

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2527 - L2 Version 3
Chandra X-Ray Center

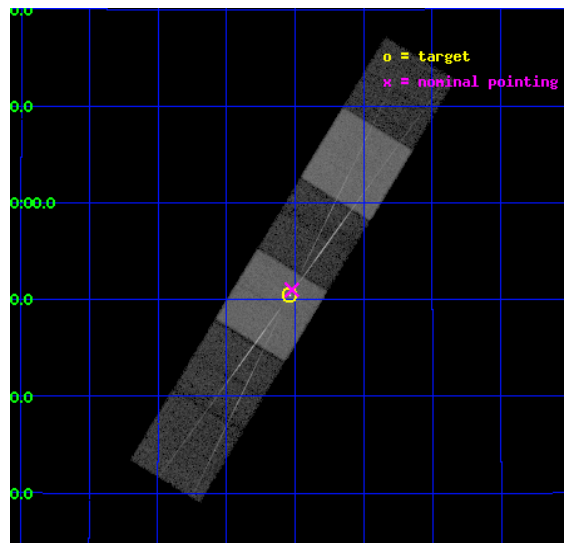
L2 Processing Date : Oct 10 2012

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1 Front

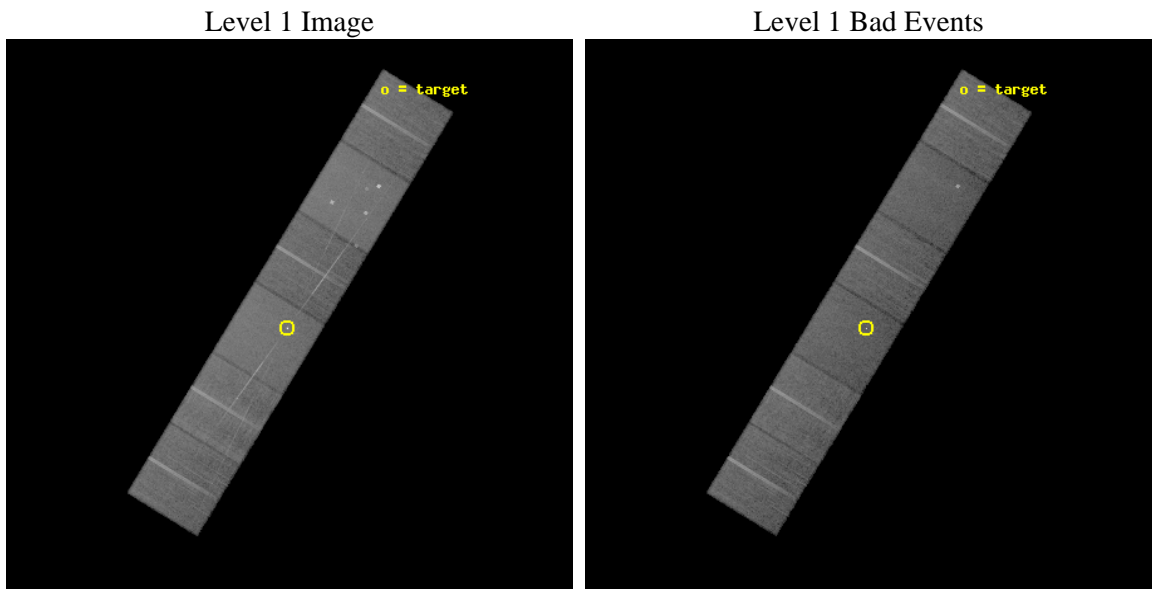
seq_num	200135	Sequence number
obs_id	2527	Observation id
title	HETGS SPECTROSCOPY OF THE LONG-PERIOD ACTIVE BINARY, IM PEGASI.	Pr
observer	Dr. David Huenemoerder	Principal investigator
object	IM PEG	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	343.259583	Observer's specified target RA [deg]
dec_targ	16.841194	Observer's specified target Dec [deg]
ra_nom	343.25590327874	Nominal RA [deg]
dec_nom	16.850233485844	Nominal Dec [deg]
roll_nom	121.40711777231	Nominal Roll [deg]
revision	3	Processing version of data
ontime	24956.799907029	Sum of GTIs [s]
livetime	24640.781879425	Livetime [s]
ontime4	24956.799907029	Sum of GTIs [s]
ontime5	24956.799907029	Sum of GTIs [s]
ontime6	24956.799907029	Sum of GTIs [s]
ontime7	24956.799907029	Sum of GTIs [s]
ontime8	24953.558946788	Sum of GTIs [s]
ontime9	24956.799907029	Sum of GTIs [s]
l2events	283879	Number of level 2 events



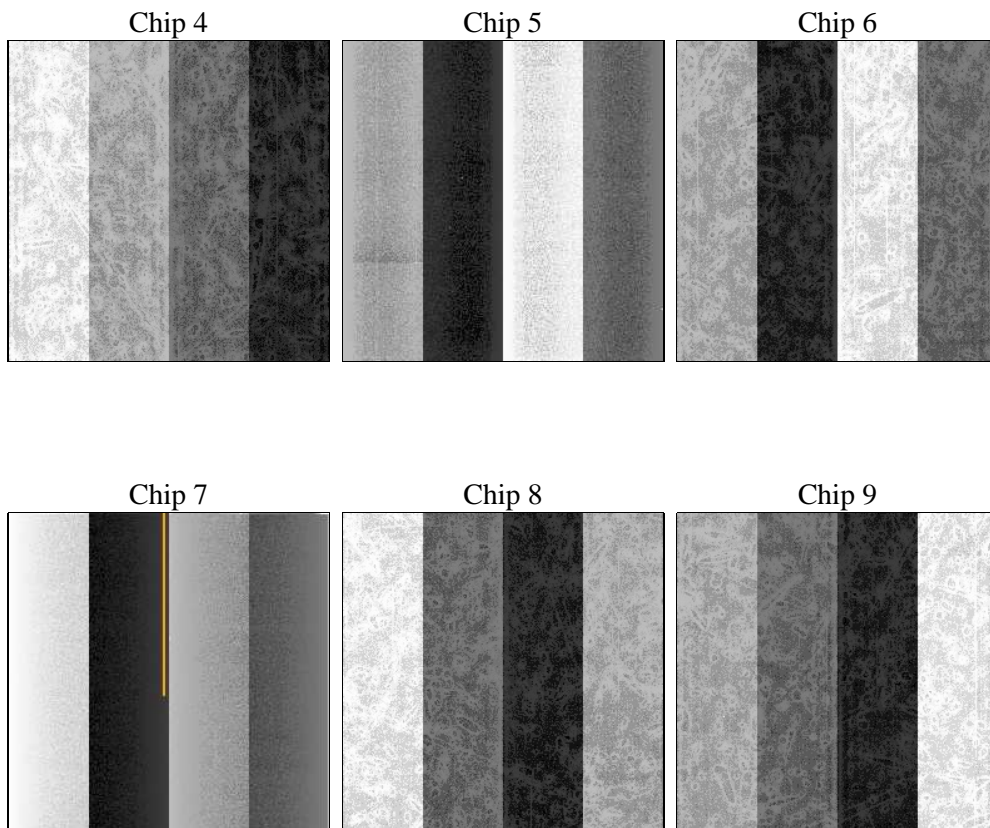
2 OBI

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	8.4.5	Processing system revision	ontime	24956.799907029	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	24956.799907029	Sum of GTIs [s]
date	2012-10-10T04:50:18	Date and time of file creation	ontime5	24956.799907029	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	24956.799907029	Sum of GTIs [s]
			ontime7	24956.799907029	Sum of GTIs [s]
			ontime8	24953.558946788	Sum of GTIs [s]
			ontime9	24956.799907029	Sum of GTIs [s]
			l1events	1230914	Number of level 1 events

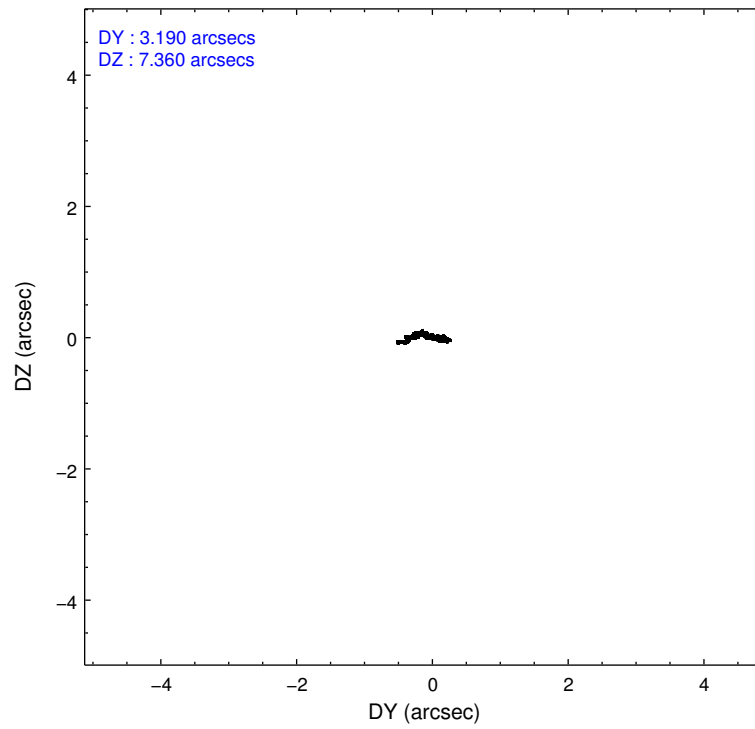
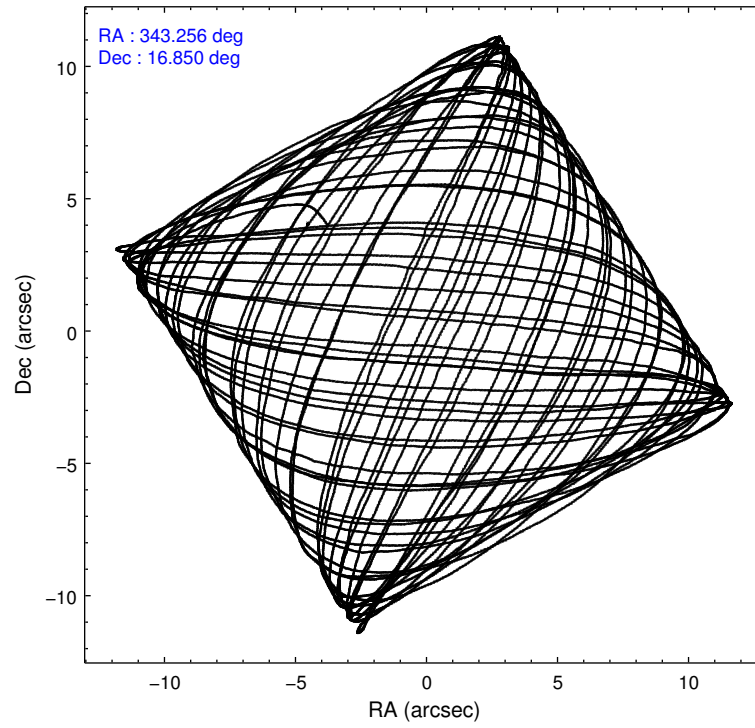
2.1.4 Events

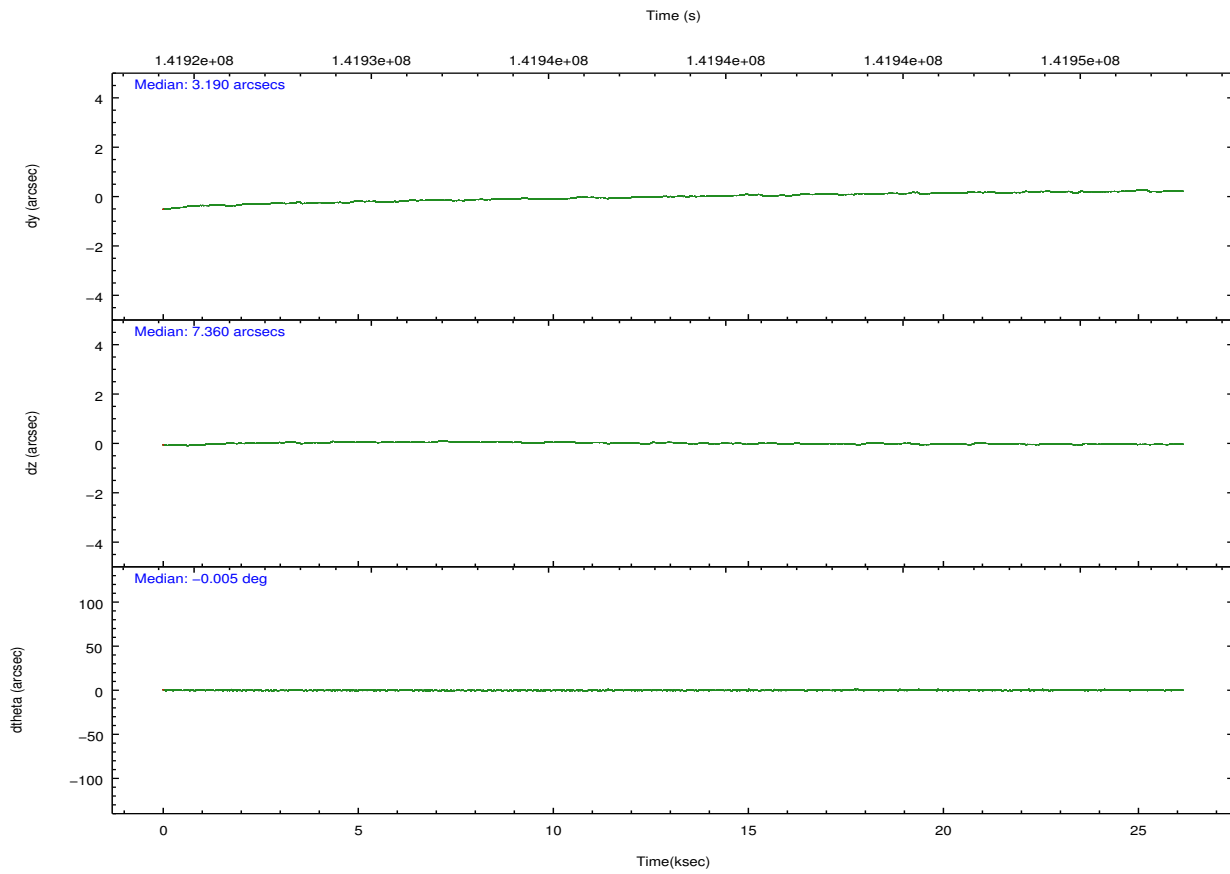
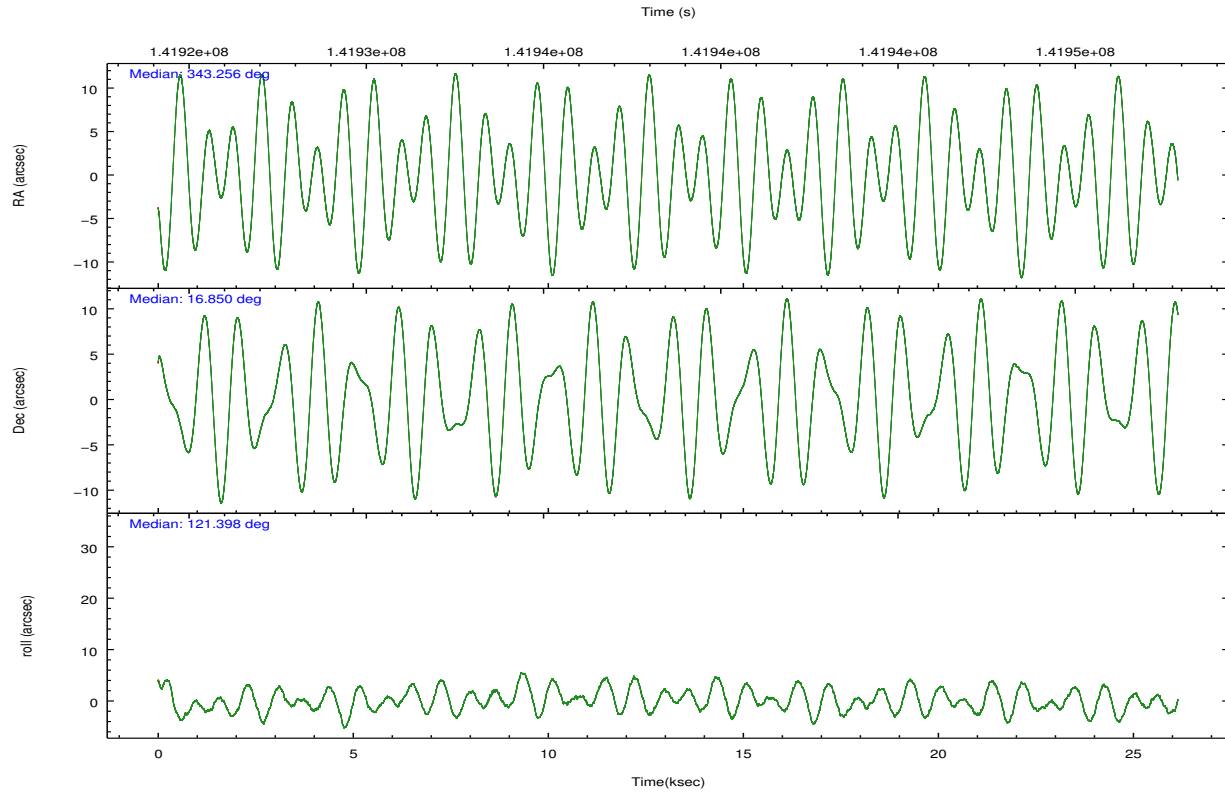
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	185271	250098	177113	229627	218118	170687	grade 0 events	8382	19045	14046	10037	17950	8806
rejected events	164608	131732	150041	130013	170329	149874		4%	7%	7%	4%	8%	5%
rejected %	88%	52%	84%	56%	78%	87%	grade 1 events	96	2165	110	383	139	93
								0%	0%	0%	0%	0%	0%
							grade 2 events	4907	32440	4734	20065	9693	4251
								2%	12%	2%	8%	4%	2%
							grade 3 events	1907	4909	2145	8972	4813	1955
								1%	1%	1%	3%	2%	1%
							grade 4 events	1802	4701	2127	8868	4435	1878
								0%	1%	1%	3%	2%	1%
							grade 5 events	6315	18241	7243	21807	9428	7601
								3%	7%	4%	9%	4%	4%
							grade 6 events	3670	57287	4023	51689	10904	3928
								1%	22%	2%	22%	4%	2%
							grade 7 events	158192	111310	142685	107806	160756	142175
								85%	44%	80%	46%	73%	83%

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	343.281077	343.2559032787368	Subarray requested	NONE	NONE
[deg] Pointing Dec	16.837487	16.85023348584388	Alternating exposures requested	N	N
[deg] Pointing Roll	121.243192	121.4071177723081	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-187.132523	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
[s] Observation start time (MET)	141926580.184000	141925148.51128			
Observation start date	2002-07-01T16:01:56	2002-07-01T15:39:08			
[s] Observation end time (MET)	141951580.184000	141952469.8874			
Observation end date	2002-07-01T22:58:36	2002-07-01T23:14:29			
Read mode	TIMED	TIMED			

2.3 Aspect



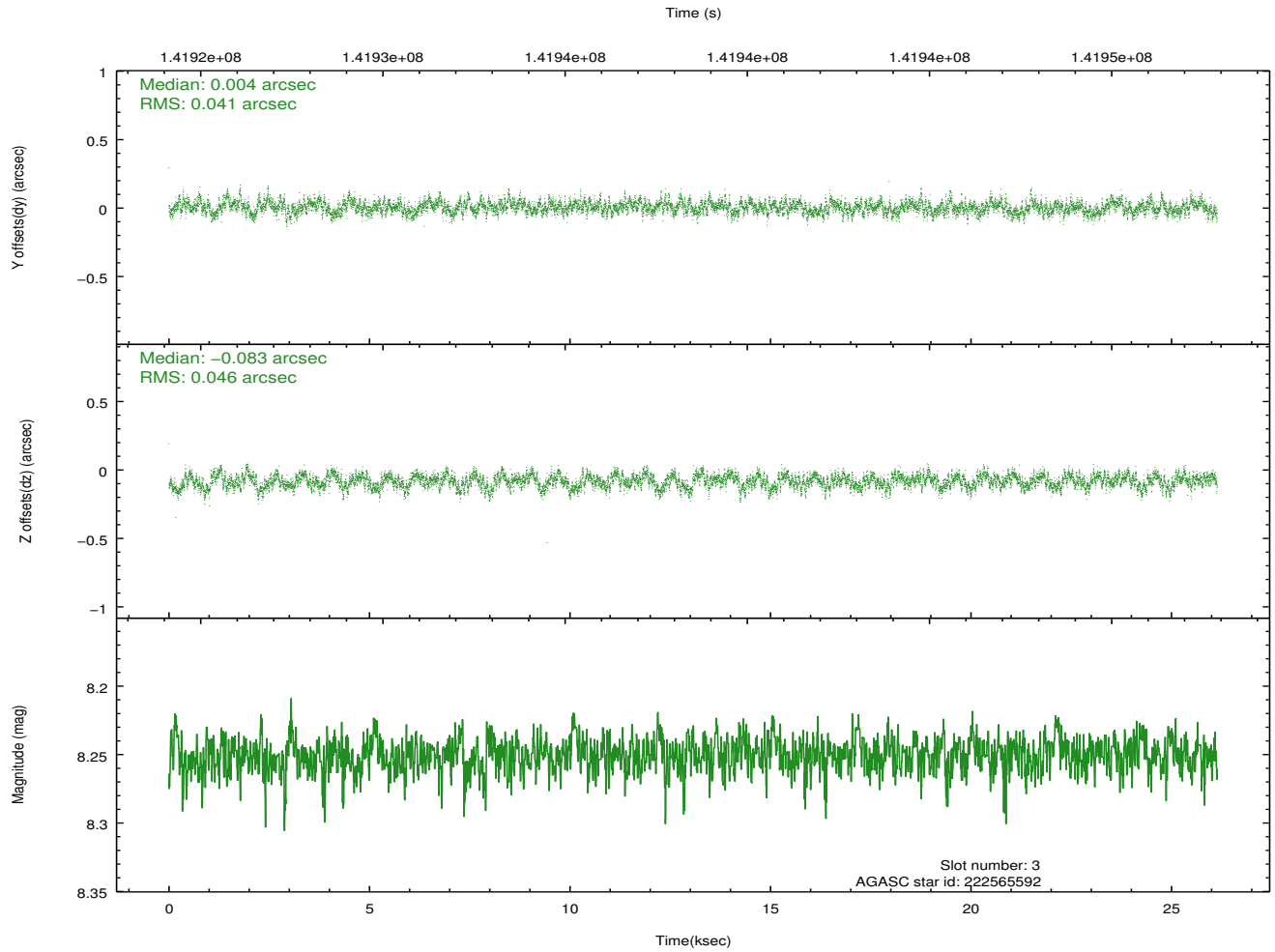
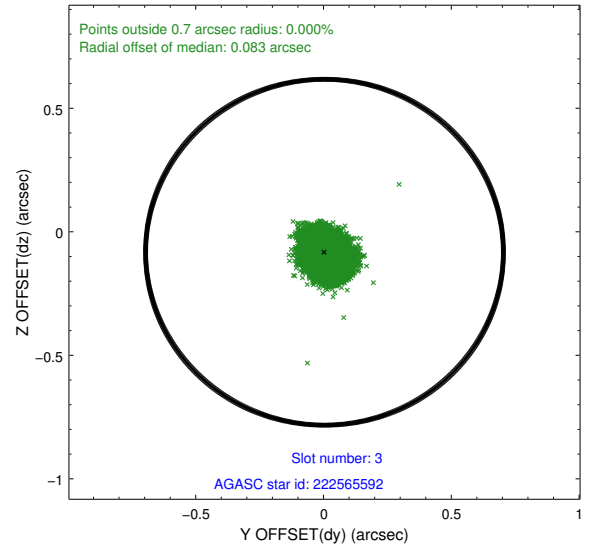
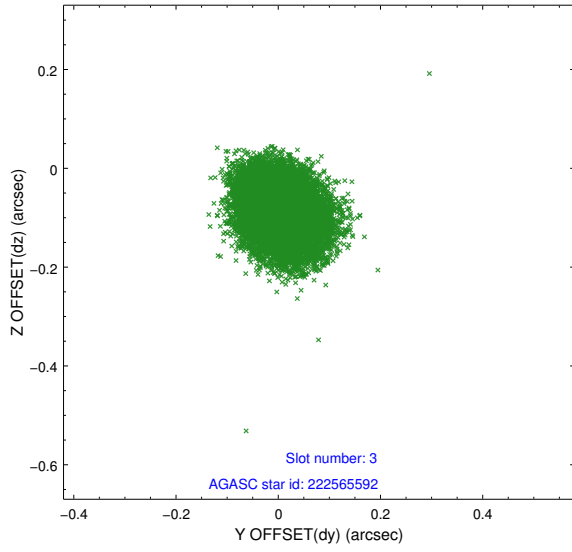


Slot Statistics

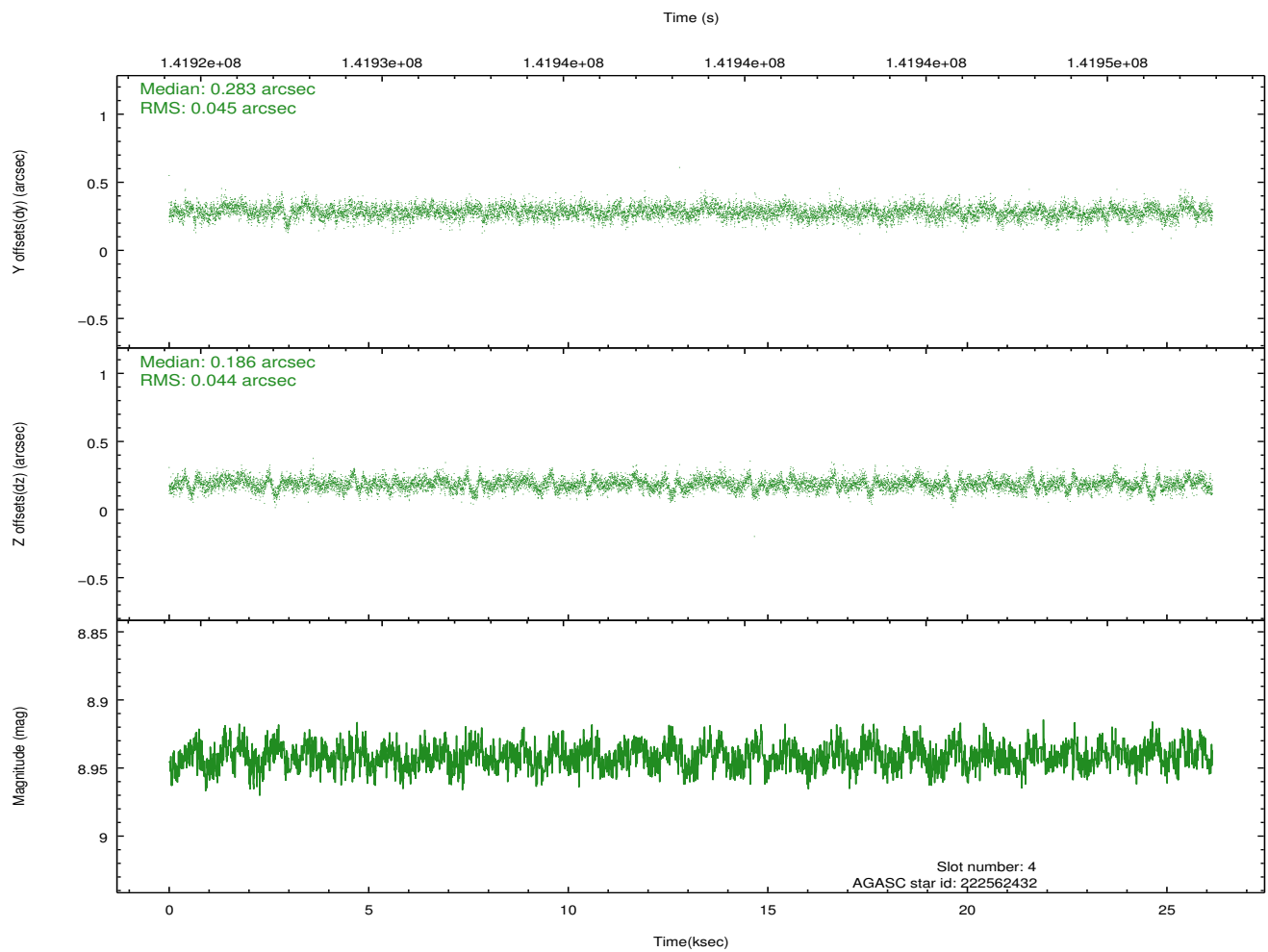
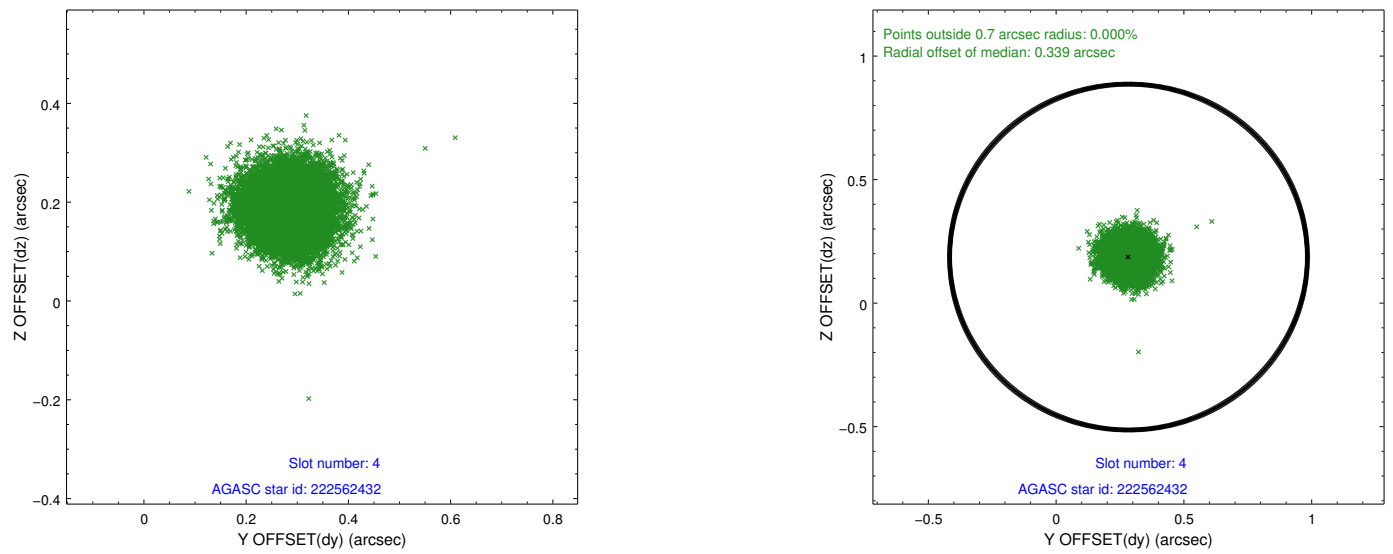
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6375	-0.053	-0.039	0.008	0.014	0.000000	0.000000	-755.62	-1790.73
1	FID	ACIS-S-4	7.20	6374	0.025	0.036	0.012	0.021	0.000000	0.000000	2157.65	117.75
2	FID	ACIS-S-5	7.23	6376	-0.003	0.011	0.010	0.017	0.000000	0.000000	-1808.31	111.46
3	GUIDE	222565592	8.25	12715	0.004	-0.083	0.066	0.106	343.291662	16.508291	-1031.19	584.53
4	GUIDE	222562432	8.94	12747	0.283	0.186	0.066	0.108	343.698150	16.309399	-2370.32	-245.87
5	GUIDE	222563736	8.82	12743	0.044	-0.193	0.080	0.127	343.076284	16.308502	-1260.23	1592.96
6	GUIDE	223089808	9.09	12685	-0.322	0.185	0.103	0.160	343.220223	17.508272	2173.70	-1072.46
7	GUIDE	222571232	9.55	12738	-0.012	-0.097	0.120	0.190	343.021766	16.540282	-449.02	1320.66

2.4 Star Slots

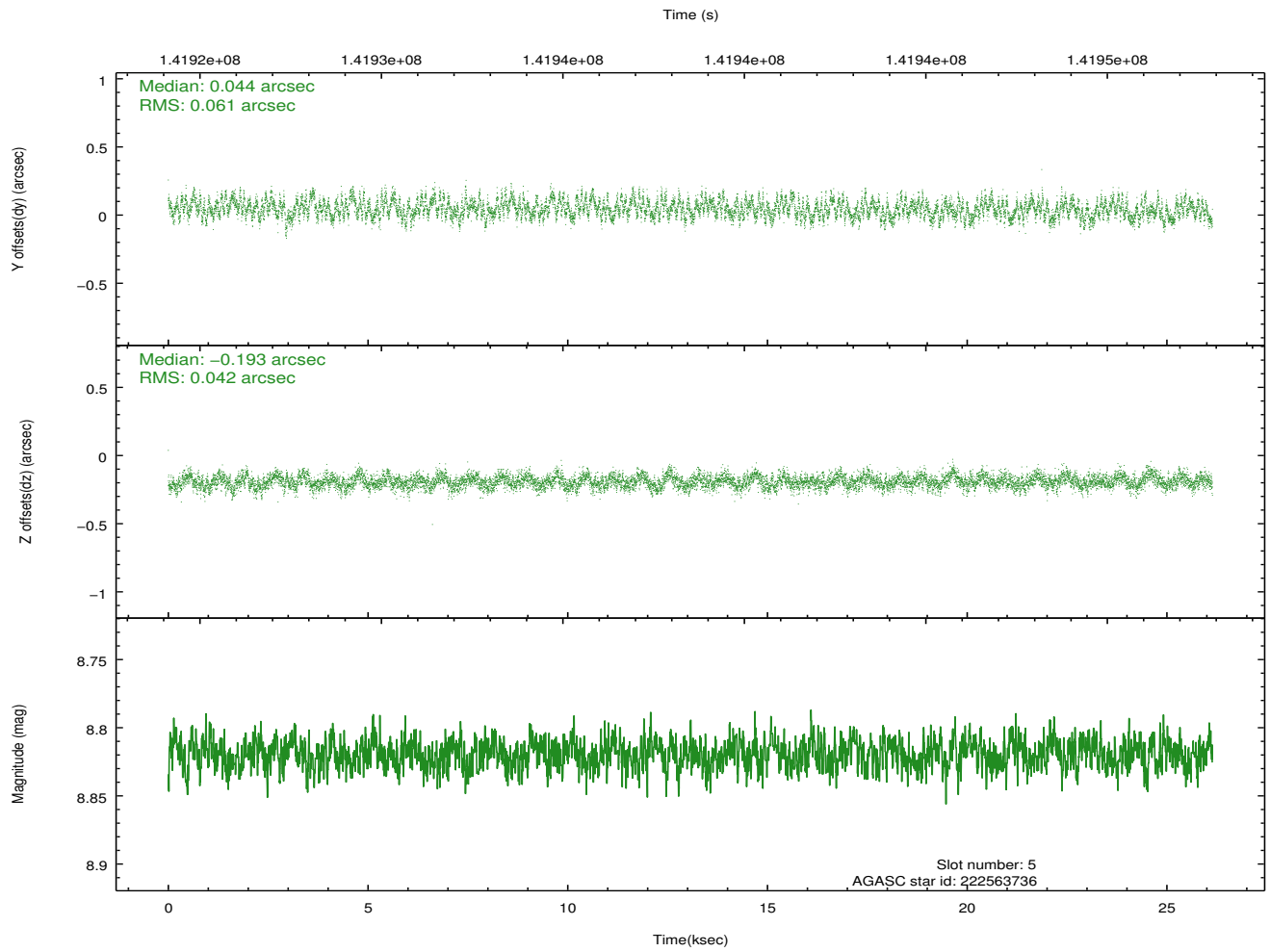
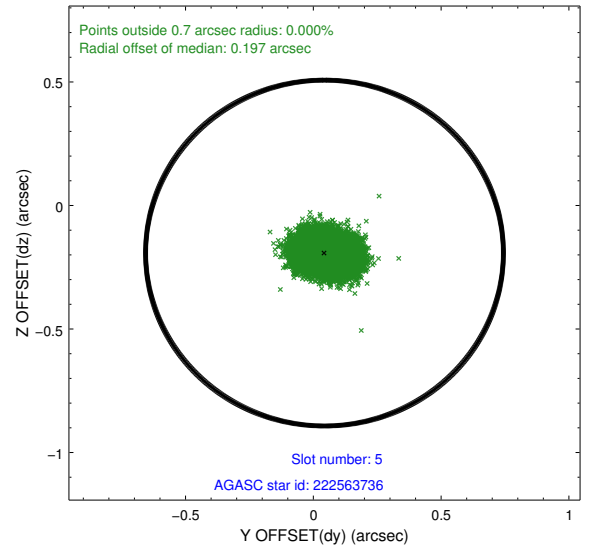
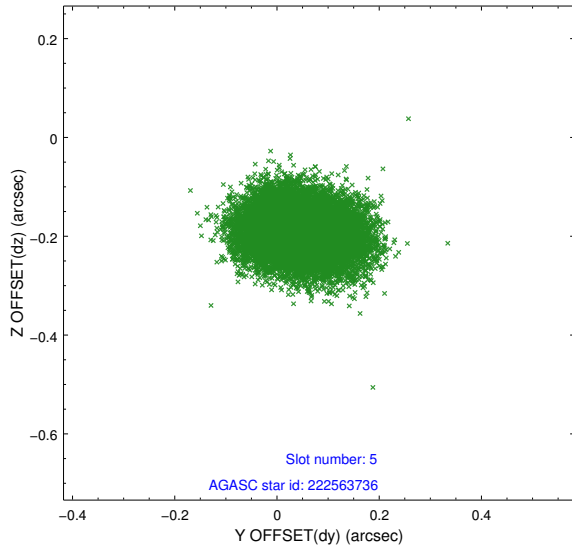
2.4.1 Slot 3



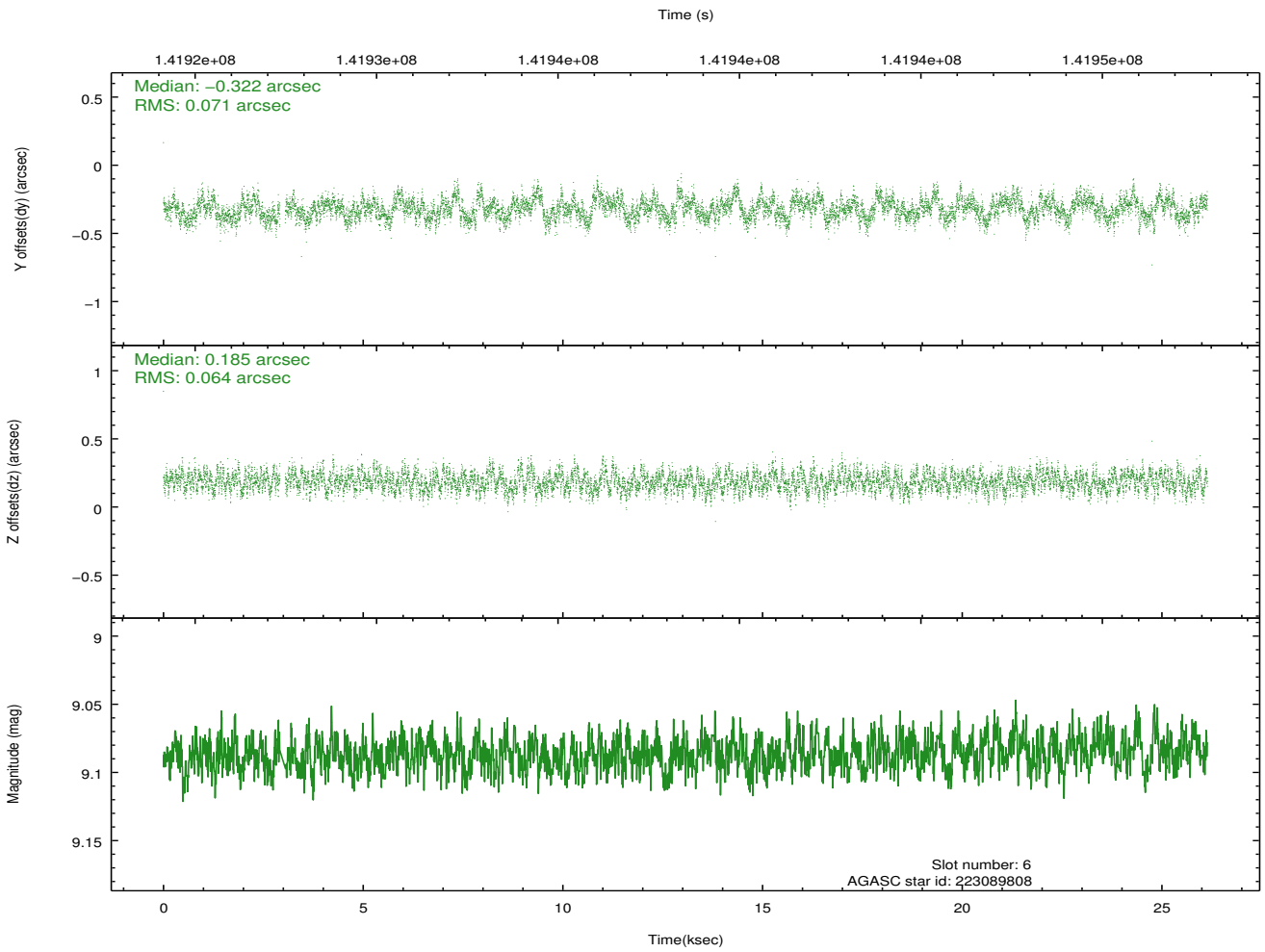
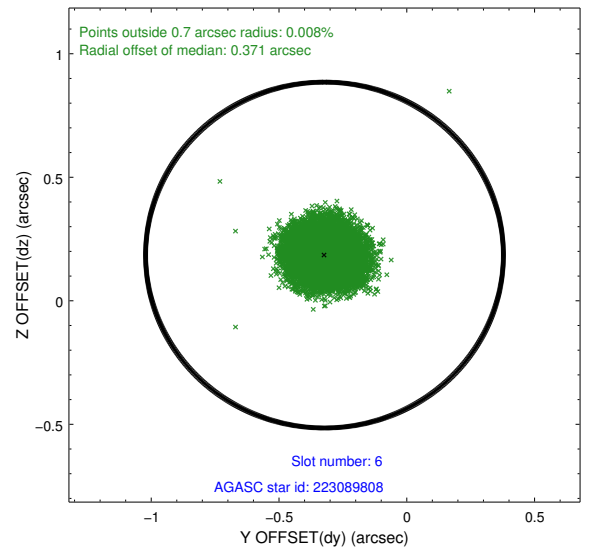
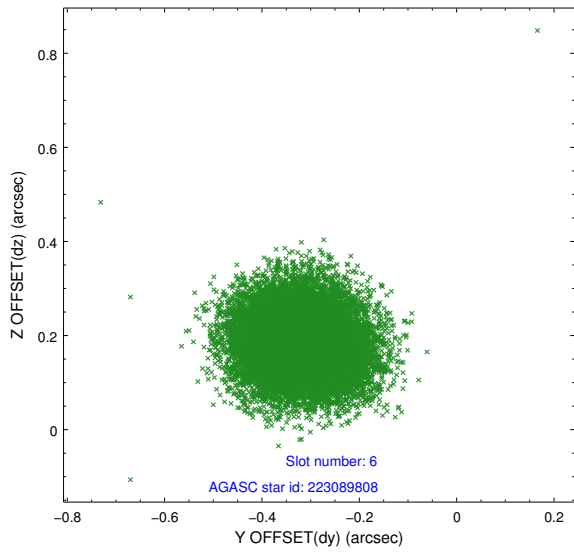
2.4.2 Slot 4



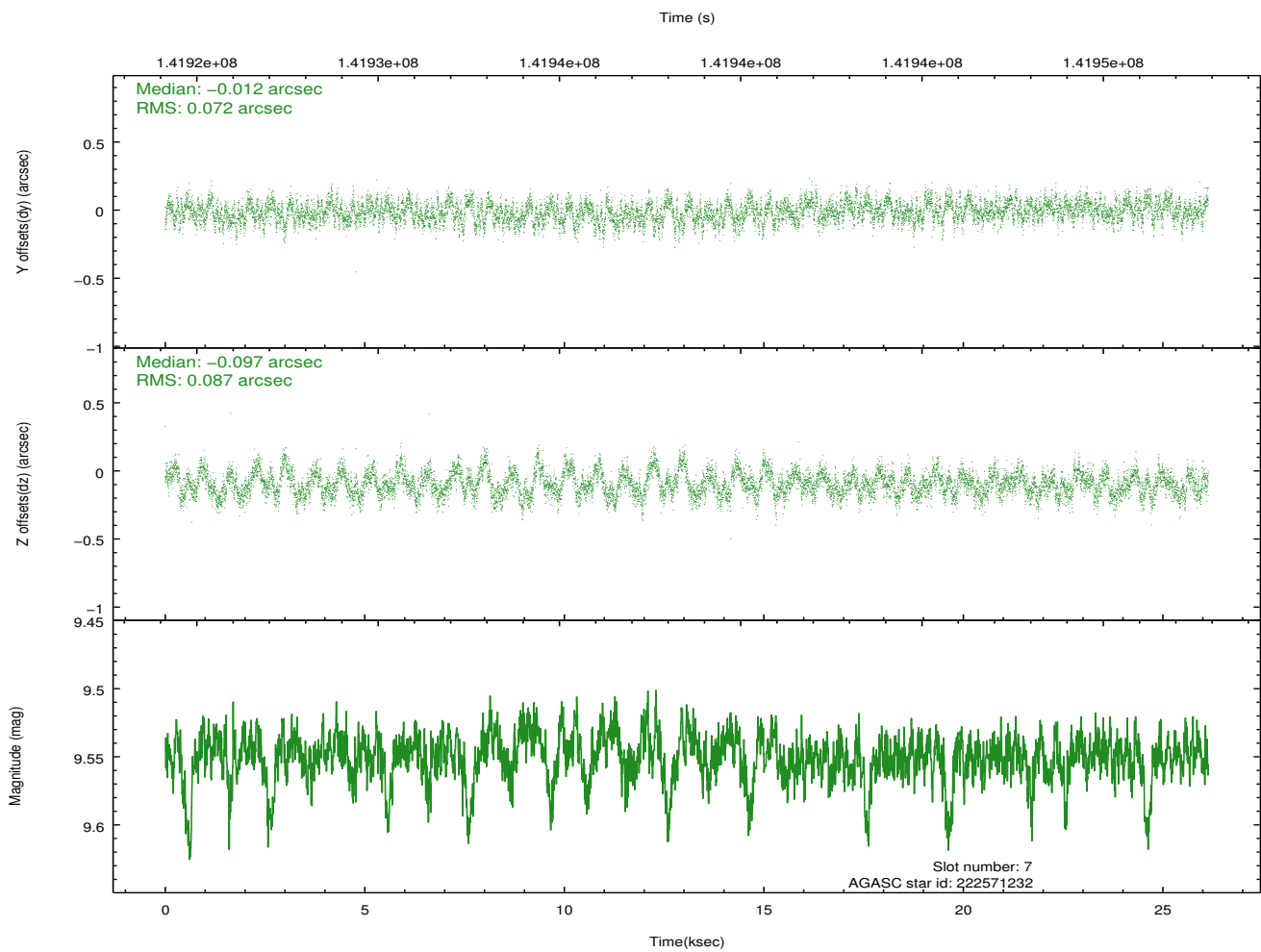
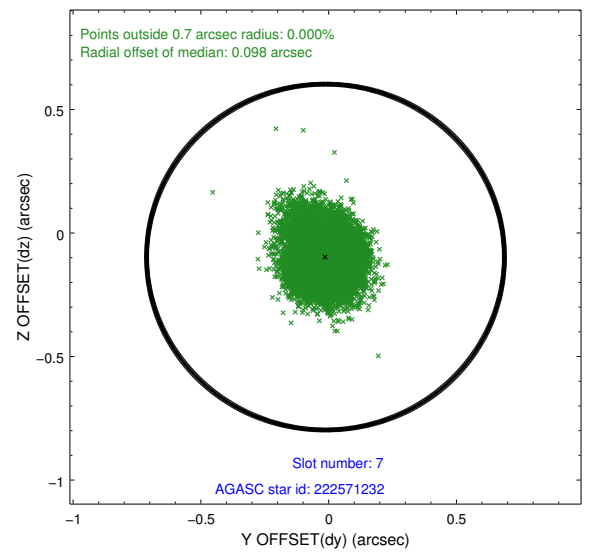
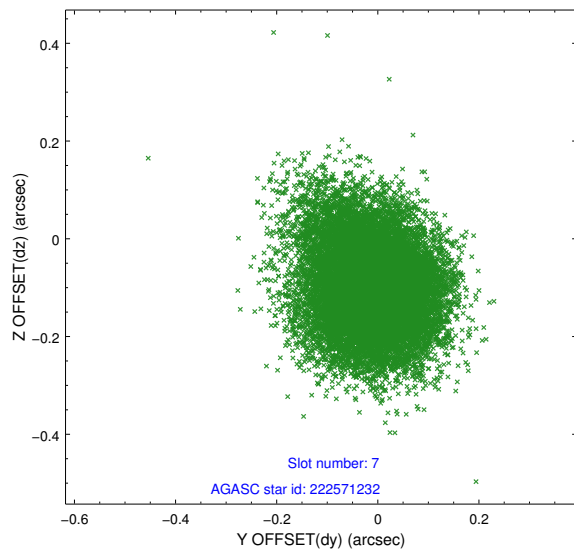
2.4.3 Slot 5



2.4.4 Slot 6

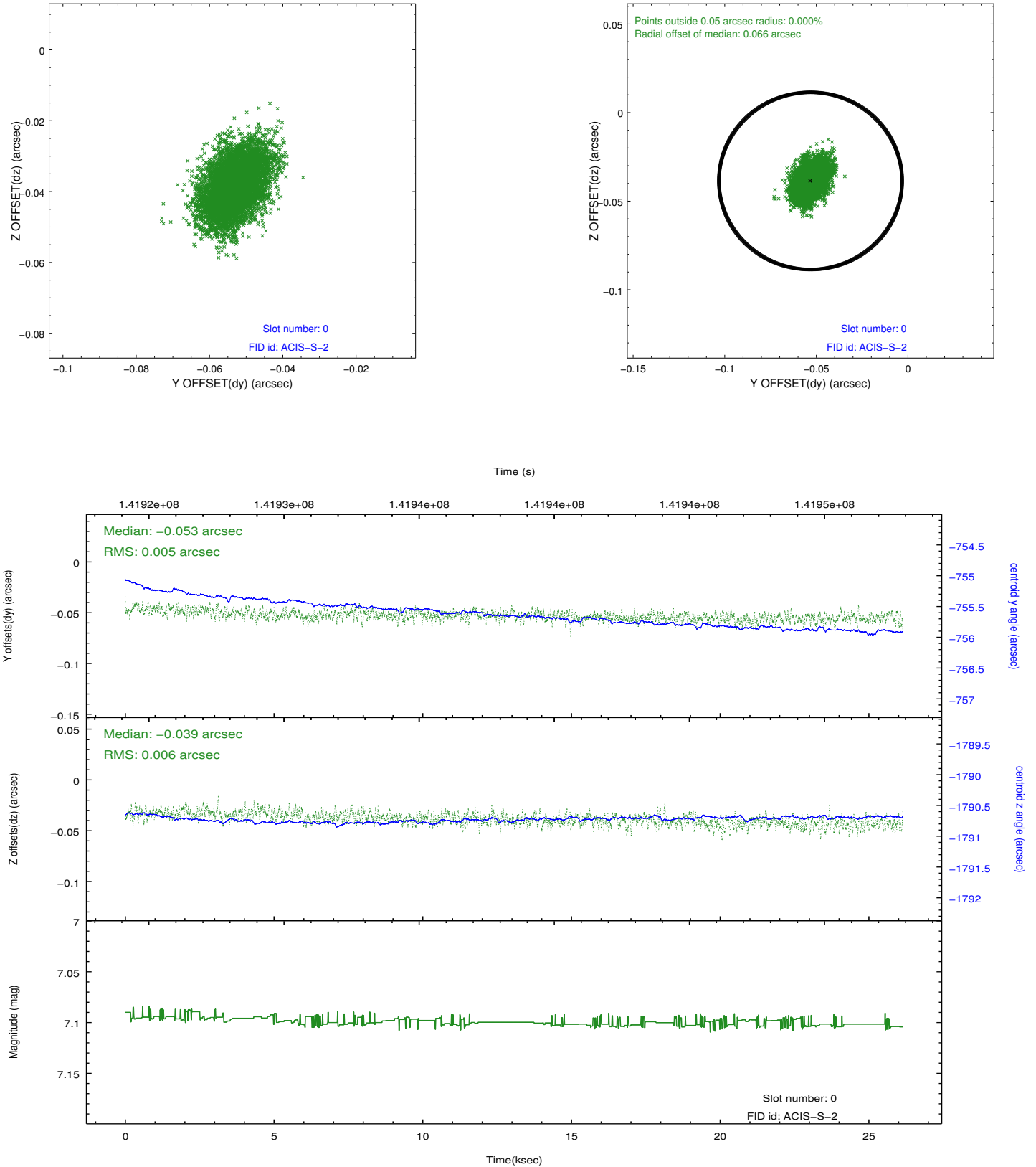


2.4.5 Slot 7

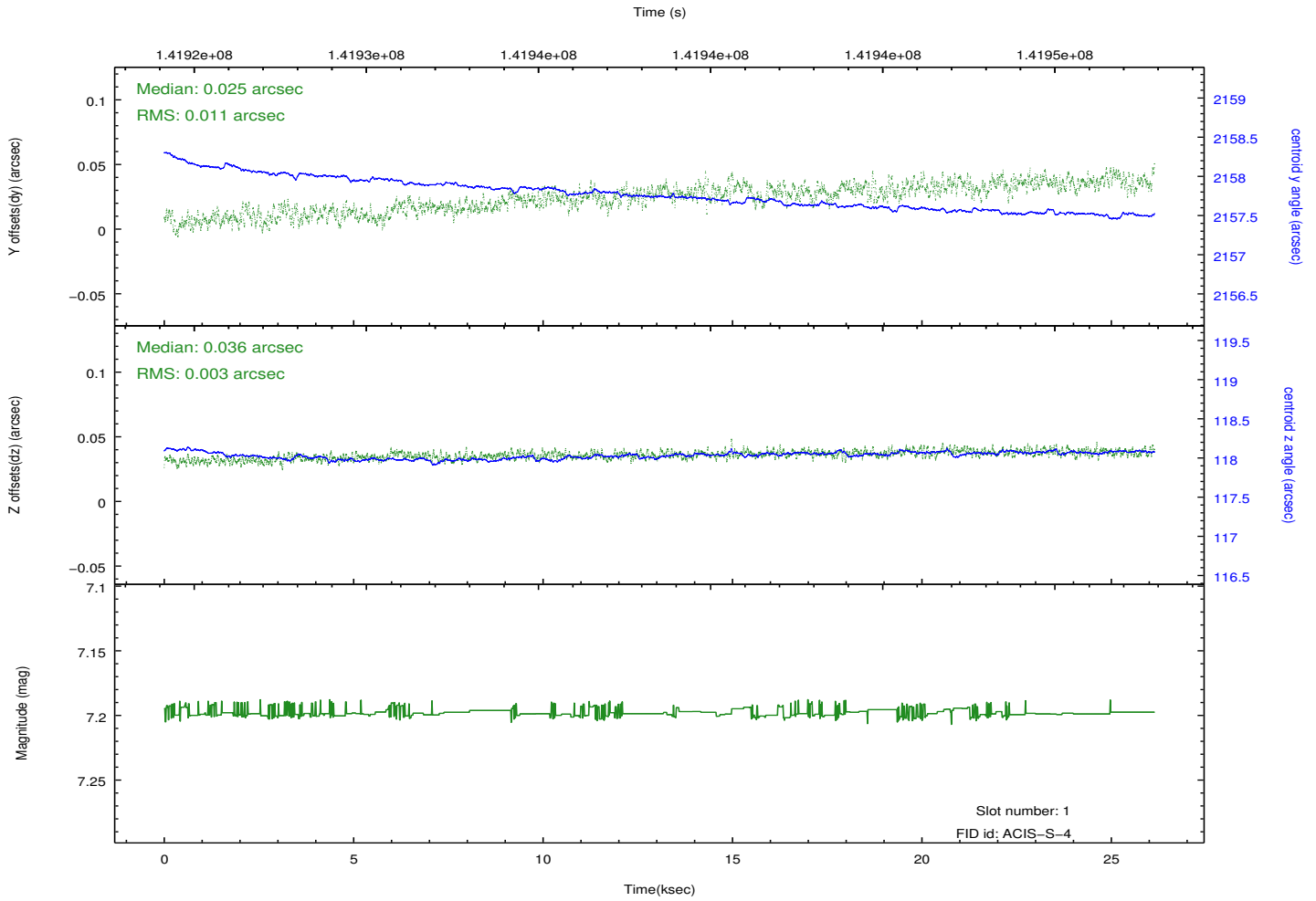
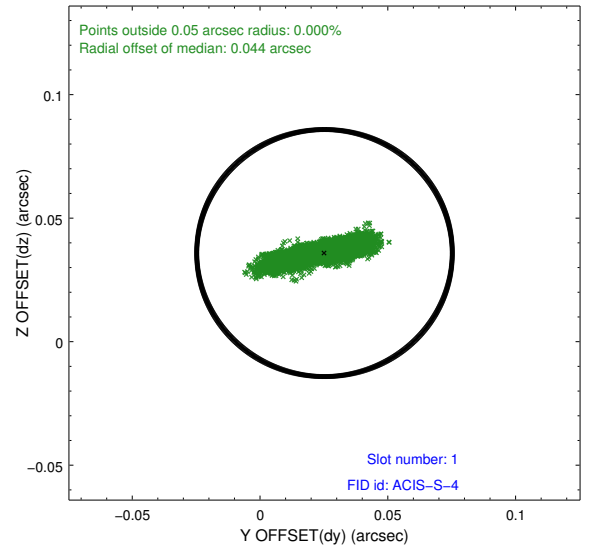
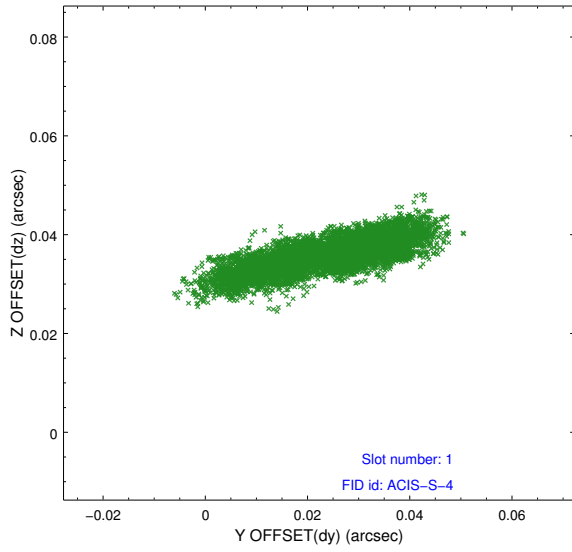


2.5 FID Slots

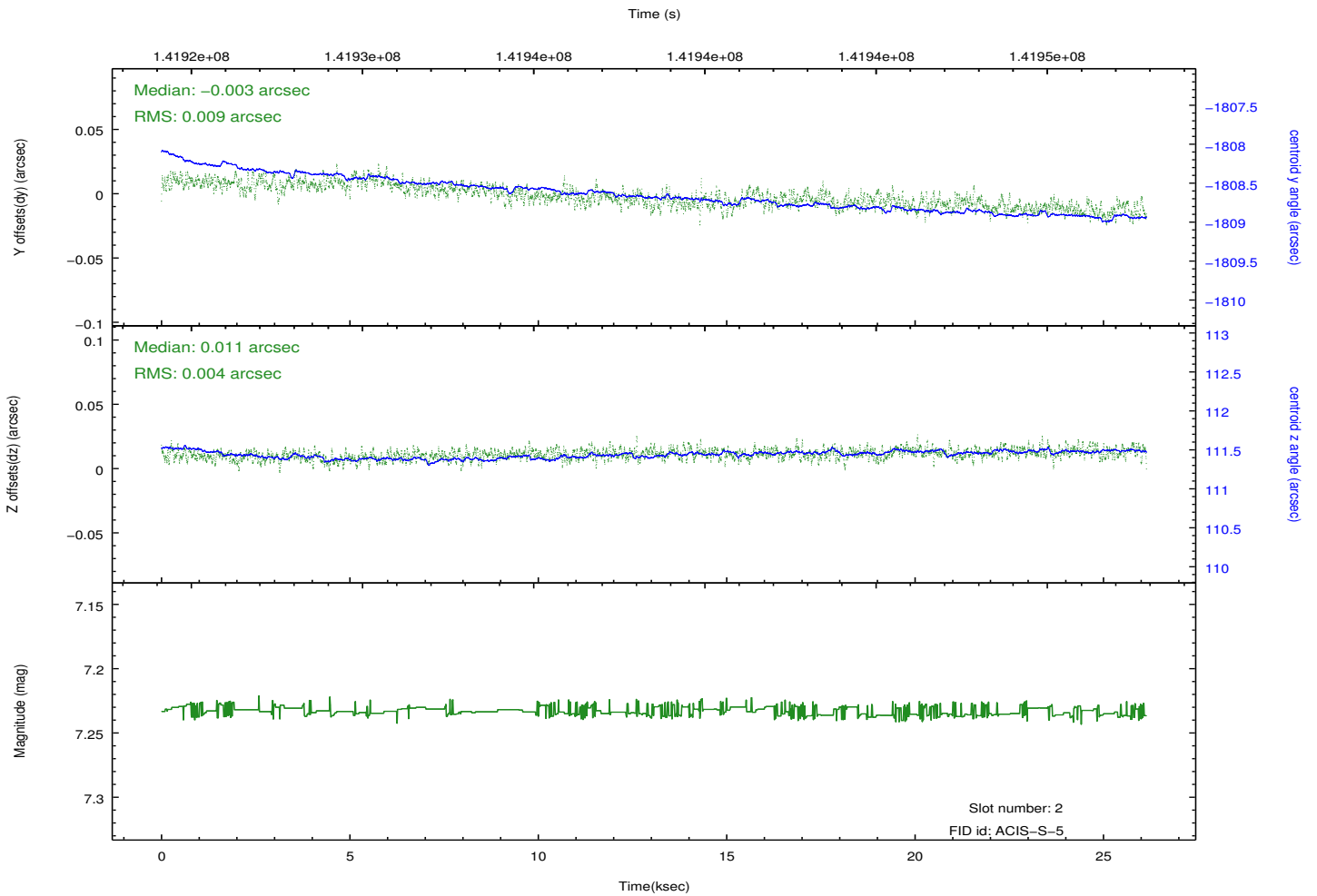
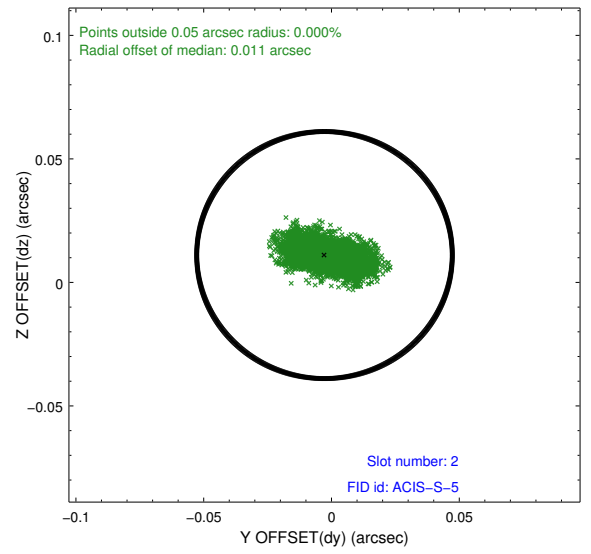
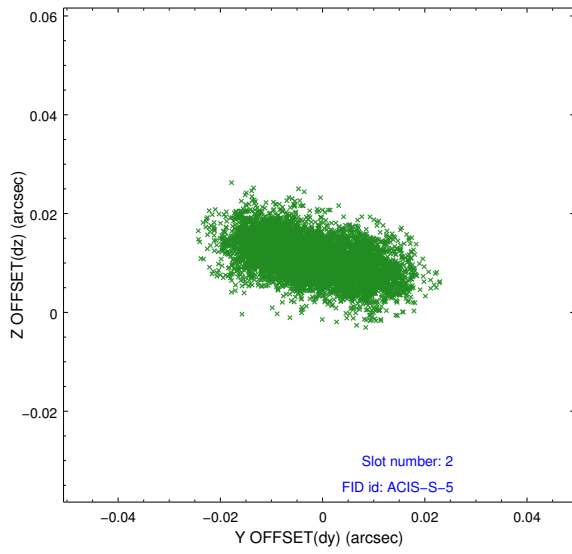
2.5.1 Slot 0



2.5.2 Slot 1

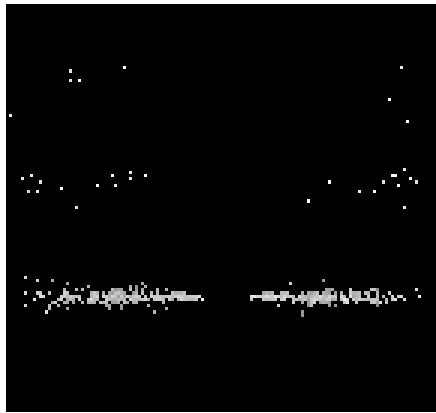


2.5.3 Slot 2

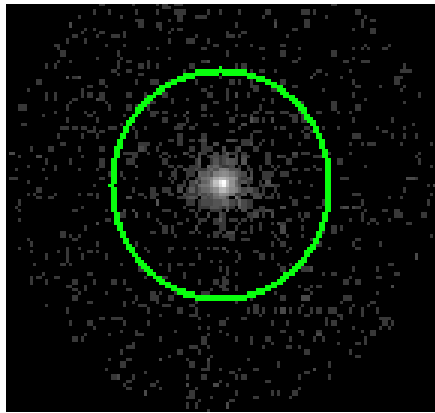


3 Gratings

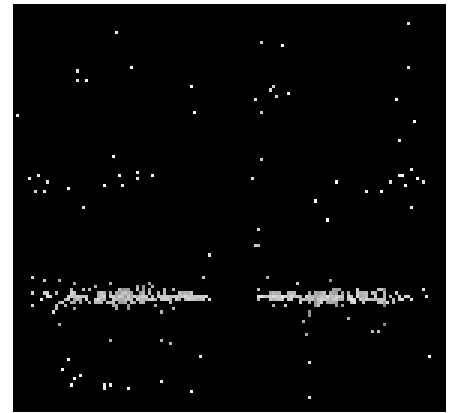
3.1 HEG Arm



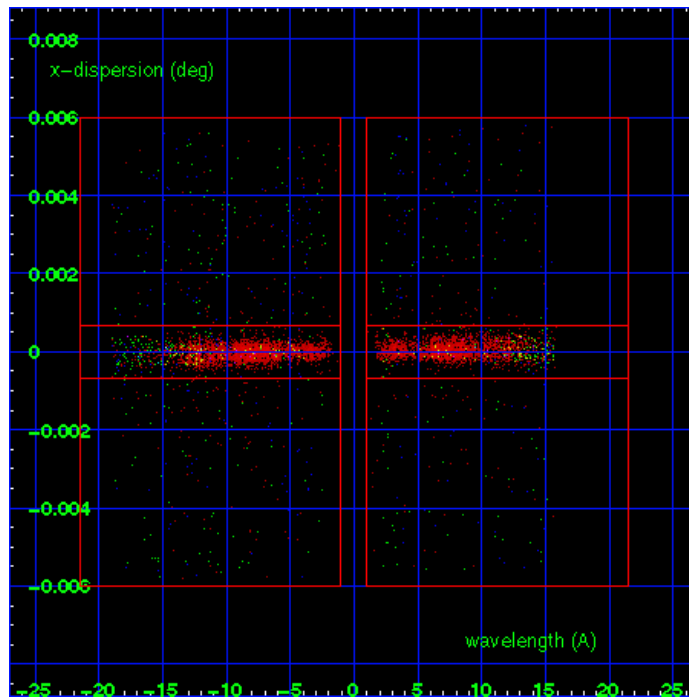
HEG Order Sort 123



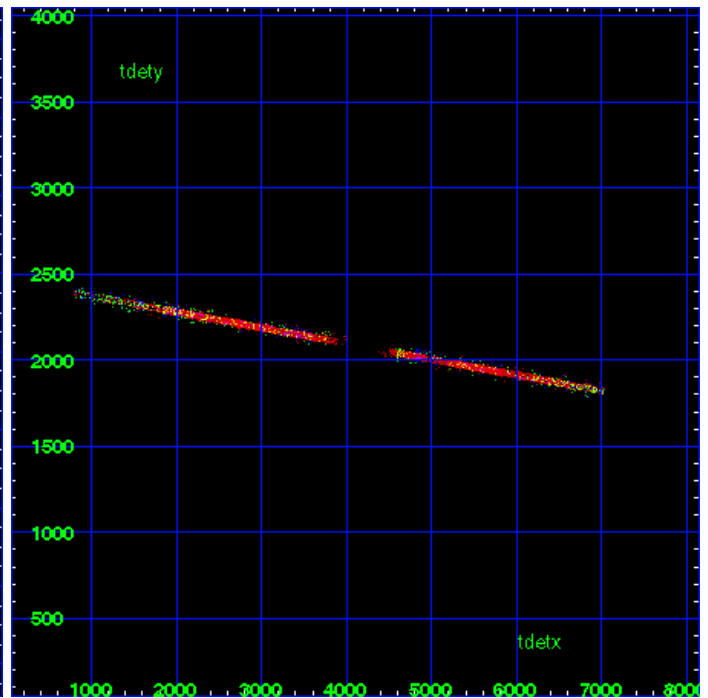
HEG Zero Order



HEG Order Sort ALL

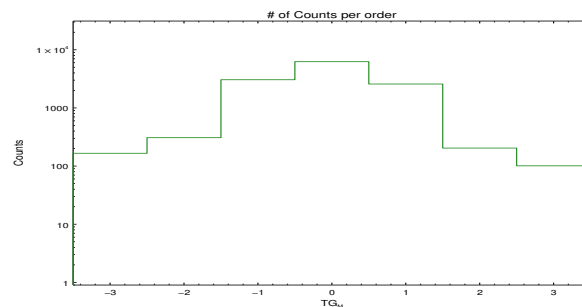


Spot Image HEG

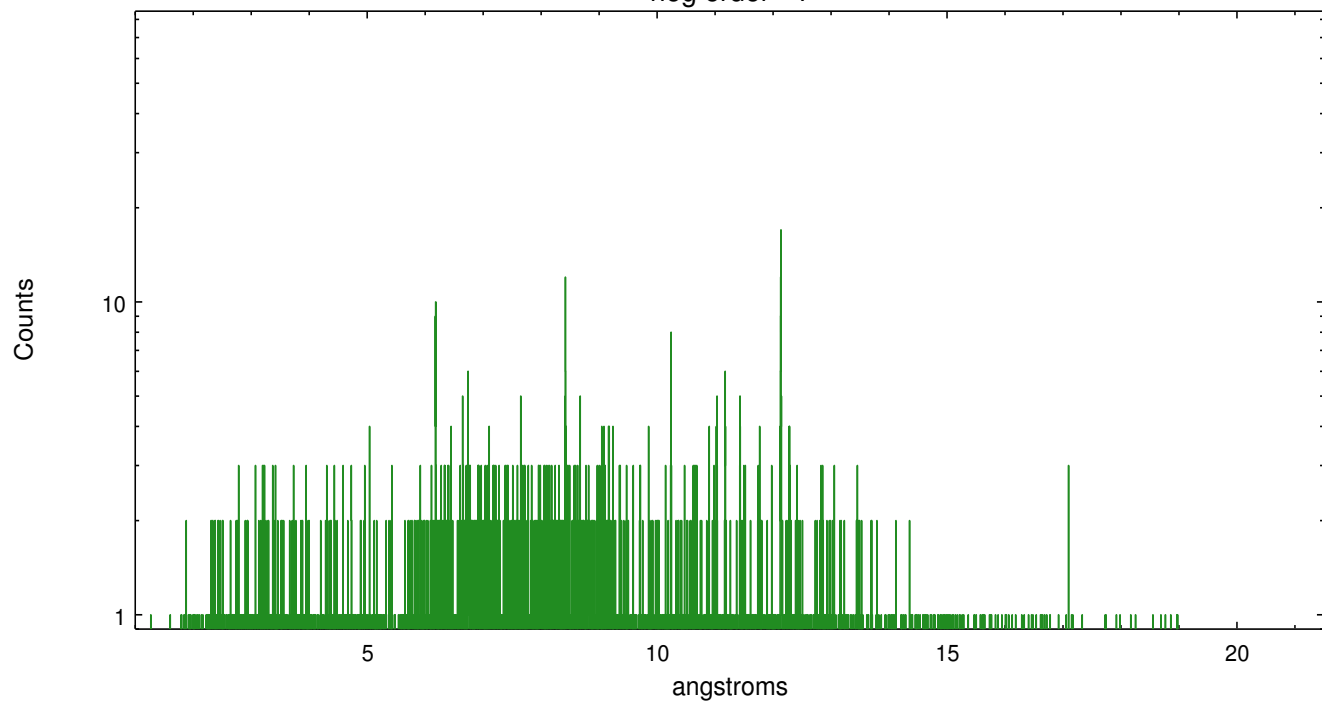


Full Detector HEG

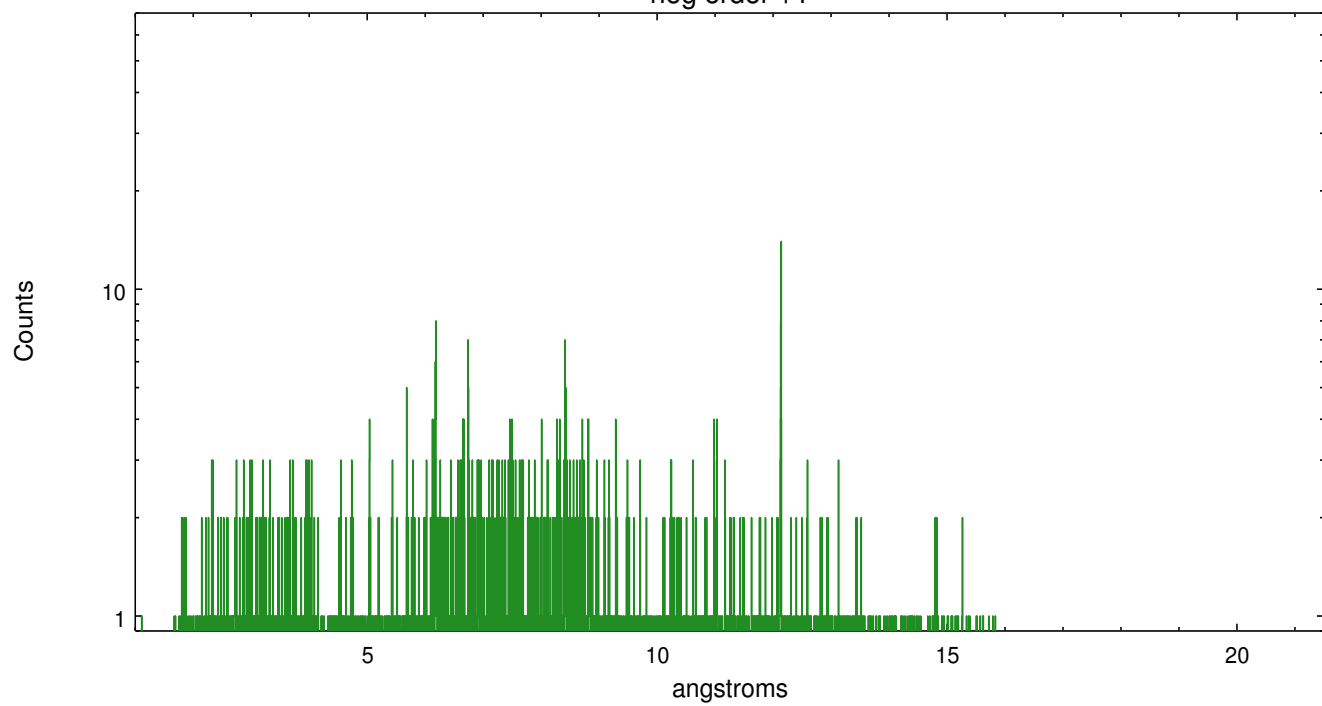
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	166	308	3055	6240	2577	204	101



heg order -1



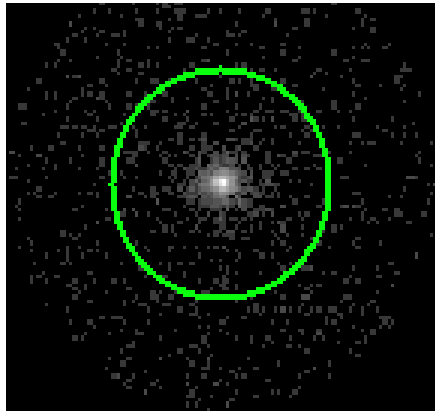
heg order +1



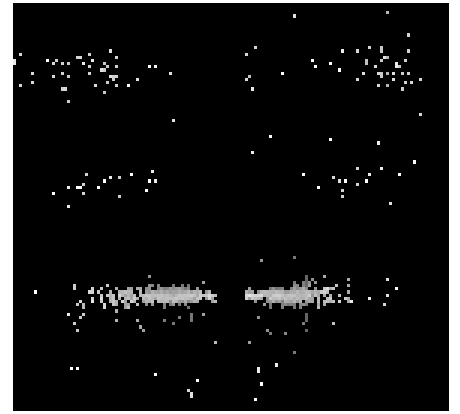
3.2 MEG Arm



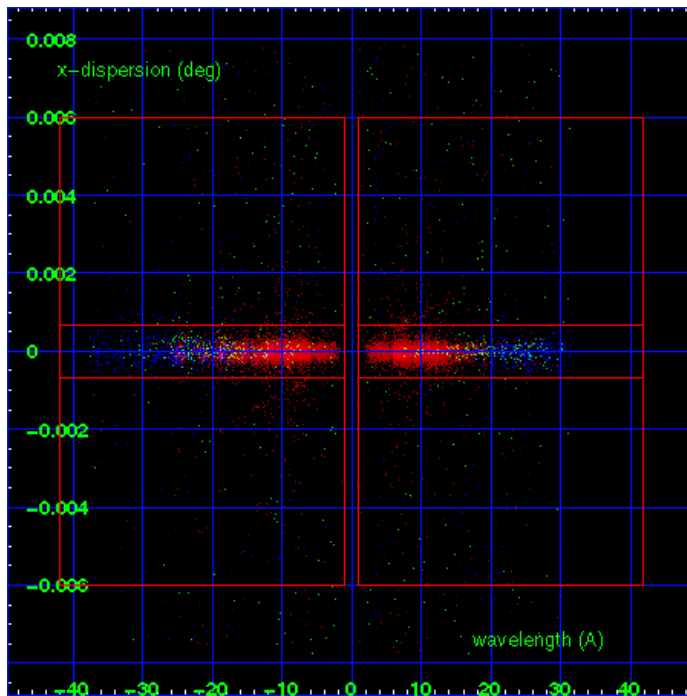
MEG Order Sort 123



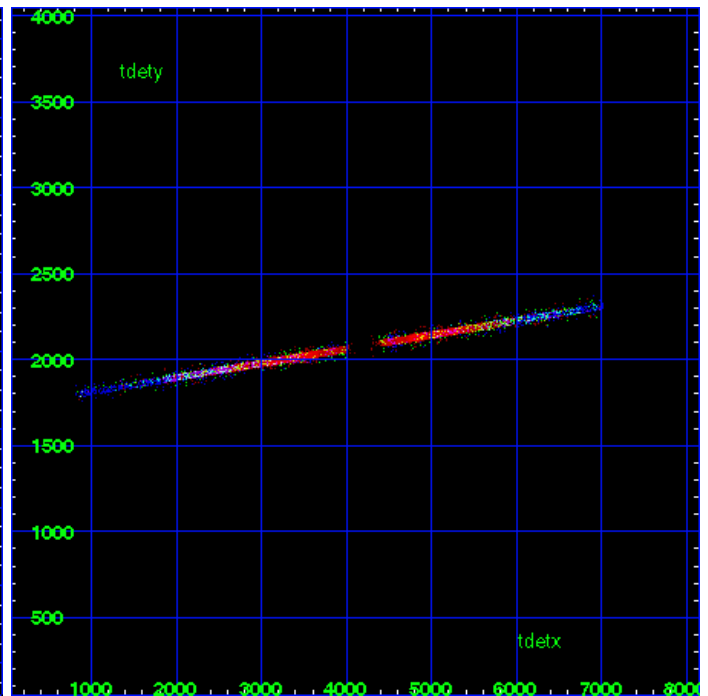
MEG Zero Order



MEG Order Sort ALL

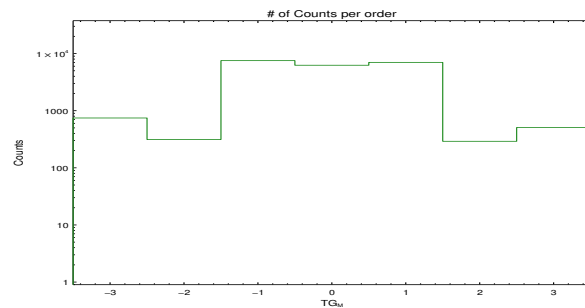


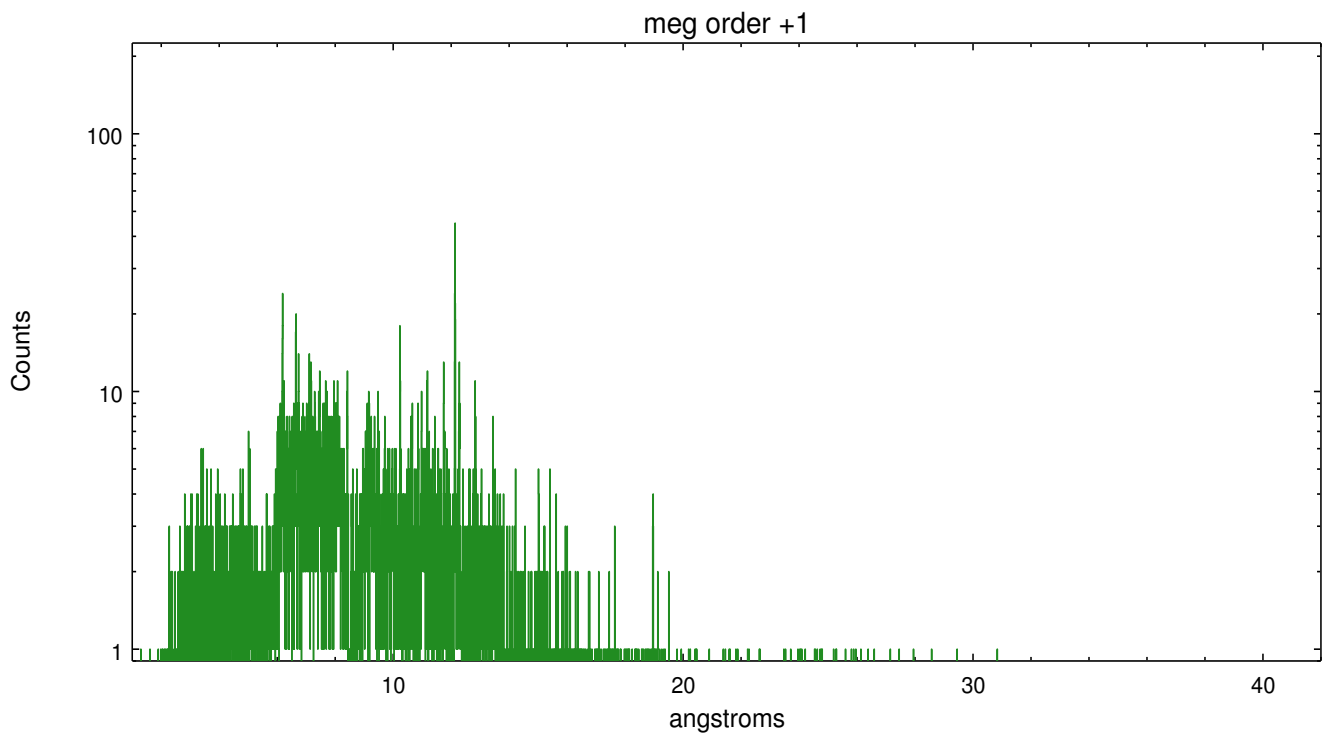
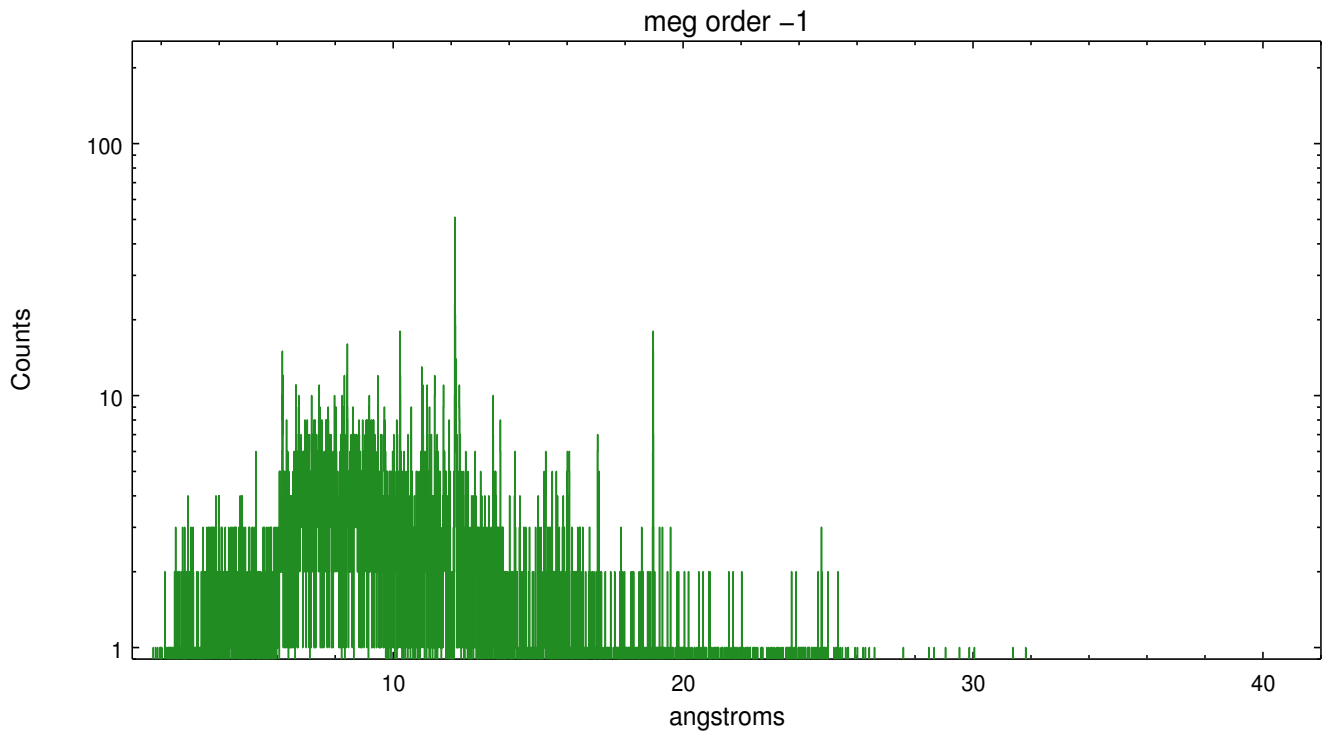
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	745	313	7522	6240	7004	291	507





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.959

A.2 Comments