

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8934 - L2 Version 2
Chandra X-Ray Center

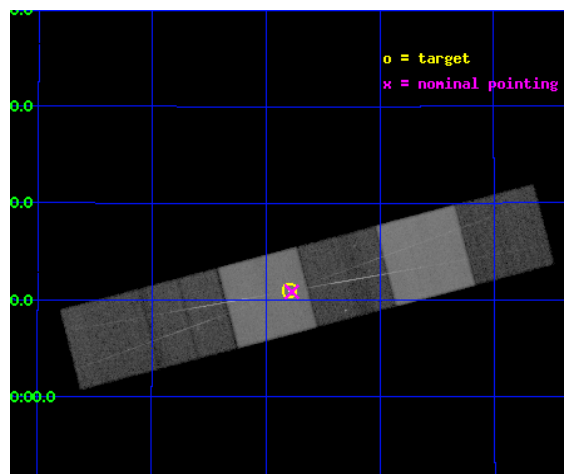
L2 Processing Date : May 12 2012

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

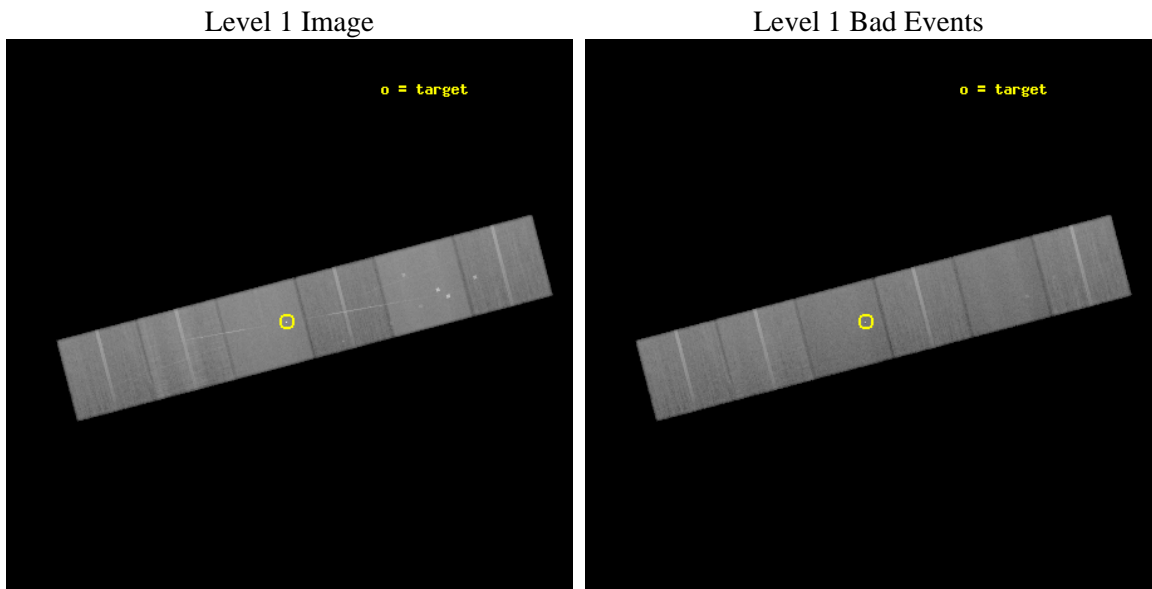
seq_num	200515	Sequence number
obs_id	8934	Observation id
title	Polar Exploration and Coronal Structure in the Active Binary HR 5110	
observer	Dr. rachel osten	Principal investigator
object	HR 5110	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	203.699167	Observer's specified target RA [deg]
dec_targ	37.182417	Observer's specified target Dec [deg]
ra_nom	203.69335585443	Nominal RA [deg]
dec_nom	37.180996382735	Nominal Dec [deg]
roll_nom	165.27952084786	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38940.758844554	Sum of GTIs [s]
livetime	38447.667508755	Livetime [s]
ontime4	38943.999854982	Sum of GTIs [s]
ontime5	38943.999854982	Sum of GTIs [s]
ontime6	38940.75883466	Sum of GTIs [s]
ontime7	38940.758844554	Sum of GTIs [s]
ontime8	38943.999854982	Sum of GTIs [s]
ontime9	38943.999854982	Sum of GTIs [s]
l2events	642815	Number of level 2 events



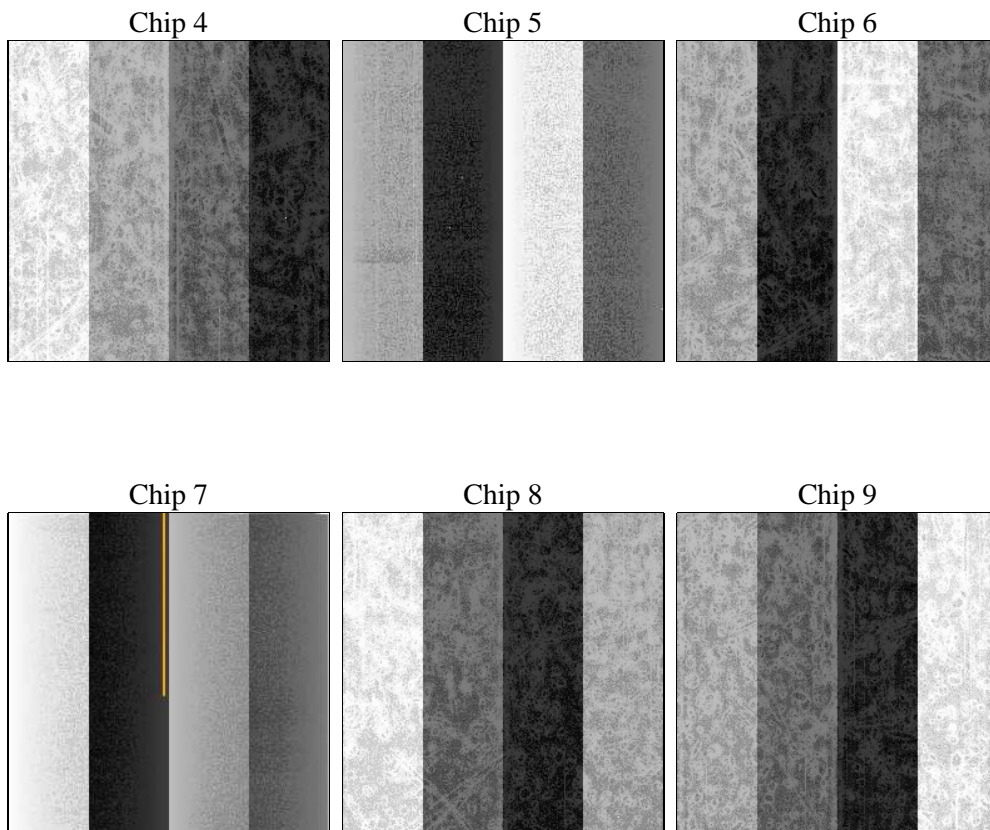
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	38940.758844554	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	38943.999854982	Sum of GTIs [s]
date	2012-05-12T14:54:54	Date and time of file creation	ontime5	38943.999854982	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	38940.75883466	Sum of GTIs [s]
			ontime7	38940.758844554	Sum of GTIs [s]
			ontime8	38943.999854982	Sum of GTIs [s]
			ontime9	38943.999854982	Sum of GTIs [s]
			l1events	2796657	Number of level 1 events

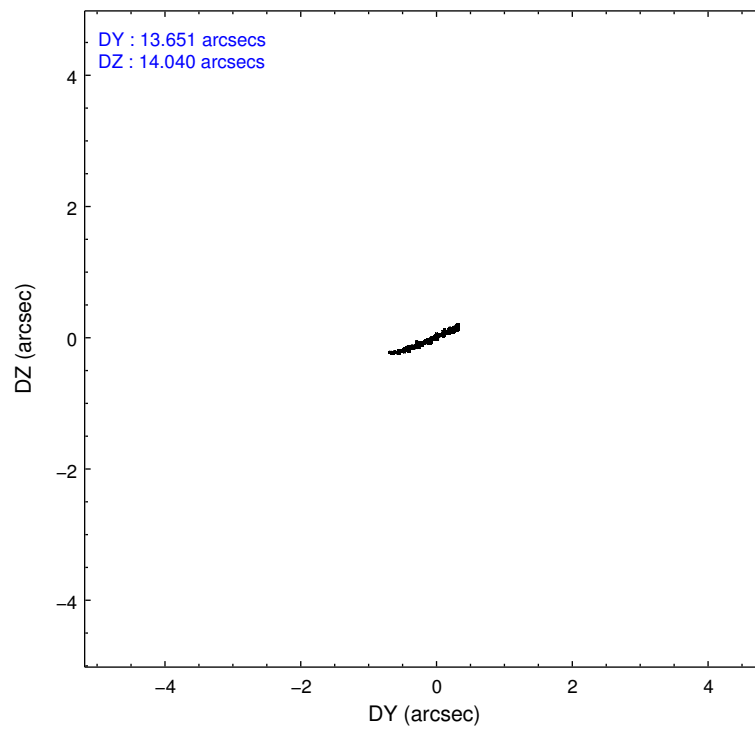
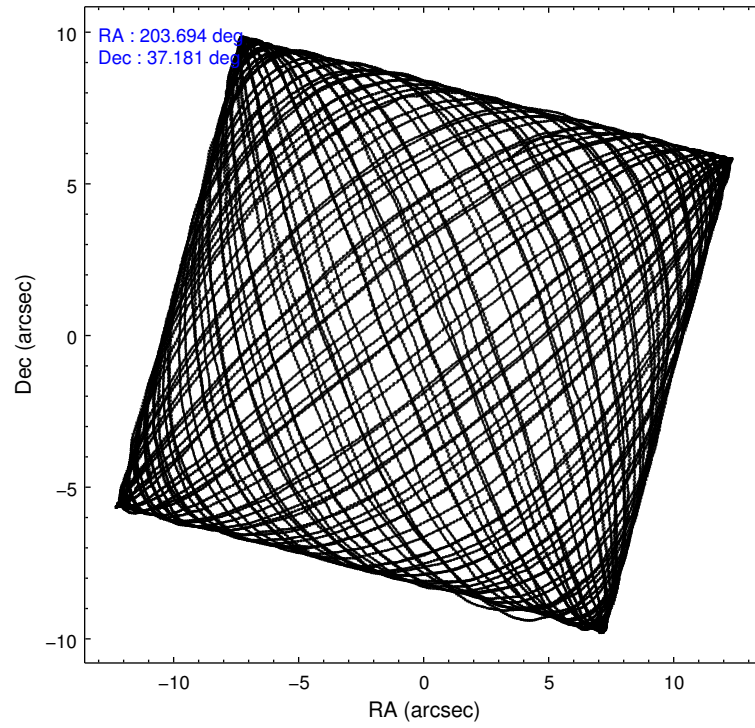
2.1.4 Events

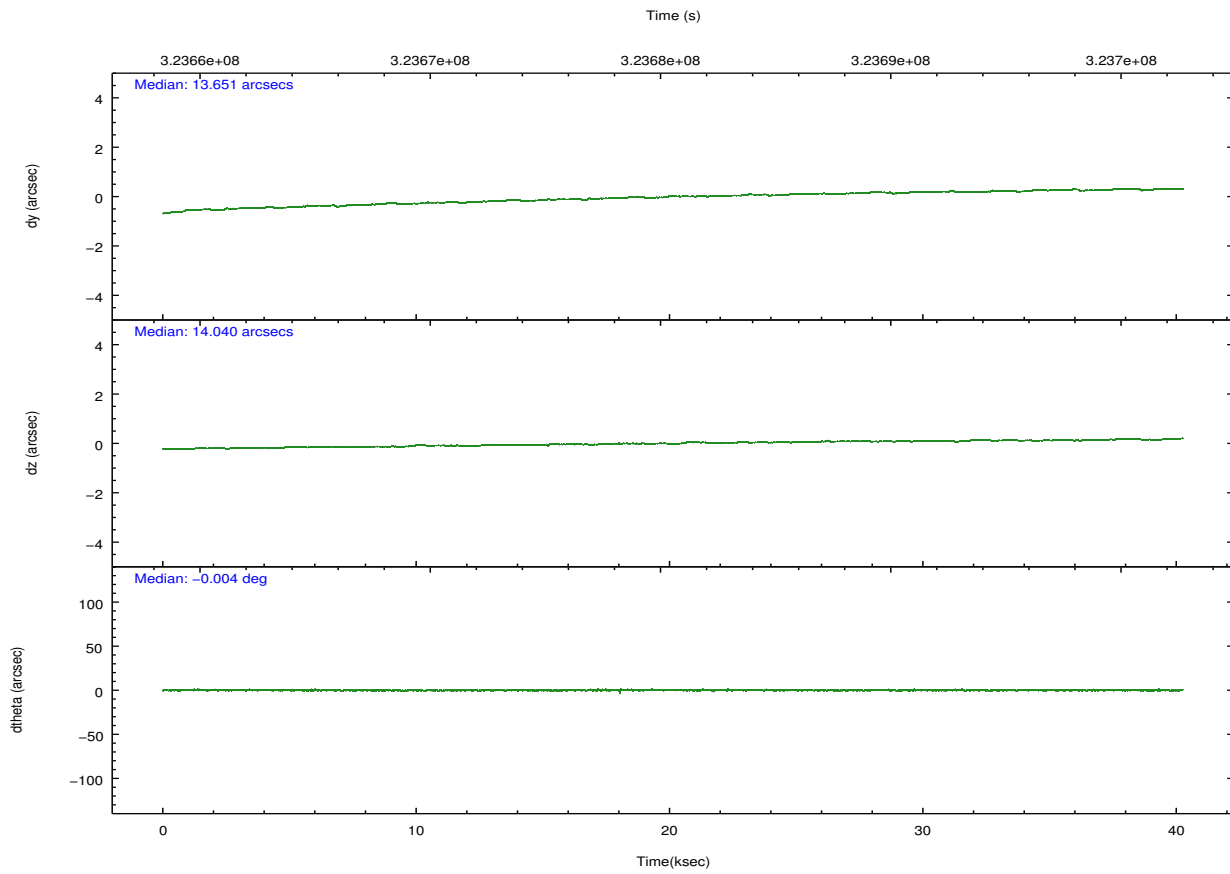
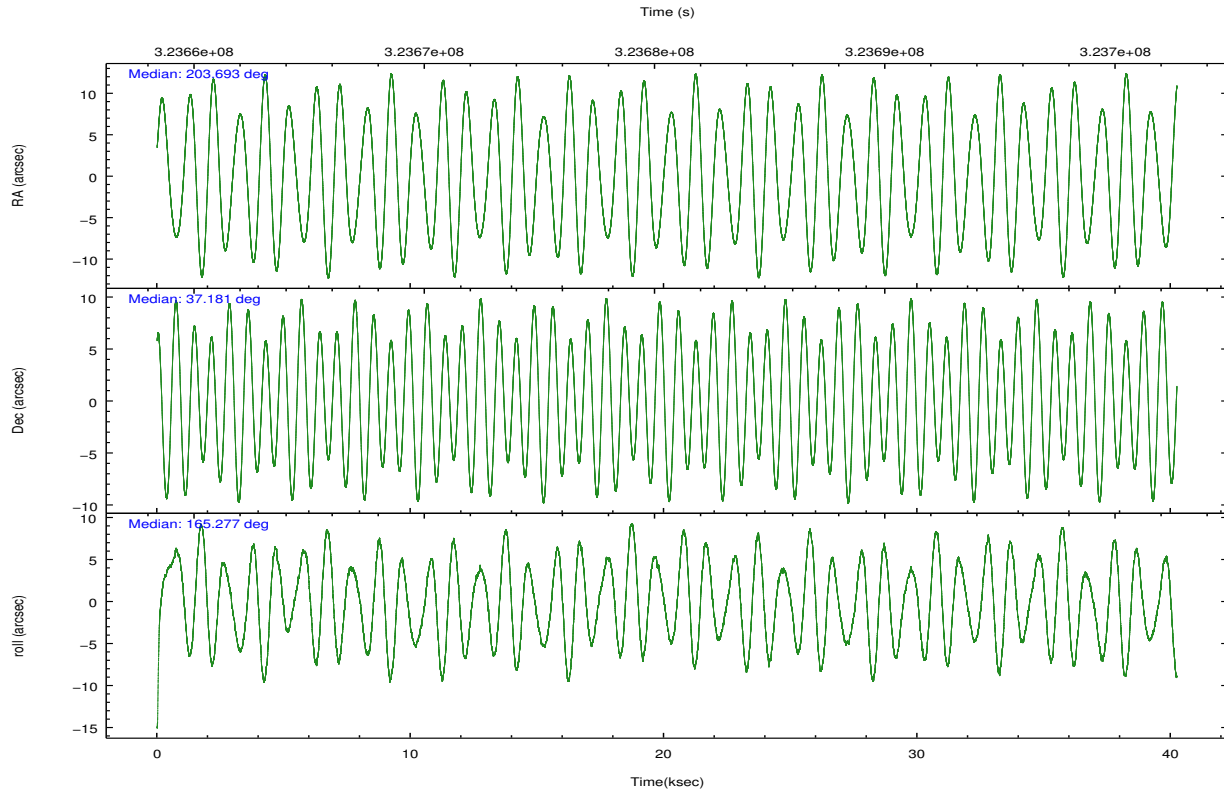
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	427054	582104	389767	530384	486692	380656	grade 0 events	24119	27326	22965	20328	37423	19714
rejected events	376551	314123	337759	306704	375550	333711		5%	4%	5%	3%	7%	5%
rejected %	88%	53%	86%	57%	77%	87%	grade 1 events	442	1179	236	692	381	239
								0%	0%	0%	0%	0%	0%
							grade 2 events	9802	81035	11054	46247	24843	9314
								2%	13%	2%	8%	5%	2%
							grade 3 events	4707	8957	4264	18933	10895	4584
								1%	1%	1%	3%	2%	1%
							grade 4 events	4559	8704	4387	18560	10268	4266
								1%	1%	1%	3%	2%	1%
							grade 5 events	17411	39189	17767	49422	24346	19190
								4%	6%	4%	9%	5%	5%
							grade 6 events	7327	142004	9345	119643	27725	9074
								1%	24%	2%	22%	5%	2%
							grade 7 events	358687	273710	319749	256559	350811	314275
								83%	47%	82%	48%	72%	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	203.726331	203.6933558544324	CCD I2 on	N	N
[deg] Pointing Dec	37.188565	37.18099638273483	CCD I3 on	N	N
[deg] Pointing Roll	165.102958	165.2795208478624	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	-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)	323661680.184000	323660041.39743	CCD S5 on	Y	Y
Observation start date	2008-04-04T02:00:15	2008-04-04T01:34:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	323700680.184000	323701528.78695	On-chip summing requested	N	N
Observation end date	2008-04-04T12:50:15	2008-04-04T13:05:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



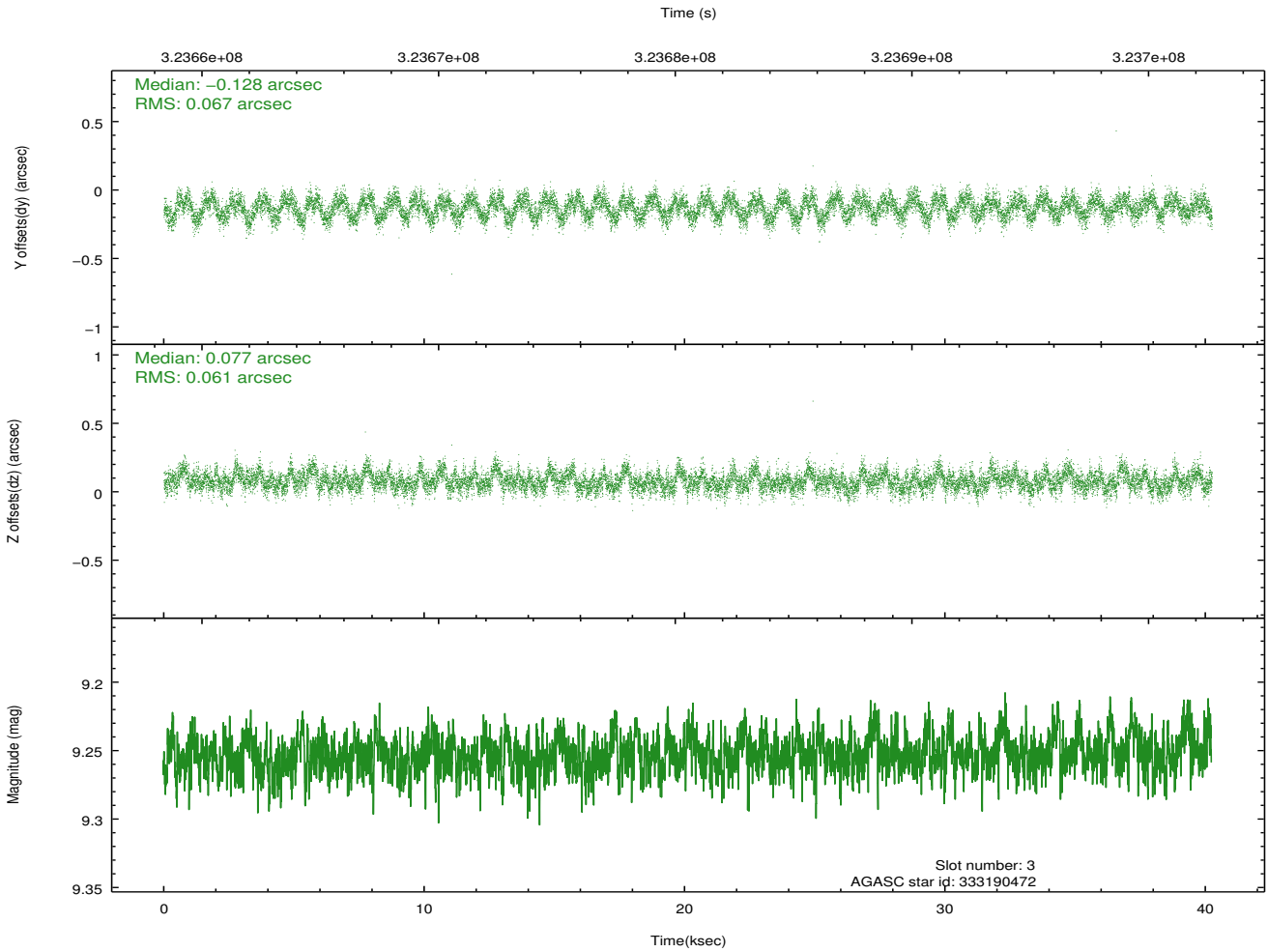
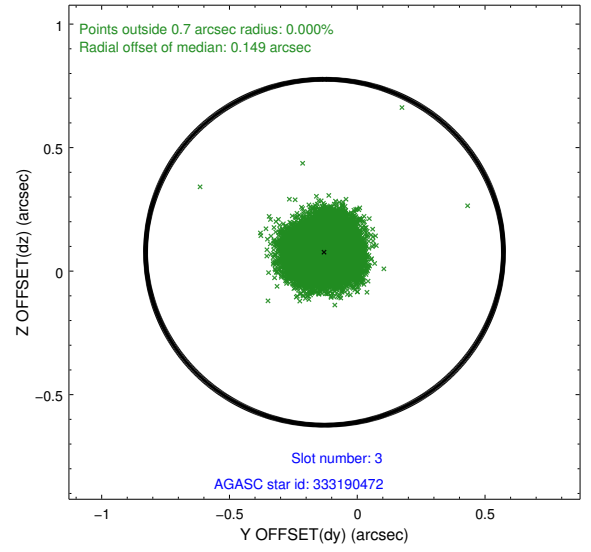
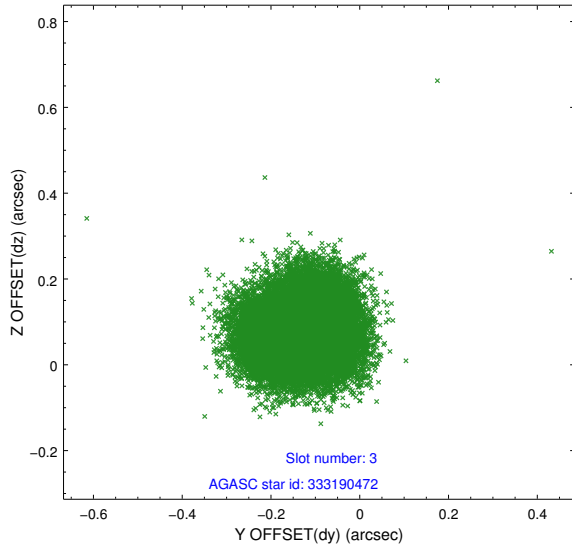


Slot Statistics

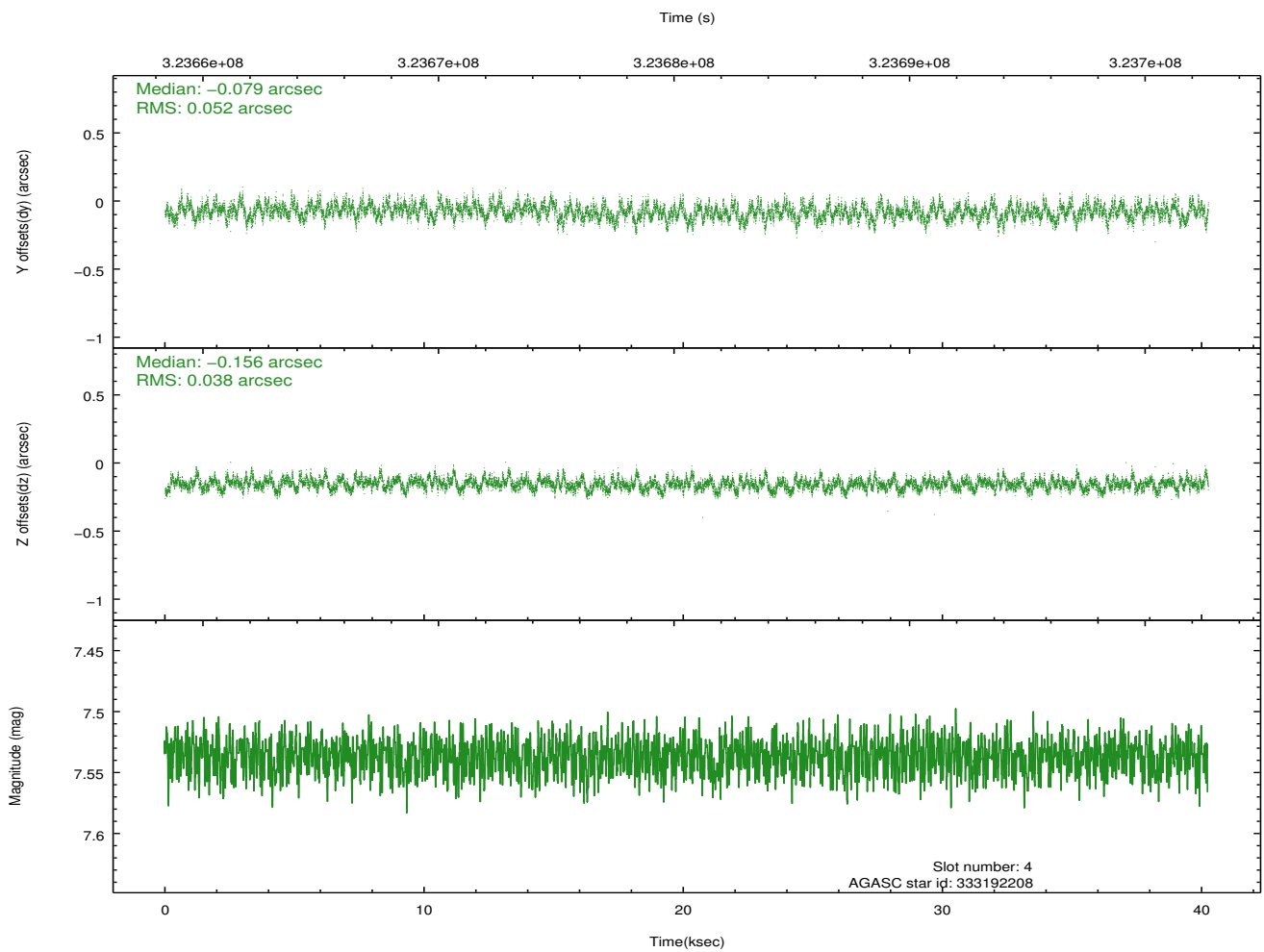
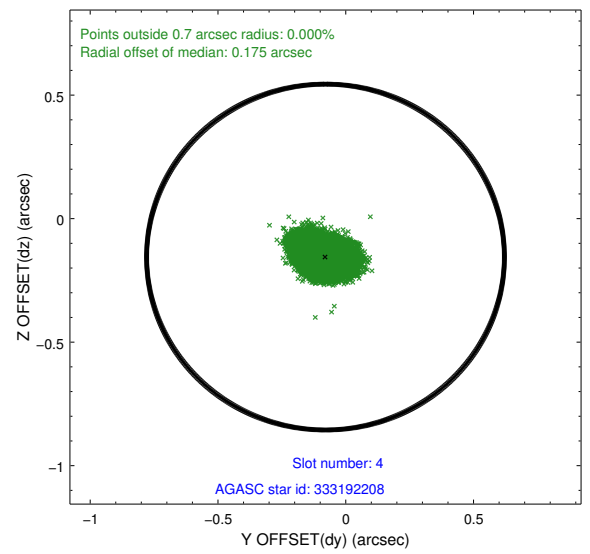
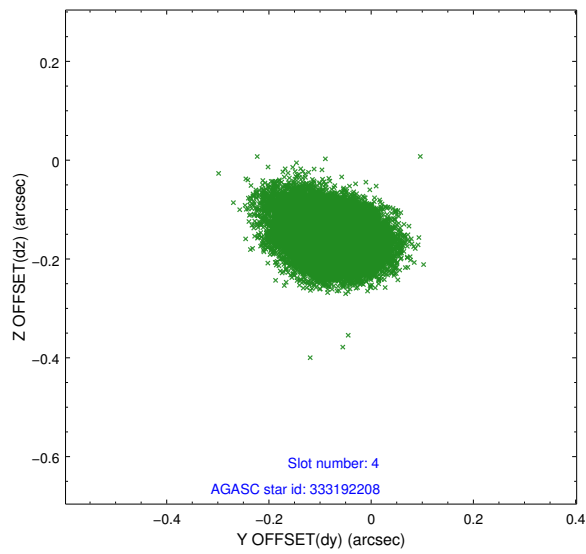
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	9814	-0.054	-0.058	0.013	0.019	0.000000	0.000000	-766.57	-1735.40
1	FID	ACIS-S-4	7.19	9812	0.182	0.042	0.012	0.020	0.000000	0.000000	2146.93	173.19
2	FID	ACIS-S-5	7.23	9814	-0.158	0.023	0.012	0.018	0.000000	0.000000	-1819.51	166.84
3	GUIDE	333190472	9.25	19610	-0.128	0.077	0.099	0.151	203.664903	37.181947	164.37	68.71
4	GUIDE	333192208	7.54	19631	-0.079	-0.156	0.068	0.114	202.900060	37.113876	2226.62	859.57
5	GUIDE	333192752	8.46	19623	0.136	0.058	0.095	0.140	203.839277	37.405848	-110.36	-838.69
6	GUIDE	396632440	10.02	19567	0.058	0.045	0.139	0.231	204.051808	37.688452	-433.10	-1978.40
7	GUIDE	333322496	9.72	19613	0.018	-0.026	0.131	0.215	204.479493	36.978676	-2284.90	165.22

2.4 Star Slots

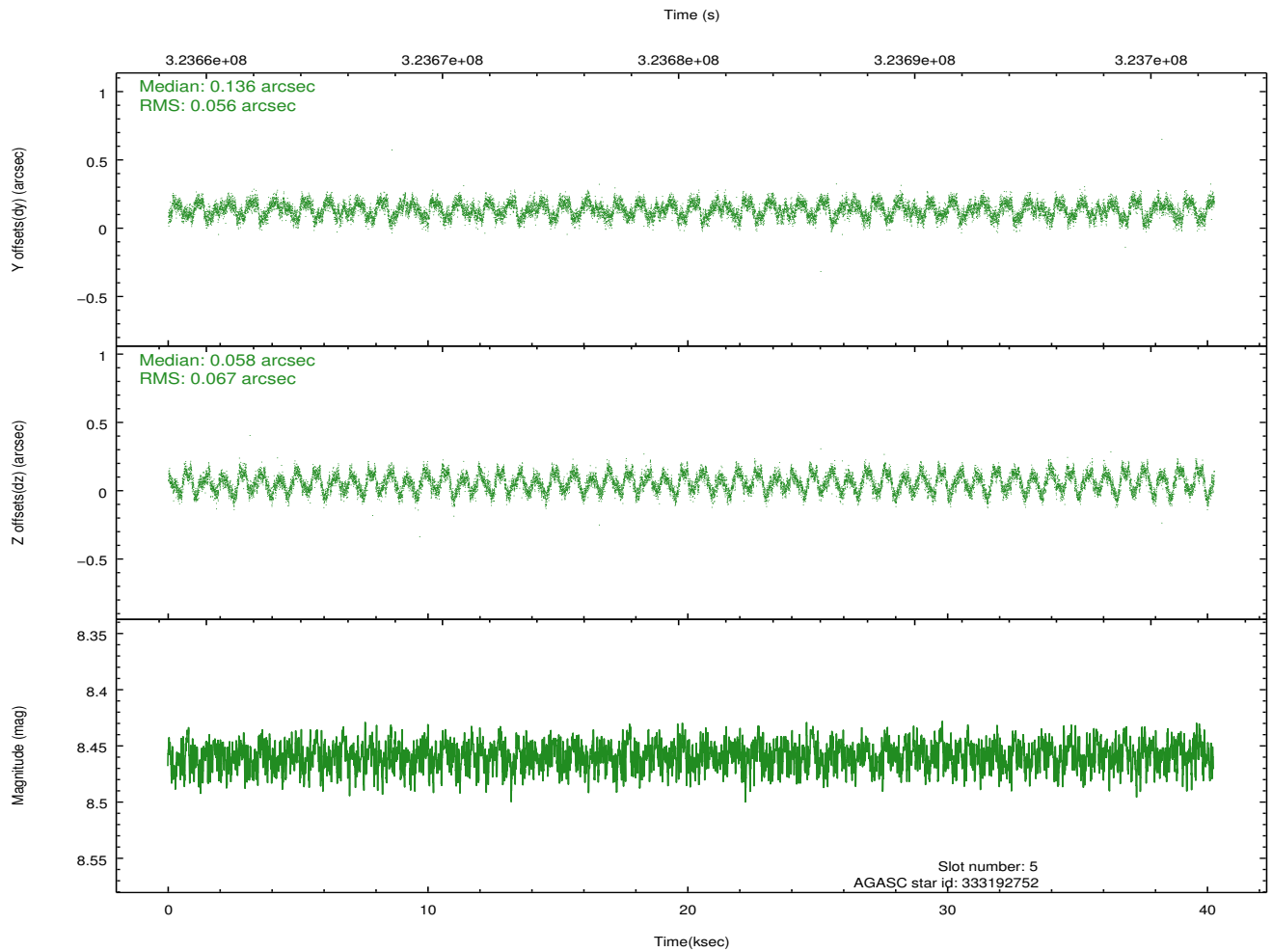
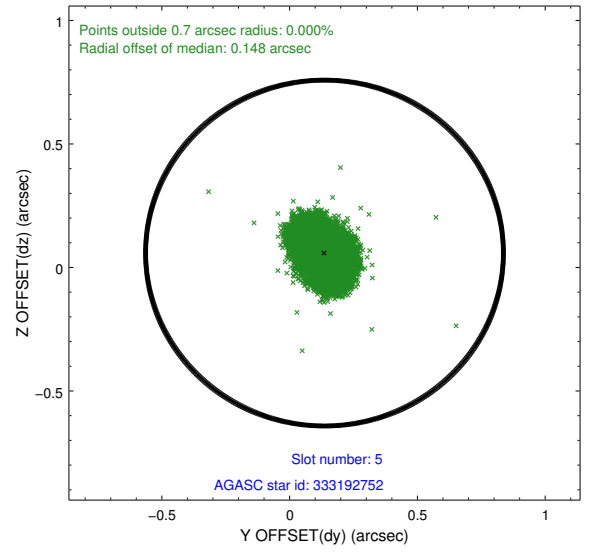
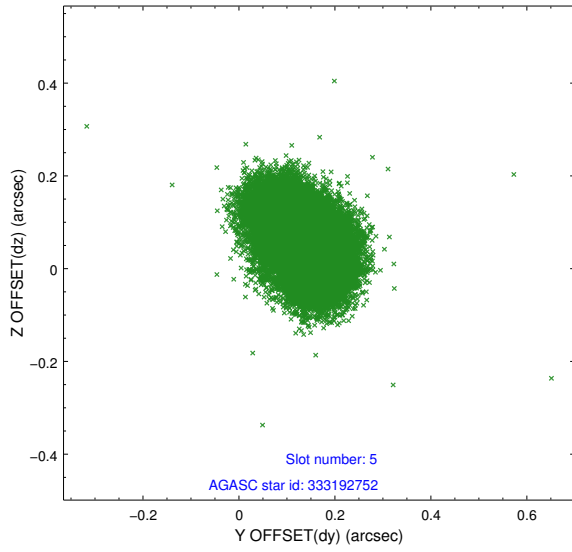
2.4.1 Slot 3



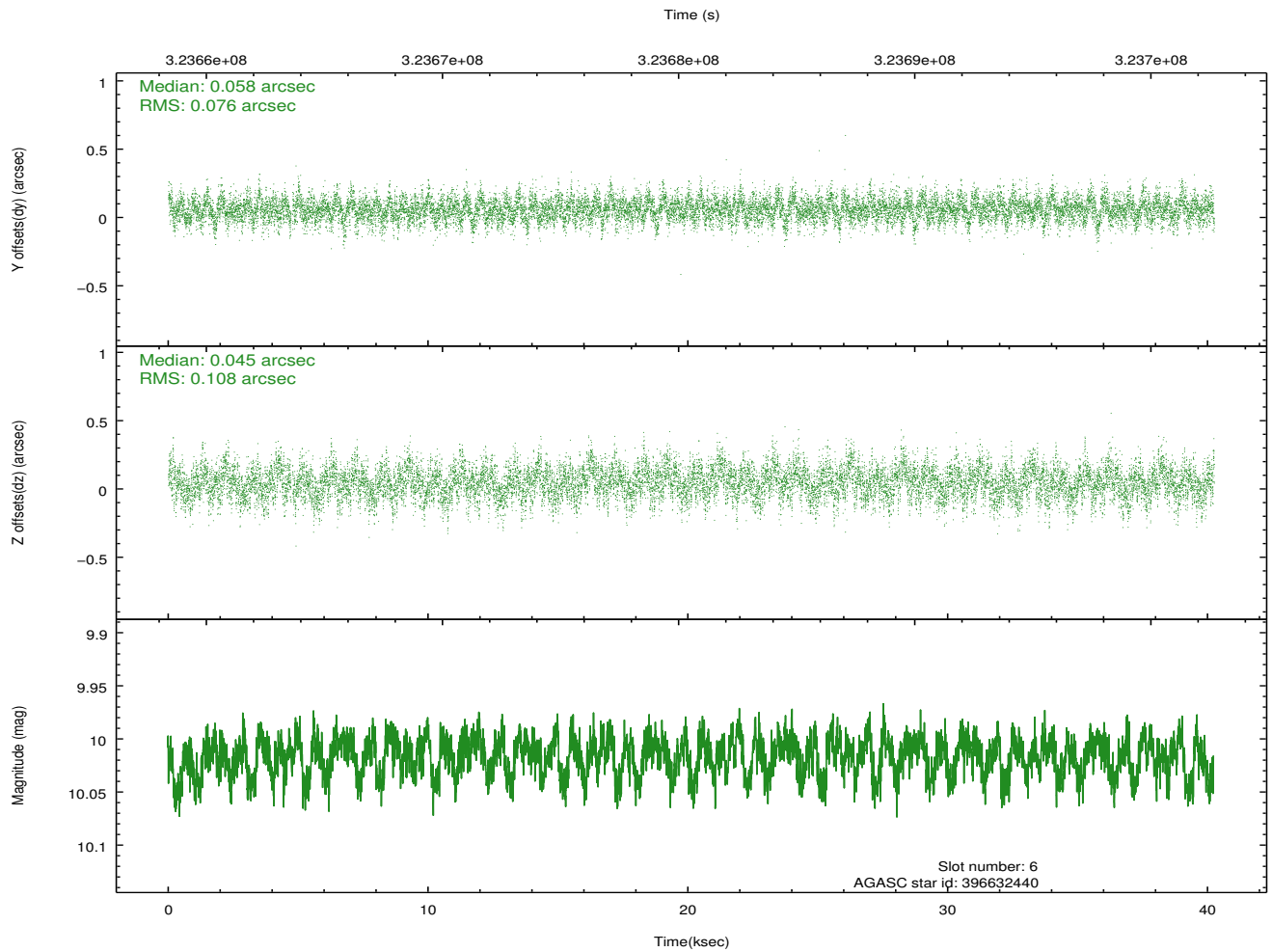
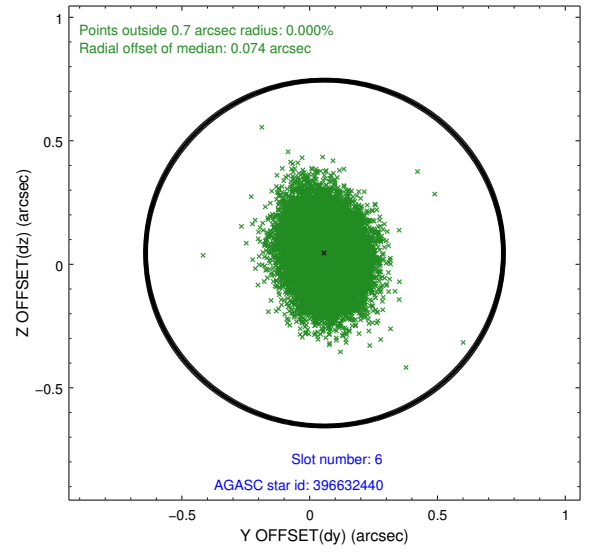
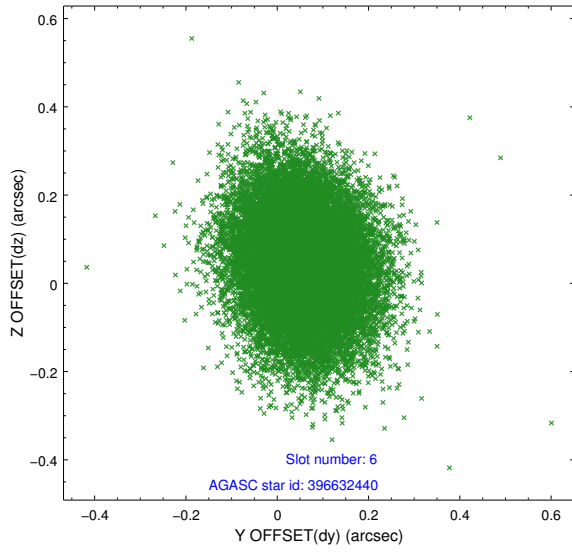
2.4.2 Slot 4



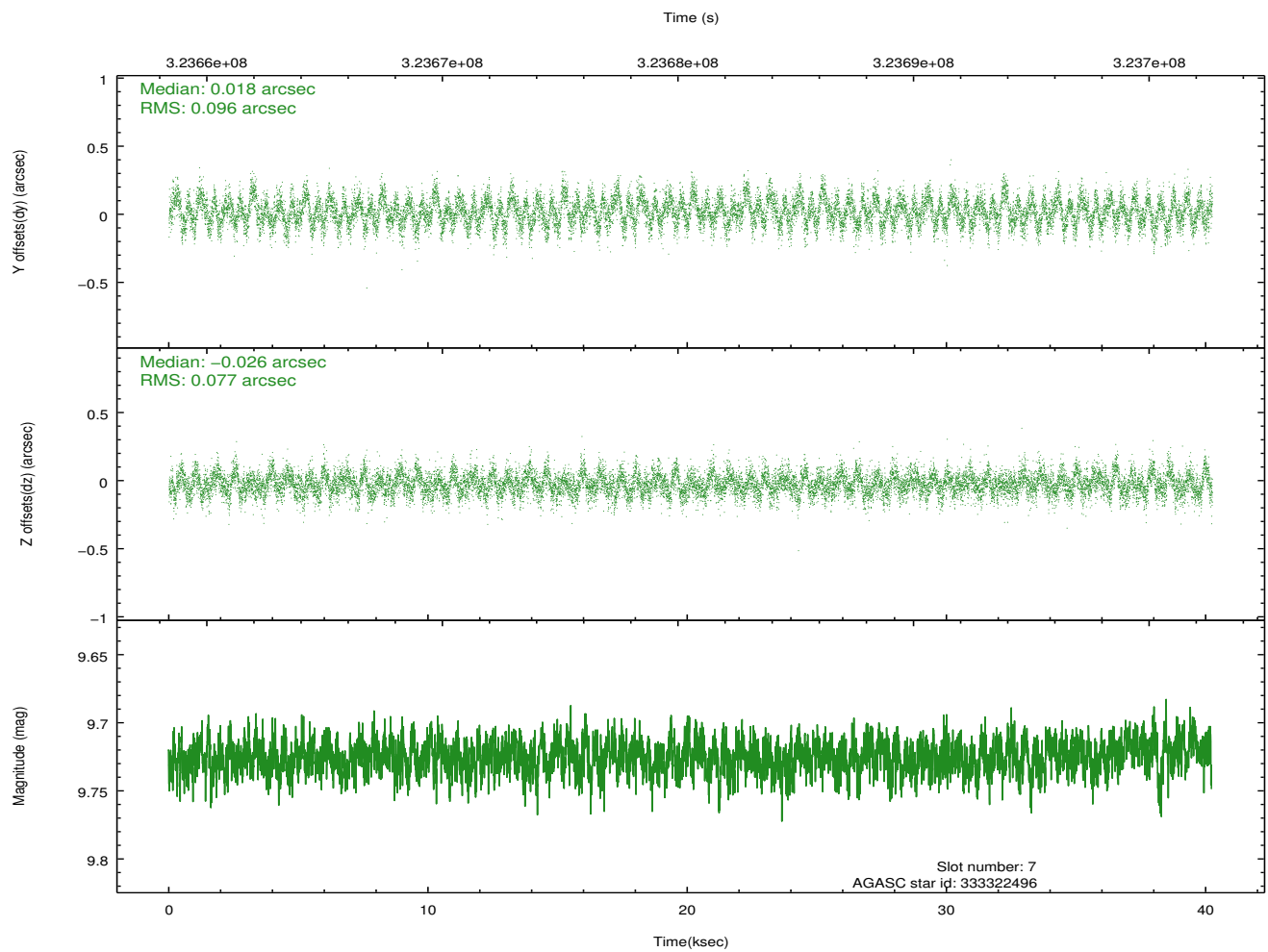
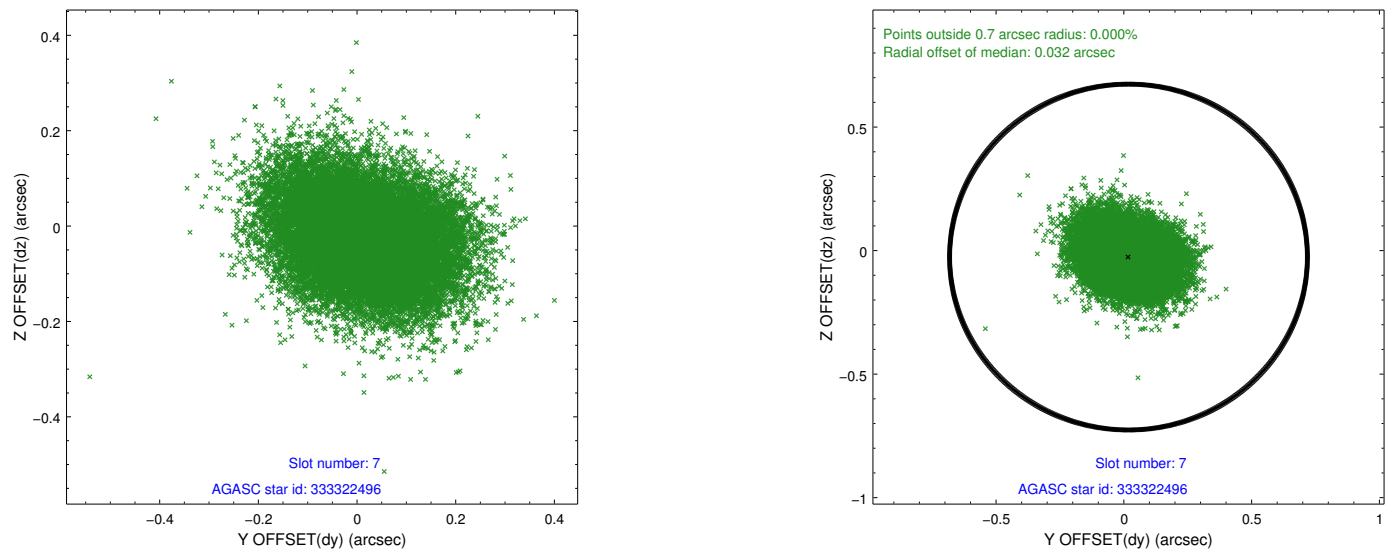
2.4.3 Slot 5



2.4.4 Slot 6

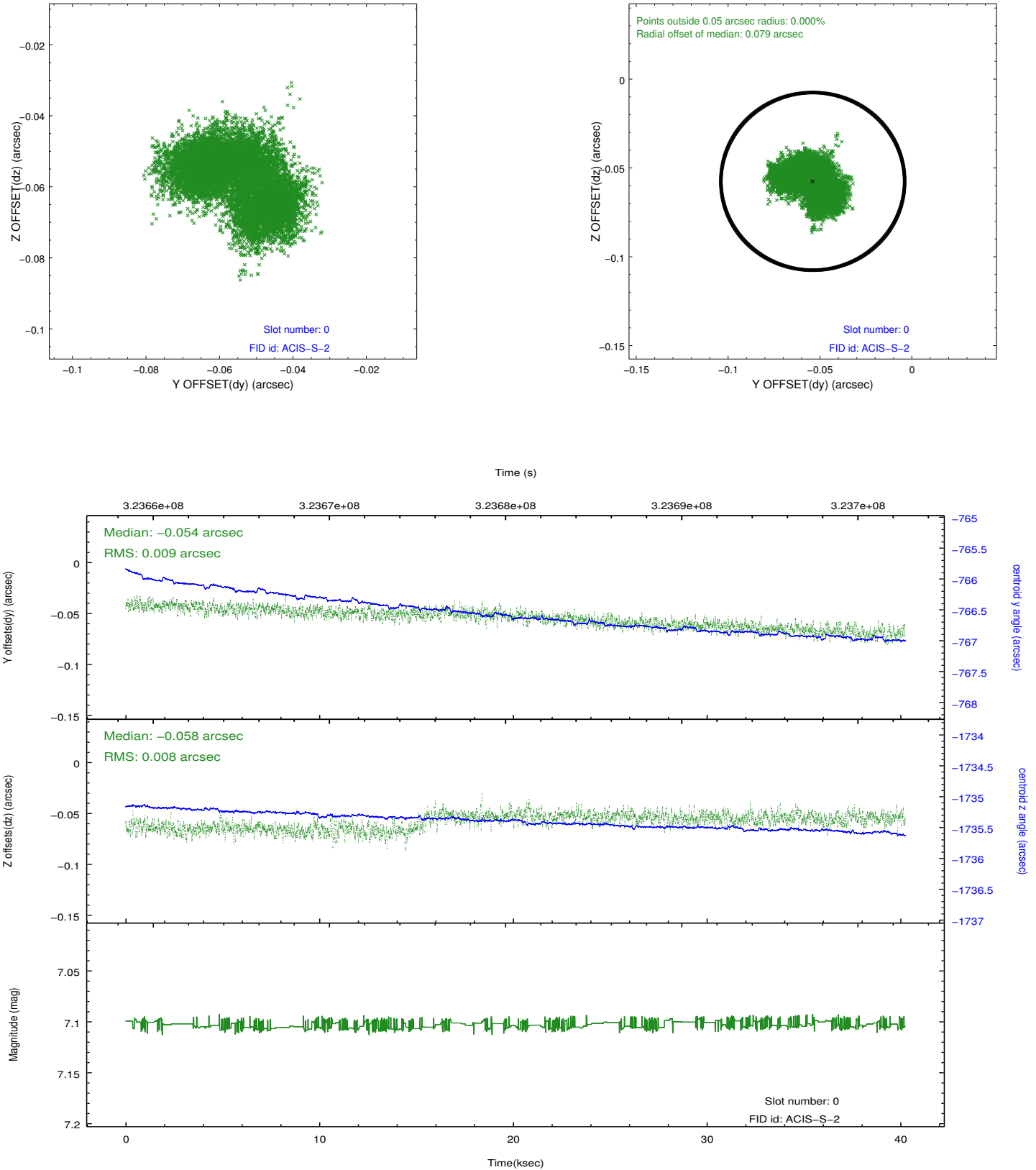


2.4.5 Slot 7

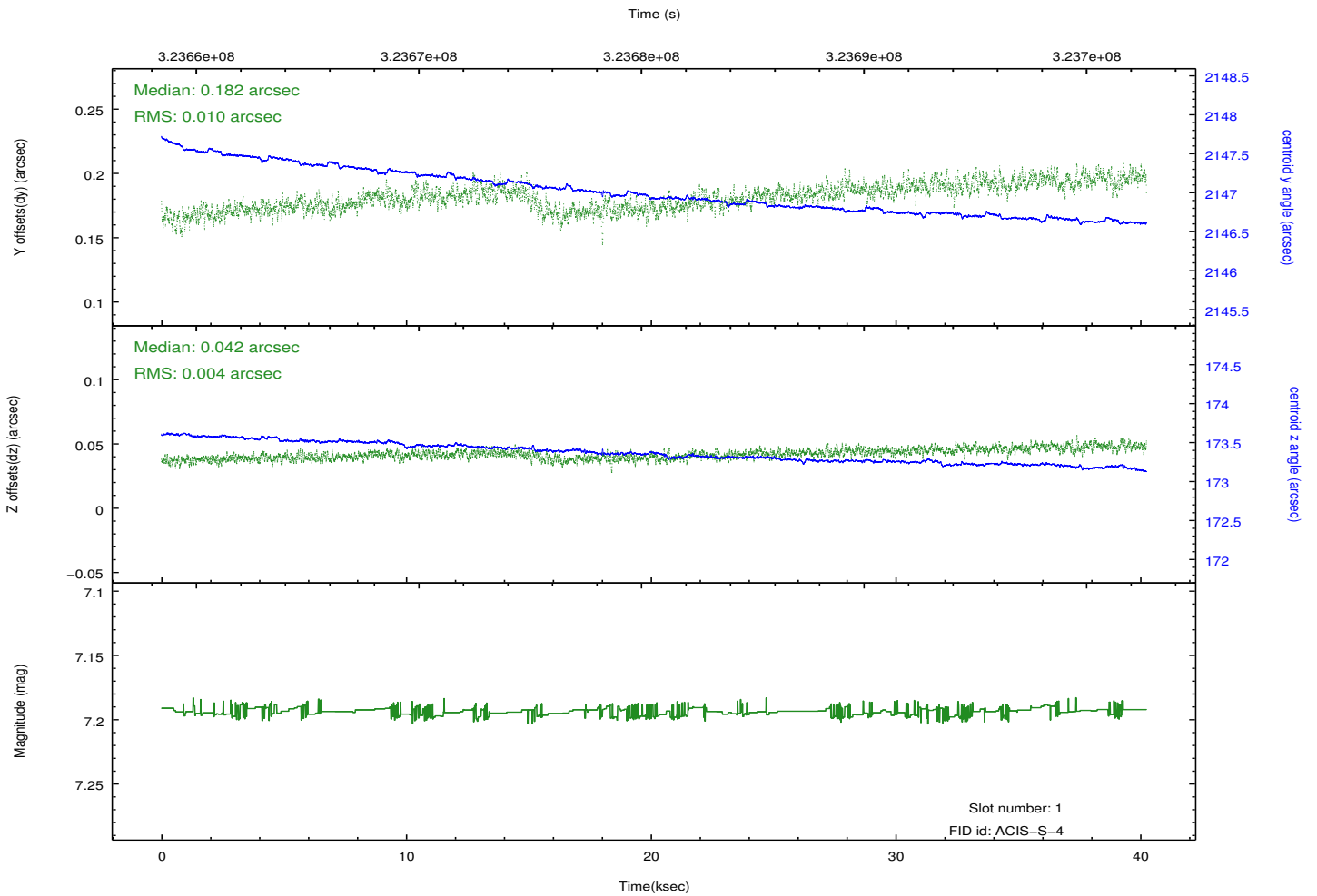
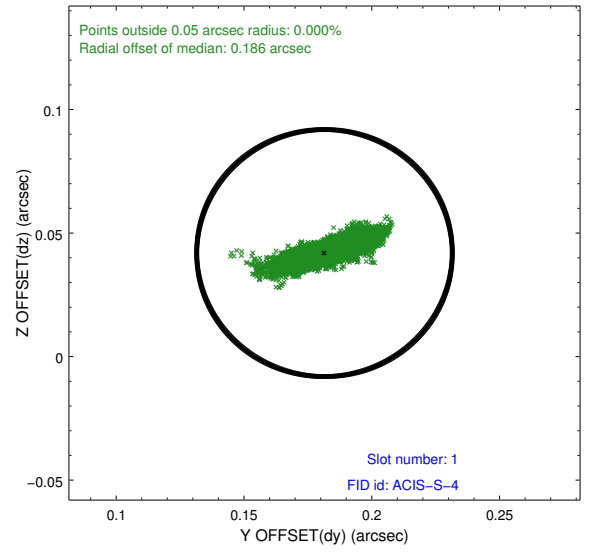
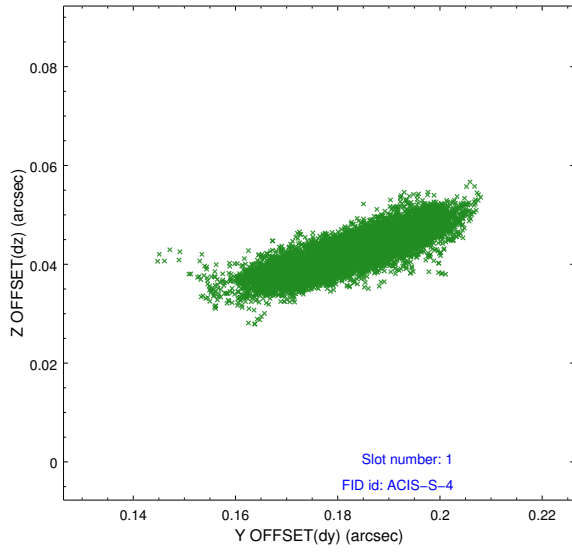


2.5 FID Slots

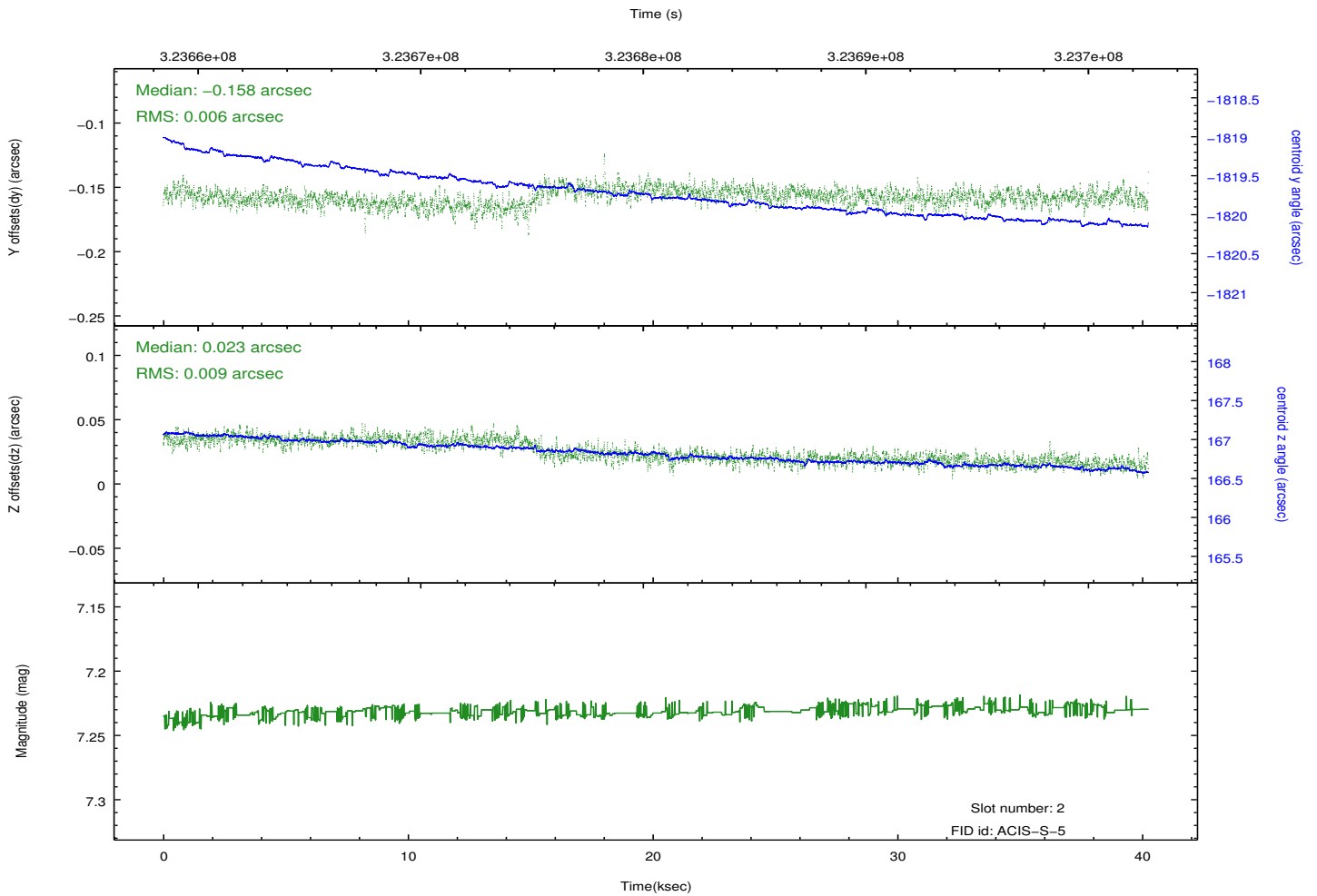
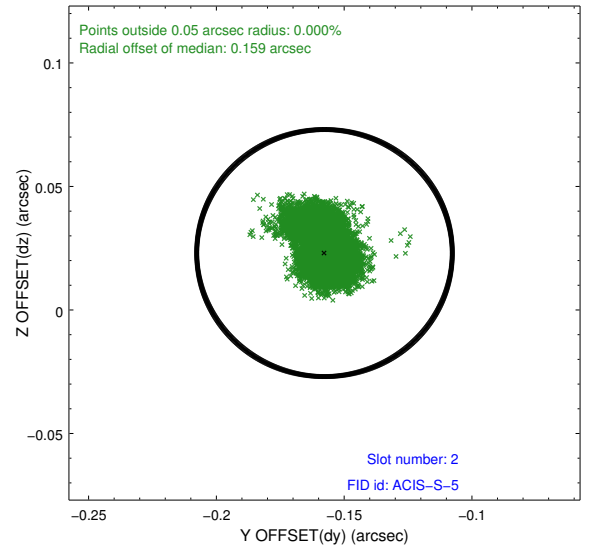
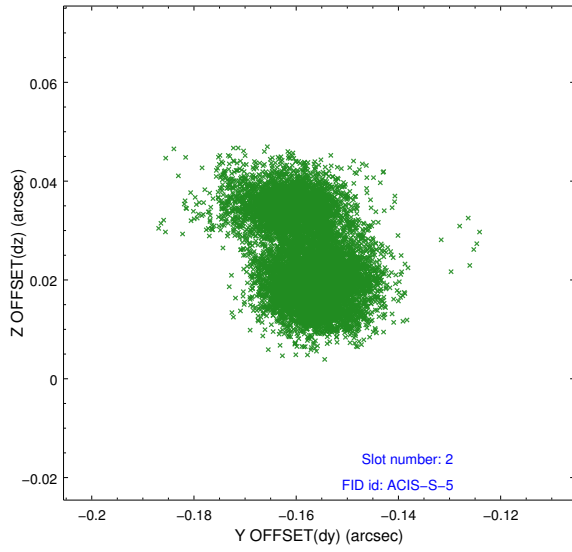
2.5.1 Slot 0



2.5.2 Slot 1

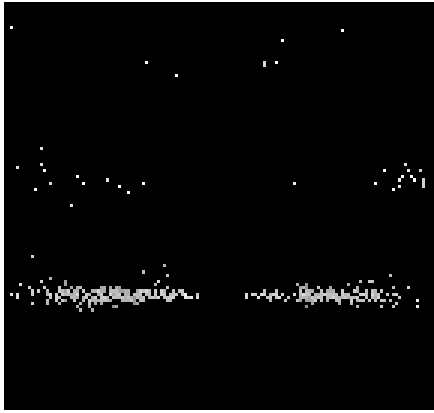


2.5.3 Slot 2

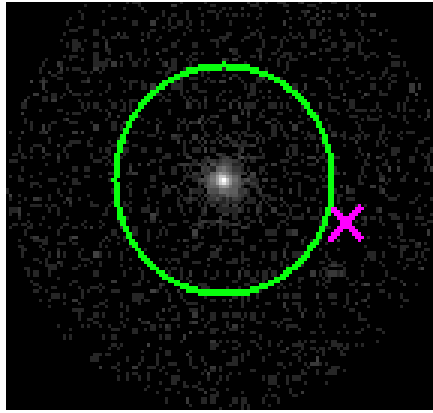


3 Gratings

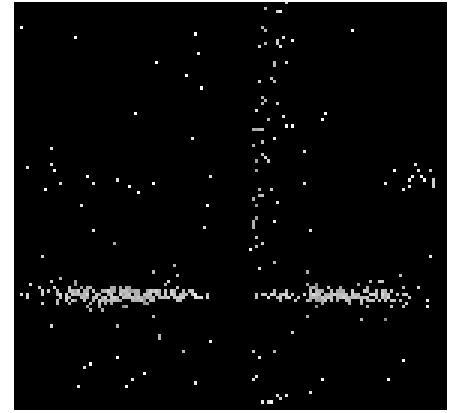
3.1 HEG Arm



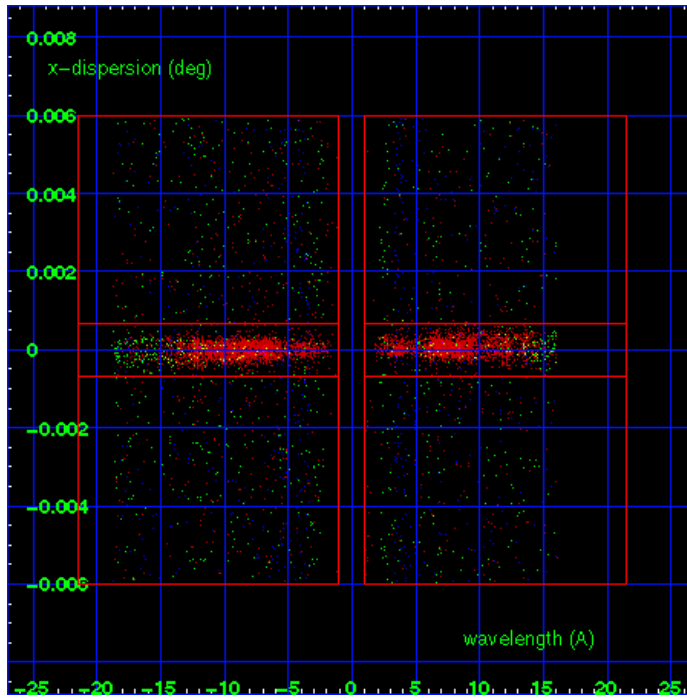
HEG Order Sort 123



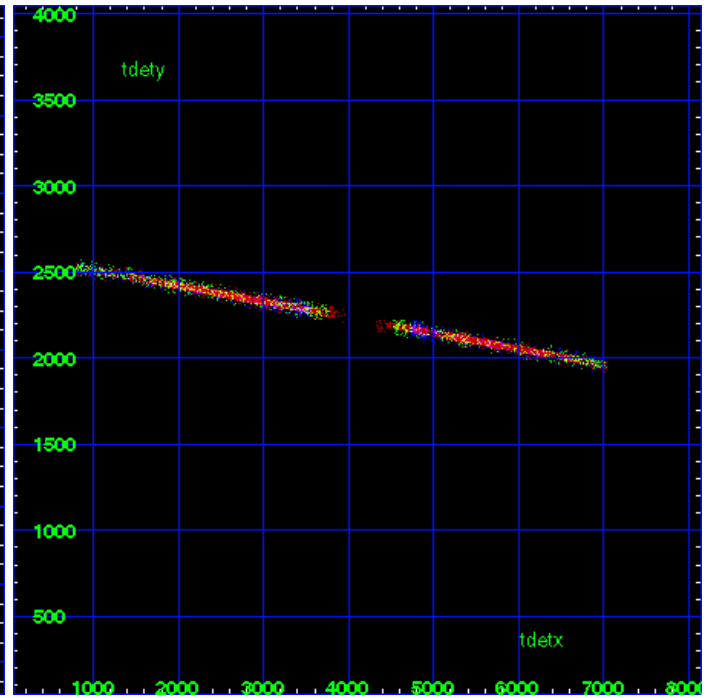
HEG Zero Order



HEG Order Sort ALL

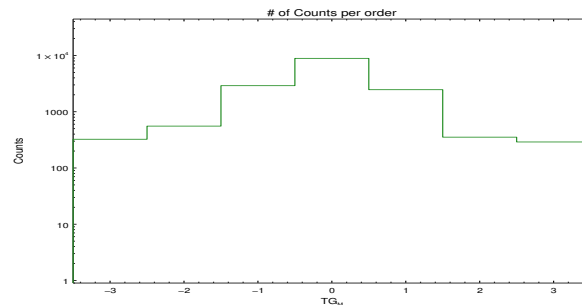


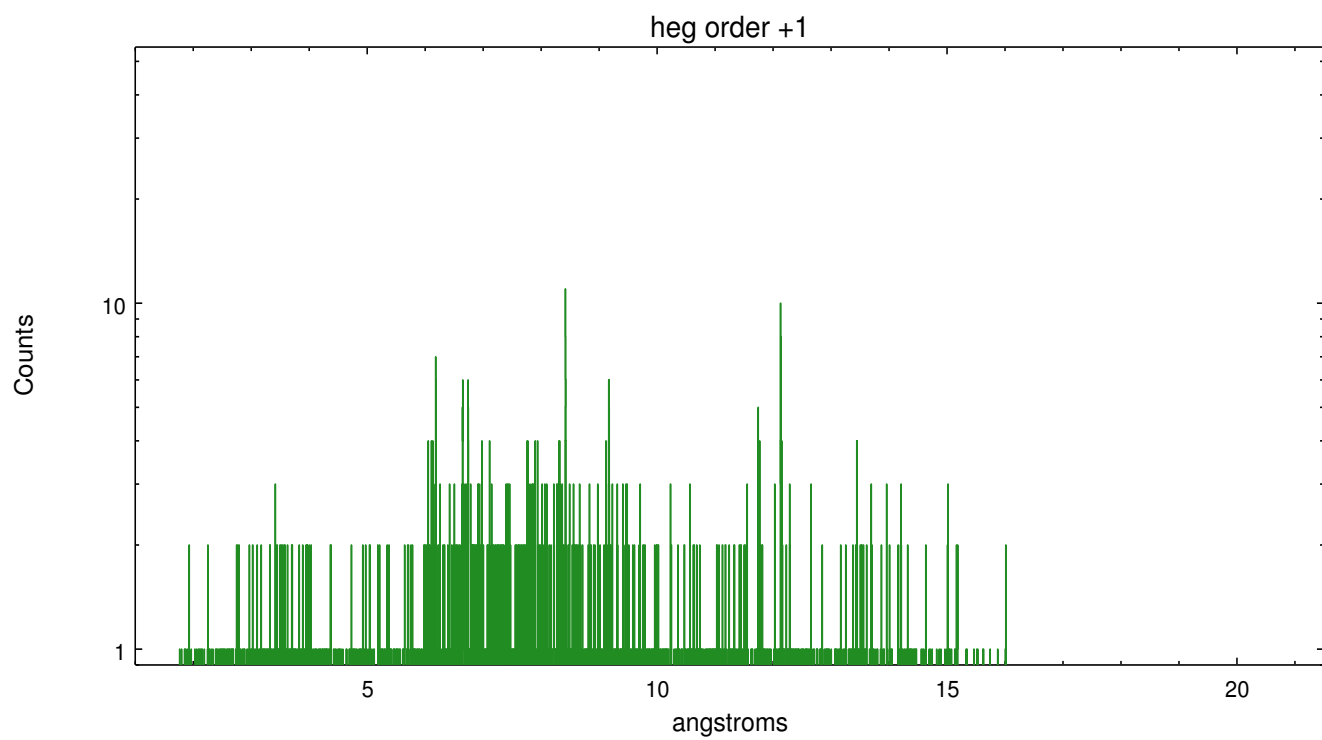
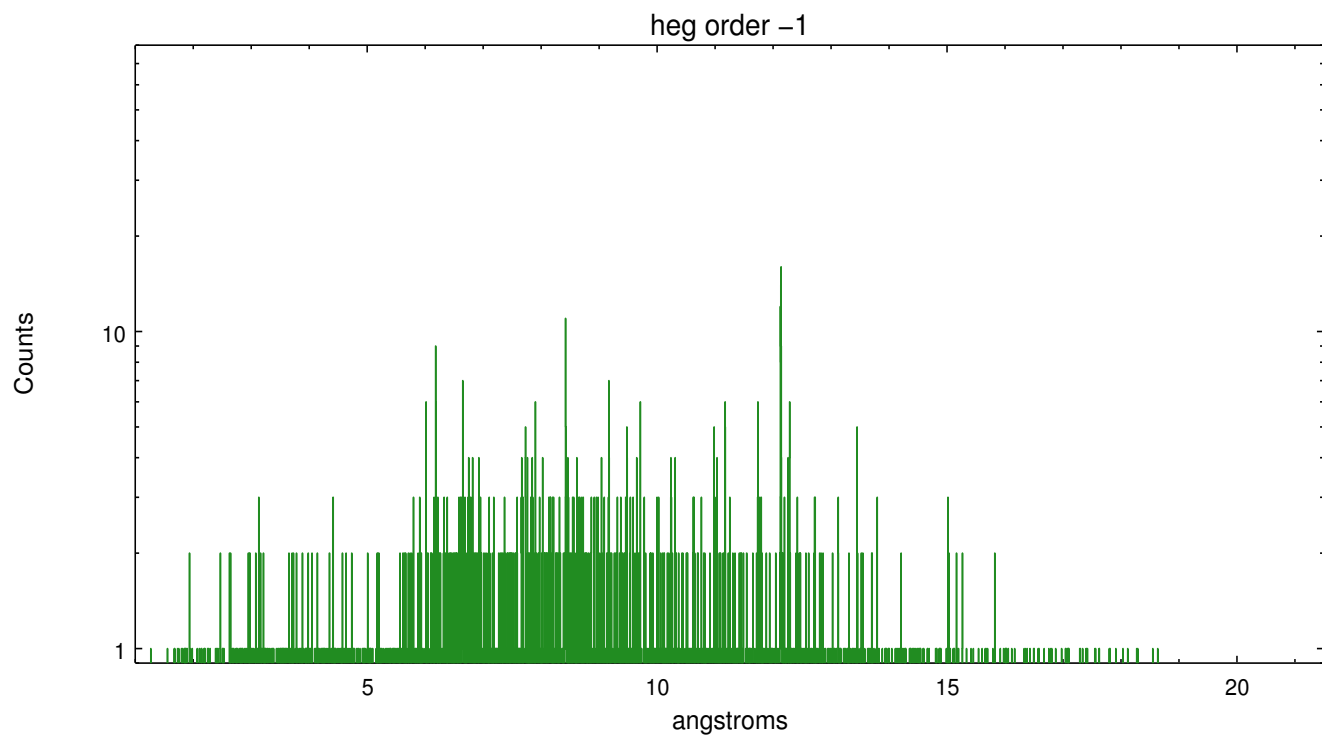
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	324	555	2906	8889	2465	353	290

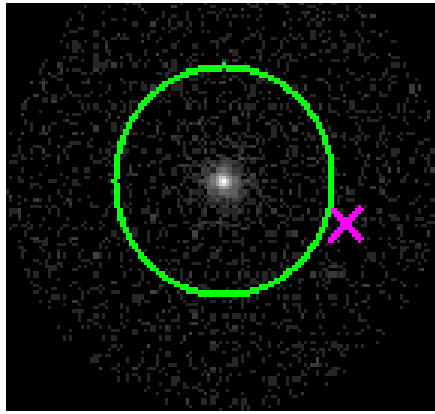




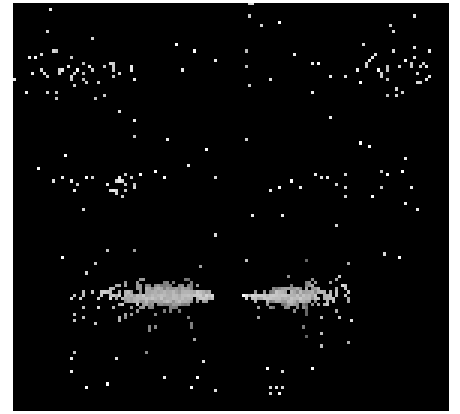
3.2 MEG Arm



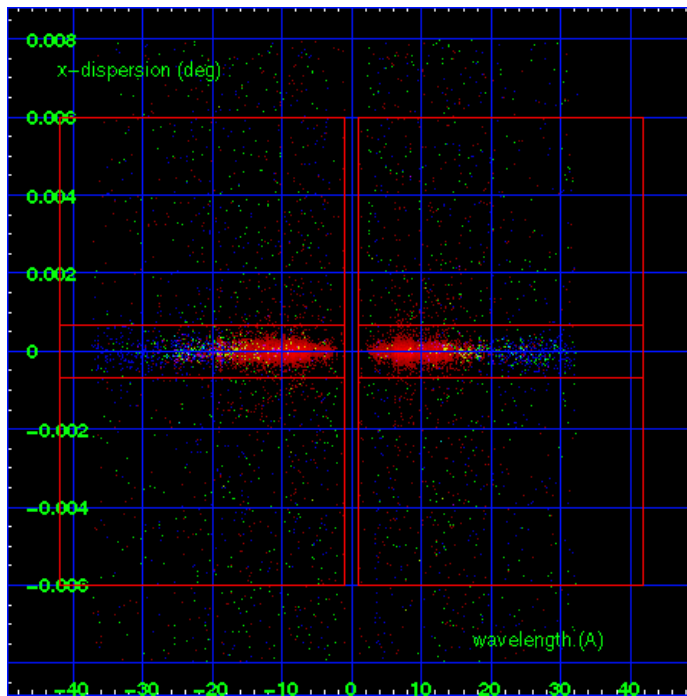
MEG Order Sort 123



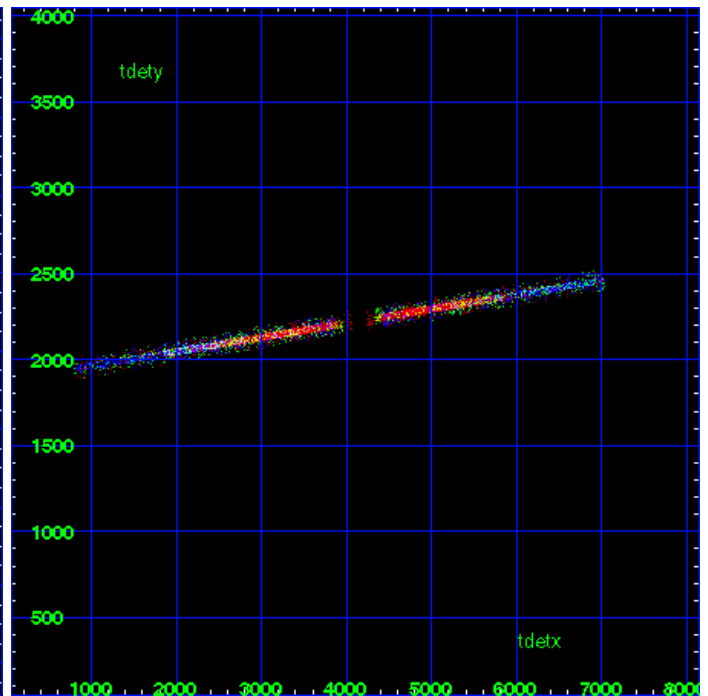
MEG Zero Order



MEG Order Sort ALL

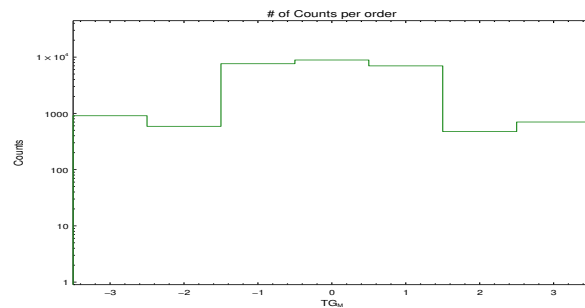


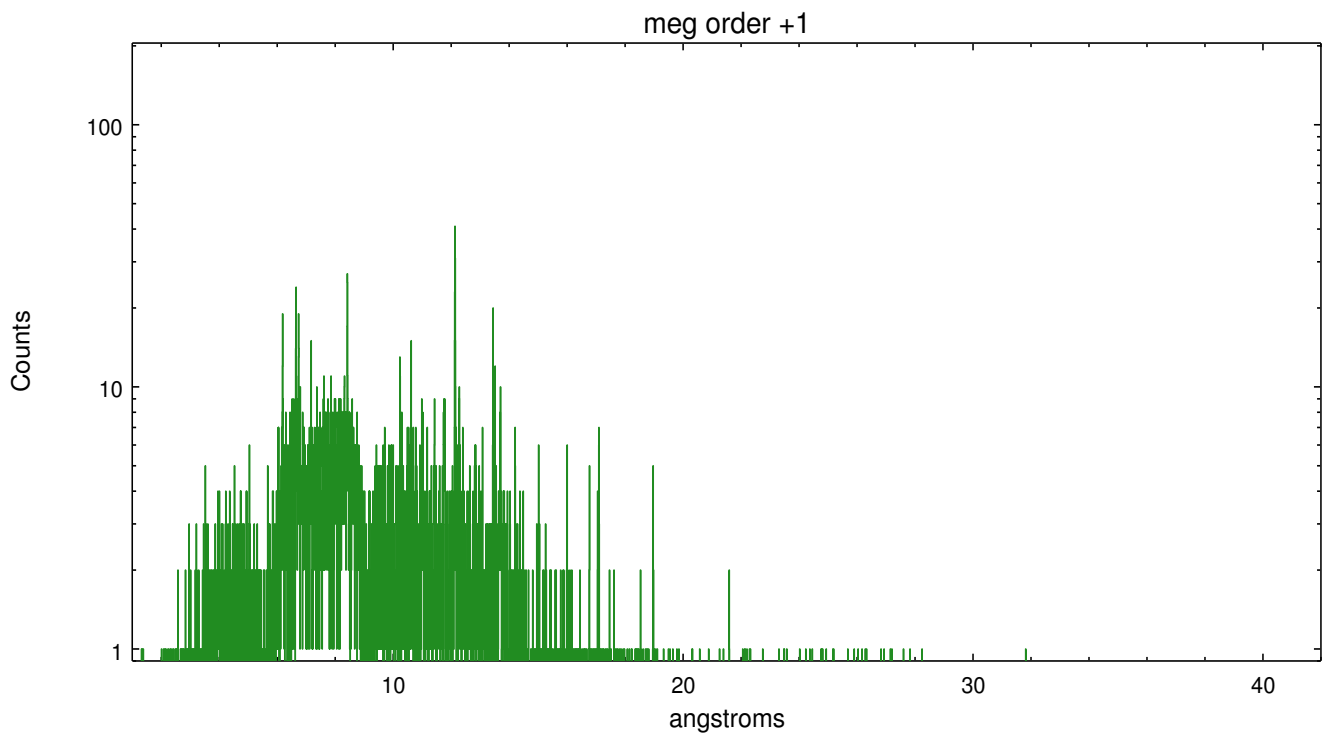
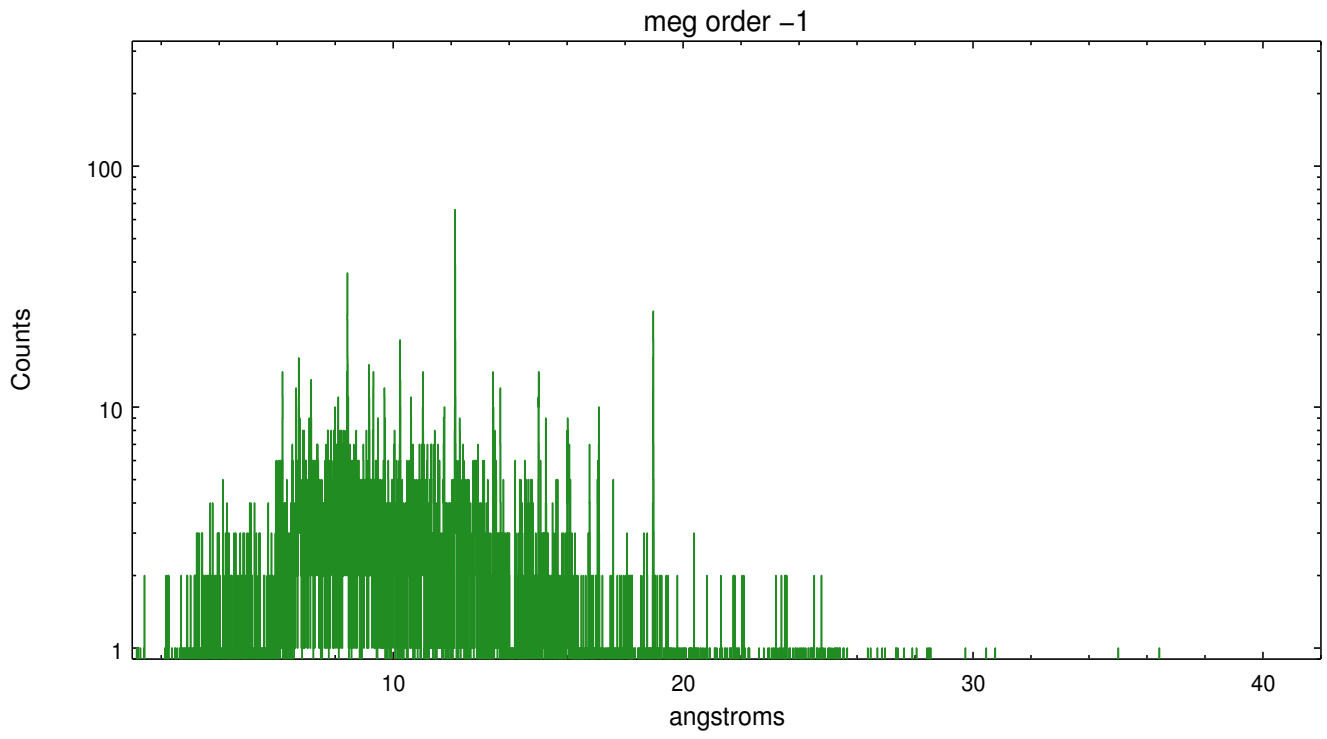
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	908	588	7637	8889	6990	475	702





A Summary

A.1 Status

V&V Scientist	John Houck
V&V Date (YYYY-MM-DD)	2012.05.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.9407588

A.2 Comments