

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8895 - L2 Version 3
Chandra X-Ray Center

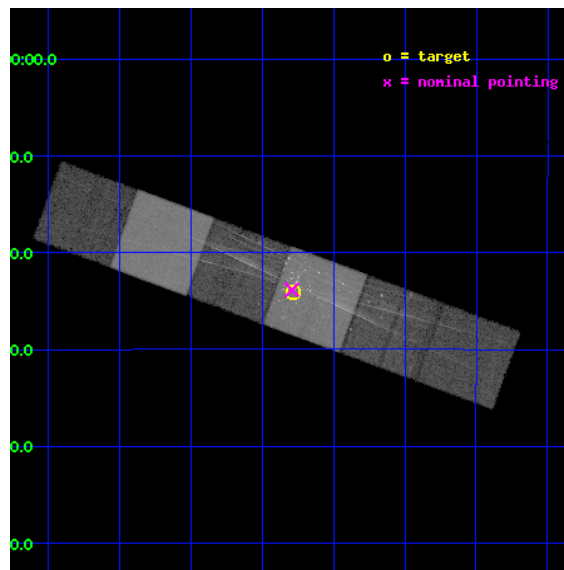
L2 Processing Date : May 5 2012

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1 Front

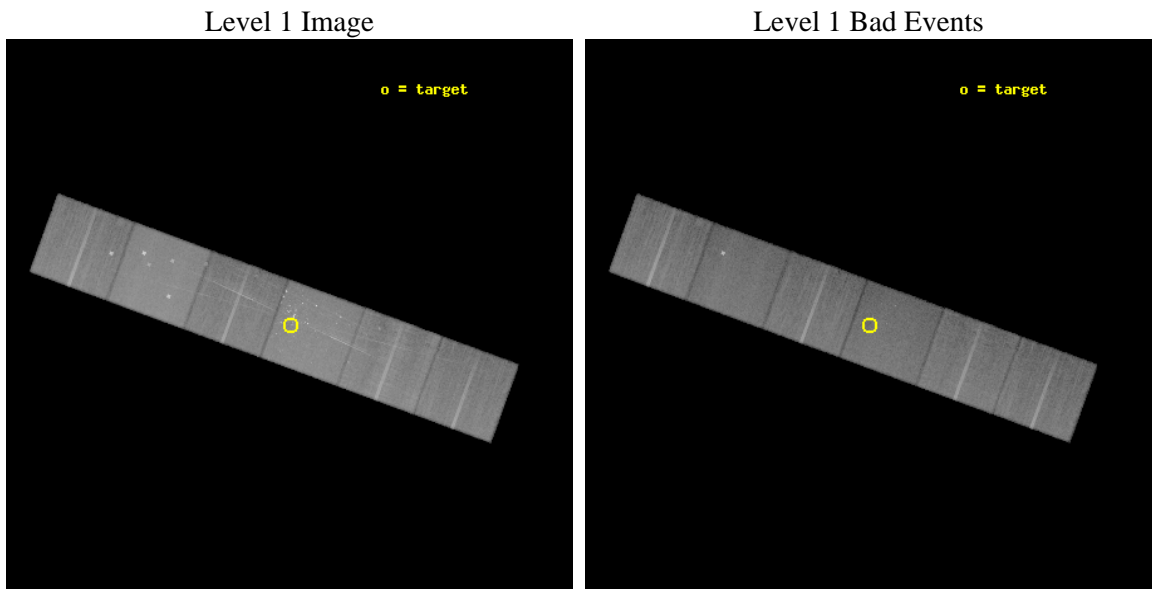
seq_num	200476	Sequence number
obs_id	8895	Observation id
title	The HETG Orion Legacy Project: PMS Stellar Studies of the Orion Trapezium Cluster	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	Orion Trapezium Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.82	Observer's specified target RA [deg]
dec_targ	-5.401167	Observer's specified target Dec [deg]
ra_nom	83.823013186725	Nominal RA [deg]
dec_nom	-5.3973720116695	Nominal Dec [deg]
roll_nom	20.114195121373	Nominal Roll [deg]
revision	3	Processing version of data
ontime	25171.19990629	Sum of GTIs [s]
livetime	24852.467016799	Livetime [s]
ontime4	25171.19990629	Sum of GTIs [s]
ontime5	25171.19990629	Sum of GTIs [s]
ontime6	25167.958895981	Sum of GTIs [s]
ontime7	25171.19990629	Sum of GTIs [s]
ontime8	25171.19990629	Sum of GTIs [s]
ontime9	25164.717875719	Sum of GTIs [s]
l2events	504538	Number of level 2 events



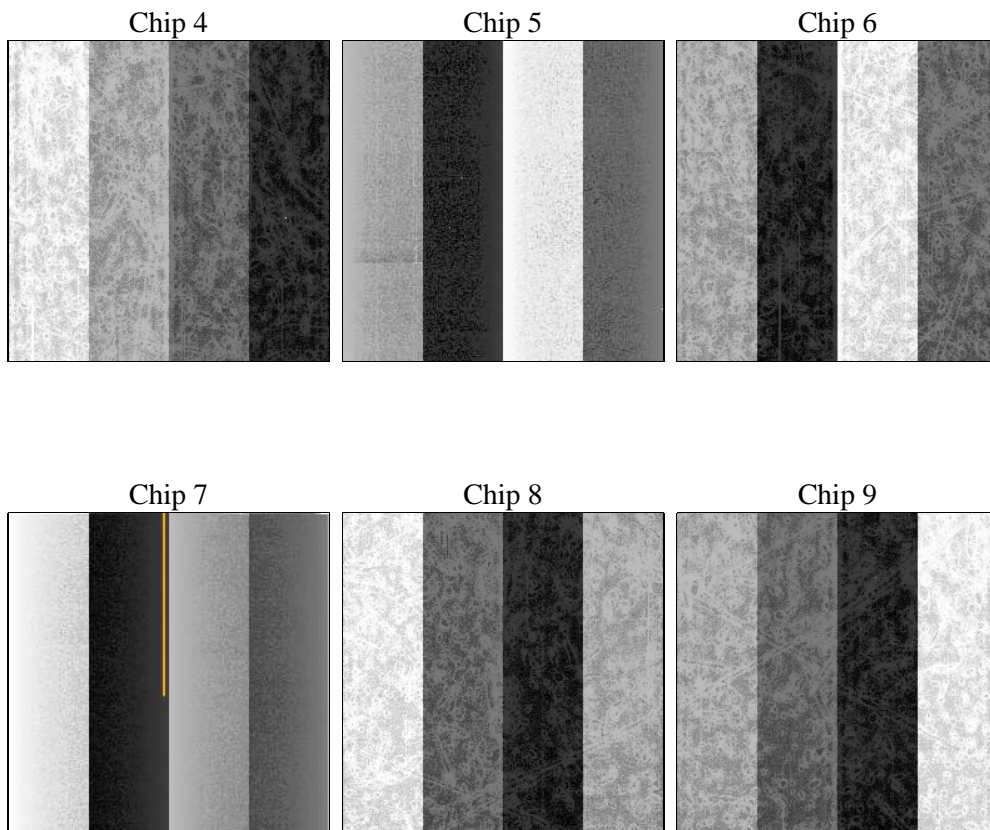
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	25171.19990629	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	25171.19990629	Sum of GTIs [s]
date	2012-05-05T21:51:53	Date and time of file creation	ontime5	25171.19990629	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	25167.958895981	Sum of GTIs [s]
			ontime7	25171.19990629	Sum of GTIs [s]
			ontime8	25171.19990629	Sum of GTIs [s]
			ontime9	25164.717875719	Sum of GTIs [s]
			l1events	1964159	Number of level 1 events

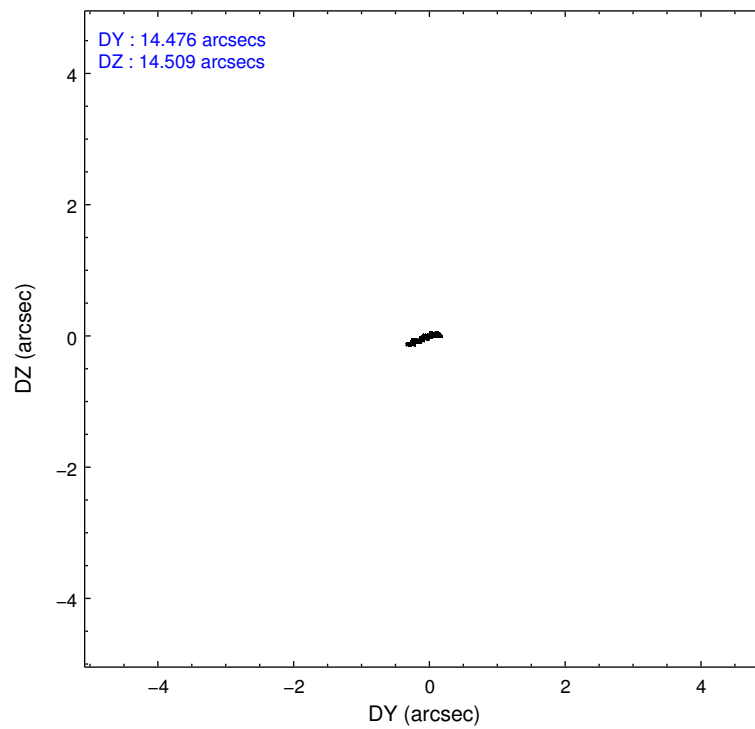
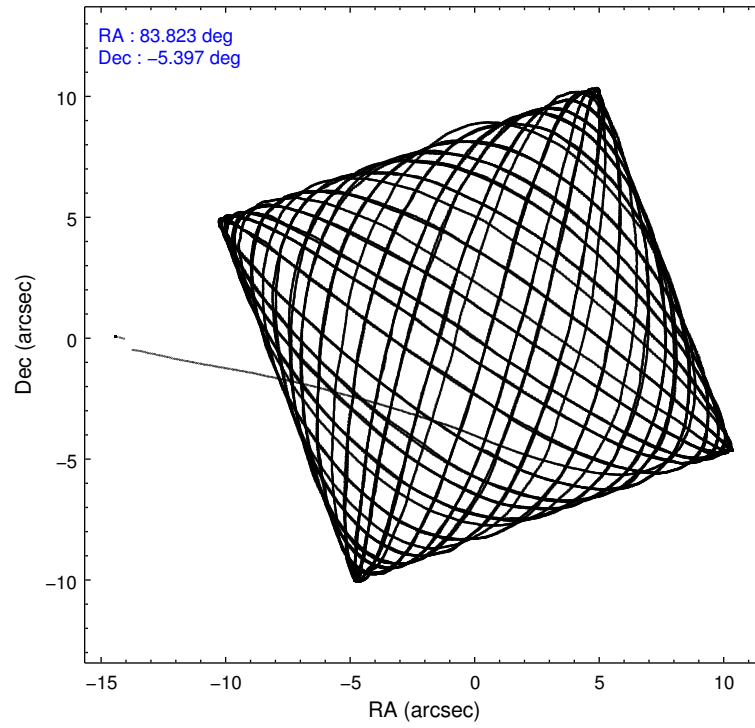
2.1.4 Events

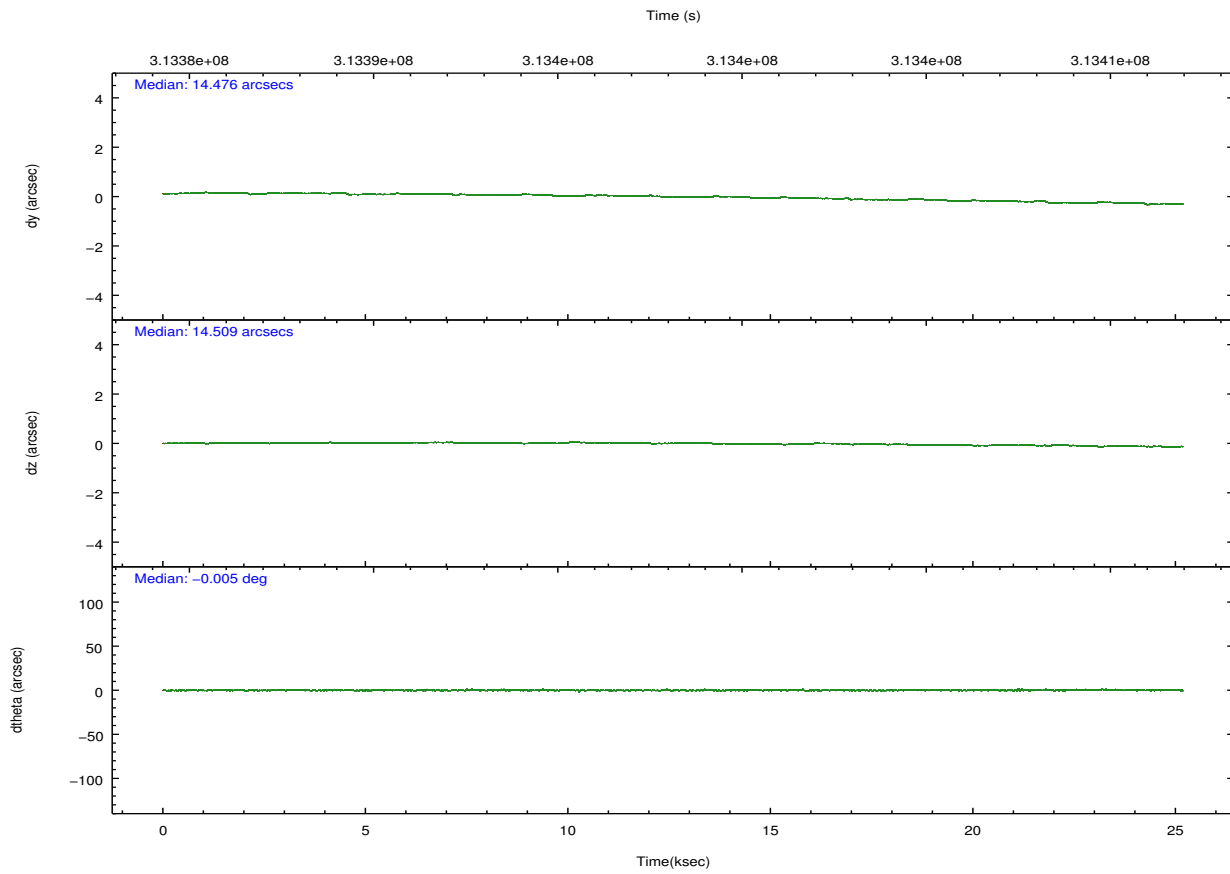
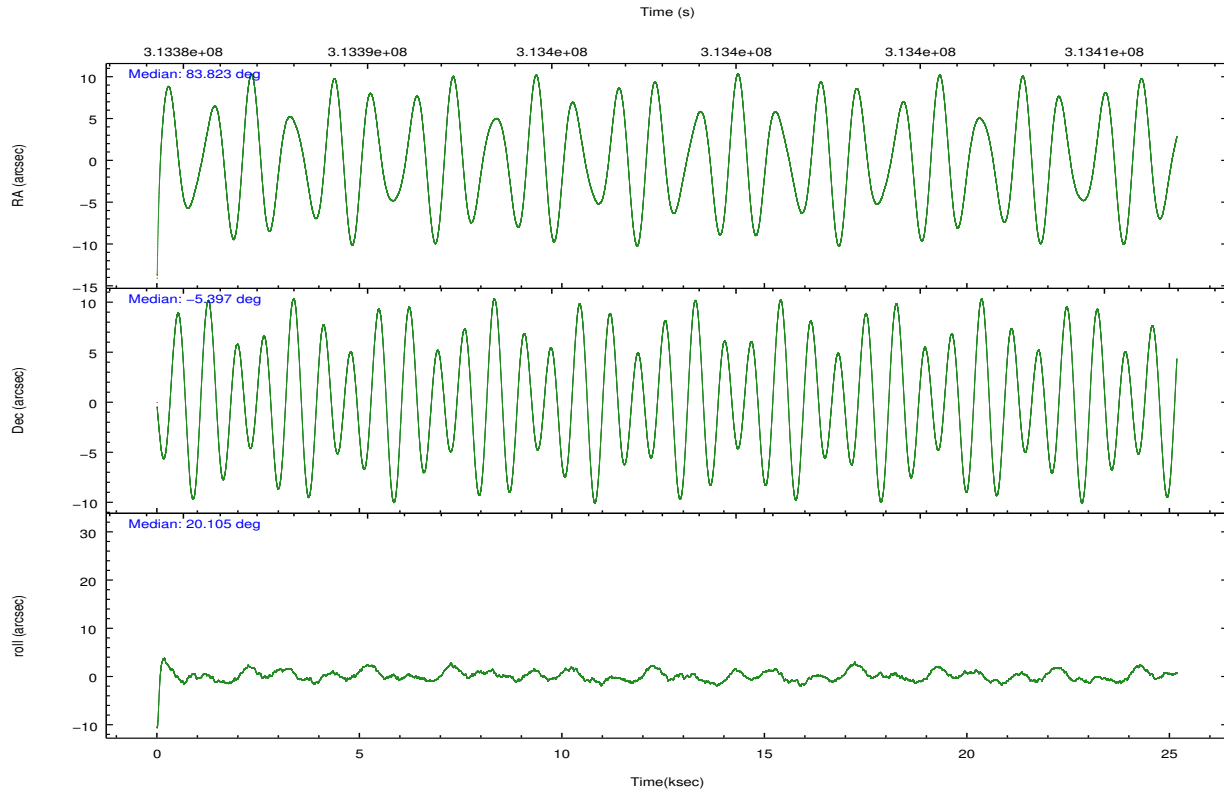
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	290262	395673	282321	399600	334064	262239	grade 0 events	18798	20222	28460	23078	33022	15259
rejected events	253797	211451	231076	206292	250013	228295		6%	5%	10%	5%	9%	5%
rejected %	87%	53%	81%	51%	74%	87%	grade 1 events	350	1089	244	495	323	187
								0%	0%	0%	0%	0%	0%
							grade 2 events	6750	56375	9031	41877	17581	6589
								2%	14%	3%	10%	5%	2%
							grade 3 events	3236	7000	3723	17596	7560	3152
								1%	1%	1%	4%	2%	1%
							grade 4 events	3082	6370	3538	17619	7184	2984
								1%	1%	1%	4%	2%	1%
							grade 5 events	11618	28655	11964	33317	15830	12565
								4%	7%	4%	8%	4%	4%
							grade 6 events	4780	95169	6748	93980	19135	6116
								1%	24%	2%	23%	5%	2%
							grade 7 events	241648	180793	218613	171638	233429	215387
								83%	45%	77%	42%	69%	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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	83.805687	83.82301318672469	CCD I2 on	N	N
[deg] Pointing Dec	-5.418578	-5.397372011669472	CCD I3 on	N	N
[deg] Pointing Roll	19.955942	20.11419512137308	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	313385723.184000	313384447.16147	CCD S5 on	Y	Y
Observation start date	2007-12-07T03:34:18	2007-12-07T03:14:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	313410723.184000	313411950.4753	On-chip summing requested	N	N
Observation end date	2007-12-07T10:30:58	2007-12-07T10:52:30	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





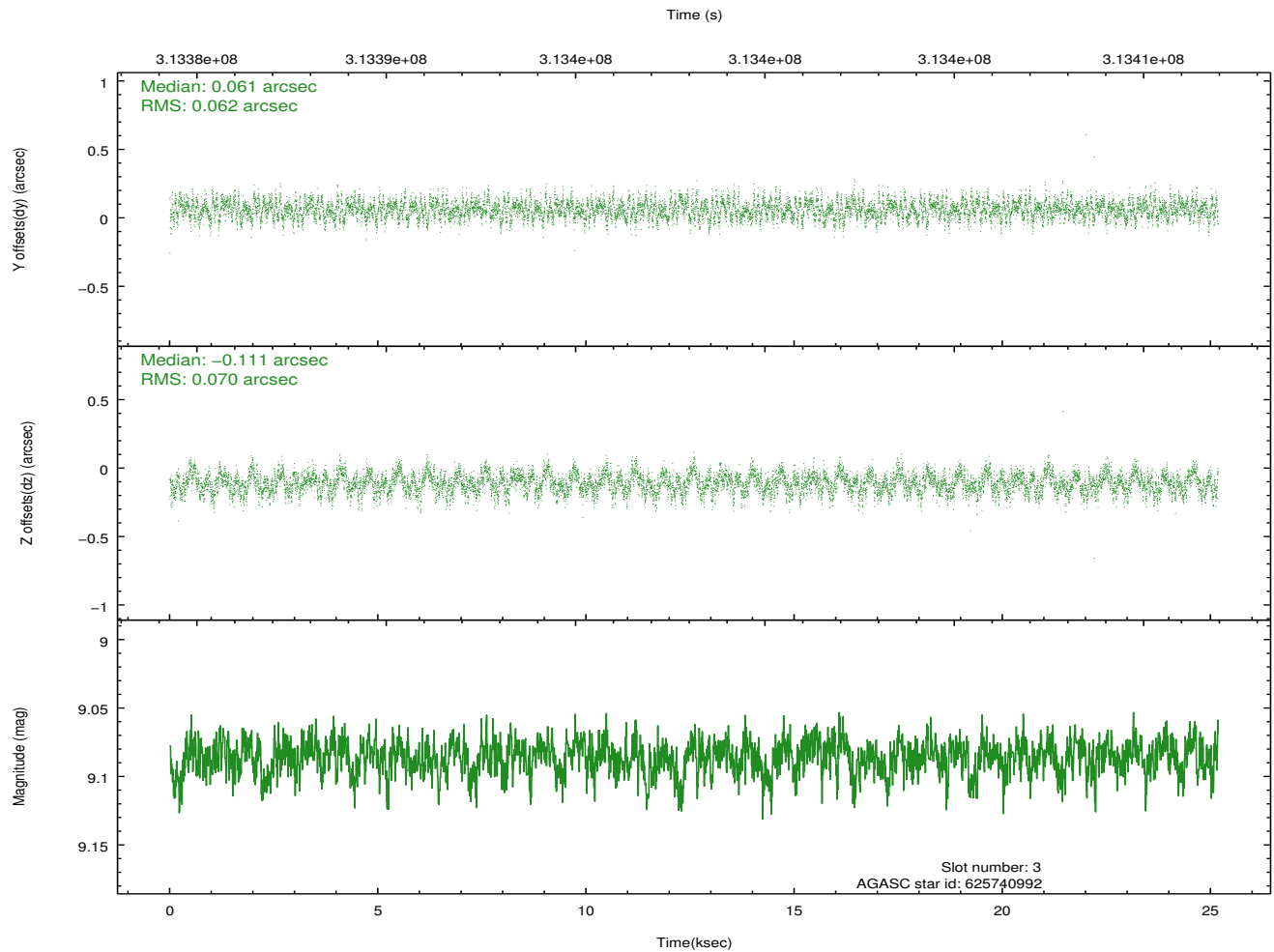
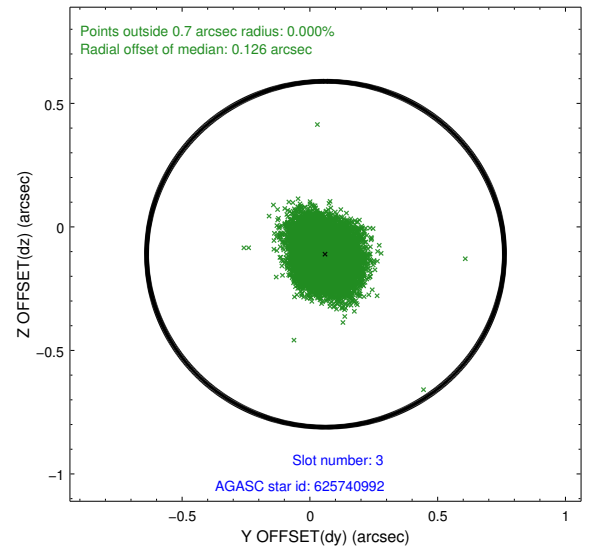
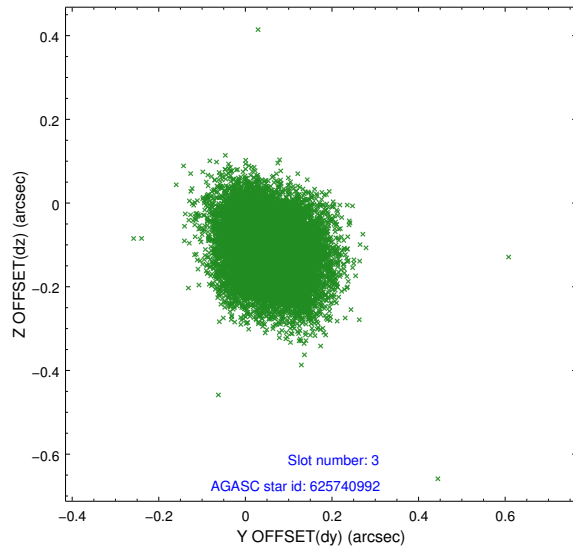
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	6142	0.028	-0.024	0.008	0.013	0.000000	0.000000	928.66	-1731.51
1	FID	ACIS-S-4	7.19	6142	0.157	0.008	0.007	0.012	0.000000	0.000000	2146.25	172.57
2	FID	ACIS-S-5	7.22	6141	-0.212	0.029	0.006	0.012	0.000000	0.000000	-1820.31	166.29
3	GUIDE	625740992	9.09	12273	0.061	-0.111	0.101	0.160	83.193672	-4.960928	-1501.40	2296.63
4	GUIDE	625745128	7.80	12281	0.033	-0.174	0.067	0.108	83.769930	-4.731835	723.02	2367.93
5	GUIDE	625745144	7.82	12282	-0.075	-0.009	0.068	0.108	83.888985	-4.837539	994.74	1864.67
6	GUIDE	626272880	7.66	12278	0.001	0.136	0.062	0.096	83.815609	-6.032748	-720.57	-2090.04
7	GUIDE	626272760	6.63	12282	-0.033	0.162	0.090	0.164	84.363987	-5.938389	1240.71	-2441.81

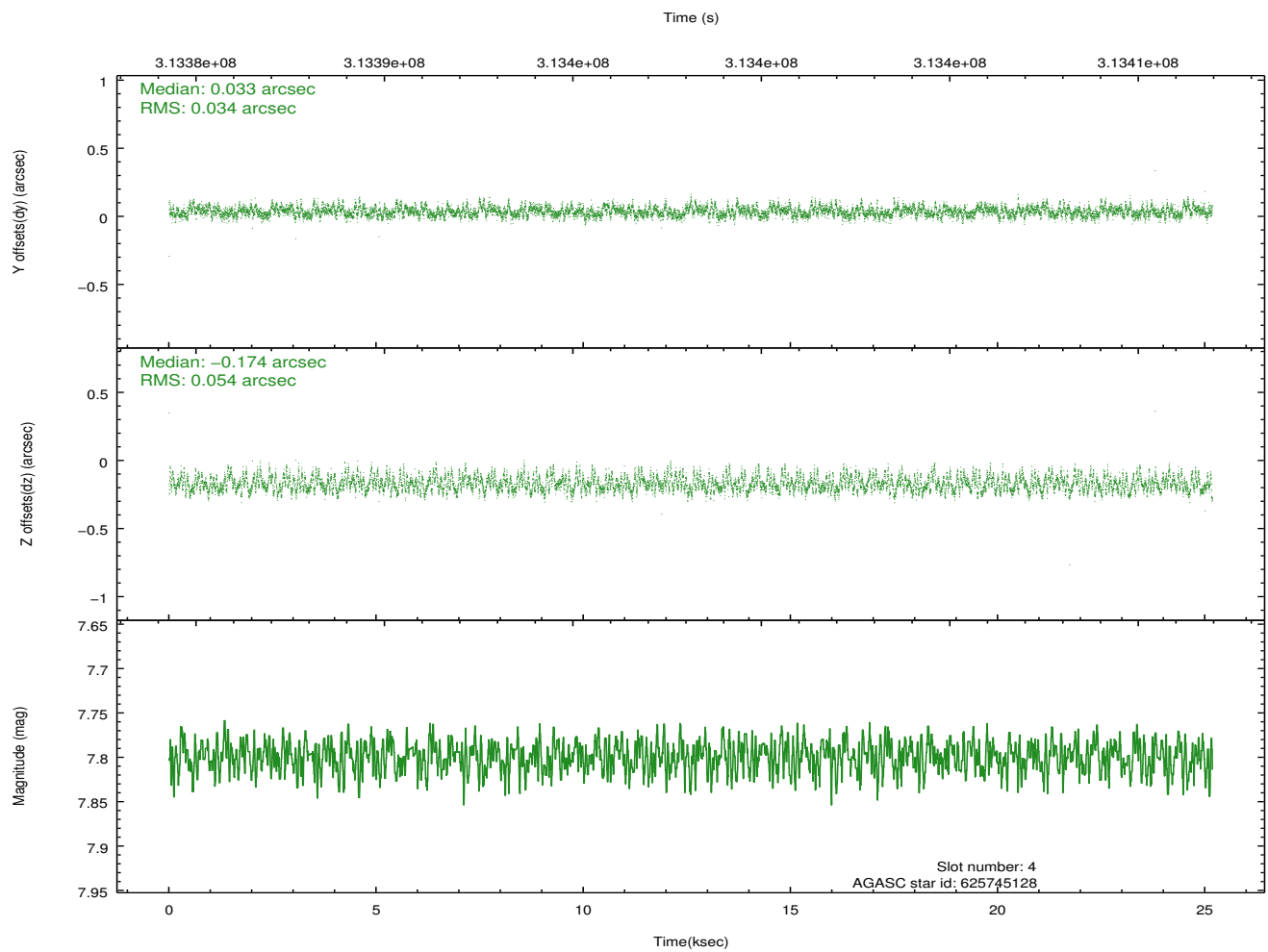
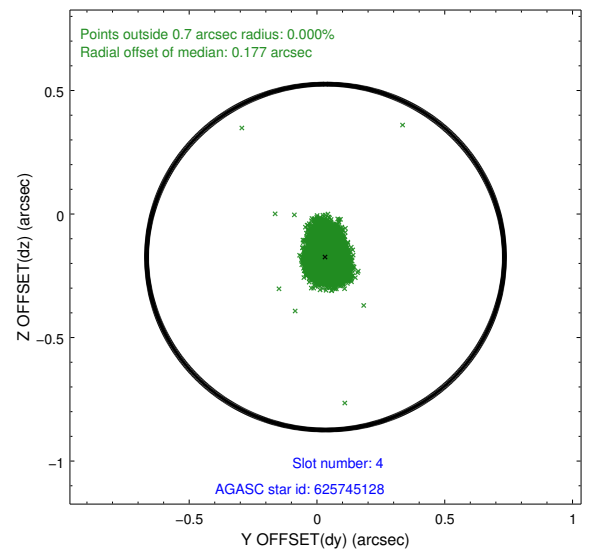
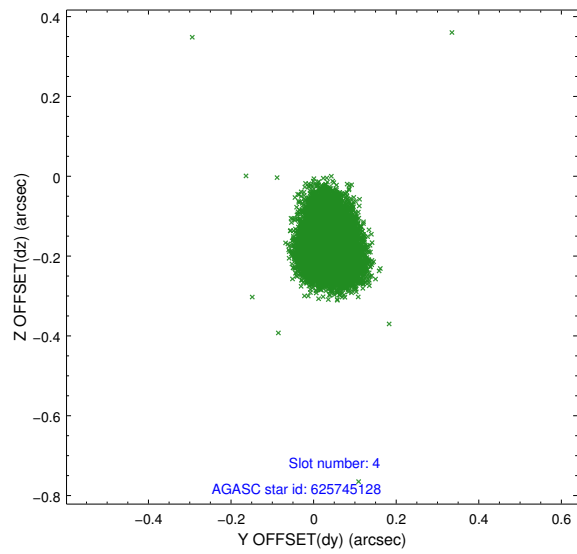
∞

2.4 Star Slots

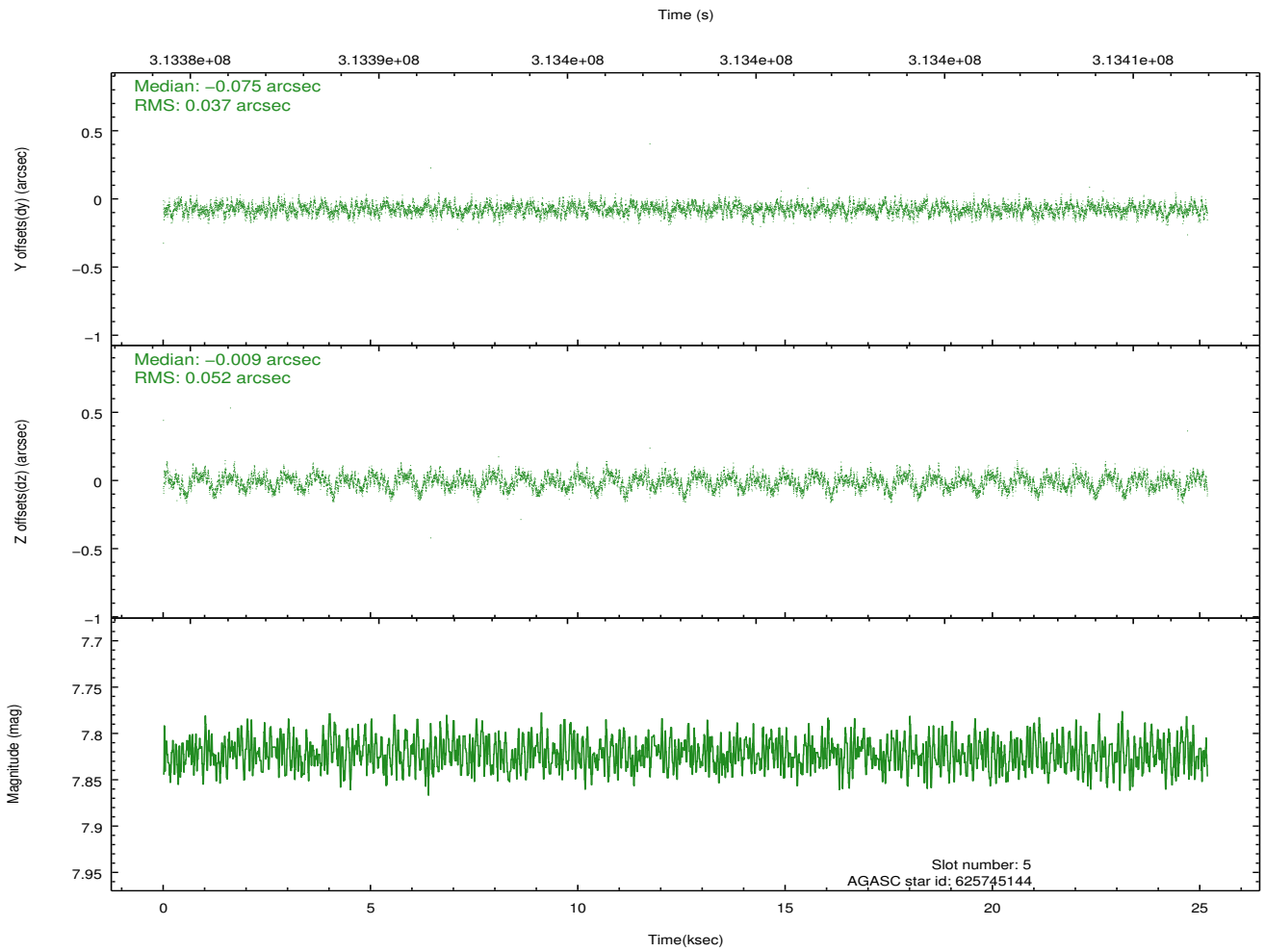
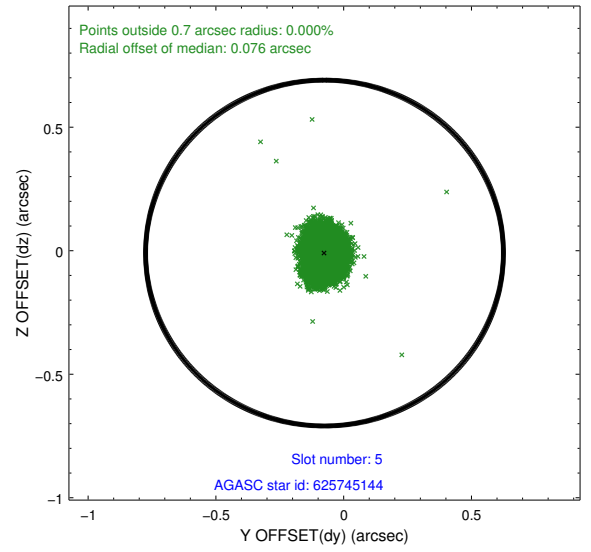
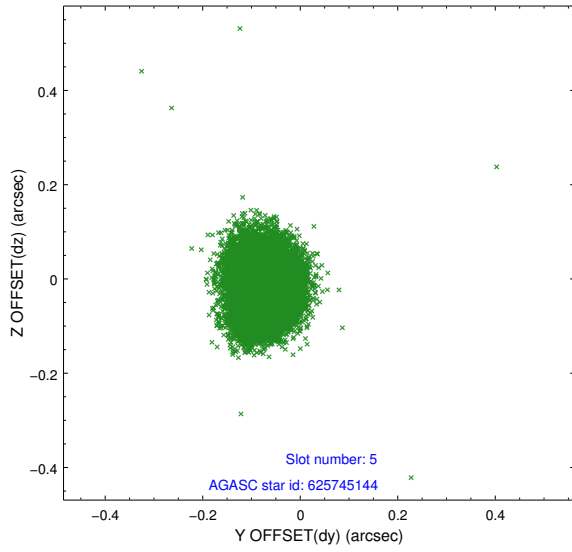
2.4.1 Slot 3



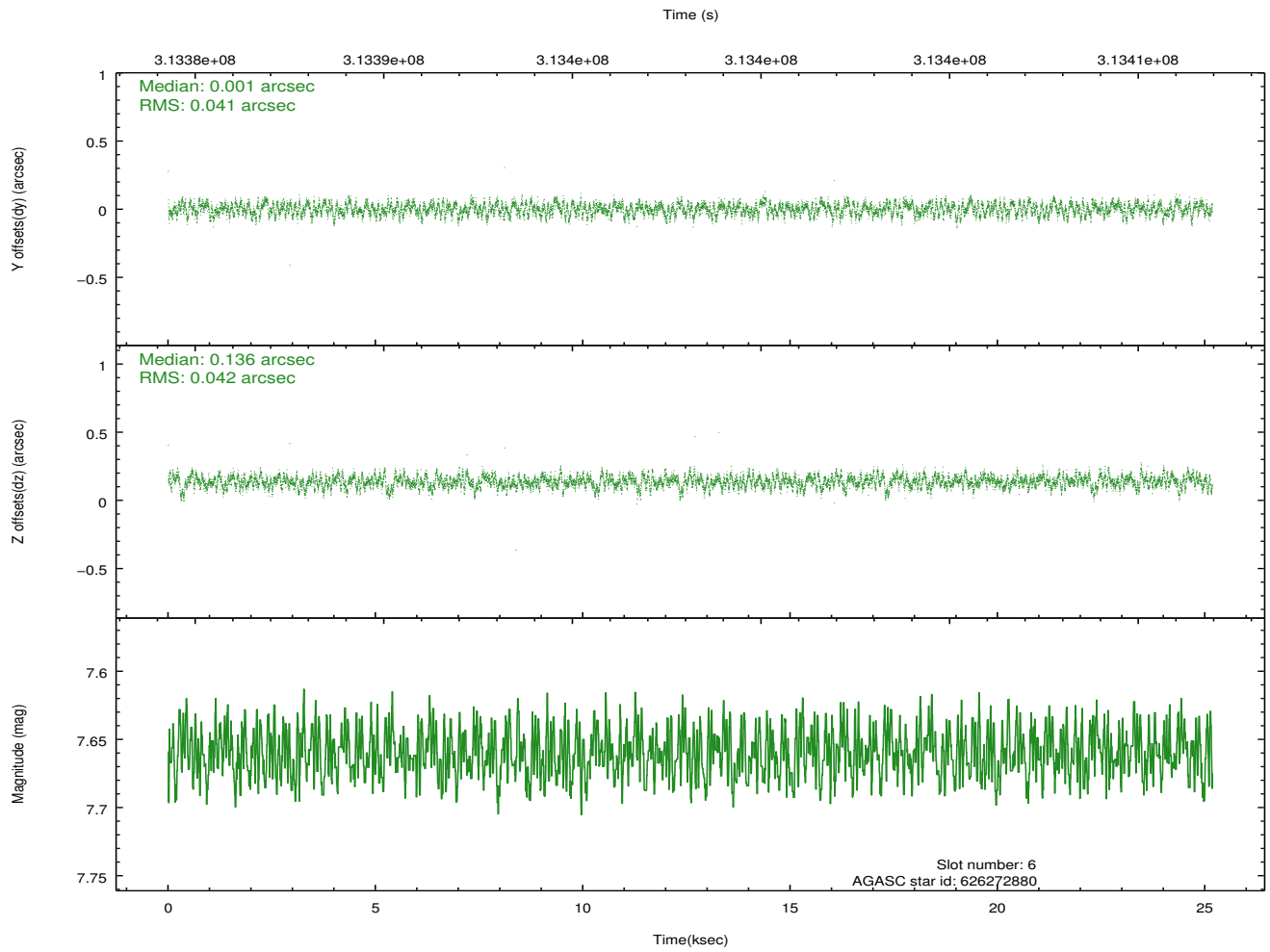
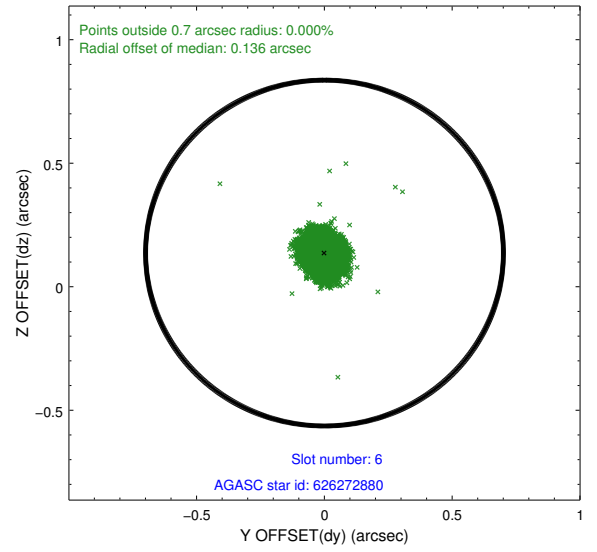
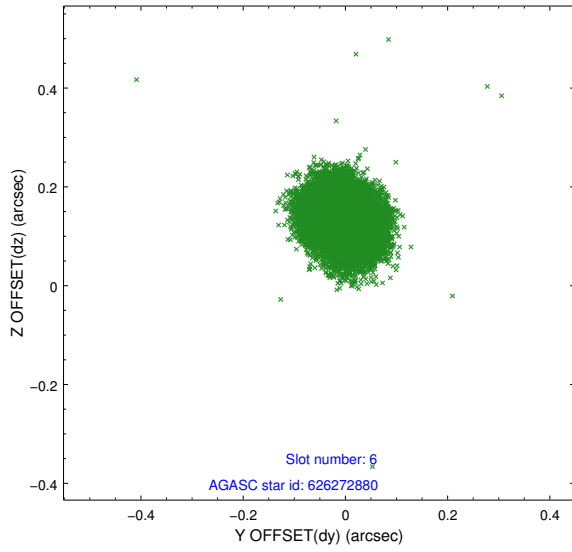
2.4.2 Slot 4



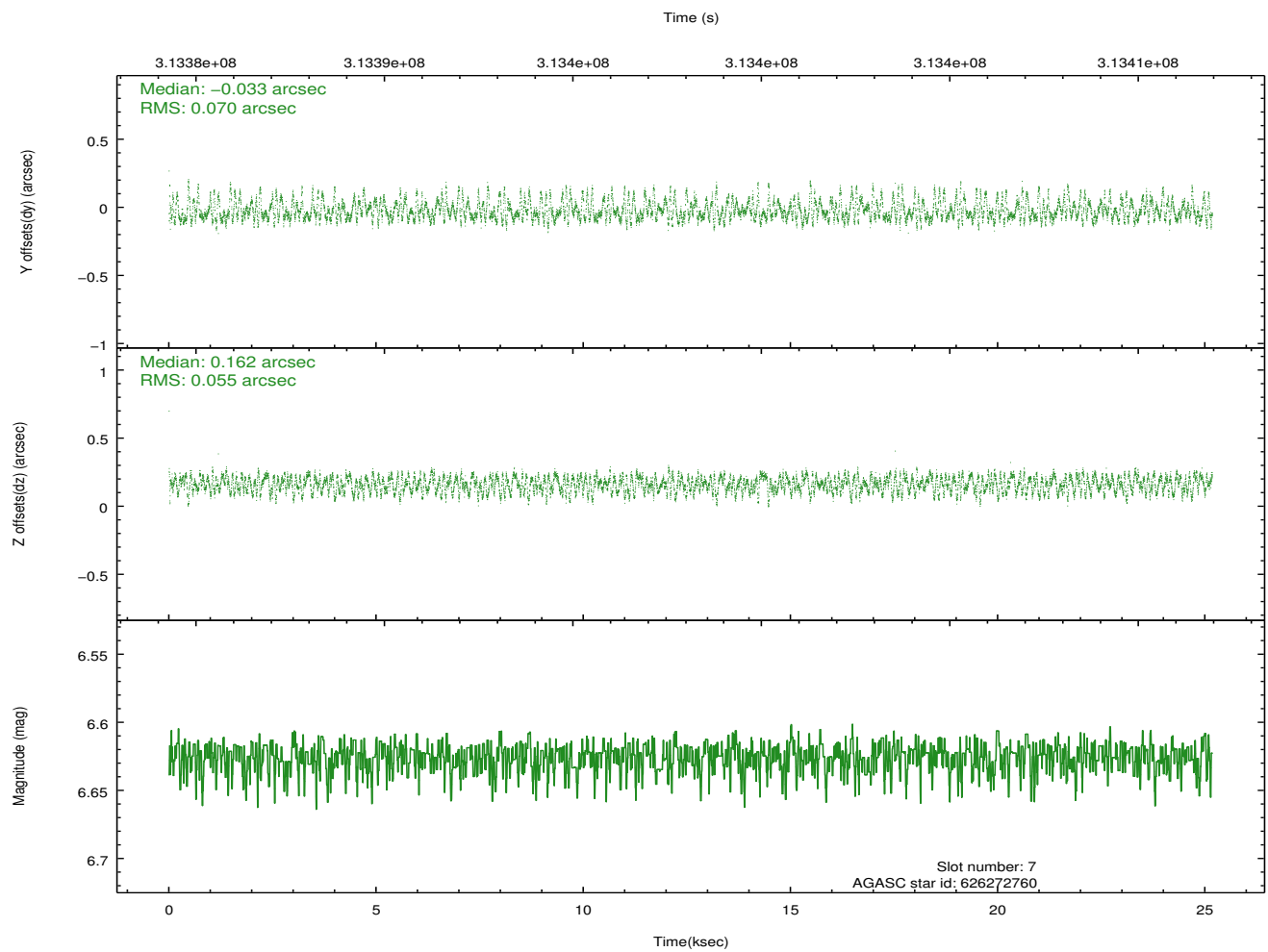
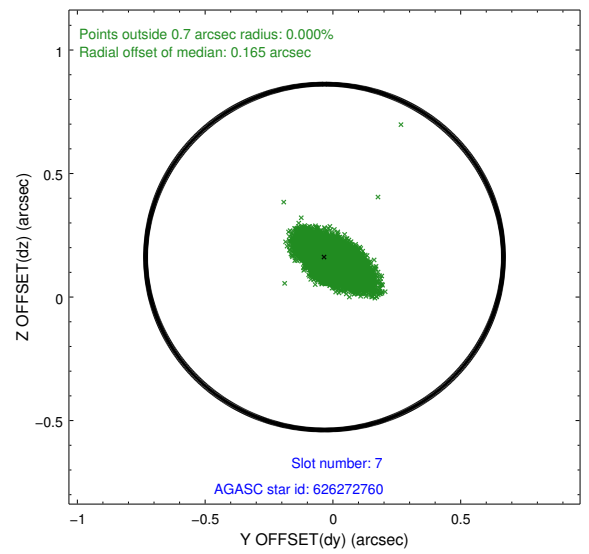
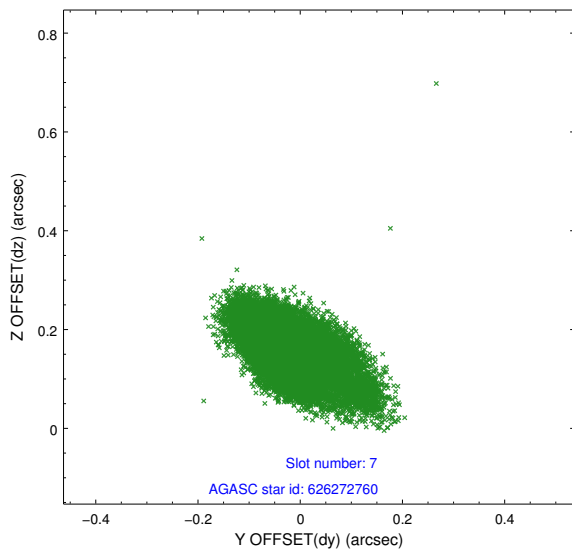
2.4.3 Slot 5



2.4.4 Slot 6

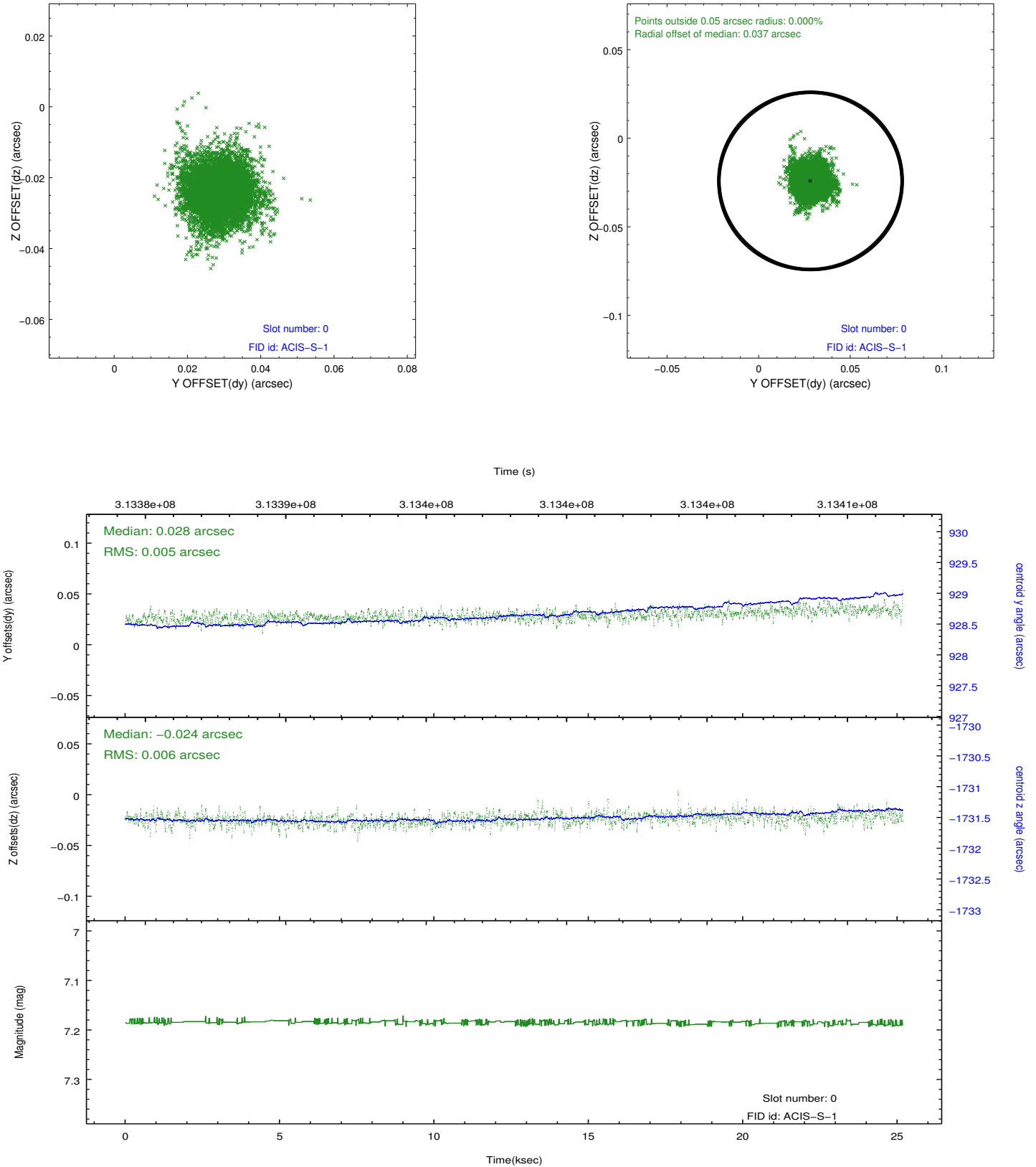


2.4.5 Slot 7

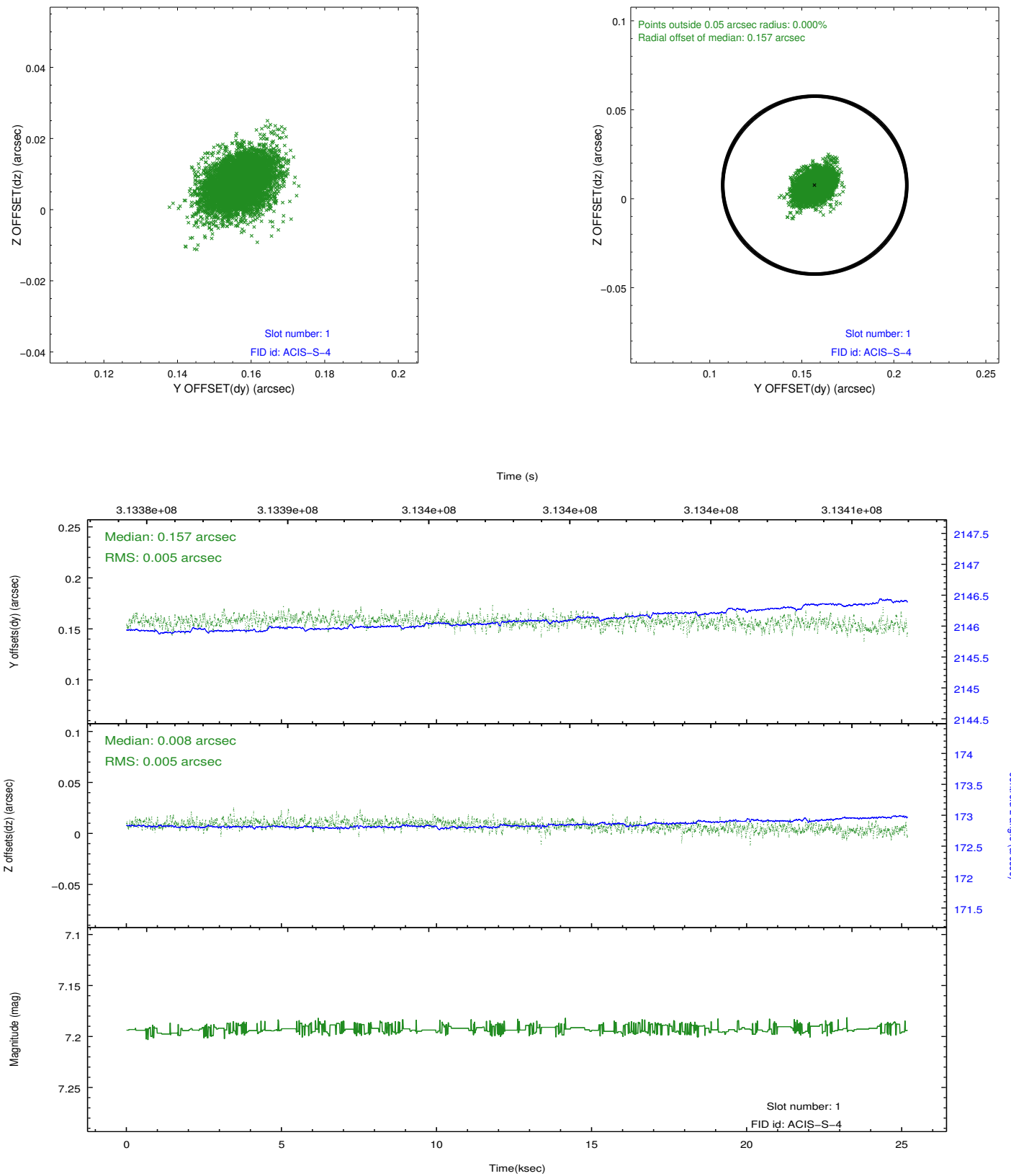


2.5 FID Slots

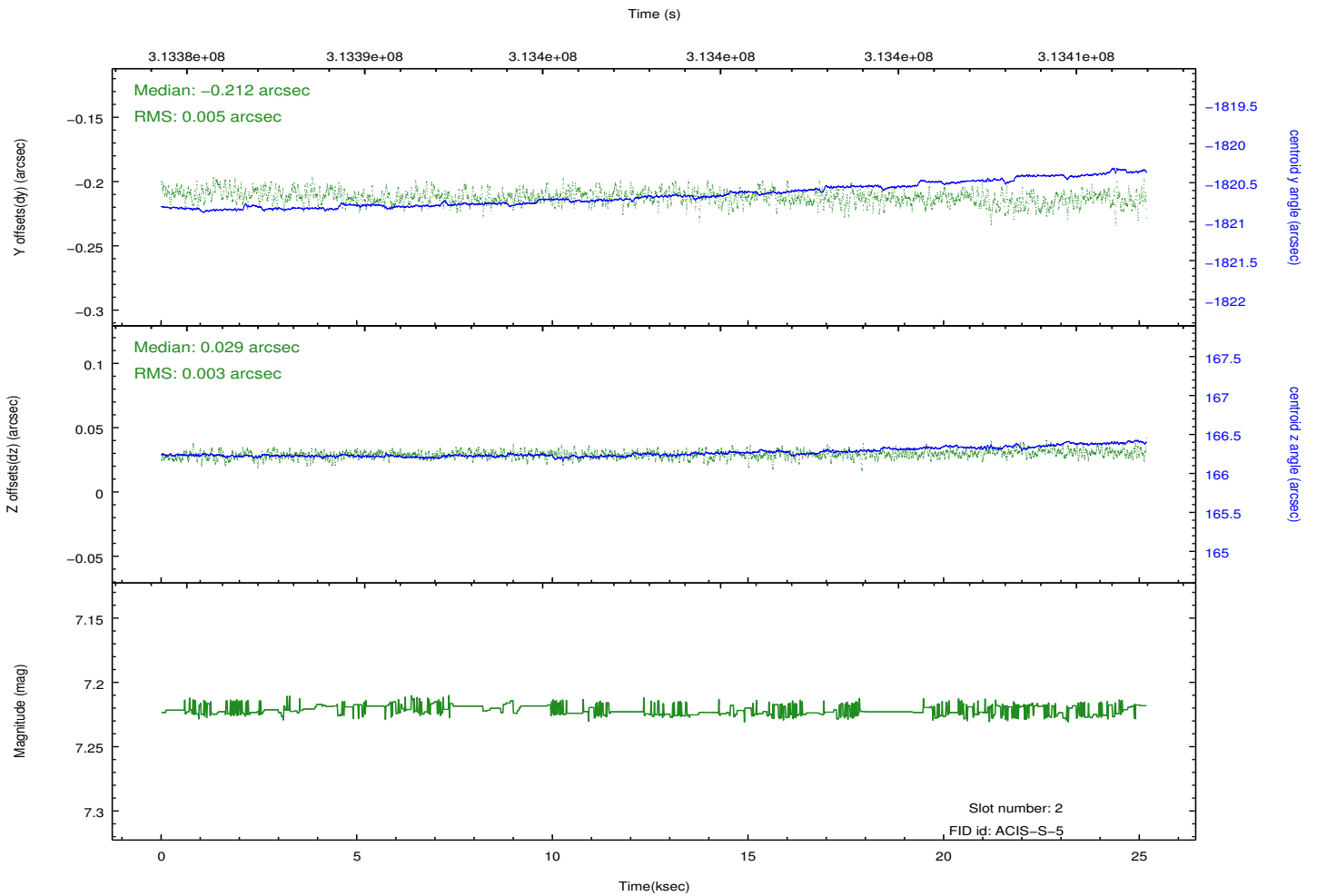
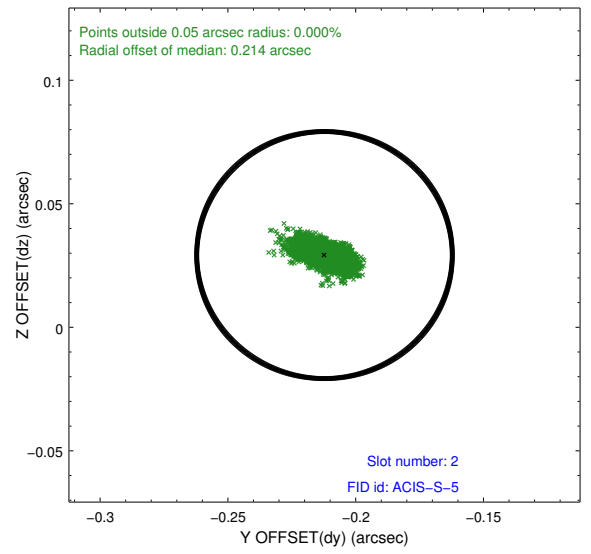
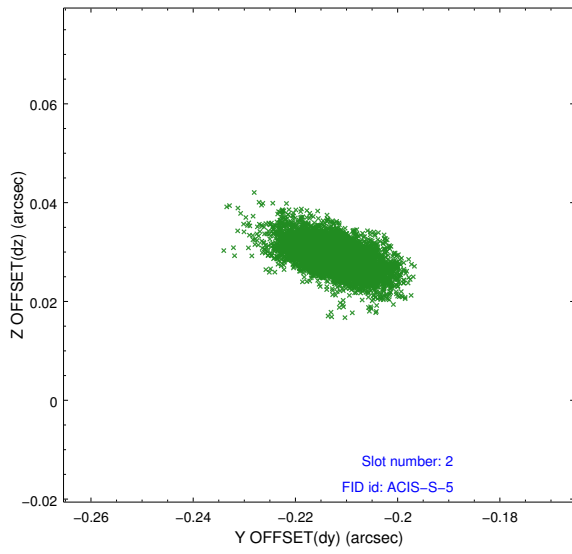
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

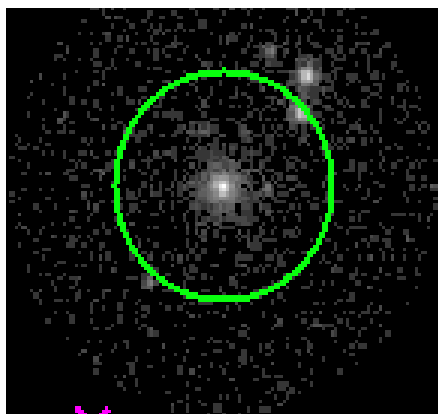


3 Gratings

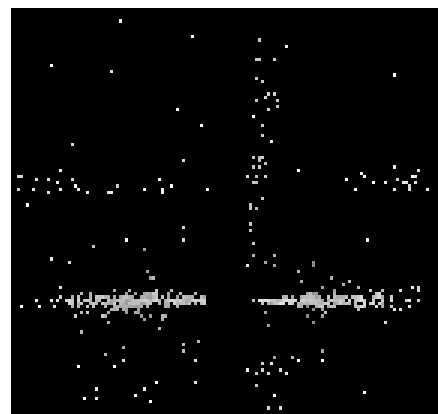
3.1 HEG Arm



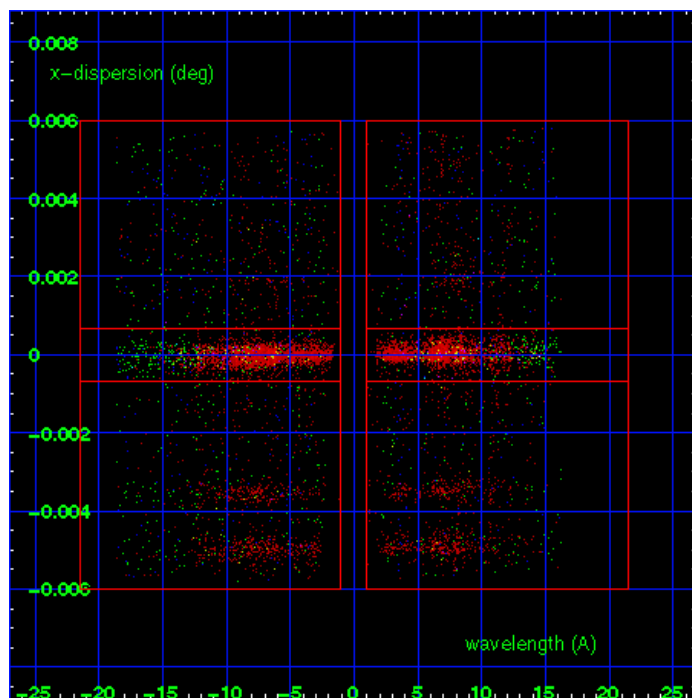
HEG Order Sort 123



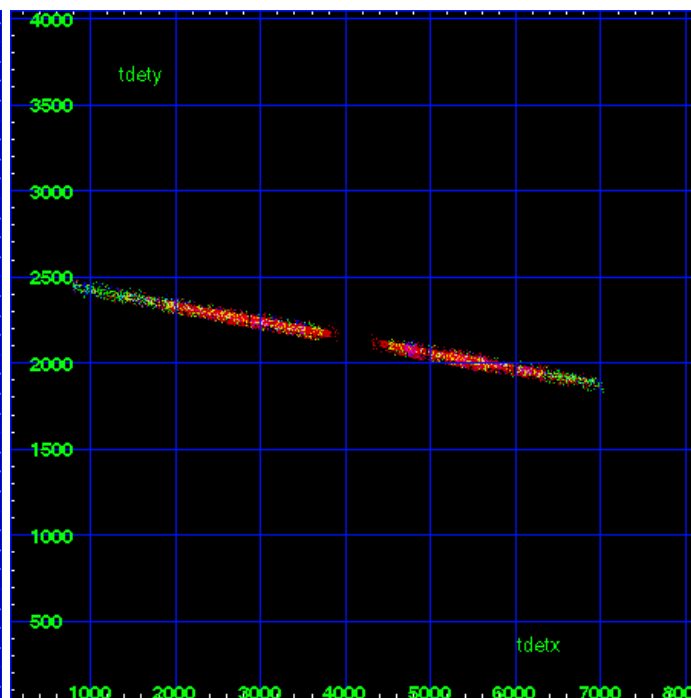
HEG Zero Order



HEG Order Sort ALL

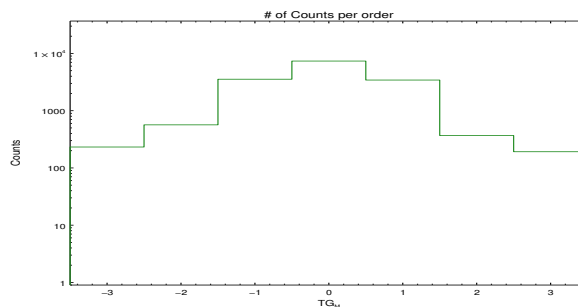


Spot Image HEG

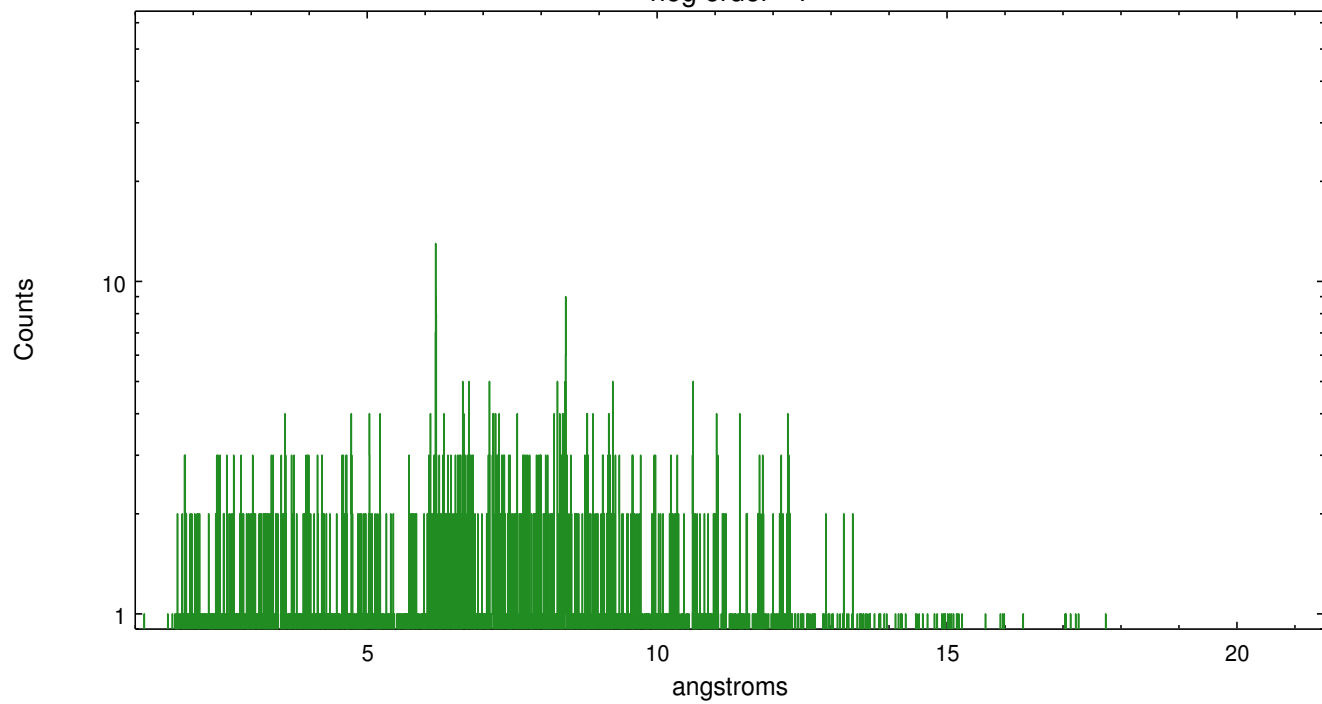


Full Detector HEG

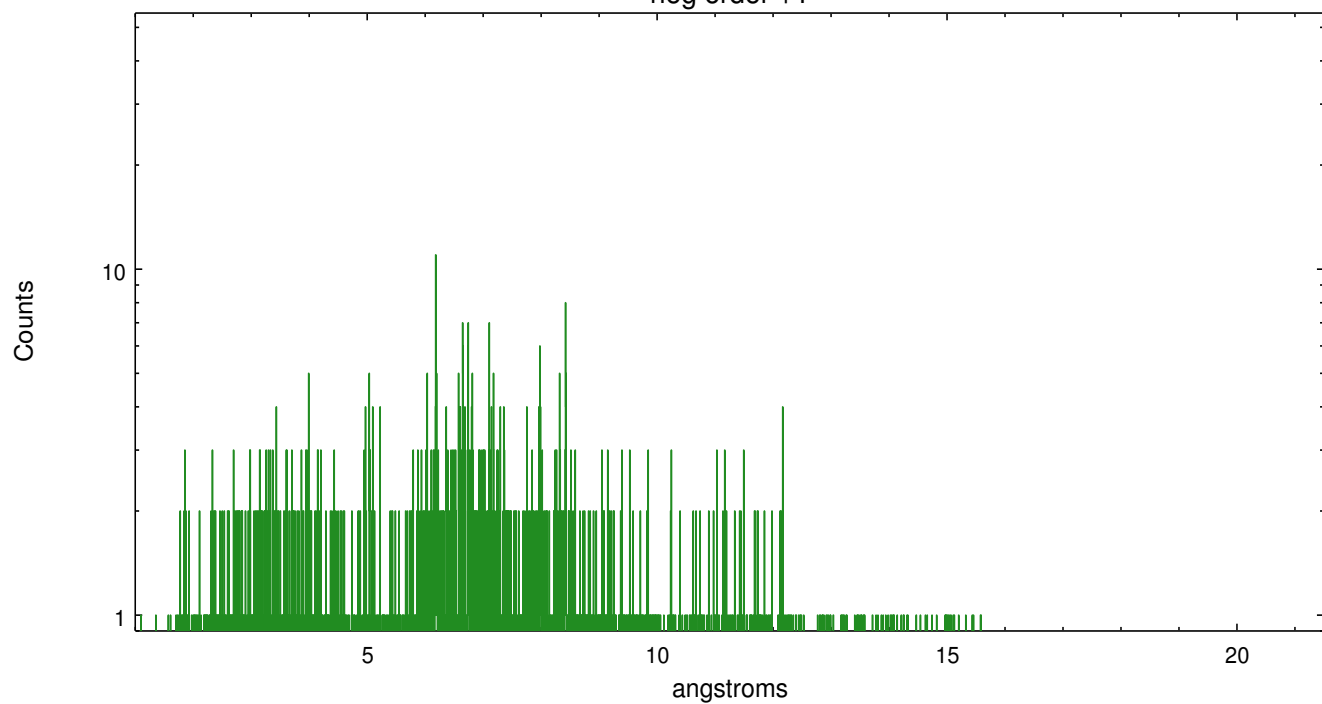
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	232	566	3544	7362	3429	368	192



heg order -1



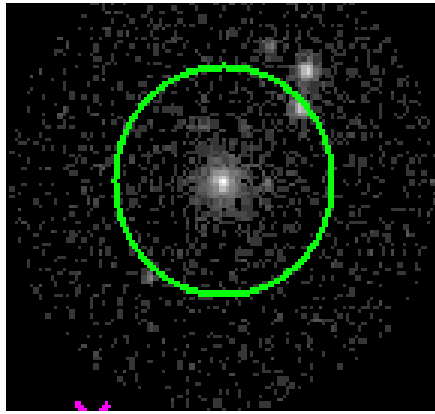
heg order +1



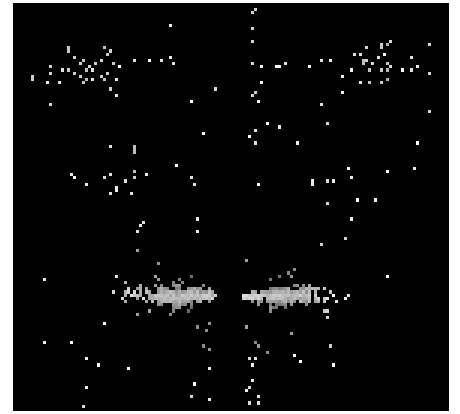
3.2 MEG Arm



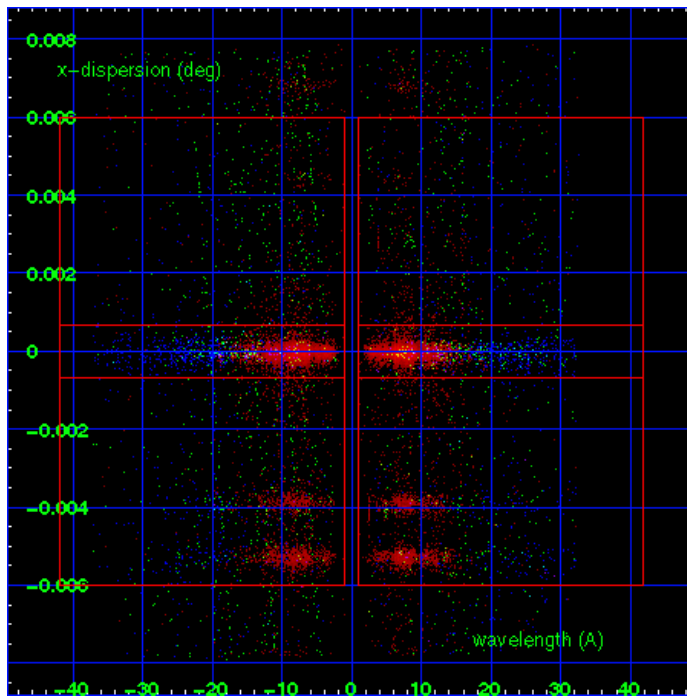
MEG Order Sort 123



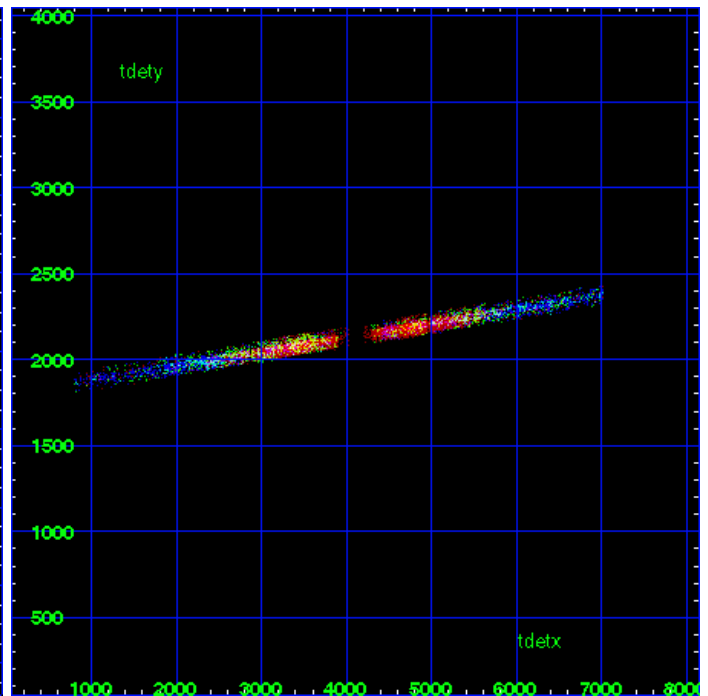
MEG Zero Order



MEG Order Sort ALL

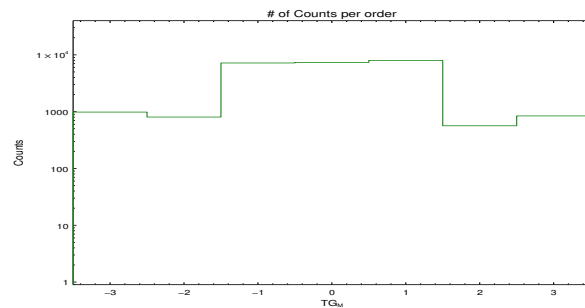


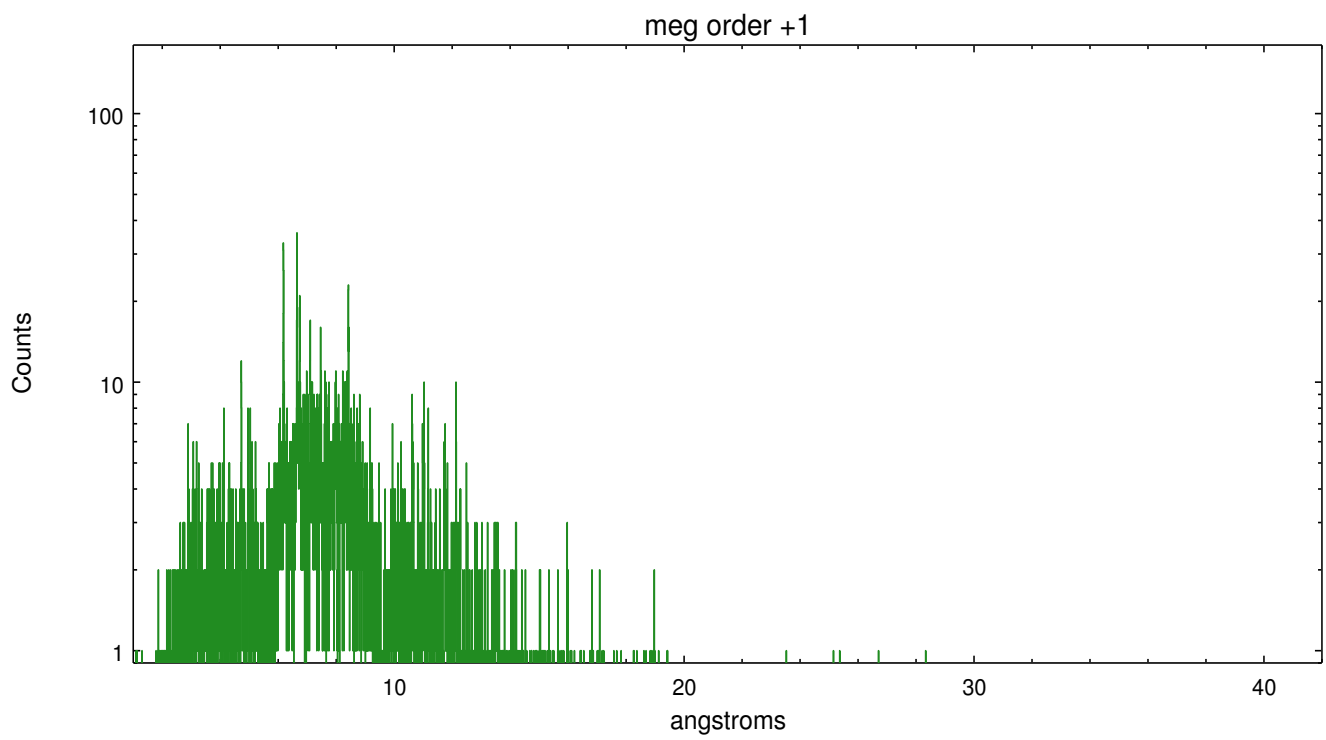
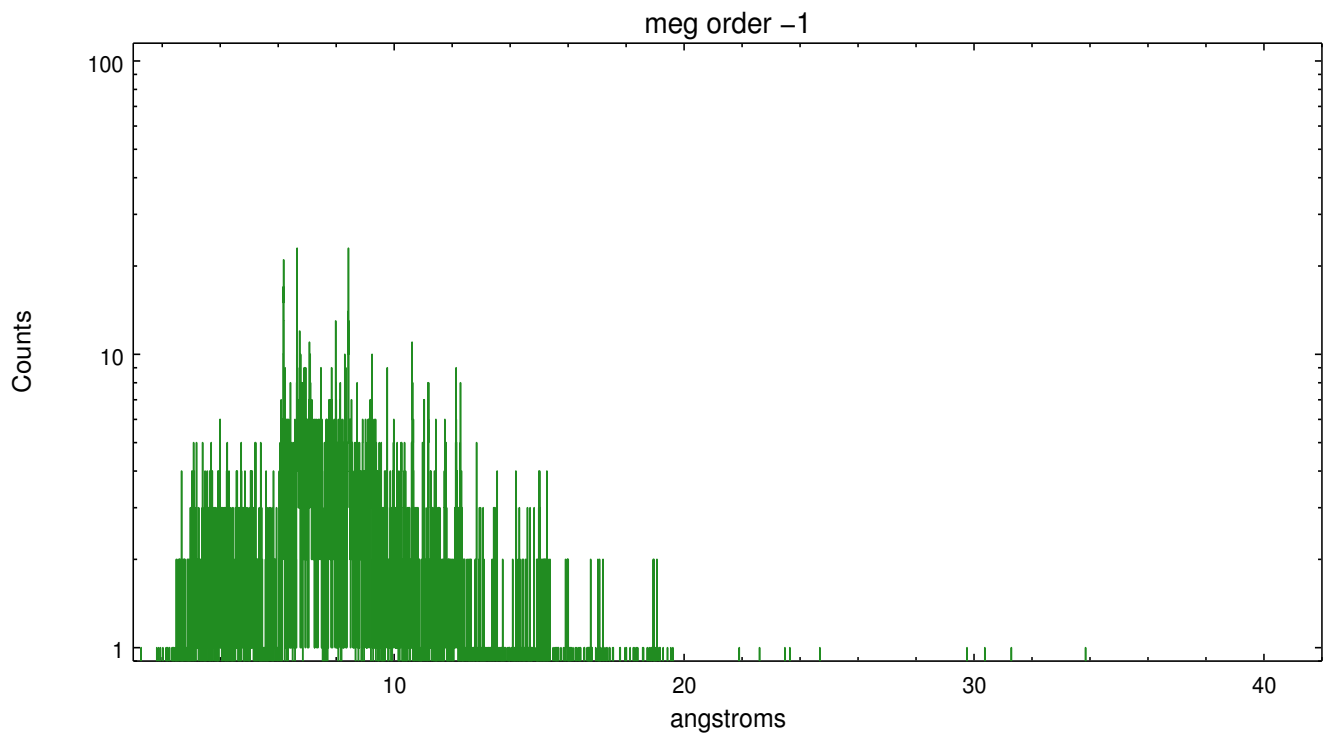
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	982	803	7187	7362	7979	564	841





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.1711999

A.2 Comments

Spectral extraction is centered on theta 1 Ori C. This source was found

automatically by the software tool tgdetect. No manual intervention was needed. Warning: Multiple sources in the field may cause contamination of the primary extraction or background at some wavelengths.