

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 7202 - L2 Version 3
Chandra X-Ray Center

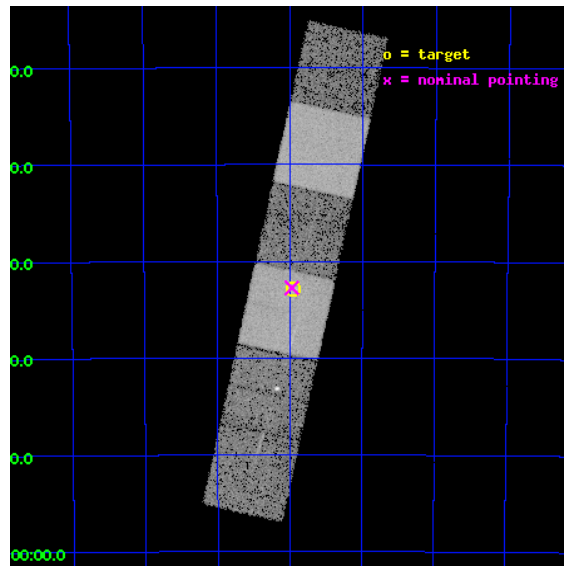
L2 Processing Date : Jan 2 2013

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1 Front

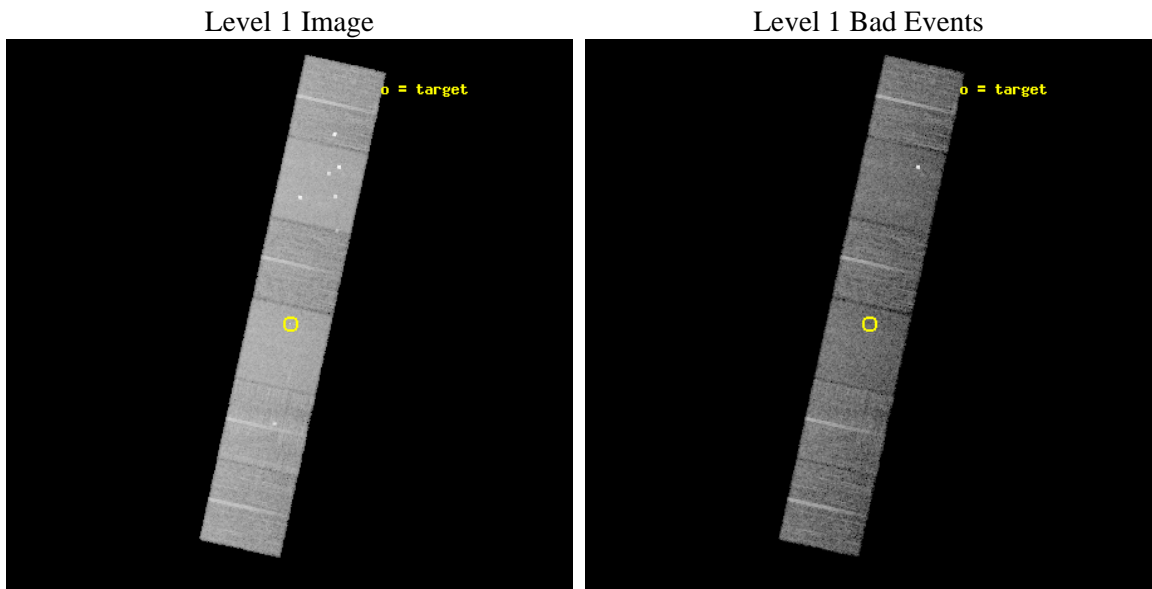
seq_num	200332	Sequence number
obs_id	7202	Observation id
title	A Chandra HETGS Survey of O-Stars	Proposal title
observer	Dr Wayne Waldron	Principal investigator
object	HD93129AB	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	160.989583	Observer's specified target RA [deg]
dec_targ	-59.5475	Observer's specified target Dec [deg]
ra_nom	160.99233303274	Nominal RA [deg]
dec_nom	-59.545934987956	Nominal Dec [deg]
roll_nom	102.45897816492	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9631.999964118	Sum of GTIs [s]
livetime	9510.0337808783	Livetime [s]
ontime4	9631.999964118	Sum of GTIs [s]
ontime5	9631.999964118	Sum of GTIs [s]
ontime6	9631.999964118	Sum of GTIs [s]
ontime7	9631.999964118	Sum of GTIs [s]
ontime8	9631.999964118	Sum of GTIs [s]
ontime9	9631.999964118	Sum of GTIs [s]
l2events	135890	Number of level 2 events



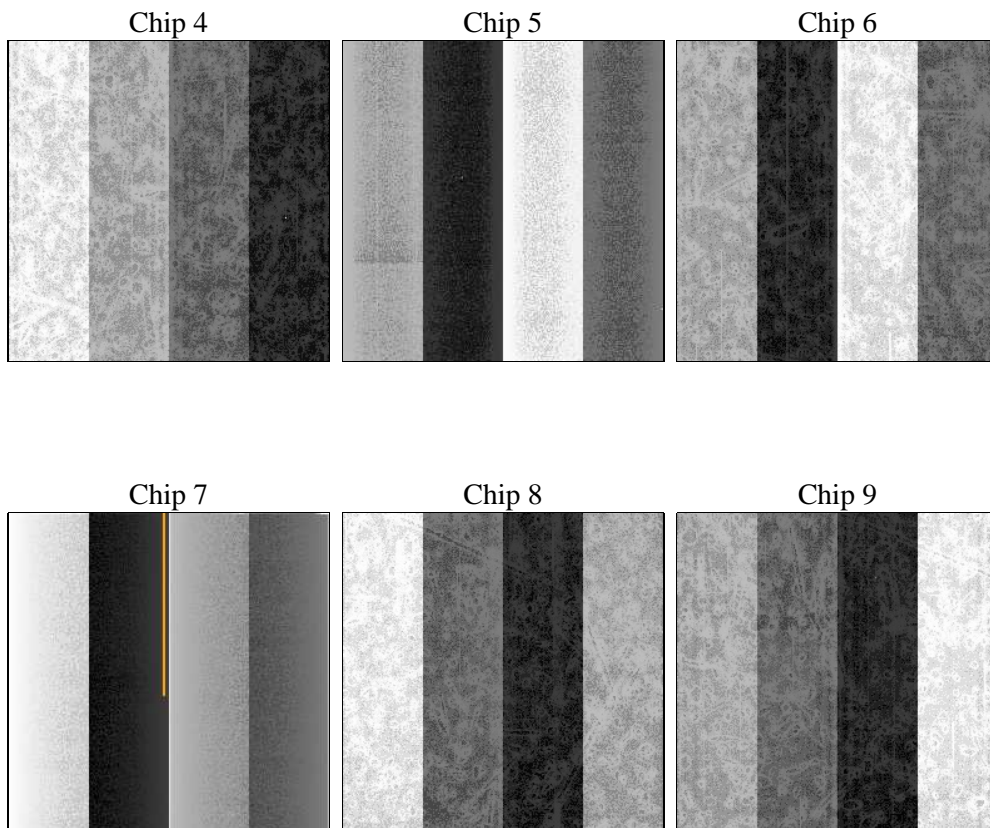
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9500.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	9631.999964118	Sum of GTIs [s]
caldsver	4.5.5	 	ontime4	9631.999964118	Sum of GTIs [s]
date	2012-12-31T11:44:11	Date and time of file creation	ontime5	9631.999964118	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	9631.999964118	Sum of GTIs [s]
			ontime7	9631.999964118	Sum of GTIs [s]
			ontime8	9631.999964118	Sum of GTIs [s]
			ontime9	9631.999964118	Sum of GTIs [s]
			l1events	689177	Number of level 1 events

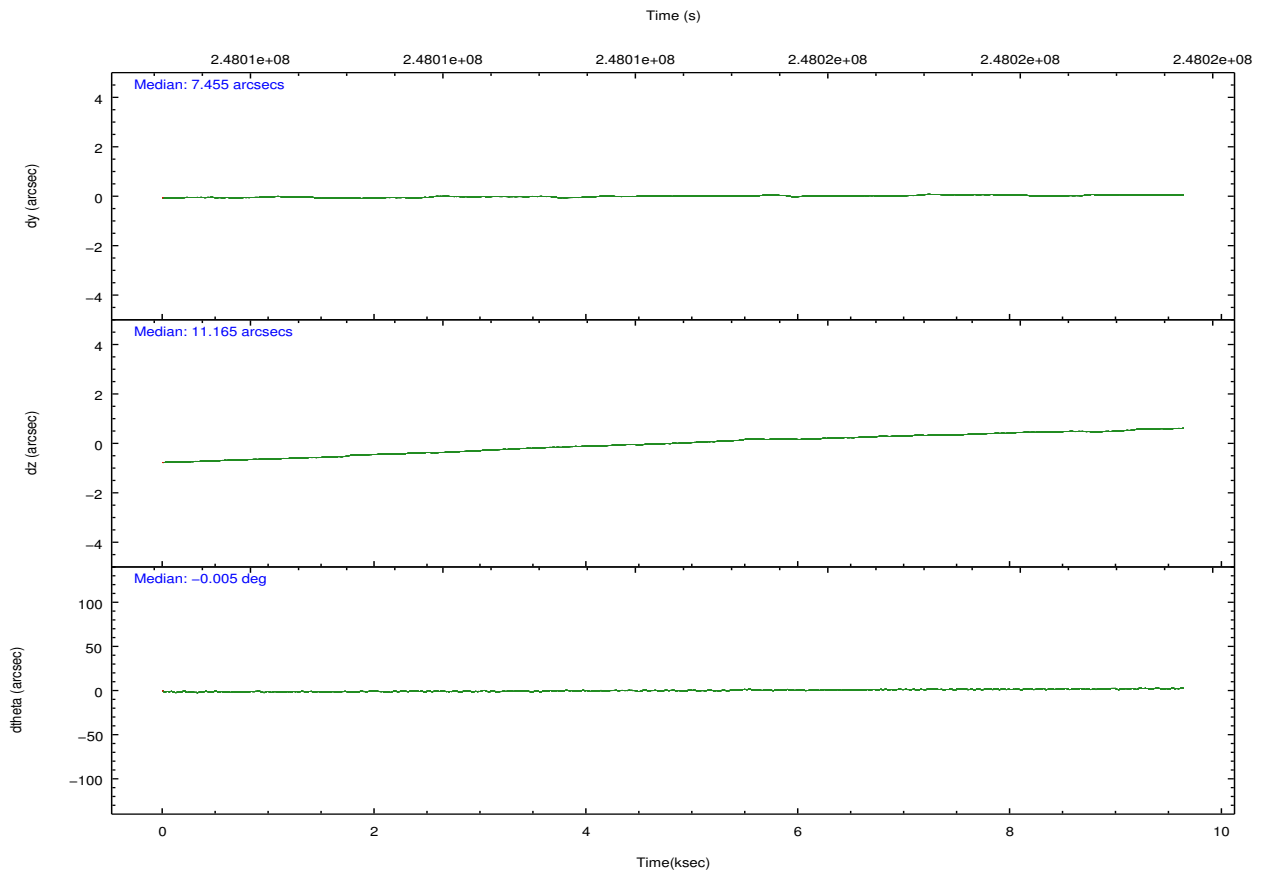
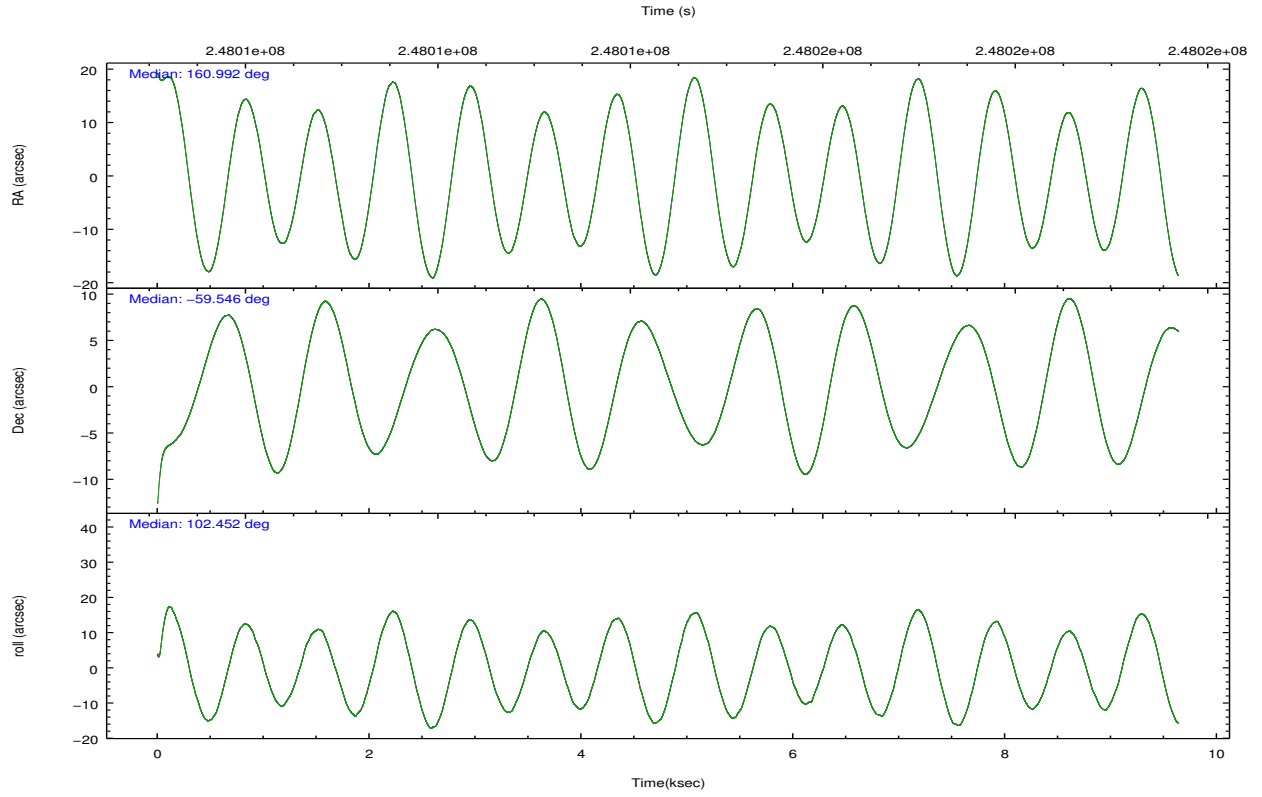
2.1.4 Events

	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	104563	146731	91879	130295	121016	94693	grade 0 events	8223	9684	5245	5394	10431	6441
rejected events	92132	89992	81434	82778	96692	83132		7%	6%	5%	4%	8%	6%
rejected %	88%	61%	88%	63%	79%	87%	grade 1 events	102	259	43	107	112	68
								0%	0%	0%	0%	0%	0%
							grade 2 events	2329	19161	2407	11239	5867	2444
								2%	13%	2%	8%	4%	2%
							grade 3 events	1156	2432	1135	5061	2850	1094
								1%	1%	1%	3%	2%	1%
							grade 4 events	1115	2308	1080	4944	2607	1131
								1%	1%	1%	3%	2%	1%
							grade 5 events	4112	10848	4152	12131	5555	4598
								3%	7%	4%	9%	4%	4%
							grade 6 events	1835	33967	2316	29049	6756	2274
								1%	23%	2%	22%	5%	2%
							grade 7 events	85691	68072	75501	62370	86838	76643
								81%	46%	82%	47%	71%	80%

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	160.9923330327364	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.565754	-59.54593498795585	Alternating exposures requested	N	N
[deg] Pointing Roll	102.334079	102.4589781649223	[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)	248009709.184000	248007757.23506			
Observation start date	2005-11-10T11:34:05	2005-11-10T11:02:37			
[s] Observation end time (MET)	248019209.184000	248020130.52313			
Observation end date	2005-11-10T14:12:25	2005-11-10T14:28:50			
Read mode	TIMED	TIMED			

2.3 Aspect



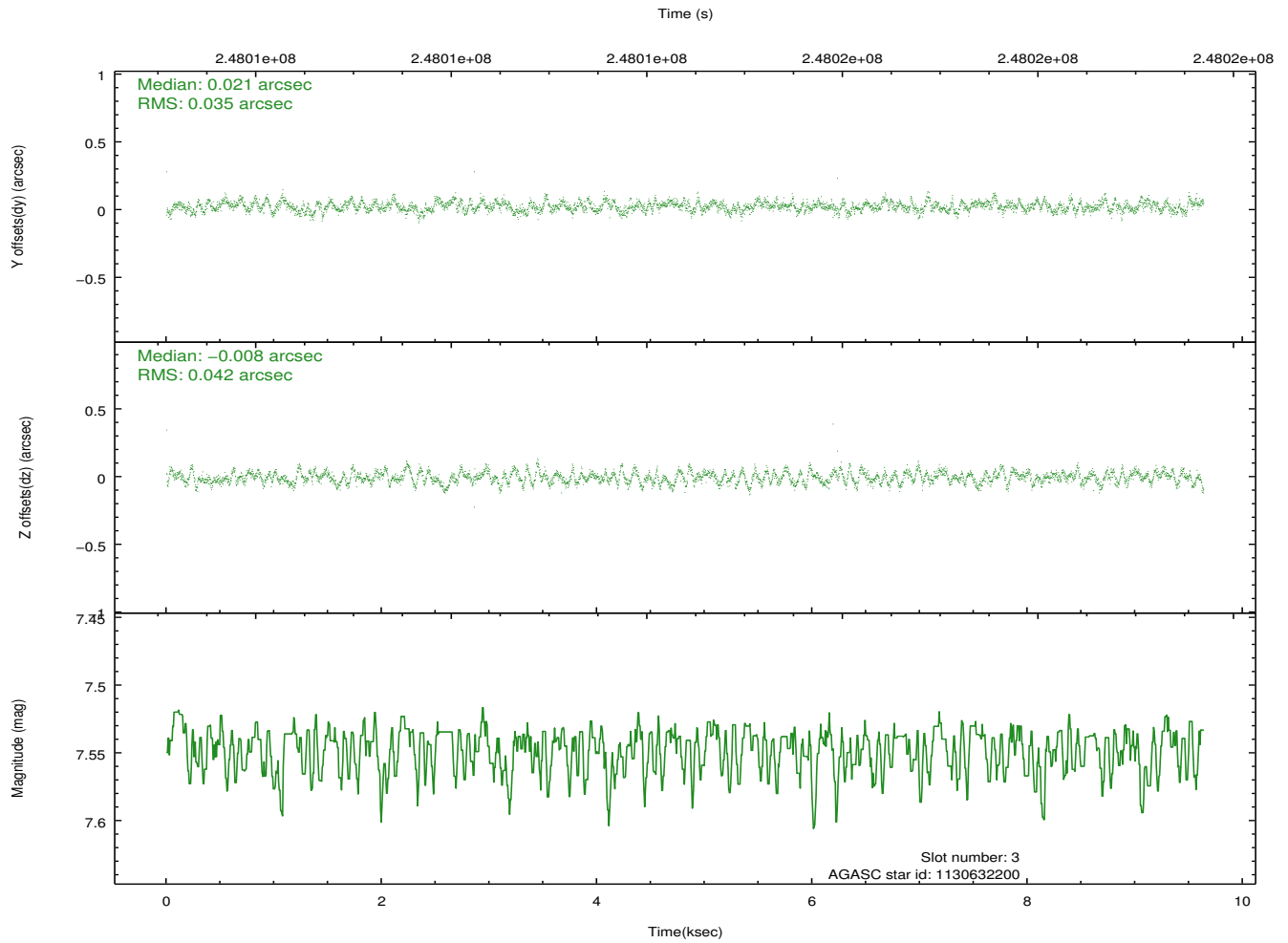
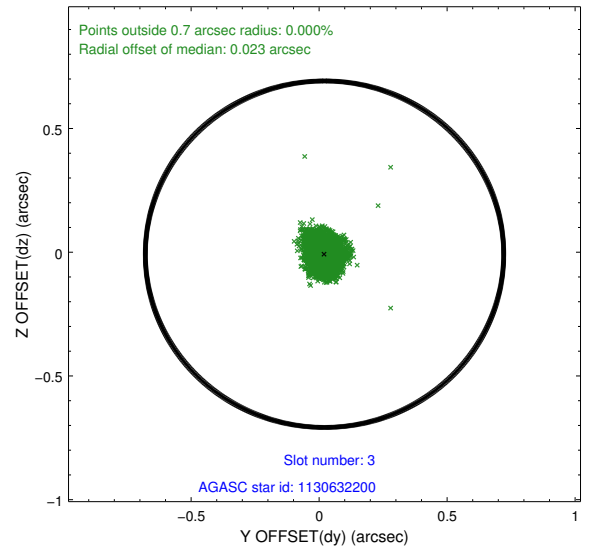
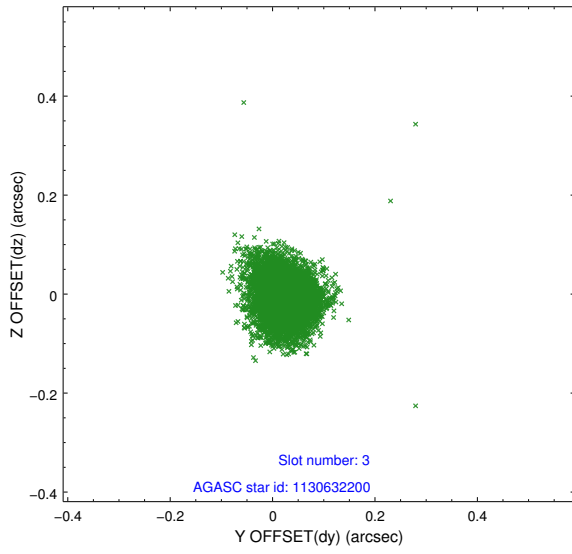
Slot Statistics

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	2351	-0.041	-0.019	0.011	0.017	0.000000	0.000000	-760.23	-1732.44
1	FID	ACIS-S-4	7.21	2351	0.088	0.024	0.009	0.014	0.000000	0.000000	2152.90	175.56
2	FID	ACIS-S-5	7.23	2351	-0.080	0.003	0.009	0.015	0.000000	0.000000	-1812.42	169.78
3	GUIDE	1130632200	7.55	4702	0.021	-0.008	0.058	0.092	161.433843	-59.407820	395.37	-845.15
4	GUIDE	1130643264	6.65	4702	-0.108	-0.106	0.063	0.100	160.322990	-59.676912	-123.23	1340.59
5	GUIDE	1130644984	8.76	4630	-0.046	0.043	0.068	0.107	162.123834	-59.745452	-1071.59	-1797.73
6	GUIDE	1128940640	8.36	4702	0.112	0.080	0.061	0.097	159.517239	-59.074495	2294.24	2361.65
7	GUIDE	1130640672	8.28	4701	0.019	-0.011	0.074	0.116	162.096044	-59.540805	-342.29	-1917.27

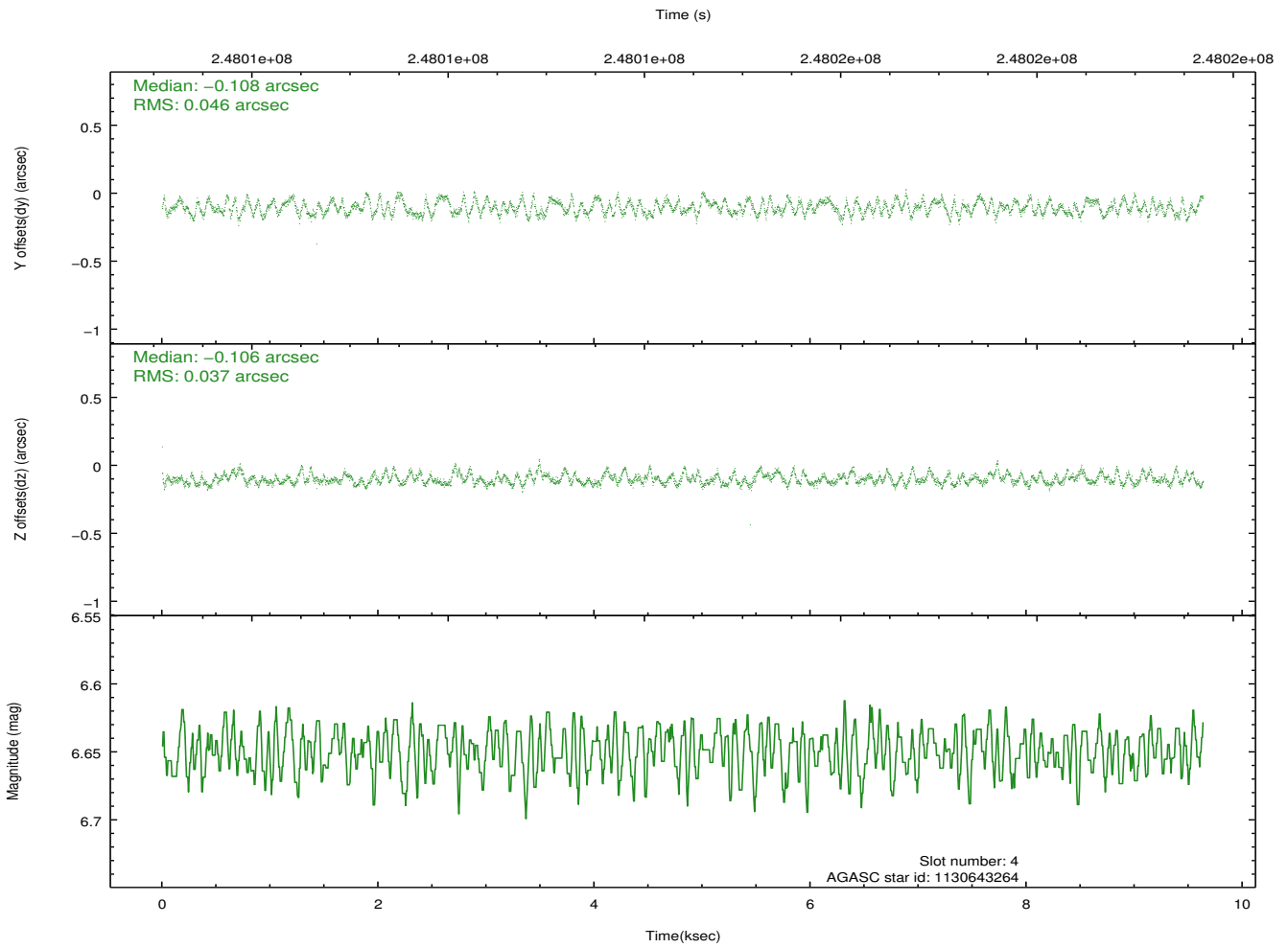
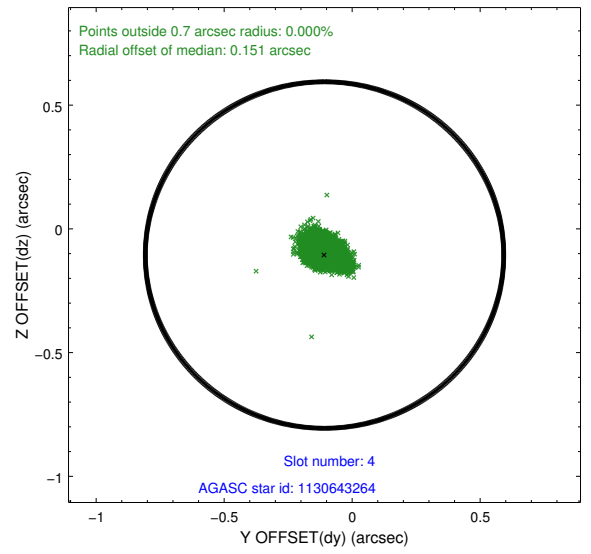
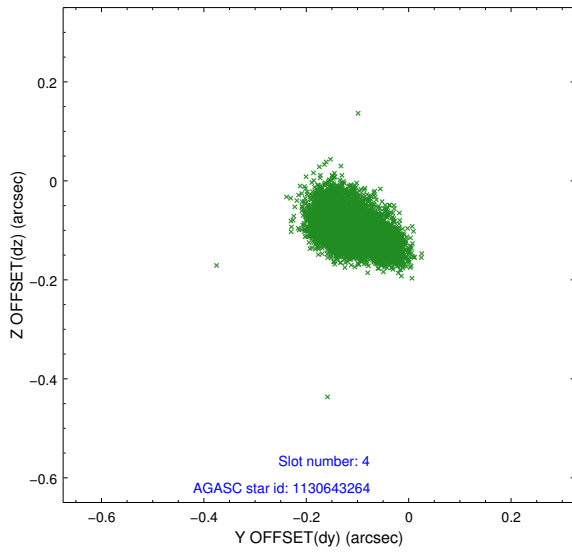
∞

2.4 Star Slots

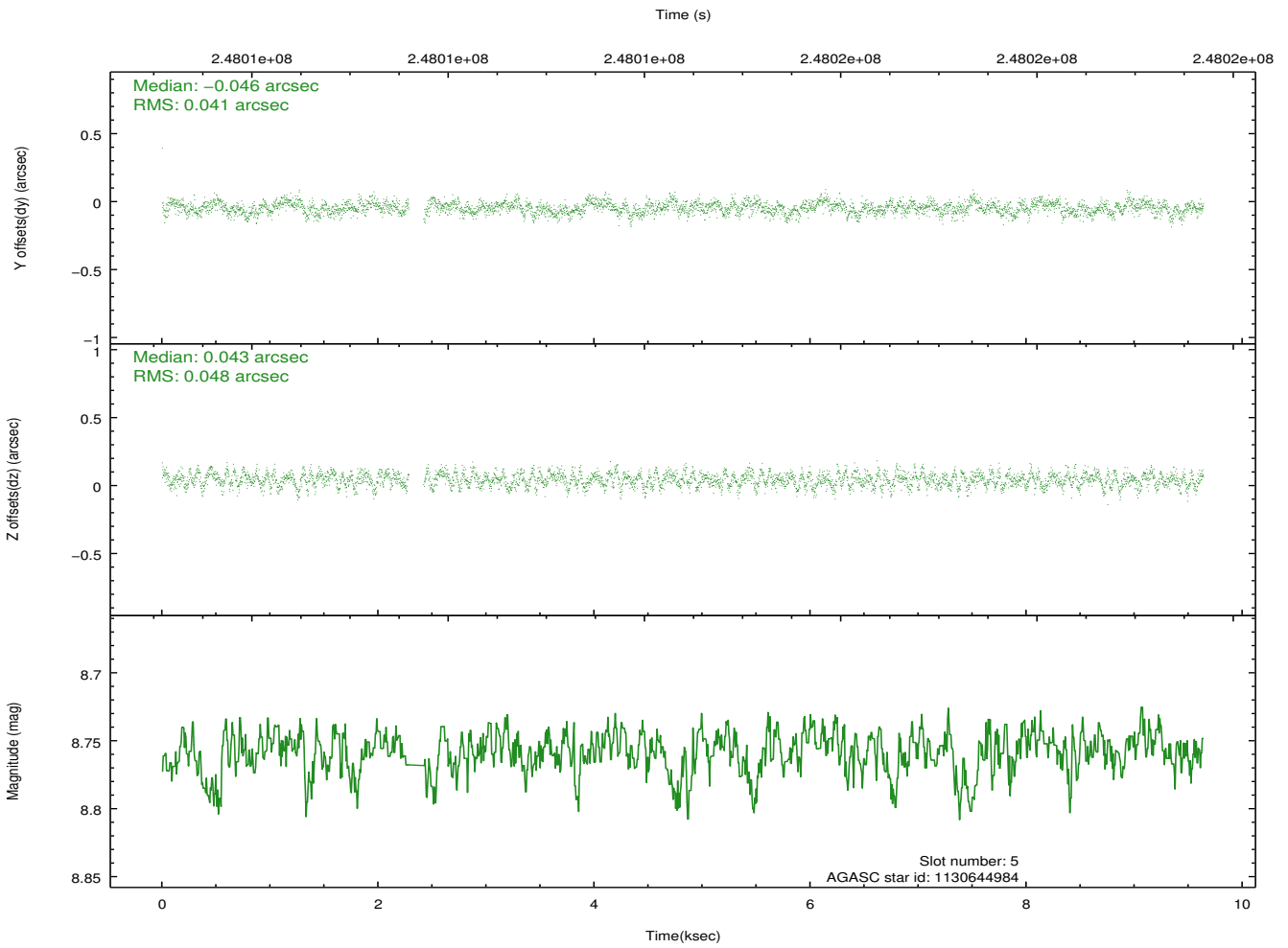
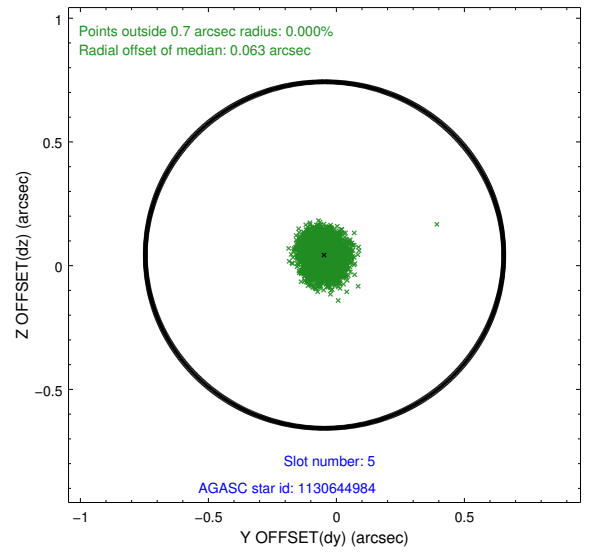
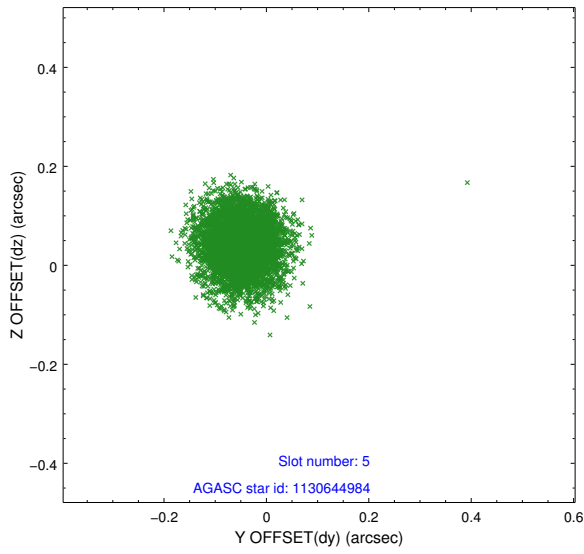
2.4.1 Slot 3



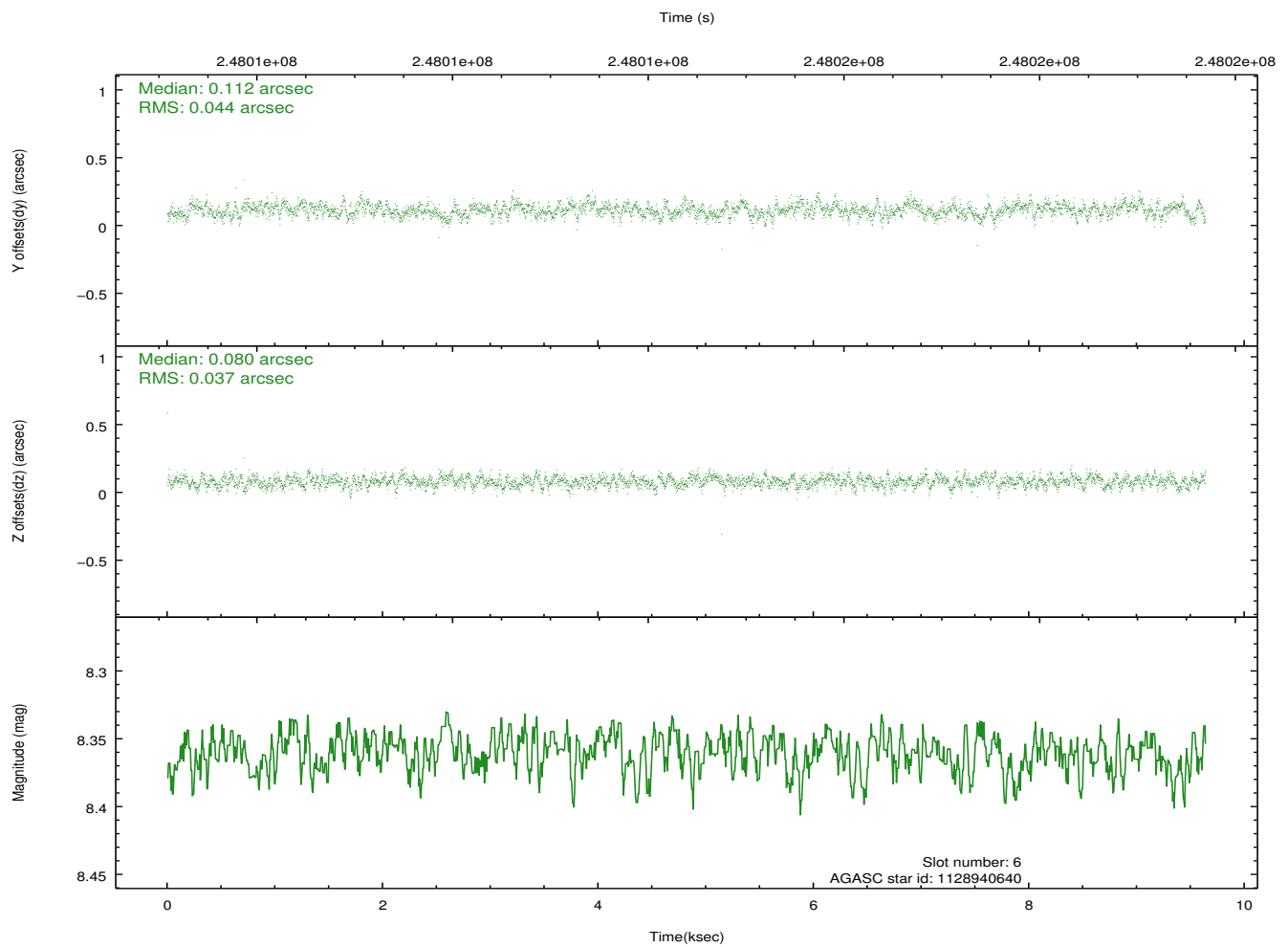
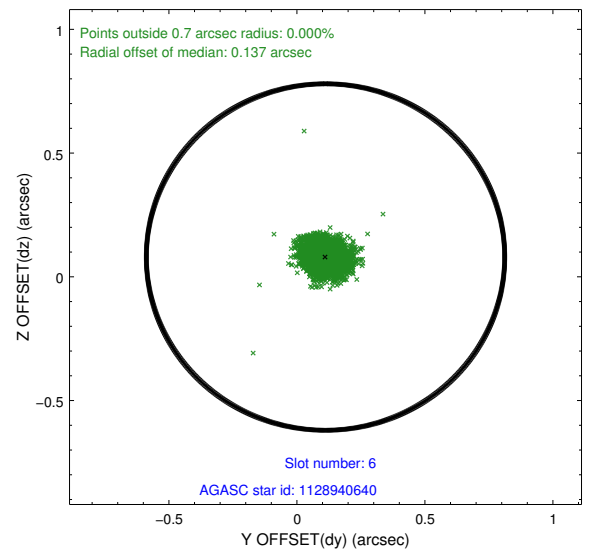
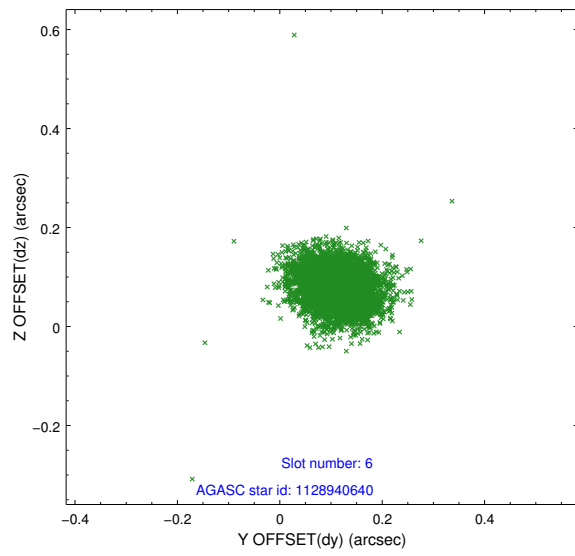
2.4.2 Slot 4



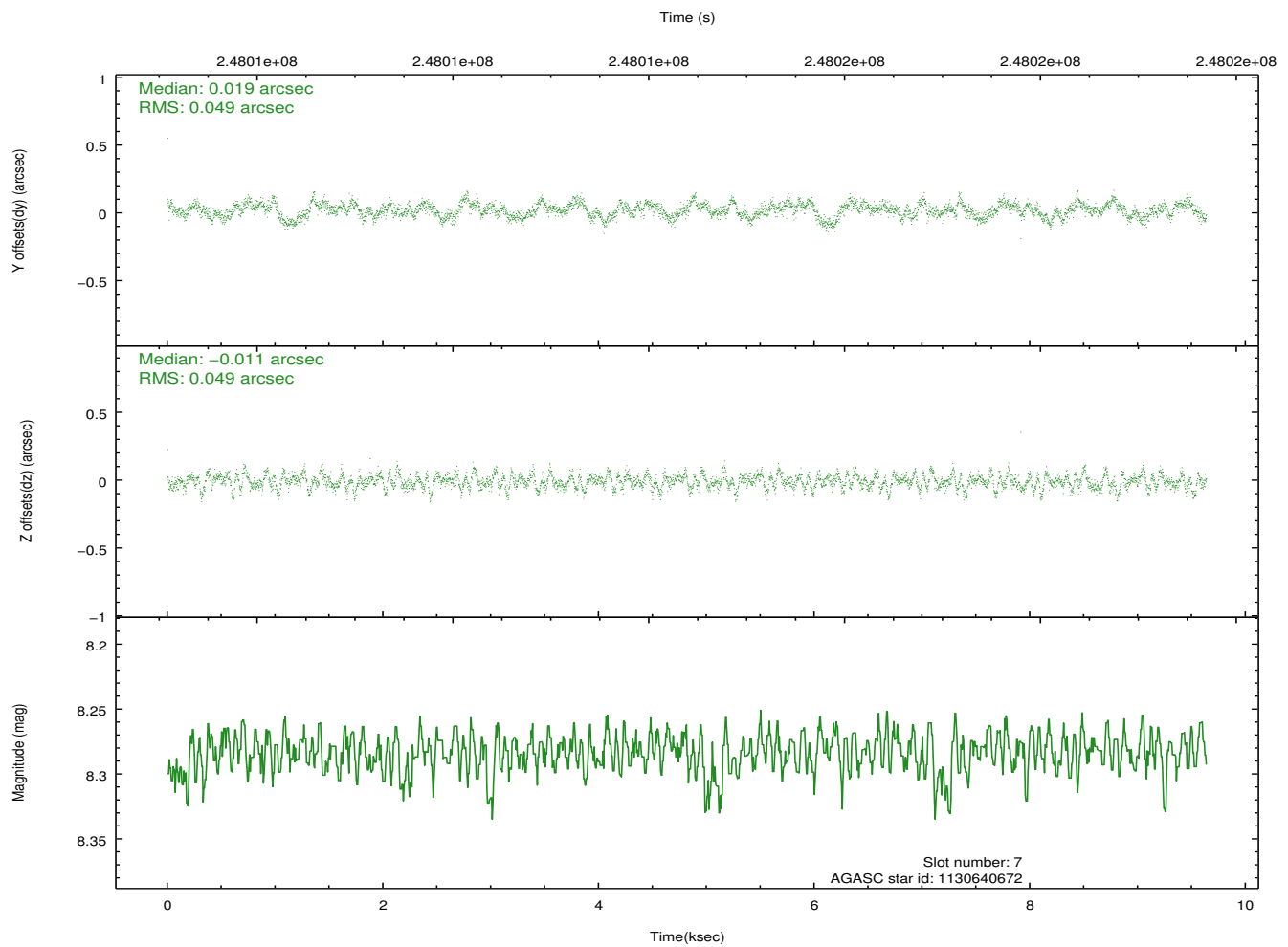
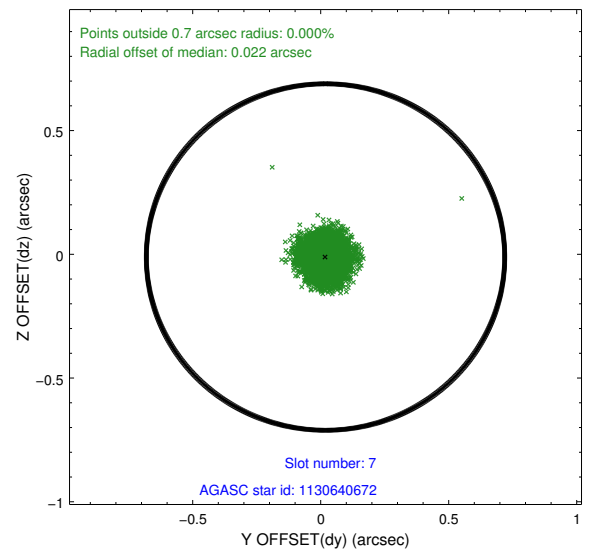
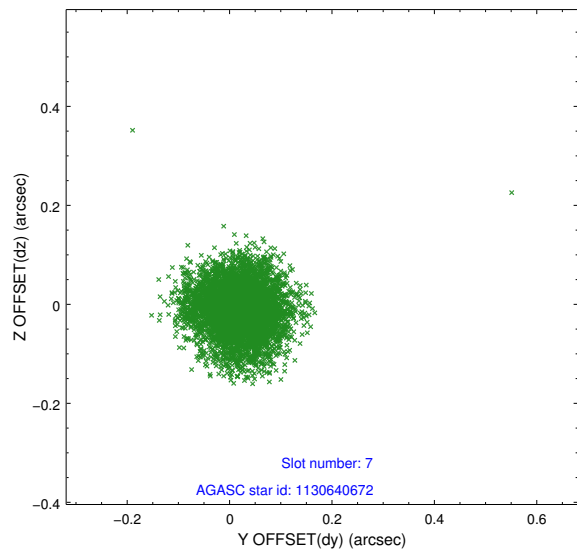
2.4.3 Slot 5



2.4.4 Slot 6

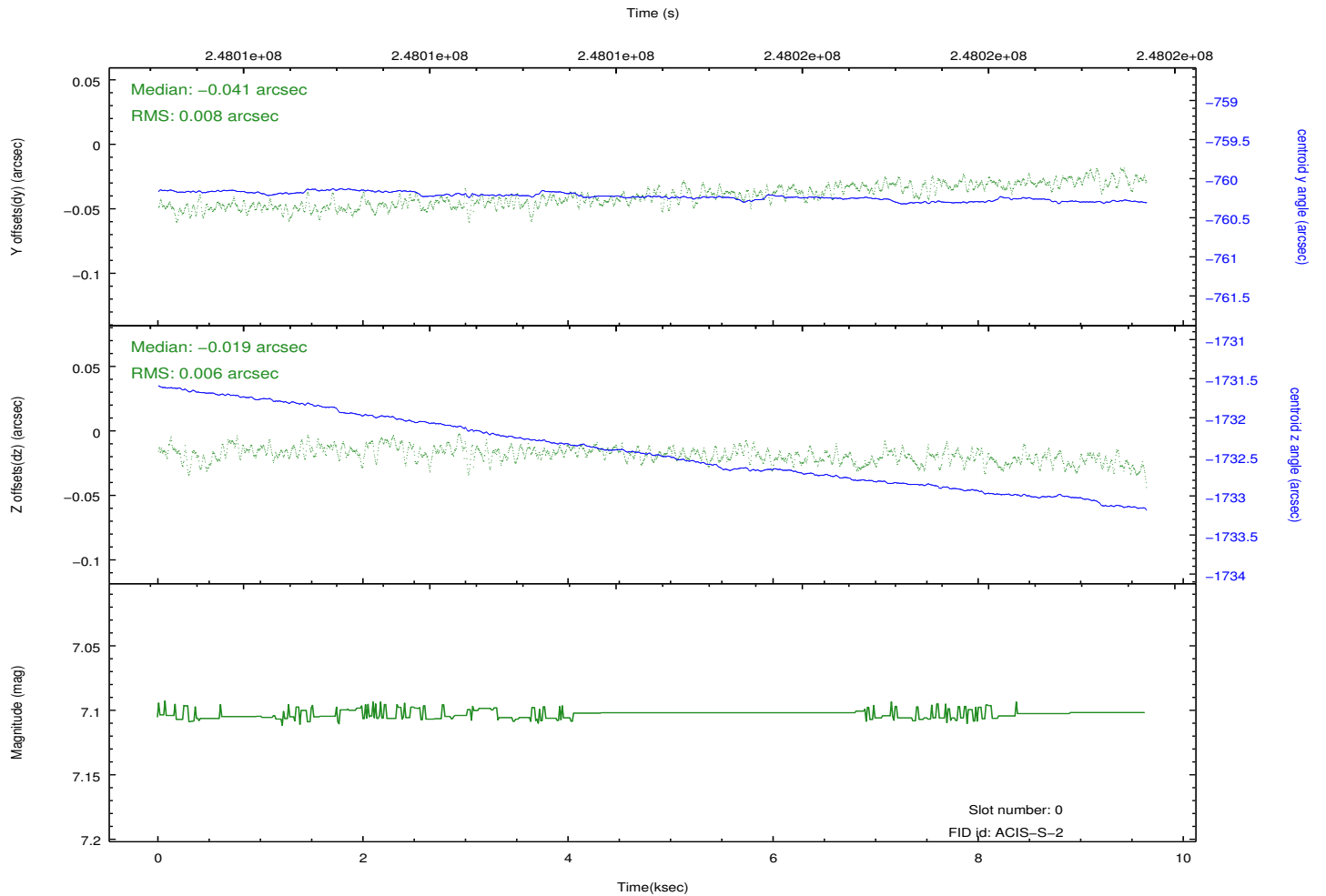
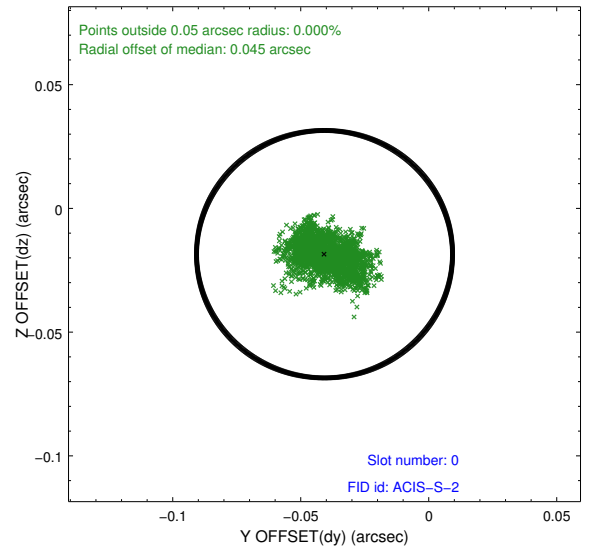
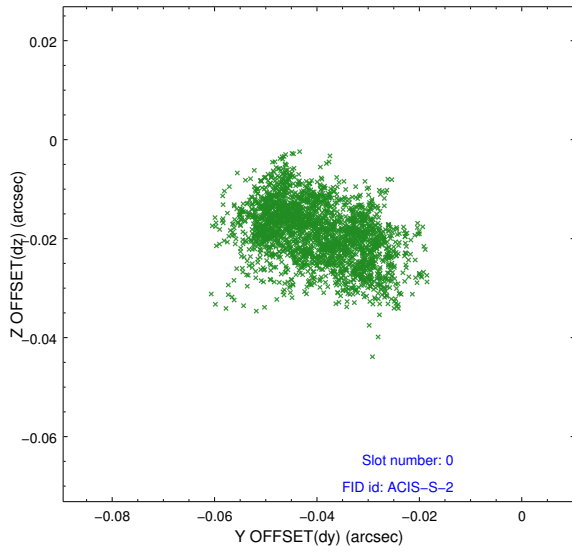


2.4.5 Slot 7

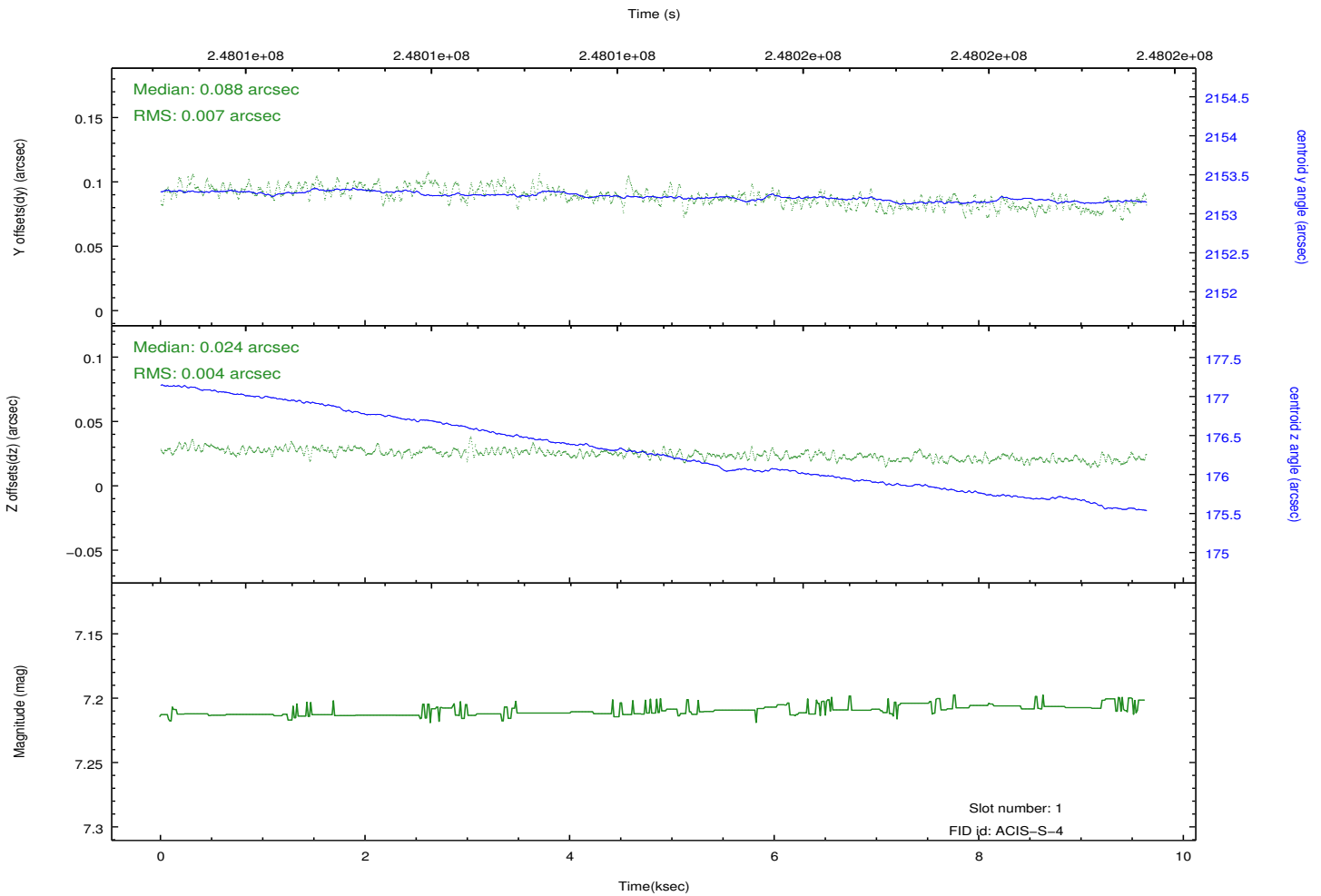
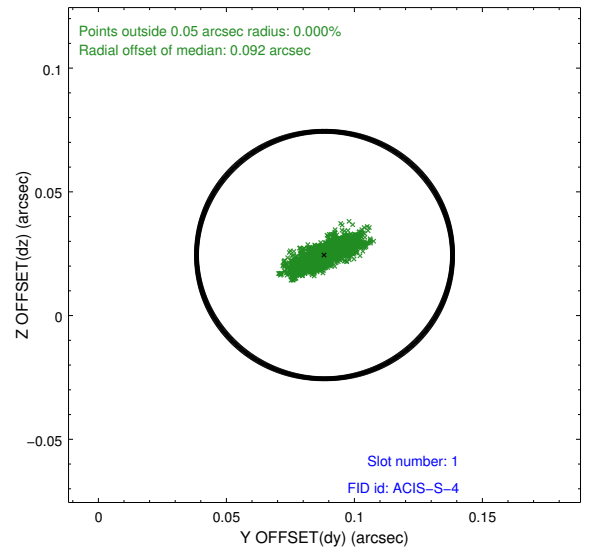
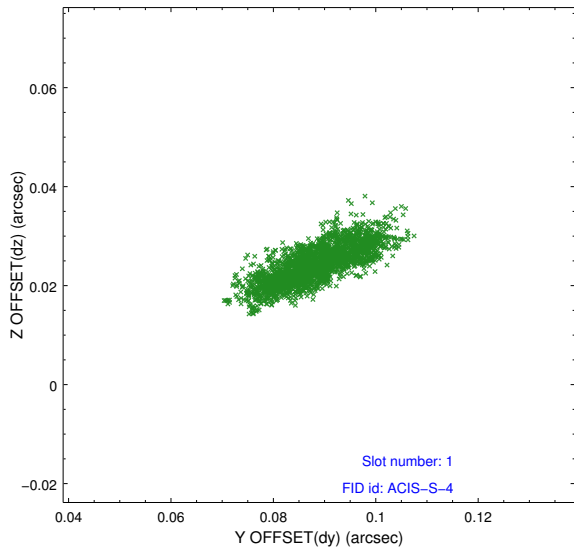


2.5 FID Slots

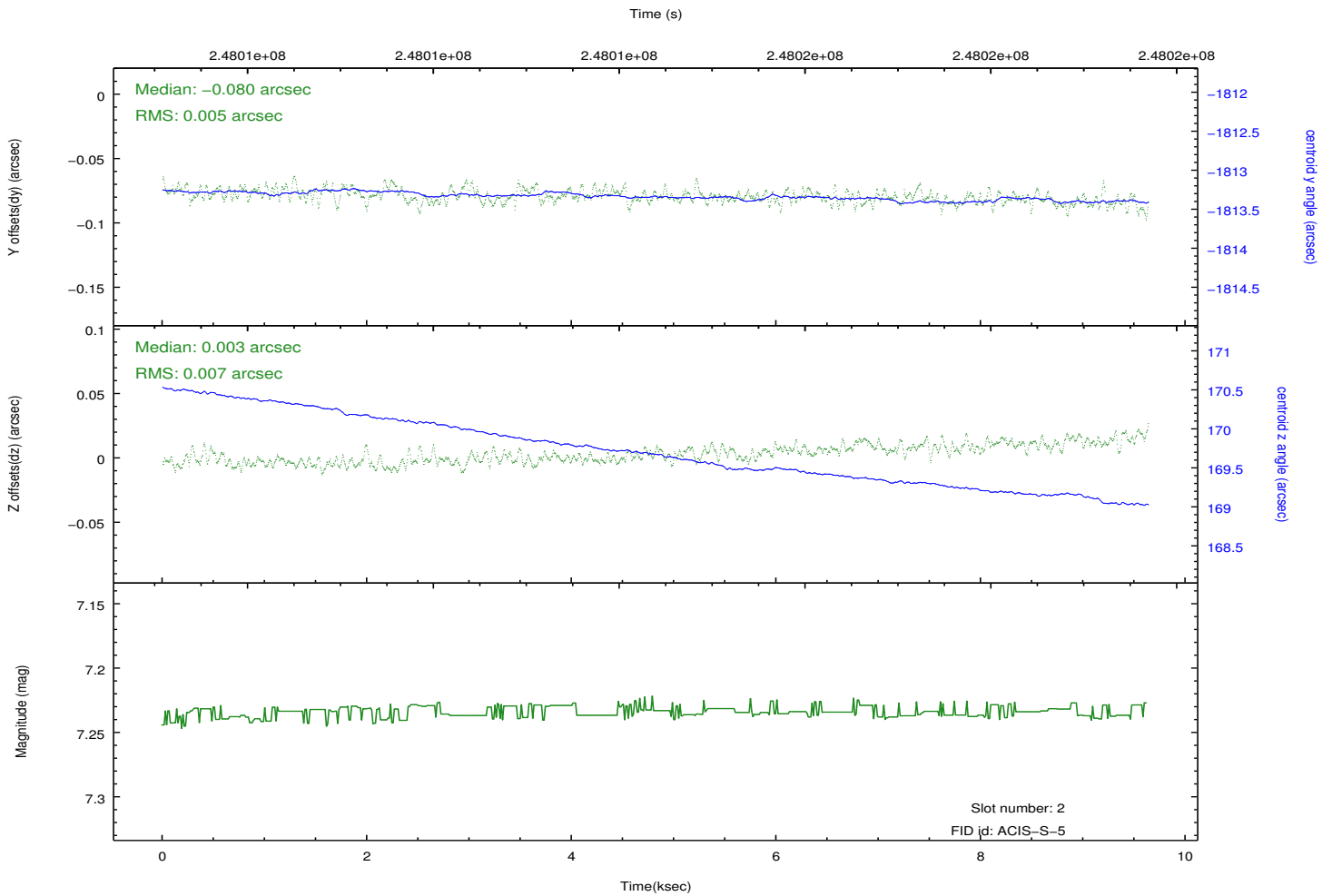
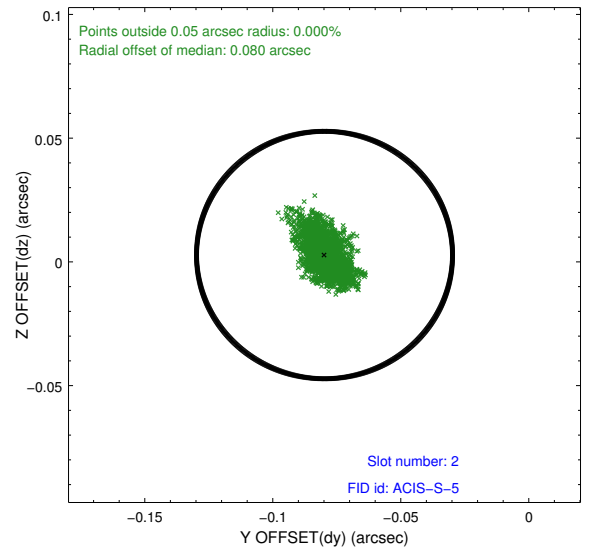
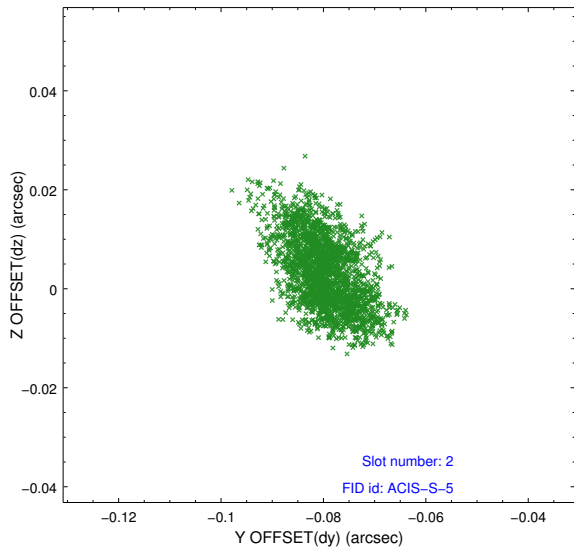
2.5.1 Slot 0



2.5.2 Slot 1

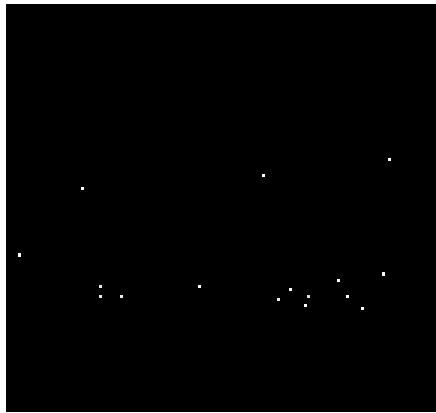


2.5.3 Slot 2

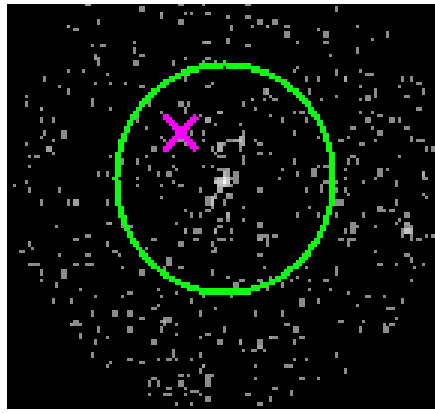


3 Gratings

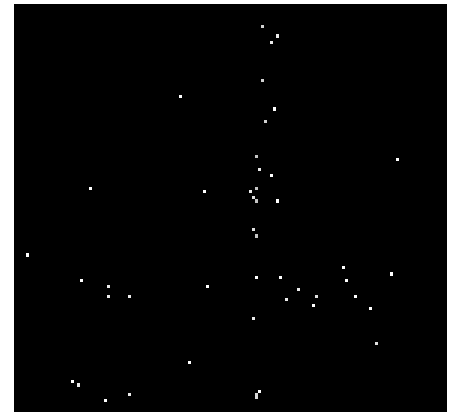
3.1 HEG Arm



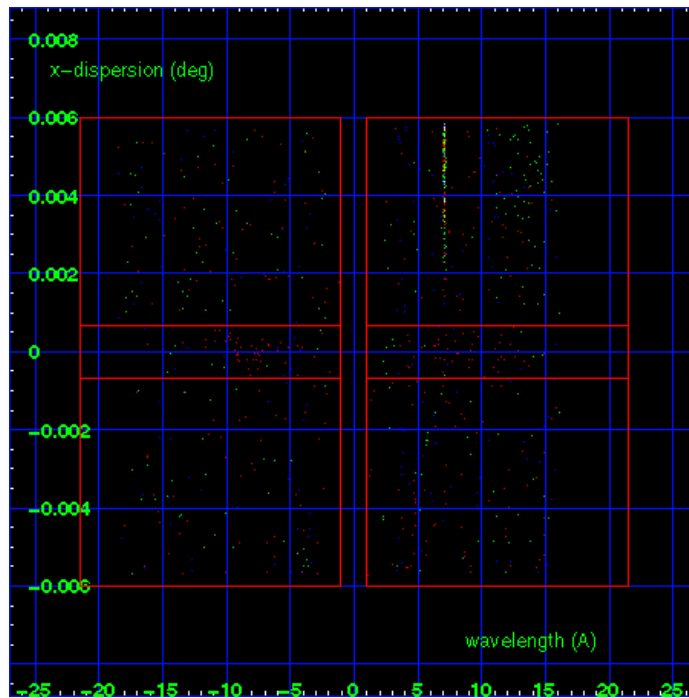
HEG Order Sort 123



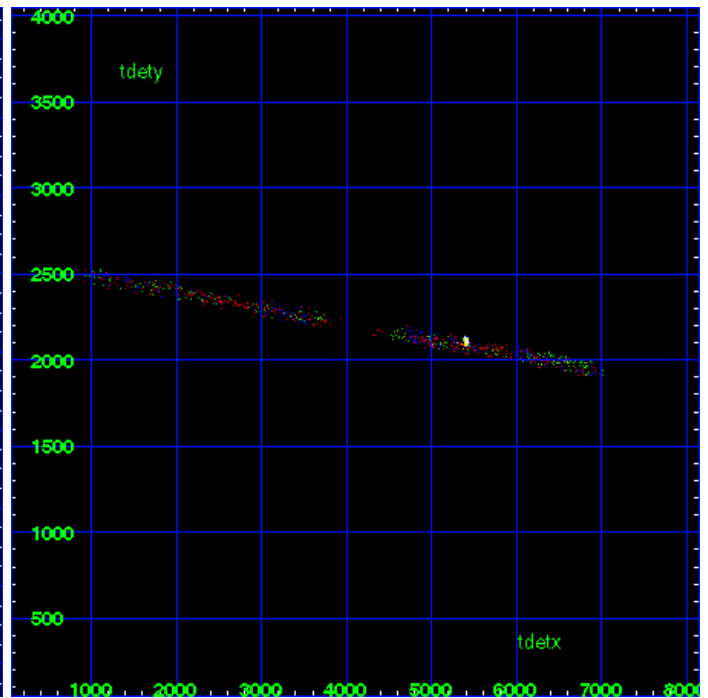
HEG Zero Order



HEG Order Sort ALL

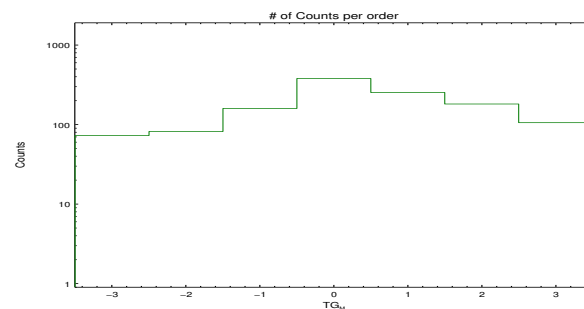


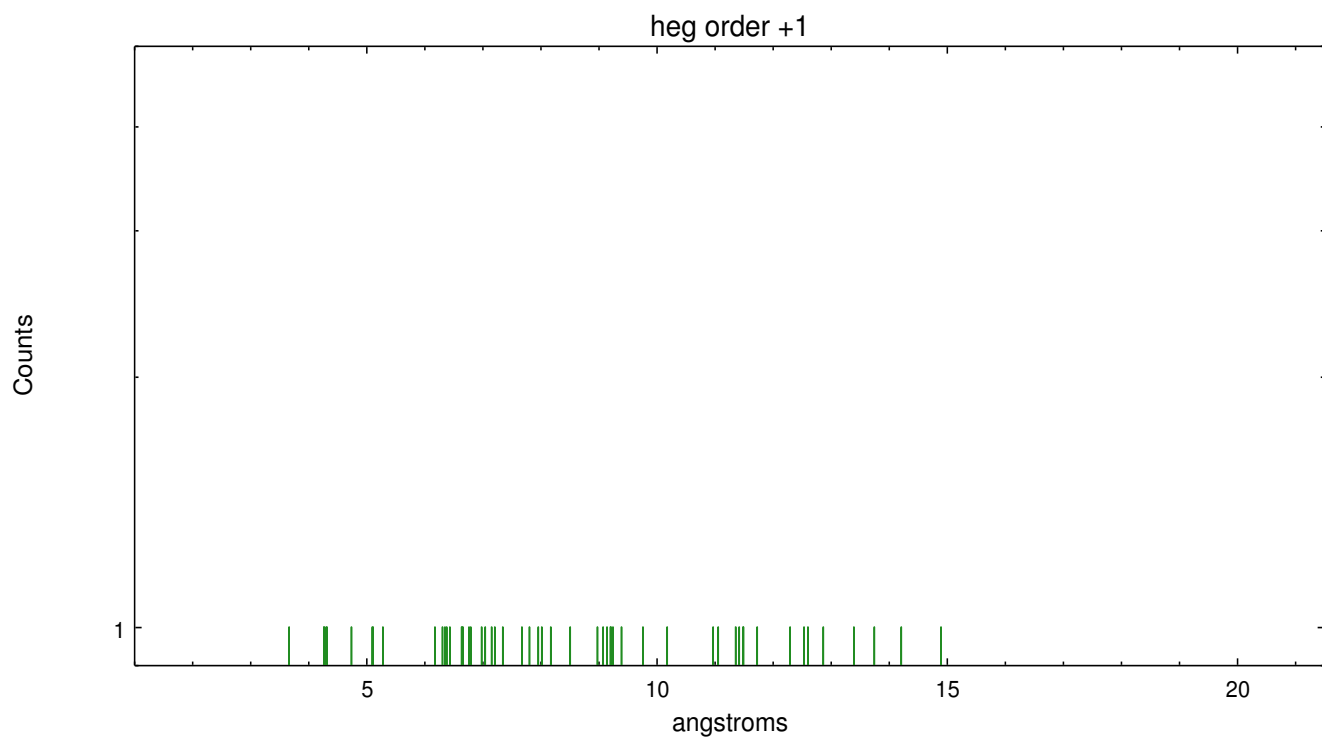
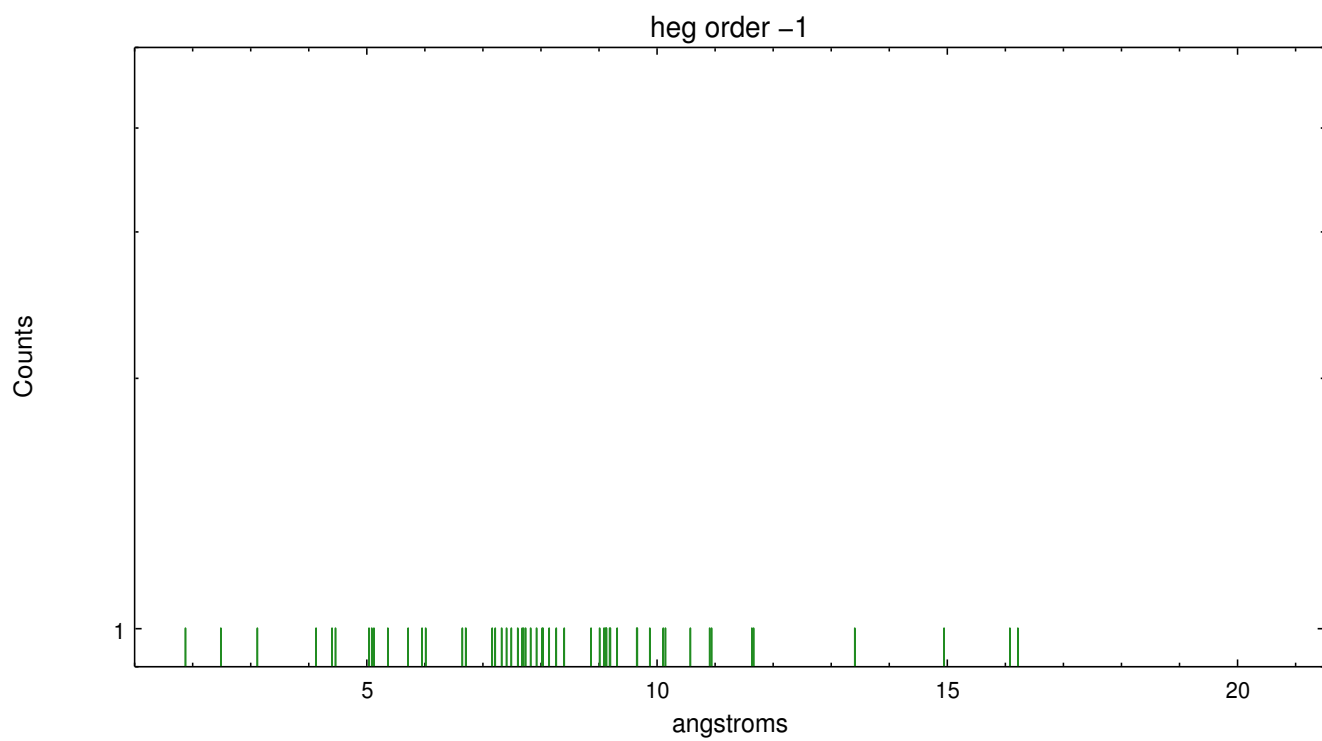
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	73	82	160	381	254	182	106

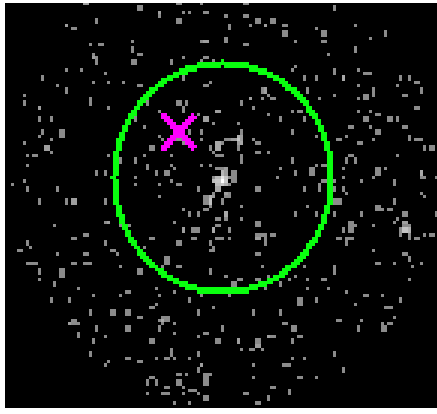




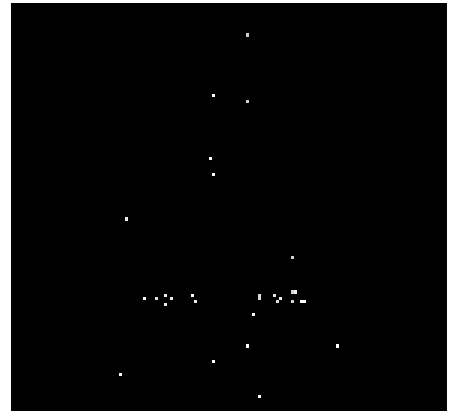
3.2 MEG Arm



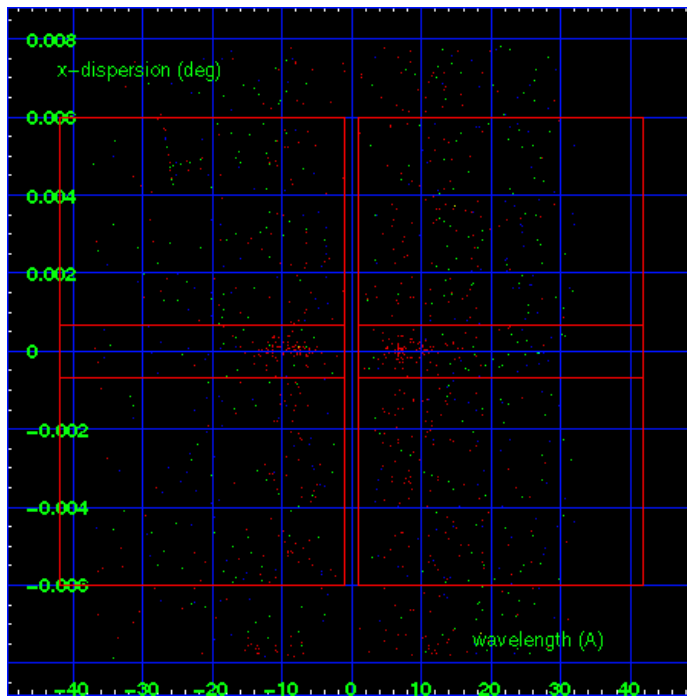
MEG Order Sort 123



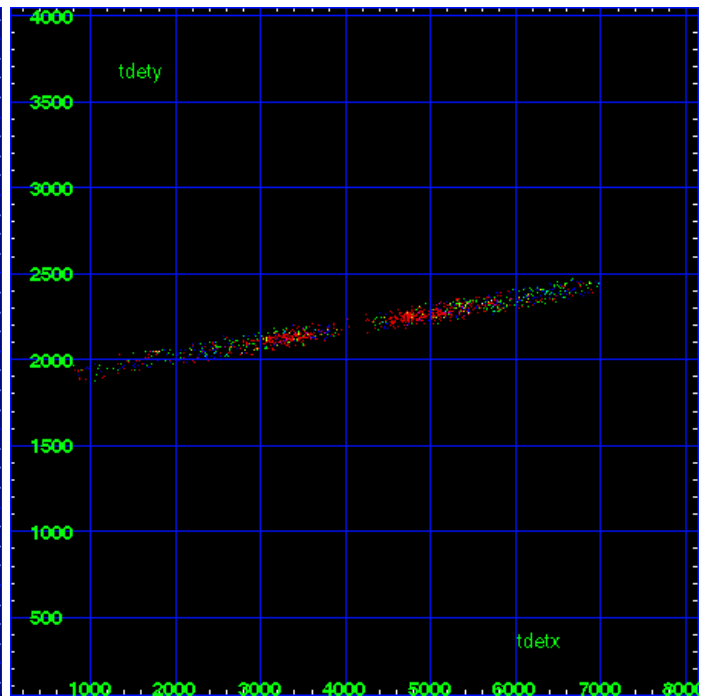
MEG Zero Order



MEG Order Sort ALL

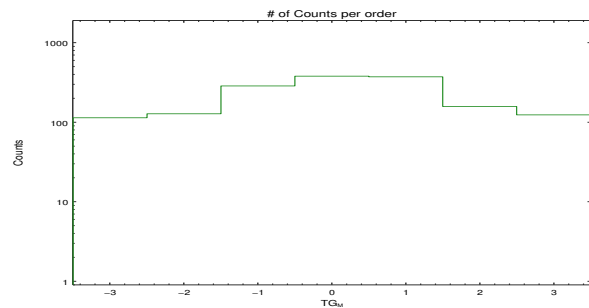


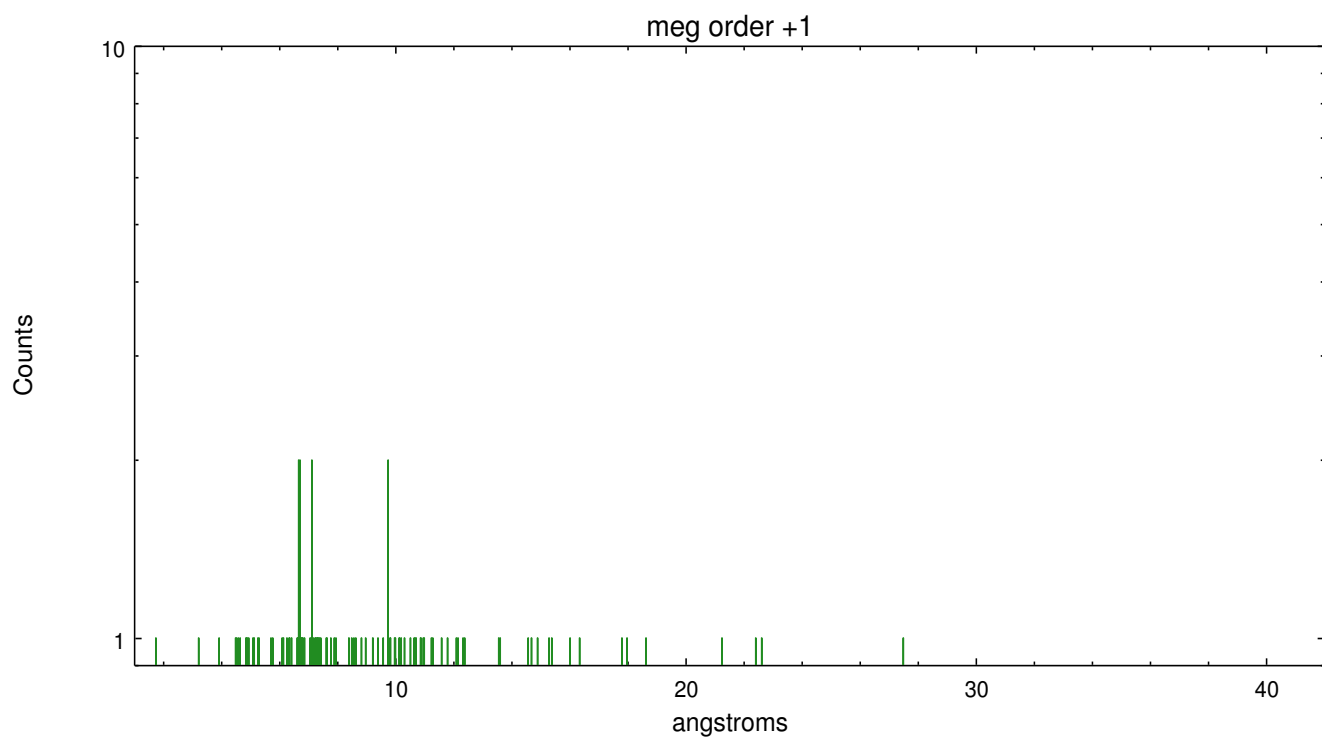
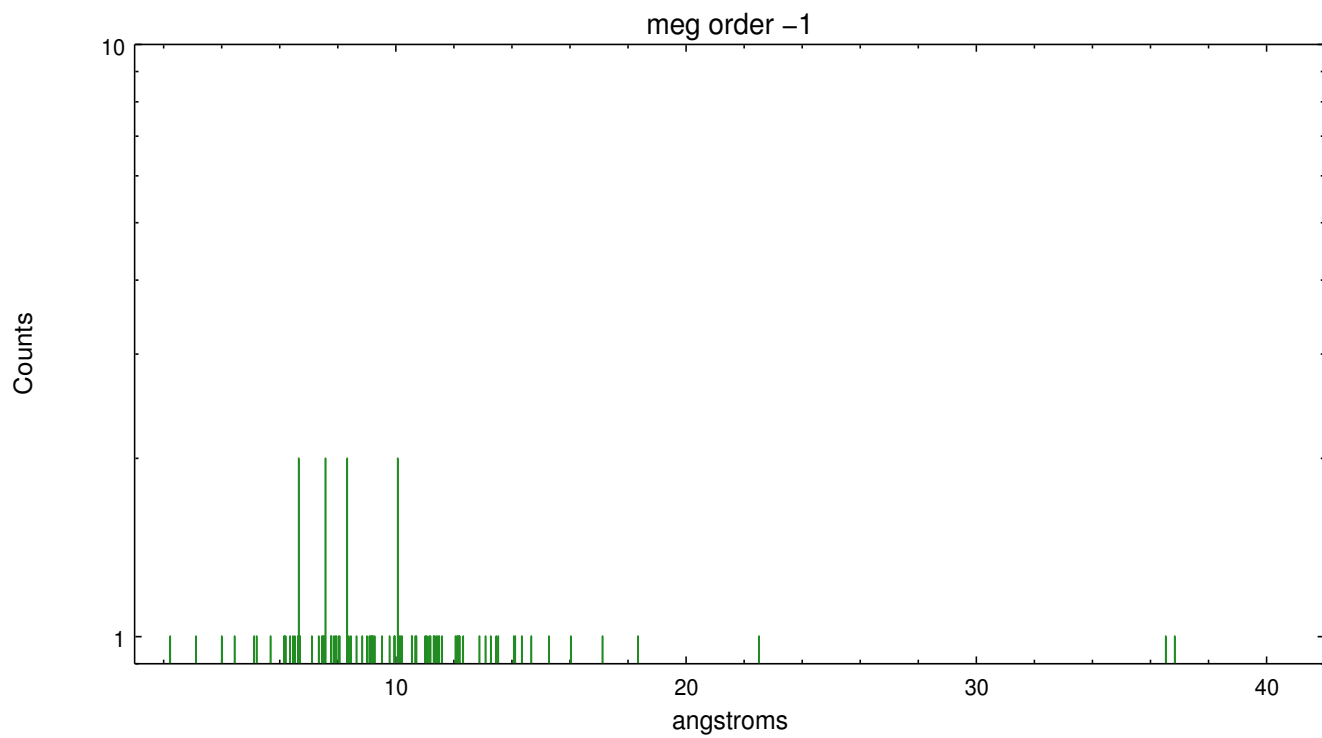
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	114	128	287	381	374	158	124





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	9.631999

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.

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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.