

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3804 - L2 Version 4
Chandra X-Ray Center

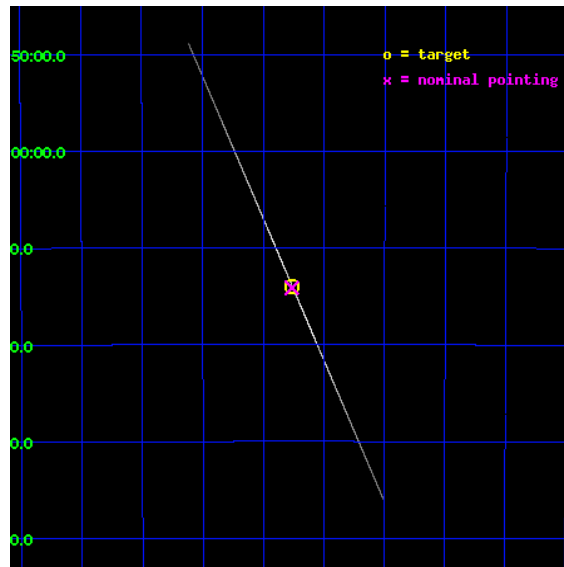
L2 Processing Date : Oct 30 2012

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1 Front

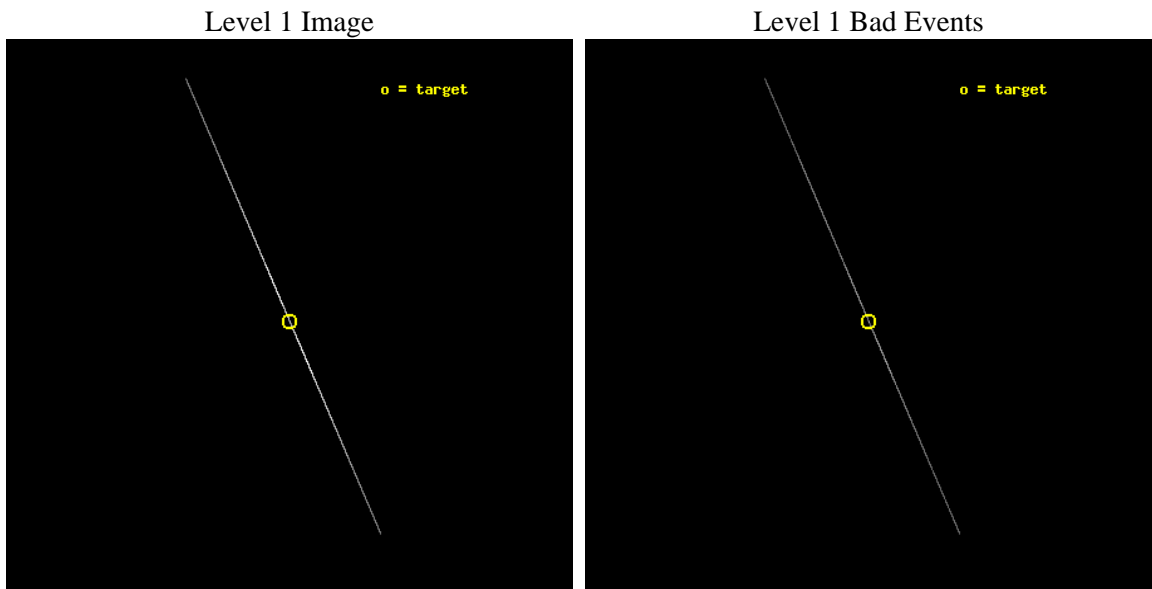
seq_num	400291	Sequence number
obs_id	3804	Observation id
title	DIAGNOSING THE ACCRETION FLOW GEOMETRY OF A GALACTIC BLACK HOLE IN OUTBURST WITH CHANDRA	Proposal title
observer	Prof. Walter Lewin	Principal investigator
object	H1743-322	Source name
ra_targ	266.565042	Observer's specified target RA [deg]
dec_targ	-32.2335	Observer's specified target Dec [deg]
ra_nom	266.56613819379	Nominal RA [deg]
dec_nom	-32.235516980838	Nominal Dec [deg]
roll_nom	66.550905296234	Nominal Roll [deg]
revision	4	Processing version of data
ontime	40145.007448763	Sum of GTIs [s]
livetime	39988.191013416	Livetime [s]
ontime4	45522.0	Sum of GTIs [s]
ontime5	45522.0	Sum of GTIs [s]
ontime6	42126.580204099	Sum of GTIs [s]
ontime7	40145.007448763	Sum of GTIs [s]
ontime8	45522.0	Sum of GTIs [s]
ontime9	45522.0	Sum of GTIs [s]
l2events	15264558	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	40145.007448763	Sum of GTIs [s]
caldbver	4.5.2	 	ontime4	45522.0	Sum of GTIs [s]
date	2012-10-28T17:10:47	Date and time of file creation	ontime5	45522.0	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	42126.580204099	Sum of GTIs [s]
			ontime7	40145.007448763	Sum of GTIs [s]
			ontime8	45522.0	Sum of GTIs [s]
			ontime9	45522.0	Sum of GTIs [s]
			l1events	16499100	Number of level 1 events

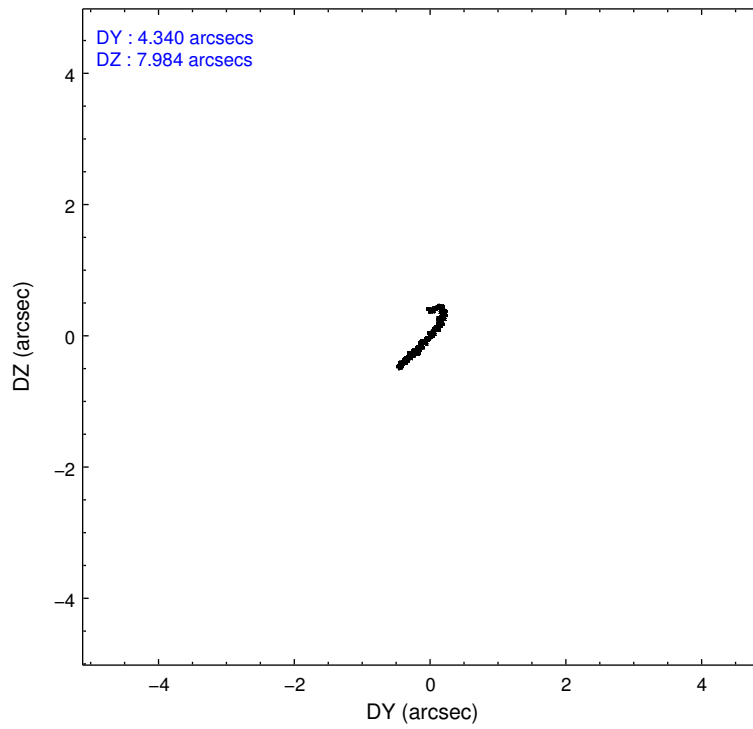
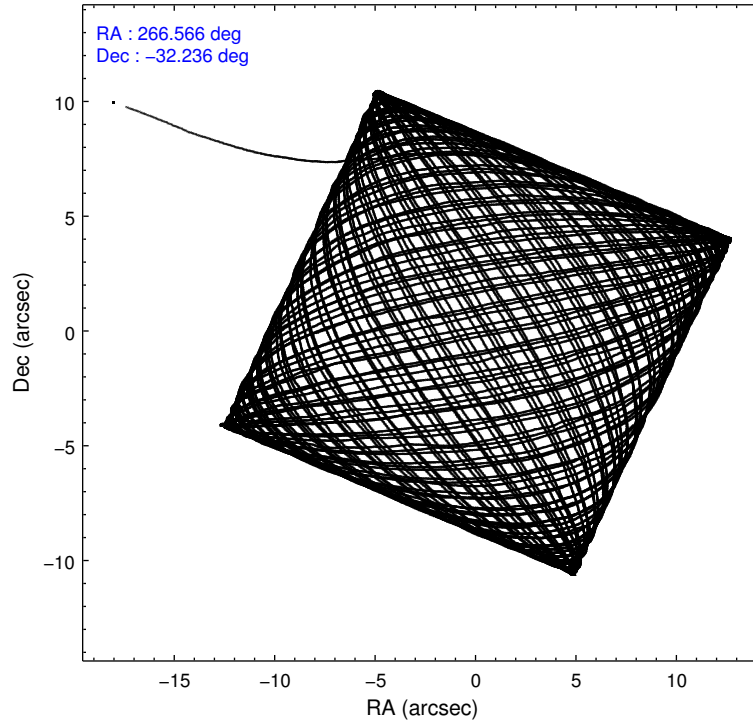
2.1.3 Events

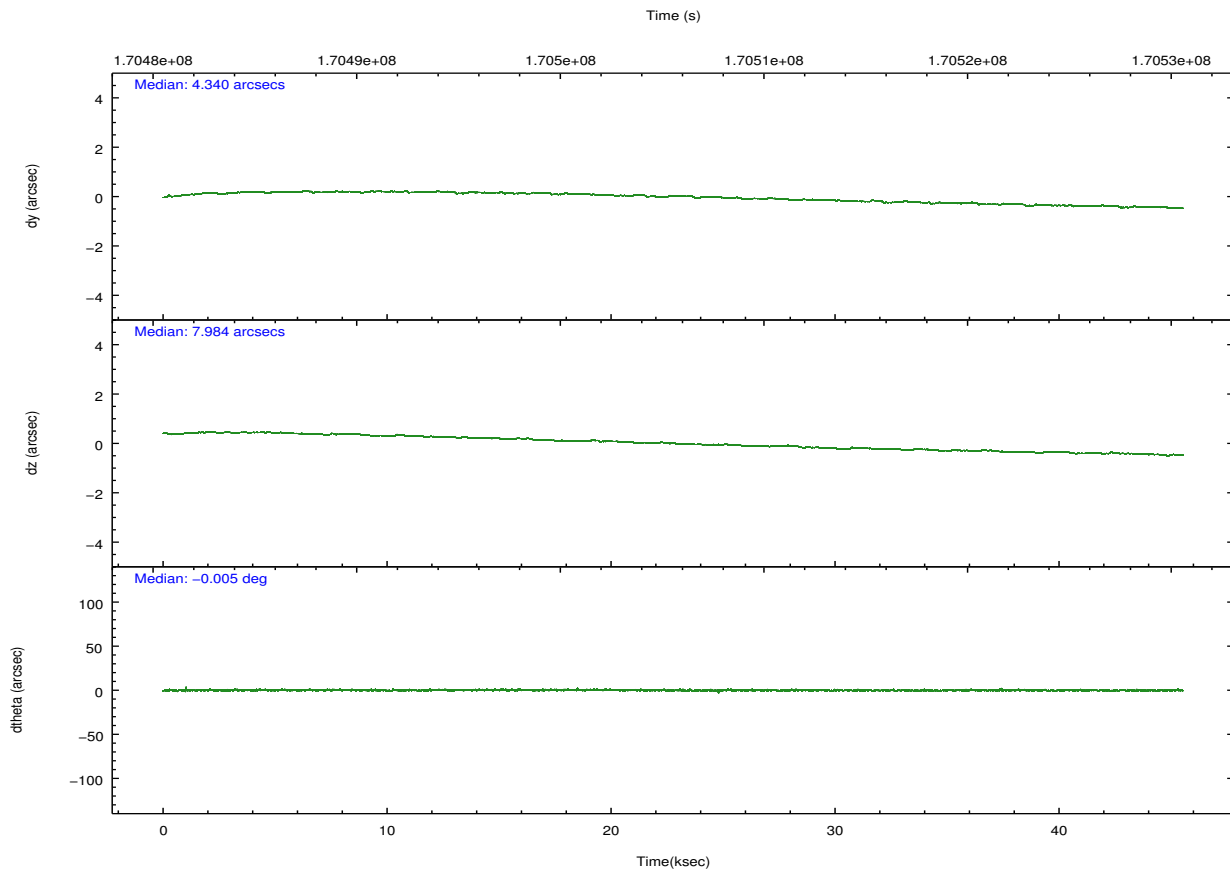
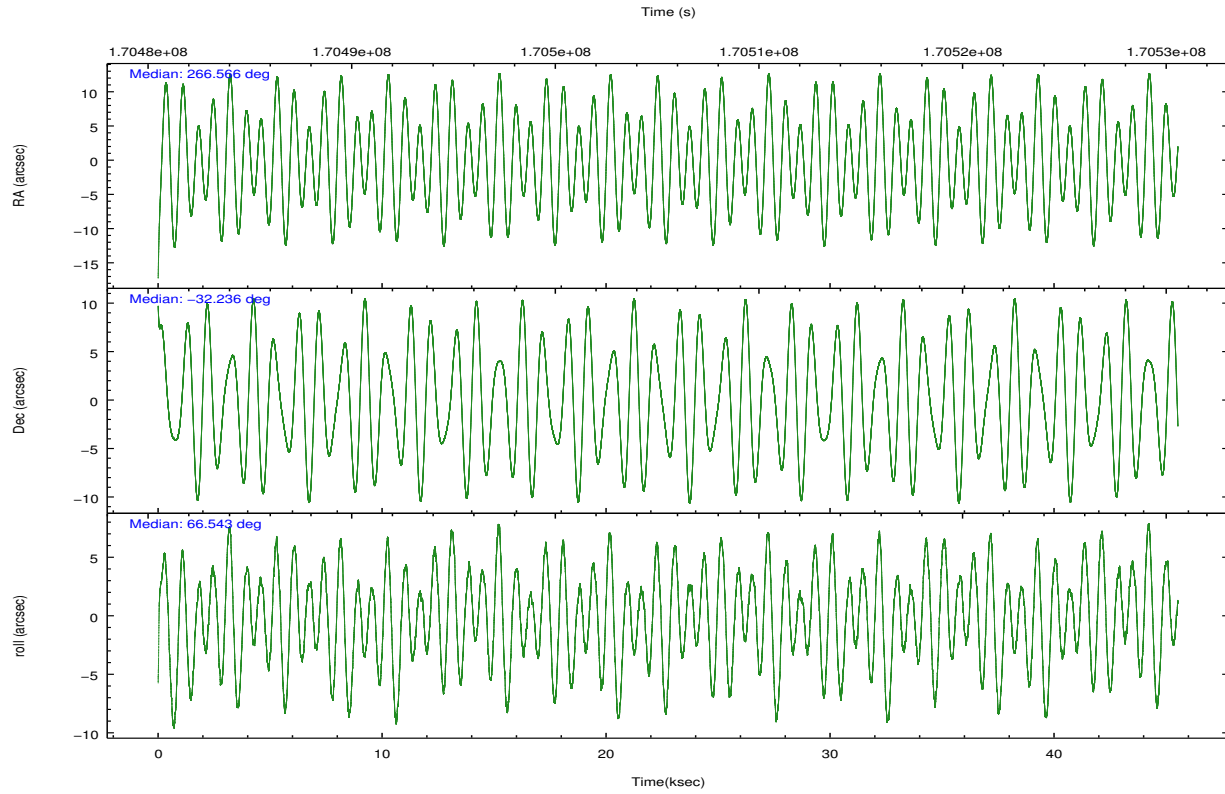
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	221395	1205345	5971714	6902360	1900267	298019	grade 0 events	16282	219406	1521051	1106036	1043964	39381
rejected events	11653	39676	61024	117393	29882	14341		7%	18%	25%	16%	54%	13%
rejected %	5%	3%	1%	1%	1%	4%	grade 1 events	222	464	5782	7022	3424	300
								0%	0%	0%	0%	0%	0%
							grade 2 events	155645	486173	3721377	1992646	598471	197558
								70%	40%	62%	28%	31%	66%
							grade 3 events	7499	49841	81622	622538	66277	8237
								3%	4%	1%	9%	3%	2%
							grade 4 events	8038	49251	81175	619259	63987	8699
								3%	4%	1%	8%	3%	2%
							grade 5 events	10564	33562	43304	93750	22279	13017
								4%	2%	0%	1%	1%	4%
							grade 6 events	23145	366648	517403	2461109	101865	30827
								10%	30%	8%	35%	5%	10%
							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	266.570256	266.5661381937864	Subarray requested	NONE	NONE
[deg] Pointing Dec	-32.262534	-32.23551698083769	Alternating exposures requested	N	N
[deg] Pointing Roll	66.396480	66.55090529623367	[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	-182.6373491900168			
[mm] SIM translation stage offset	-7.5	-7.495173392990978			
[s] Observation start time (MET)	170483299.184000	170482161.17775			
Observation start date	2003-05-28T04:27:15	2003-05-28T04:09:21			
[s] Observation end time (MET)	170528299.184000	170528615.71722			
Observation end date	2003-05-28T16:57:15	2003-05-28T17:03:35			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



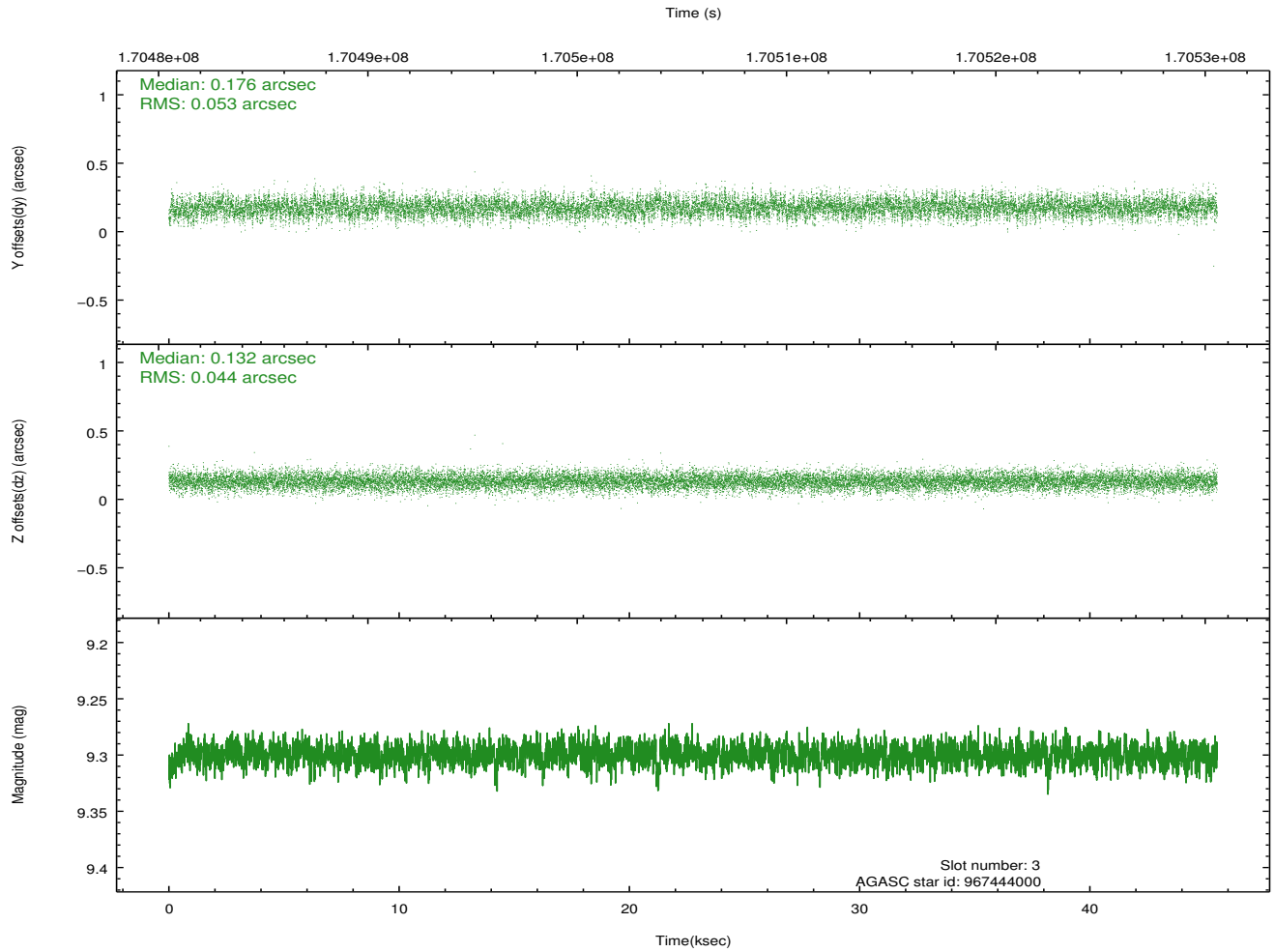
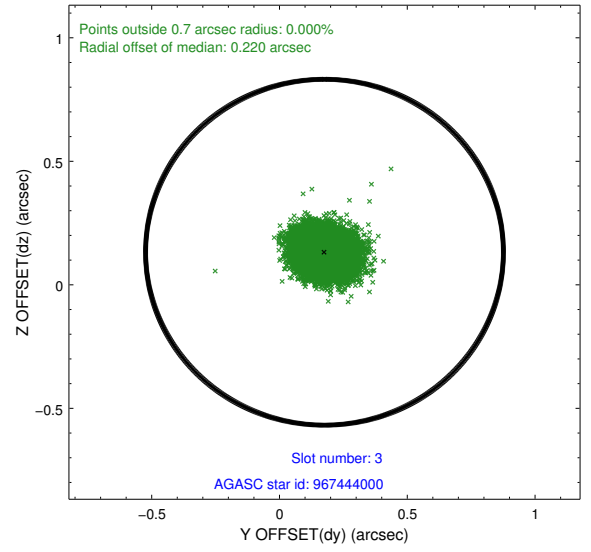
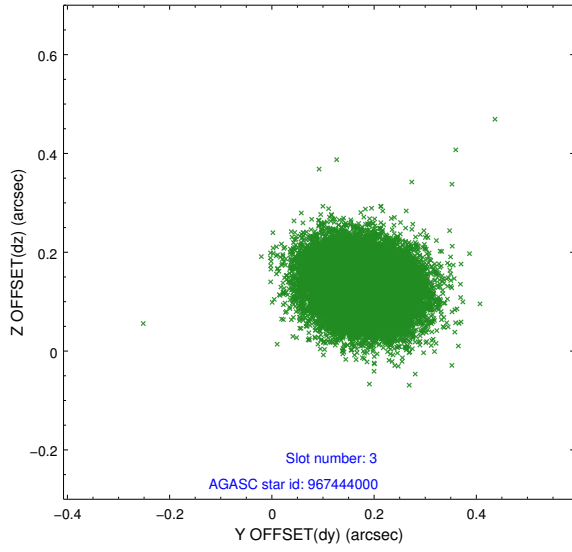


Slot Statistics

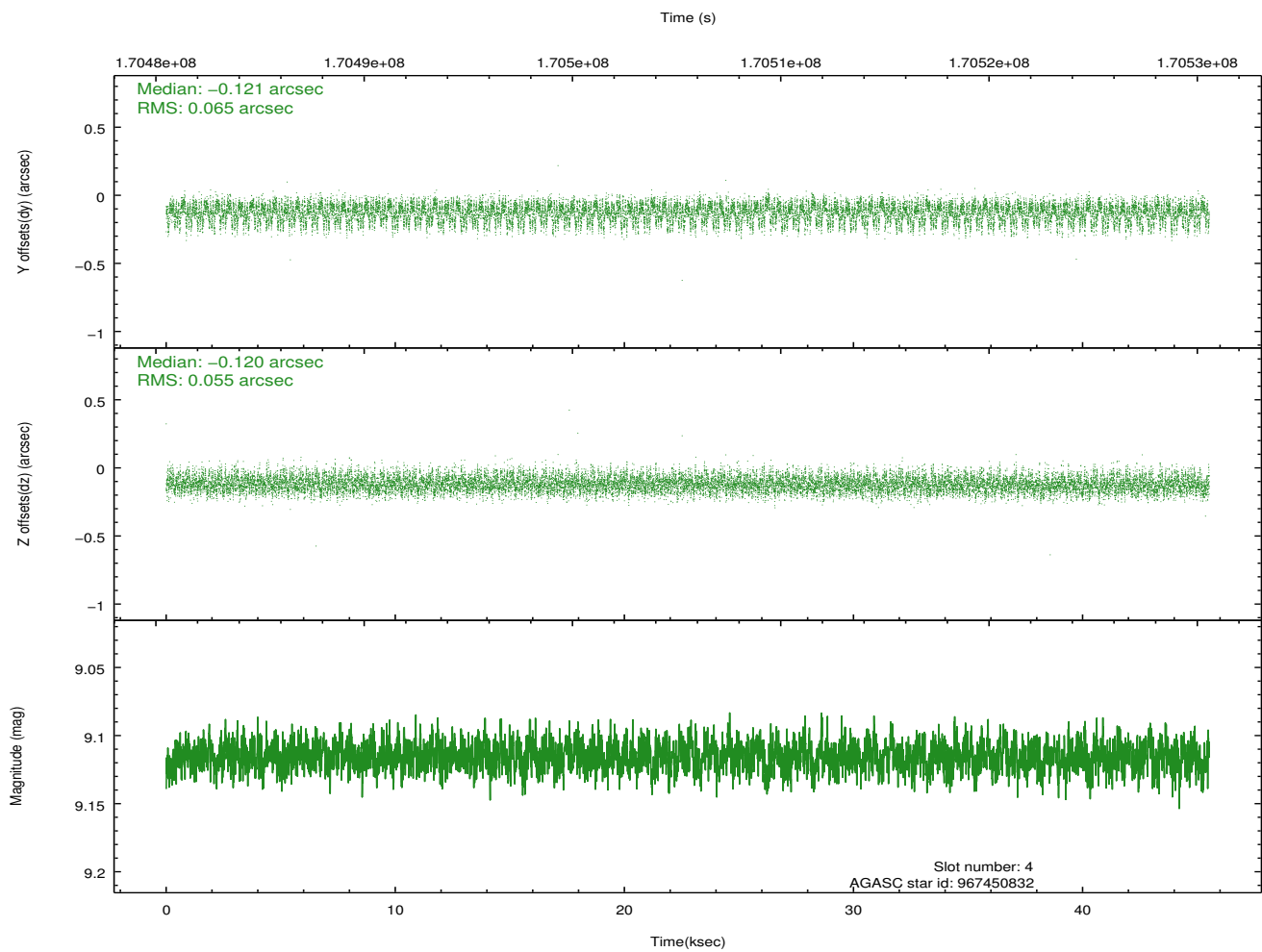
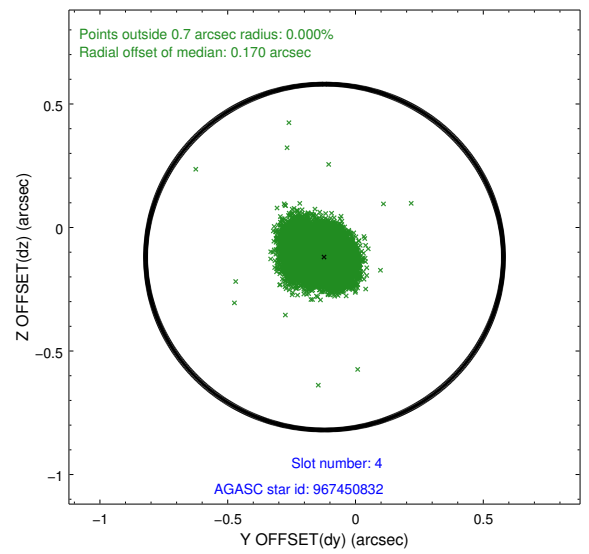
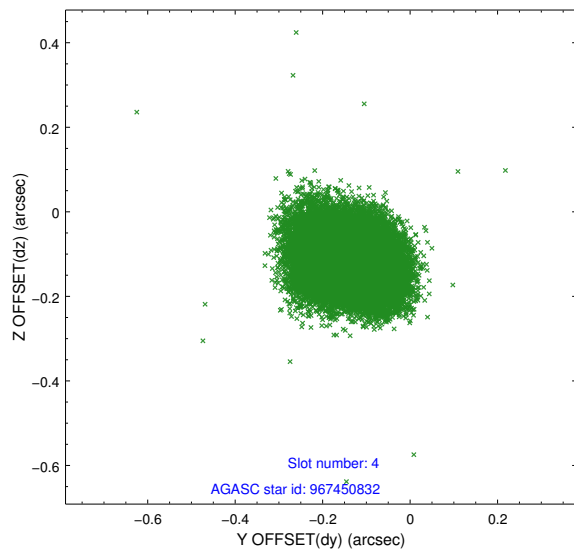
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	11103	0.079	0.206	0.011	0.020	0.000000	0.000000	939.68	-1879.04
1	FID	ACIS-S-2	7.09	11105	-0.165	-0.136	0.013	0.022	0.000000	0.000000	-756.47	-1883.93
2	FID	ACIS-S-4	7.17	11105	0.061	-0.066	0.009	0.015	0.000000	0.000000	2156.91	24.83
3	GUIDE	967444000	9.30	22198	0.176	0.132	0.074	0.120	266.327670	-32.824762	-2148.89	-138.24
4	GUIDE	967450832	9.12	22197	-0.121	-0.120	0.090	0.145	266.078096	-31.879979	656.13	1928.93
5	GUIDE	967448688	8.08	22208	0.081	-0.159	0.080	0.129	265.570021	-32.523235	-2088.79	2400.57
6	GUIDE	967446352	7.75	22207	-0.061	0.046	0.058	0.101	267.069988	-32.671157	-744.67	-1977.84
7	GUIDE	967451816	9.28	22200	-0.072	0.105	0.093	0.151	267.266669	-31.901374	2037.55	-1432.09

2.4 Star Slots

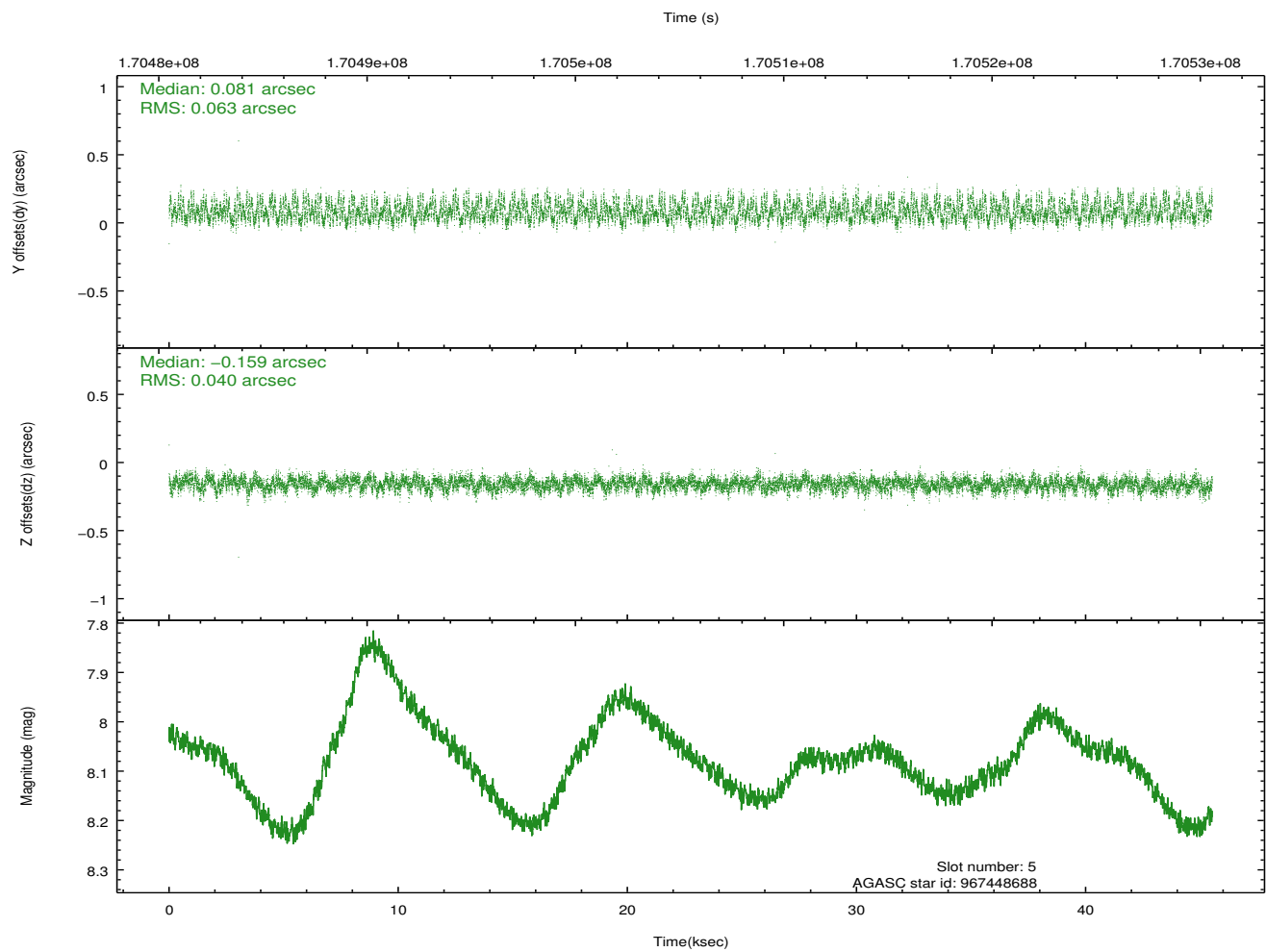
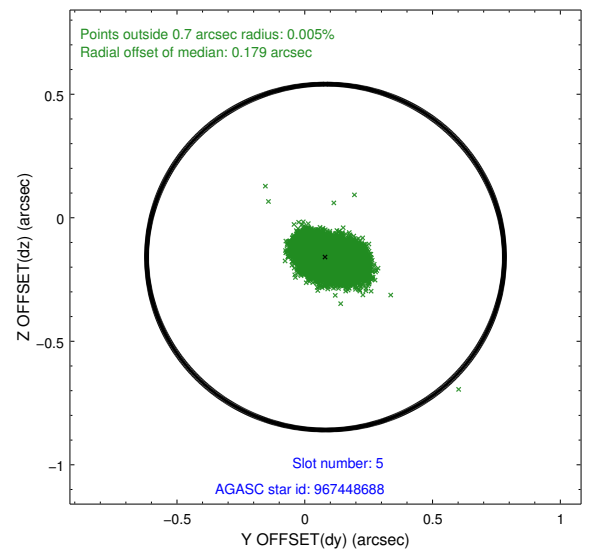
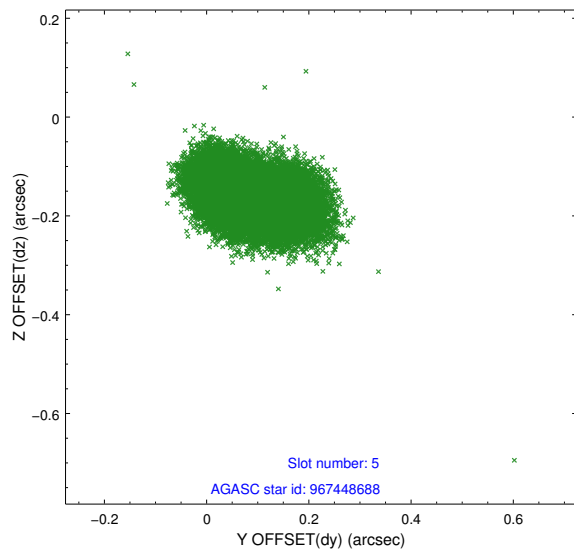
2.4.1 Slot 3



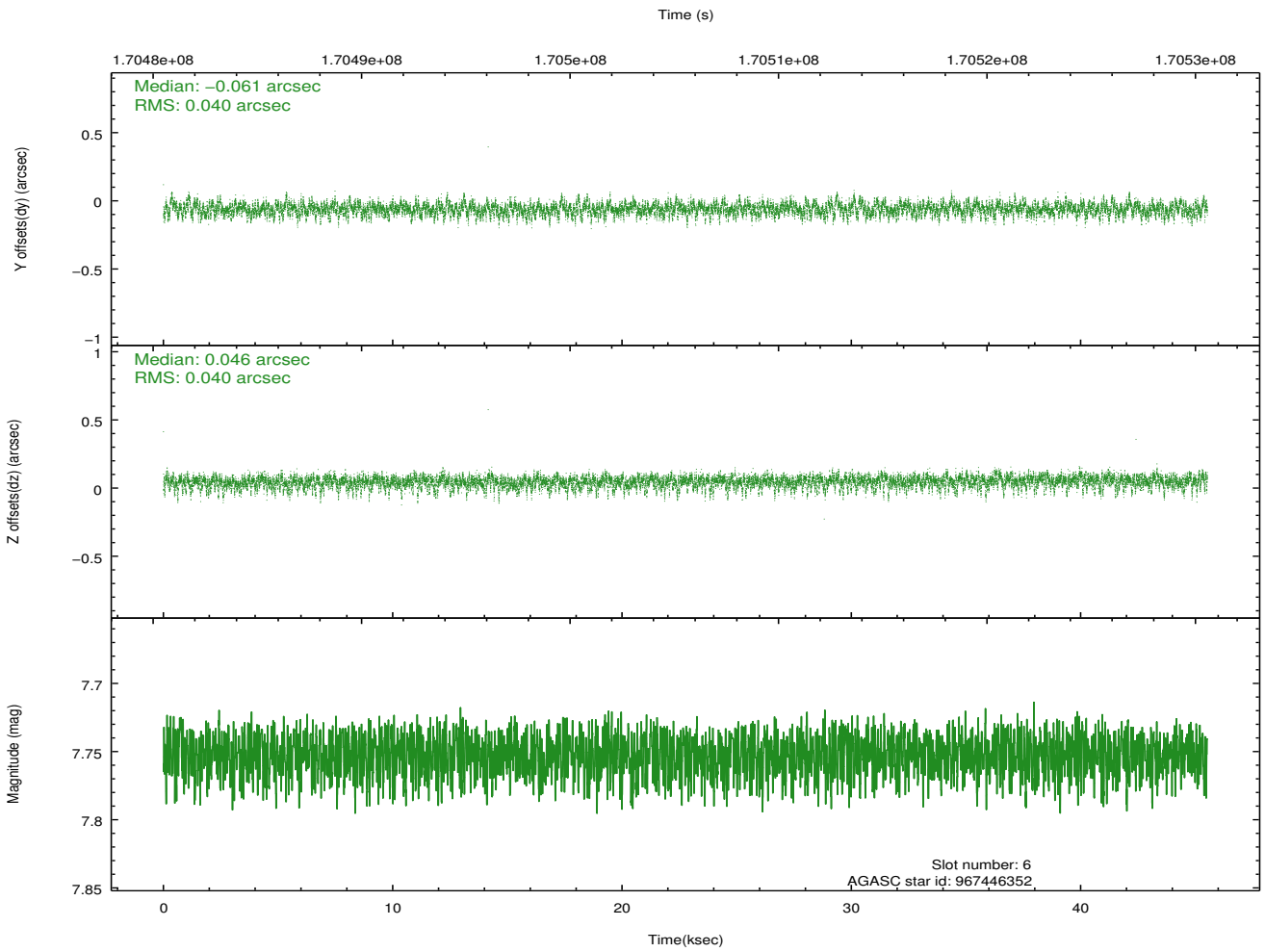
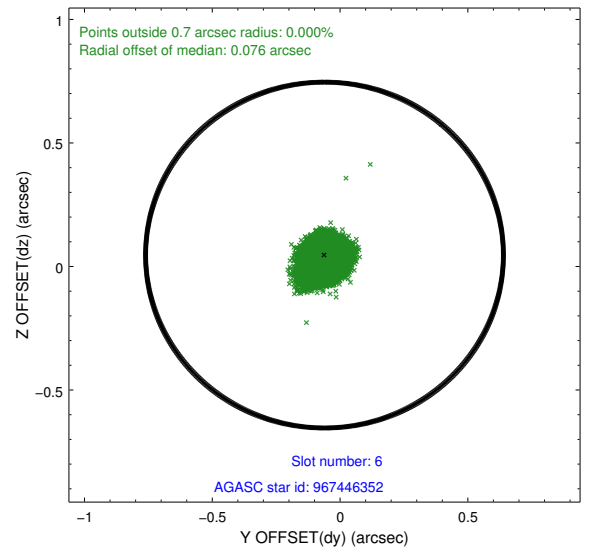
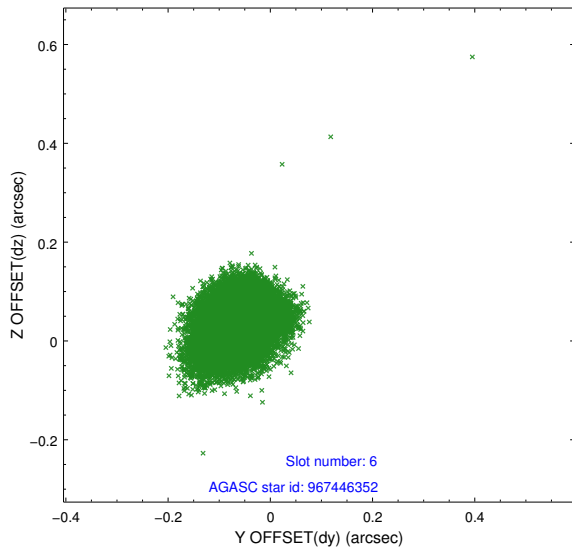
2.4.2 Slot 4



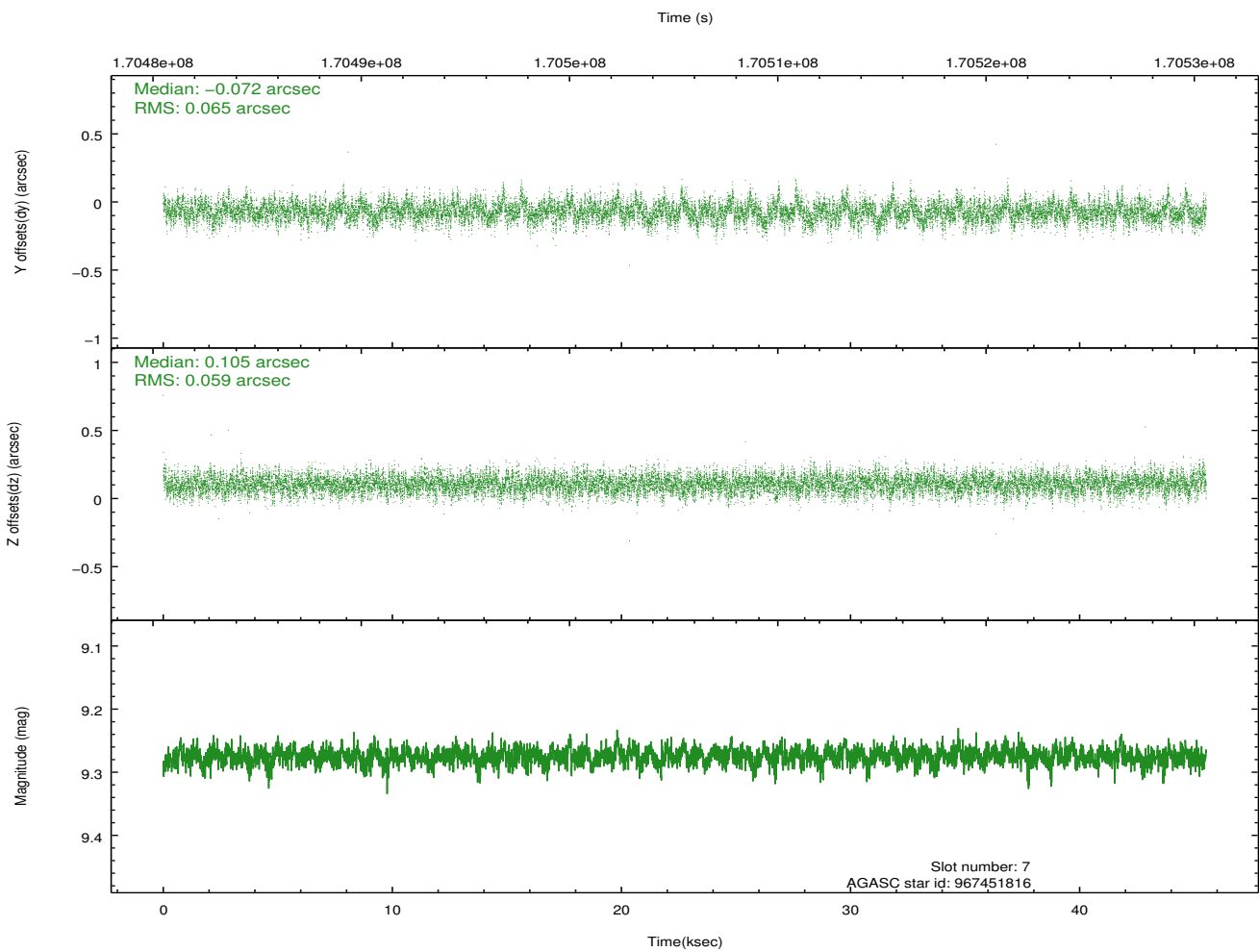
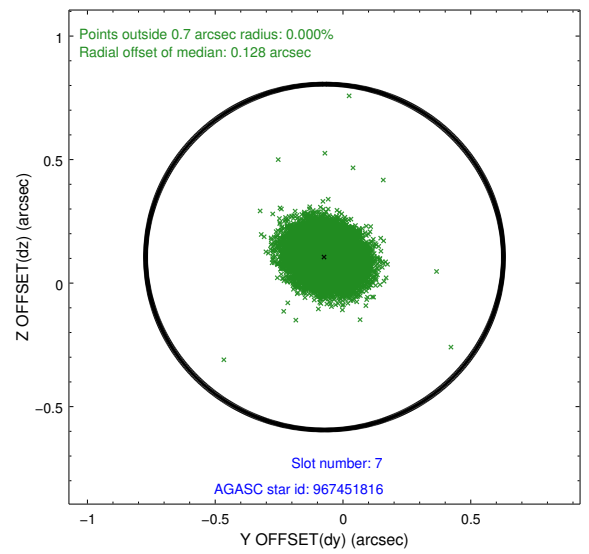
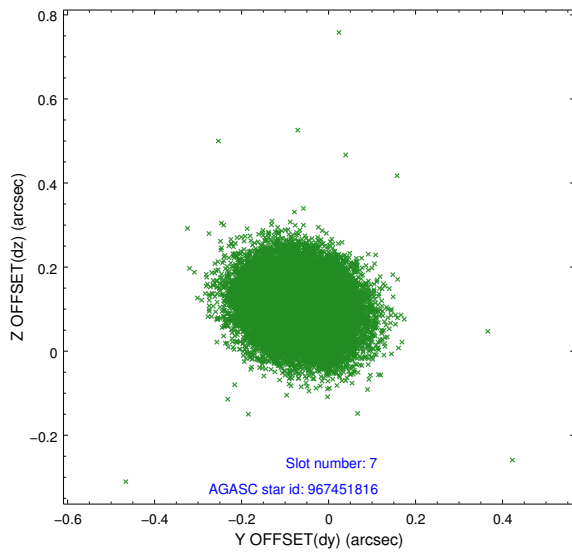
2.4.3 Slot 5



2.4.4 Slot 6

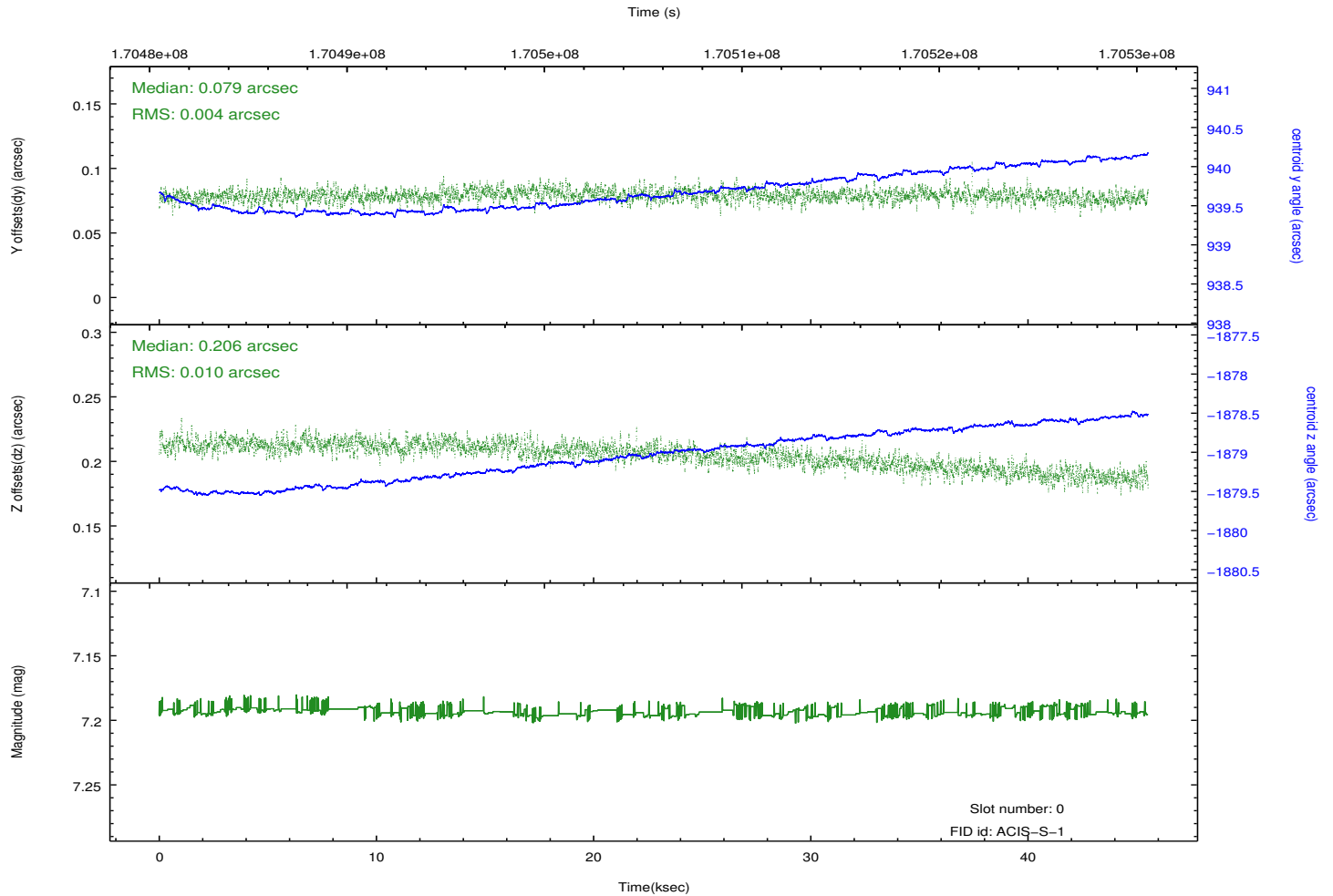
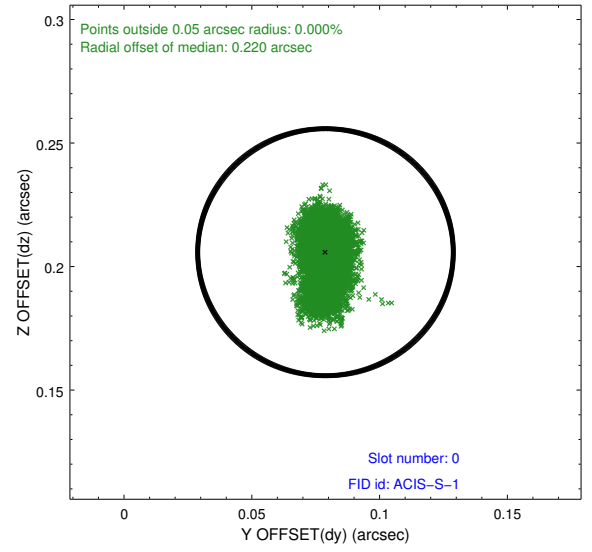
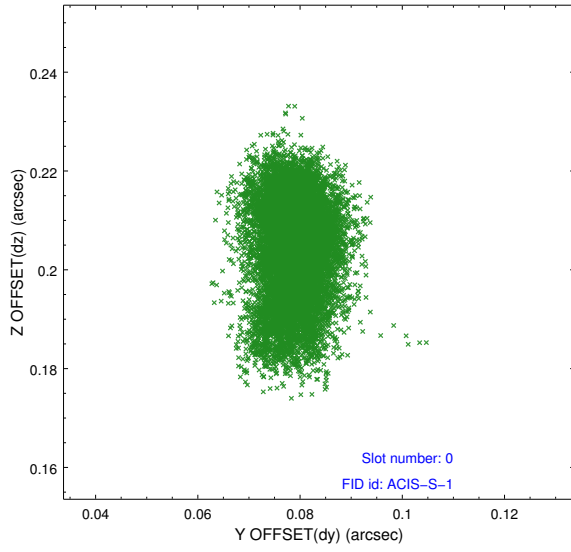


2.4.5 Slot 7

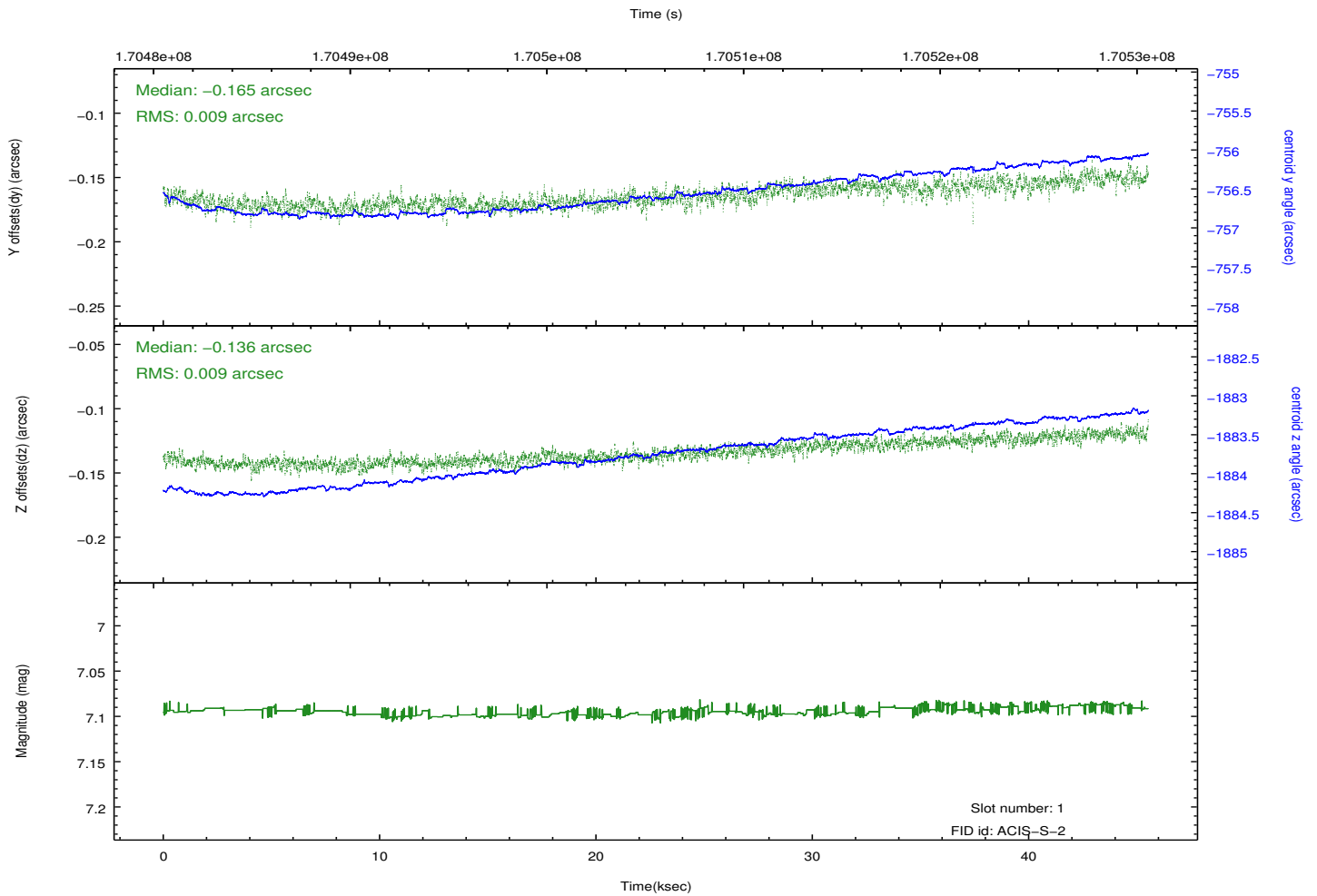
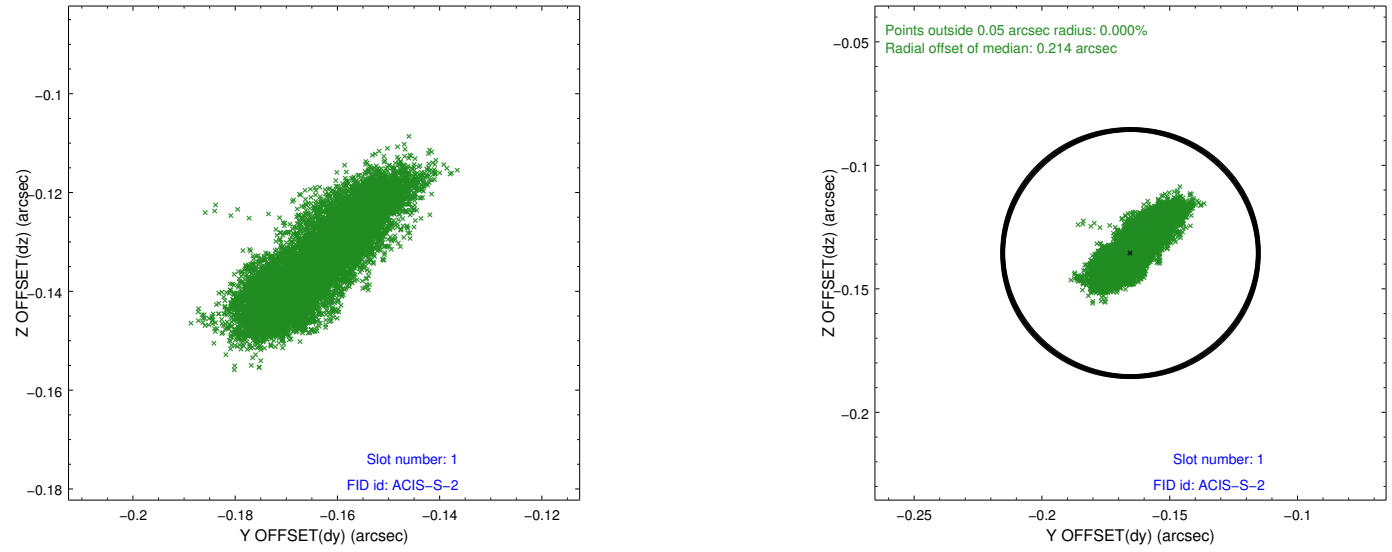


2.5 FID Slots

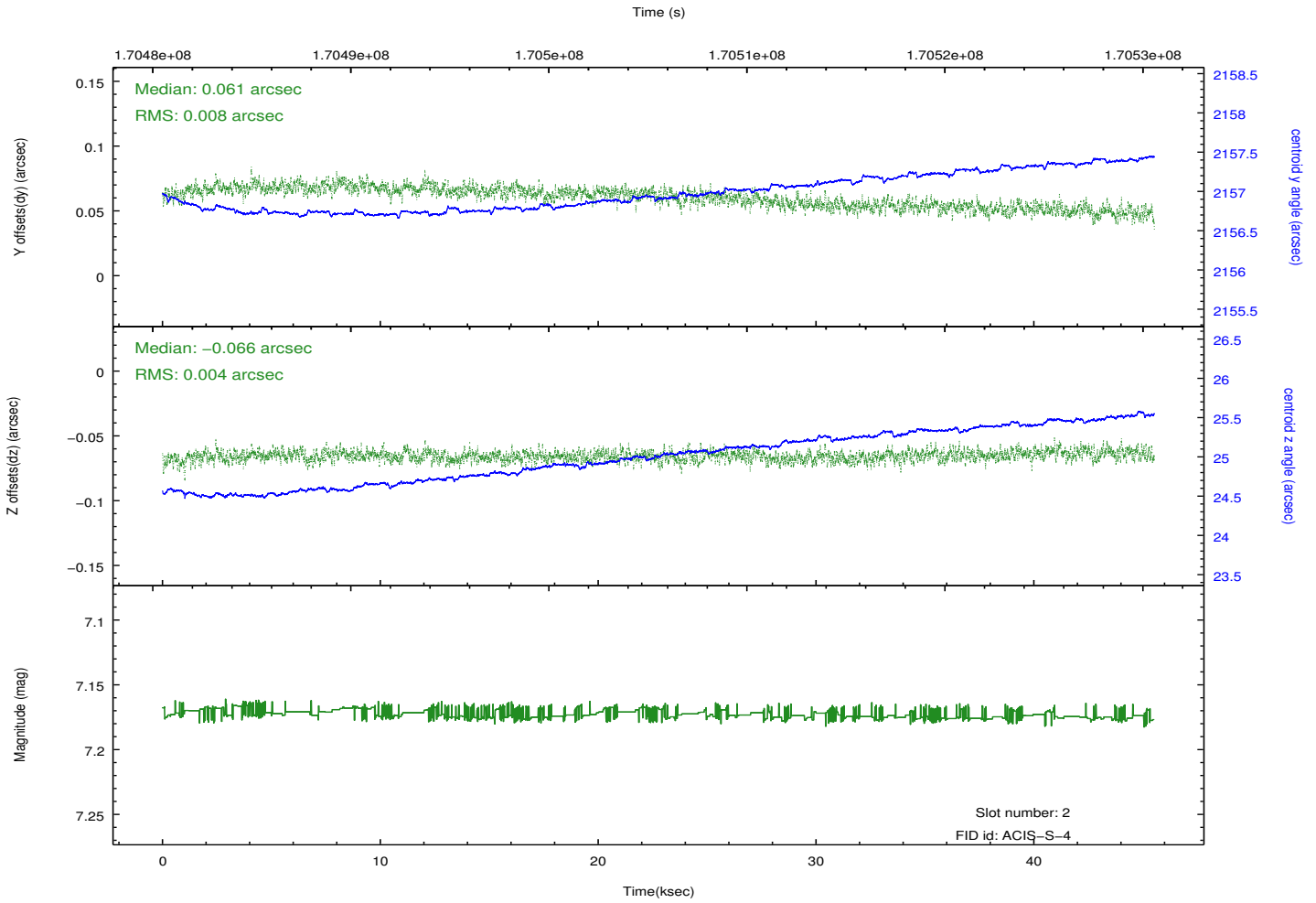
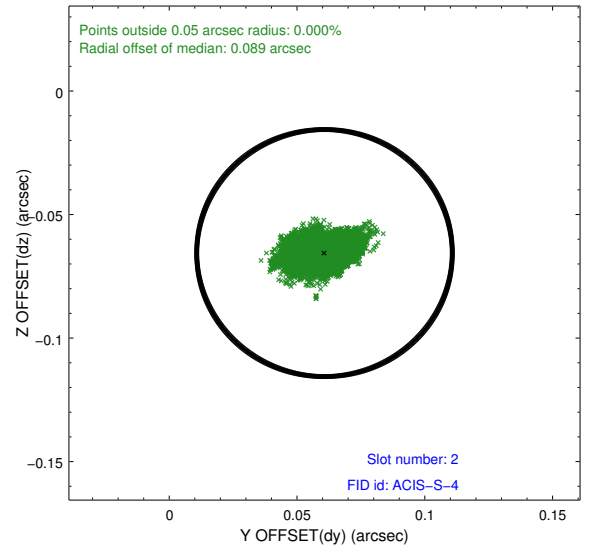
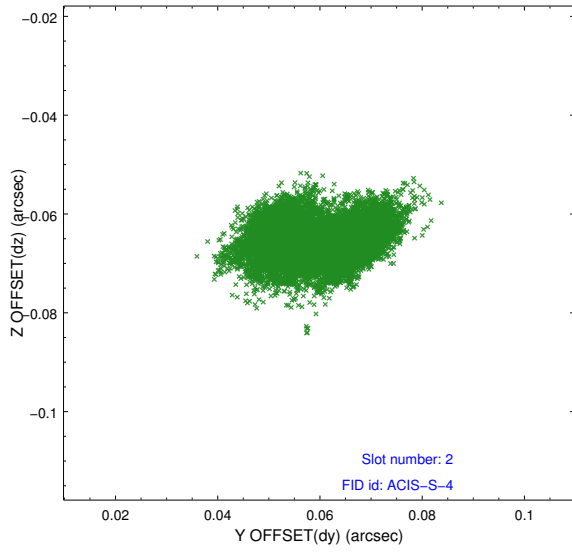
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Gratings

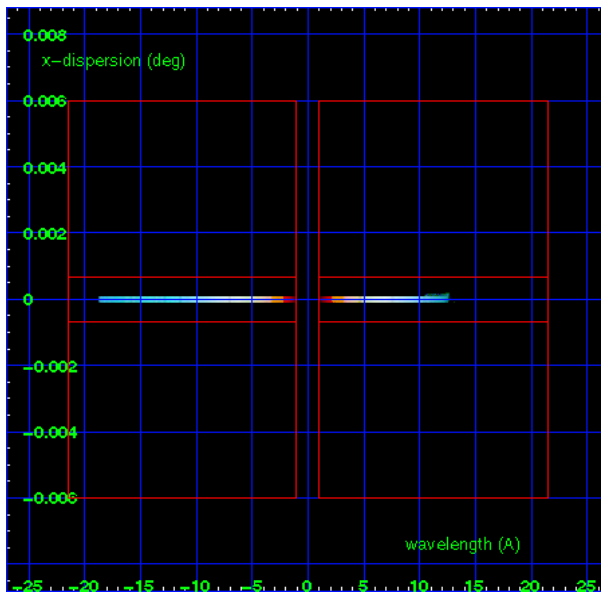
3.1 HEG Arm



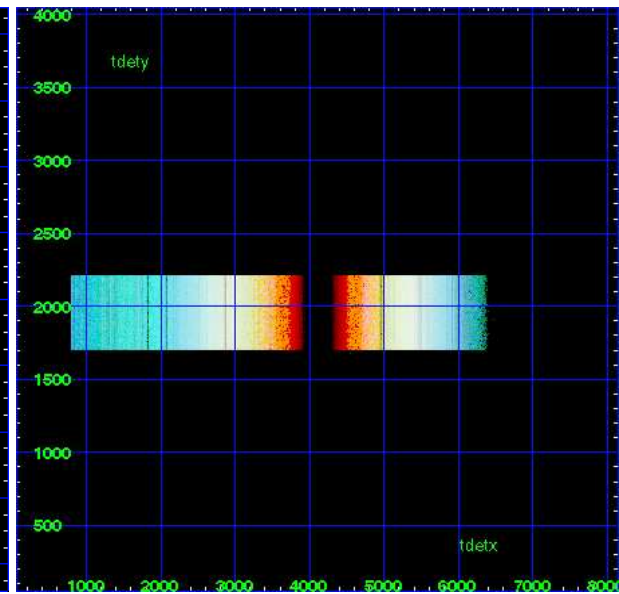
HEG Order Sort 123



HEG Order Sort ALL

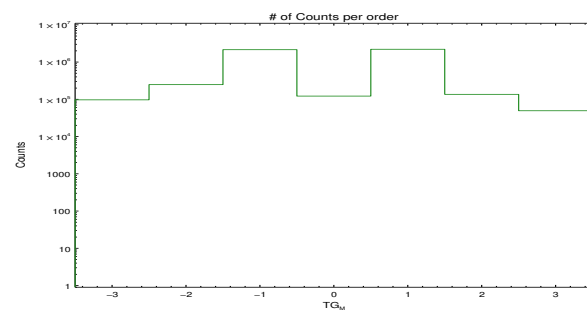


Spot Image HEG

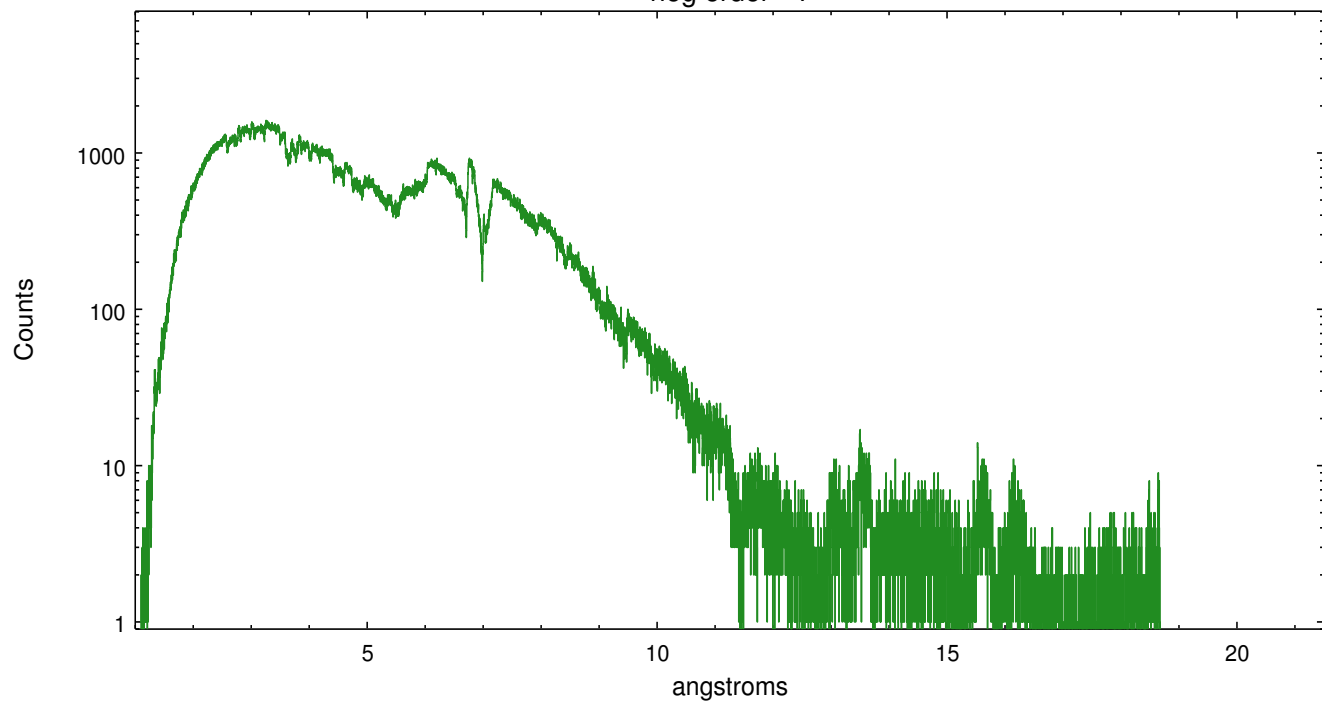


Full Detector HEG

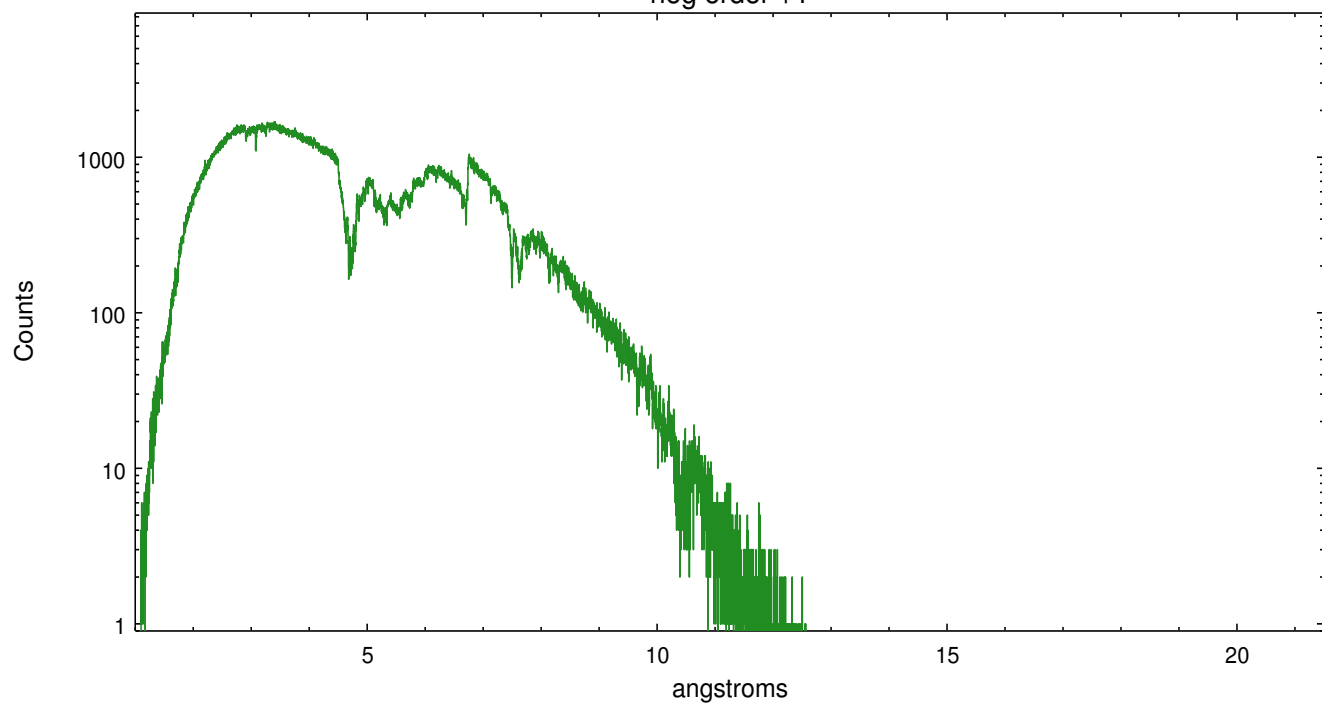
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	96812	247903	2150685	121935	2203863	135841	49345



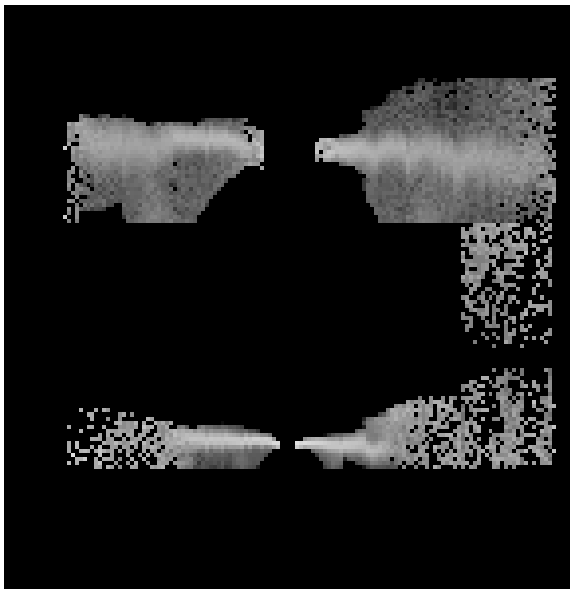
heg order -1



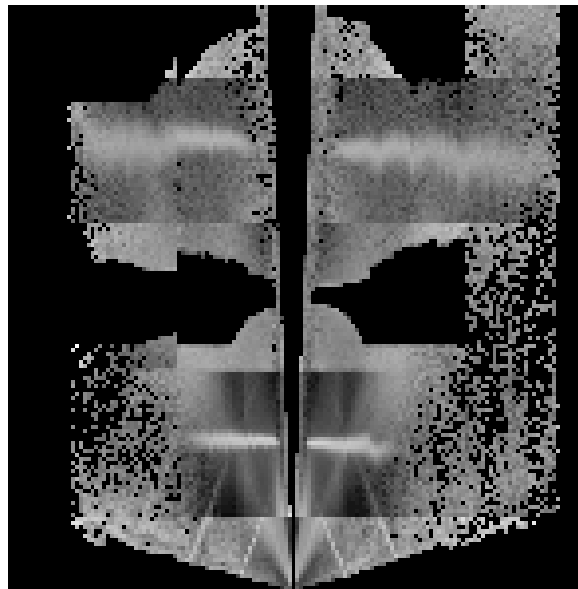
heg order +1



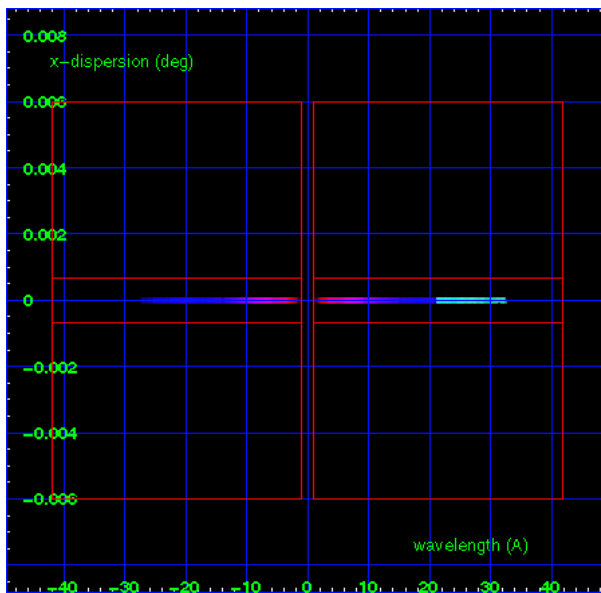
3.2 MEG Arm



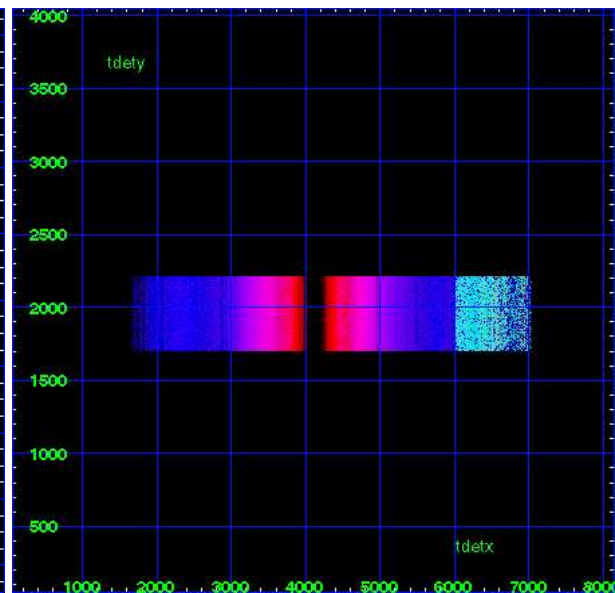
MEG Order Sort 123



MEG Order Sort ALL

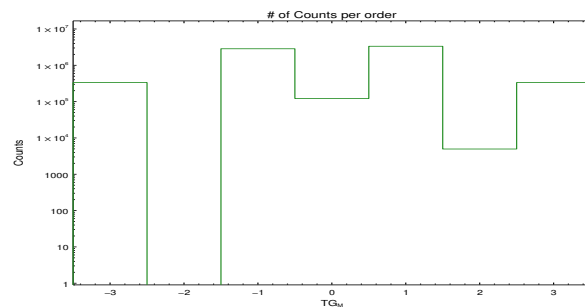


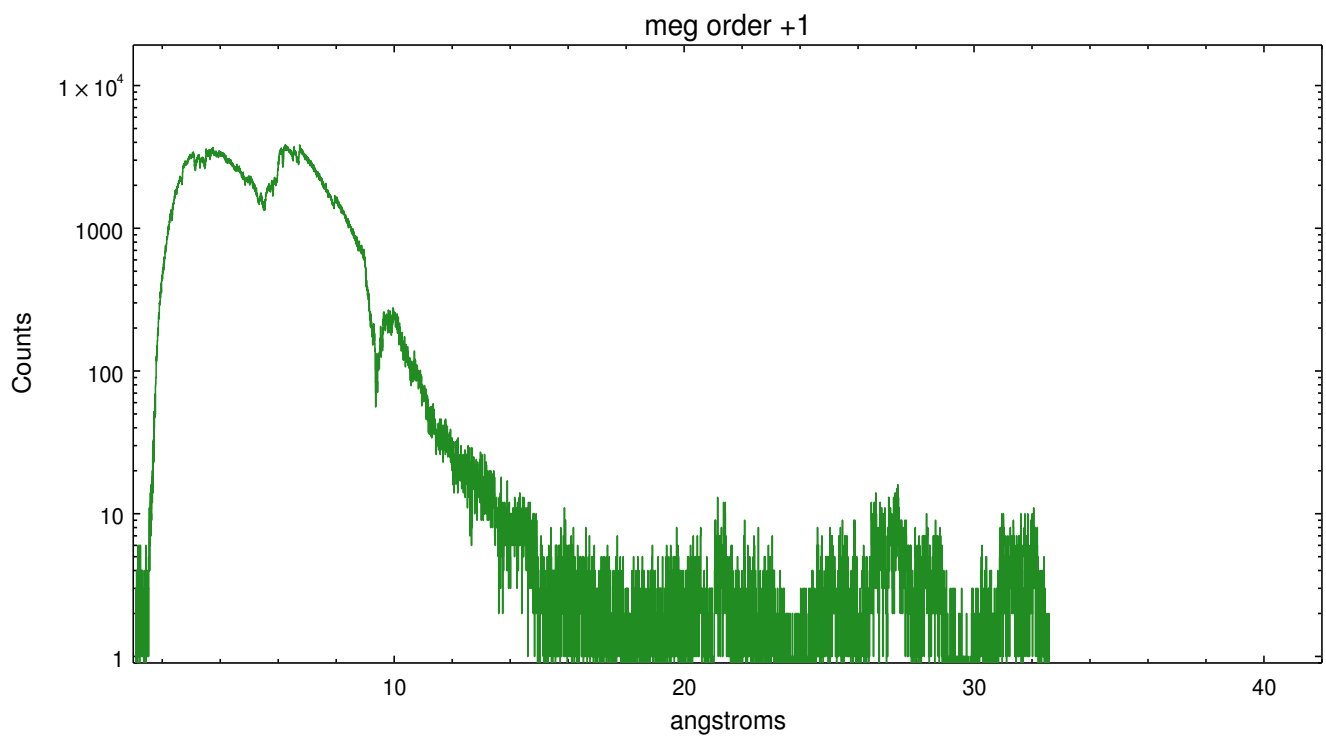
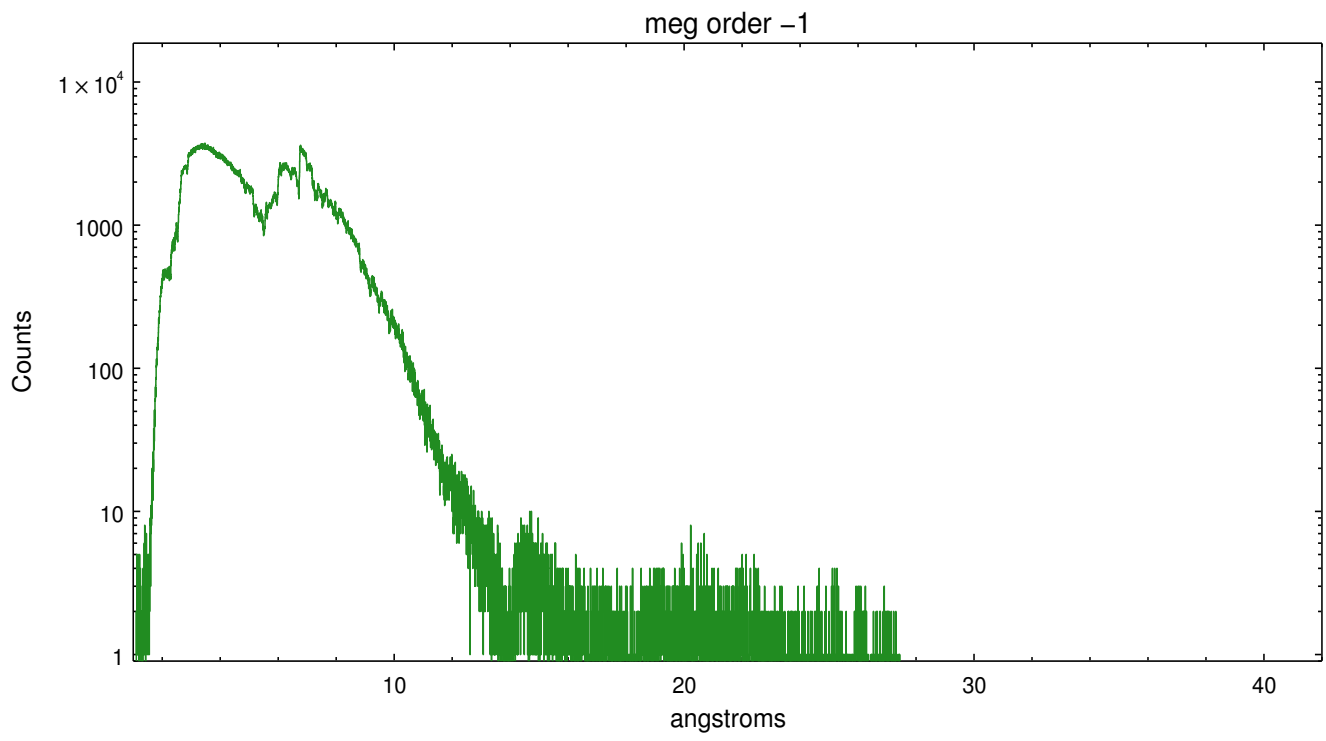
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	335033	0	2854195	121935	3340048	4956	334617





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.12.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.522

A.2 Comments