

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 8451 - L2 Version 2
Chandra X-Ray Center

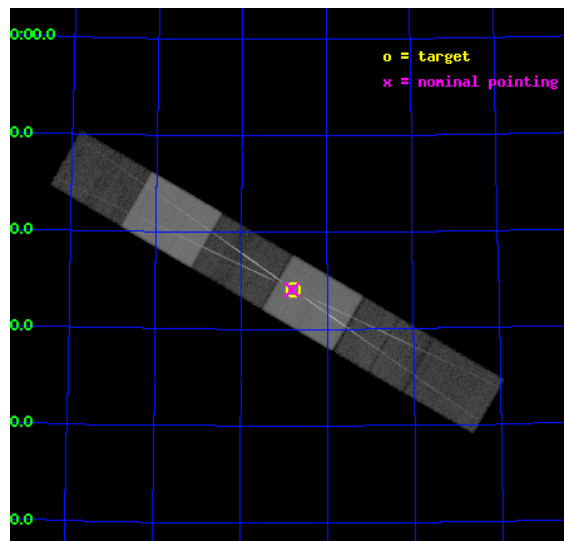
L2 Processing Date : Apr 11 2012

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

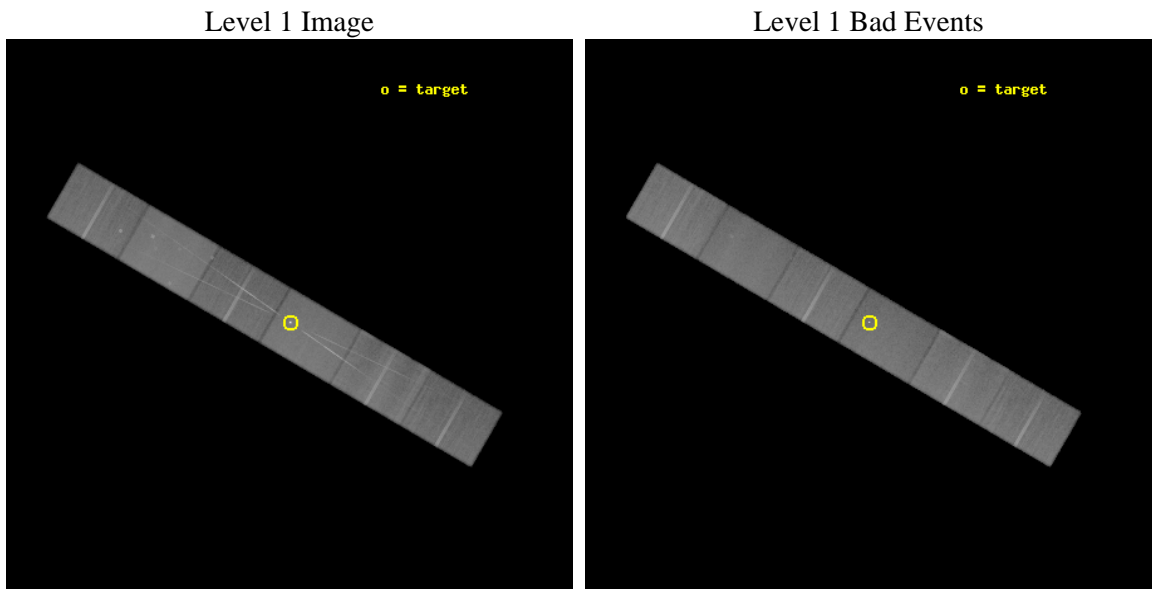
seq_num	701337	Sequence number
obs_id	8451	Observation id
title	NGC 3516: Disk Diagnostics from a Windy BLSy1 in a High-State	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 3516	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	166.698333	Observer's specified target RA [deg]
dec_targ	72.568972	Observer's specified target Dec [deg]
ra_nom	166.7047440202	Nominal RA [deg]
dec_nom	72.568154222028	Nominal Dec [deg]
roll_nom	30.150509230255	Nominal Roll [deg]
revision	2	Processing version of data
ontime	48137.5	Sum of GTIs [s]
livetime	47360.037622391	Livetime [s]
ontime4	48137.5	Sum of GTIs [s]
ontime5	48137.5	Sum of GTIs [s]
ontime6	48137.5	Sum of GTIs [s]
ontime7	48137.5	Sum of GTIs [s]
ontime8	48137.5	Sum of GTIs [s]
ontime9	48137.5	Sum of GTIs [s]
l2events	638040	Number of level 2 events



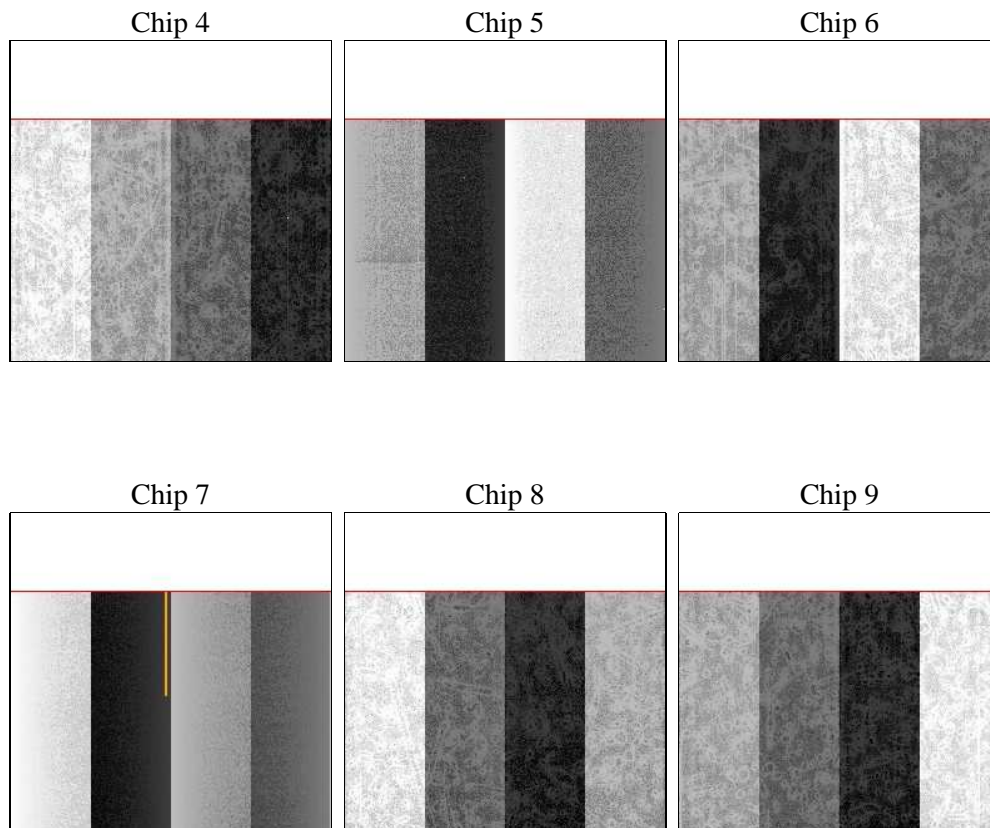
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	48137.5	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	48137.5	Sum of GTIs [s]
date	2012-04-11T16:25:48	Date and time of file creation	ontime5	48137.5	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	48137.5	Sum of GTIs [s]
			ontime7	48137.5	Sum of GTIs [s]
			ontime8	48137.5	Sum of GTIs [s]
			ontime9	48137.5	Sum of GTIs [s]
			l1events	2559009	Number of level 1 events

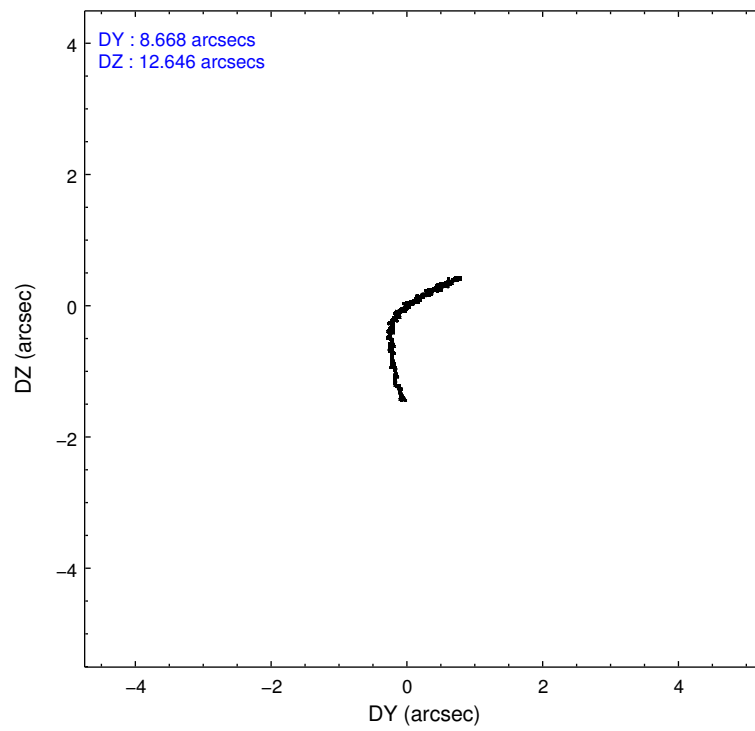
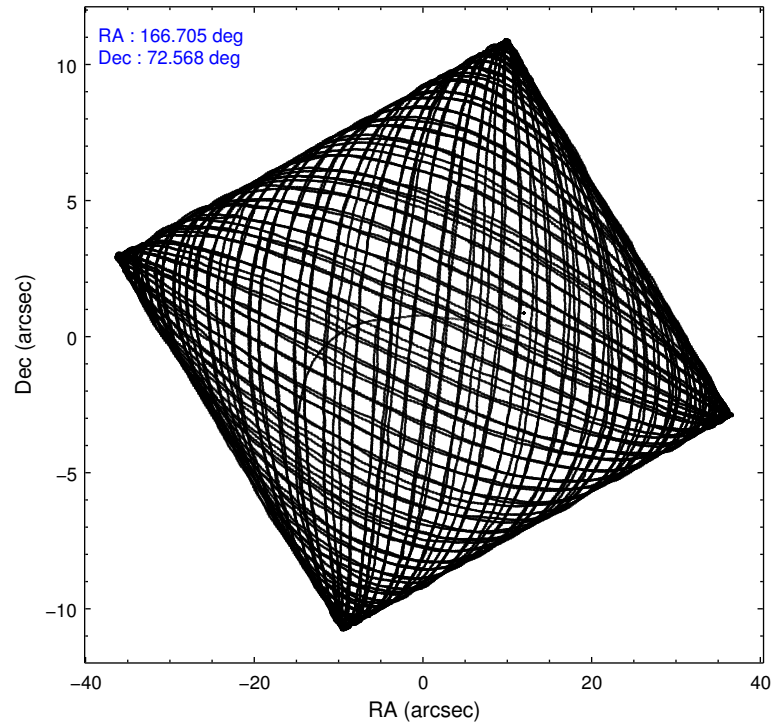
2.1.4 Events

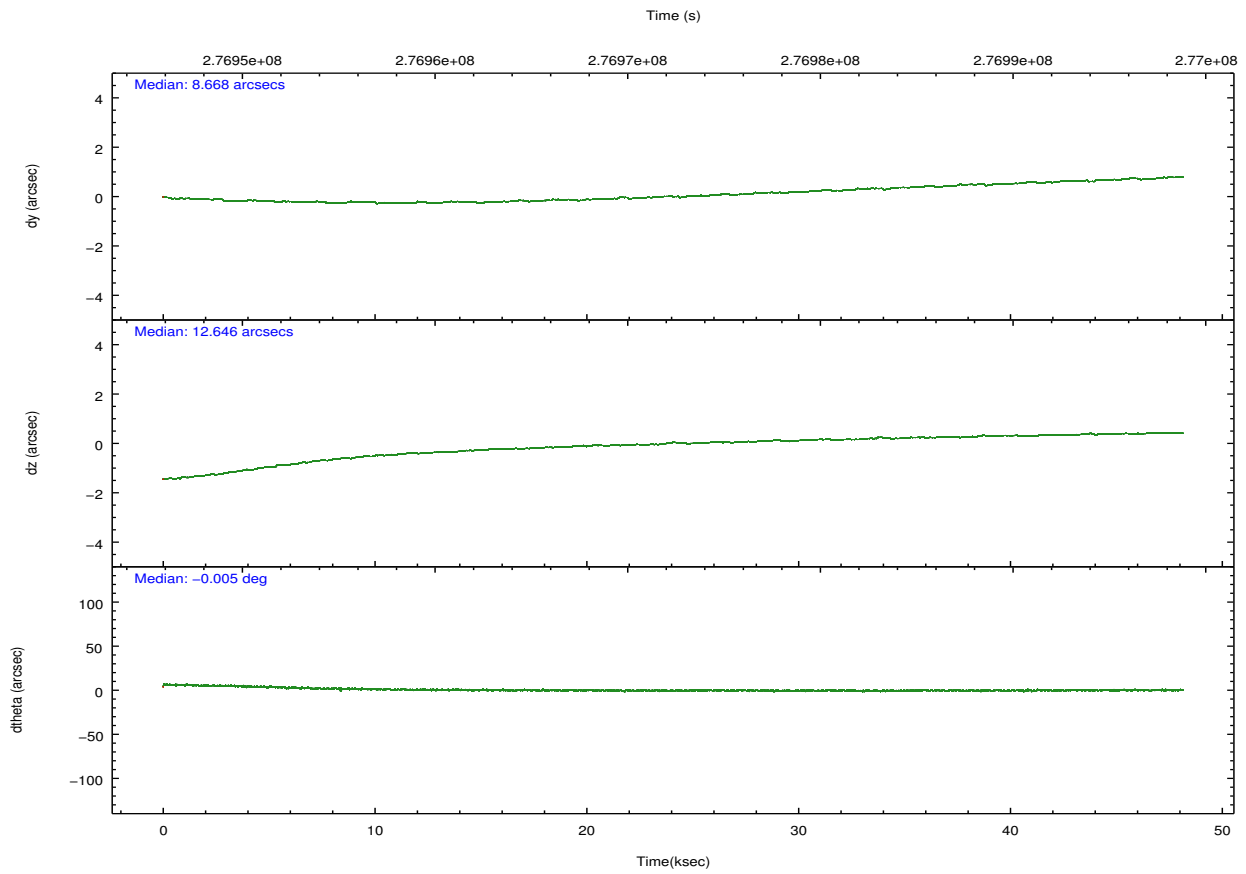
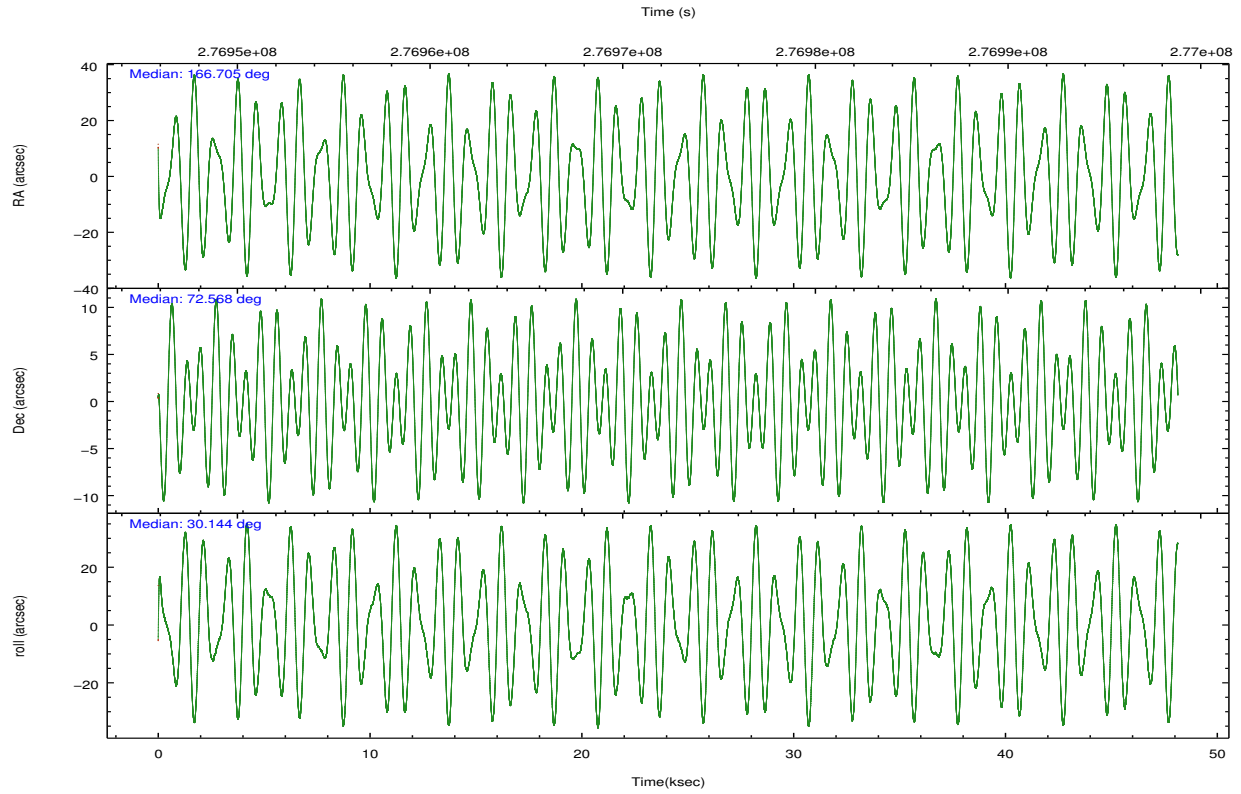
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	388398	512240	367766	503998	444567	342040	grade 0 events	22072	20240	35027	24168	38289	18473
rejected events	341293	276391	302027	273593	337853	298400		5%	3%	9%	4%	8%	5%
rejected %	87%	53%	82%	54%	75%	87%	grade 1 events	308	1183	225	846	320	180
								0%	0%	0%	0%	0%	0%
							grade 2 events	9558	70842	11523	47967	22261	8651
								2%	13%	3%	9%	5%	2%
							grade 3 events	4393	10833	5170	20978	10746	4301
								1%	2%	1%	4%	2%	1%
							grade 4 events	4429	10481	5115	21071	10075	4346
								1%	2%	1%	4%	2%	1%
							grade 5 events	14894	38327	15631	45507	20594	16451
								3%	7%	4%	9%	4%	4%
							grade 6 events	6881	124670	9175	117199	25900	8056
								1%	24%	2%	23%	5%	2%
							grade 7 events	325863	235664	285900	226262	316382	281582
								83%	46%	77%	44%	71%	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	166.660615	166.7047440201959	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	72.544351	72.56815422202826	Subarray start row	1	1
[deg] Pointing Roll	30.035981	30.15050923025527	Subarray row count	774	774
[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	2.5
[mm] SIM translation stage pos	-187.132523	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
[s] Observation start time (MET)	276948429.184000	276947374.37204			
Observation start date	2006-10-11T10:06:04	2006-10-11T09:49:34			
[s] Observation end time (MET)	276996429.184000	276997214.99938			
Observation end date	2006-10-11T23:26:04	2006-10-11T23:40:14			
Read mode	TIMED	TIMED			

2.3 Aspect



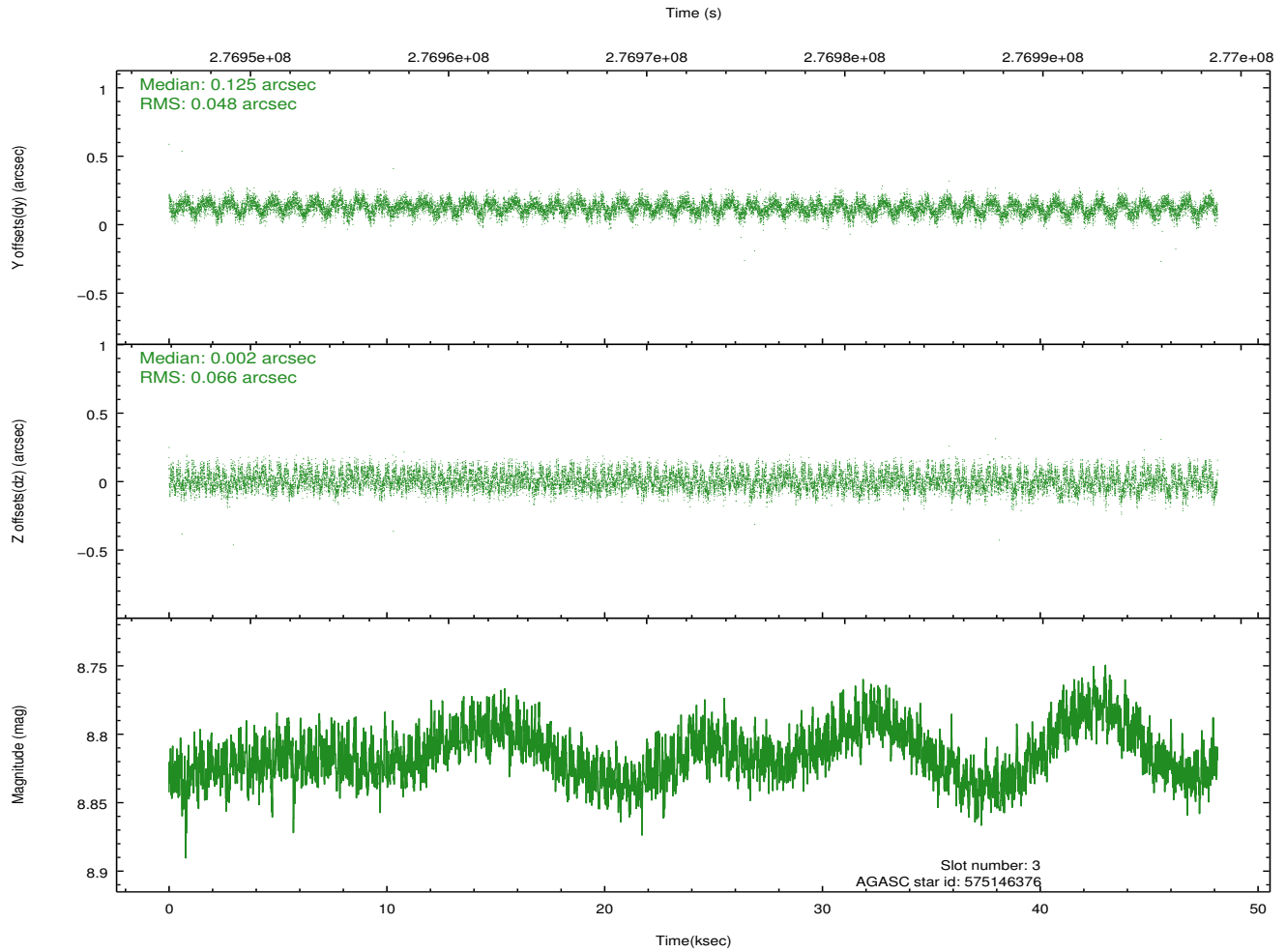
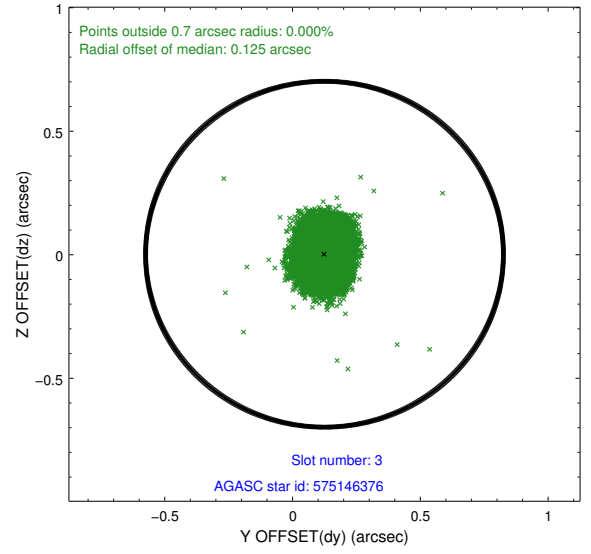
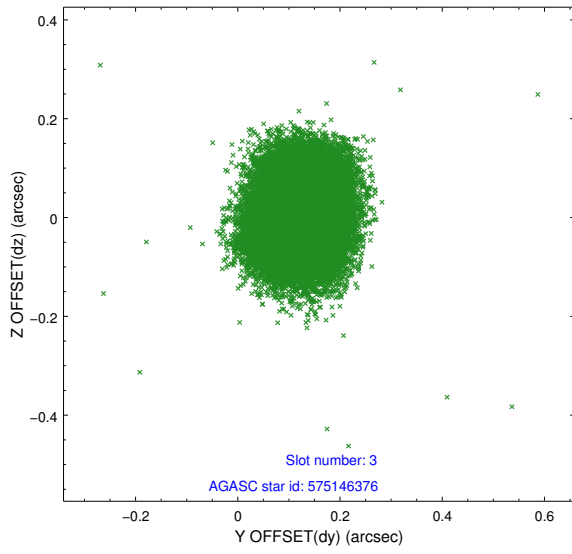


Slot Statistics

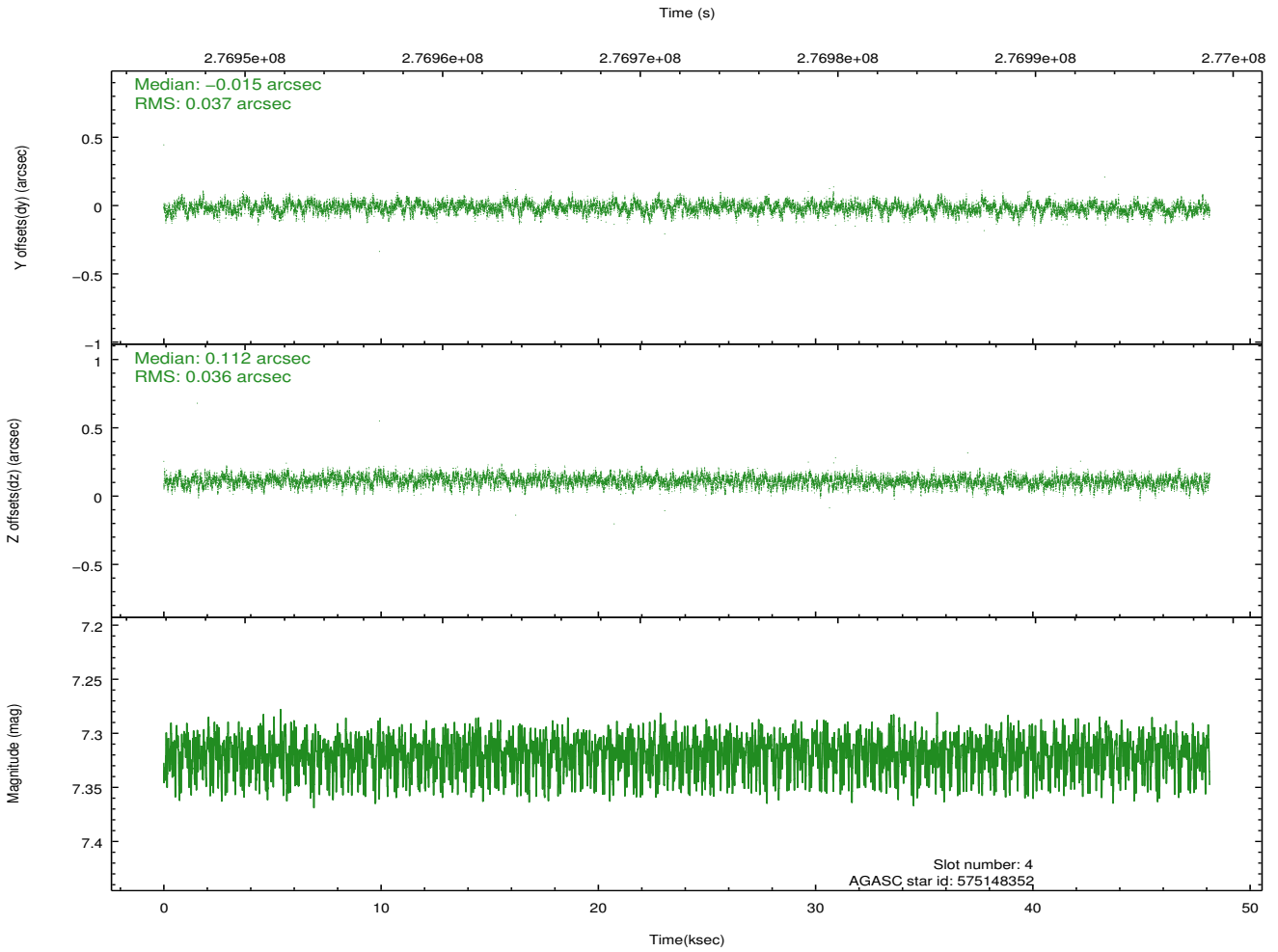
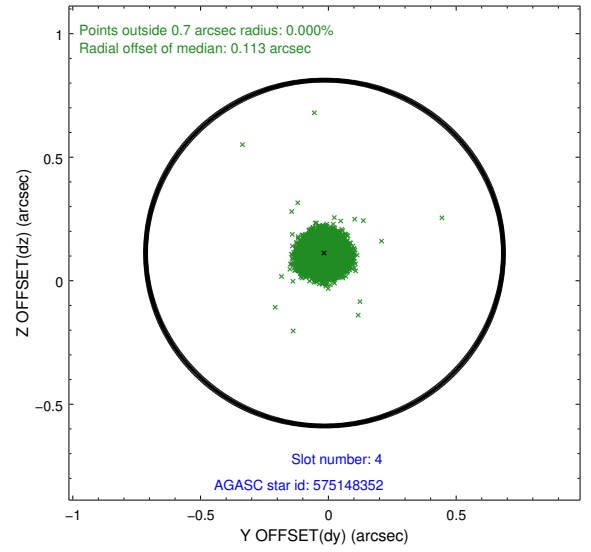
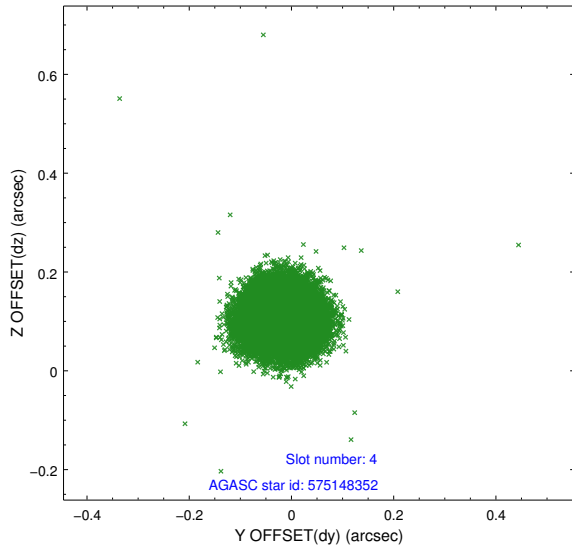
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-4	7.20	11742	0.125	0.015	0.012	0.019	0.000000	0.000000	2152.10	112.74
1	FID	ACIS-S-5	7.24	11741	-0.180	0.002	0.020	0.033	0.000000	0.000000	-1814.42	106.17
2	FID	ACIS-S-6	7.37	11743	0.028	-0.003	0.015	0.028	0.000000	0.000000	400.27	749.92
3	GUIDE	575146376	8.82	23471	0.125	0.002	0.088	0.137	166.888472	72.124920	-536.94	-1432.56
4	GUIDE	575148352	7.32	23485	-0.015	0.112	0.055	0.088	167.090916	71.958979	-638.29	-2062.76
5	GUIDE	575150616	8.22	23482	0.018	0.129	0.065	0.107	167.218511	72.045663	-360.59	-1861.17
6	GUIDE	575541080	8.95	23470	-0.383	0.026	0.086	0.141	167.870403	73.115273	2130.04	1157.76
7	GUIDE	575541344	9.37	23454	0.263	-0.268	0.089	0.148	166.947366	72.953762	1000.67	1125.32

2.4 Star Slots

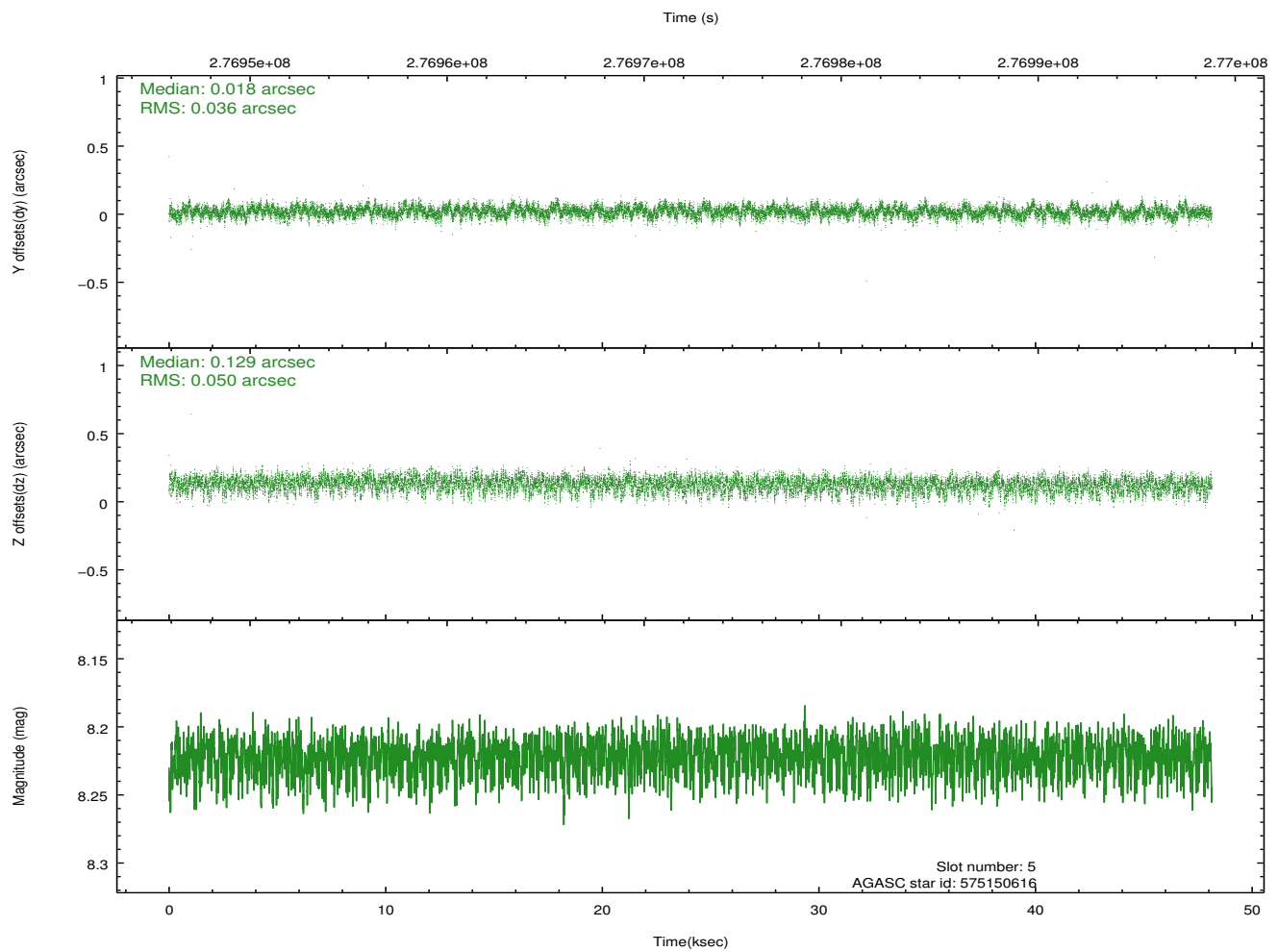
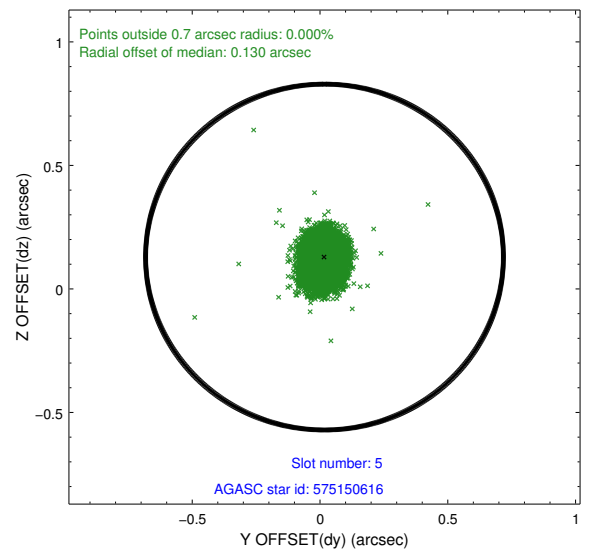
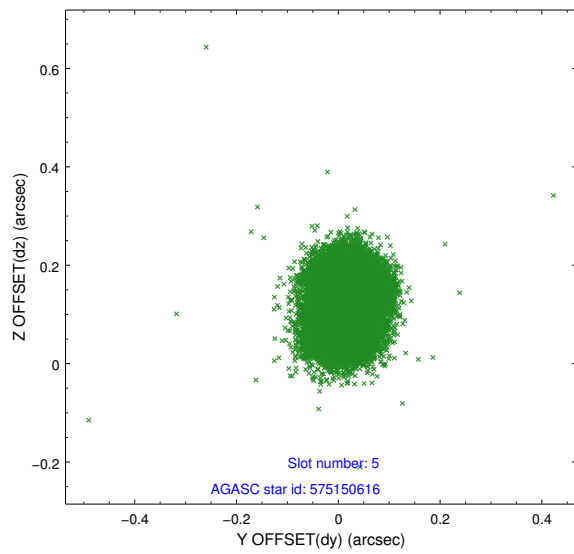
2.4.1 Slot 3



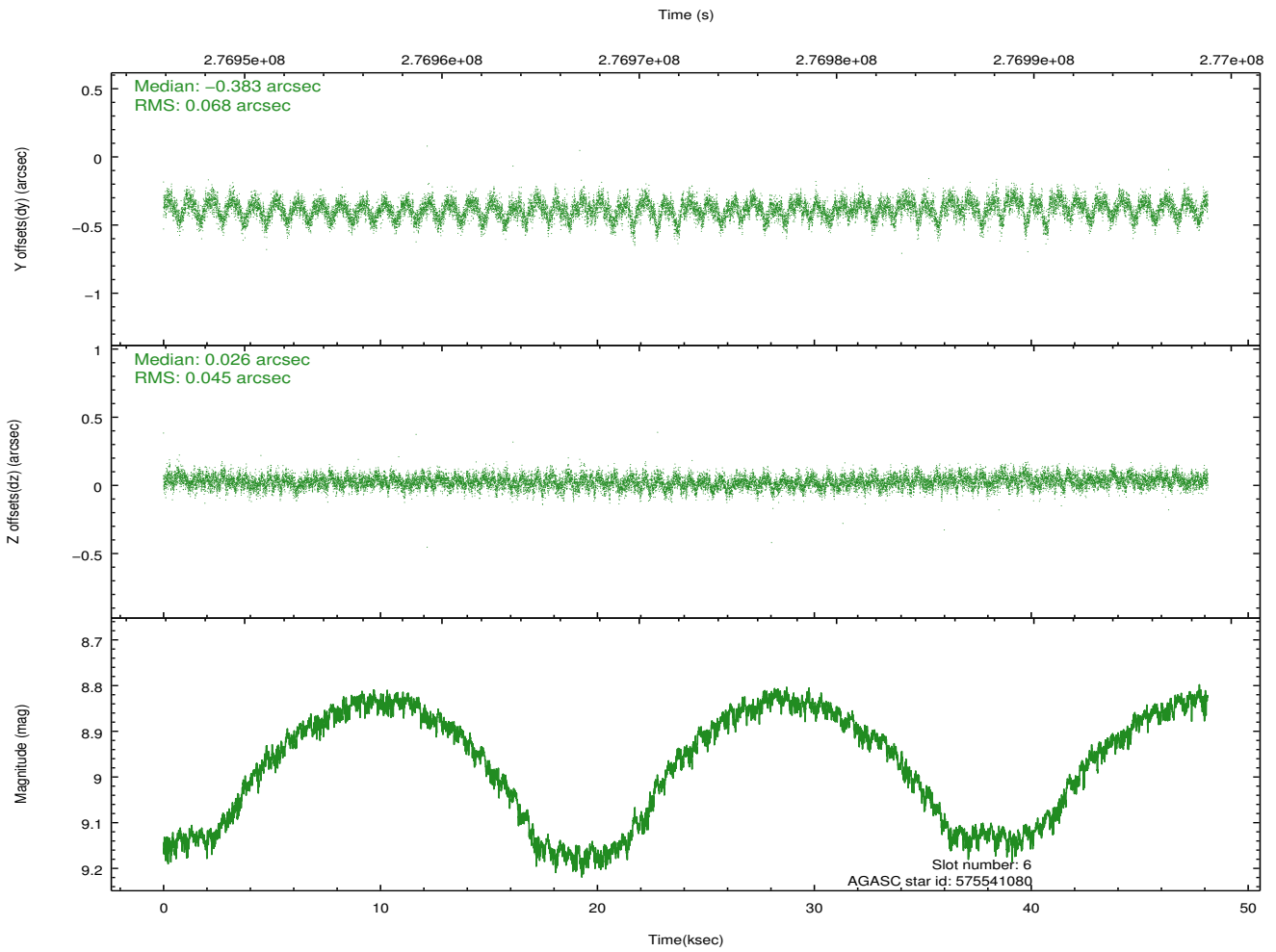
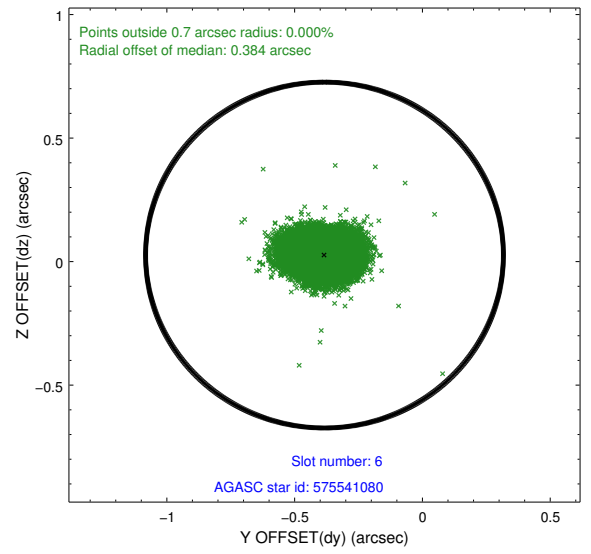
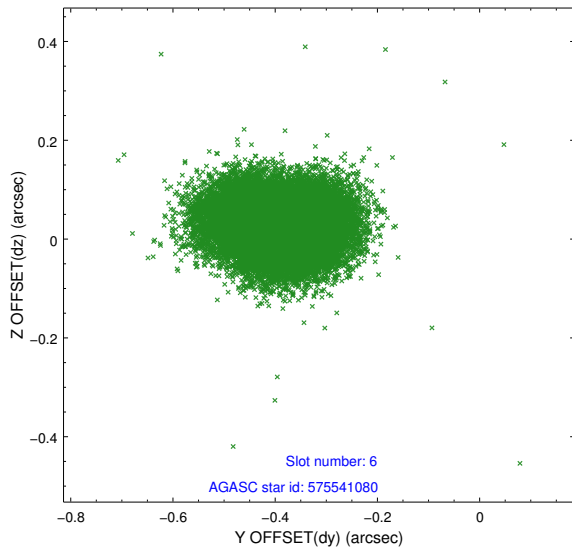
2.4.2 Slot 4



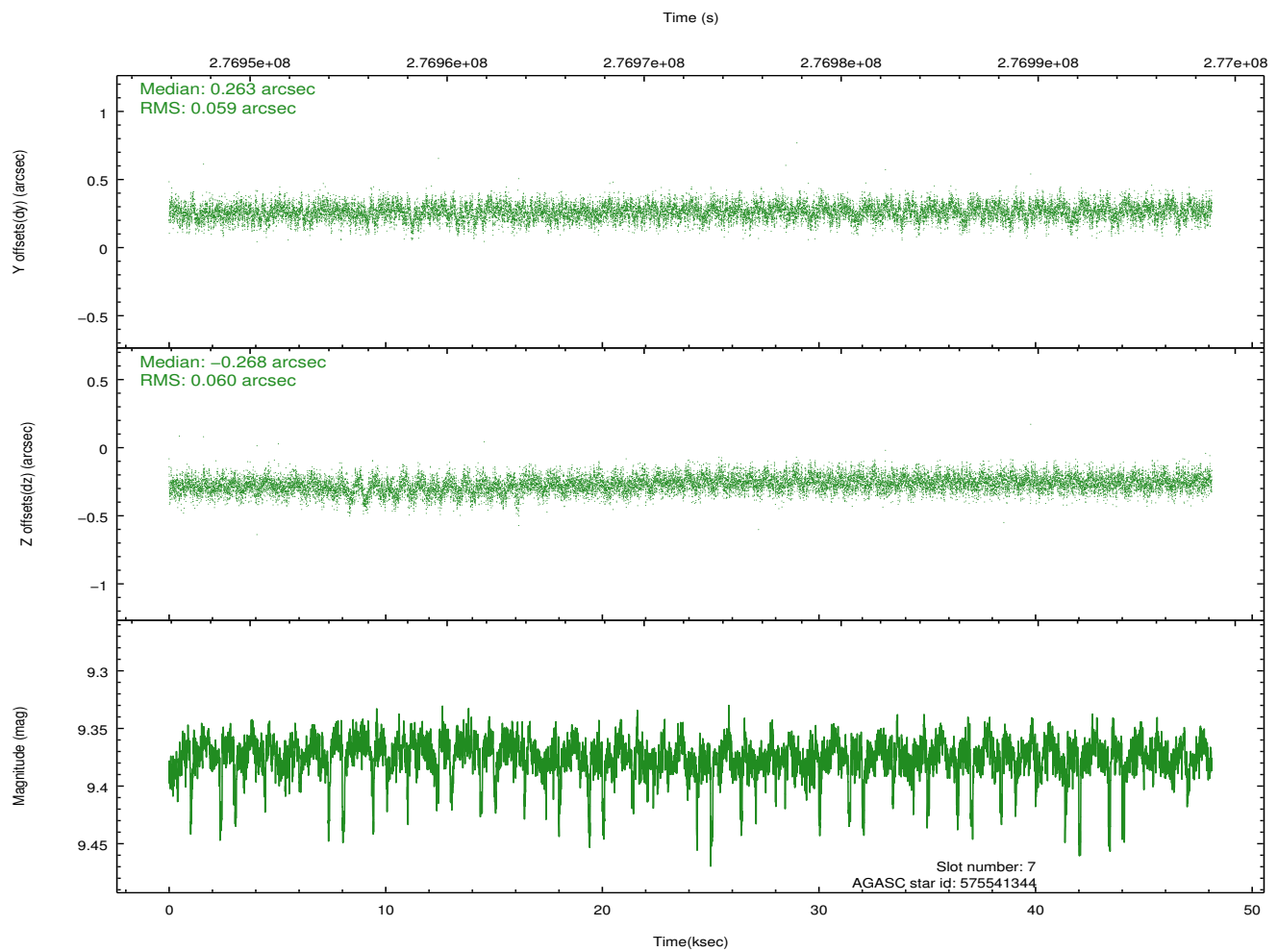
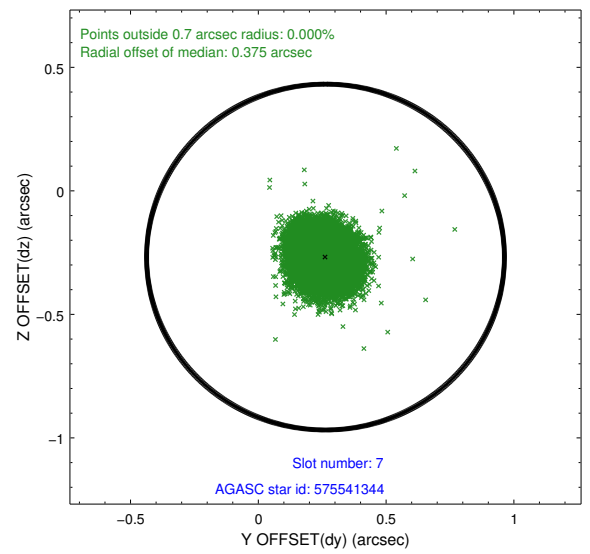
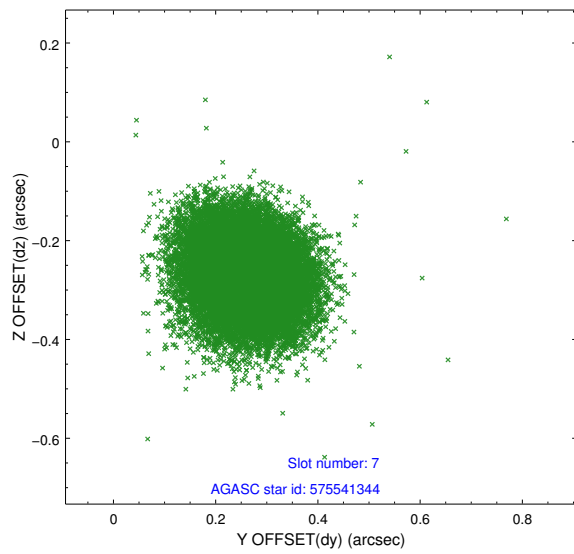
2.4.3 Slot 5



2.4.4 Slot 6

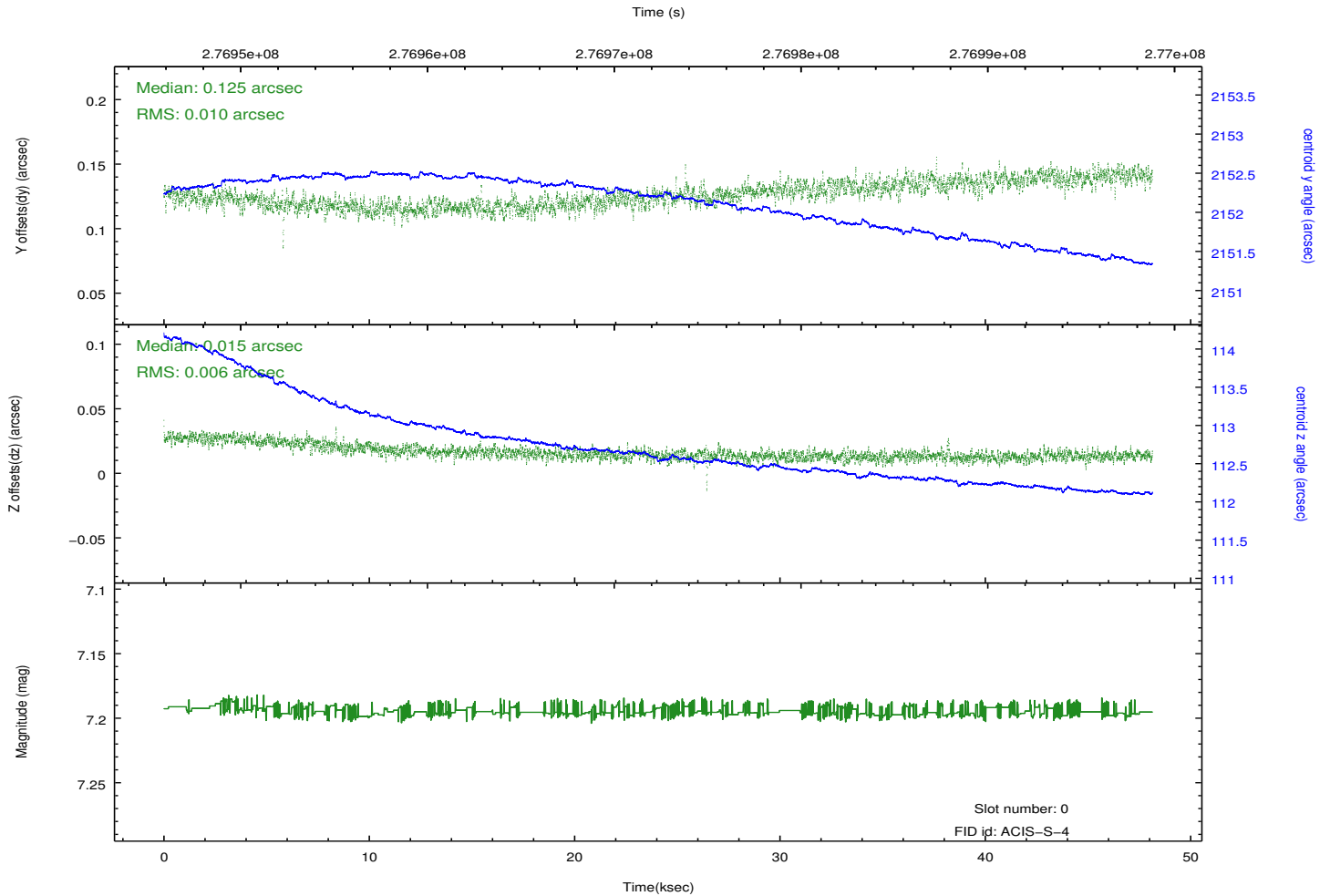
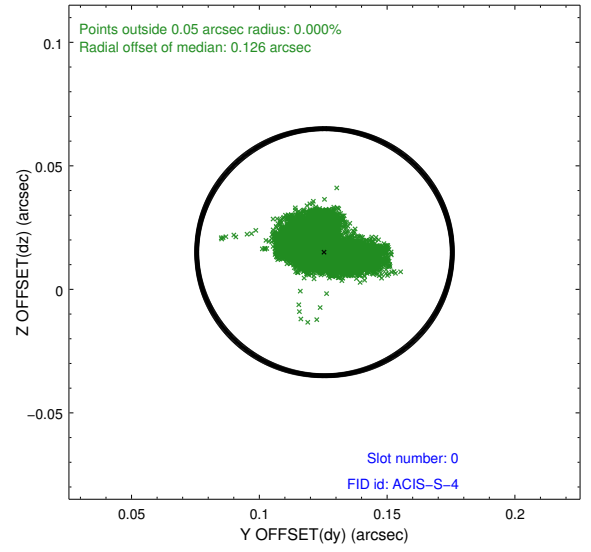
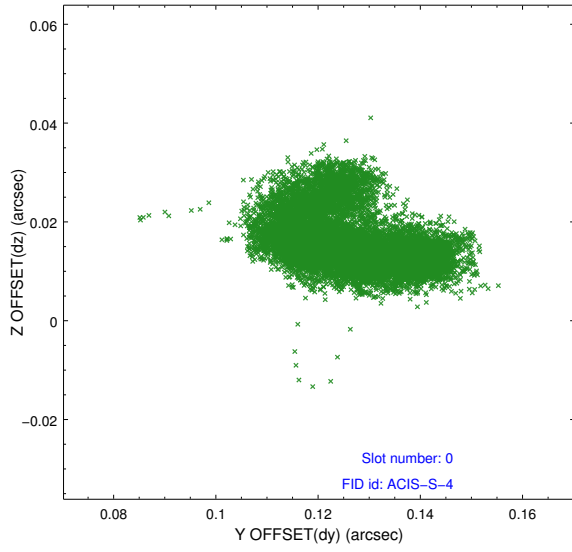


2.4.5 Slot 7

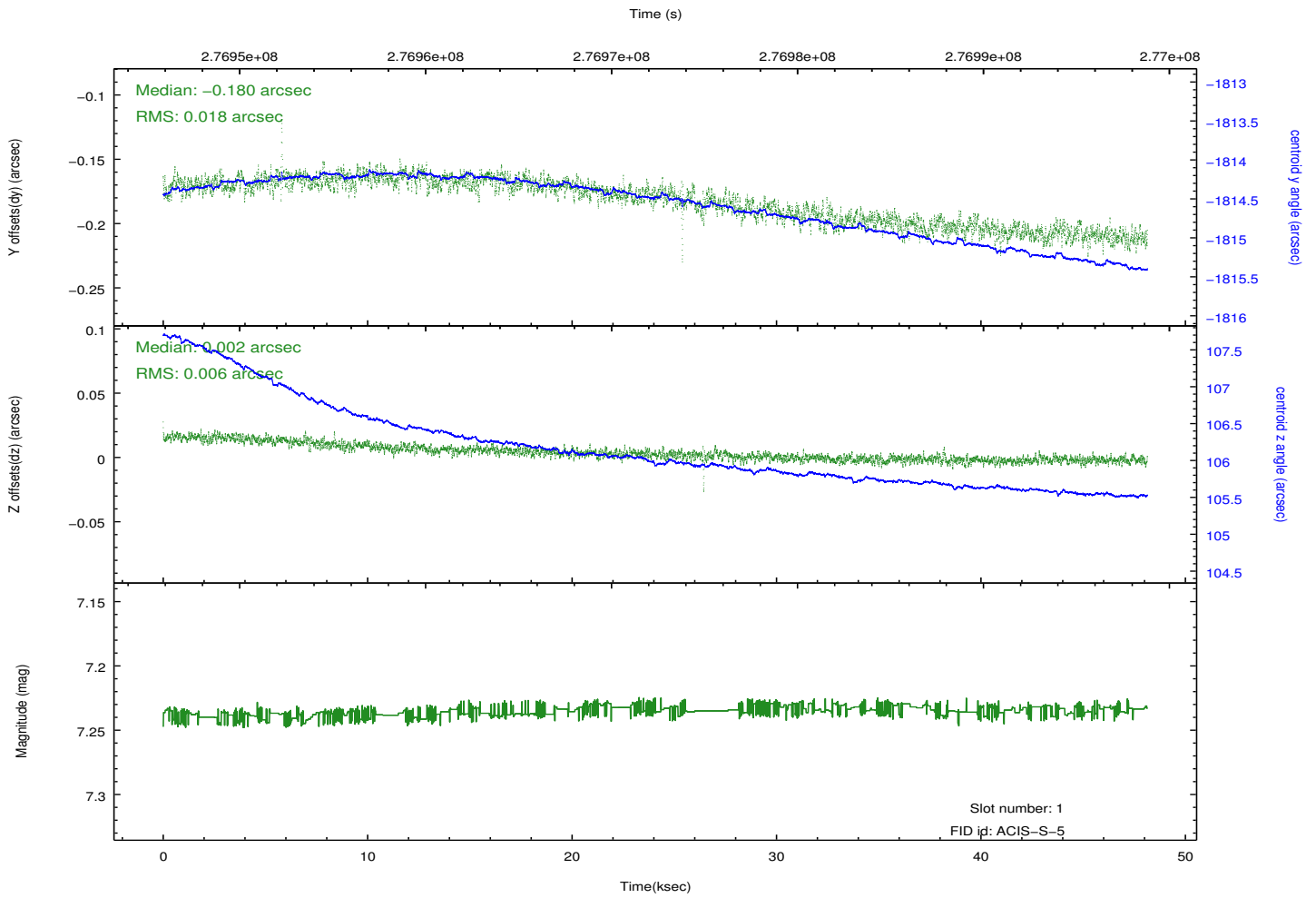
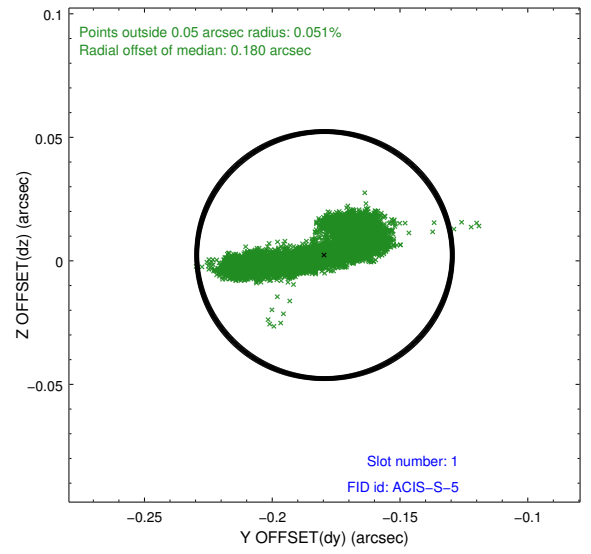
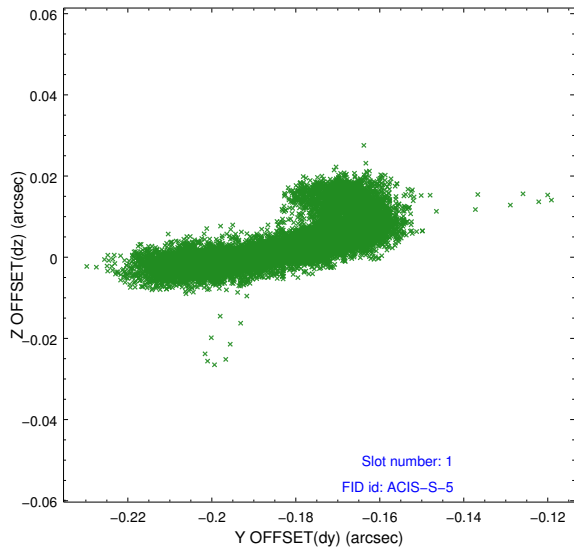


2.5 FID Slots

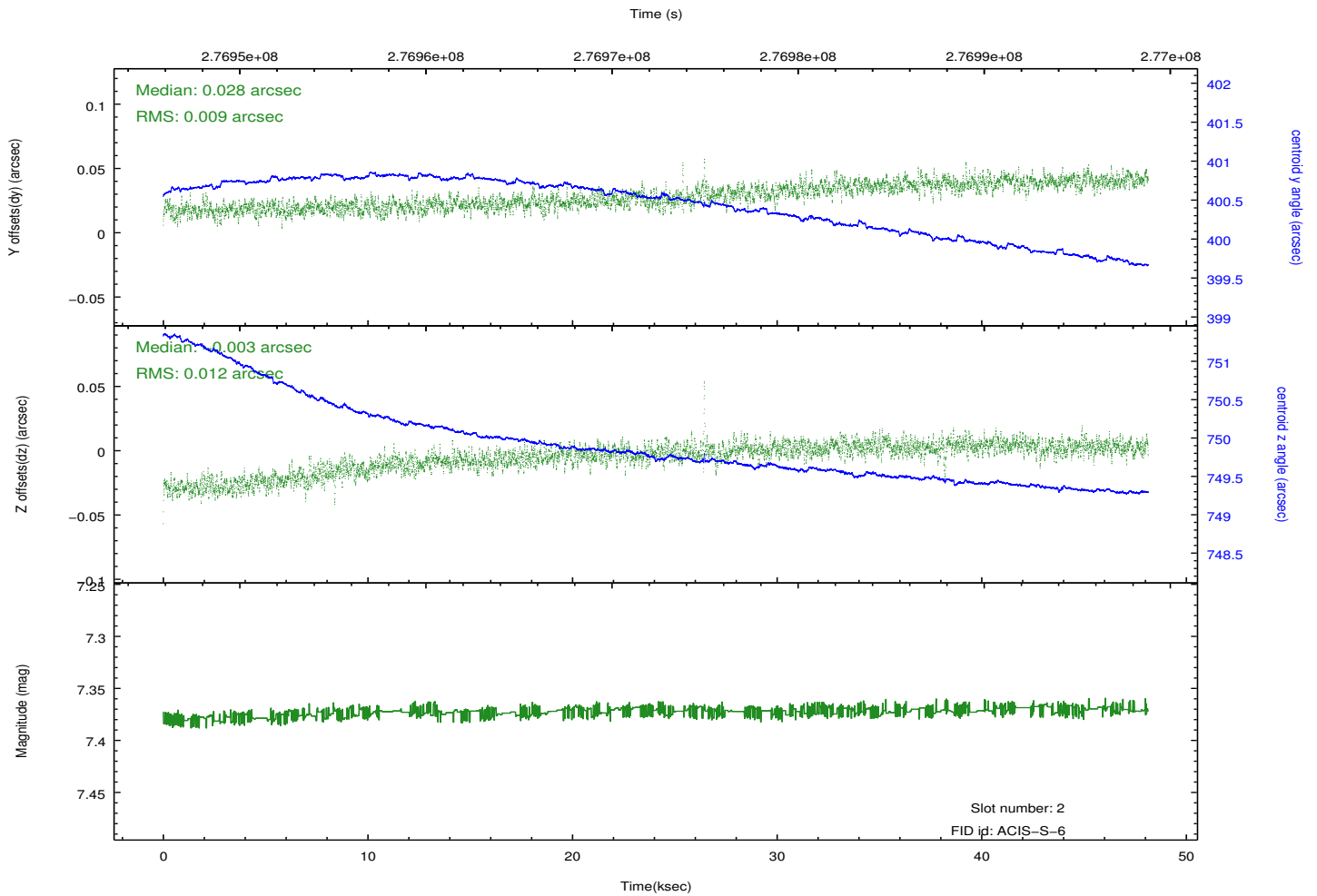
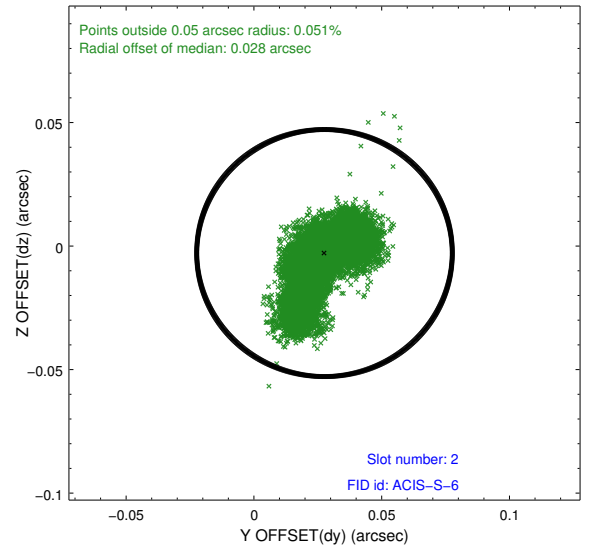
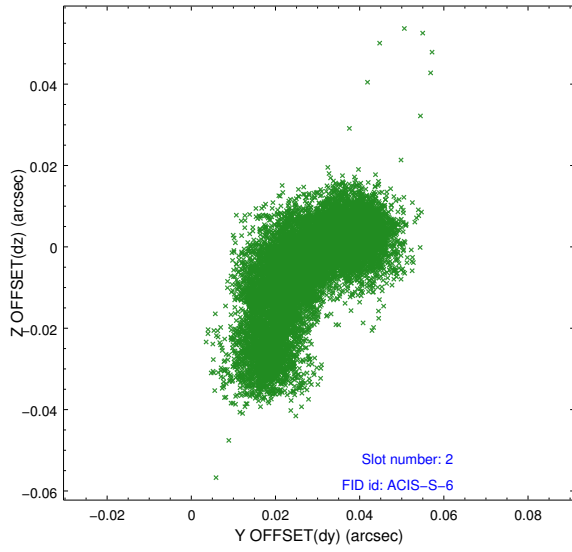
2.5.1 Slot 0



2.5.2 Slot 1

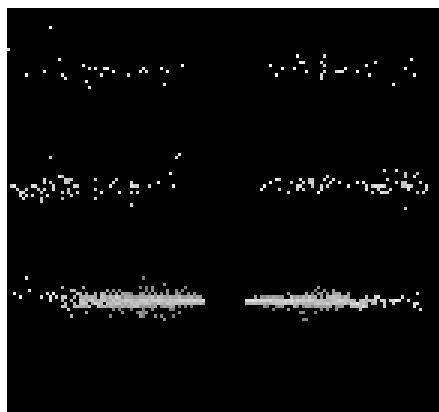


2.5.3 Slot 2

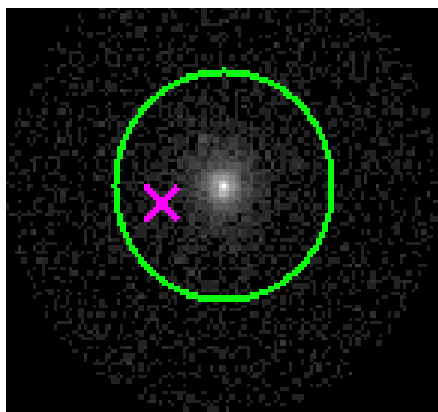


3 Gratings

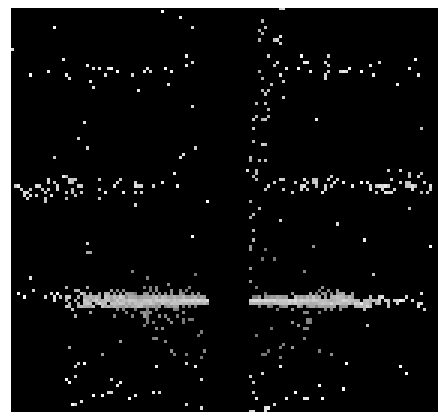
3.1 HEG Arm



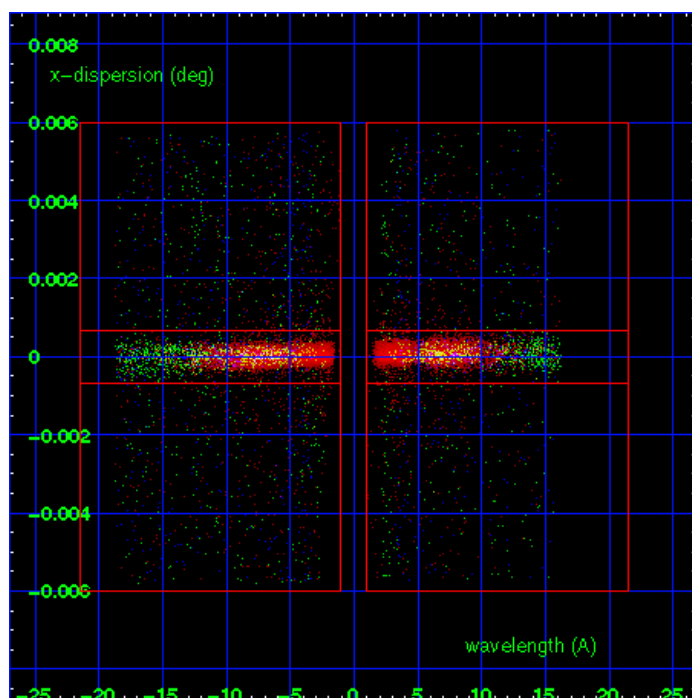
HEG Order Sort 123



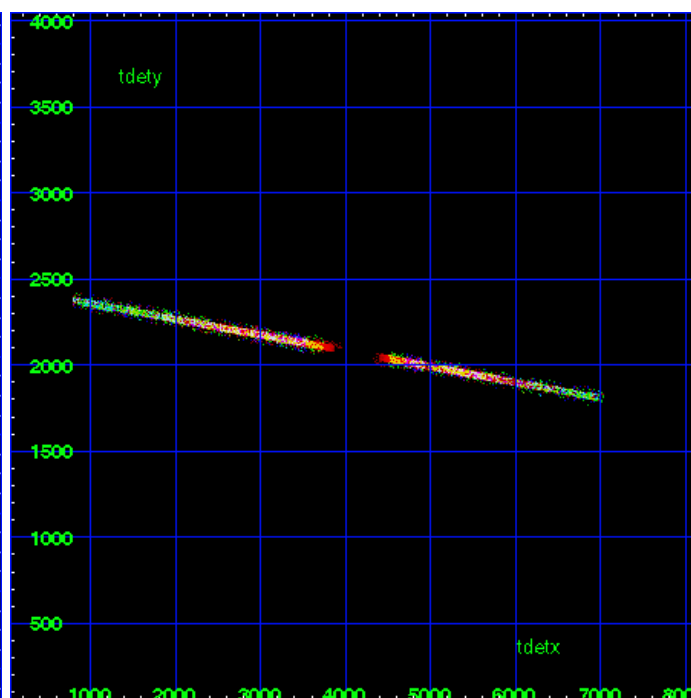
HEG Zero Order



HEG Order Sort ALL

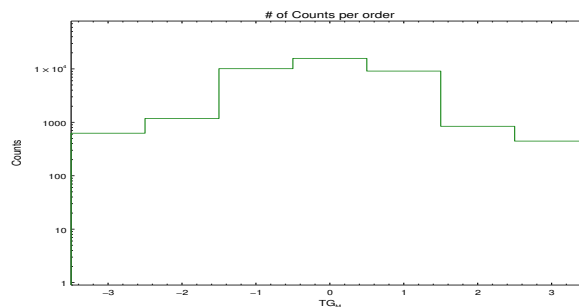


Spot Image HEG

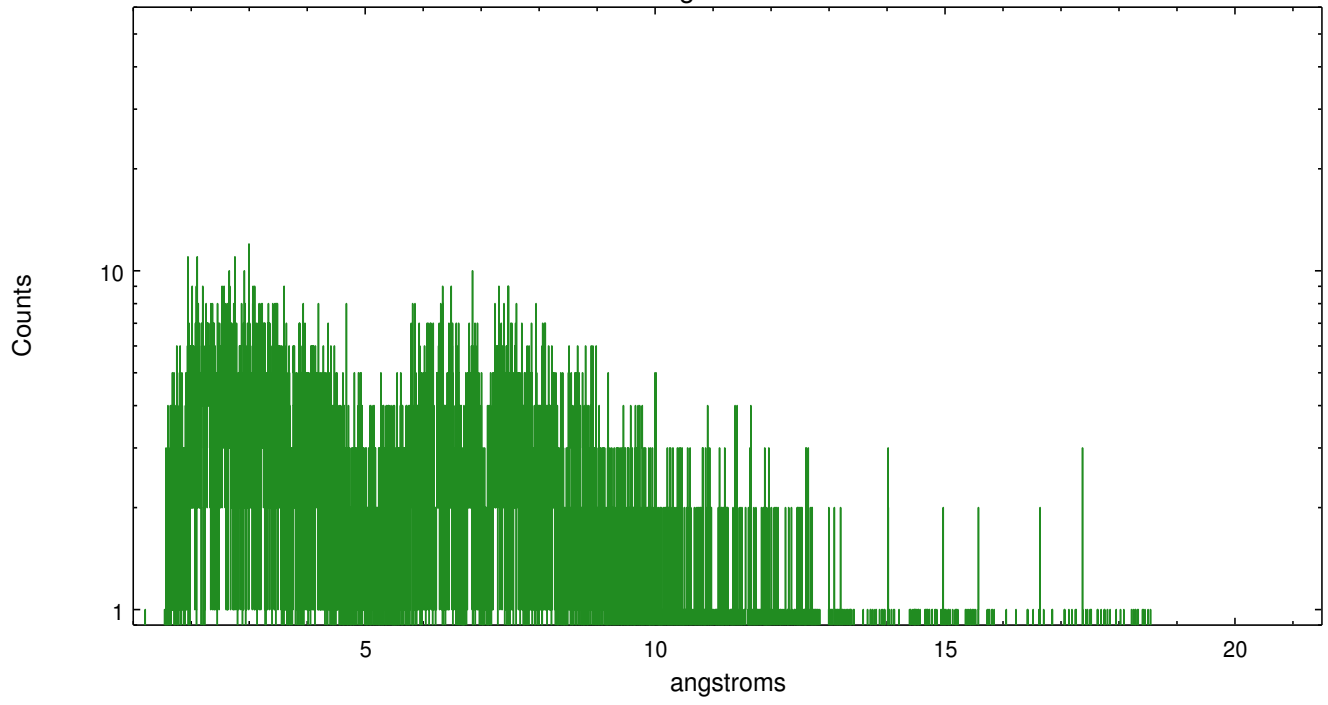


Full Detector HEG

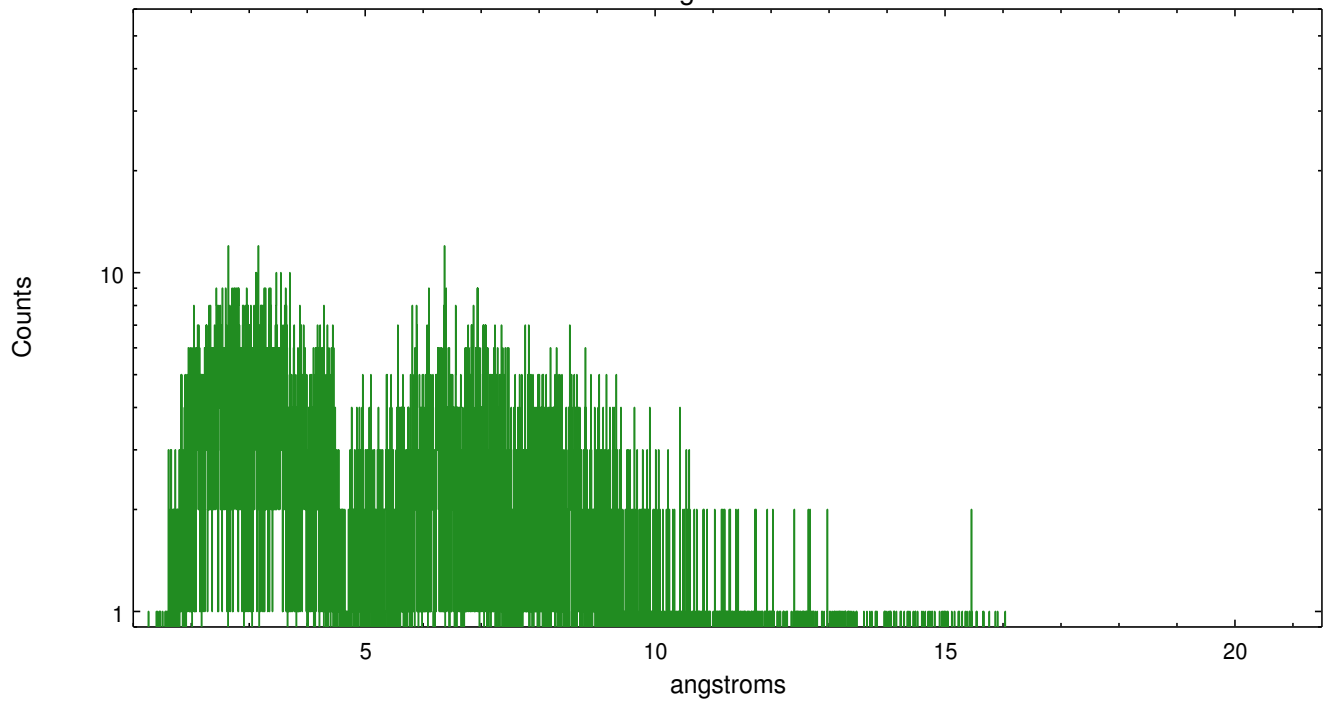
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	625	1178	10095	15723	9095	842	445



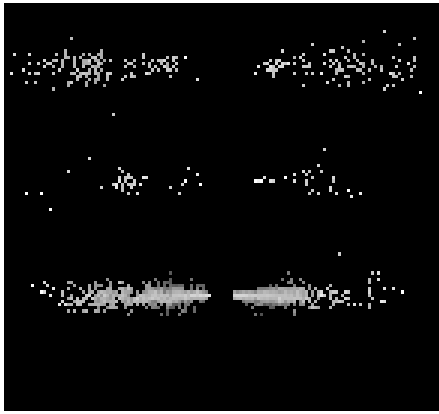
heg order -1



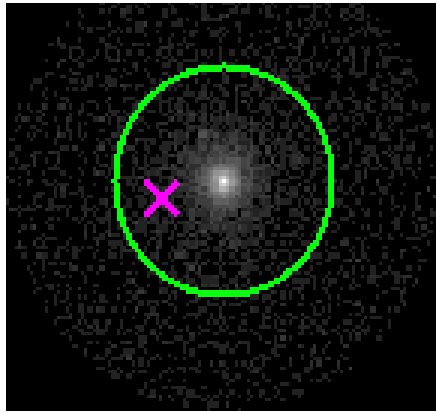
heg order +1



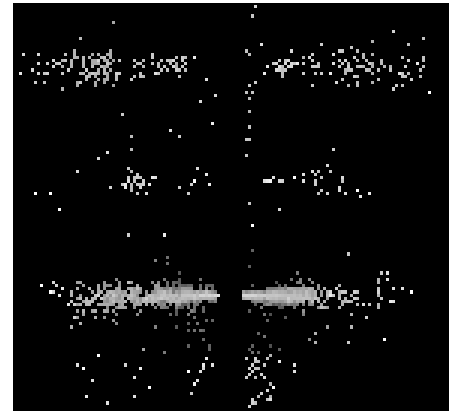
3.2 MEG Arm



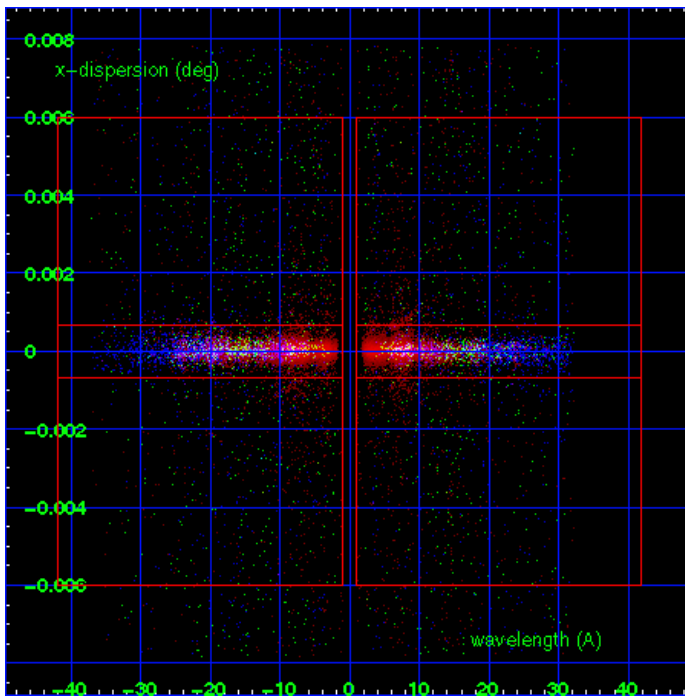
MEG Order Sort 123



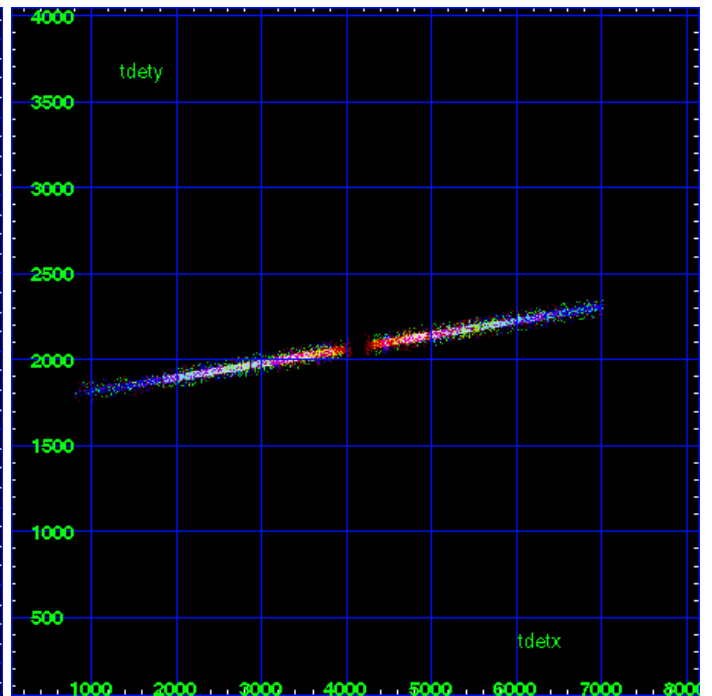
MEG Zero Order



MEG Order Sort ALL

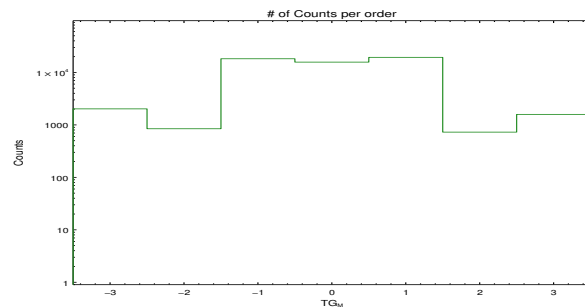


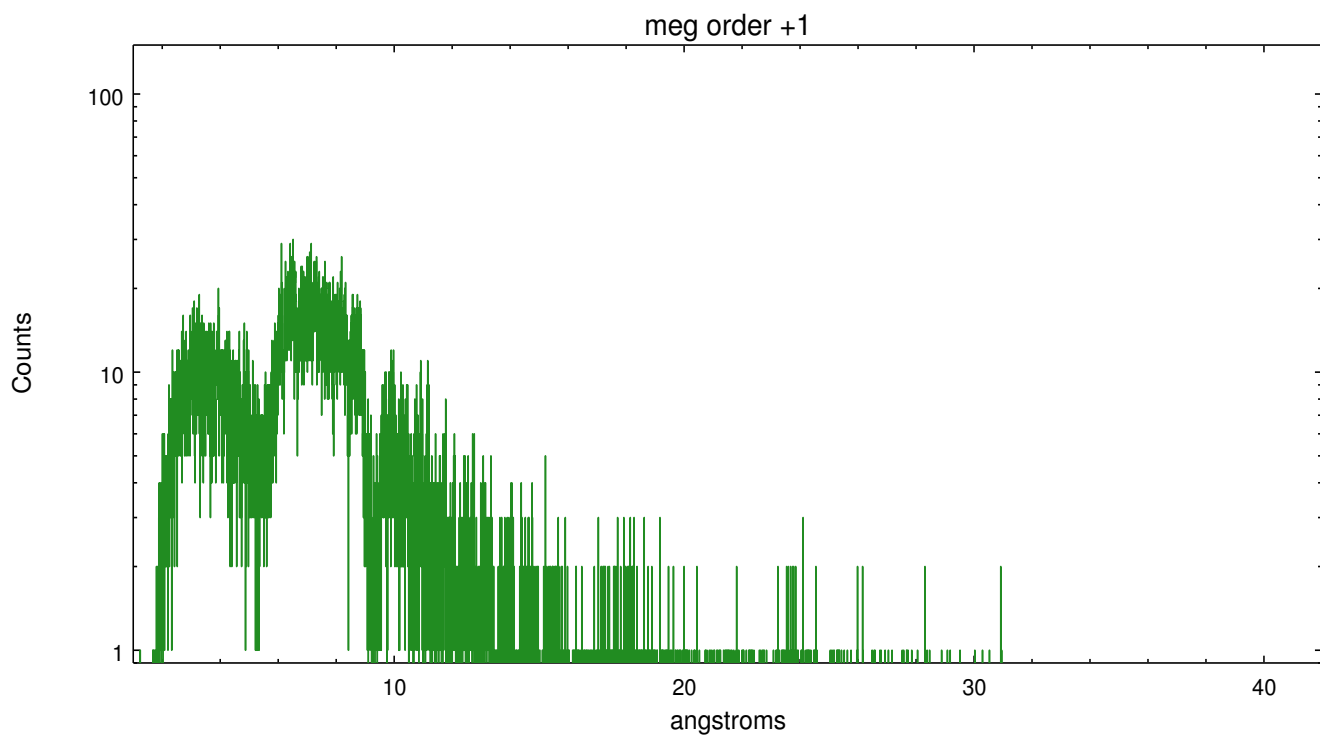
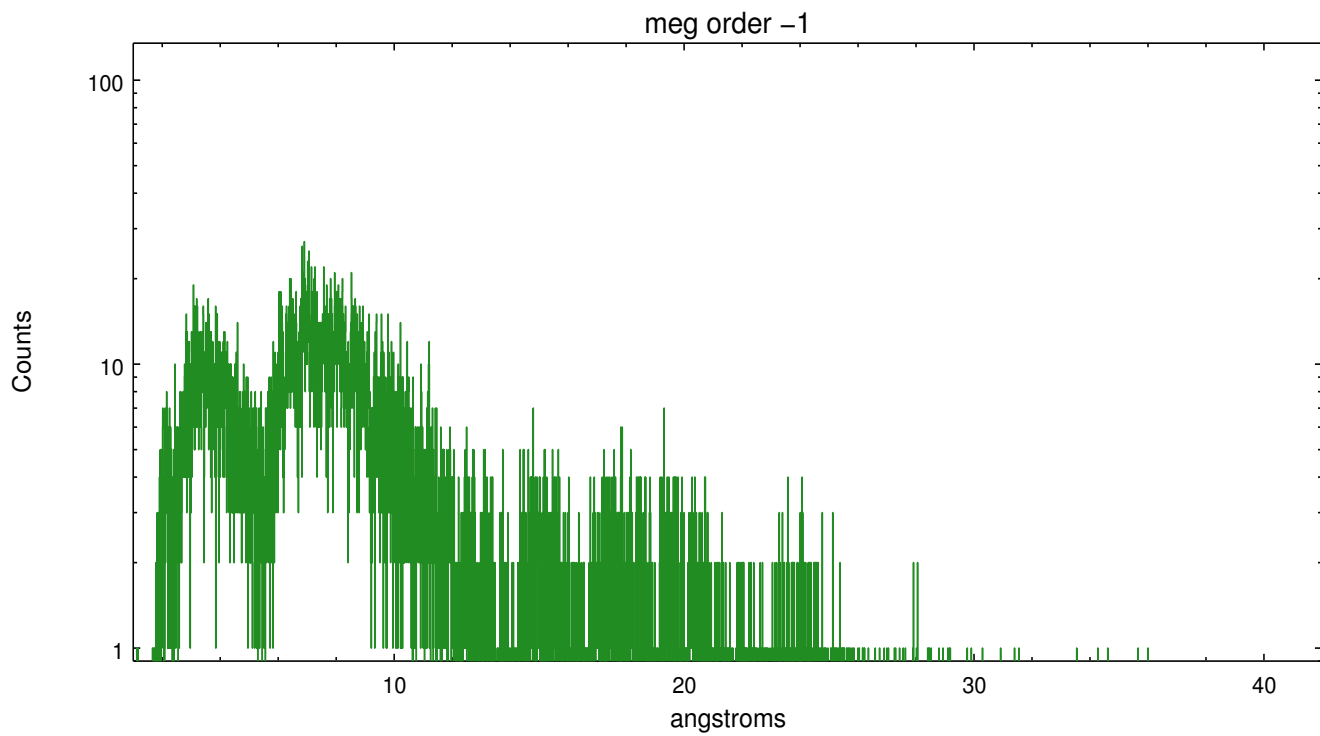
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2022	845	18235	15723	19387	728	1586





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.1375

A.2 Comments

Position of X-ray source is not exactly coincident with requested coordinates, which are apparently the position for the galaxy NGC 3516.