

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11992 - L2 Version 3
Chandra X-Ray Center

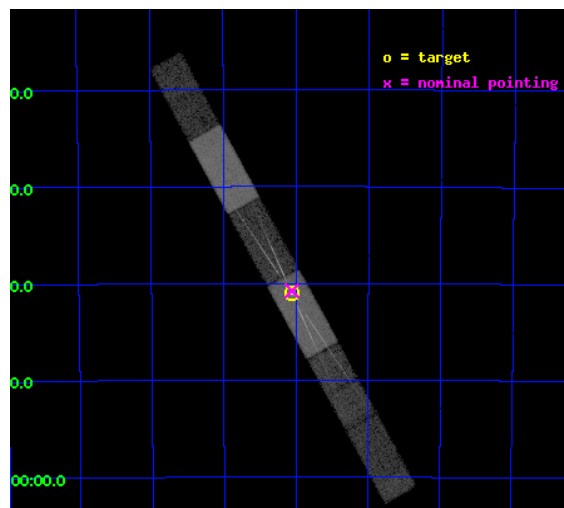
L2 Processing Date : Jun 21 2012

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1 Front

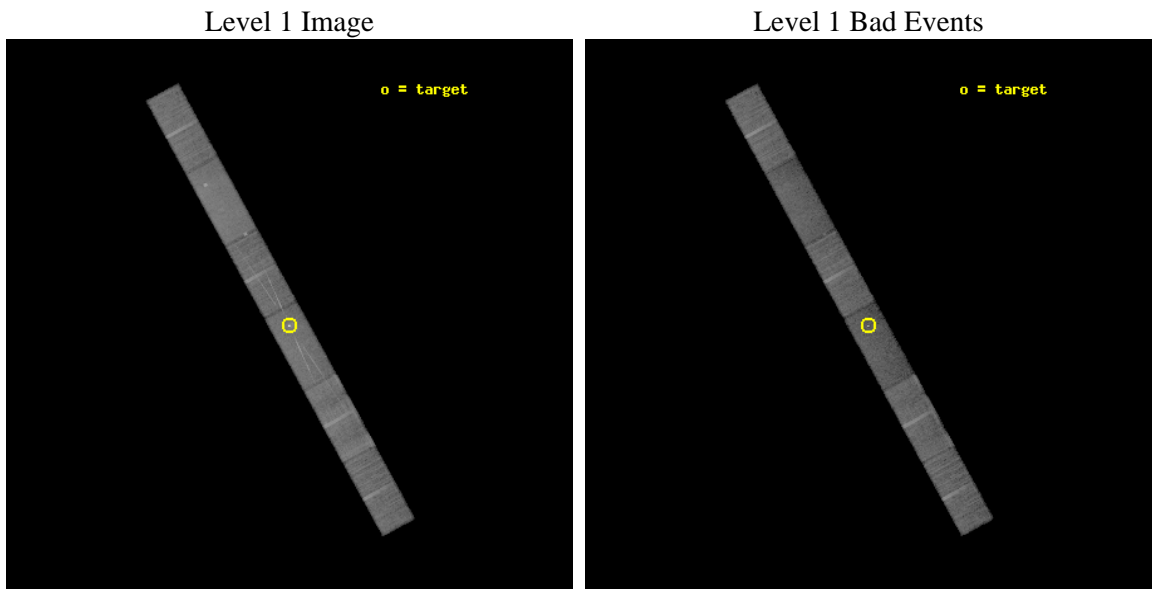
seq_num	200646	Sequence number
obs_id	11992	Observation id
title	Monitoring Dynamical Mass Loss from Eta Car with the HETG	Proposal
observer	Dr Michael Corcoran	Principal investigator
object	Eta Car	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.265	Observer's specified target RA [deg]
dec_targ	-59.684528	Observer's specified target Dec [deg]
ra_nom	161.26455322409	Nominal RA [deg]
dec_nom	-59.679702250761	Nominal Dec [deg]
roll_nom	61.156238691133	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18933.0	Sum of GTIs [s]
livetime	18428.788350724	Livetime [s]
ontime4	18933.0	Sum of GTIs [s]
ontime5	18933.0	Sum of GTIs [s]
ontime6	18933.0	Sum of GTIs [s]
ontime7	18933.0	Sum of GTIs [s]
ontime8	18933.0	Sum of GTIs [s]
ontime9	18933.0	Sum of GTIs [s]
l2events	145985	Number of level 2 events



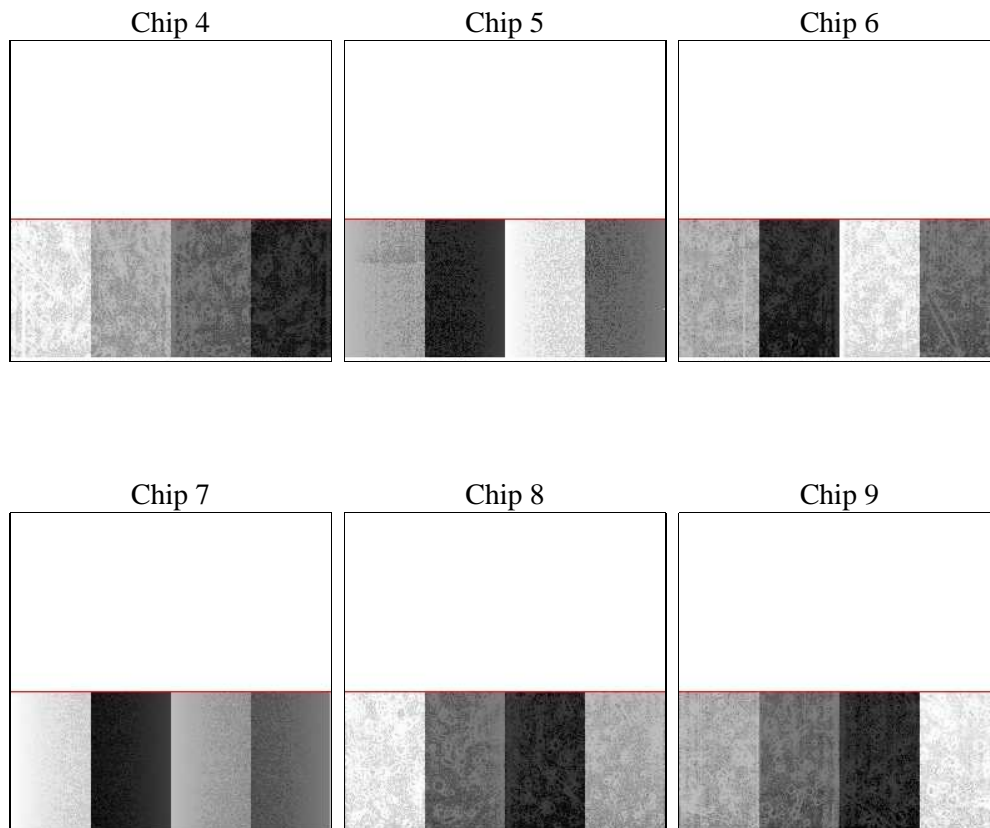
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	18933.0	Sum of GTIs [s]
caldbver	4.4.10	 	ontime4	18933.0	Sum of GTIs [s]
date	2012-06-21T03:34:53	Date and time of file creation	ontime5	18933.0	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	18933.0	Sum of GTIs [s]
			ontime7	18933.0	Sum of GTIs [s]
			ontime8	18933.0	Sum of GTIs [s]
			ontime9	18933.0	Sum of GTIs [s]
			l1events	567239	Number of level 1 events

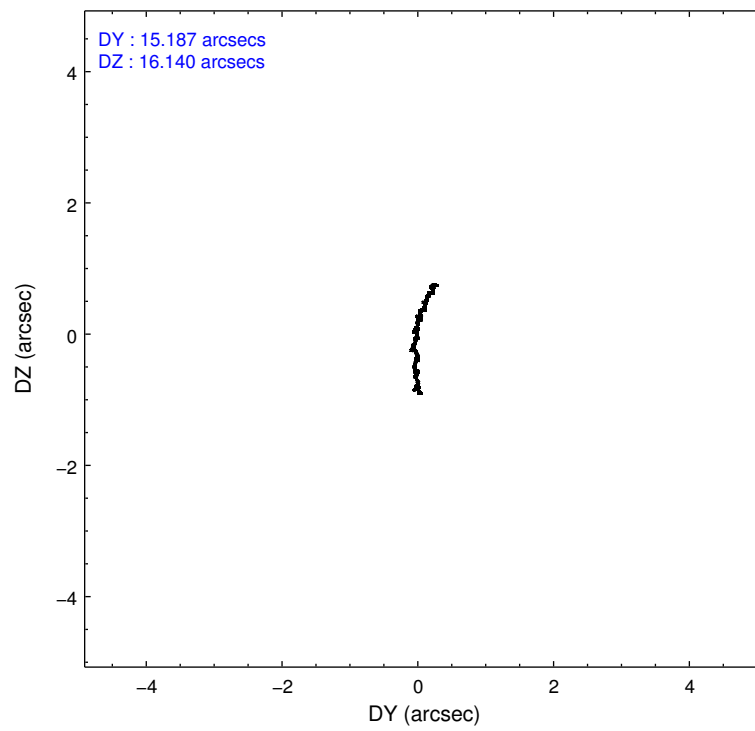
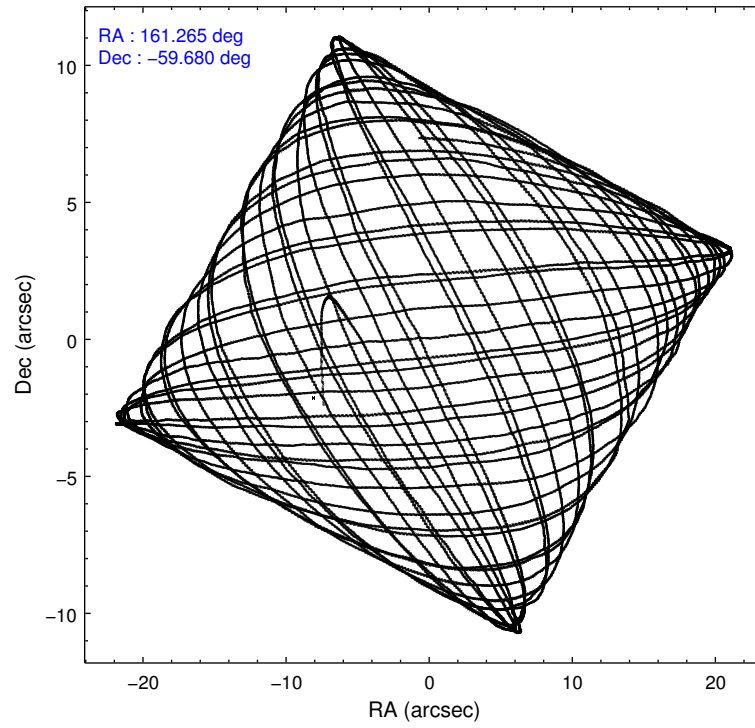
2.1.4 Events

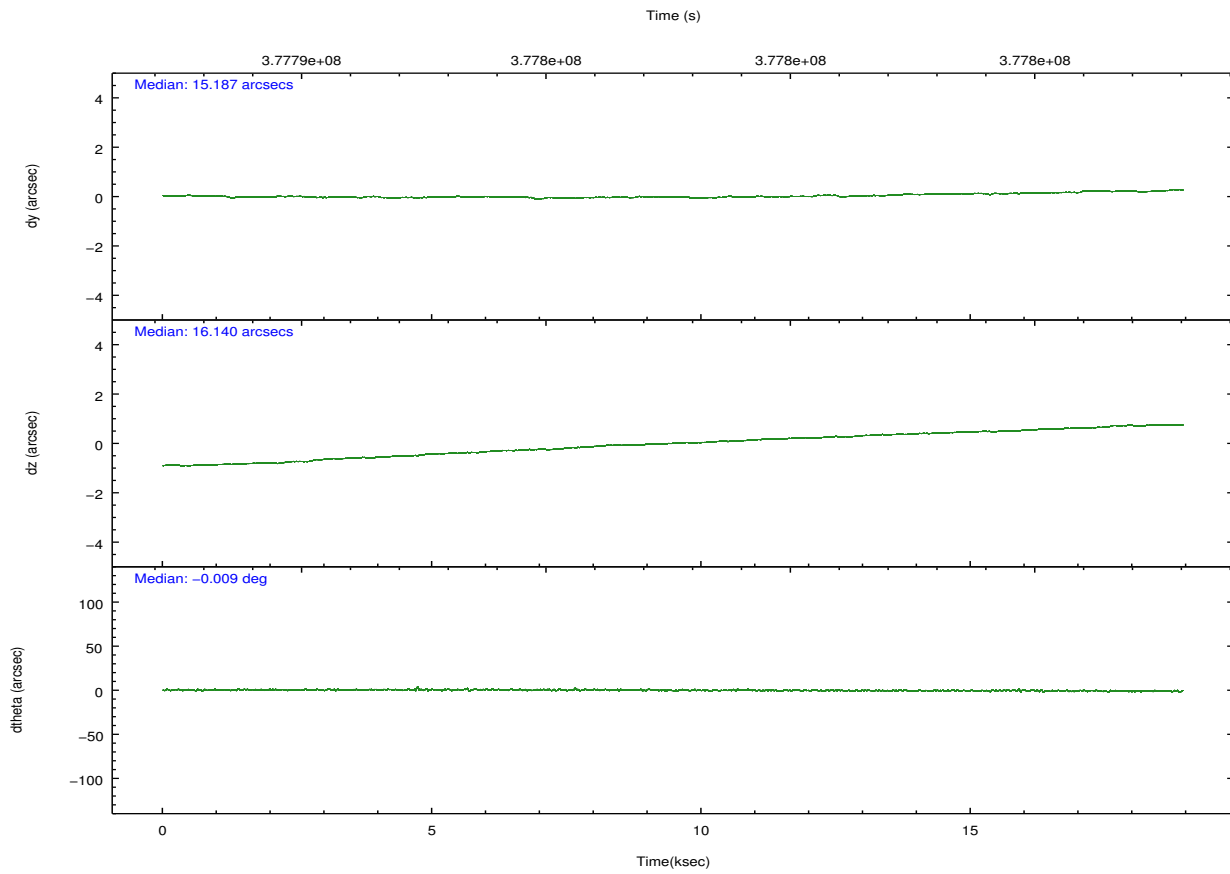
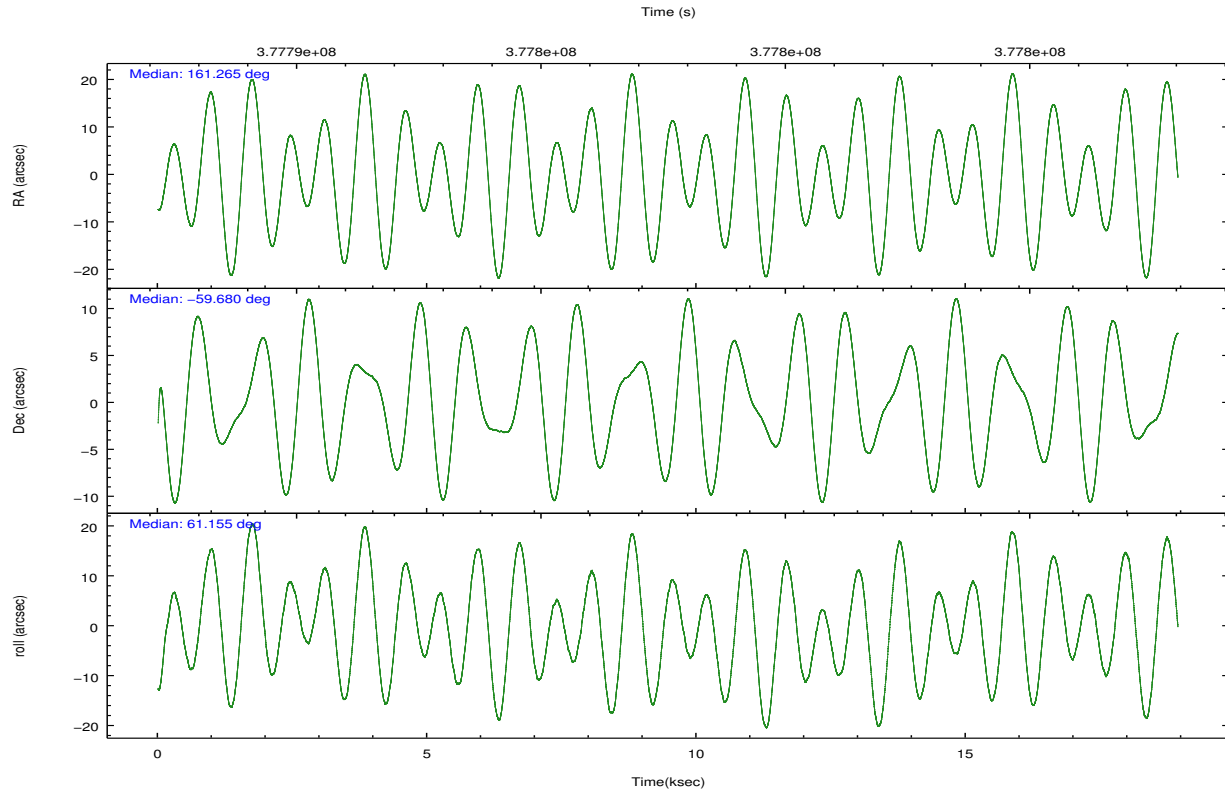
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	88103	108485	85756	104373	104102	76420	grade 0 events	3632	6757	7505	7104	10018	3848
rejected events	78491	53778	71048	47862	75239	66591		4%	6%	8%	6%	9%	5%
rejected %	89%	49%	82%	45%	72%	87%	grade 1 events	46	459	48	192	82	32
								0%	0%	0%	0%	0%	0%
							grade 2 events	2230	15300	2663	12432	5785	1925
								2%	14%	3%	11%	5%	2%
							grade 3 events	1198	3456	1374	5888	3409	1248
								1%	3%	1%	5%	3%	1%
							grade 4 events	1109	3333	1373	5753	3003	1234
								1%	3%	1%	5%	2%	1%
							grade 5 events	2932	9272	2944	9515	4253	3100
								3%	8%	3%	9%	4%	4%
							grade 6 events	1604	27066	2030	26264	7153	1760
								1%	24%	2%	25%	6%	2%
							grade 7 events	75352	42842	67819	37225	70399	63273
								85%	39%	79%	35%	67%	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	161.266366	161.264553224092	CCD I2 on	N	N
[deg] Pointing Dec	-59.707011	-59.67970225076112	CCD I3 on	N	N
[deg] Pointing Roll	61.001186	61.1562386911331	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	-183.332523	-183.3212429520412	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.8	-6.811279630966652	CCD S4 on	Y	Y
[s] Observation start time (MET)	377788279.184000	377787128.6535	CCD S5 on	O2	Y
Observation start date	2009-12-21T13:10:13	2009-12-21T12:52:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	377807079.184000	377807987.40456	On-chip summing requested	N	N
Observation end date	2009-12-21T18:23:33	2009-12-21T18:39:47	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	15	15
			Subarray row count	440	440
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.5

2.3 Aspect



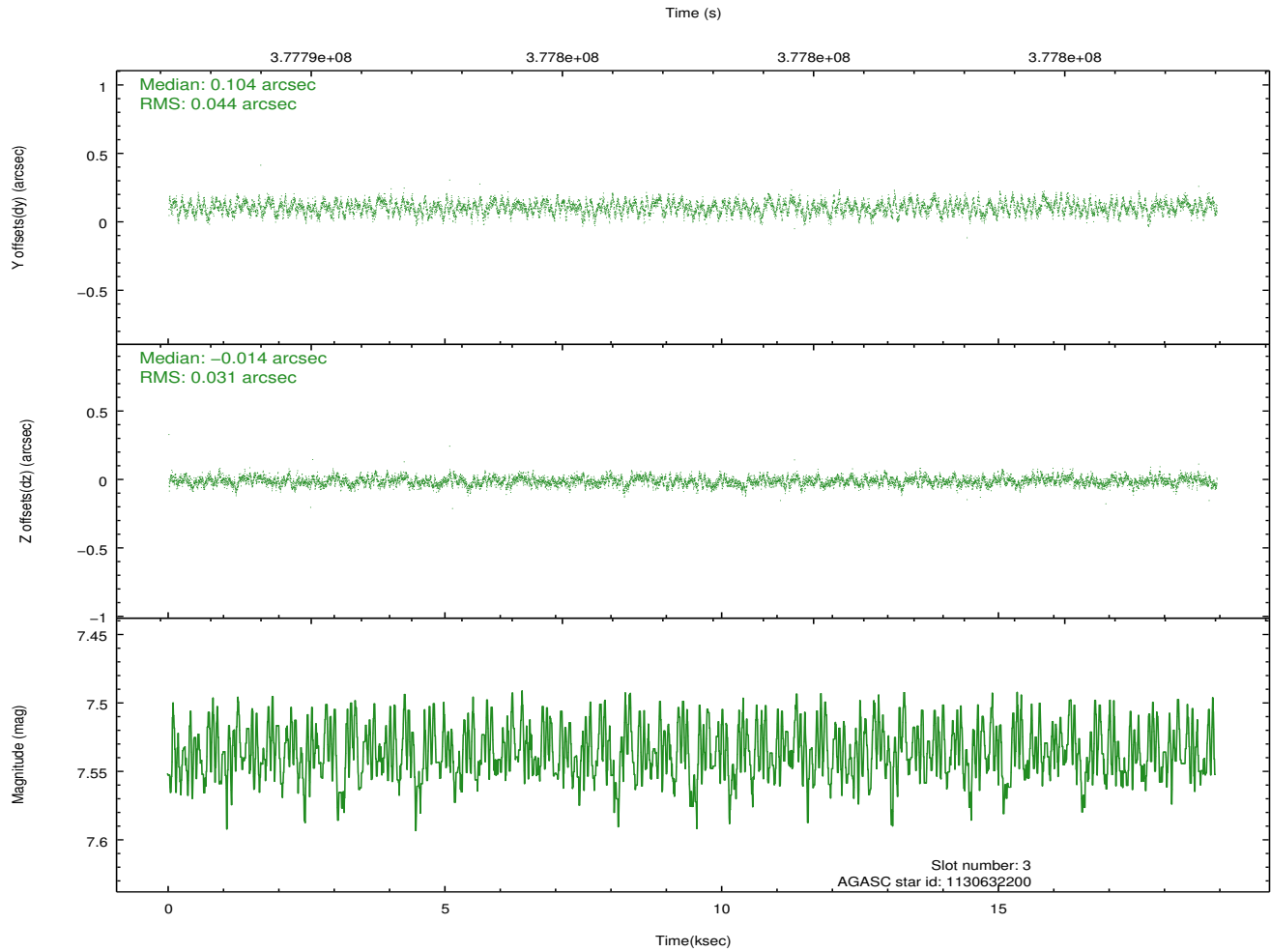
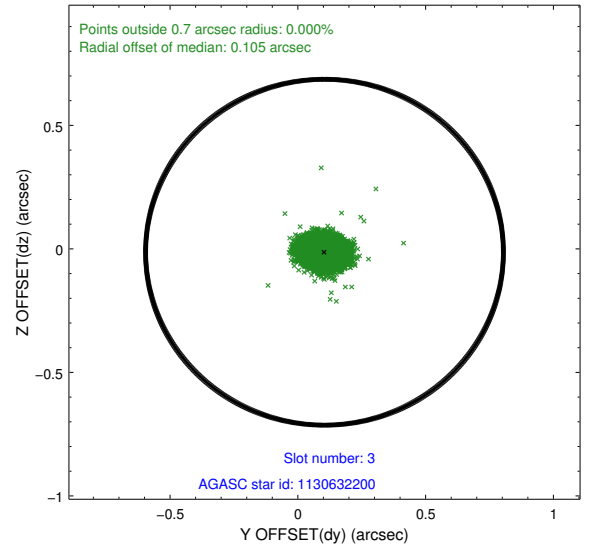
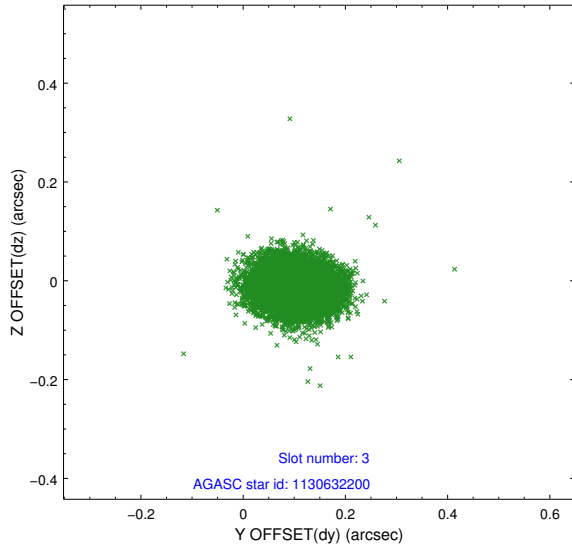


Slot Statistics

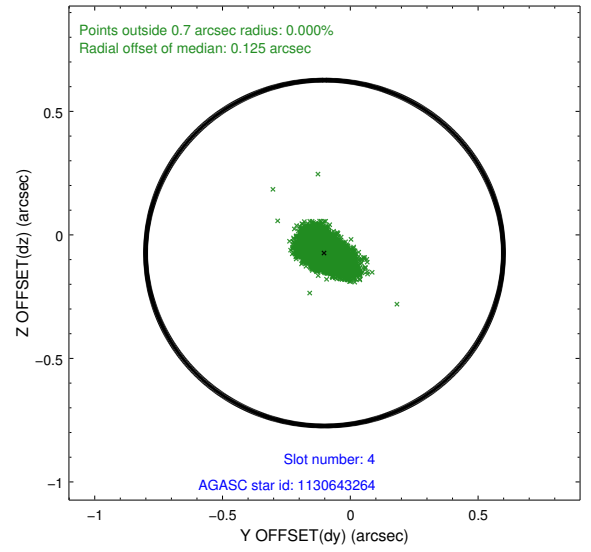
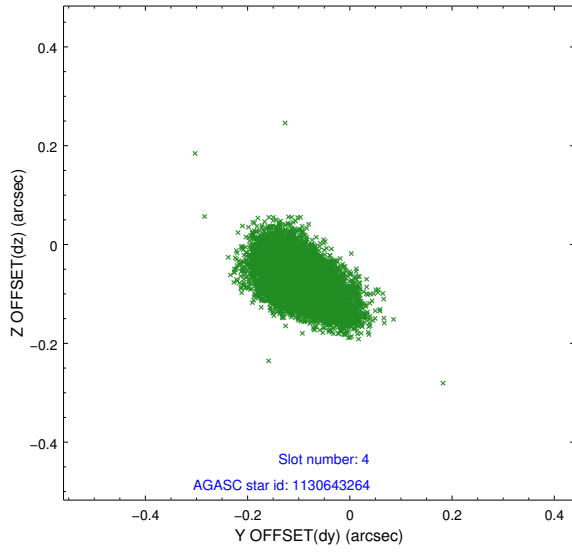
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.96	4619	0.078	-0.055	0.011	0.018	0.000000	0.000000	928.51	-1873.51
1	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
2	FID	ACIS-S-5	7.00	4619	-0.093	0.062	0.011	0.018	0.000000	0.000000	-1820.64	23.76
3	GUIDE	1130632200	7.54	9232	0.104	-0.014	0.058	0.090	161.433843	-59.407820	1090.70	253.84
4	GUIDE	1130643264	6.67	9236	-0.101	-0.074	0.067	0.114	160.322990	-59.676912	-747.00	1546.40
5	GUIDE	1130632064	8.51	9235	-0.176	-0.137	0.064	0.105	160.452382	-59.130948	1076.76	2316.20
6	GUIDE	1174012960	7.15	9235	0.168	0.219	0.055	0.088	160.855674	-60.332270	-2325.07	-451.66
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

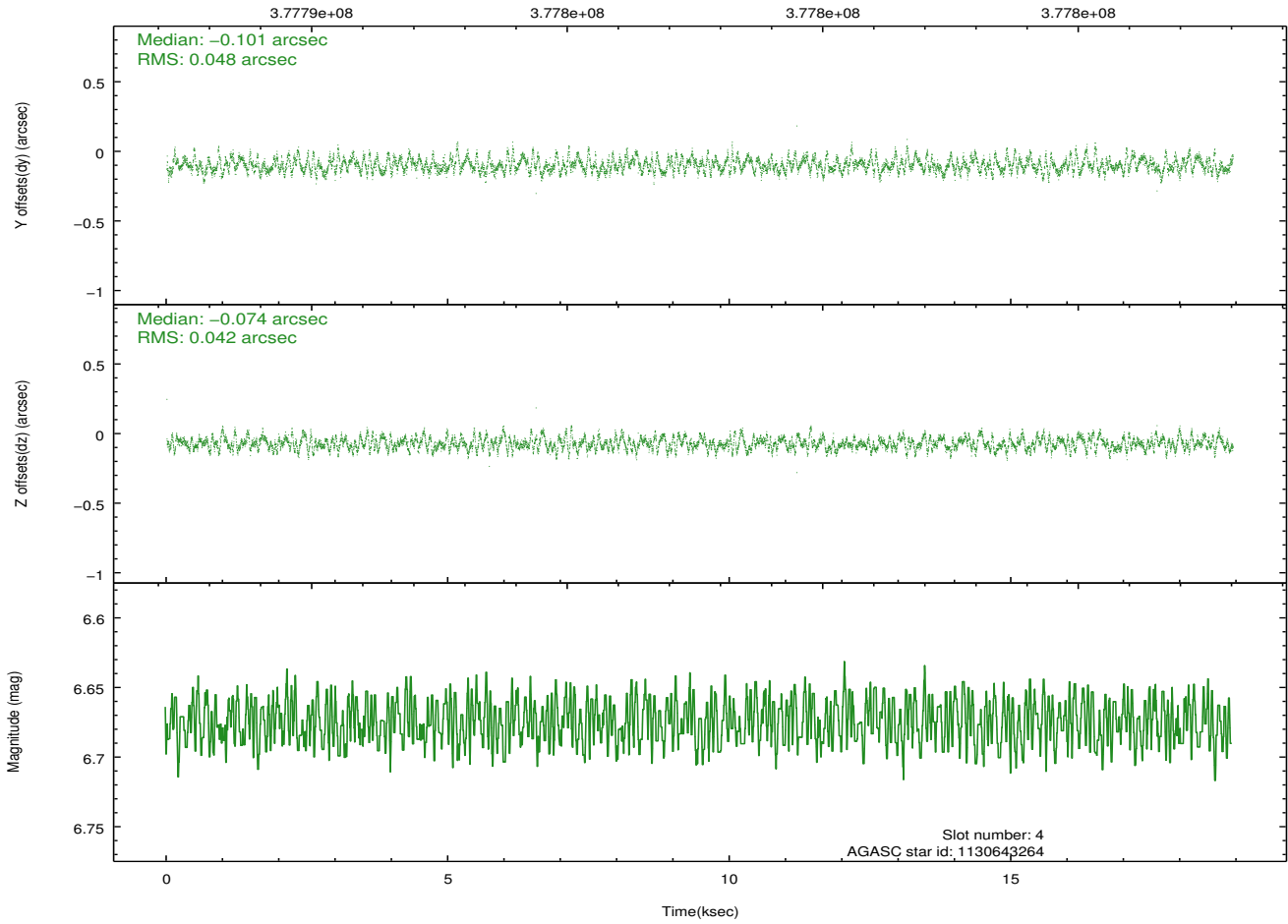
2.4.1 Slot 3



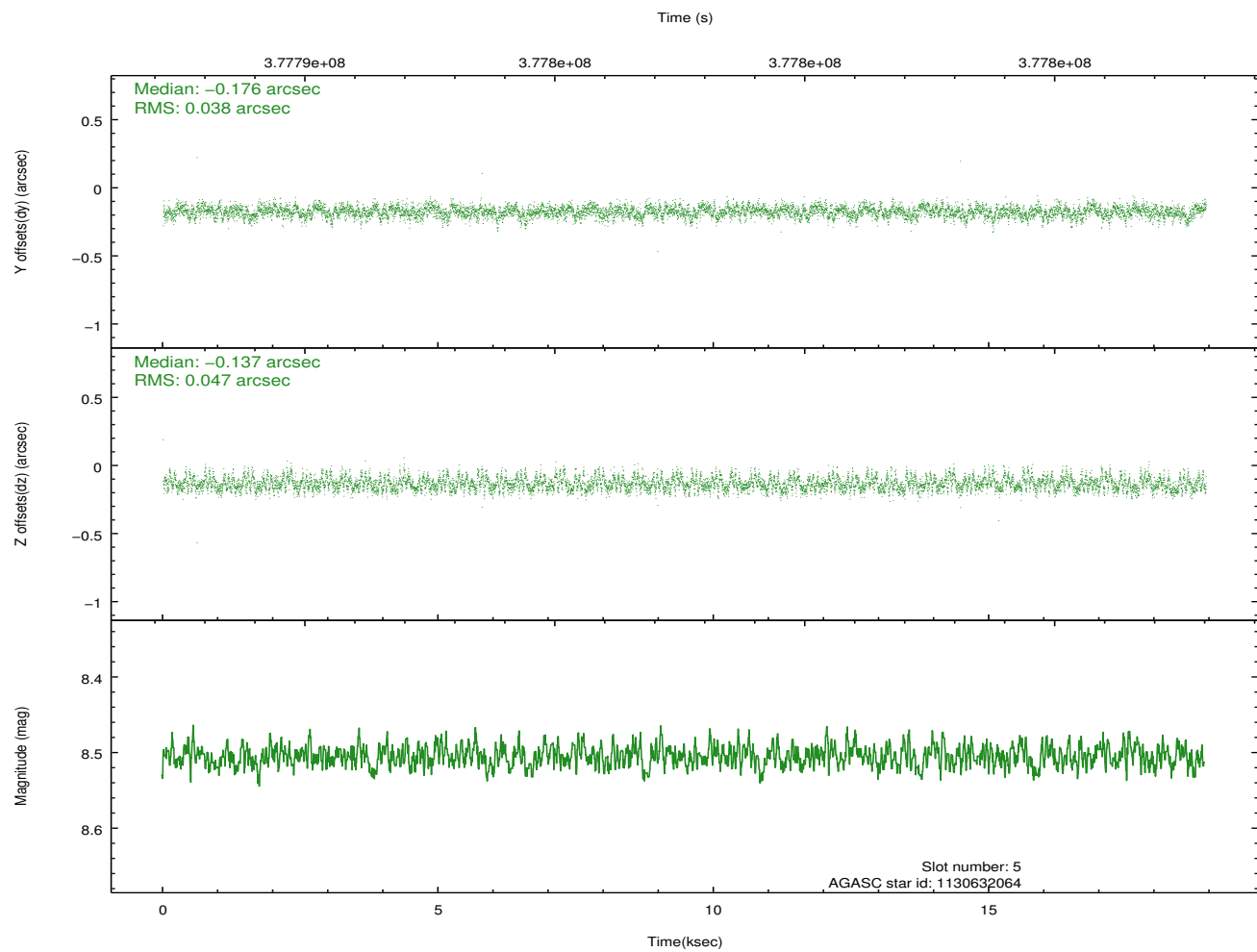
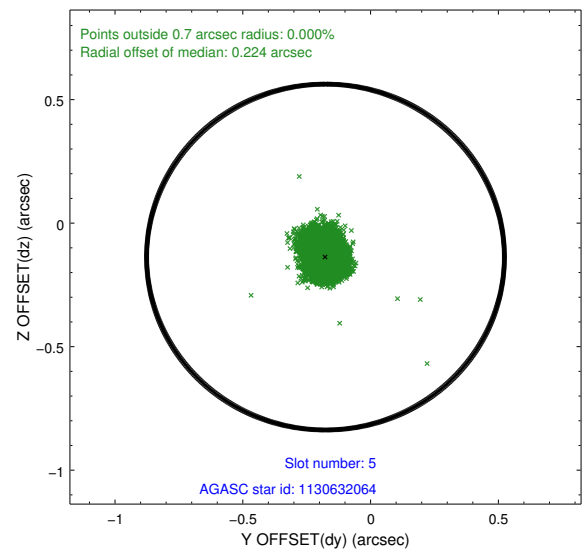
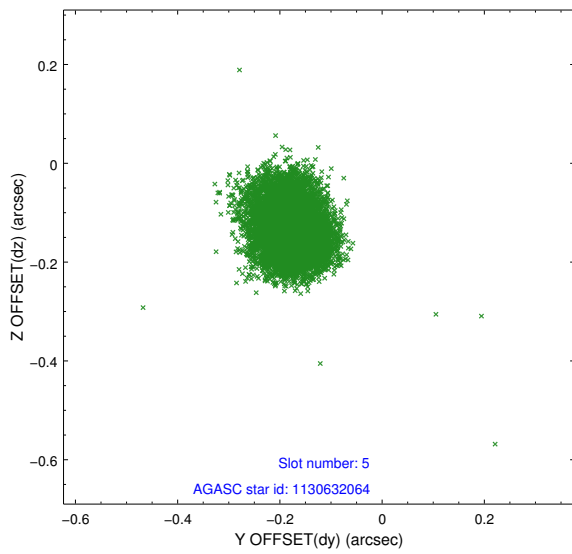
2.4.2 Slot 4



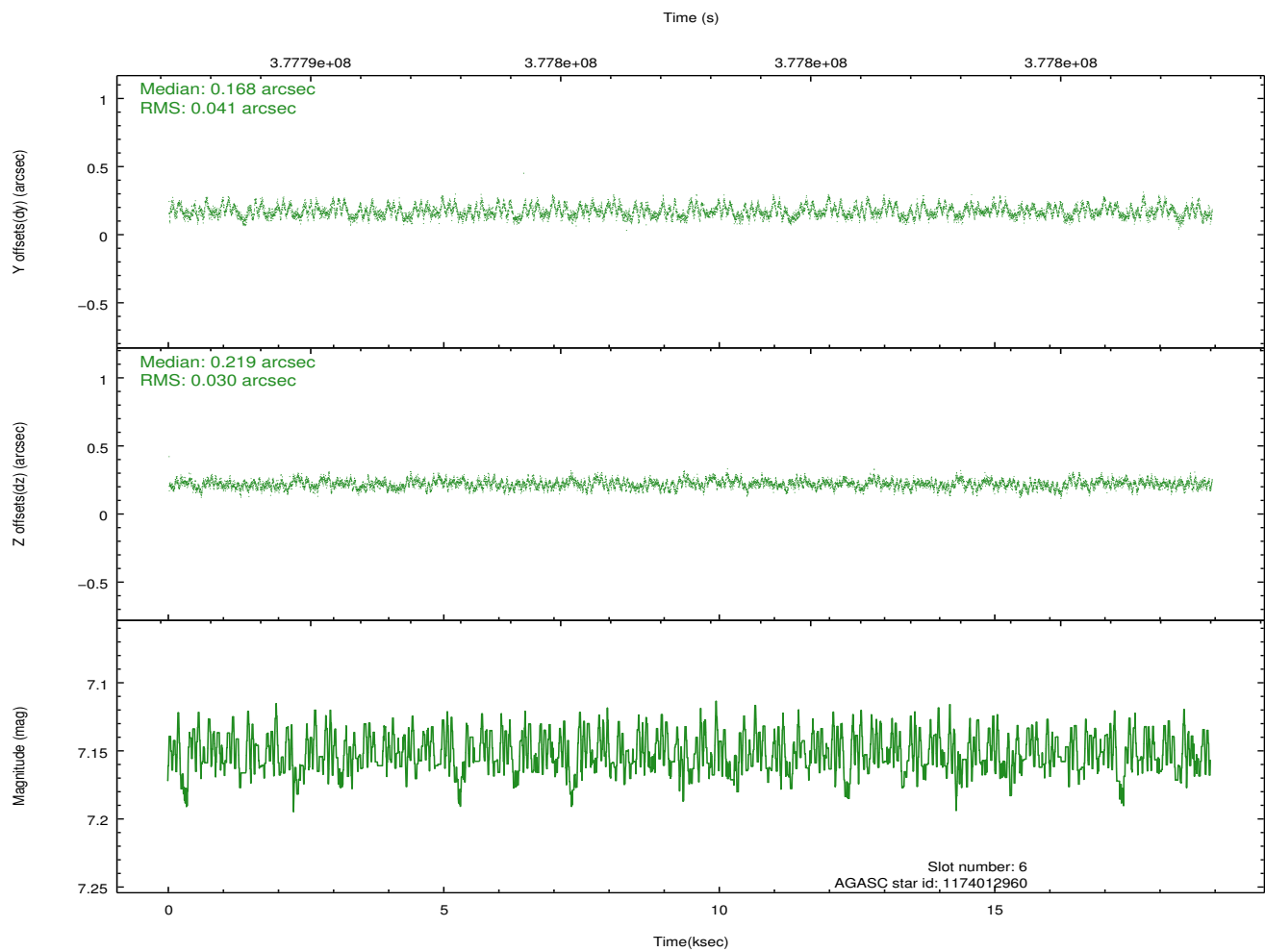
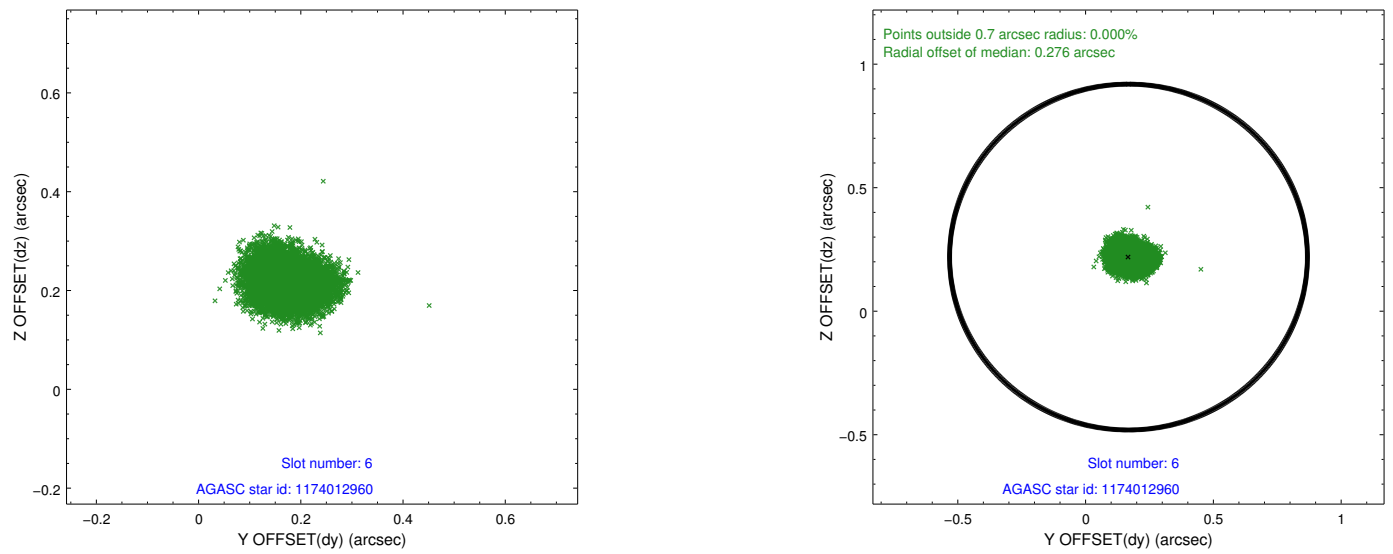
Time (s)



2.4.3 Slot 5

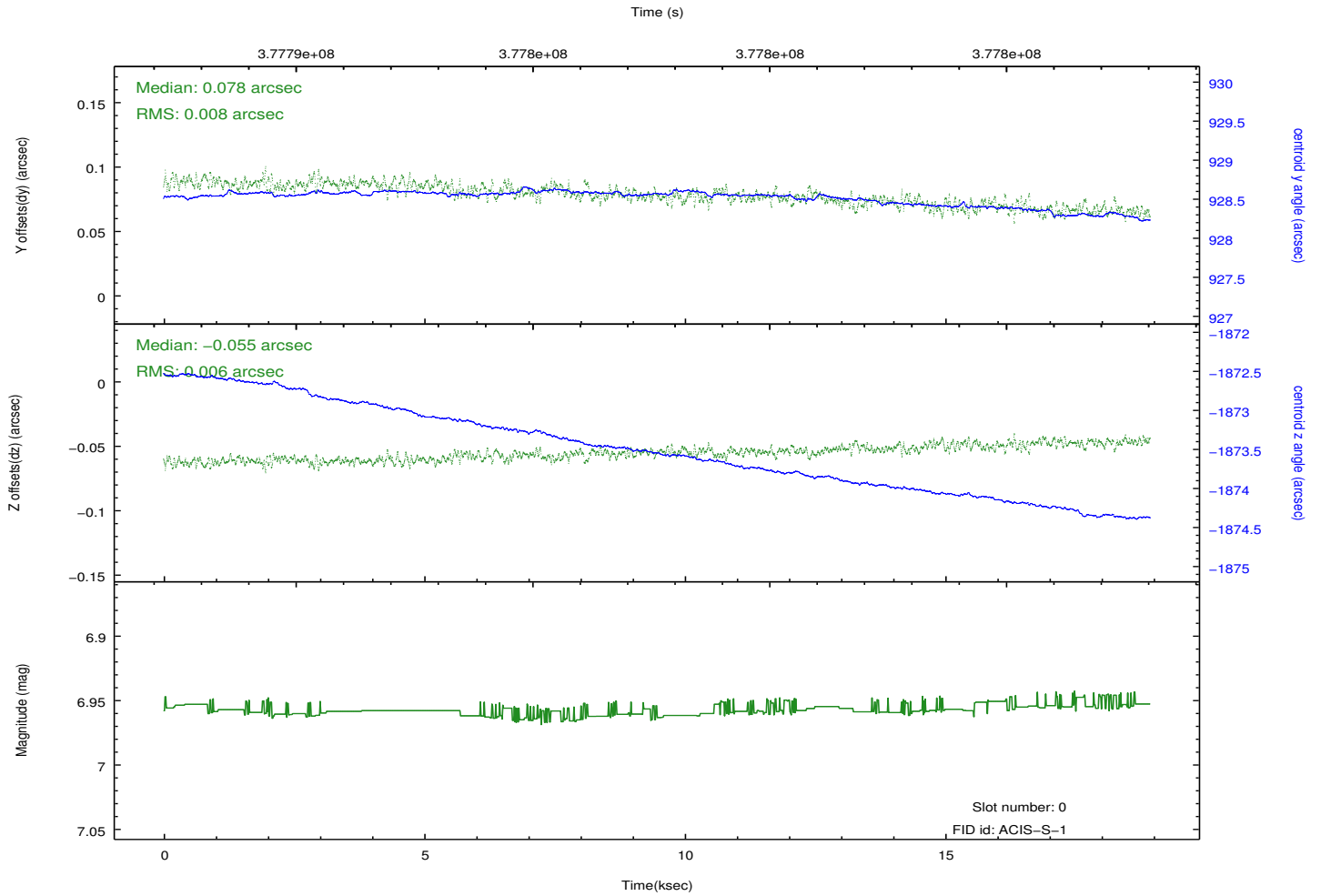
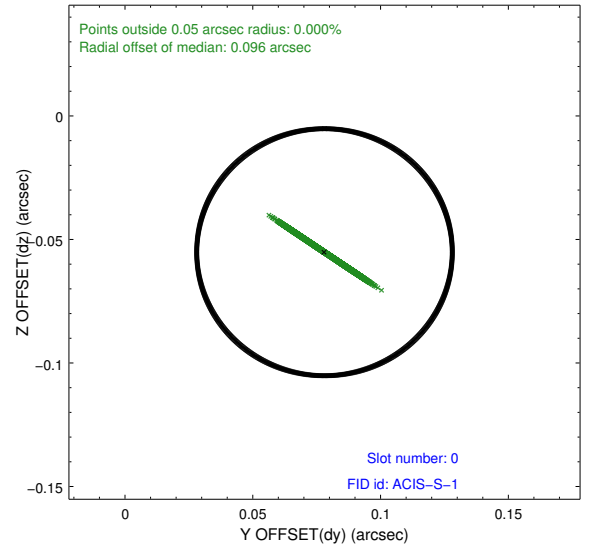
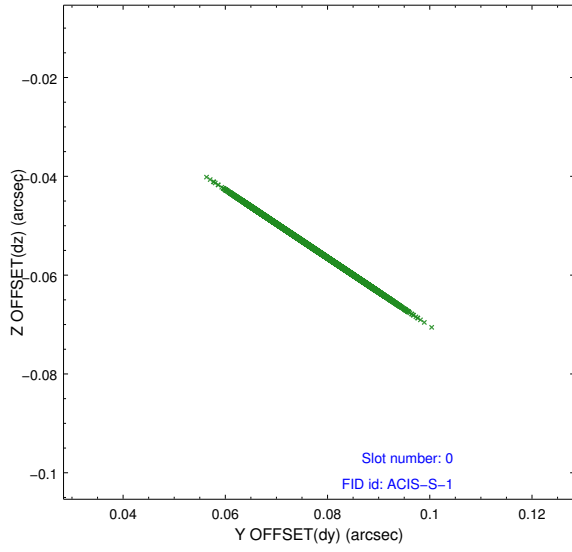


2.4.4 Slot 6

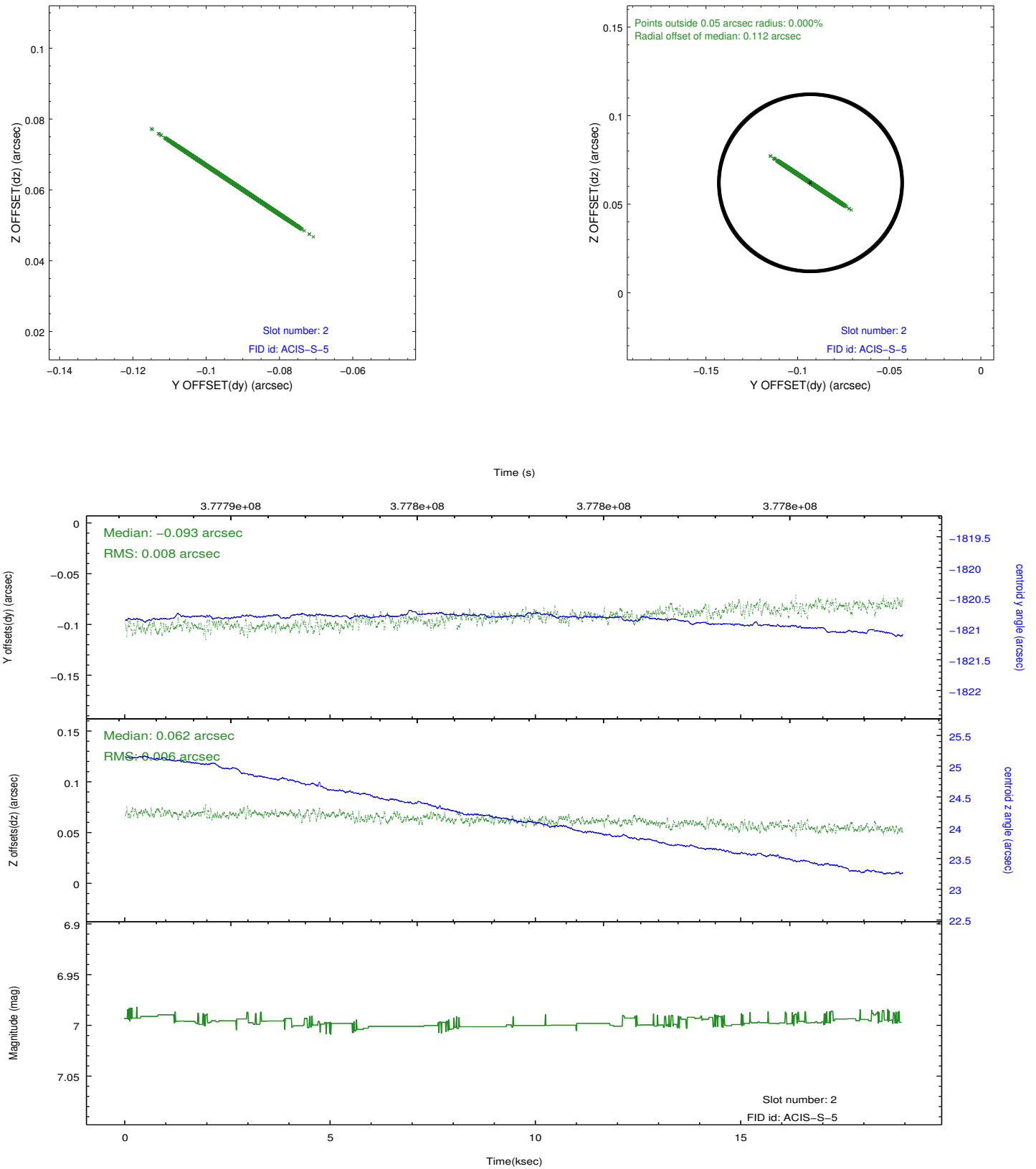


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 2

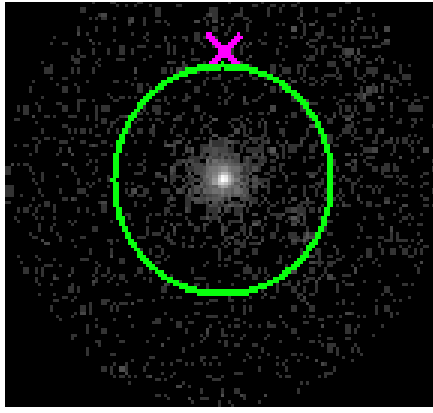


3 Gratings

3.1 HEG Arm



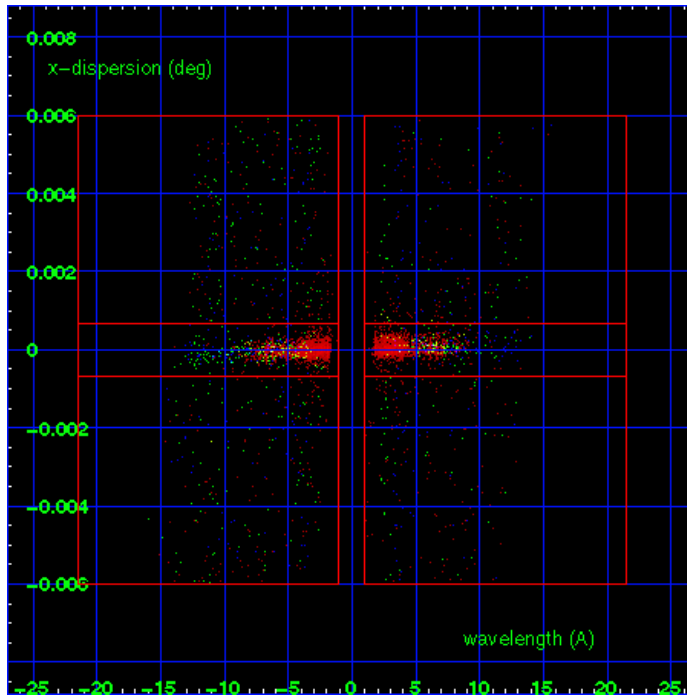
HEG Order Sort 123



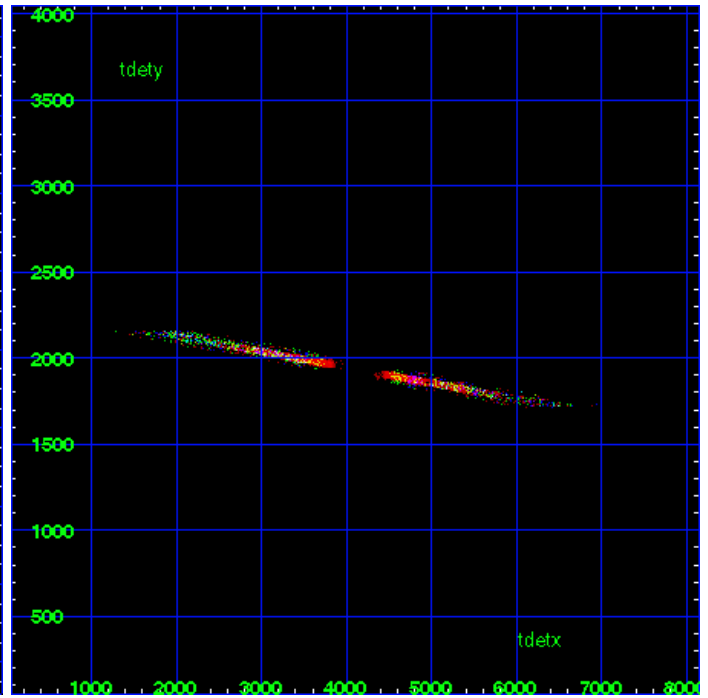
HEG Zero Order



HEG Order Sort ALL

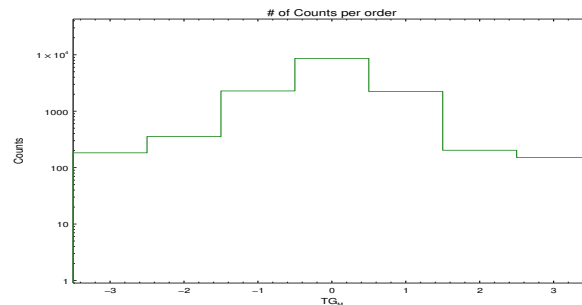


Spot Image HEG

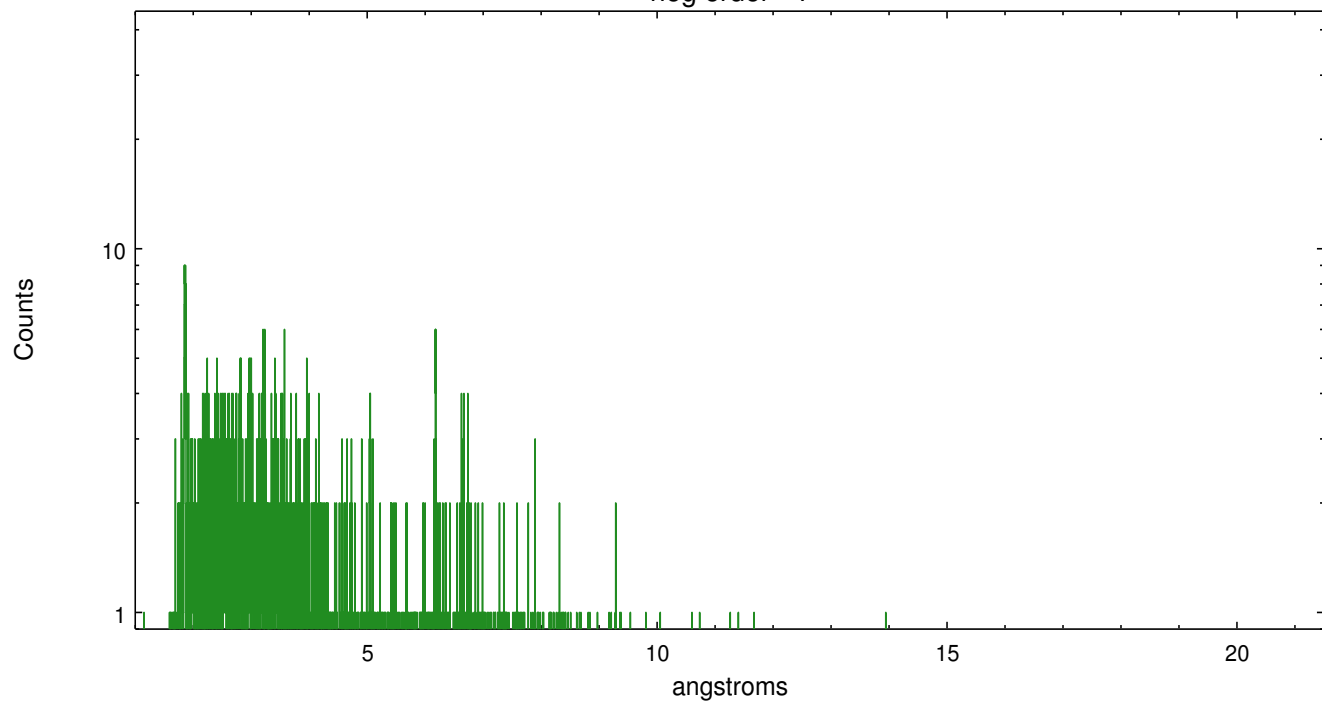


Full Detector HEG

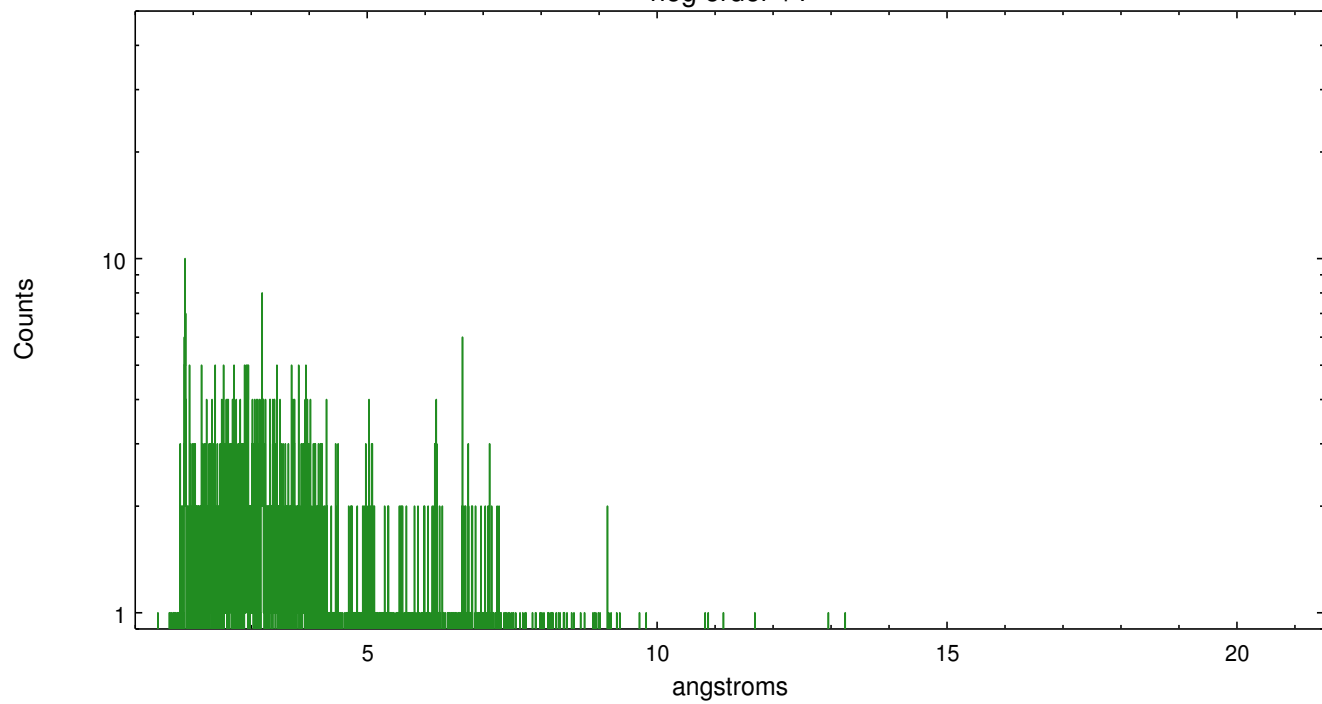
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	183	355	2286	8598	2234	203	151



heg order -1



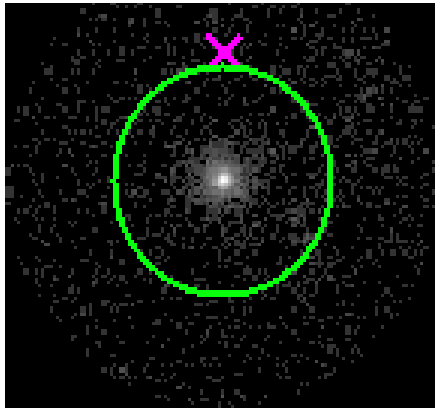
heg order +1



3.2 MEG Arm



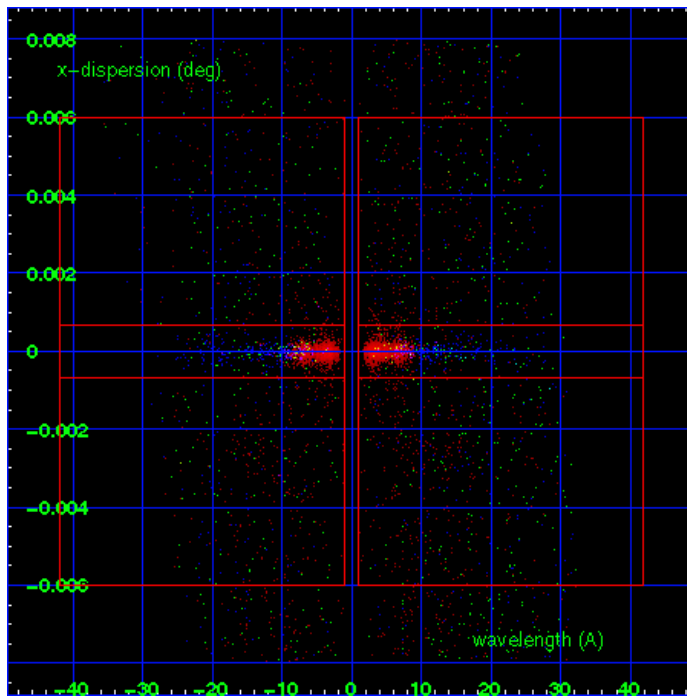
MEG Order Sort 123



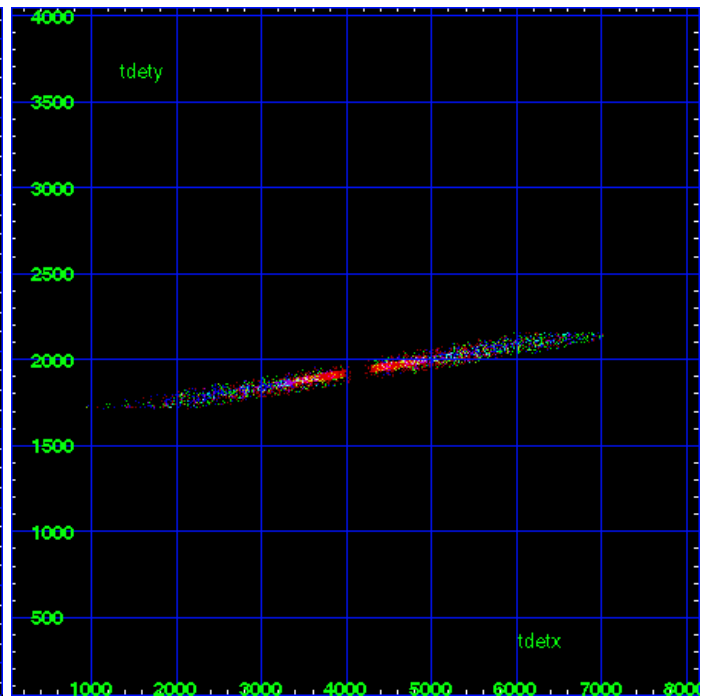
MEG Zero Order



MEG Order Sort ALL

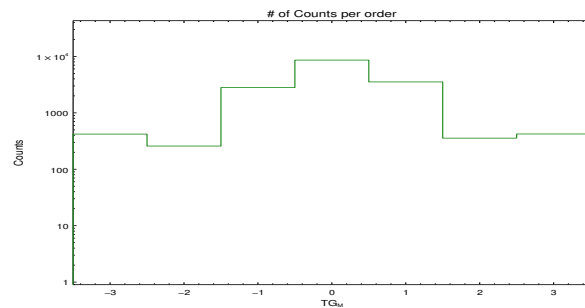


Spot Image MEG

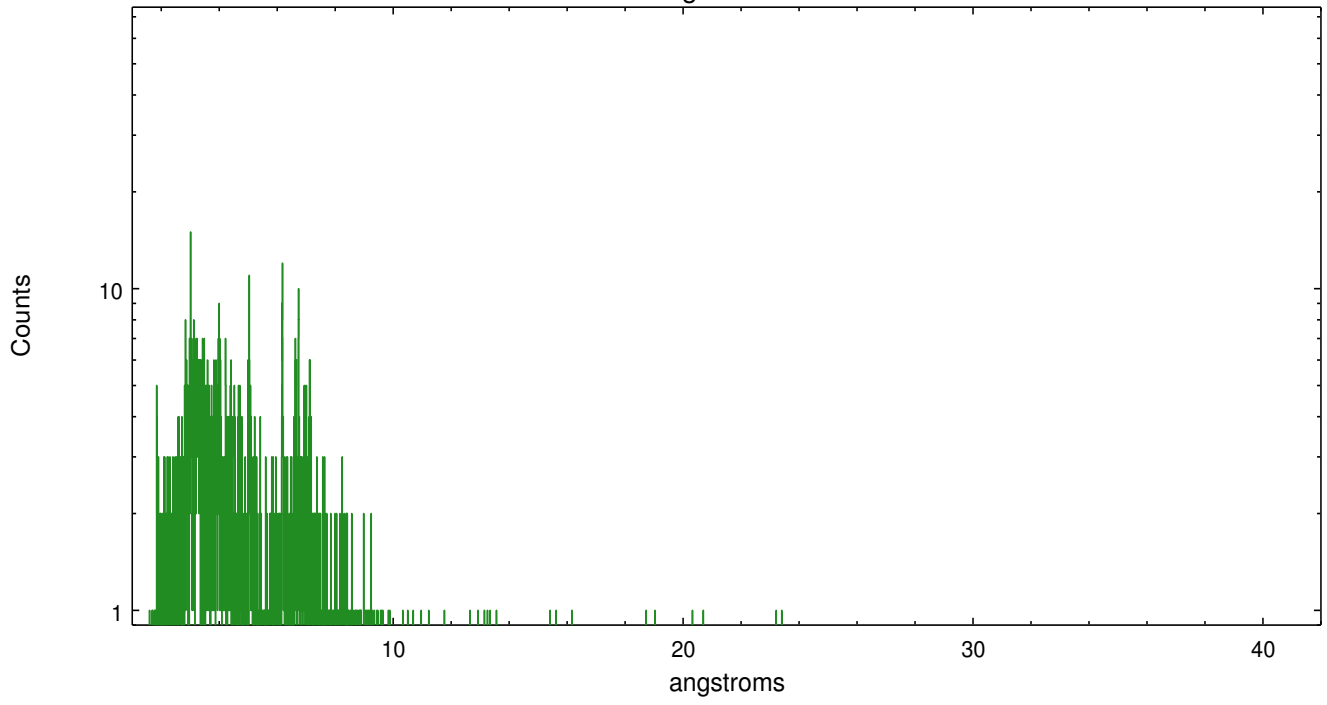


Full Detector MEG

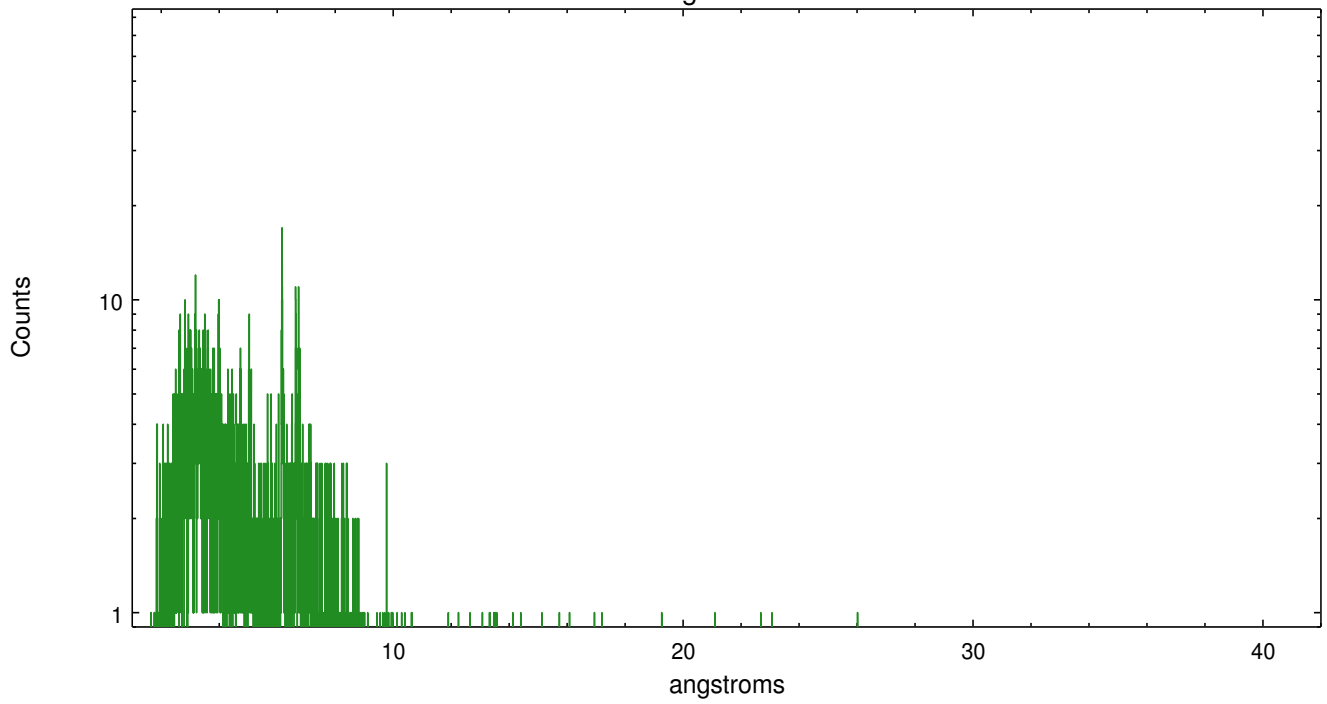
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	420	258	2805	8598	3534	356	422



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.933

A.2 Comments

Spatially complex field. Extraction centered on zeroth order position that was automatically selected by the software (tgdetect).

===

Optical photometry of target in guide star slot 7.

===

The fid light in slot 1 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this fid light from the solution.