

V&V Reference Report

L2 ASCDS Version : 7.6.7

Observation 5475 - L2 Version 3
Chandra X-Ray Center

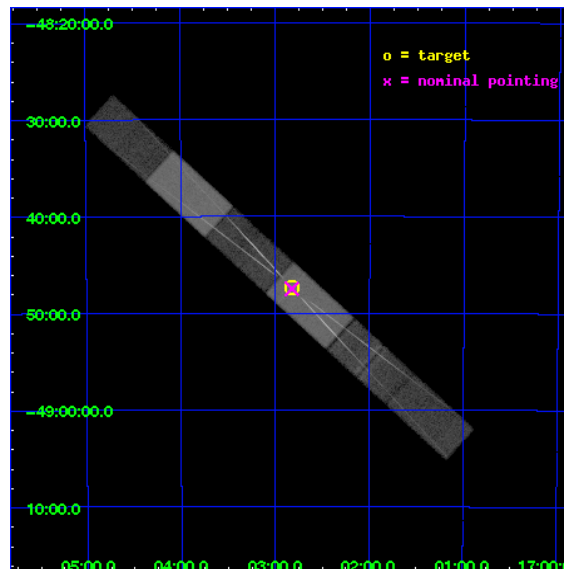
L2 Processing Date : Aug 8 2009

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1 Front

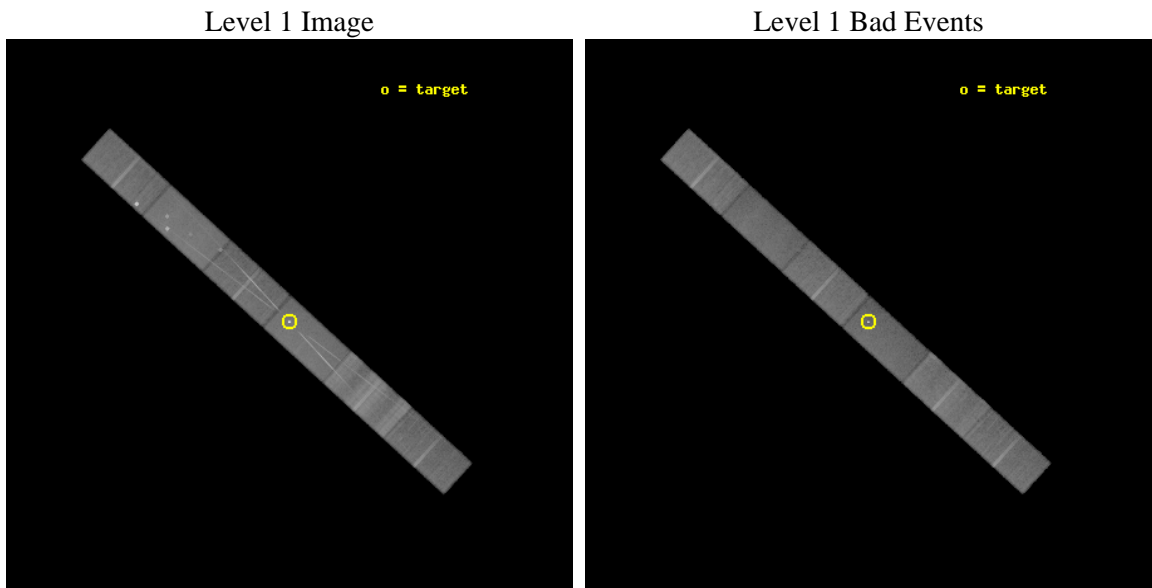
seq_num	400405	Sequence number
obs_id	5475	Observation id
title	Resolving the Fe Line, Warm Absorber, and Scattering Halo of GX339-4 with Joint Chandra/RXTE Observations	Proposal title
observer	Dr. Michael Nowak	Principal investigator
object	GX 339-4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.705833	Observer's specified target RA
dec_targ	-48.789556	Observer's specified target Dec
ra_nom	255.70584203617	Nominal RA
dec_nom	-48.791806637573	Nominal Dec
roll_nom	42.362735928671	Nominal Roll
revision	3	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	351820	Number of level 2 events



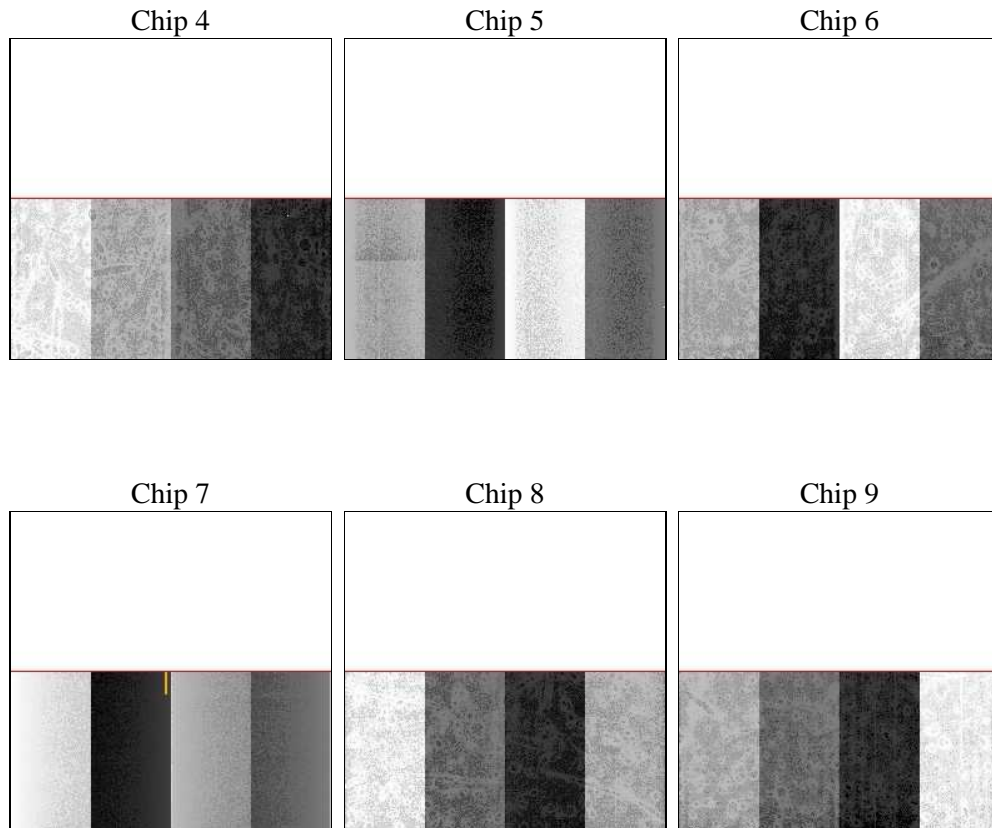
2 OBI

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	Scheduled observation exposure time
ascdsver	8.0	ASCDS version number	ontime	38342.943723351	Sum of GTIs [s]
caldbver	4.1.3	 	ontime4	38342.984763354	Sum of GTIs [s]
date	2009-08-08T02:16:16	Date and time of file creation	ontime5	38342.902683347	Sum of GTIs [s]
revision	3	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

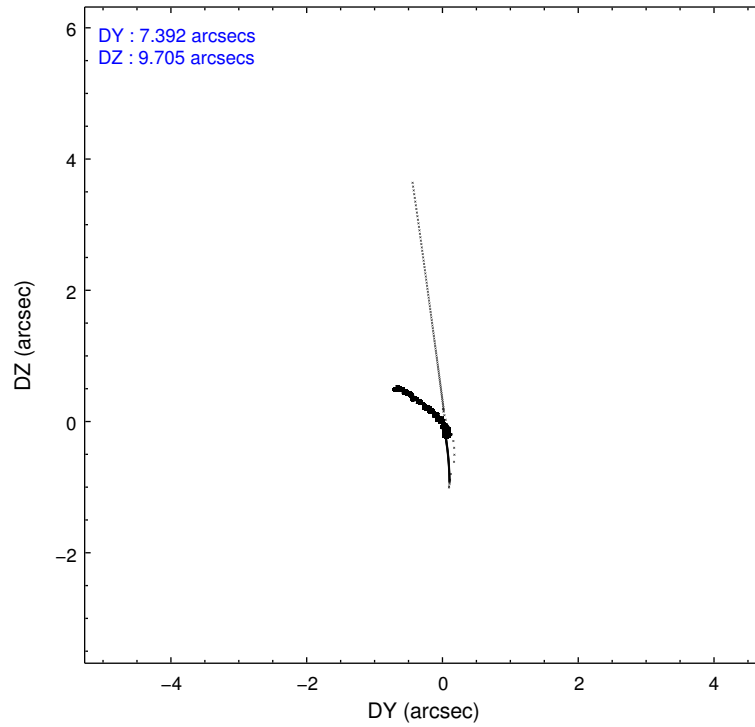
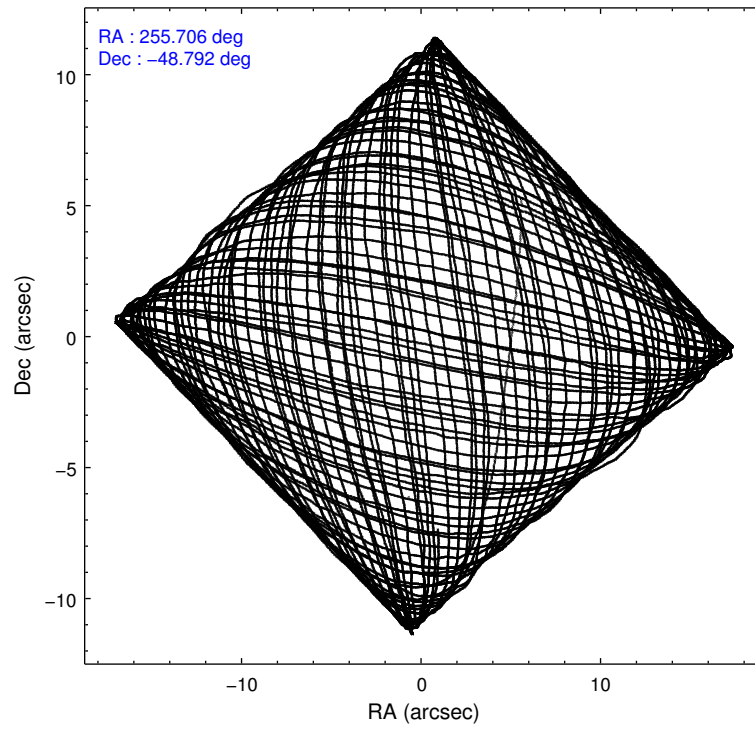
2.1.4 Events

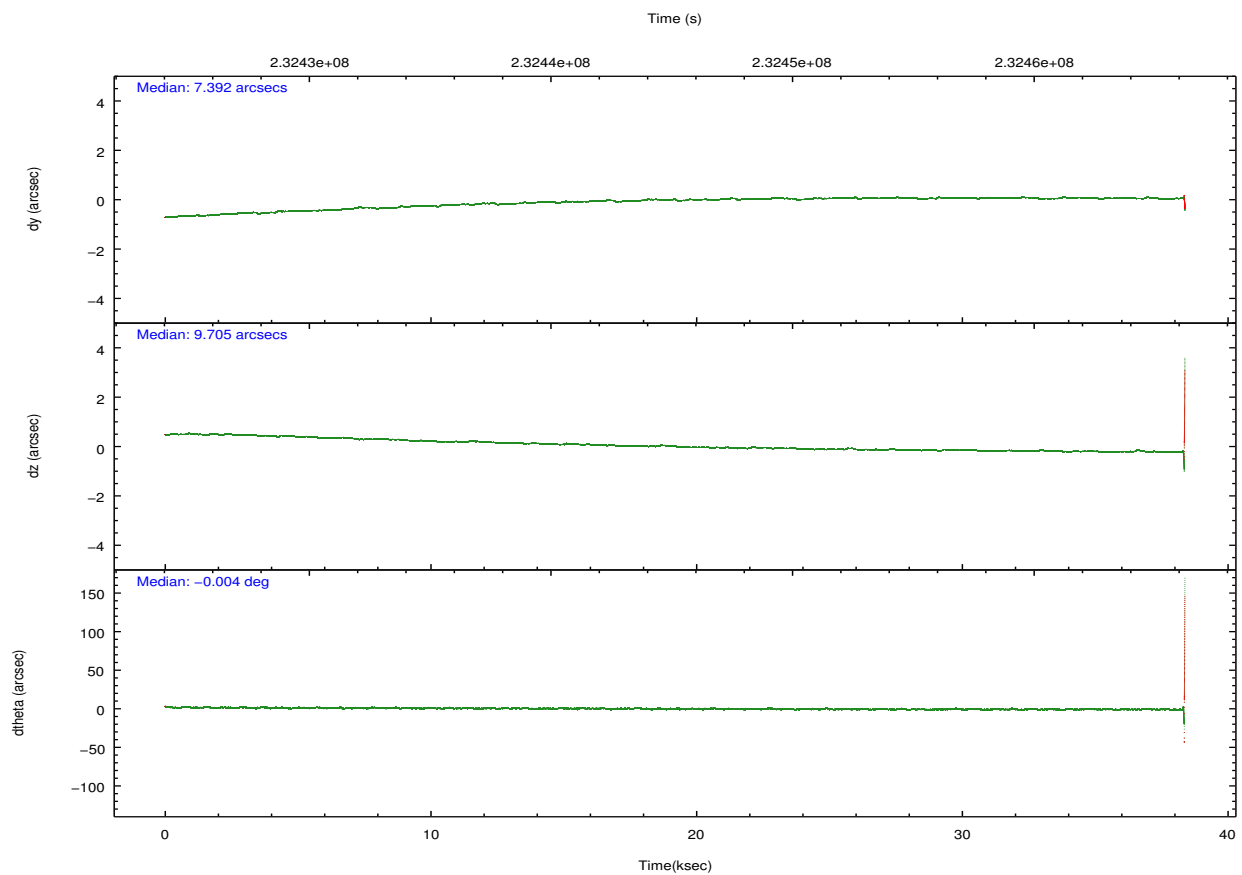
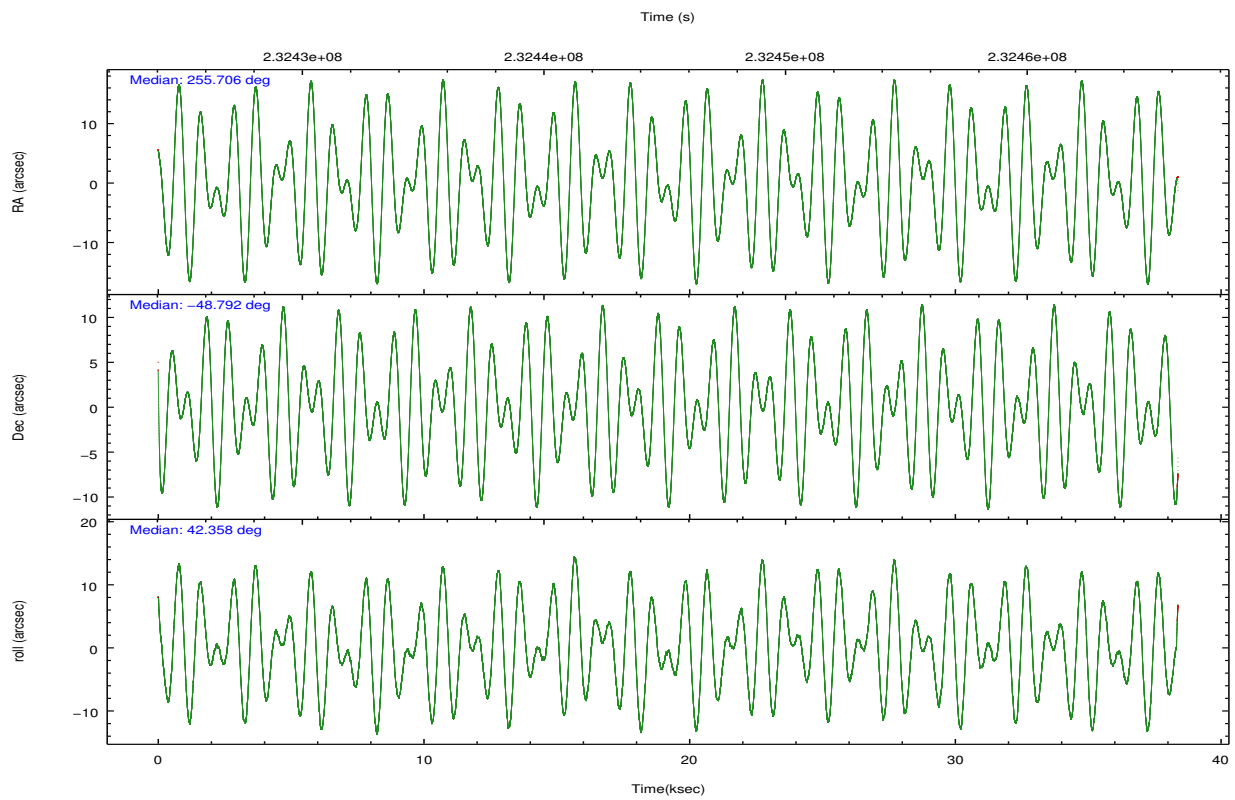
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	208491	240121	199991	252307	301212	167020	grade 0 events	27050	18105	27955	16166	36058	10914
rejected events	166274	118663	152900	120500	182687	142540		12%	7%	13%	6%	11%	6%
rejected %	79%	49%	76%	47%	60%	85%	grade 1 events	162	403	113	553	239	74
								0%	0%	0%	0%	0%	0%
							grade 2 events	6607	34819	8010	28737	20666	4749
								3%	14%	4%	11%	6%	2%
							grade 3 events	2535	6903	3253	12793	16645	2494
								1%	2%	1%	5%	5%	1%
							grade 4 events	2430	6804	3104	12665	14958	2389
								1%	2%	1%	5%	4%	1%
							grade 5 events	6100	17651	6516	20299	9732	6694
								2%	7%	3%	8%	3%	4%
							grade 6 events	3634	54945	4812	61565	30341	3962
								1%	22%	2%	24%	10%	2%
							grade 7 events	159973	100491	146228	99529	172573	135744
								76%	41%	73%	39%	57%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	1/2
Pointing RA	255.693890	255.7058420361663	Subarray start row	1	1
Pointing Dec	-48.817848	-48.79180663757261	Subarray row count	512	512
Pointing Roll	42.197110	42.362735928671	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.7
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-183.992523	-183.985022191653			
SIM translation stage offset (mm)	-6.14	-6.147500391354811			
Observation start time	232426134.184000	232425122.27065			
Observation start date	2005-05-14T02:47:50	2005-05-14T02:32:02			
Observation end time	232484134.184000	232464352.60994			
Observation end date	2005-05-14T18:54:30	2005-05-14T13:25:52			
Read mode	TIMED	TIMED			

2.3 Aspect



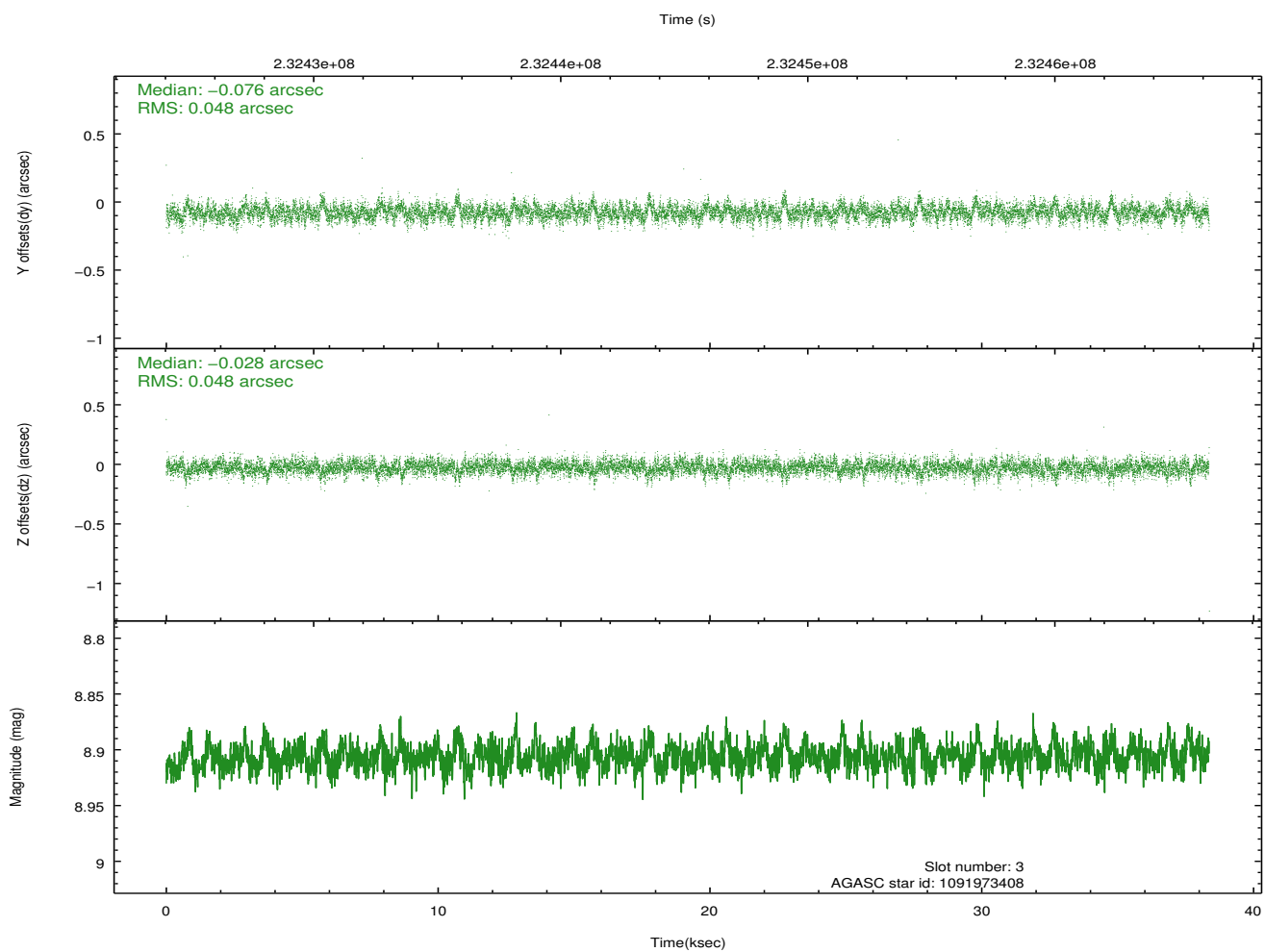
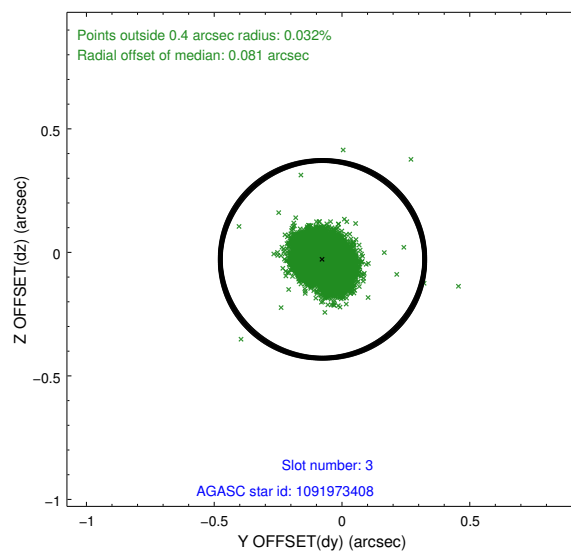
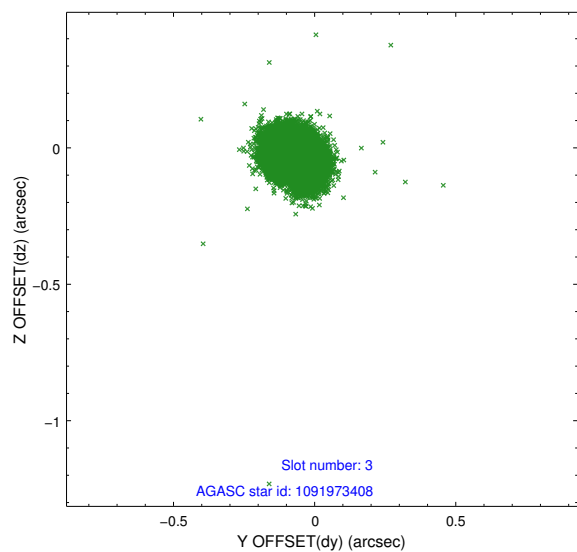


Slot Statistics

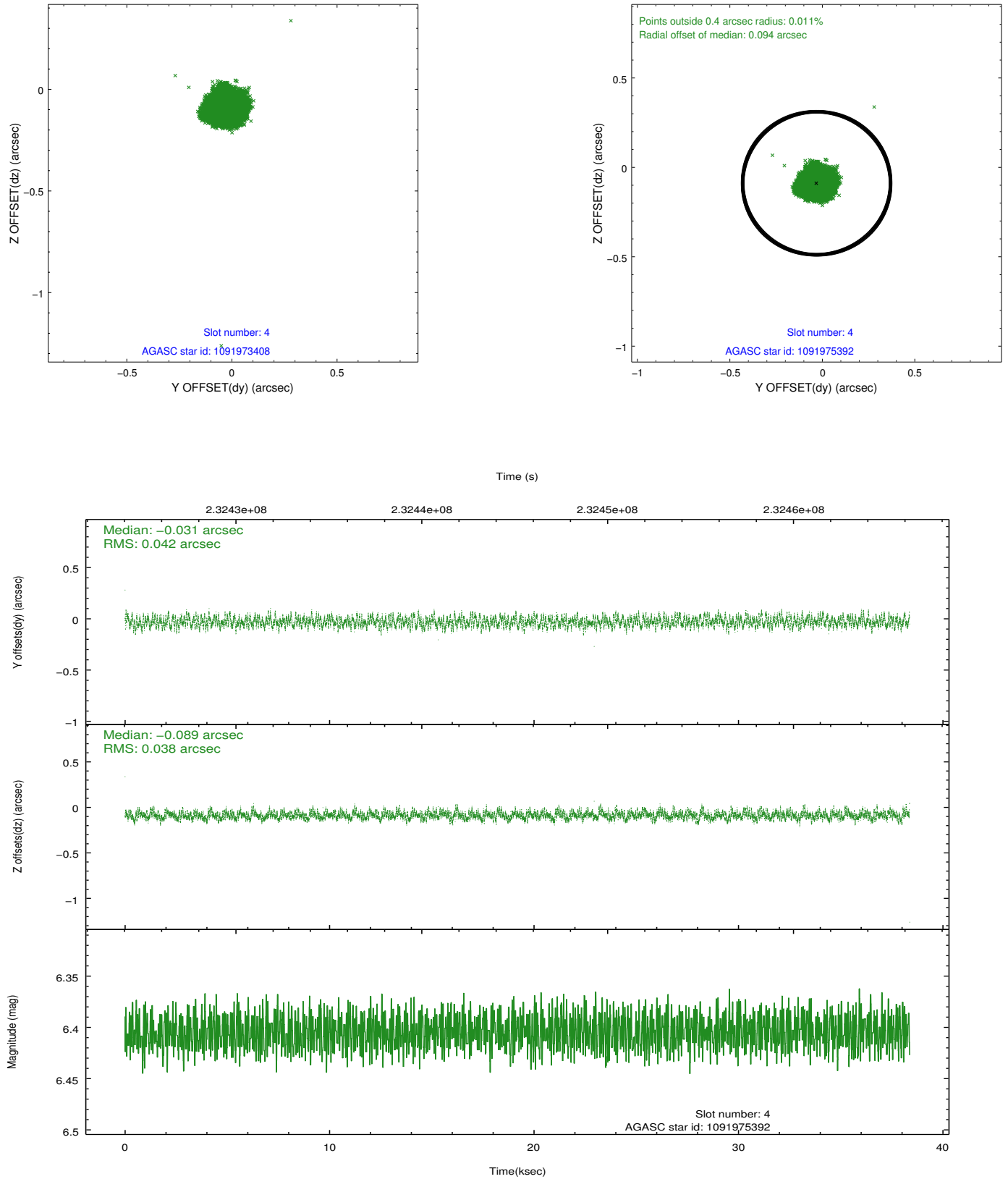
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.07	9352	-0.055	-0.109	0.011	0.018	0.000000	0.000000	-759.65	-1857.82
1	FID	ACIS-S-4	7.18	9353	0.099	0.056	0.007	0.013	0.000000	0.000000	2153.77	50.77
2	FID	ACIS-S-5	7.22	9359	-0.075	0.062	0.010	0.016	0.000000	0.000000	-1812.48	44.49
3	GUIDE	1091973408	8.91	18706	-0.076	-0.028	0.070	0.116	255.800233	-48.601800	710.02	406.21
4	GUIDE	1091975392	6.40	18717	-0.031	-0.089	0.061	0.093	255.805002	-48.336791	1360.30	1104.45
5	GUIDE	1092485728	6.88	18716	0.123	-0.115	0.059	0.100	254.773222	-48.875124	-1761.91	1301.64
6	GUIDE	1092491384	9.12	18705	-0.047	0.120	0.071	0.119	254.923973	-49.184437	-2234.62	232.54
7	GUIDE	1092627912	6.50	18717	0.026	0.112	0.064	0.105	257.034537	-48.883770	2173.21	-2327.85

2.4 Star Slots

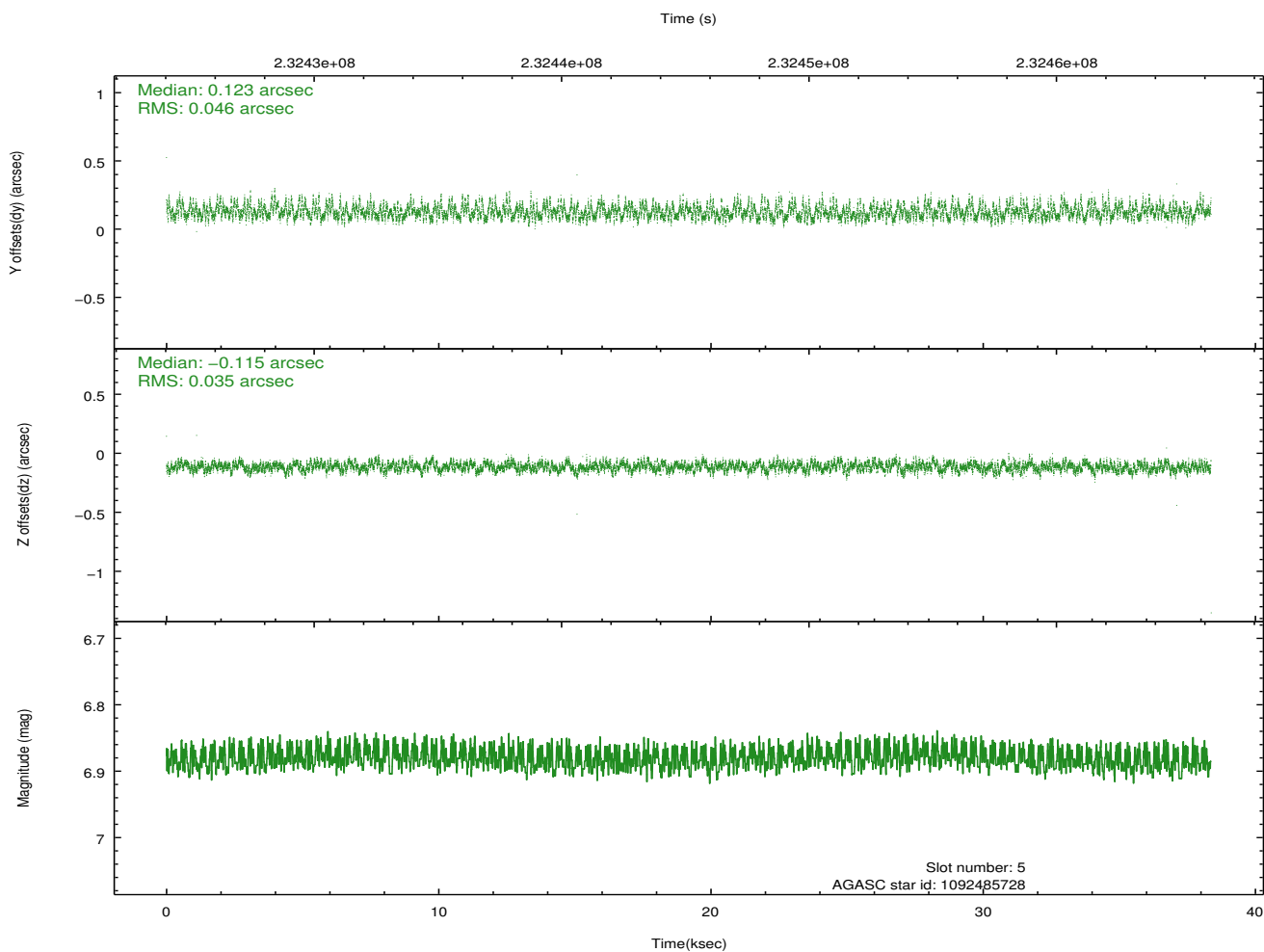
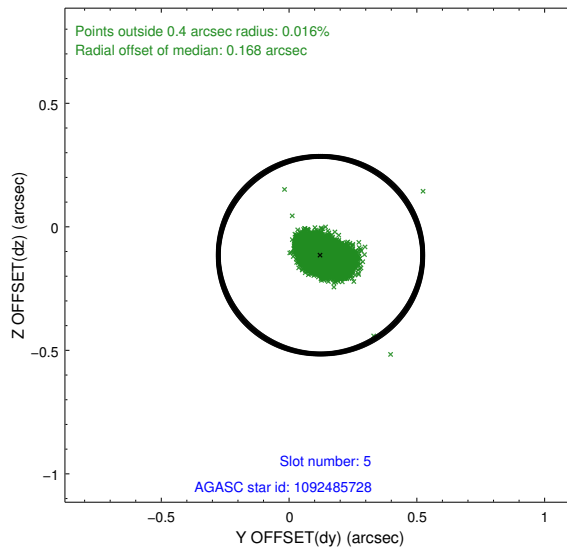
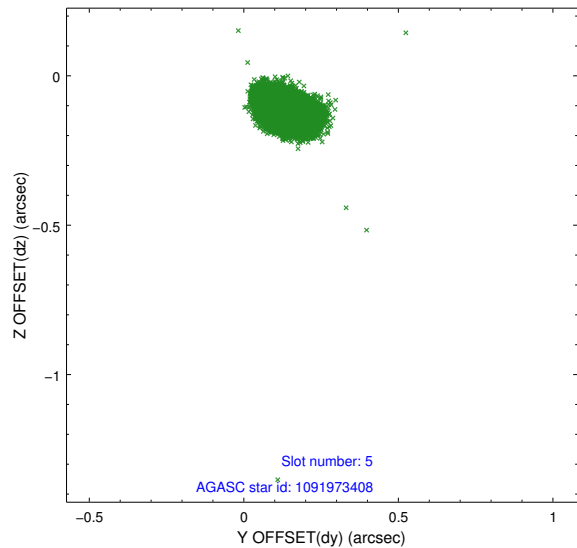
2.4.1 Slot 3



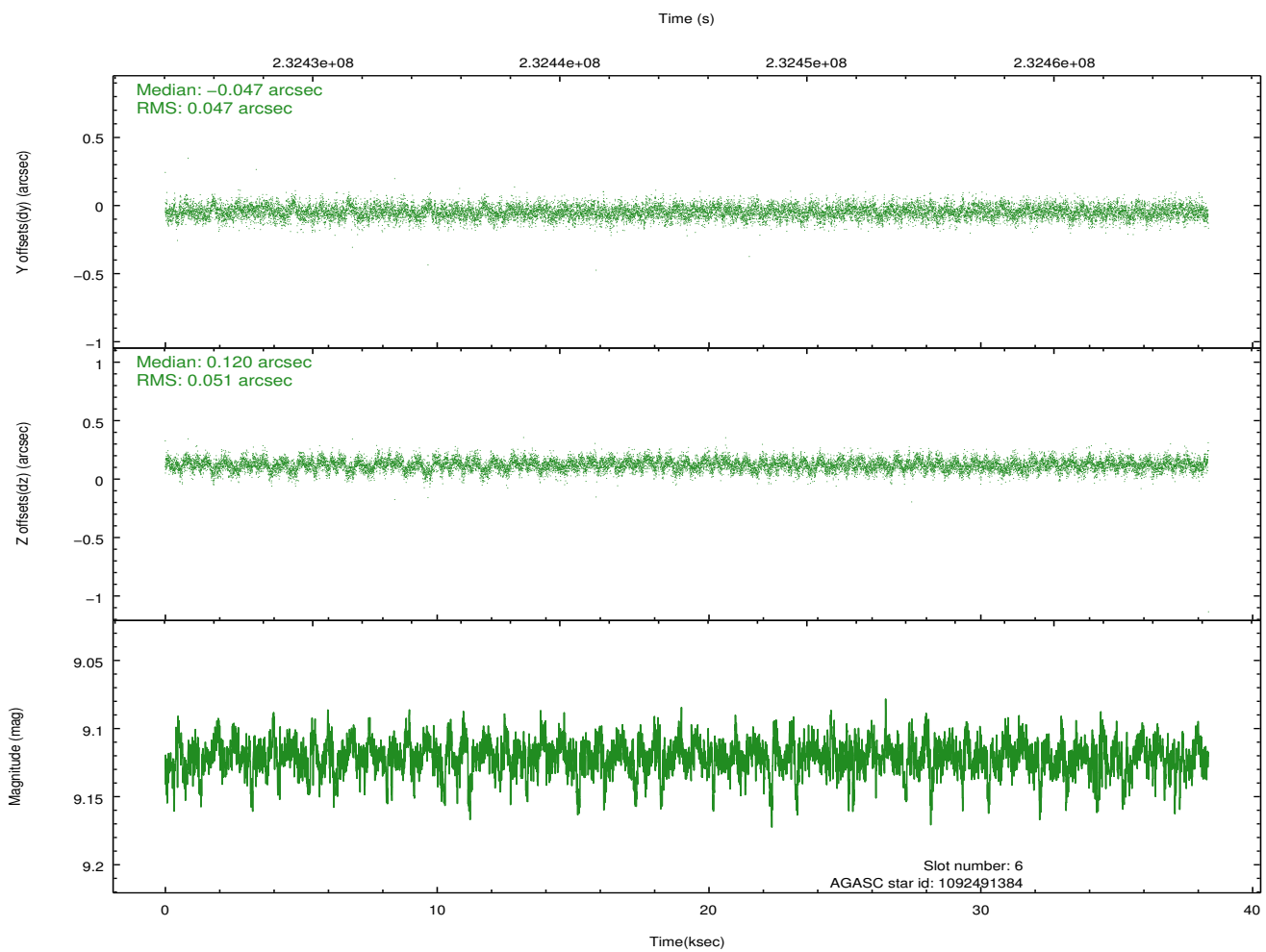
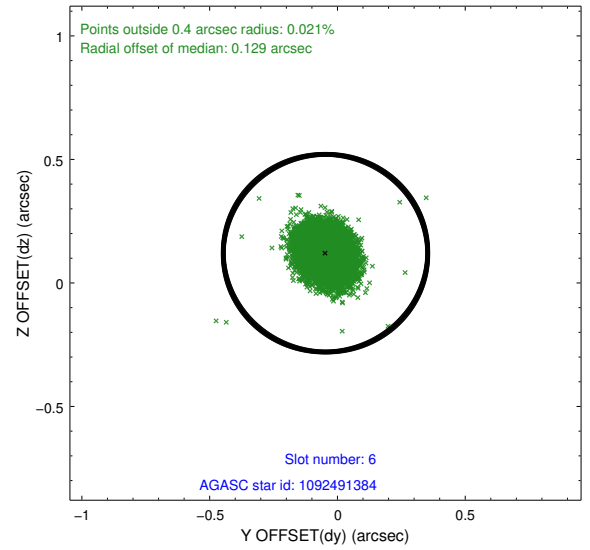
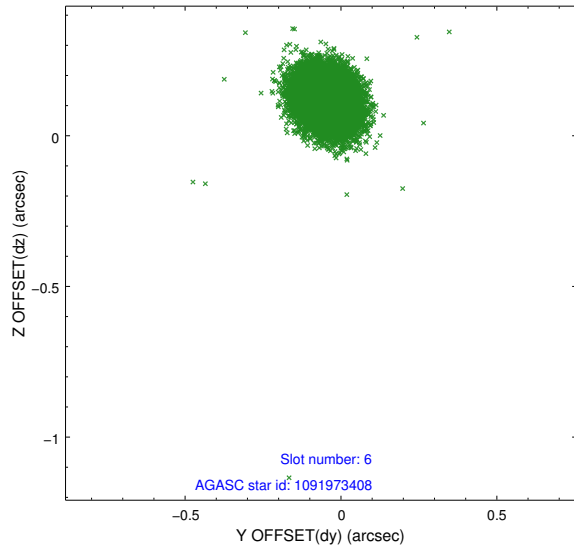
2.4.2 Slot 4



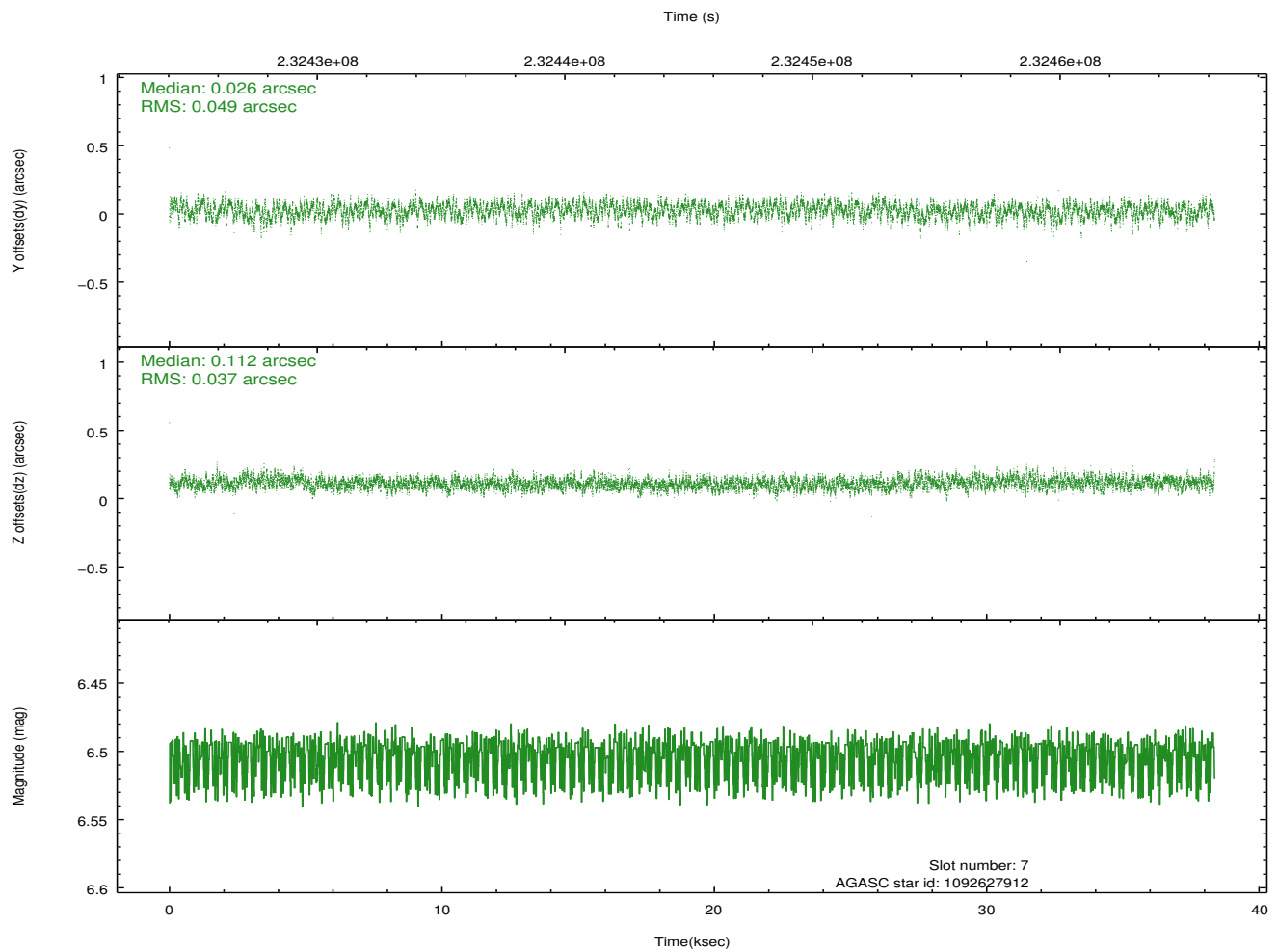
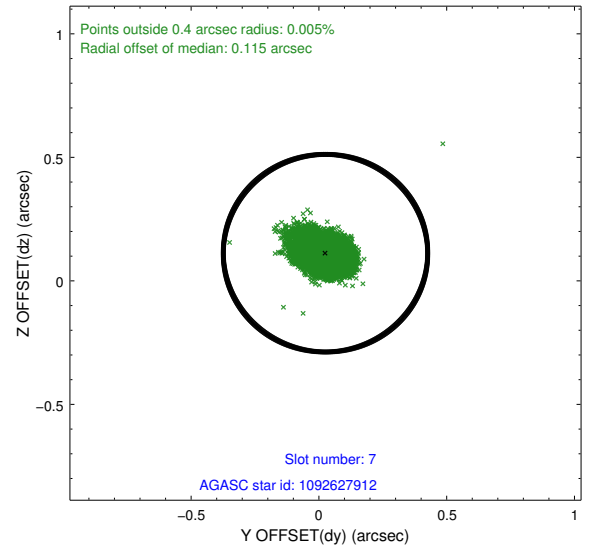
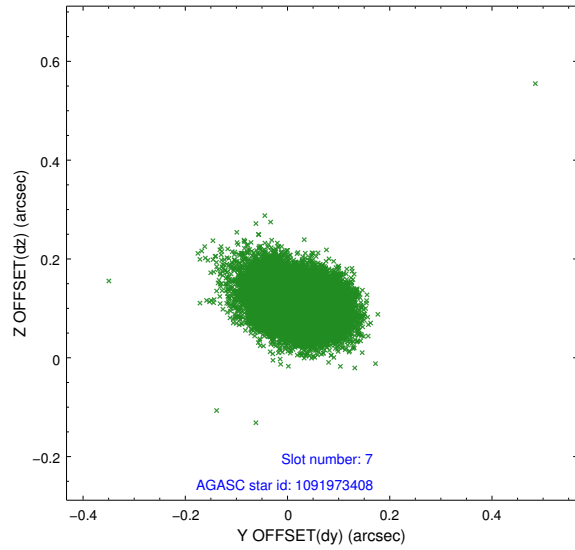
2.4.3 Slot 5



2.4.4 Slot 6

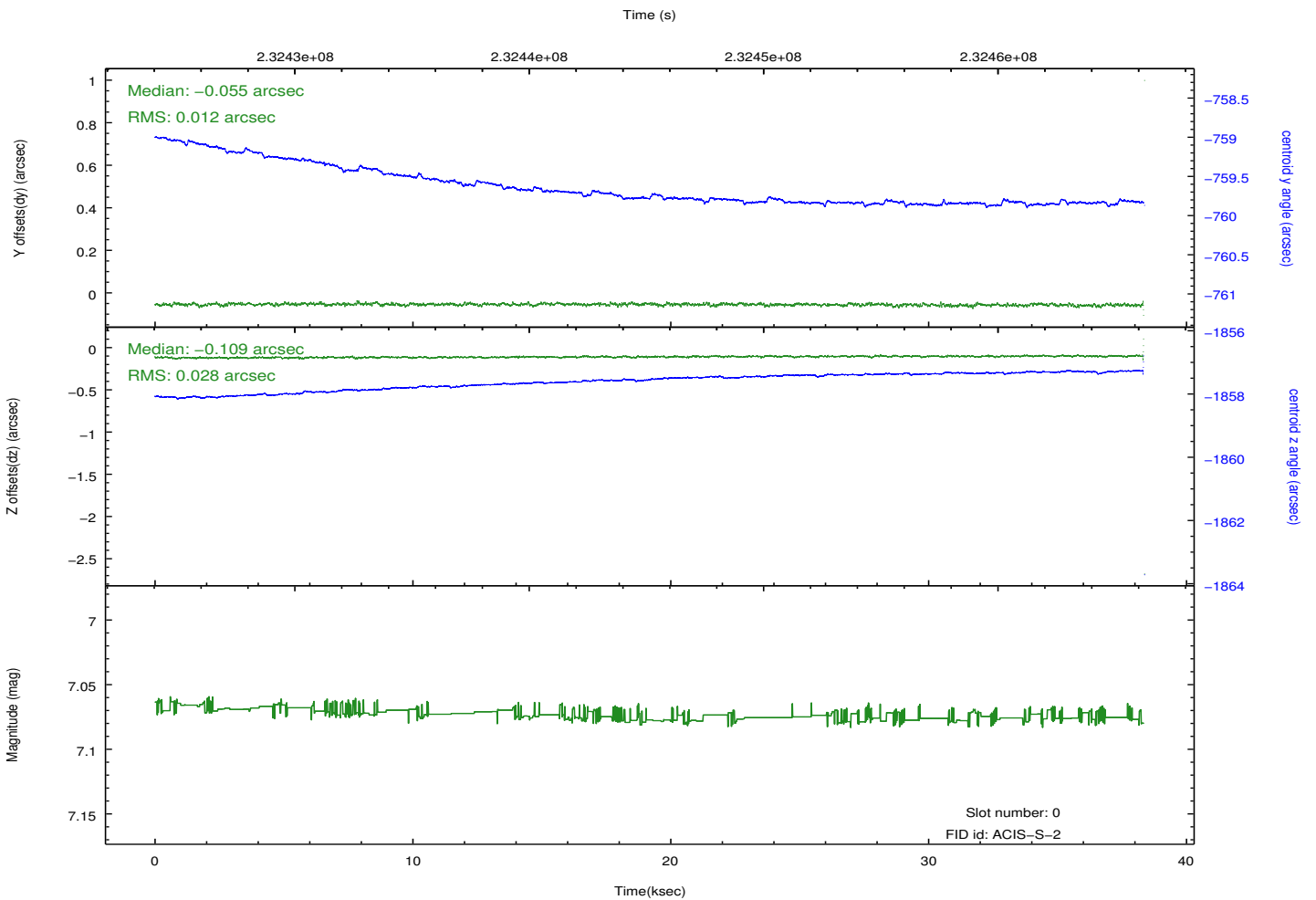
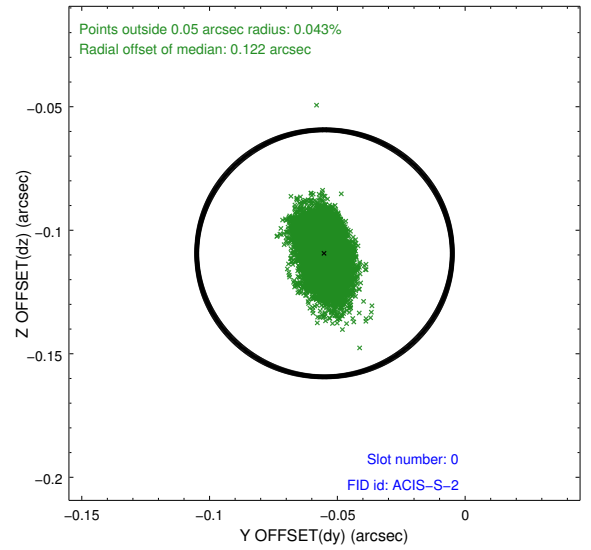
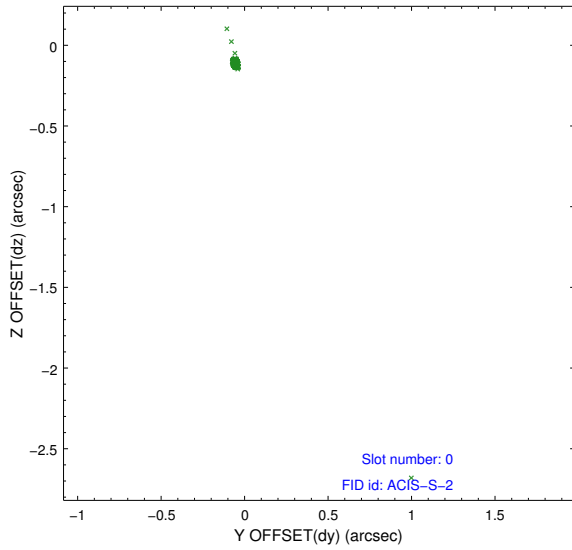


2.4.5 Slot 7

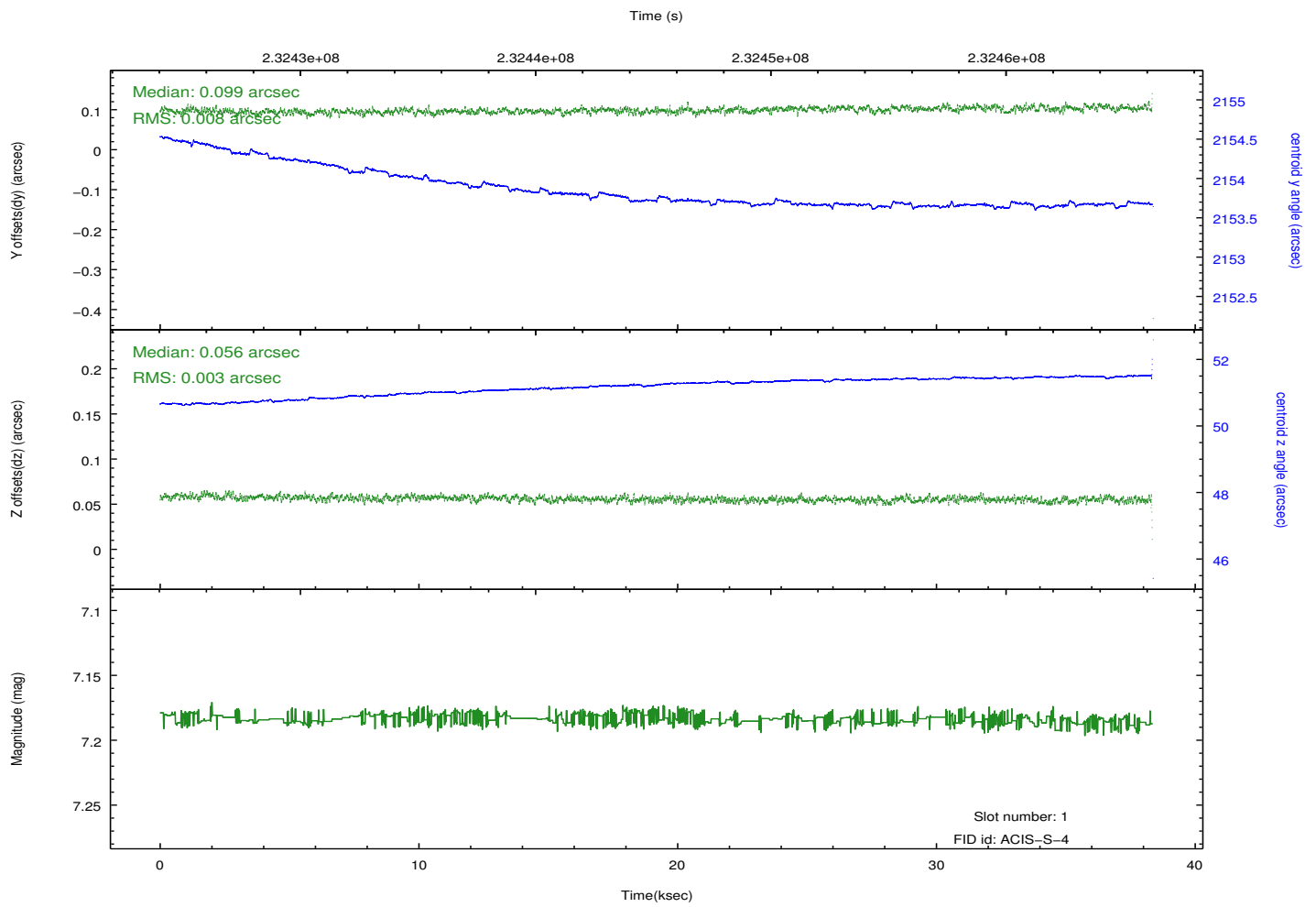
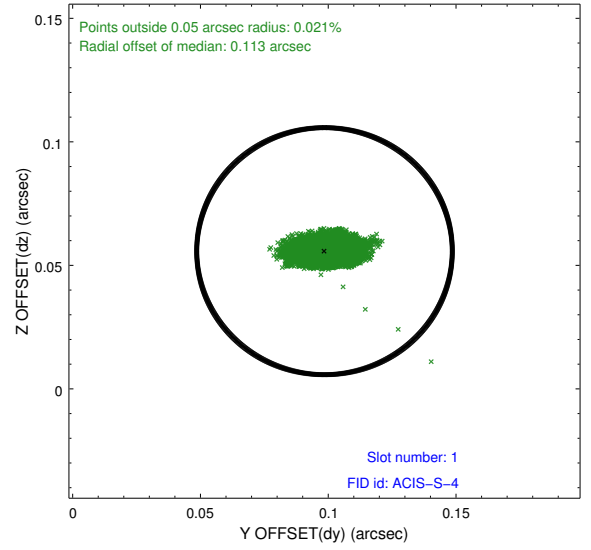
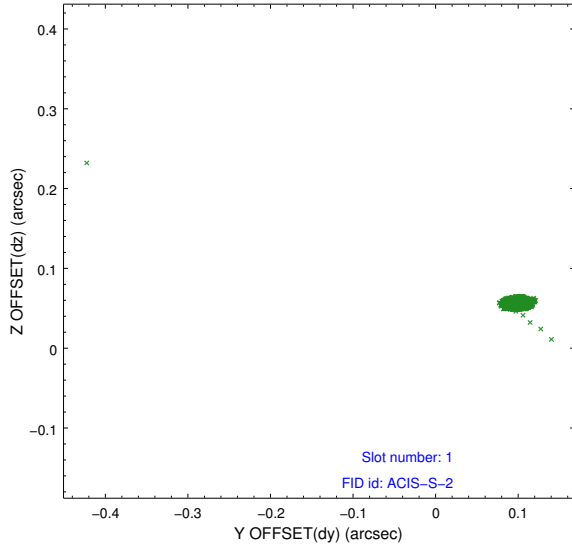


2.5 FID Slots

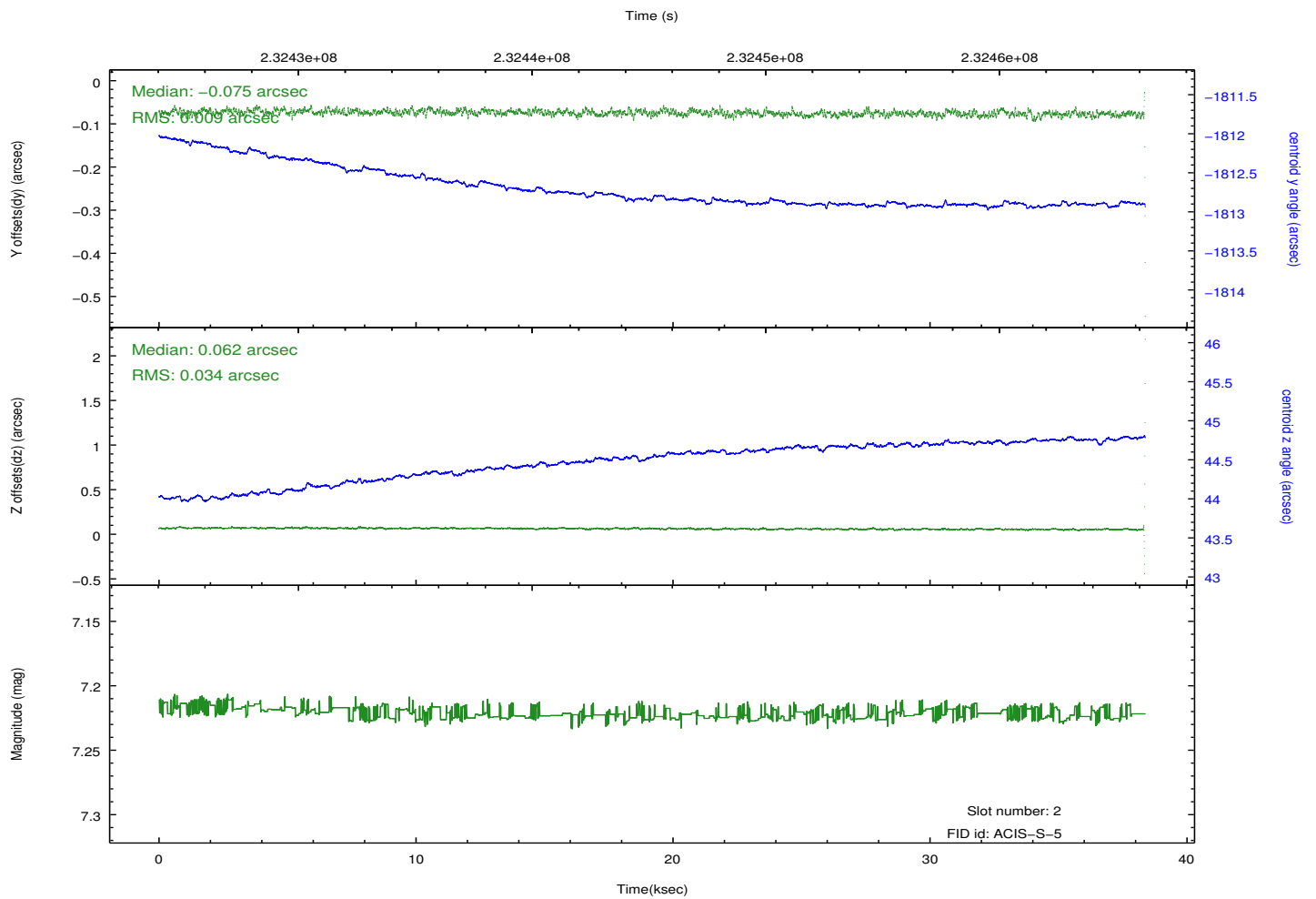
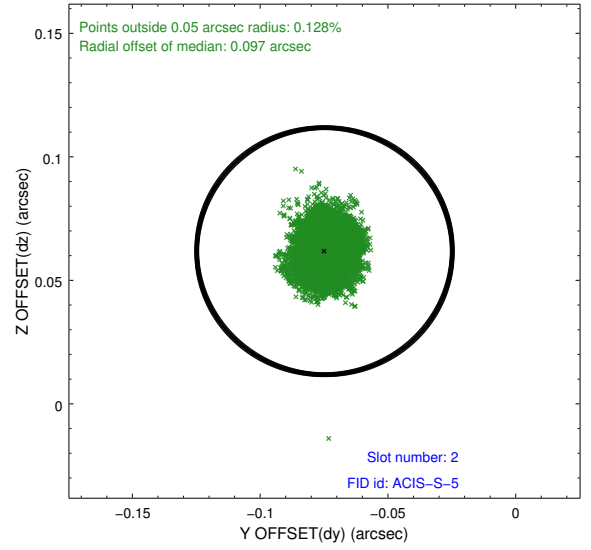
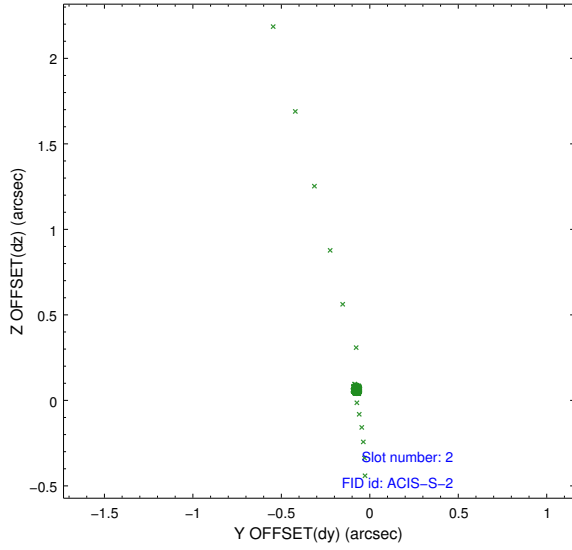
2.5.1 Slot 0



2.5.2 Slot 1

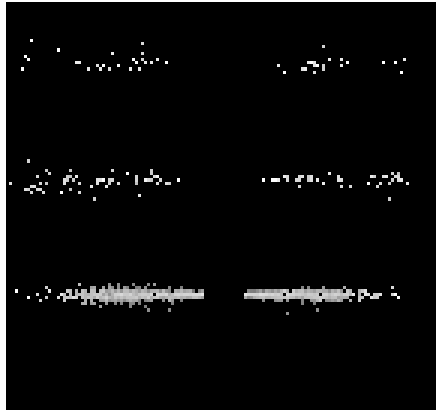


2.5.3 Slot 2

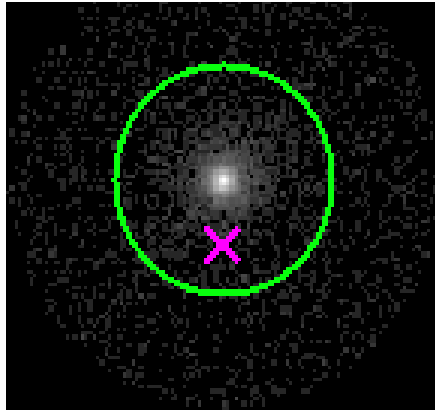


3 Gratings

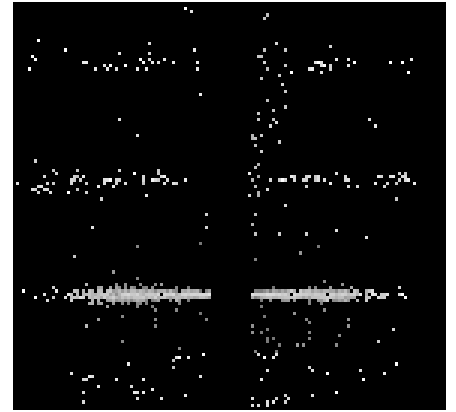
3.1 HEG Arm



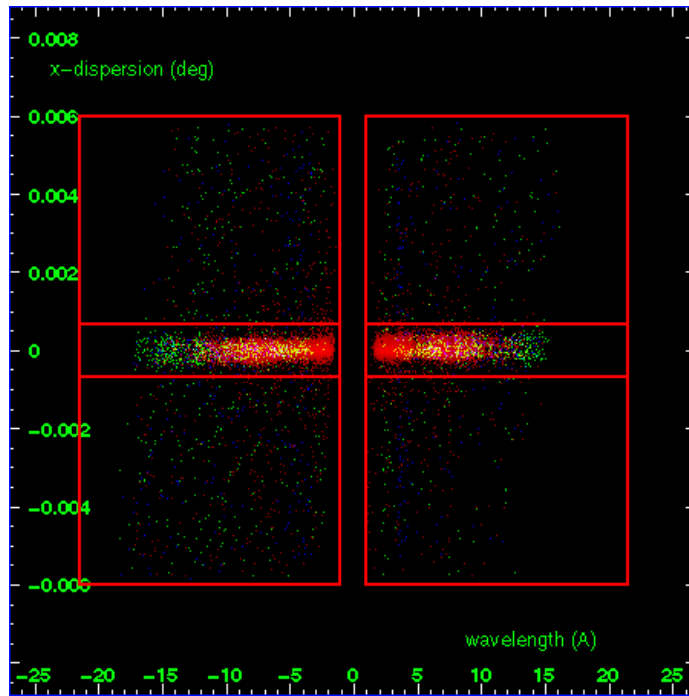
HEG Order Sort 123



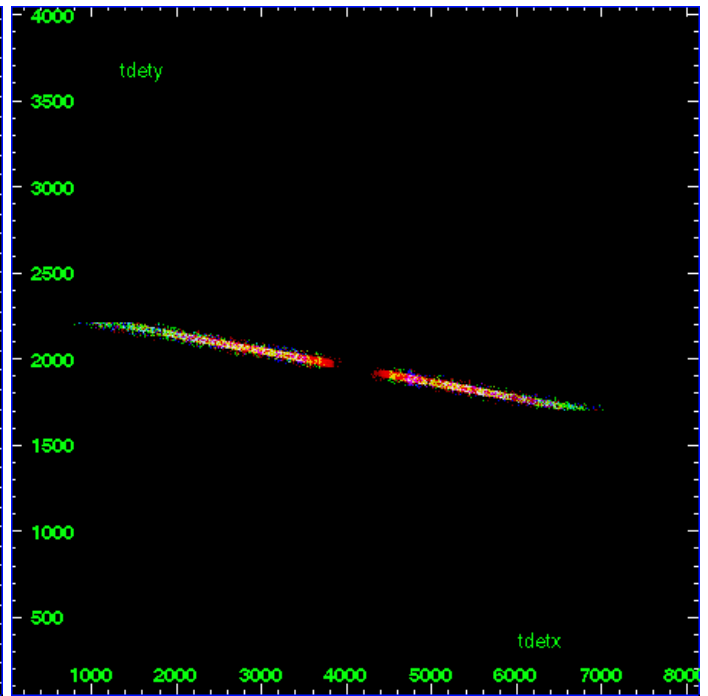
HEG Zero Order



HEG Order Sort ALL

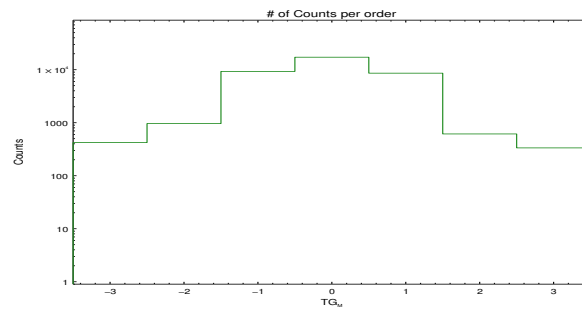


Spot Image HEG

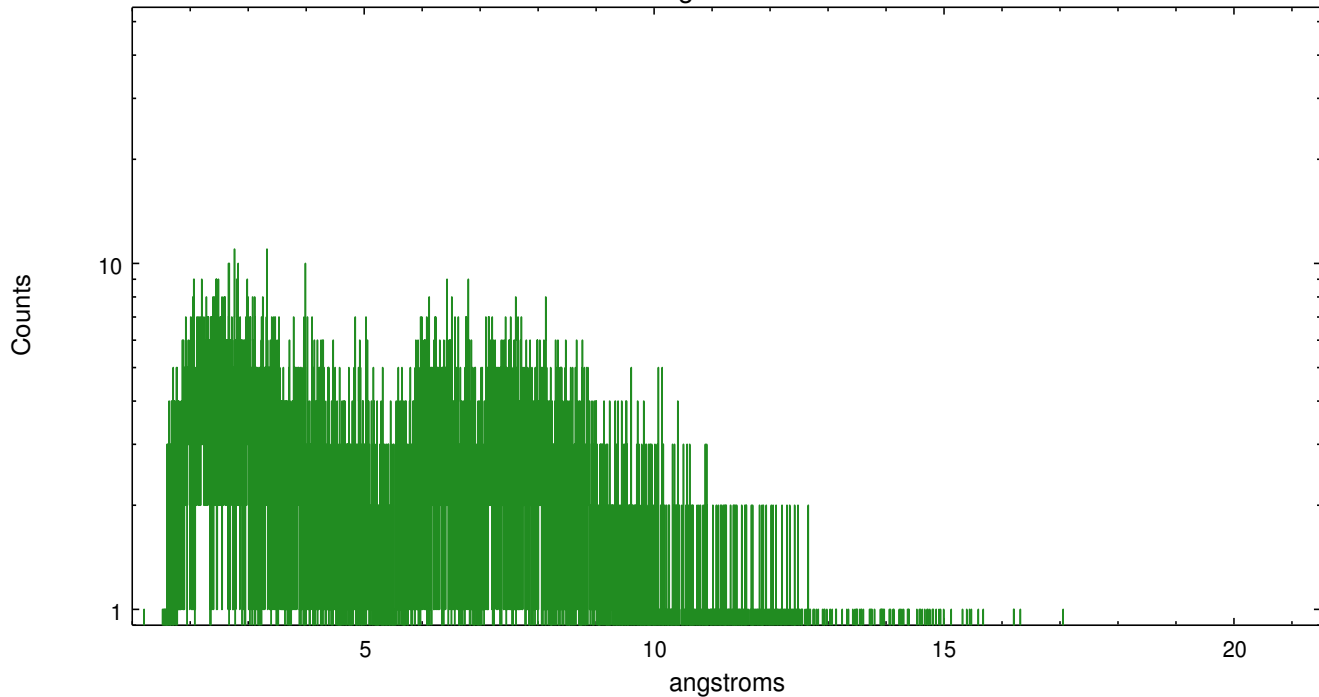


Full Detector HEG

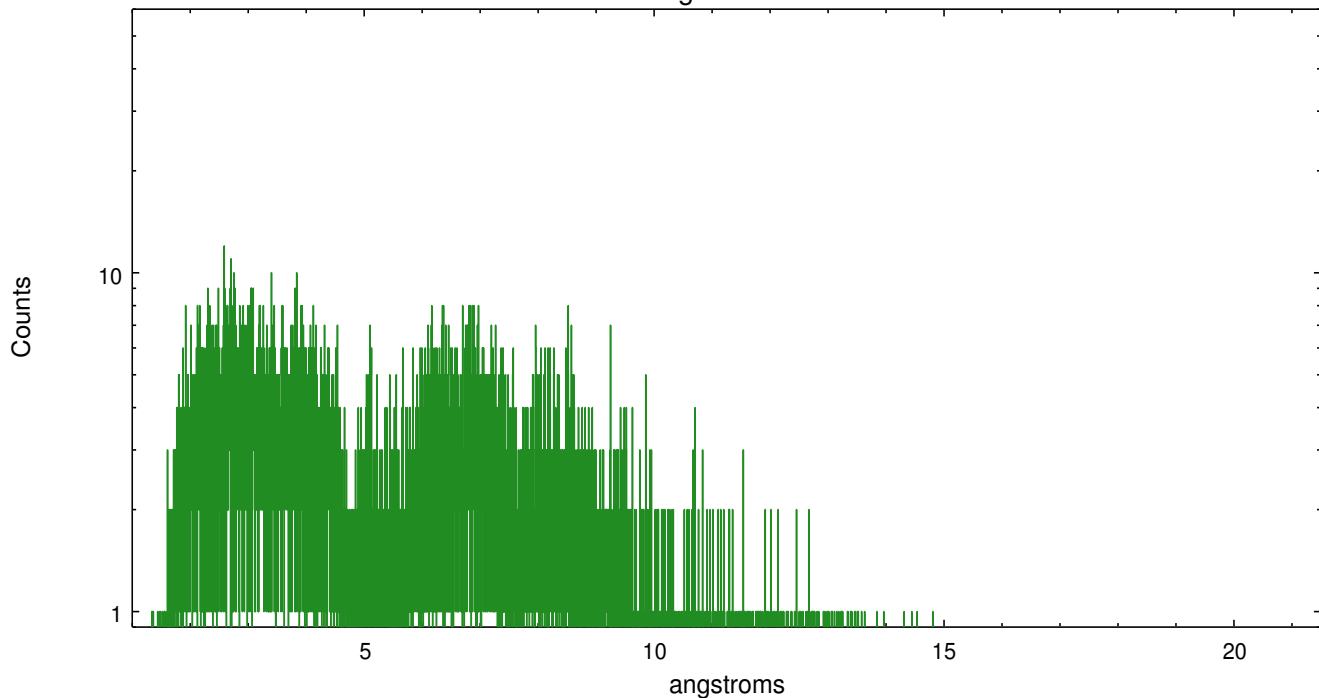
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	422	963	9280	17194	8595	614	335



heg order -1



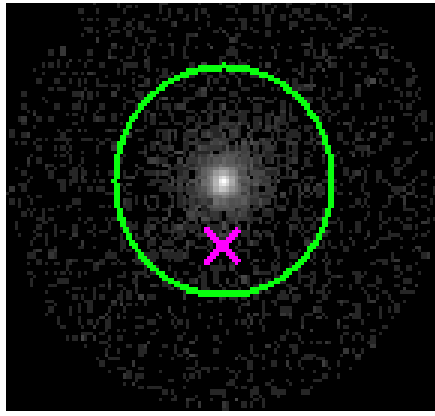
heg order +1



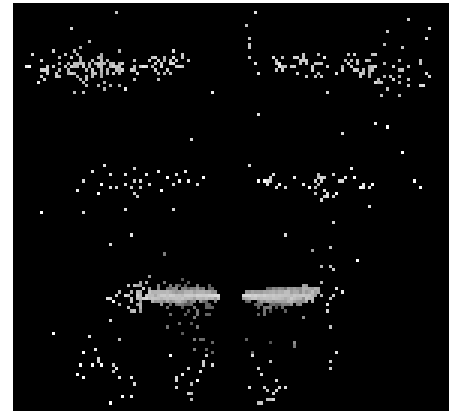
3.2 MEG Arm



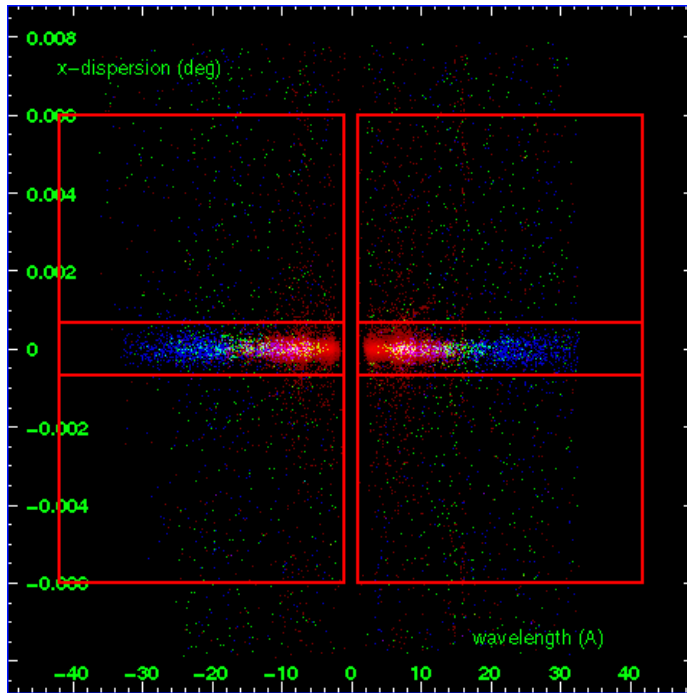
MEG Order Sort 123



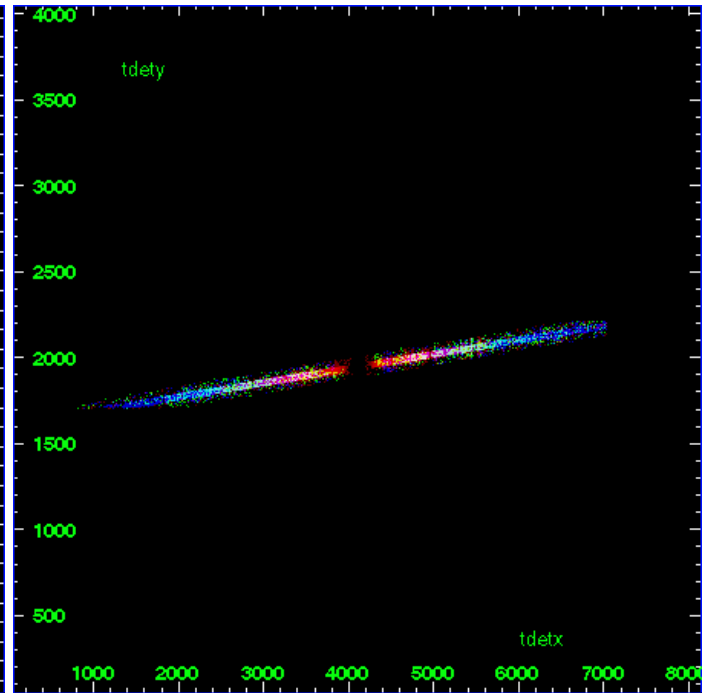
MEG Zero Order



MEG Order Sort ALL

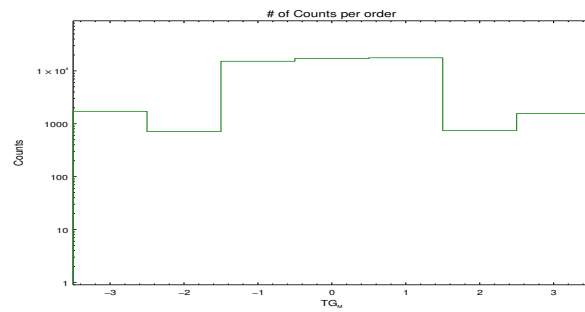


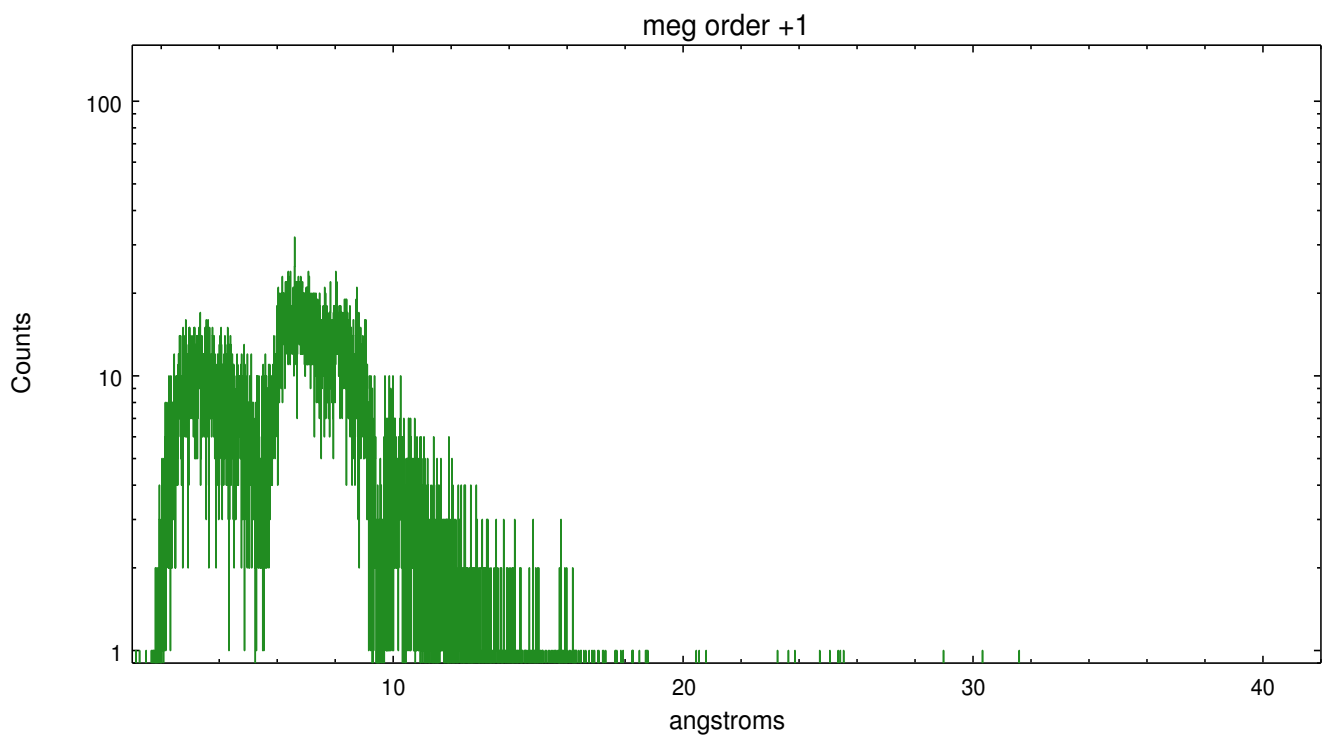
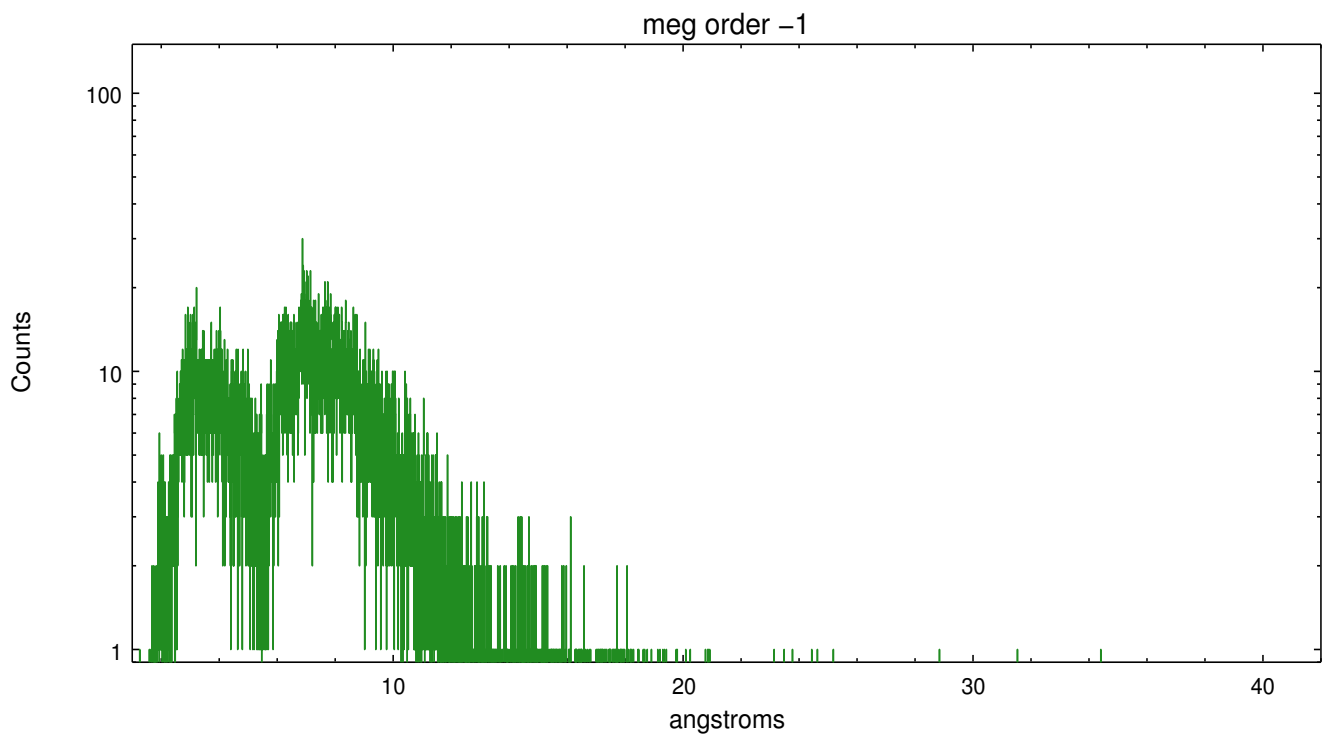
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1715	712	15162	17194	17694	741	1556





A Summary

A.1 Status

V&V Scientist	Dan Dewey
V&V Date (YYYY-MM-DD)	2009.08.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.3429437

A.2 Comments

Issue #140 has been fixed and obsid 5475 reprocessed:

A software fix was implemented to correctly determine the aspect solution for obsids that

ended prematurely with an SCS107. The previous software included part of

the sim motion after SCS107 ran, so the aspect was messed up.

=====

This observation was interrupted by an 'SCS107' safing of the science instruments onboard Chandra due to high solar radiation environment.

=== previous comments: ===

Comments for Obi 2

SIM dz has 85 discontinuities > 0.200 arcsec