

V&V Reference Report

L2 ASCDS Version : 10.4.3

Observation 18751 - L2 Version 1
Chandra X-Ray Center

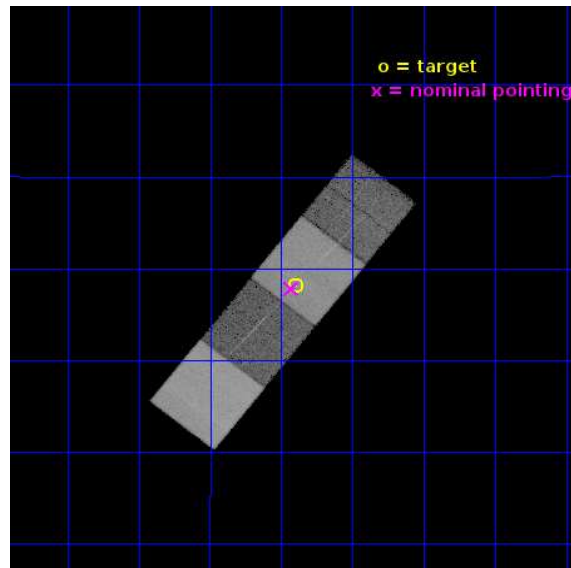
L2 Processing Date : Jan 19 2016

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1 Front

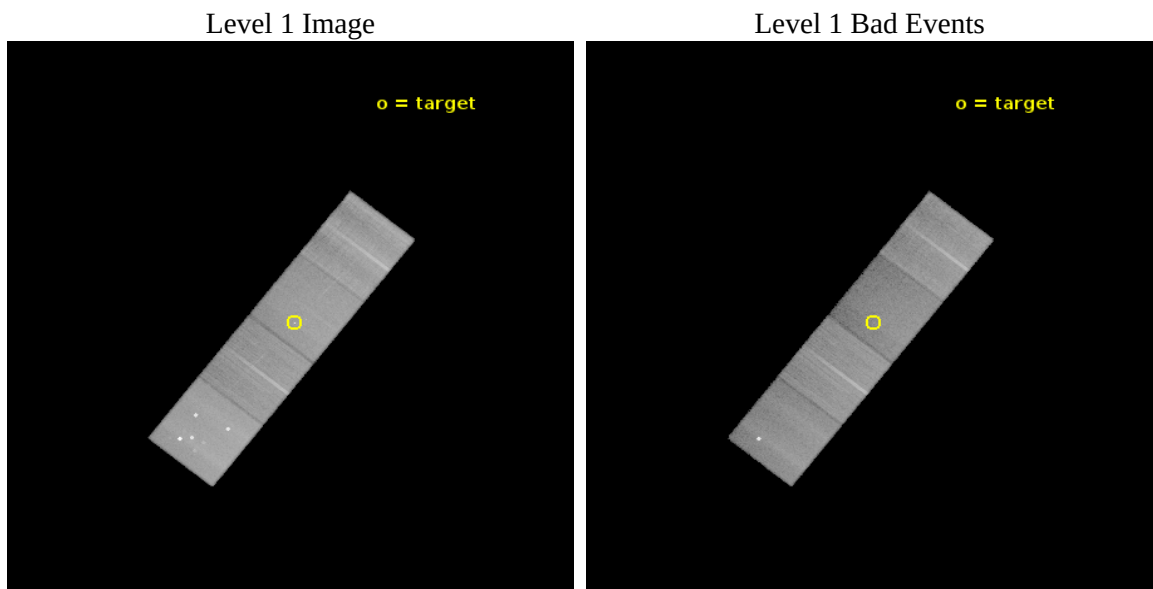
seq_num	201041	Sequence number
obs_id	18751	Observation id
title	A PROBE OF THE HYBRID COLLIDING WIND AND CENTRIFUGAL-MAGNETOSPHERIC X-RAY EMISSION OF PLASKETT'S STAR	Proposal title
observer	Dr. Maurice Leutenegger	Principal investigator
object	Plaskett's star	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	99.35	Observer's specified target RA [deg]
dec_targ	6.135389	Observer's specified target Dec [deg]
ra_nom	99.357144588332	Nominal RA [deg]
dec_nom	6.1301969282499	Nominal Dec [deg]
roll_nom	308.15587299984	Nominal Roll [deg]
revision	1	Processing version of data
ontime	44553.200342774	Sum of GTIs [s]
livetime	43971.079980707	Livetime [s]
ontime5	44550.059272528	Sum of GTIs [s]
ontime6	44553.200342774	Sum of GTIs [s]
ontime7	44553.200342774	Sum of GTIs [s]
ontime8	44546.918321729	Sum of GTIs [s]
l2events	338871	Number of level 2 events



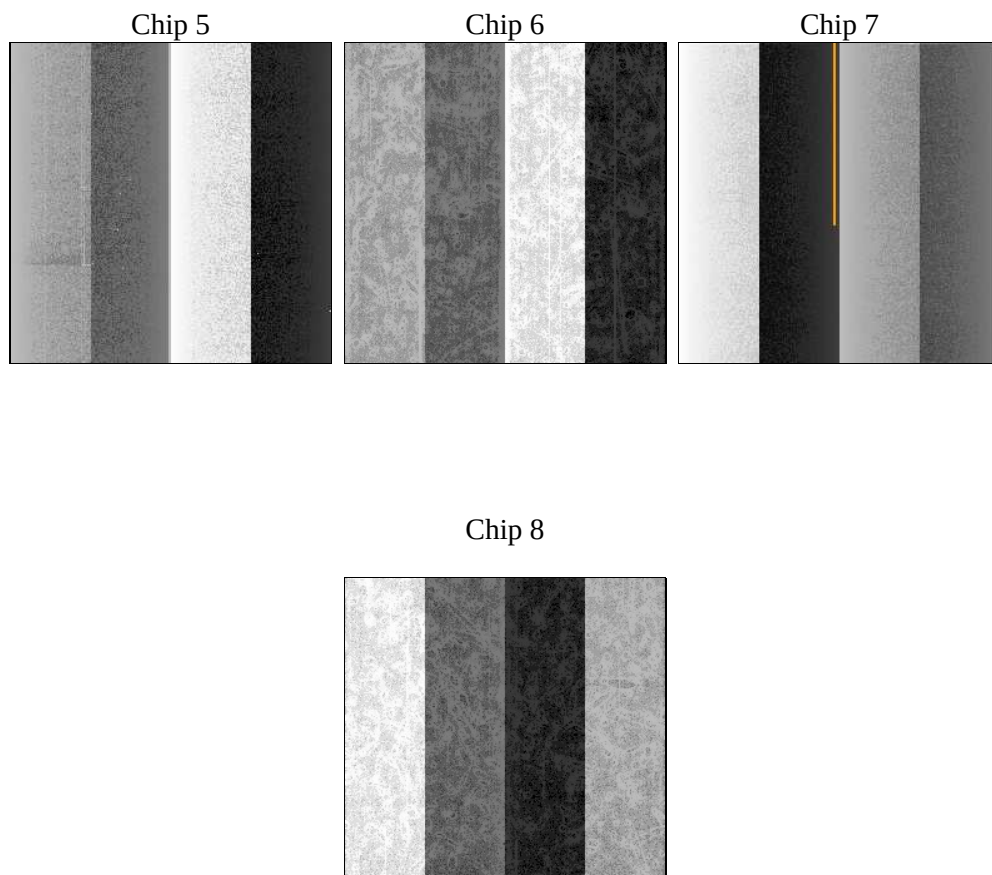
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	44450.661000	[s] Scheduled observation exposure time
ascdsver	10.4.3	Processing system revision	ontime	44553.200342774	Sum of GTIs [s]
caldsver	4.7.0	 	ontime5	44550.059272528	Sum of GTIs [s]
date	2016-01-19T15:35:57	Date and time of file creation	ontime6	44553.200342774	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	44553.200342774	Sum of GTIs [s]
			ontime8	44546.918321729	Sum of GTIs [s]
			l1events	1191892	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4146.53, 4134.90)	src1a sky pixel position

2.1.4 Events

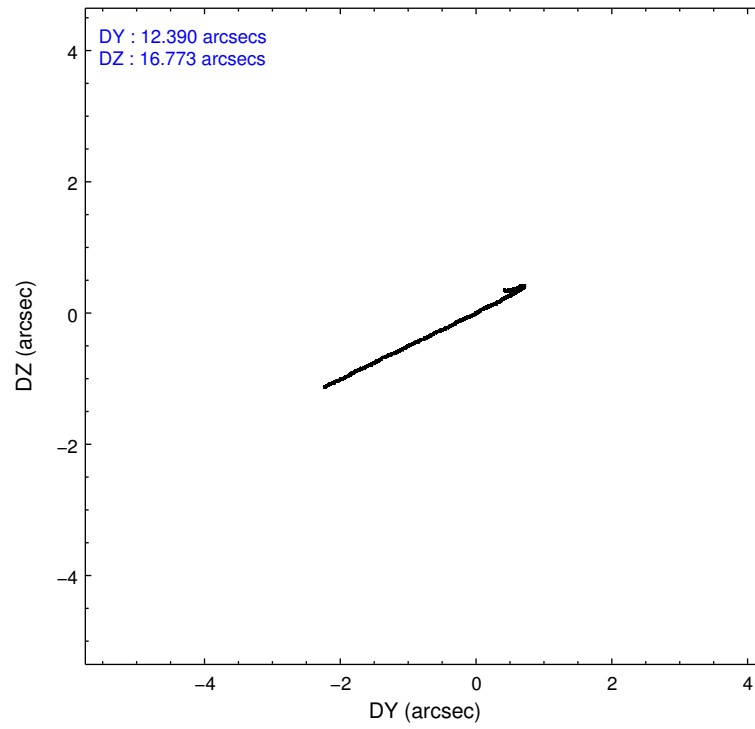
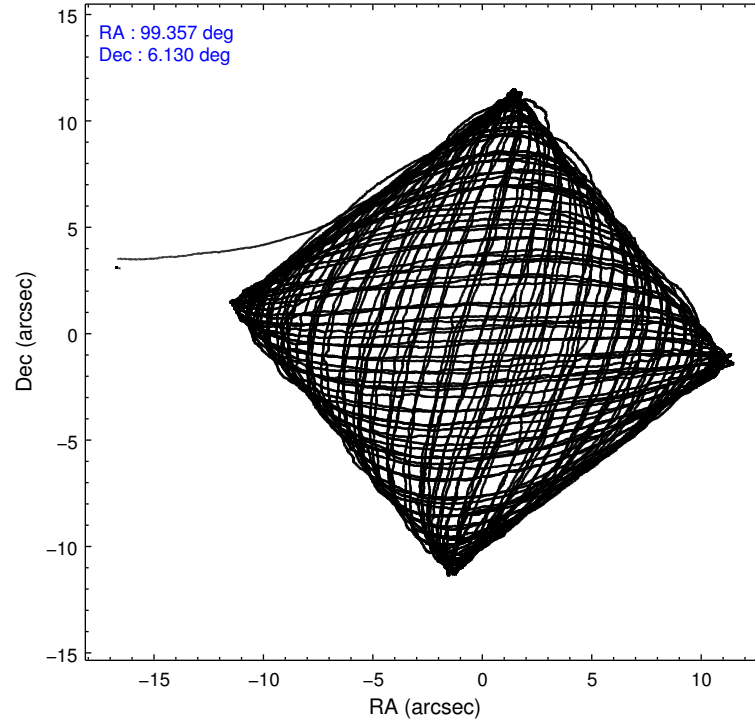
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	373945	243461	266900	307586
rejected events	178421	215810	141850	226150
rejected %	47%	88%	53%	73%

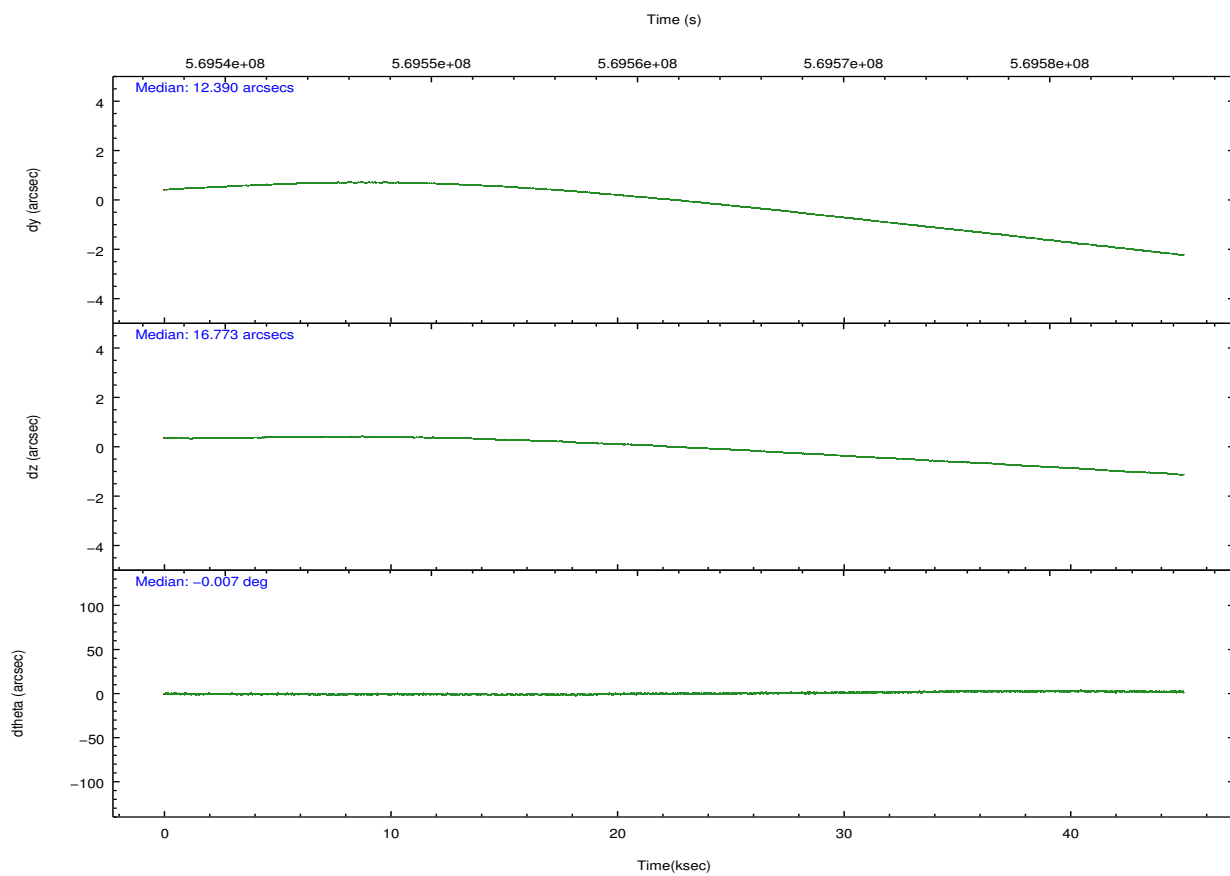
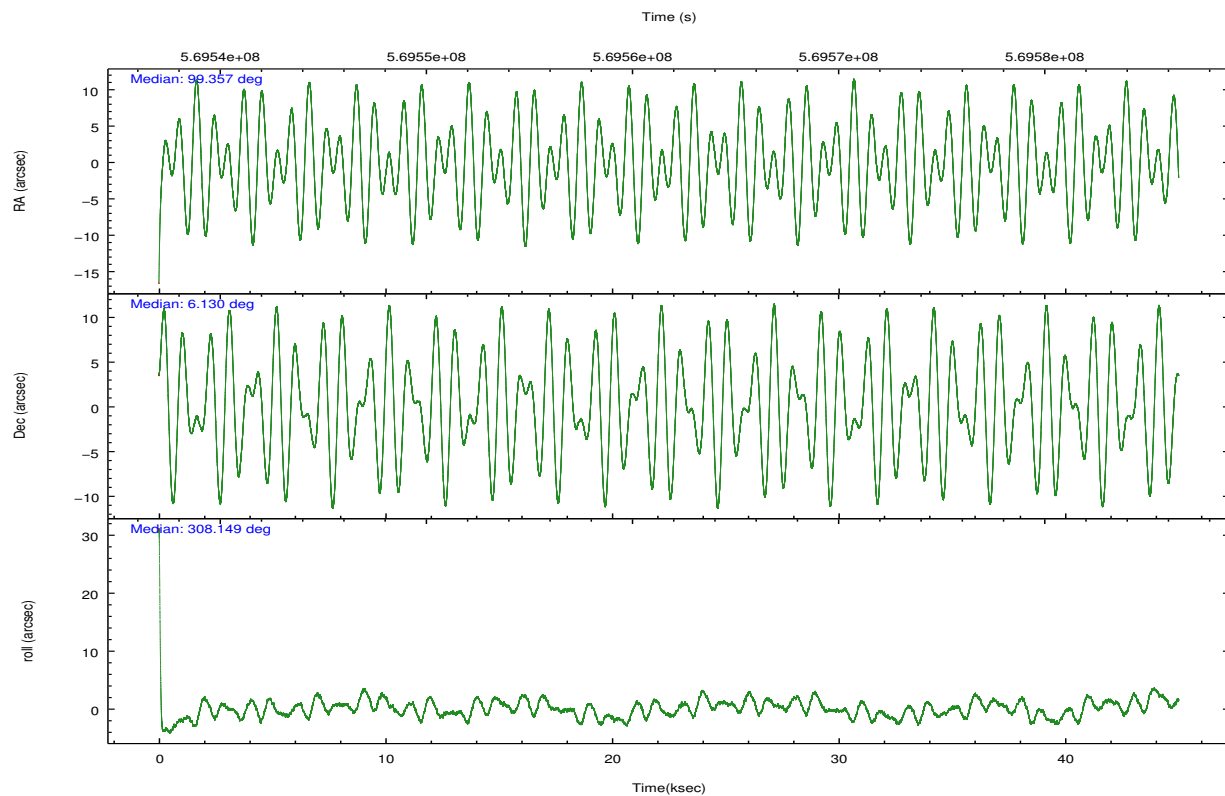
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	31045	9862	11403	23139
	8%	4%	4%	7%
grade 1 events	970	122	421	228
	0%	0%	0%	0%
grade 2 events	57788	6608	27730	20221
	15%	2%	10%	6%
grade 3 events	5795	2506	10082	8230
	1%	1%	3%	2%
grade 4 events	5310	2548	9943	7674
	1%	1%	3%	2%
grade 5 events	24367	9230	26444	15462
	6%	3%	9%	5%
grade 6 events	95604	6128	65897	22175
	25%	2%	24%	7%
grade 7 events	153066	206457	114980	210457
	40%	84%	43%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	99.331383	99.35714458833188	CCD I2 on	N	N
[deg] Pointing Dec	6.140059	6.130196928249856	CCD I3 on	N	N
[deg] Pointing Roll	308.001987	308.1558729998375	CCD S0 on	O1	N
[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
Phase constraints	Y	Y	CCD S5 on	O2	N
[d] Phase period	14.396257	14.396257	Number of optional ACIS chips dropped	2	2
[d] Phase epoch (MJD)	57369.740000	57369.740000	On-chip summing requested	N	N
Phase start	0.450000	0.450000	Subarray requested	NONE	NONE
Phase end	0.550000	0.550000	Alternating exposures requested	N	N
Phase start error	0.050000	0.050000	[s] Primary exposure time	0.000000	3.1
Phase end error	0.050000	0.050000			
[s] Observation start time (MET)	569539798.184000	569538563.67759			
Observation start date	2016-01-18T21:28:50	2016-01-18T21:09:23			
[s] Observation end time (MET)	569584249.184000	569584474.9677			
Observation end date	2016-01-19T09:49:41	2016-01-19T09:54:34			
Read mode	TIMED	TIMED			

2.3 Aspect



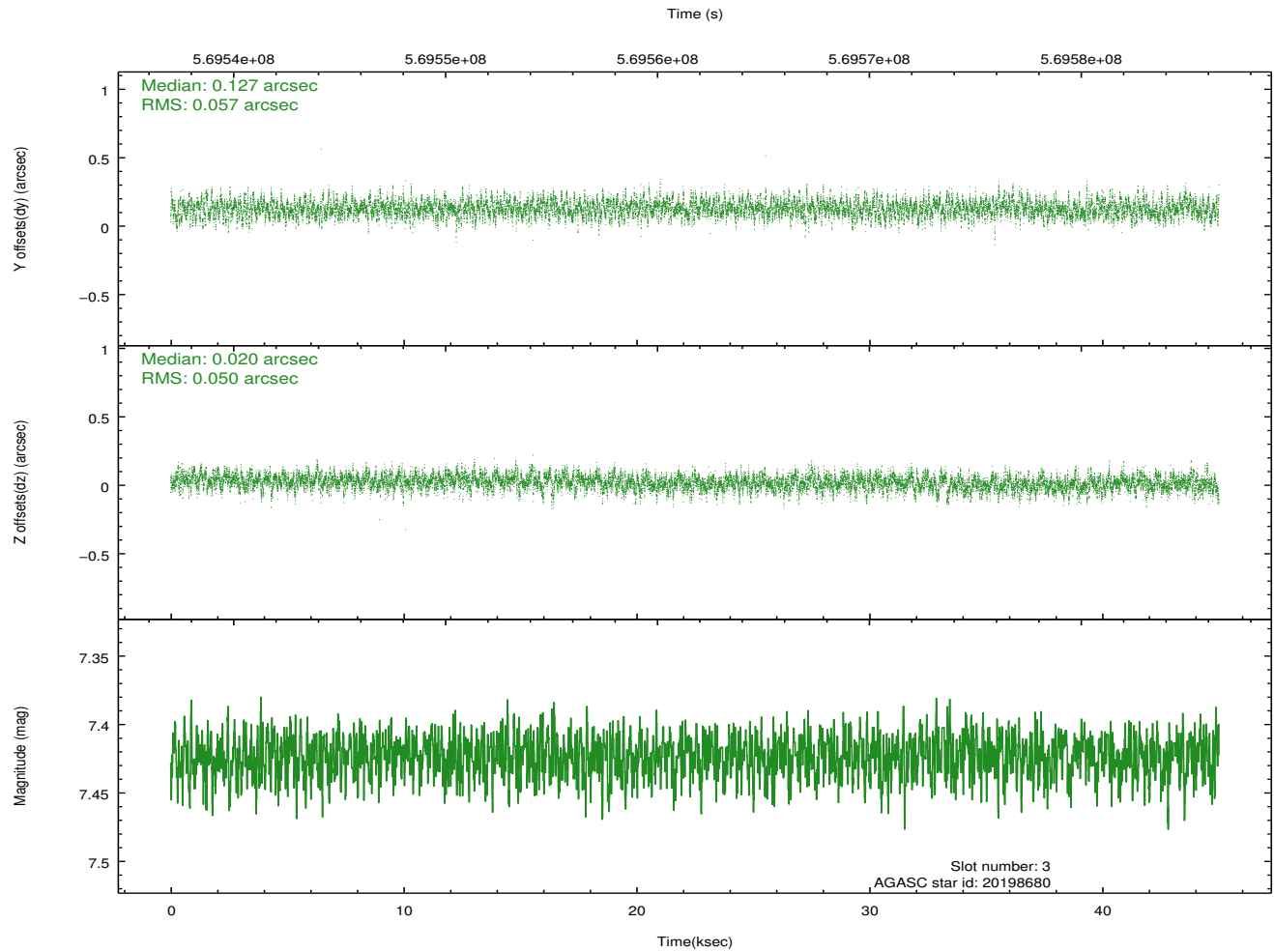
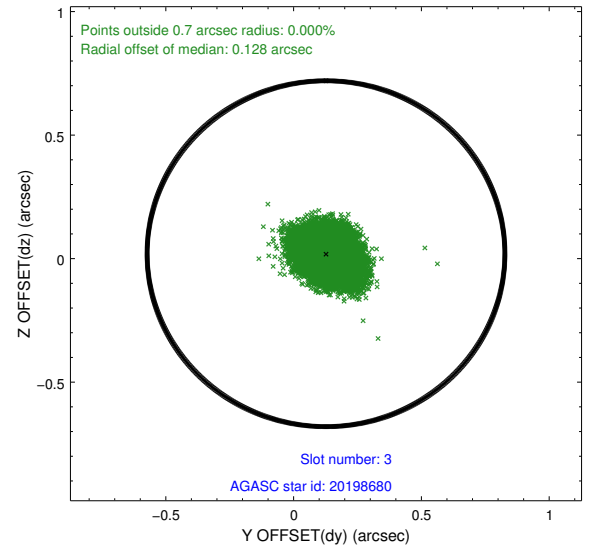
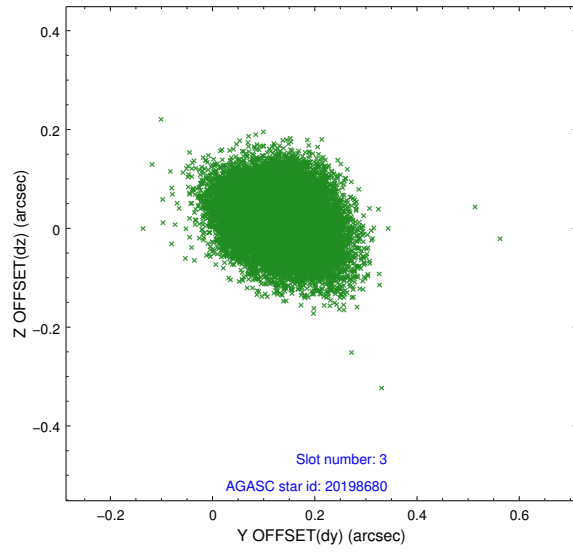


Slot Statistics

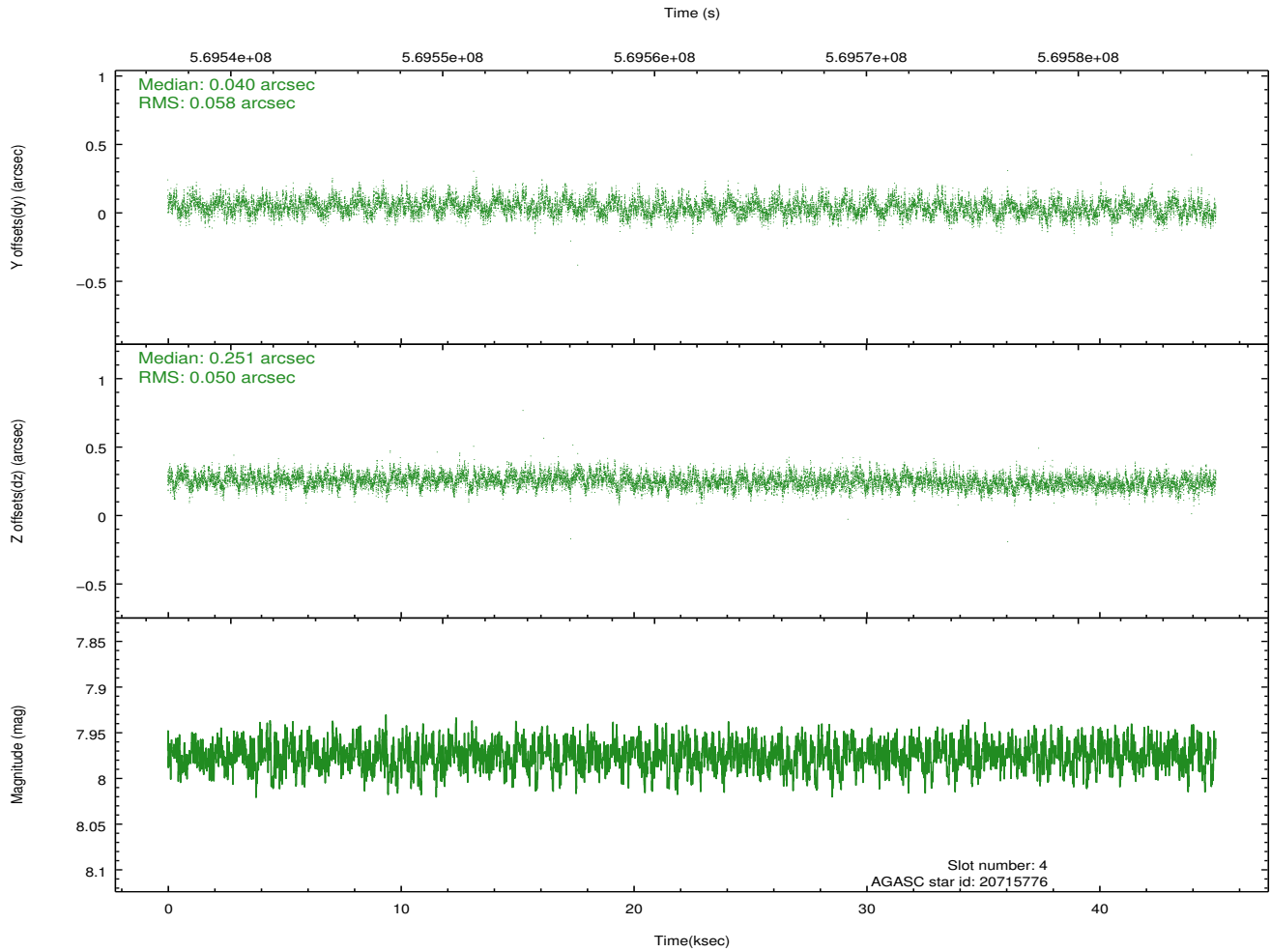
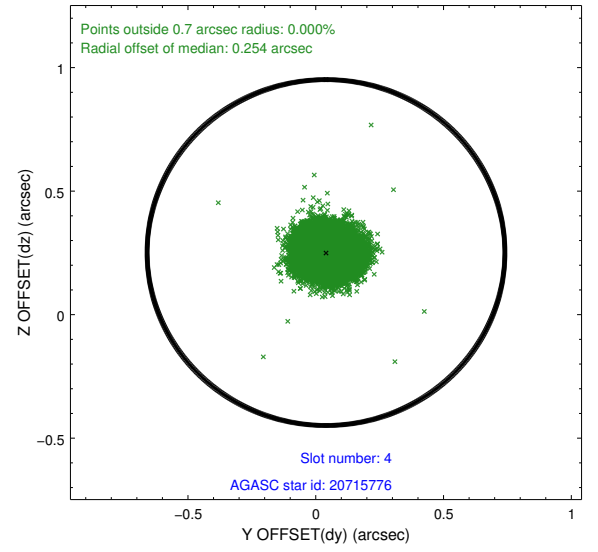
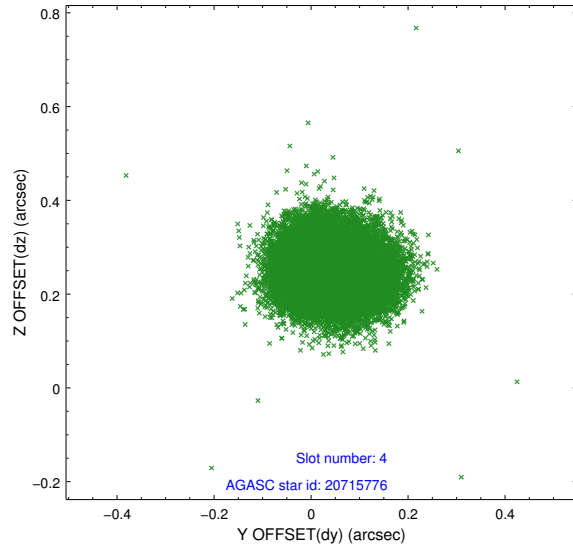
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.21	10977	0.149	-0.094	0.035	0.060	0.000000	0.000000	931.23	-1733.77
1	FID		ACIS-S-5	7.25	10975	-0.246	0.087	0.043	0.054	0.000000	0.000000	-1818.20	163.89
2	FID		ACIS-S-6	7.36	10976	0.088	0.034	0.025	0.033	0.000000	0.000000	396.68	807.85
3	GUIDE	used	20198680	7.42	21948	0.127	0.020	0.080	0.132	99.264537	5.519391	1613.60	-1564.36
4	GUIDE	used	20715776	7.97	21950	0.040	0.251	0.082	0.131	99.096185	6.235863	-789.53	-450.88
5	GUIDE	used	20849928	8.45	21946	0.006	-0.051	0.086	0.136	99.890363	6.116347	1298.51	1524.93
6	GUIDE	used	20860264	8.30	21949	-0.087	-0.037	0.077	0.125	99.464533	6.683248	-1247.71	1578.91
7	GUIDE	used	20844600	8.41	21938	-0.086	-0.179	0.103	0.168	99.971598	6.056945	1645.84	1622.81

2.4 Star Slots

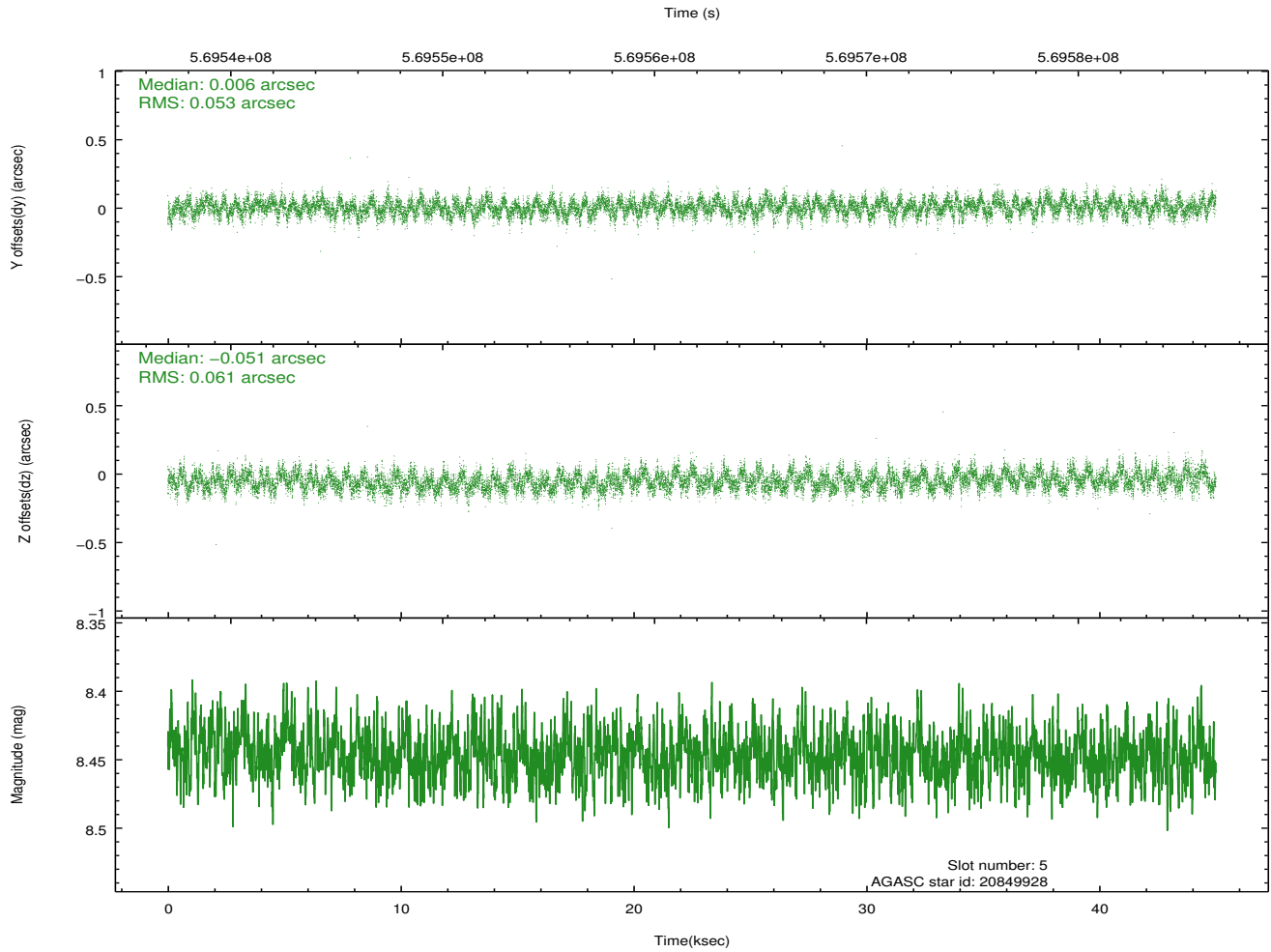
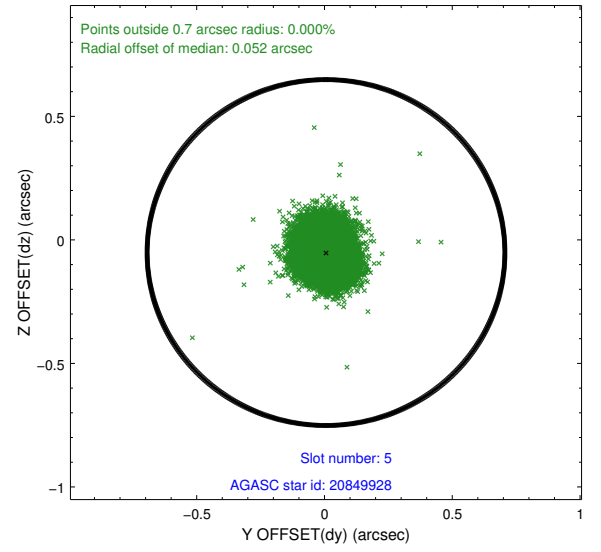
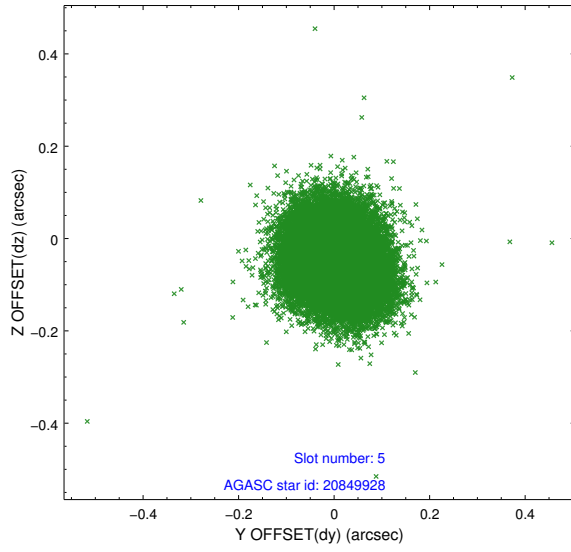
2.4.1 Slot 3



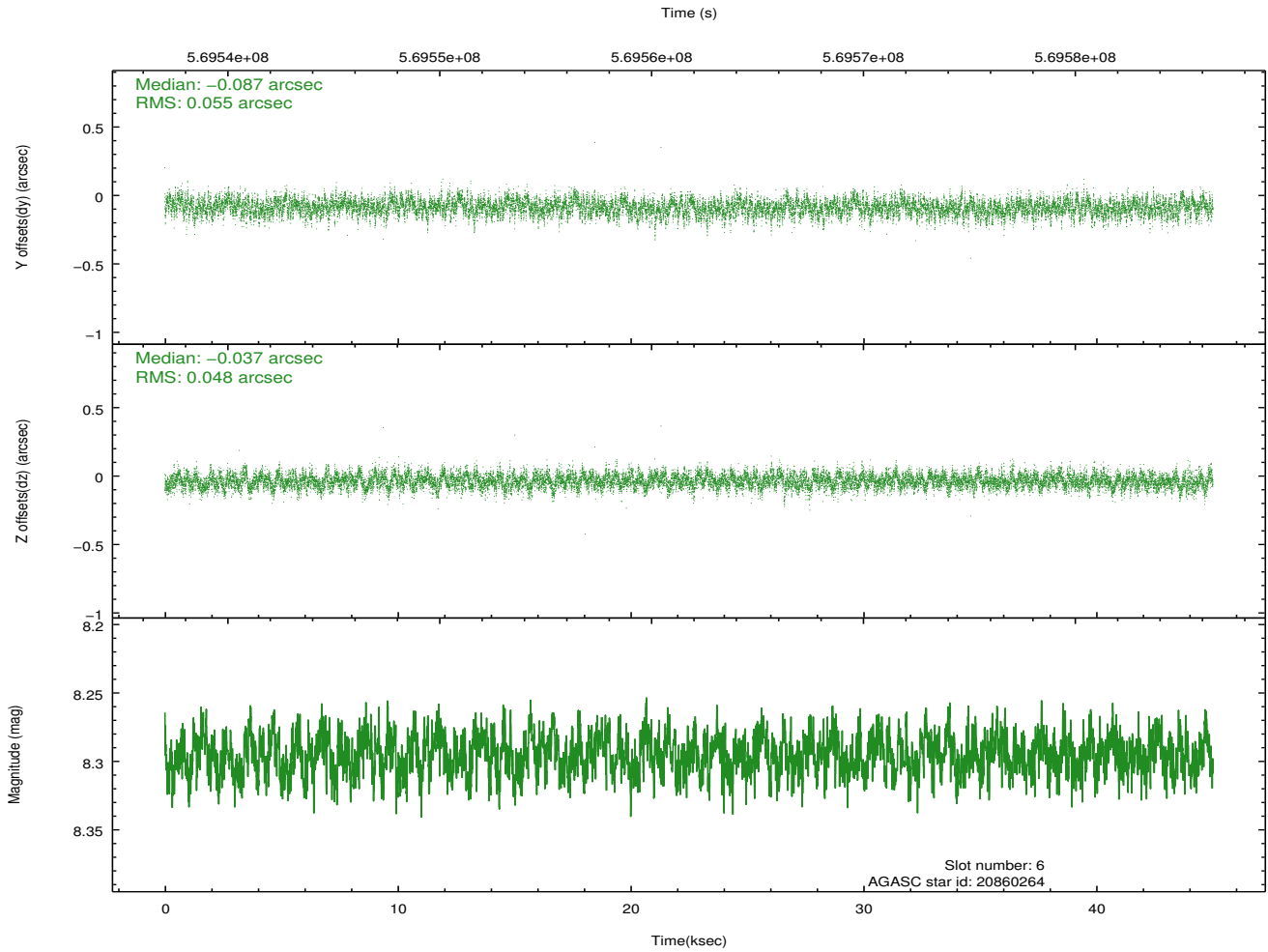
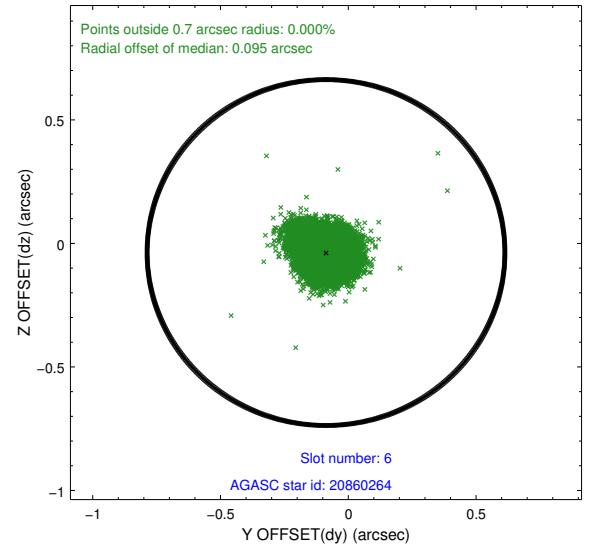
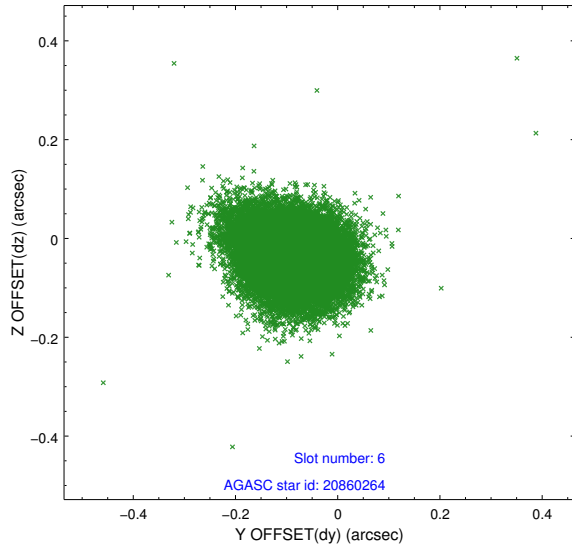
2.4.2 Slot 4



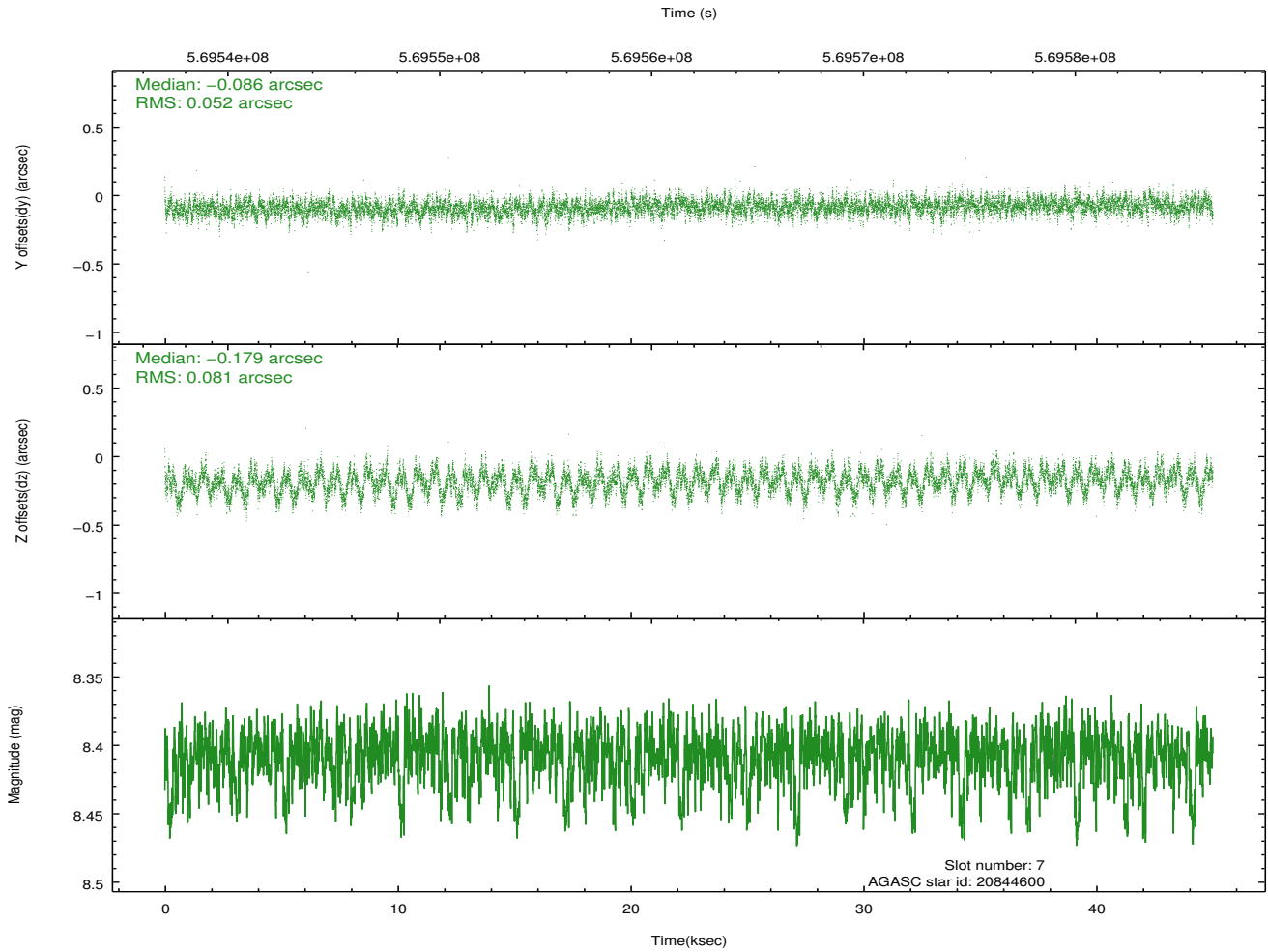
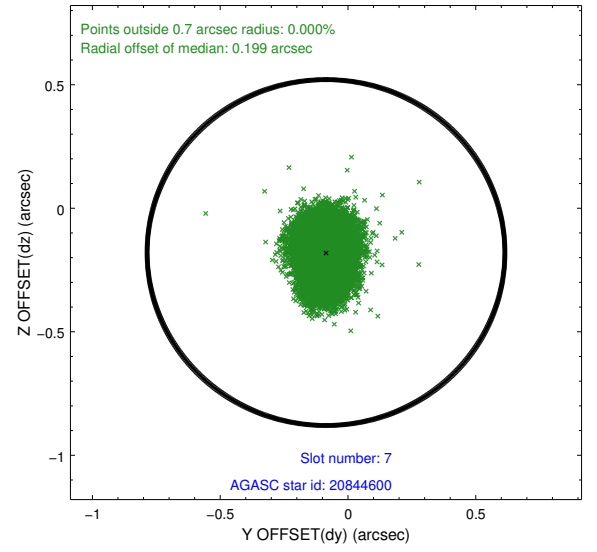
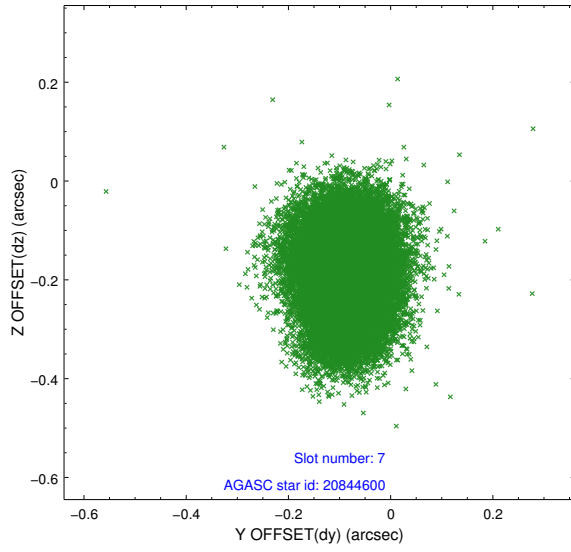
2.4.3 Slot 5



2.4.4 Slot 6

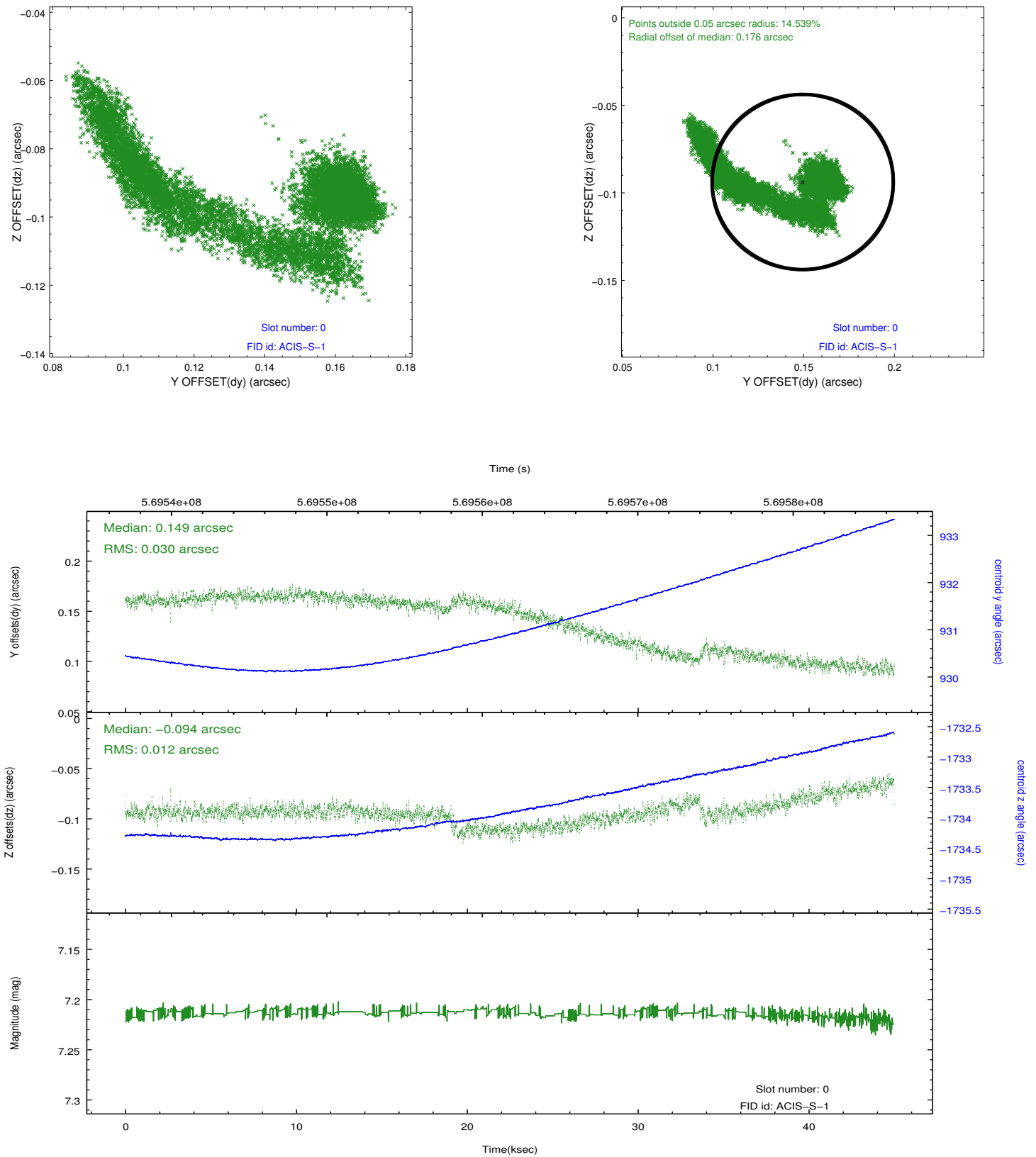


2.4.5 Slot 7

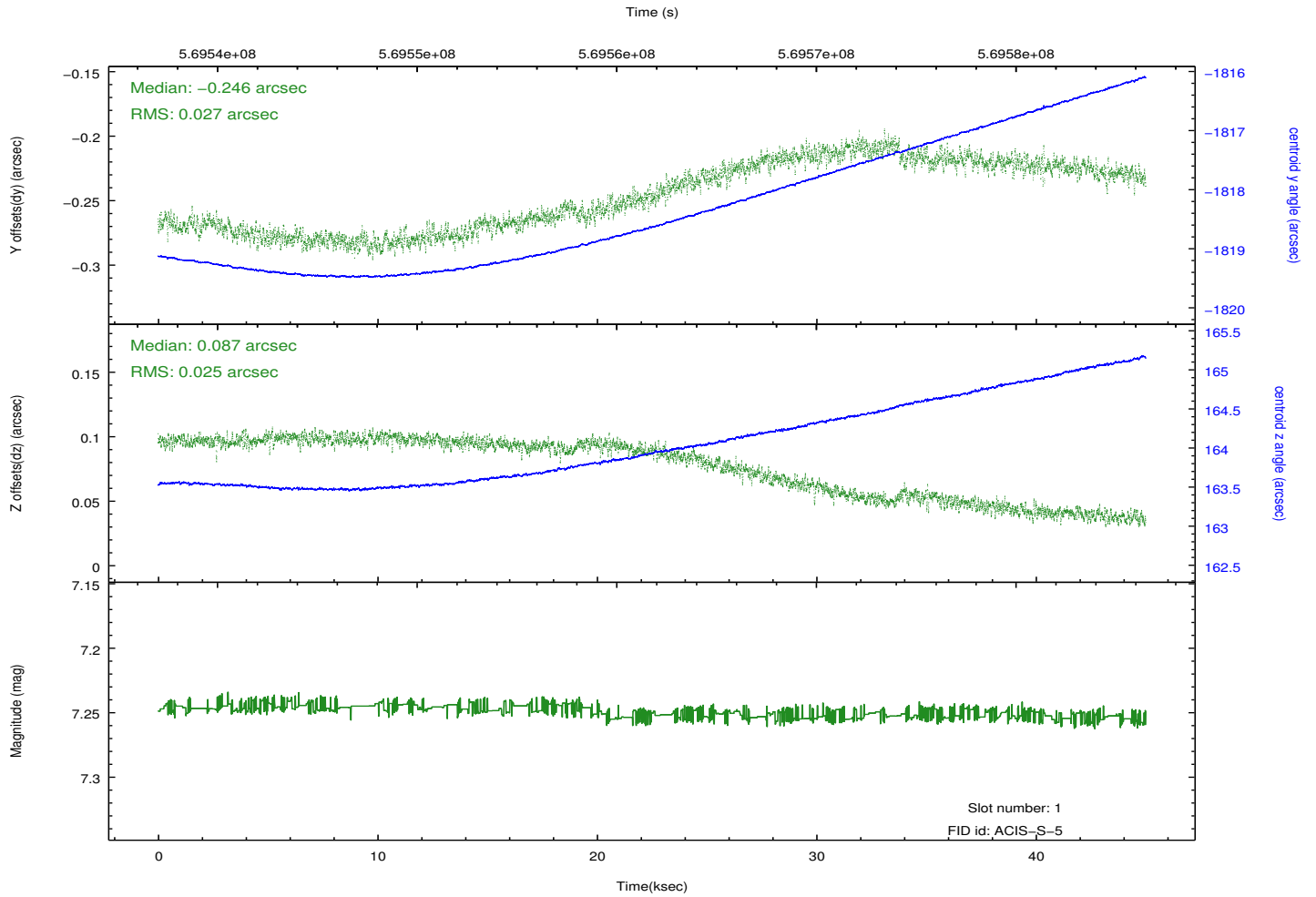
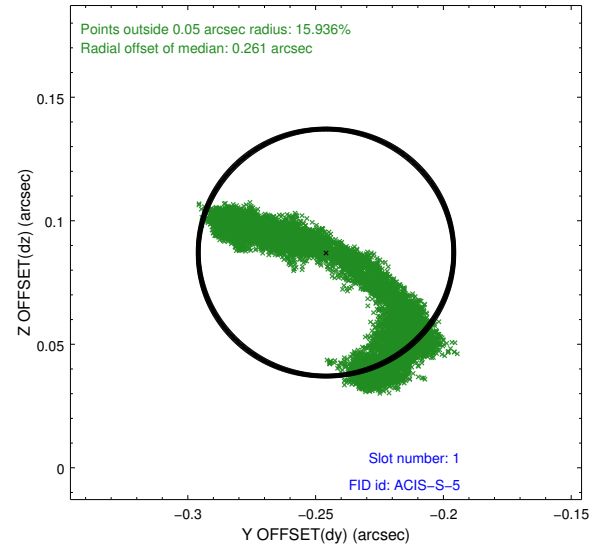
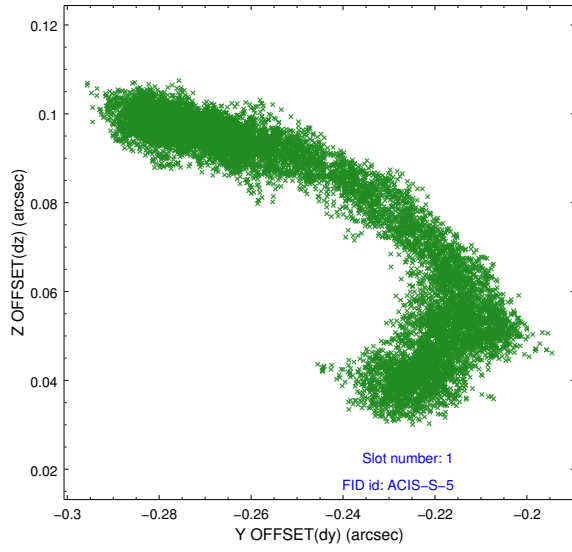


2.5 FID Slots

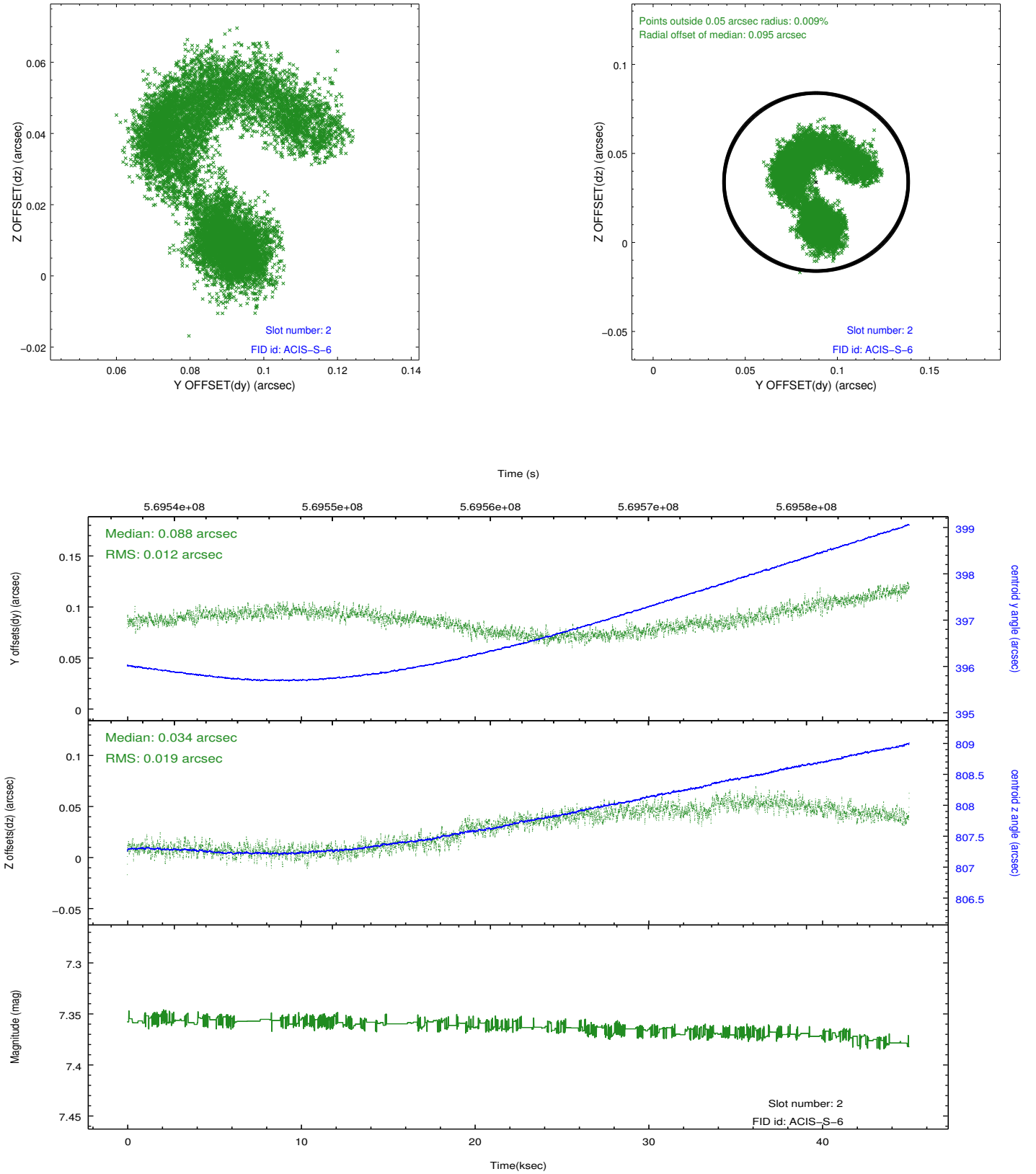
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

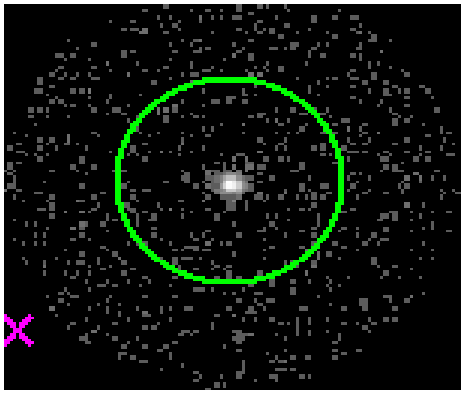


3 Gratings

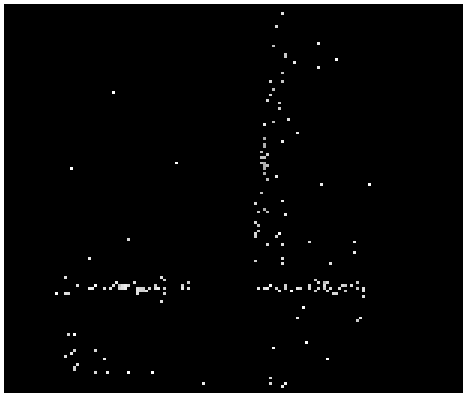
3.1 HEG Arm



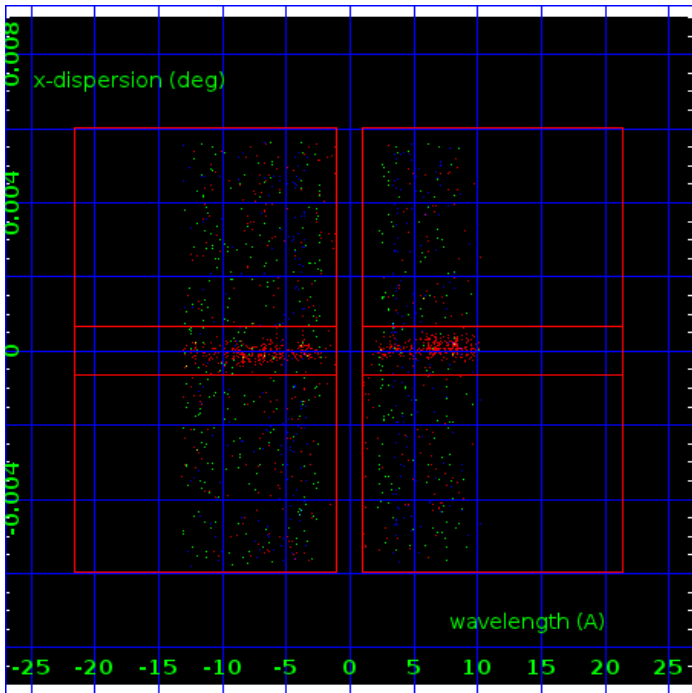
HEG Order Sort 123



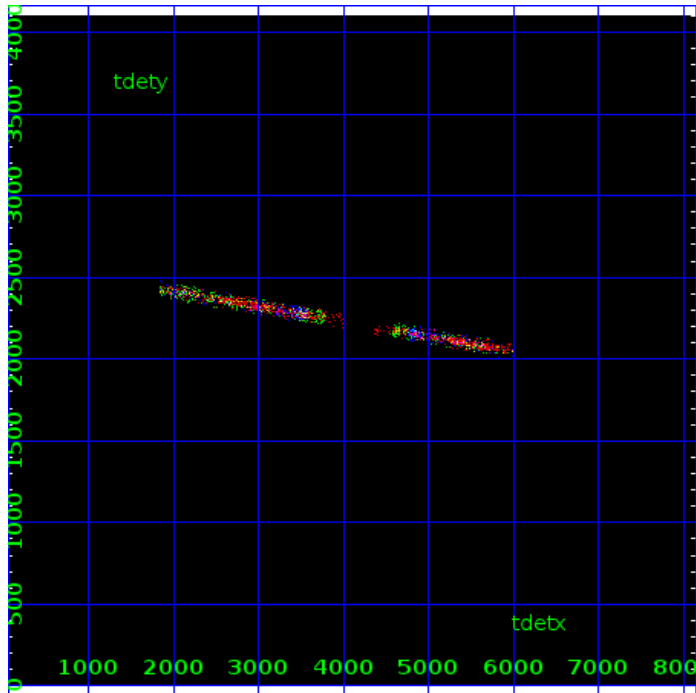
HEG Zero Order



HEG Order Sort ALL

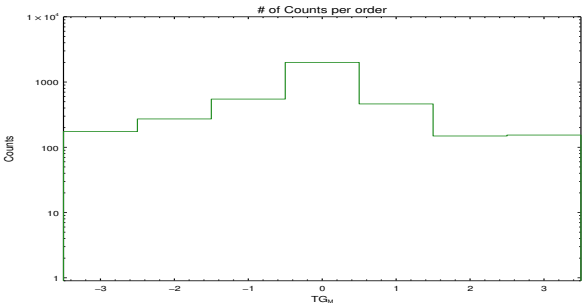


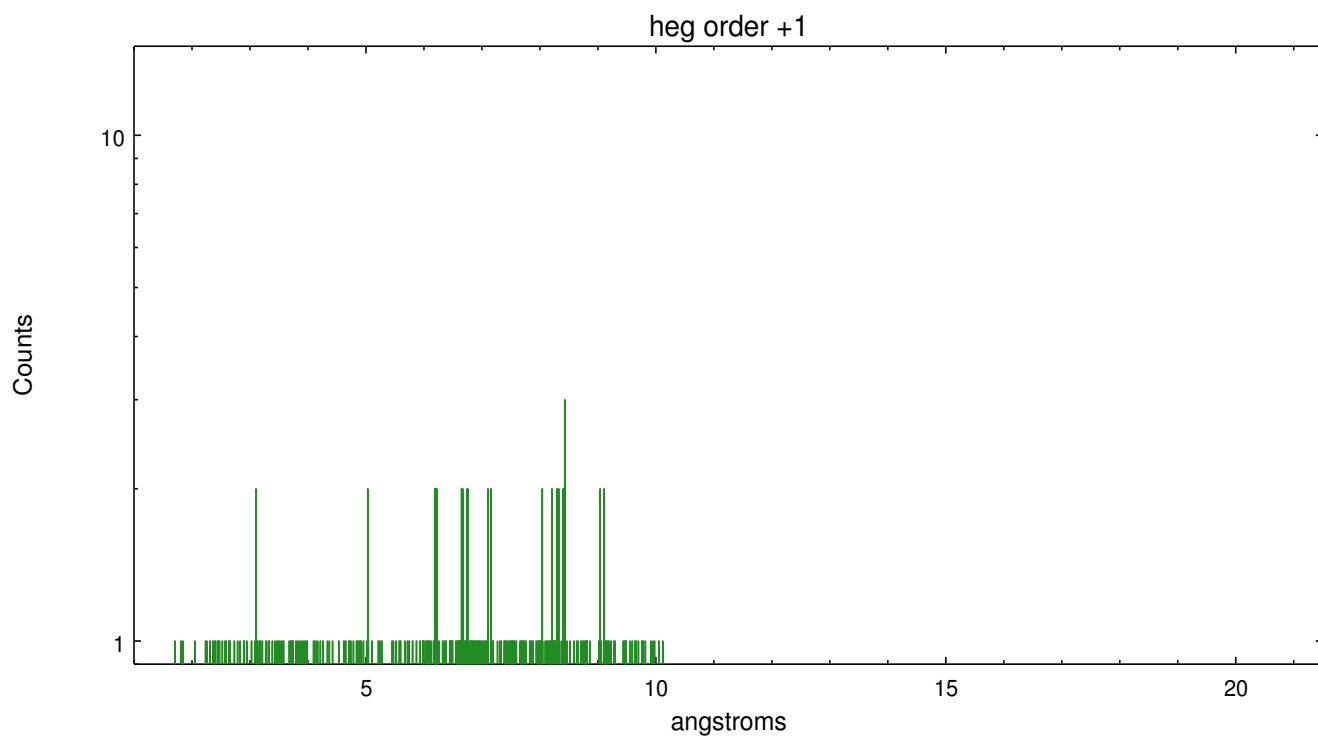
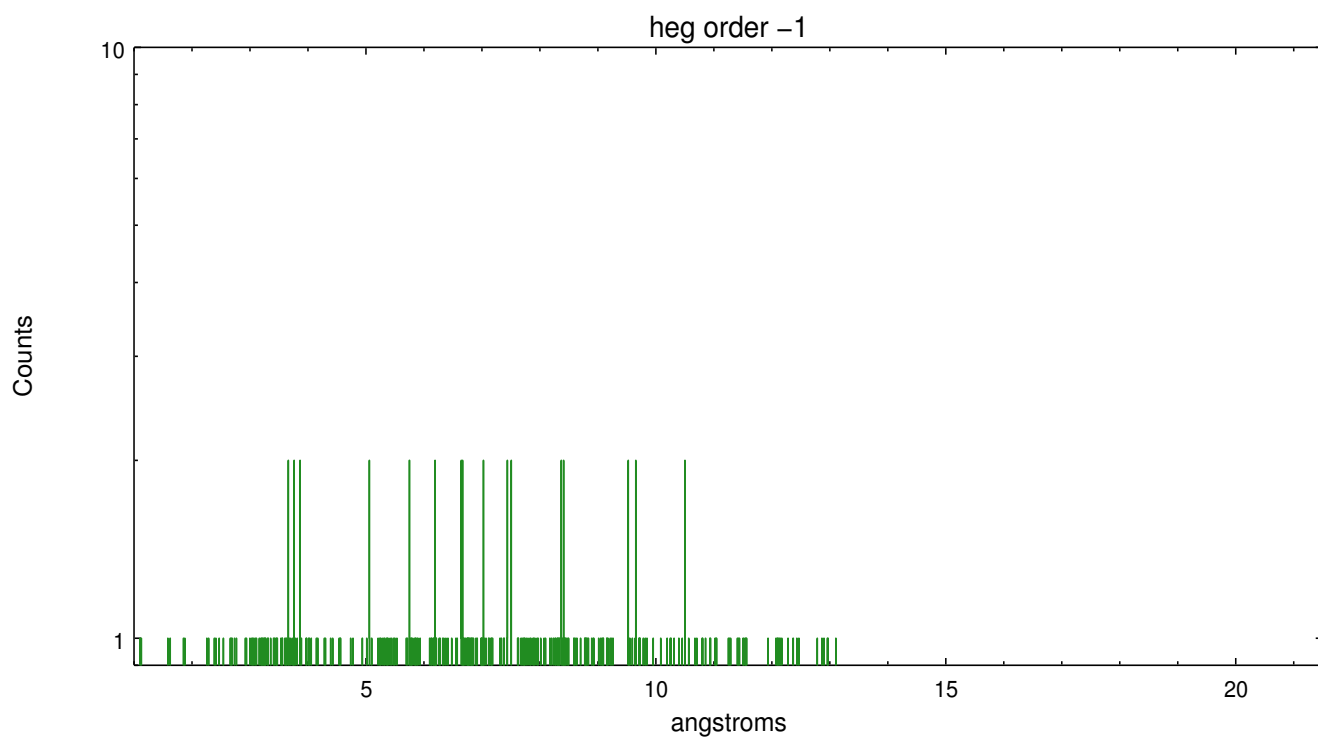
Spot Image HEG



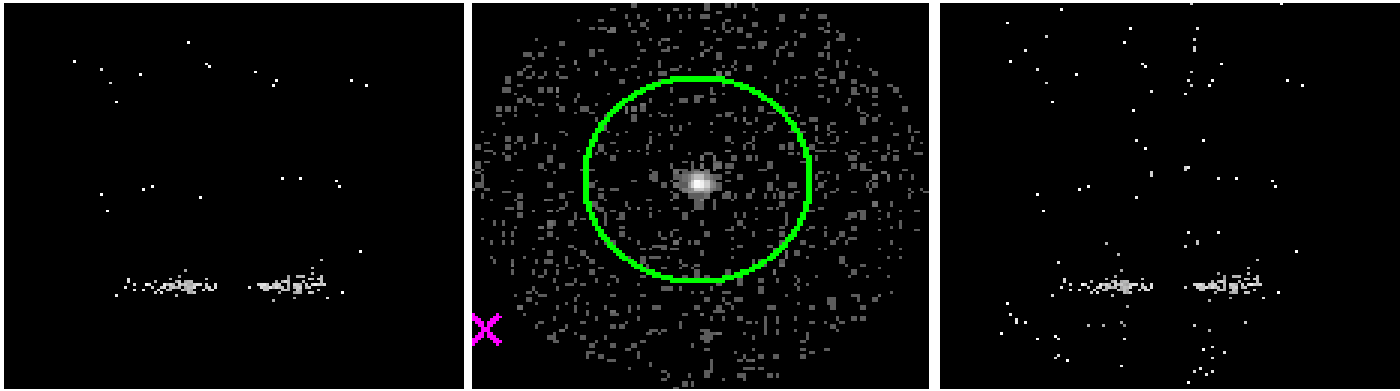
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	174	272	548	2000	462	149	154





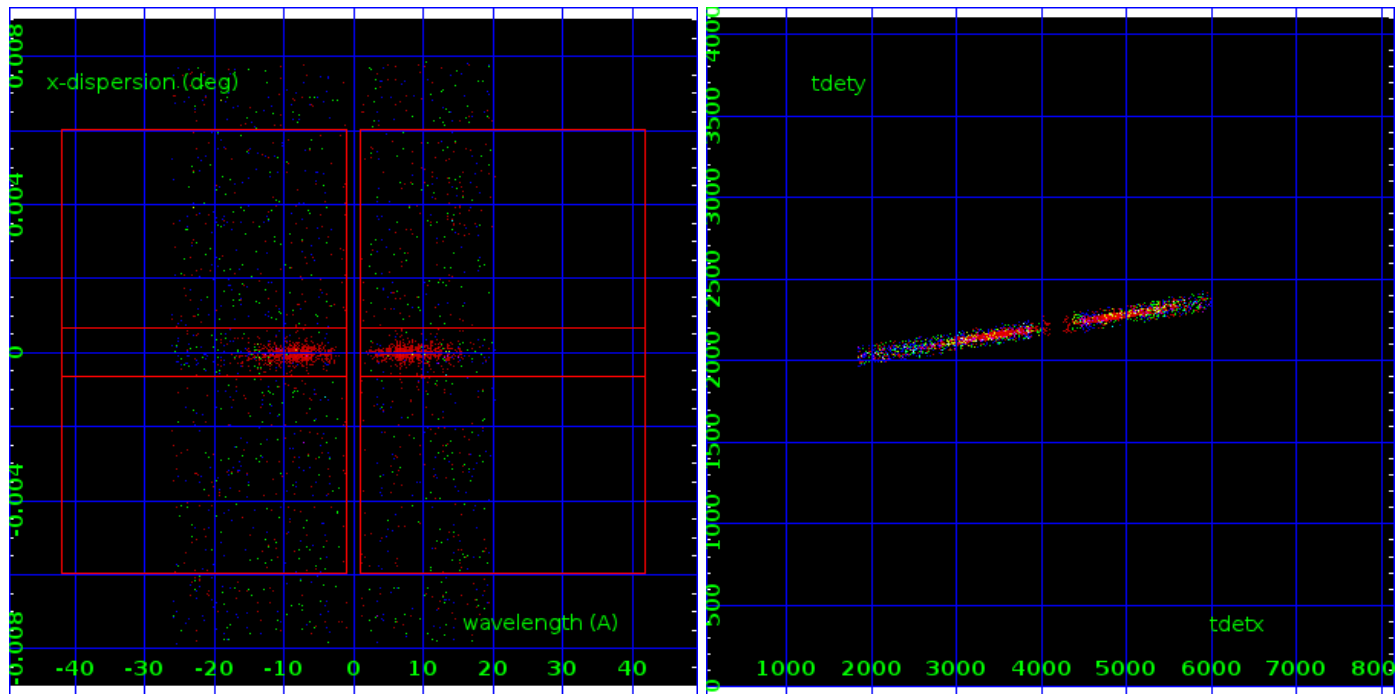
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

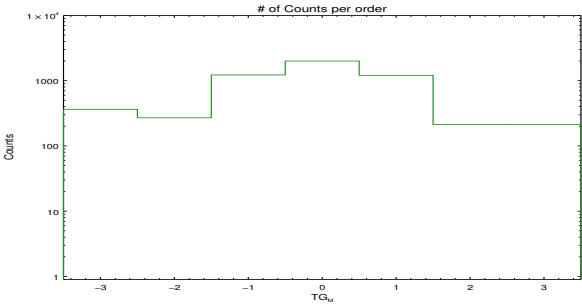
MEG Order Sort ALL

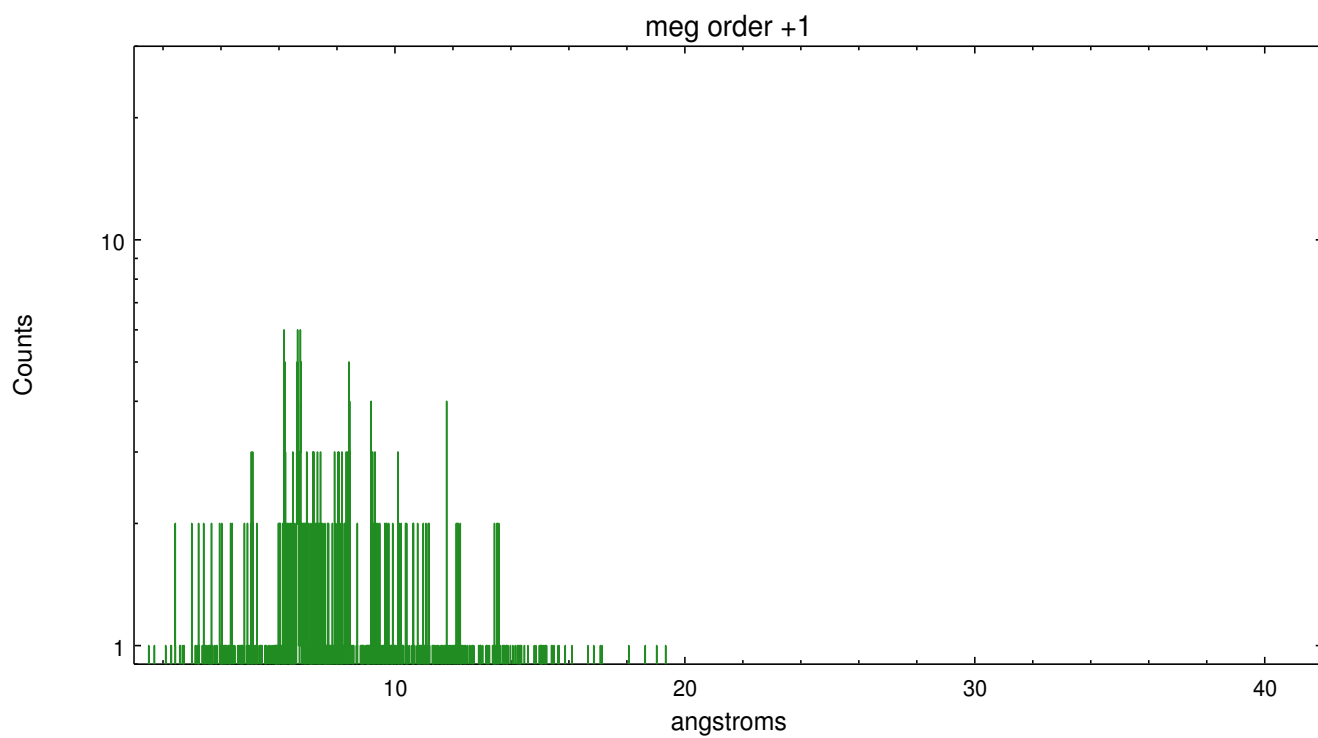
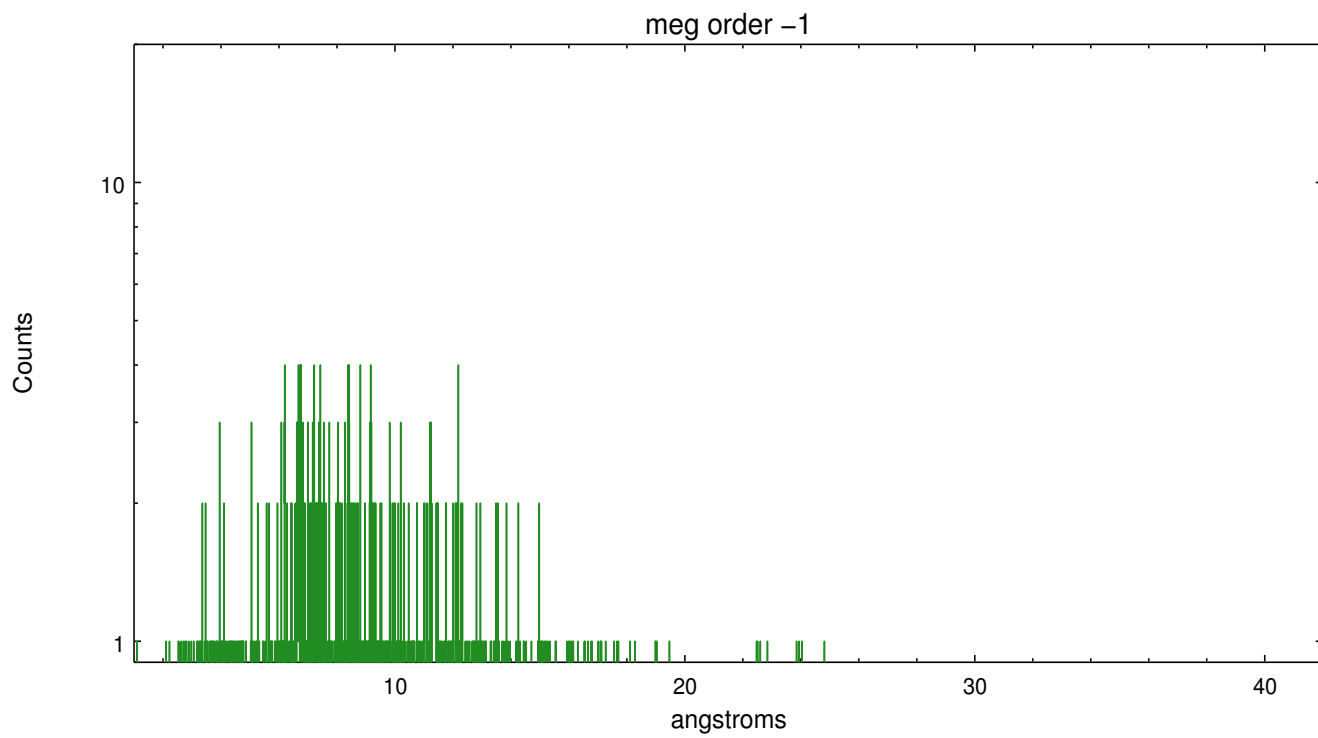


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	364	270	1225	2000	1208	213	212





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.01.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.553200342774

A.2 Comments

Phase constraint met.