

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3805 - L2 Version 4
Chandra X-Ray Center

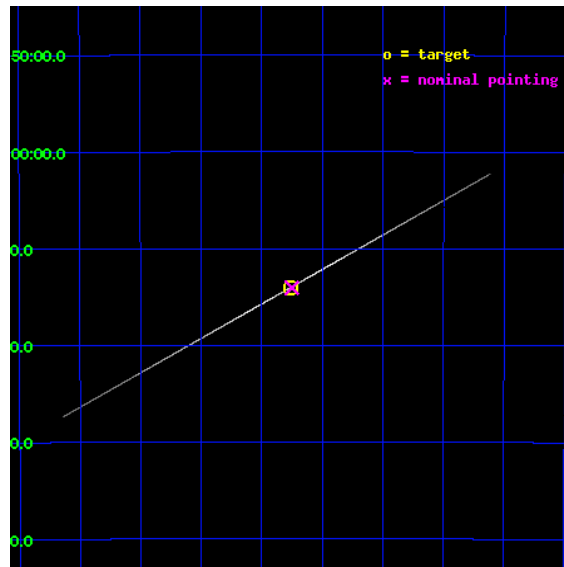
L2 Processing Date : Oct 31 2012

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1 Front

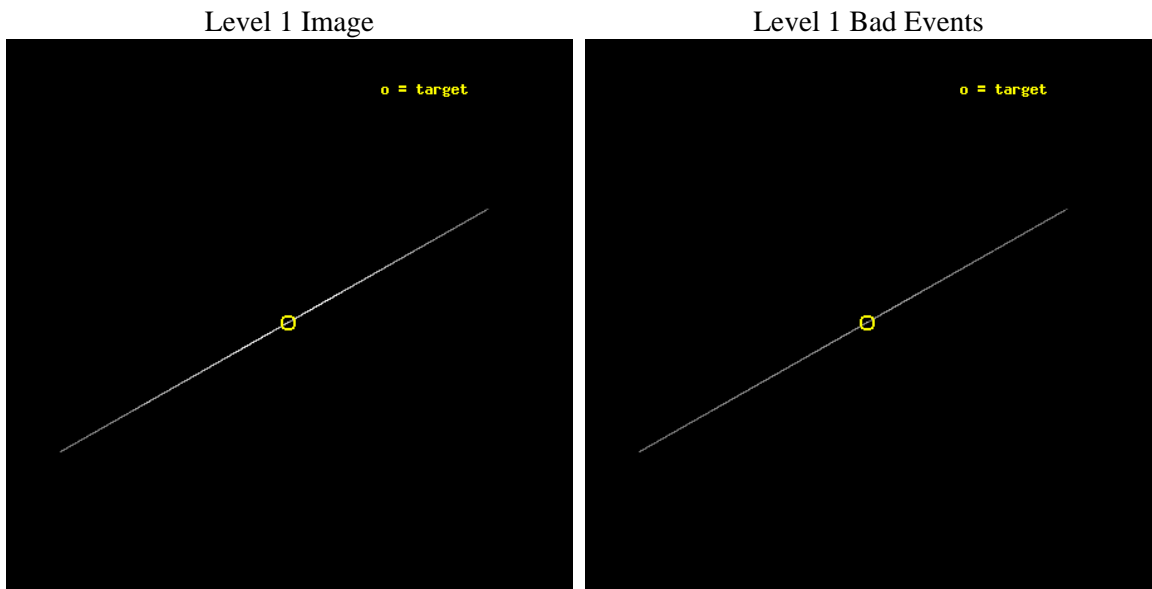
seq_num	400292	Sequence number
obs_id	3805	Observation id
title	DIAGNOSING THE ACCRETION FLOW GEOMETRY OF A GALACTIC BLACK HOLE IN OUTBURST WITH CHANDRA	Proposal title
observer	Prof. Walter Lewin	Principal investigator
object	H1743-322	Source name
ra_targ	266.565042	Observer's specified target RA [deg]
dec_targ	-32.2335	Observer's specified target Dec [deg]
ra_nom	266.56256684331	Nominal RA [deg]
dec_nom	-32.234229957853	Nominal Dec [deg]
roll_nom	330.65052993434	Nominal Roll [deg]
revision	4	Processing version of data
ontime	50064.5	Sum of GTIs [s]
livetime	49868.935546875	Livetime [s]
ontime4	50064.5	Sum of GTIs [s]
ontime5	50064.5	Sum of GTIs [s]
ontime6	50064.5	Sum of GTIs [s]
ontime7	50064.5	Sum of GTIs [s]
ontime8	50064.5	Sum of GTIs [s]
ontime9	50064.5	Sum of GTIs [s]
l2events	12537971	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	8.4.5	Processing system revision	ontime	50064.5	Sum of GTIs [s]
caldbver	4.5.2	 	ontime4	50064.5	Sum of GTIs [s]
date	2012-10-29T20:36:31	Date and time of file creation	ontime5	50064.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	50064.5	Sum of GTIs [s]
			ontime7	50064.5	Sum of GTIs [s]
			ontime8	50064.5	Sum of GTIs [s]
			ontime9	50064.5	Sum of GTIs [s]
			l1events	13748731	Number of level 1 events

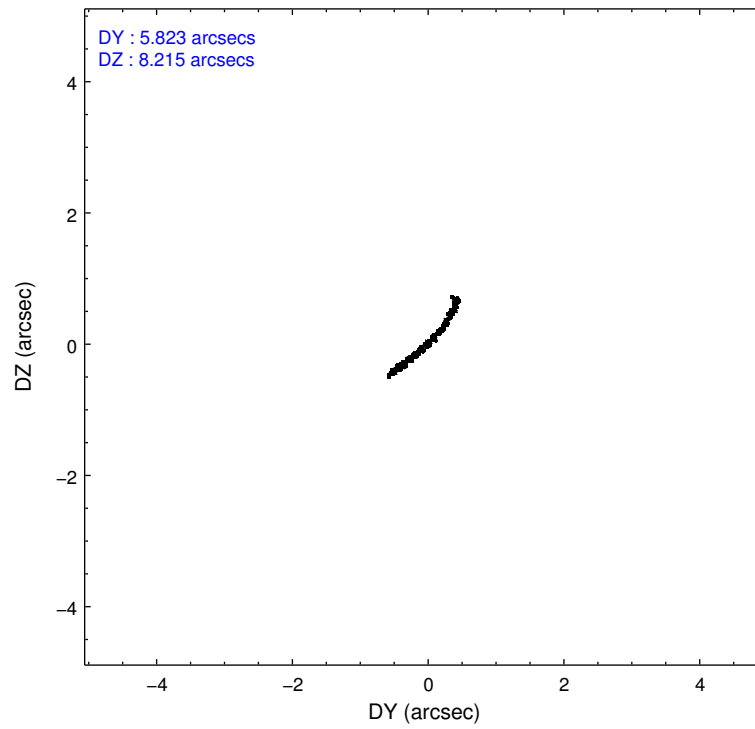
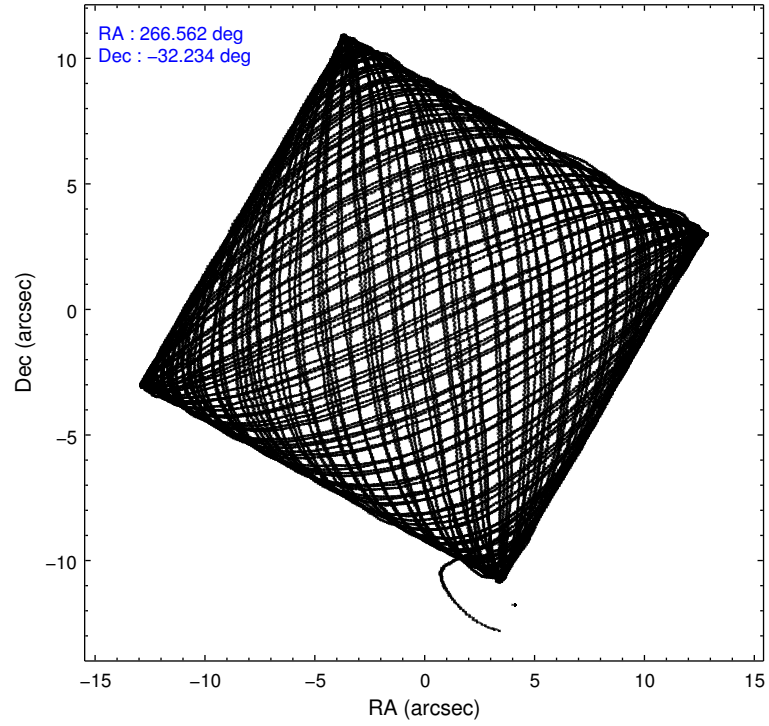
2.1.3 Events

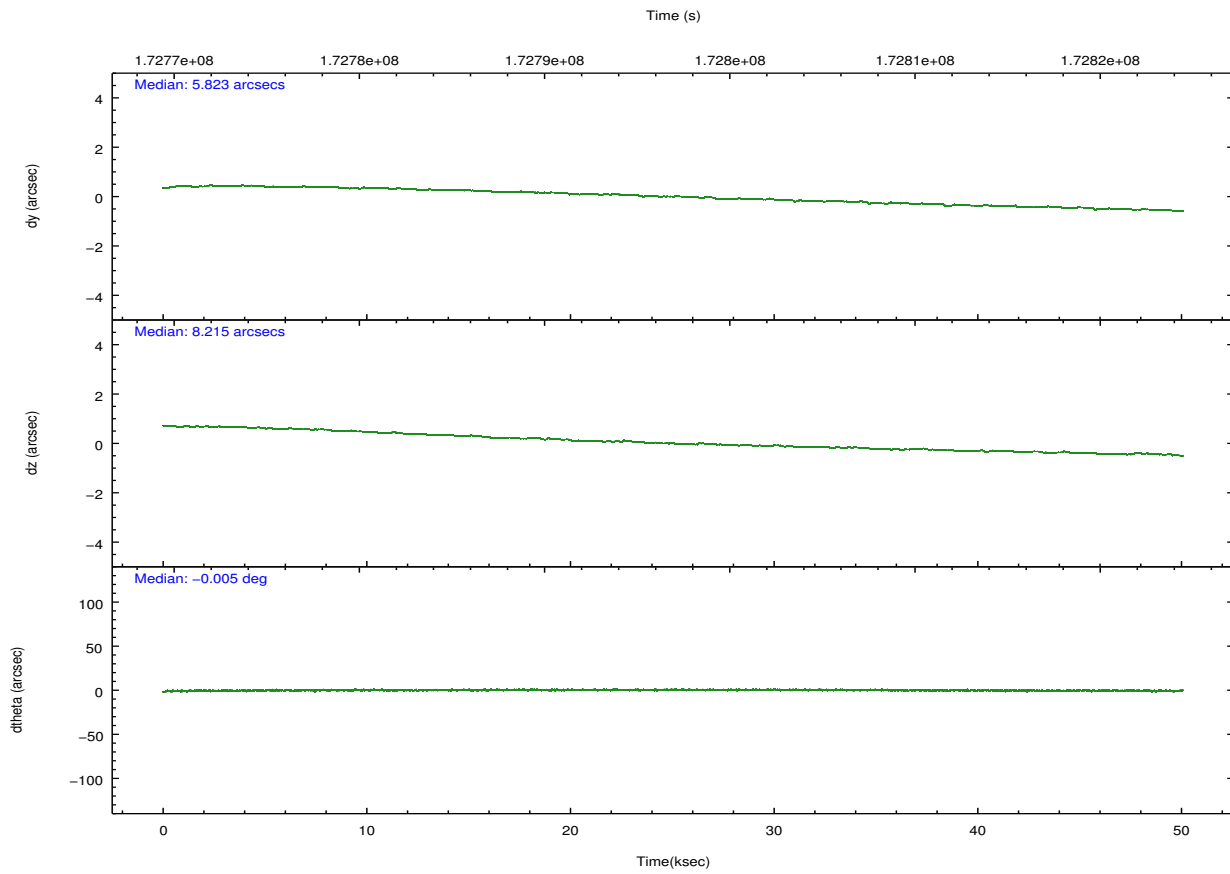
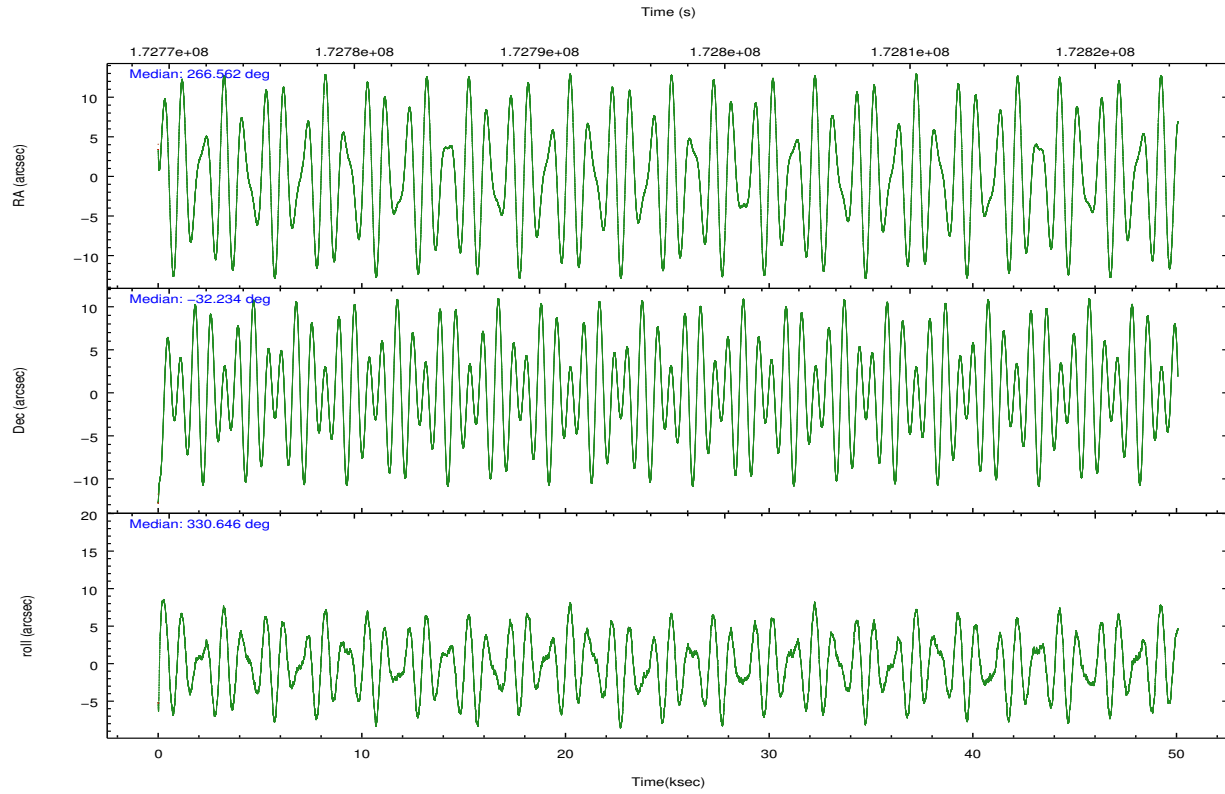
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	202513	1093644	4821139	5887500	1482500	261435	grade 0 events	14042	245270	1145963	960080	802481	31893
rejected events	28636	55584	74531	132724	47384	31560		6%	22%	23%	16%	54%	12%
rejected %	14%	5%	1%	2%	3%	12%	grade 1 events	221	393	3714	6183	2431	253
								0%	0%	0%	0%	0%	0%
							grade 2 events	139250	419740	3106544	1685369	483489	171354
								68%	38%	64%	28%	32%	65%
							grade 3 events	7317	40243	63549	541463	46349	7283
								3%	3%	1%	9%	3%	2%
							grade 4 events	7483	39443	63806	536762	46163	7931
								3%	3%	1%	9%	3%	3%
							grade 5 events	10405	31787	35665	86923	20662	12740
								5%	2%	0%	1%	1%	4%
							grade 6 events	23795	316768	401898	2070720	80925	29981
								11%	28%	8%	35%	5%	11%
							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	266.530378	266.5625668433066	Subarray requested	NONE	NONE
[deg] Pointing Dec	-32.234901	-32.23422995785302	Alternating exposures requested	N	N
[deg] Pointing Roll	330.476740	330.6505299343383	[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)	172771974.184000	172770970.38742			
Observation start date	2003-06-23T16:11:50	2003-06-23T15:56:10			
[s] Observation end time (MET)	172821974.184000	172822968.63963			
Observation end date	2003-06-24T06:05:10	2003-06-24T06:22:48			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



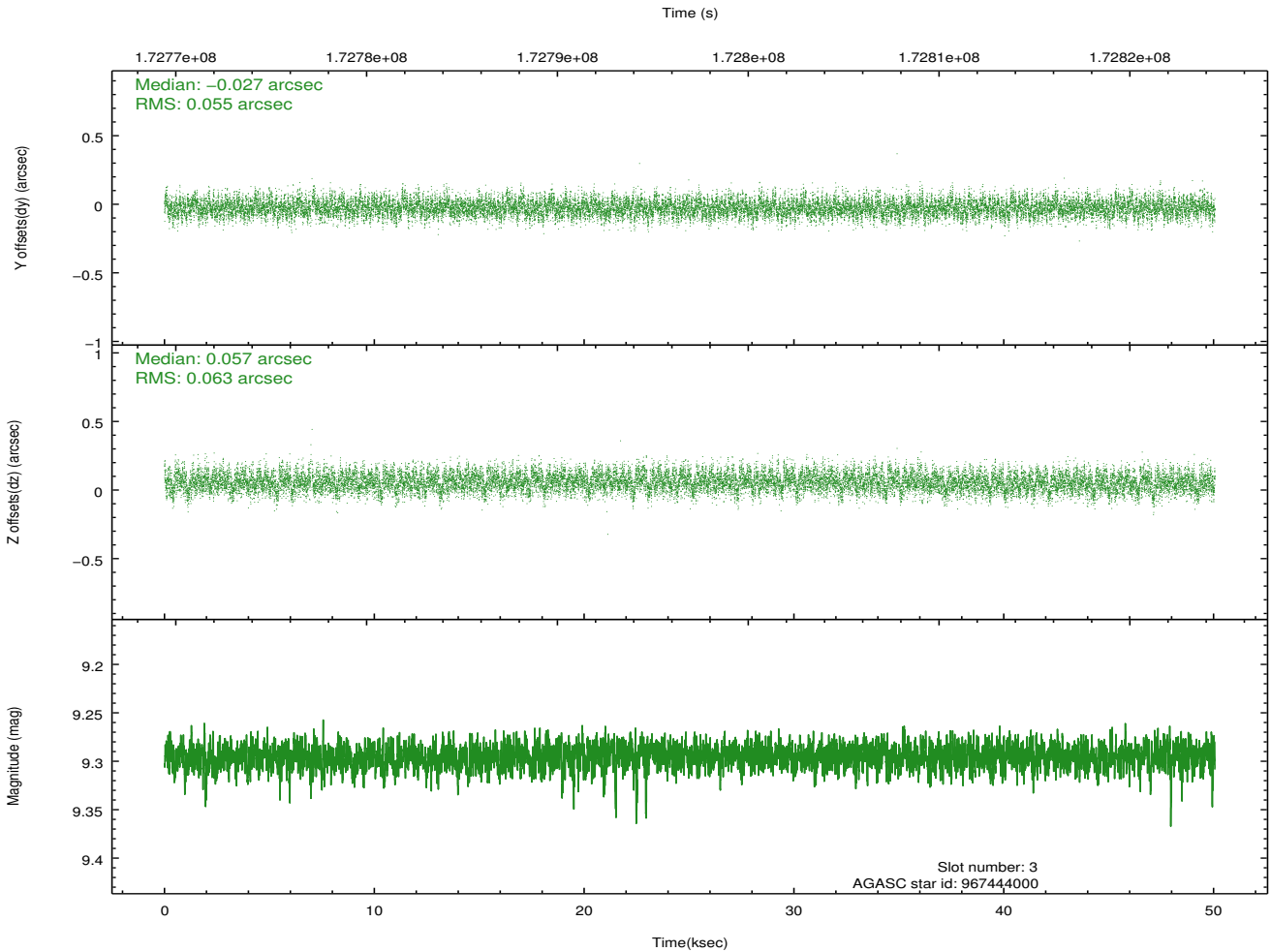
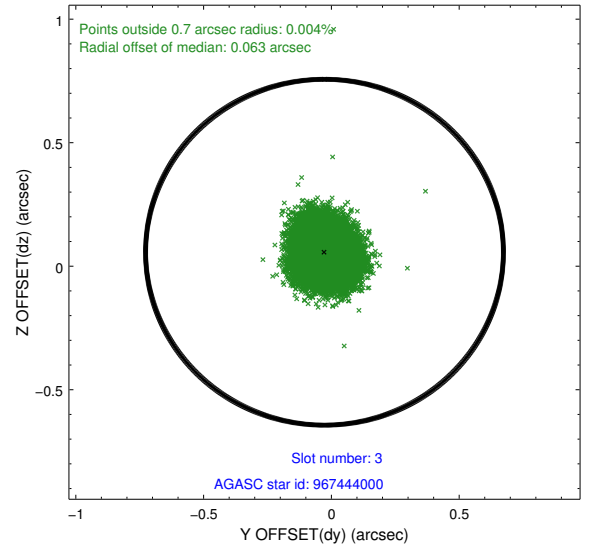
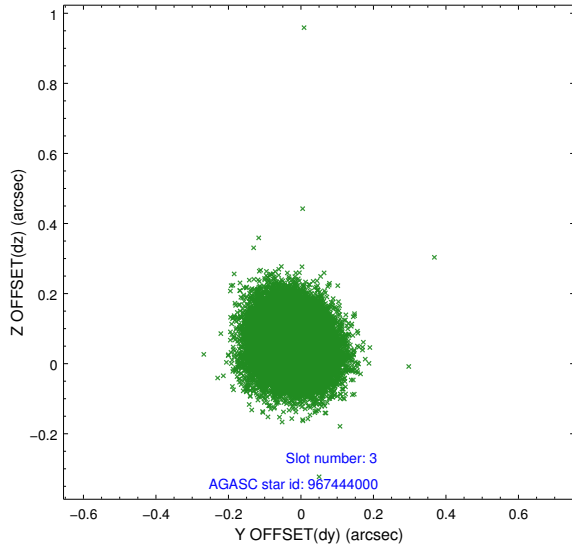


Slot Statistics

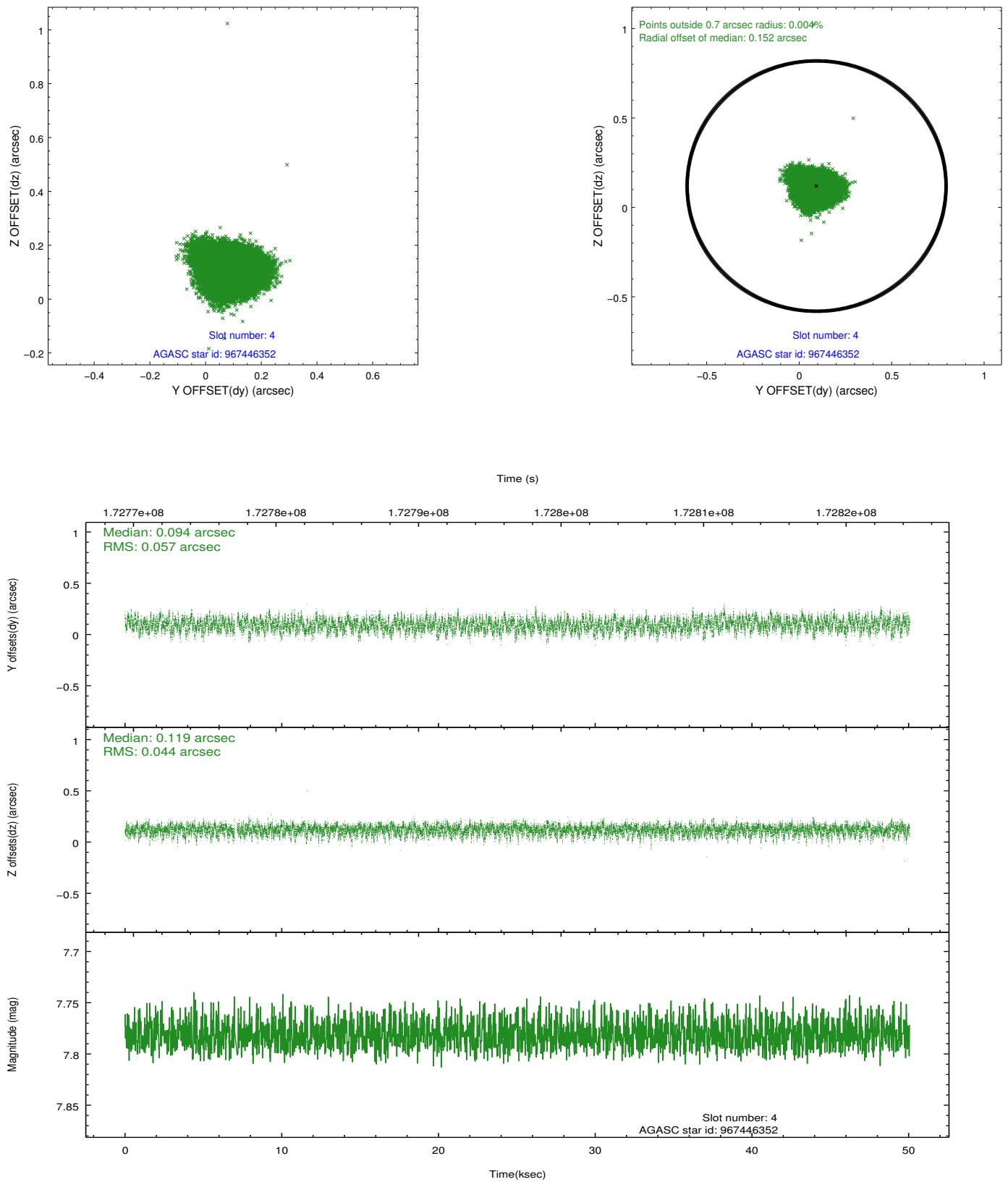
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	12205	0.021	0.119	0.020	0.041	0.000000	0.000000	938.07	-1879.42
1	FID	ACIS-S-5	7.23	12212	-0.084	0.041	0.022	0.034	0.000000	0.000000	-1811.04	18.06
2	FID	ACIS-S-6	7.41	12213	0.043	-0.145	0.010	0.017	0.000000	0.000000	403.67	661.81
3	GUIDE	967444000	9.30	24391	-0.027	0.057	0.090	0.143	266.327670	-32.824762	513.63	-2150.21
4	GUIDE	967446352	7.78	24348	0.094	0.119	0.077	0.123	267.069988	-32.671157	2199.43	-564.21
5	GUIDE	967450832	9.11	24317	0.031	-0.133	0.071	0.116	266.078096	-31.879979	-1830.81	427.86
6	GUIDE	967448688	8.05	24420	-0.131	0.029	0.070	0.112	265.570021	-32.523235	-2018.34	-2351.08
7	GUIDE	967451816	9.27	24349	0.031	-0.063	0.095	0.148	267.266669	-31.901374	1370.56	2147.00

2.4 Star Slots

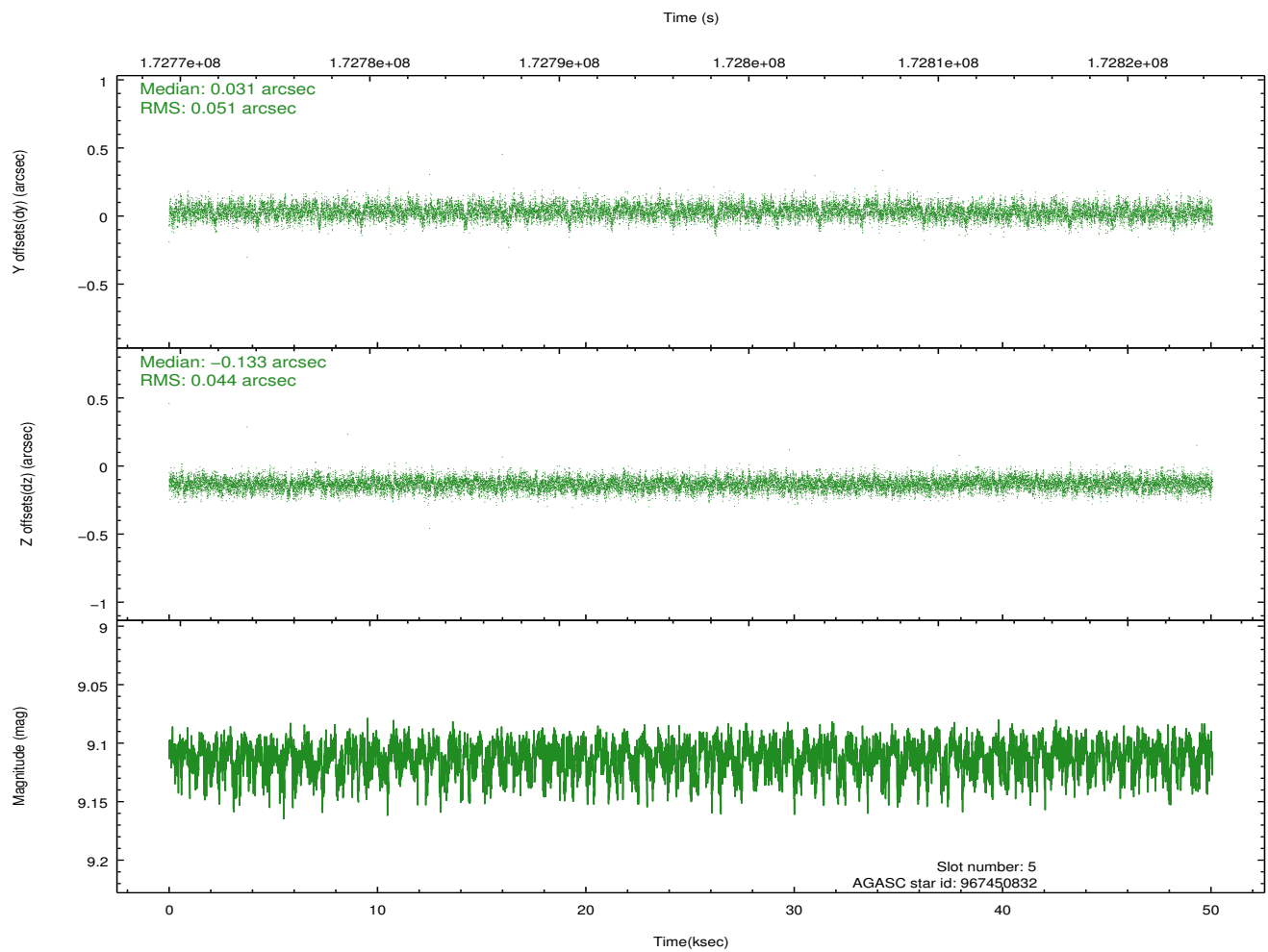
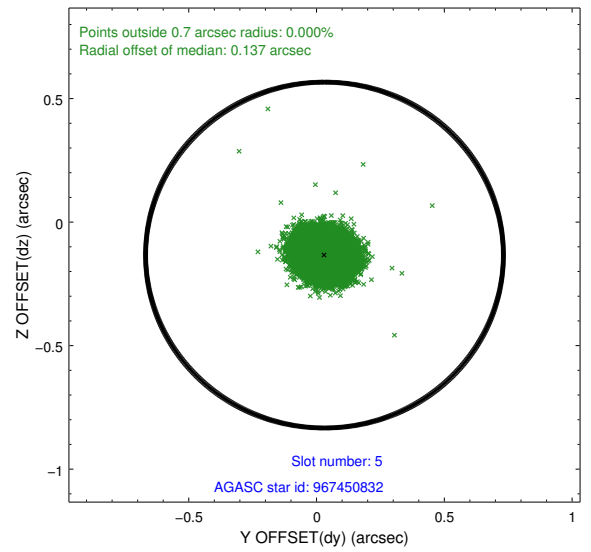
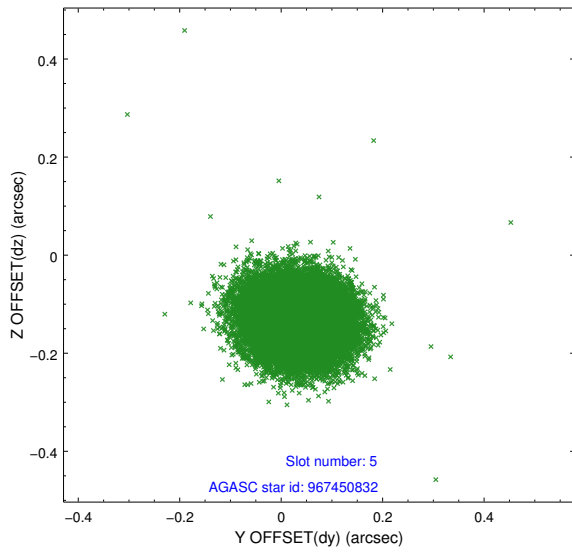
2.4.1 Slot 3



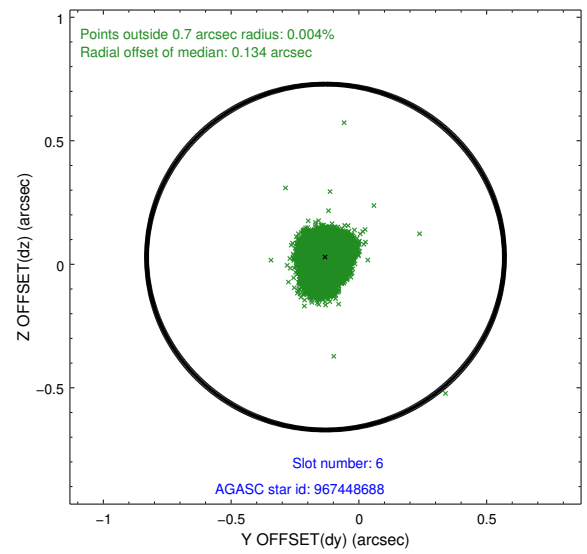
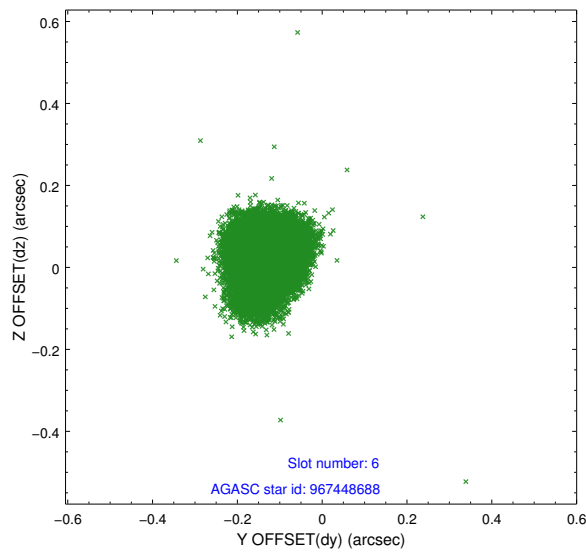
2.4.2 Slot 4



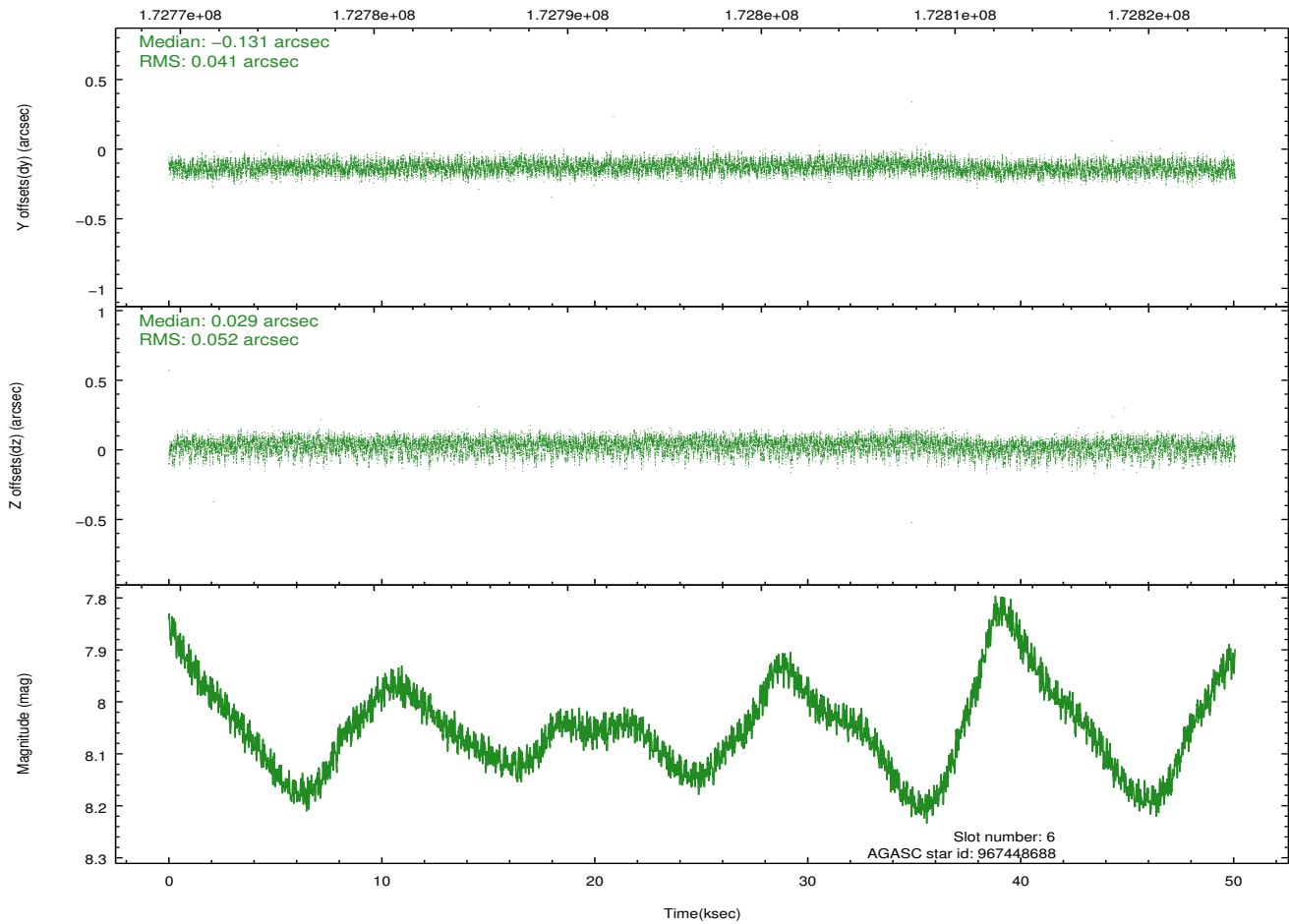
2.4.3 Slot 5



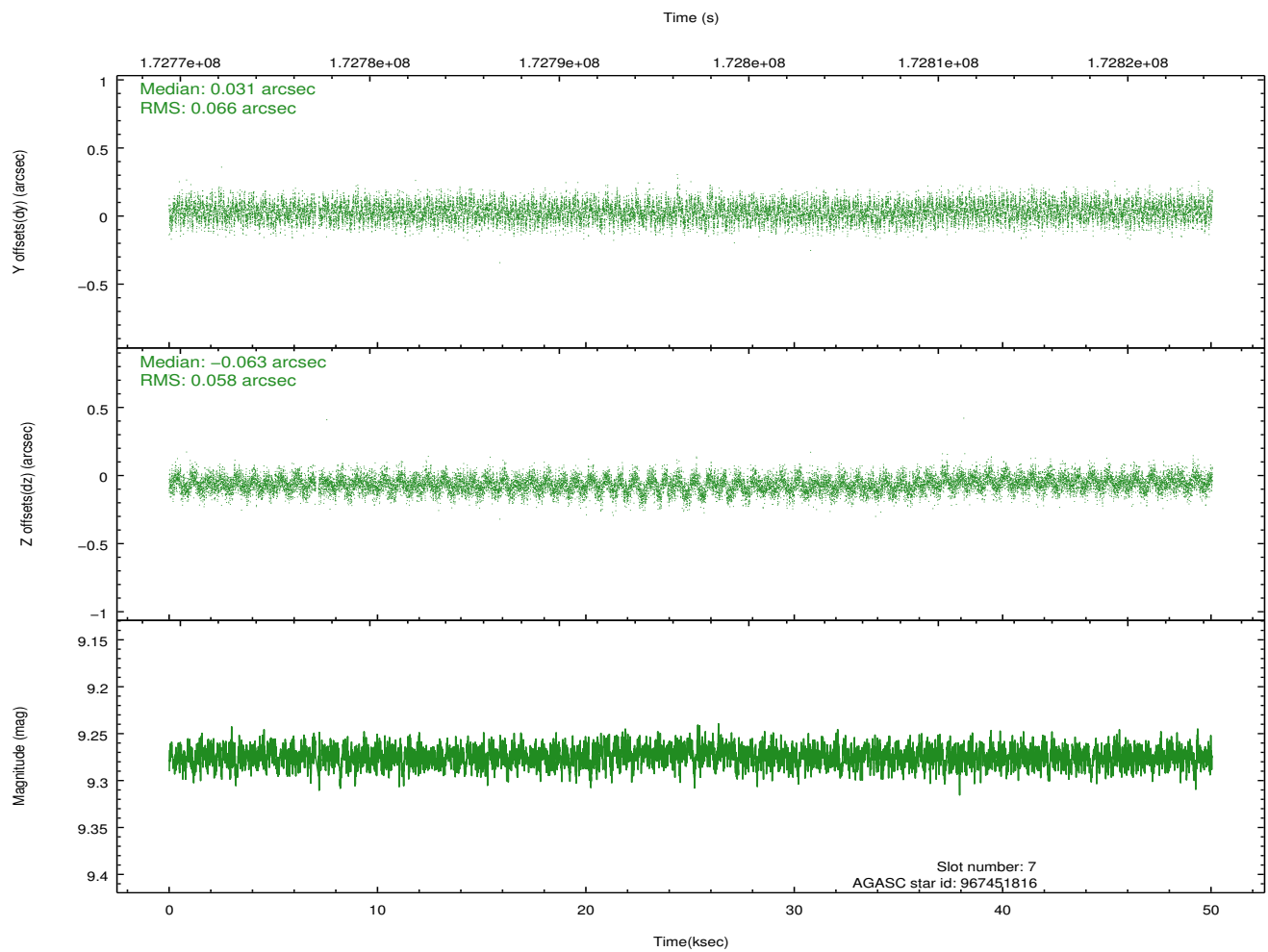
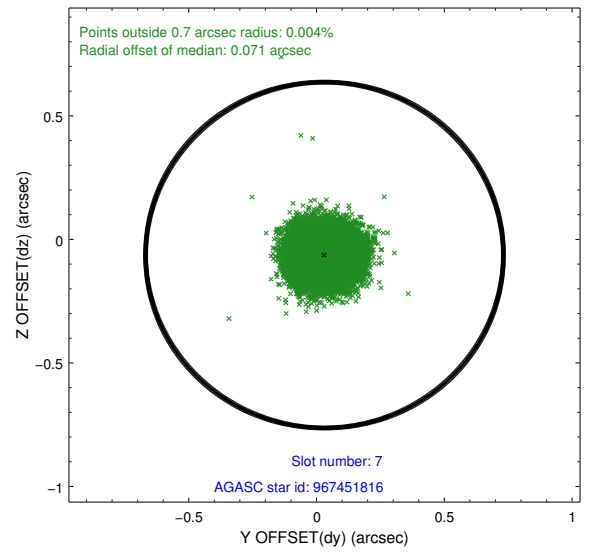
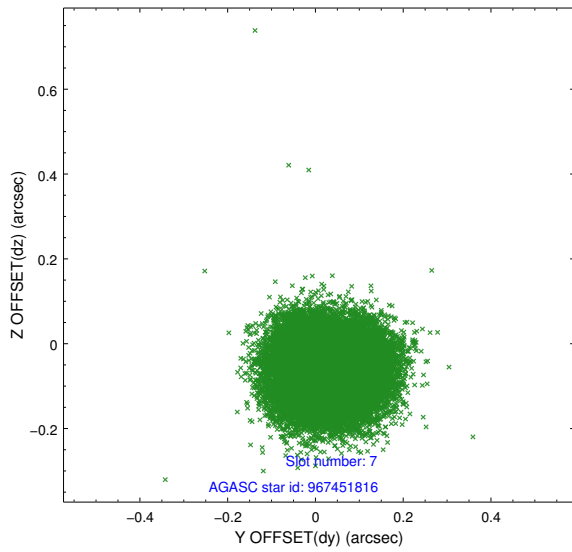
2.4.4 Slot 6



Time (s)

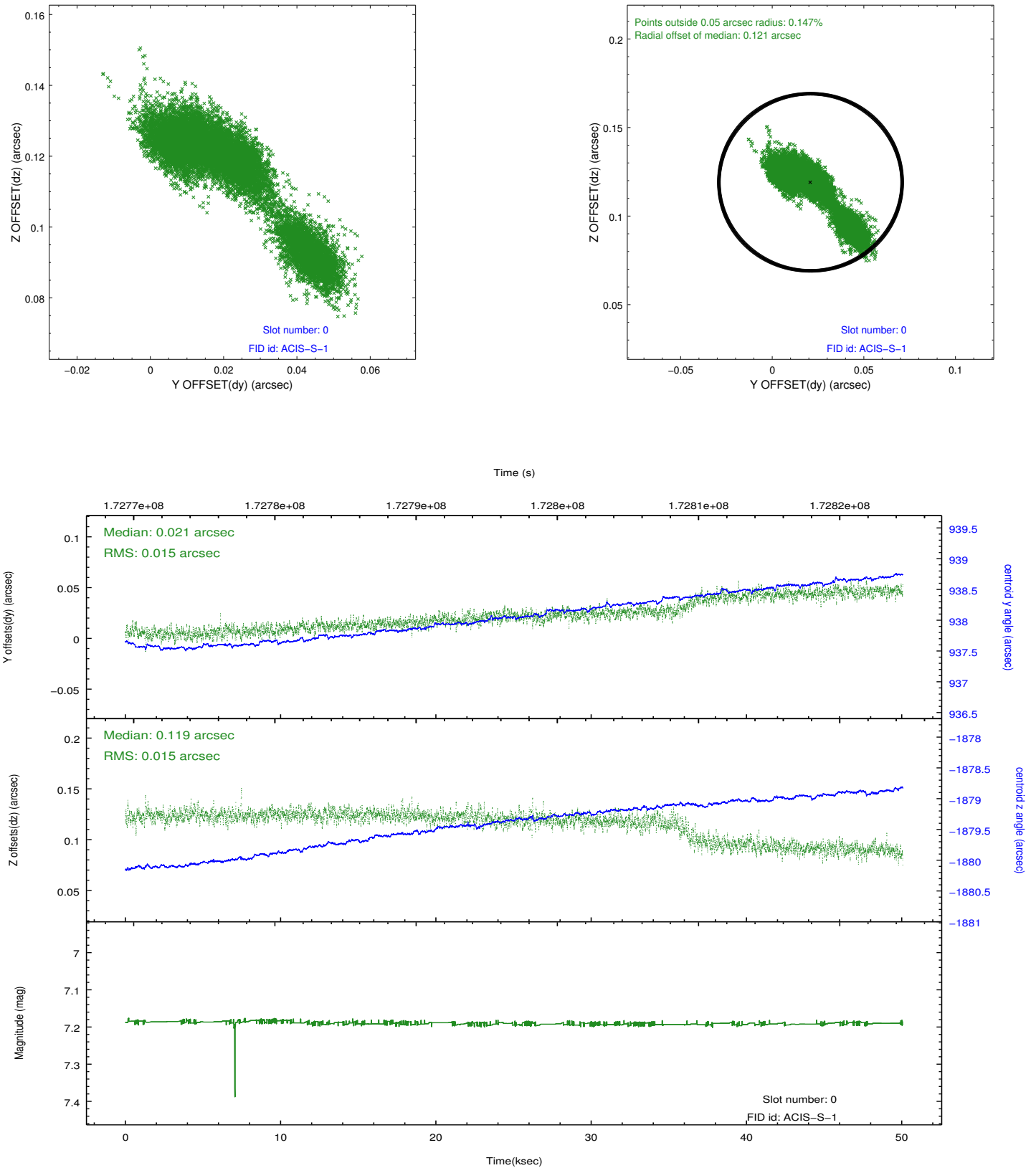


2.4.5 Slot 7

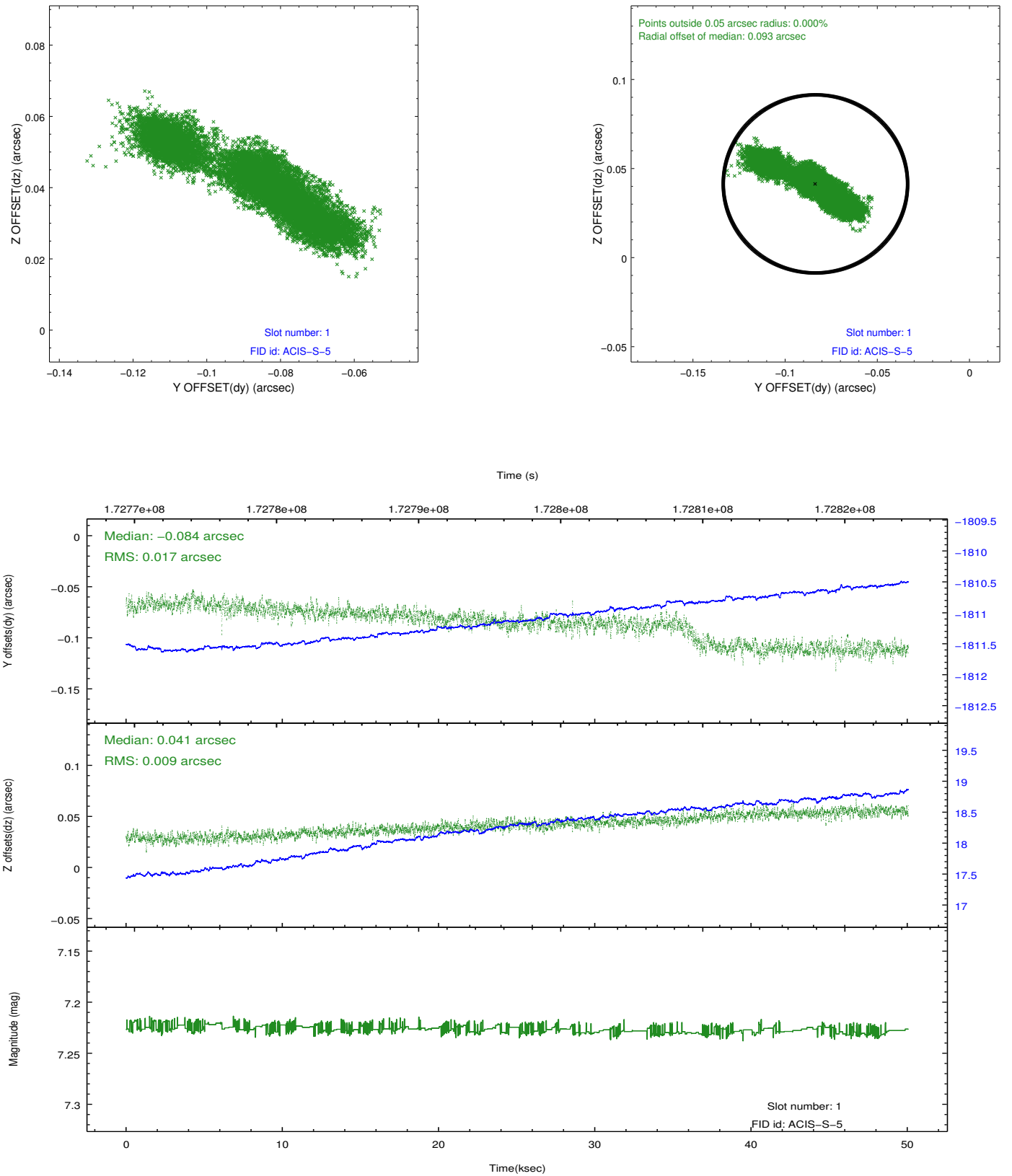


2.5 FID Slots

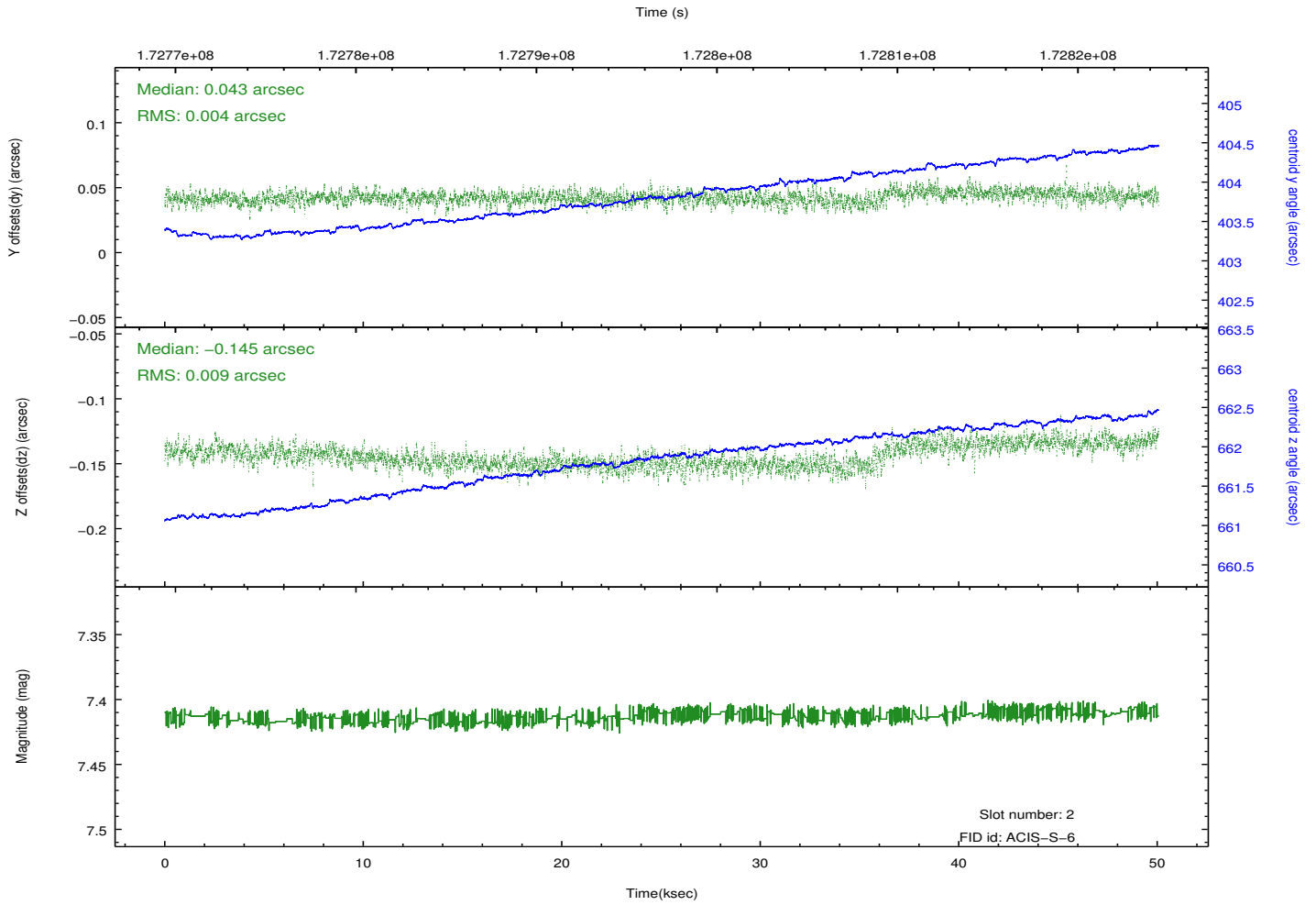
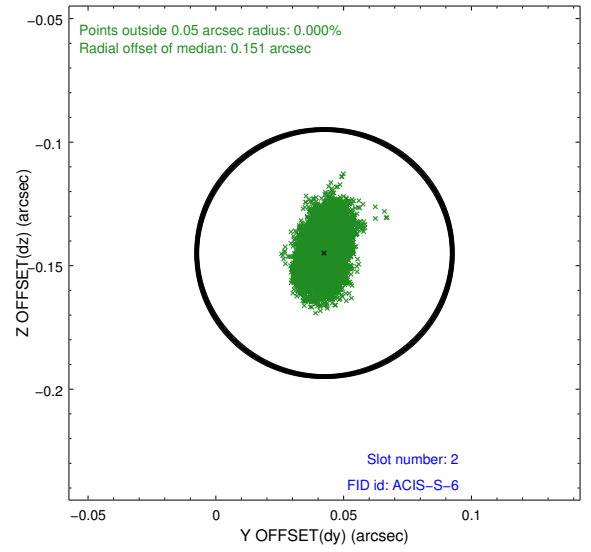
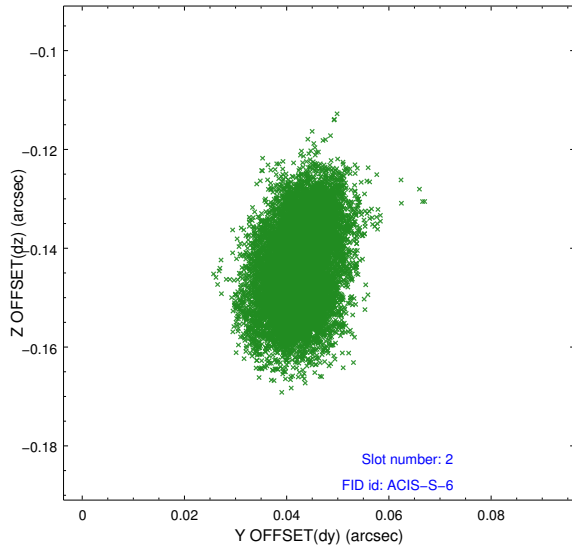
2.5.1 Slot 0



2.5.2 Slot 1

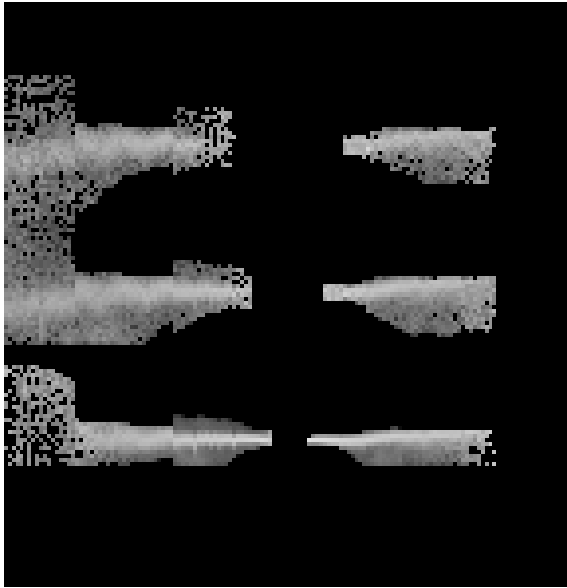


2.5.3 Slot 2



3 Gratings

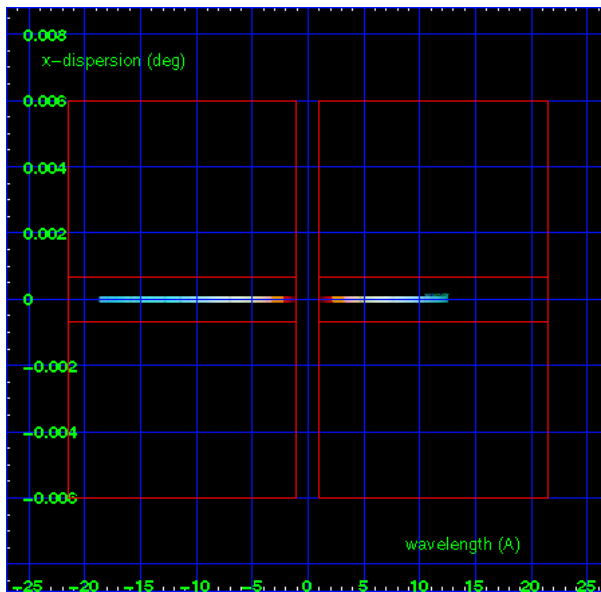
3.1 HEG Arm



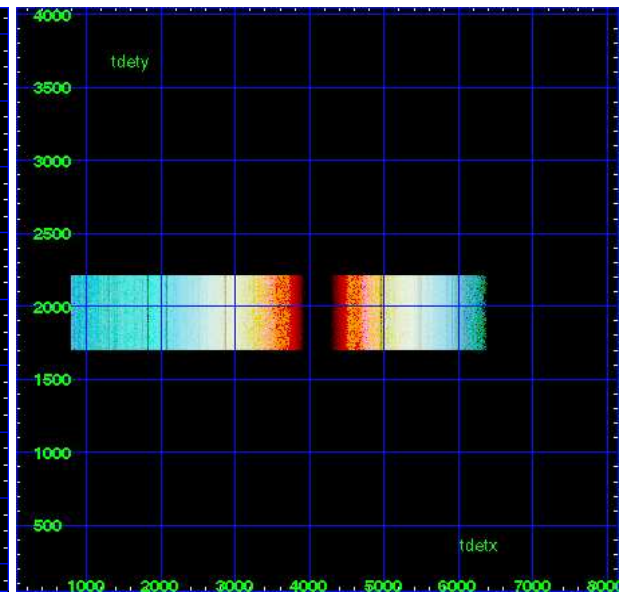
HEG Order Sort 123



HEG Order Sort ALL

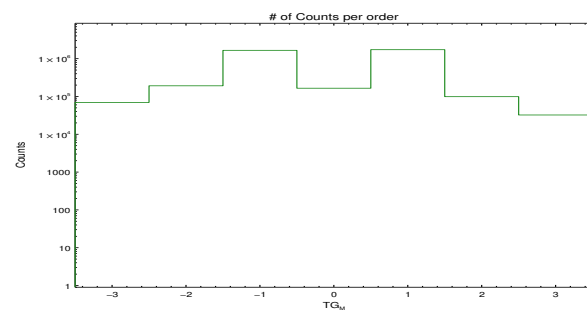


Spot Image HEG

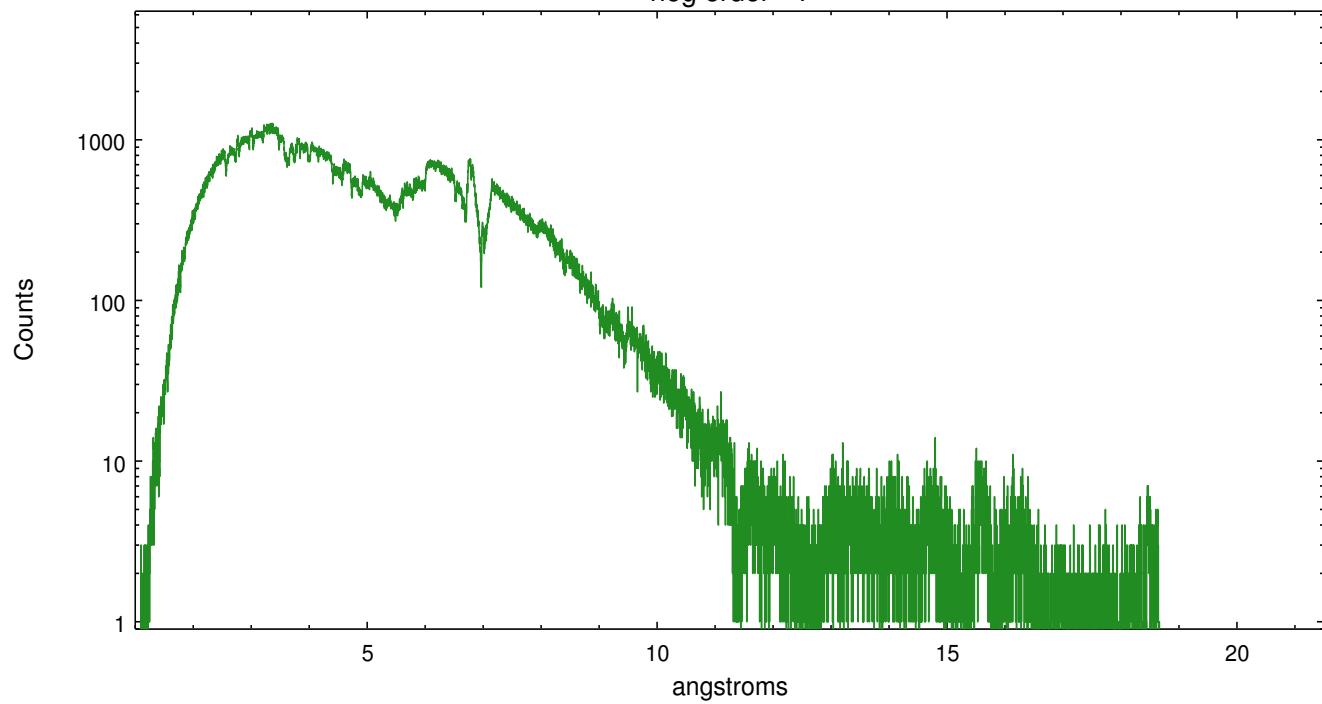


Full Detector HEG

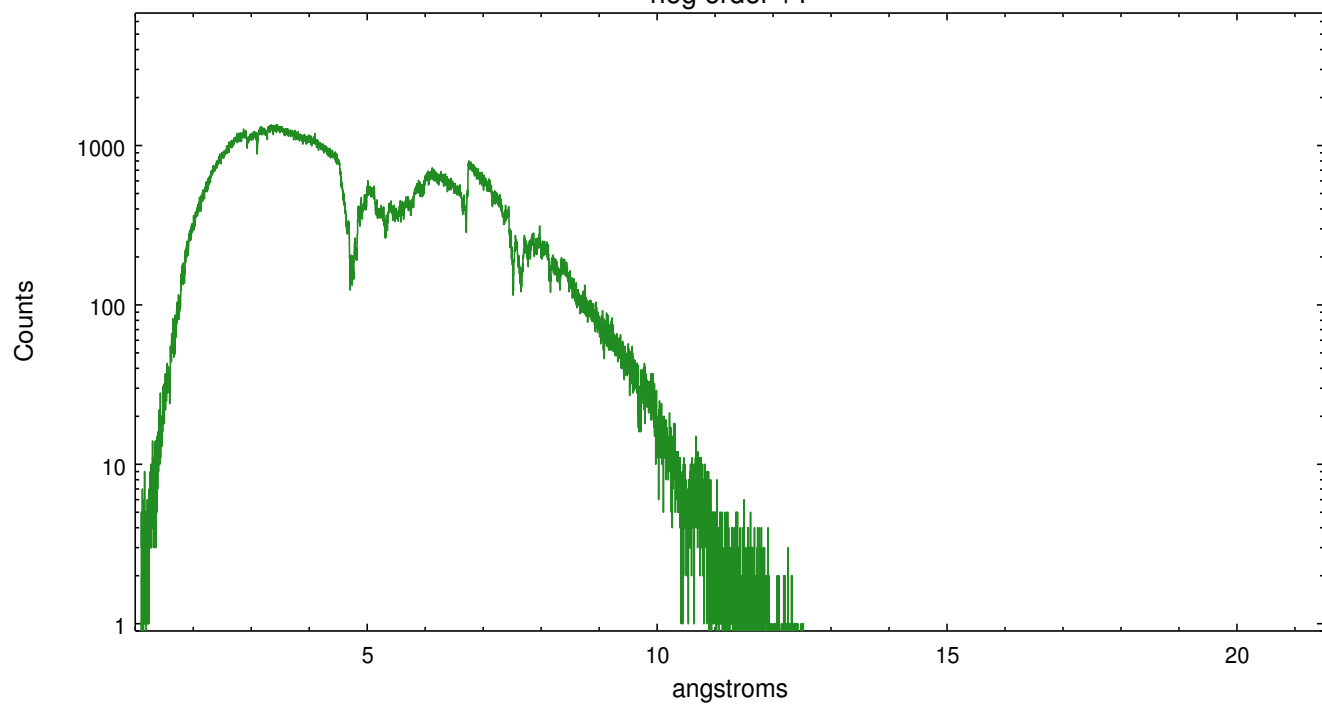
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	69613	191646	1659730	165166	1729053	98875	32391



heg order -1



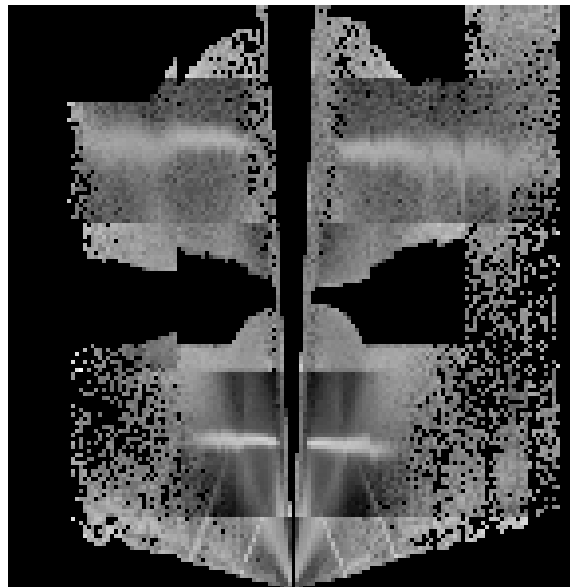
heg order +1



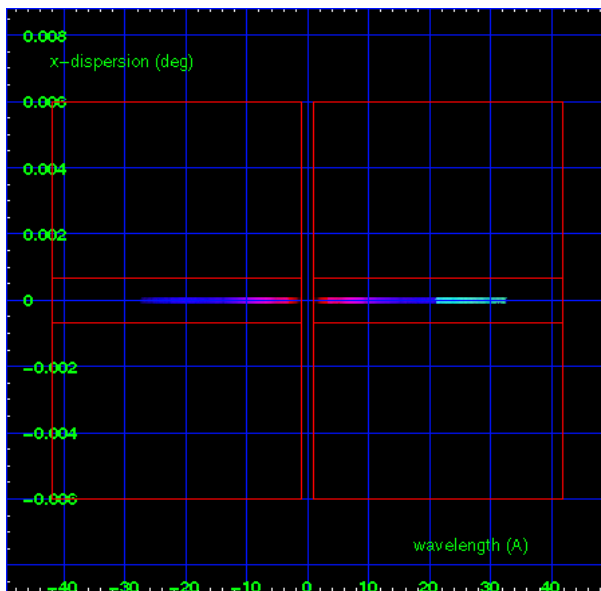
3.2 MEG Arm



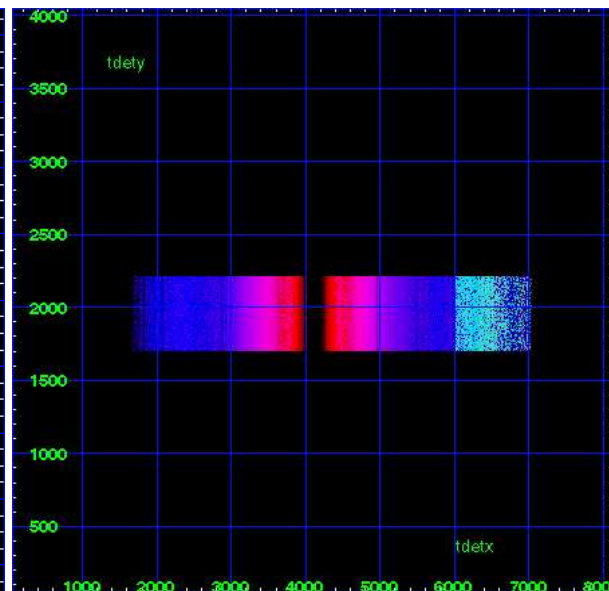
MEG Order Sort 123



MEG Order Sort ALL

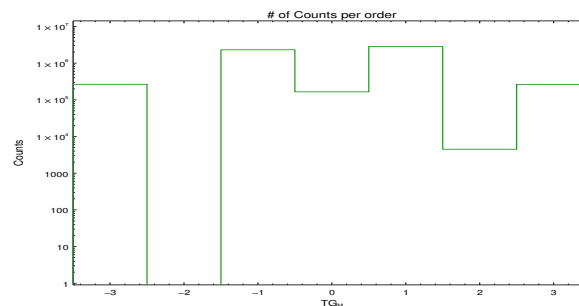


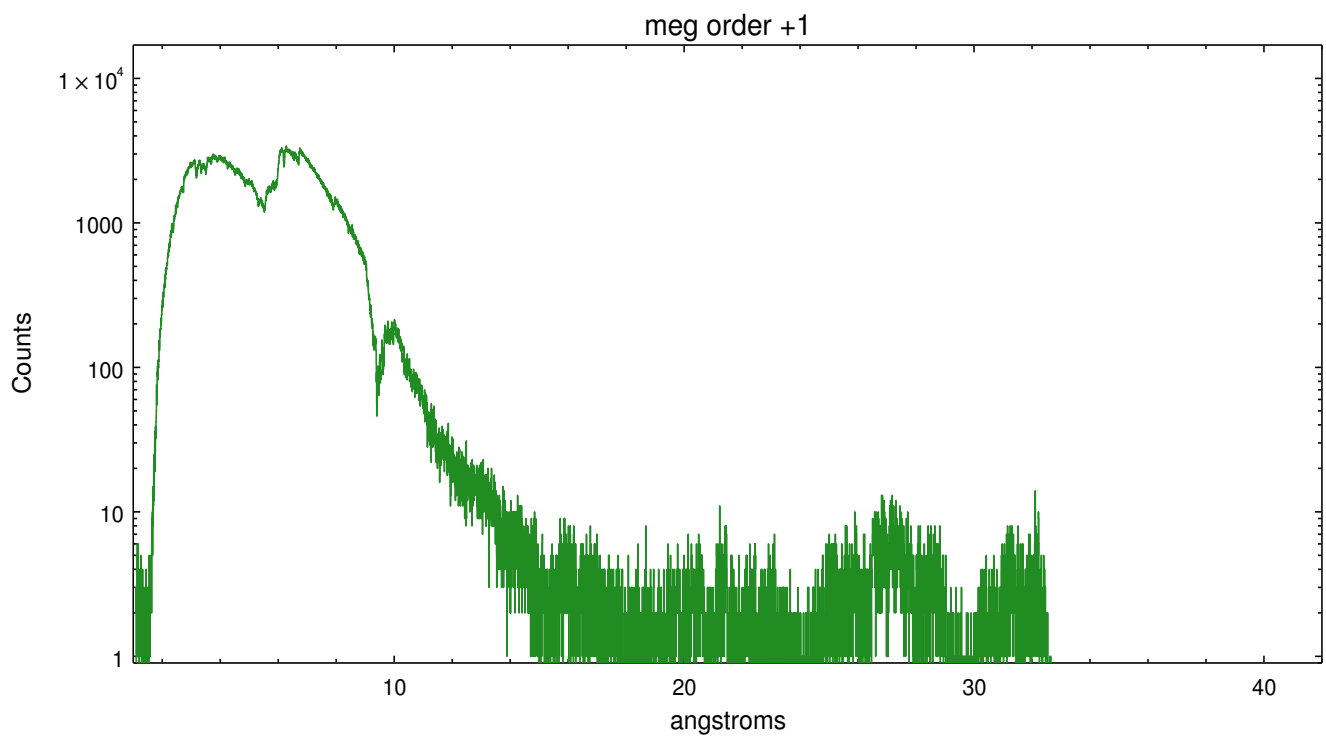
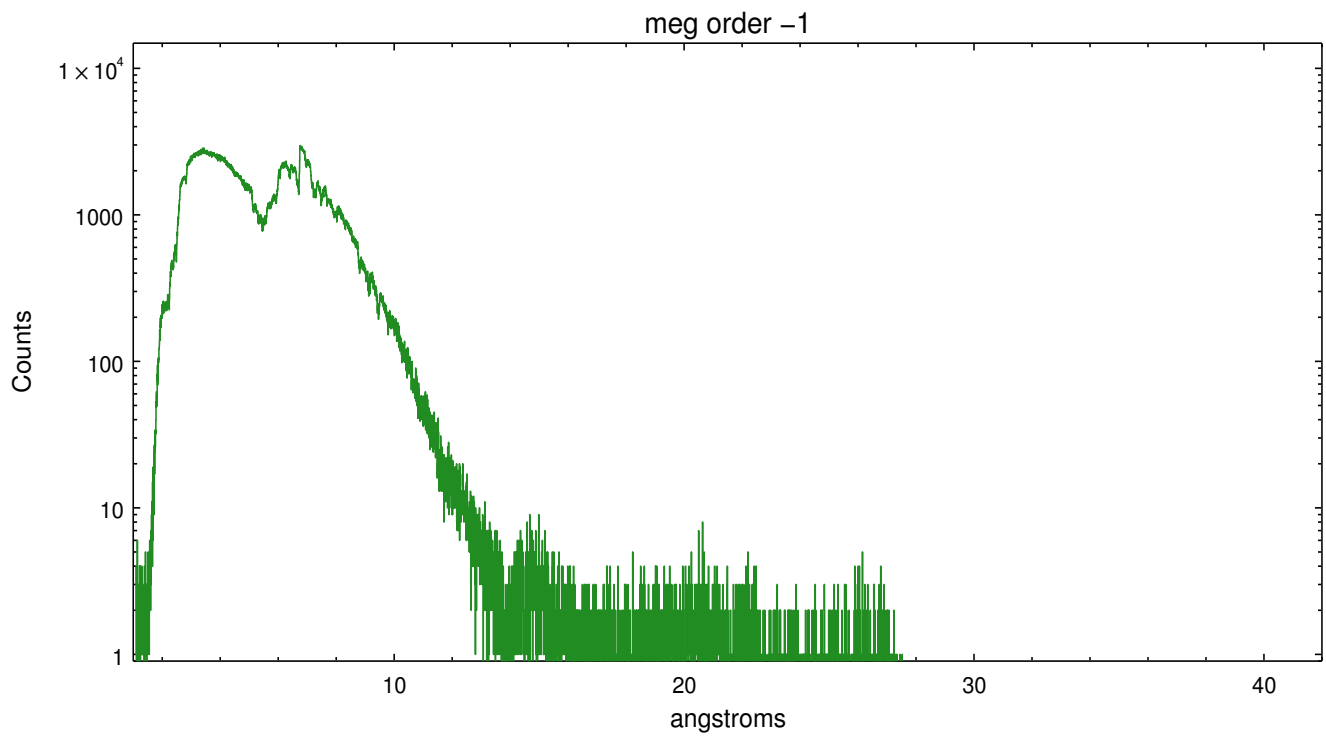
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	264625	0	2315774	165166	2838109	4499	263061





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.067

A.2 Comments