

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 4569 - L2 Version 4
Chandra X-Ray Center

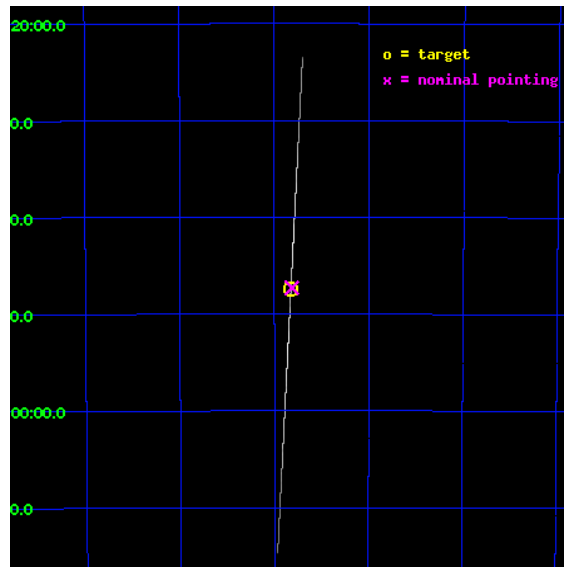
L2 Processing Date : Dec 8 2012

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1 Front

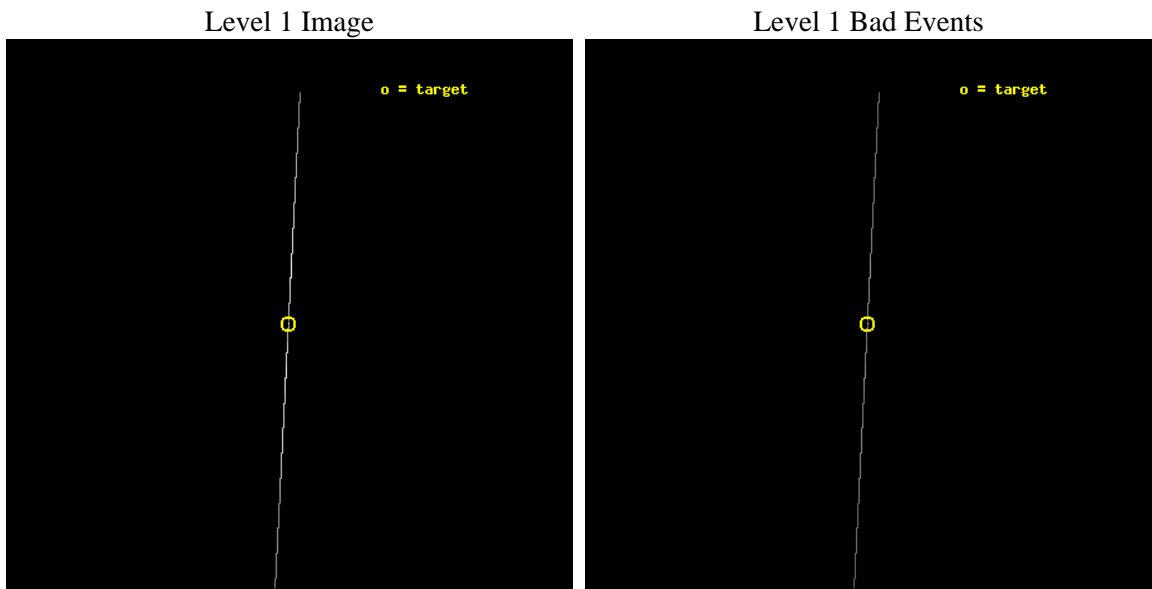
seq_num	400352	Sequence number
obs_id	4569	Observation id
title	Resolving Relativistic Effects and the Accretion Flow Geometry of a Black Hole in Outburst	Proposal title
observer	Dr Jon Miller	Principal investigator
object	GX 339-4	Source name
ra_targ	255.70625	Observer's specified target RA [deg]
dec_targ	-48.789722	Observer's specified target Dec [deg]
ra_nom	255.70362148241	Nominal RA [deg]
dec_nom	-48.788350046661	Nominal Dec [deg]
roll_nom	272.86738330459	Nominal Roll [deg]
revision	4	Processing version of data
ontime	50096.75	Sum of GTIs [s]
livetime	49901.059570312	Livetime [s]
ontime4	50096.75	Sum of GTIs [s]
ontime5	50096.75	Sum of GTIs [s]
ontime6	50096.75	Sum of GTIs [s]
ontime7	50096.75	Sum of GTIs [s]
ontime8	50096.75	Sum of GTIs [s]
ontime9	50096.75	Sum of GTIs [s]
l2events	13170413	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	50096.75	Sum of GTIs [s]
caldbver	4.5.4	 	ontime4	50096.75	Sum of GTIs [s]
date	2012-12-07T20:34:24	Date and time of file creation	ontime5	50096.75	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	50096.75	Sum of GTIs [s]
			ontime7	50096.75	Sum of GTIs [s]
			ontime8	50096.75	Sum of GTIs [s]
			ontime9	50096.75	Sum of GTIs [s]
			l1events	14307418	Number of level 1 events

2.1.3 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	254187	1710790	4794000	4642957	2502857	402627	grade 0 events	16828	333691	1971536	940606	1639348	57548
rejected events	13364	45737	43360	84229	31969	17577		6%	19%	41%	20%	65%	14%
rejected %	5%	2%	0%	1%	1%	4%	grade 1 events	210	620	5242	5967	4388	419
								0%	0%	0%	0%	0%	0%
							grade 2 events	181685	696735	2351733	1336198	604093	272512
								71%	40%	49%	28%	24%	67%
							grade 3 events	8510	94233	88678	453643	71054	9154
								3%	5%	1%	9%	2%	2%
							grade 4 events	8619	93040	88454	448946	70408	9771
								3%	5%	1%	9%	2%	2%
							grade 5 events	13139	45030	37869	77979	27432	17128
								5%	2%	0%	1%	1%	4%
							grade 6 events	25196	447441	250488	1379618	86134	36095
								9%	26%	5%	29%	3%	8%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

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	CC33_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	255.680714	255.7036214824106	Subarray requested	NONE	NONE
[deg] Pointing Dec	-48.765654	-48.78835004666114	Alternating exposures requested	N	N
[deg] Pointing Roll	272.693522	272.8673833045924	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.632523	-182.6398635053184			
[mm] SIM translation stage offset	-7.5	-7.49265907768941			
[s] Observation start time (MET)	209567805.184000	209567090.80316			
Observation start date	2004-08-22T13:15:41	2004-08-22T13:04:50			
[s] Observation end time (MET)	209617805.184000	209618782.06796			
Observation end date	2004-08-23T03:09:01	2004-08-23T03:26:22			
Read mode	CONTINUOUS	CONTINUOUS			

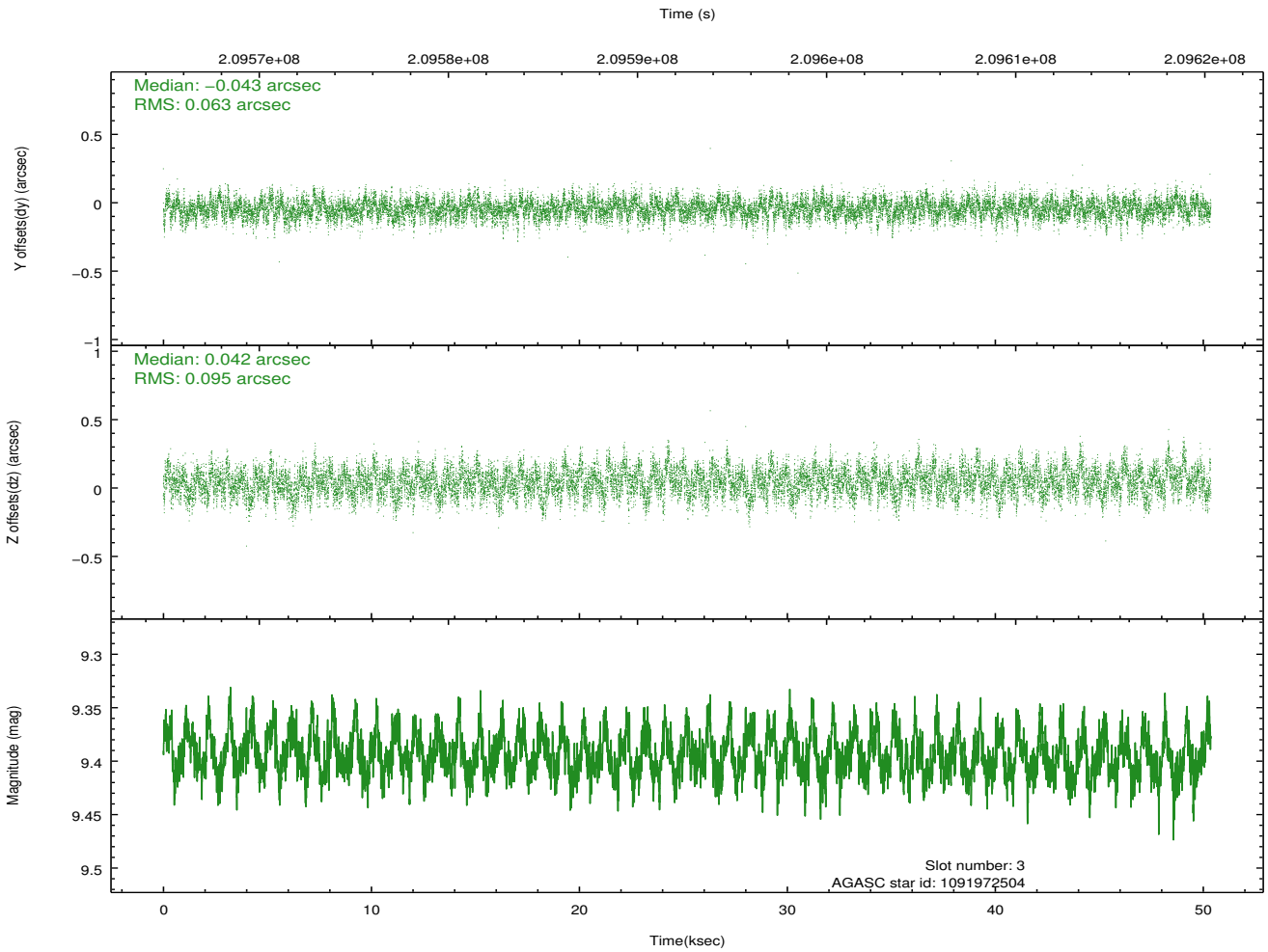
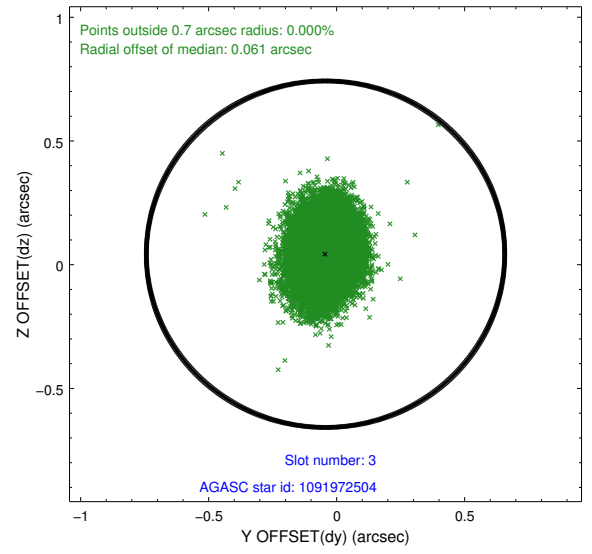
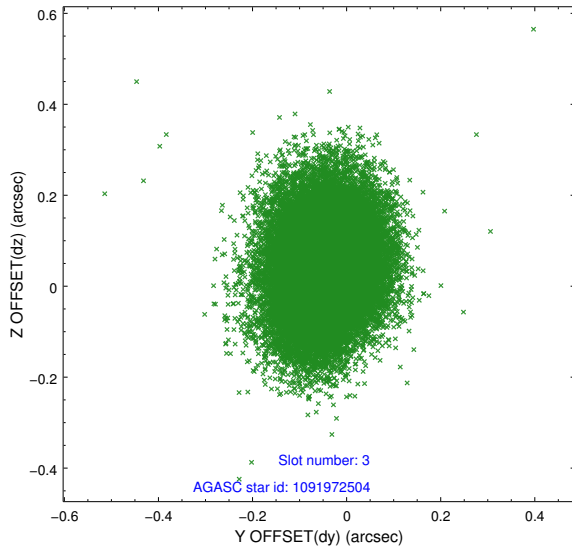
2.3 Aspect

Slot Statistics

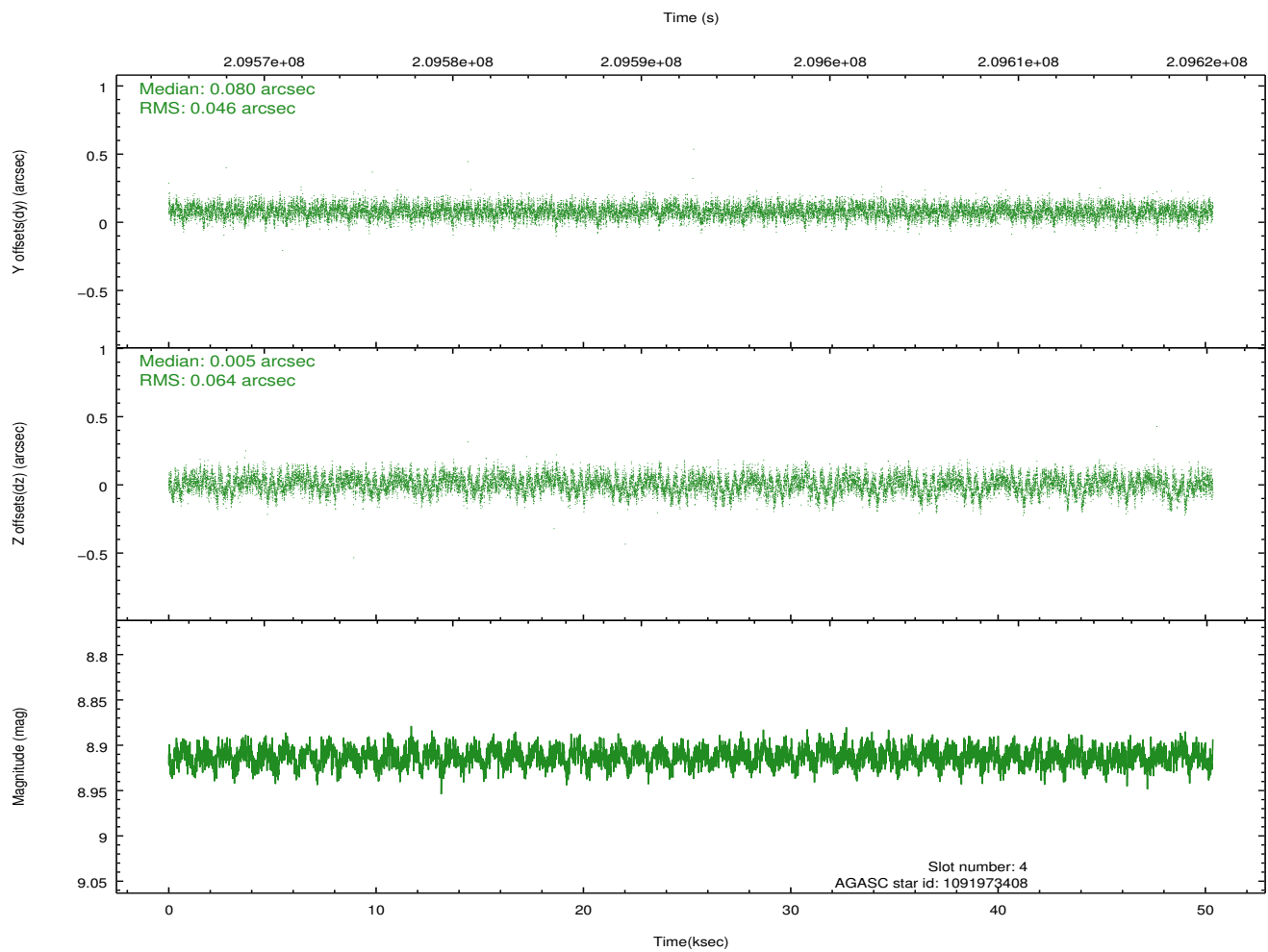
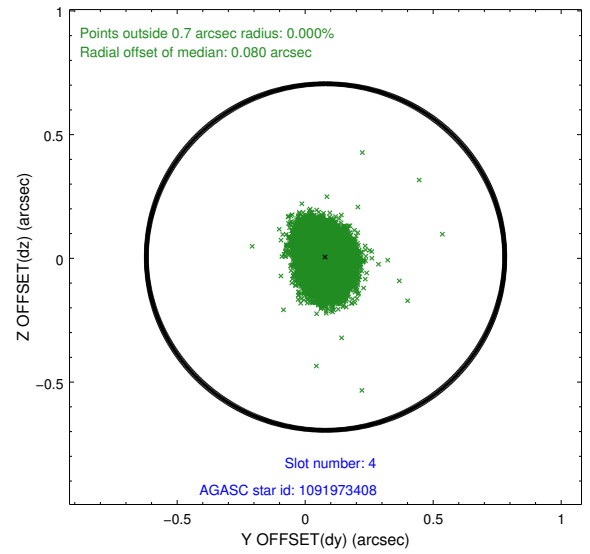
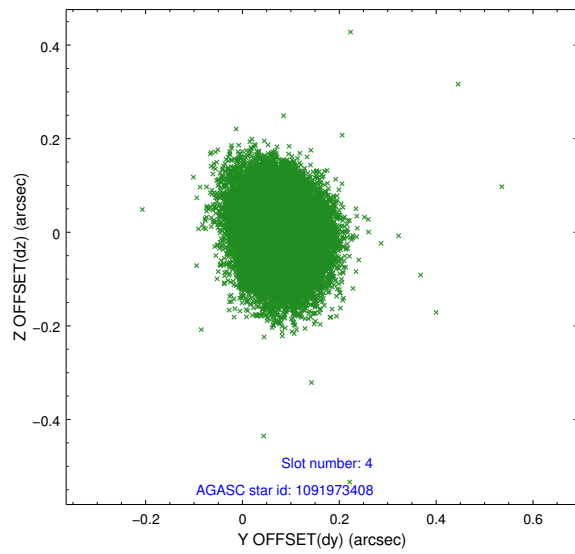
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	12283	0.029	0.110	0.024	0.034	0.000000	0.000000	938.25	-1879.81
1	FID	ACIS-S-5	7.22	12286	-0.106	0.044	0.025	0.042	0.000000	0.000000	-1810.91	17.66
2	FID	ACIS-S-6	7.40	12284	0.053	-0.145	0.019	0.032	0.000000	0.000000	403.83	661.42
3	GUIDE	1091972504	9.39	24552	-0.043	0.042	0.119	0.198	254.743578	-48.438196	-1268.31	-2180.98
4	GUIDE	1091973408	8.91	24562	0.080	0.005	0.083	0.136	255.800233	-48.601800	-575.43	312.01
5	GUIDE	1091975392	6.39	24571	-0.279	0.069	0.057	0.087	255.805002	-48.336791	-1528.12	369.73
6	GUIDE	1092485728	6.88	24571	0.059	0.106	0.060	0.097	254.773222	-48.875124	306.14	-2164.93
7	GUIDE	1092491384	9.13	24560	0.180	-0.222	0.077	0.123	254.923973	-49.184437	1431.95	-1849.71

2.4 Star Slots

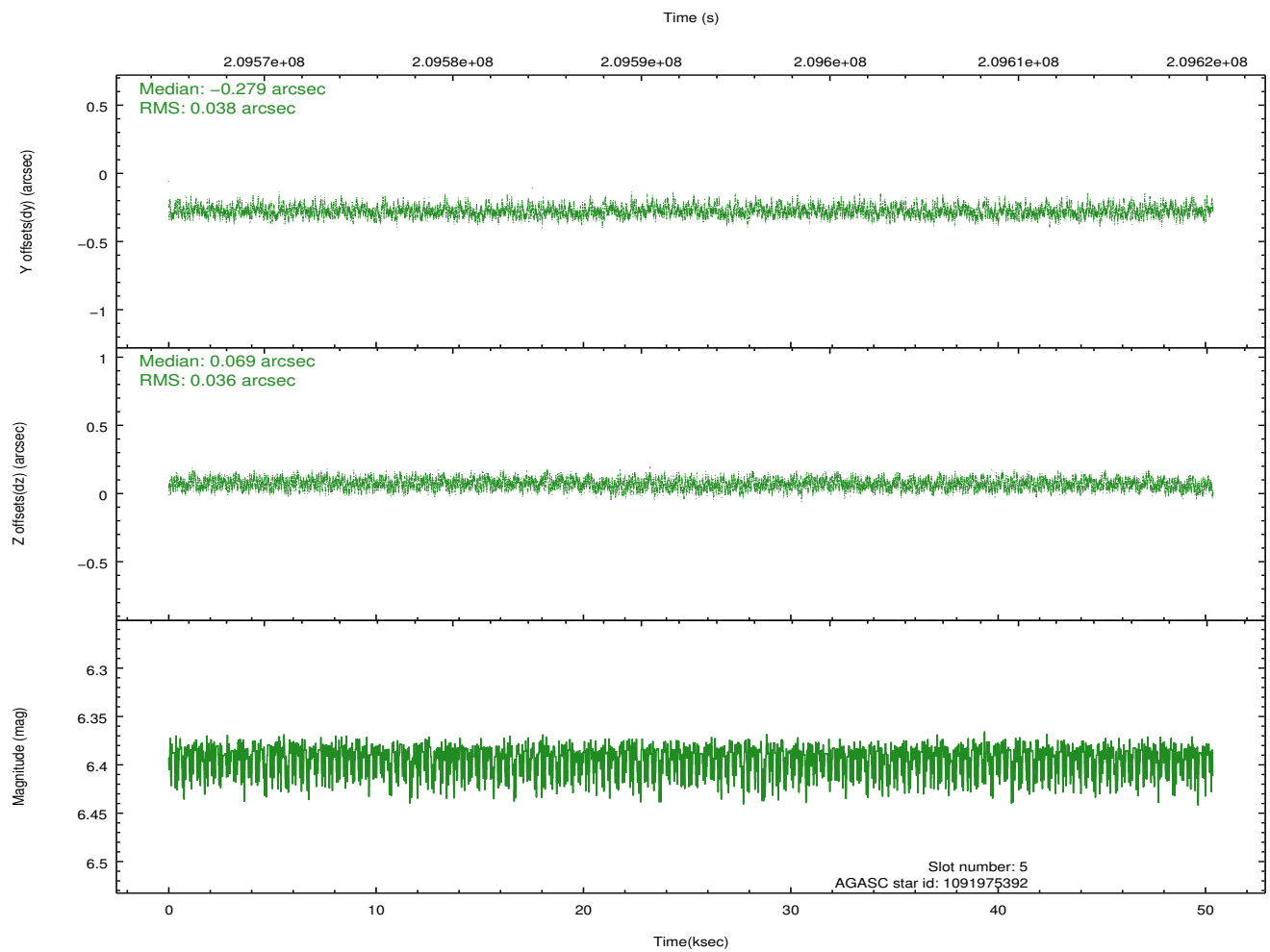
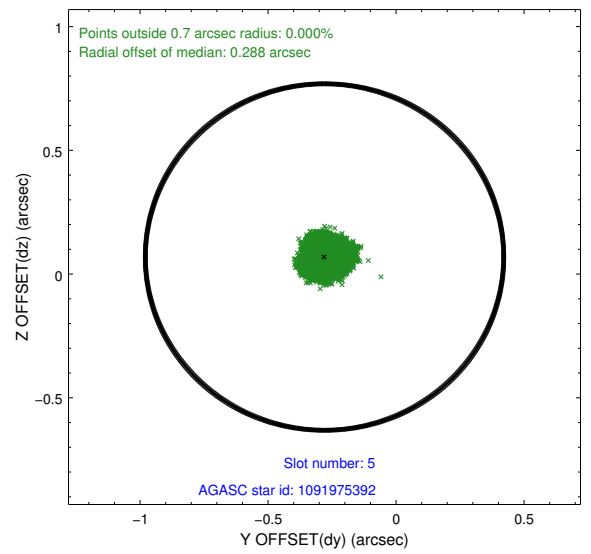
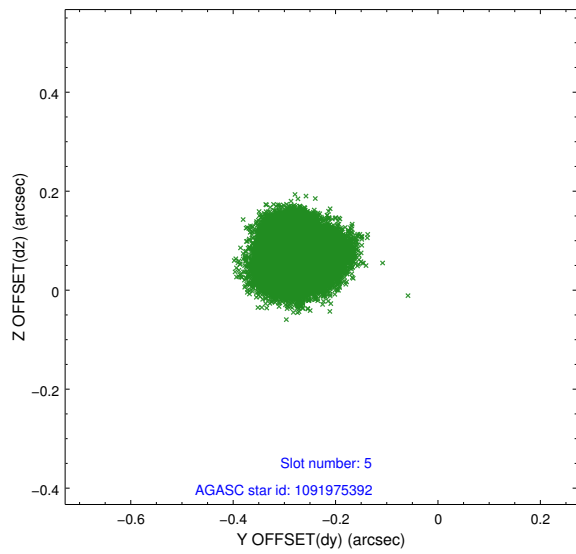
2.4.1 Slot 3



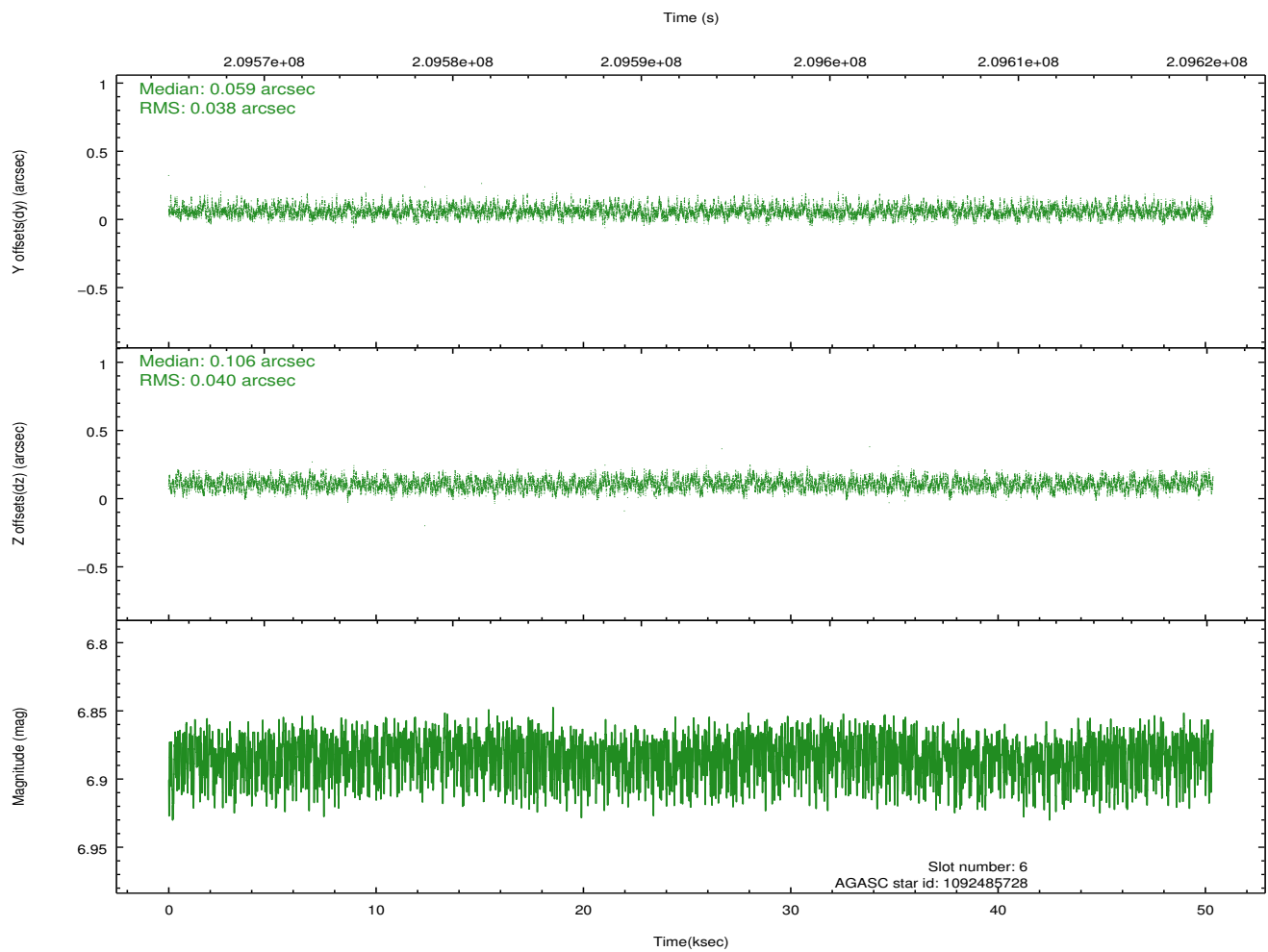
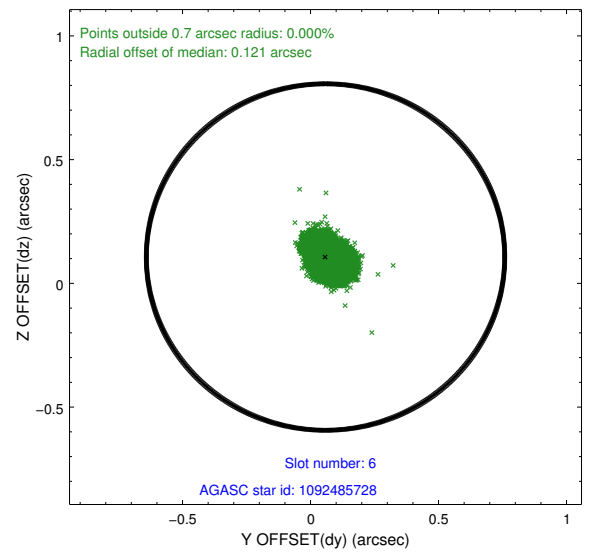
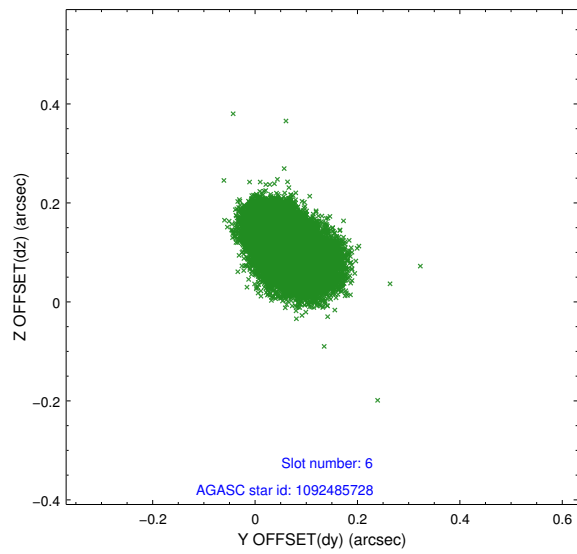
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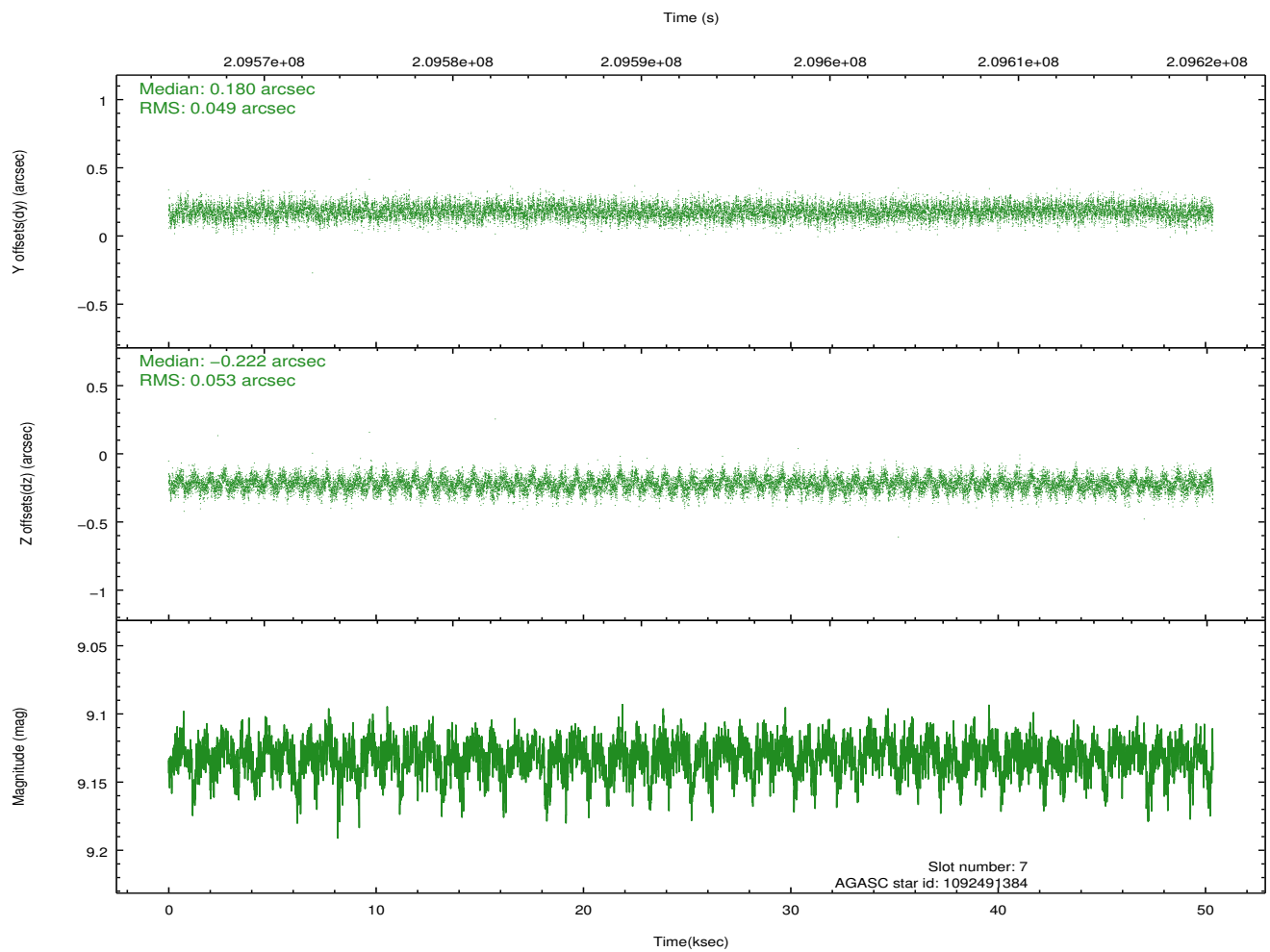
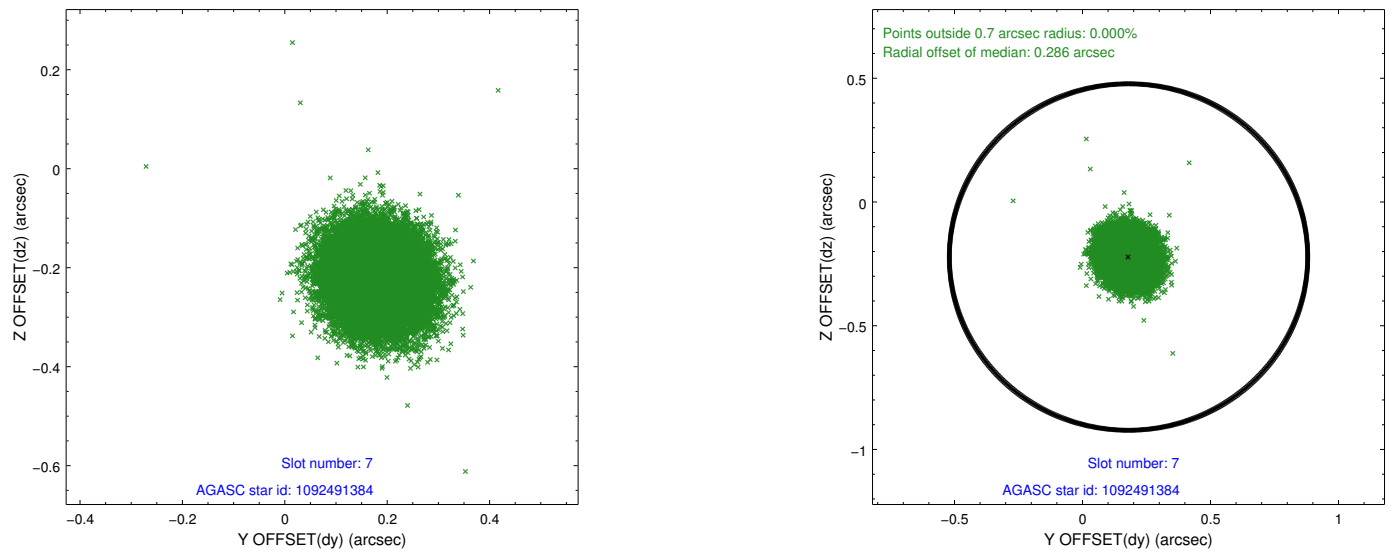
2.4.3 Slot 5



2.4.4 Slot 6

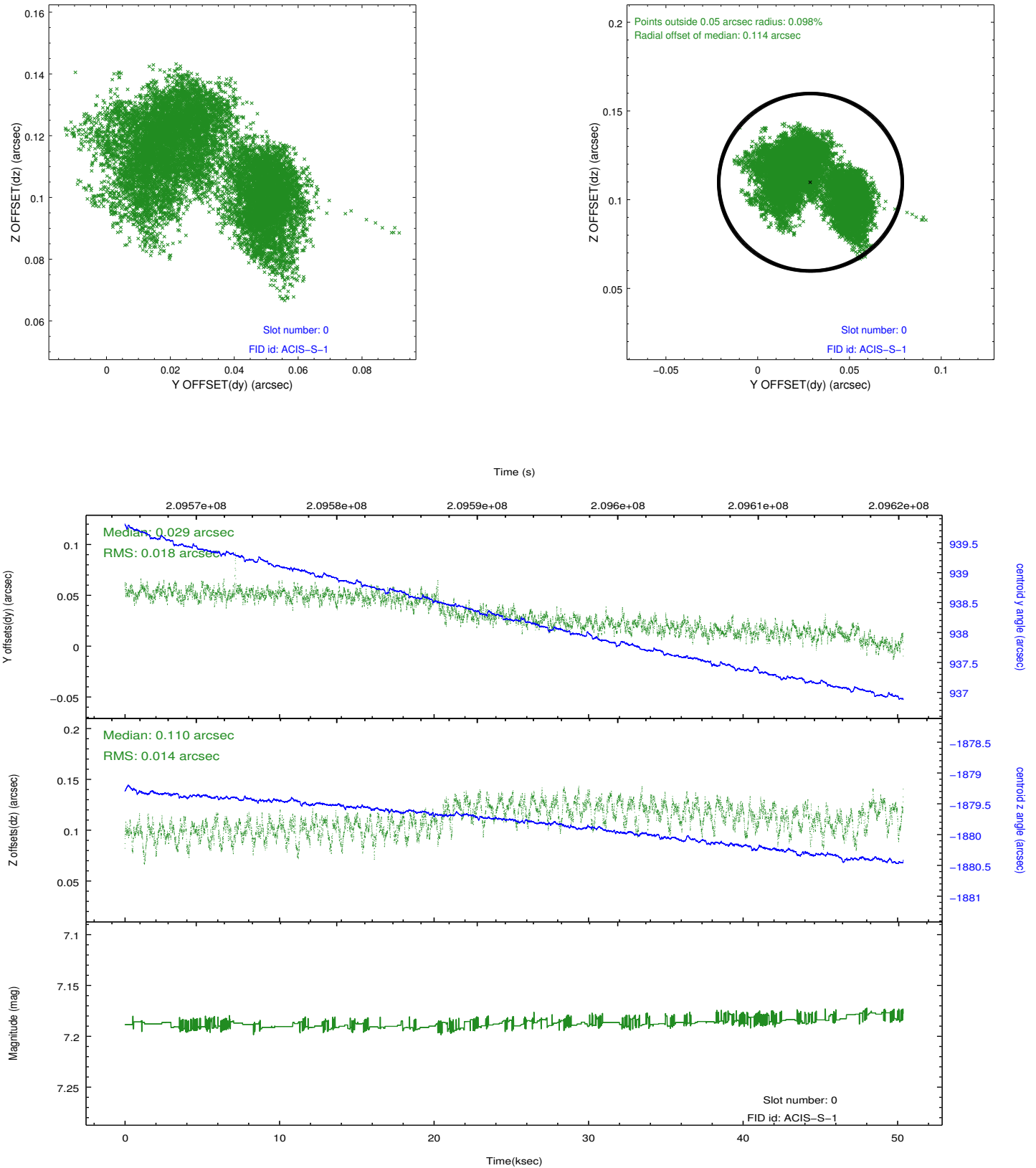


2.4.5 Slot 7

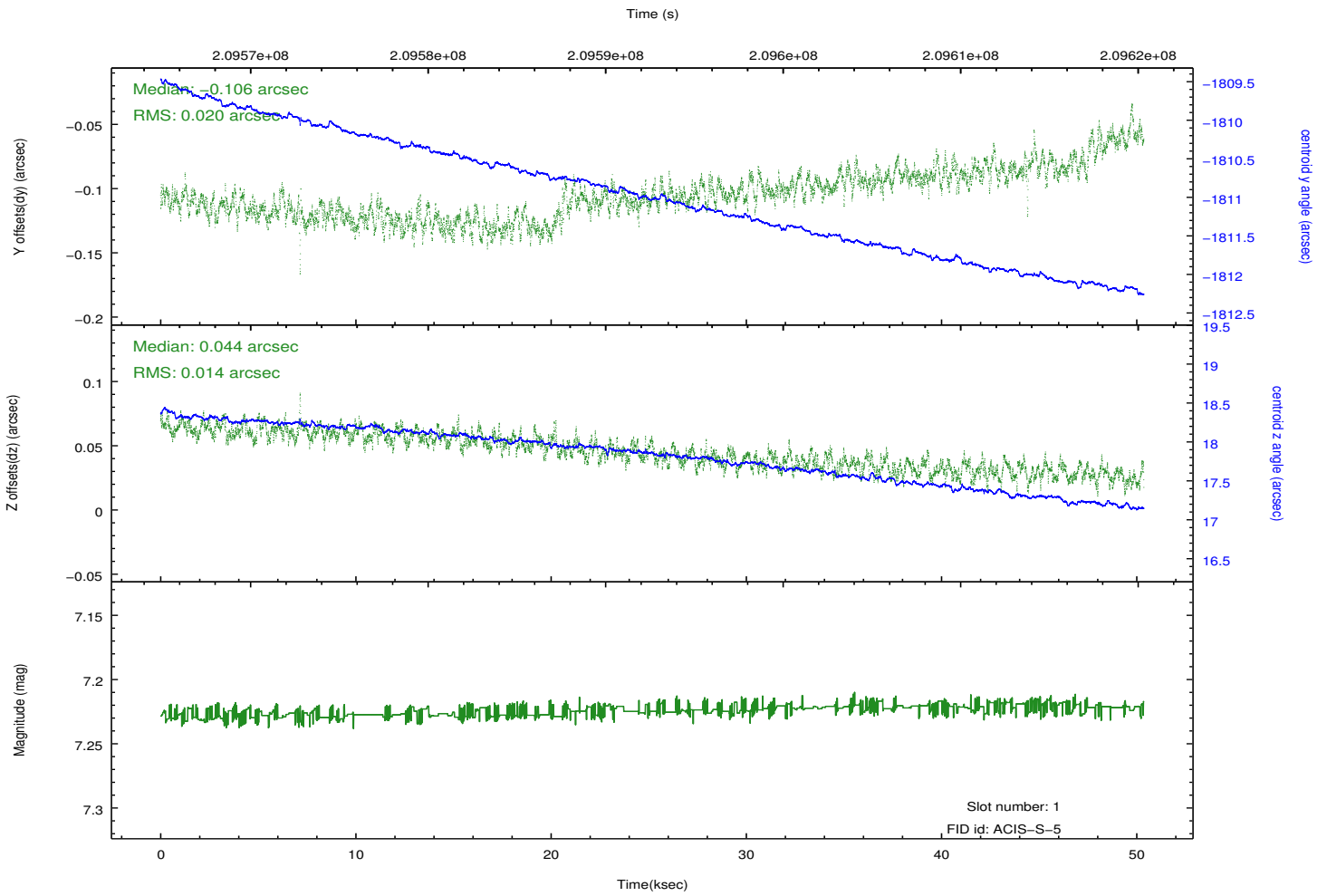
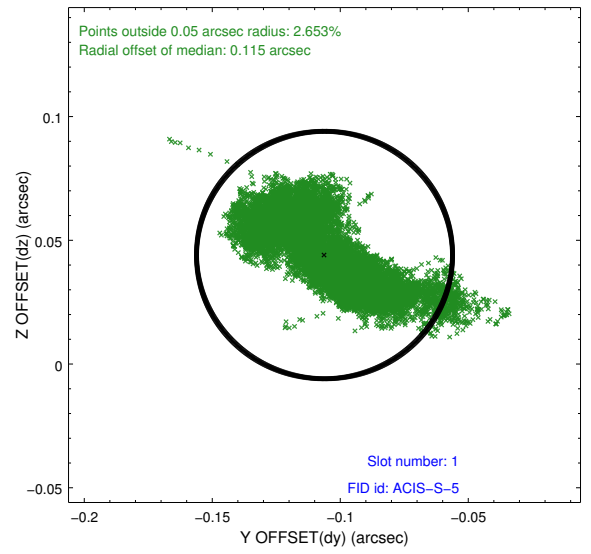
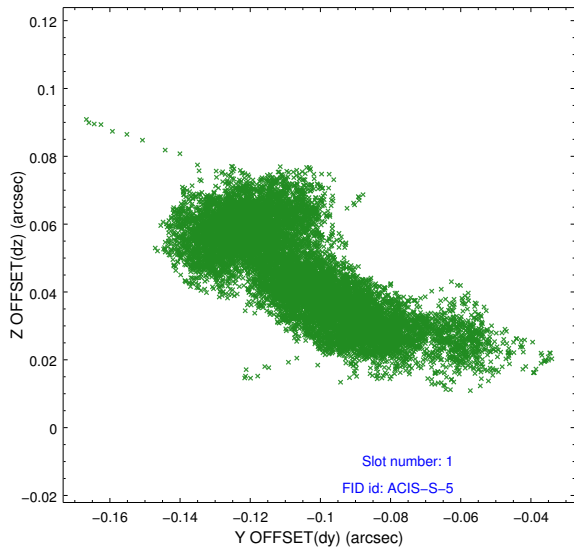


2.5 FID Slots

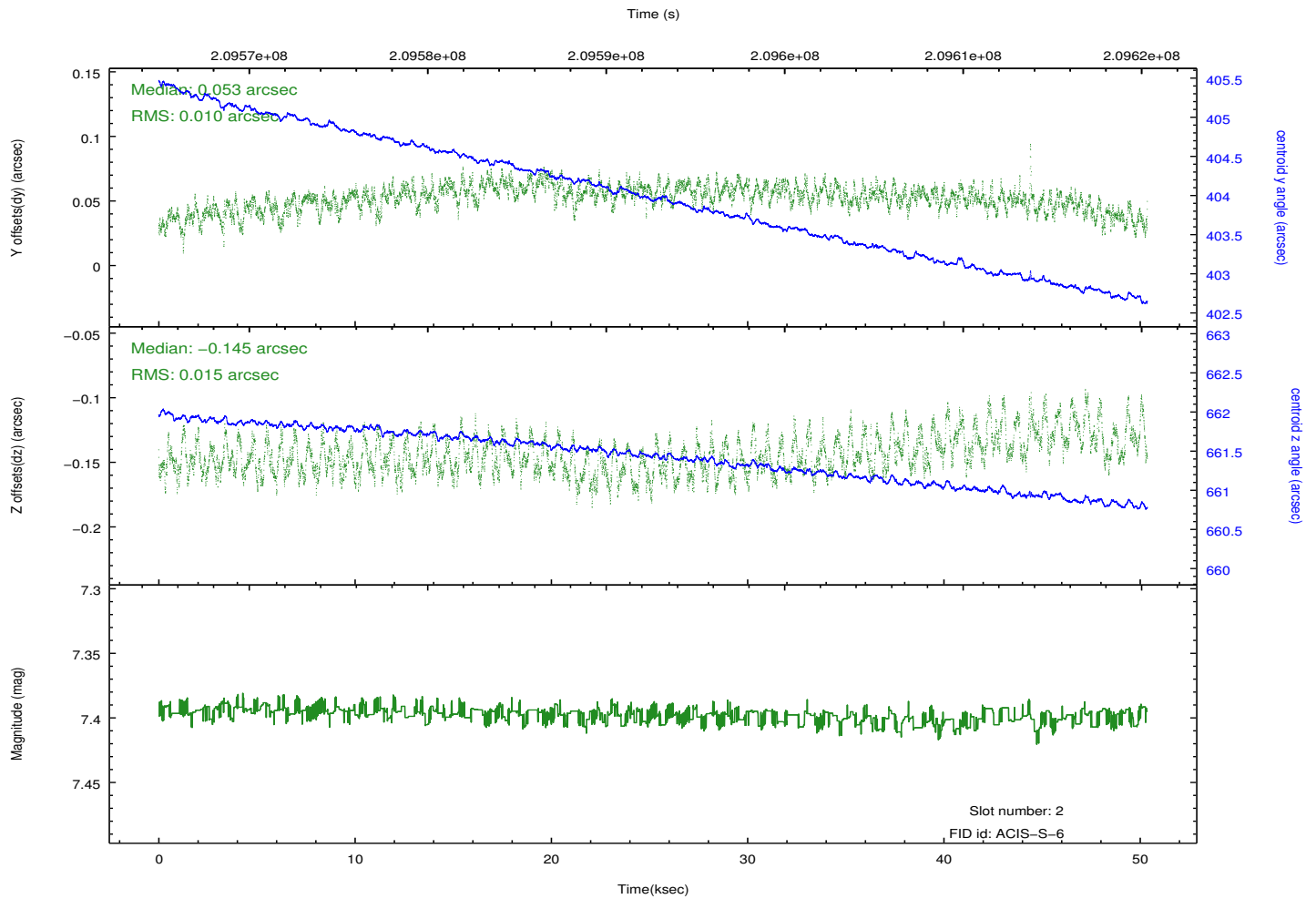
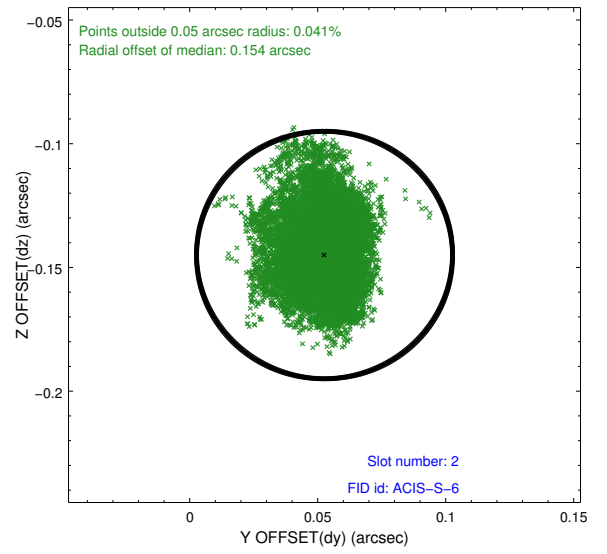
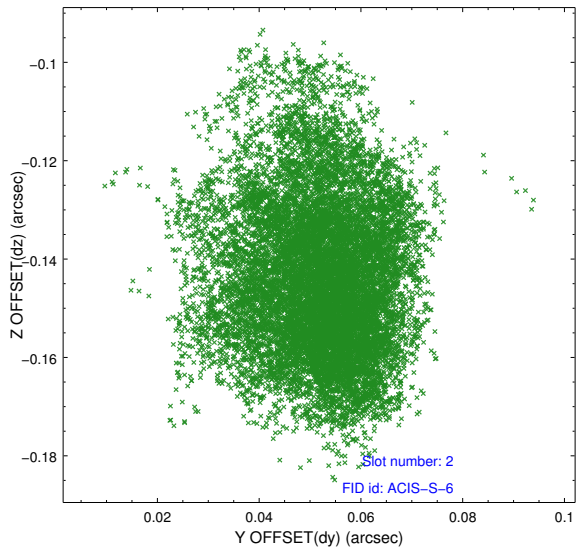
2.5.1 Slot 0



2.5.2 Slot 1

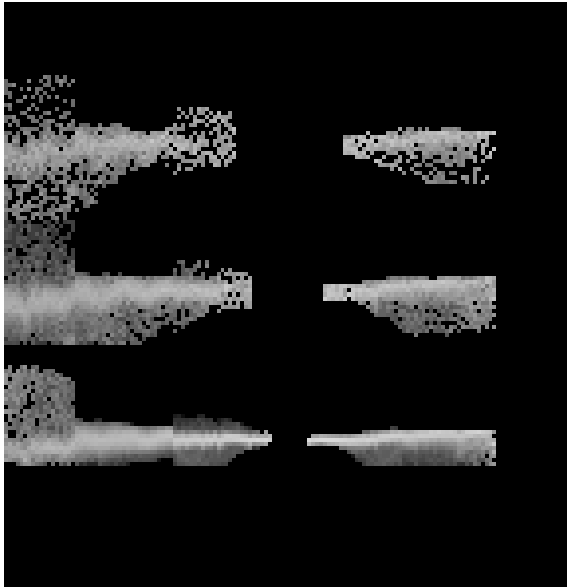


2.5.3 Slot 2



3 Gratings

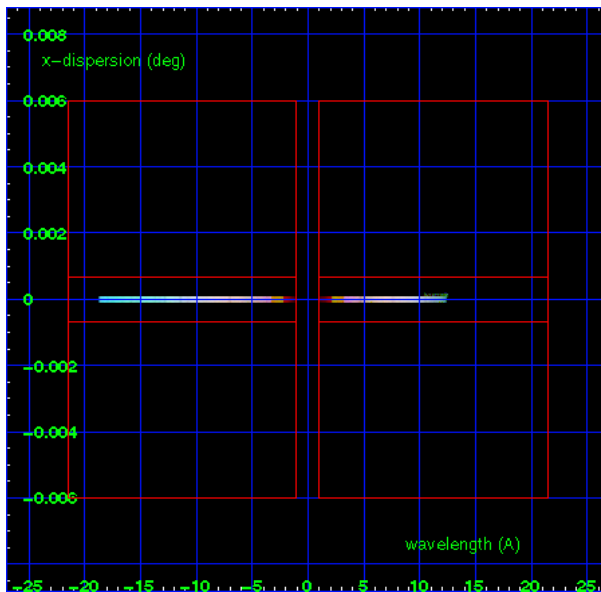
3.1 HEG Arm



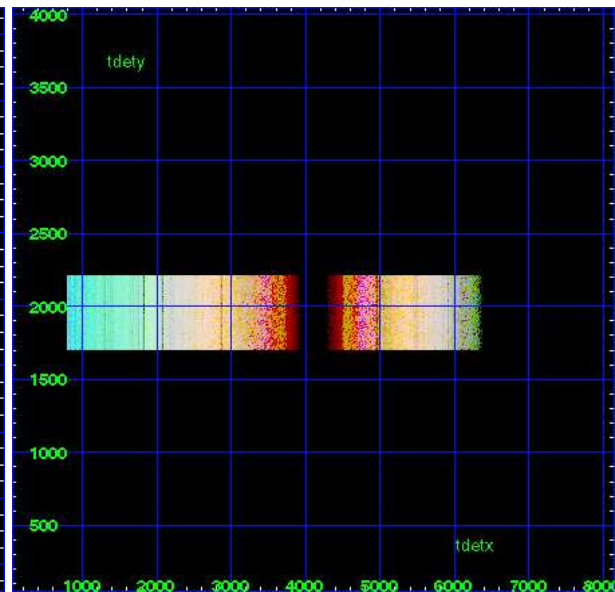
HEG Order Sort 123



HEG Order Sort ALL

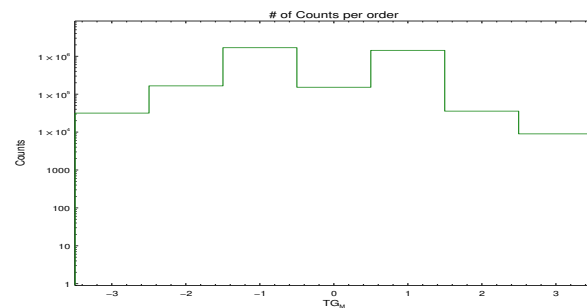


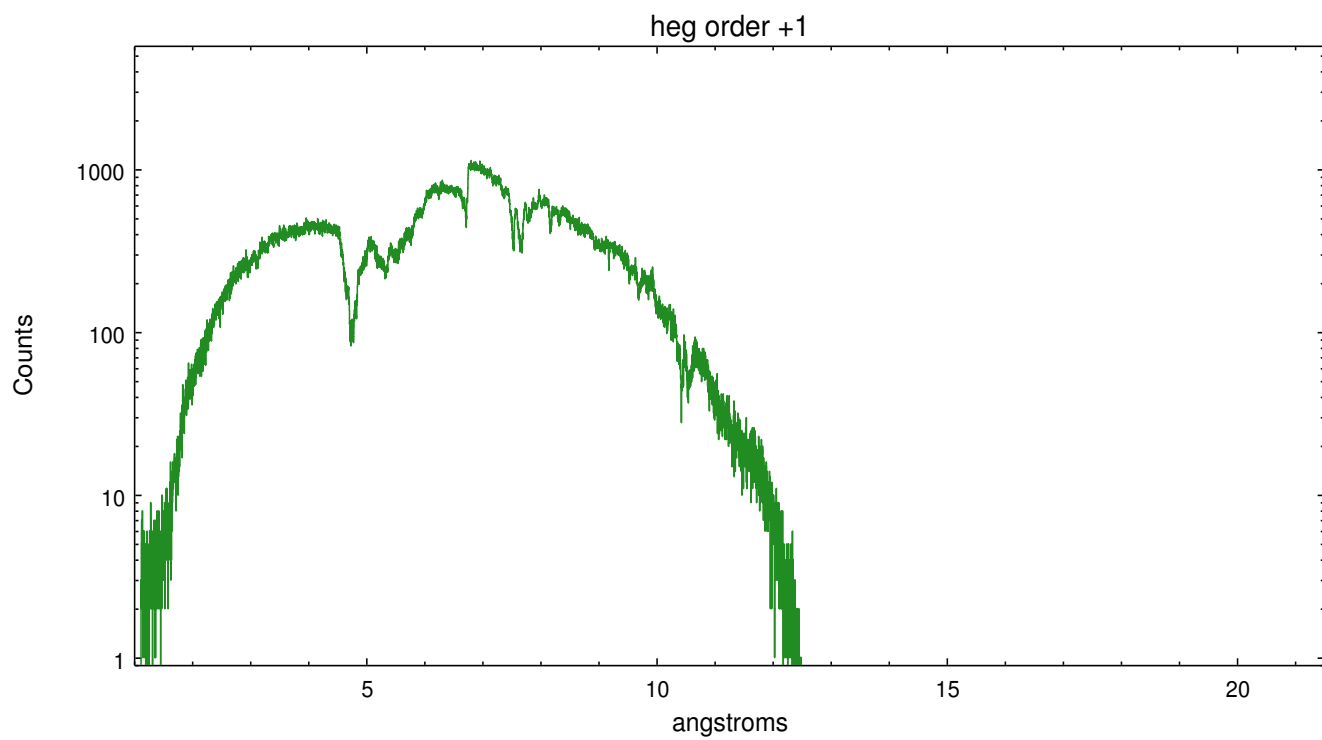
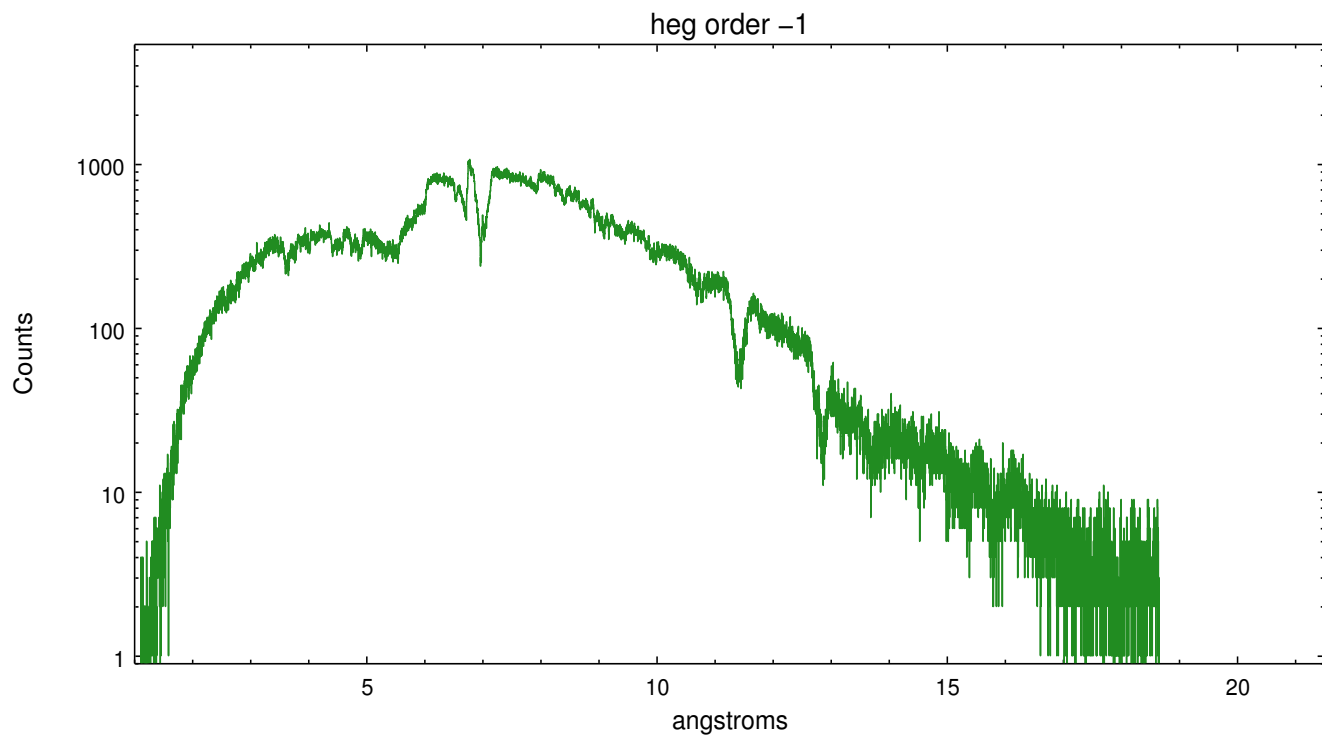
Spot Image HEG



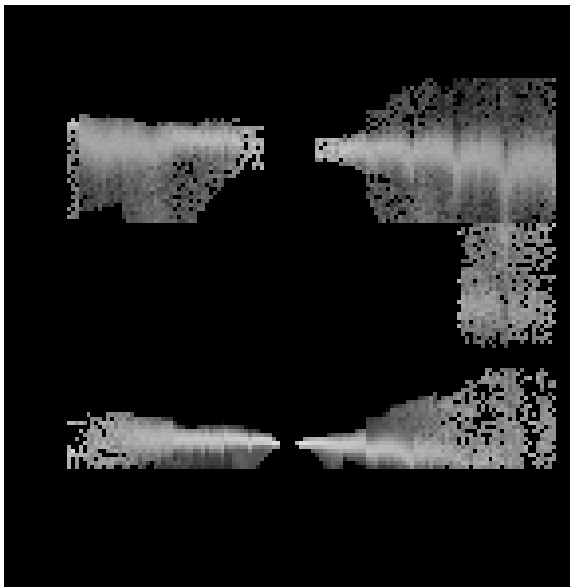
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	31816	166864	1701904	153277	1447507	35867	8996

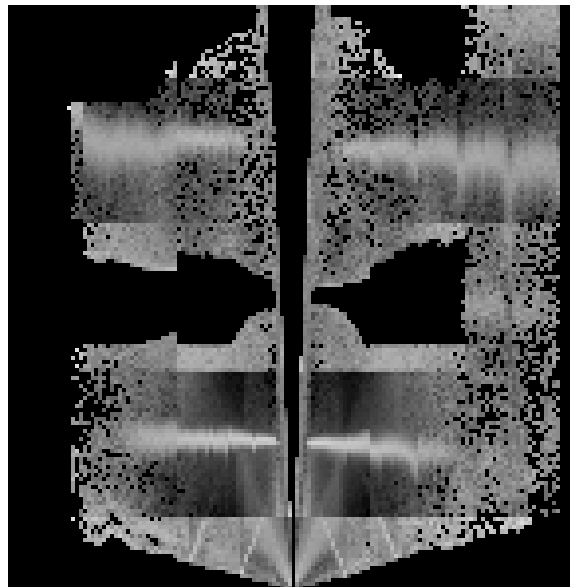




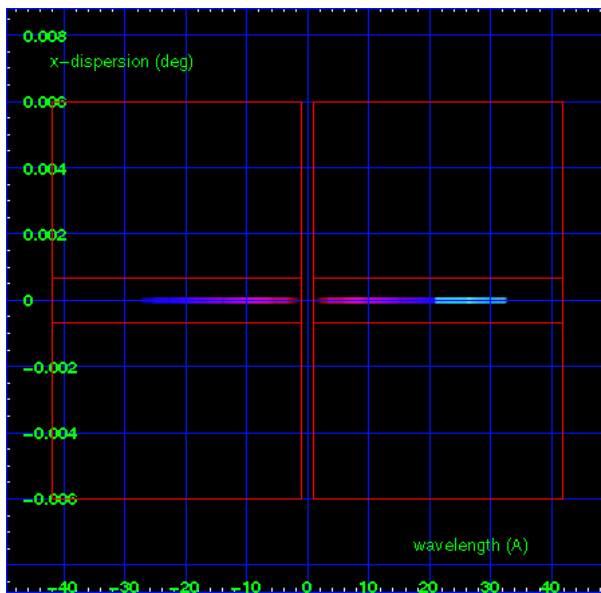
3.2 MEG Arm



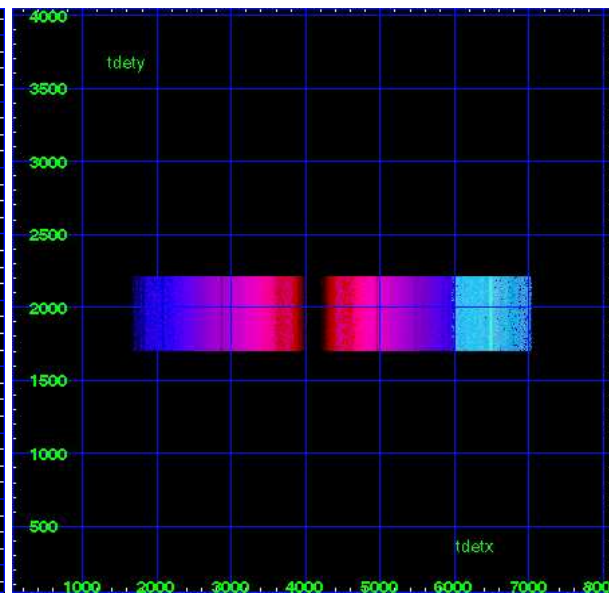
MEG Order Sort 123



MEG Order Sort ALL

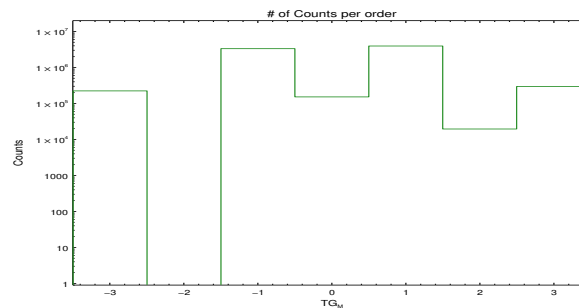


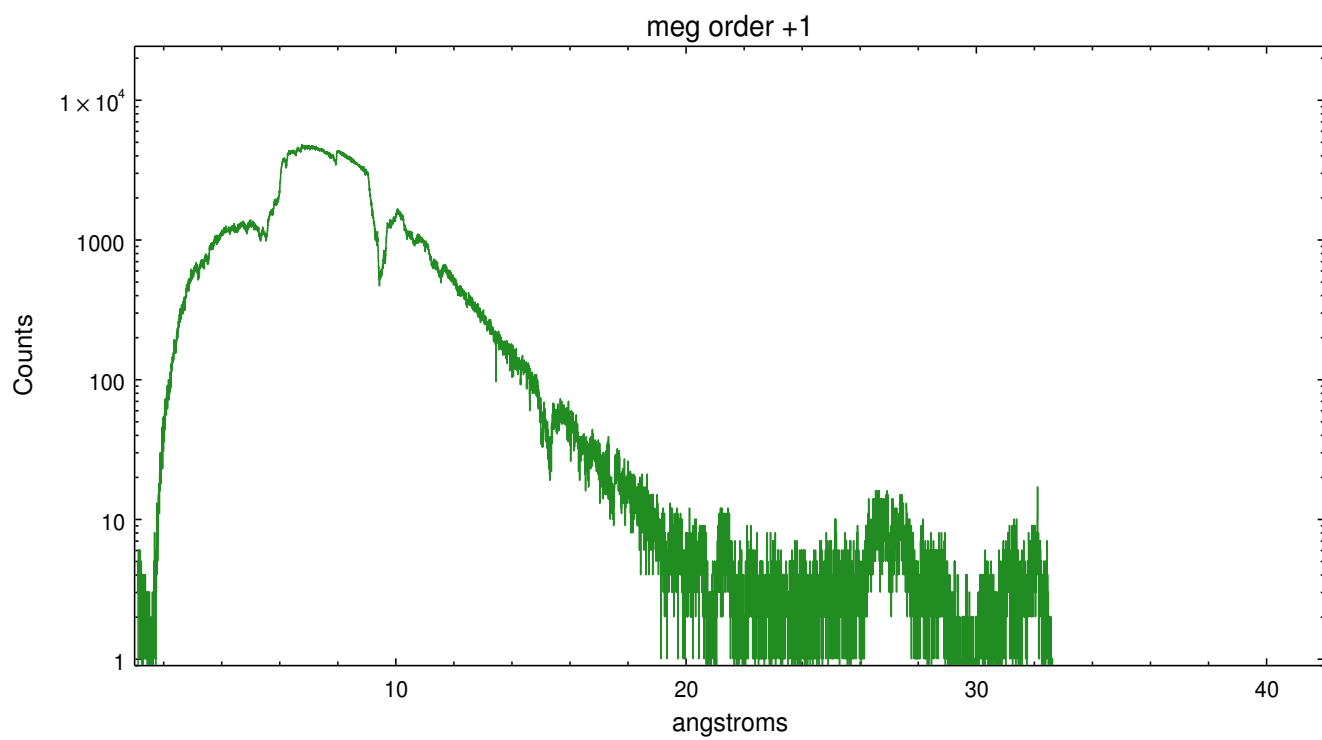
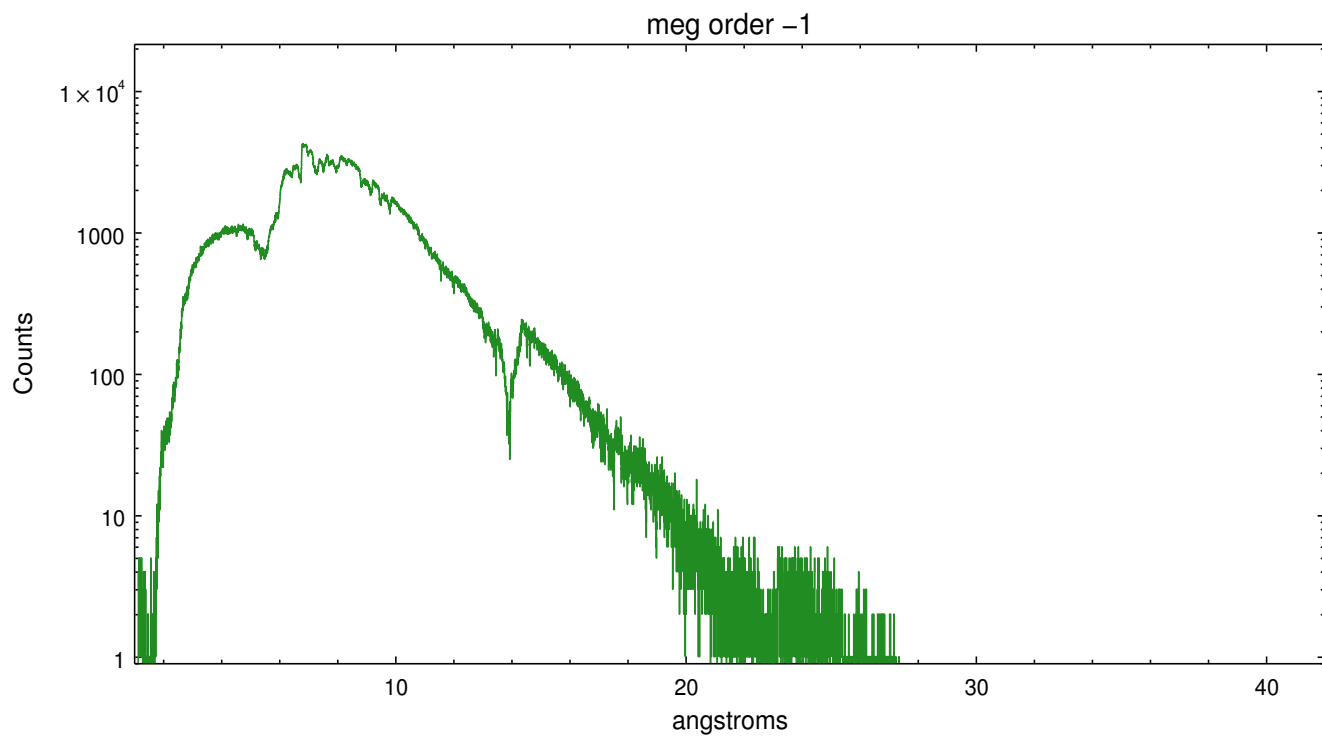
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	225231	0	3370506	153277	3995654	19592	298199





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2013.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.096

A.2 Comments