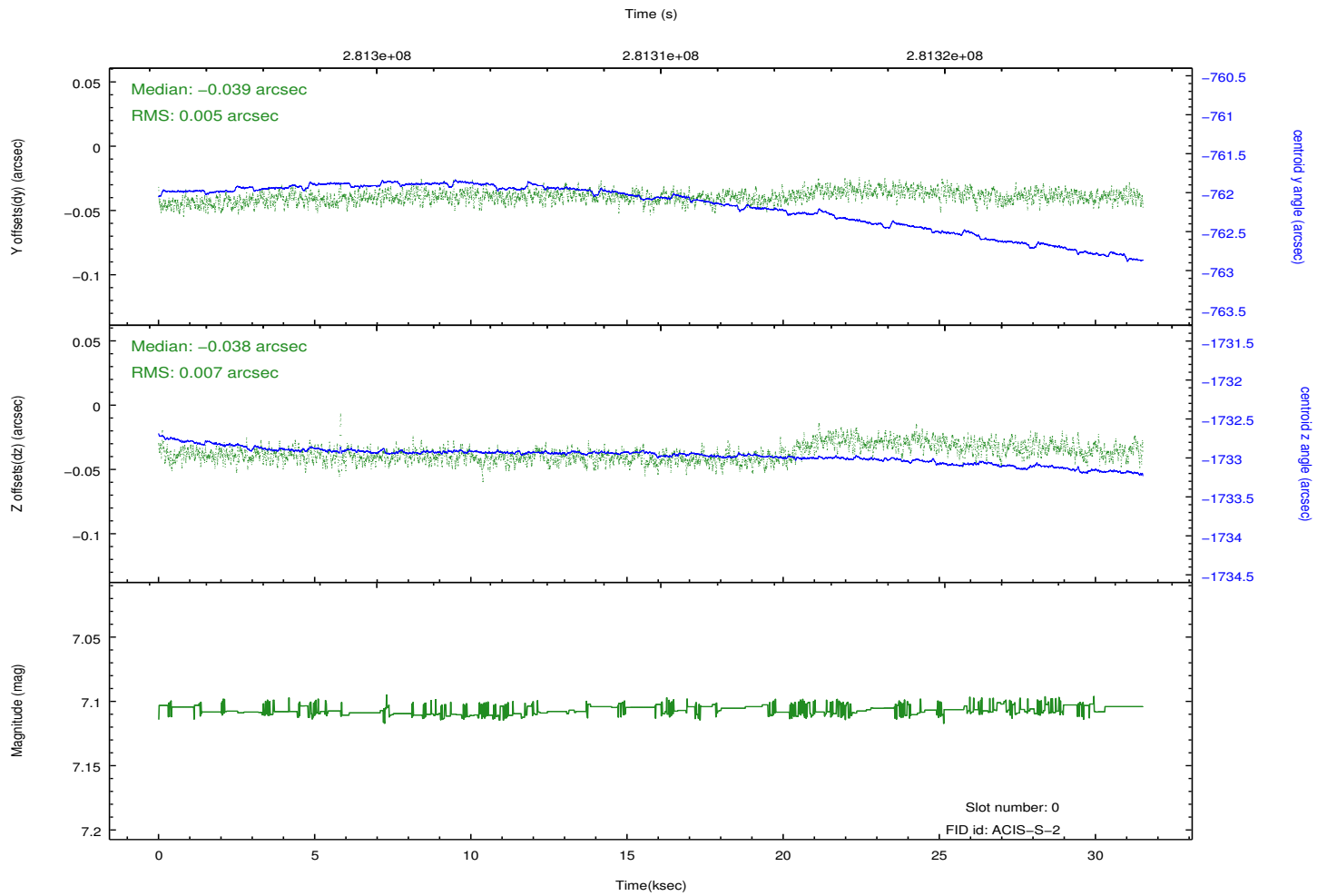
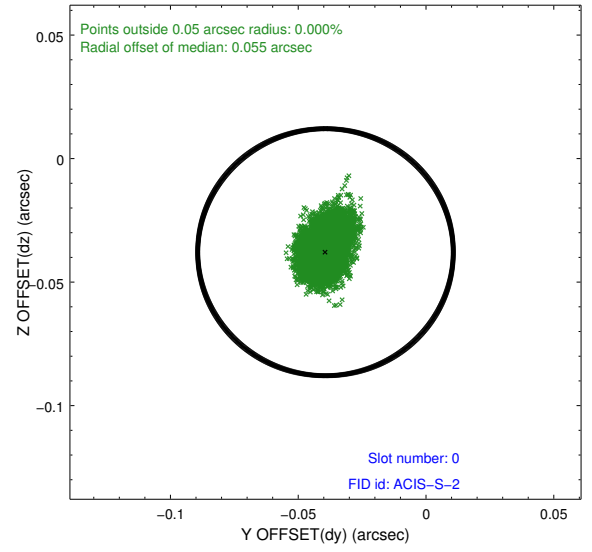
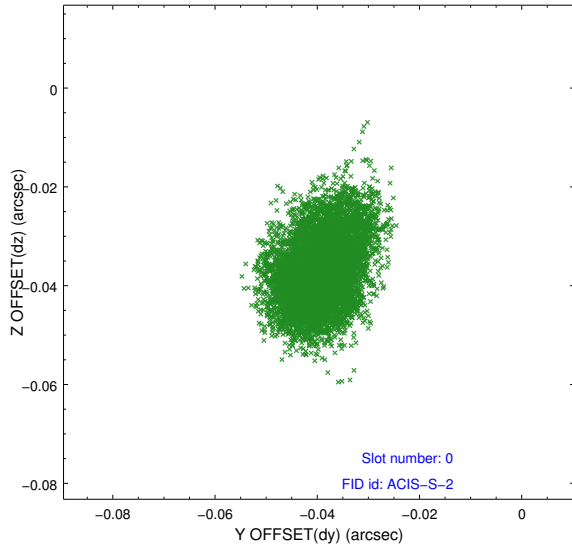


2.4.5 Slot 7

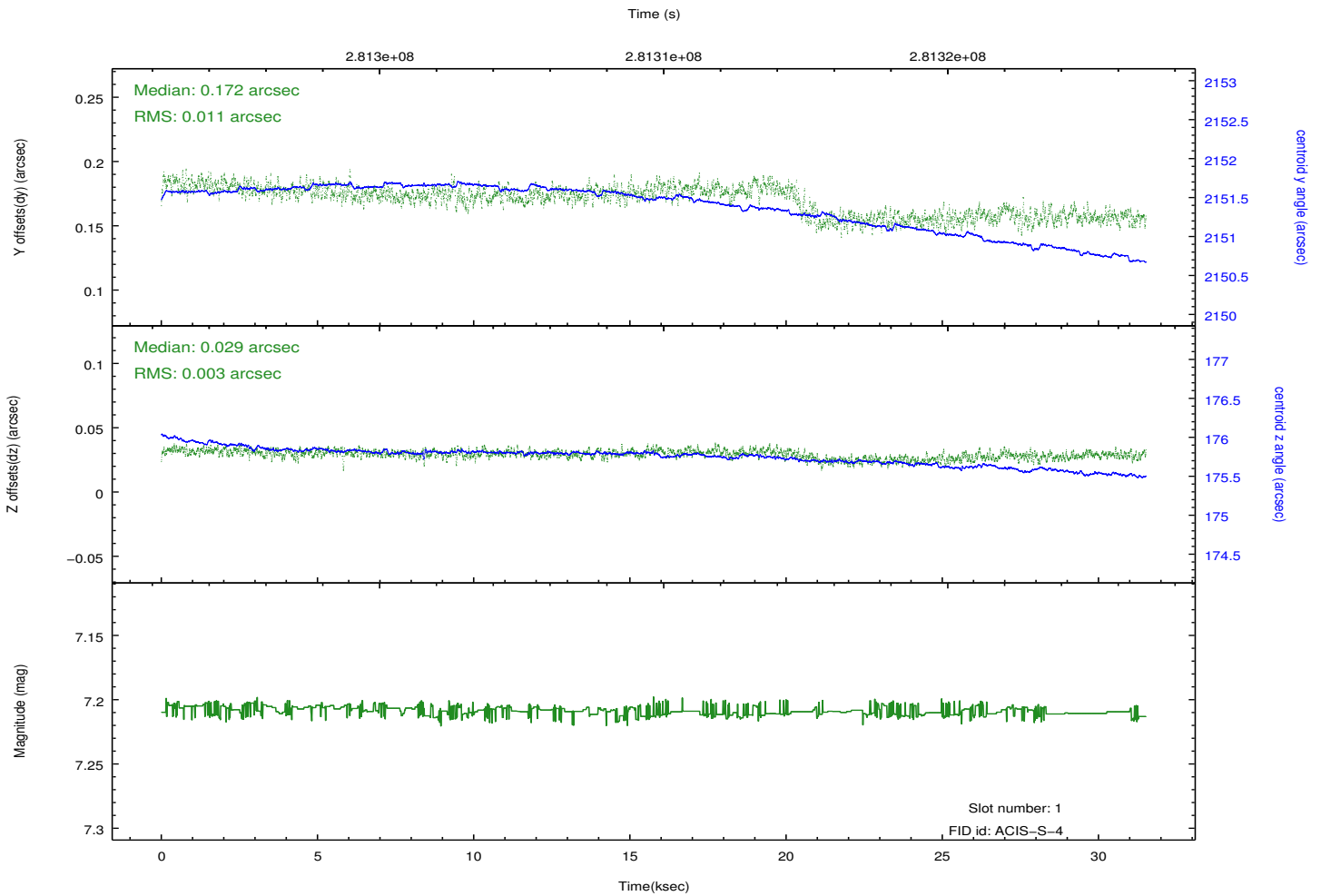
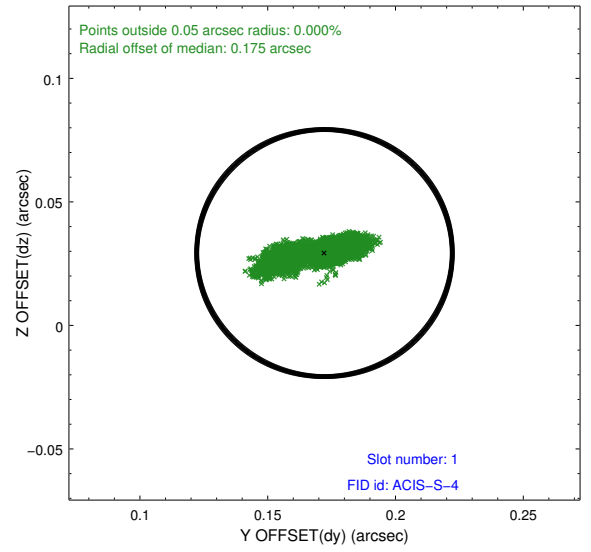
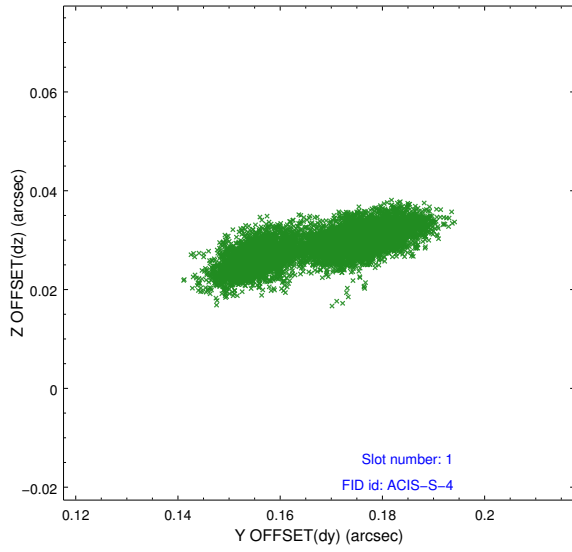


2.5 FID Slots

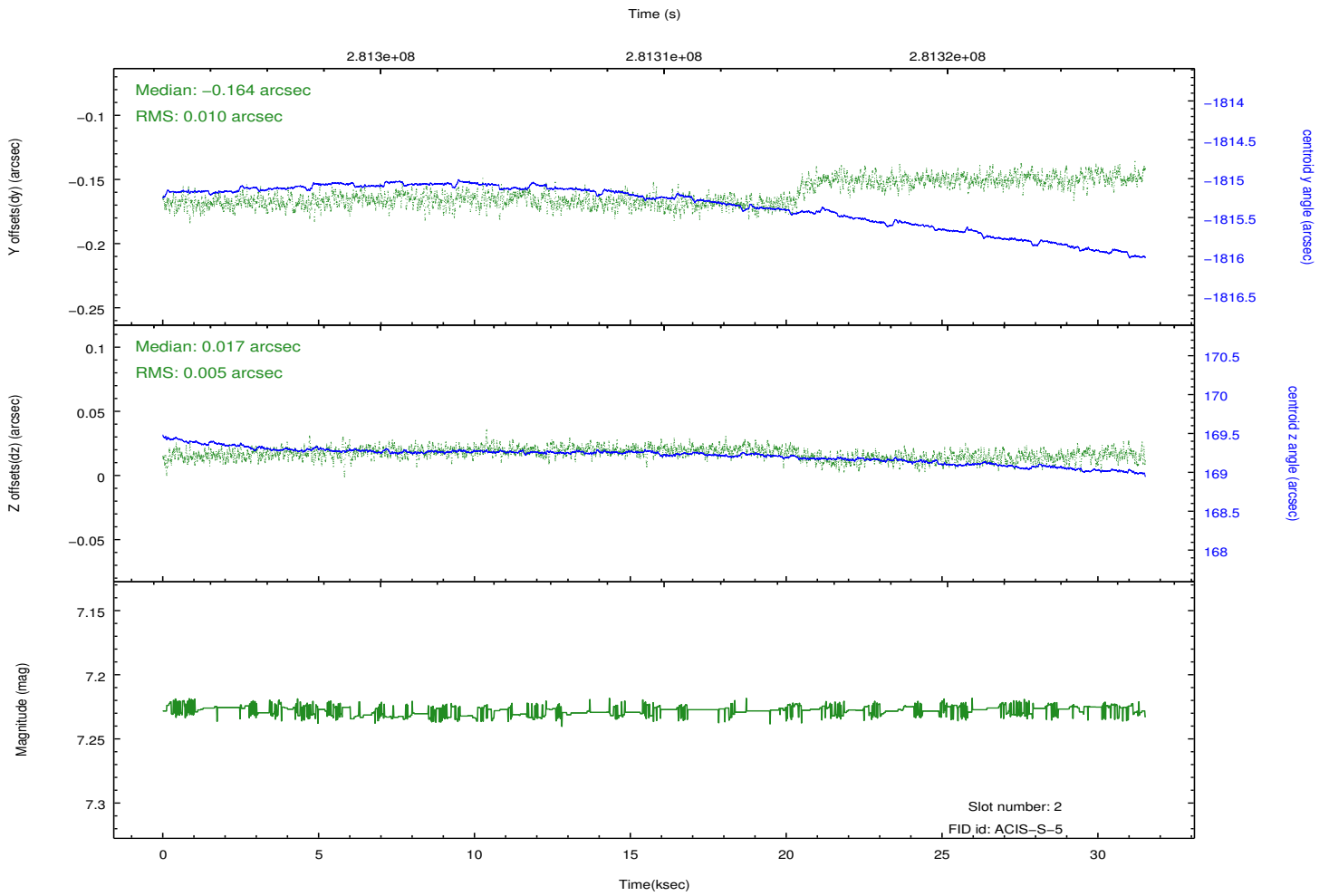
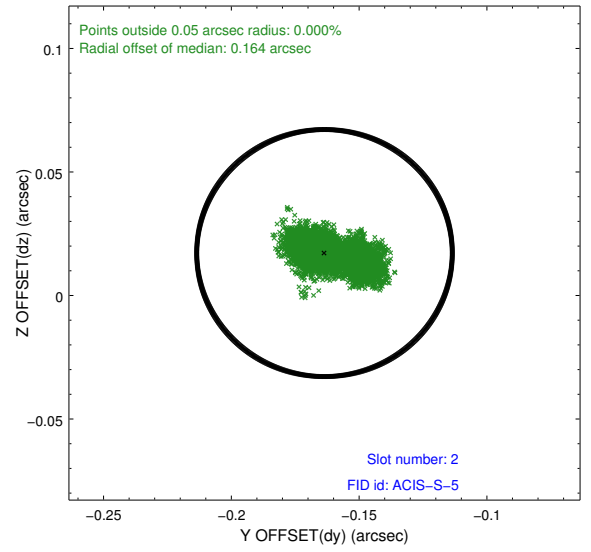
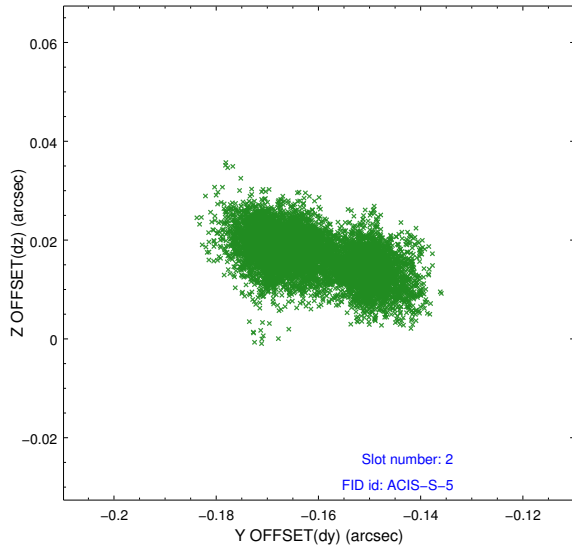
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

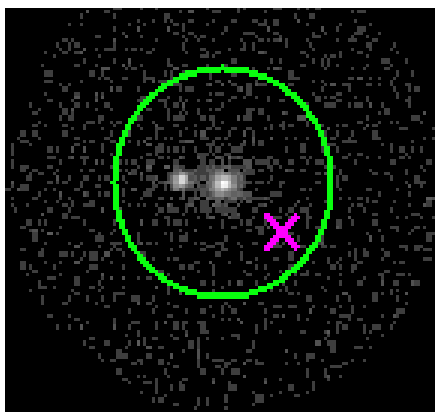


3 Gratings

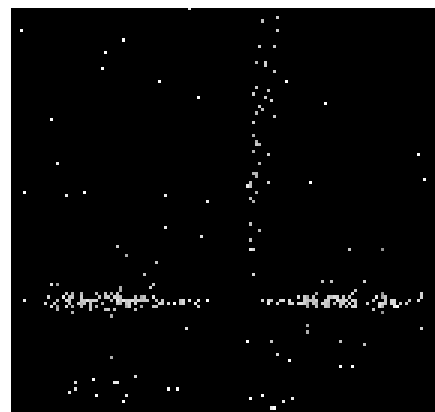
3.1 HEG Arm



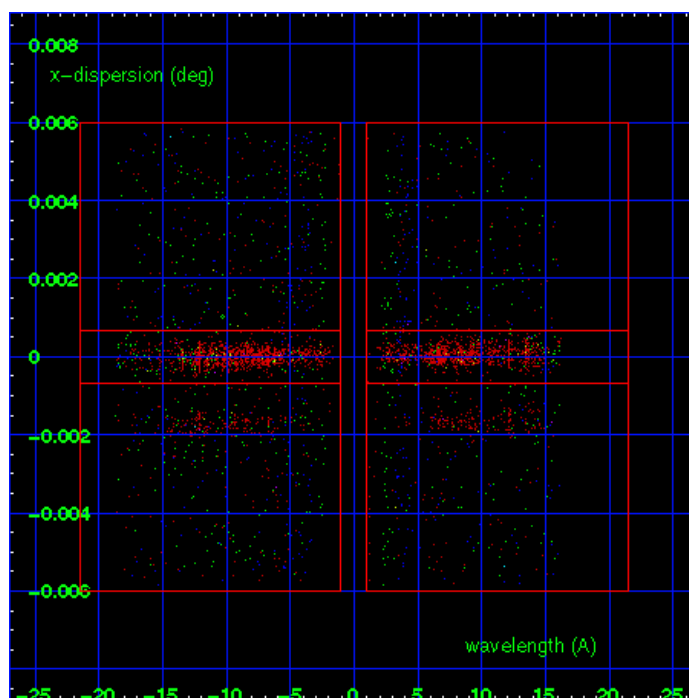
HEG Order Sort 123



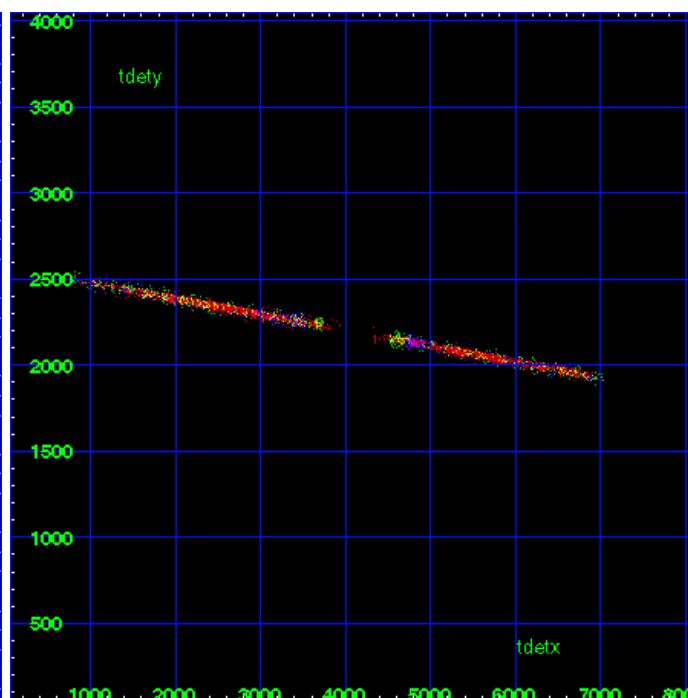
HEG Zero Order



HEG Order Sort ALL

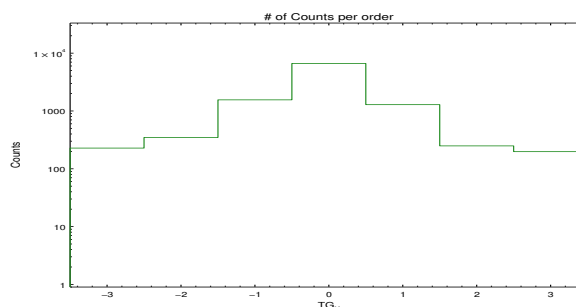


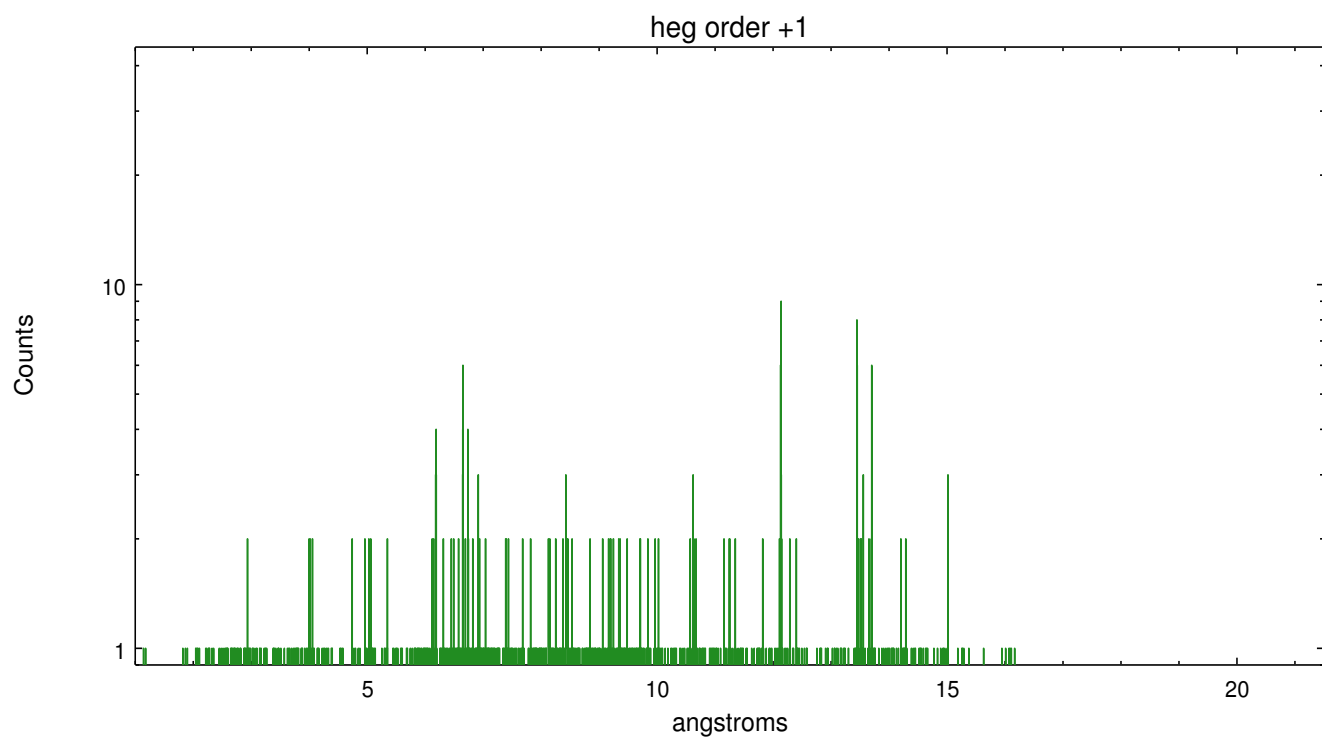
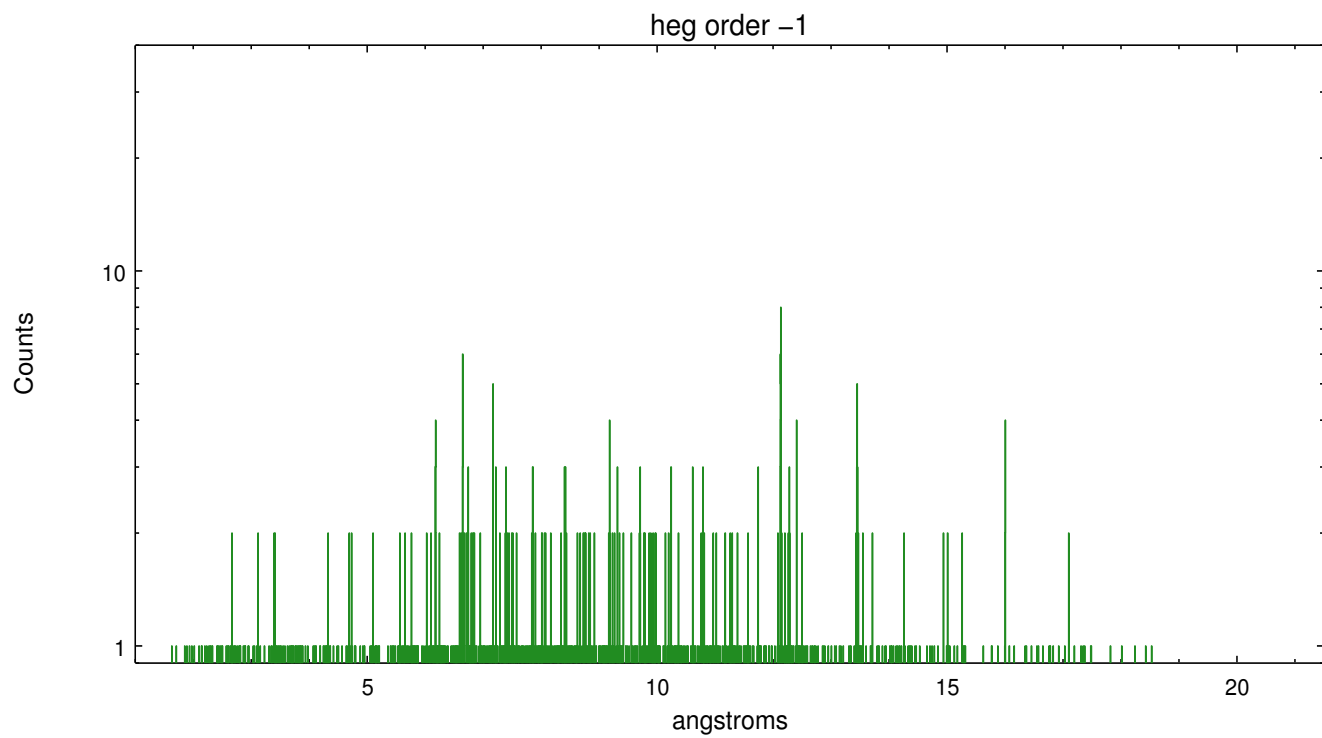
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	228	348	1558	6639	1287	249	198

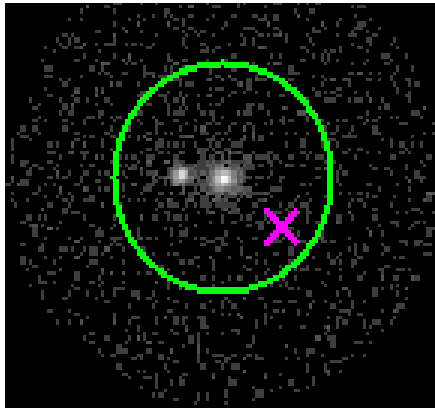




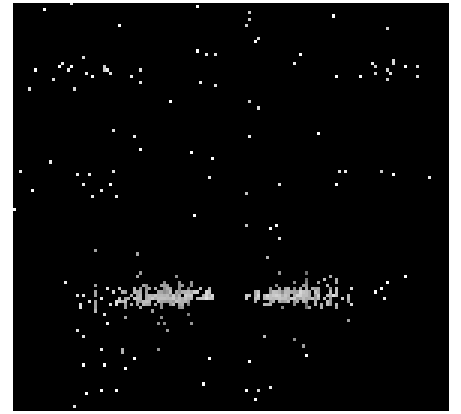
3.2 MEG Arm



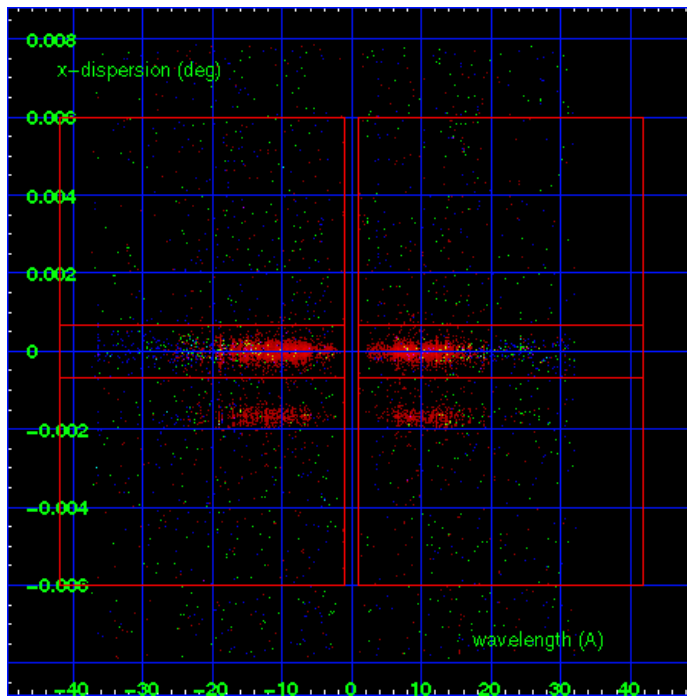
MEG Order Sort 123



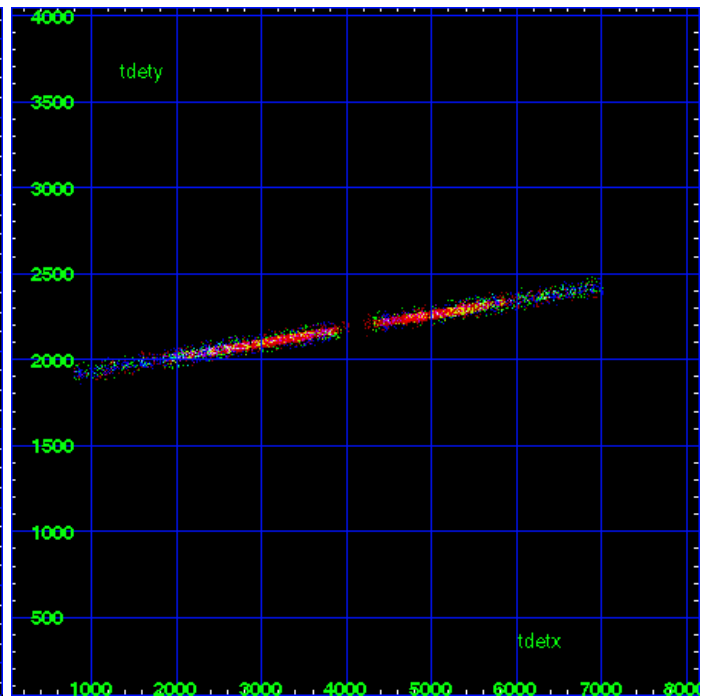
MEG Zero Order



MEG Order Sort ALL

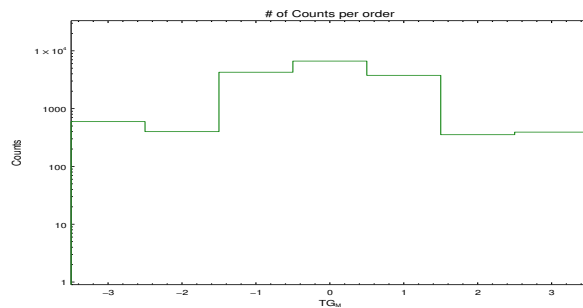


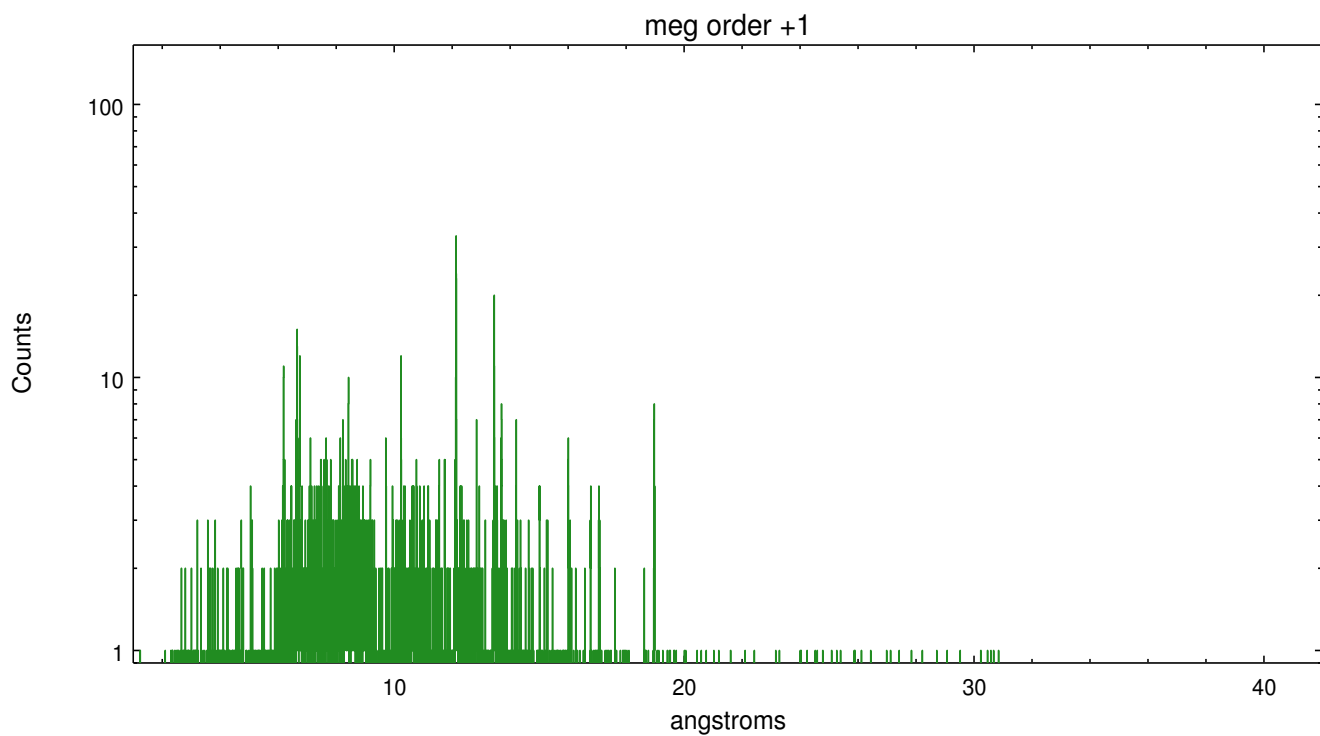
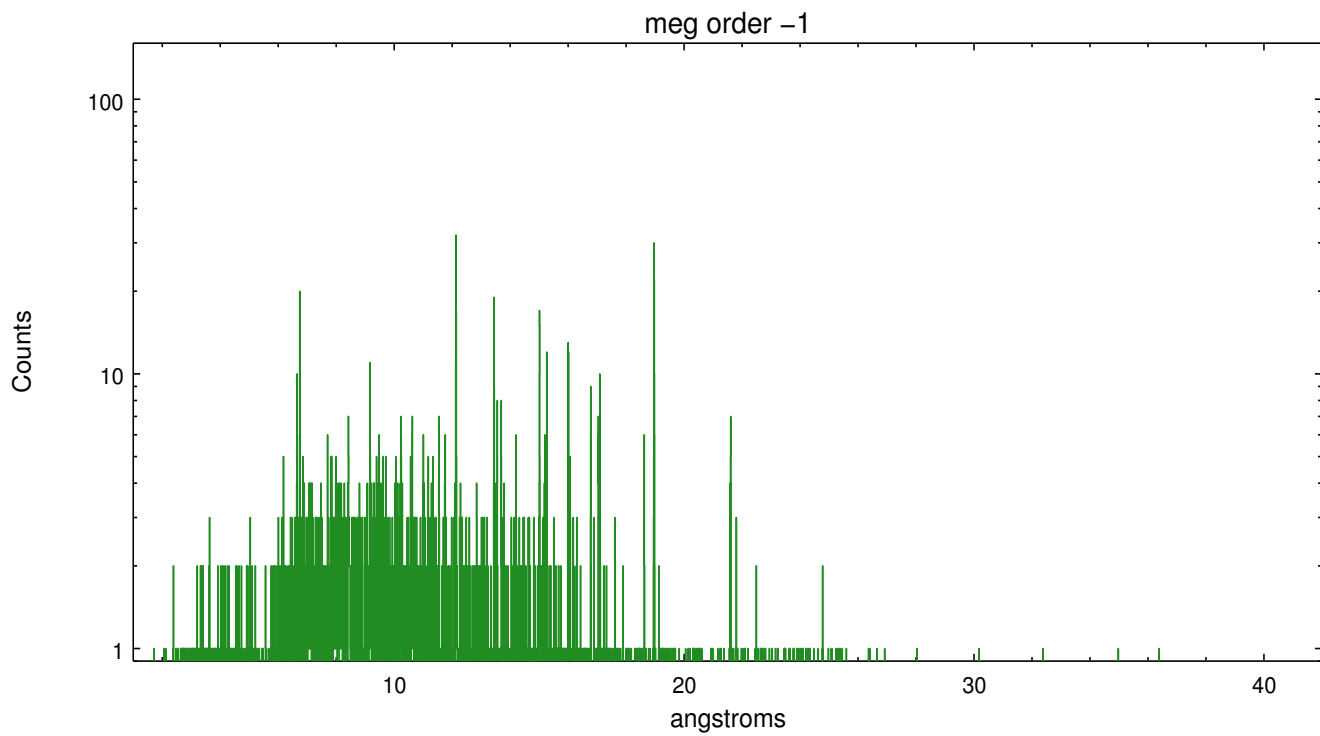
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	596	400	4259	6639	3762	354	392





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.9439998

A.2 Comments

This is a binary source with the components separated by 5 arcsec.

The

separation is in the cross-dispersion direction and the individual dispersed spectra are separated sufficiently to be extracted separately.

The investigator

will need to use narrow extraction widths and avoid background contamination

from the nearby spectrum. The zeroth orders will need to be determined separately for each spectrum. CIAO tools are available for these tasks.

===

The spectral extraction in this processing is based on the position of the brighter X-ray source (the western source). Manual intervention was used to input the correct sky coordinates (x=4080.5, y=4107.5) into the *srcla.fits file table. Note that these corrected coordinates of the zeroth order cannot be reproduced by running tgdetect on the data.