

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 7203 - L2 Version 3
Chandra X-Ray Center

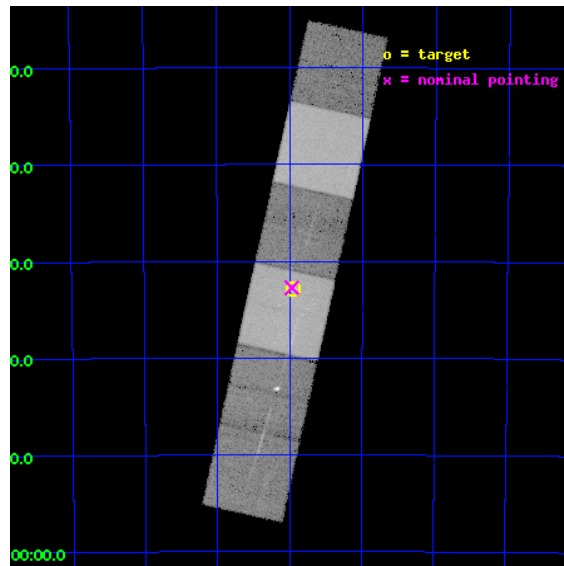
L2 Processing Date : Jan 2 2013

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1 Front

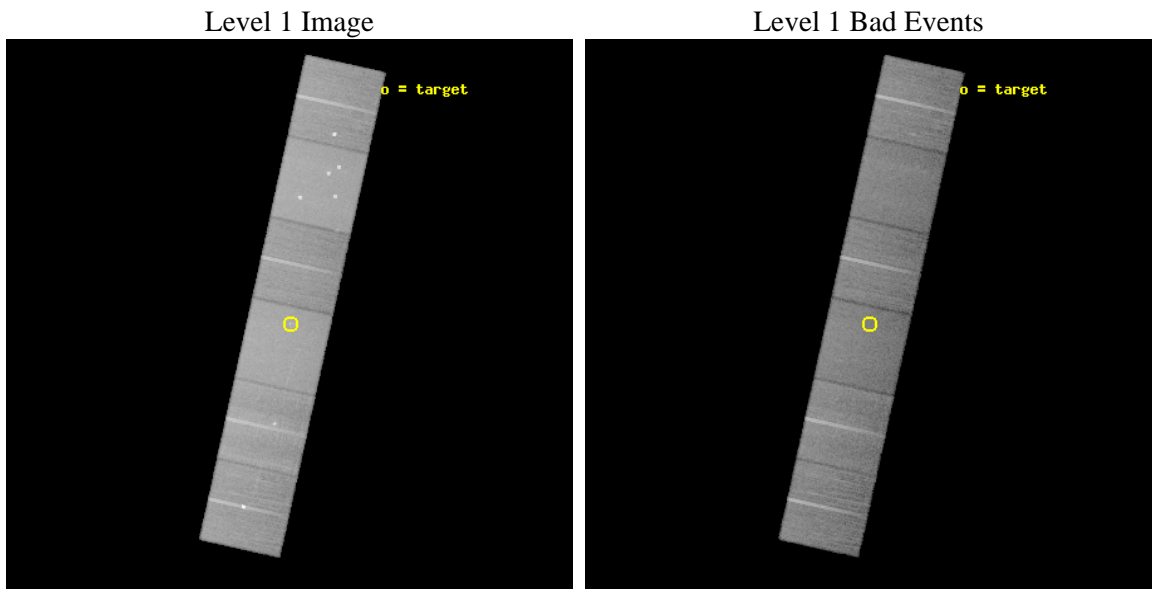
seq_num	200332	Sequence number
obs_id	7203	Observation id
title	A Chandra HETGS Survey of O-Stars	Proposal title
observer	Dr Wayne Waldron	Principal investigator
object	HD93129AB	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	160.989583	Observer's specified target RA [deg]
dec_targ	-59.5475	Observer's specified target Dec [deg]
ra_nom	160.99227067454	Nominal RA [deg]
dec_nom	-59.545896400252	Nominal Dec [deg]
roll_nom	102.45893940402	Nominal Roll [deg]
revision	3	Processing version of data
ontime	27635.199897051	Sum of GTIs [s]
livetime	27285.266356035	Livetime [s]
ontime4	27635.199897051	Sum of GTIs [s]
ontime5	27635.199897051	Sum of GTIs [s]
ontime6	27635.199897051	Sum of GTIs [s]
ontime7	27635.199897051	Sum of GTIs [s]
ontime8	27631.958926767	Sum of GTIs [s]
ontime9	27631.958926767	Sum of GTIs [s]
l2events	391646	Number of level 2 events



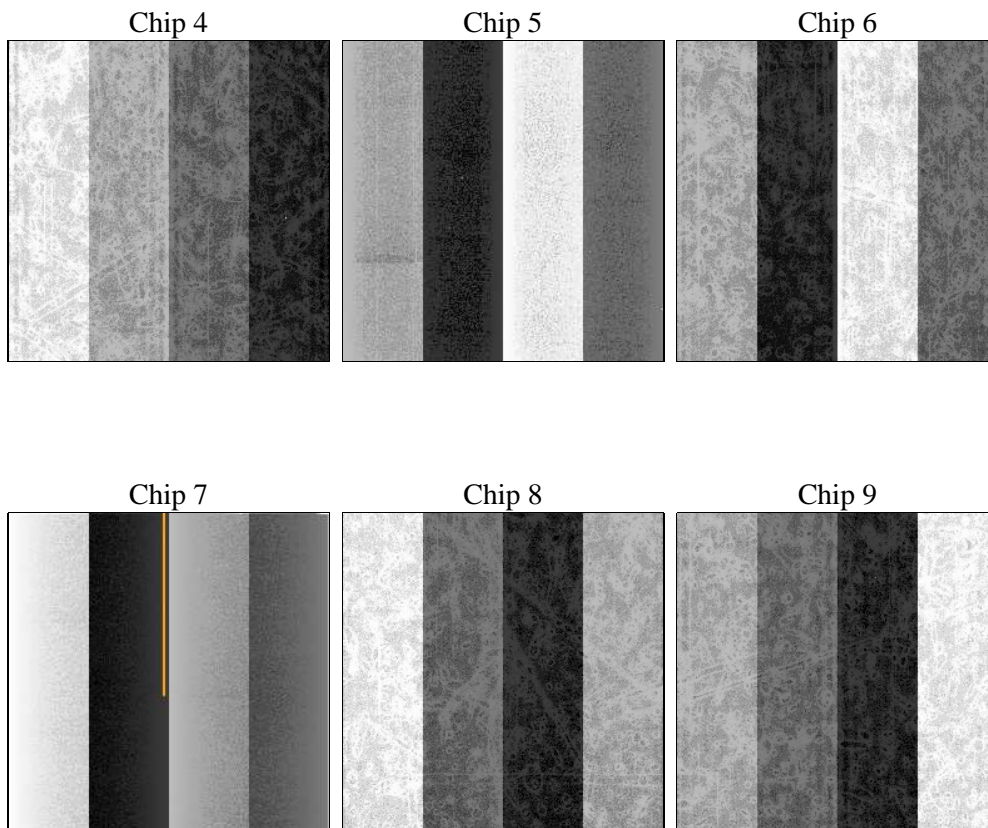
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27500.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	27635.199897051	Sum of GTIs [s]
caldbver	4.5.5	 	ontime4	27635.199897051	Sum of GTIs [s]
date	2012-12-31T18:36:02	Date and time of file creation	ontime5	27635.199897051	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	27635.199897051	Sum of GTIs [s]
			ontime7	27635.199897051	Sum of GTIs [s]
			ontime8	27631.958926767	Sum of GTIs [s]
			ontime9	27631.958926767	Sum of GTIs [s]
			l1events	1668868	Number of level 1 events

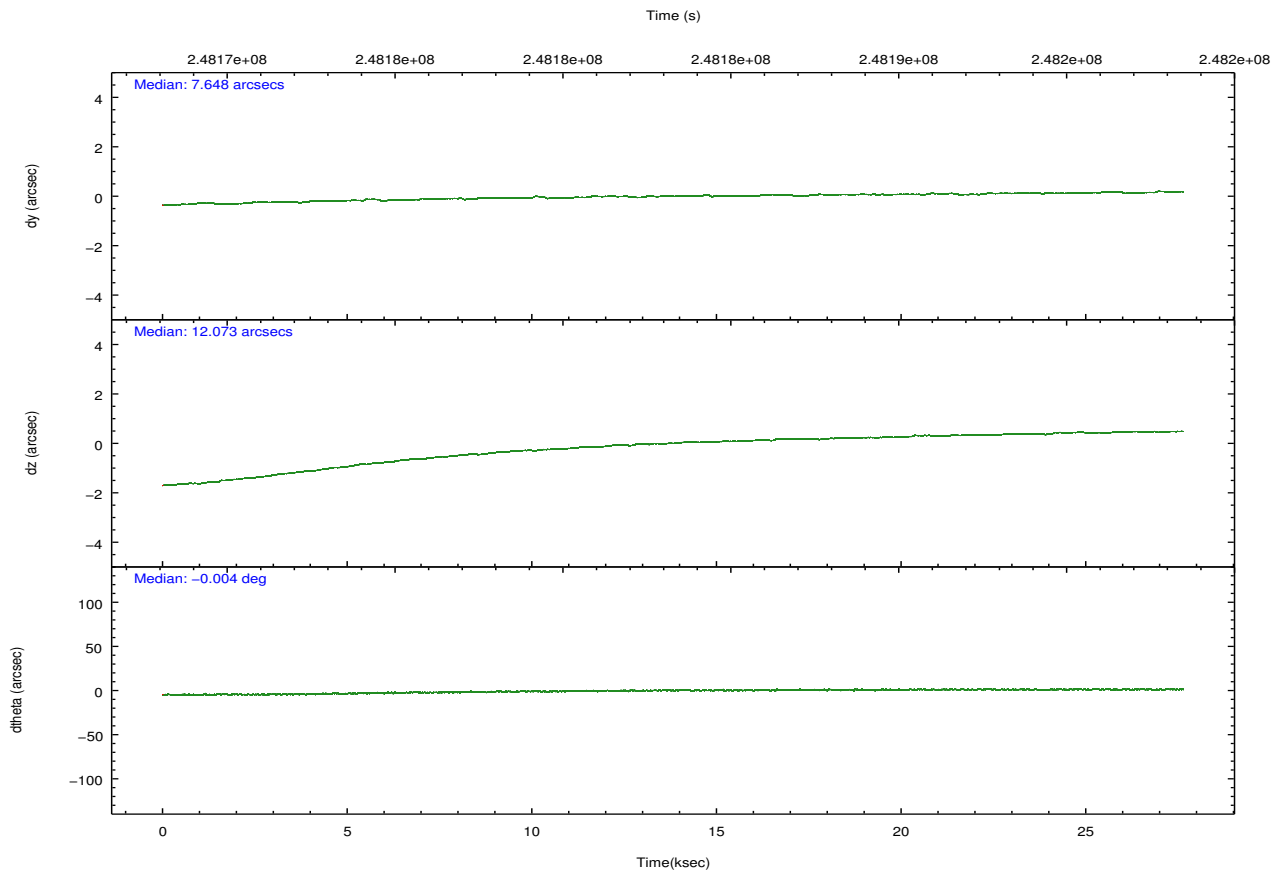
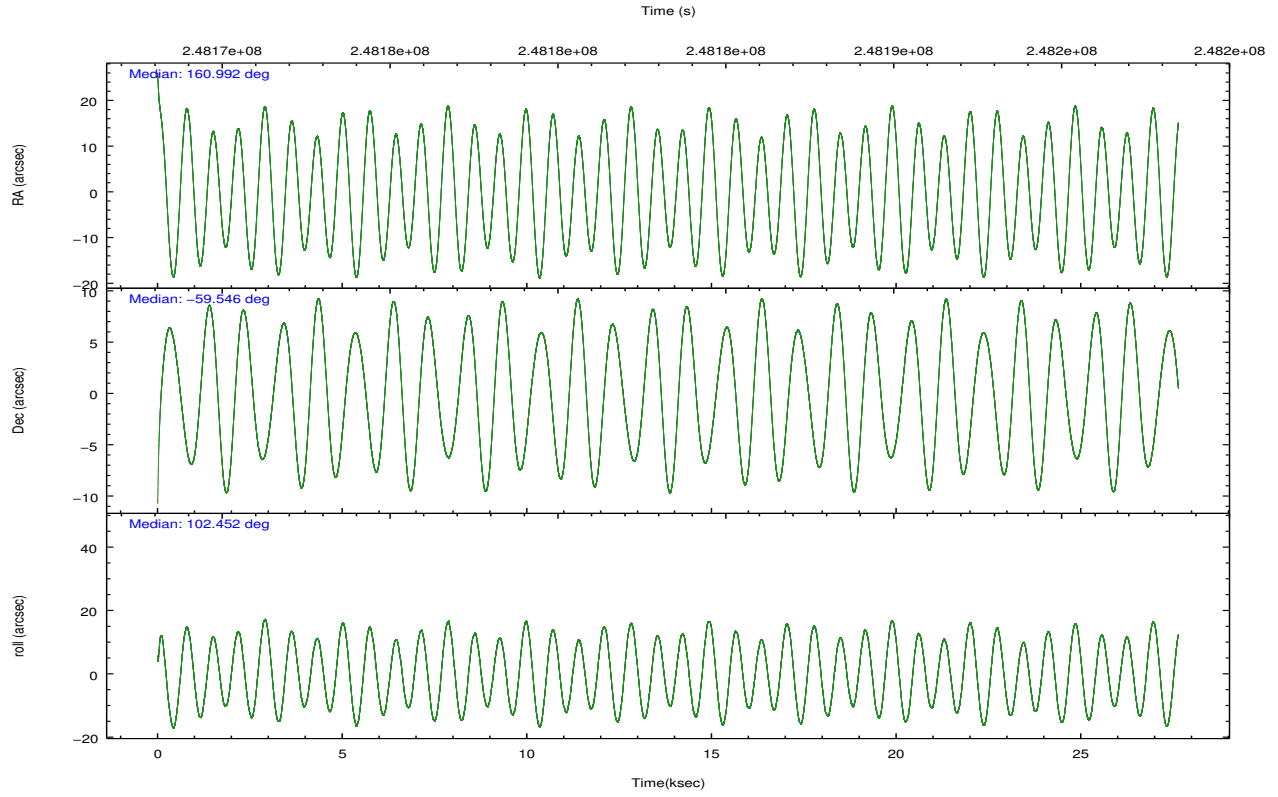
2.1.4 Events

	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	255775	344350	227079	316972	288179	236513	grade 0 events	18018	23093	13802	14229	25904	23918
rejected events	221880	182073	196265	179149	220784	195596		7%	6%	6%	4%	8%	10%
rejected %	86%	52%	86%	56%	76%	82%	grade 1 events	273	632	136	305	237	225
								0%	0%	0%	0%	0%	0%
							grade 2 events	6002	45330	6060	28424	14054	5844
								2%	13%	2%	8%	4%	2%
							grade 3 events	2820	6461	2751	12351	6169	2921
								1%	1%	1%	3%	2%	1%
							grade 4 events	2701	6090	2656	12407	5883	2794
								1%	1%	1%	3%	2%	1%
							grade 5 events	10065	24250	10481	29079	13767	11193
								3%	7%	4%	9%	4%	4%
							grade 6 events	4407	81561	5595	70659	15489	5510
								1%	23%	2%	22%	5%	2%
							grade 7 events	211489	156933	185598	149518	206676	184108
								82%	45%	81%	47%	71%	77%

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	161.029106	160.9922706745384	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.565754	-59.54589640025156	Alternating exposures requested	N	N
[deg] Pointing Roll	102.334079	102.4589394040211	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	248169604.184000	248168475.19248			
Observation start date	2005-11-12T07:59:00	2005-11-12T07:41:15			
[s] Observation end time (MET)	248197104.184000	248198032.09384			
Observation end date	2005-11-12T15:37:20	2005-11-12T15:53:52			
Read mode	TIMED	TIMED			

2.3 Aspect

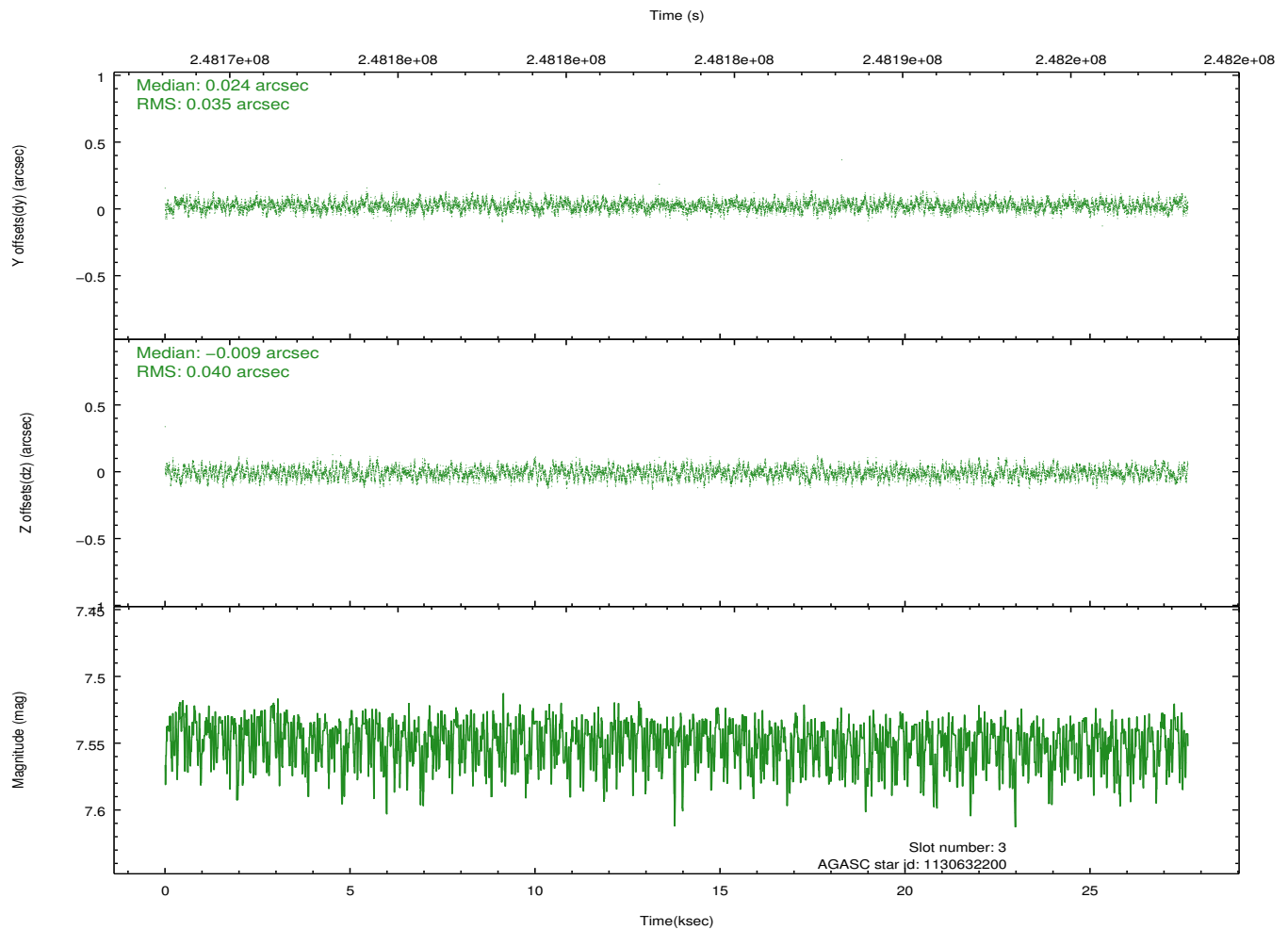
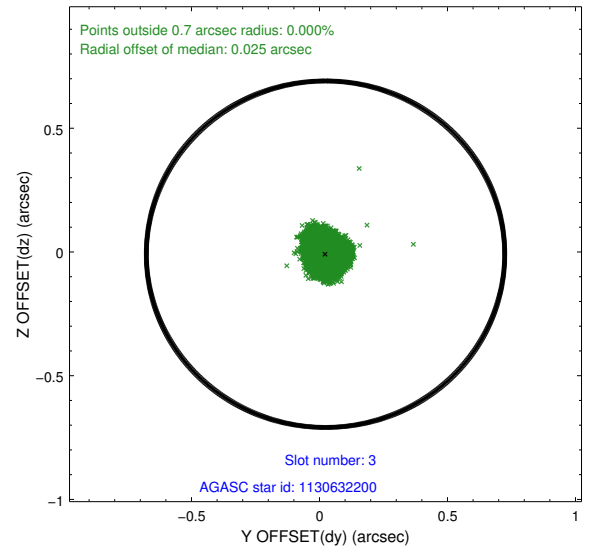
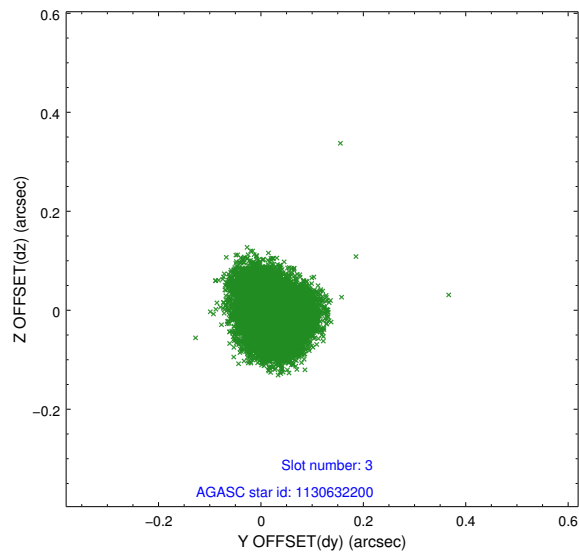


Slot Statistics

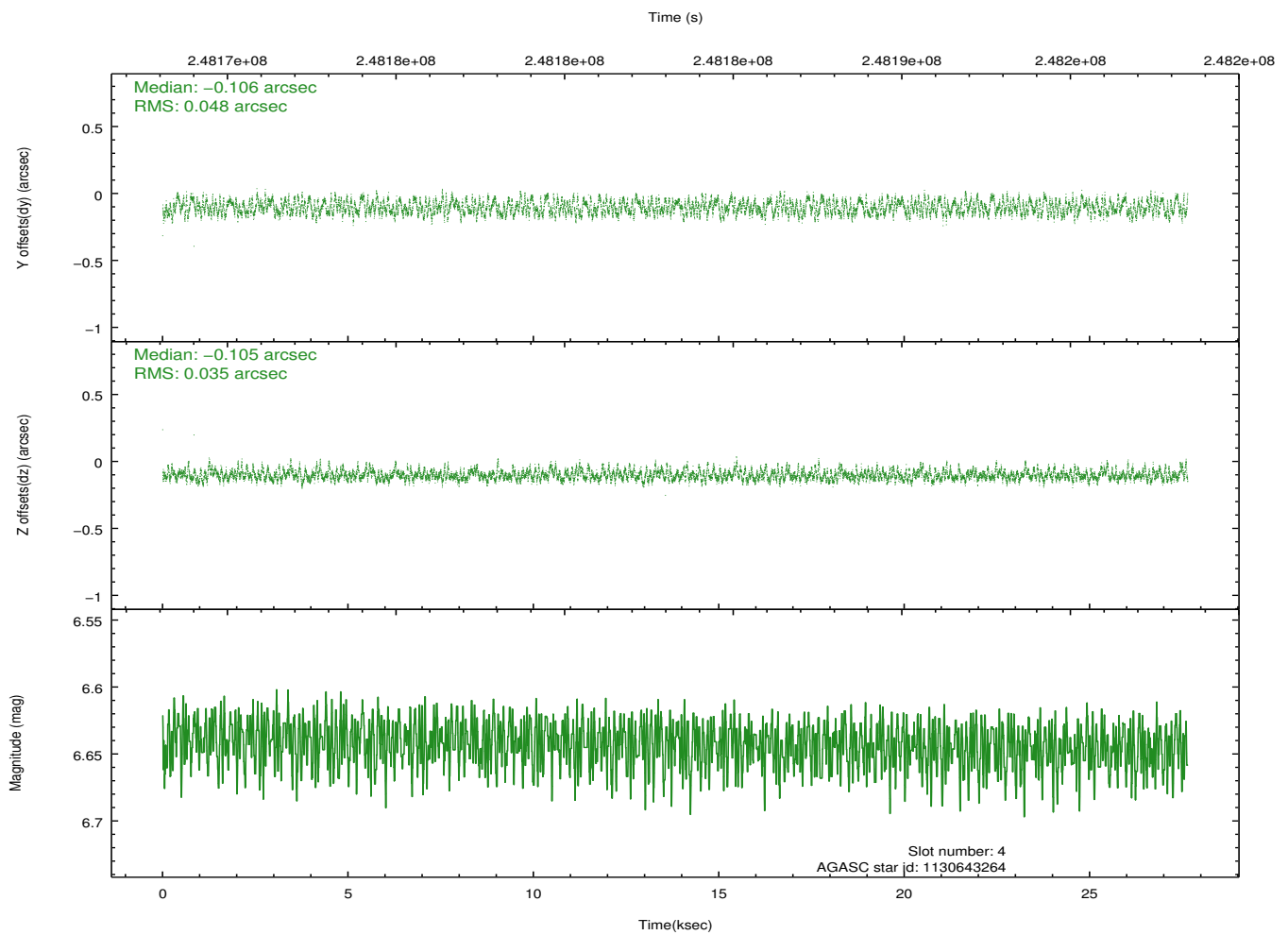
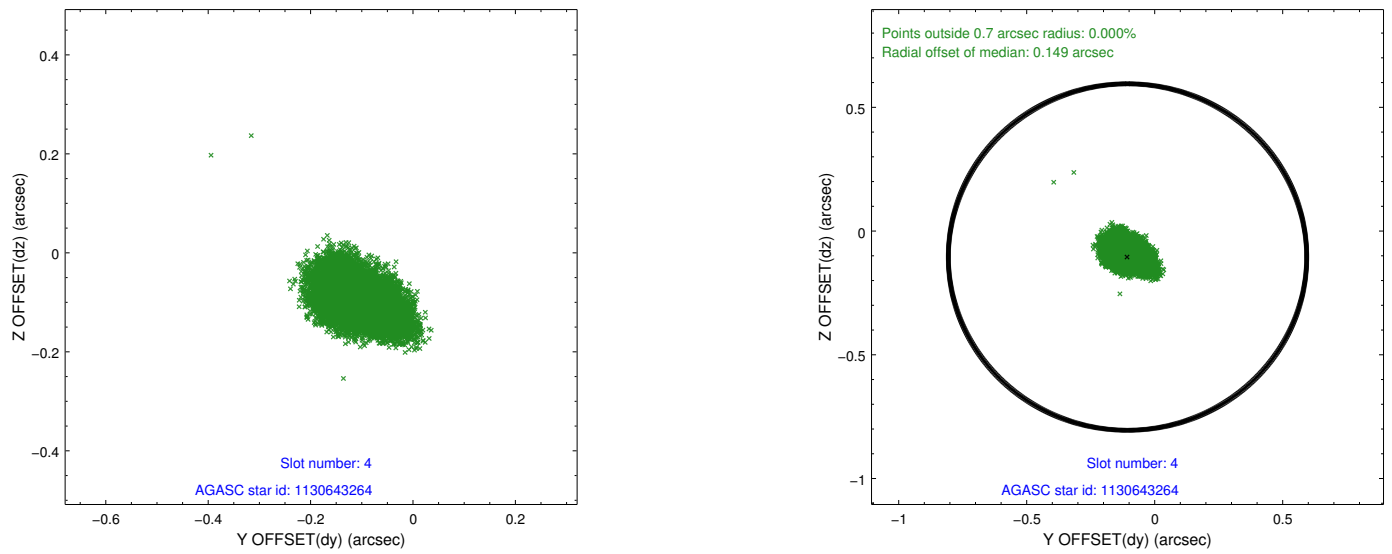
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6742	-0.013	-0.025	0.017	0.038	0.000000	0.000000	-760.39	-1733.17
1	FID	ACIS-S-4	7.20	6742	0.075	0.014	0.009	0.022	0.000000	0.000000	2152.93	175.27
2	FID	ACIS-S-5	7.23	6741	-0.090	0.021	0.018	0.032	0.000000	0.000000	-1813.20	169.03
3	GUIDE	1130632200	7.55	13484	0.024	-0.009	0.057	0.089	161.433843	-59.407820	395.21	-845.24
4	GUIDE	1130643264	6.64	13484	-0.106	-0.105	0.064	0.099	160.322990	-59.676912	-123.45	1340.62
5	GUIDE	1130644984	8.76	13478	-0.050	0.043	0.068	0.109	162.123834	-59.745452	-1071.73	-1797.96
6	GUIDE	1128940640	8.36	13482	0.111	0.082	0.061	0.097	159.517239	-59.074495	2294.22	2361.81
7	GUIDE	1130640672	8.29	13410	0.020	-0.010	0.076	0.119	162.096044	-59.540805	-342.76	-1917.71

2.4 Star Slots

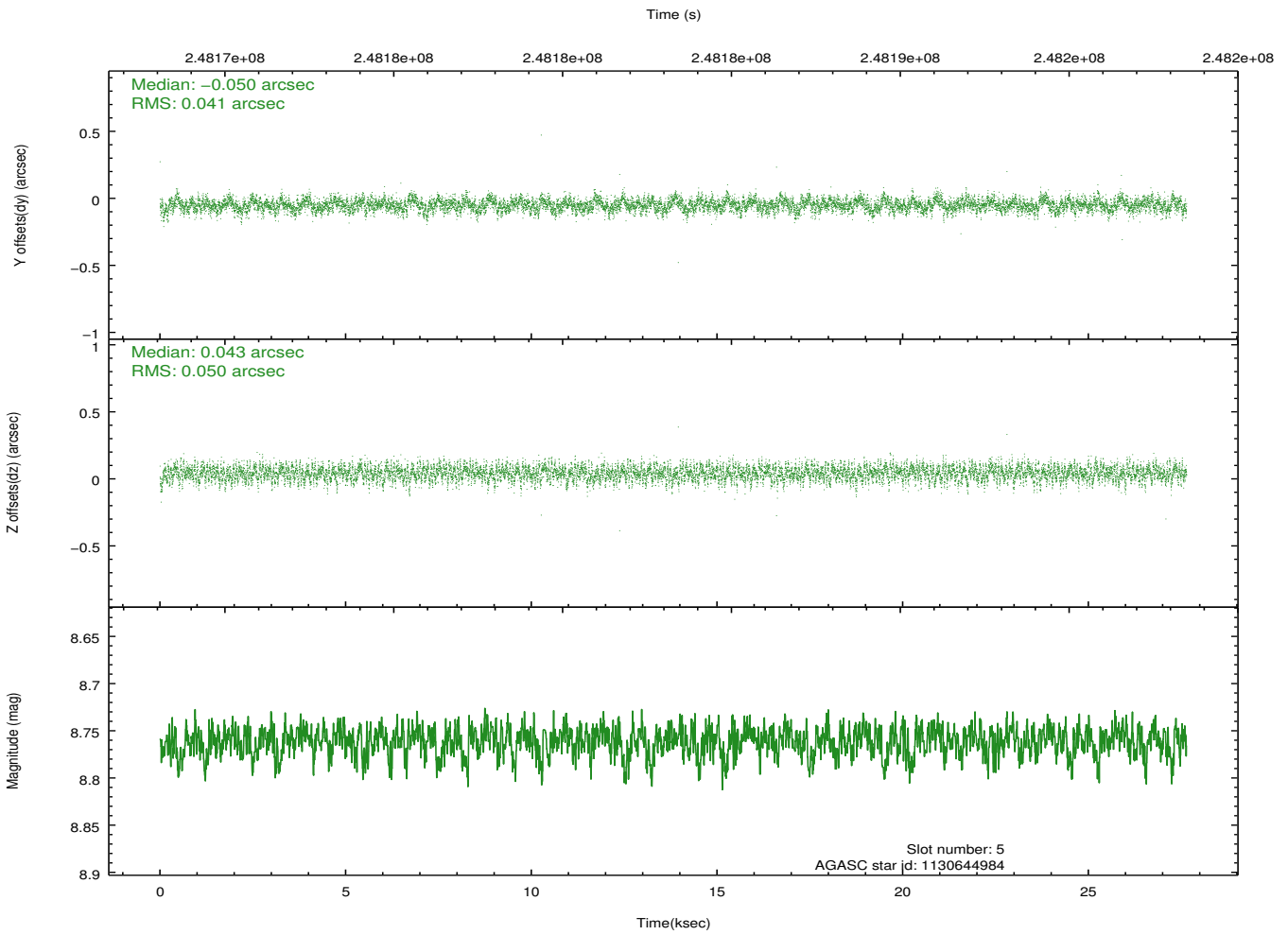
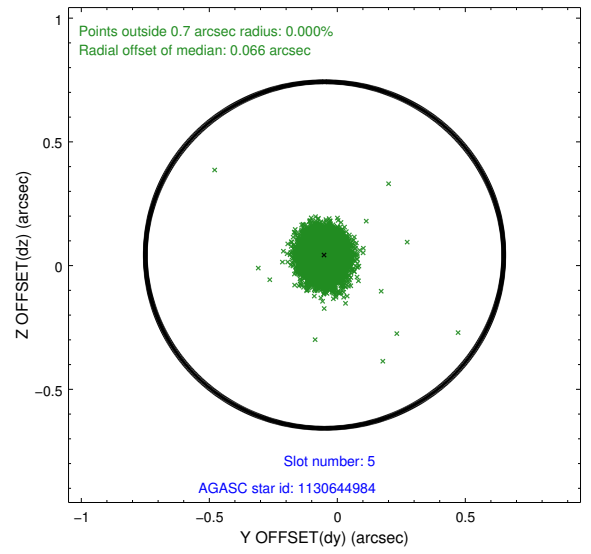
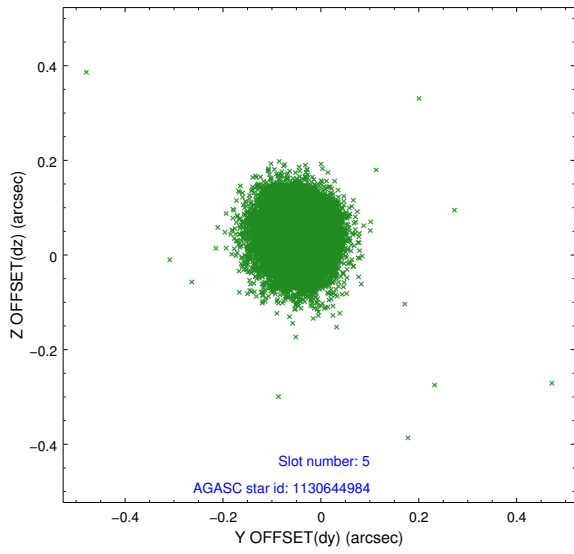
2.4.1 Slot 3



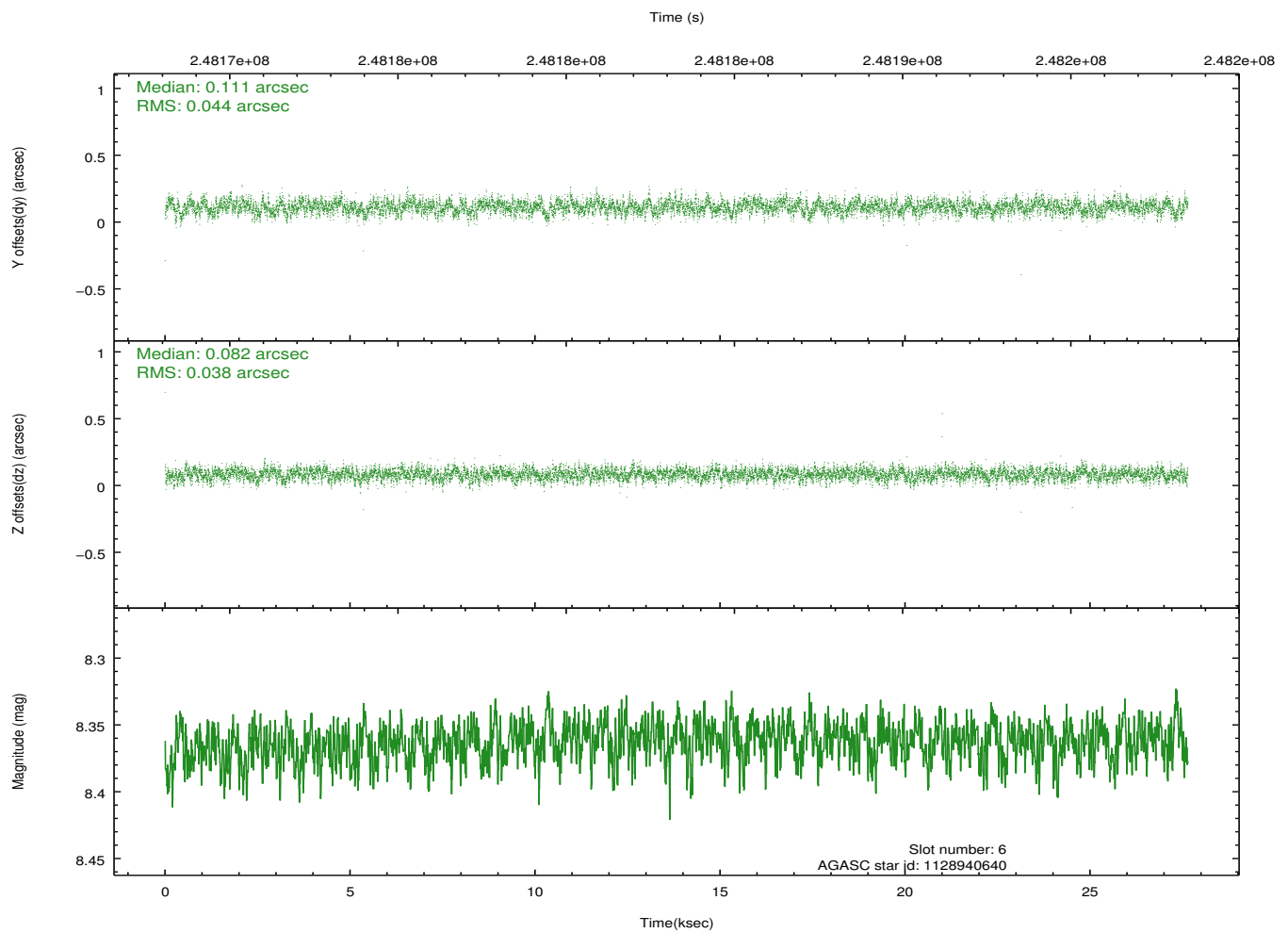
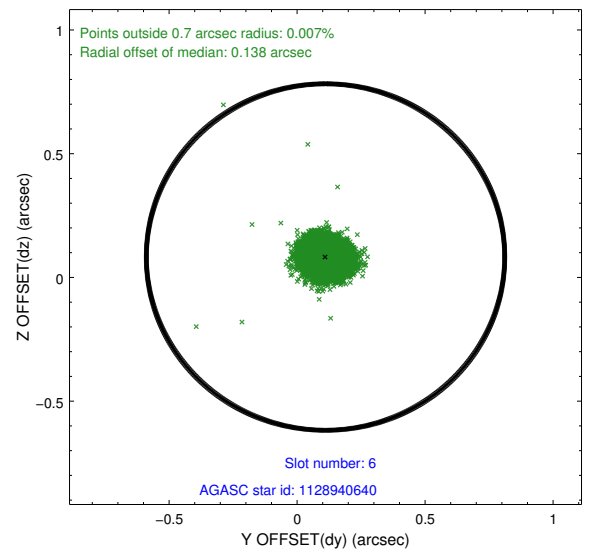
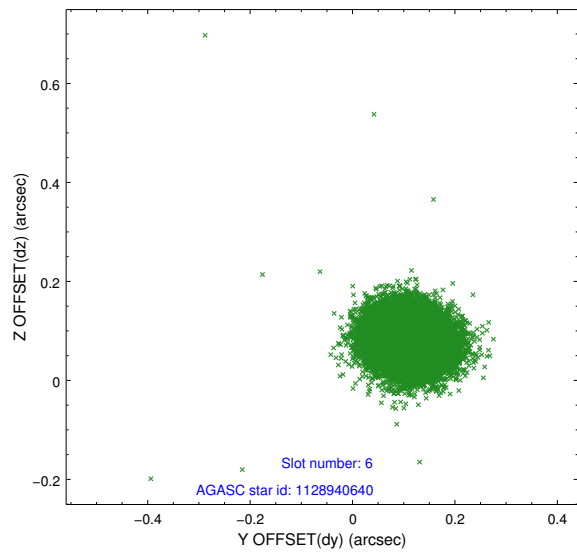
2.4.2 Slot 4



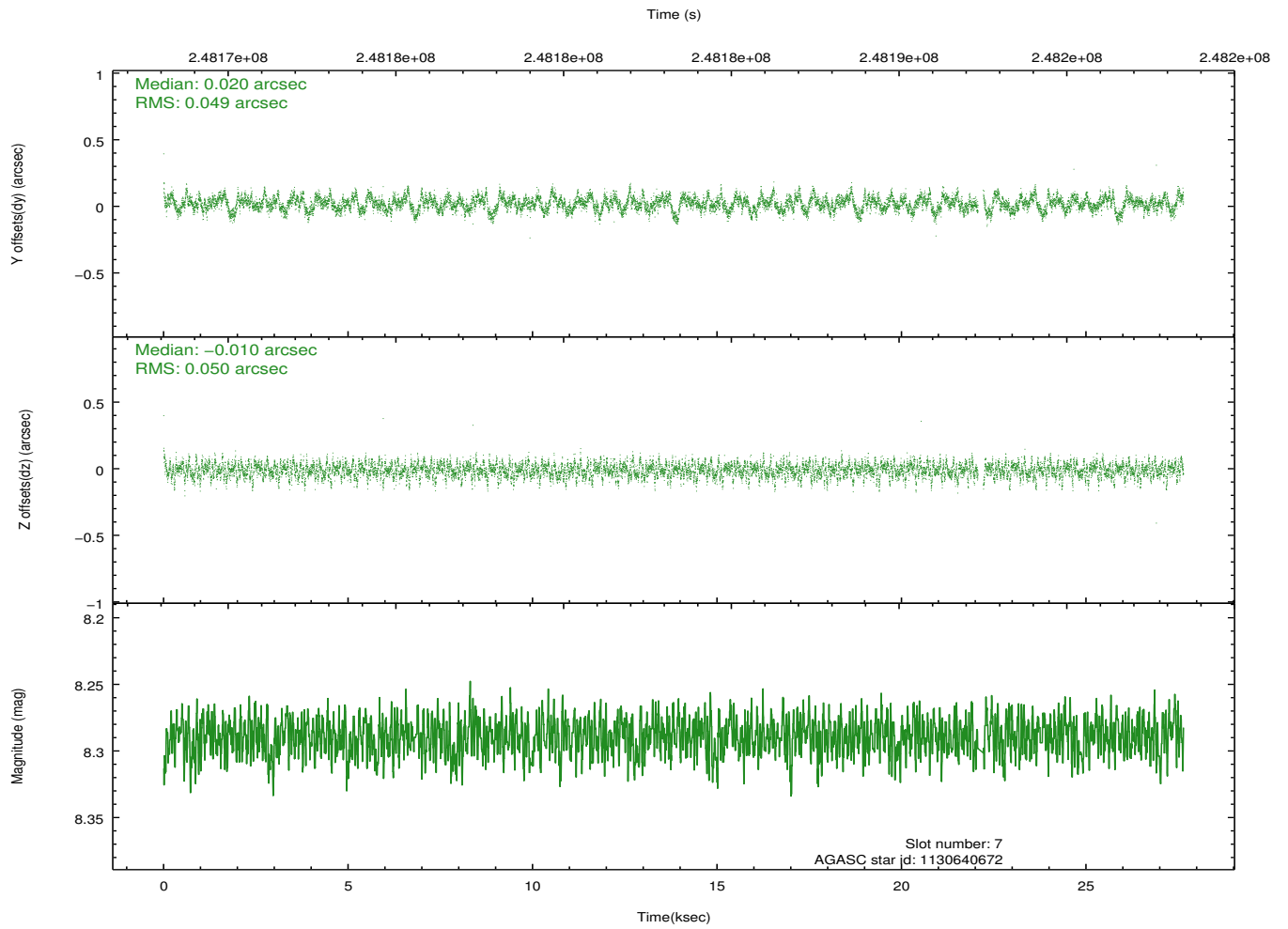
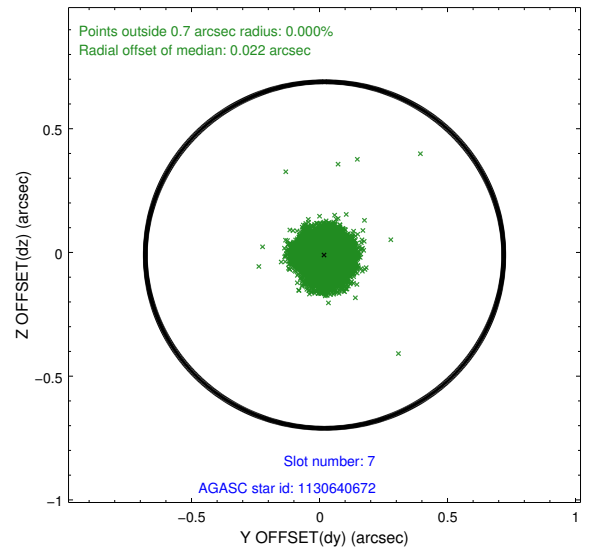
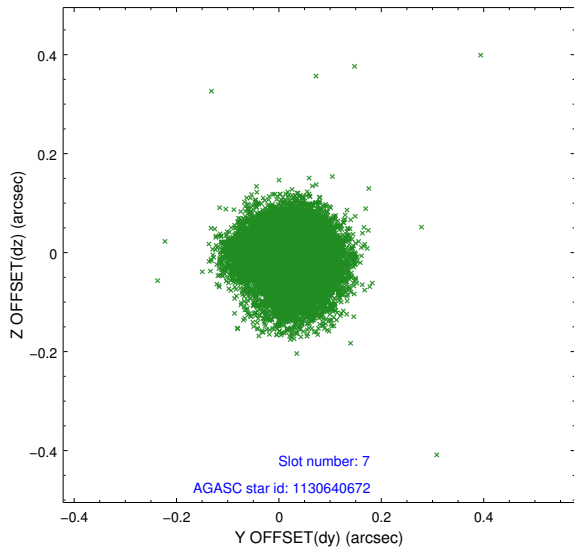
2.4.3 Slot 5



2.4.4 Slot 6

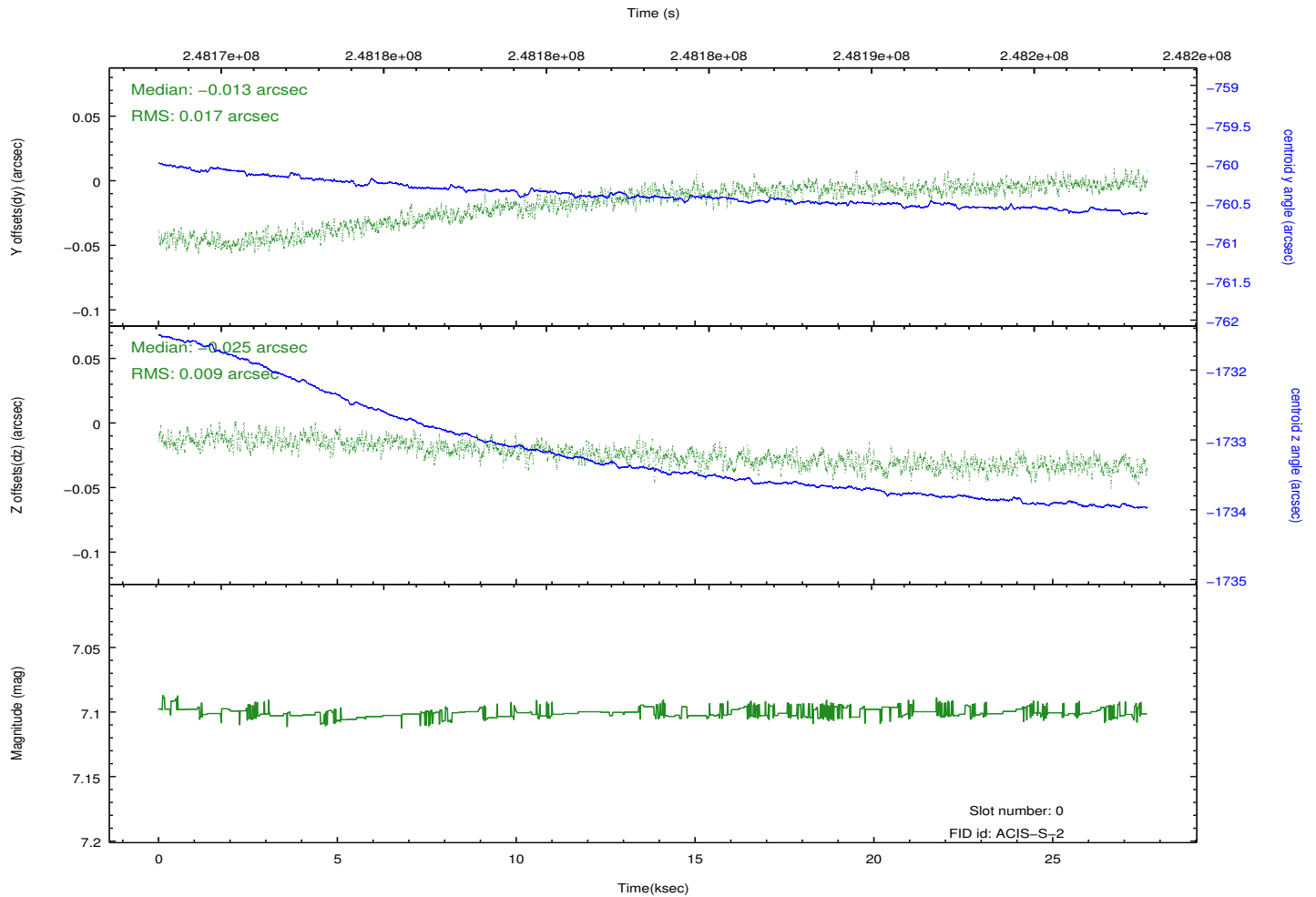
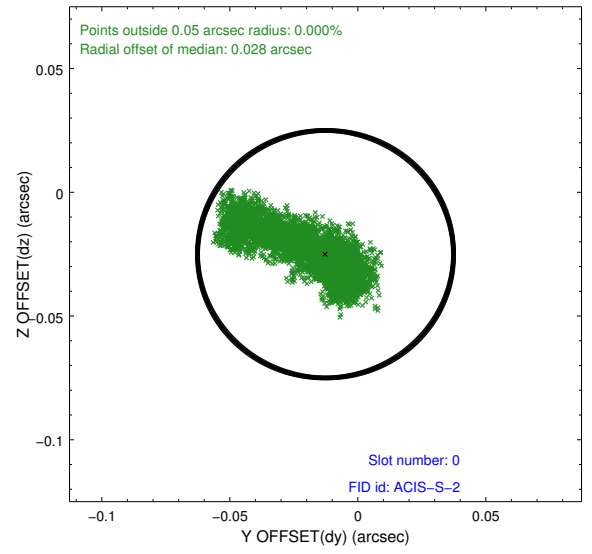
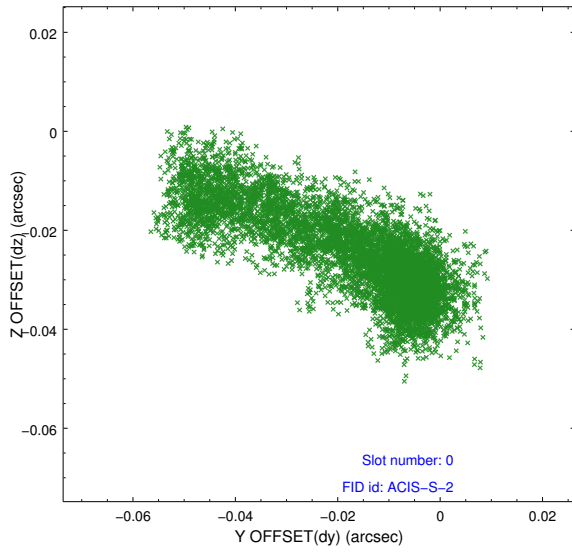


2.4.5 Slot 7

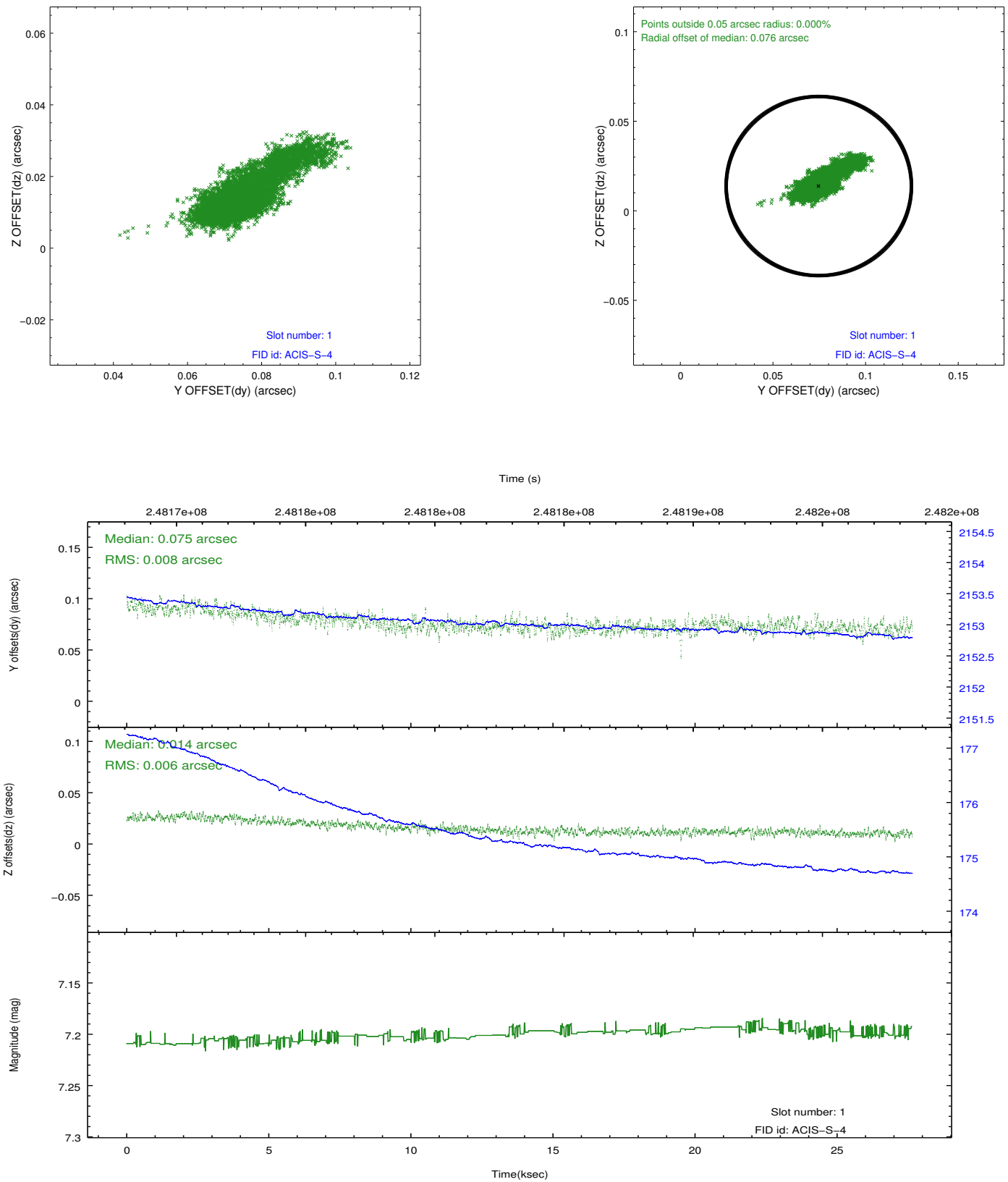


2.5 FID Slots

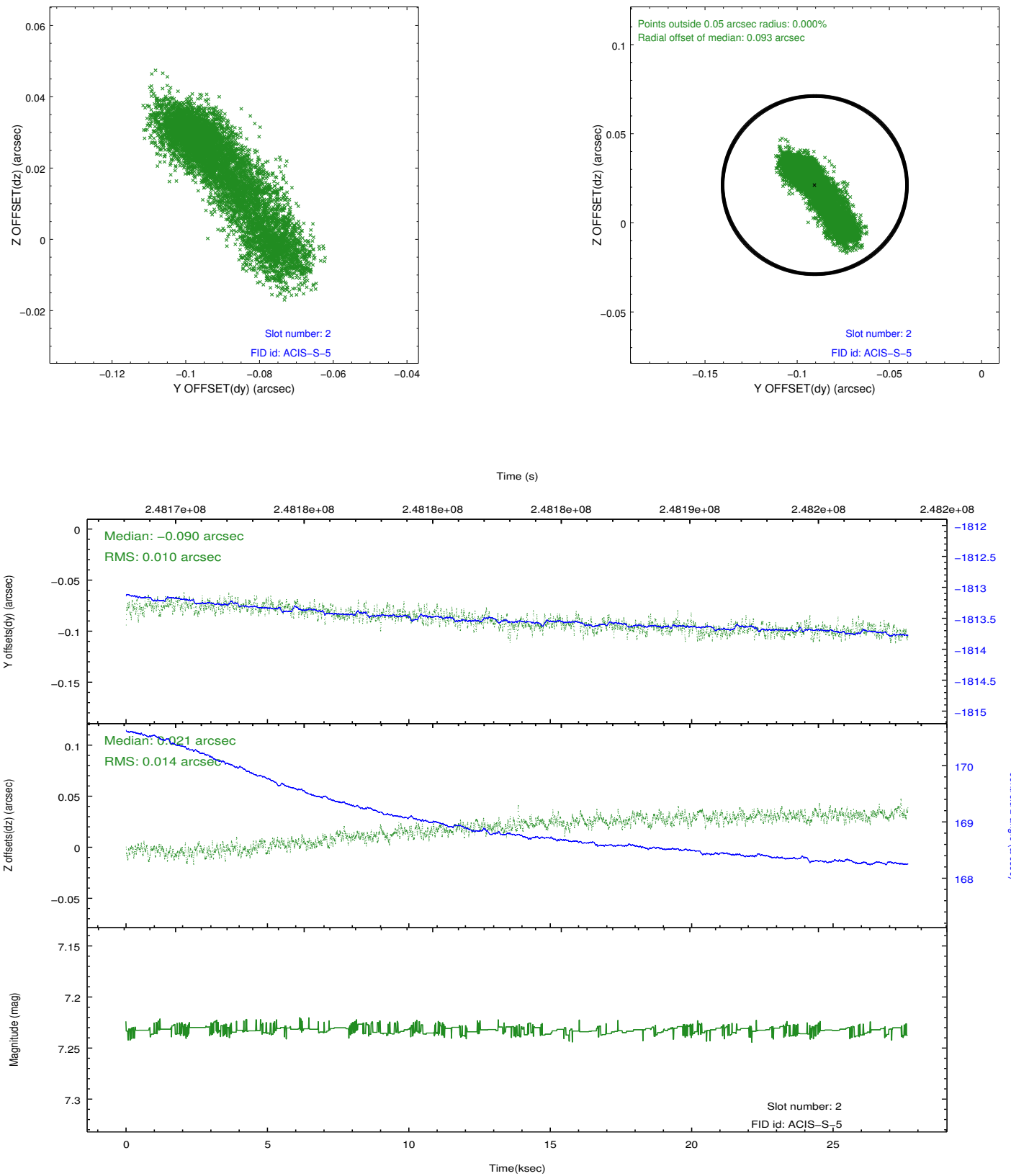
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

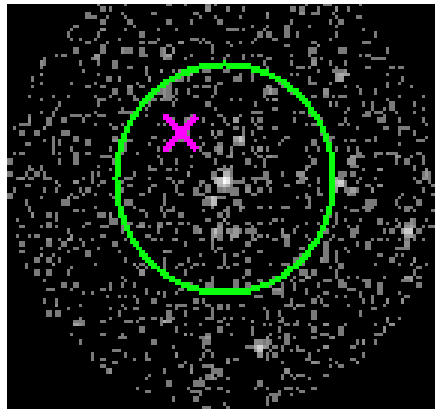


3 Gratings

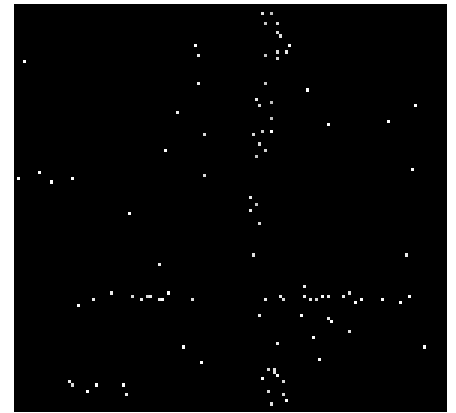
3.1 HEG Arm



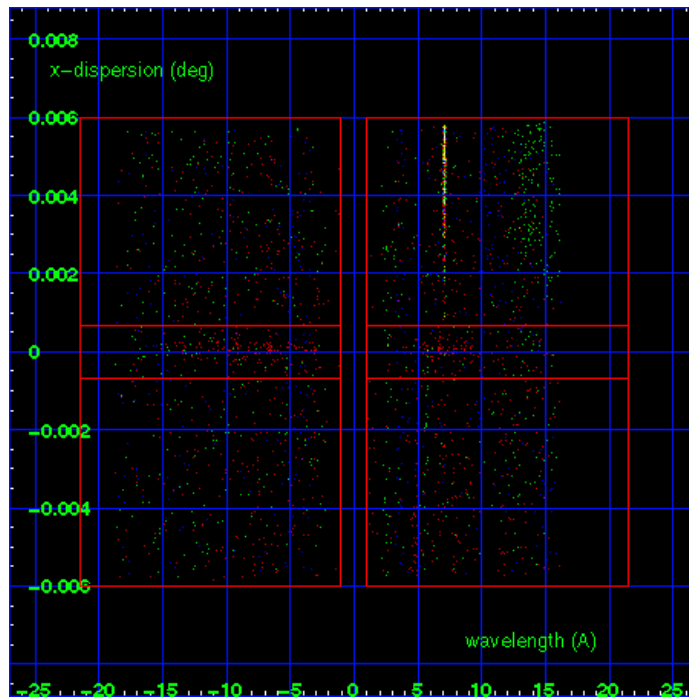
HEG Order Sort 123



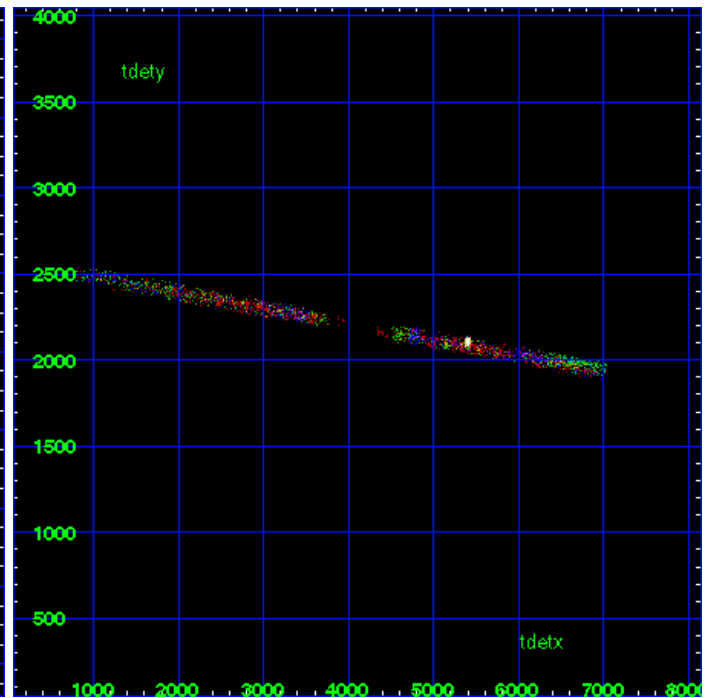
HEG Zero Order



HEG Order Sort ALL

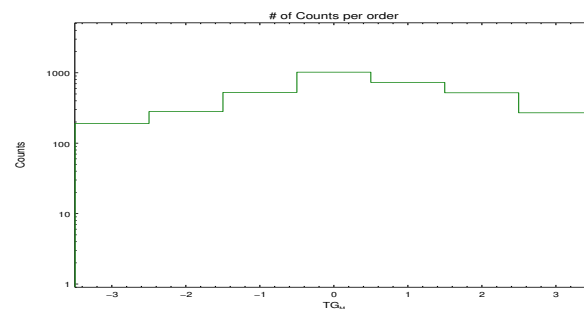


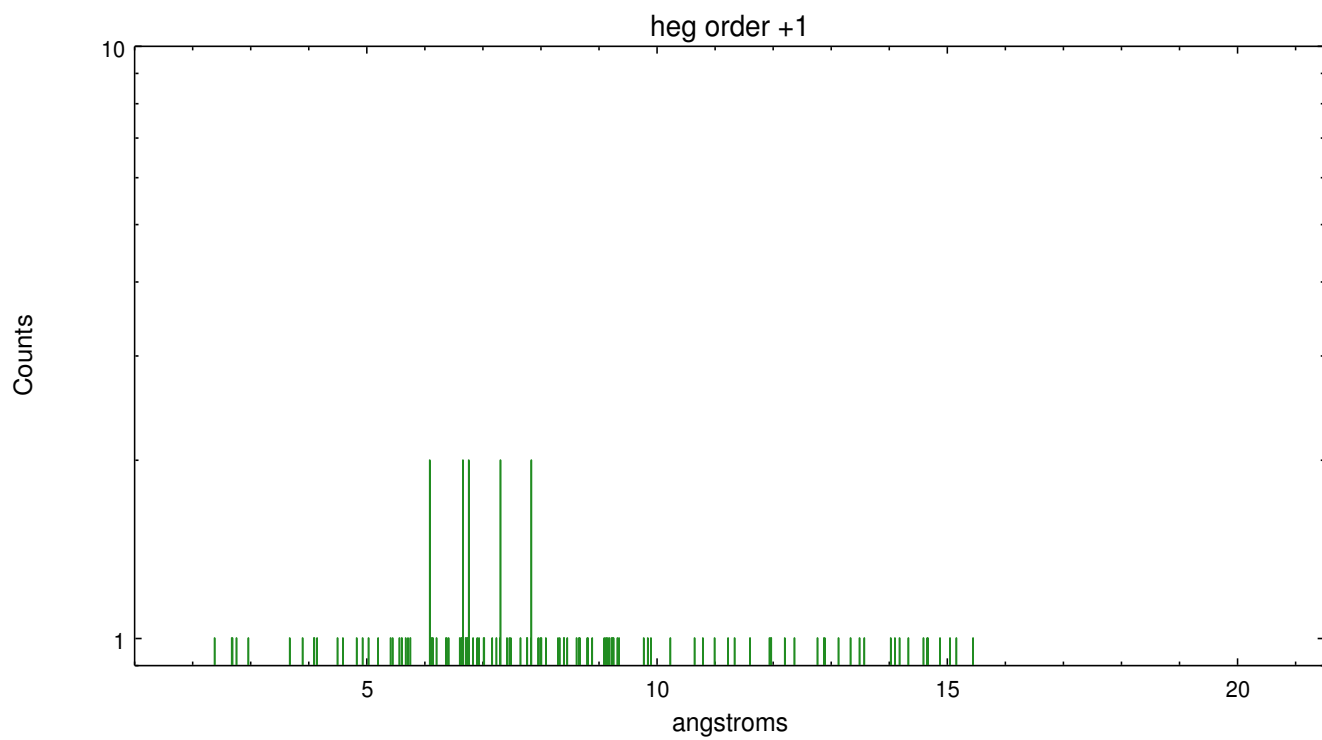
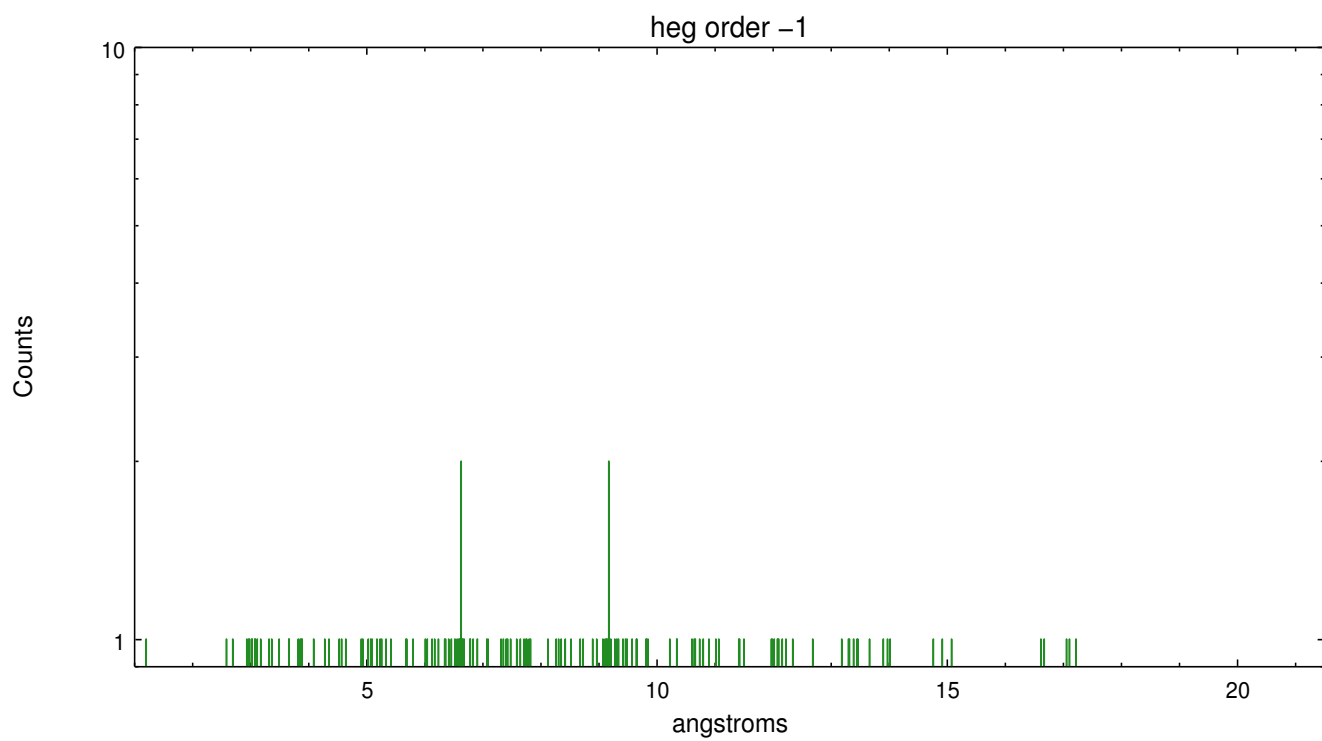
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	191	282	528	1024	733	522	271

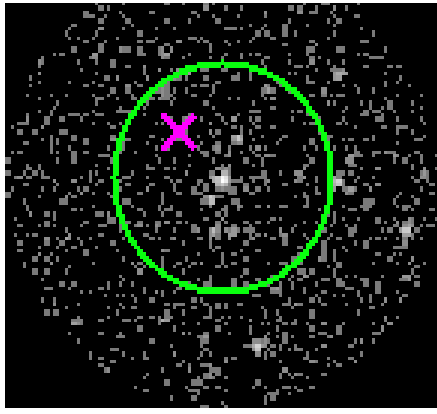




3.2 MEG Arm



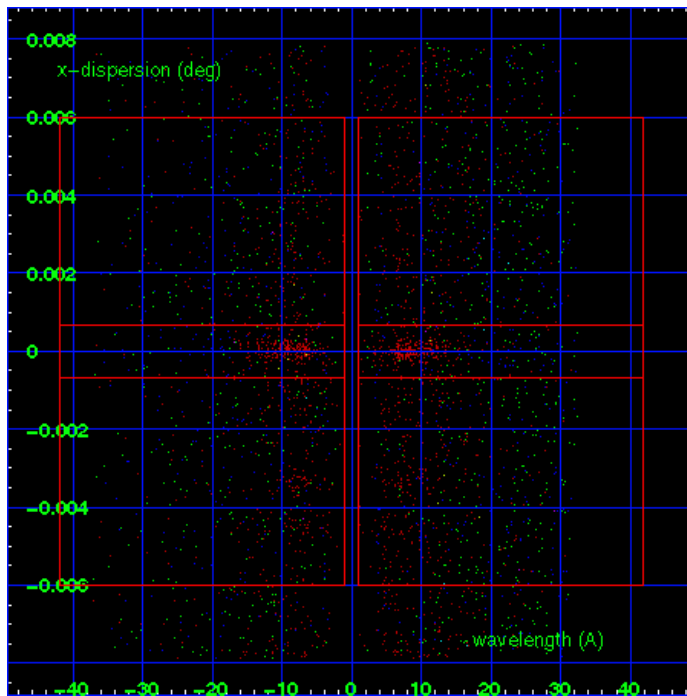
MEG Order Sort 123



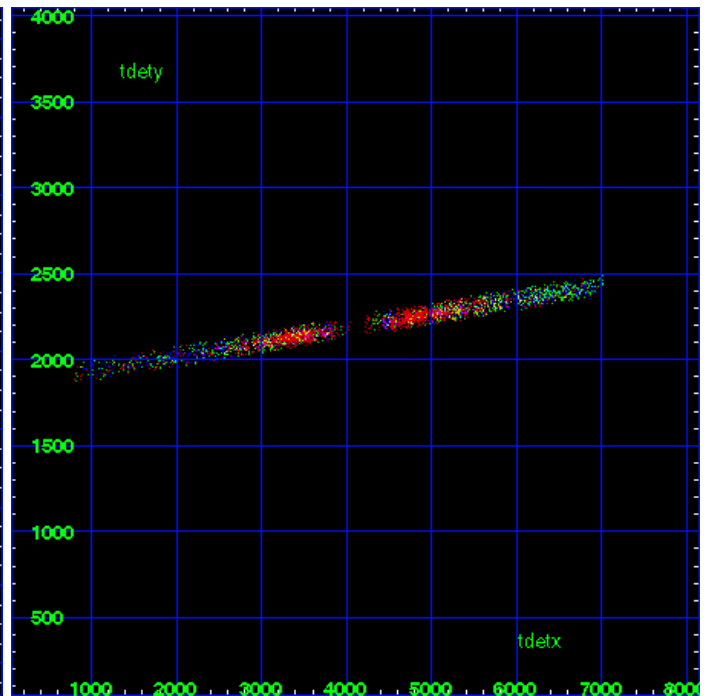
MEG Zero Order



MEG Order Sort ALL

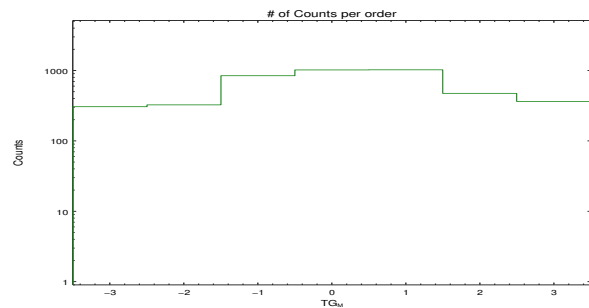


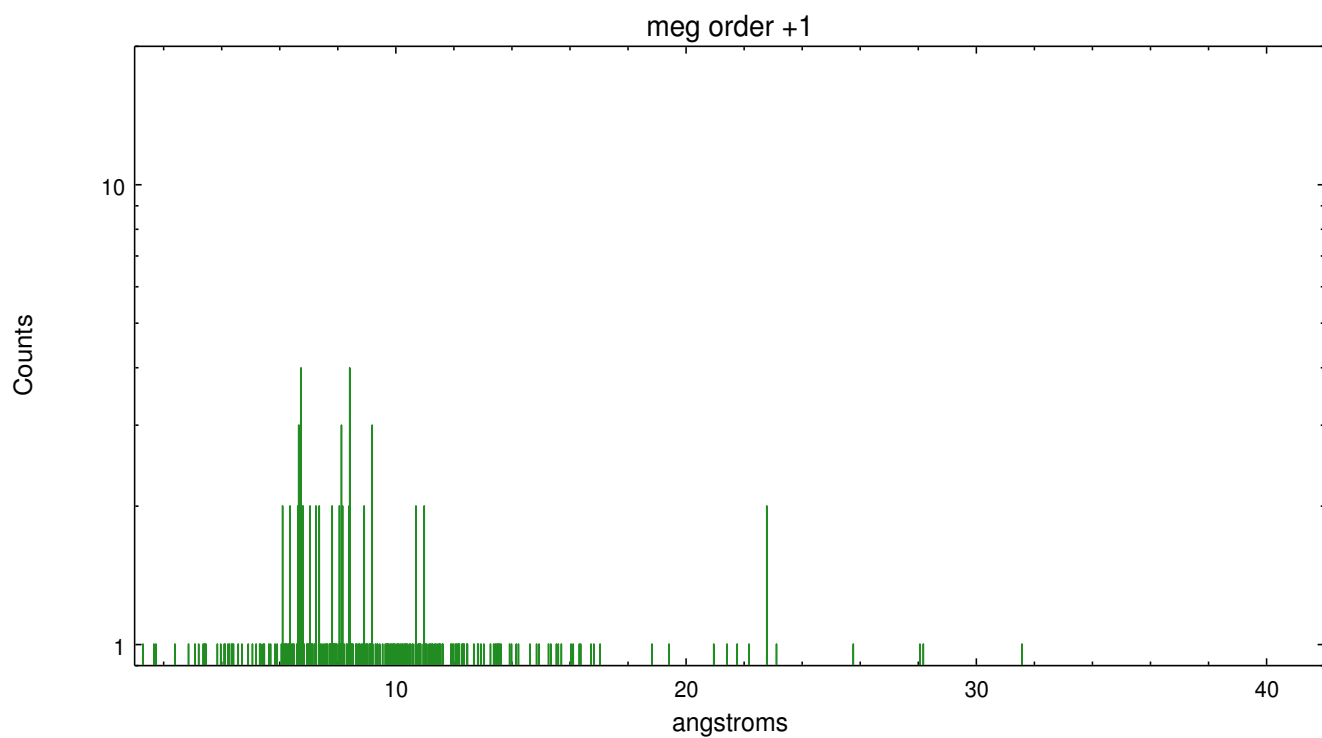
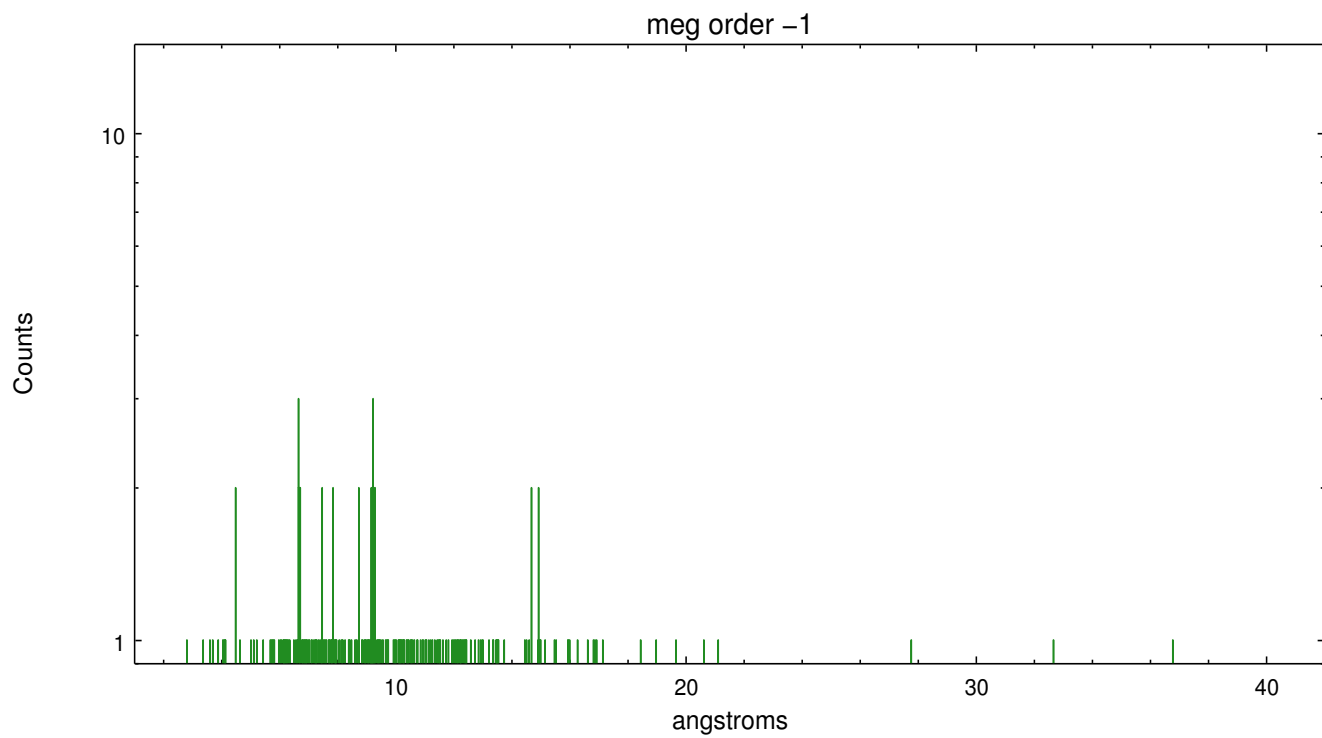
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	307	326	847	1024	1028	475	365





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.63519

A.2 Comments

Very crowded field. Zeroth order position selected was
ra=10:43:57.457, dec=-59:32:51.32. This position is the mean of the the
brightest

X-ray position for all 7 obsids of this source (5398, 7201, 7202, 7203,
7204, 7228, 7229). This zeroth order position was entered manually into
the processing. The output of the automatic source detection tool
tgdetect was not used for this processing.

===

Warning: Multiple sources in the field may cause contamination of the
primary extraction at some wavelengths. Extraction is of HD 93129AB.
Warning: Background important for HEG at about 7 A, plus arm. HD 93162
falls in background region. Comment: Complex source: [ESW2004] is within
2 arcsec of the target in the dispersion direction. Extraction probably
includes both sources with offset in wavelength. These two objects
cannot be extracted separately.

====

Several x-ray sources are included in the region defining the zeroth
order and in the dispersed spectrum. Spectrum may need to be
re-extracted in CIAO to separate the sources. Serendipitous zeroth order
image and dispersed spectrum of HD 93162 present; zeroth order of
HD93162 has a bad CCD row and off-axis PSF. The zeroth order and the
dispersed spectrum of HD93162 lie on top of the spectral arm of the
dispersed spectrum of the primary target. User could possibly exploit
asymmetry in plus and minus orders.