

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5475 - L2 Version 4
Chandra X-Ray Center

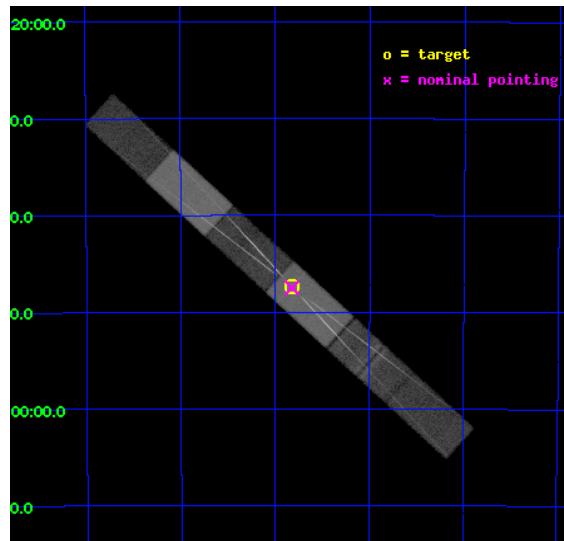
L2 Processing Date : Dec 24 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

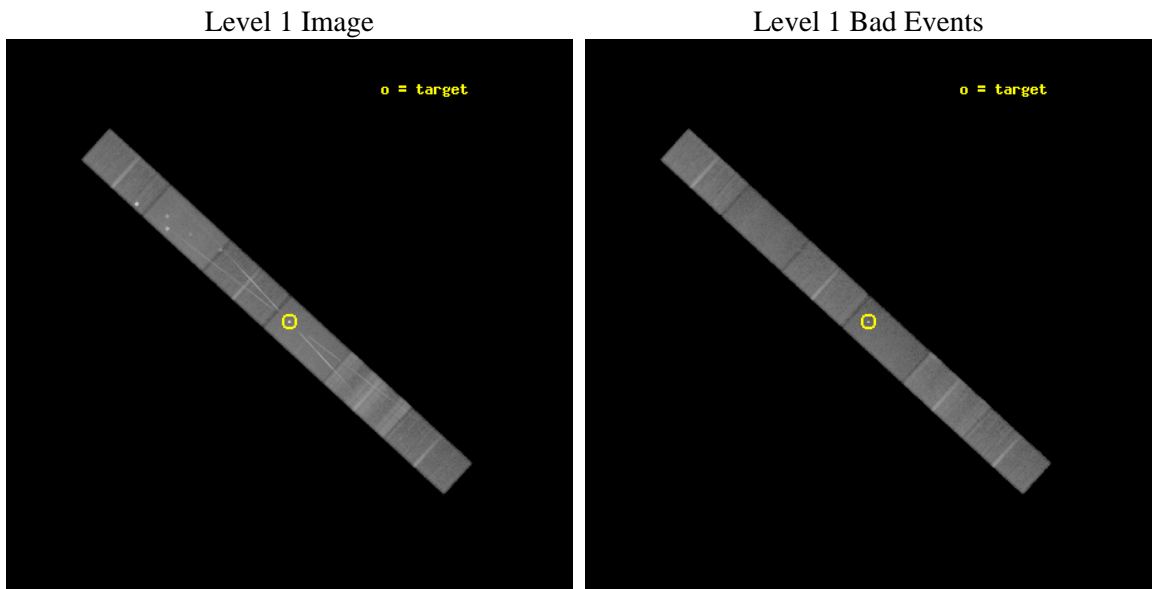
seq_num	400405	Sequence number
obs_id	5475	Observation id
title	Resolving the Fe Line, Warm Absorber, and Scattering Halo of GX339-4 with Joint Chandra/RXTE Observations	Proposal title
observer	Dr. Michael Nowak	Principal investigator
object	GX 339-4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.705833	Observer's specified target RA [deg]
dec_targ	-48.789556	Observer's specified target Dec [deg]
ra_nom	255.70587206102	Nominal RA [deg]
dec_nom	-48.791787282257	Nominal Dec [deg]
roll_nom	42.362758720986	Nominal Roll [deg]
revision	4	Processing version of data
ontime	38342.943723351	Sum of GTIs [s]
livetime	37439.119336544	Livetime [s]
ontime4	38342.984763354	Sum of GTIs [s]
ontime5	38342.902683347	Sum of GTIs [s]
ontime6	38342.861643344	Sum of GTIs [s]
ontime7	38342.943723351	Sum of GTIs [s]
ontime8	38342.820603341	Sum of GTIs [s]
ontime9	38342.779563367	Sum of GTIs [s]
l2events	353546	Number of level 2 events



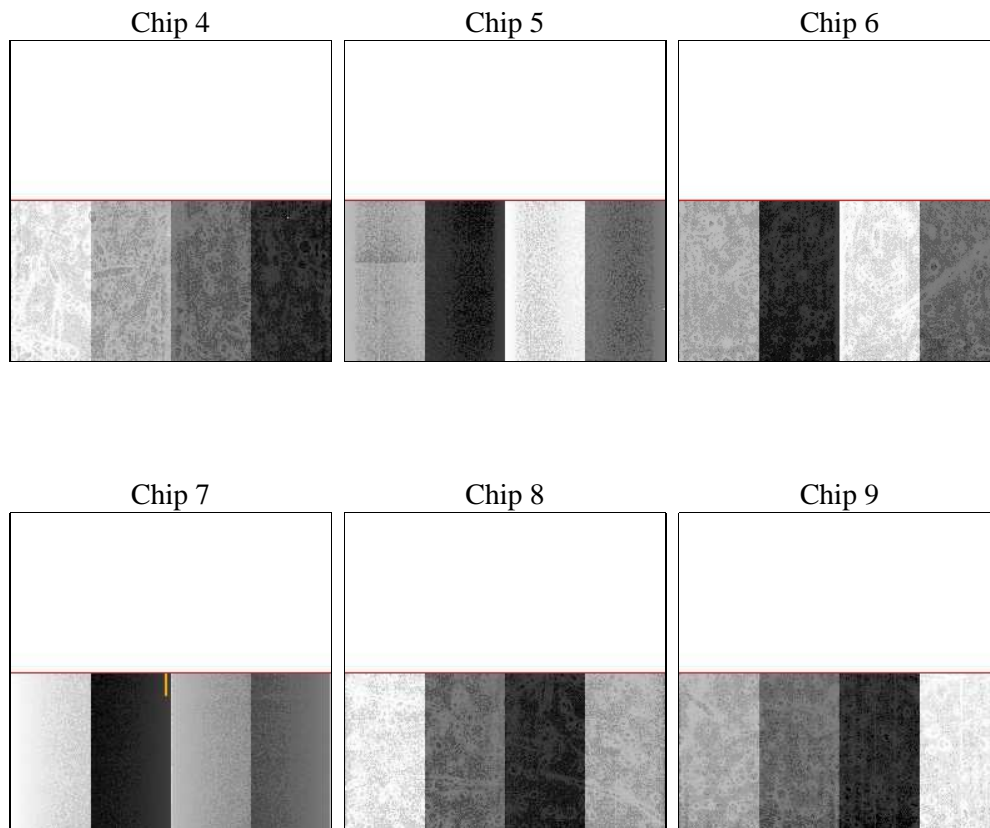
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	58000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	38342.943723351	Sum of GTIs [s]
caldsver	4.5.5	 	ontime4	38342.984763354	Sum of GTIs [s]
date	2012-12-23T16:55:35	Date and time of file creation	ontime5	38342.902683347	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	38342.861643344	Sum of GTIs [s]
			ontime7	38342.943723351	Sum of GTIs [s]
			ontime8	38342.820603341	Sum of GTIs [s]
			ontime9	38342.779563367	Sum of GTIs [s]
			l1events	1369142	Number of level 1 events

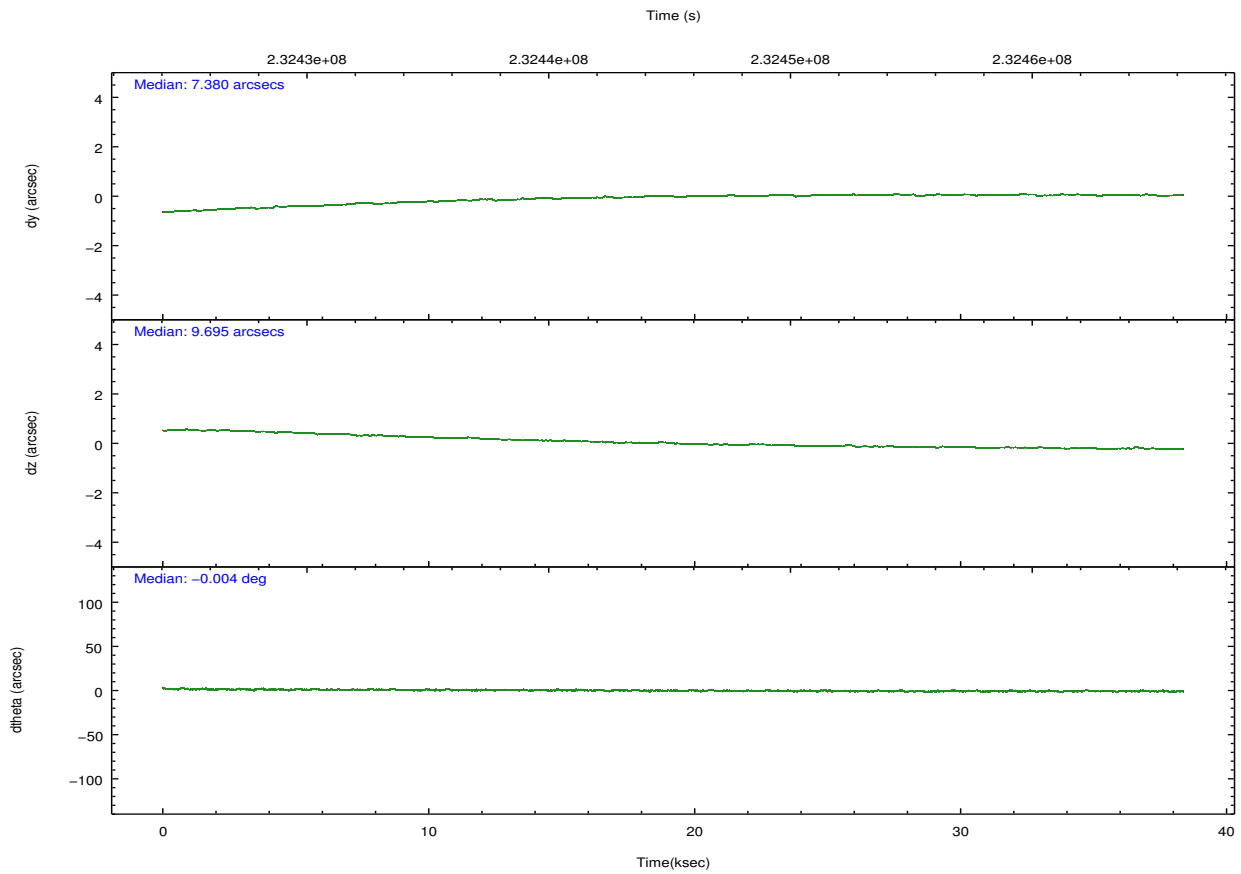
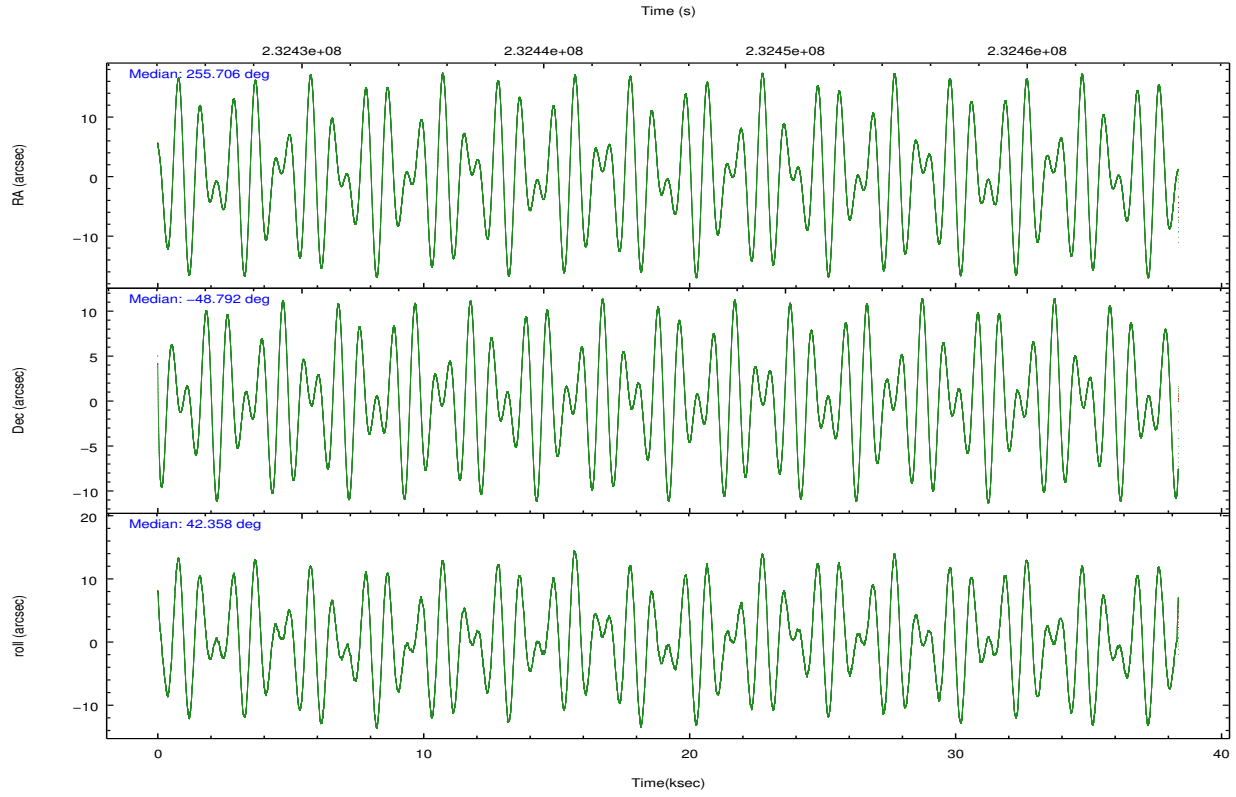
2.1.4 Events

	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	208491	240121	199991	252307	301212	167020	grade 0 events	27050	18092	27956	16166	36061	10914
rejected events	166275	118672	152897	120502	182688	142540		12%	7%	13%	6%	11%	6%
rejected %	79%	49%	76%	47%	60%	85%	grade 1 events	162	403	113	553	239	74
								0%	0%	0%	0%	0%	0%
							grade 2 events	6607	34831	8010	28738	20663	4749
								3%	14%	4%	11%	6%	2%
							grade 3 events	2535	6895	3253	12788	16646	2494
								1%	2%	1%	5%	5%	1%
							grade 4 events	2430	6793	3104	12658	14958	2389
								1%	2%	1%	5%	4%	1%
							grade 5 events	6101	17638	6517	20295	9734	6695
								2%	7%	3%	8%	3%	4%
							grade 6 events	3633	54956	4814	61574	30339	3962
								1%	22%	2%	24%	10%	2%
							grade 7 events	159973	100513	146224	99535	172572	135743
								76%	41%	73%	39%	57%	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	255.693890	255.705872061024	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	-48.817848	-48.79178728225693	Subarray start row	1	1
[deg] Pointing Roll	42.197110	42.36275872098635	Subarray row count	512	512
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.7
[mm] SIM translation stage pos	-183.992523	-183.985022191653			
[mm] SIM translation stage offset	-6.14	-6.147500391354811			
[s] Observation start time (MET)	232426134.184000	232425122.27065			
Observation start date	2005-05-14T02:47:50	2005-05-14T02:32:02			
[s] Observation end time (MET)	232484134.184000	232464345.43494			
Observation end date	2005-05-14T18:54:30	2005-05-14T13:25:45			
Read mode	TIMED	TIMED			

2.3 Aspect

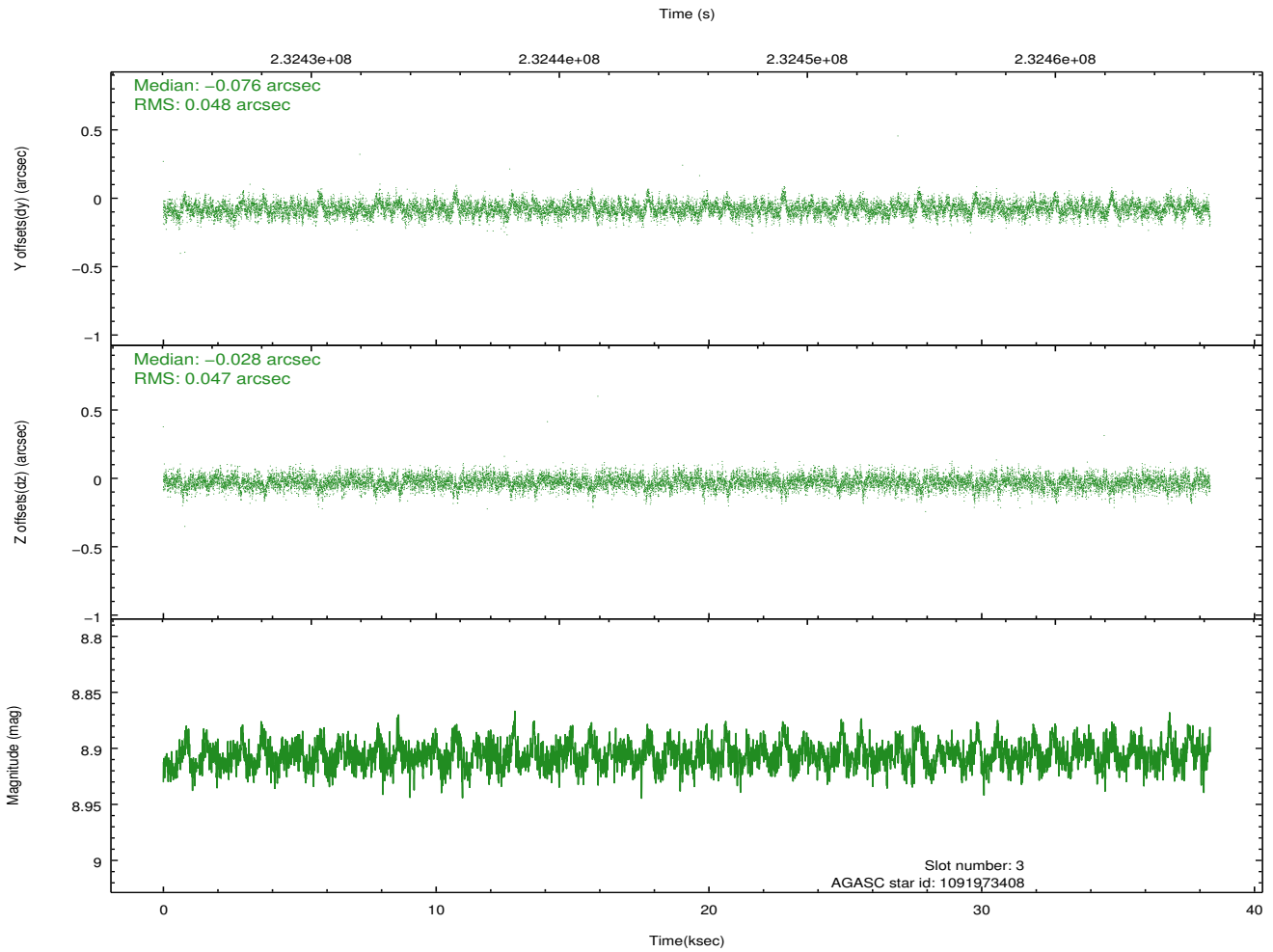
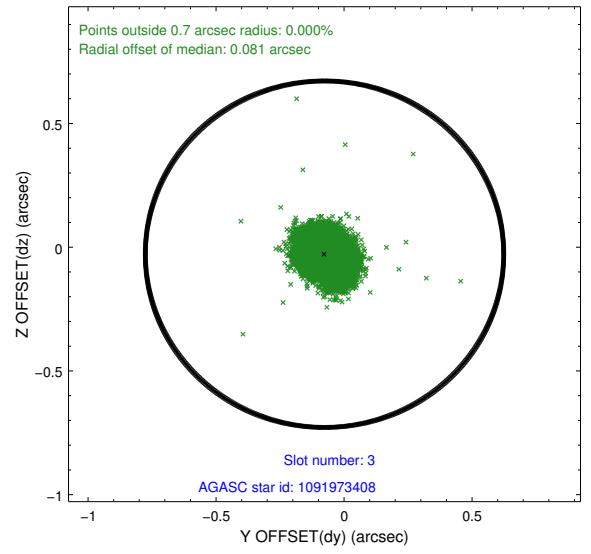
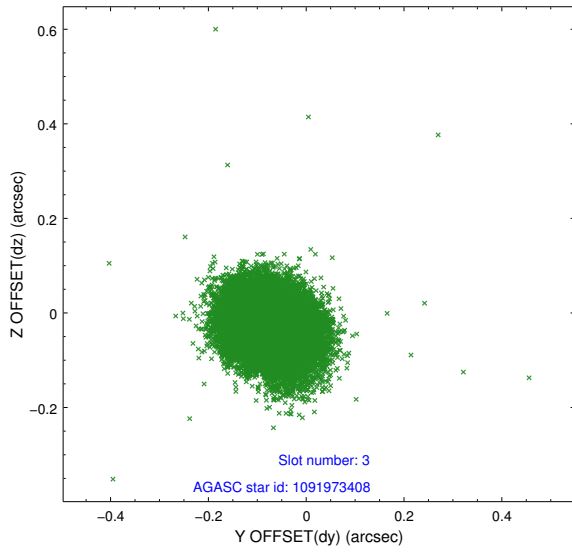


Slot Statistics

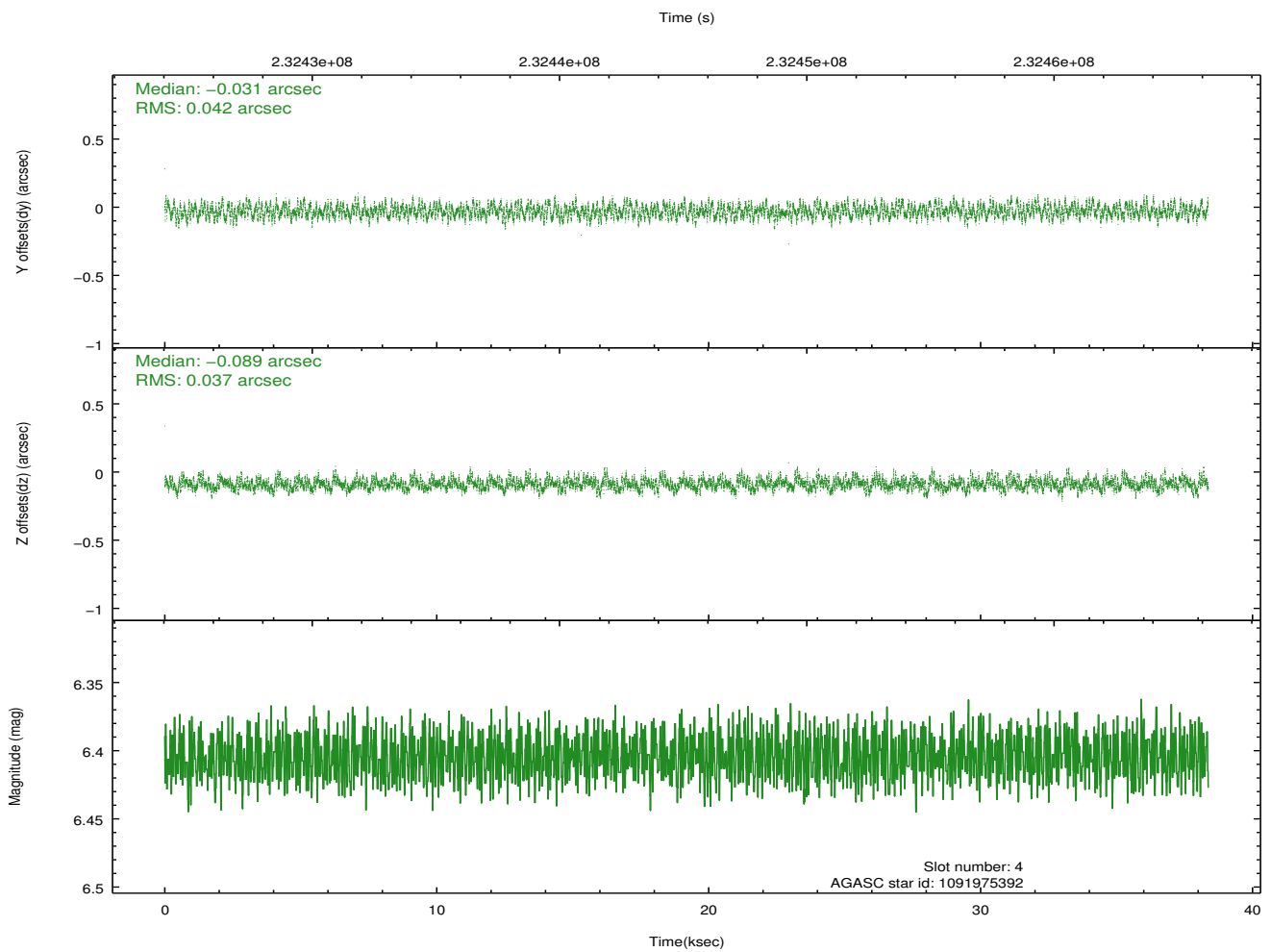
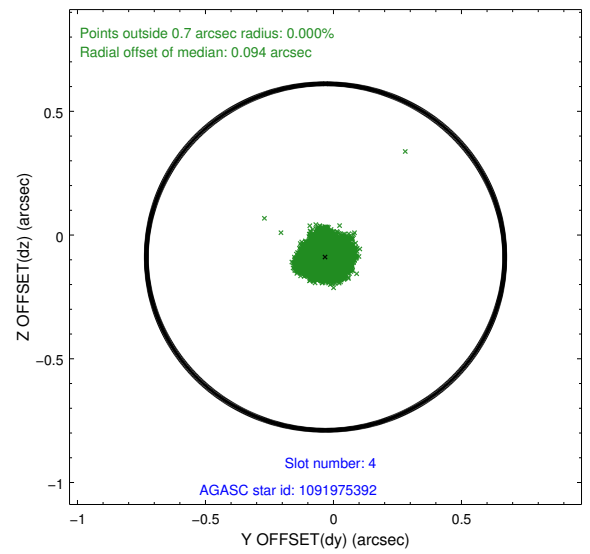
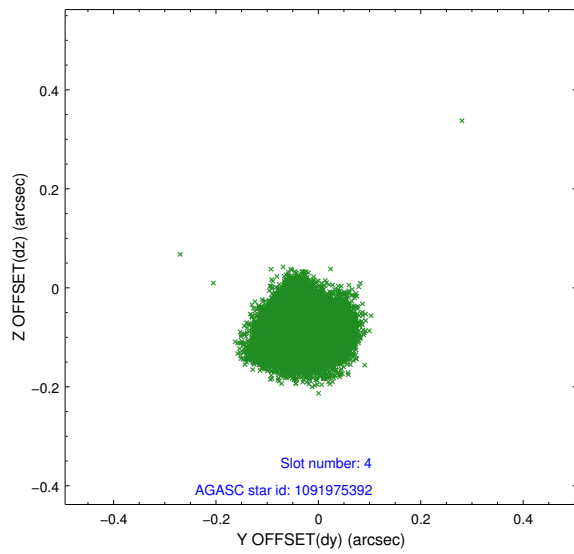
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.07	9360	-0.055	-0.109	0.011	0.018	0.000000	0.000000	-759.65	-1857.82
1	FID	ACIS-S-4	7.18	9360	0.099	0.056	0.007	0.013	0.000000	0.000000	2153.77	50.77
2	FID	ACIS-S-5	7.22	9359	-0.075	0.062	0.010	0.016	0.000000	0.000000	-1812.48	44.49
3	GUIDE	1091973408	8.91	18712	-0.076	-0.028	0.070	0.116	255.800233	-48.601800	710.02	406.21
4	GUIDE	1091975392	6.40	18721	-0.031	-0.089	0.061	0.093	255.805002	-48.336791	1360.30	1104.45
5	GUIDE	1092485728	6.88	18720	0.123	-0.115	0.059	0.101	254.773222	-48.875124	-1761.91	1301.64
6	GUIDE	1092491384	9.12	18709	-0.047	0.120	0.071	0.118	254.923973	-49.184437	-2234.62	232.54
7	GUIDE	1092627912	6.50	18722	0.026	0.112	0.064	0.105	257.034537	-48.883770	2173.21	-2327.85

2.4 Star Slots

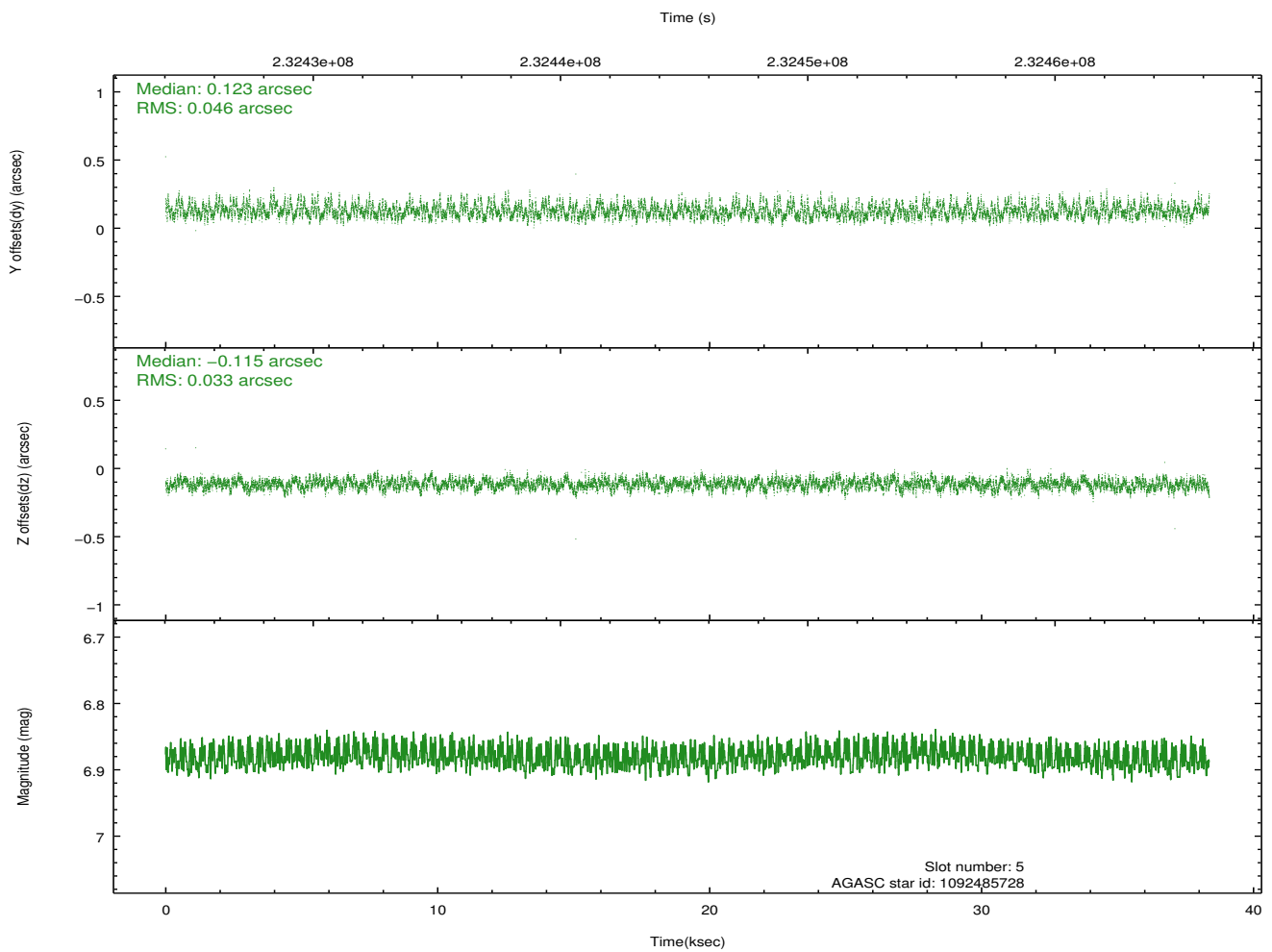
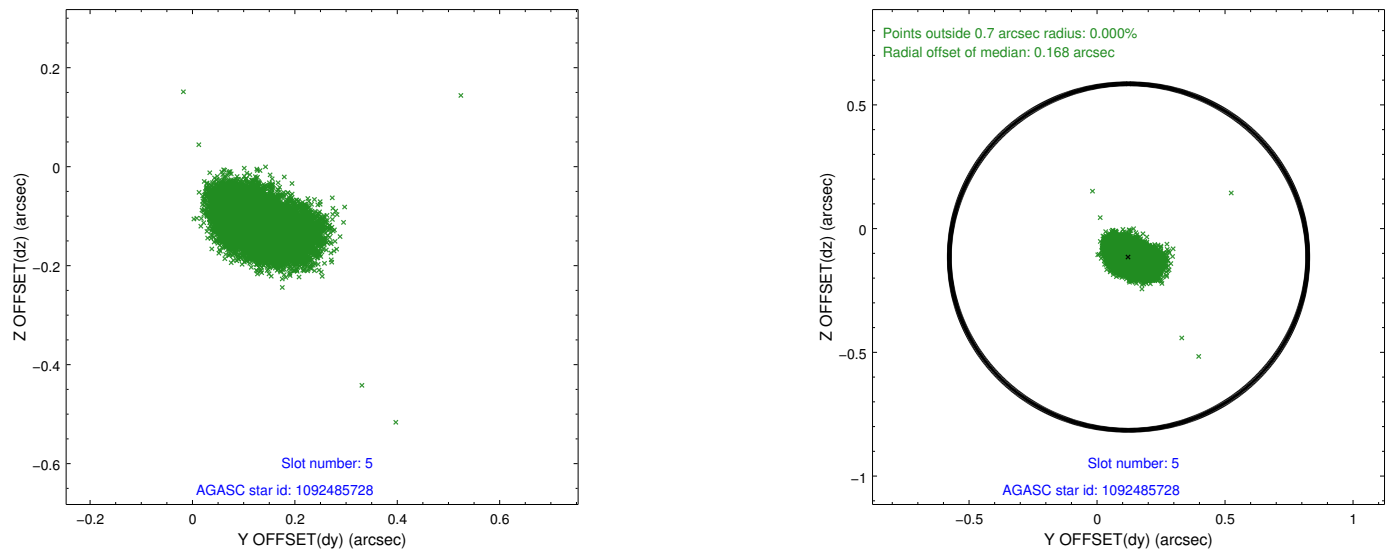
2.4.1 Slot 3



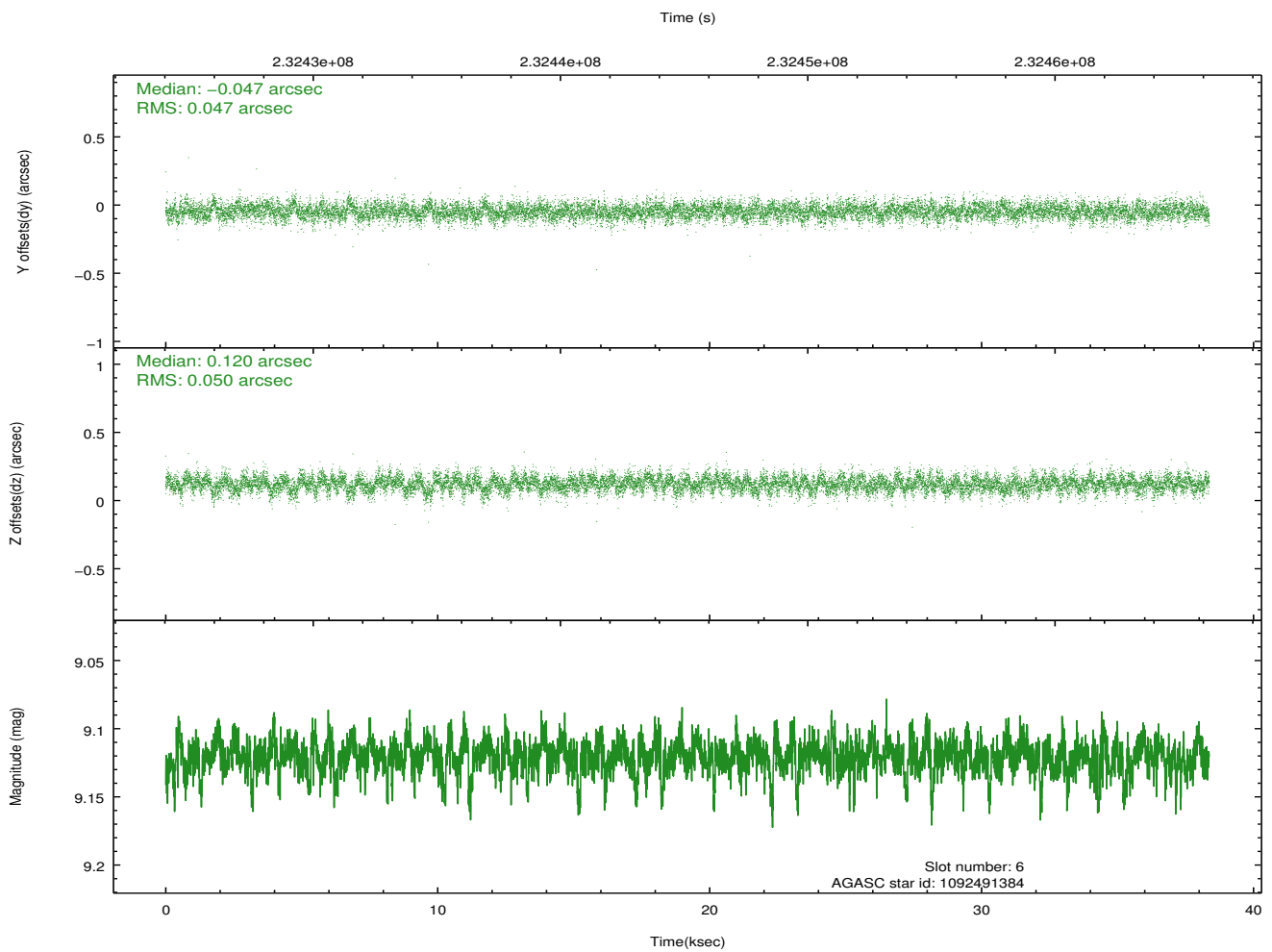
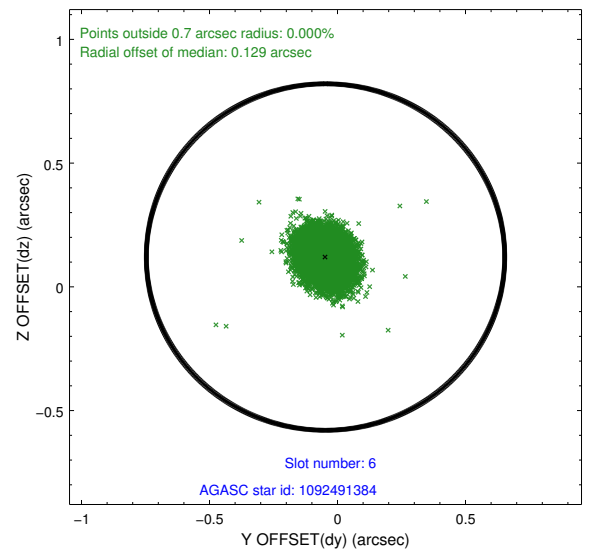
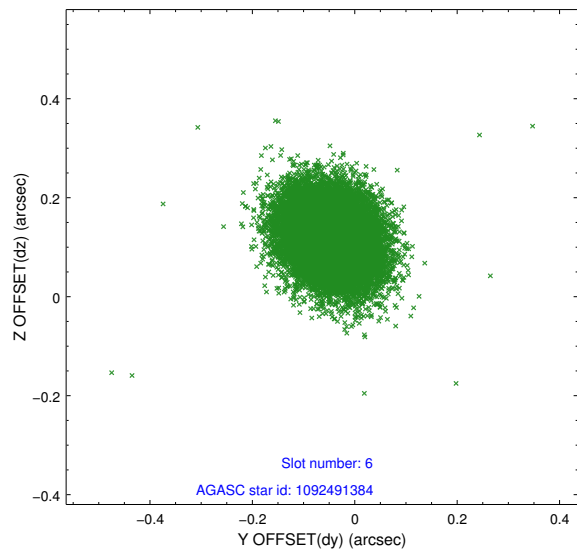
2.4.2 Slot 4



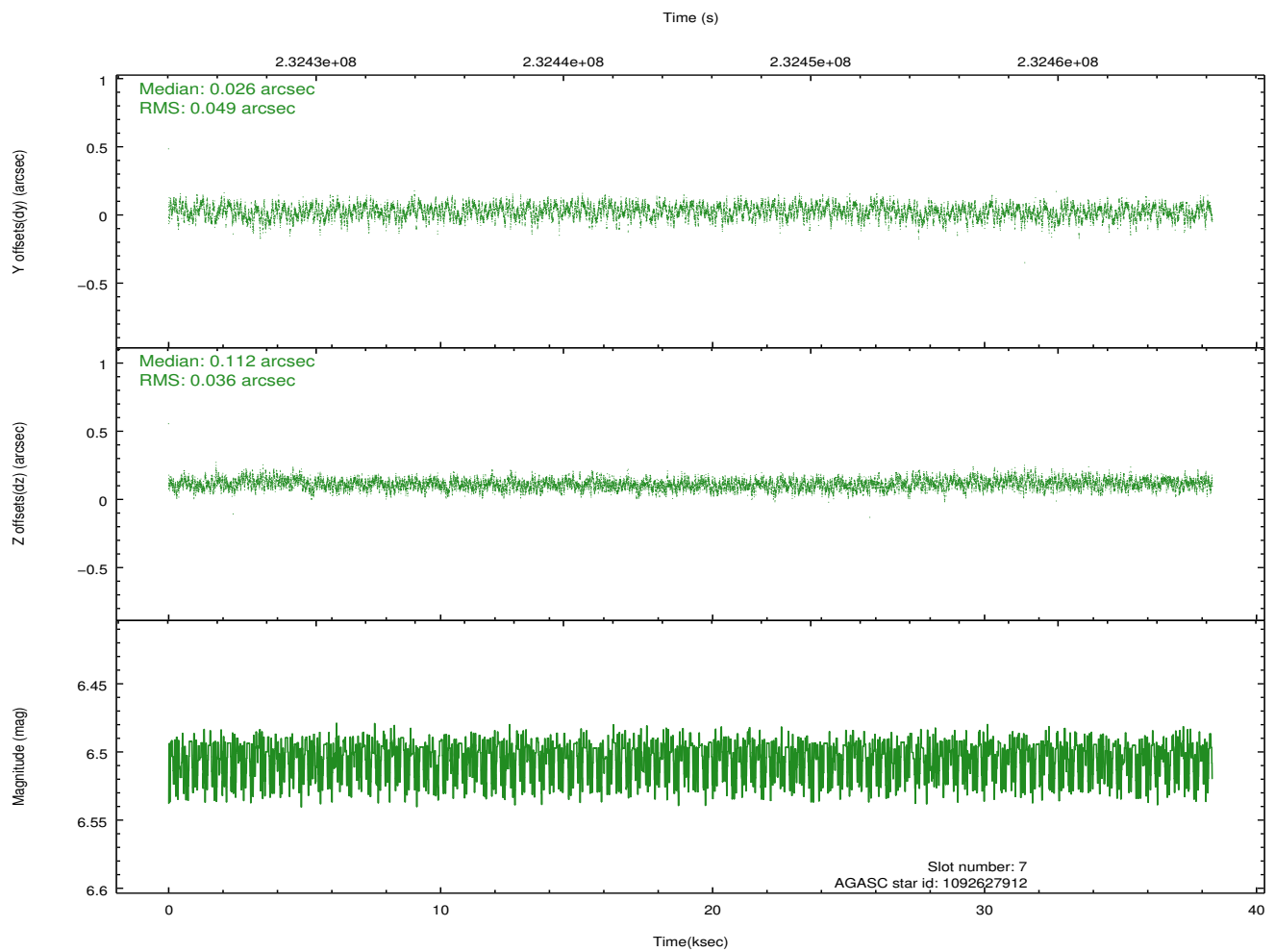
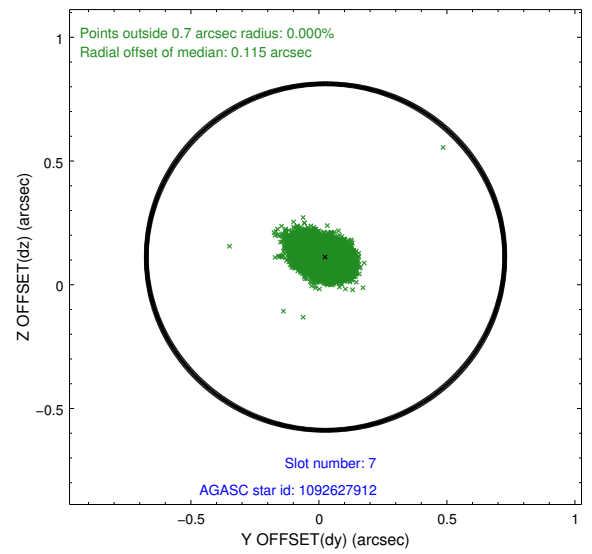
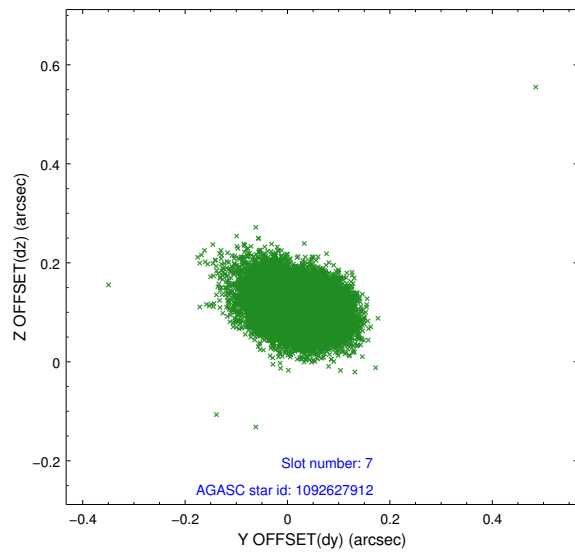
2.4.3 Slot 5



2.4.4 Slot 6

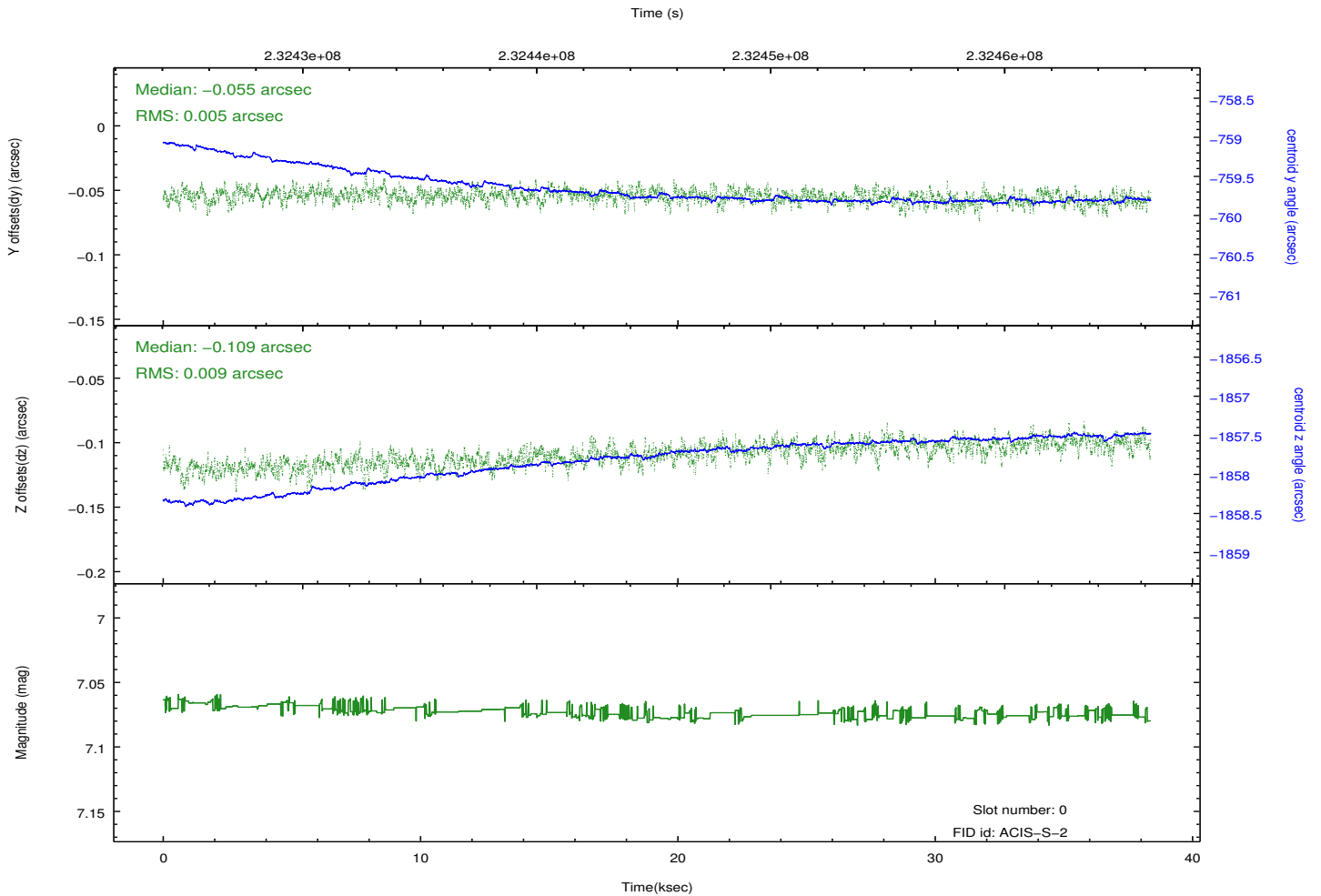
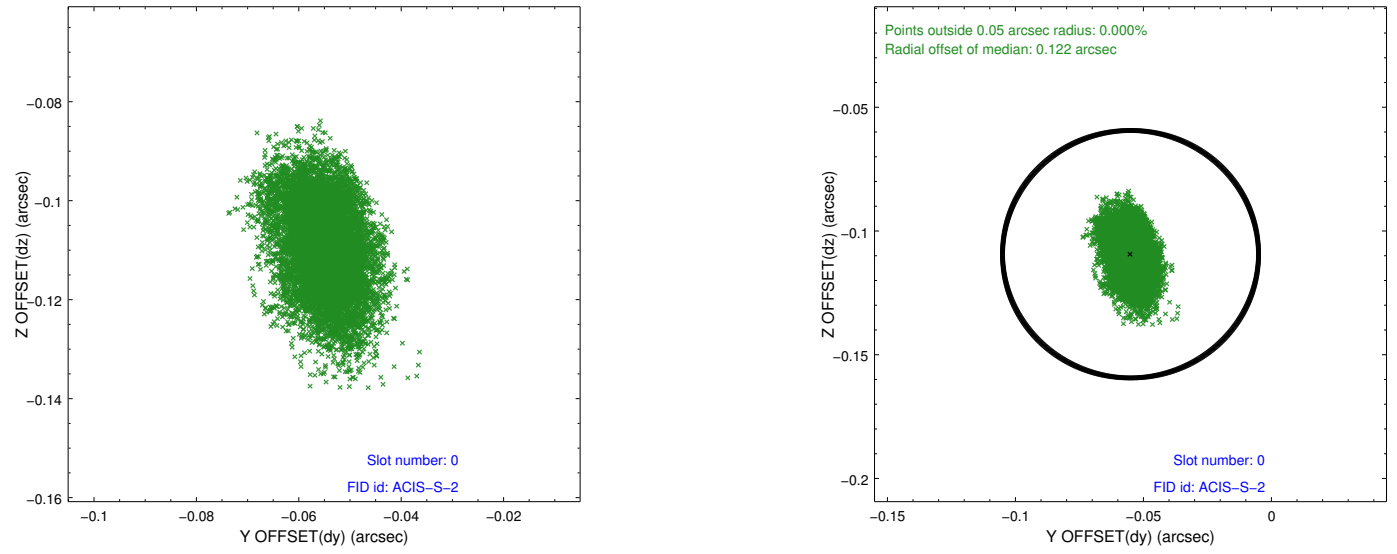


2.4.5 Slot 7

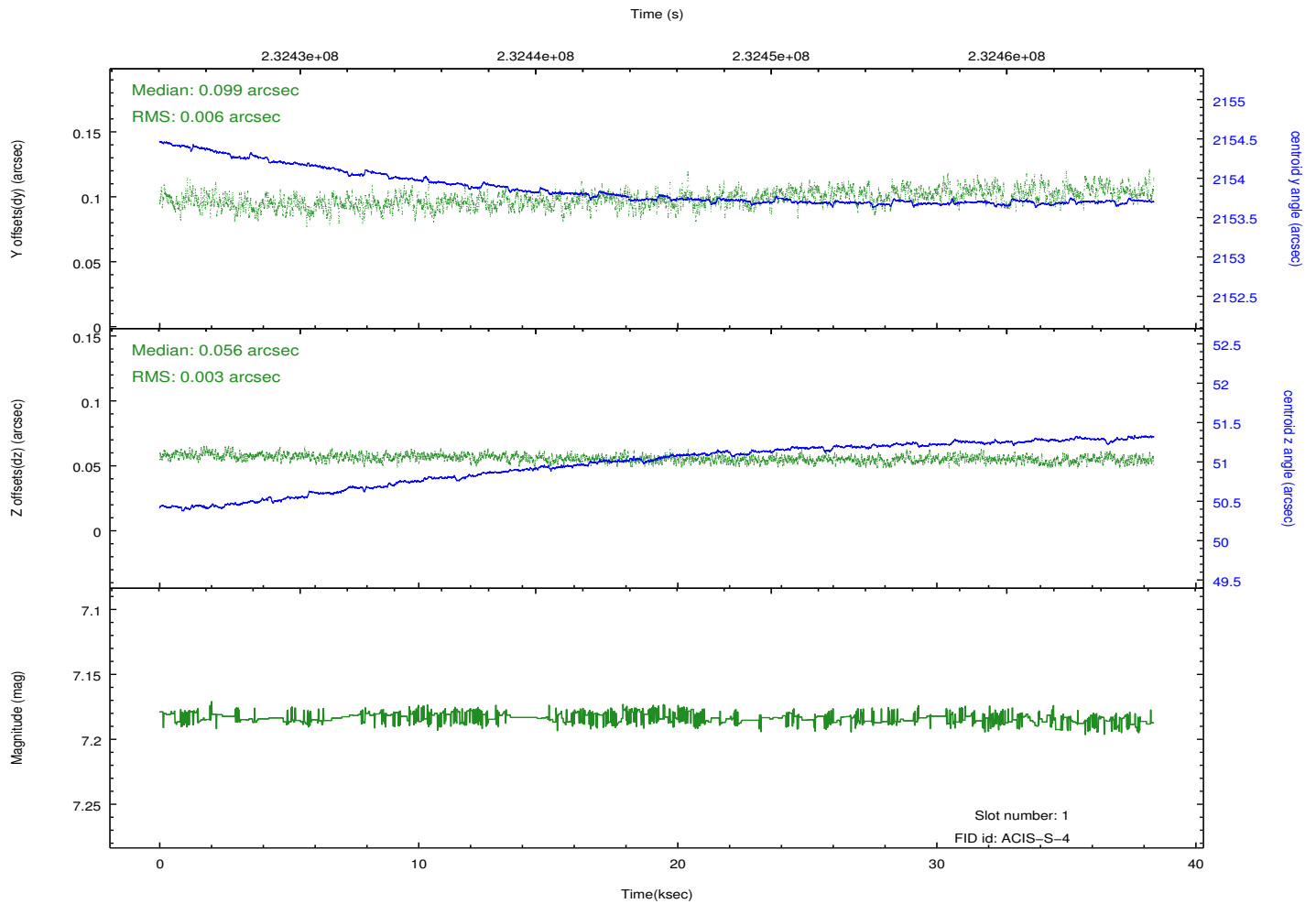
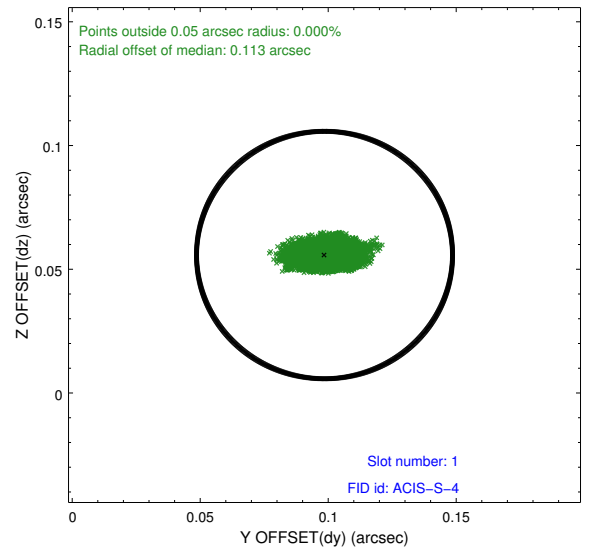
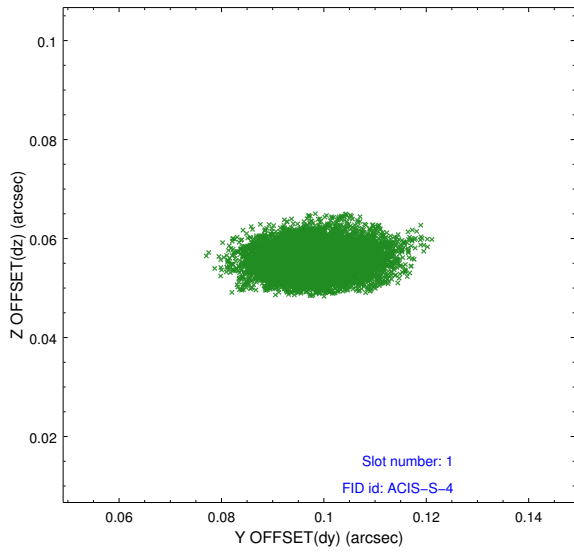


2.5 FID Slots

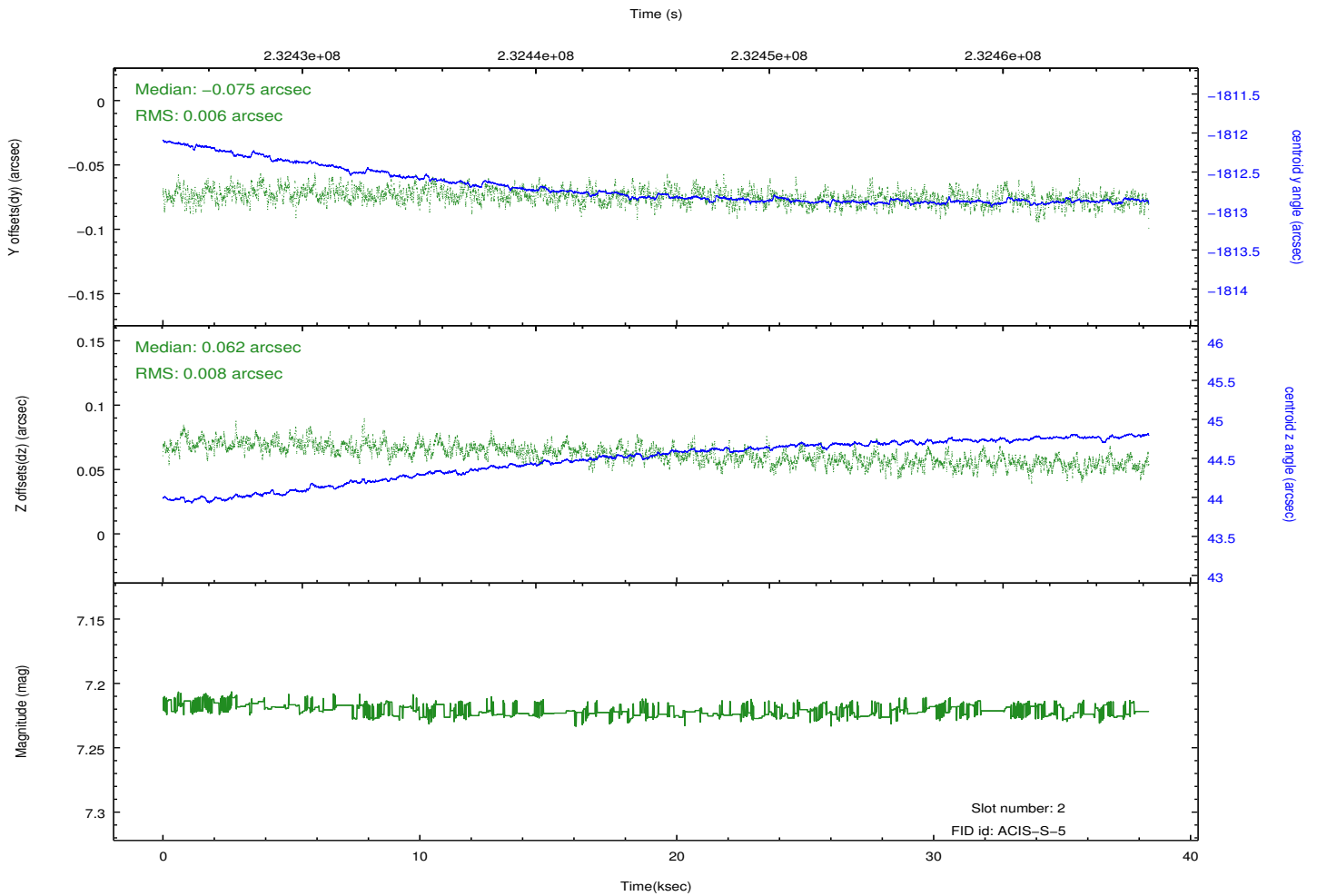
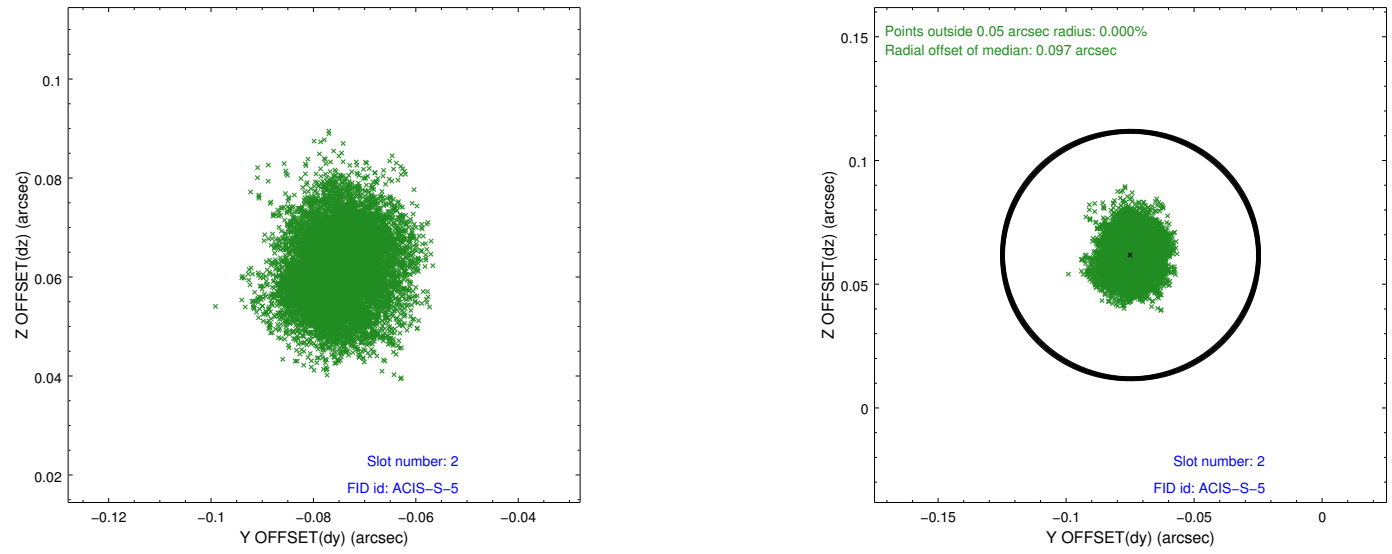
2.5.1 Slot 0



2.5.2 Slot 1

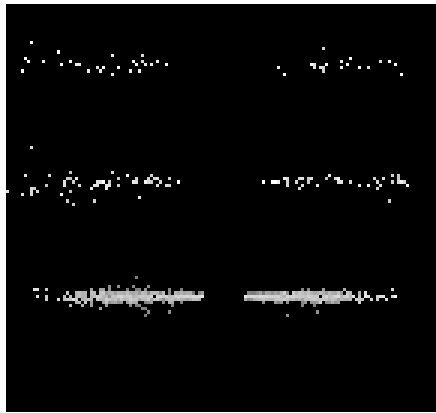


2.5.3 Slot 2

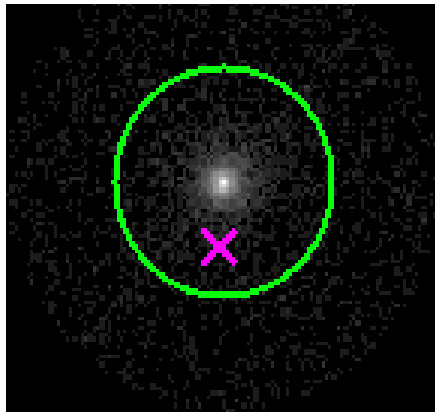


3 Gratings

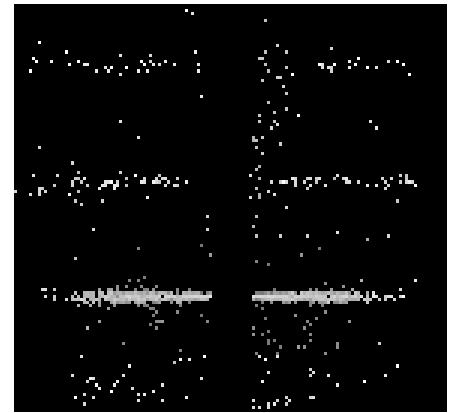
3.1 HEG Arm



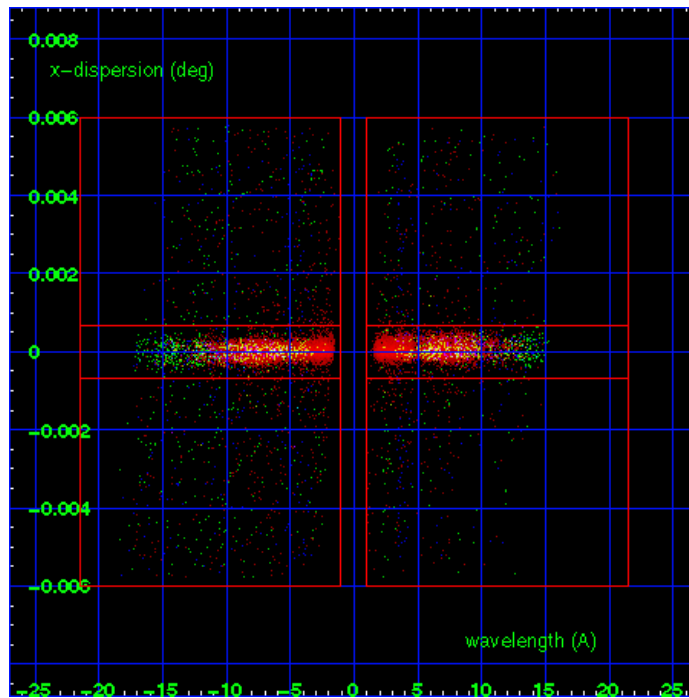
HEG Order Sort 123



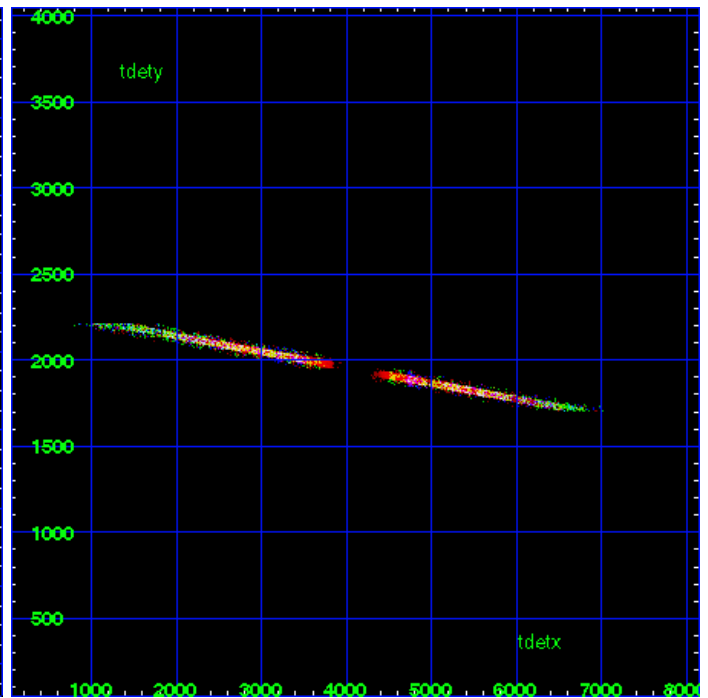
HEG Zero Order



HEG Order Sort ALL

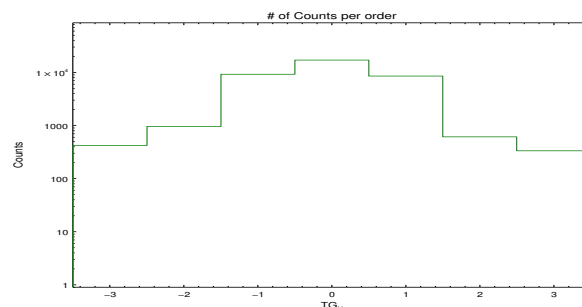


Spot Image HEG

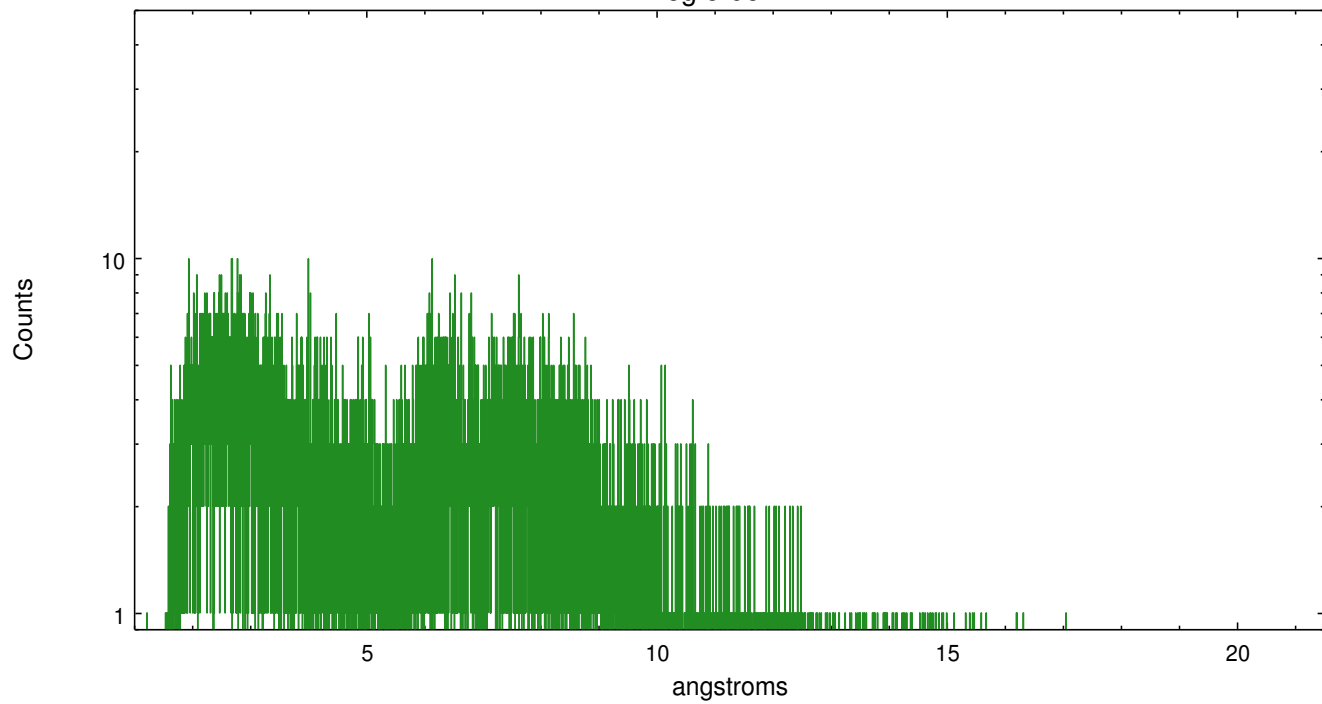


Full Detector HEG

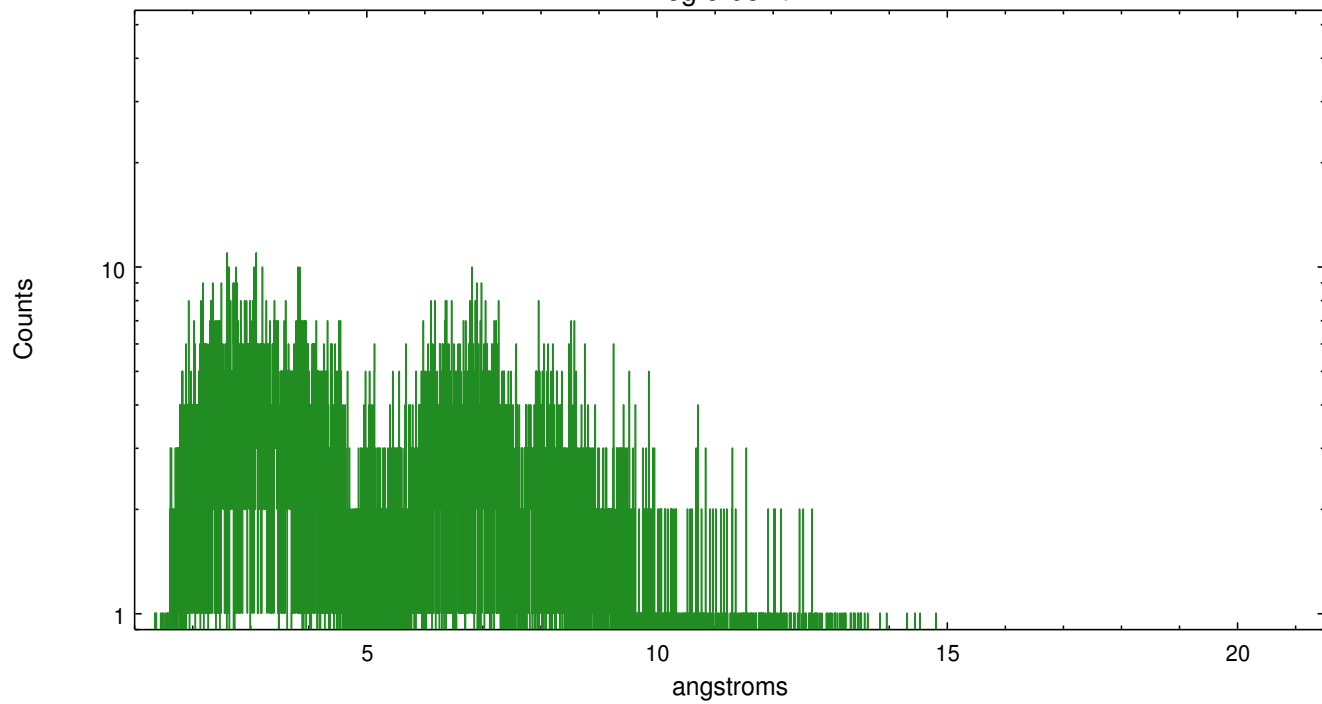
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	422	964	9283	17200	8597	614	335



heg order -1



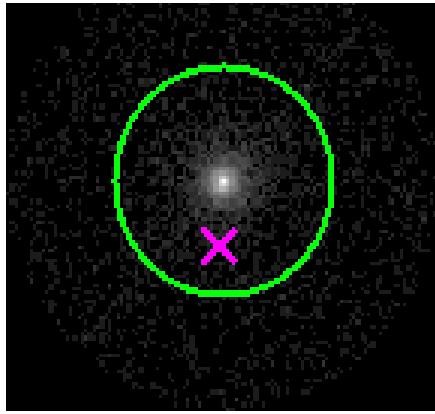
heg order +1



3.2 MEG Arm



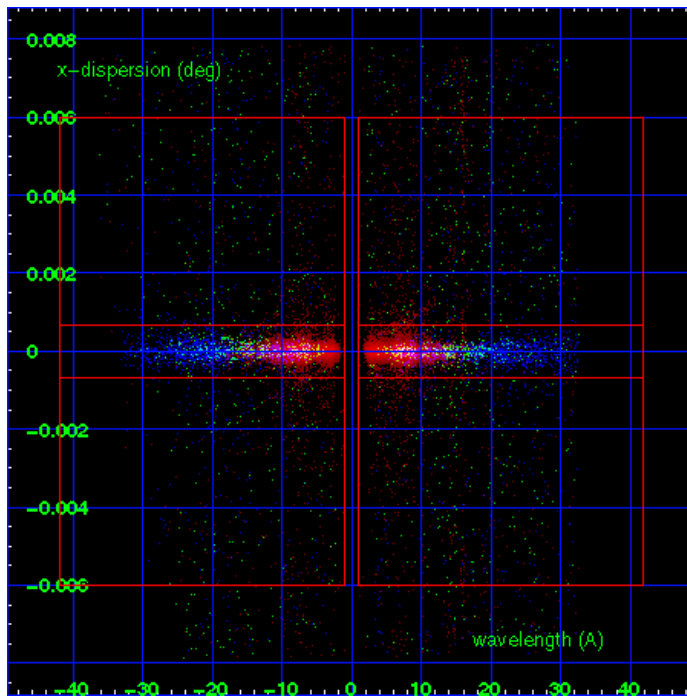
MEG Order Sort 123



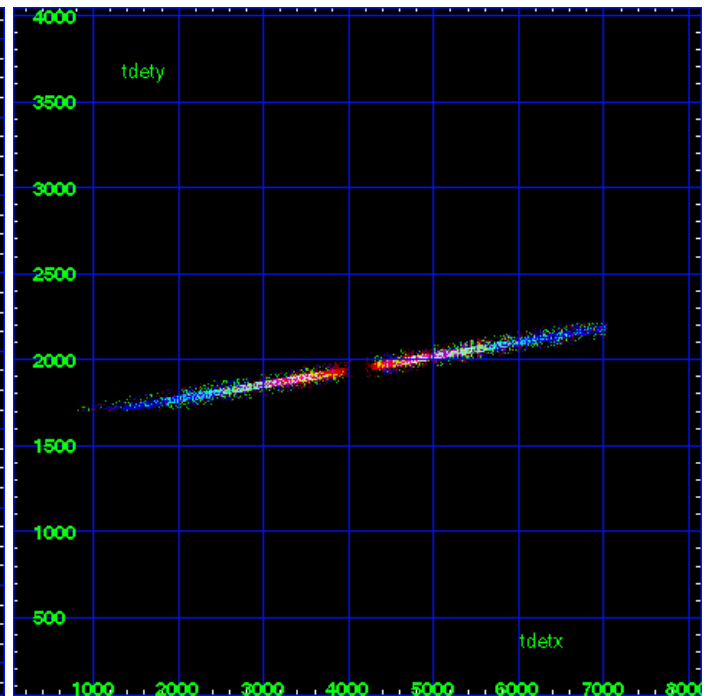
MEG Zero Order



MEG Order Sort ALL

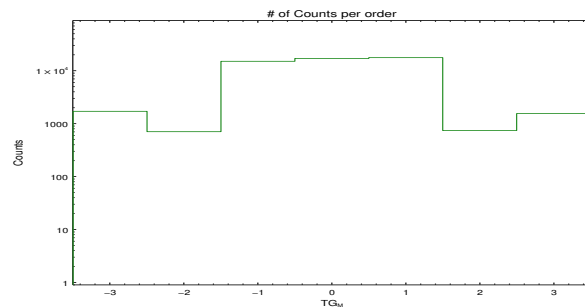


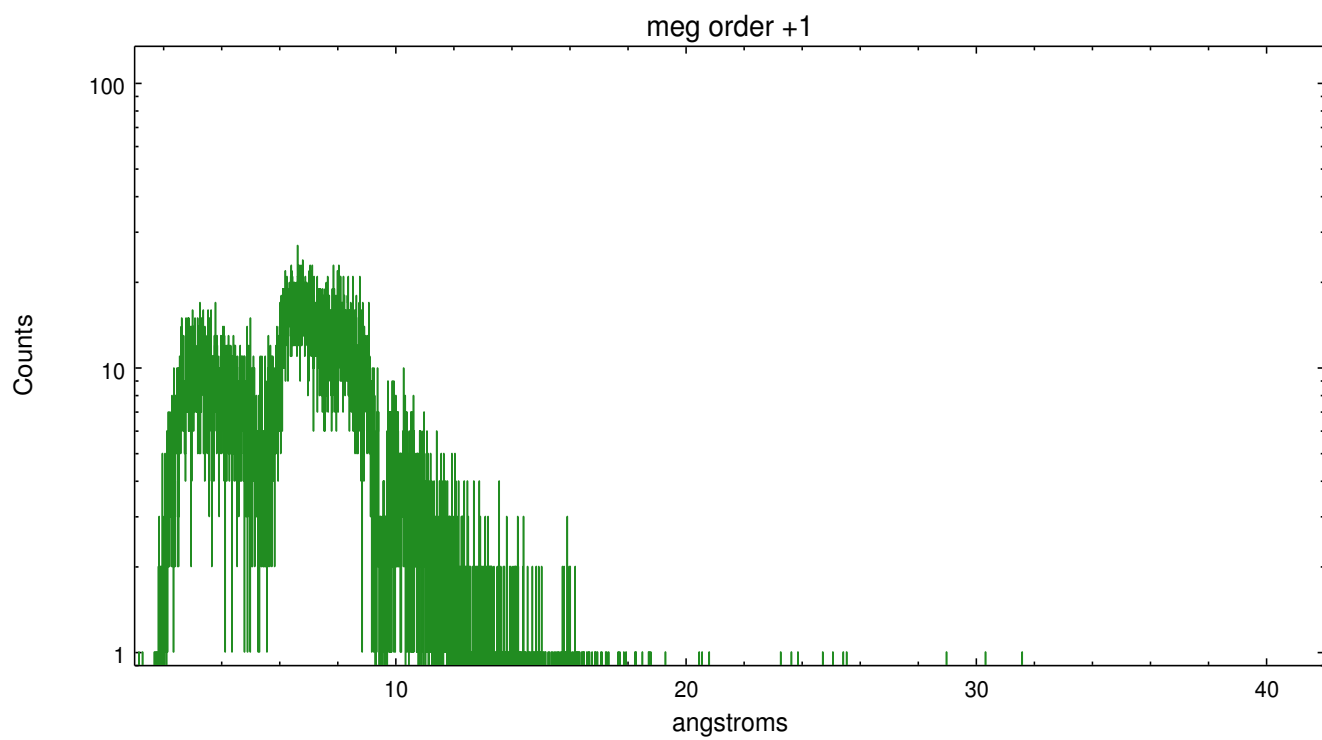
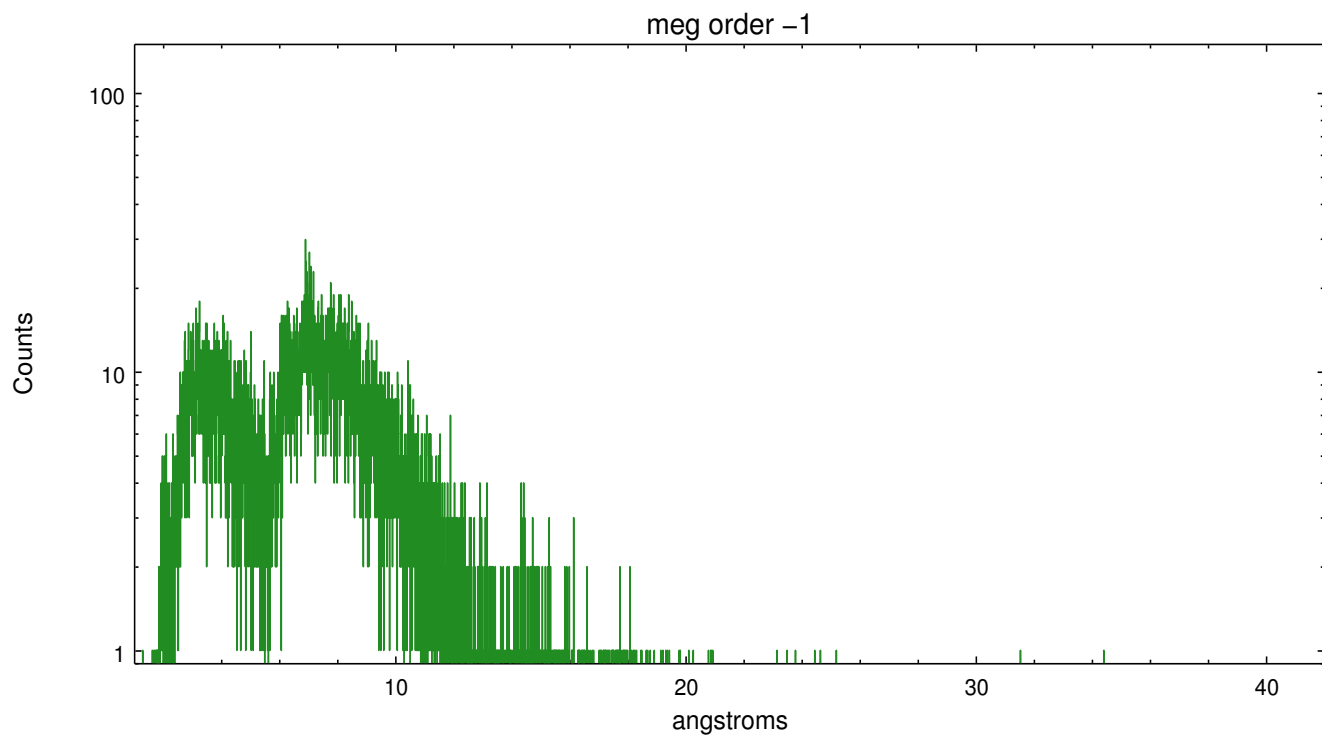
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1715	707	15160	17200	17798	742	1556





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.3429437

A.2 Comments

This observation was interrupted by safing of the science instruments onboard Chandra due to high solar radiation environment. Due to a high radiation environment, the instruments were safed and the observation terminated early.