

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 6926 - L2 Version 2
Chandra X-Ray Center

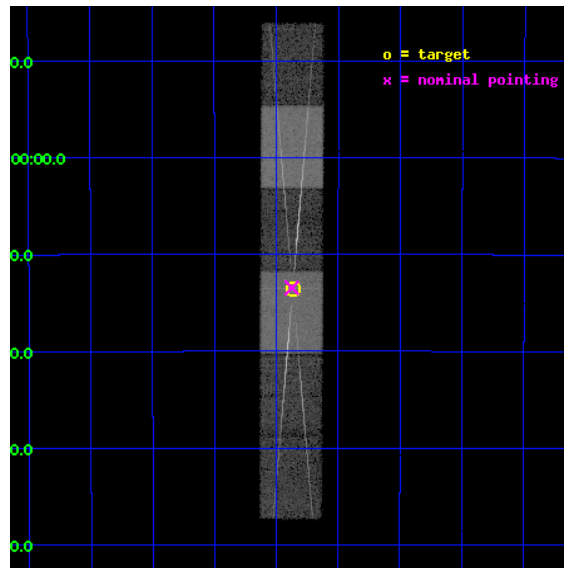
L2 Processing Date : Apr 4 2012

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

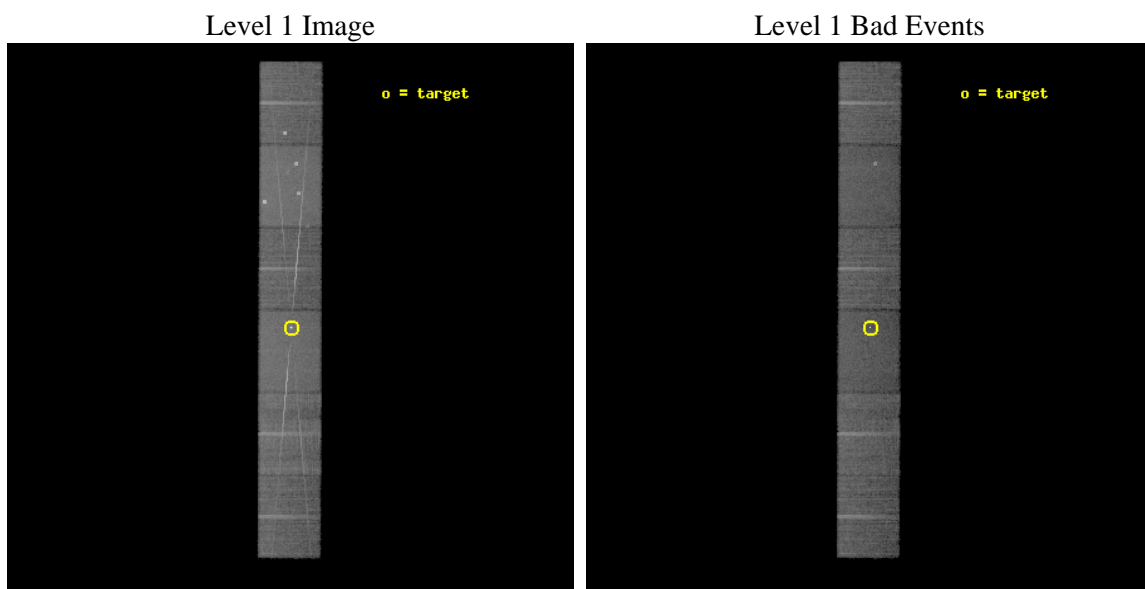
seq_num	790106	Sequence number
obs_id	6926	Observation id
title	AO7 Calibration Observations of PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.71856856712	Nominal RA [deg]
dec_nom	-30.224329770866	Nominal Dec [deg]
roll_nom	90.197277501984	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14042.215275466	Sum of GTIs [s]
livetime	13815.421319092	Livetime [s]
ontime4	14039.715345144	Sum of GTIs [s]
ontime5	14042.174235463	Sum of GTIs [s]
ontime6	14042.13319546	Sum of GTIs [s]
ontime7	14042.215275466	Sum of GTIs [s]
ontime8	14042.092155457	Sum of GTIs [s]
ontime9	14042.051115453	Sum of GTIs [s]
l2events	206401	Number of level 2 events



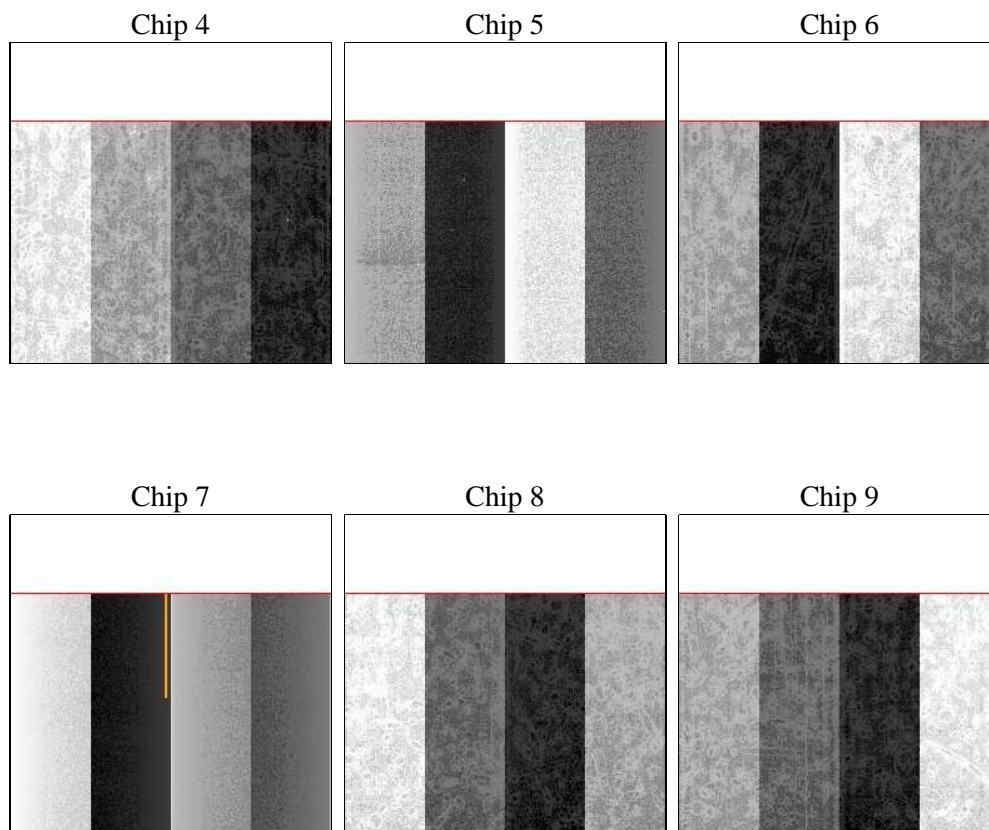
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	14042.215275466	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	14039.715345144	Sum of GTIs [s]
date	2012-04-04T20:12:34	Date and time of file creation	ontime5	14042.174235463	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	14042.13319546	Sum of GTIs [s]
			ontime7	14042.215275466	Sum of GTIs [s]
			ontime8	14042.092155457	Sum of GTIs [s]
			ontime9	14042.051115453	Sum of GTIs [s]
			l1events	781129	Number of level 1 events

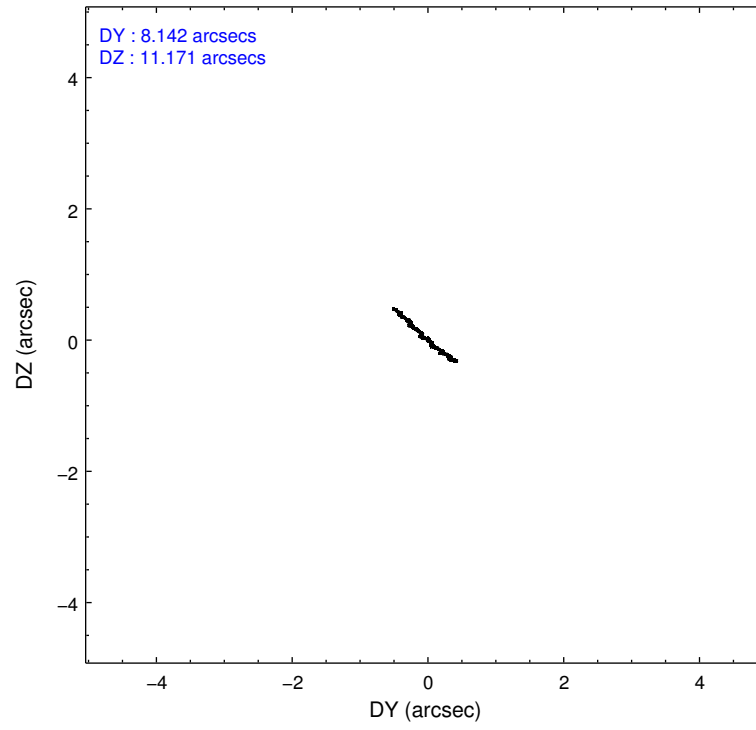
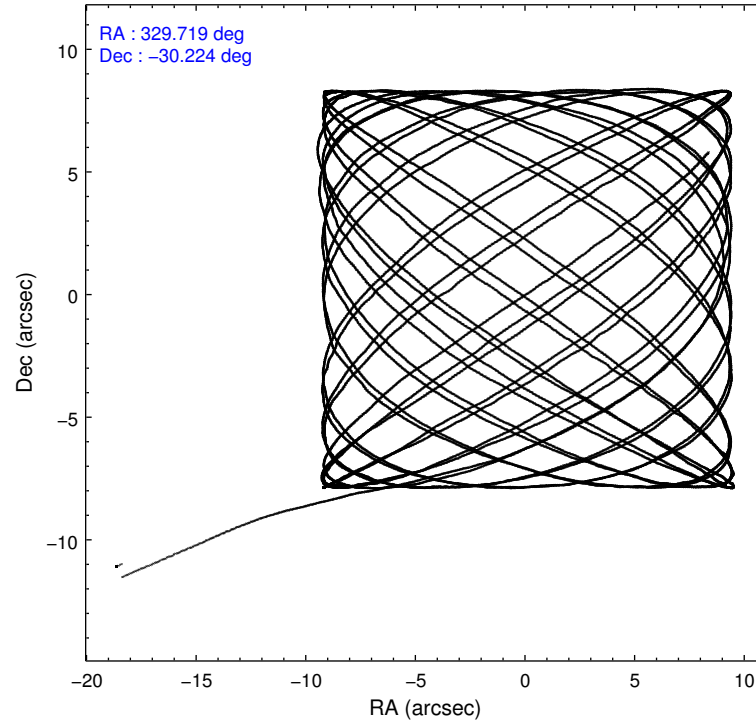
2.1.4 Events

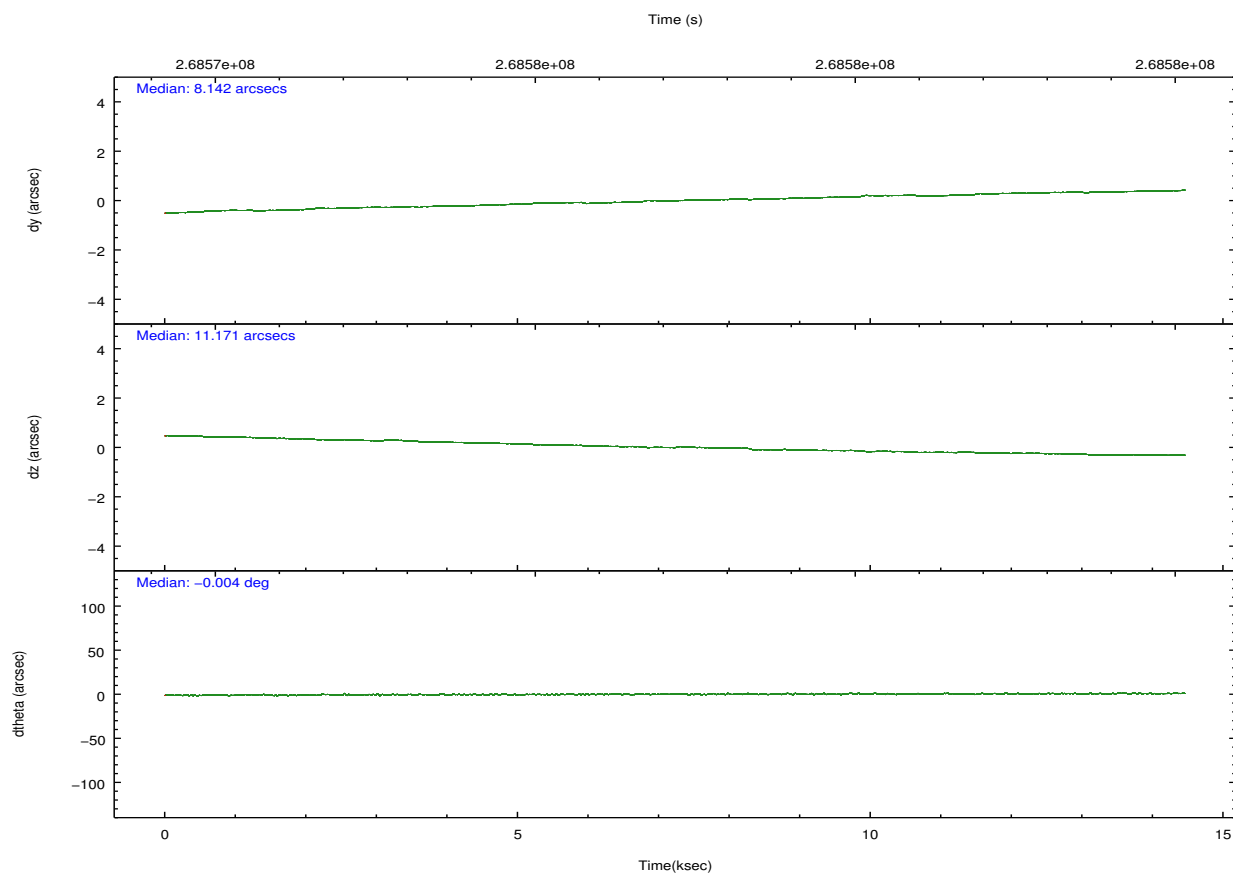
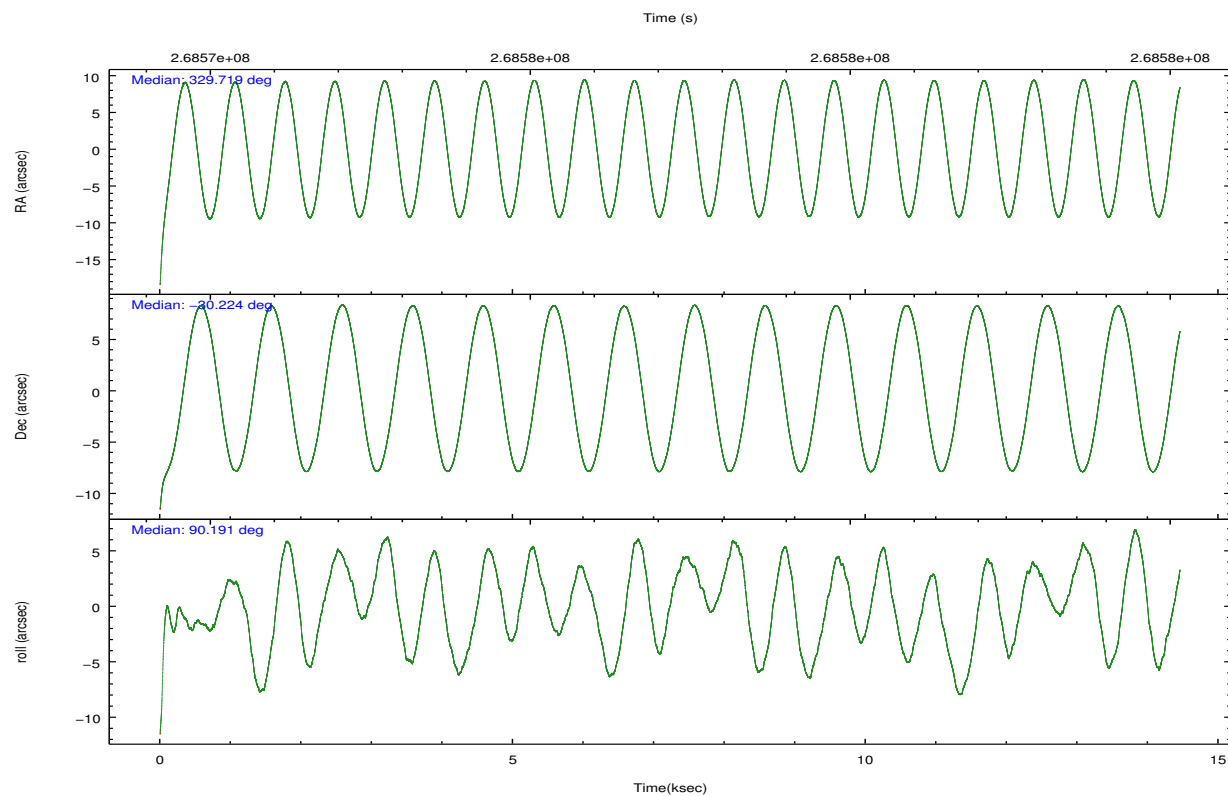
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	116859	163252	114402	147846	139316	99454	grade 0 events	10417	16527	15682	8138	17681	6938
rejected events	98946	79346	89081	79529	99587	85012		8%	10%	13%	5%	12%	6%
rejected %	84%	48%	77%	53%	71%	85%	grade 1 events	113	310	102	271	122	63
								0%	0%	0%	0%	0%	0%
							grade 2 events	2863	24025	3826	14402	7361	2602
								2%	14%	3%	9%	5%	2%
							grade 3 events	1345	3804	1677	6353	3476	1326
								1%	2%	1%	4%	2%	1%
							grade 4 events	1286	3654	1578	6190	3230	1296
								1%	2%	1%	4%	2%	1%
							grade 5 events	4191	11609	4484	13018	5854	4643
								3%	7%	3%	8%	4%	4%
							grade 6 events	2012	35939	2570	33253	7989	2284
								1%	22%	2%	22%	5%	2%
							grade 7 events	94632	67384	84483	66221	93603	80302
								80%	41%	73%	44%	67%	80%

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	329.734821	329.7185685671197	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-30.247650	-30.22432977086588	Subarray start row	1	1
[deg] Pointing Roll	90.048839	90.19727750198396	Subarray row count	774	774
[s] Window start time (MET)	268099265.184000	268099265.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	273369665.184000	273369665.184000	[s] Primary exposure time	0.000000	2.5
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-187.132523	-187.127916318603			
[mm] SIM translation stage offset	-3	-3.004606264404799			
[s] Observation start time (MET)	268570233.184000	268569117.25356			
Observation start date	2006-07-06T10:49:28	2006-07-06T10:31:57			
[s] Observation end time (MET)	268584233.184000	268584414.35428			
Observation end date	2006-07-06T14:42:48	2006-07-06T14:46:54			
Read mode	TIMED	TIMED			

2.3 Aspect



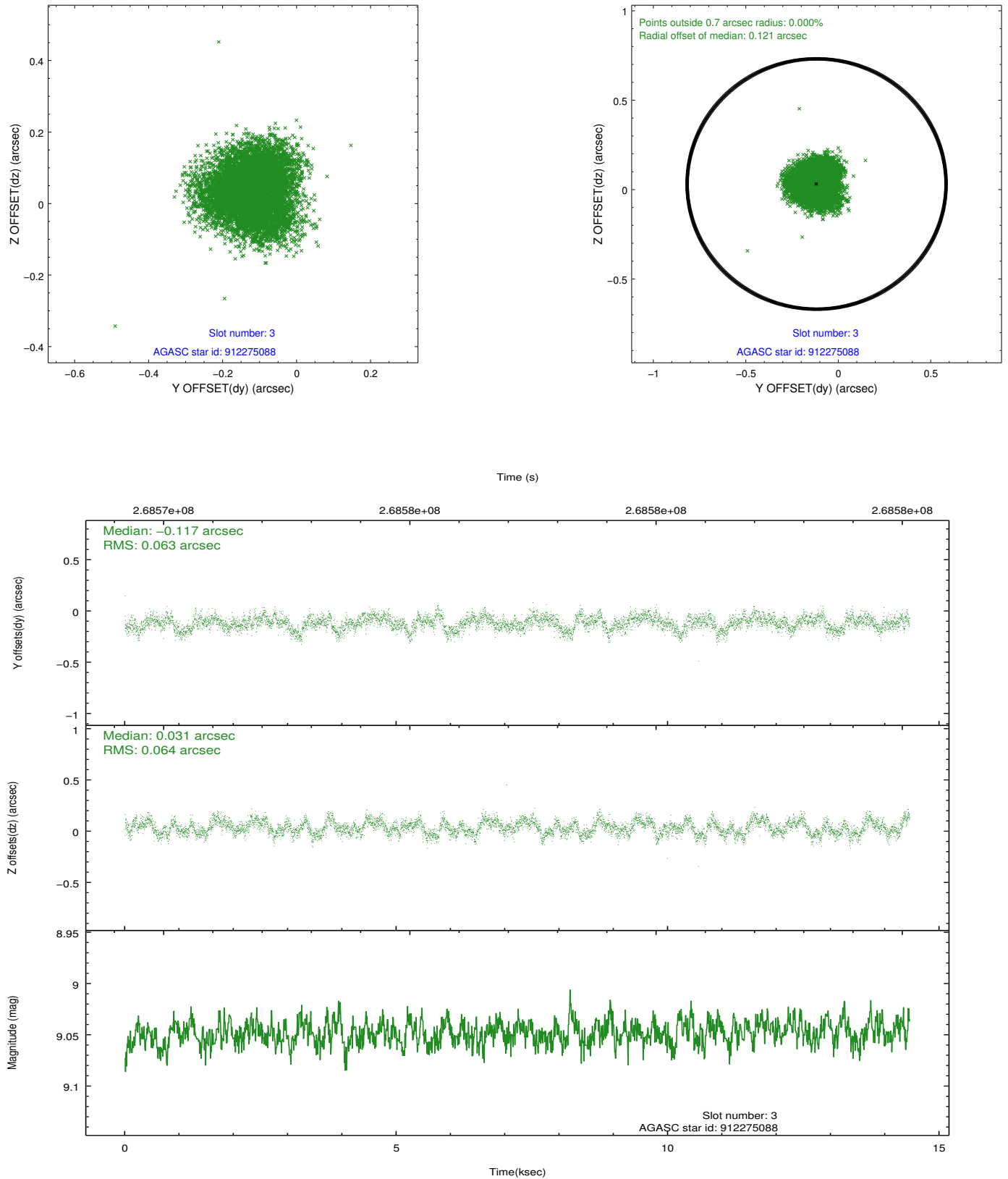


Slot Statistics

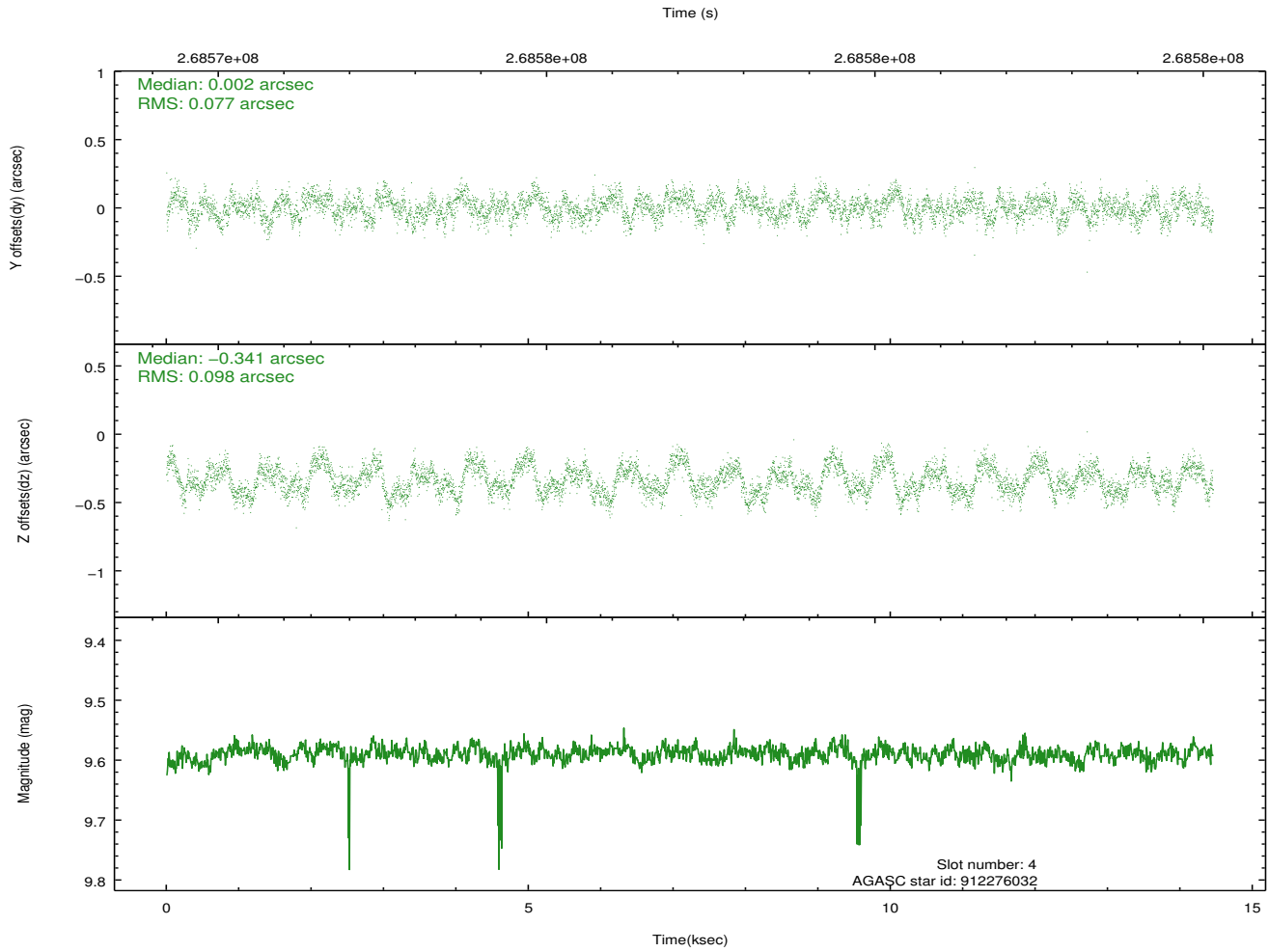
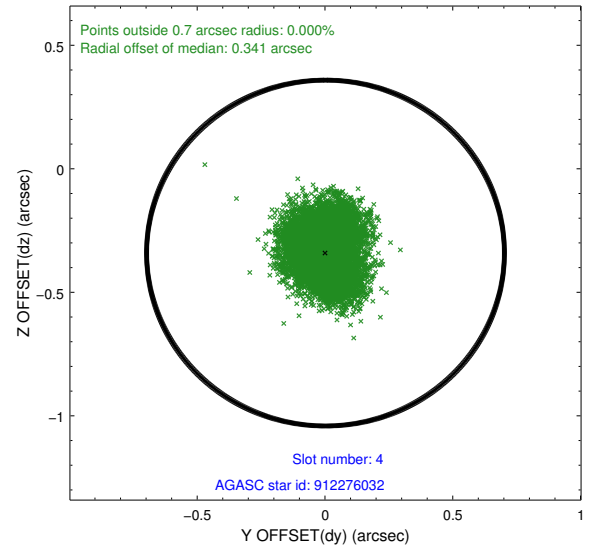
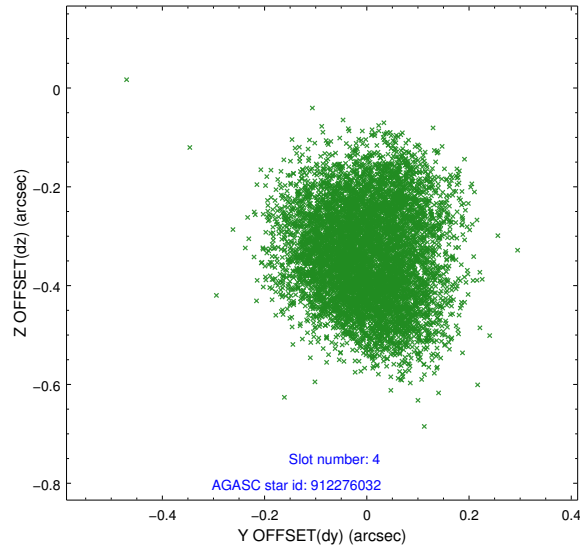
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3526	-0.052	-0.107	0.009	0.016	0.000000	0.000000	-760.76	-1794.61
1	FID	ACIS-S-4	7.19	3526	0.134	0.053	0.014	0.023	0.000000	0.000000	2152.57	113.67
2	FID	ACIS-S-5	7.24	3526	-0.115	0.063	0.017	0.027	0.000000	0.000000	-1813.25	107.72
3	GUIDE	912275088	9.05	7048	-0.117	0.031	0.097	0.151	329.619228	-29.738698	1832.54	359.98
4	GUIDE	912276032	9.59	7030	0.002	-0.341	0.136	0.207	329.395967	-29.803466	1598.91	1057.05
5	GUIDE	981468128	9.36	7032	0.097	0.439	0.095	0.157	329.756350	-30.158334	322.04	-66.84
6	GUIDE	981478152	9.40	7043	-0.004	0.085	0.100	0.157	329.415589	-30.057192	685.38	994.23
7	GUIDE	981471664	6.35	7051	0.016	-0.223	0.072	0.124	328.981826	-30.605916	-1295.48	2333.68

2.4 Star Slots

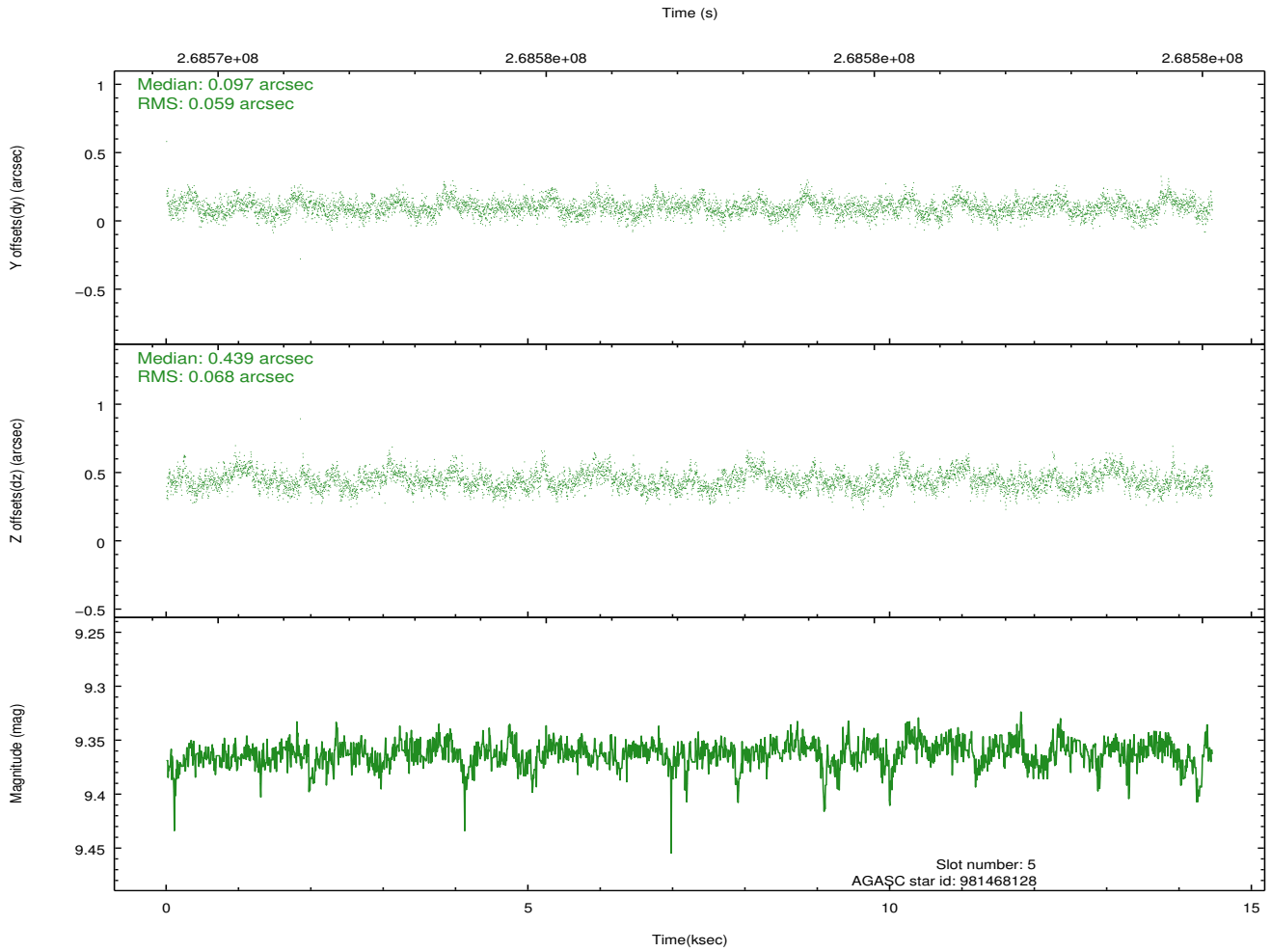
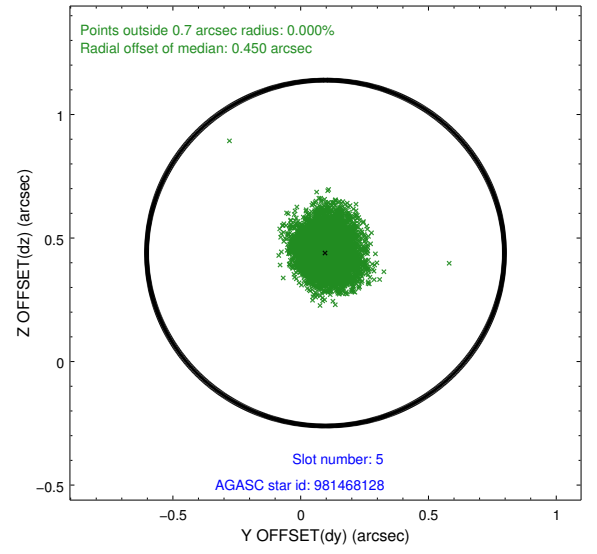
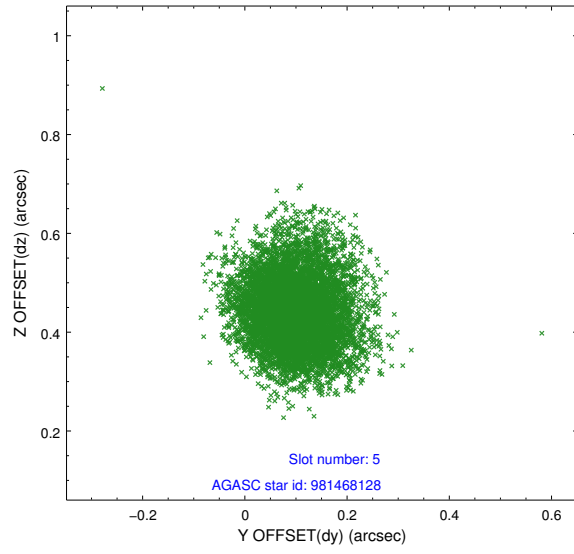
2.4.1 Slot 3



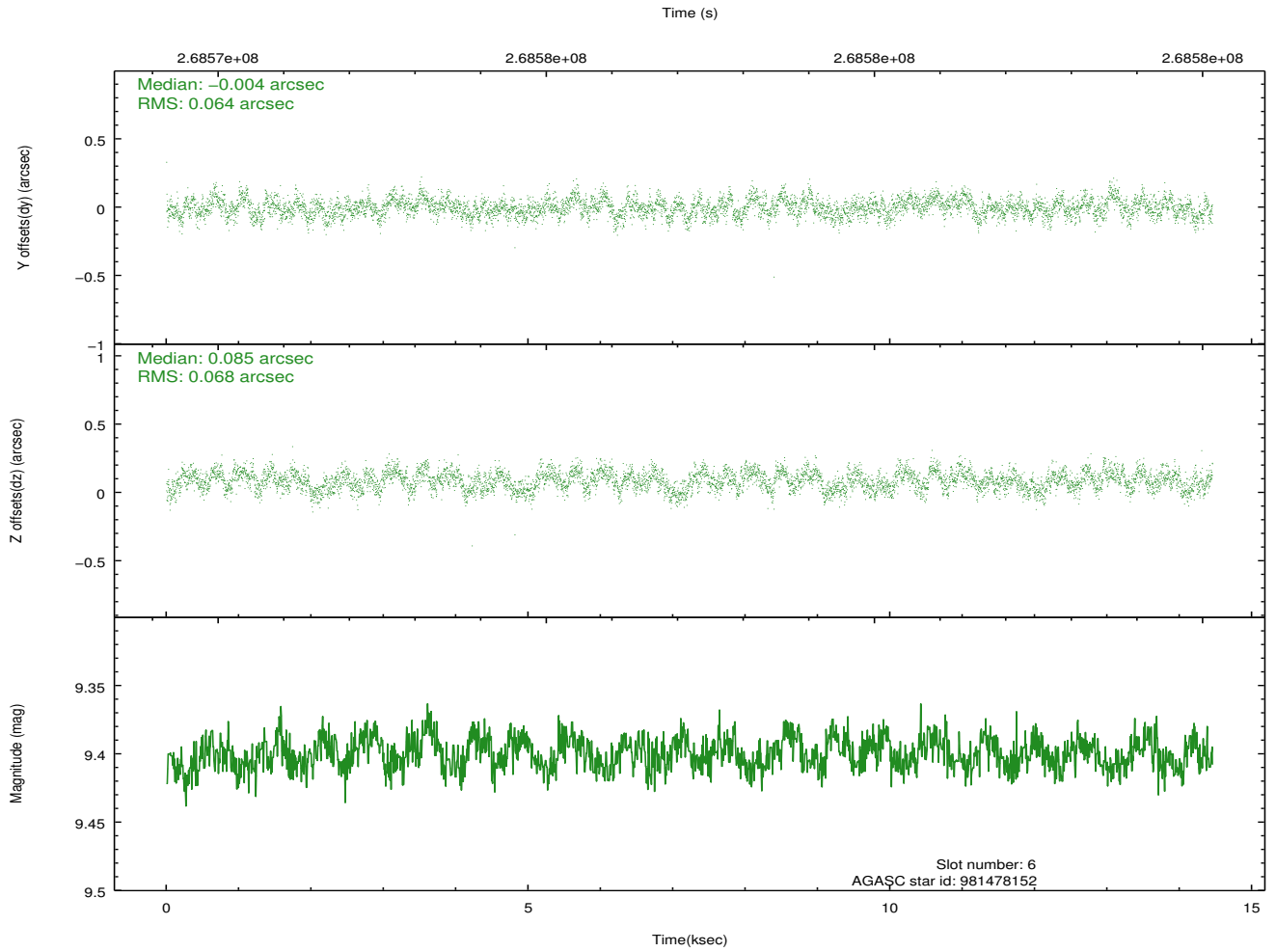
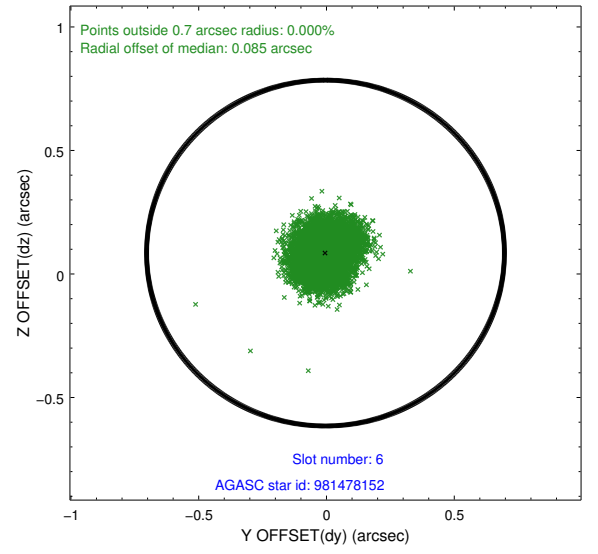
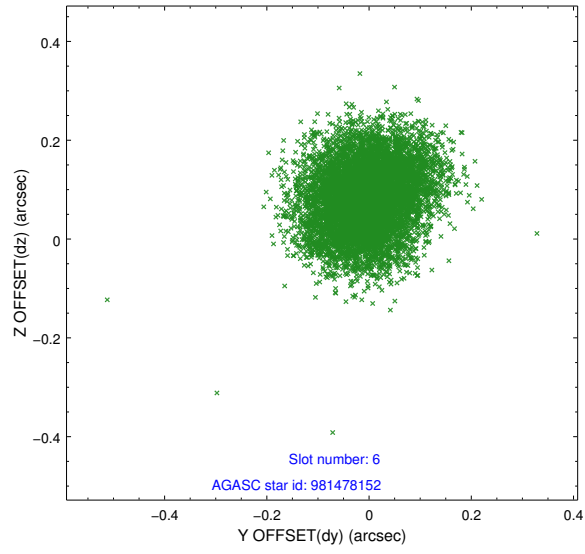
2.4.2 Slot 4



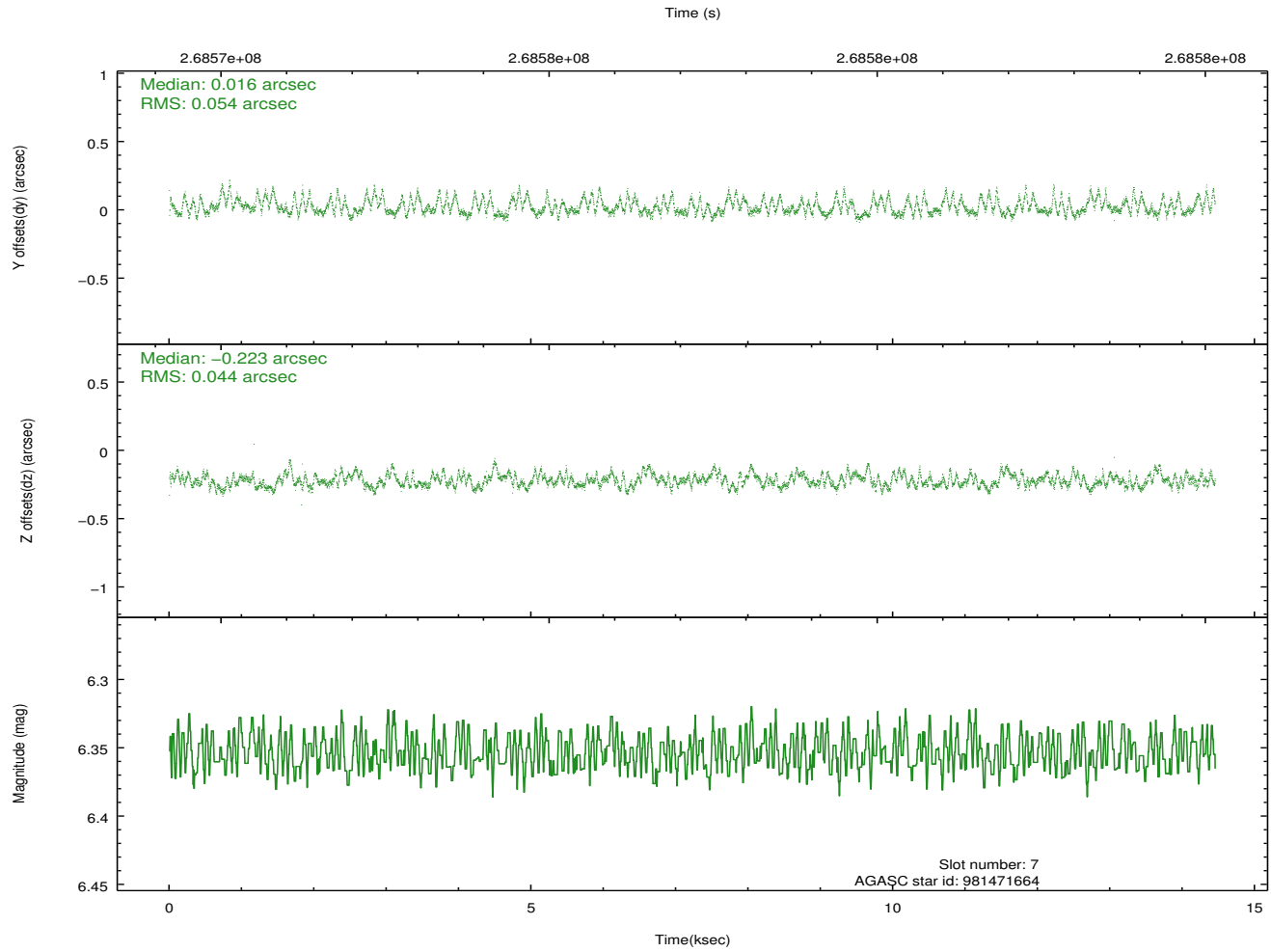
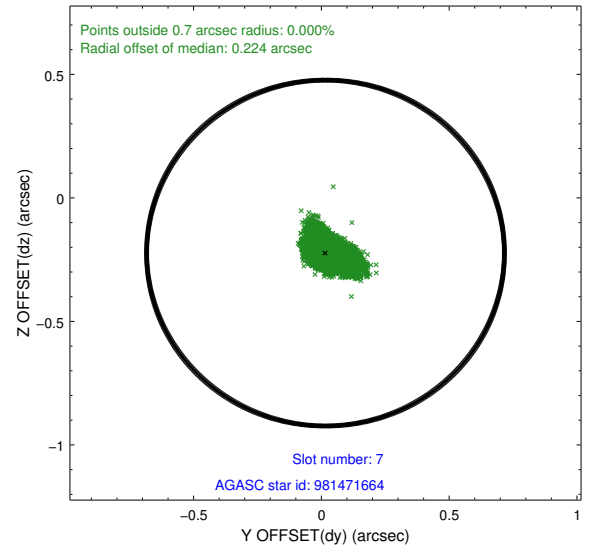
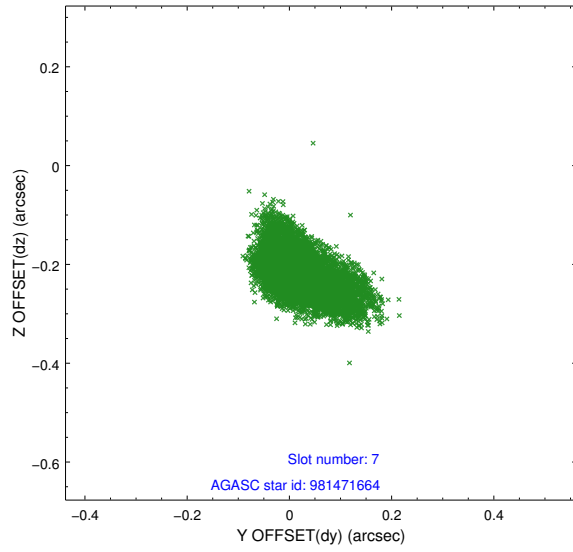
2.4.3 Slot 5



2.4.4 Slot 6

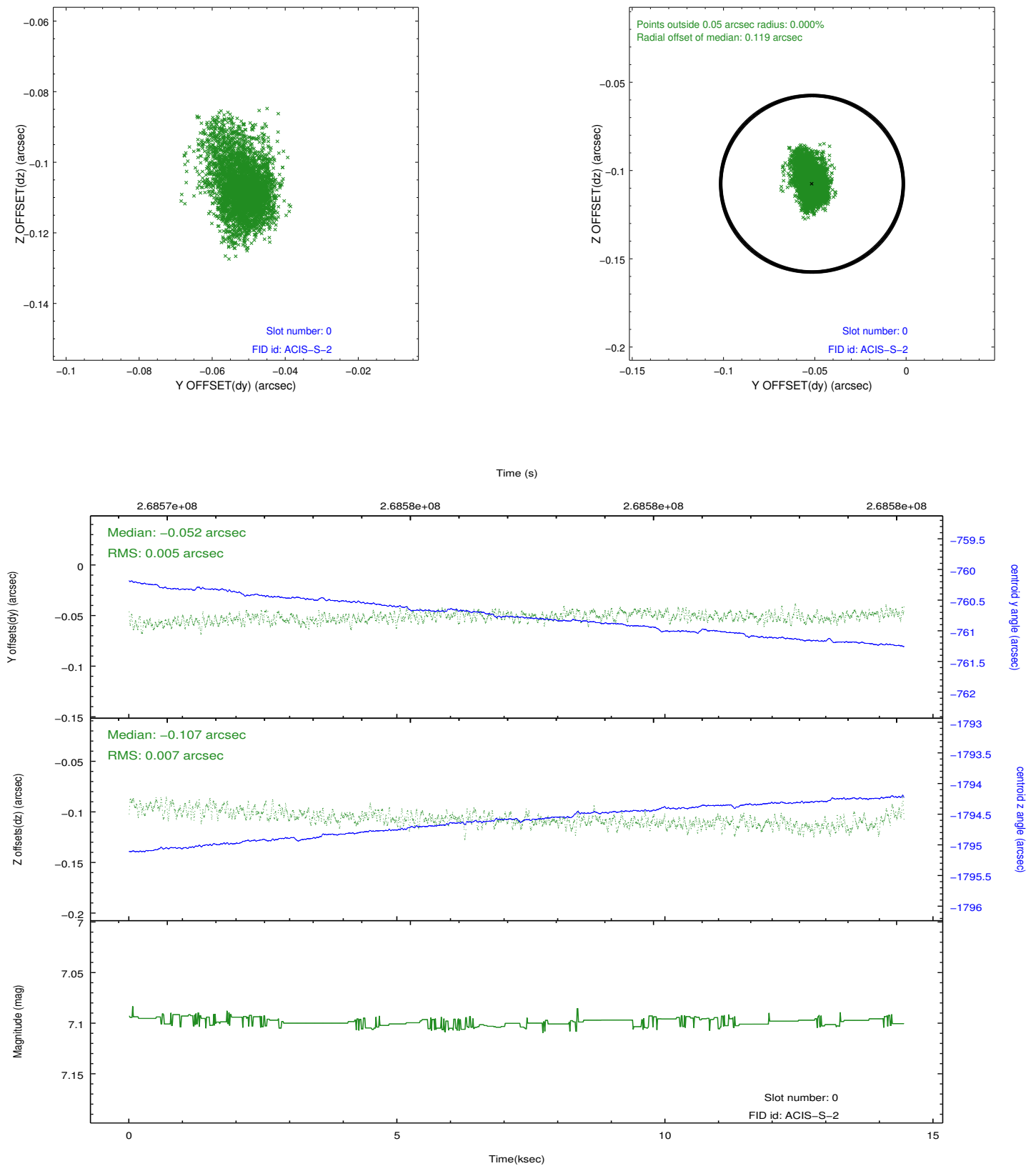


2.4.5 Slot 7

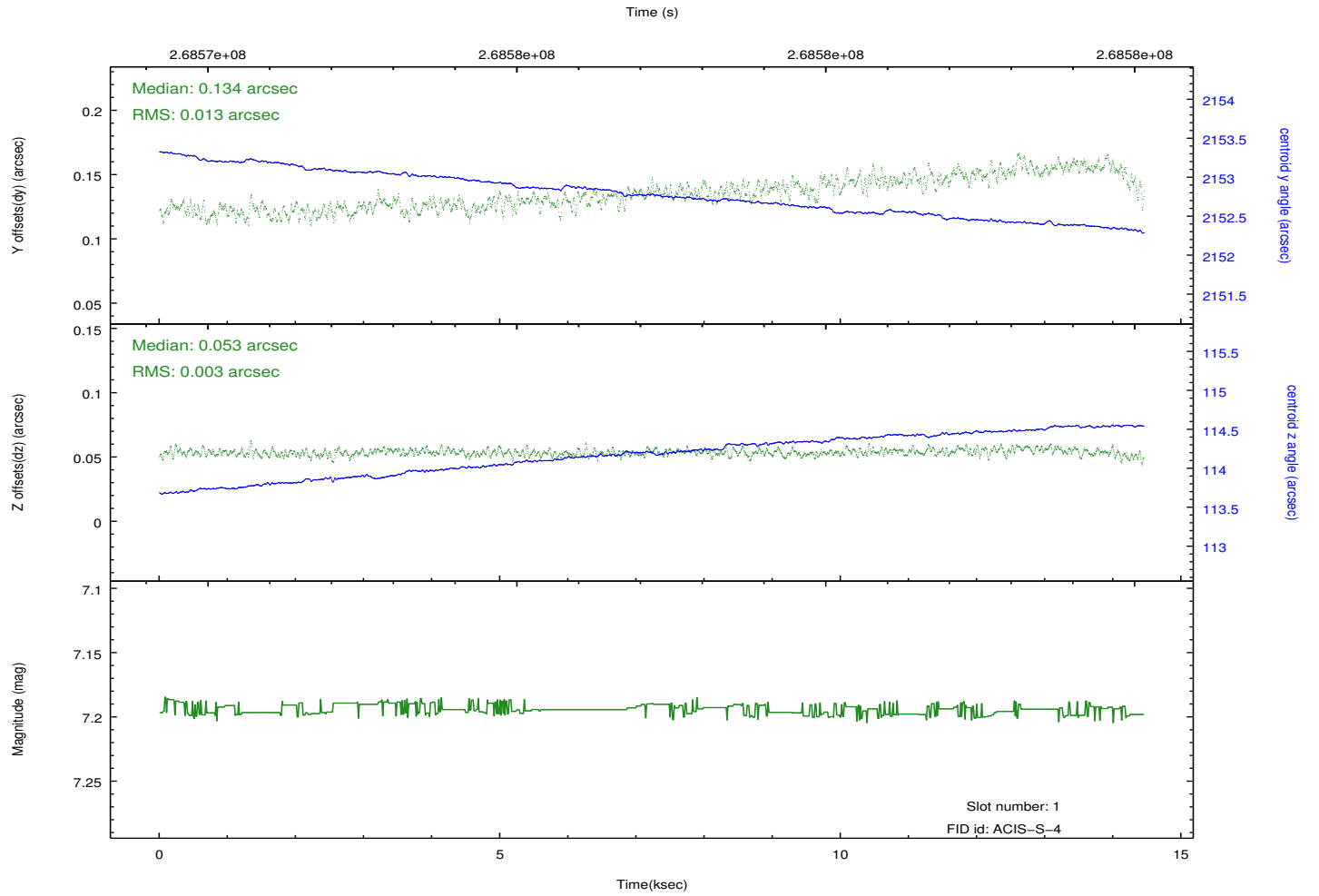
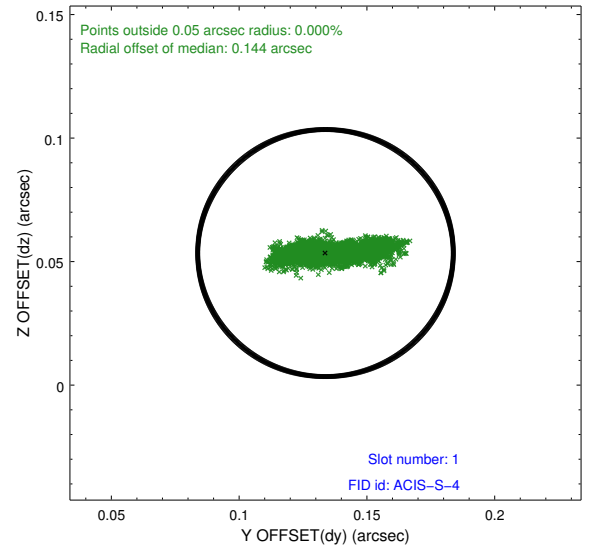
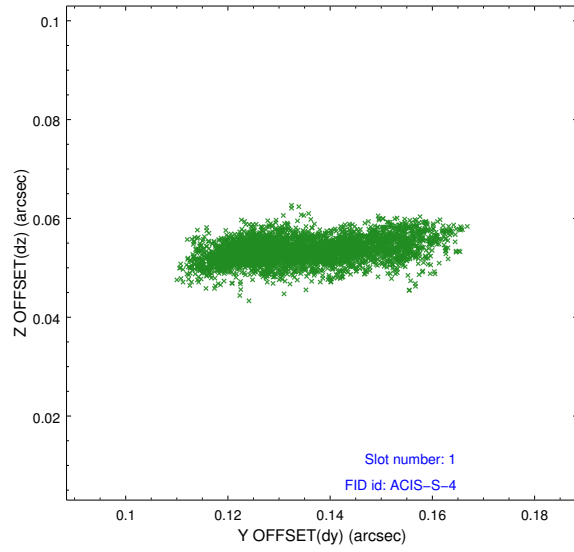


2.5 FID Slots

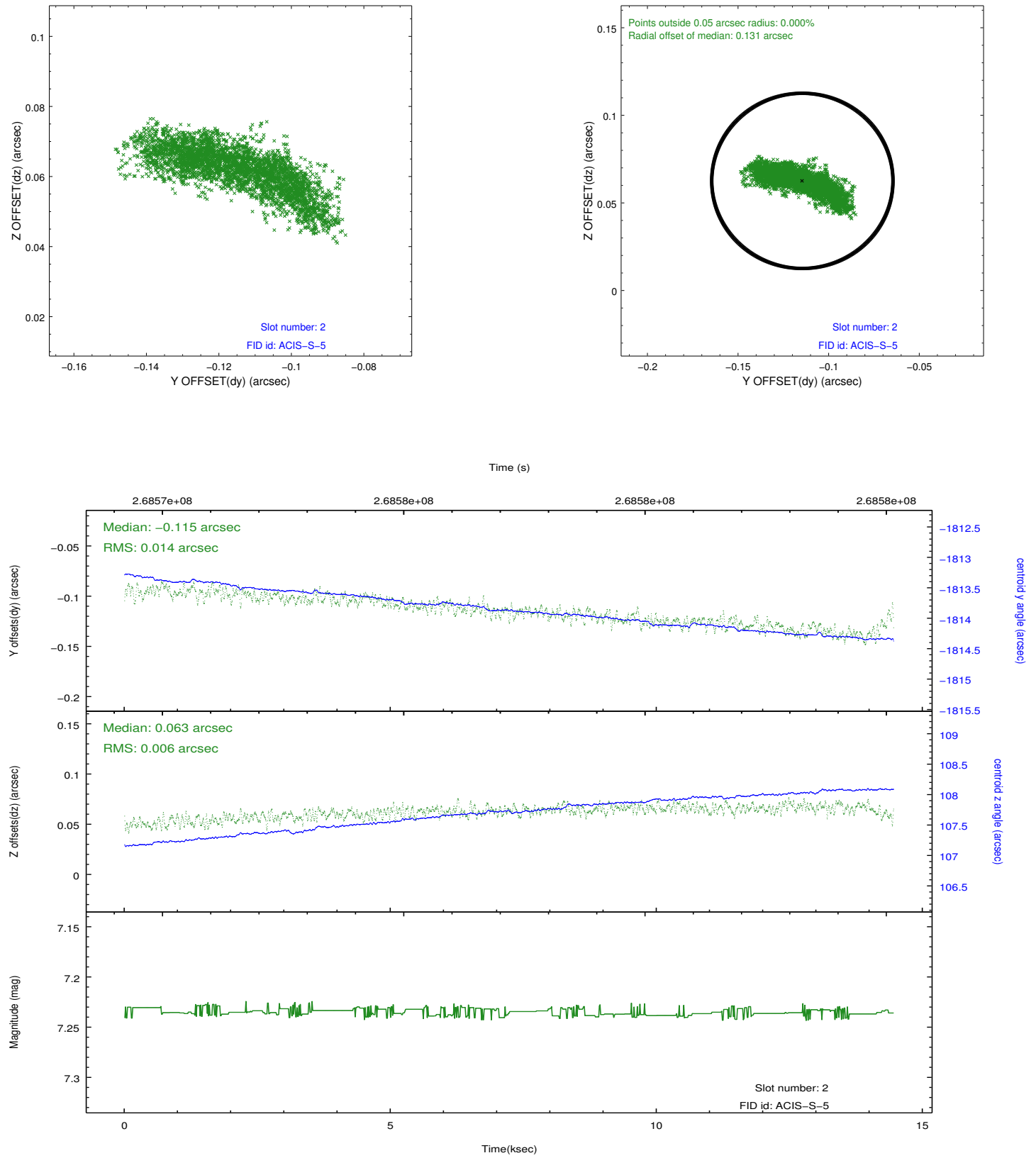
2.5.1 Slot 0



2.5.2 Slot 1

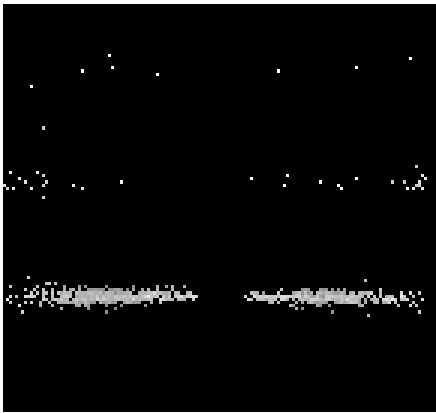


2.5.3 Slot 2

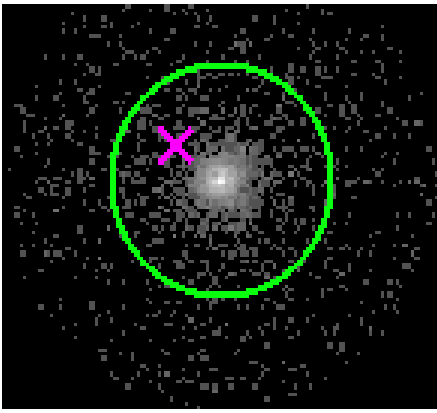


3 Gratings

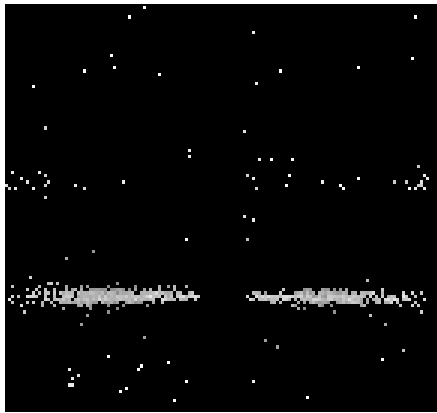
3.1 HEG Arm



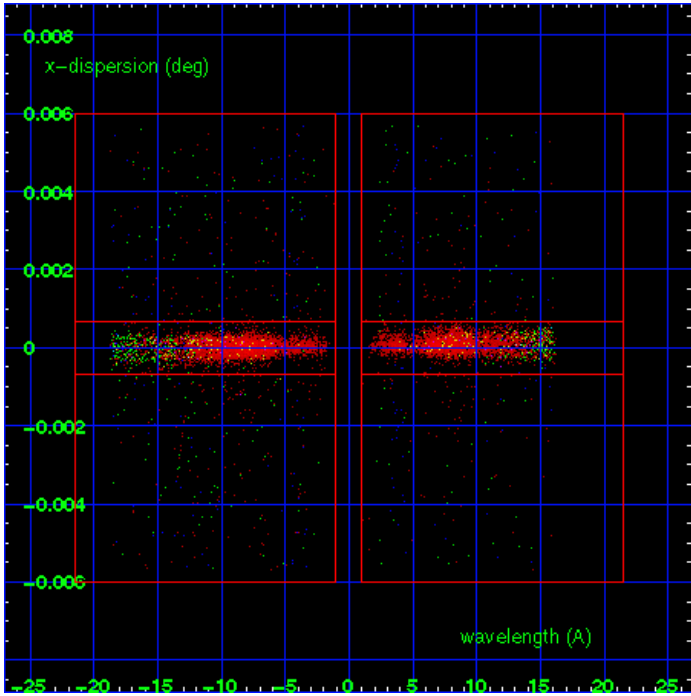
HEG Order Sort 123



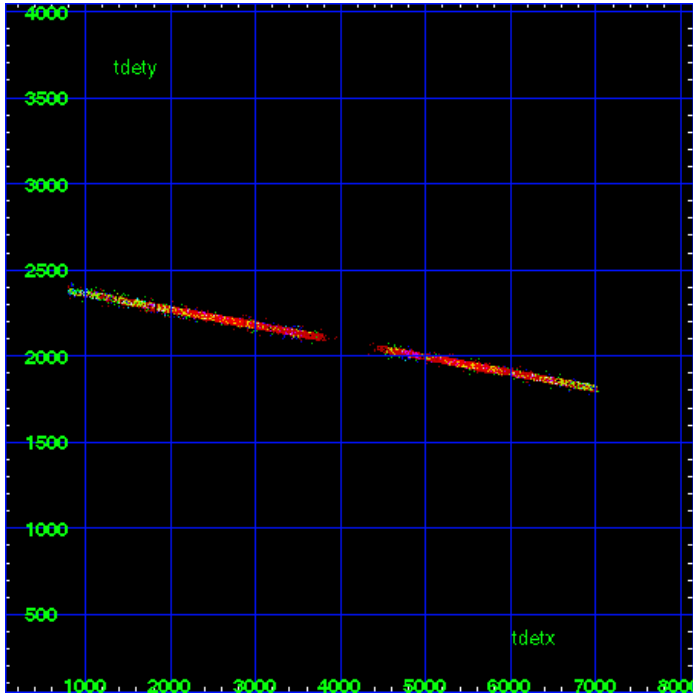
HEG Zero Order



HEG Order Sort ALL

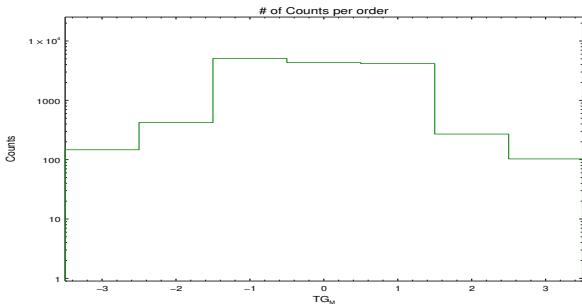


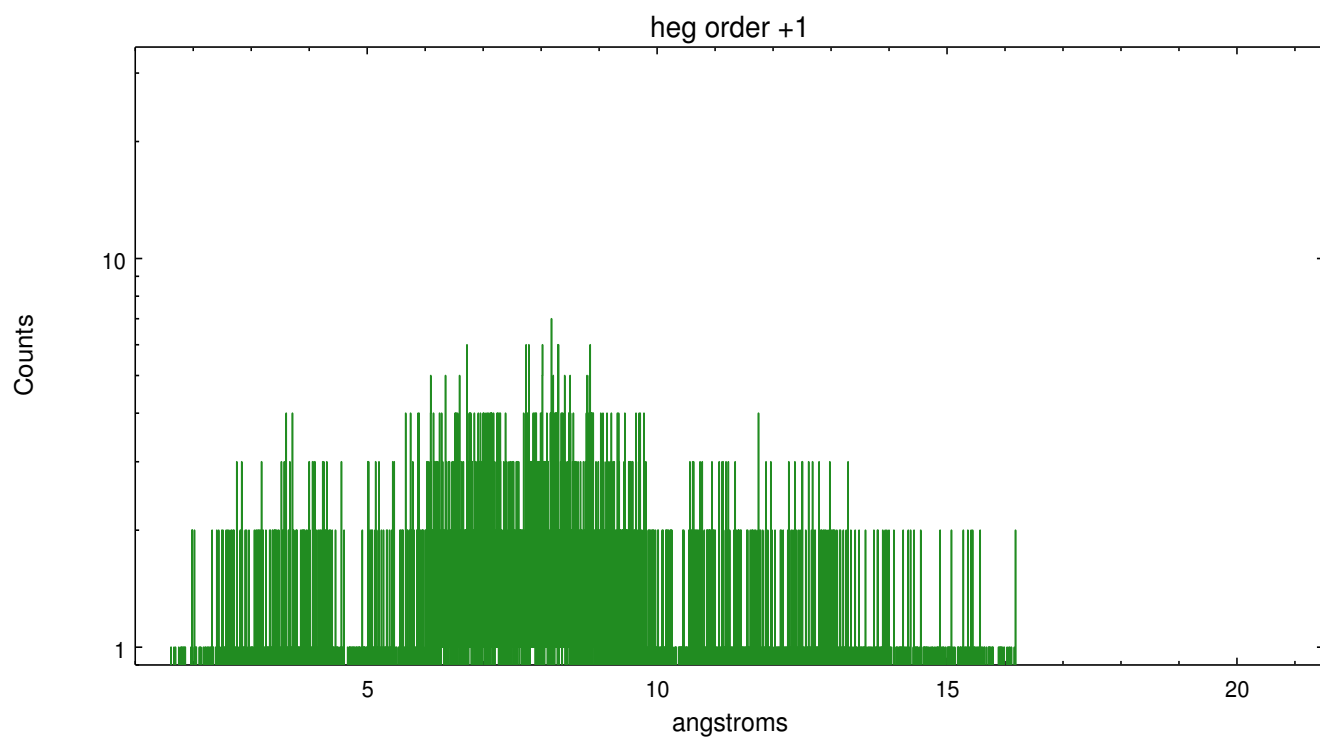
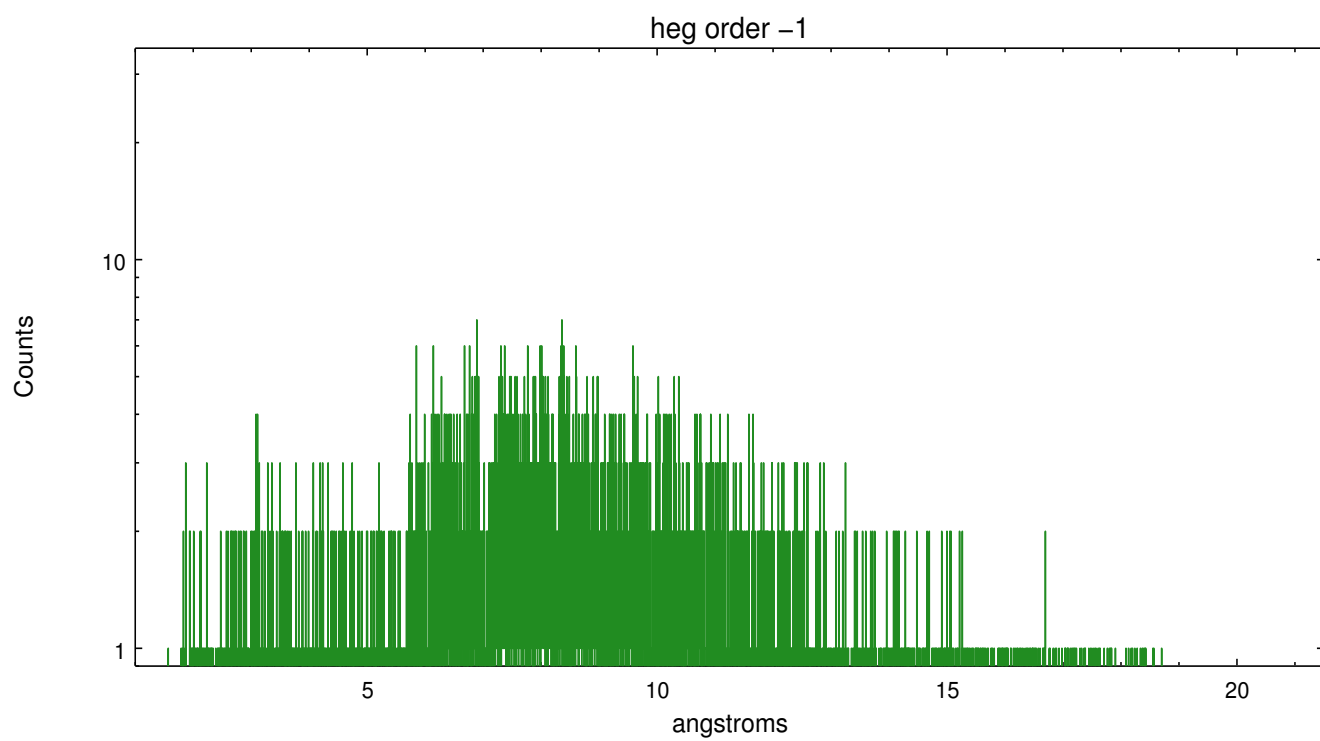
Spot Image HEG



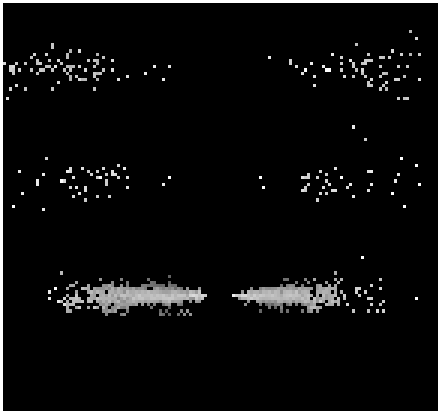
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	147	422	5067	4318	4158	270	103

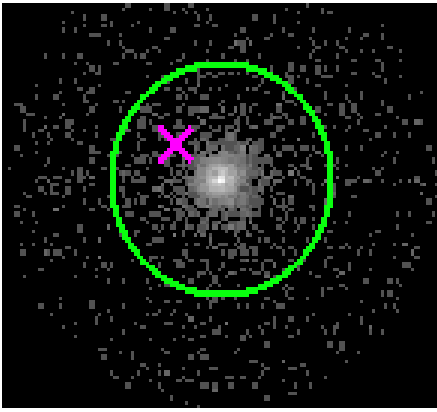




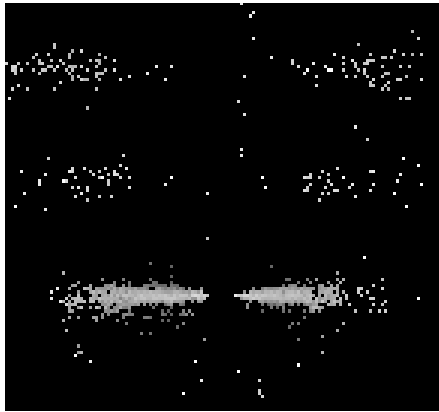
3.2 MEG Arm



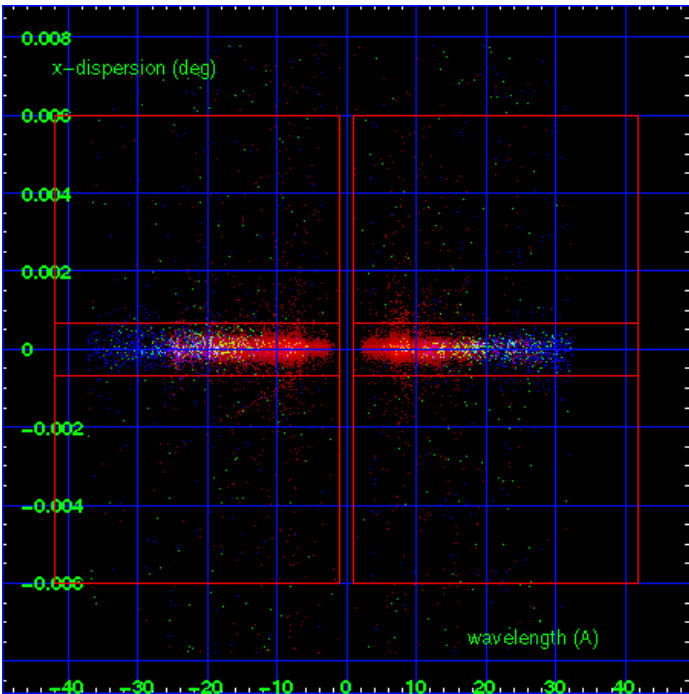
MEG Order Sort 123



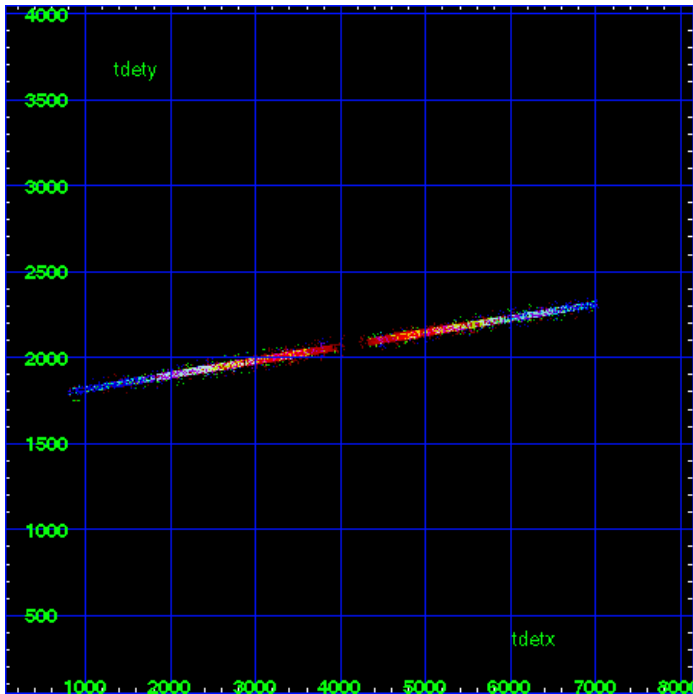
MEG Zero Order



MEG Order Sort ALL

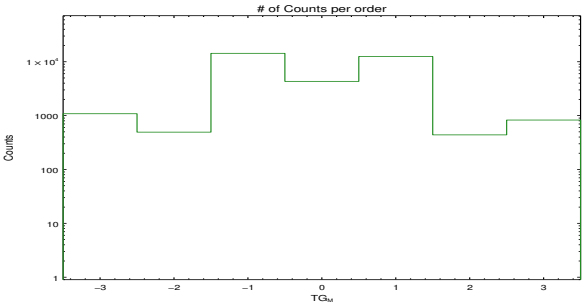


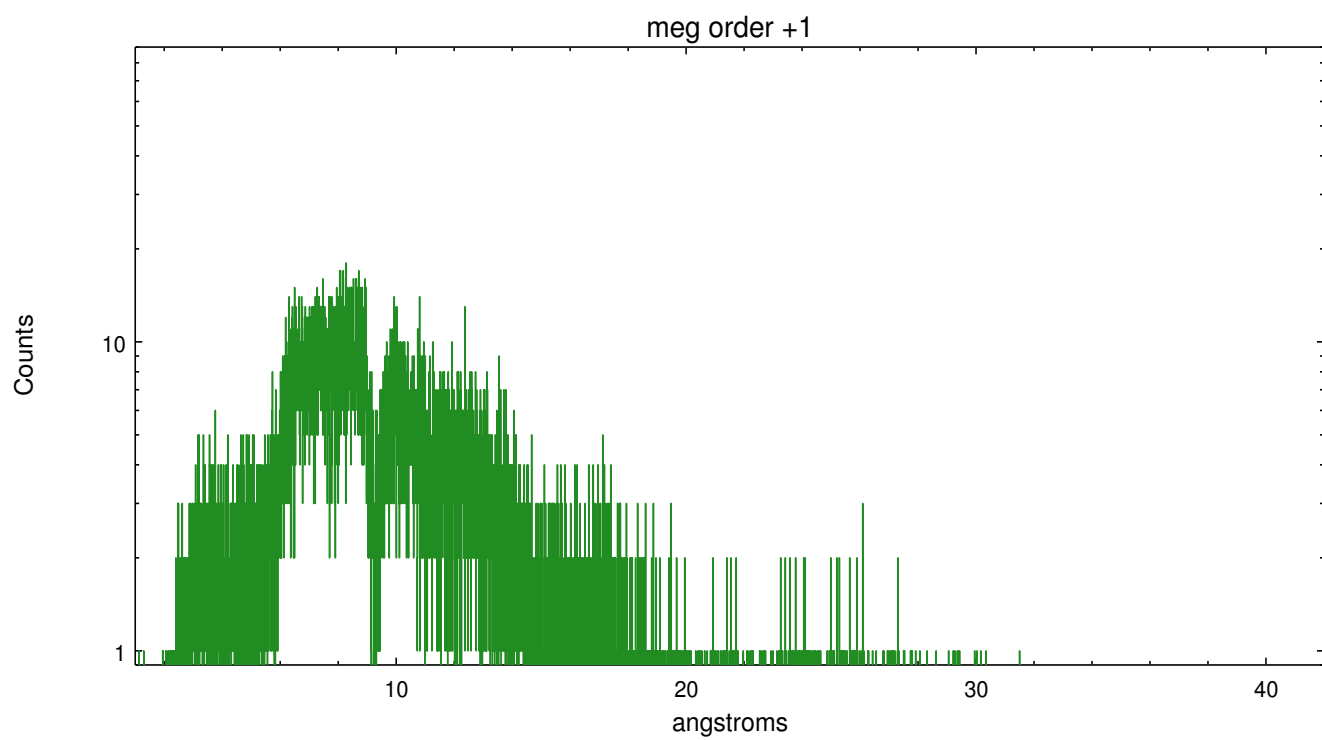
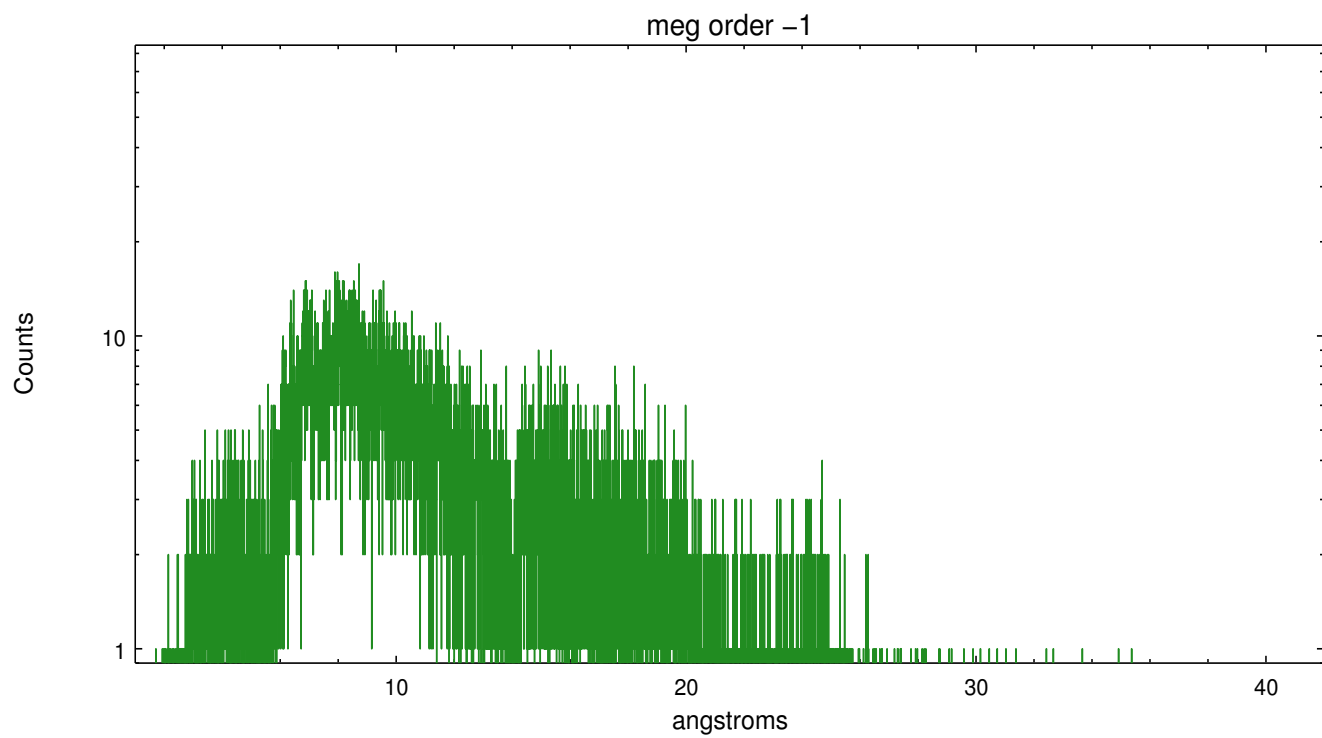
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1084	493	14316	4318	12501	439	827





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.0425

A.2 Comments