

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8967 - L2 Version 2
Chandra X-Ray Center

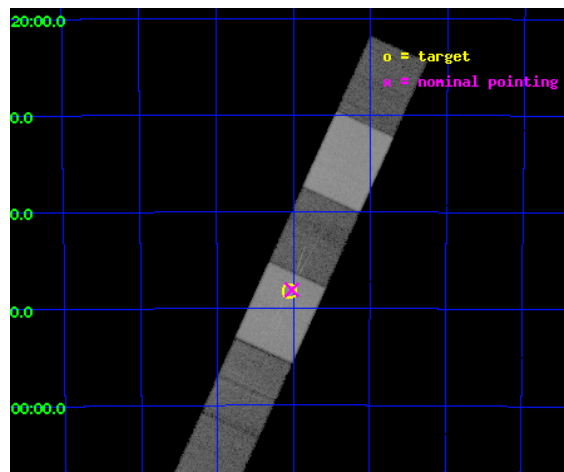
L2 Processing Date : May 25 2012

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1 Front

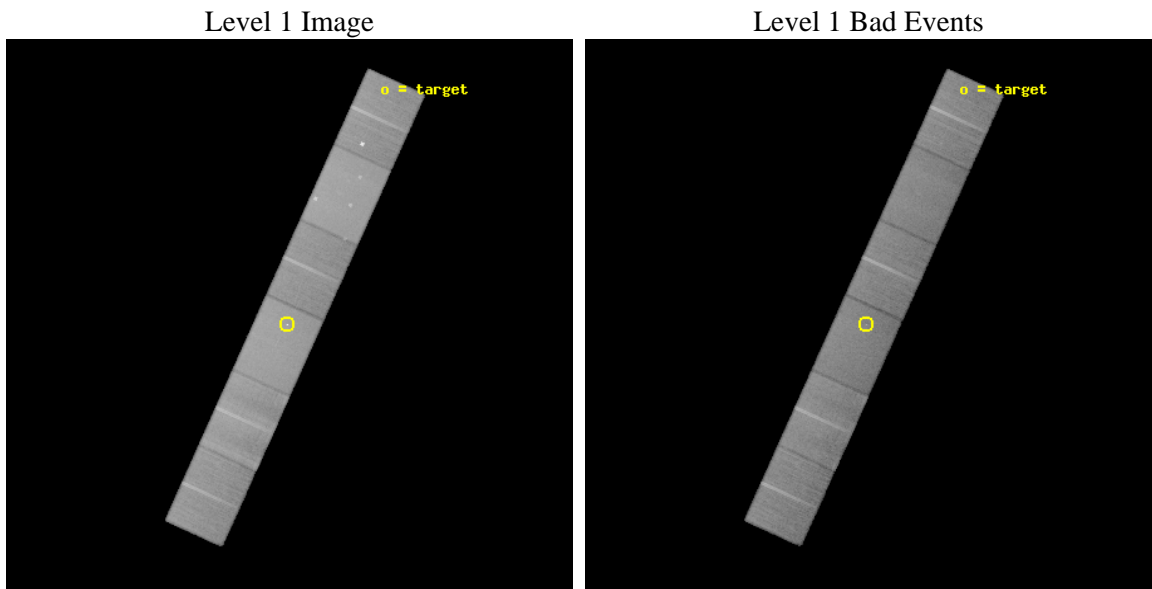
seq_num	300223	Sequence number
obs_id	8967	Observation id
title	The Symbiotic Star SS73 17: What Generates the Hard X-rays?	Propos
observer	Dr. Randall Smith	Principal investigator
object	SS73 17	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	152.762083	Observer's specified target RA [deg]
dec_targ	-57.803861	Observer's specified target Dec [deg]
ra_nom	152.75453794474	Nominal RA [deg]
dec_nom	-57.801162045028	Nominal Dec [deg]
roll_nom	114.40056531047	Nominal Roll [deg]
revision	2	Processing version of data
ontime	35177.5	Sum of GTIs [s]
livetime	34609.352863394	Livetime [s]
ontime4	35177.5	Sum of GTIs [s]
ontime5	35177.5	Sum of GTIs [s]
ontime6	35177.5	Sum of GTIs [s]
ontime7	35177.5	Sum of GTIs [s]
ontime8	35177.5	Sum of GTIs [s]
ontime9	35177.5	Sum of GTIs [s]
l2events	460704	Number of level 2 events



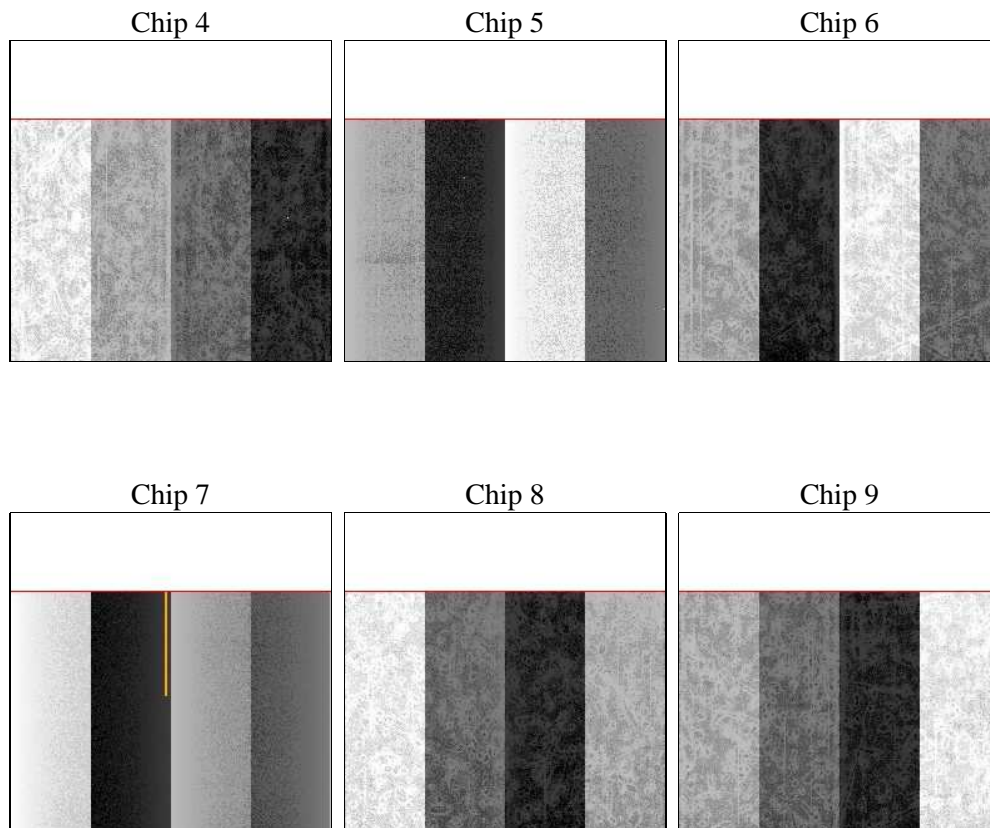
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	35177.5	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	35177.5	Sum of GTIs [s]
date	2012-05-25T05:10:31	Date and time of file creation	ontime5	35177.5	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	35177.5	Sum of GTIs [s]
			ontime7	35177.5	Sum of GTIs [s]
			ontime8	35177.5	Sum of GTIs [s]
			ontime9	35177.5	Sum of GTIs [s]
			l1events	1992855	Number of level 1 events

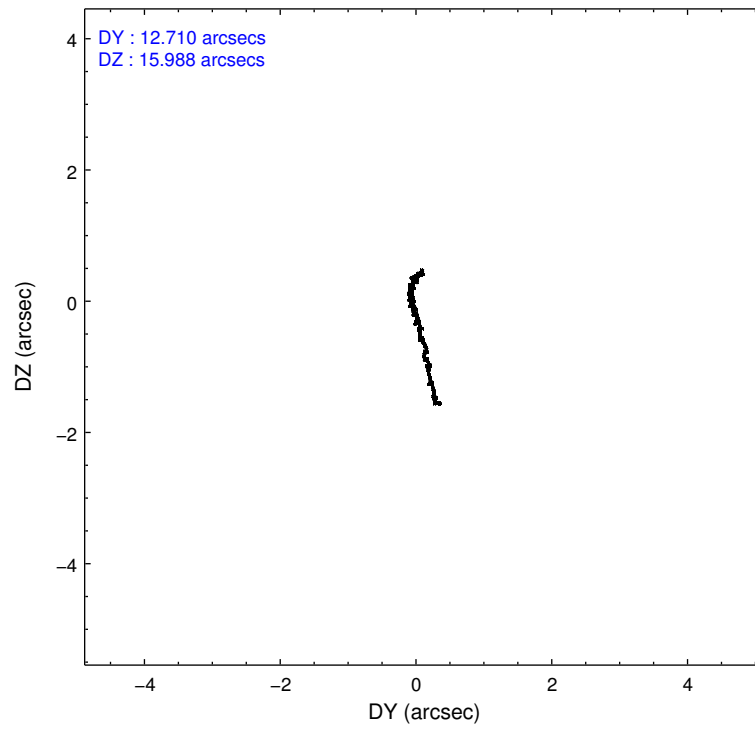
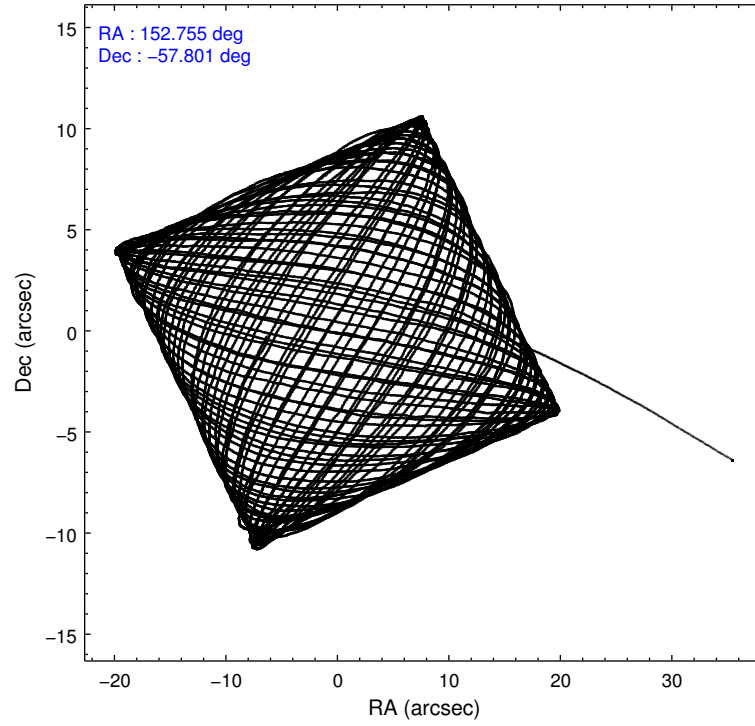
2.1.4 Events

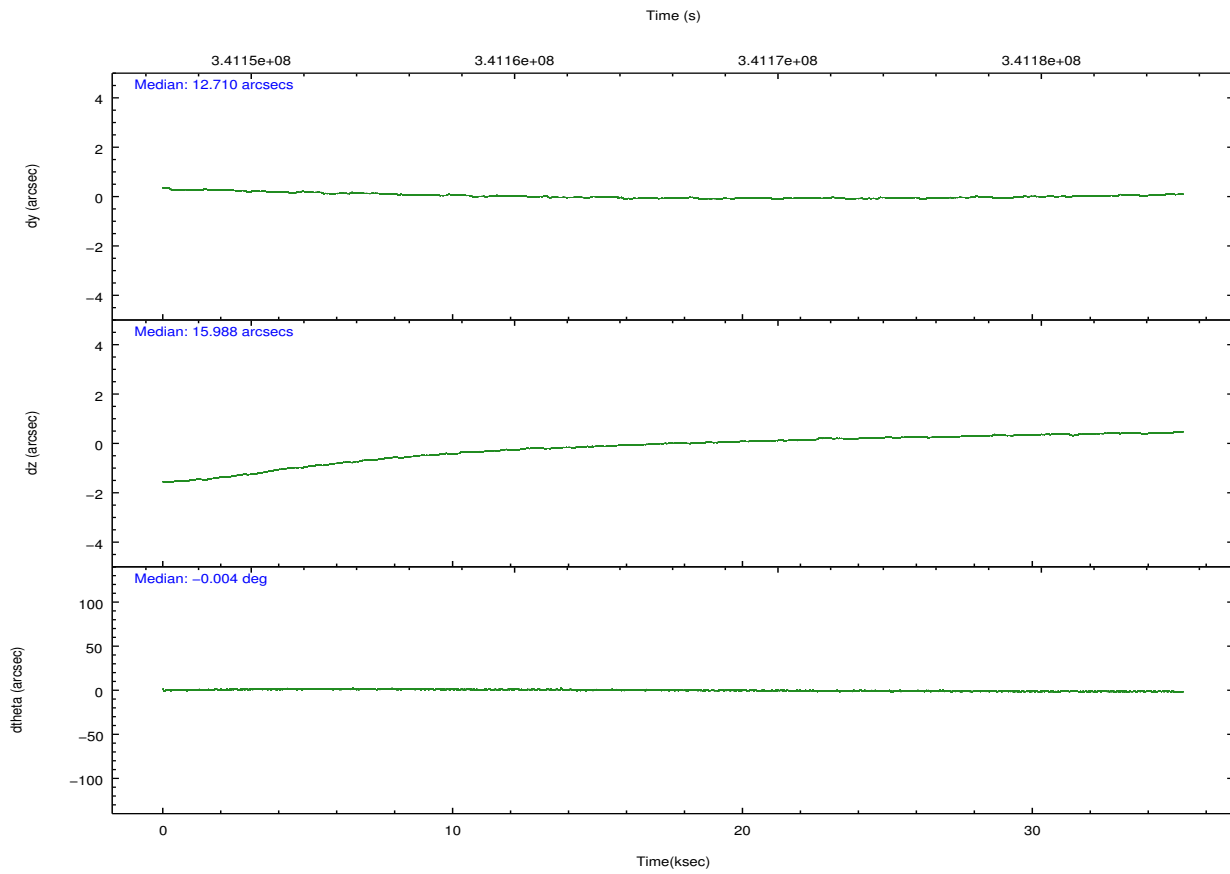
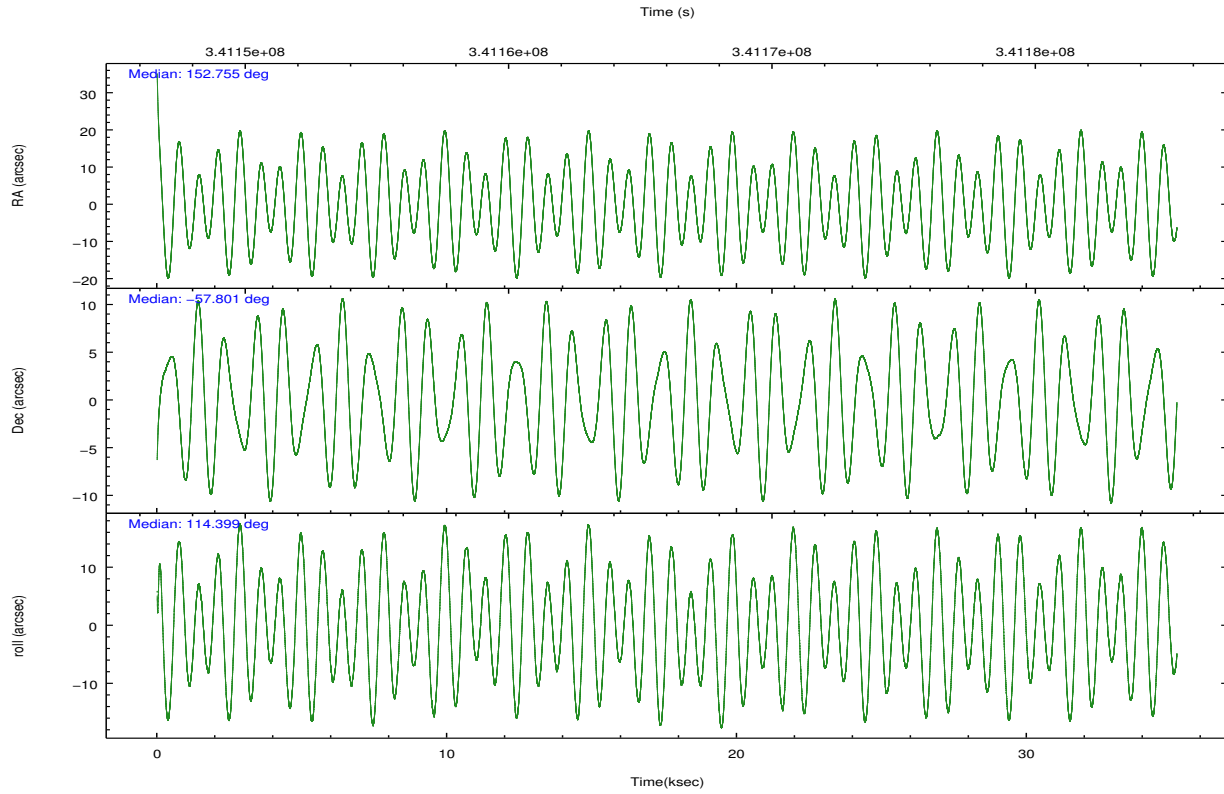
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	304848	419860	272360	379048	349758	266981	grade 0 events	25596	19424	13733	14251	25382	14003
rejected events	259624	227360	238223	219043	268609	232650		8%	4%	5%	3%	7%	5%
rejected %	85%	54%	87%	57%	76%	87%	grade 1 events	275	574	135	407	248	158
								0%	0%	0%	0%	0%	0%
							grade 2 events	7816	57570	7467	33197	18392	7136
								2%	13%	2%	8%	5%	2%
							grade 3 events	3575	8345	3371	14241	8836	3488
								1%	1%	1%	3%	2%	1%
							grade 4 events	3292	8123	3264	14243	8251	3345
								1%	1%	1%	3%	2%	1%
							grade 5 events	12526	31810	12756	35001	17077	13580
								4%	7%	4%	9%	4%	5%
							grade 6 events	5584	101921	6750	86316	21488	6794
								1%	24%	2%	22%	6%	2%
							grade 7 events	246184	192093	224884	181392	250084	218477
								80%	45%	82%	47%	71%	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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	152.796669	152.7545379447386	CCD I2 on	N	N
[deg] Pointing Dec	-57.816752	-57.80116204502762	CCD I3 on	N	N
[deg] Pointing Roll	114.279602	114.4005653104726	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	-187.132523	-187.1228876879999	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.009634895007935	CCD S4 on	Y	Y
[s] Observation start time (MET)	341148613.184000	341147394.31349	CCD S5 on	O2	Y
Observation start date	2008-10-23T11:29:08	2008-10-23T11:09:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	341183613.184000	341183903.27779	On-chip summing requested	N	N
Observation end date	2008-10-23T21:12:28	2008-10-23T21:18:23	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	774	774
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	2.5

2.3 Aspect



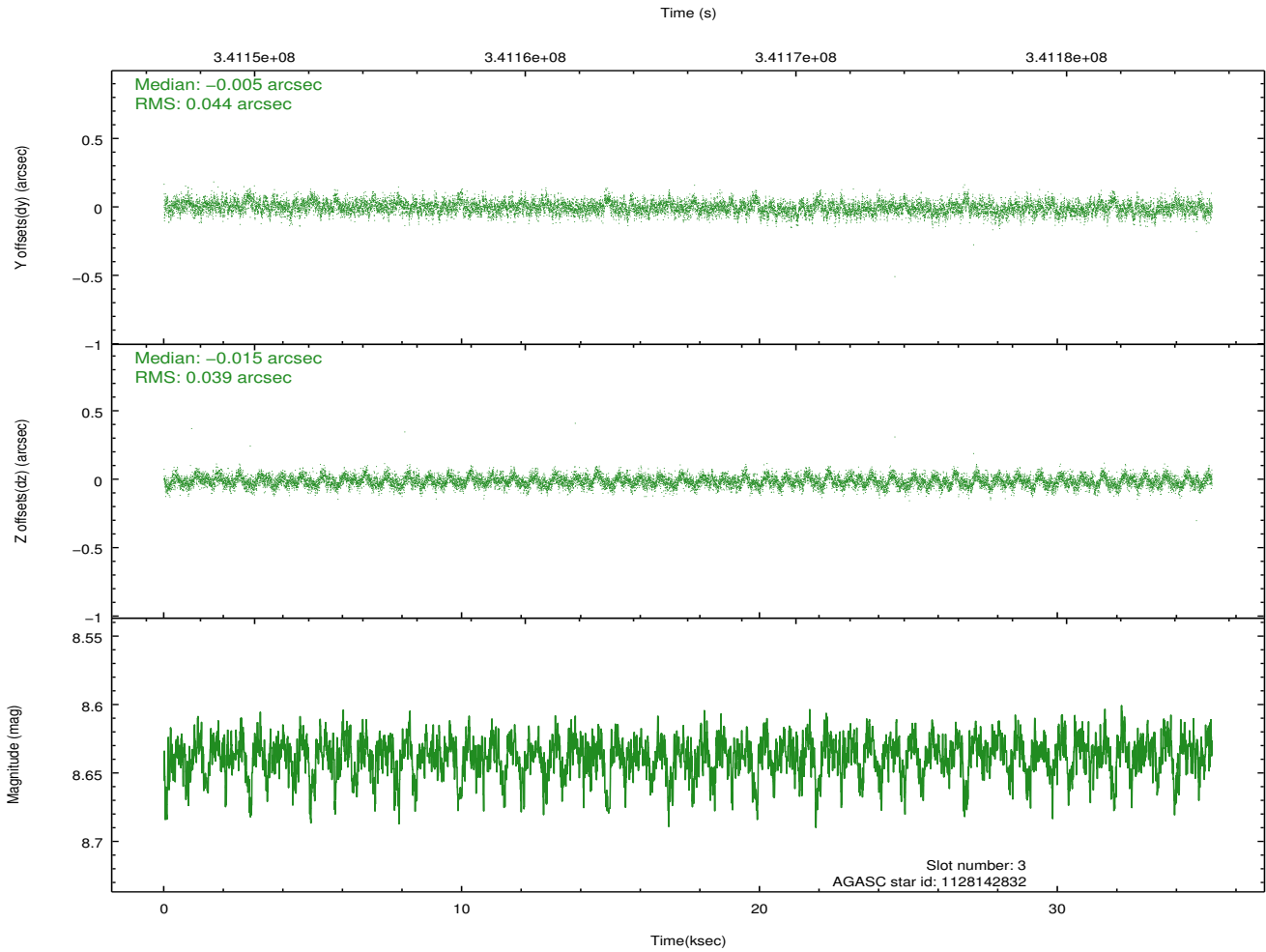
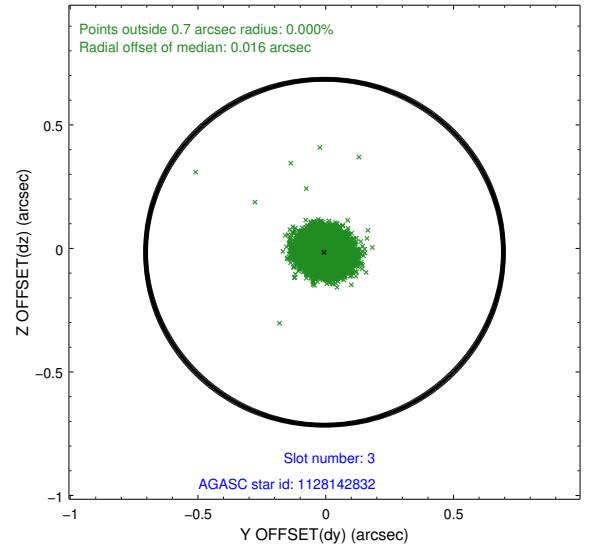
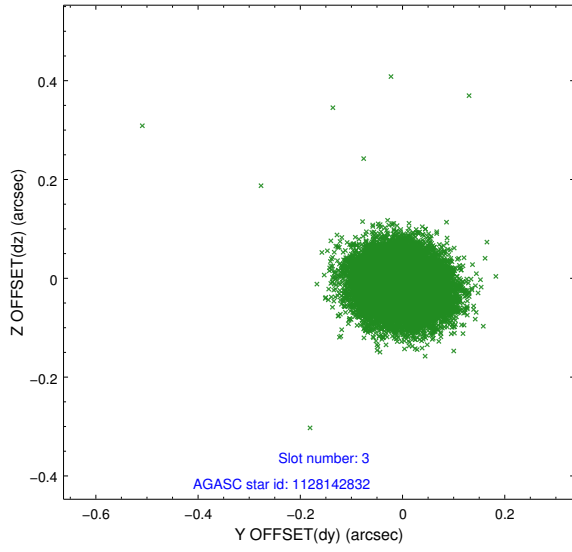


Slot Statistics

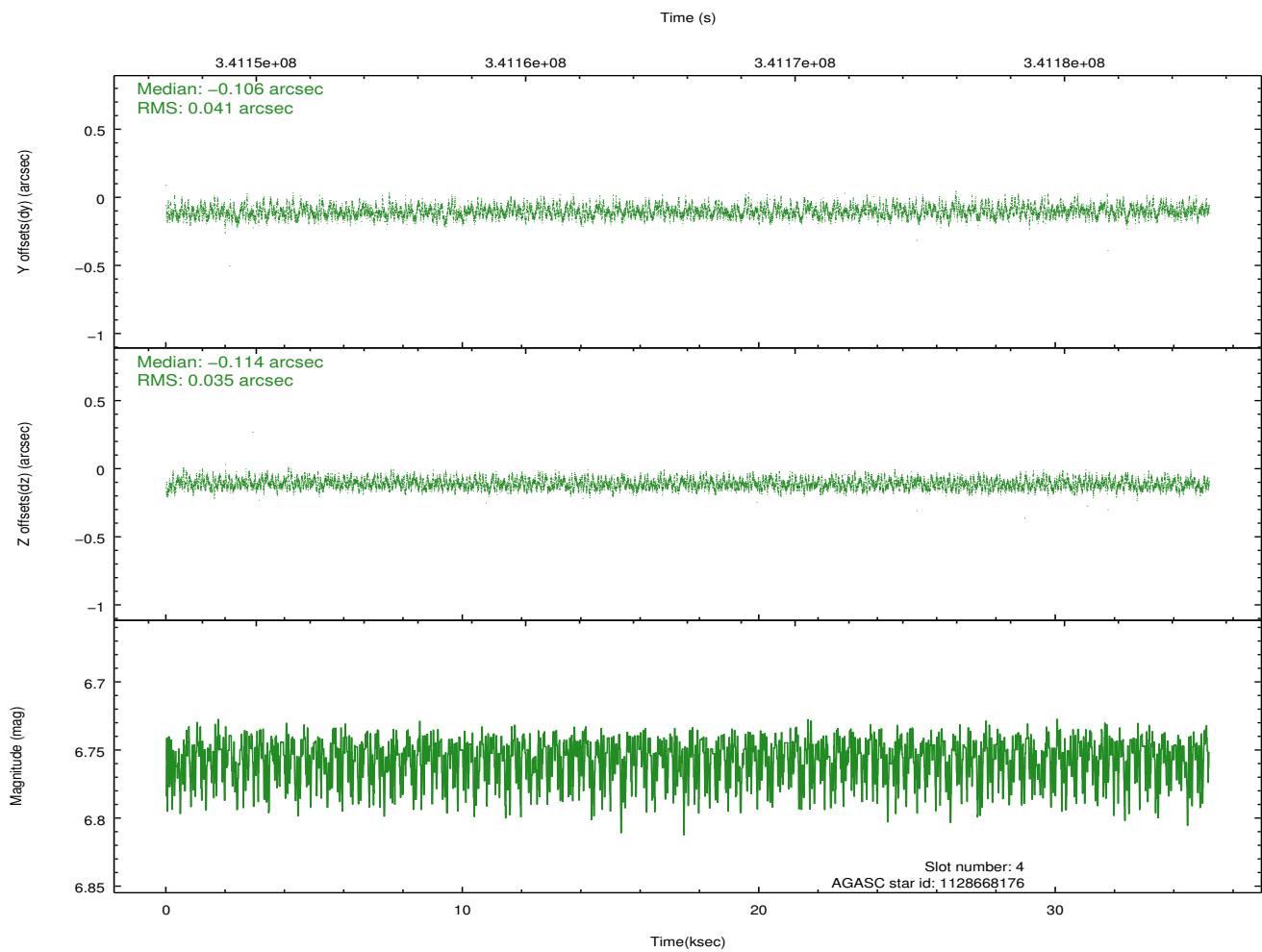
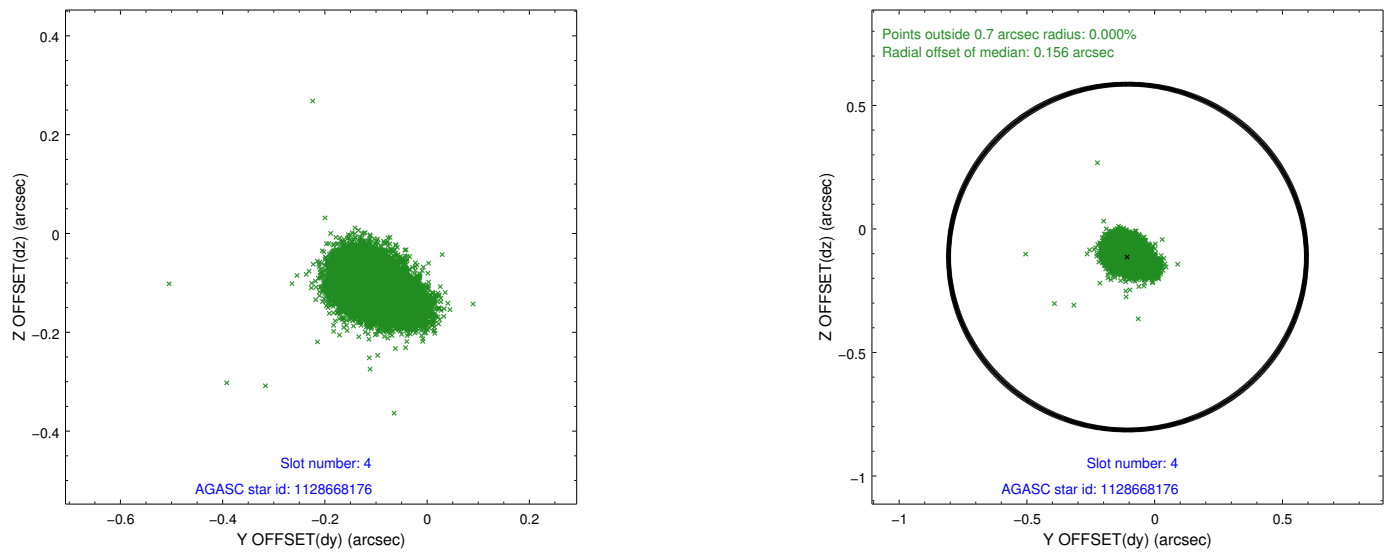
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.87	8582	-0.071	-0.082	0.010	0.017	0.000000	0.000000	-765.53	-1799.41
1	FID	ACIS-S-4	6.94	8582	0.150	0.056	0.008	0.023	0.000000	0.000000	2147.97	109.13
2	FID	ACIS-S-5	7.00	8582	-0.109	0.034	0.014	0.028	0.000000	0.000000	-1818.34	102.86
3	GUIDE	1128142832	8.64	17154	-0.005	-0.015	0.062	0.100	151.690539	-57.394211	2253.15	1337.79
4	GUIDE	1128668176	6.75	17163	-0.106	-0.114	0.058	0.093	152.075503	-58.198582	-697.00	1815.32
5	GUIDE	1128141680	8.41	17160	0.009	0.047	0.061	0.099	151.879182	-57.549956	1593.37	1225.70
6	GUIDE	1128798008	8.58	17158	0.134	0.143	0.063	0.101	153.338718	-58.362994	-2216.80	-122.56
7	GUIDE	1128136880	8.21	8578	-0.065	-0.131	0.062	0.097	152.762282	-57.803859	69.22	40.94

2.4 Star Slots

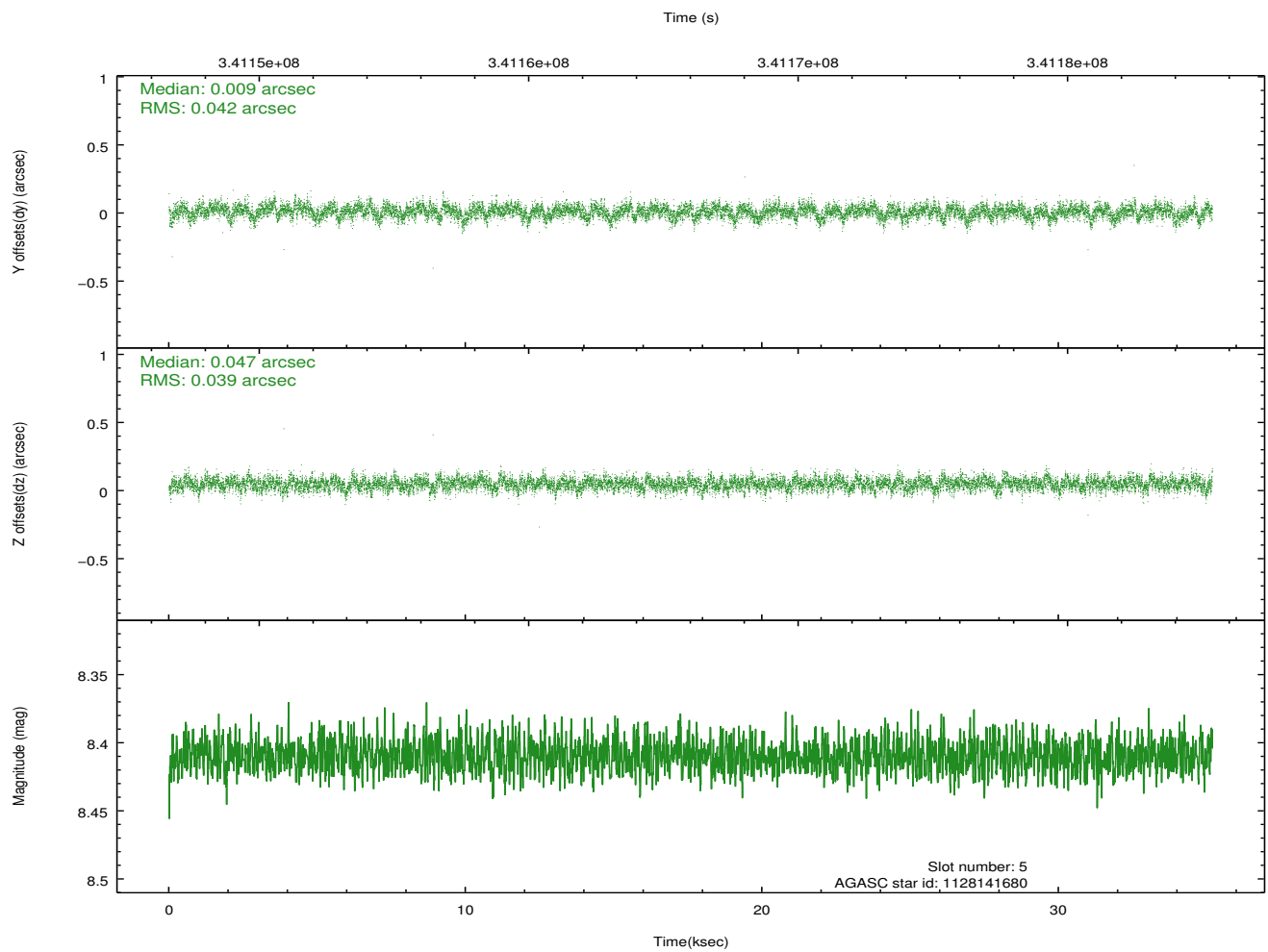
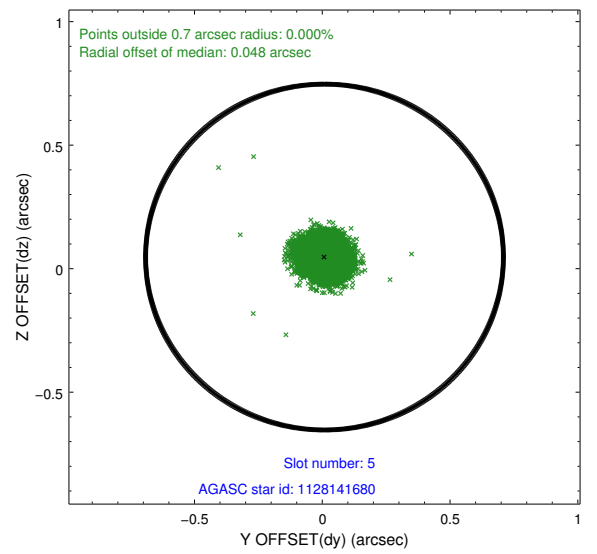
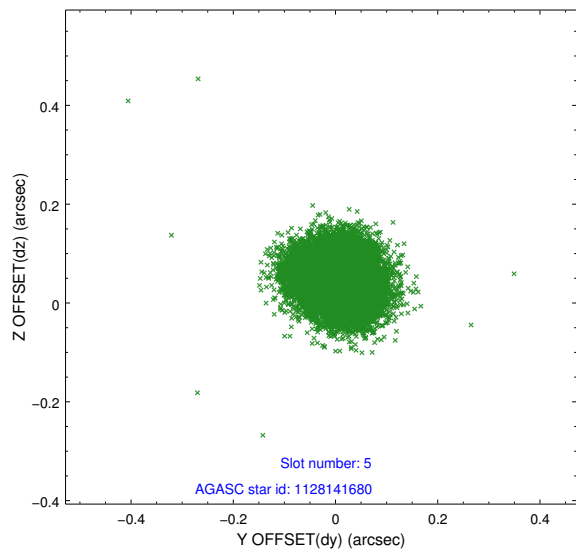
2.4.1 Slot 3



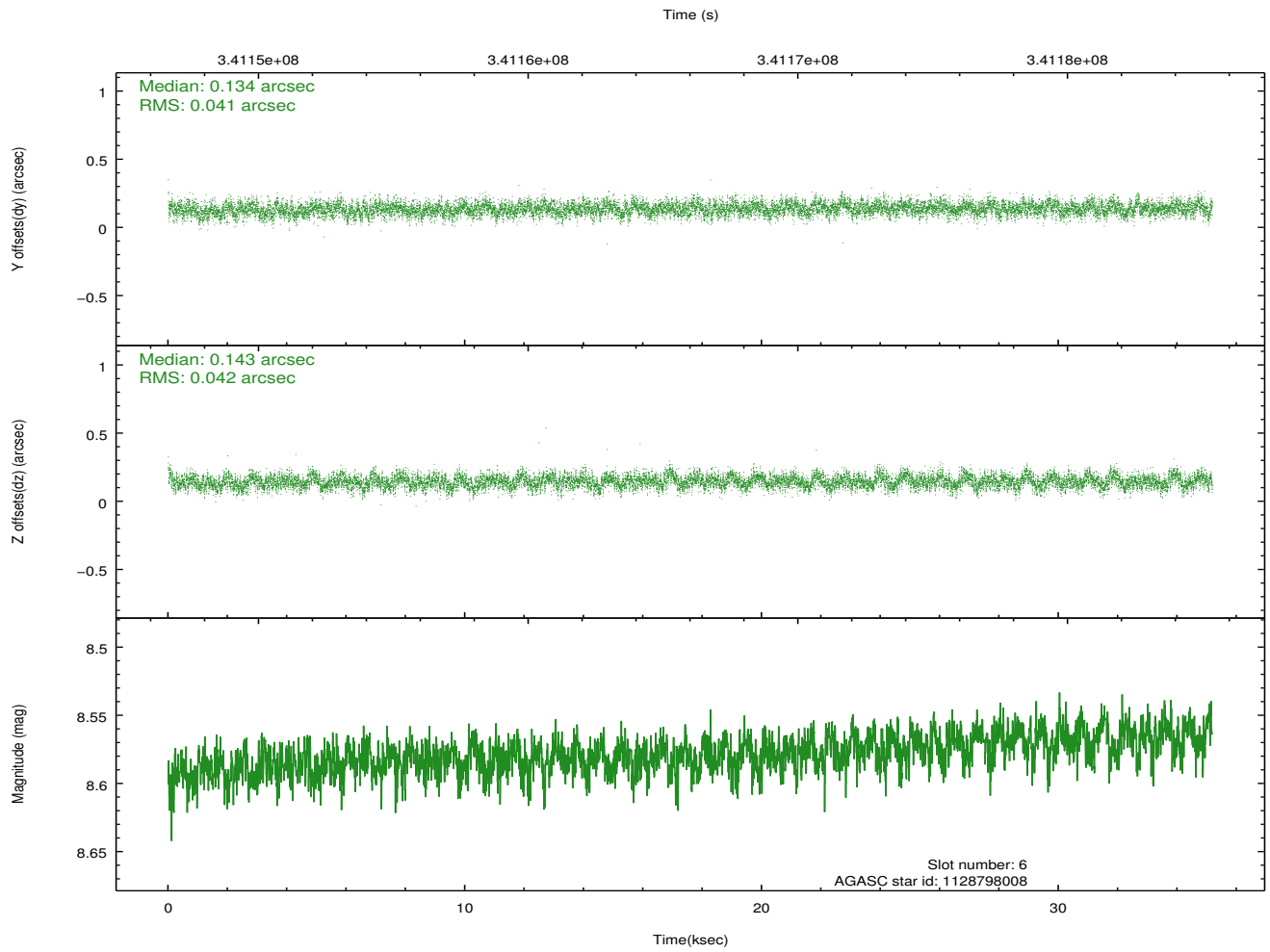
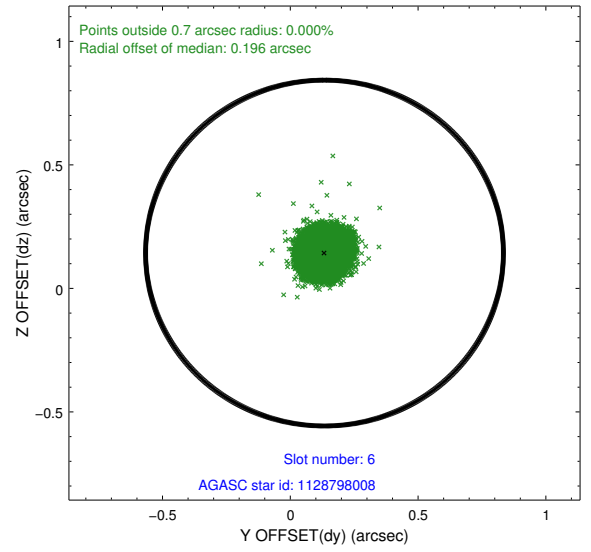
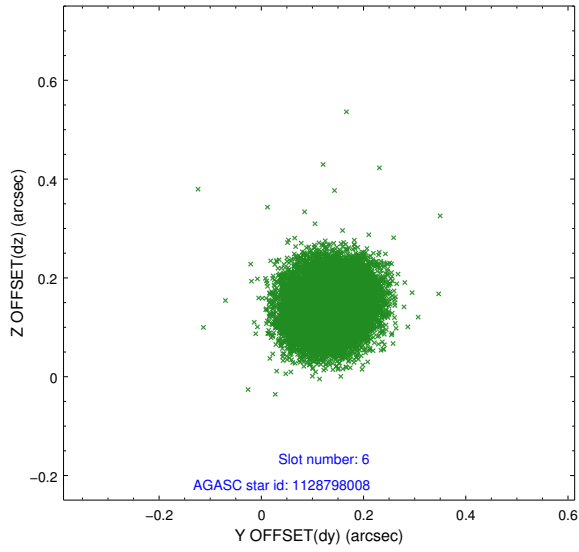
2.4.2 Slot 4



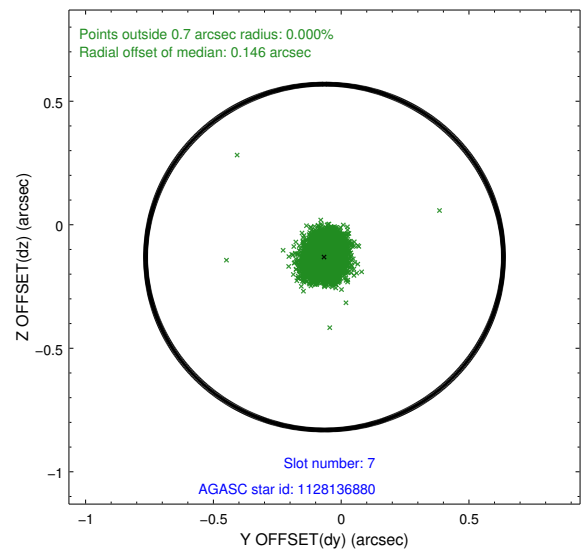
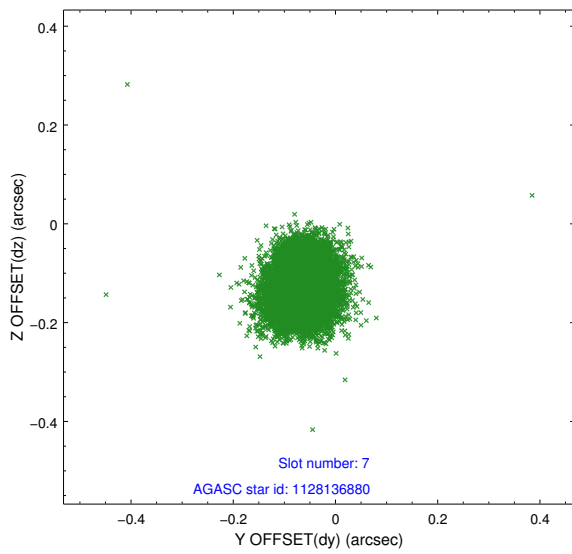
2.4.3 Slot 5



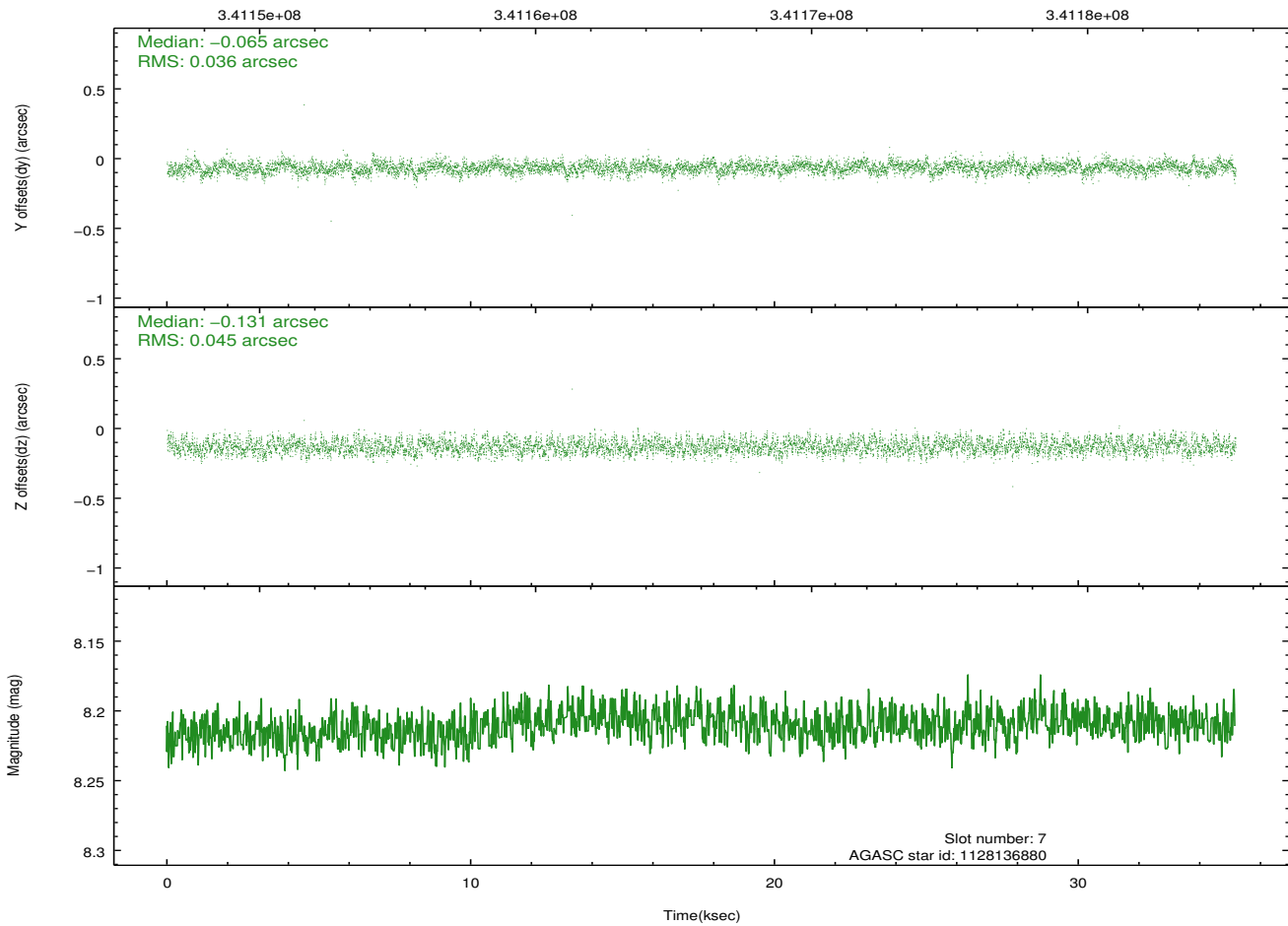
2.4.4 Slot 6



2.4.5 Slot 7

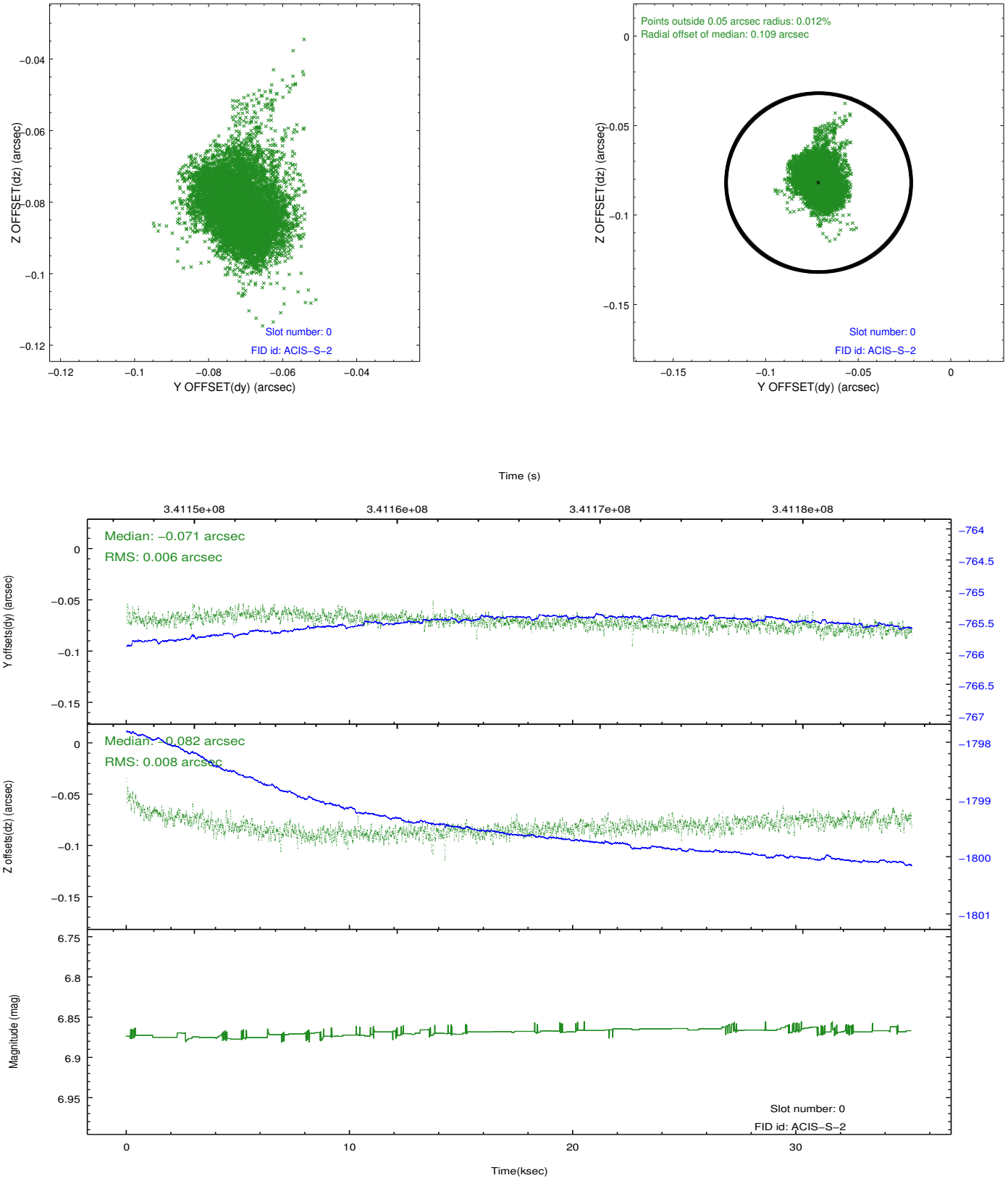


Time (s)

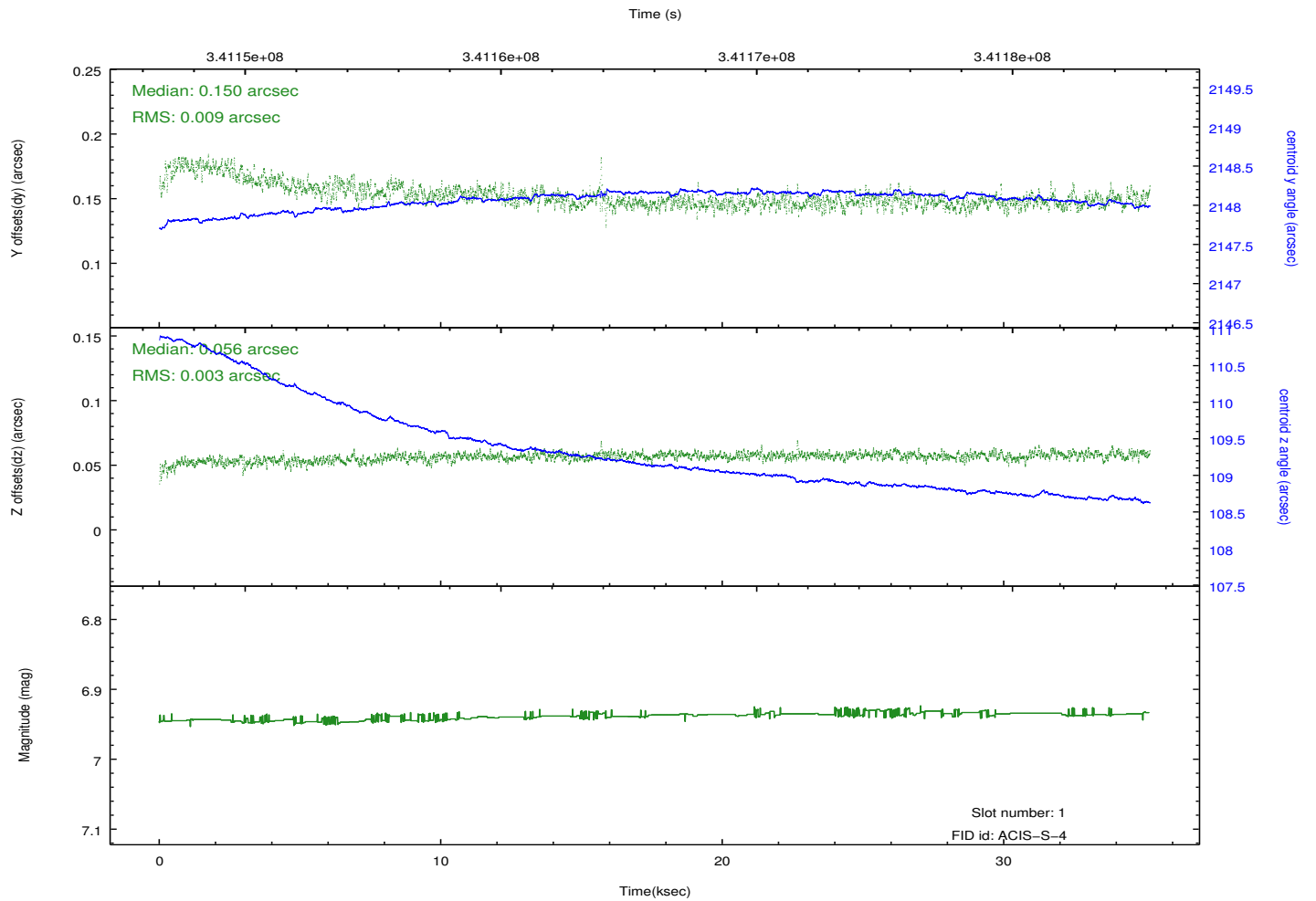
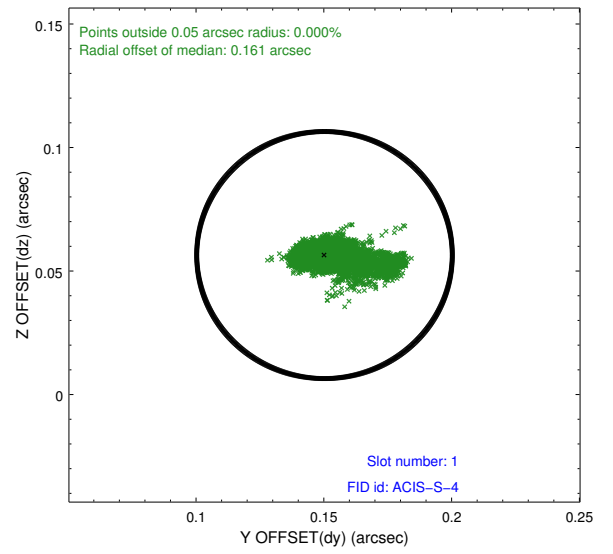
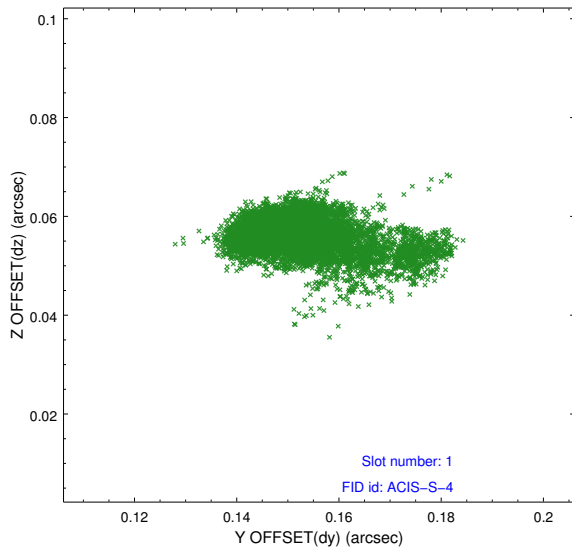


2.5 FID Slots

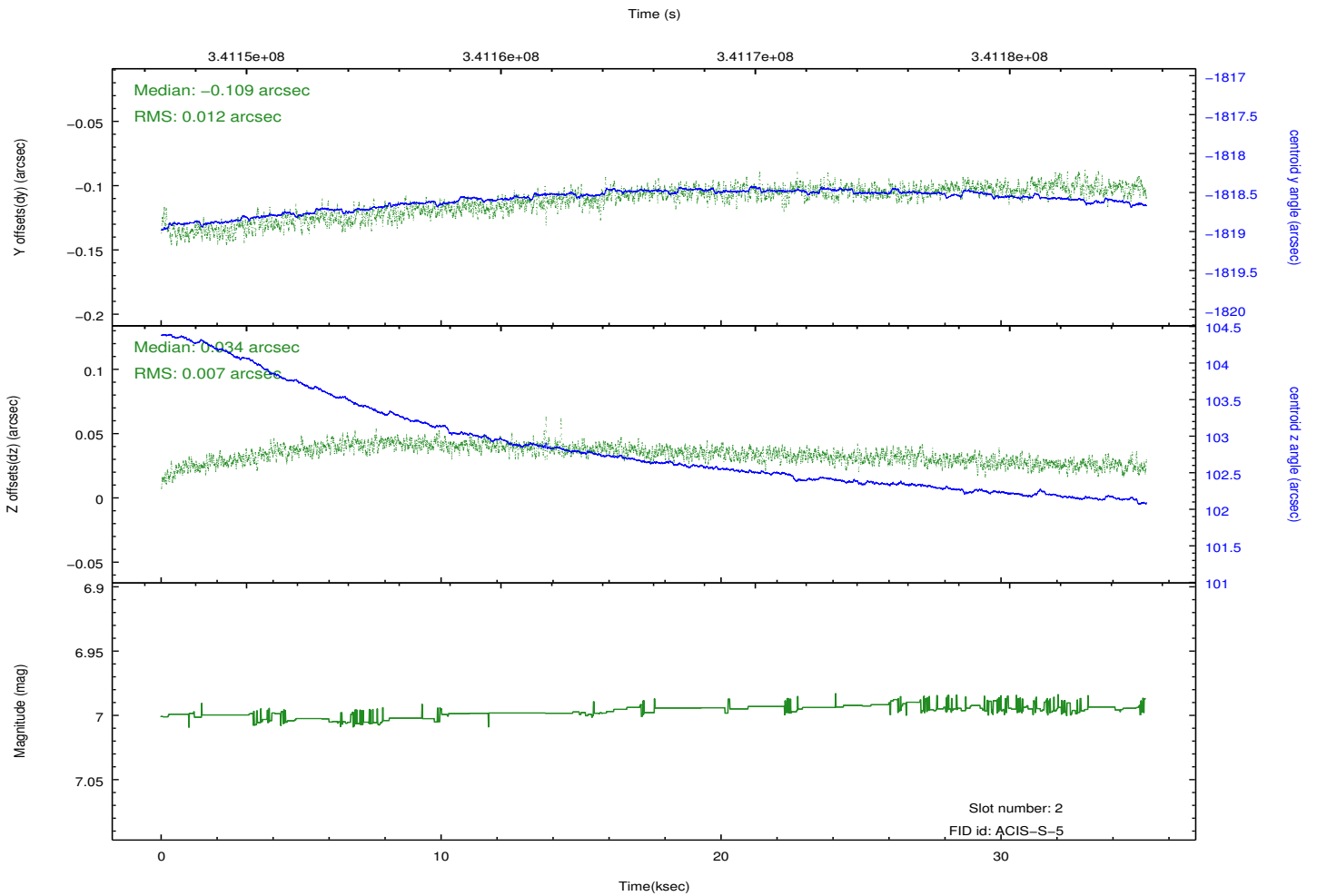
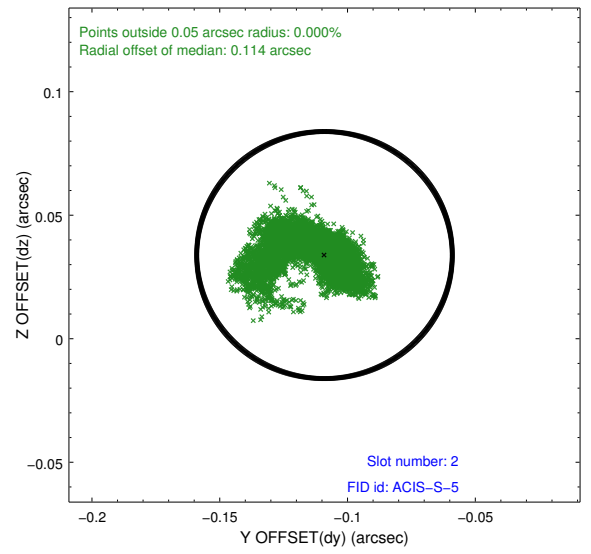
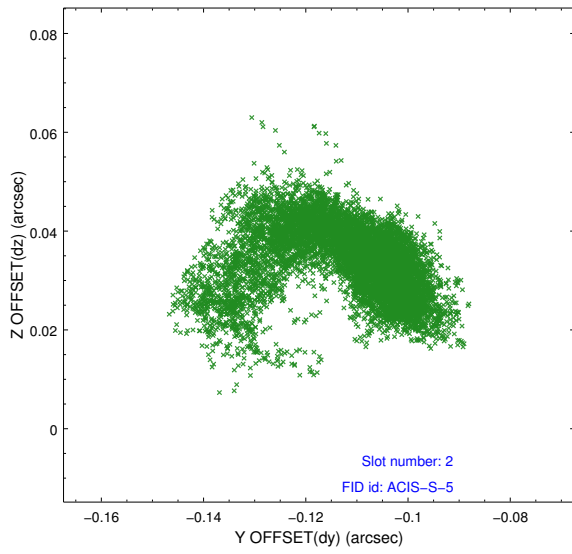
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

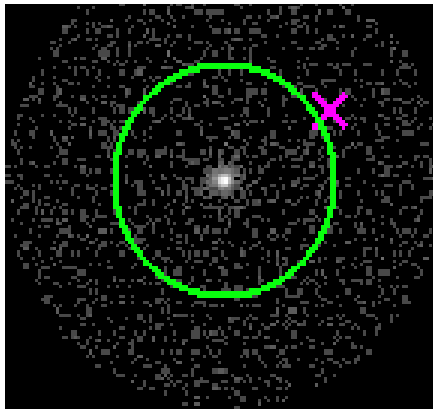


3 Gratings

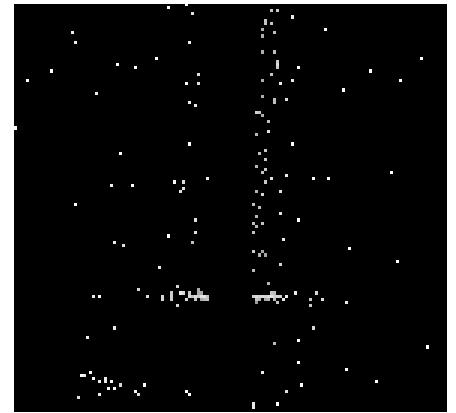
3.1 HEG Arm



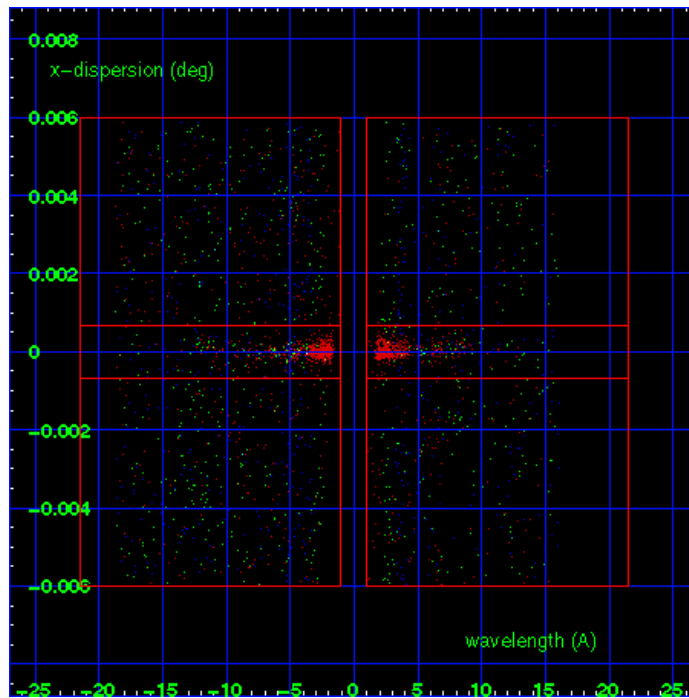
HEG Order Sort 123



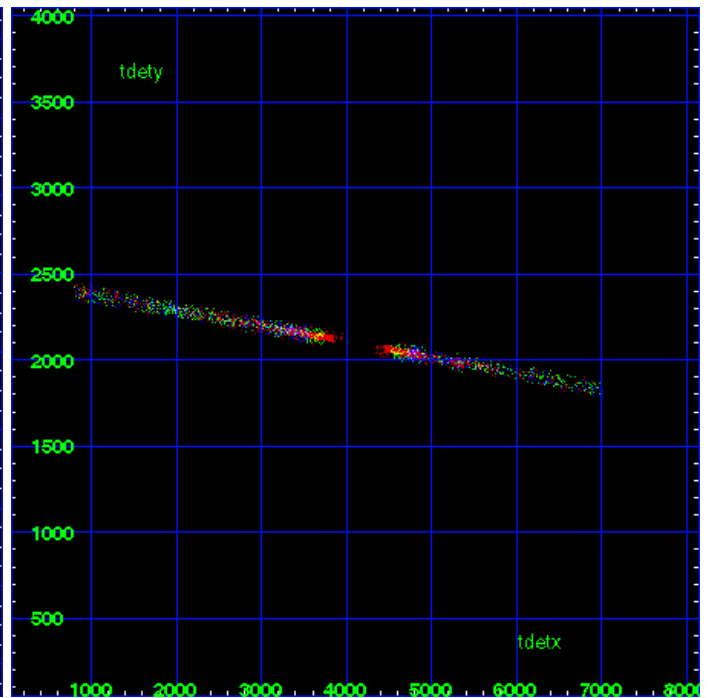
HEG Zero Order



HEG Order Sort ALL

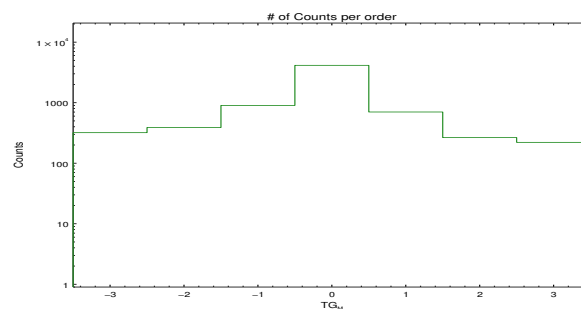


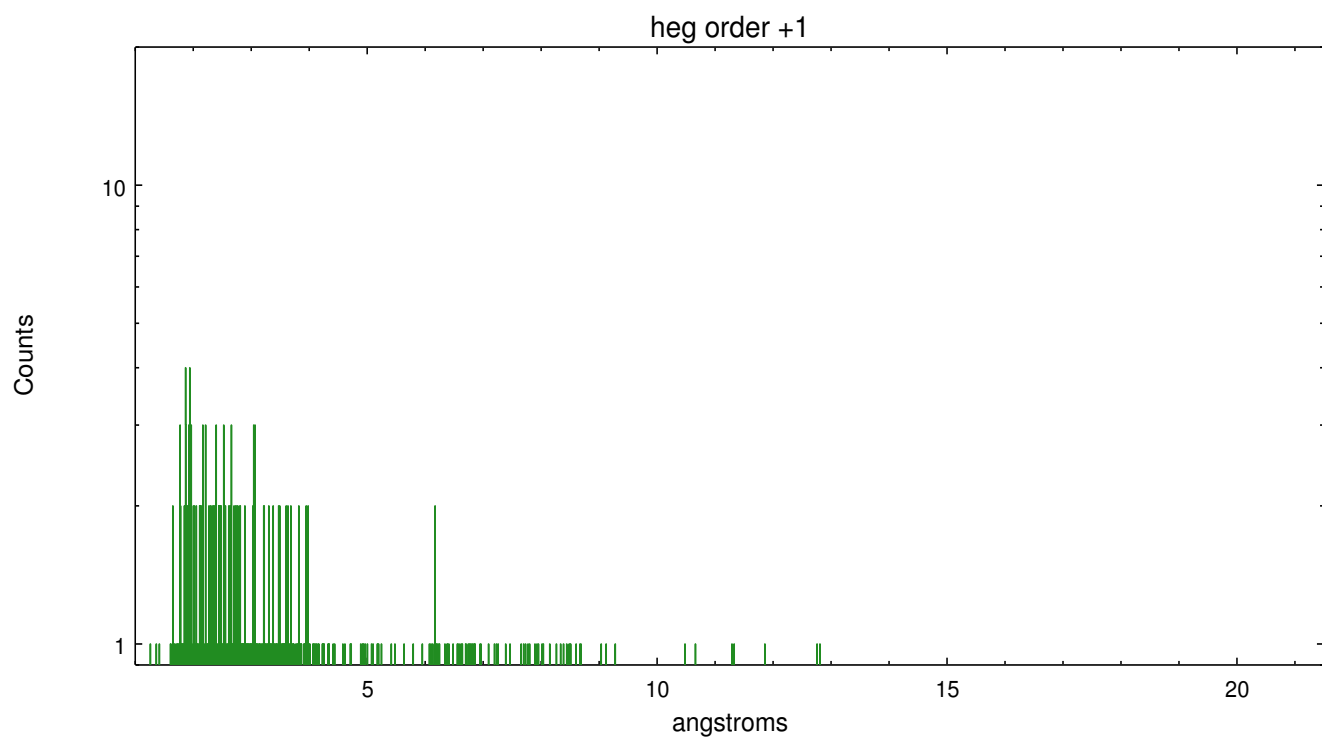
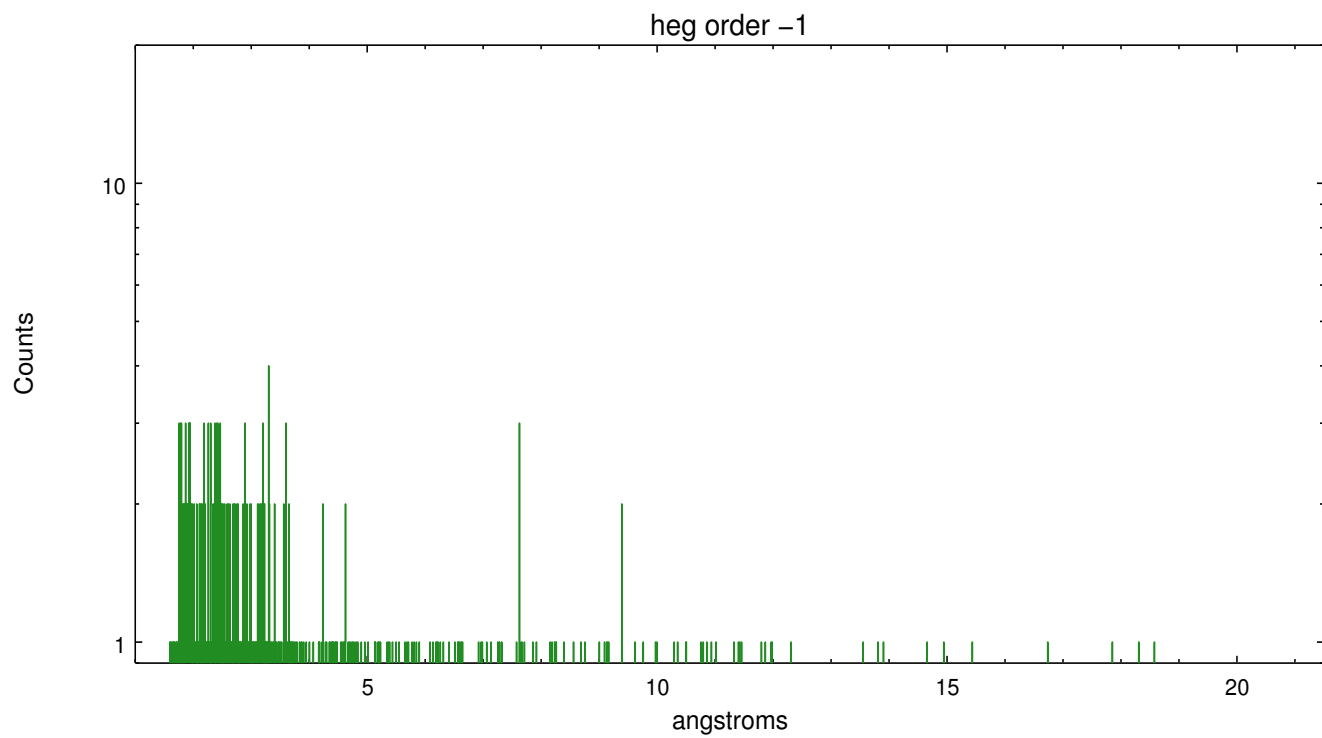
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	320	389	902	4139	702	265	221

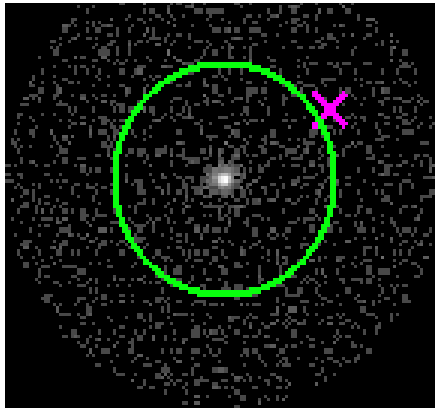




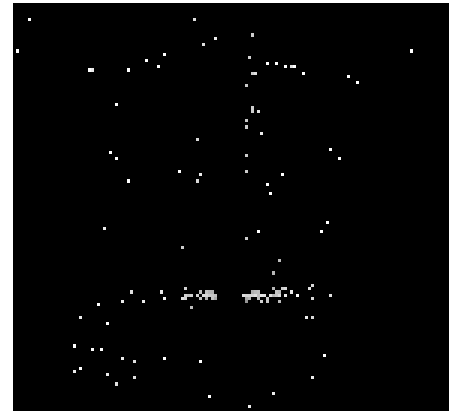
3.2 MEG Arm



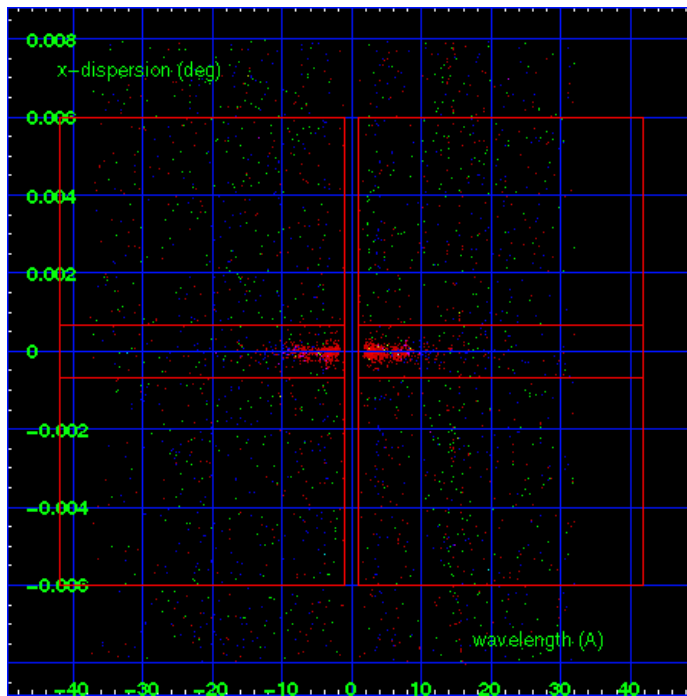
MEG Order Sort 123



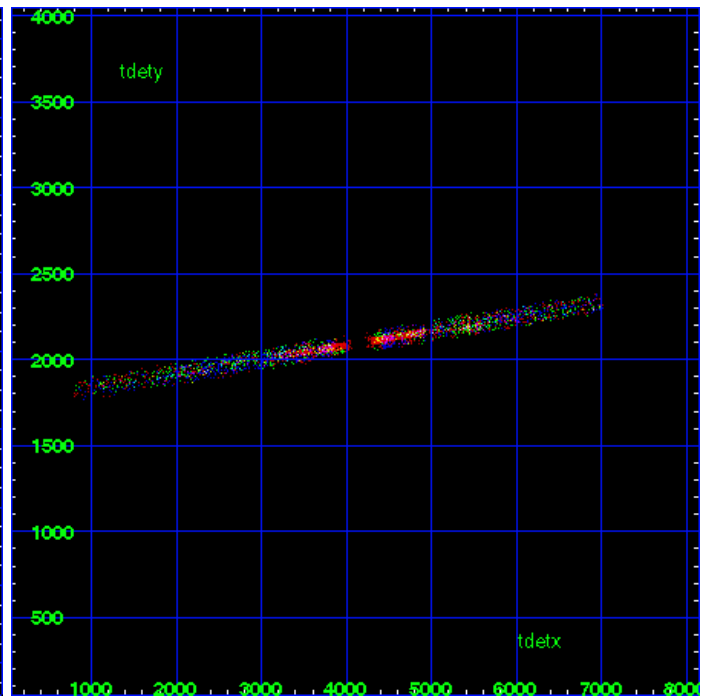
MEG Zero Order



MEG Order Sort ALL

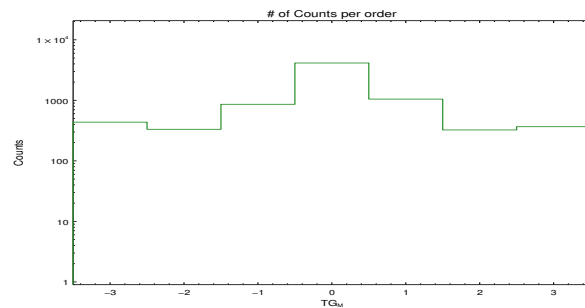


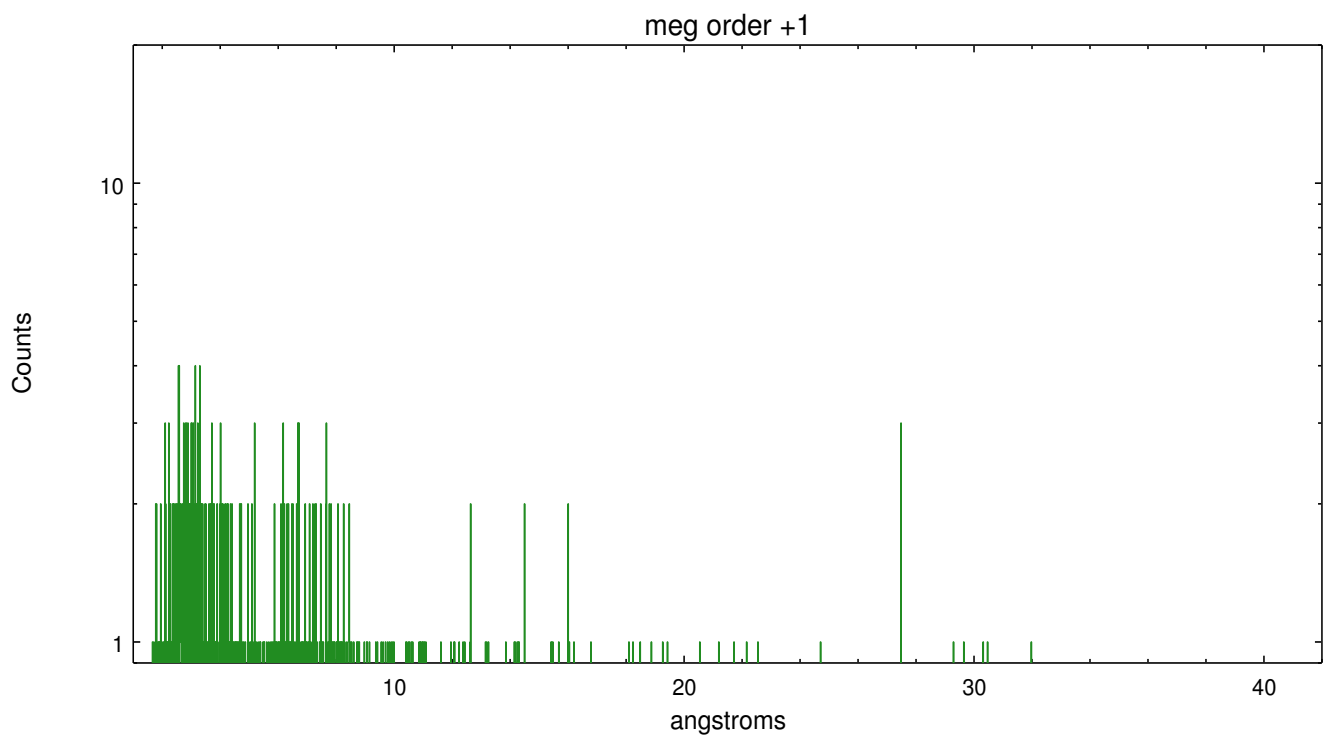
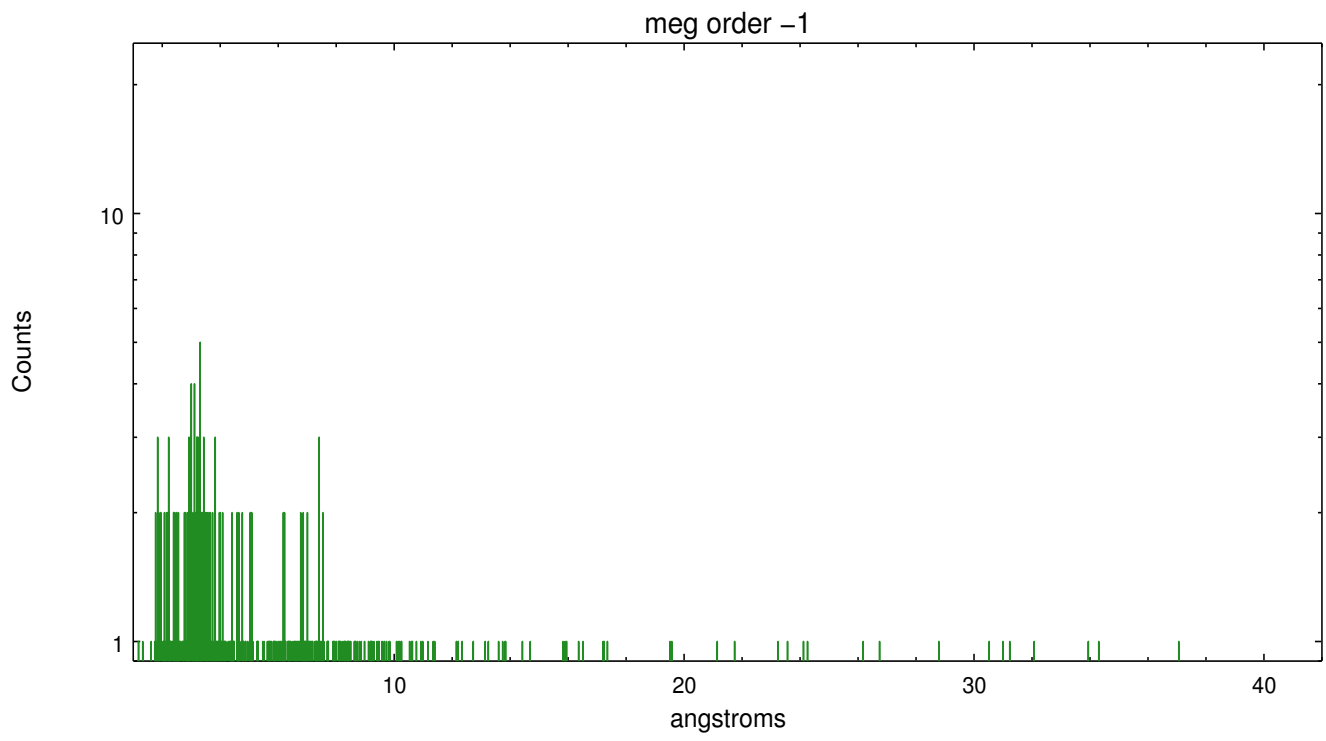
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	436	332	860	4139	1048	324	367





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.1775

A.2 Comments