

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 17648 - L2 Version 1
Chandra X-Ray Center

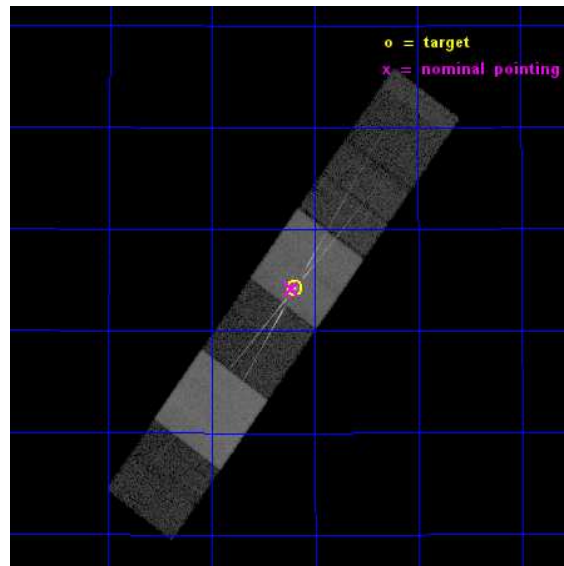
L2 Processing Date : Apr 5 2015

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

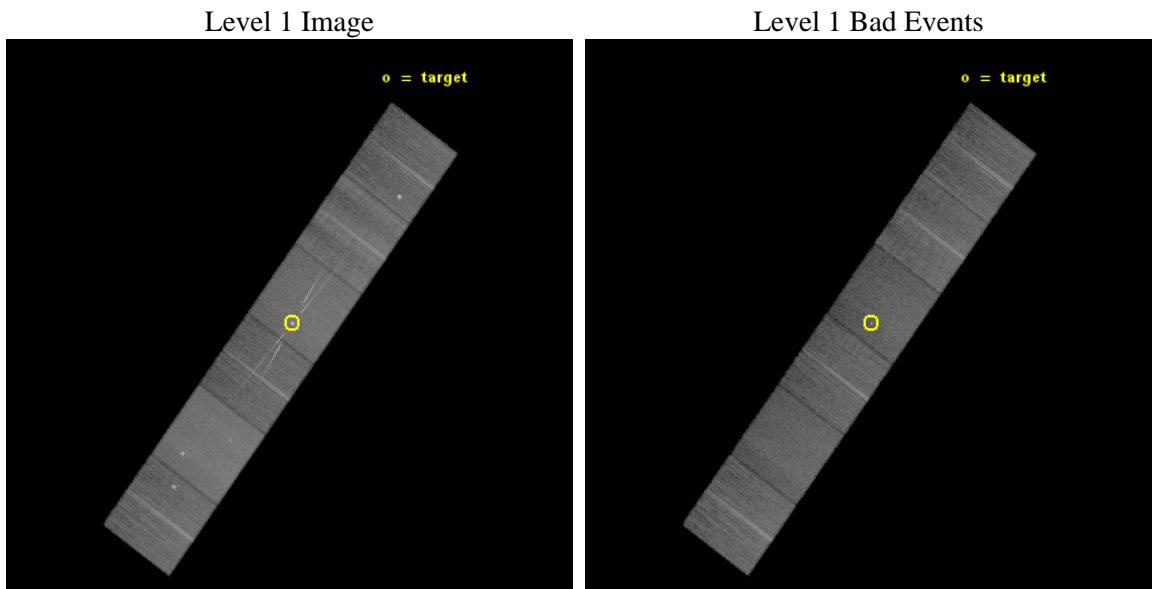
seq_num	300338	Sequence number
obs_id	17648	Observation id
title	GK Persei in the current dwarf-nova-like outburst	Proposal title
observer	Dr. Marina Orio	Principal investigator
object	GK Persei	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	52.8	Observer's specified target RA [deg]
dec_targ	43.904306	Observer's specified target Dec [deg]
ra_nom	52.807296372523	Nominal RA [deg]
dec_nom	43.902897333514	Nominal Dec [deg]
roll_nom	305.98194323138	Nominal Roll [deg]
revision	1	Processing version of data
ontime	34947.200520754	Sum of GTIs [s]
livetime	34504.678025082	Livetime [s]
ontime4	34943.959560394	Sum of GTIs [s]
ontime5	34947.200520754	Sum of GTIs [s]
ontime6	34947.200520754	Sum of GTIs [s]
ontime7	34947.200520754	Sum of GTIs [s]
ontime8	34947.200520754	Sum of GTIs [s]
ontime9	34947.200520754	Sum of GTIs [s]
l2events	315632	Number of level 2 events



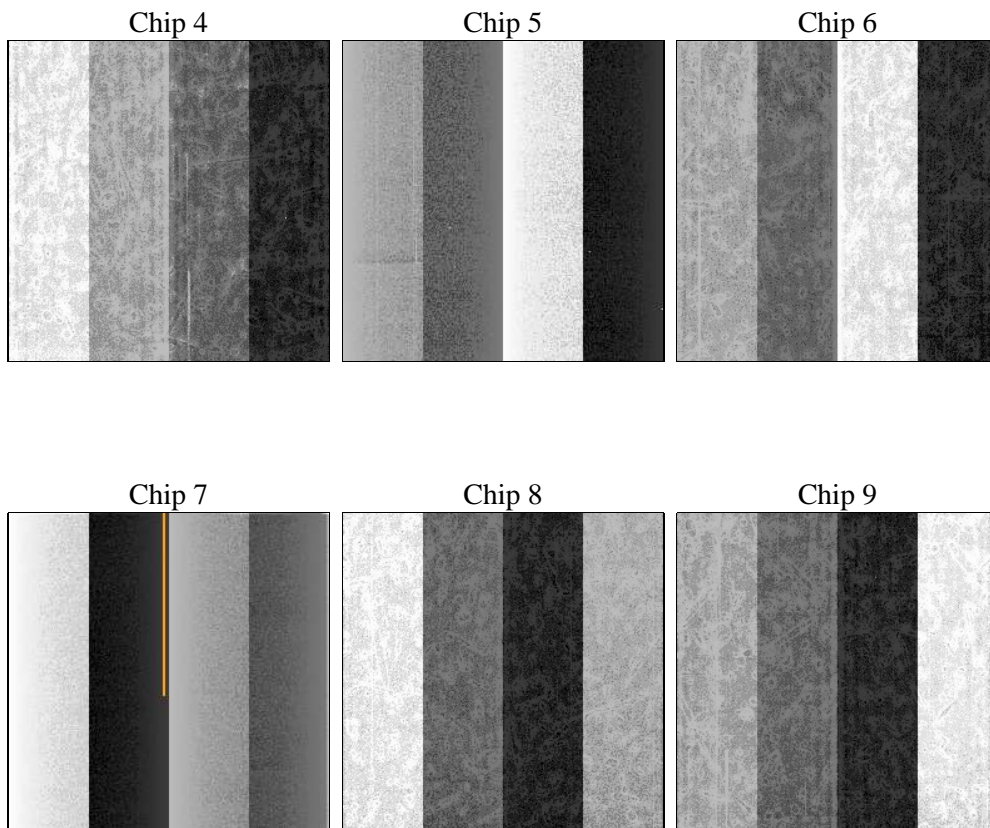
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	34947.200520754	Sum of GTIs [s]
caldbver	4.6.7	 	ontime4	34943.959560394	Sum of GTIs [s]
date	2015-04-05T03:32:32	Date and time of file creation	ontime5	34947.200520754	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	34947.200520754	Sum of GTIs [s]
			ontime7	34947.200520754	Sum of GTIs [s]
			ontime8	34947.200520754	Sum of GTIs [s]
			ontime9	34947.200520754	Sum of GTIs [s]
			l1events	1275640	Number of level 1 events
			tgmethod	FINDZO	Method used to create src1a file
			z0_pos	(4133.35 4105.36)	src1a sky pixel position

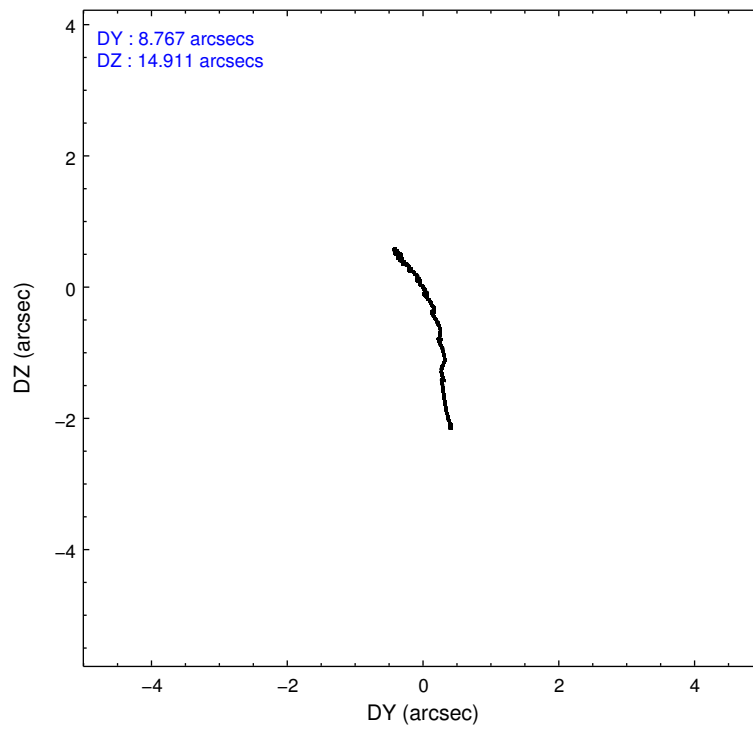
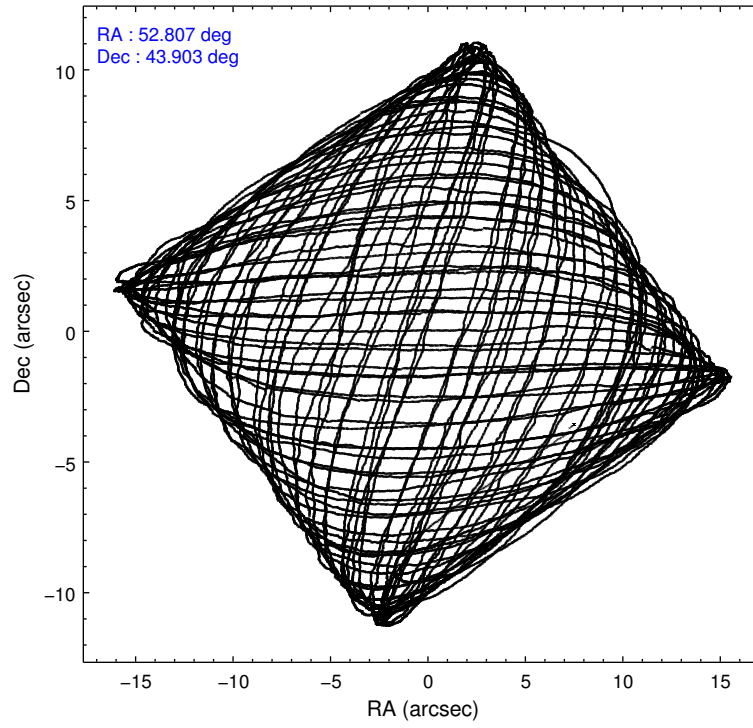
2.1.4 Events

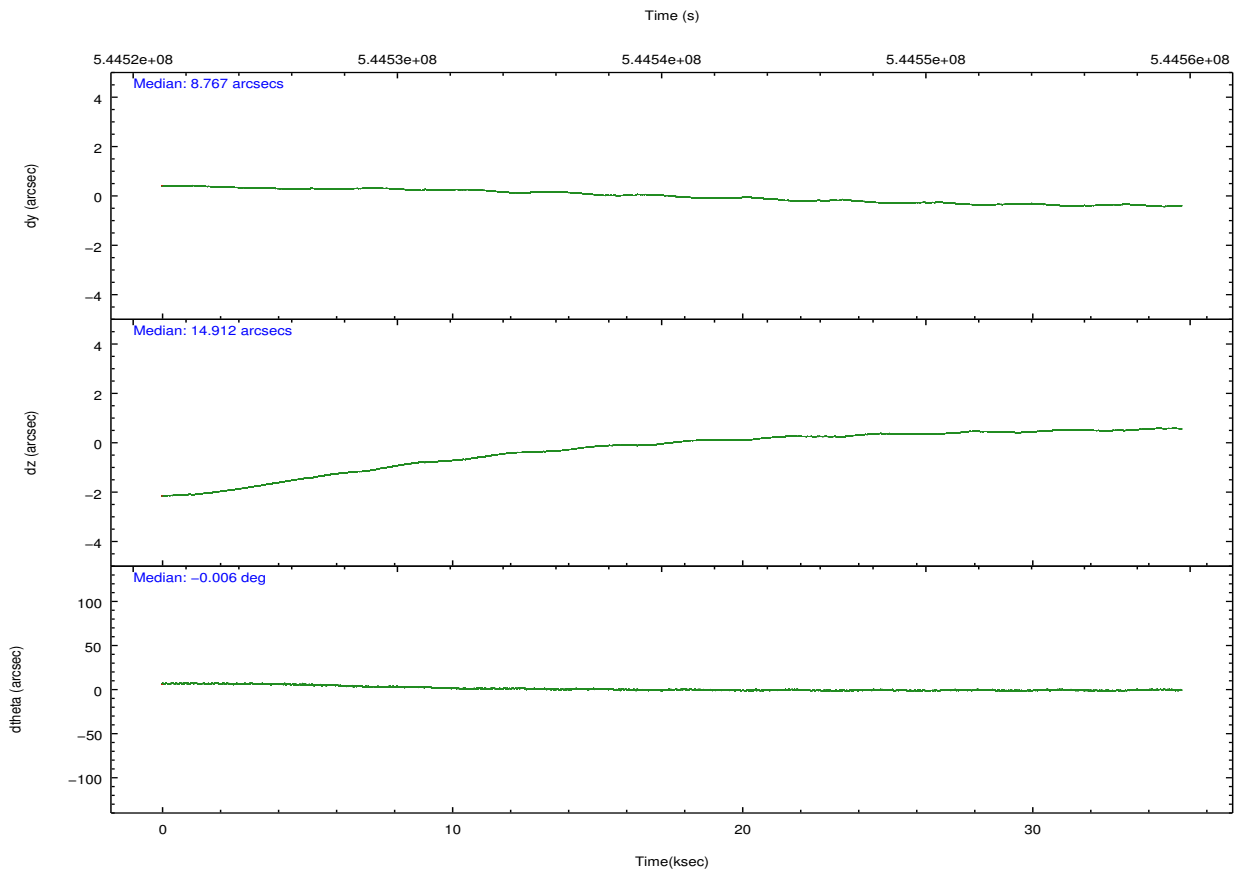
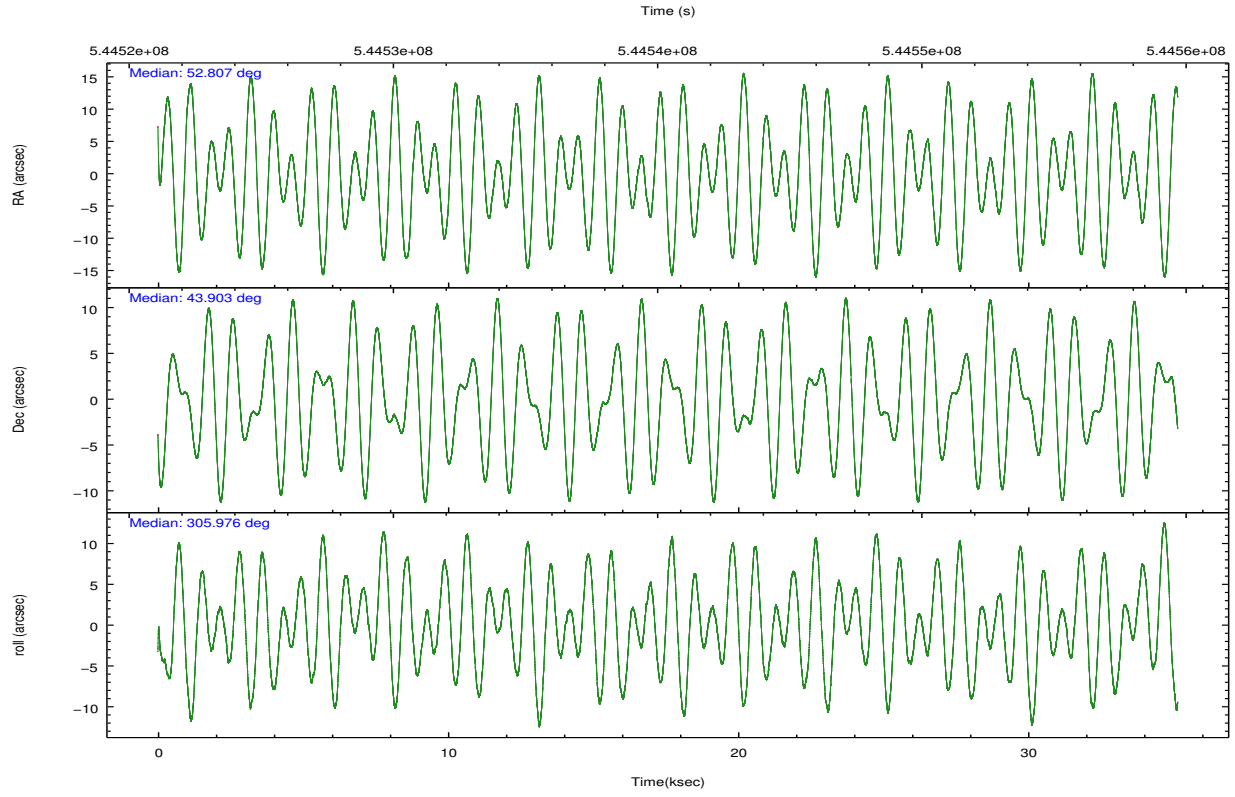
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	193978	268342	176094	243806	221964	171456	grade 0 events	9842	9149	11344	12198	17507	11646
rejected events	171249	140259	148340	129630	162677	146265		5%	3%	6%	5%	7%	6%
rejected %	88%	52%	84%	53%	73%	85%	grade 1 events	189	611	103	527	166	133
								0%	0%	0%	0%	0%	0%
							grade 2 events	4968	39986	5935	24139	14056	4639
								2%	14%	3%	9%	6%	2%
							grade 3 events	2109	4129	2355	9423	5951	2138
								1%	1%	1%	3%	2%	1%
							grade 4 events	2094	4071	2345	9215	5792	2109
								1%	1%	1%	3%	2%	1%
							grade 5 events	8674	19155	8405	23433	12319	9250
								4%	7%	4%	9%	5%	5%
							grade 6 events	3718	70755	5778	59208	15984	4662
								1%	26%	3%	24%	7%	2%
							grade 7 events	162384	120486	139829	105663	150189	136879
								83%	44%	79%	43%	67%	79%

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	52.772285	52.80729637252252	CCD I2 on	N	N
[deg] Pointing Dec	43.913727	43.90289733351351	CCD I3 on	N	N
[deg] Pointing Roll	305.849597	305.9819432313839	CCD S0 on	Y	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	544522948.184000	544521662.20272	CCD S5 on	O1	Y
Observation start date	2015-04-04T08:21:21	2015-04-04T08:01:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	544557948.184000	544558957.85481	On-chip summing requested	N	N
Observation end date	2015-04-04T18:04:41	2015-04-04T18:22:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



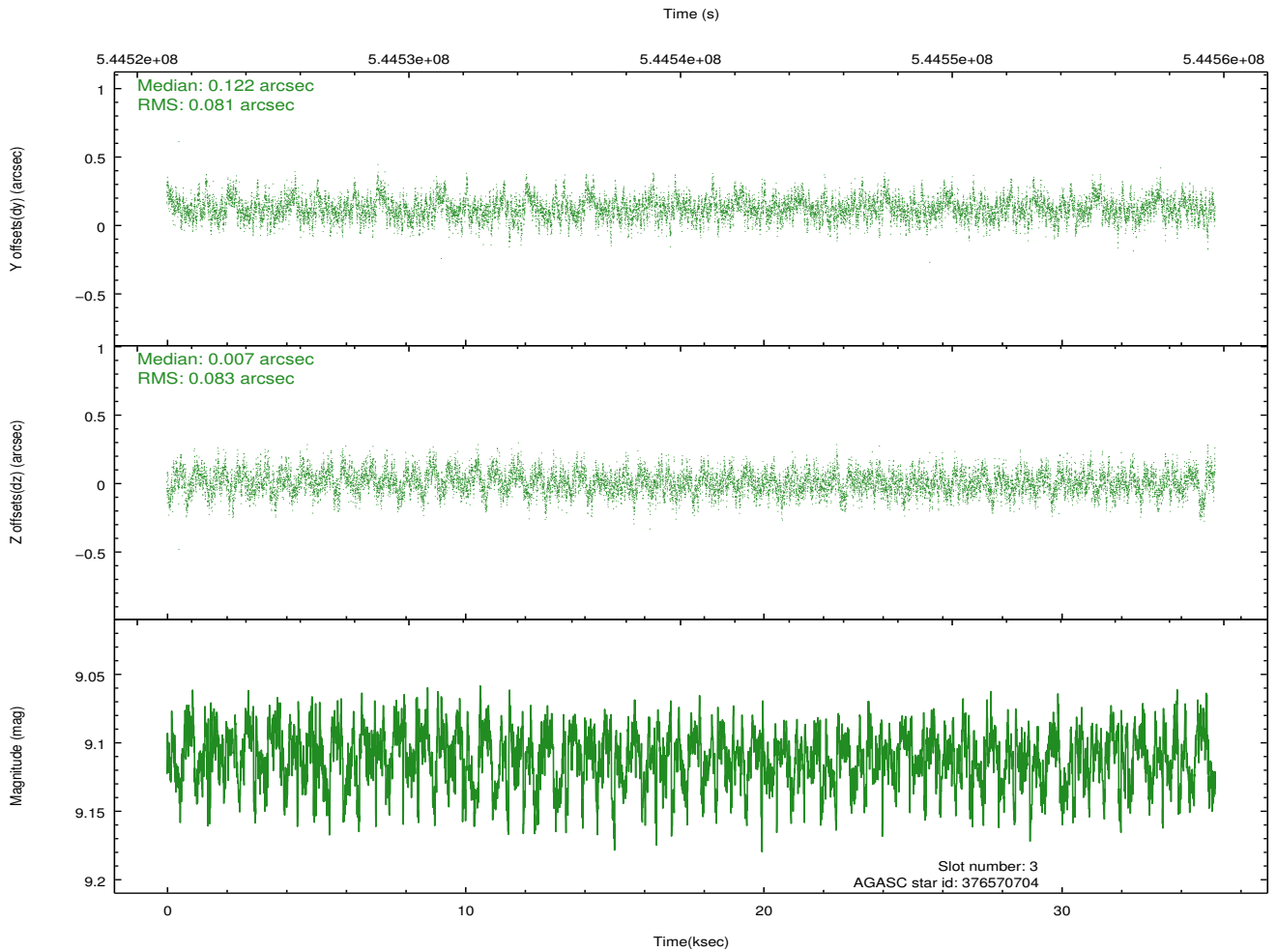
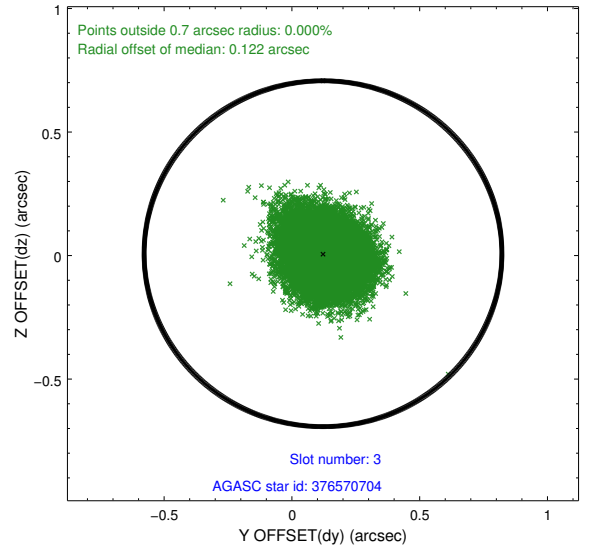
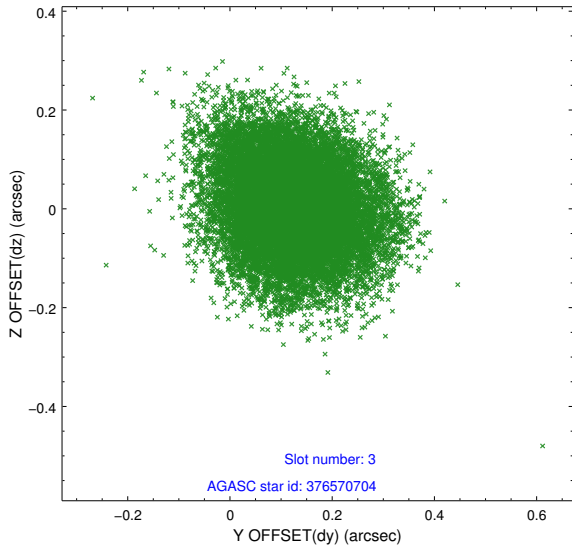


Slot Statistics

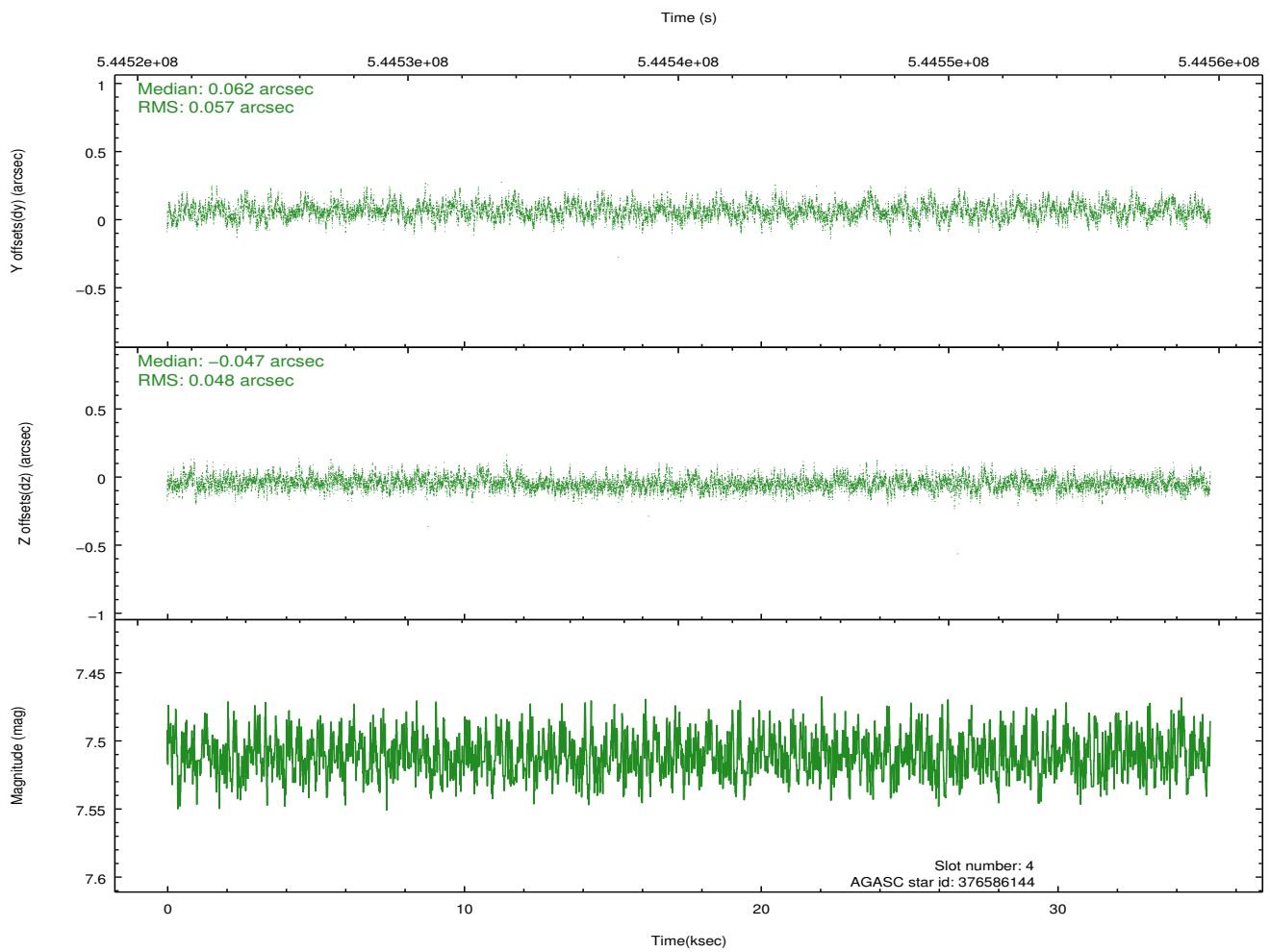
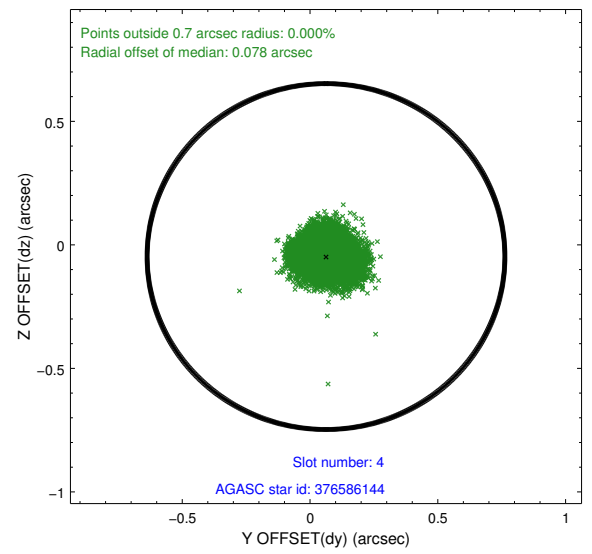
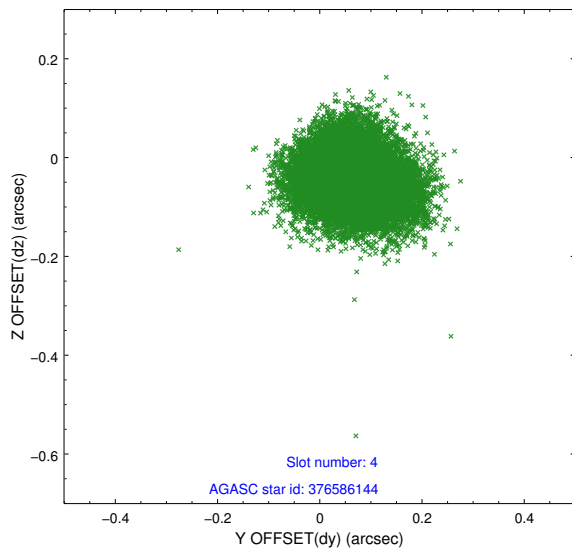
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.11	8575	0.035	-0.015	0.022	0.035	0.000000	0.000000	934.53	-1731.56
1	FID		ACIS-S-4	7.11	8575	0.168	-0.003	0.020	0.028	0.000000	0.000000	2152.07	172.57
2	FID		ACIS-S-5	7.14	8575	-0.235	0.030	0.020	0.030	0.000000	0.000000	-1814.58	166.21
3	GUIDE	used	376570704	9.11	17145	0.122	0.007	0.123	0.201	52.383963	43.230715	1395.72	-2263.97
4	GUIDE	used	376586144	7.51	17148	0.062	-0.047	0.079	0.128	52.137991	43.753592	-503.28	-1671.10
5	GUIDE	used	376701952	9.14	17130	-0.065	0.188	0.104	0.170	52.832333	44.654698	-2072.22	1686.99
6	GUIDE	used	376708016	7.22	17150	-0.105	-0.187	0.083	0.135	53.836874	43.847951	1796.05	2112.29
7	GUIDE	used	376718080	8.43	17141	-0.019	0.038	0.074	0.122	52.906904	44.533699	-1606.86	1587.48

2.4 Star Slots

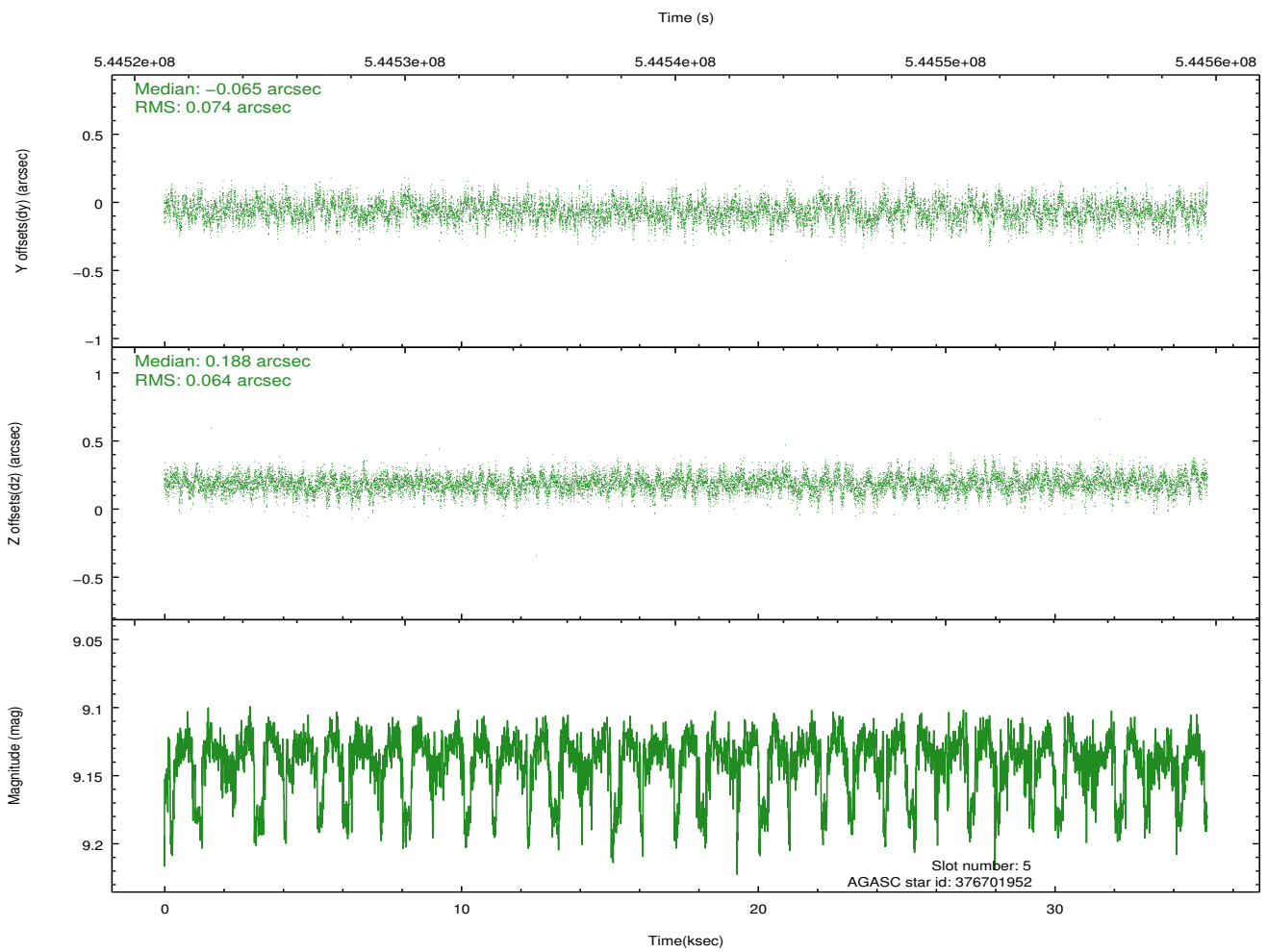
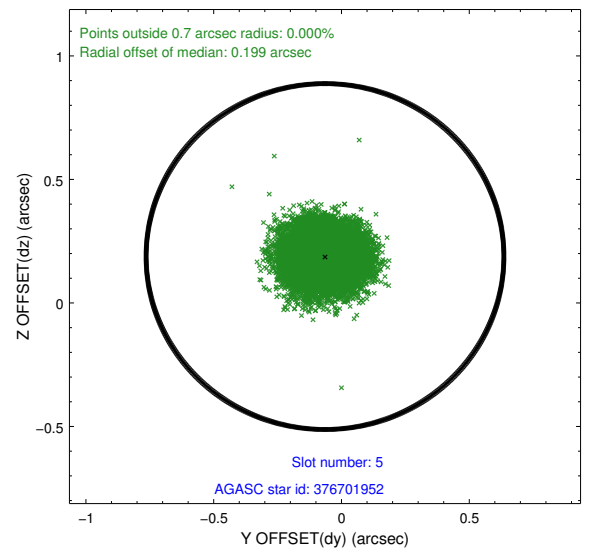
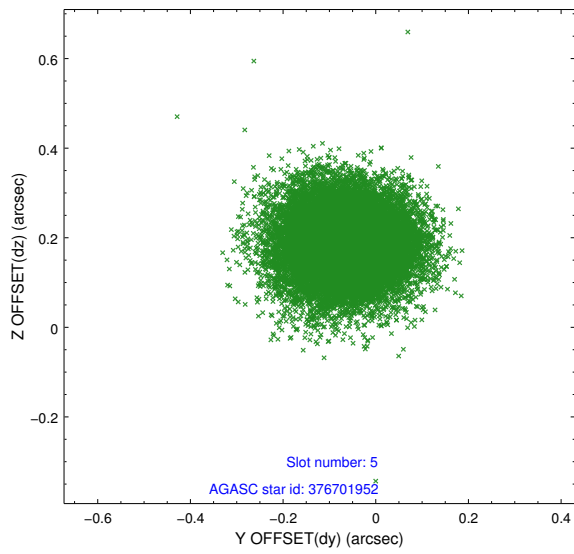
2.4.1 Slot 3



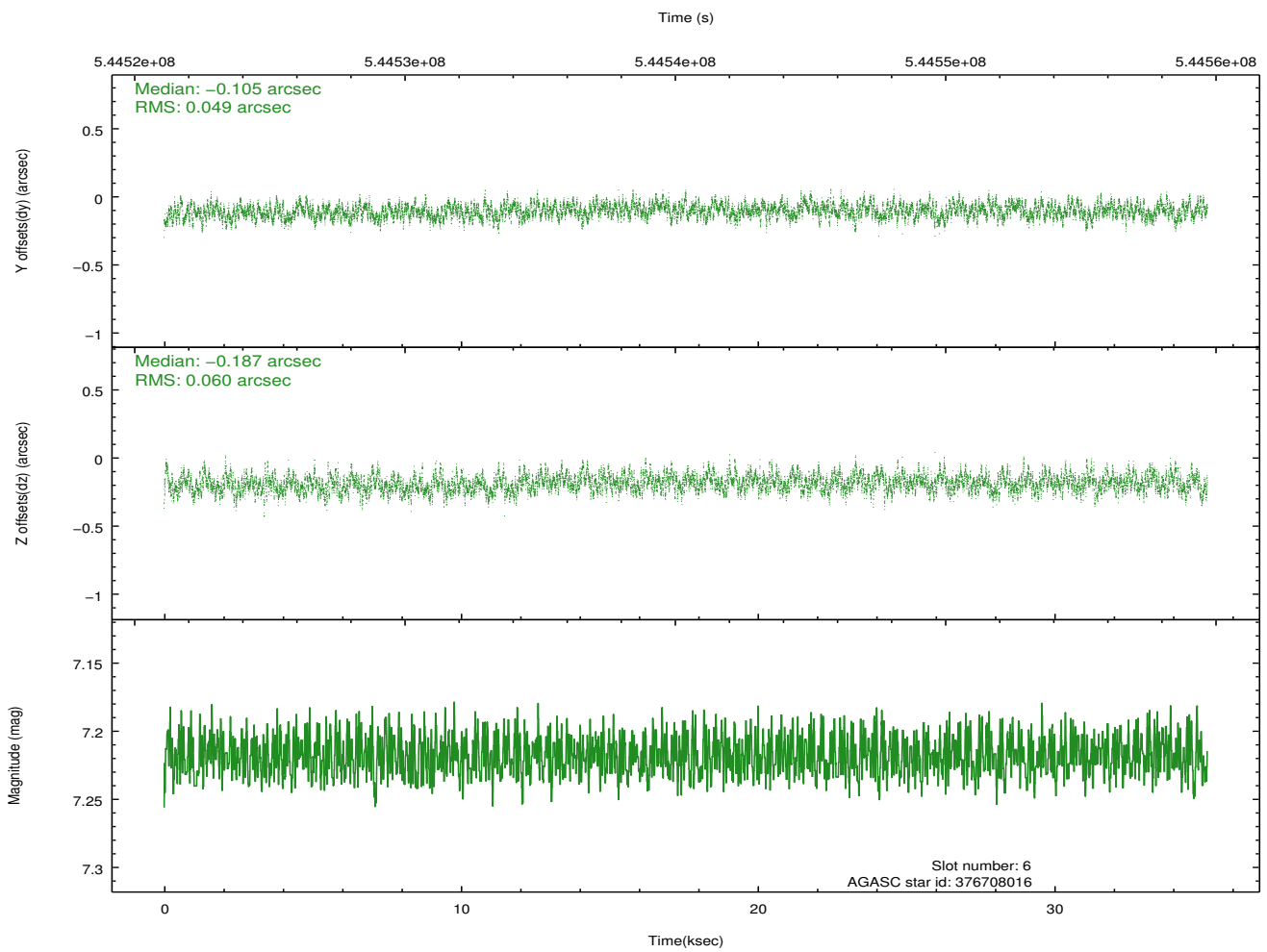
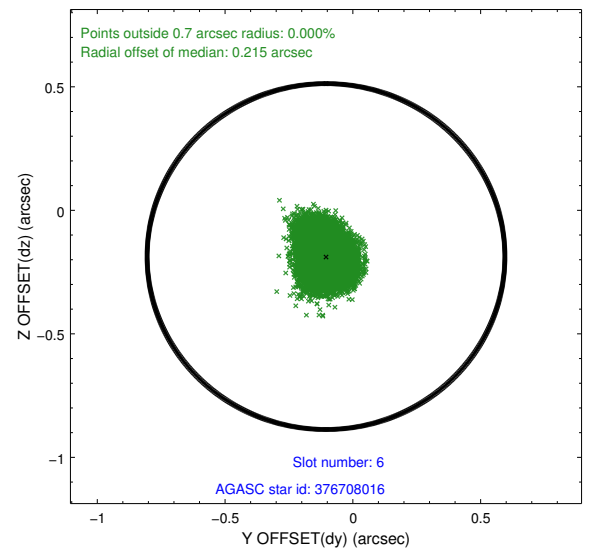
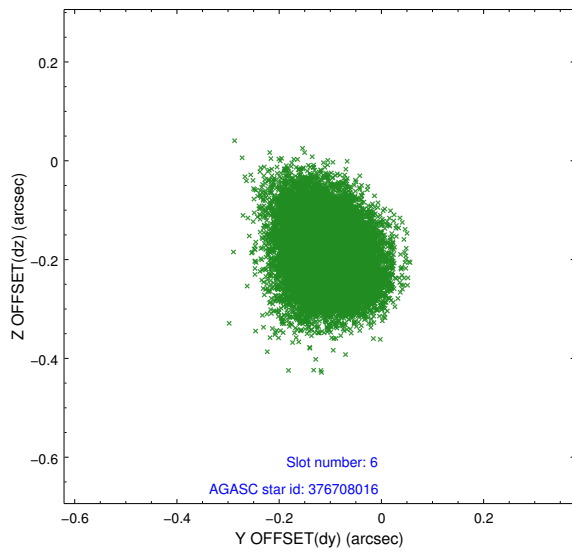
2.4.2 Slot 4



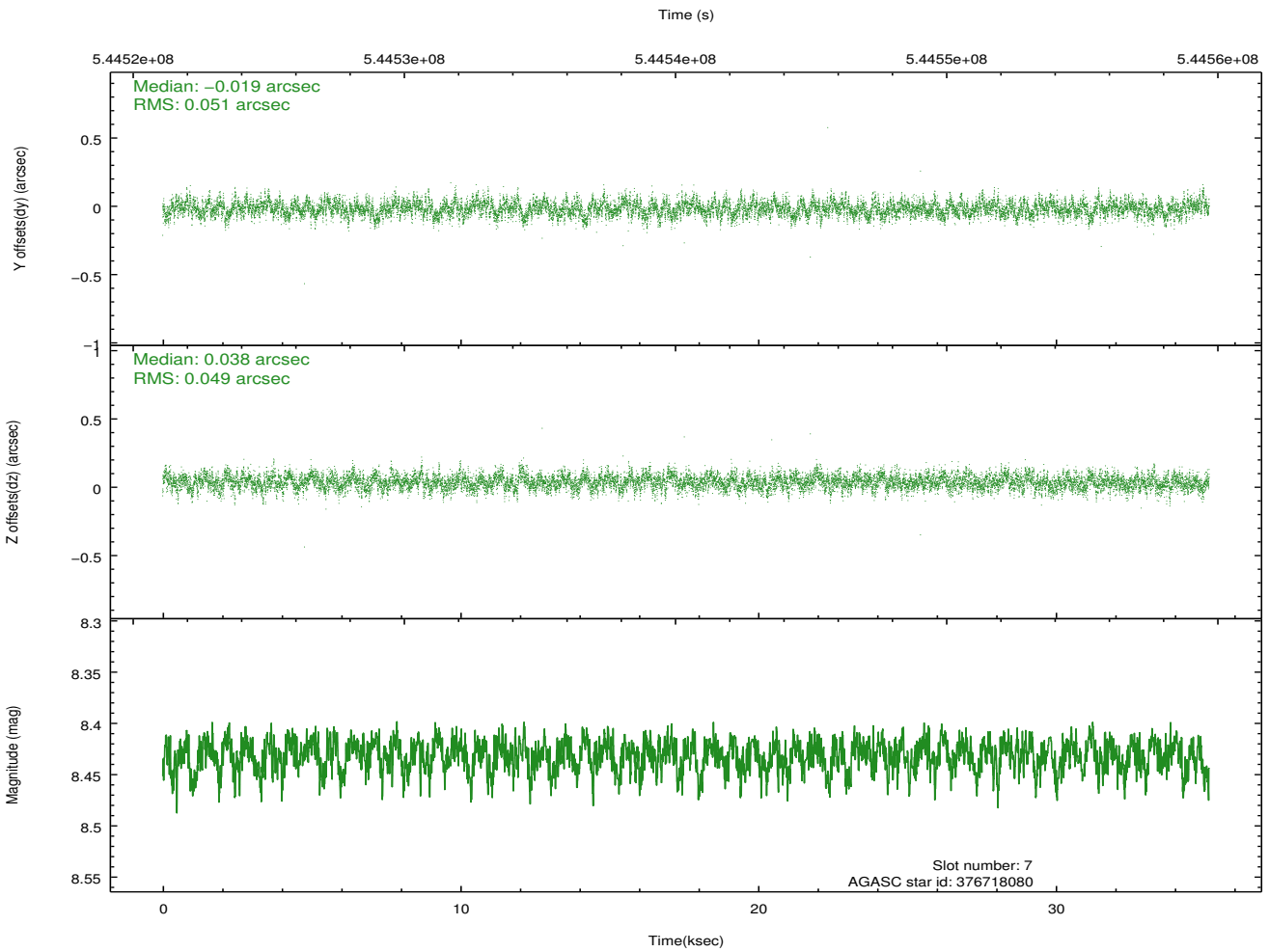
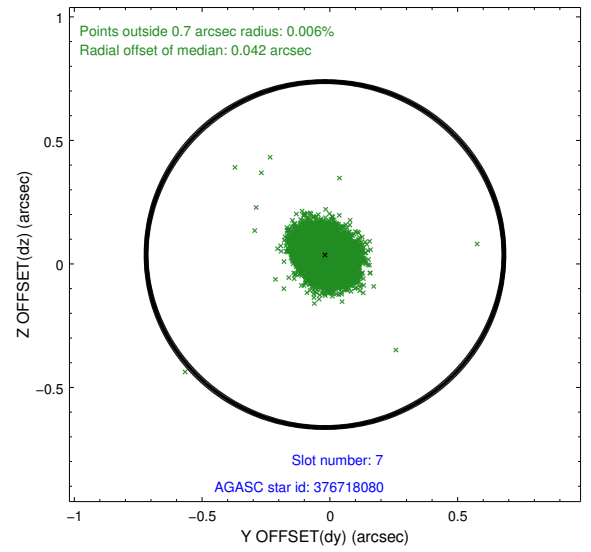
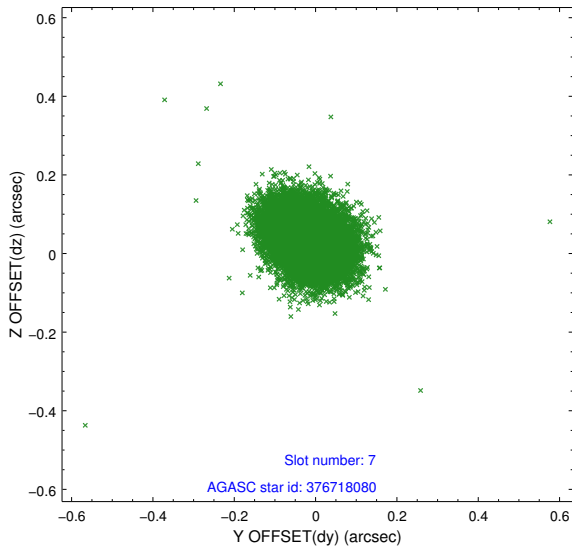
2.4.3 Slot 5



2.4.4 Slot 6

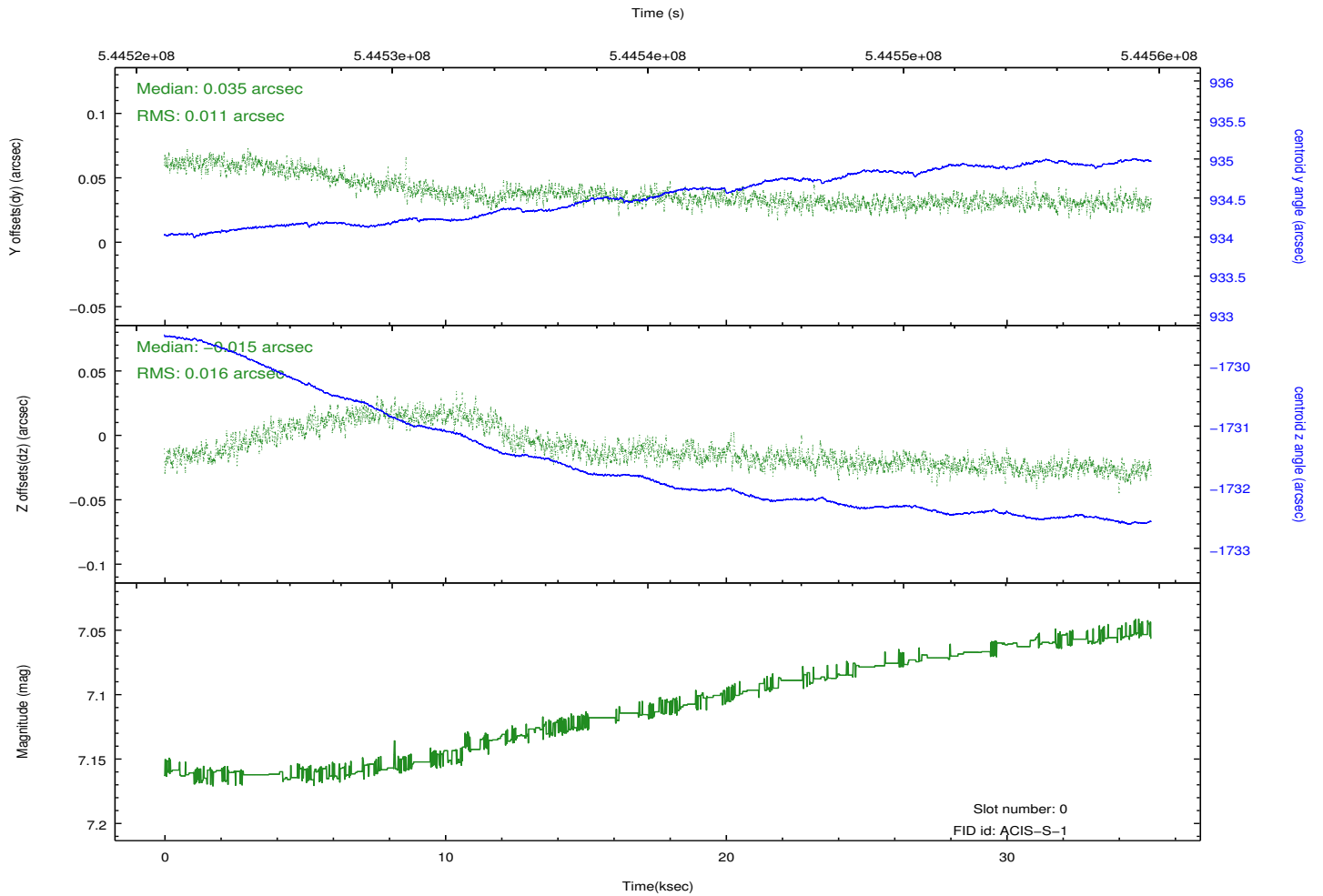
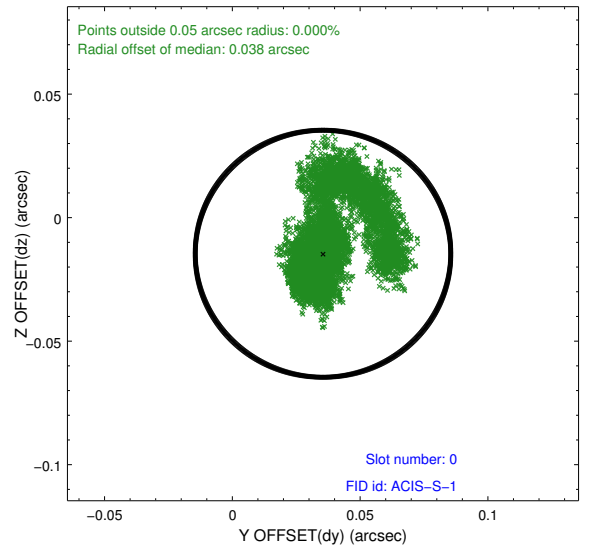
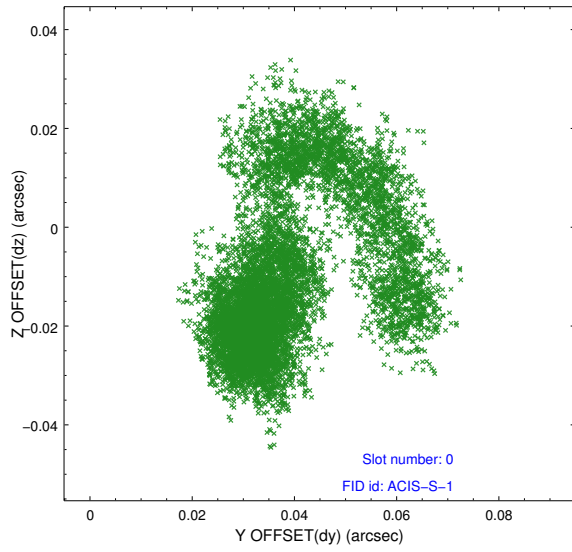


2.4.5 Slot 7

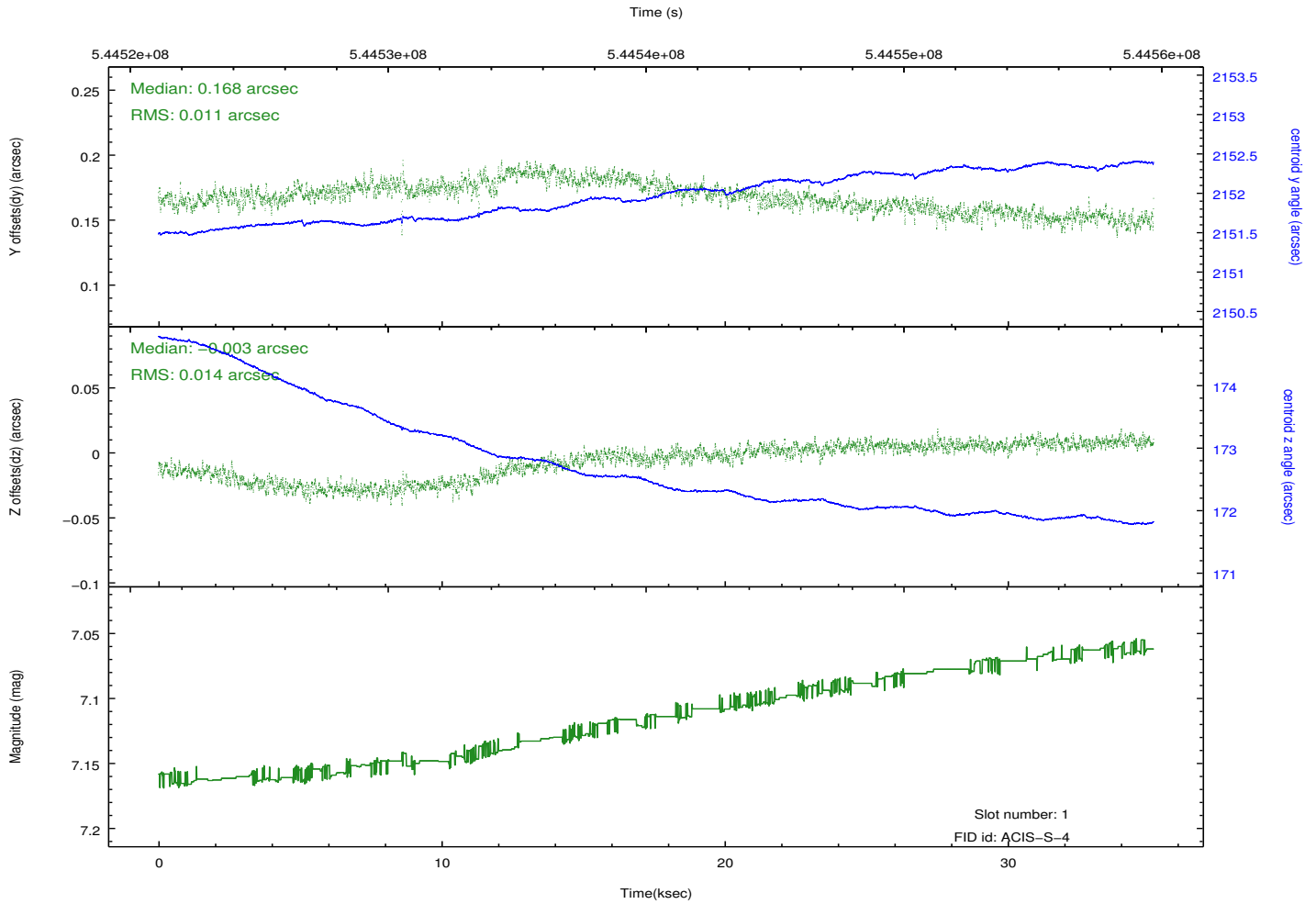
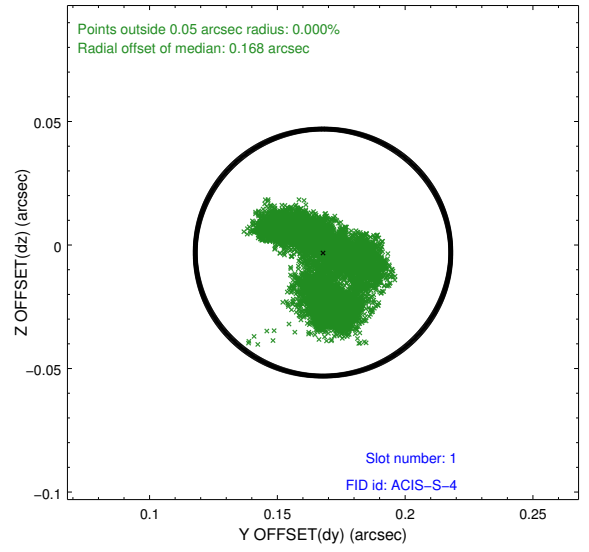
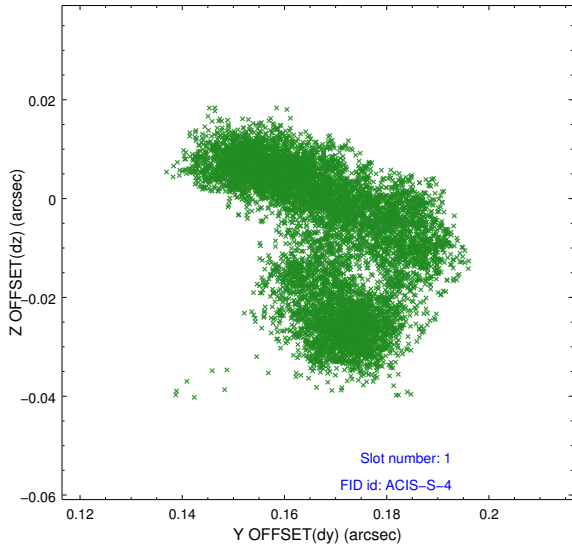


2.5 FID Slots

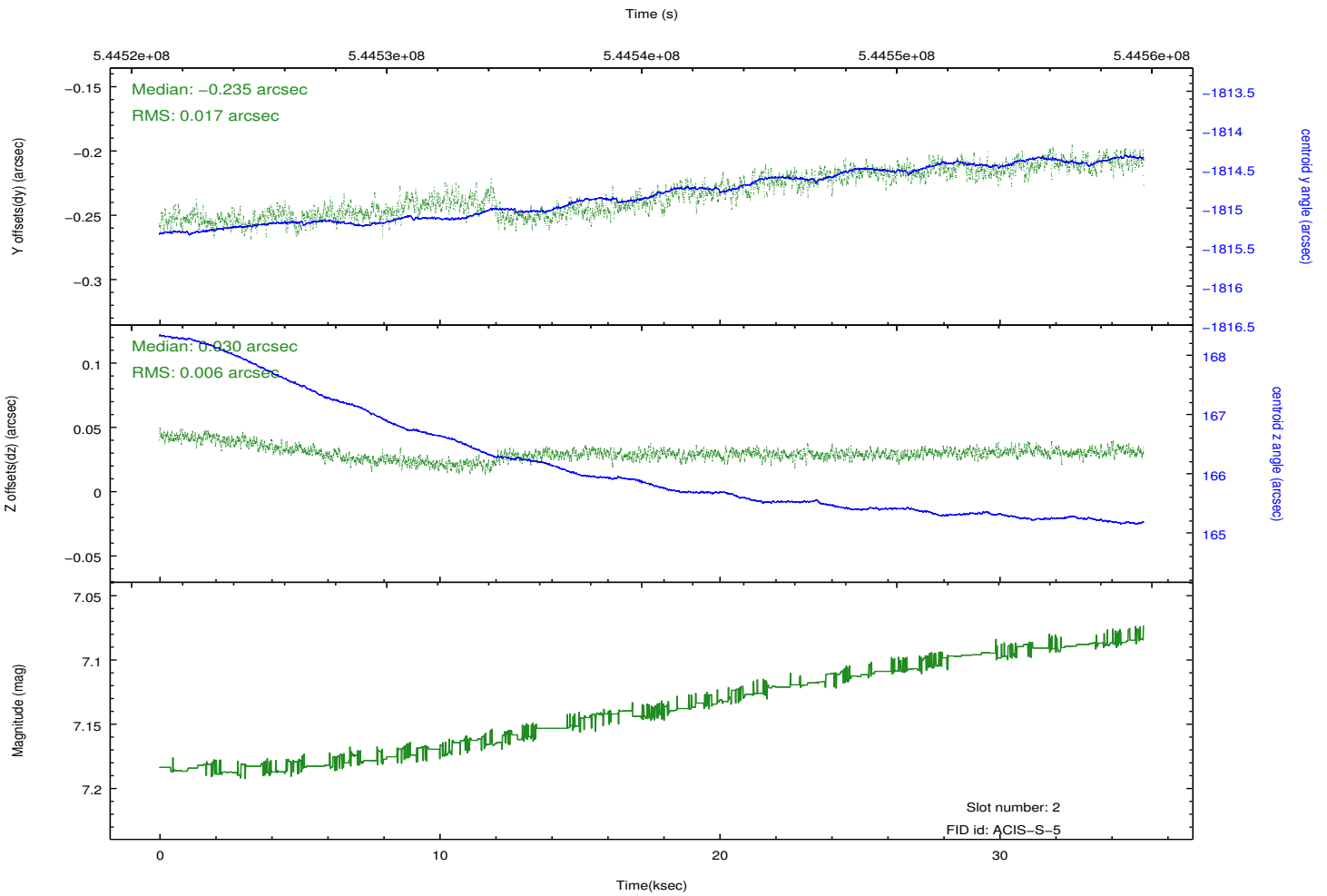
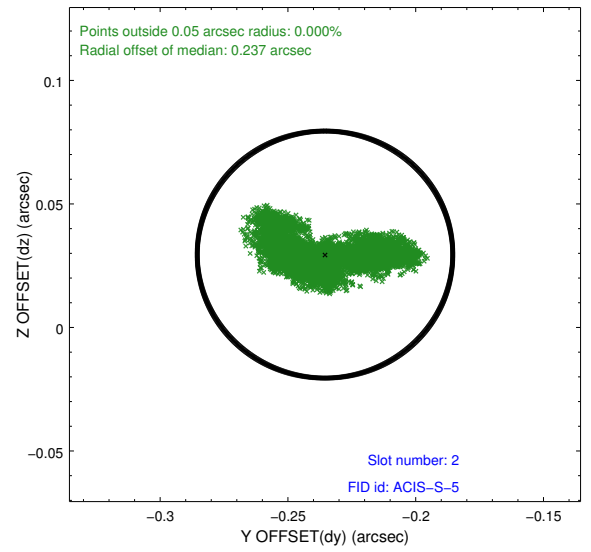
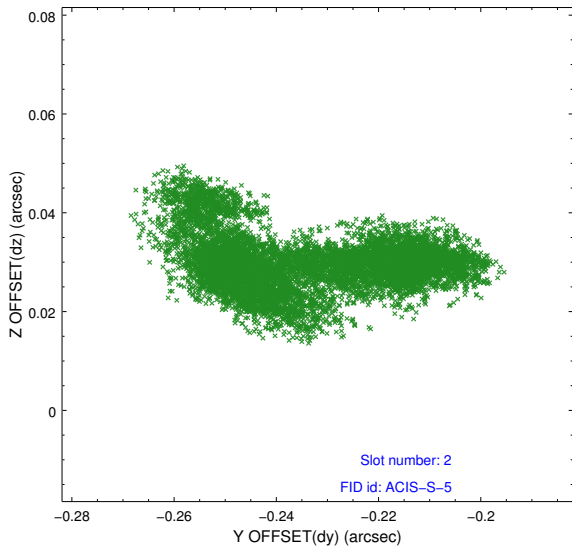
2.5.1 Slot 0



2.5.2 Slot 1

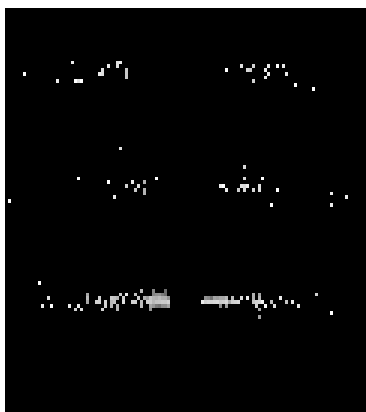


2.5.3 Slot 2

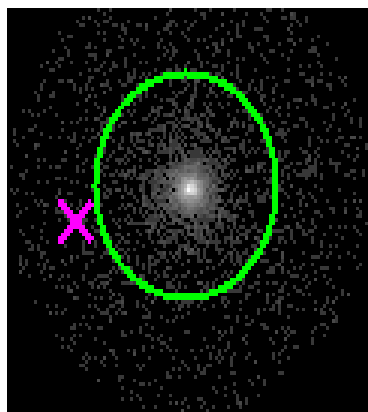


3 Gratings

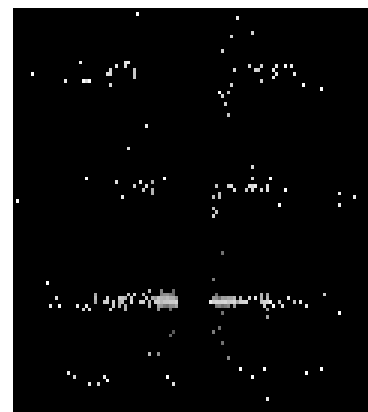
3.1 HEG Arm



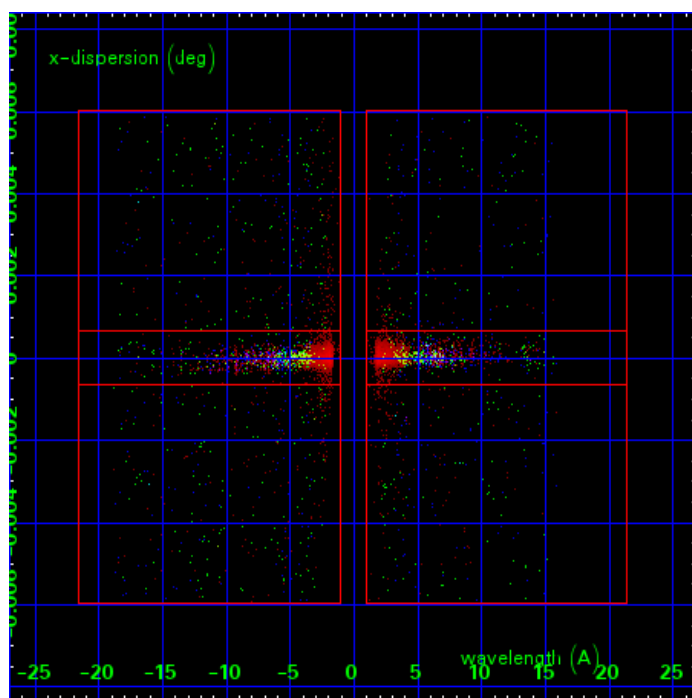
HEG Order Sort 123



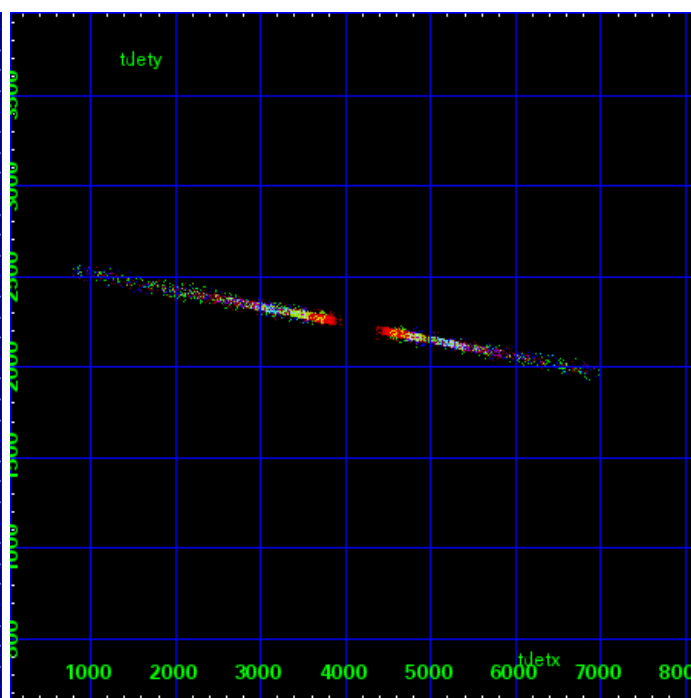
HEG Zero Order



HEG Order Sort ALL

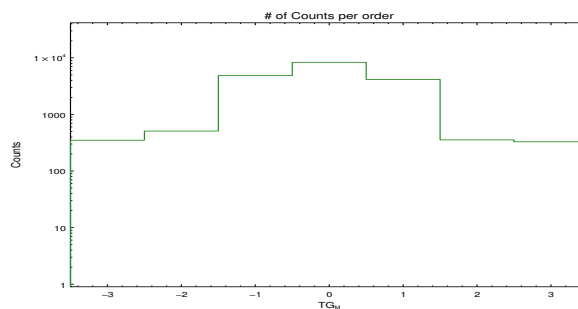


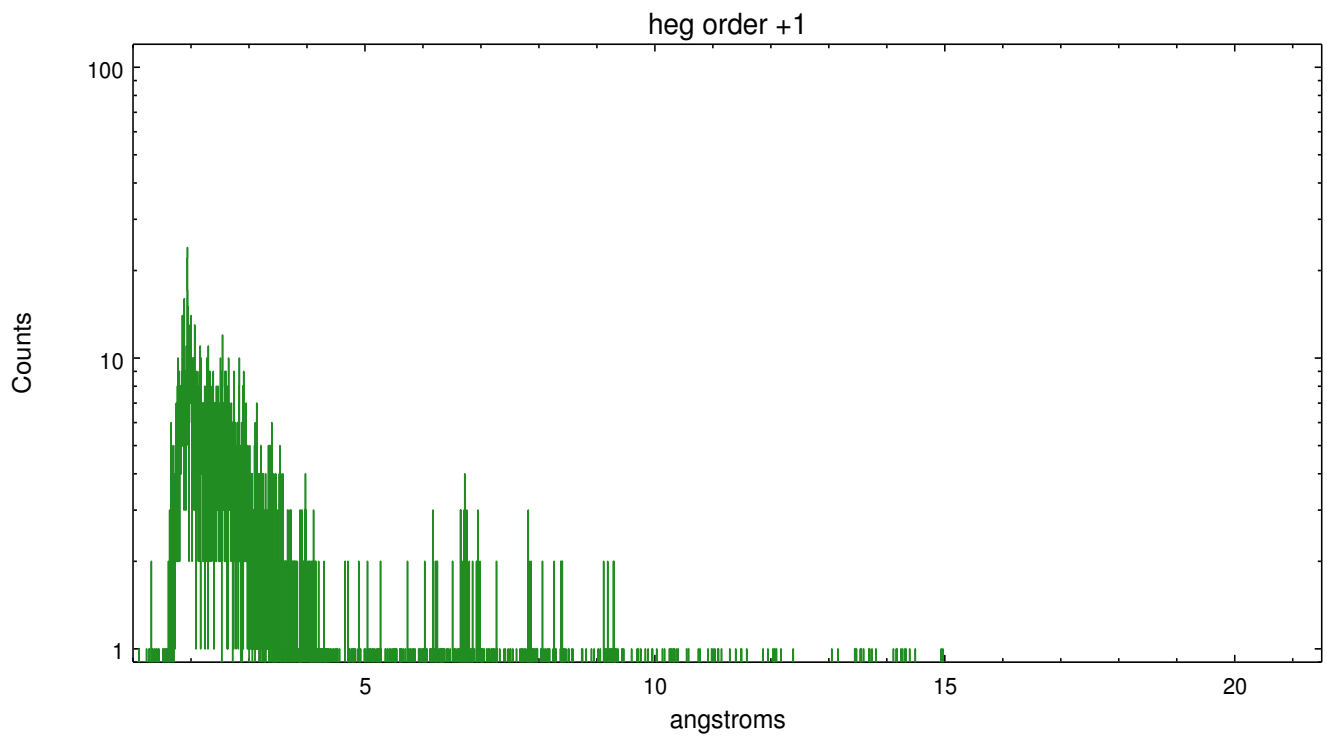
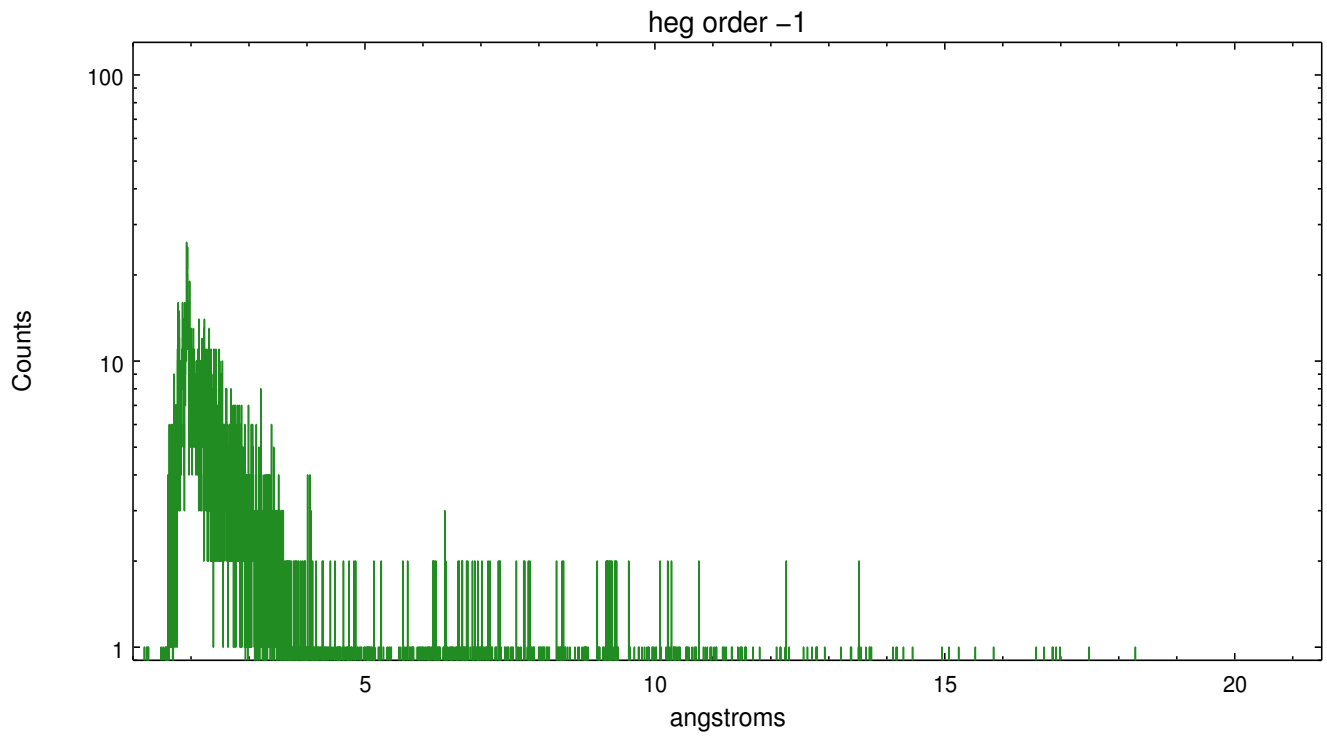
Spot Image HEG



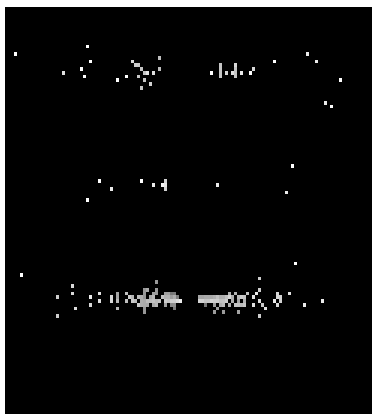
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	350	509	4859	8337	4162	355	329

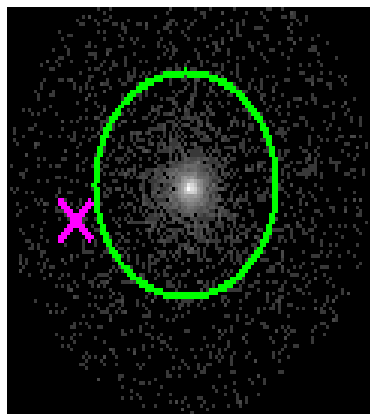




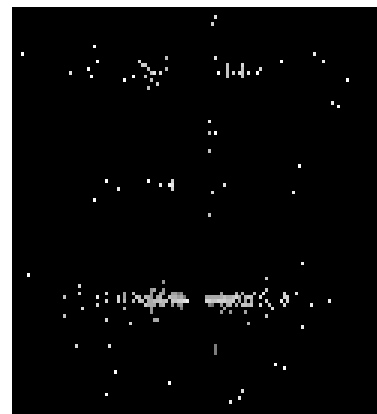
3.2 MEG Arm



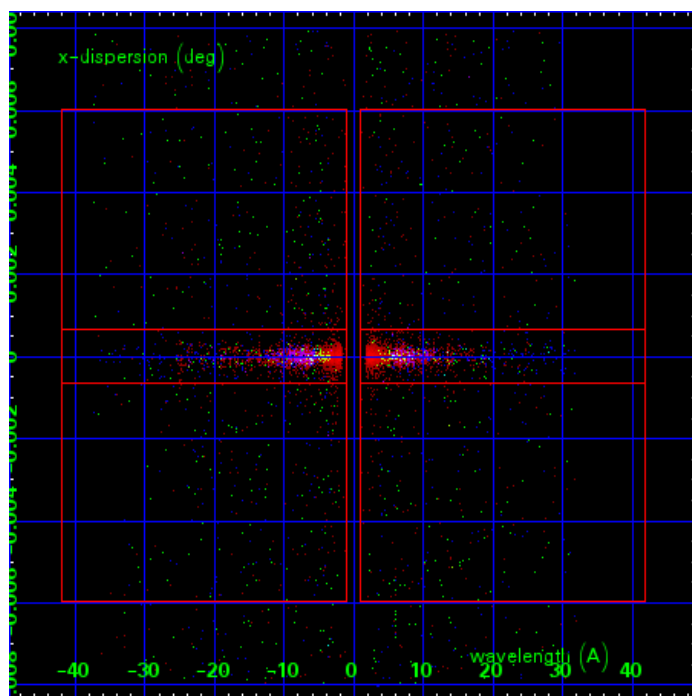
MEG Order Sort 123



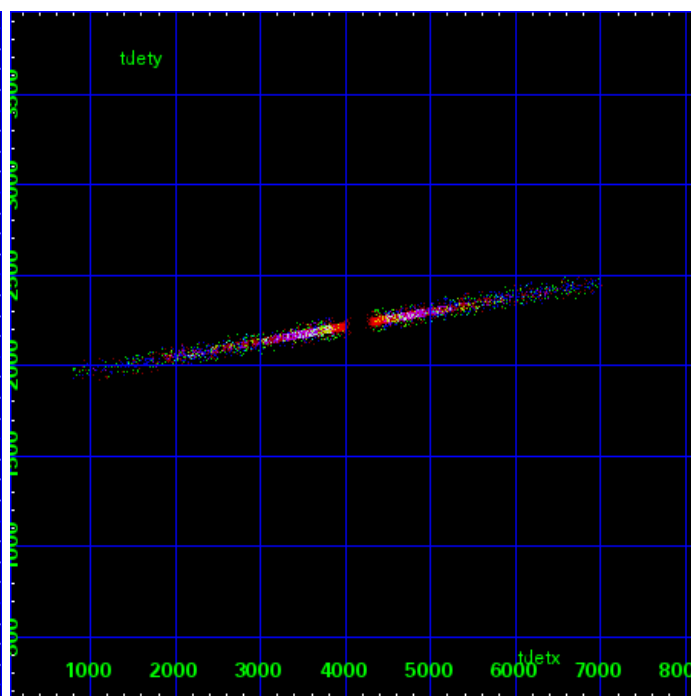
MEG Zero Order



MEG Order Sort ALL

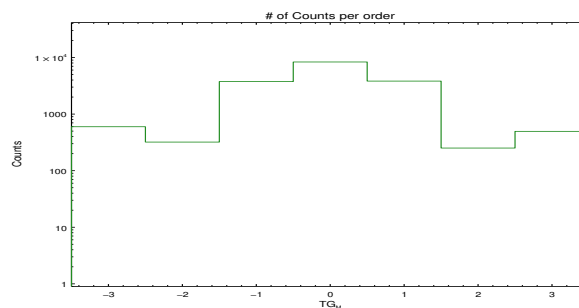


Spot Image MEG

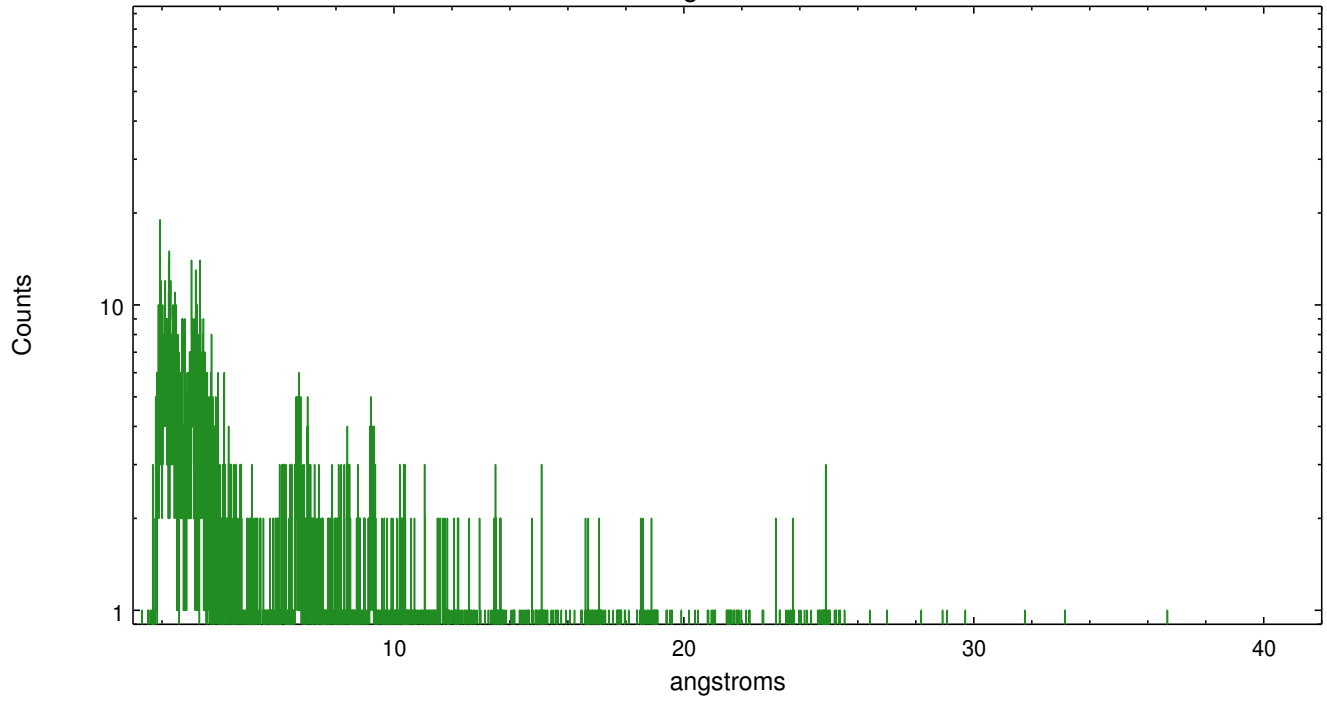


Full Detector MEG

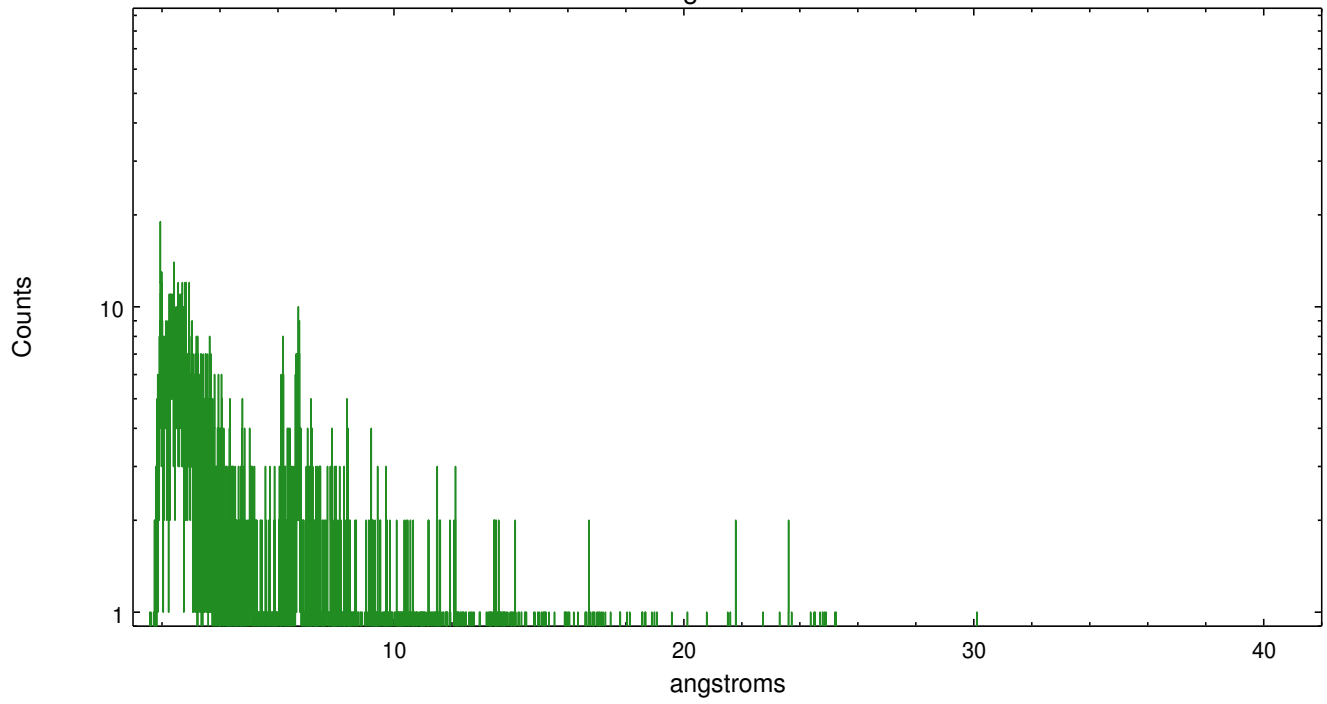
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	598	320	3753	8337	3828	251	495



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.04.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.947200520754

A.2 Comments