

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6088 - L2 Version 3
Chandra X-Ray Center

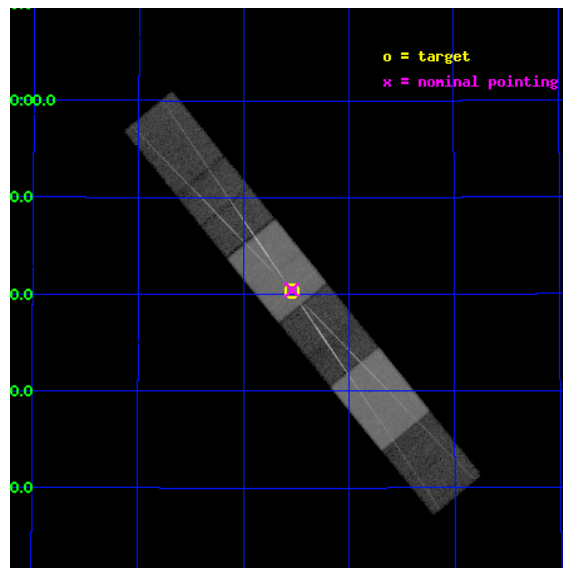
L2 Processing Date : Dec 25 2012

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

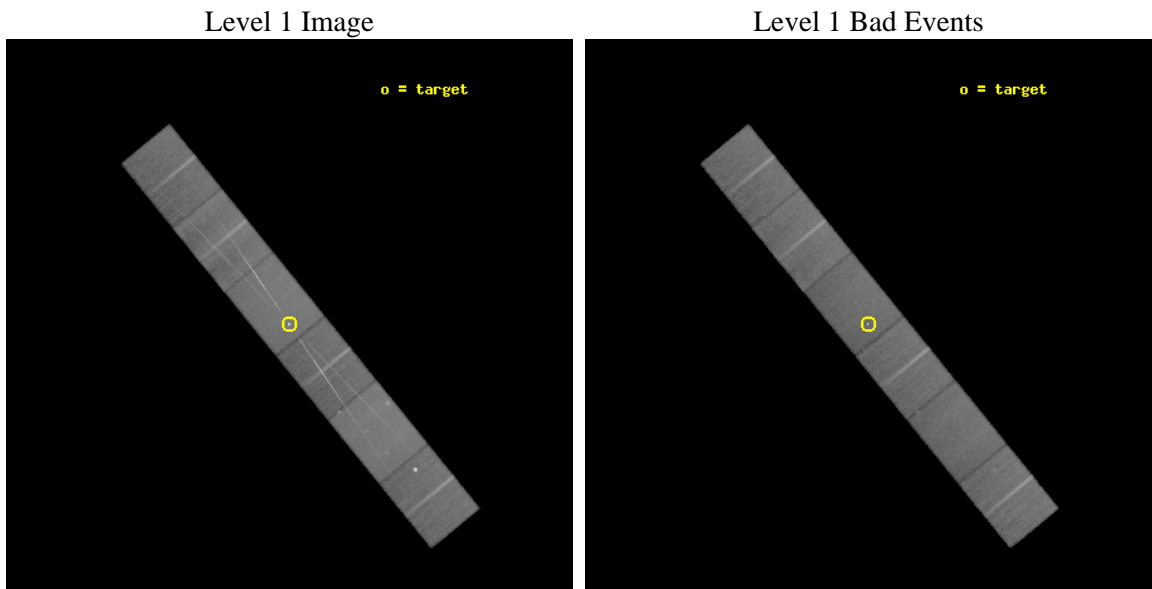
seq_num	790097	Sequence number
obs_id	6088	Observation id
title	AO6 Calibration Observations of 3C273	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	1H1426+428	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	217.135833	Observer's specified target RA [deg]
dec_targ	42.6725	Observer's specified target Dec [deg]
ra_nom	217.13534345082	Nominal RA [deg]
dec_nom	42.674680814791	Nominal Dec [deg]
roll_nom	230.75066827942	Nominal Roll [deg]
revision	3	Processing version of data
ontime	41042.5	Sum of GTIs [s]
livetime	40379.62802632	Livetime [s]
ontime4	41039.959009826	Sum of GTIs [s]
ontime5	41042.5	Sum of GTIs [s]
ontime6	41042.5	Sum of GTIs [s]
ontime7	41042.5	Sum of GTIs [s]
ontime8	41039.958999813	Sum of GTIs [s]
ontime9	41042.5	Sum of GTIs [s]
l2events	467625	Number of level 2 events



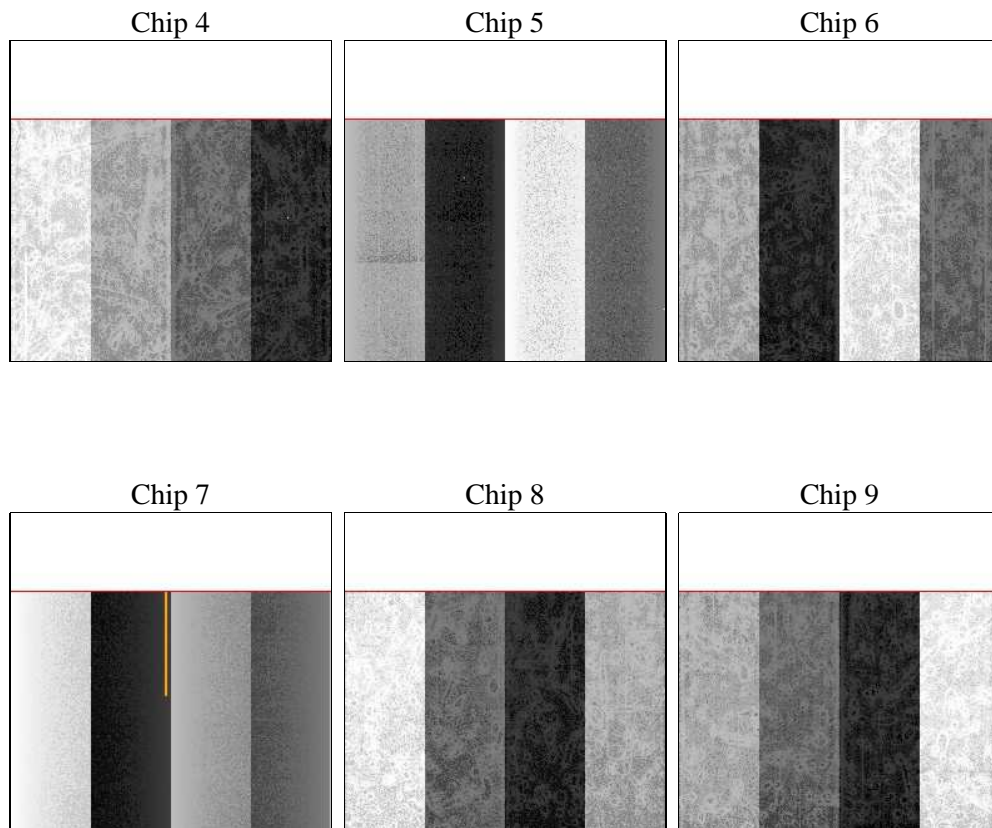
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	41000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	41042.5	Sum of GTIs [s]
caldbver	4.5.5	 	ontime4	41039.959009826	Sum of GTIs [s]
date	2012-12-25T09:00:25	Date and time of file creation	ontime5	41042.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	41042.5	Sum of GTIs [s]
			ontime7	41042.5	Sum of GTIs [s]
			ontime8	41039.958999813	Sum of GTIs [s]
			ontime9	41042.5	Sum of GTIs [s]
			l1events	1831007	Number of level 1 events

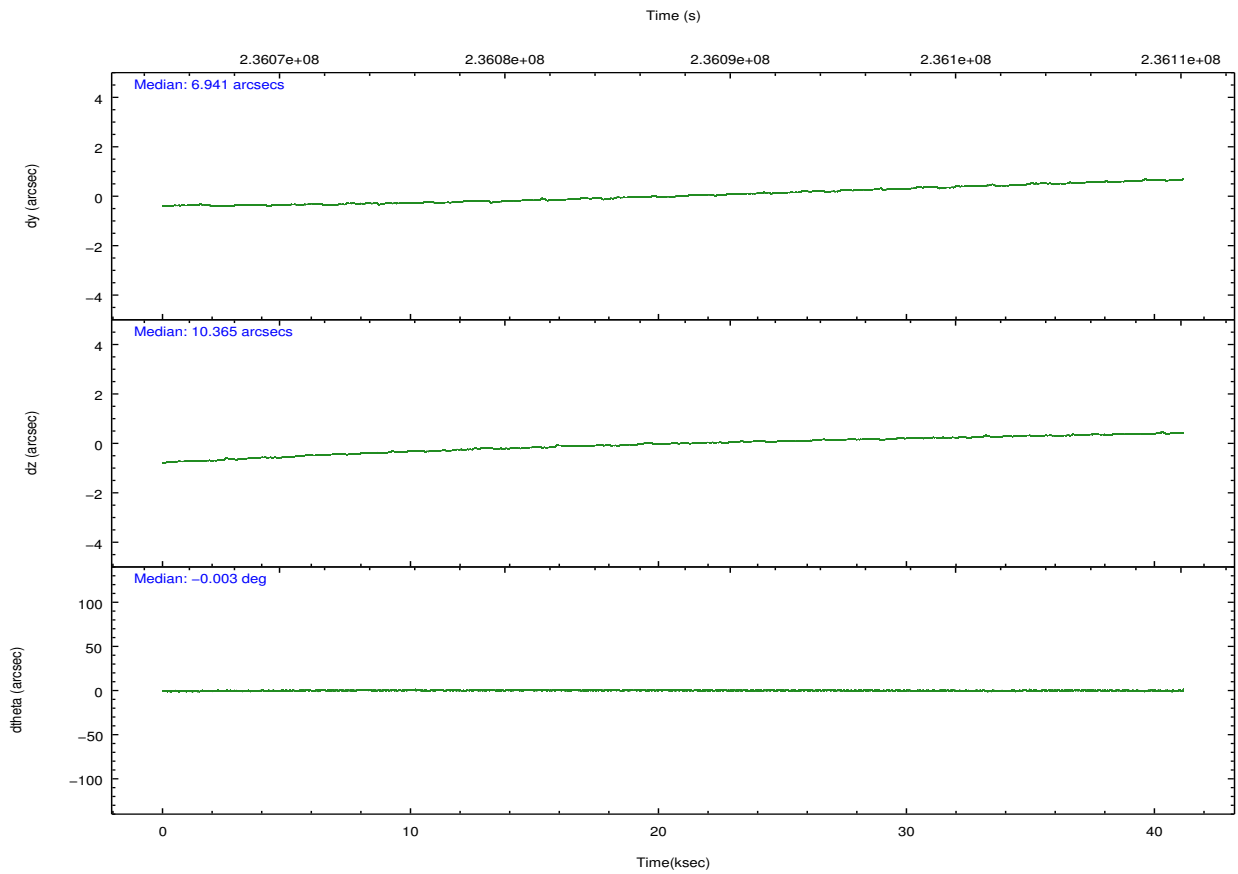
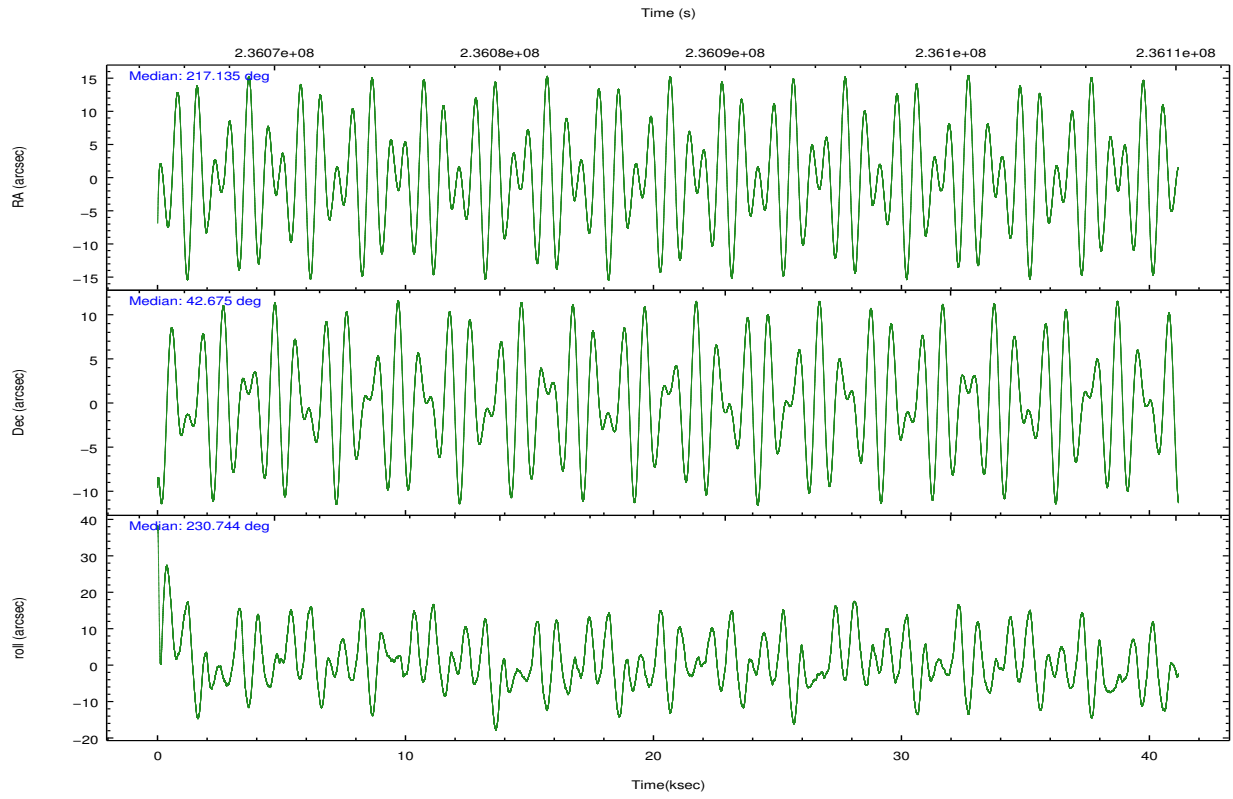
2.1.4 Events

	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	283680	362289	266285	362549	314575	241629	grade 0 events	29507	16963	30478	18725	30232	14313
rejected events	236431	193608	213340	195304	237778	209060		10%	4%	11%	5%	9%	5%
rejected %	83%	53%	80%	53%	75%	86%	grade 1 events	361	679	175	608	209	108
								0%	0%	0%	0%	0%	0%
							grade 2 events	6597	50006	8514	34640	15660	6064
								2%	13%	3%	9%	4%	2%
							grade 3 events	3344	7959	3798	15646	6871	3236
								1%	2%	1%	4%	2%	1%
							grade 4 events	3038	7649	3722	15568	6505	3115
								1%	2%	1%	4%	2%	1%
							grade 5 events	10258	27022	11042	32591	14351	11565
								3%	7%	4%	8%	4%	4%
							grade 6 events	4768	86125	6440	82684	17534	5842
								1%	23%	2%	22%	5%	2%
							grade 7 events	225807	165886	202116	162087	223213	197386
								79%	45%	75%	44%	70%	81%

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	217.140811	217.1353434508245	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	42.701628	42.67468081479134	Subarray start row	1	1
[deg] Pointing Roll	230.590318	230.7506682794155	Subarray row count	774	774
[s] Window start time (MET)	233971264.184000	233971264.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	241833664.184000	241833664.184000	[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	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	236067053.184000	236066085.41174			
Observation start date	2005-06-25T06:09:49	2005-06-25T05:54:45			
[s] Observation end time (MET)	236108053.184000	236108761.28869			
Observation end date	2005-06-25T17:33:09	2005-06-25T17:46:01			
Read mode	TIMED	TIMED			

2.3 Aspect

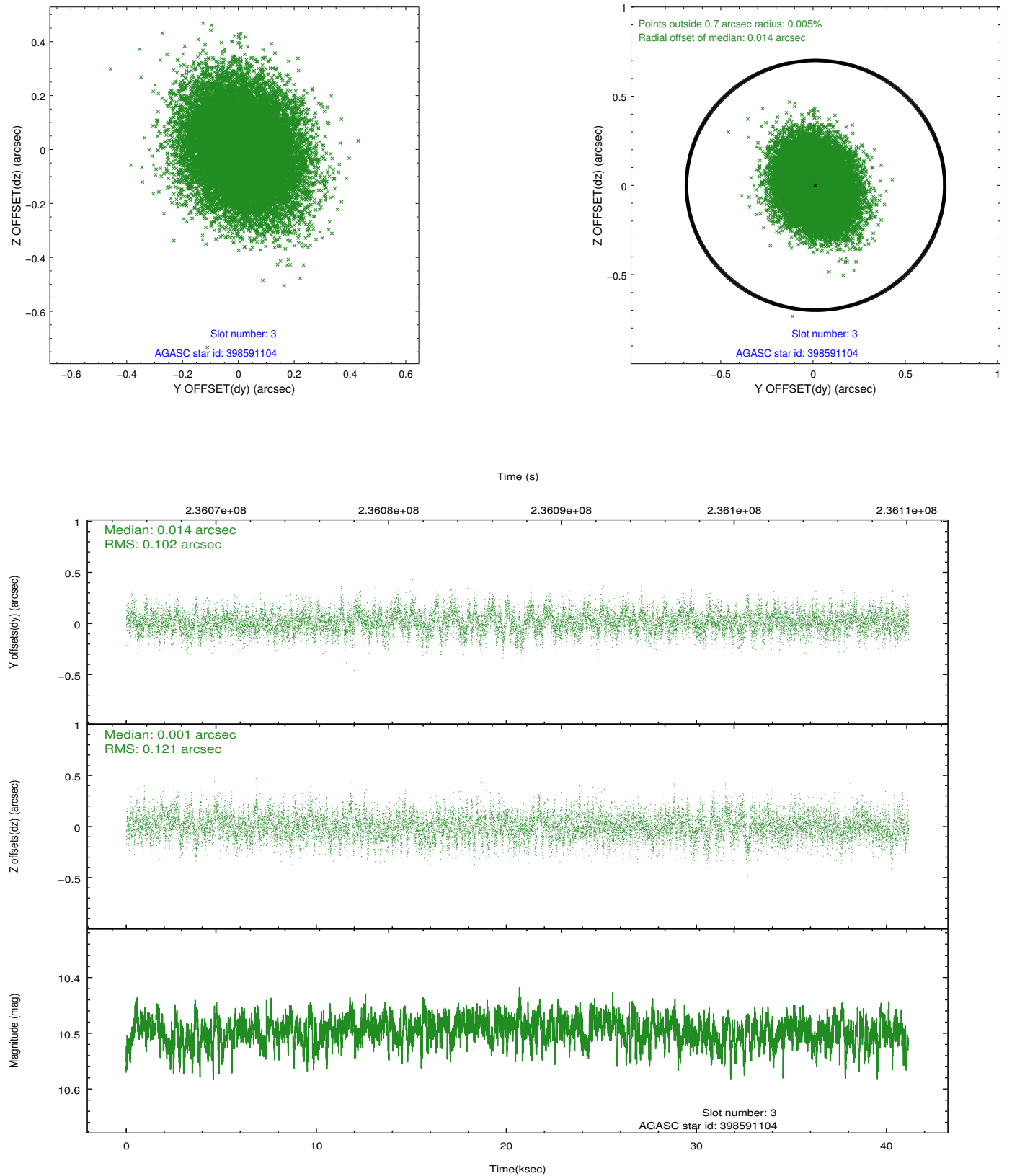


Slot Statistics

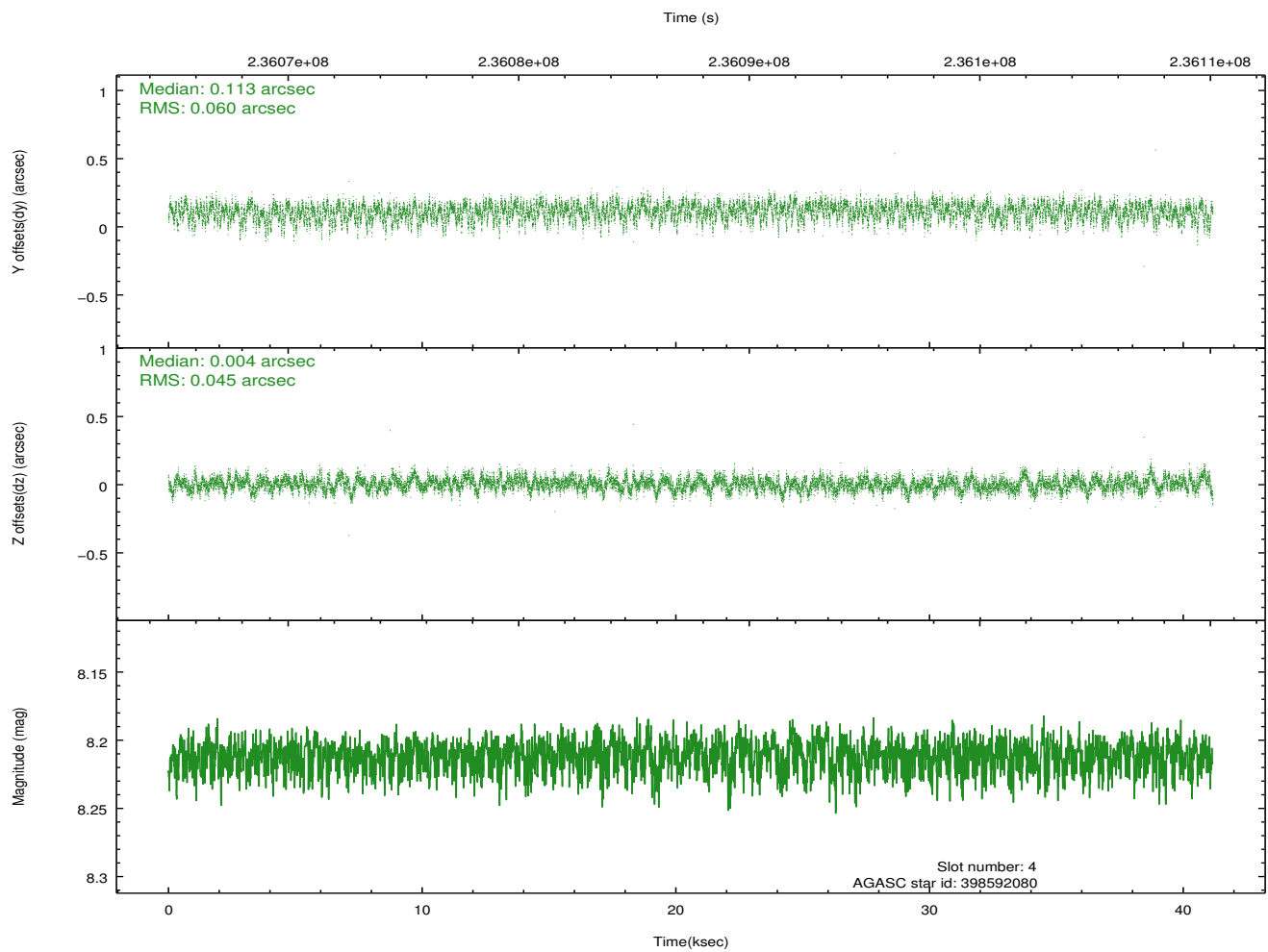
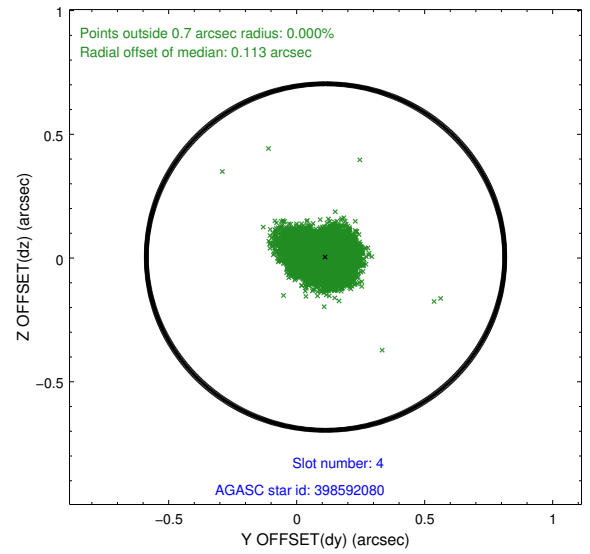
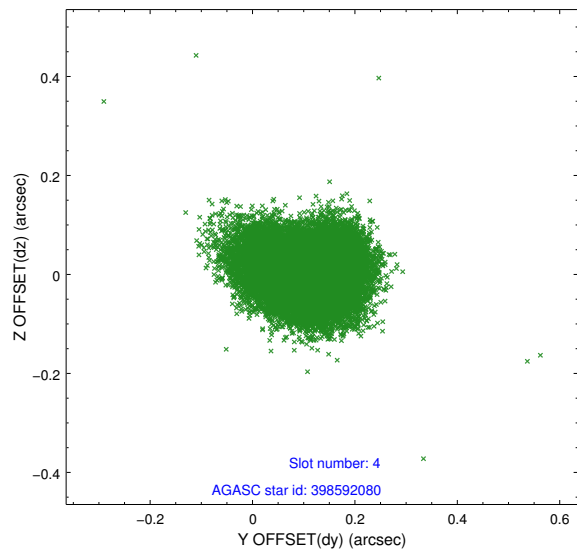
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	10041	-0.055	-0.096	0.015	0.025	0.000000	0.000000	-759.62	-1793.72
1	FID	ACIS-S-4	7.19	10041	0.111	0.052	0.008	0.018	0.000000	0.000000	2153.85	114.84
2	FID	ACIS-S-5	7.23	10040	-0.086	0.054	0.015	0.027	0.000000	0.000000	-1812.45	108.58
3	GUIDE	398591104	10.50	20050	0.014	0.001	0.167	0.277	216.266610	42.893718	920.76	-2227.69
4	GUIDE	398592080	8.21	20079	0.113	0.004	0.079	0.130	216.056075	42.661607	1920.81	-2138.86
5	GUIDE	398592952	10.09	19595	-0.117	-0.022	0.183	0.314	216.343106	43.029643	413.06	-2378.12
6	GUIDE	398723464	9.05	20069	0.057	-0.057	0.093	0.147	217.255519	42.514001	329.06	663.96
7	GUIDE	398725424	8.79	20072	-0.067	0.078	0.085	0.138	217.673023	42.542871	-458.10	1450.99

2.4 Star Slots

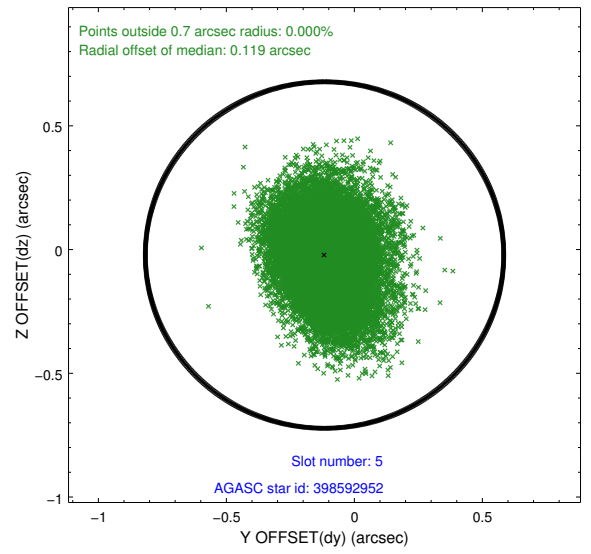
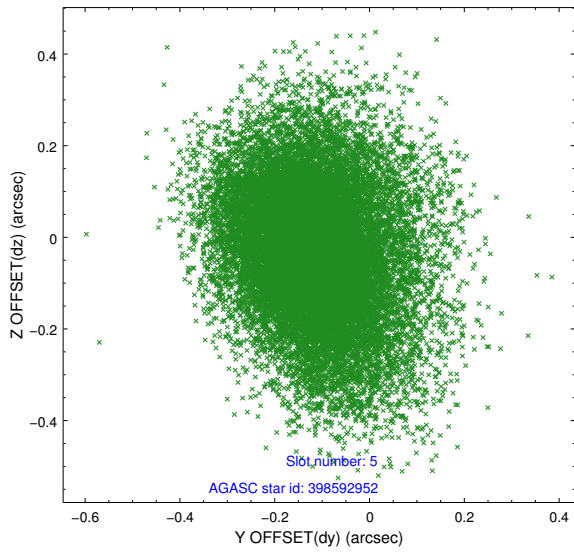
2.4.1 Slot 3



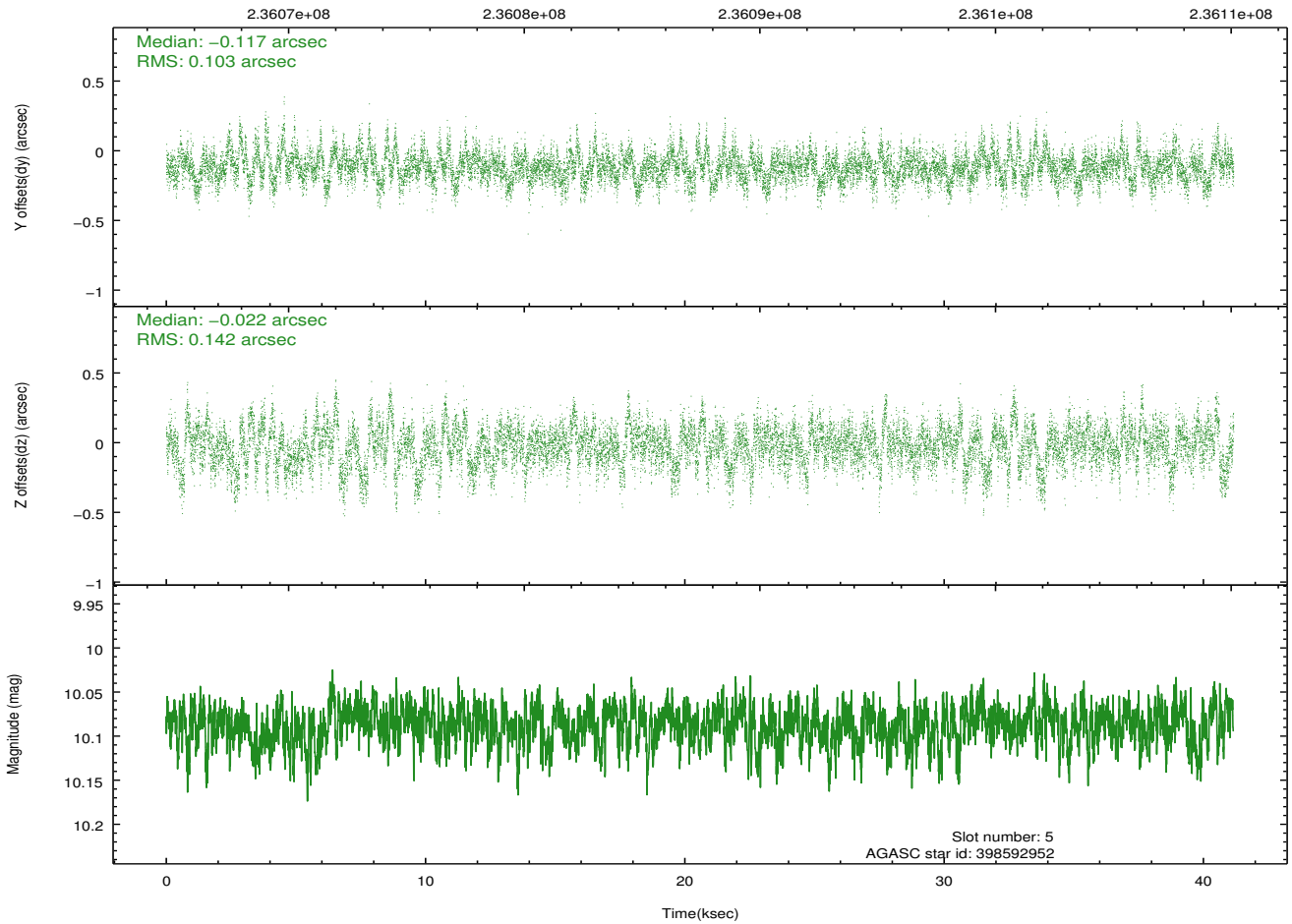
2.4.2 Slot 4



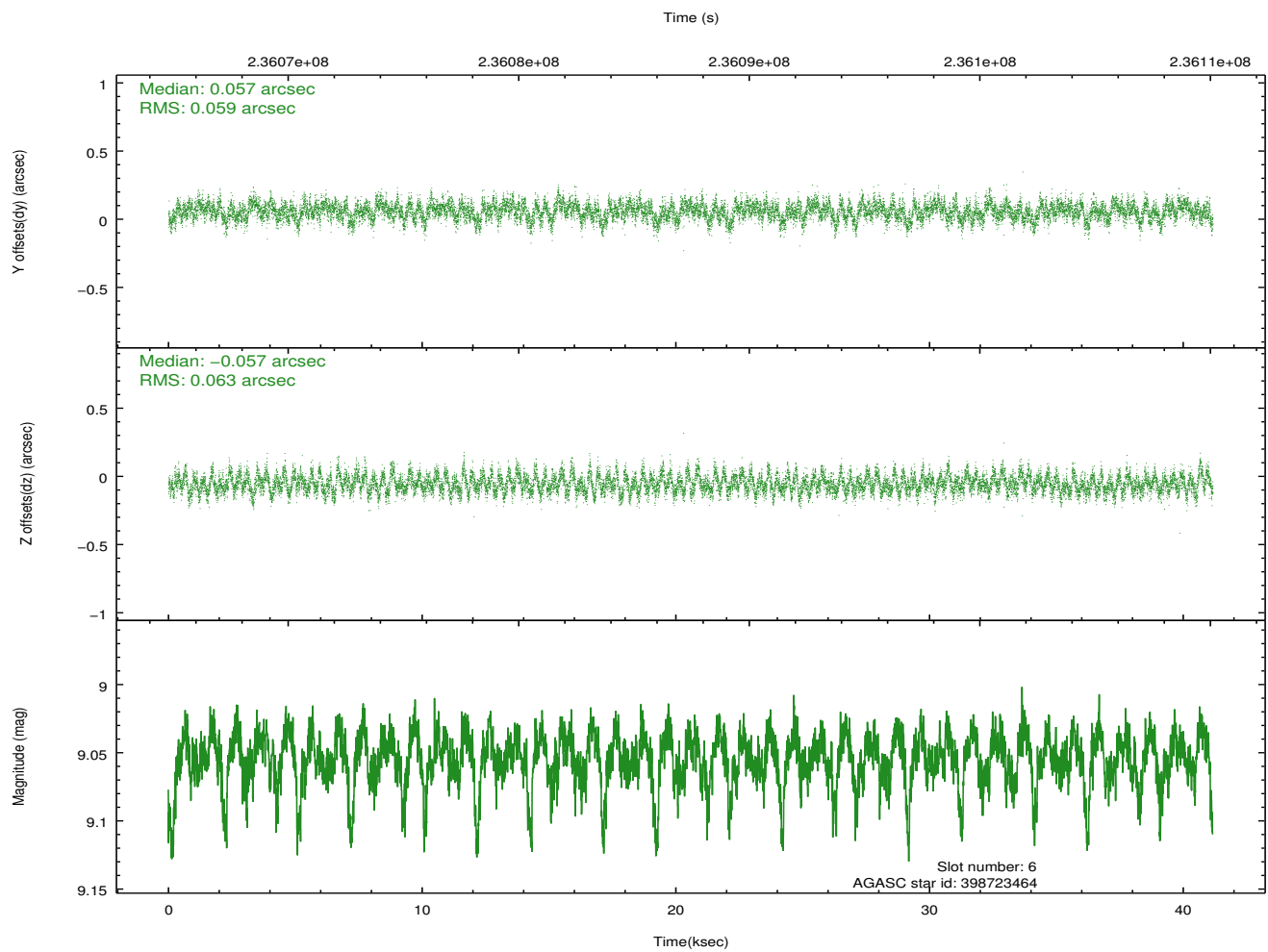
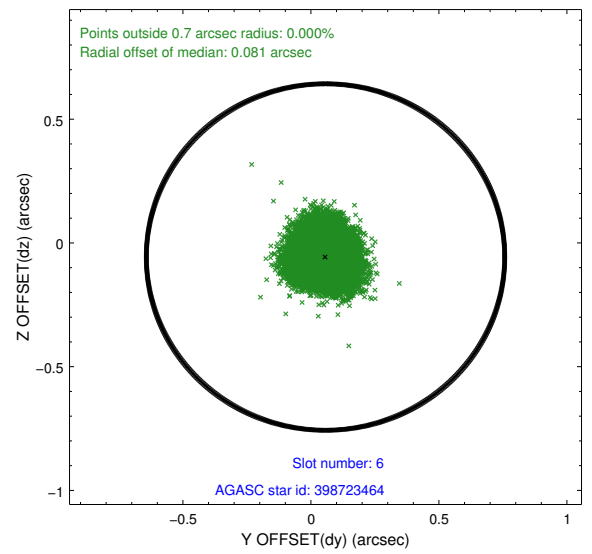
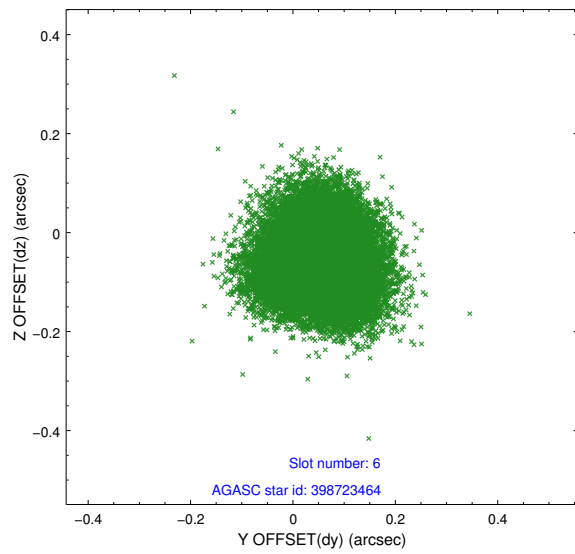
2.4.3 Slot 5



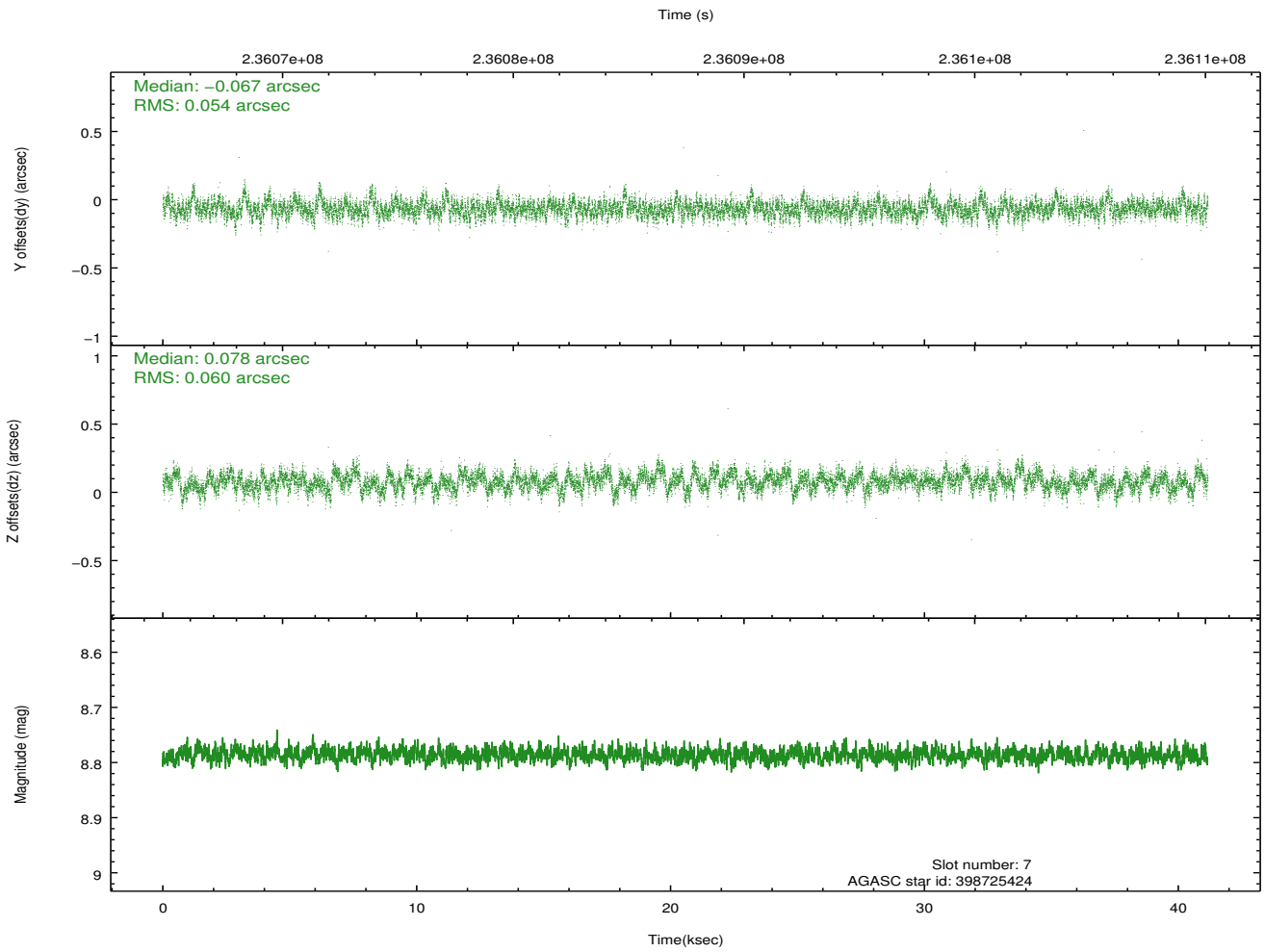
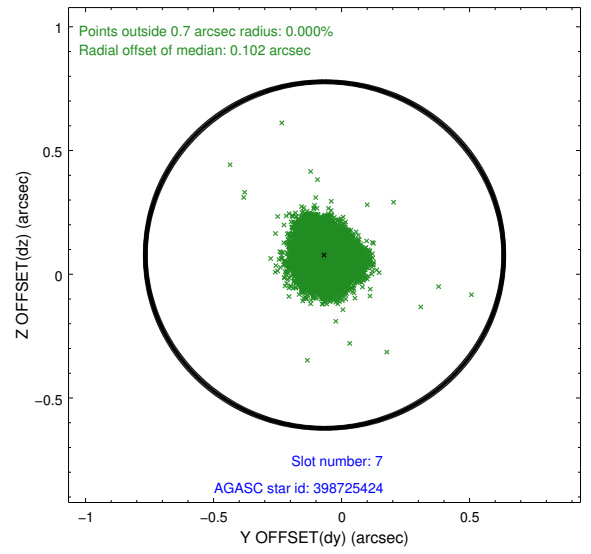
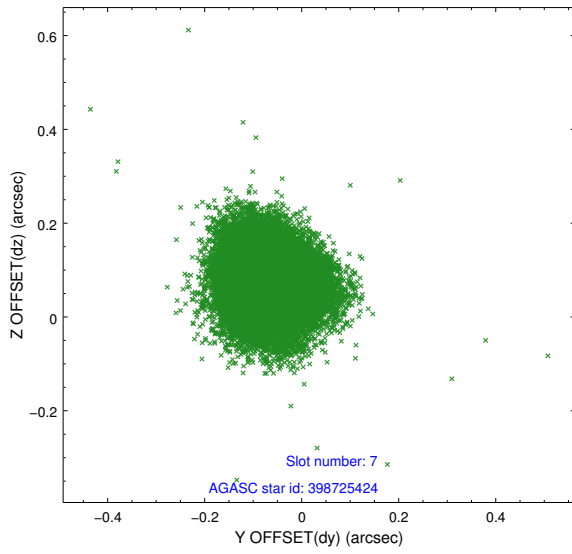
Time (s)



2.4.4 Slot 6

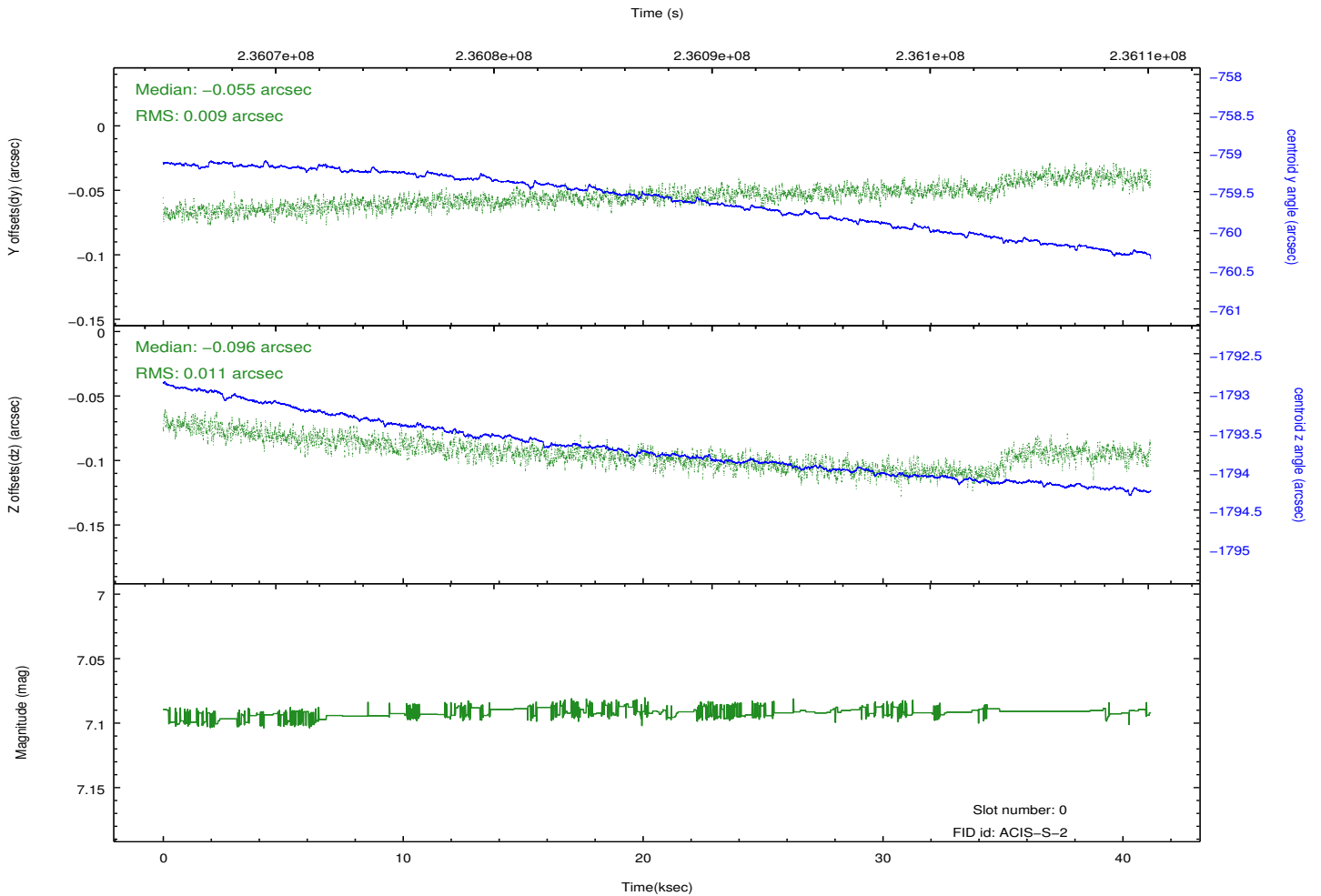
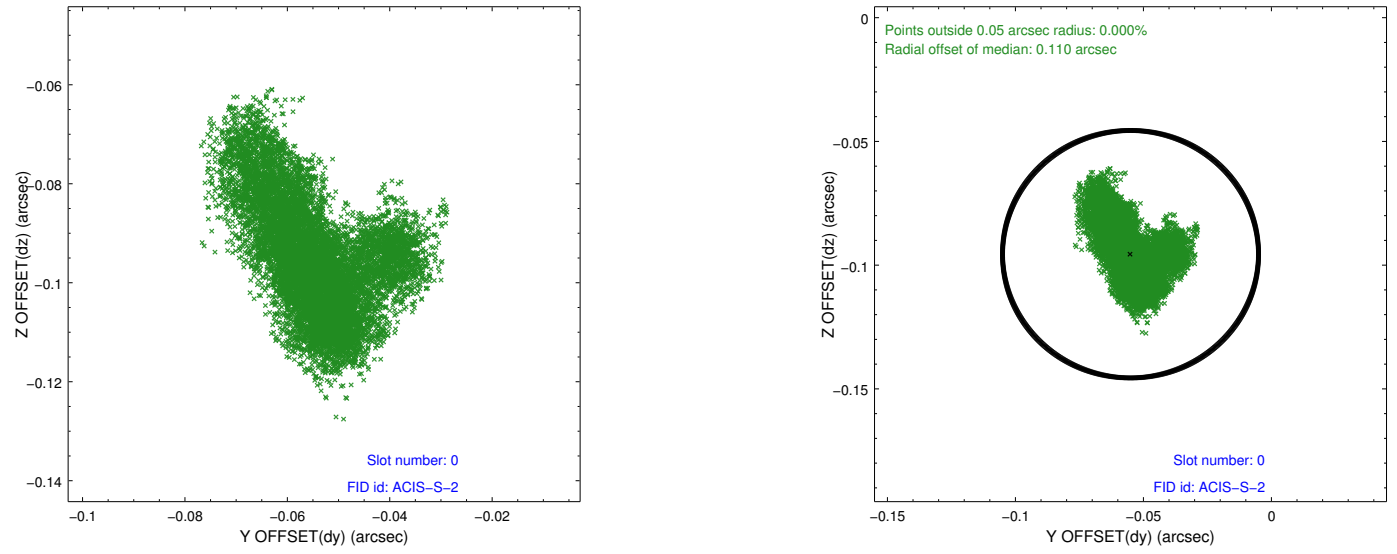


2.4.5 Slot 7

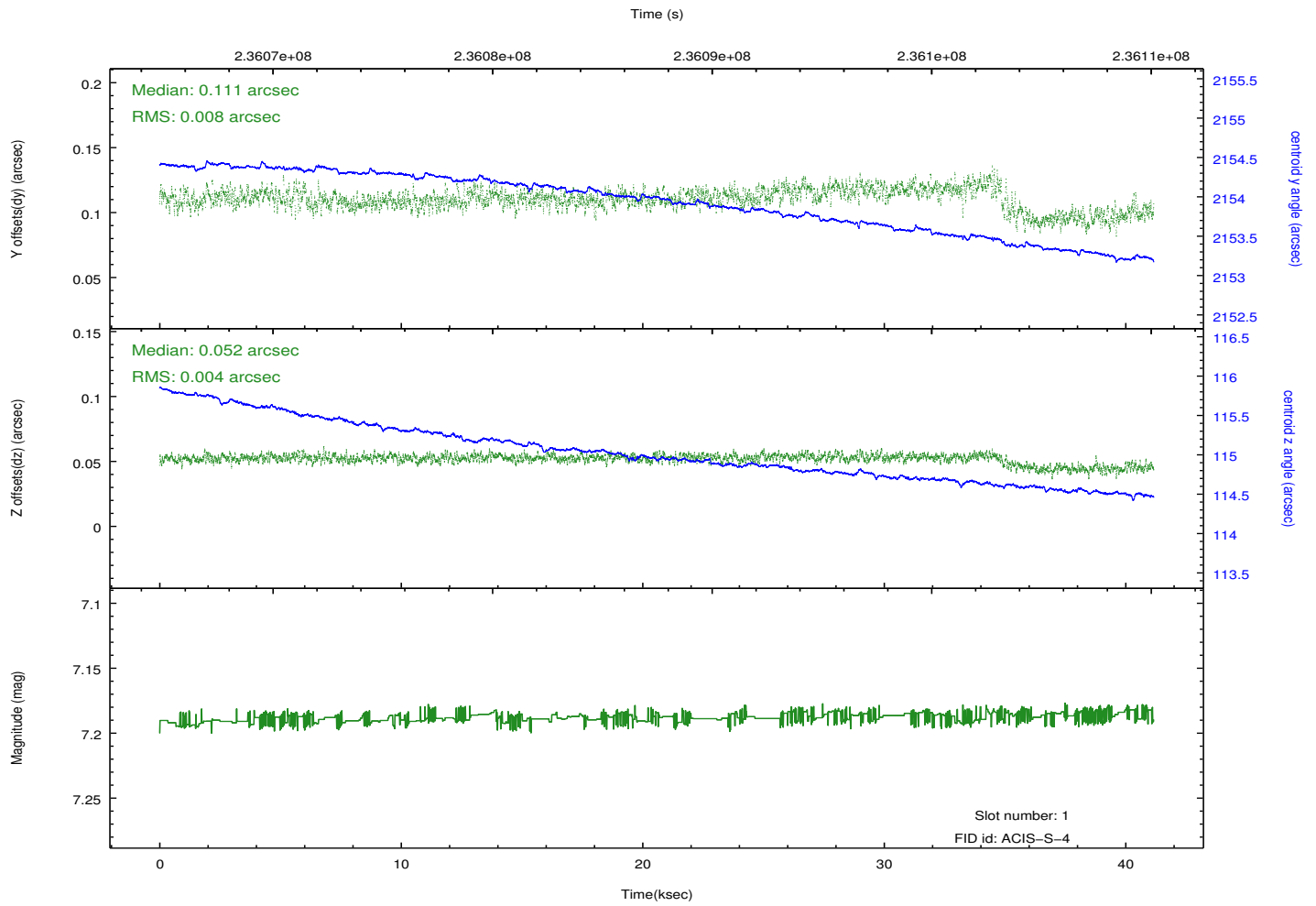
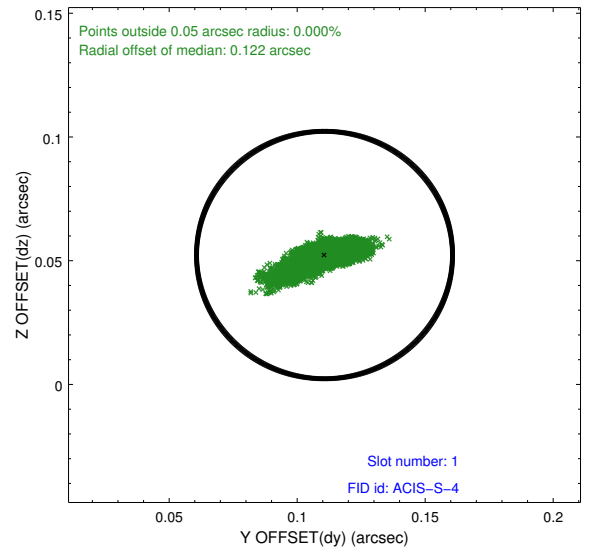
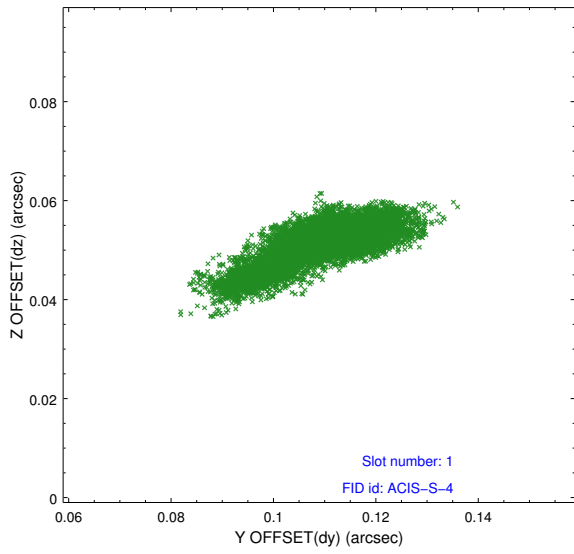


2.5 FID Slots

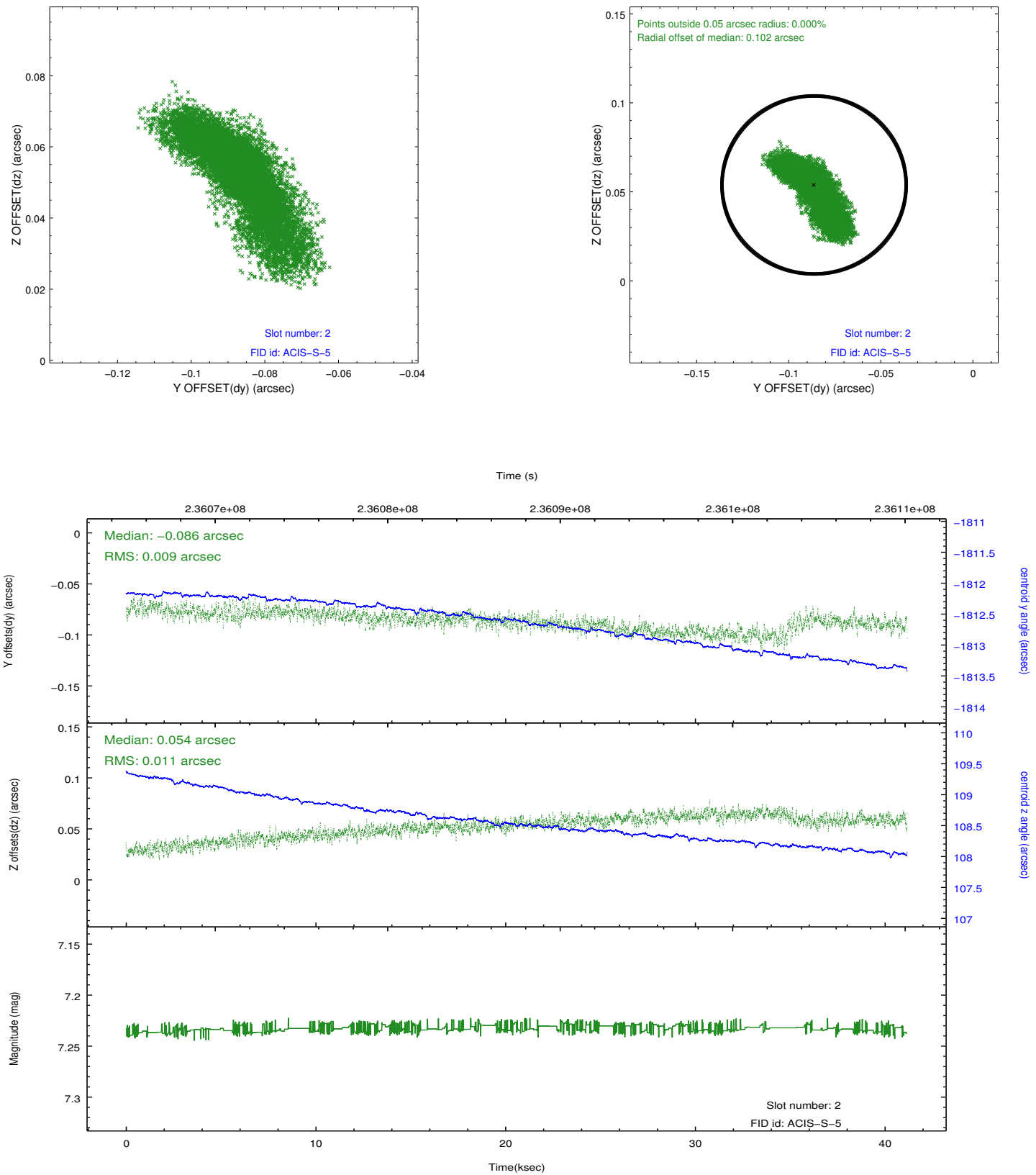
2.5.1 Slot 0



2.5.2 Slot 1

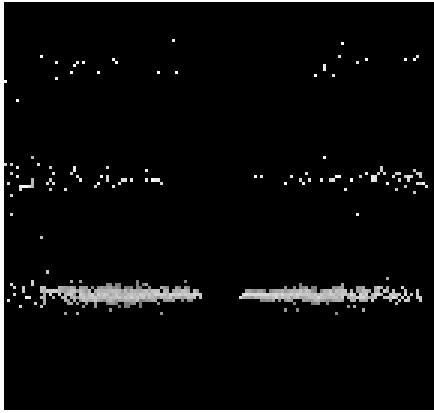


2.5.3 Slot 2

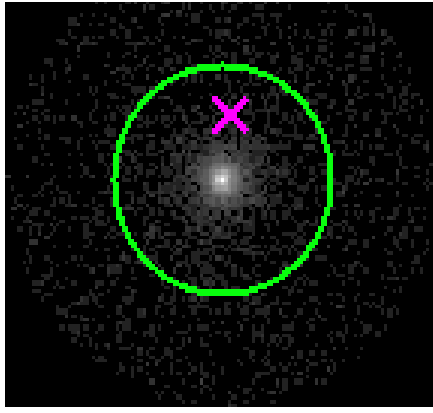


3 Gratings

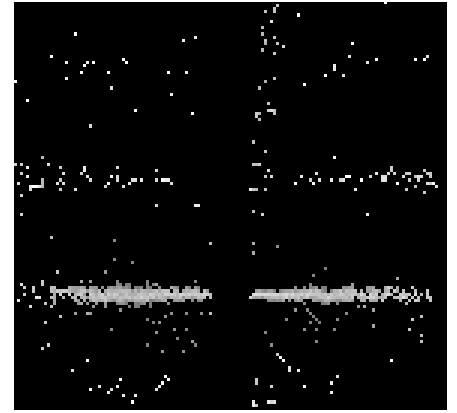
3.1 HEG Arm



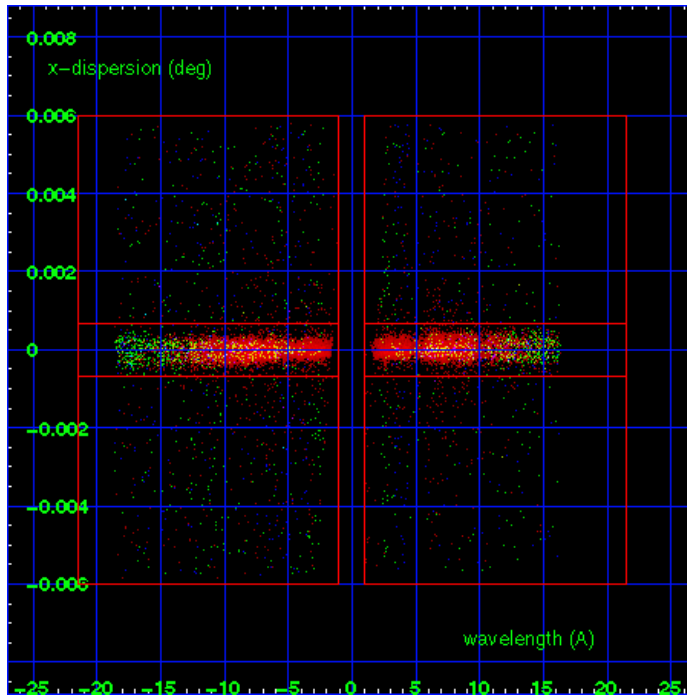
HEG Order Sort 123



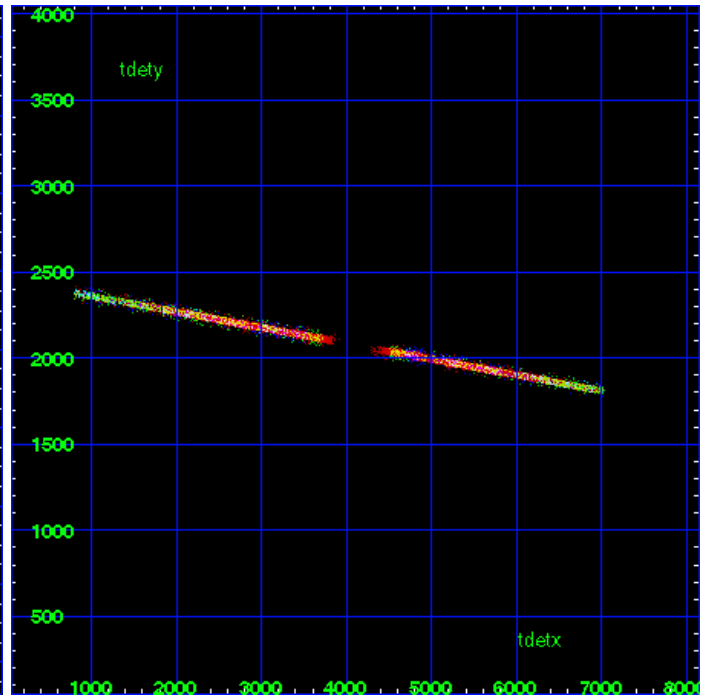
HEG Zero Order



HEG Order Sort ALL

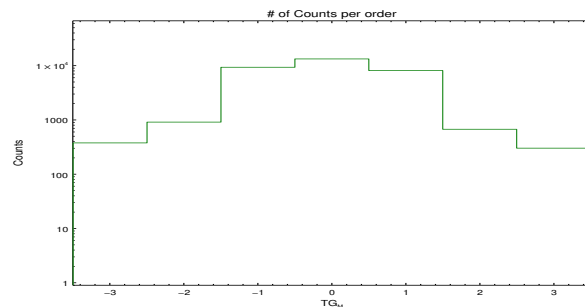


Spot Image HEG

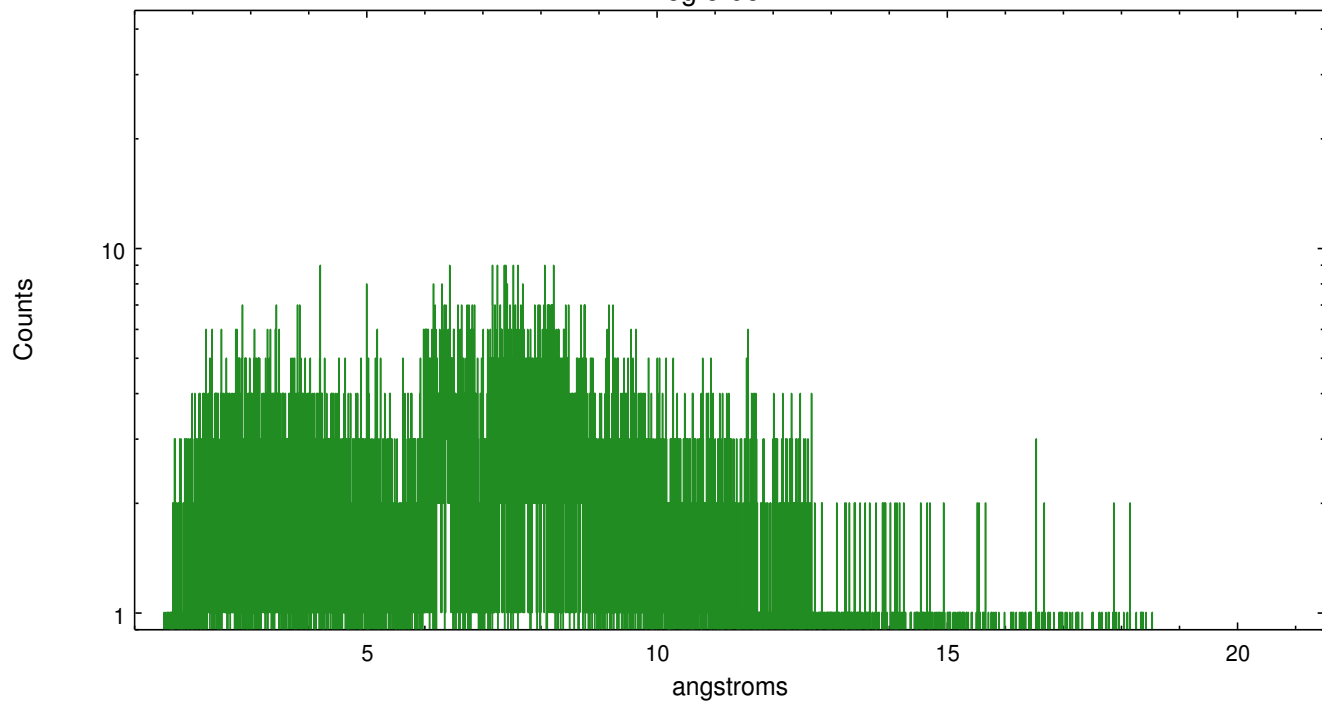


Full Detector HEG

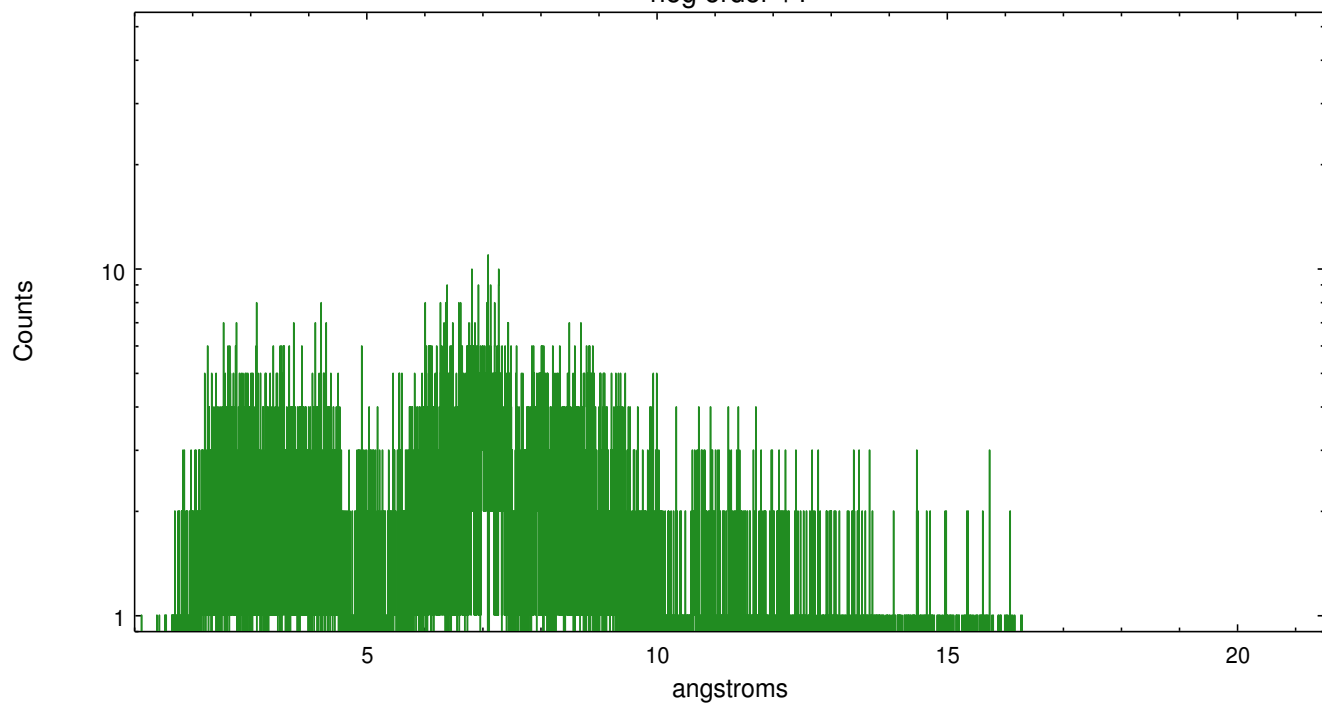
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	378	914	9395	13402	8172	674	302



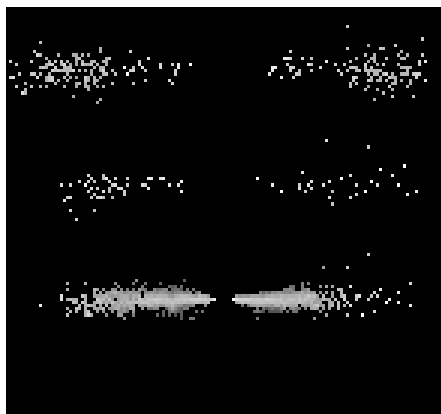
heg order -1



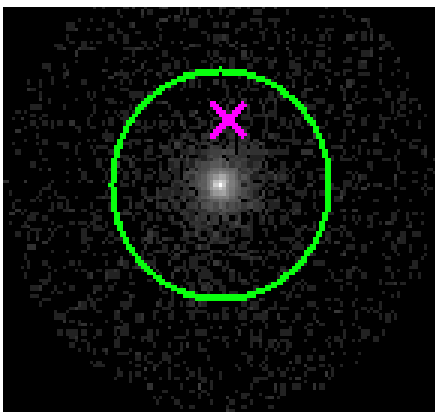
heg order +1



3.2 MEG Arm



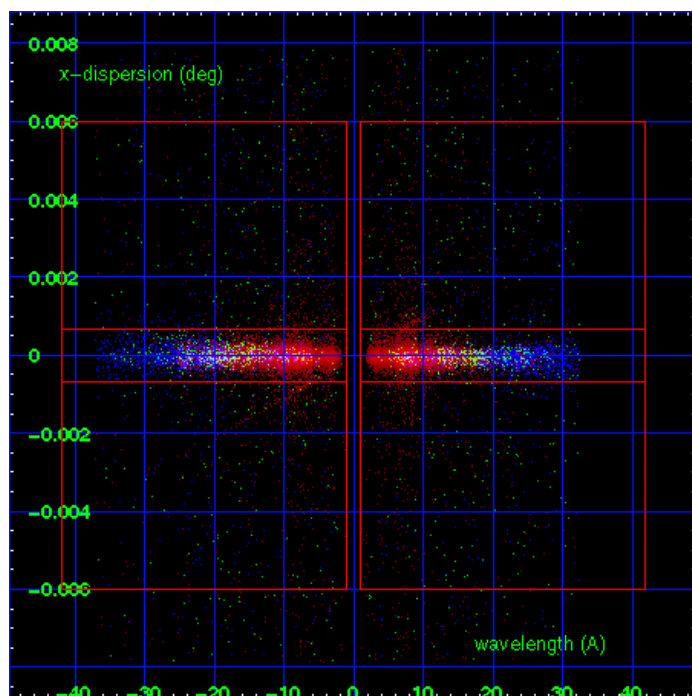
MEG Order Sort 123



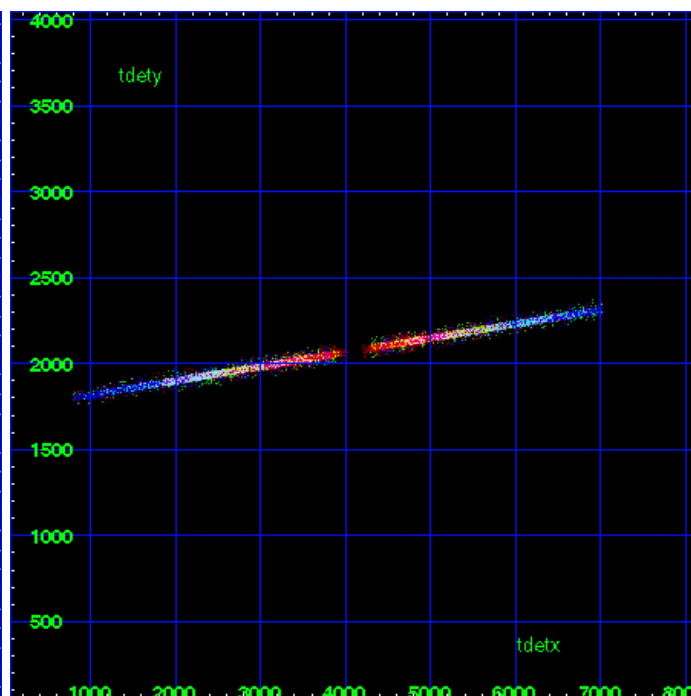
MEG Zero Order



MEG Order Sort ALL

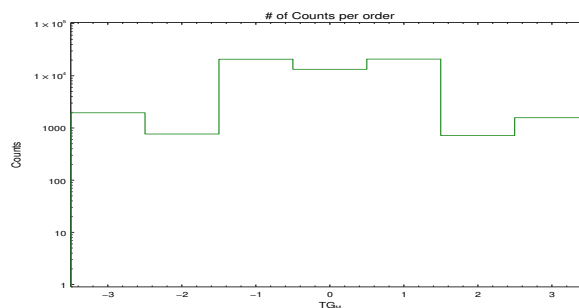


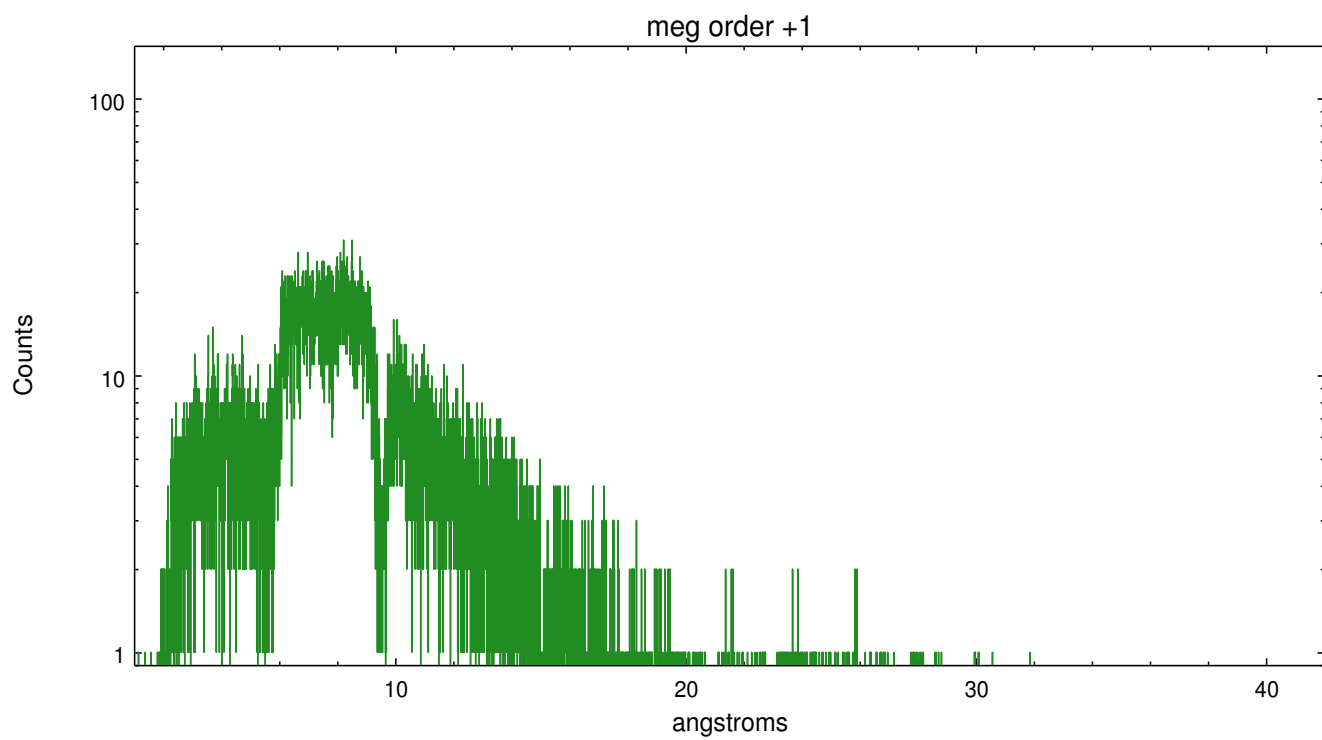
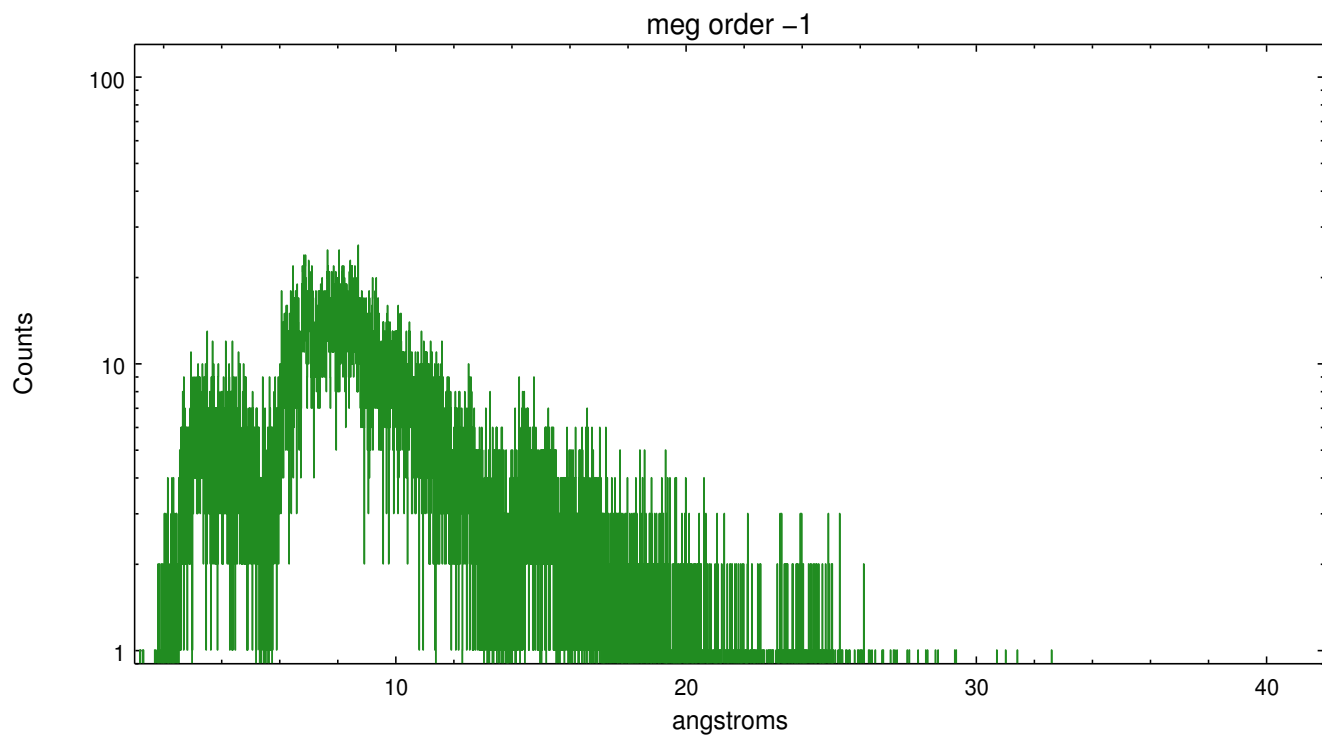
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1963	768	20948	13402	21070	718	1579





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.0425

A.2 Comments