

V&V Reference Report

L2 ASCDS Version : 10.4.3

Observation 17737 - L2 Version 2
Chandra X-Ray Center

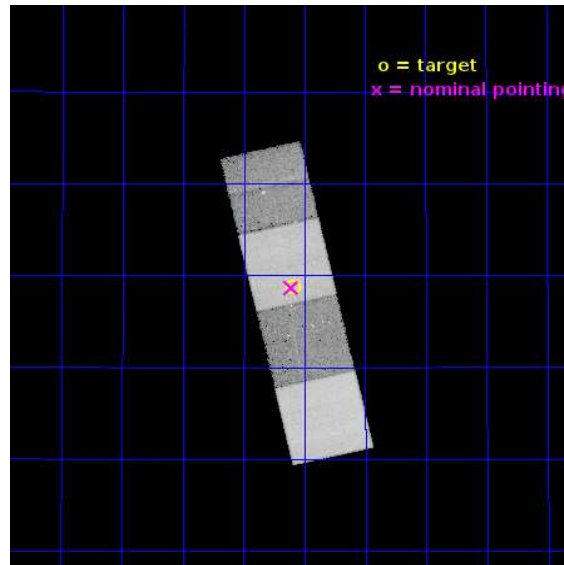
L2 Processing Date : Dec 17 2015

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1 Front

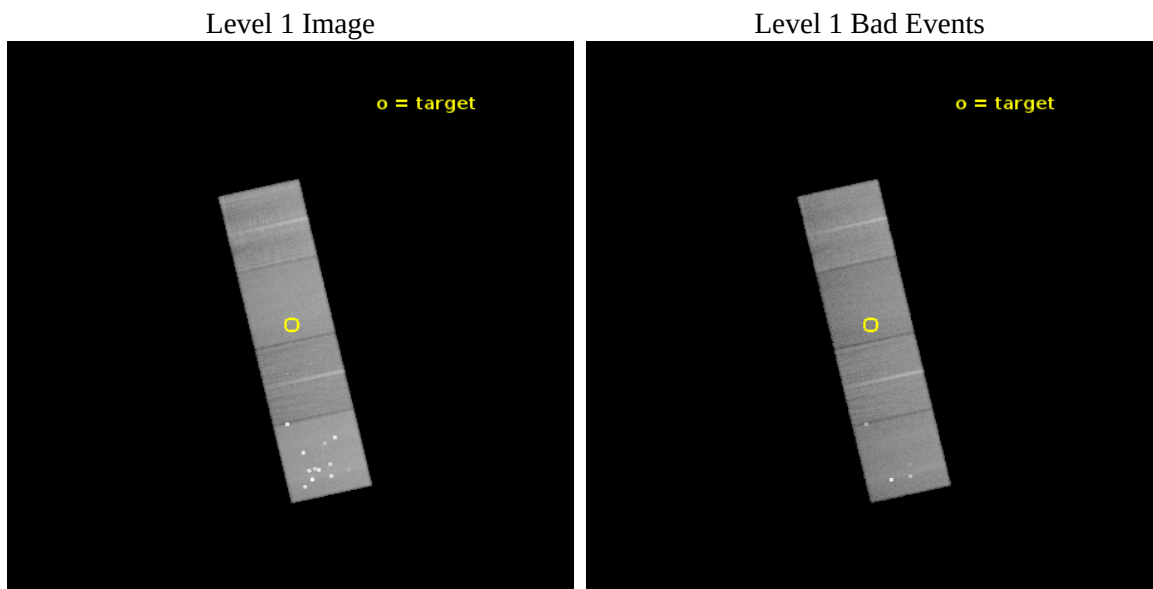
seq_num	201048	Sequence number
obs_id	17737	Observation id
title	Using high resolution x-ray spectra to probe accretion, abundances, and coronal activity in the young cluster IC 348	Proposal title
observer	Dr. David Huenemoerder	Principal investigator
object	IC 348	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	56.149167	Observer's specified target RA [deg]
dec_targ	32.145306	Observer's specified target Dec [deg]
ra_nom	56.151935656967	Nominal RA [deg]
dec_nom	32.144801429196	Nominal Dec [deg]
roll_nom	257.04877253938	Nominal Roll [deg]
revision	2	Processing version of data
ontime	43060.679821372	Sum of GTIs [s]
livetime	42498.060338695	Livetime [s]
ontime5	43060.638781428	Sum of GTIs [s]
ontime6	43060.597741365	Sum of GTIs [s]
ontime7	43060.679821372	Sum of GTIs [s]
ontime8	43060.556701422	Sum of GTIs [s]
l2events	361151	Number of level 2 events



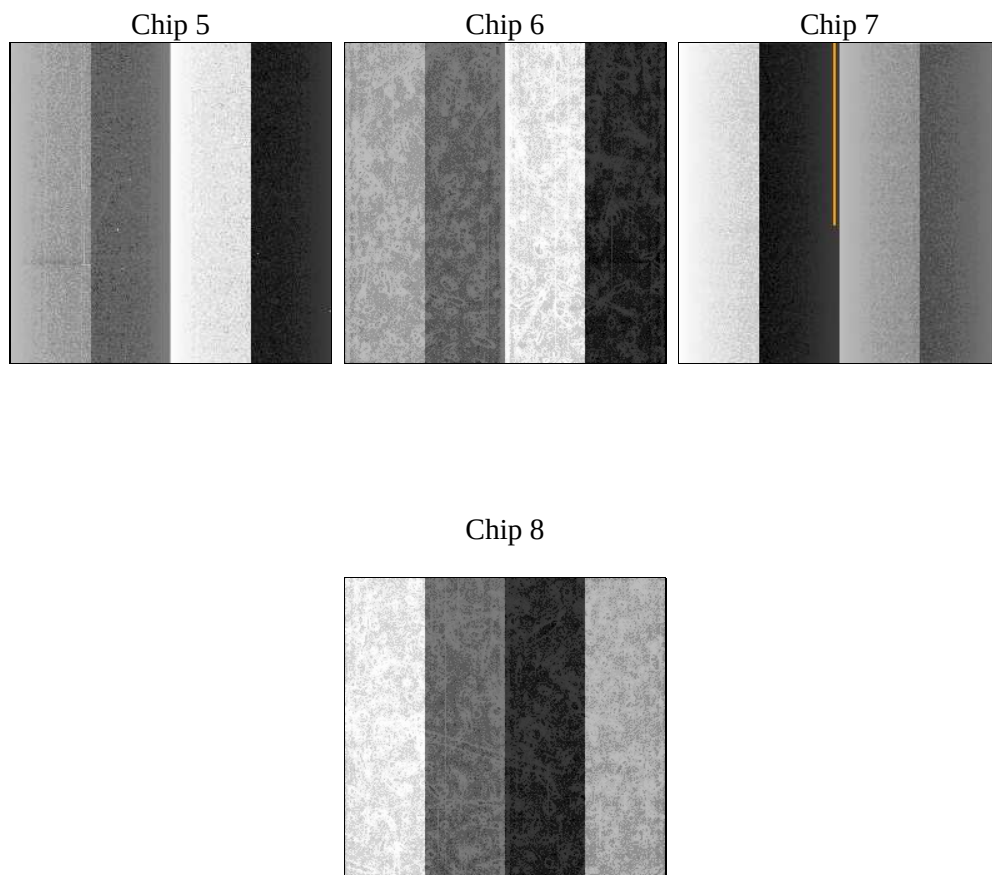
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3	Processing system revision	ontime	43060.679821372	Sum of GTIs [s]
caldsver	4.7.0	 	ontime5	43060.638781428	Sum of GTIs [s]
date	2015-12-17T16:20:28	Date and time of file creation	ontime6	43060.597741365	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	43060.679821372	Sum of GTIs [s]
			ontime8	43060.556701422	Sum of GTIs [s]
			l1events	1379160	Number of level 1 events
			tgmethod	MANUAL	Method used to create src1a file
			zo_pos	(4192.75, 4088.44)	src1a sky pixel position

2.1.4 Events

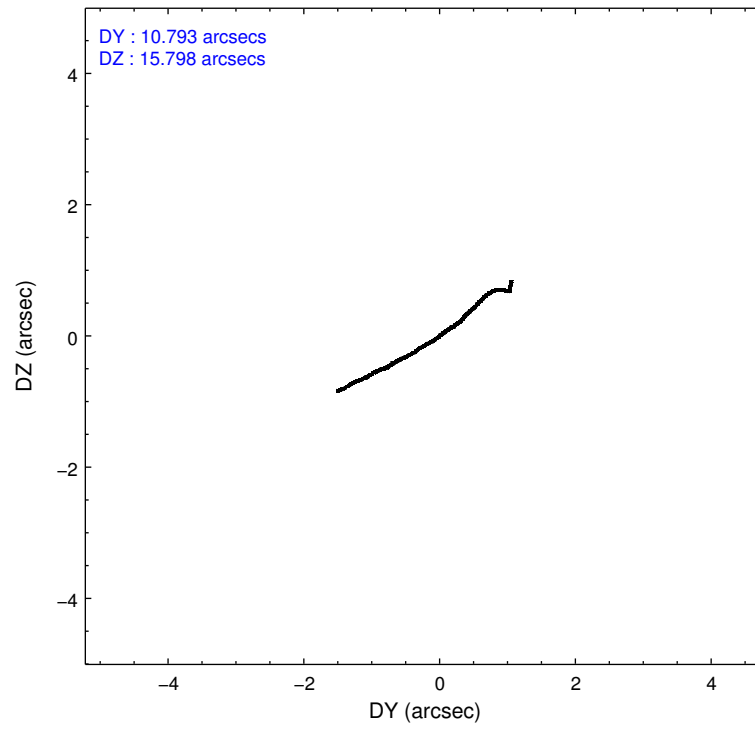
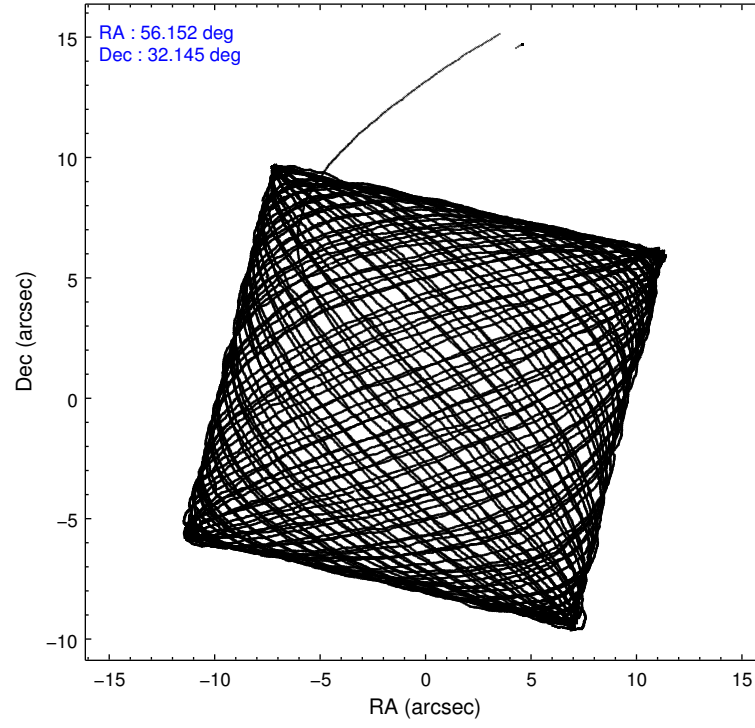
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	500325	245396	319201	314238
rejected events	217816	215215	182084	235525
rejected %	43%	87%	57%	74%

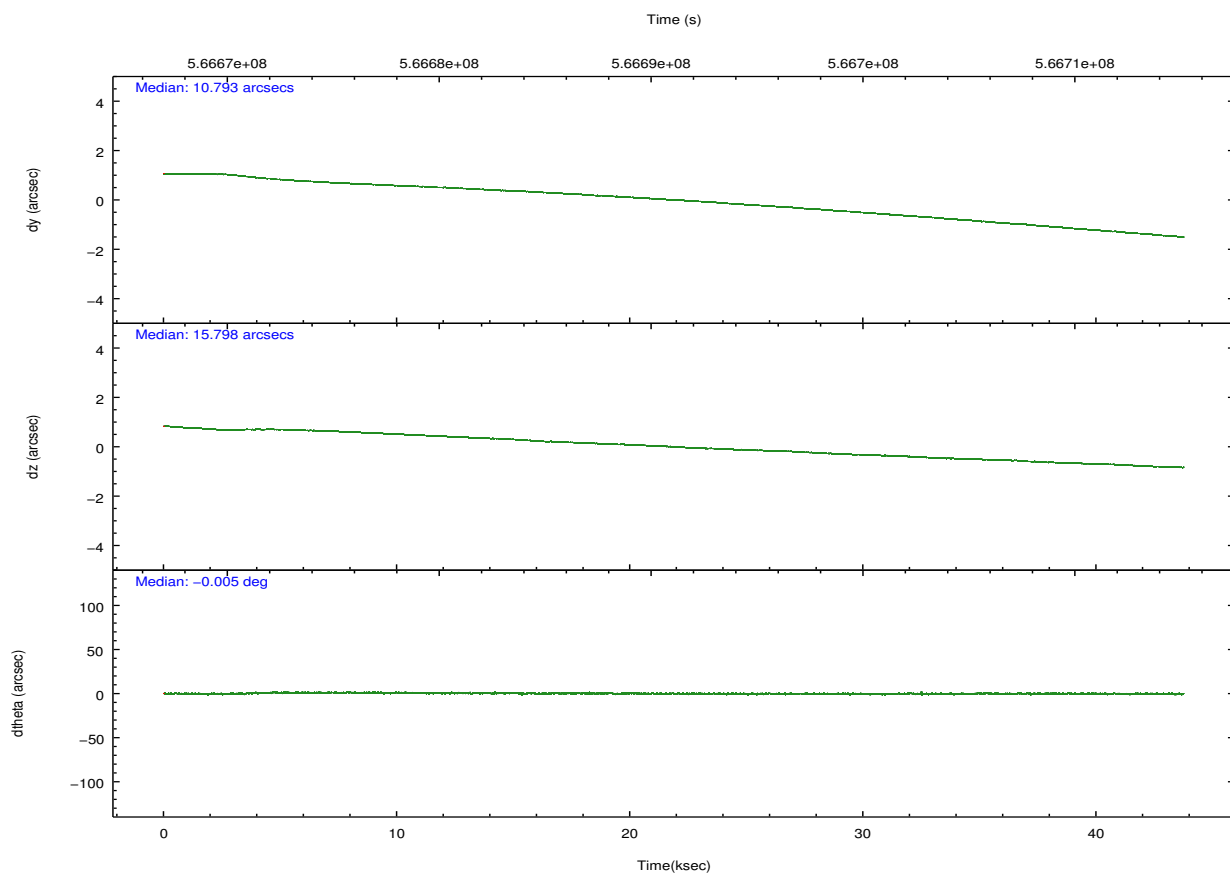
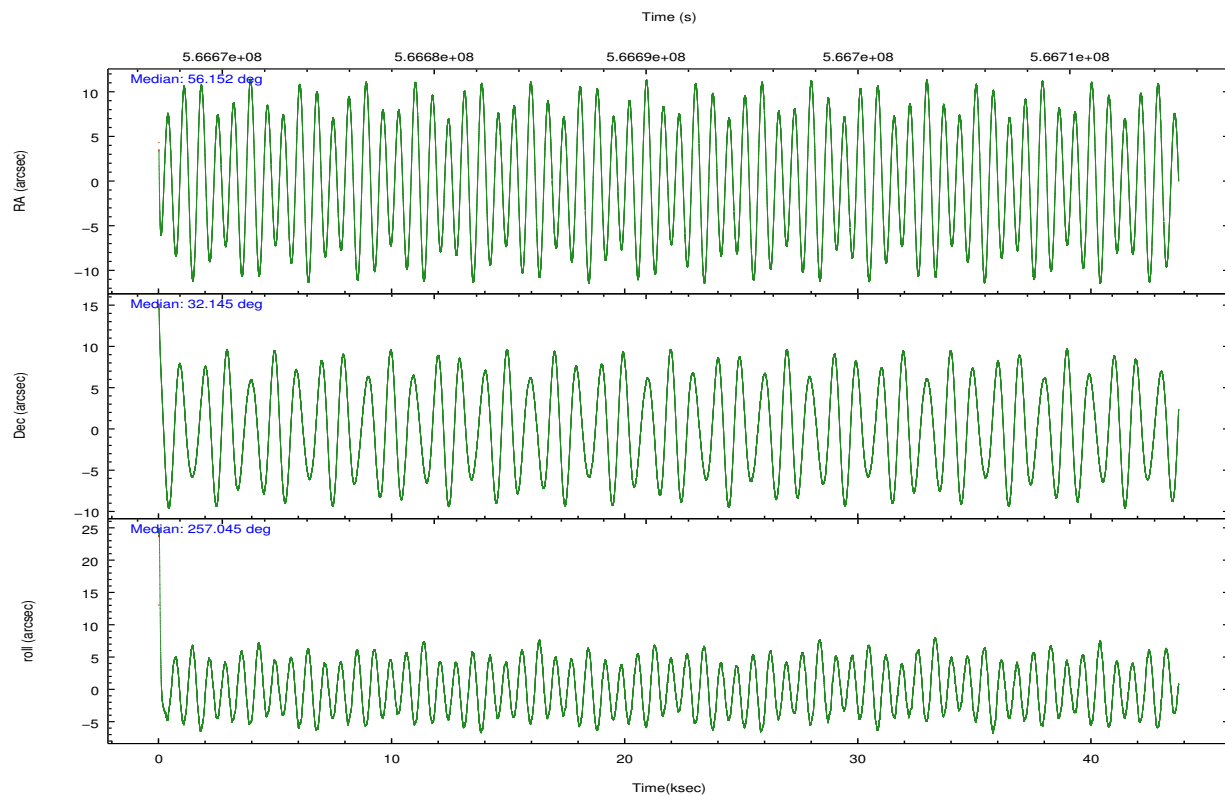
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	80977	10762	11450	22426
	16%	4%	3%	7%
grade 1 events	859	121	385	230
	0%	0%	0%	0%
grade 2 events	74731	6953	29080	19276
	14%	2%	9%	6%
grade 3 events	8194	2692	10573	7863
	1%	1%	3%	2%
grade 4 events	7539	2547	10296	7491
	1%	1%	3%	2%
grade 5 events	28367	11081	29960	17026
	5%	4%	9%	5%
grade 6 events	111092	7230	75730	21660
	22%	2%	23%	6%
grade 7 events	188566	204010	151727	218266
	37%	83%	47%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	56.142008	56.15193565696742	CCD I2 on	N	N
[deg] Pointing Dec	32.170940	32.1448014291956	CCD I3 on	N	N
[deg] Pointing Roll	256.897419	257.0487725393837	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	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	566669950.184000	566667936.72715	CCD S5 on	O2	N
Observation start date	2015-12-16T16:18:02	2015-12-16T15:45:36	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	566712950.184000	566714050.96727	On-chip summing requested	N	N
Observation end date	2015-12-17T04:14:42	2015-12-17T04:34:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



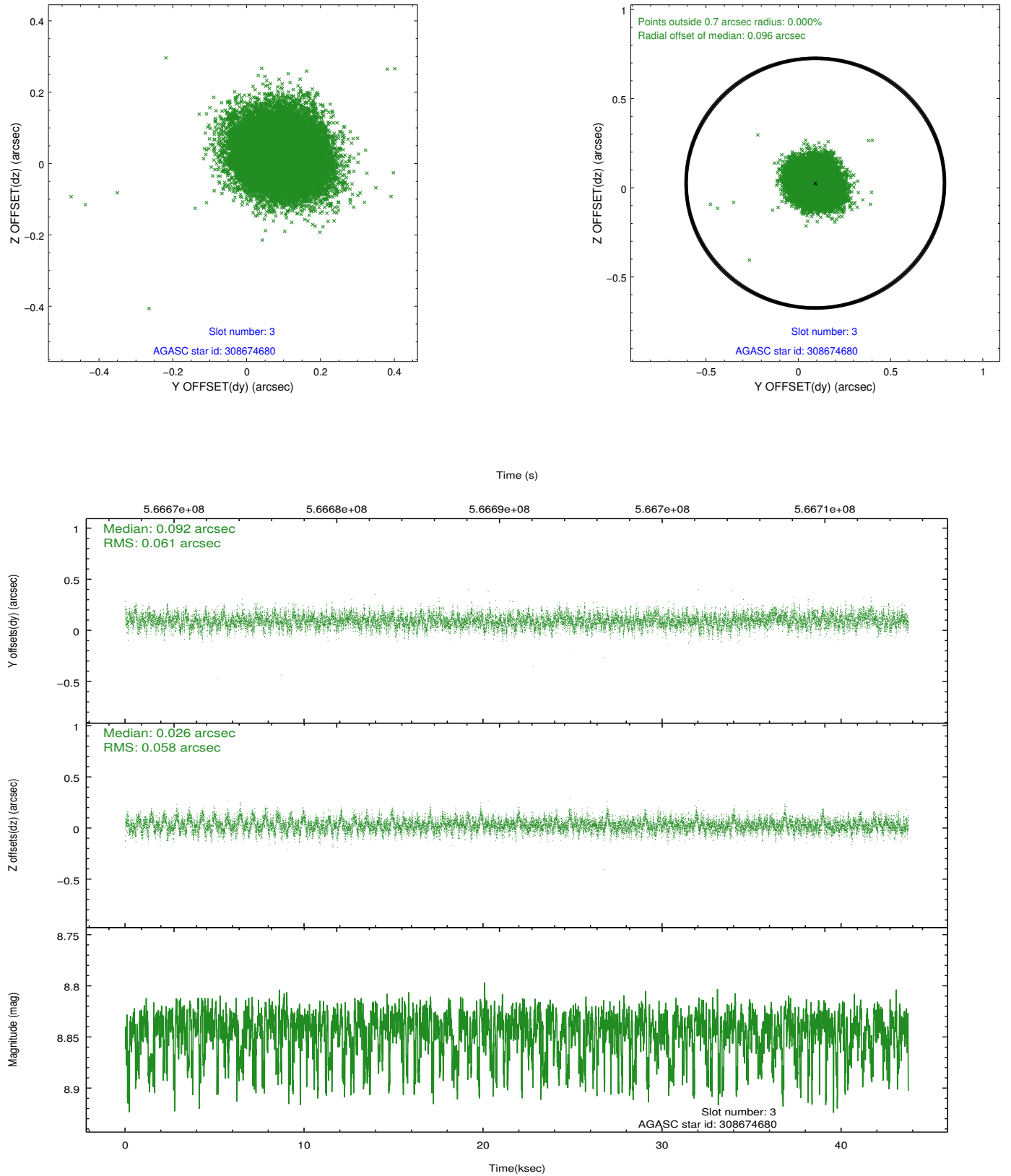


Slot Statistics

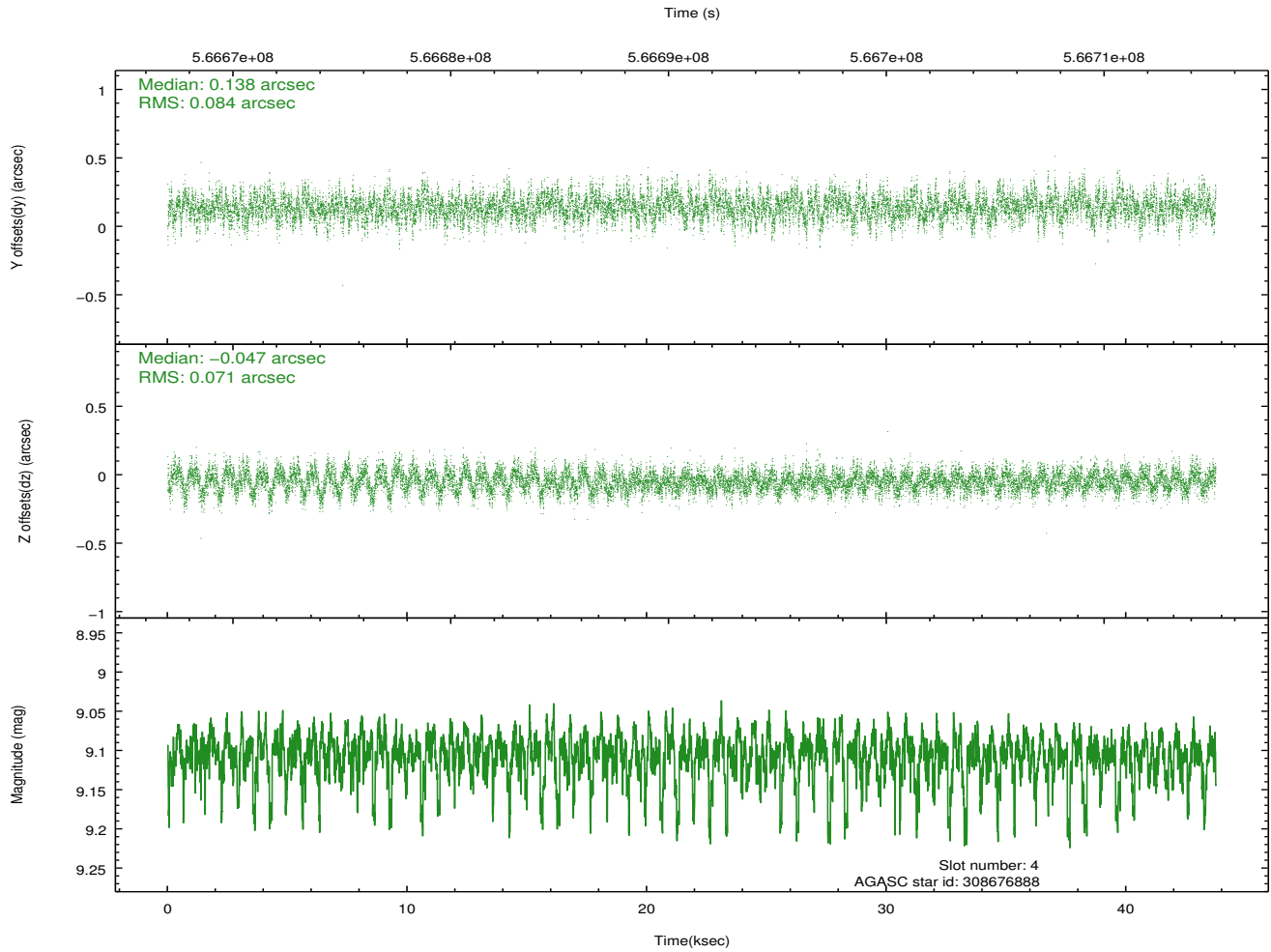
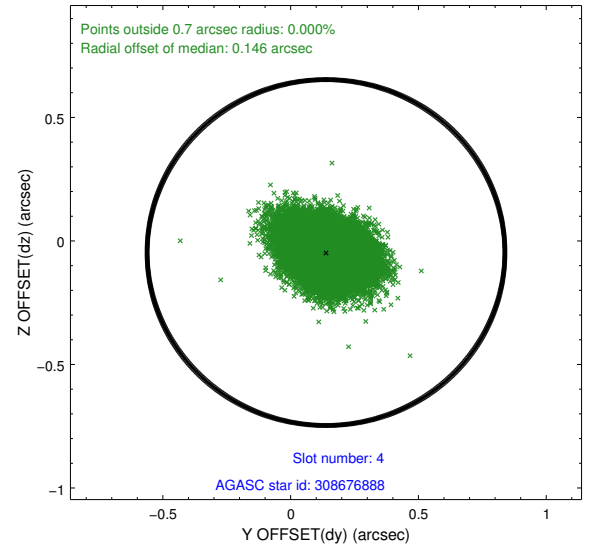
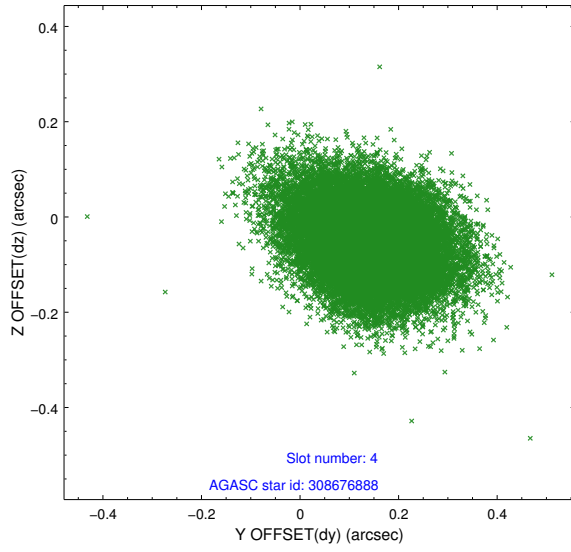
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.12	10667	-0.137	-0.054	0.017	0.033	0.000000	0.000000	-763.67	-1737.27
1	FID		ACIS-S-4	7.23	10670	0.346	0.080	0.014	0.023	0.000000	0.000000	2150.06	171.38
2	FID		ACIS-S-5	7.25	10670	-0.242	-0.018	0.016	0.028	0.000000	0.000000	-1816.65	164.90
3	GUIDE	used	308674680	8.84	21320	0.092	0.026	0.088	0.145	55.747345	31.652644	2088.84	-754.53
4	GUIDE	used	308676888	9.11	21332	0.138	-0.047	0.116	0.190	55.566279	31.676245	2130.94	-1314.70
5	GUIDE	used	309332904	7.52	21337	-0.076	-0.068	0.089	0.147	56.362777	32.287653	-562.23	558.70
6	GUIDE	used	309336160	7.08	21340	-0.091	-0.036	0.087	0.149	56.670296	32.290187	-786.22	1467.83
7	GUIDE	used	309204808	6.95	21337	-0.070	0.125	0.083	0.125	55.615150	32.939222	-2335.05	-2177.55

2.4 Star Slots

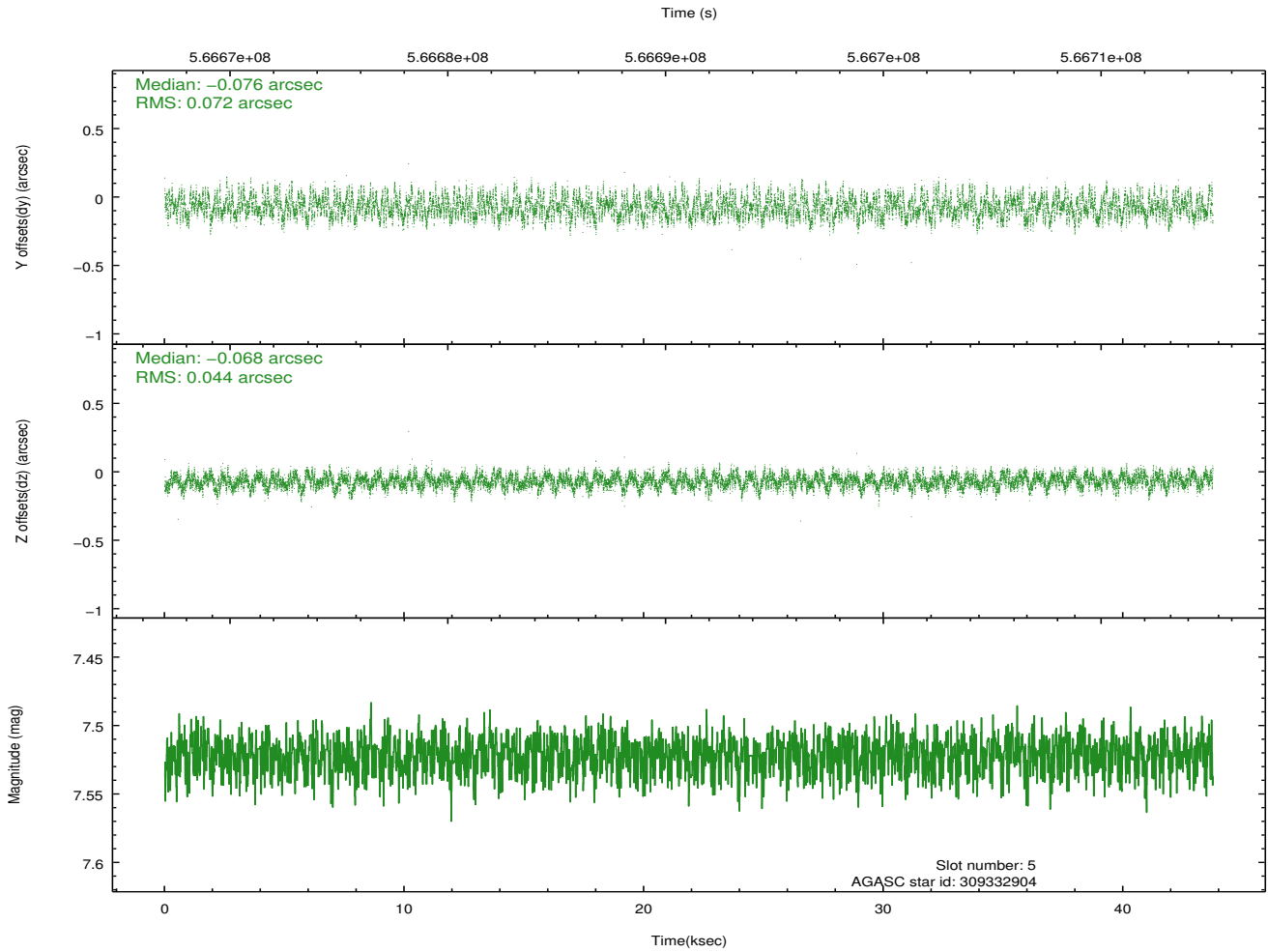
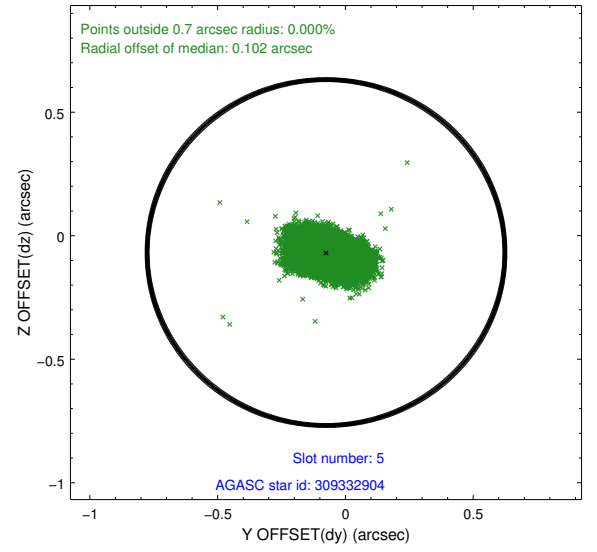
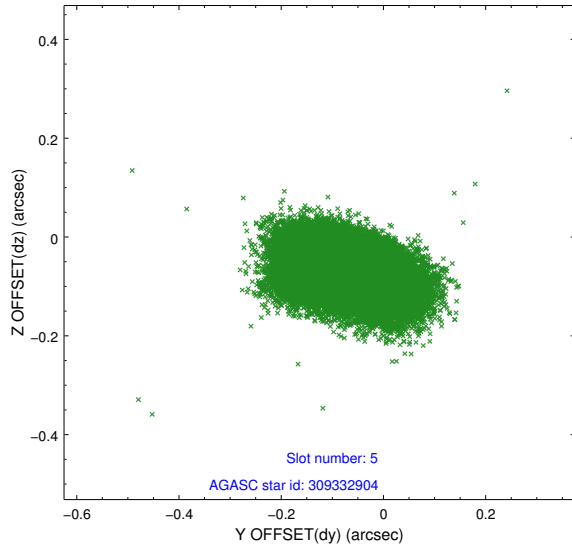
2.4.1 Slot 3



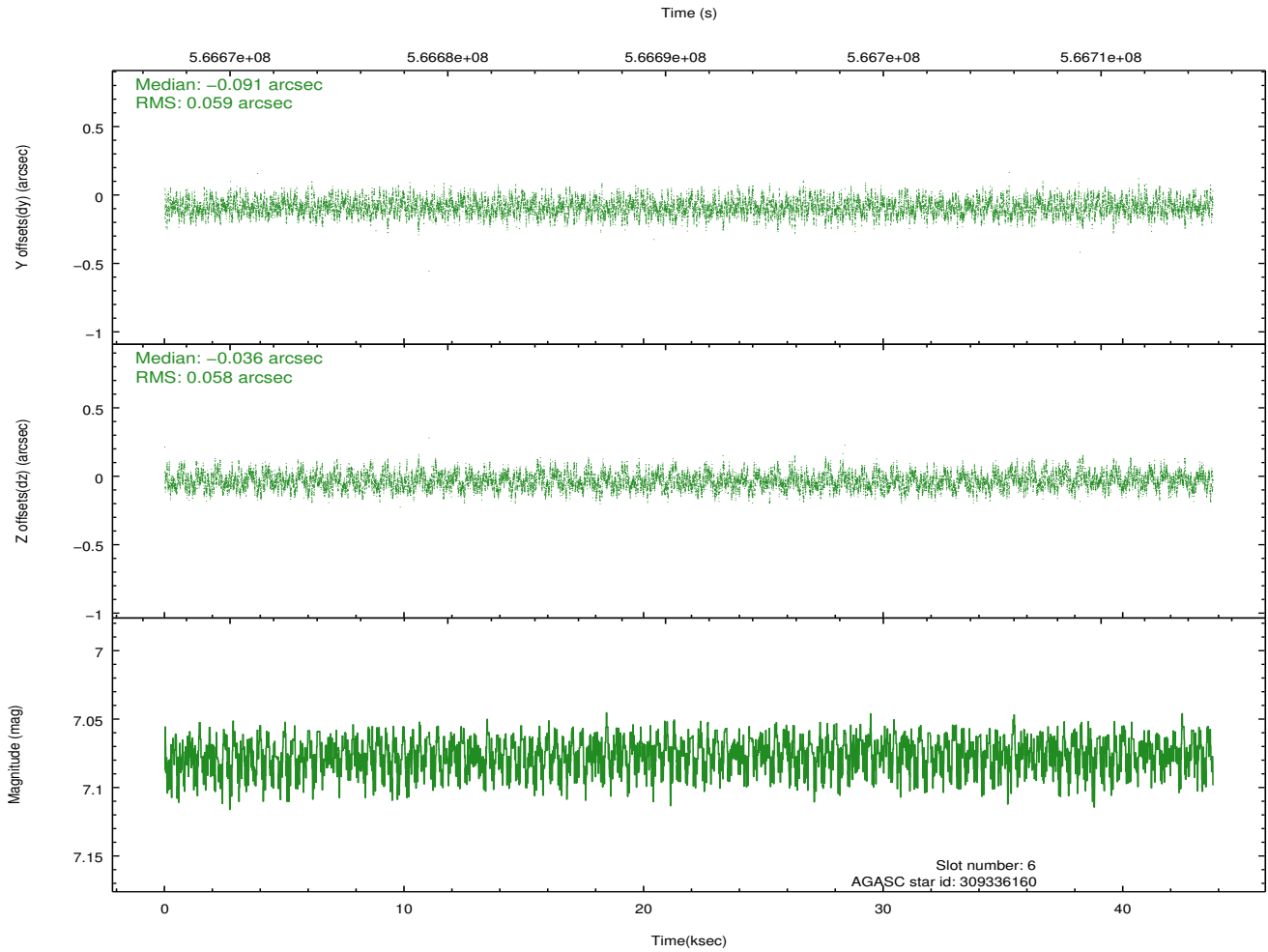
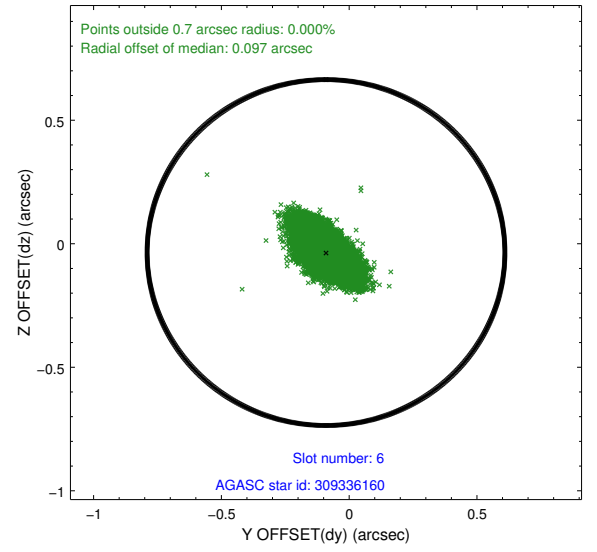
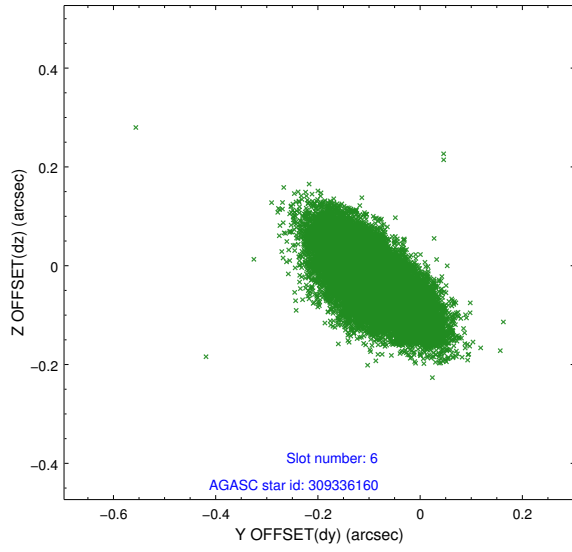
2.4.2 Slot 4



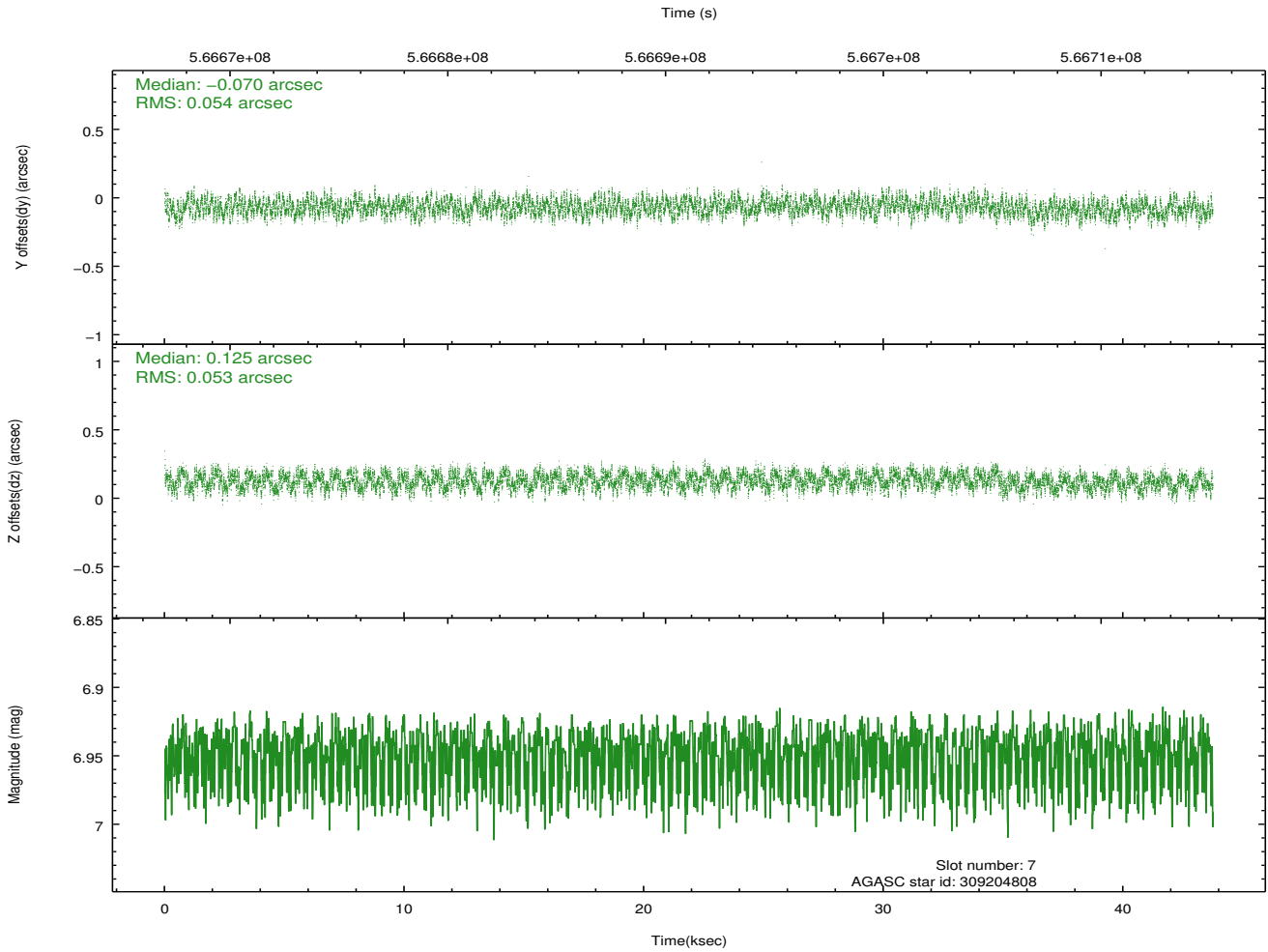
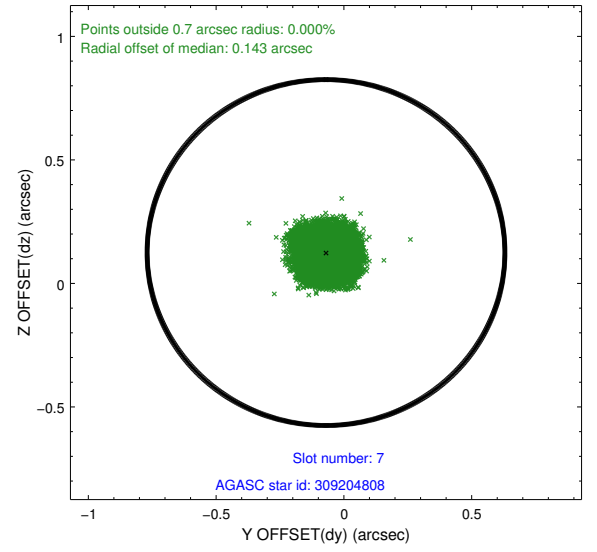
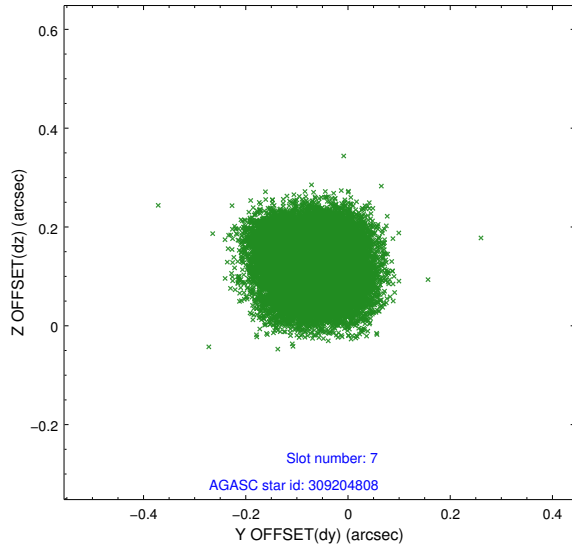
2.4.3 Slot 5



2.4.4 Slot 6

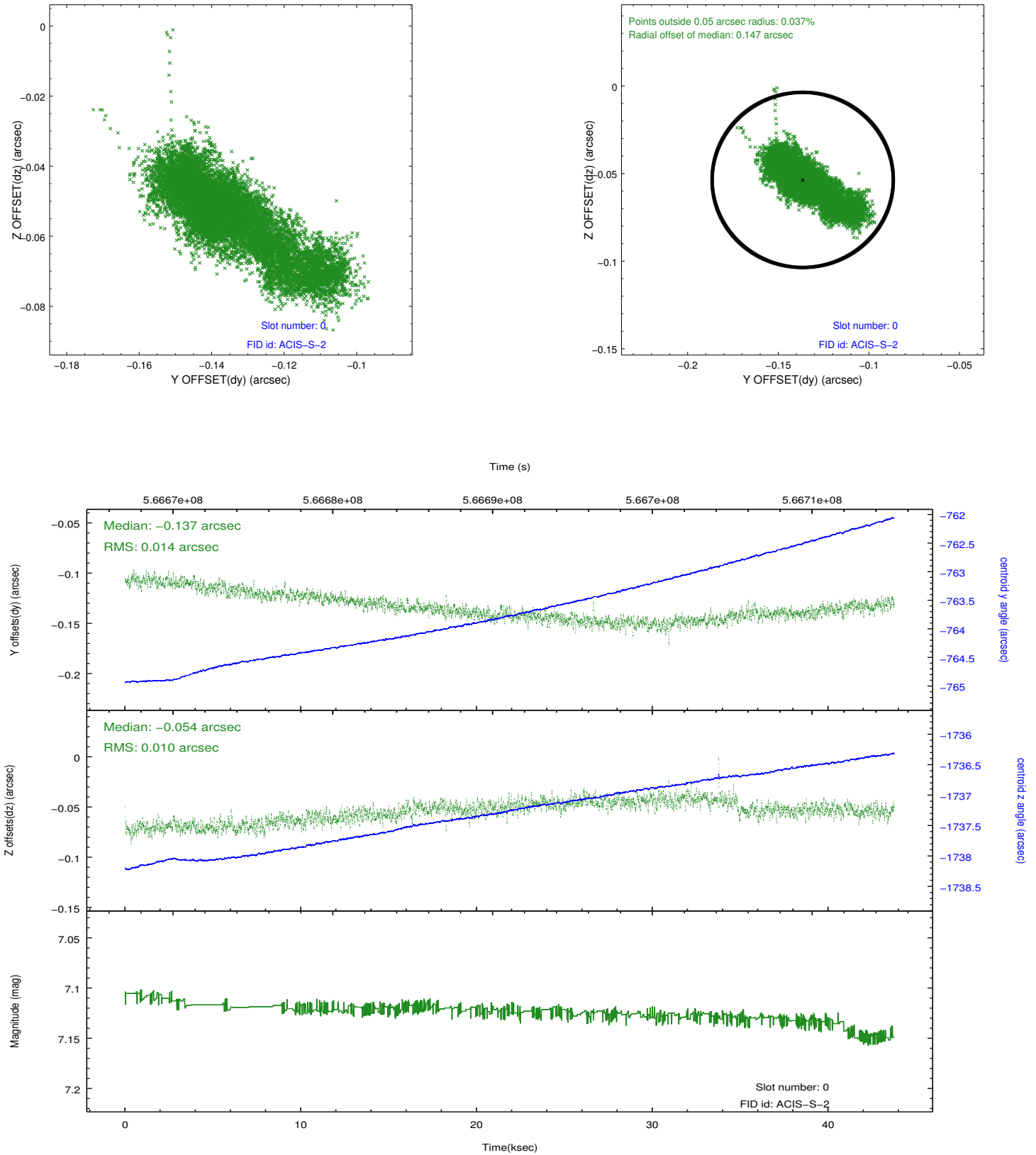


2.4.5 Slot 7

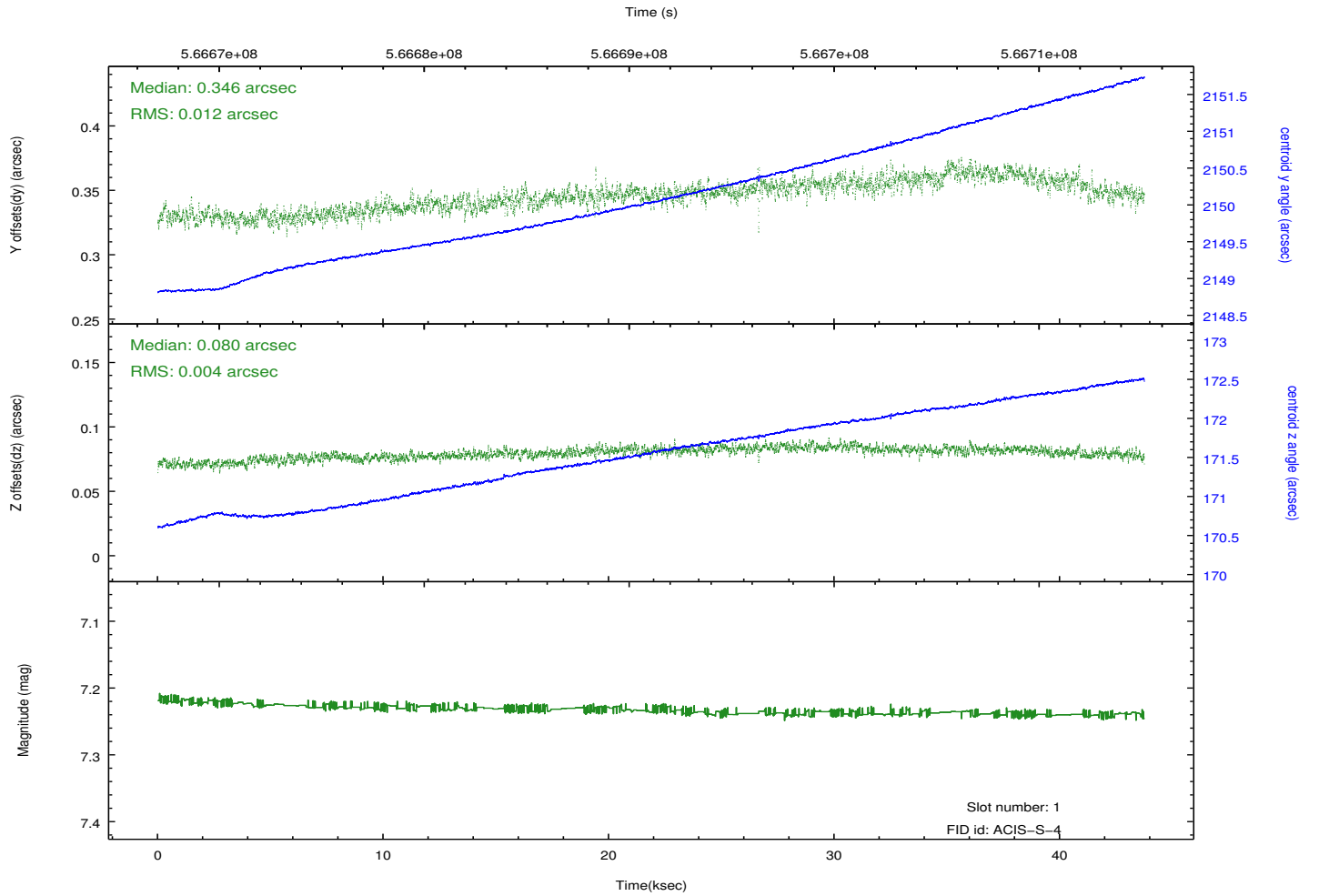
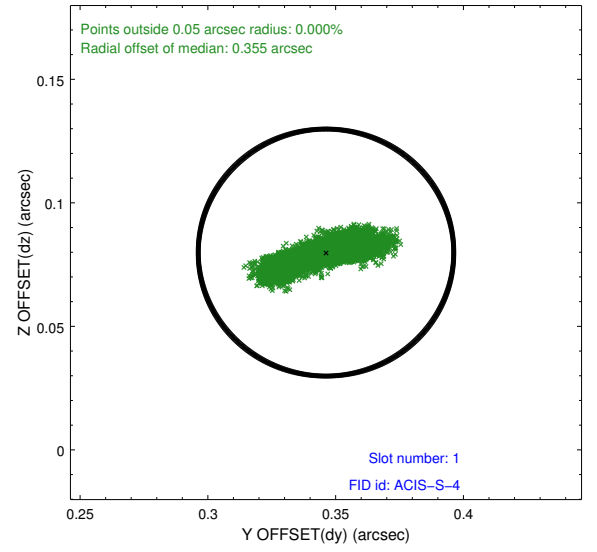
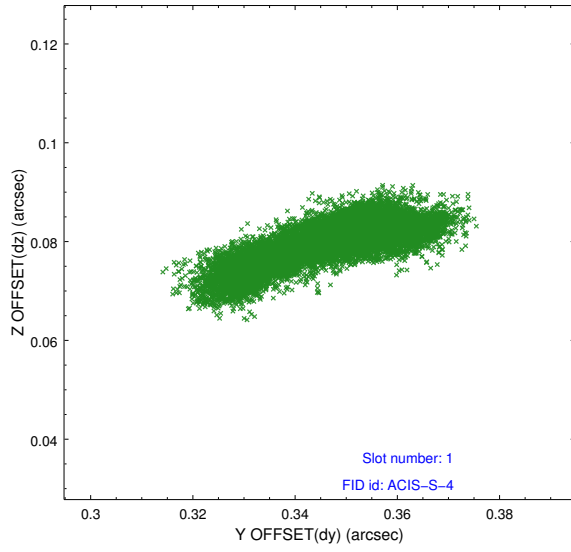


2.5 FID Slots

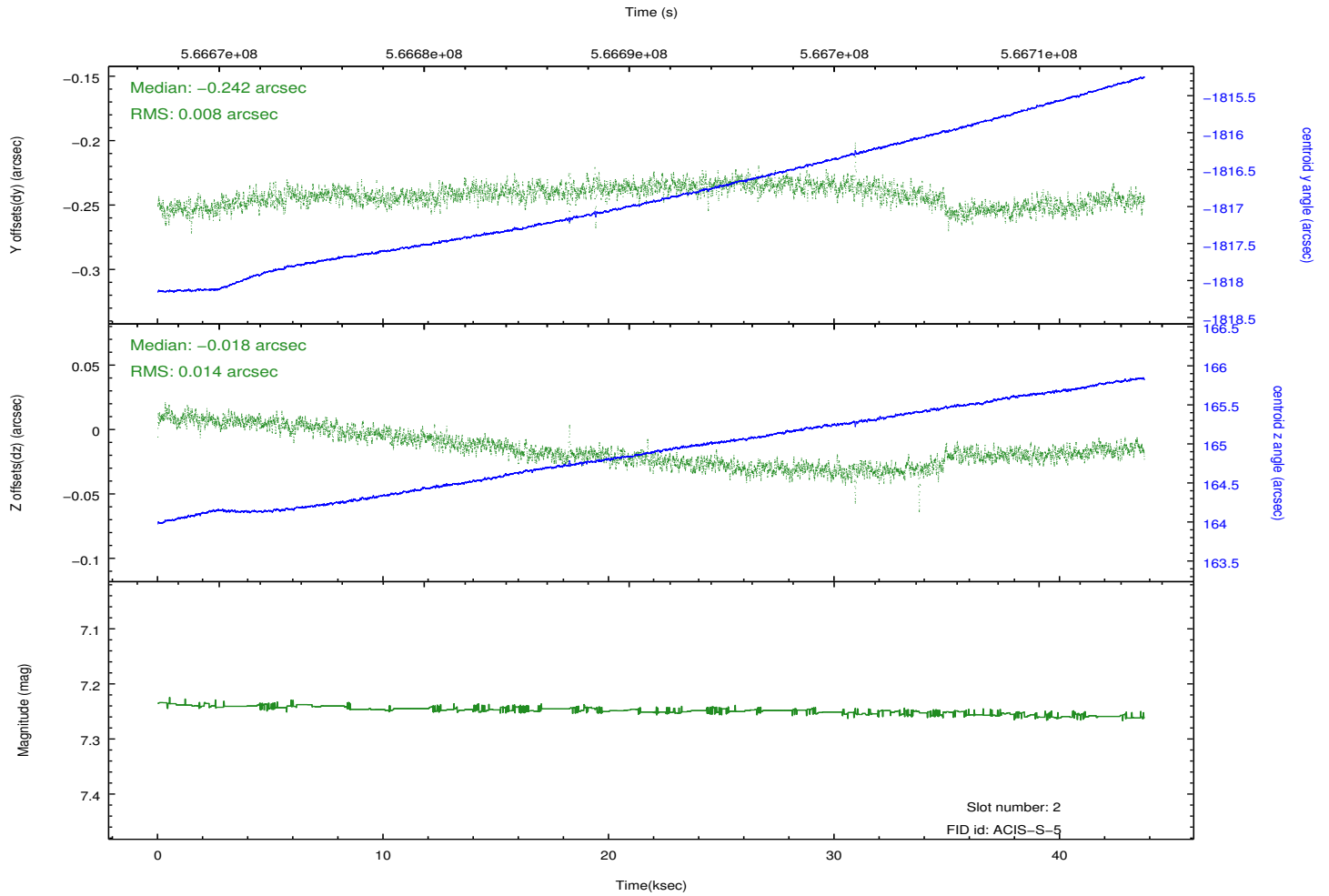
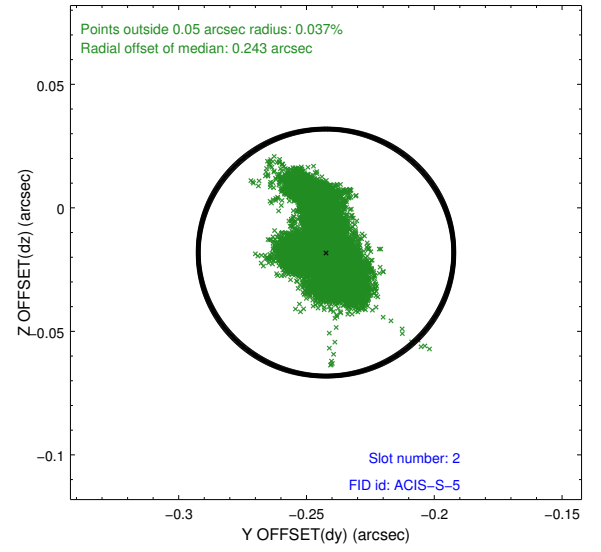
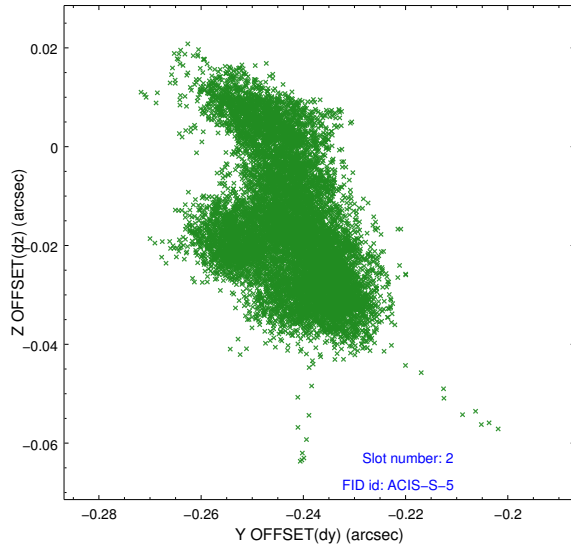
2.5.1 Slot 0



2.5.2 Slot 1

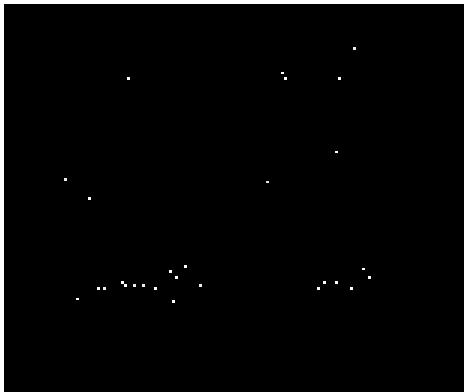


2.5.3 Slot 2

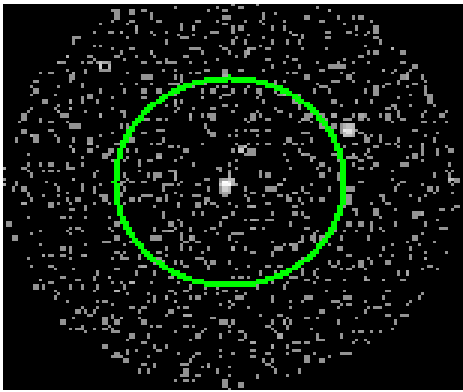


3 Gratings

3.1 HEG Arm



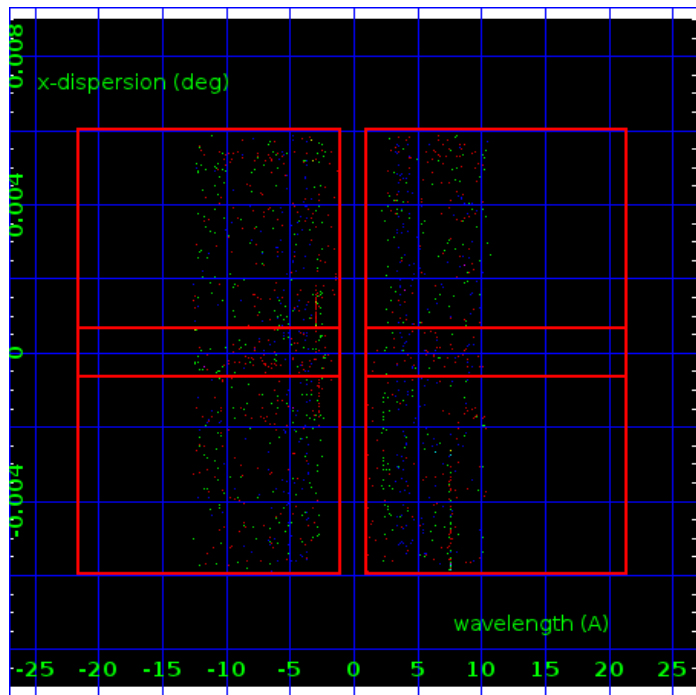
HEG Order Sort 123



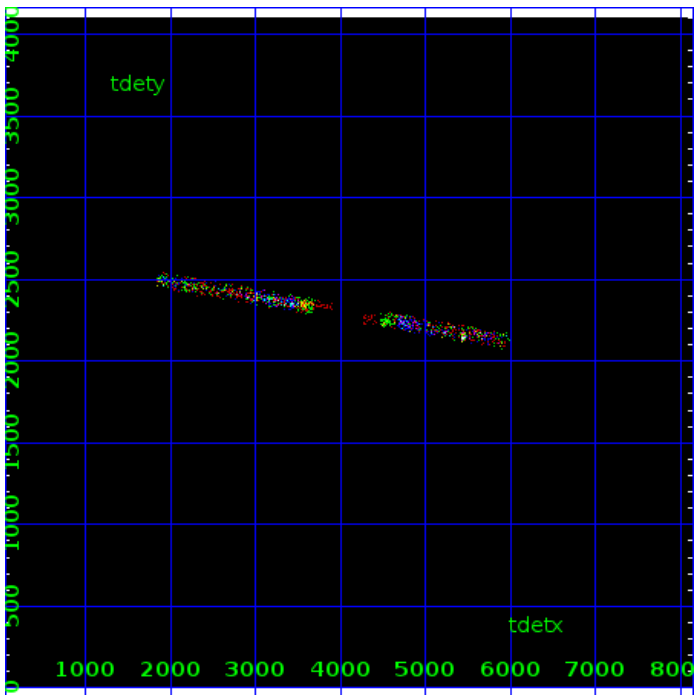
HEG Zero Order



HEG Order Sort ALL

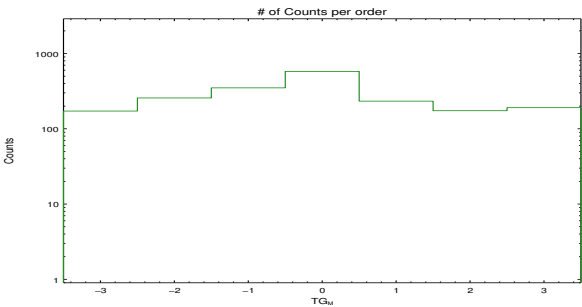


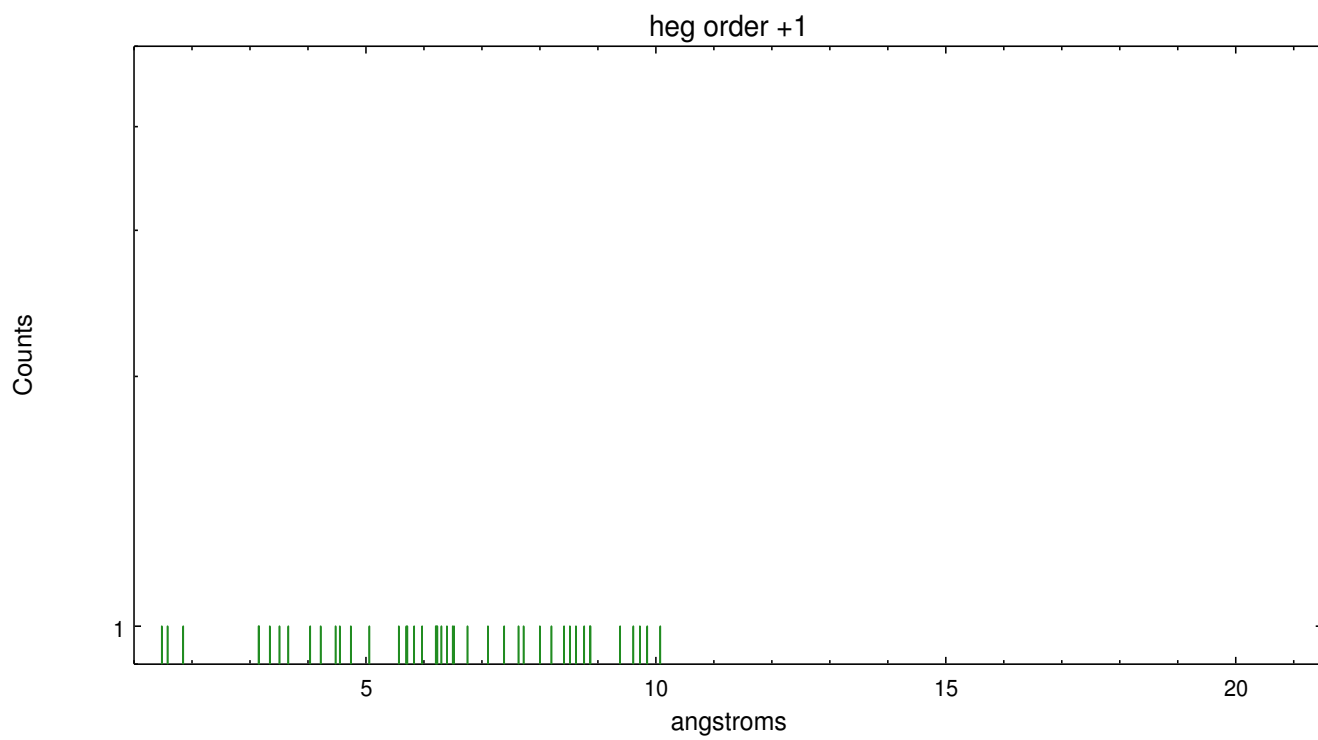
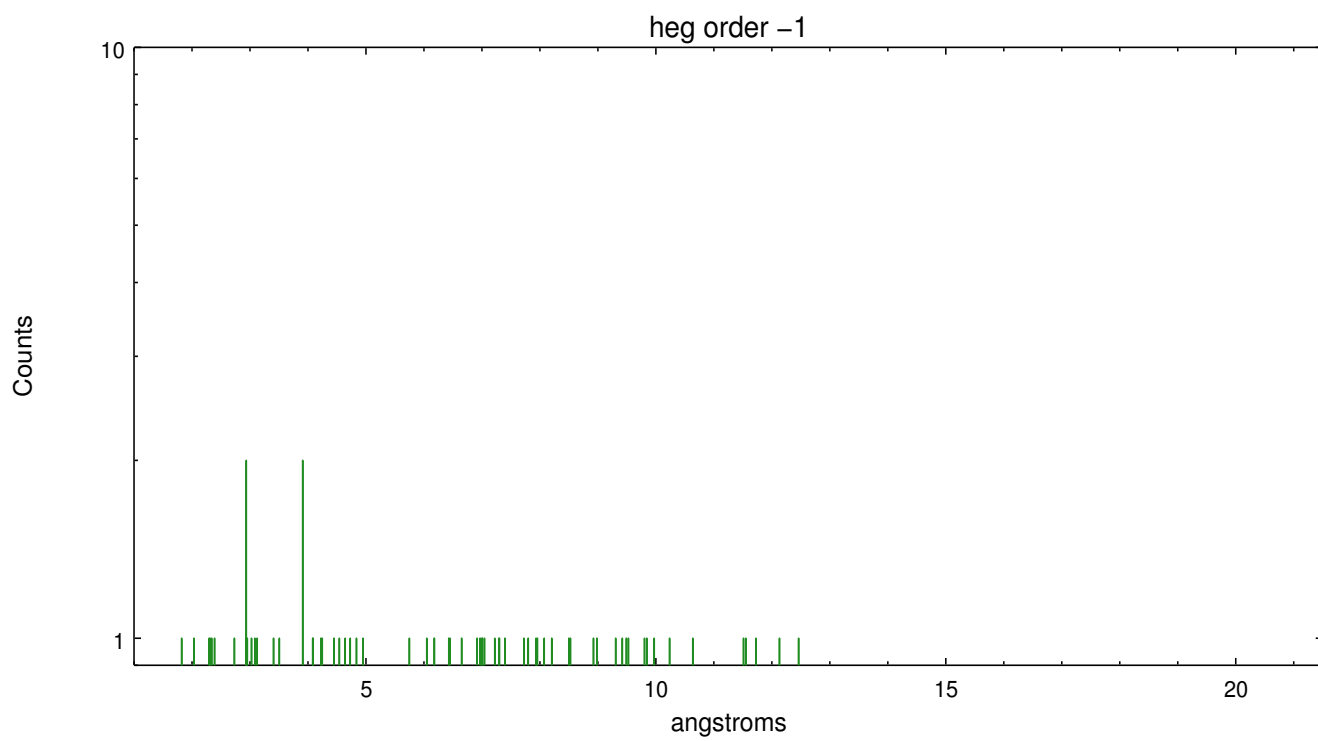
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	172	257	350	579	233	174	191

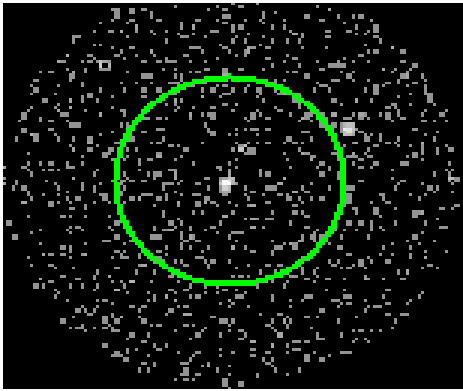




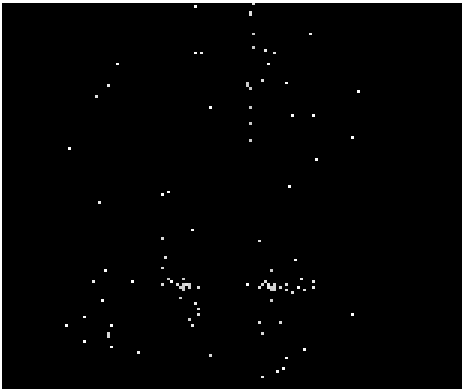
3.2 MEG Arm



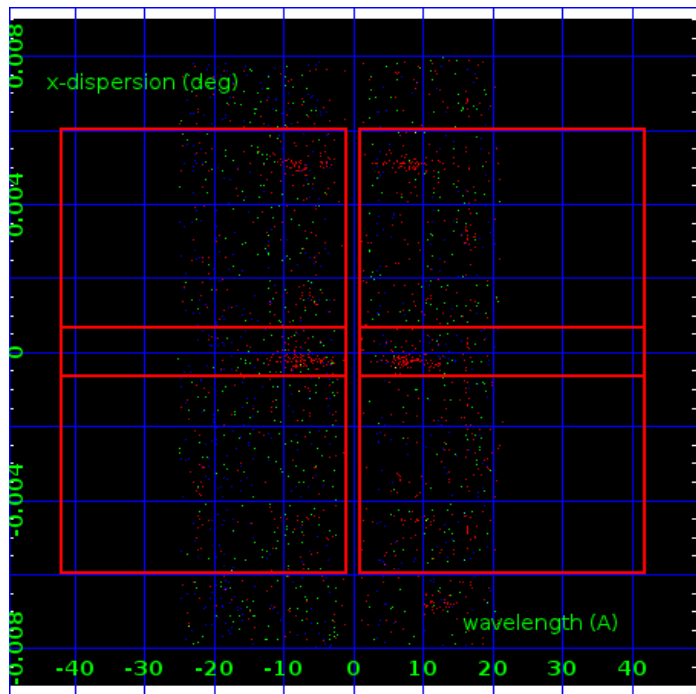
MEG Order Sort 123



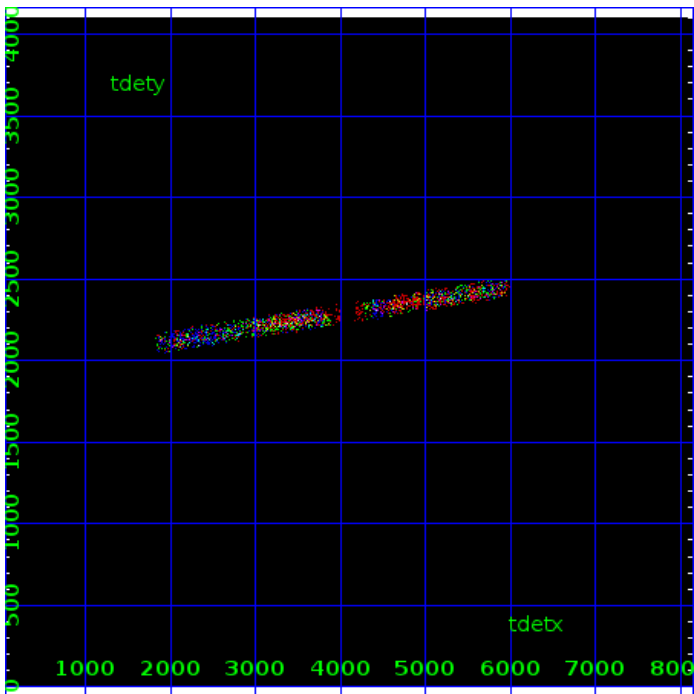
MEG Zero Order



MEG Order Sort ALL

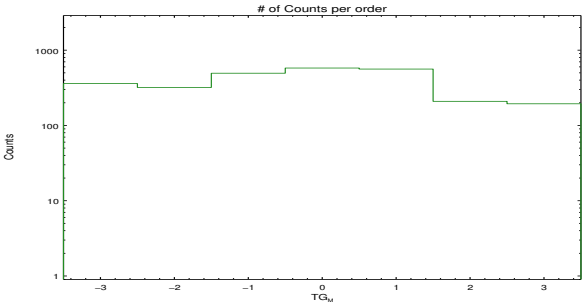


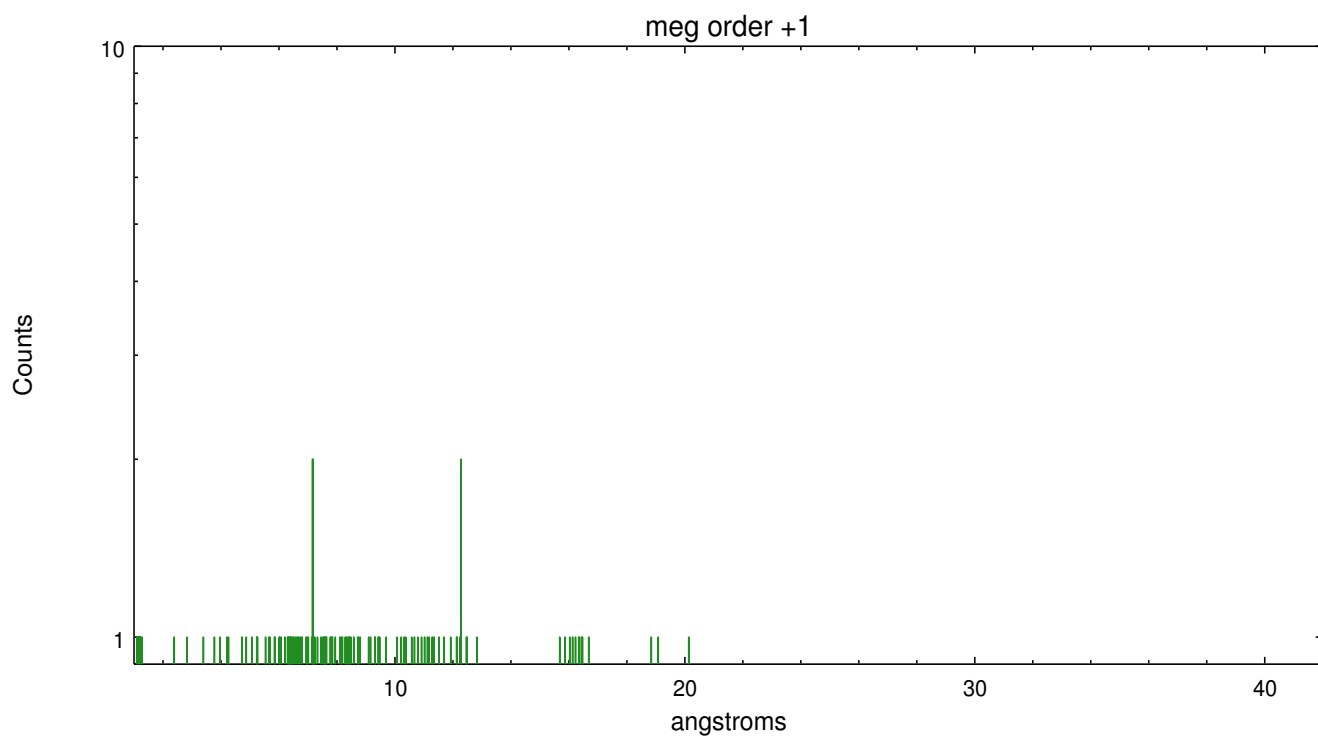
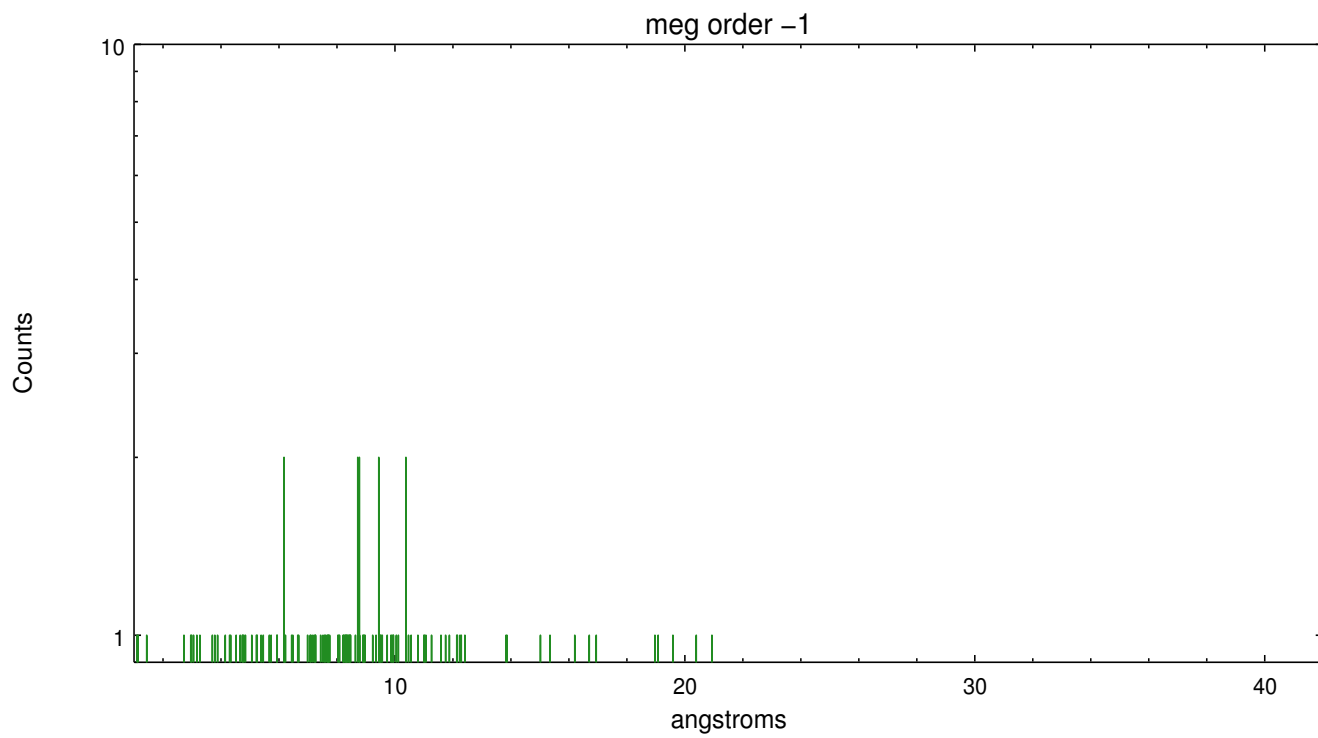
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	360	320	494	579	561	209	194





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2015.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.060679821372

A.2 Comments