

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 605 - L2 Version 4
Chandra X-Ray Center

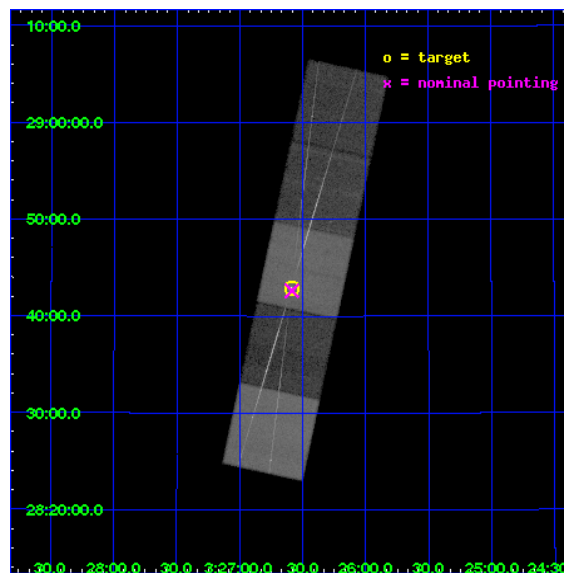
L2 Processing Date : Dec 2 2009

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
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
3	Gratings	16
3.1	HEG Arm	16
3.2	MEG Arm	18
A	Summary	20
A.1	Status	20
A.2	Comments	20

1 Front

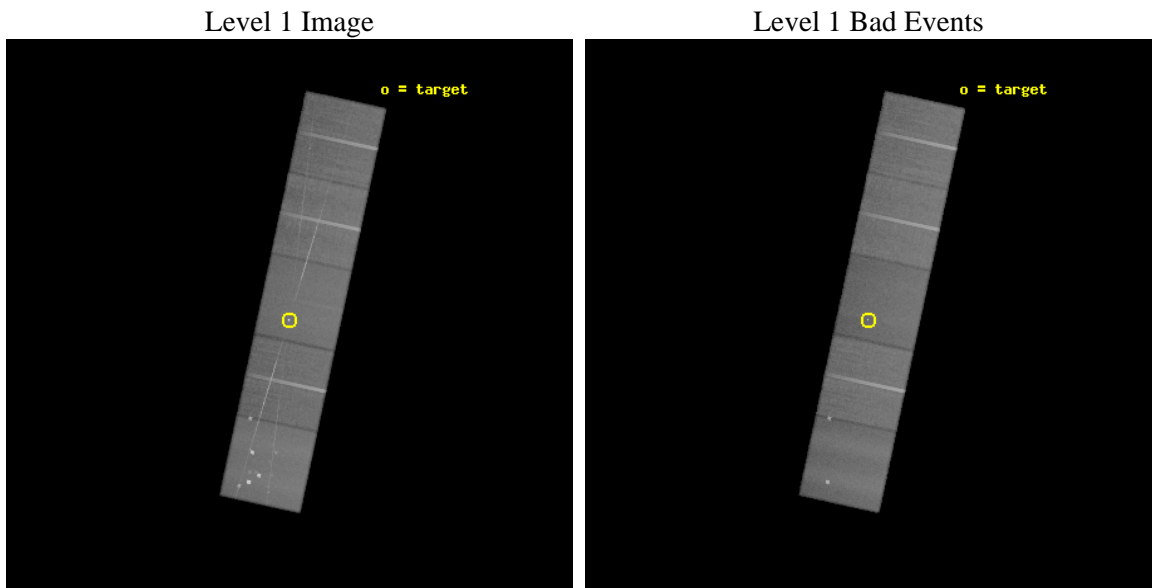
seq_num	200030	Sequence number
obs_id	605	Observation id
title	ACIS/HETG SPECTROSCOPY OF THE ACTIVE BINARIES ALGOL & UX ARI	Propo
observer	DR. STEPHEN DRAKE	Principal investigator
object	UX ARI	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	51.6475	Observer's specified target RA
dec_targ	28.715139	Observer's specified target Dec
ra_nom	51.646472690358	Nominal RA
dec_nom	28.710360931249	Nominal Dec
roll_nom	282.15712883245	Nominal Roll
revision	4	Processing version of data
ontime	49128.858138405	Sum of GTIs [s]
livetime	48506.758954809	Livetime [s]
ontime5	49125.576118268	Sum of GTIs [s]
ontime6	49125.535078272	Sum of GTIs [s]
ontime7	49128.858138405	Sum of GTIs [s]
ontime8	49131.975948699	Sum of GTIs [s]
ontime9	49131.934908703	Sum of GTIs [s]
l2events	529054	Number of level 2 events



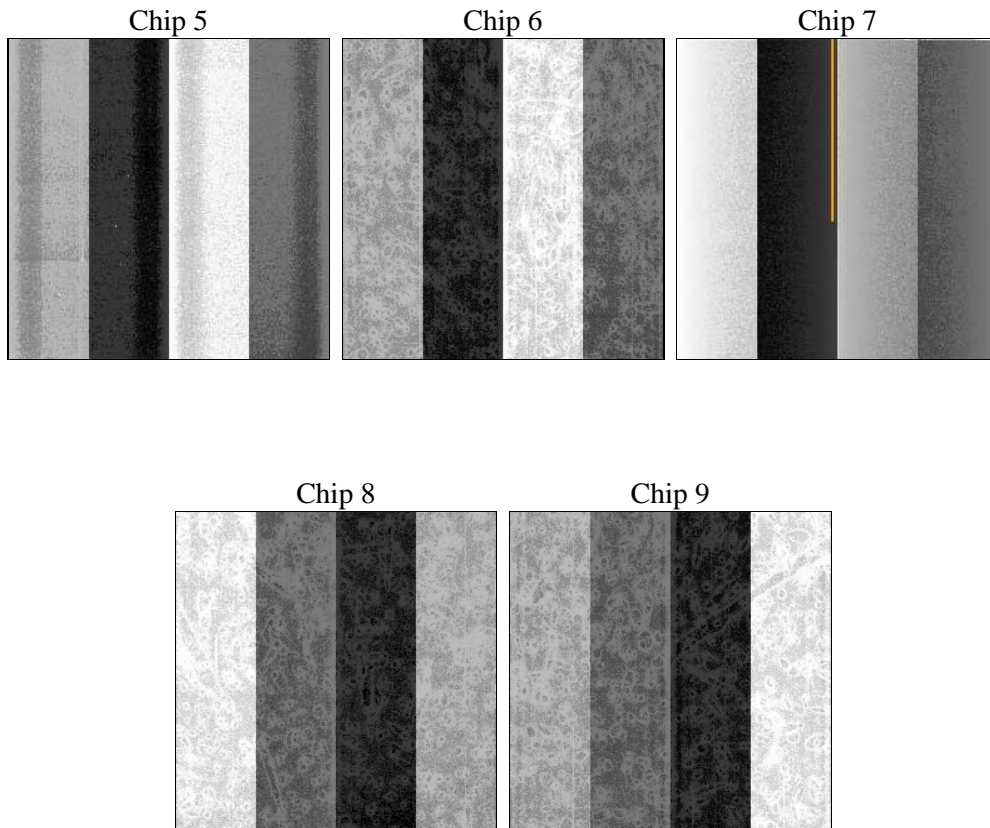
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	49128.858138405	Sum of GTIs [s]
caldbver	4.1.4	 	ontime5	49125.576118268	Sum of GTIs [s]
date	2009-12-02T14:17:29	Date and time of file creation	ontime6	49125.535078272	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	49128.858138405	Sum of GTIs [s]
			ontime8	49131.975948699	Sum of GTIs [s]
			ontime9	49131.934908703	Sum of GTIs [s]
			l1events	2381148	Number of level 1 events

2.1.4 Events

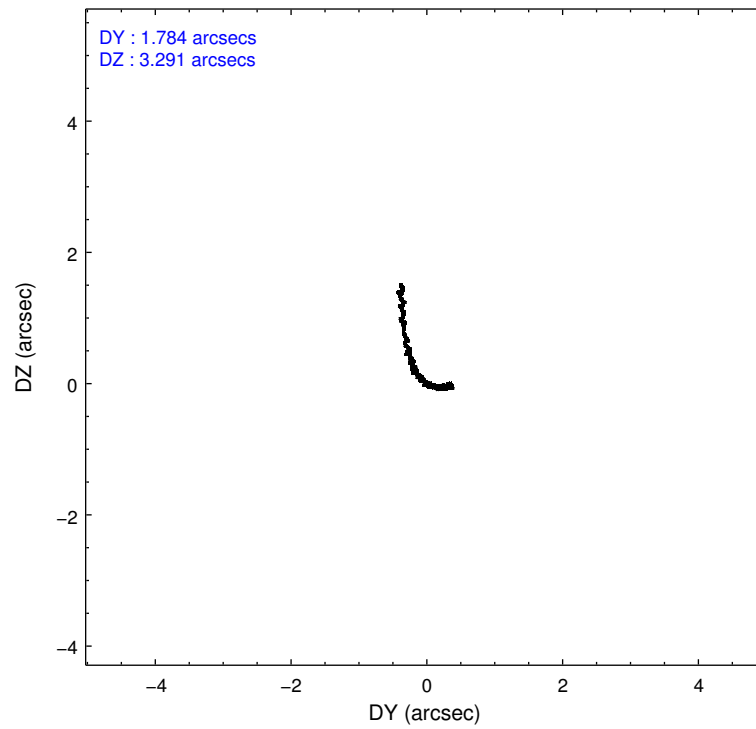
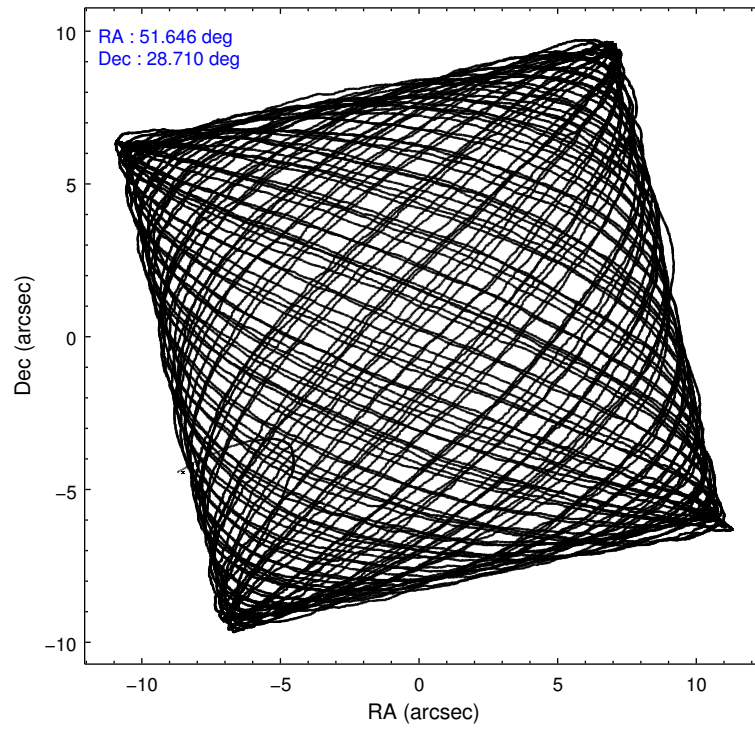
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	560117	439248	468784	505082	407917
rejected events	306175	381520	283745	409506	364295
rejected %	54%	86%	60%	81%	89%

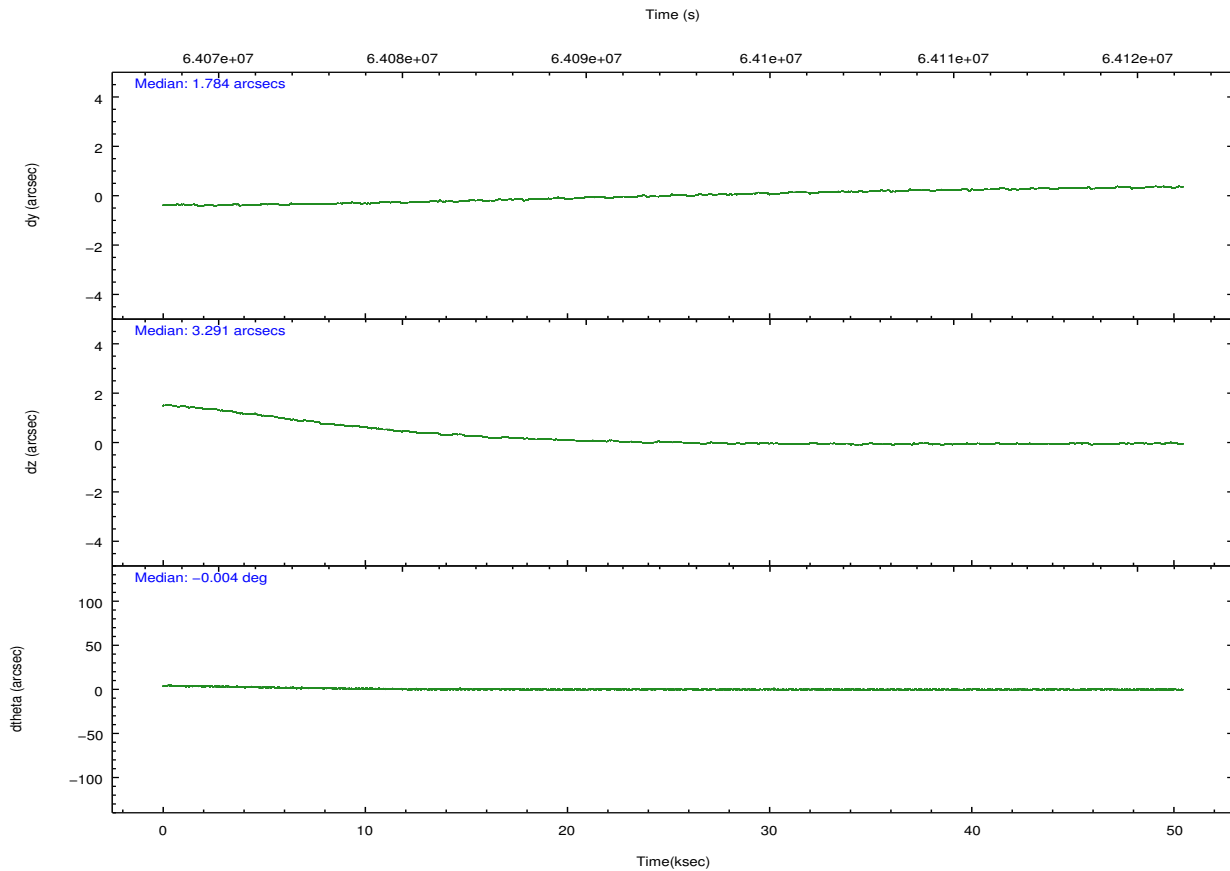
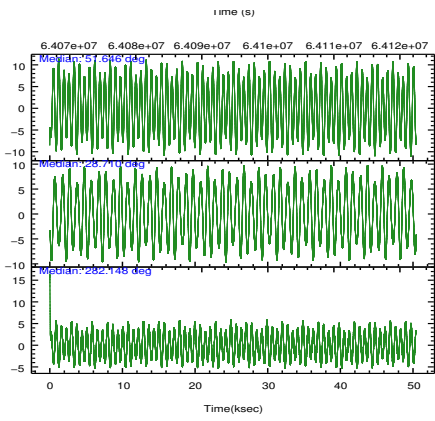
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	50804	21697	12352	30141	9955
	9%	4%	2%	5%	2%
grade 1 events	2003	121	509	214	82
	0%	0%	0%	0%	0%
grade 2 events	55653	18223	39358	27982	16721
	9%	4%	8%	5%	4%
grade 3 events	8291	3147	11650	6711	2722
	1%	0%	2%	1%	0%
grade 4 events	7262	3020	10260	6384	2602
	1%	0%	2%	1%	0%
grade 5 events	23224	8980	28214	11865	9086
	4%	2%	6%	2%	2%
grade 6 events	131954	11646	111426	24374	11624
	23%	2%	23%	4%	2%
grade 7 events	280926	372414	255015	397411	355125
	50%	84%	54%	78%	87%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-56789	ACIS-56789	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
Pointing RA	51.625441	51.6464726903581	Subarray requested	NONE	NONE
Pointing Dec	28.730790	28.71036093124888	Alternating exposures requested	N	N
Pointing Roll	282.010601	282.1571288324499	Primary exposure time	0.000000	3.2
Window start time	58060864.184000	58060864.184000			
Window stop time	67042864.184000	67042864.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.127916318603			
SIM translation stage offset (mm)	-3	-3.004606264404799			
Observation start time	64069949.184000	64068622.87155			
Observation start date	2000-01-12T13:11:25	2000-01-12T12:50:22			
Observation end time	64119949.184000	64120649.310939			
Observation end date	2000-01-13T03:04:45	2000-01-13T03:17:29			
Read mode	TIMED	TIMED			

2.3 Aspect



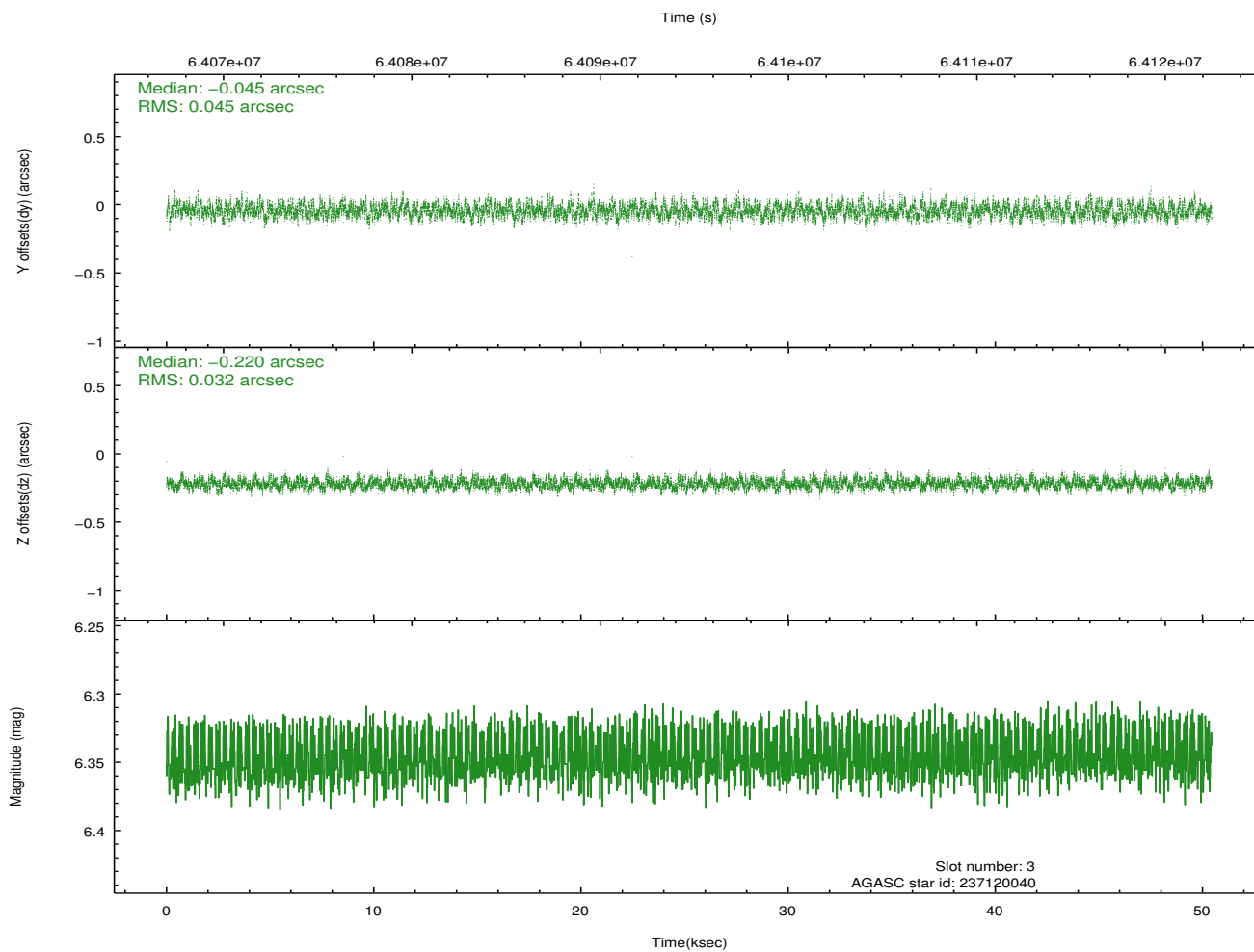
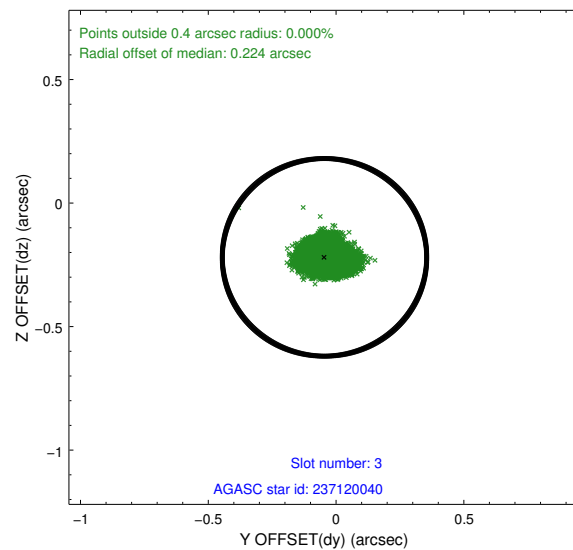
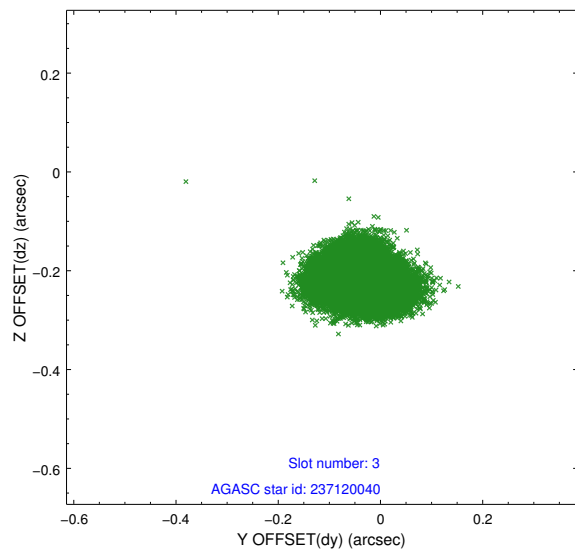


Slot Statistics

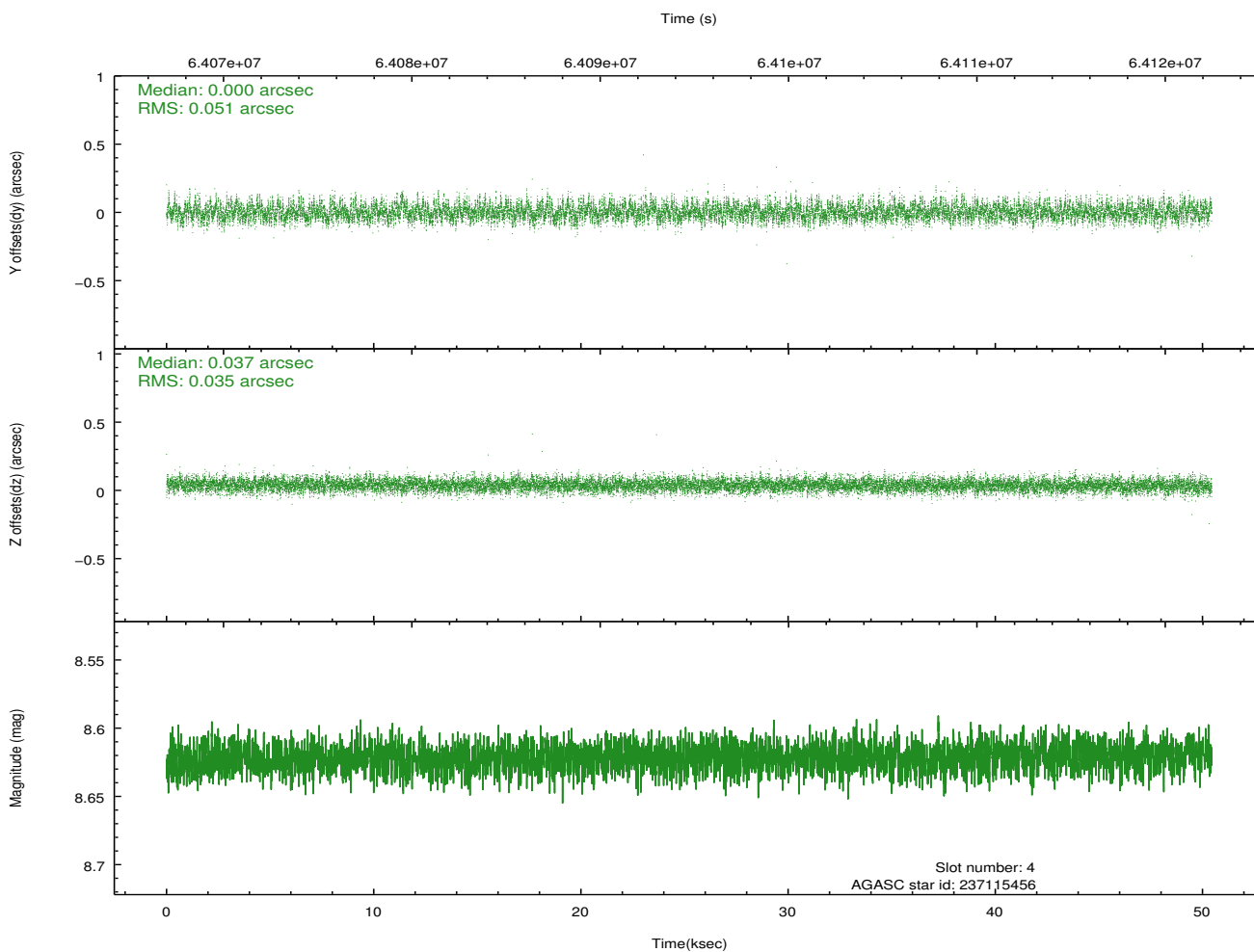
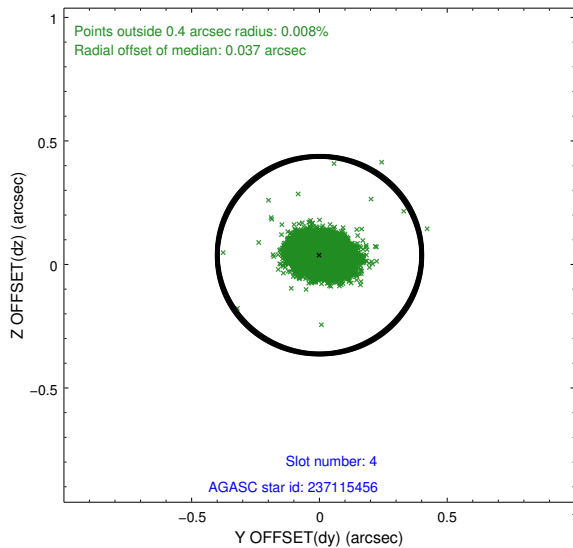
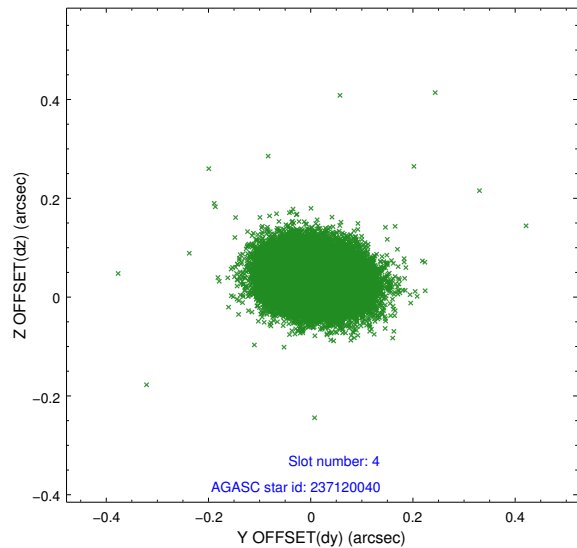
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	12302	-0.058	-0.030	0.009	0.019	0.000000	0.000000	-754.23	-1786.68
1	FID	ACIS-S-4	7.20	12300	0.019	0.036	0.009	0.017	0.000000	0.000000	2159.13	121.88
2	FID	ACIS-S-5	7.24	12300	0.007	0.003	0.008	0.014	0.000000	0.000000	-1807.03	115.50
3	GUIDE	237120040	6.35	24603	-0.045	-0.220	0.059	0.093	51.647464	28.715092	69.93	56.01
4	GUIDE	237115456	8.62	24590	0.000	0.037	0.065	0.108	51.067324	28.429895	688.39	-1952.67
5	GUIDE	237113232	9.30	24518	0.204	-0.061	0.077	0.124	51.256732	28.716913	-194.45	-1148.85
6	GUIDE	237109448	9.49	24591	-0.158	0.239	0.112	0.179	52.023333	29.446877	-2264.23	1756.82
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

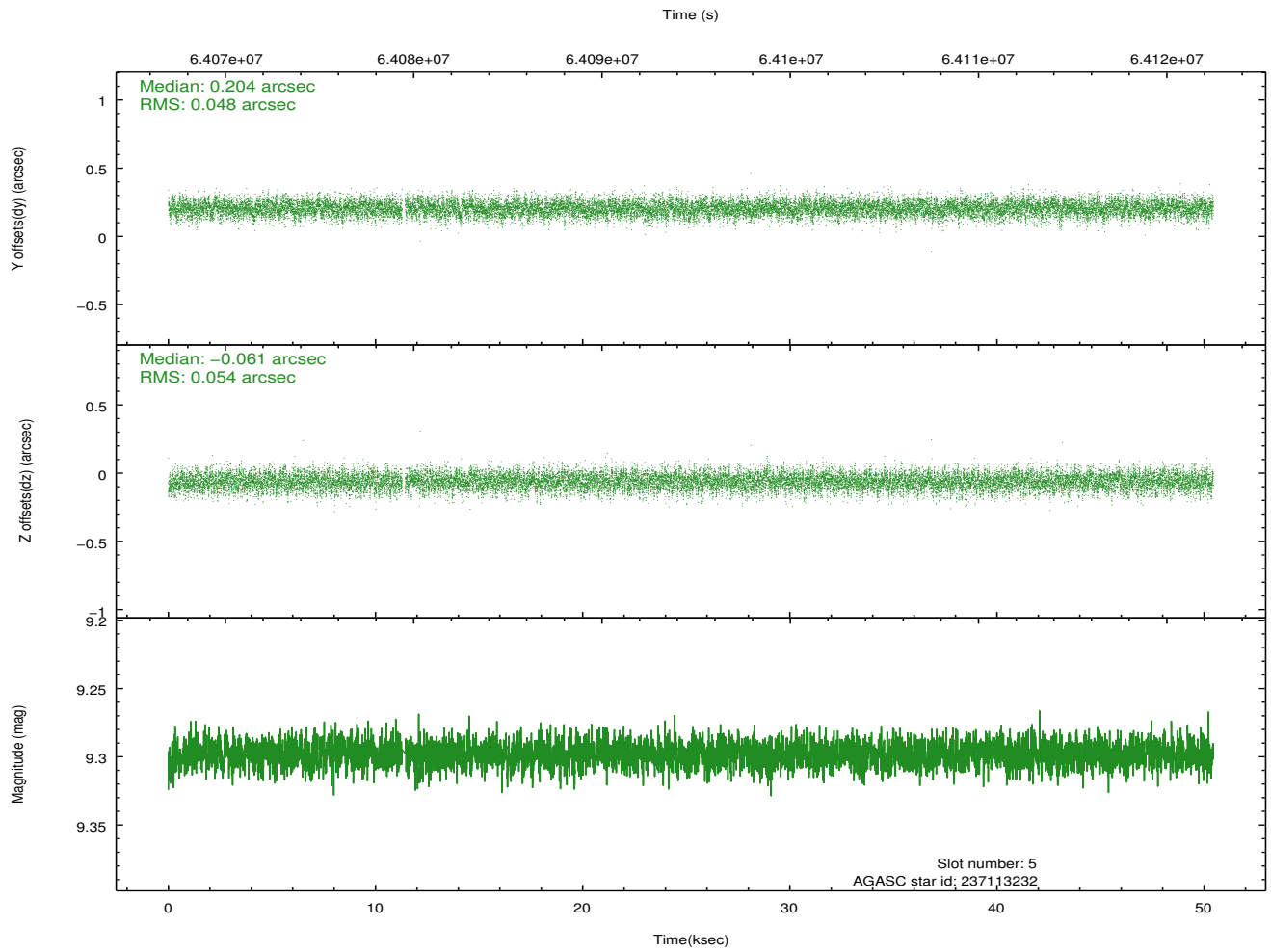
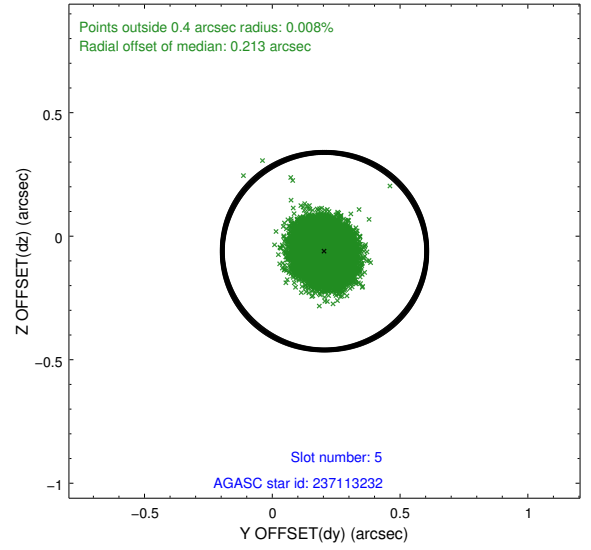
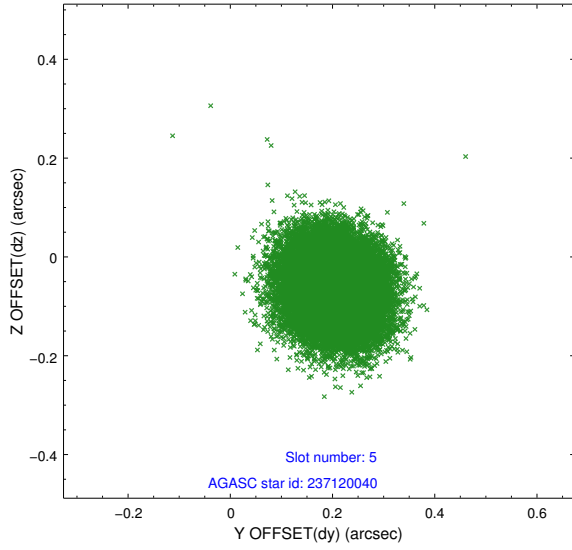
2.4.1 Slot 3



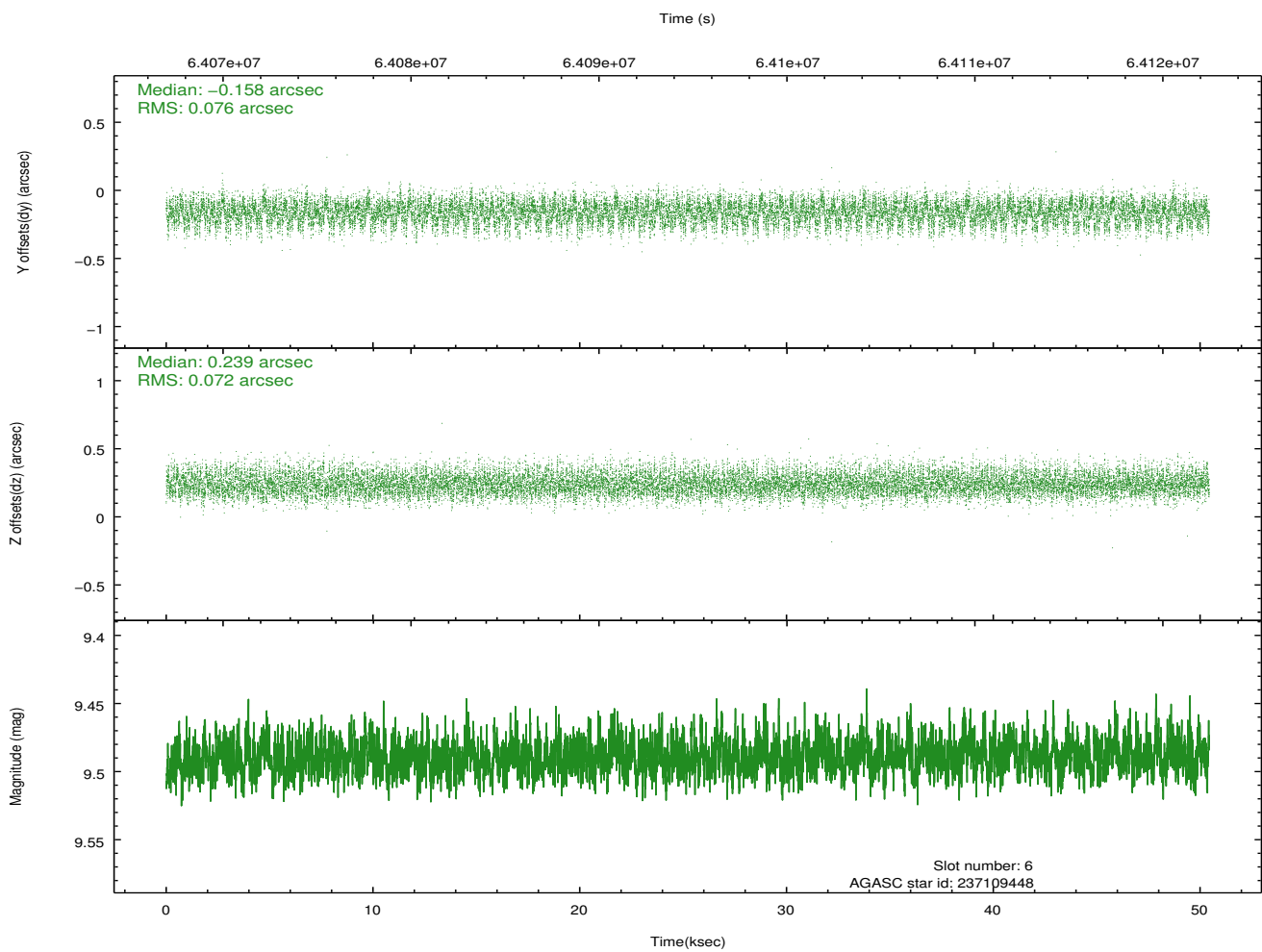
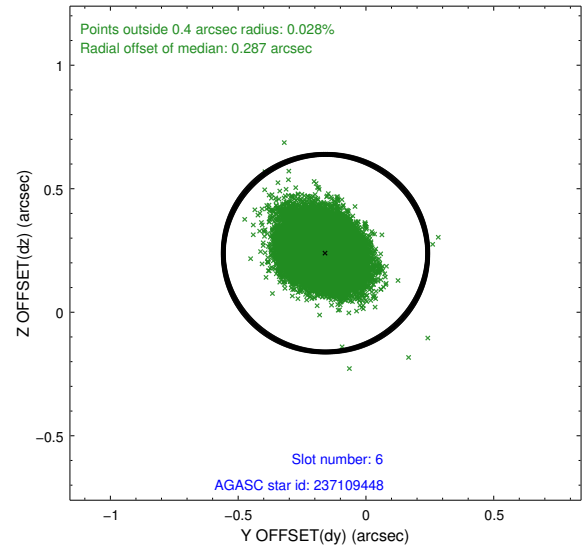
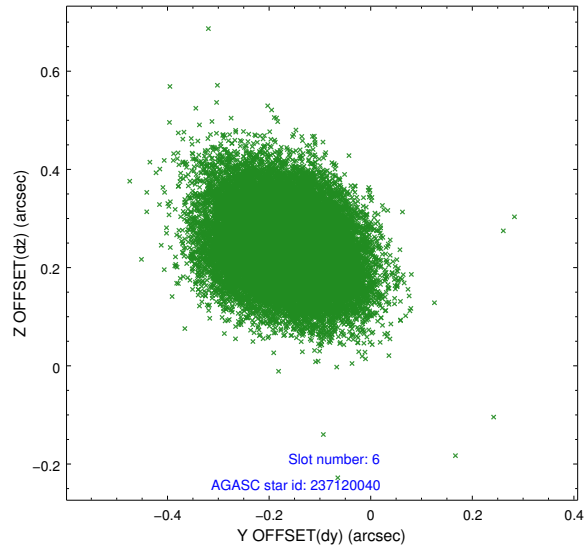
2.4.2 Slot 4



2.4.3 Slot 5

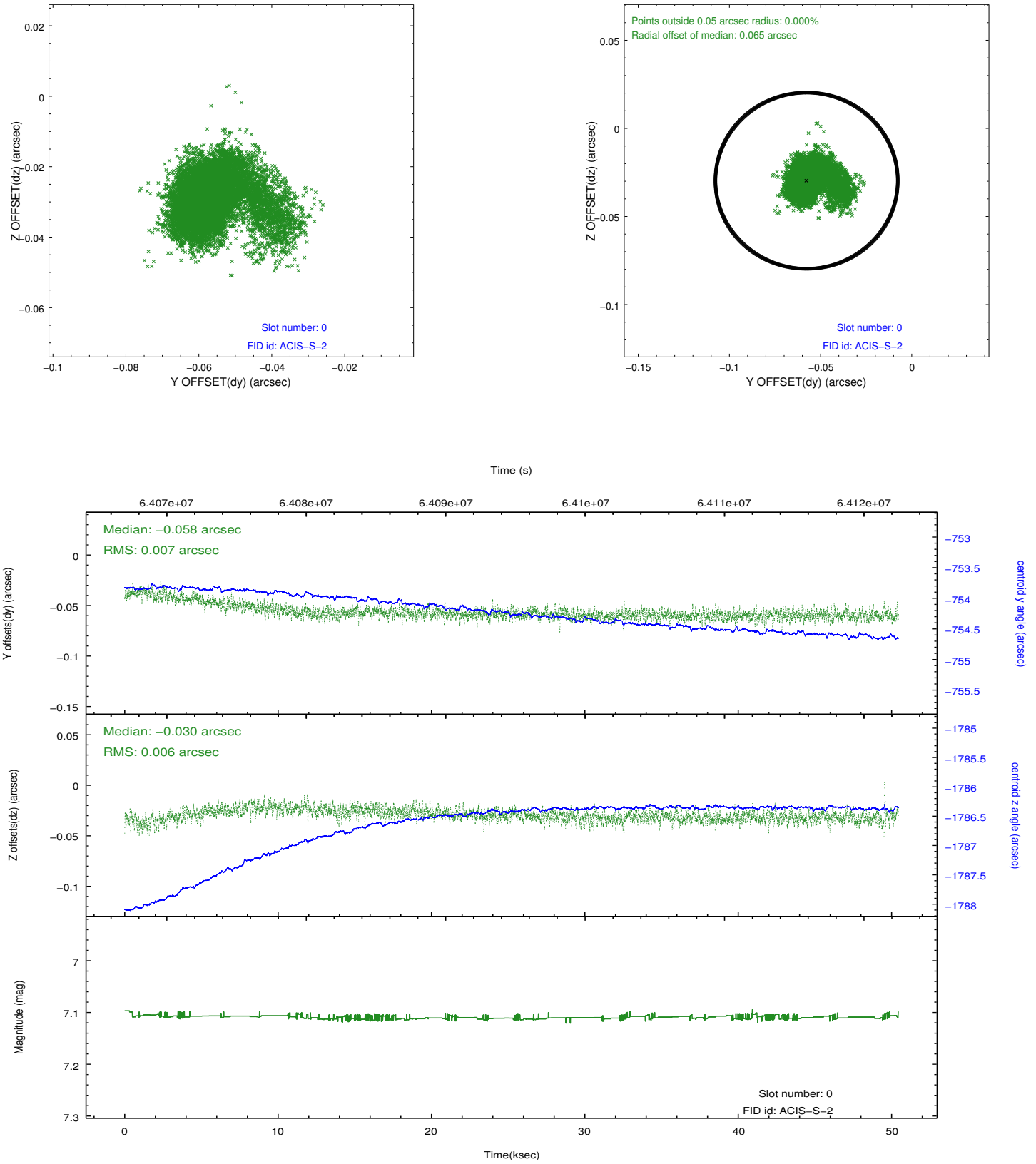


2.4.4 Slot 6

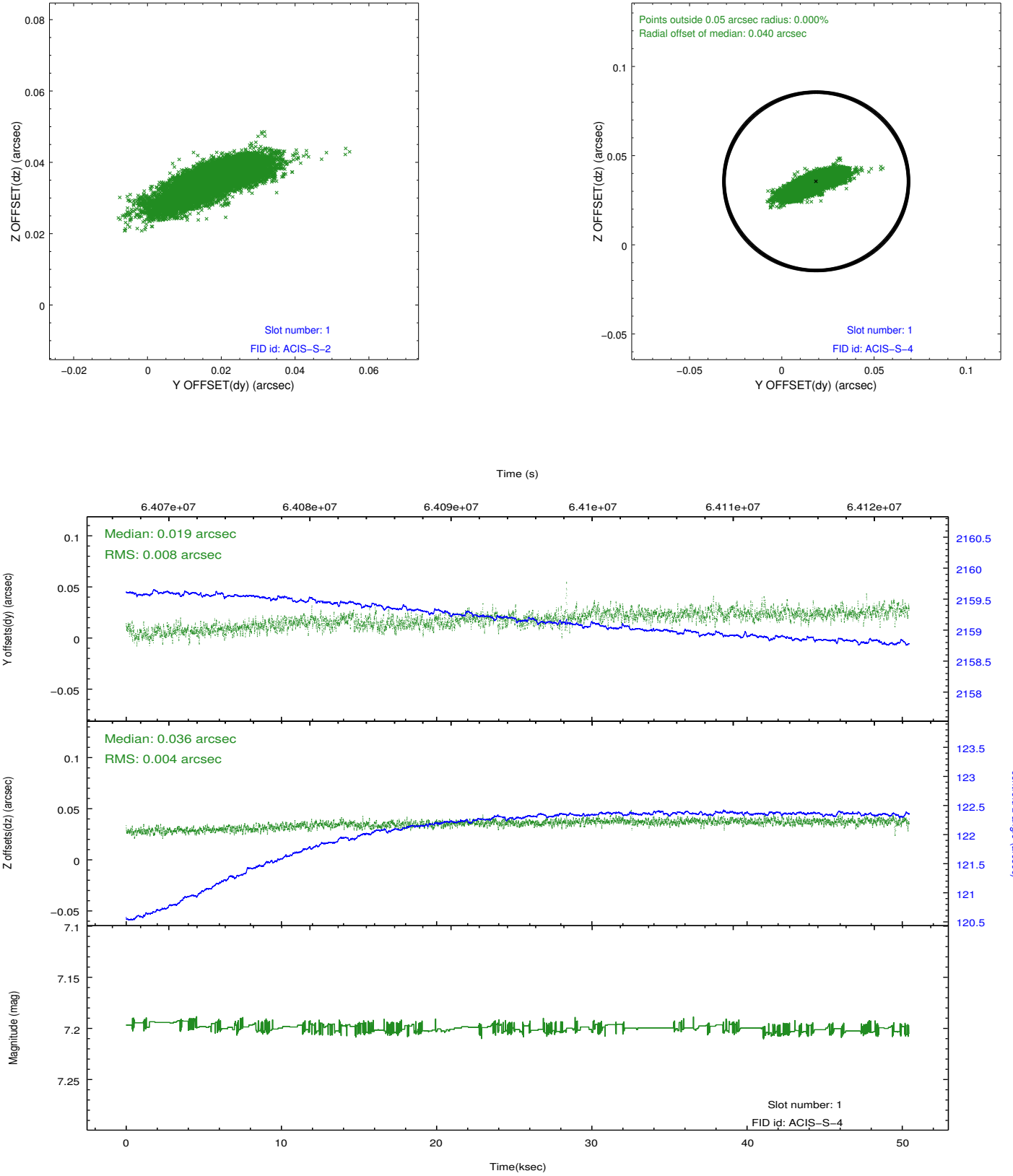


2.5 FID Slots

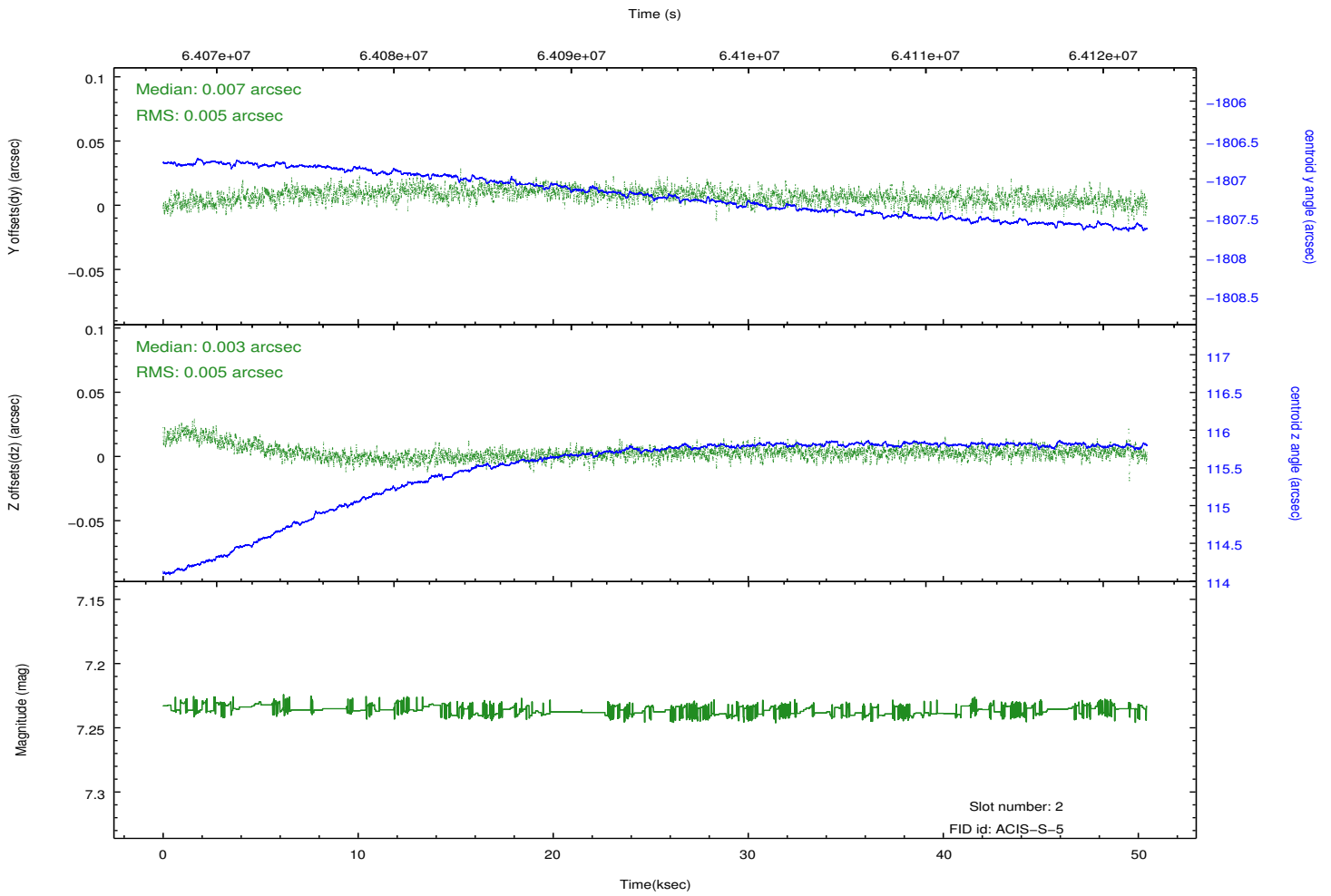
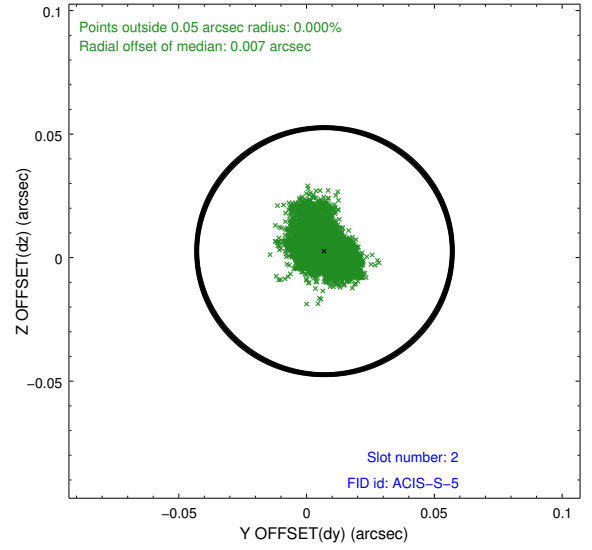
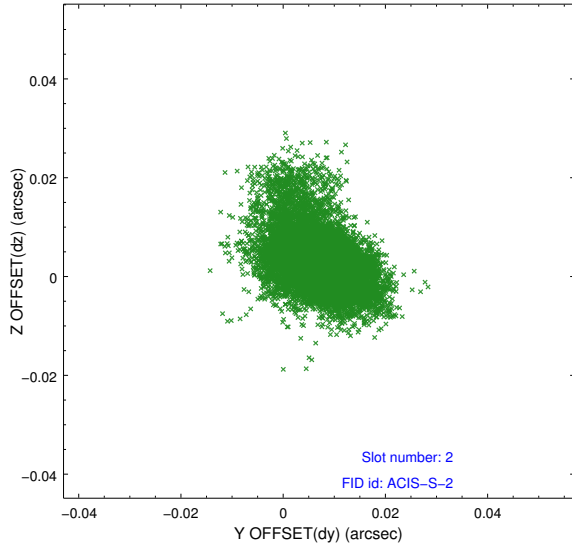
2.5.1 Slot 0



2.5.2 Slot 1

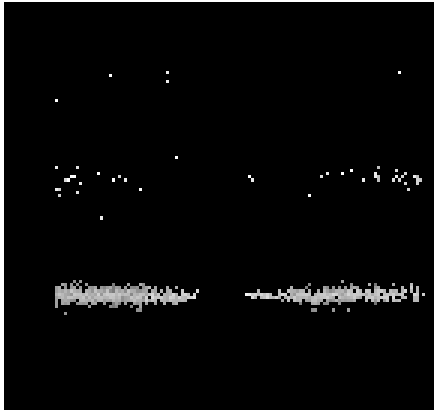


2.5.3 Slot 2

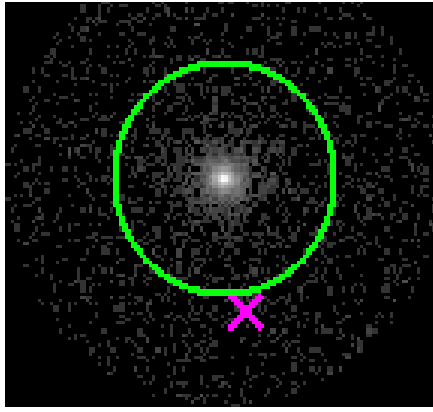


3 Gratings

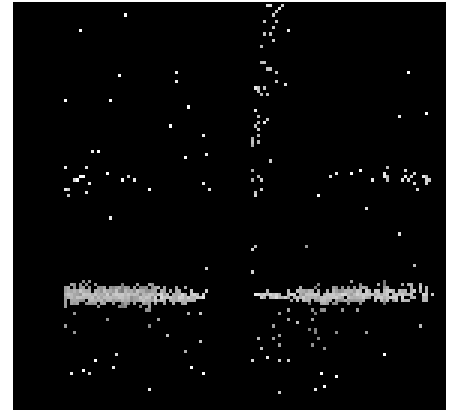
3.1 HEG Arm



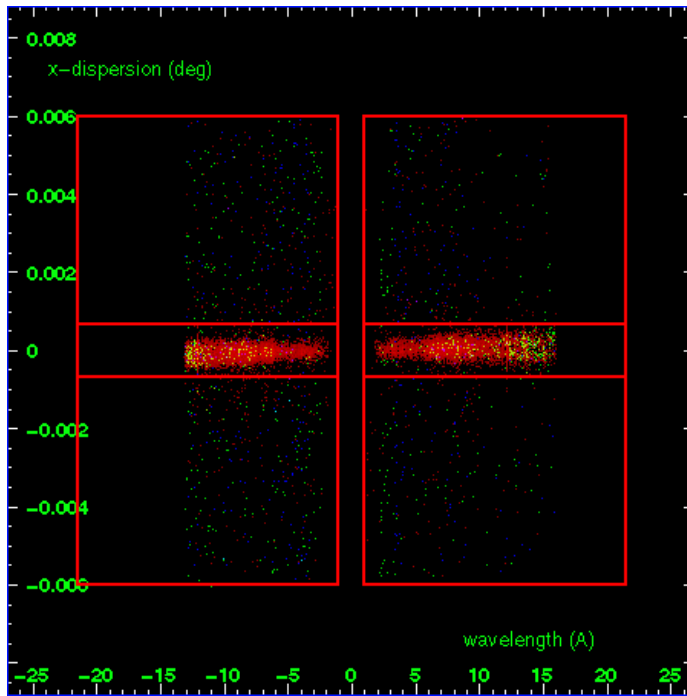
HEG Order Sort 123



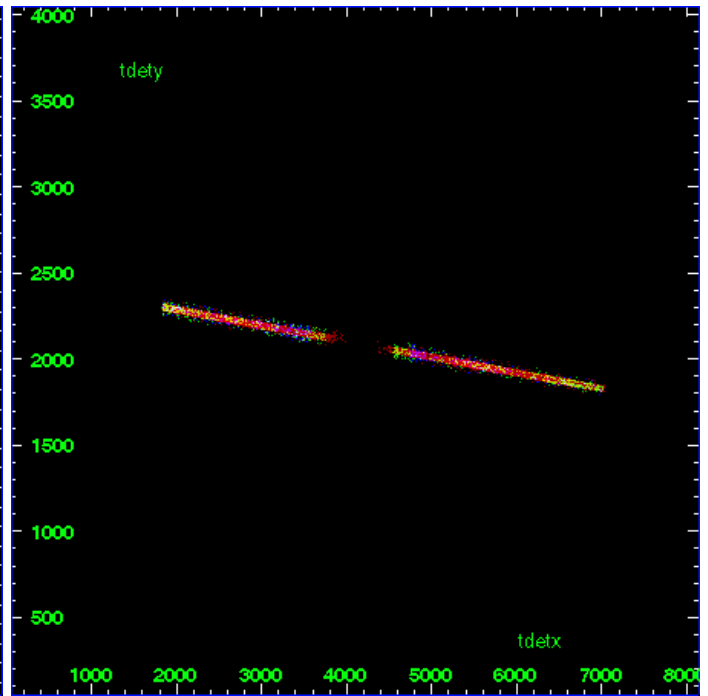
HEG Zero Order



HEG Order Sort ALL

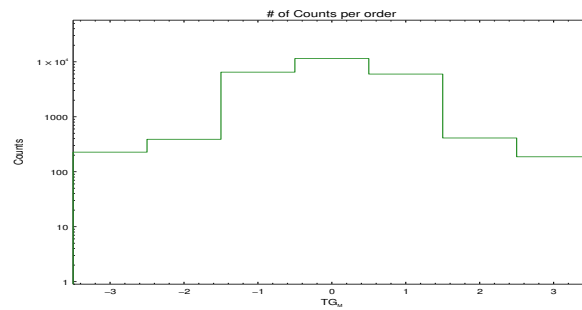


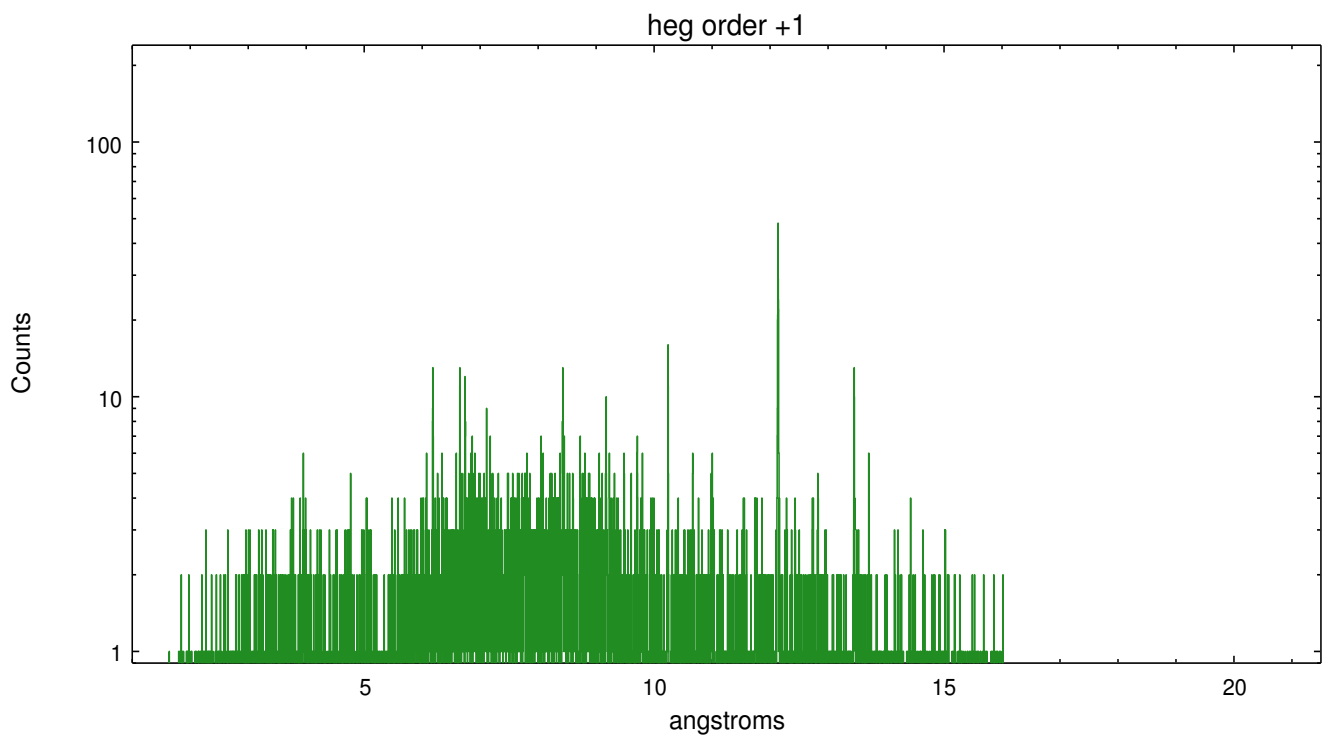
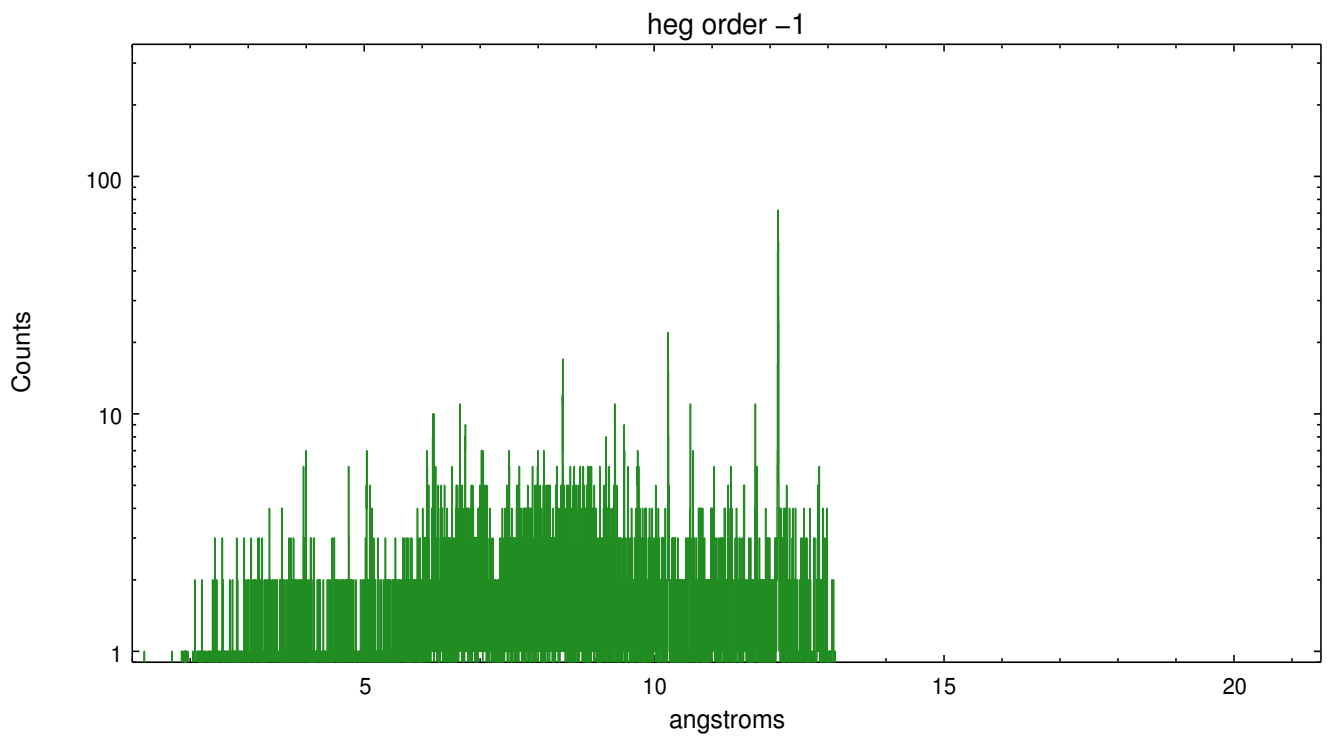
Spot Image HEG



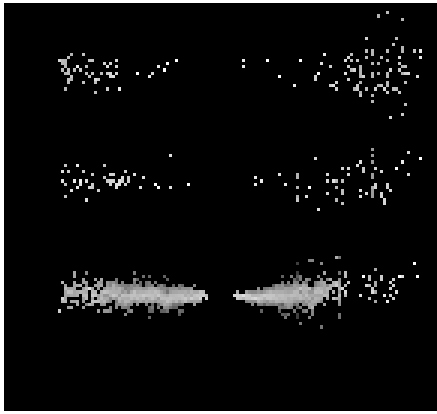
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	227	389	6479	11440	5978	411	187

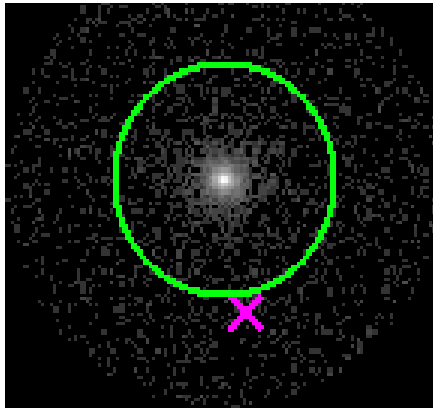




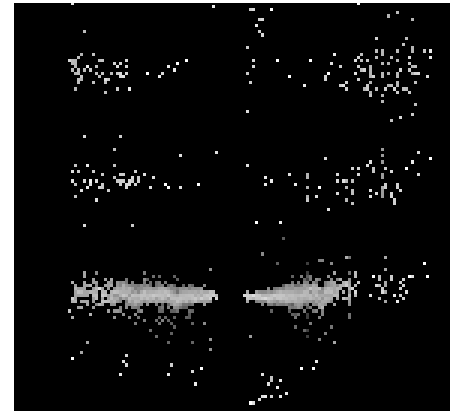
3.2 MEG Arm



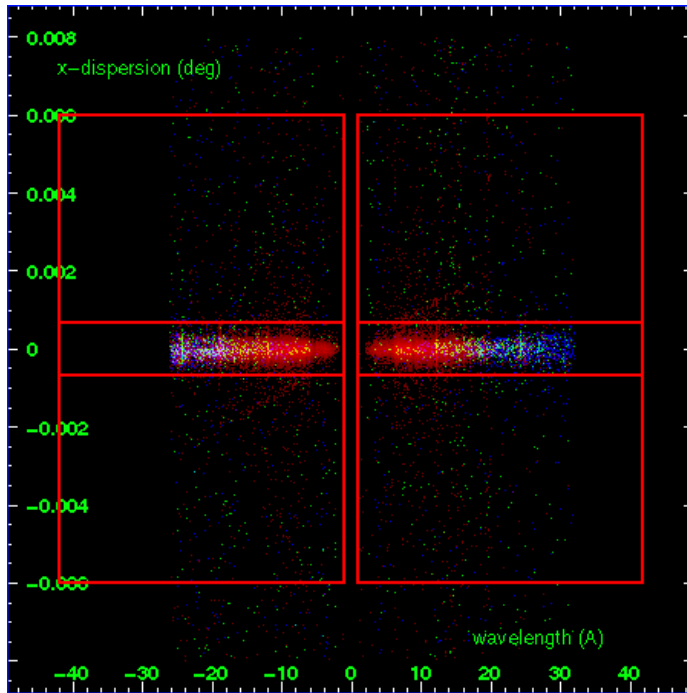
MEG Order Sort 123



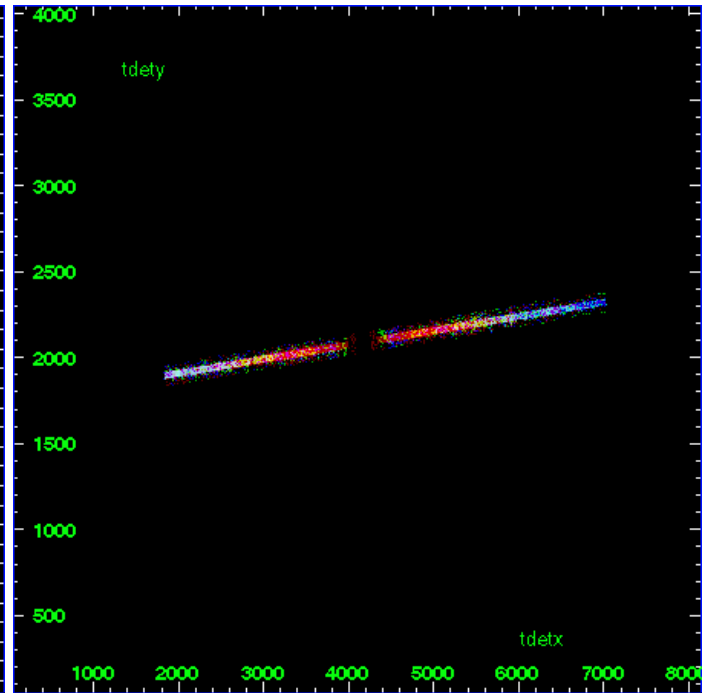
MEG Zero Order



MEG Order Sort ALL

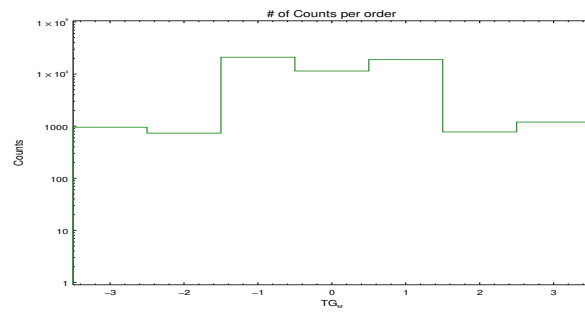


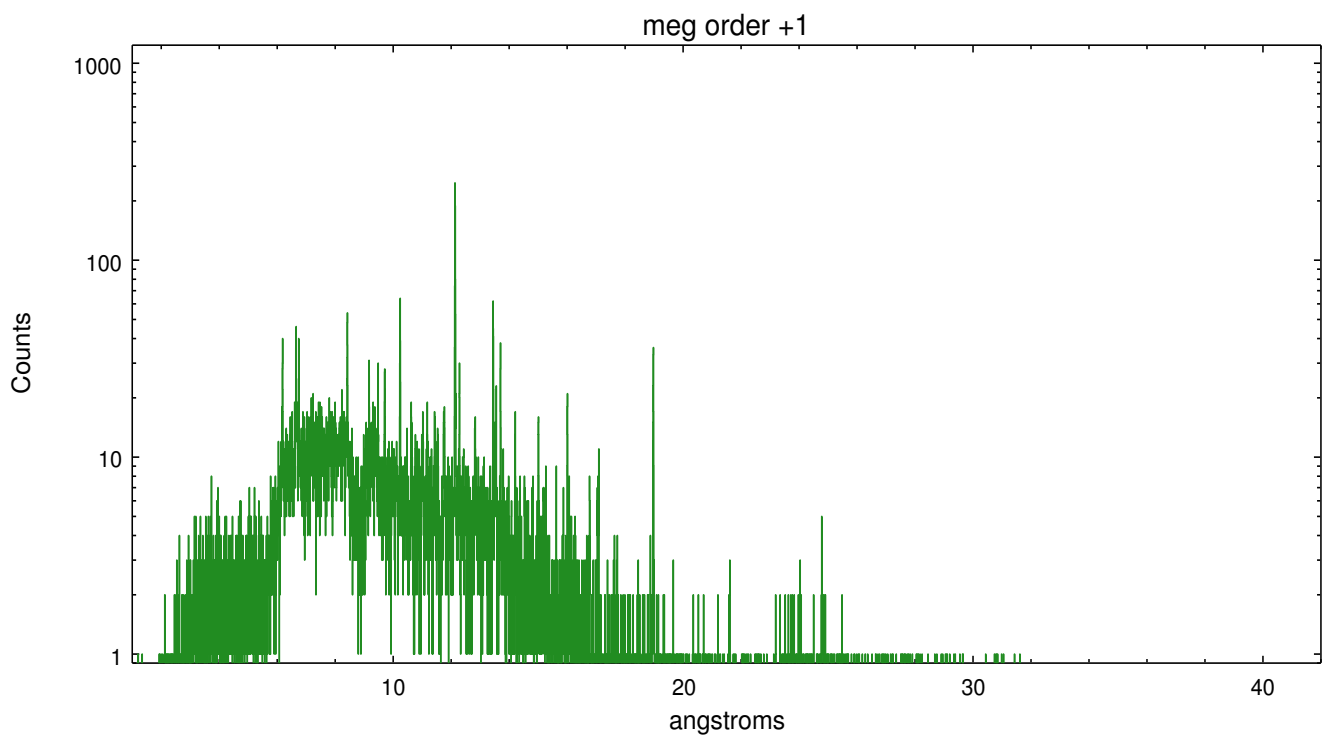
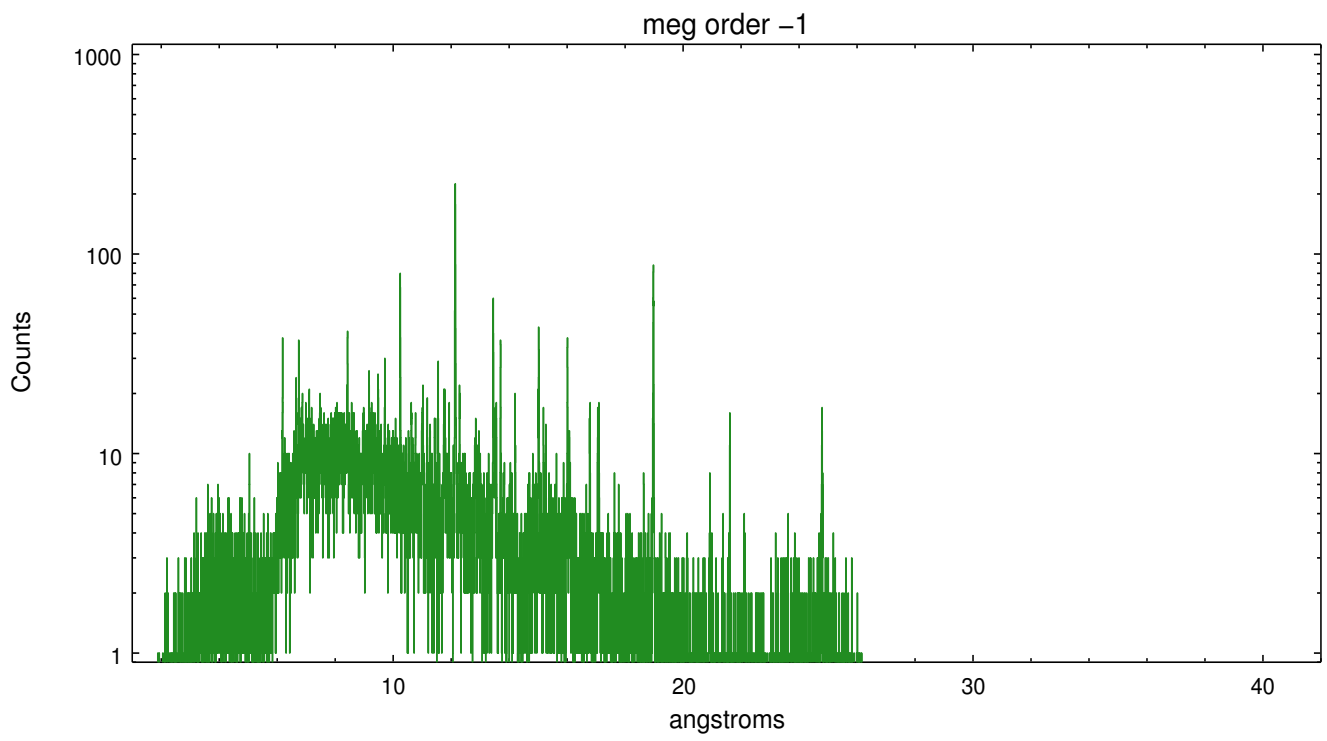
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	953	734	21041	11440	18901	774	1198





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2009.12.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.091

A.2 Comments