

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 16740 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Jul 28 2015

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

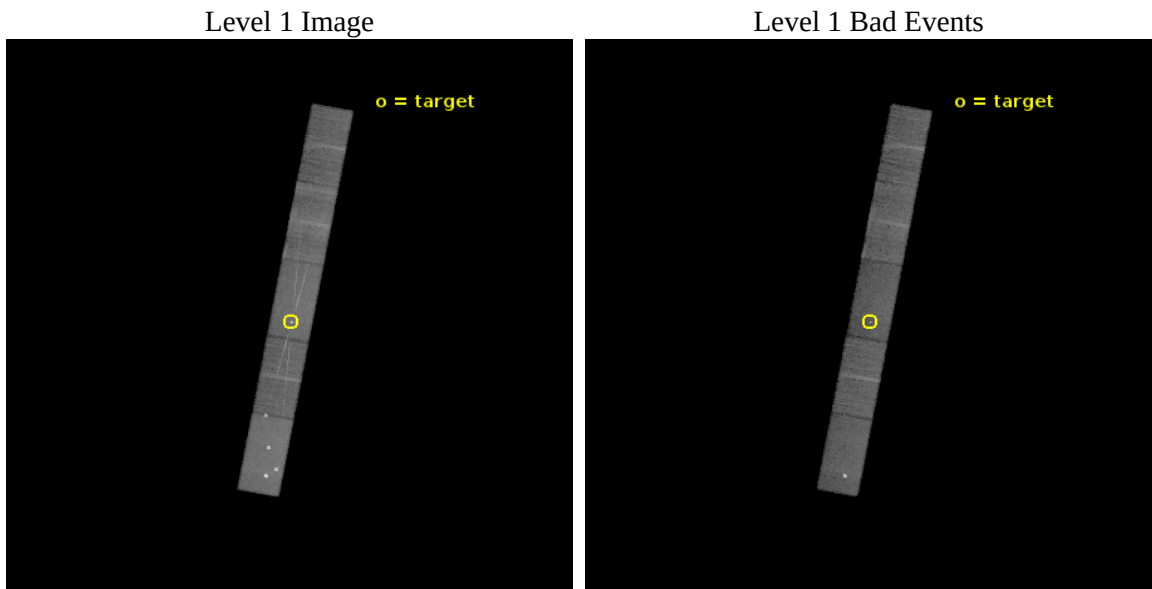
seq_num	401662	Sequence number
obs_id	16740	Observation id
title	An Integrated Approach to Winds, Jets, and State Transitions	Propo
observer	Dr. Joseph Neilsen	Principal investigator
object	H1743-322	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.565042	Observer's specified target RA [deg]
dec_targ	-32.2335	Observer's specified target Dec [deg]
ra_nom	266.56992159926	Nominal RA [deg]
dec_nom	-32.237004284958	Nominal Dec [deg]
roll_nom	280.49790505433	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30076.219317436	Sum of GTIs [s]
livetime	29367.259132267	Livetime [s]
ontime5	30076.178277493	Sum of GTIs [s]
ontime6	30074.396197319	Sum of GTIs [s]
ontime7	30076.219317436	Sum of GTIs [s]
ontime8	30076.096197486	Sum of GTIs [s]
ontime9	30076.055157423	Sum of GTIs [s]
l2events	160621	Number of level 2 events



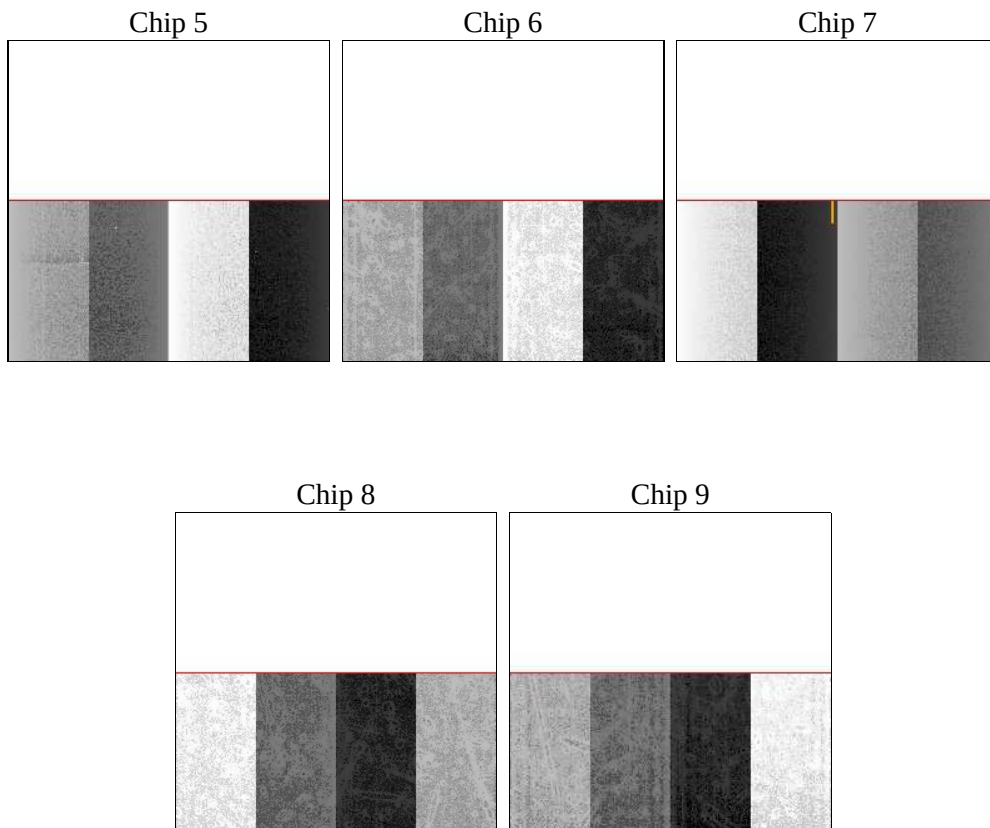
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	30076.219317436	Sum of GTIs [s]
caldsver	4.6.8	 	ontime5	30076.178277493	Sum of GTIs [s]
date	2015-07-28T06:20:25	Date and time of file creation	ontime6	30074.396197319	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	30076.219317436	Sum of GTIs [s]
			ontime8	30076.096197486	Sum of GTIs [s]
			ontime9	30076.055157423	Sum of GTIs [s]
			l1events	571043	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4127.17, 4121.61)	src1a sky pixel position

2.1.4 Events

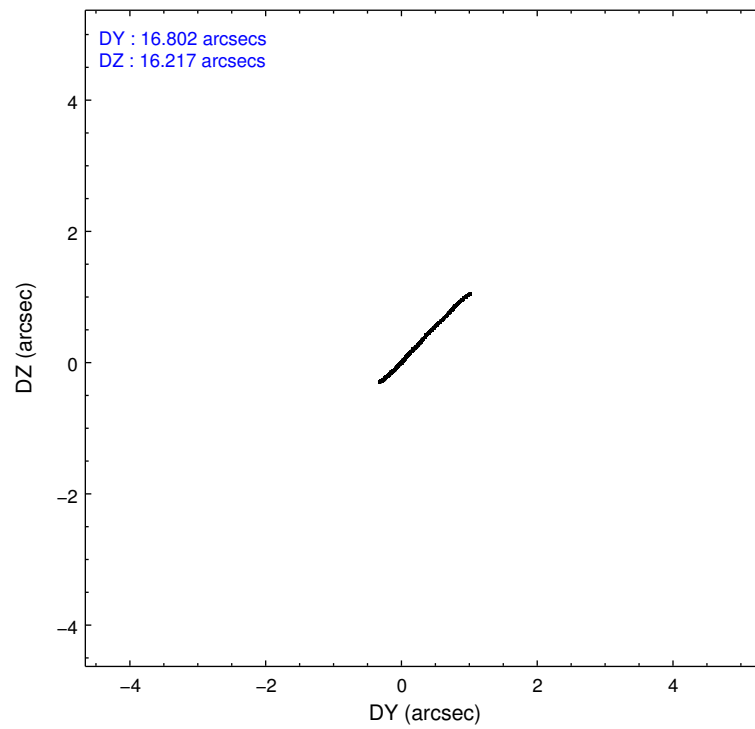
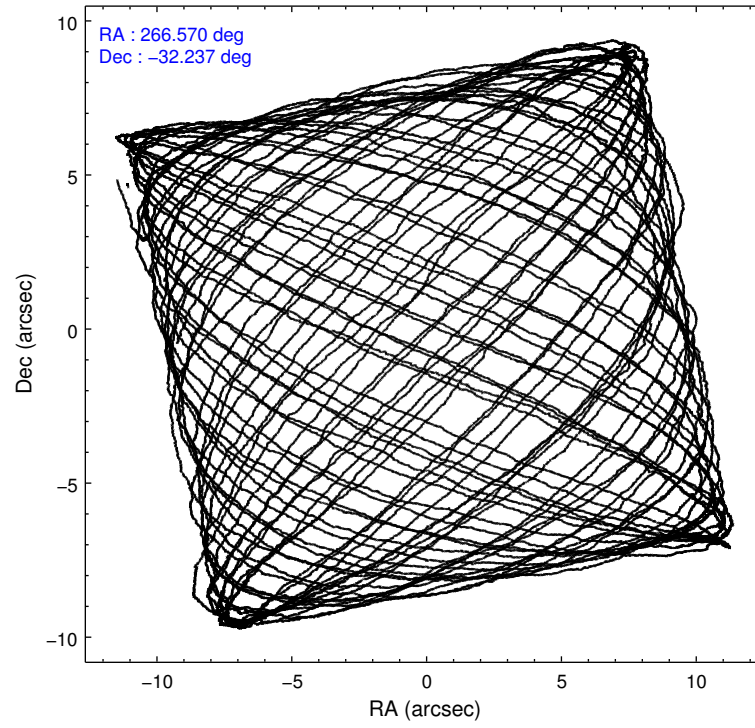
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	159455	91557	127197	112112	80722
rejected events	72798	75014	61695	80990	69668
rejected %	45%	81%	48%	72%	86%

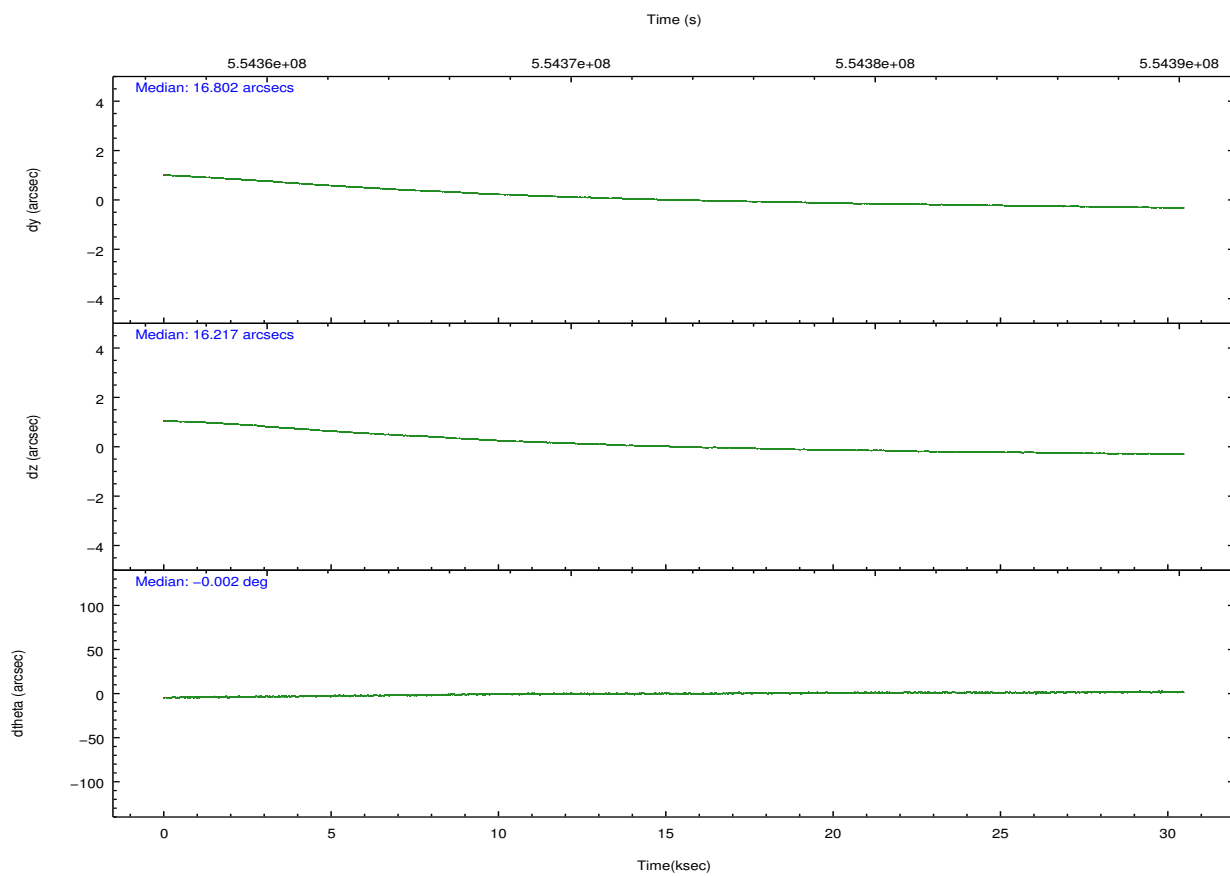
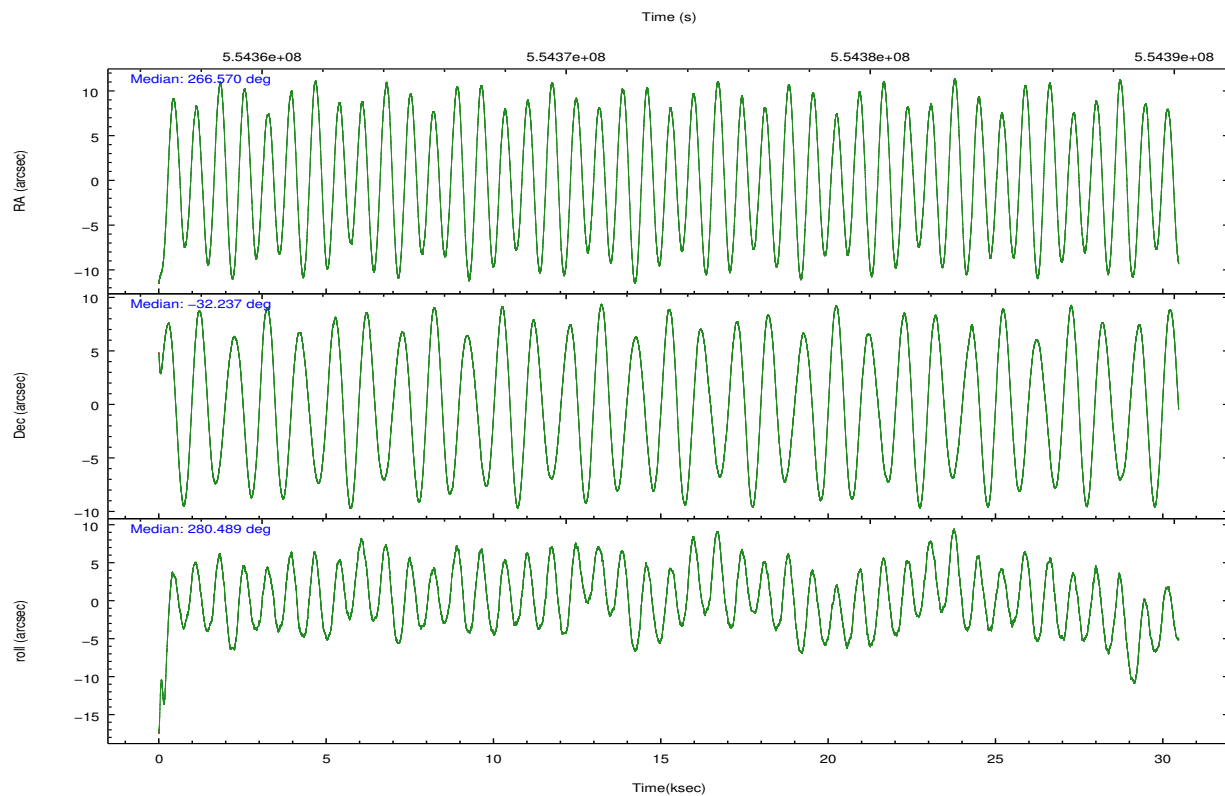
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	21771	8003	7452	9142	3954
	13%	8%	5%	8%	4%
grade 1 events	347	44	278	78	23
	0%	0%	0%	0%	0%
grade 2 events	22530	3199	14072	6949	2335
	14%	3%	11%	6%	2%
grade 3 events	4790	1442	6167	3539	1272
	3%	1%	4%	3%	1%
grade 4 events	4283	1397	6180	3303	1185
	2%	1%	4%	2%	1%
grade 5 events	13402	3935	11503	5671	4094
	8%	4%	9%	5%	5%
grade 6 events	33290	2503	31633	8189	2309
	20%	2%	24%	7%	2%
grade 7 events	59042	71034	49912	75241	65550
	37%	77%	39%	67%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	266.548533	266.5699215992639	CCD I2 on	N	N
[deg] Pointing Dec	-32.216399	-32.237004284958	CCD I3 on	N	N
[deg] Pointing Roll	280.329877	280.4979050543307	CCD S0 on	O1	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-183.992523	-183.9875365069546	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.144986076053243	CCD S4 on	Y	Y
[s] Observation start time (MET)	554358619.184000	554357563.77986	CCD S5 on	O2	Y
Observation start date	2015-07-27T04:29:11	2015-07-27T04:12:43	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	554388619.184000	554388936.46912	On-chip summing requested	N	N
Observation end date	2015-07-27T12:49:11	2015-07-27T12:55:36	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



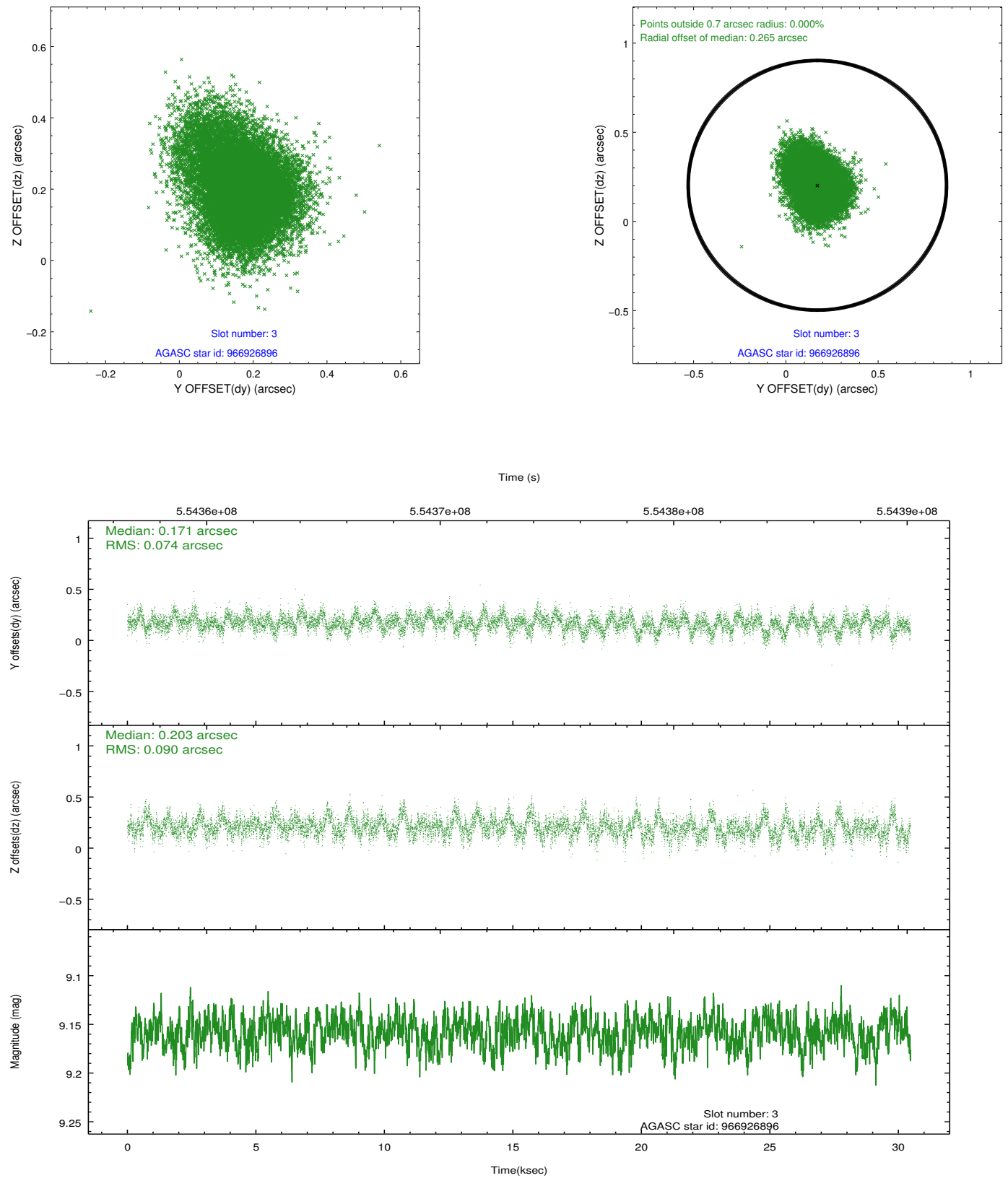


Slot Statistics

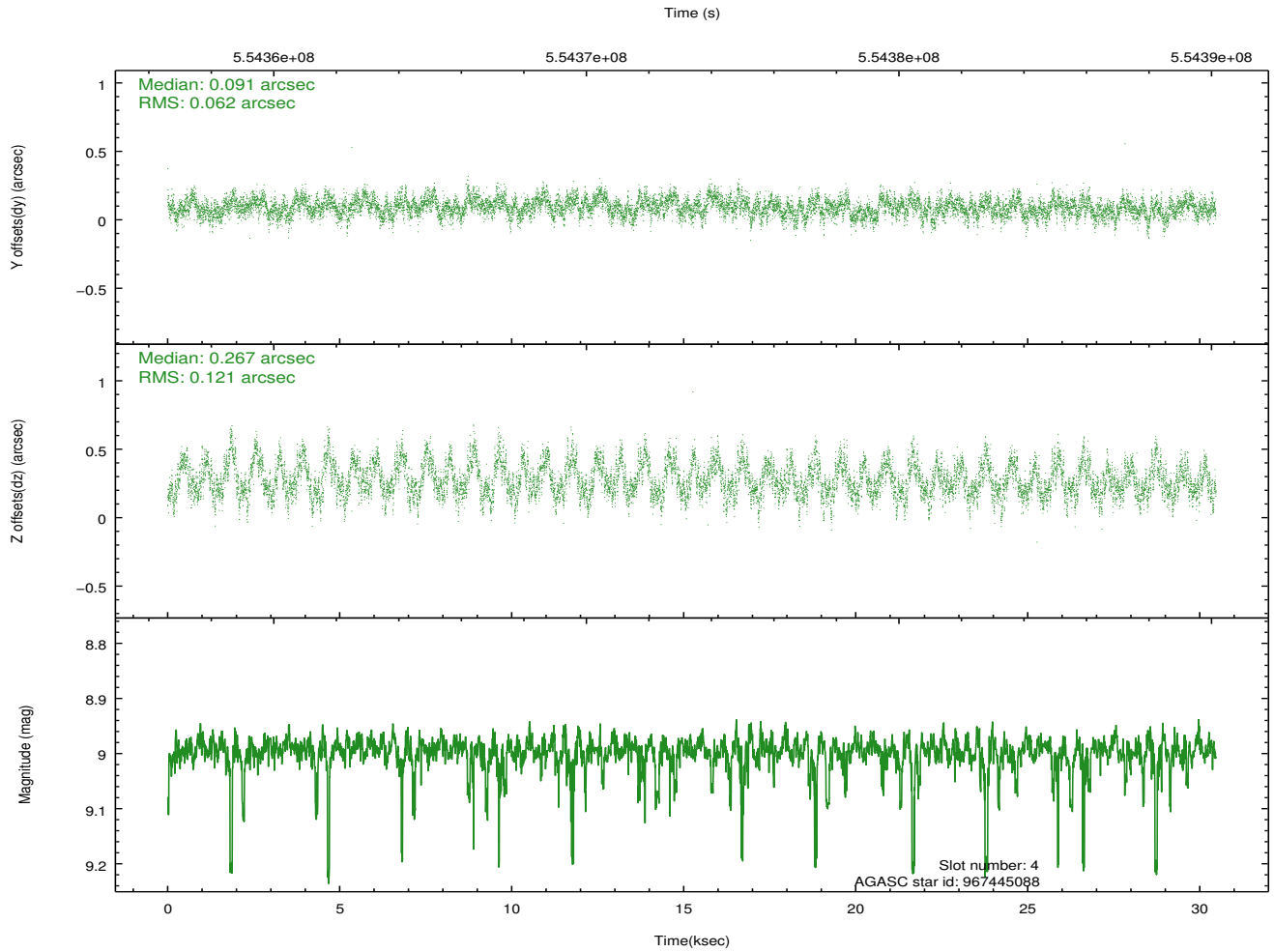
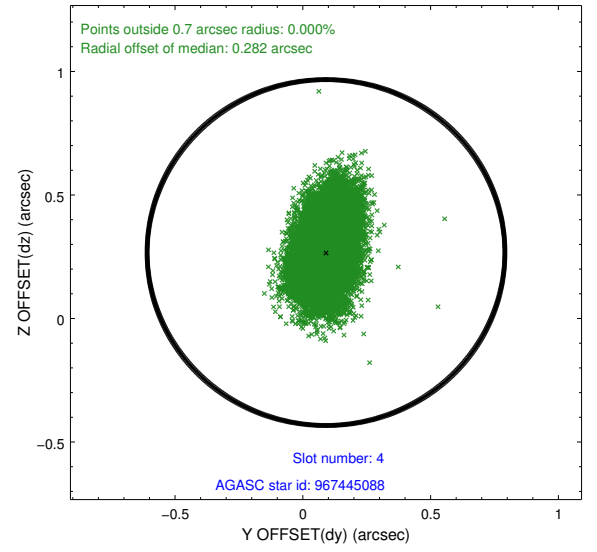
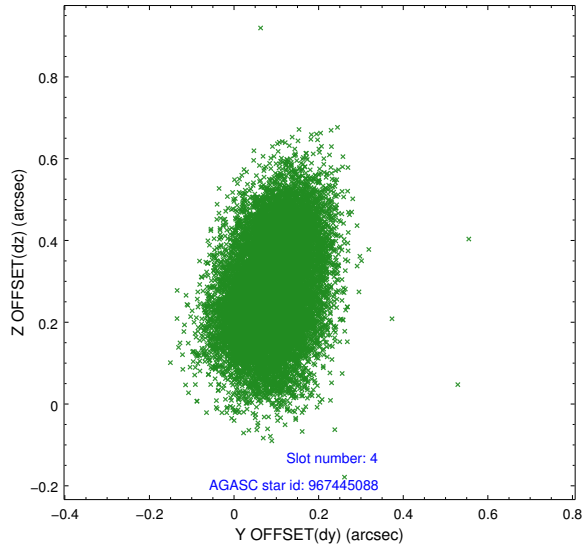
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.97	7432	-0.128	-0.138	0.022	0.045	0.000000	0.000000	-769.69	-1864.55
1	FID		ACIS-S-4	7.07	7432	0.304	0.099	0.010	0.023	0.000000	0.000000	2144.03	43.99
2	FID		ACIS-S-5	7.10	7432	-0.206	0.046	0.017	0.037	0.000000	0.000000	-1822.48	37.79
3	GUIDE	used	966926896	9.16	14855	0.171	0.203	0.122	0.206	266.197771	-31.663459	-2148.55	-700.69
4	GUIDE	used	967445088	9.00	14853	0.091	0.267	0.142	0.240	265.761342	-32.072953	-929.06	-2270.87
5	GUIDE	used	967446352	7.74	14860	-0.056	-0.176	0.097	0.153	267.069988	-32.671157	1898.48	1260.07
6	GUIDE	used	967445928	8.79	14859	0.019	-0.078	0.117	0.186	266.024801	-32.612408	1123.44	-1818.27
7	GUIDE	used	967451816	9.24	14848	-0.228	-0.236	0.149	0.236	267.266669	-31.901374	-714.27	2361.05

2.4 Star Slots

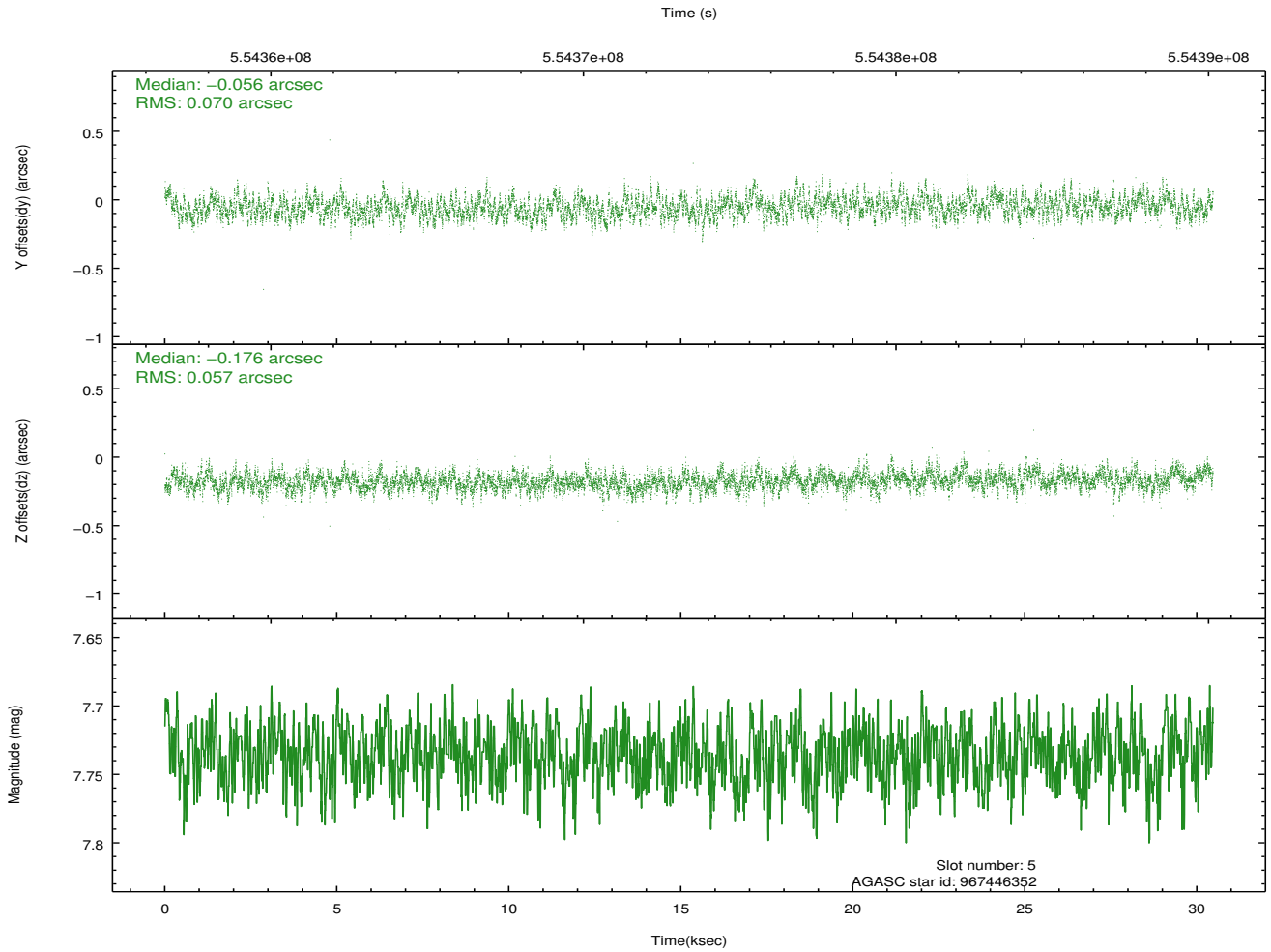
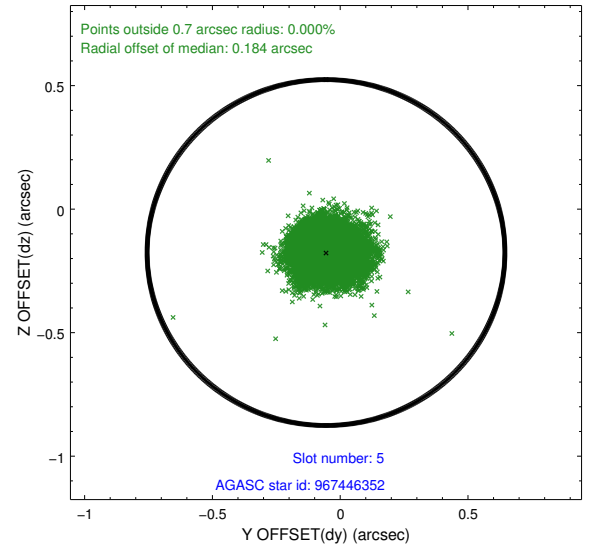
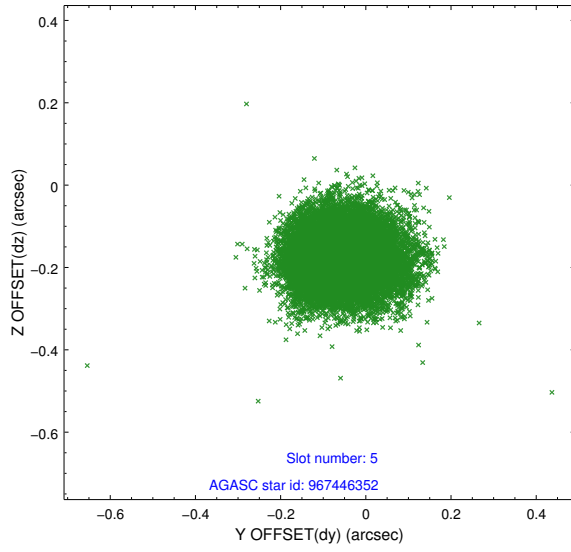
2.4.1 Slot 3



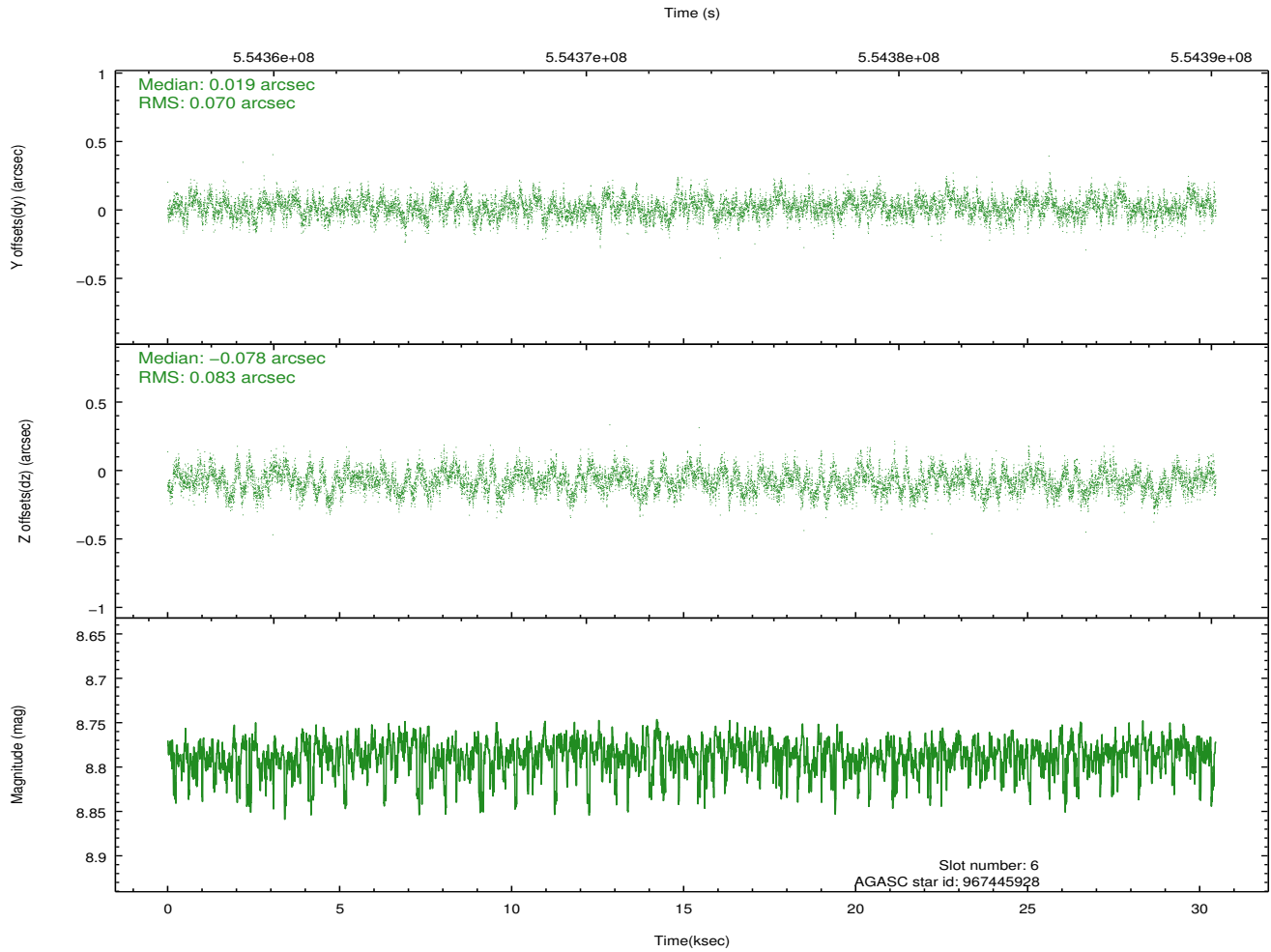
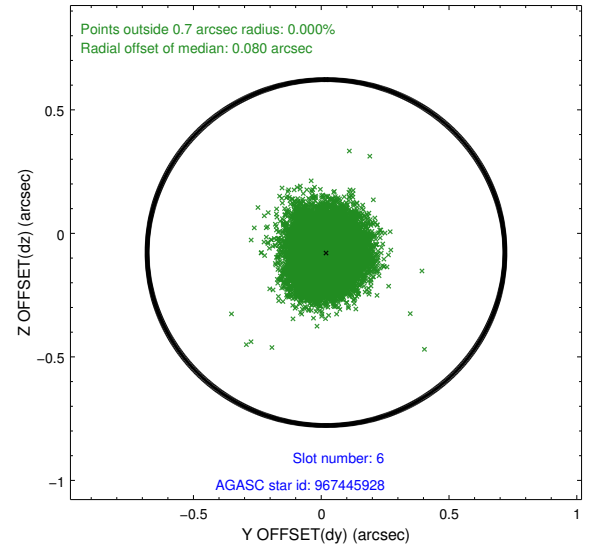
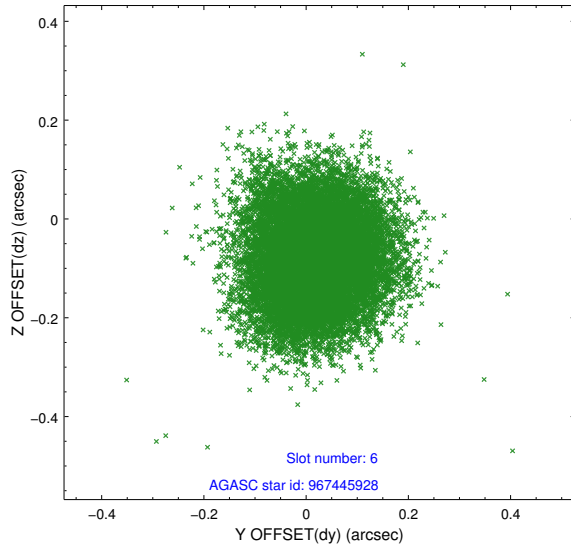
2.4.2 Slot 4



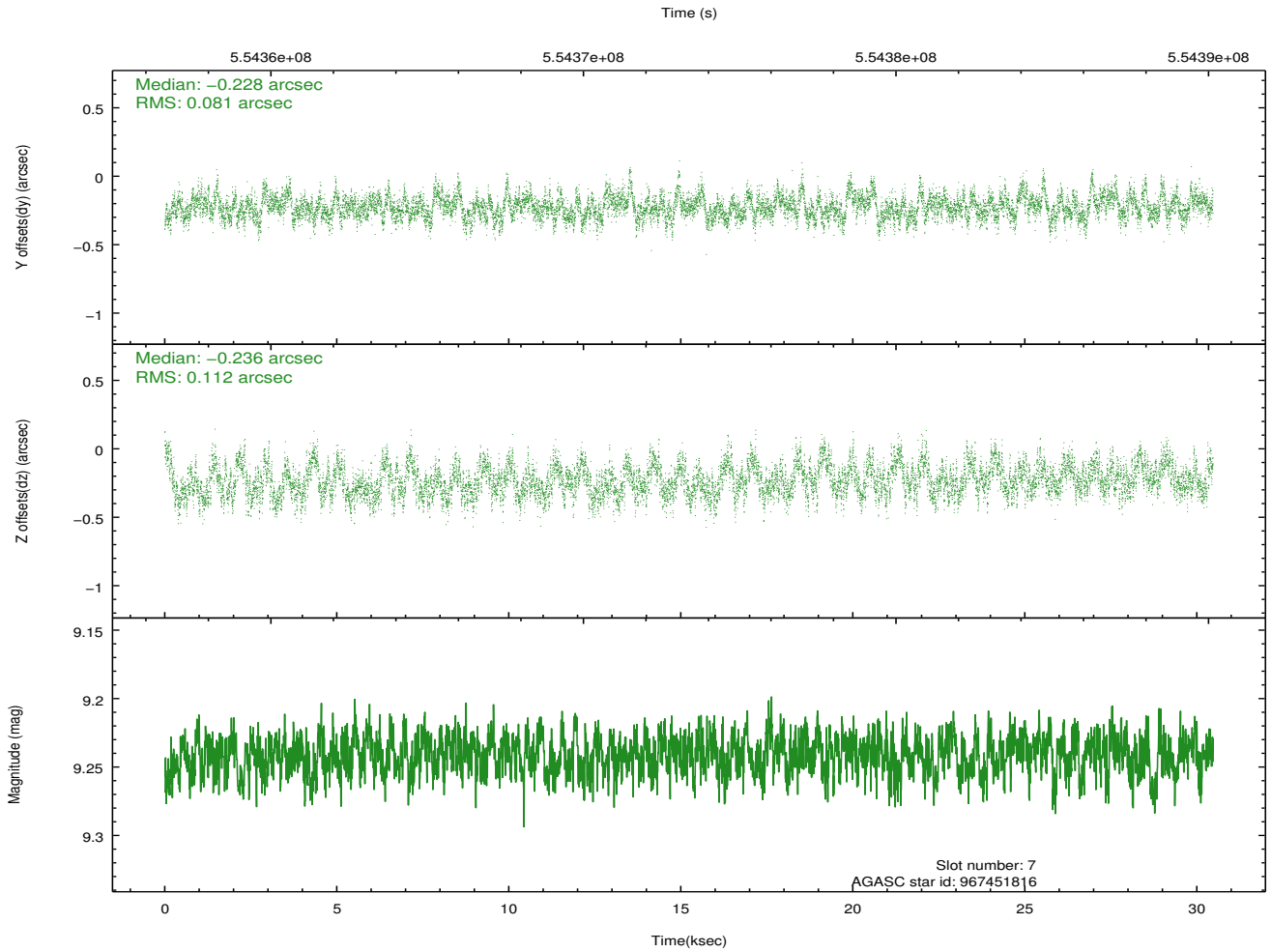
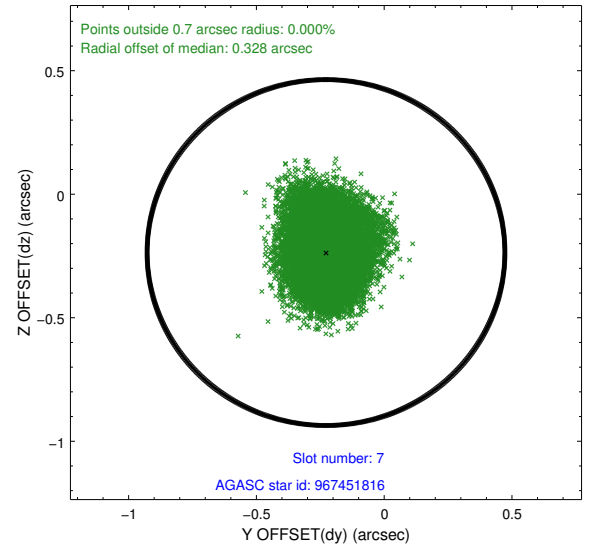
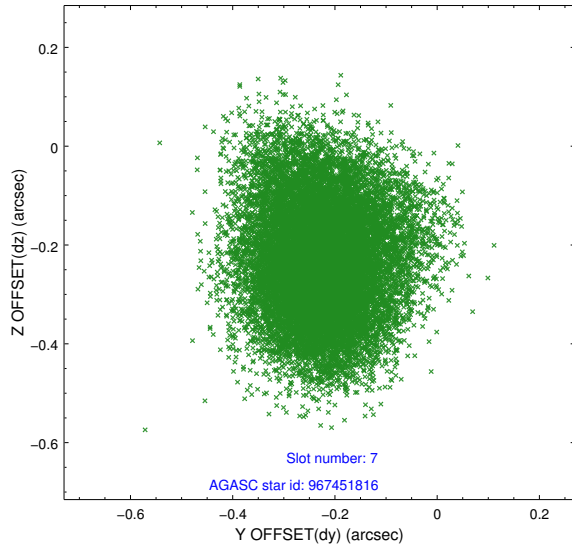
2.4.3 Slot 5



2.4.4 Slot 6

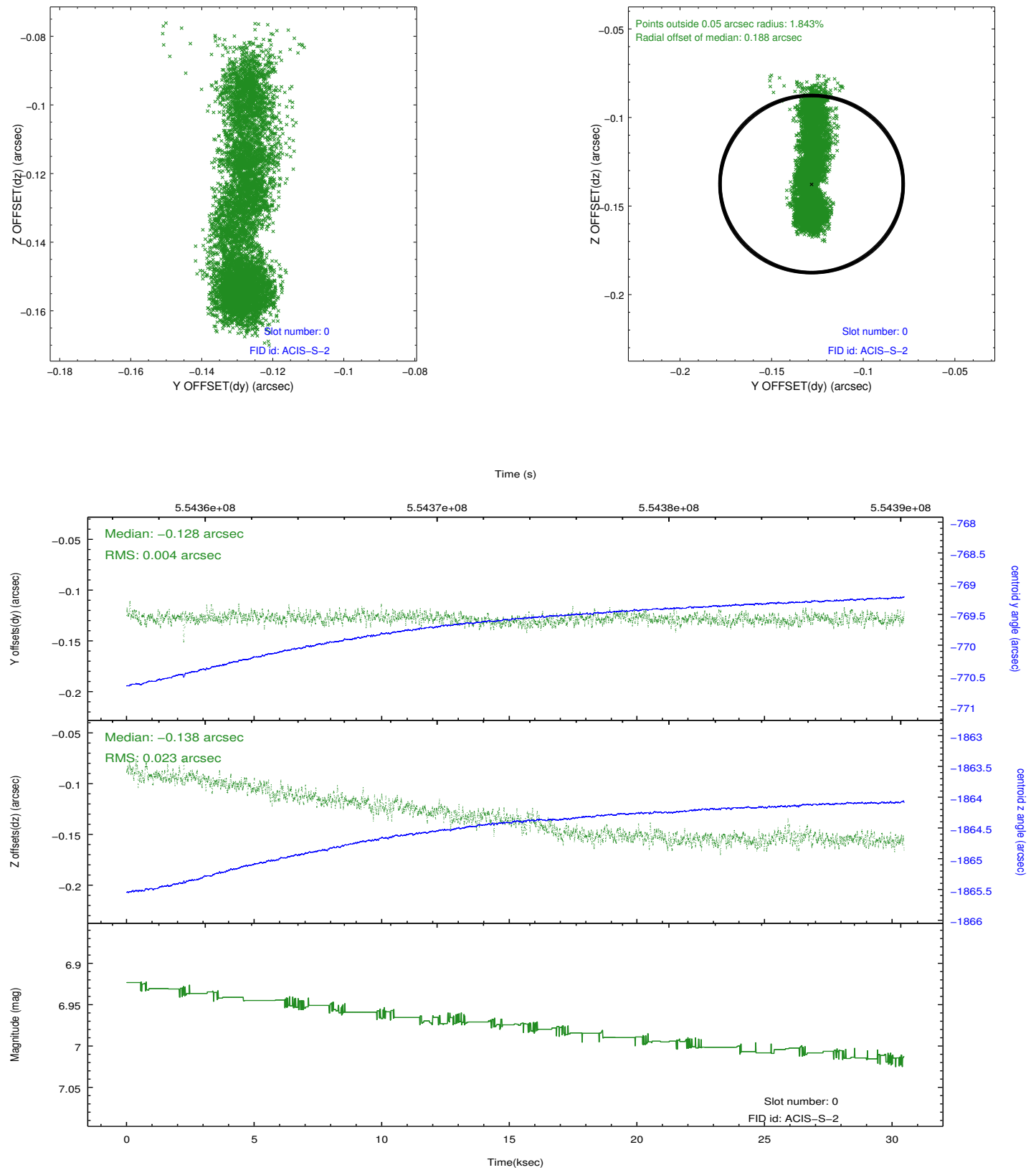


2.4.5 Slot 7

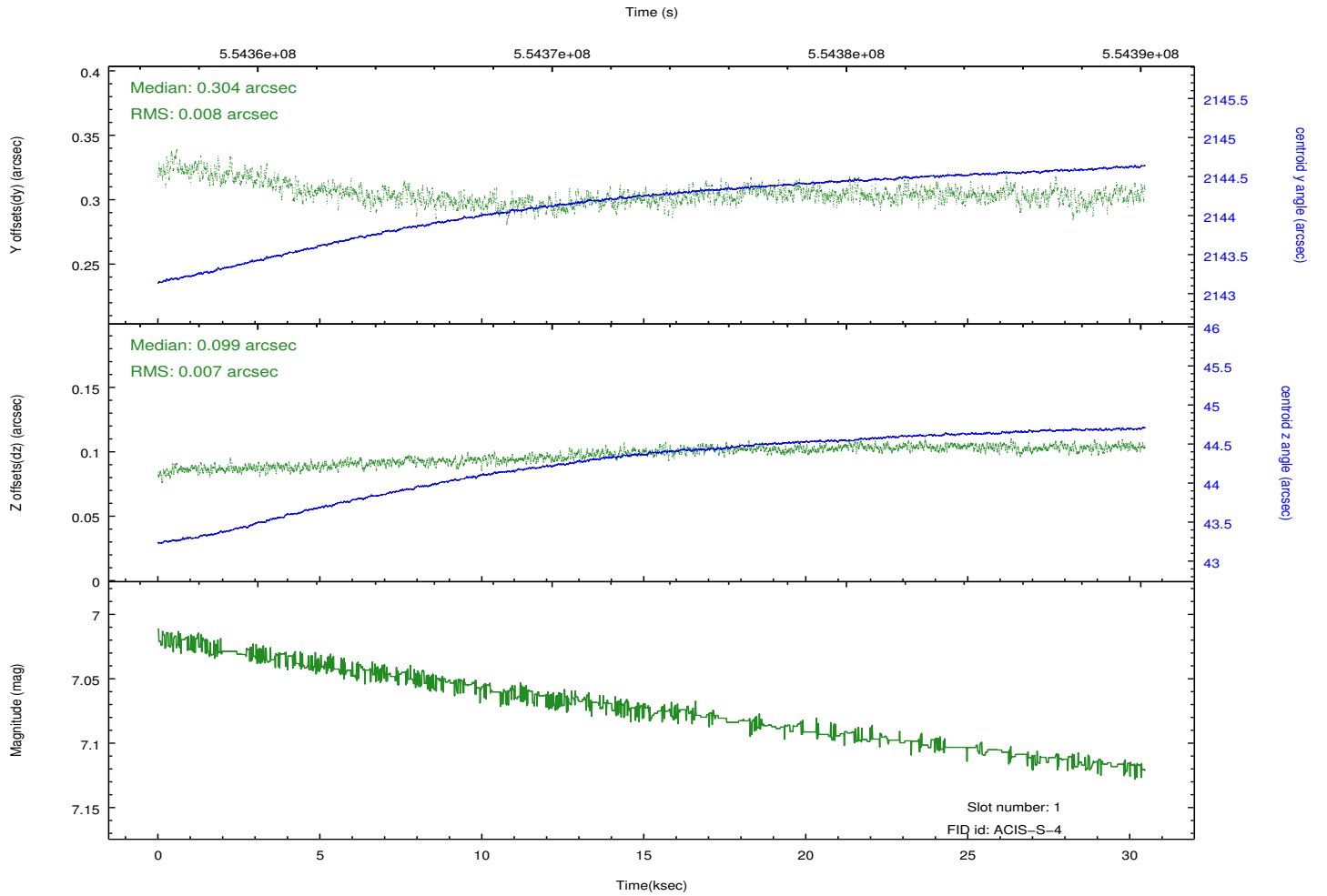
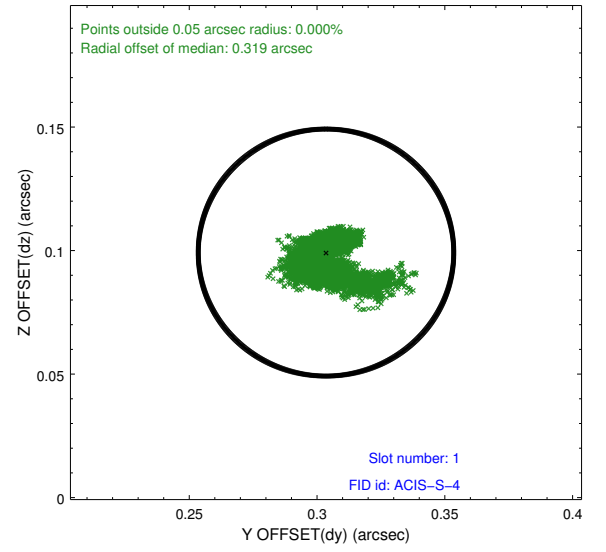
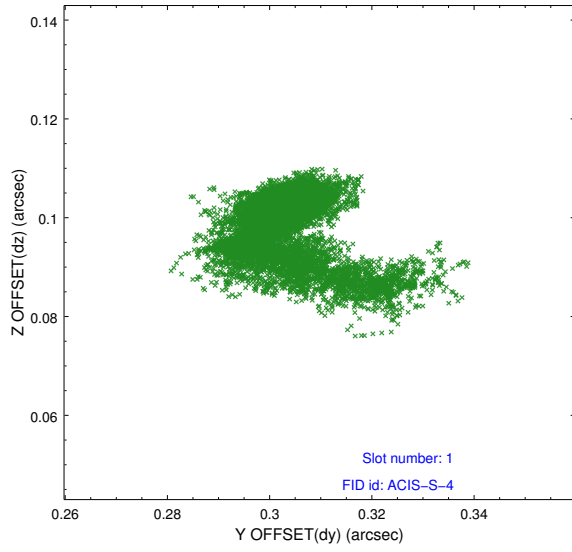


2.5 FID Slots

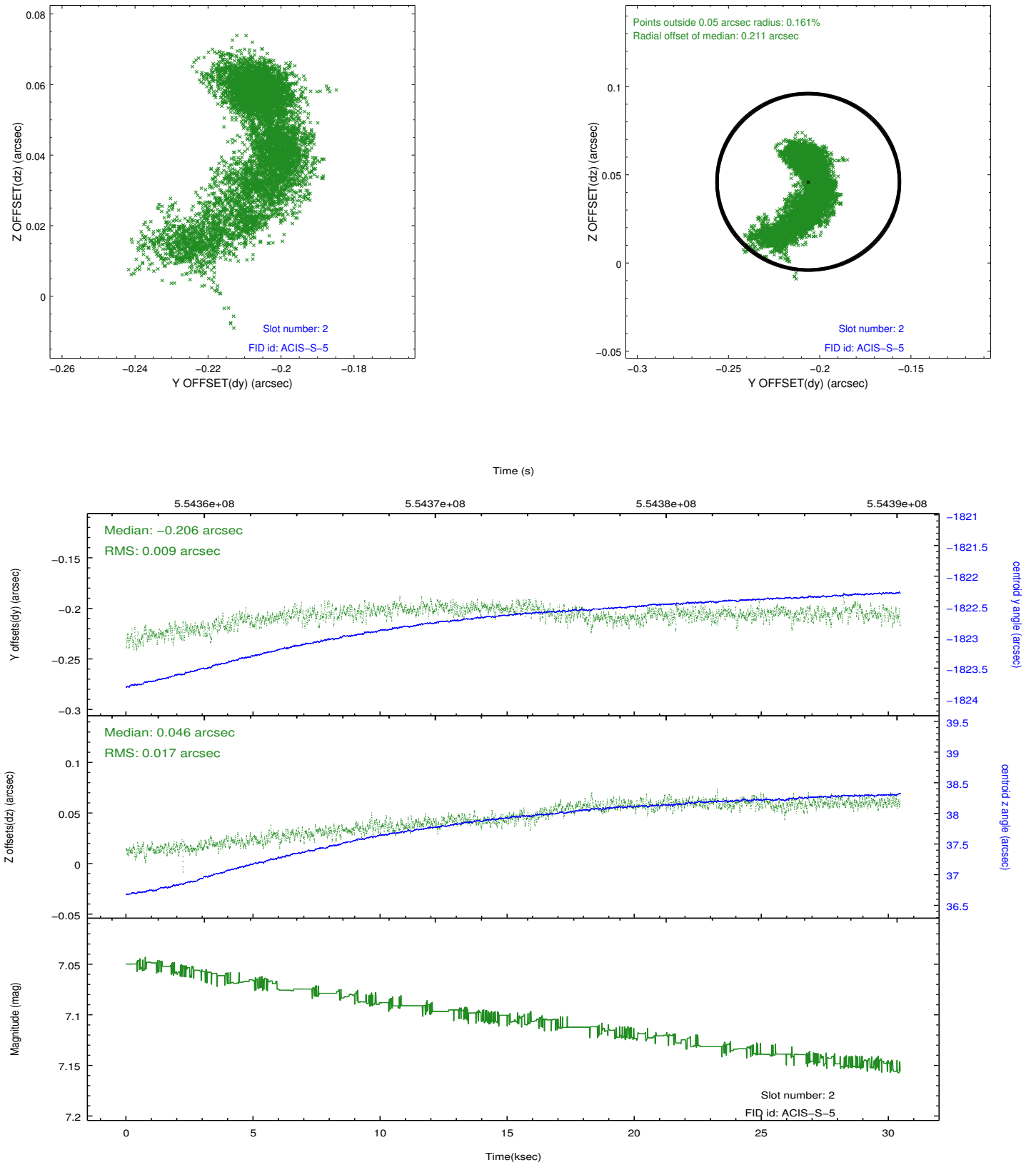
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

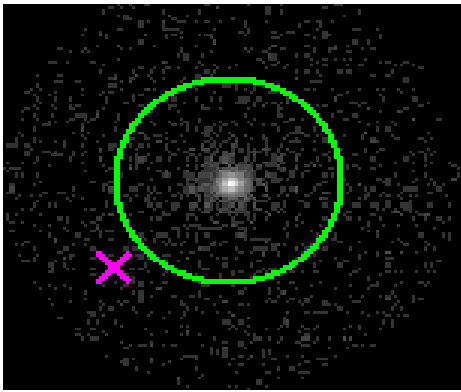


3 Gratings

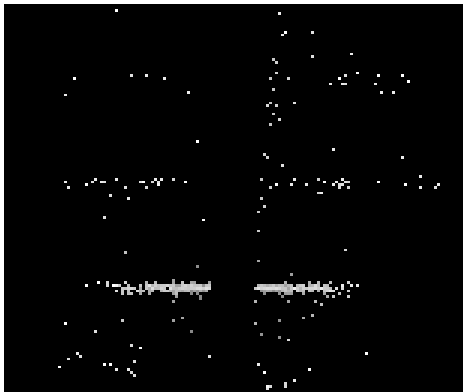
3.1 HEG Arm



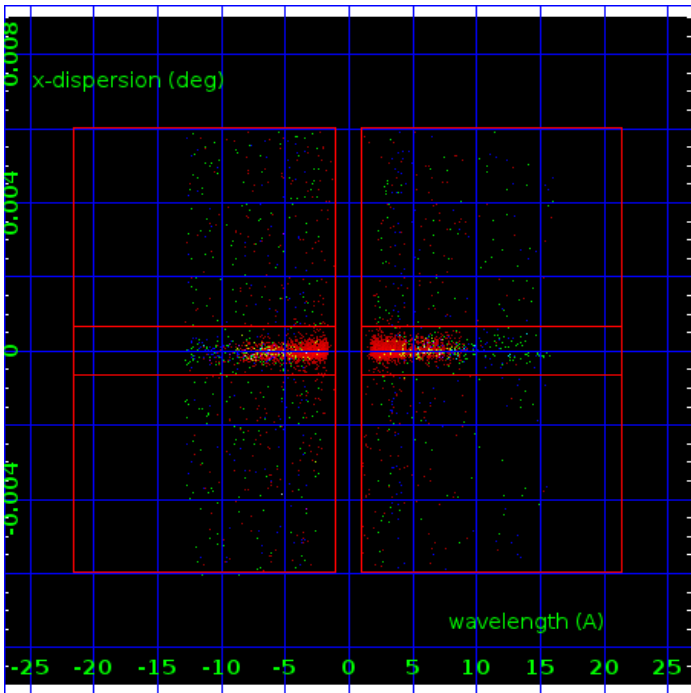
HEG Order Sort 123



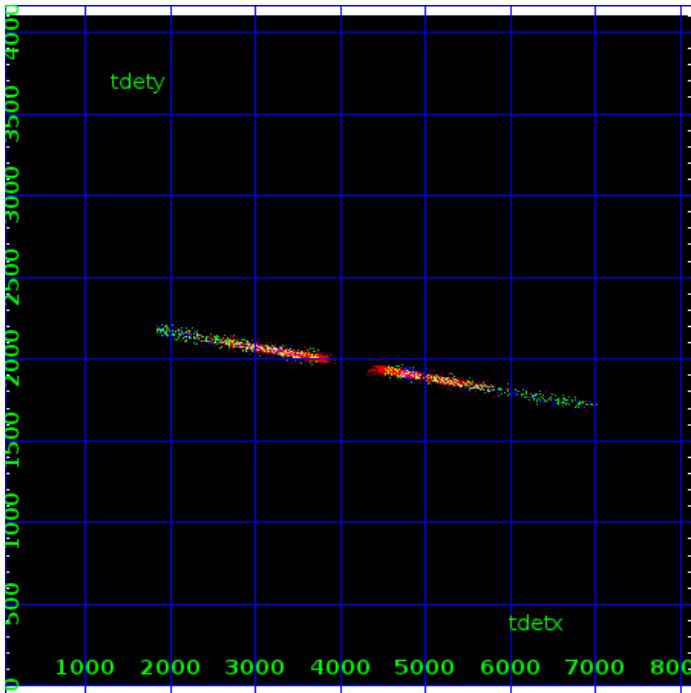
HEG Zero Order



HEG Order Sort ALL

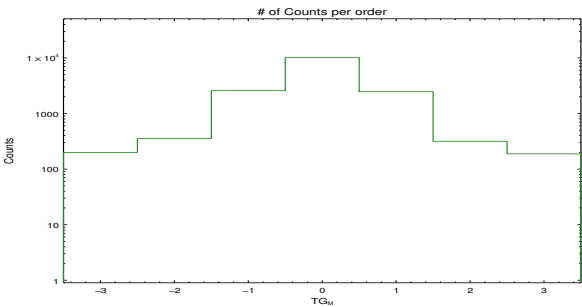


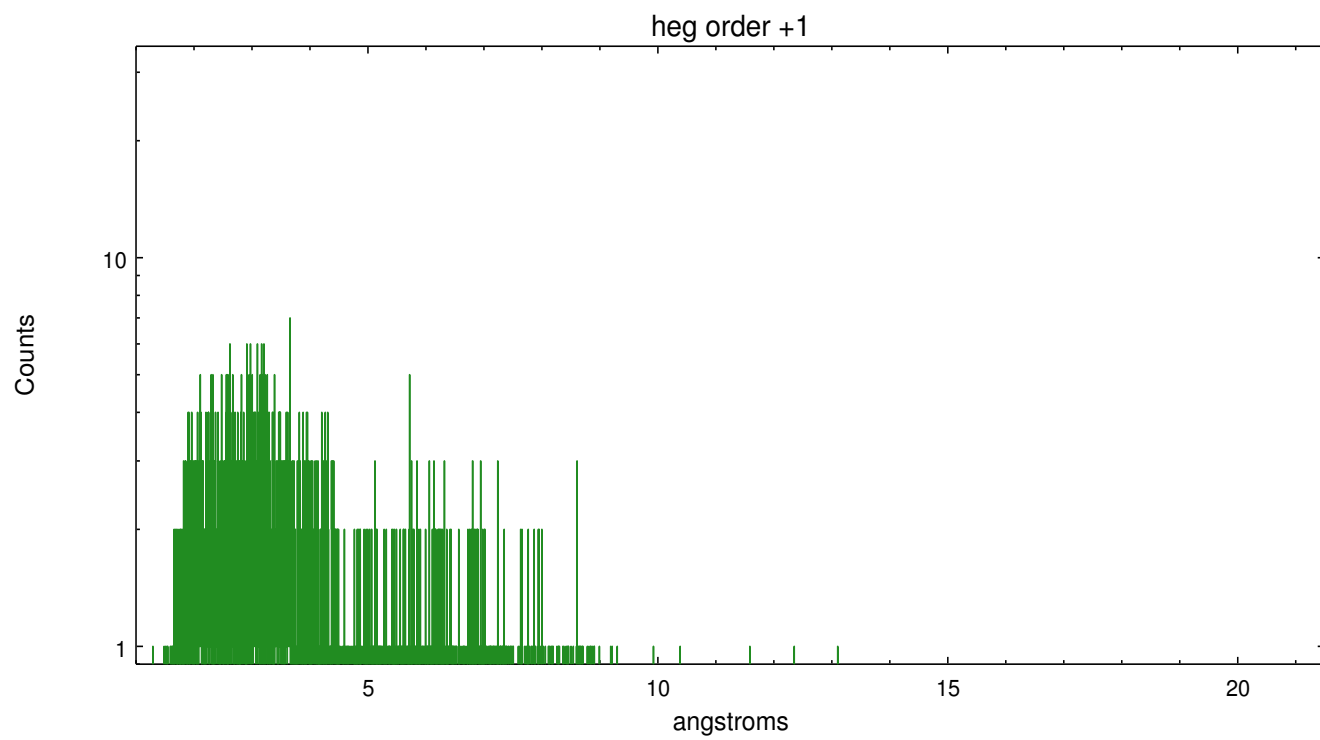
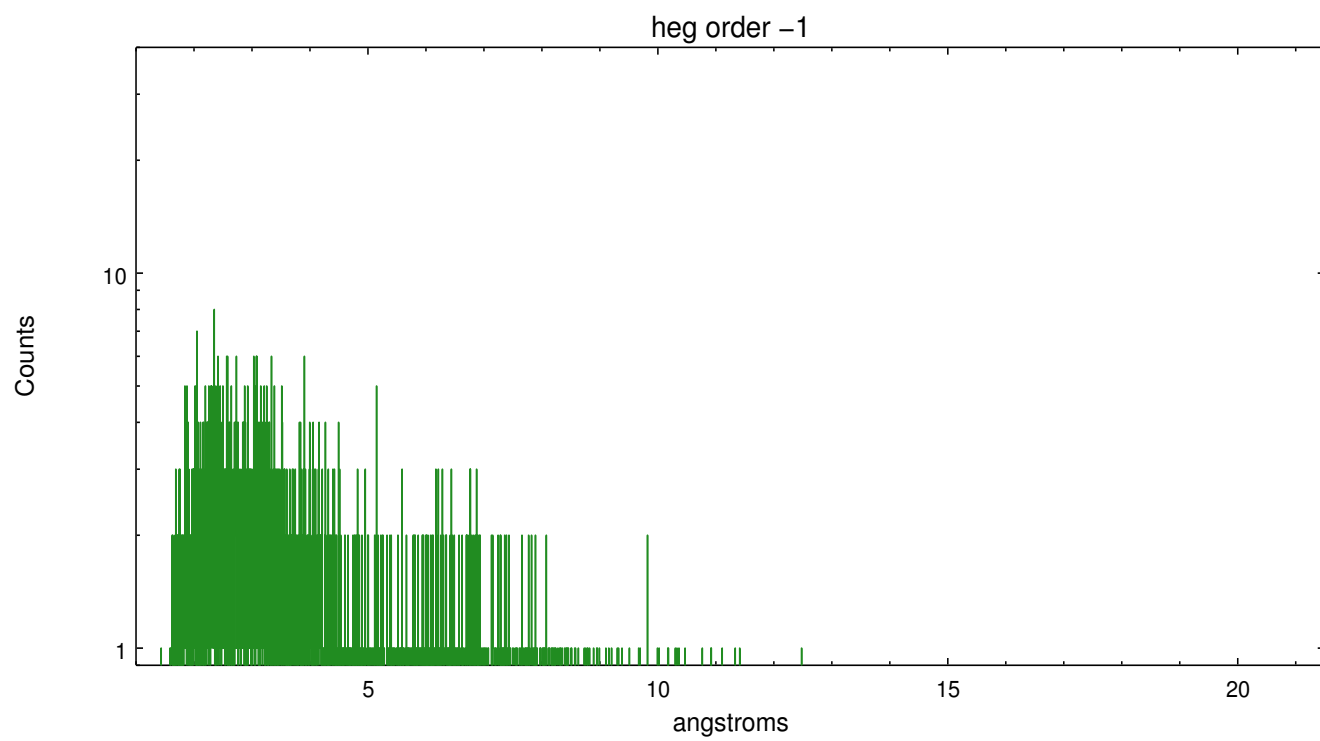
Spot Image HEG



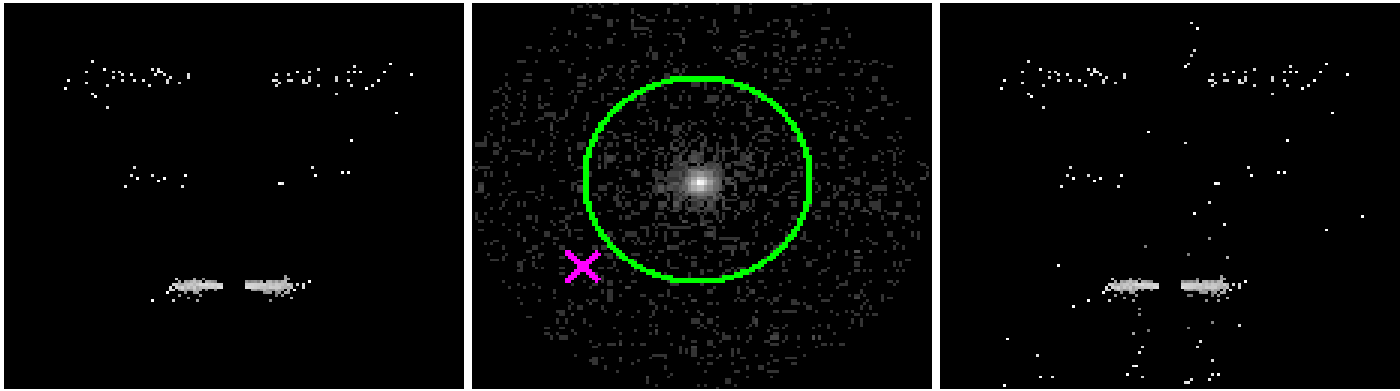
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	199	354	2574	10113	2466	316	188





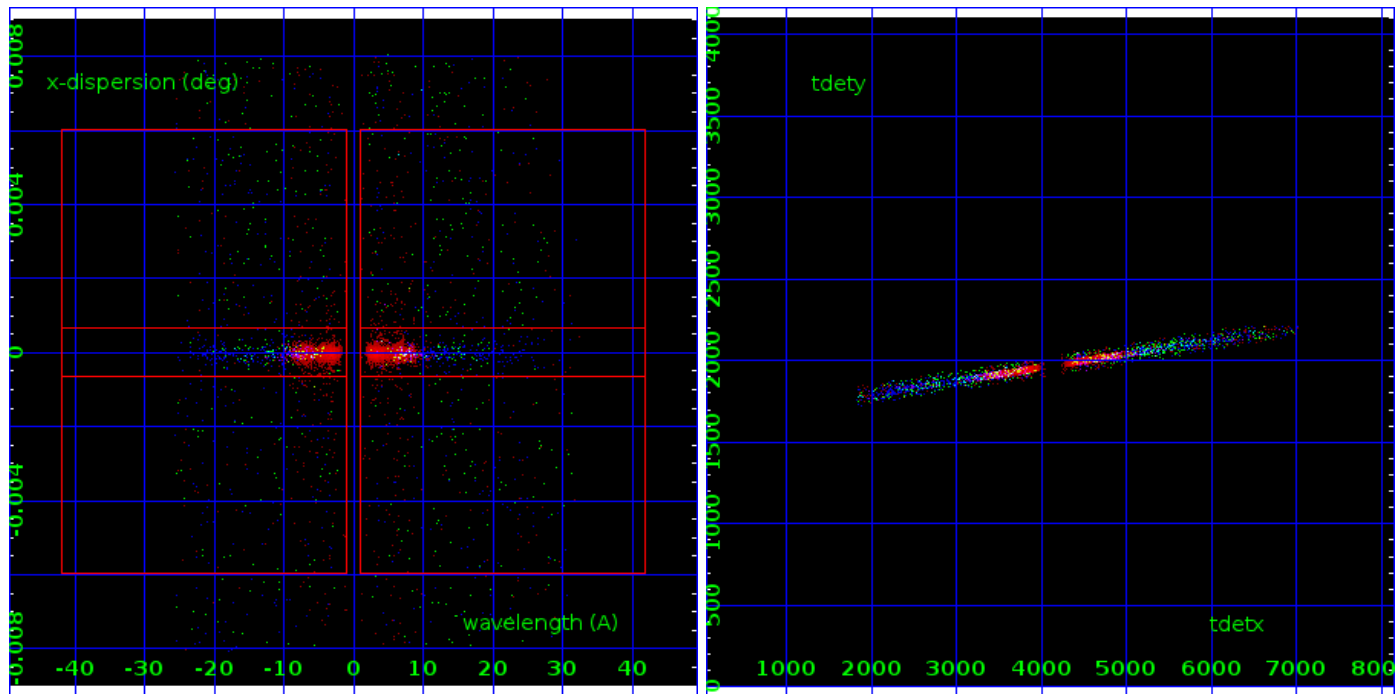
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

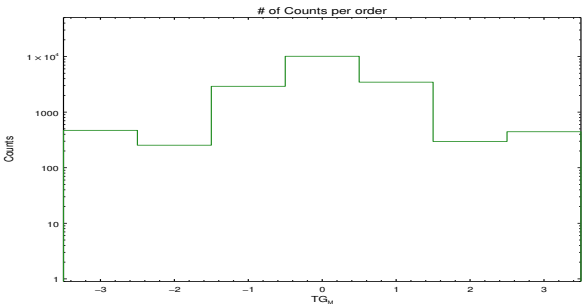
MEG Order Sort ALL

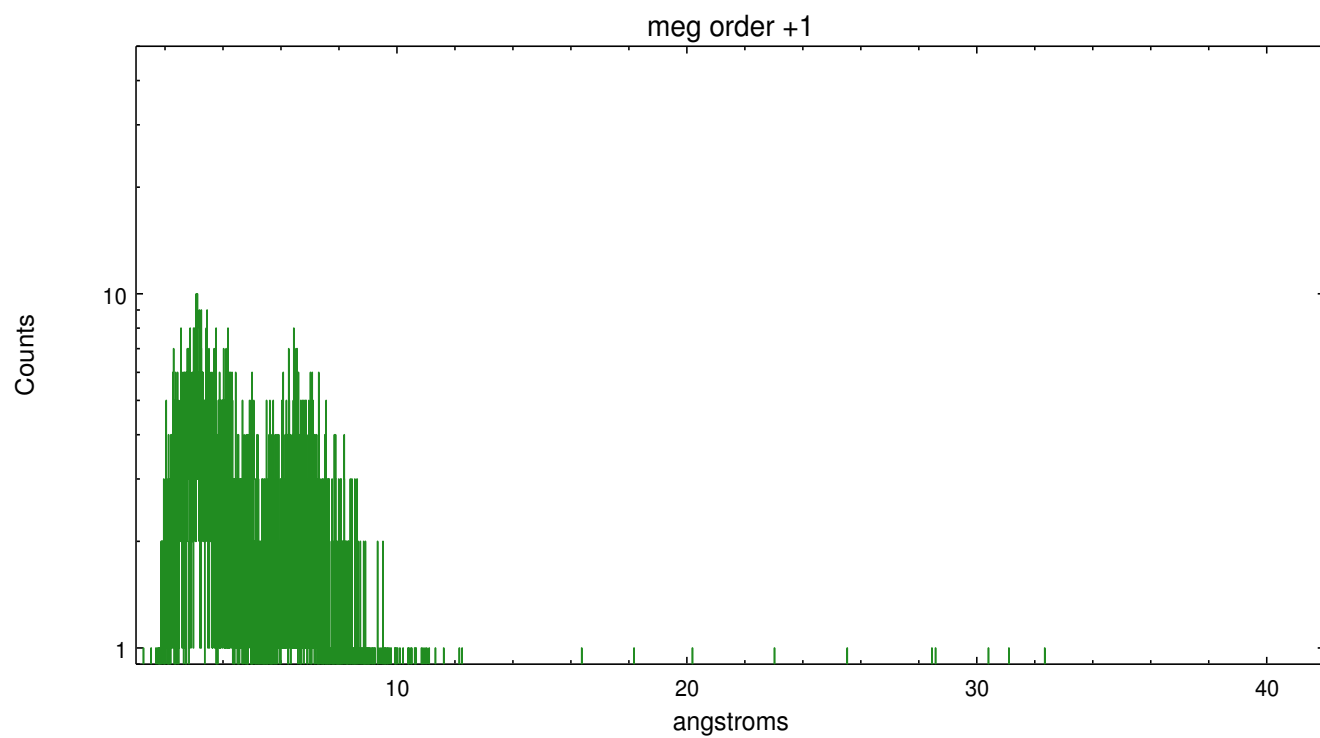
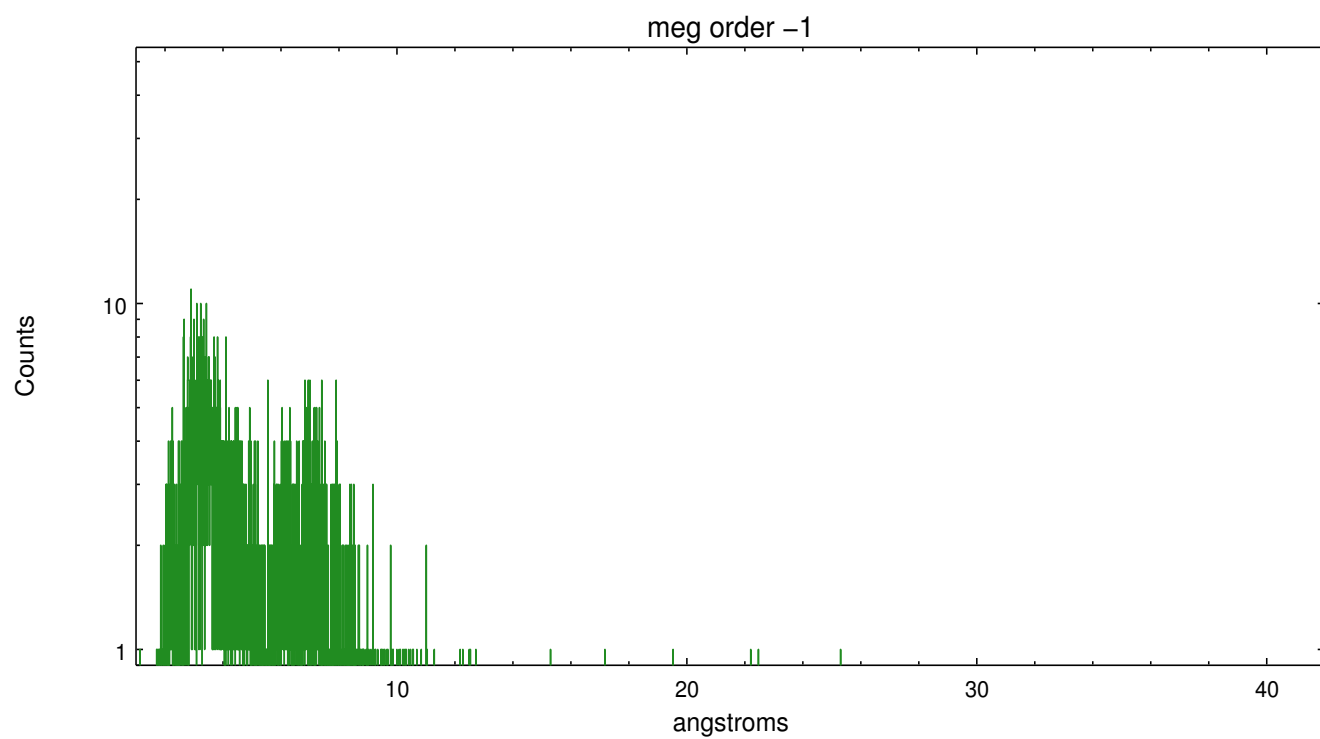


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	470	254	2914	10113	3461	297	444





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2015.07.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.076219317436

A.2 Comments