

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10839 - L2 Version 2
Chandra X-Ray Center

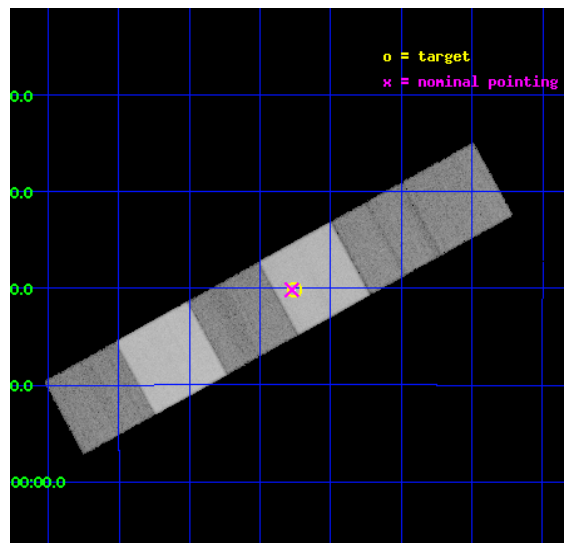
L2 Processing Date : May 28 2012

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

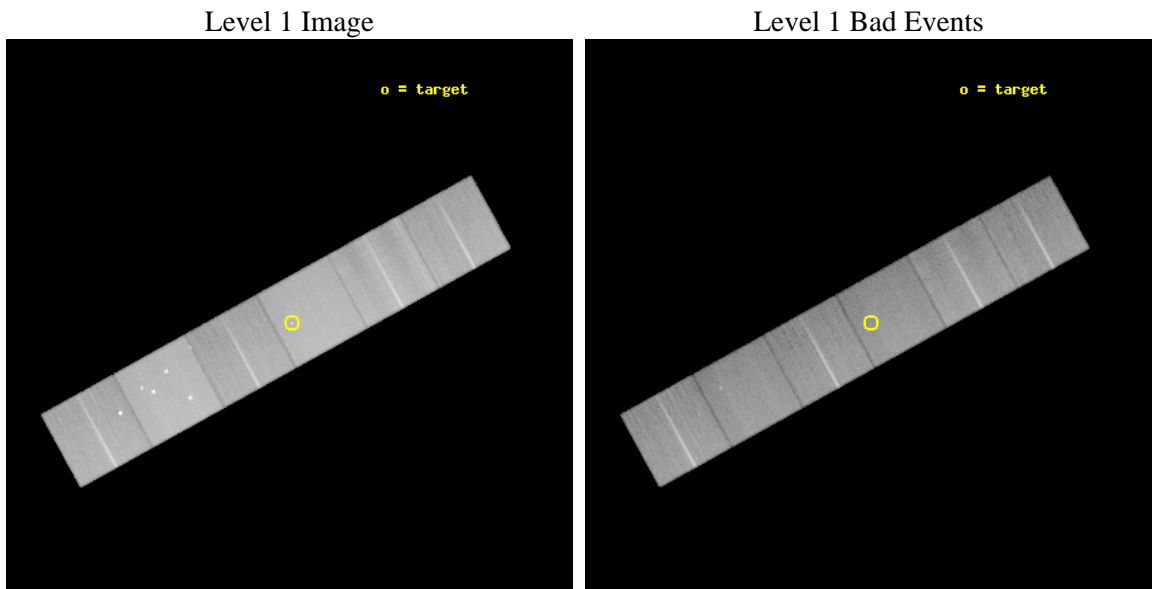
seq_num	200555	Sequence number
obs_id	10839	Observation id
title	Using a Cool B Supergiant to Probe the Deepest X-Ray Emitting Layers of a Dense Stellar Wind	Proposal title
observer	Dr Wayne Waldron	Principal investigator
object	Kappa Ori	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	86.93875	Observer's specified target RA [deg]
dec_targ	-9.669722	Observer's specified target Dec [deg]
ra_nom	86.943653970723	Nominal RA [deg]
dec_nom	-9.6694863729667	Nominal Dec [deg]
roll_nom	331.15745452304	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38997.82693392	Sum of GTIs [s]
livetime	38504.012967611	Livetime [s]
ontime4	38997.867973924	Sum of GTIs [s]
ontime5	38997.785893917	Sum of GTIs [s]
ontime6	38988.021782875	Sum of GTIs [s]
ontime7	38997.82693392	Sum of GTIs [s]
ontime8	38997.70381391	Sum of GTIs [s]
ontime9	38997.662773907	Sum of GTIs [s]
l2events	649920	Number of level 2 events



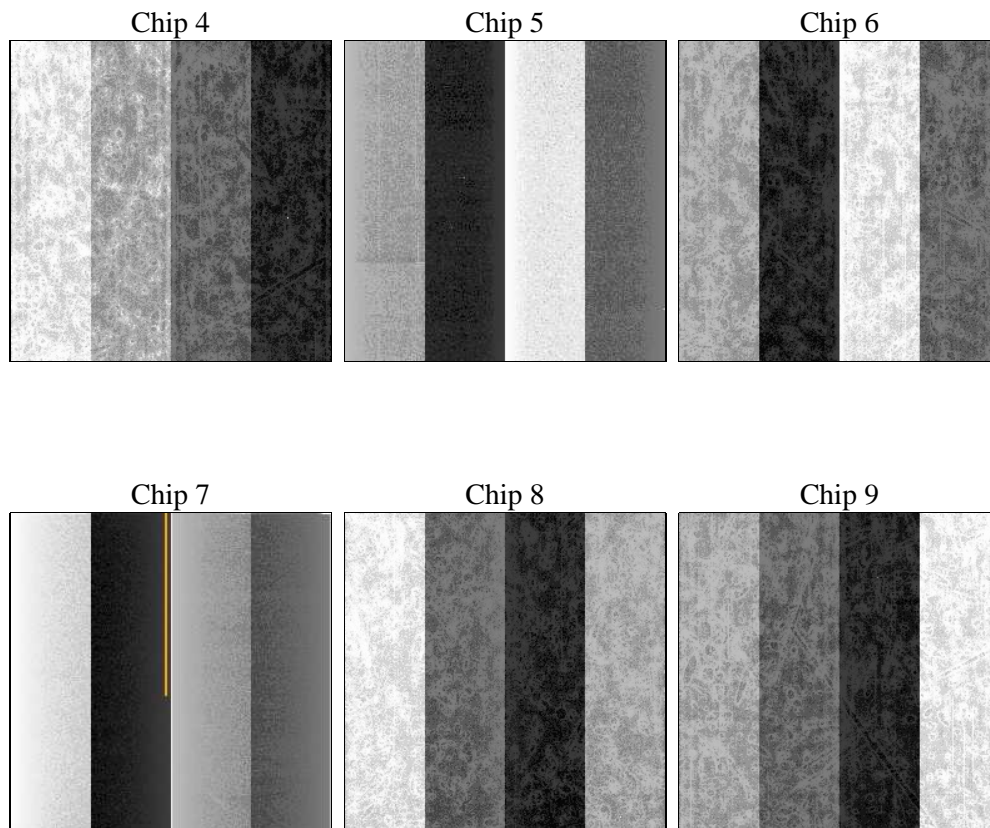
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39046.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	38997.82693392	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	38997.867973924	Sum of GTIs [s]
date	2012-05-28T12:33:40	Date and time of file creation	ontime5	38997.785893917	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	38988.021782875	Sum of GTIs [s]
			ontime7	38997.82693392	Sum of GTIs [s]
			ontime8	38997.70381391	Sum of GTIs [s]
			ontime9	38997.662773907	Sum of GTIs [s]
			l1events	2899253	Number of level 1 events

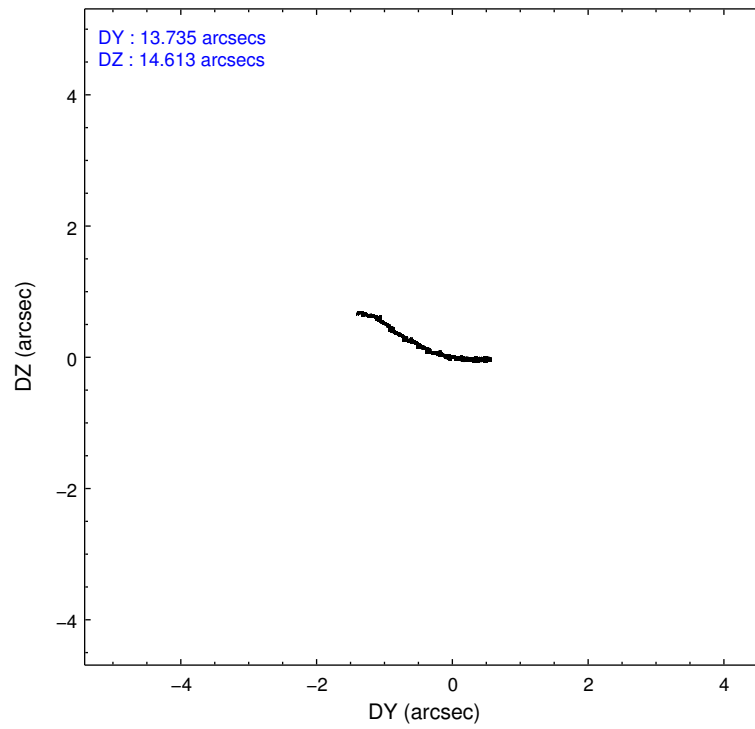
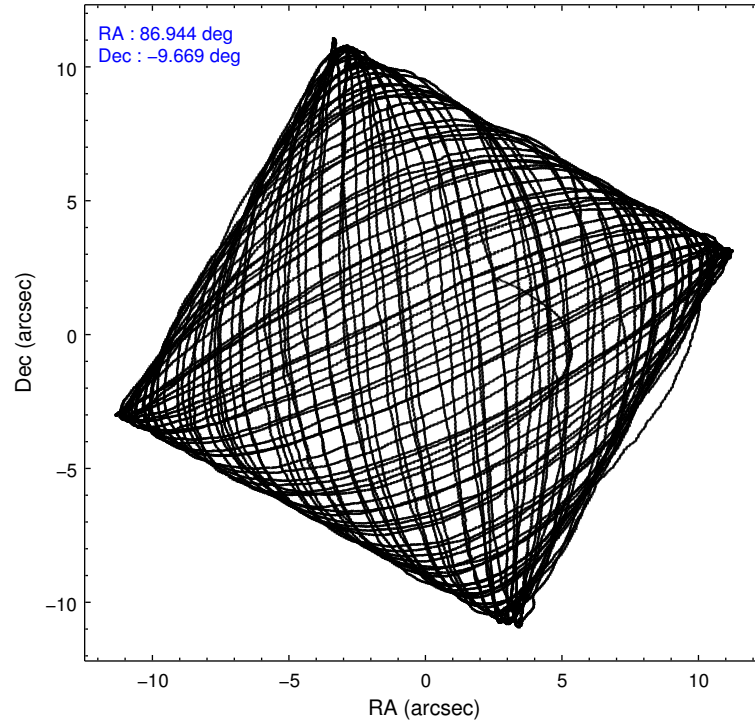
2.1.4 Events

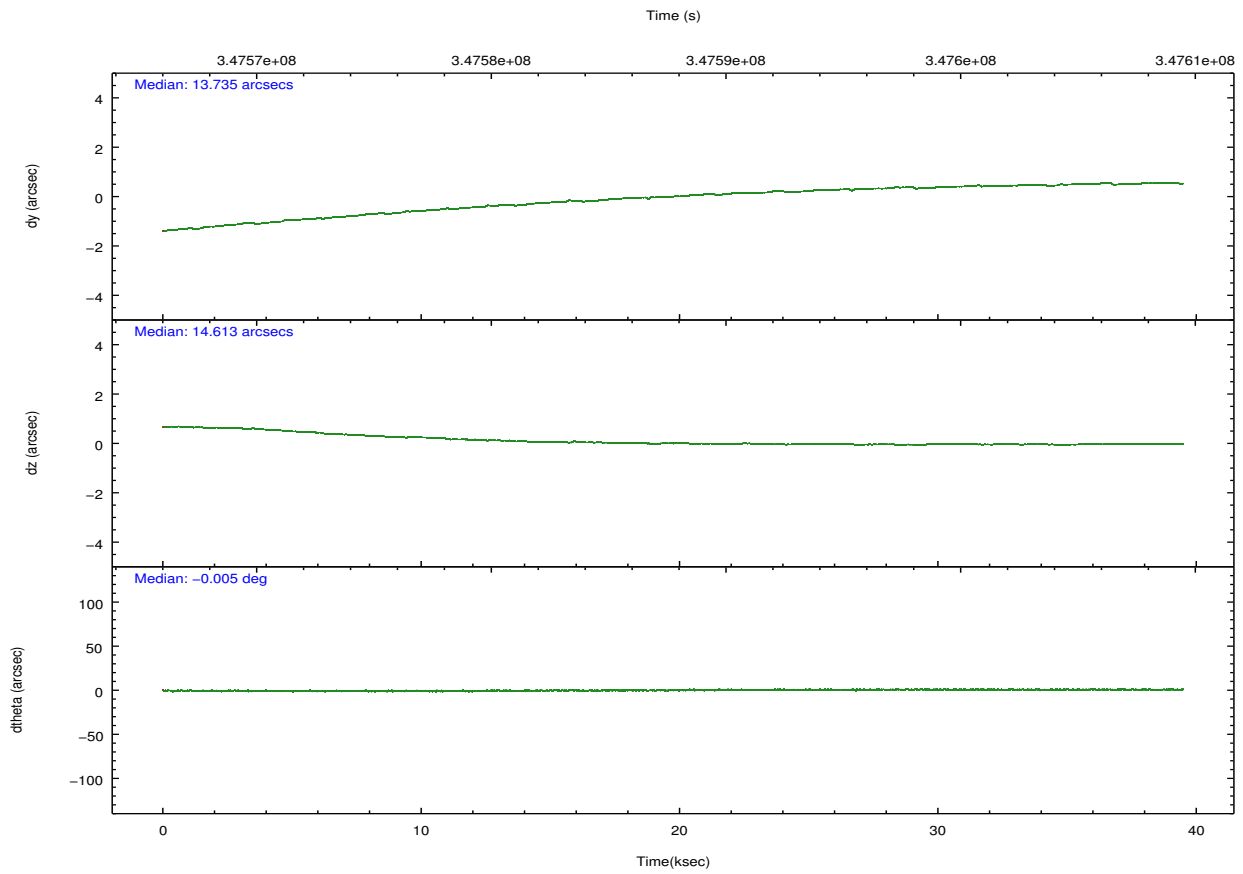
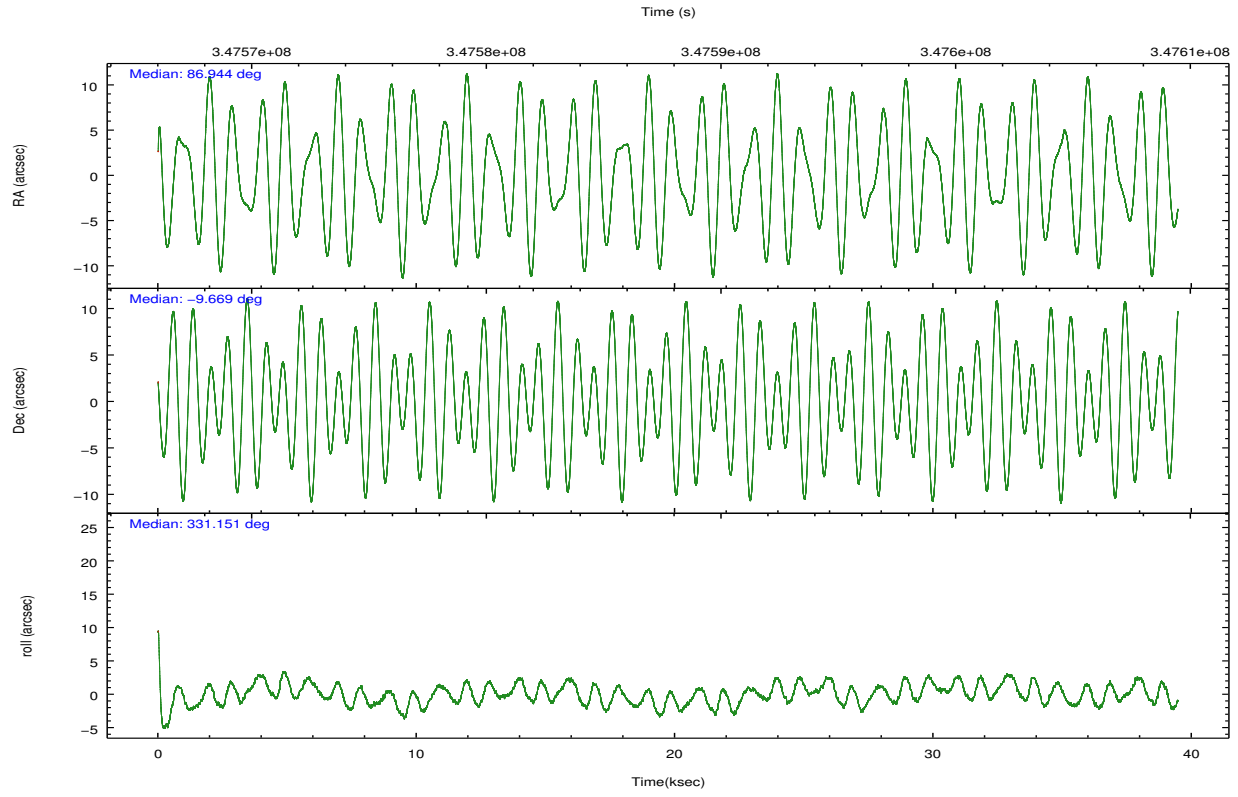
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	446015	621956	393524	544241	502875	390642	grade 0 events	31193	37493	17756	18900	35637	19838
rejected events	386770	330419	346852	318832	387724	341794		6%	6%	4%	3%	7%	5%
rejected %	86%	53%	88%	58%	77%	87%	grade 1 events	510	853	222	591	372	231
								0%	0%	0%	0%	0%	0%
							grade 2 events	10639	85947	10586	46479	26655	9985
								2%	13%	2%	8%	5%	2%
							grade 3 events	4878	9968	4373	19068	11927	4702
								1%	1%	1%	3%	2%	1%
							grade 4 events	4731	9126	4287	18802	11076	4542
								1%	1%	1%	3%	2%	1%
							grade 5 events	18211	42785	18686	52034	25142	20222
								4%	6%	4%	9%	4%	5%
							grade 6 events	7808	149030	9672	122182	29863	9785
								1%	23%	2%	22%	5%	2%
							grade 7 events	368045	286754	327942	266185	362203	321337
								82%	46%	83%	48%	72%	82%

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	86.915940	86.94365397072265	CCD I2 on	N	N
[deg] Pointing Dec	-9.670411	-9.669486372966709	CCD I3 on	N	N
[deg] Pointing Roll	330.996167	331.1574545230393	CCD S0 on	O1	Y
[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)	347568439.184000	347567215.11805	CCD S5 on	O2	Y
Observation start date	2009-01-05T18:46:13	2009-01-05T18:26:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	347607485.184000	347608924.42012	On-chip summing requested	N	N
Observation end date	2009-01-06T05:36:59	2009-01-06T06:02:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



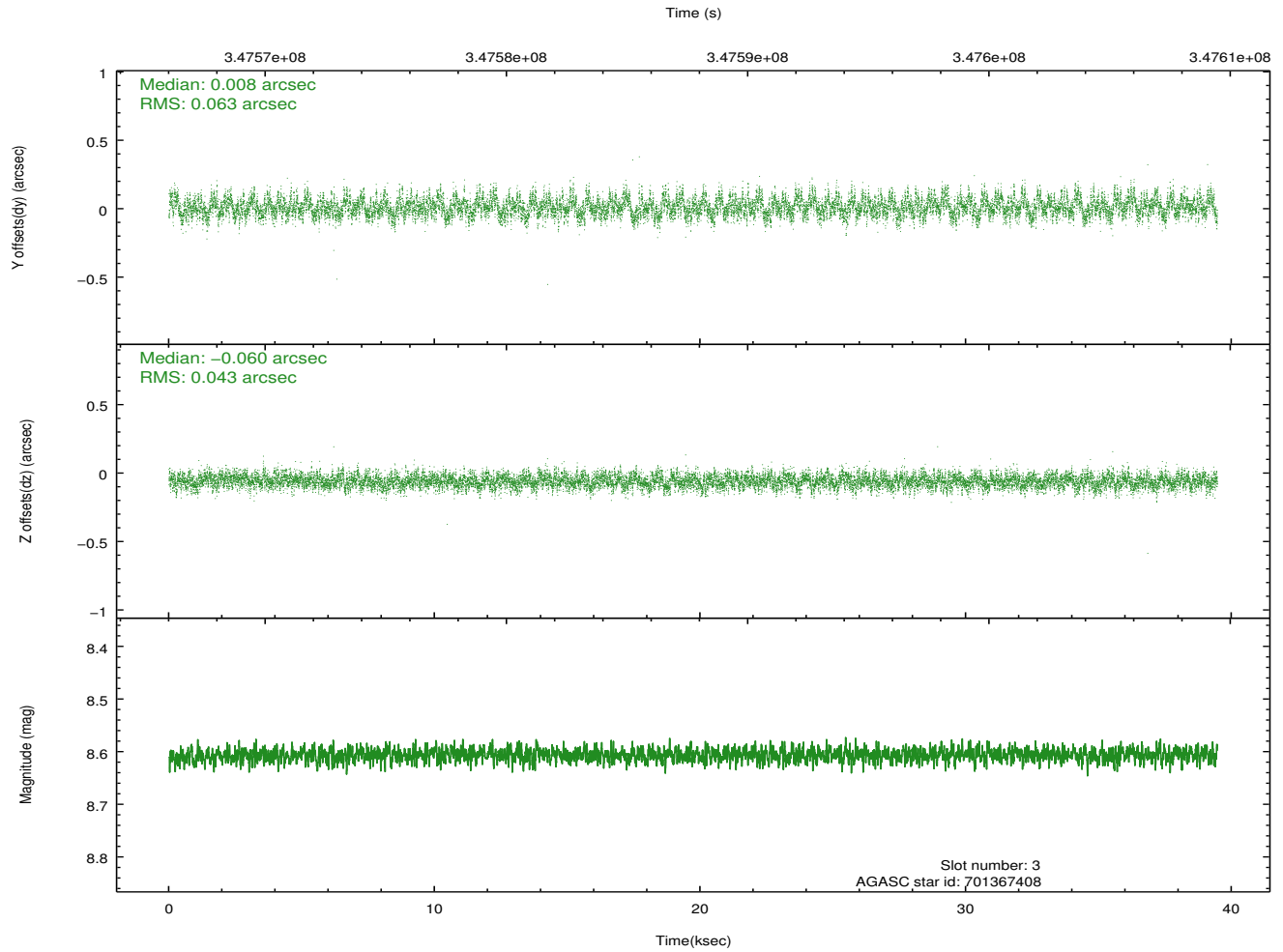
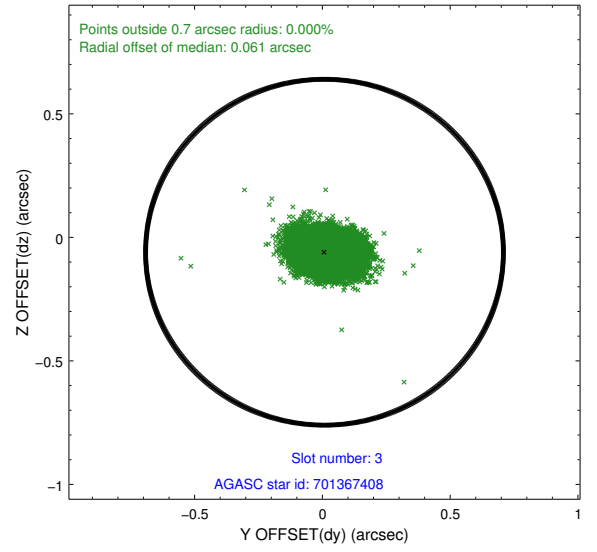
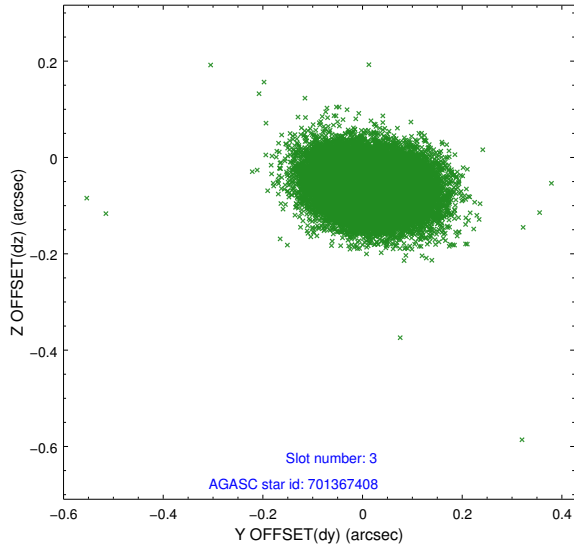


Slot Statistics

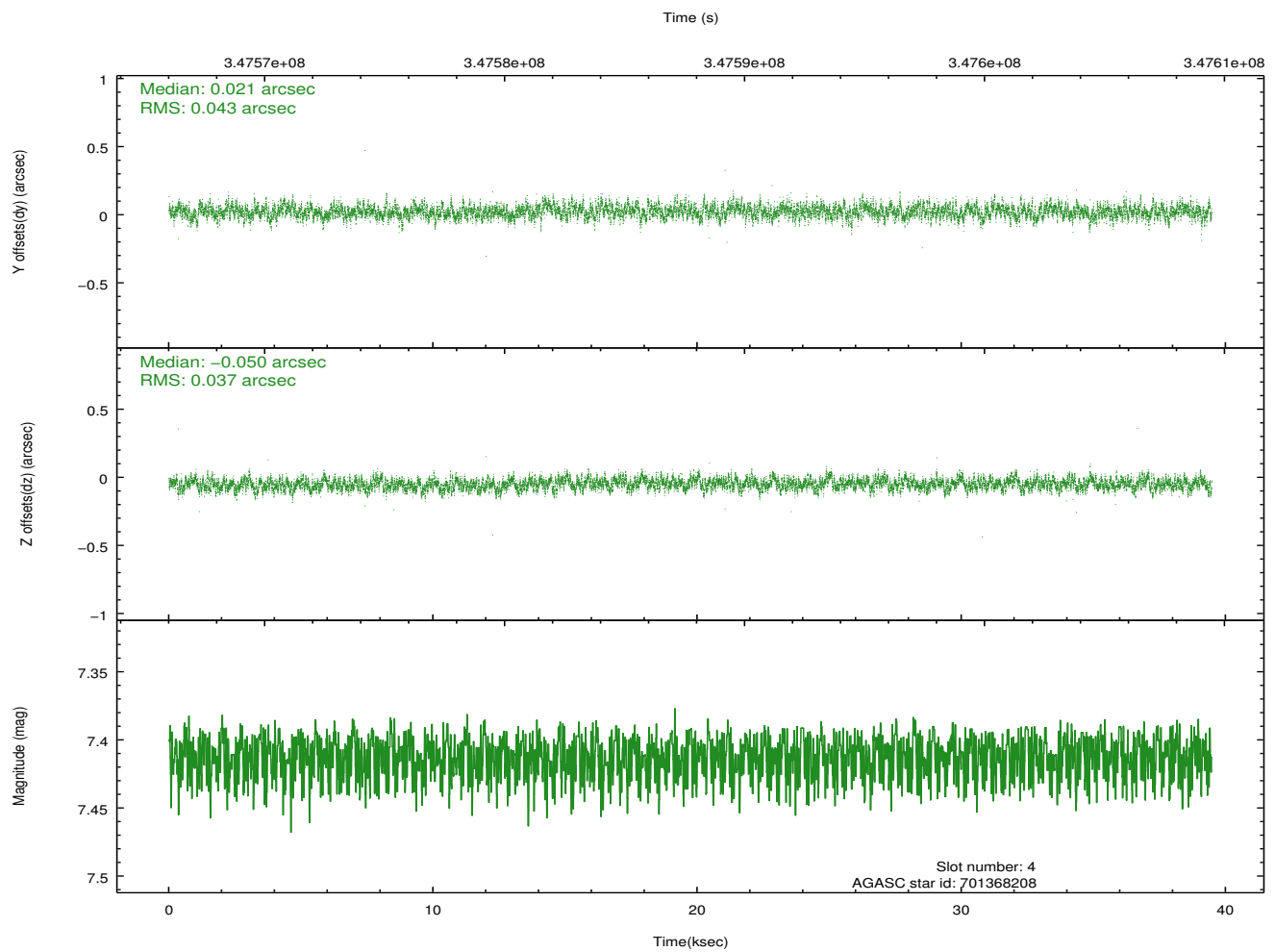
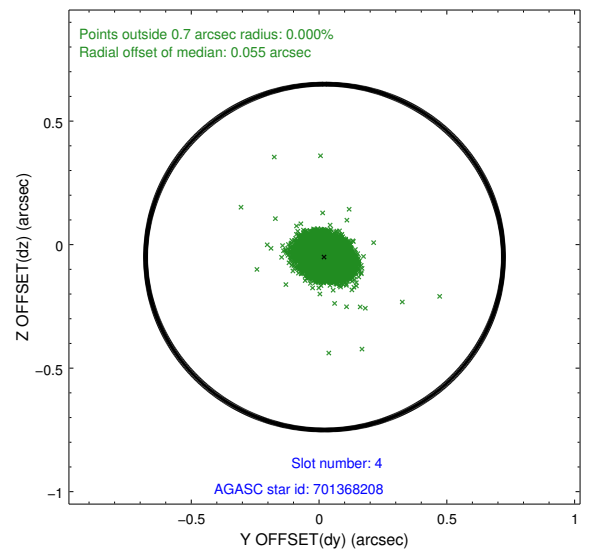
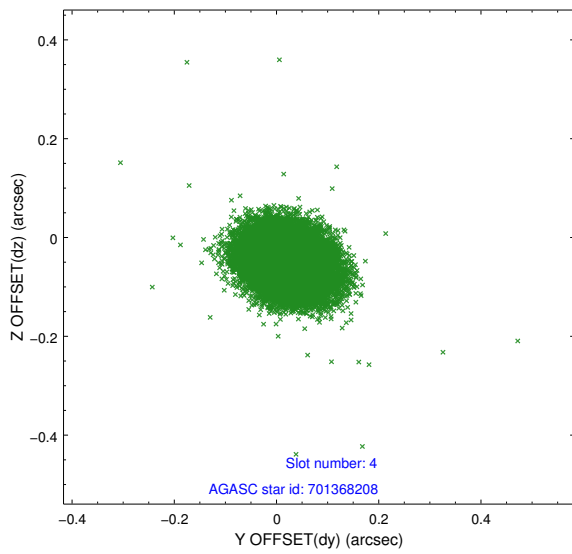
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	9628	-0.056	-0.027	0.013	0.020	0.000000	0.000000	-766.56	-1736.15
1	FID	ACIS-S-4	6.99	9628	0.179	0.035	0.015	0.029	0.000000	0.000000	2146.92	172.42
2	FID	ACIS-S-5	7.02	9627	-0.152	0.000	0.008	0.018	0.000000	0.000000	-1819.50	166.02
3	GUIDE	701367408	8.61	19246	0.008	-0.060	0.081	0.133	87.317763	-10.299239	2343.72	-1289.86
4	GUIDE	701368208	7.41	19255	0.021	-0.050	0.060	0.097	86.739759	-9.838895	-251.62	-833.75
5	GUIDE	701369032	8.61	19241	0.095	0.005	0.075	0.126	87.612873	-9.684453	2189.14	1153.14
6	GUIDE	701369896	8.97	19241	-0.115	0.164	0.084	0.135	87.316713	-9.377889	735.01	1610.93
7	GUIDE	701371368	8.51	19242	-0.011	-0.058	0.079	0.127	87.172717	-10.269772	1842.11	-1445.79

2.4 Star Slots

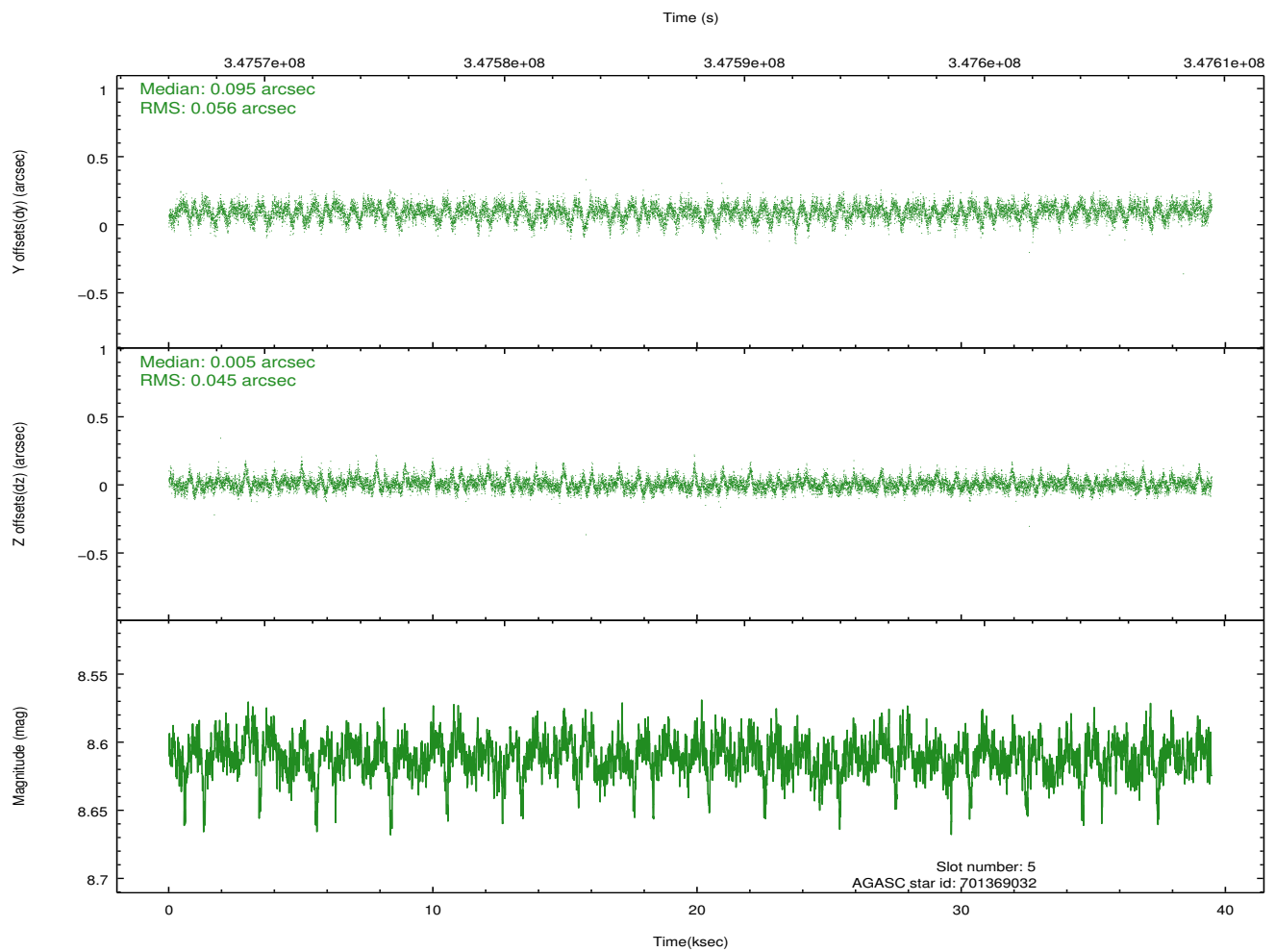
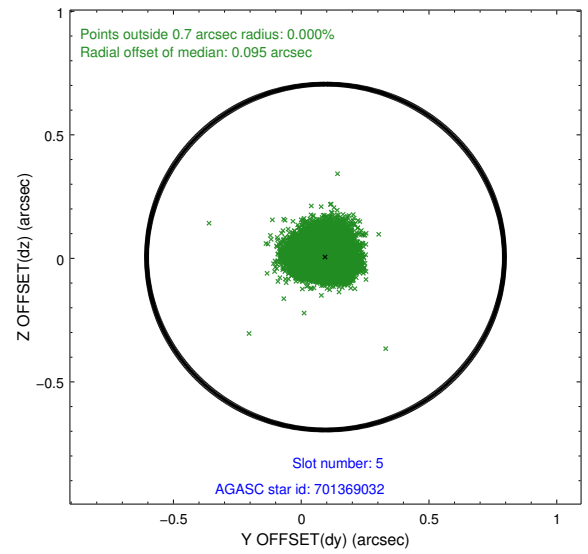
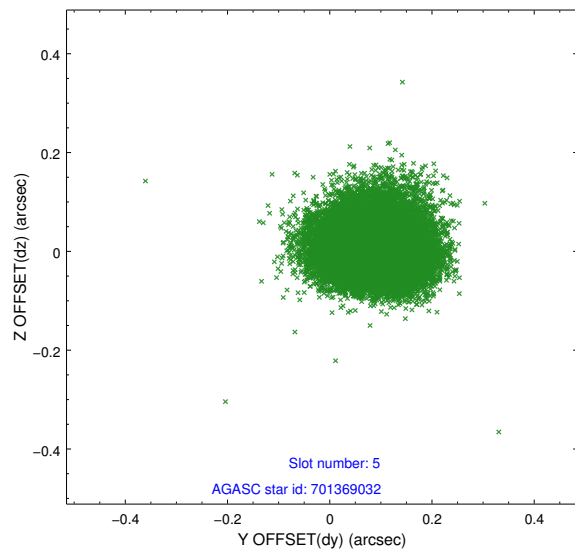
2.4.1 Slot 3



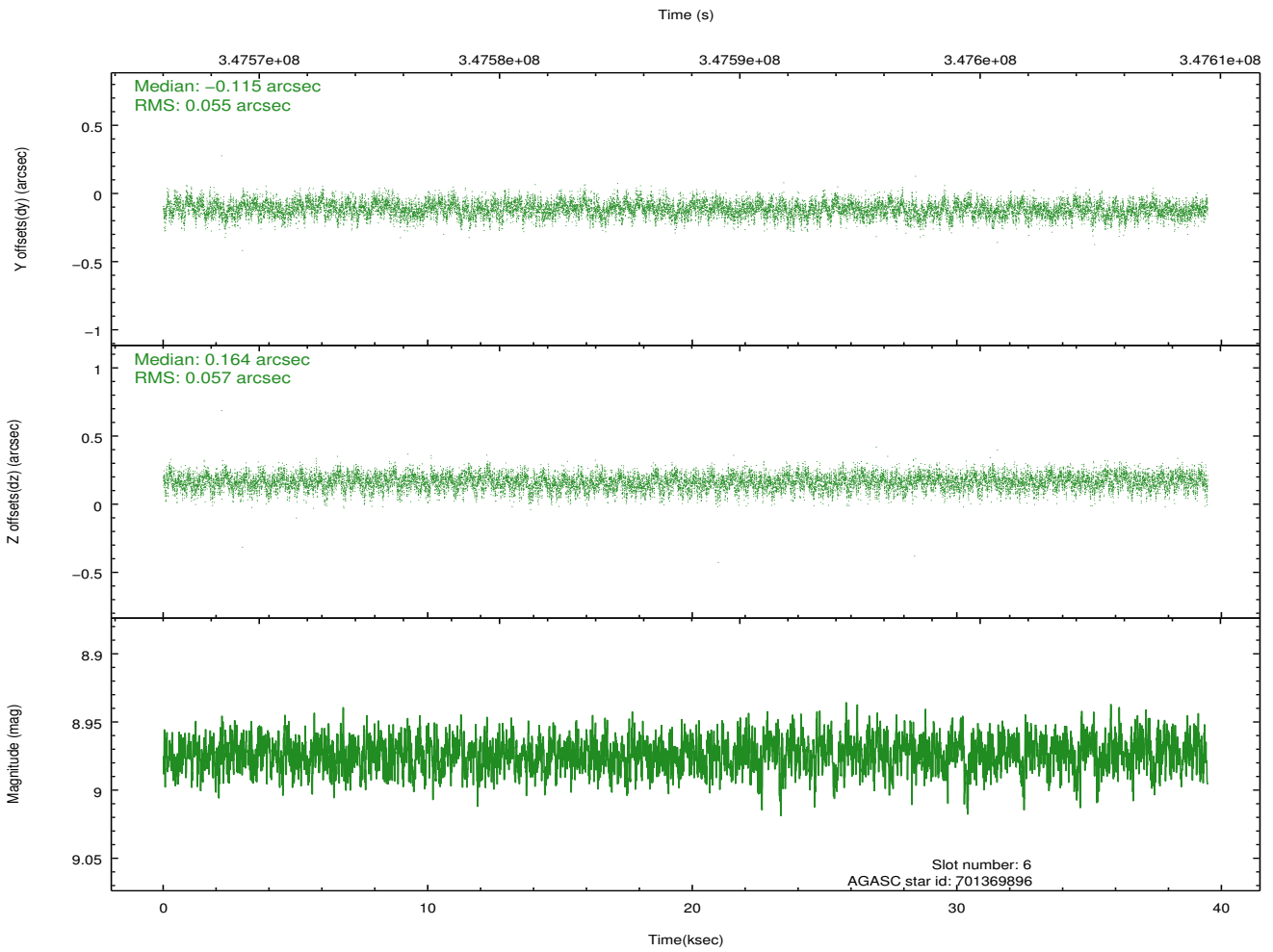
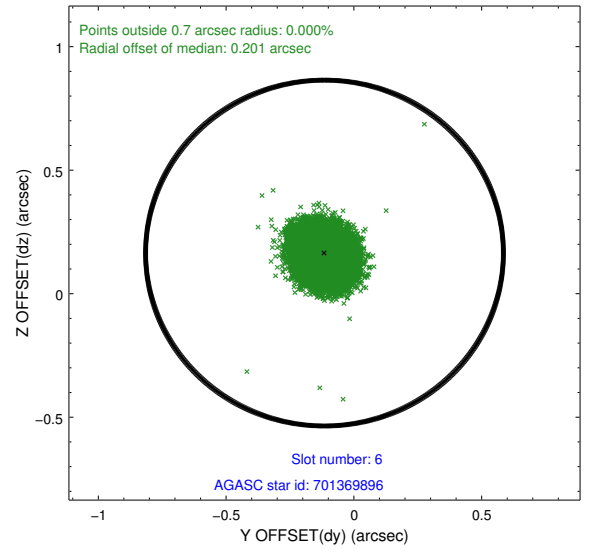
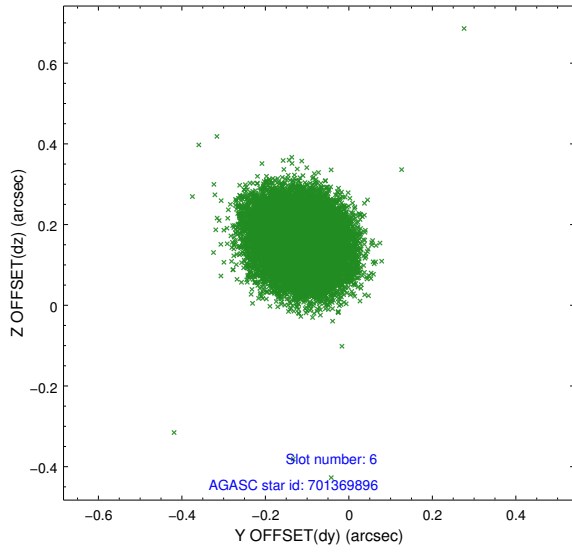
2.4.2 Slot 4



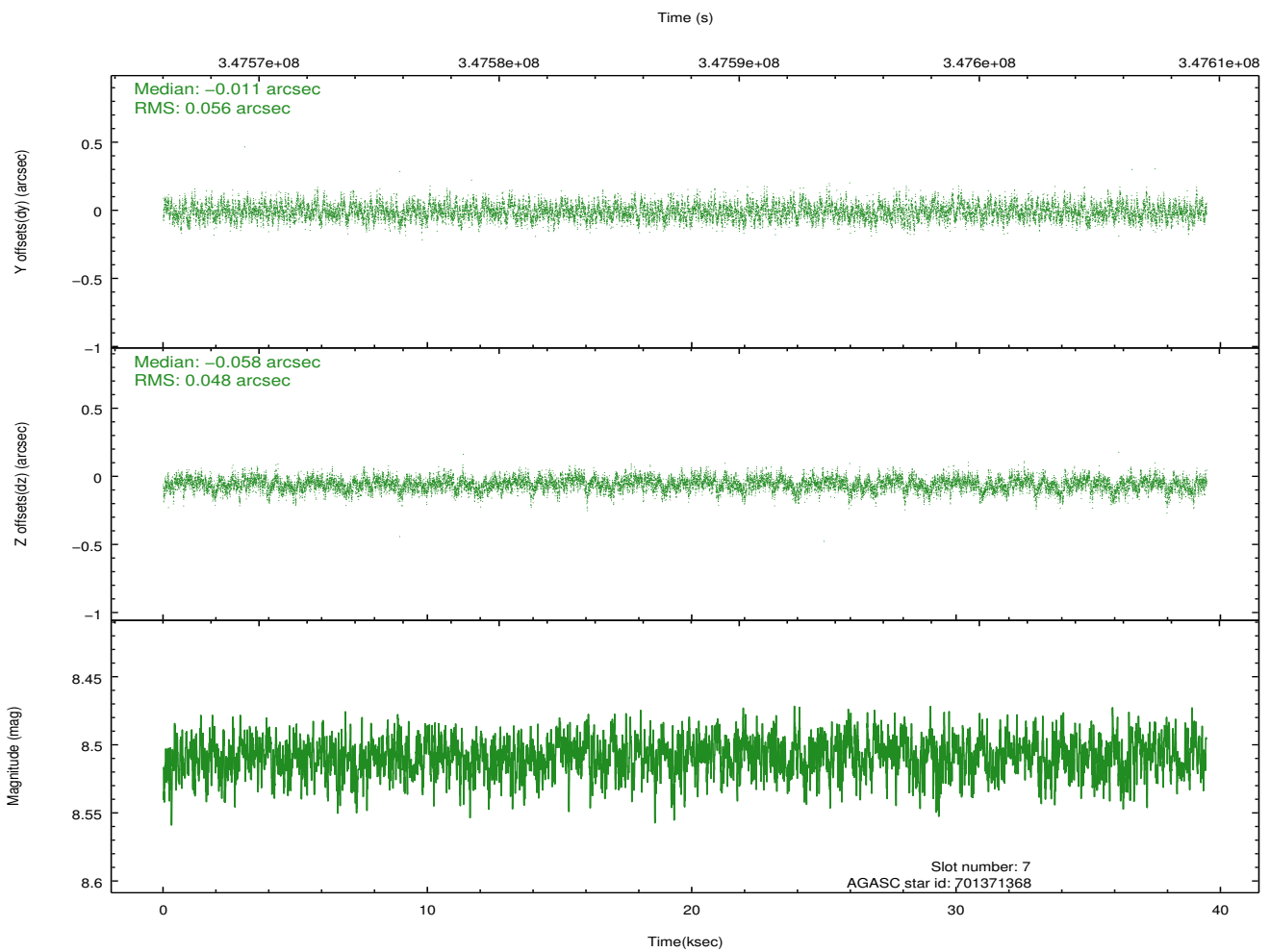
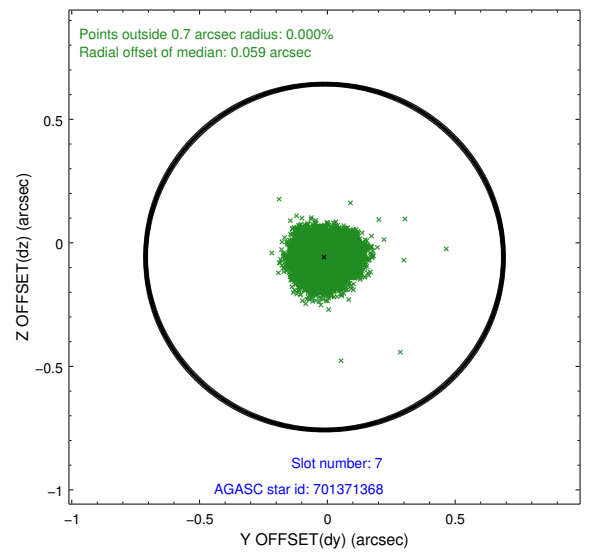
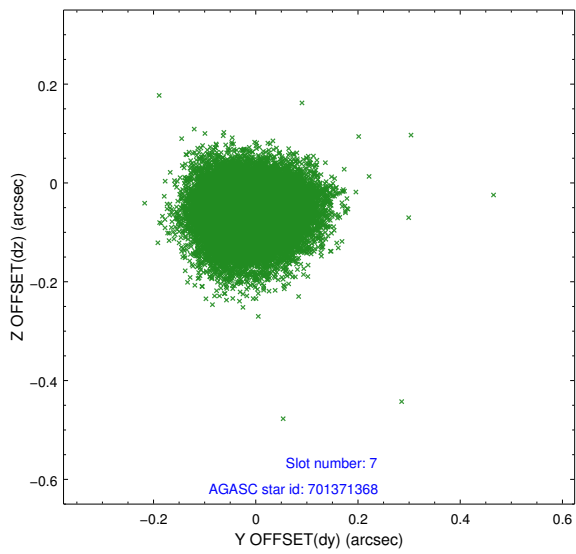
2.4.3 Slot 5



2.4.4 Slot 6

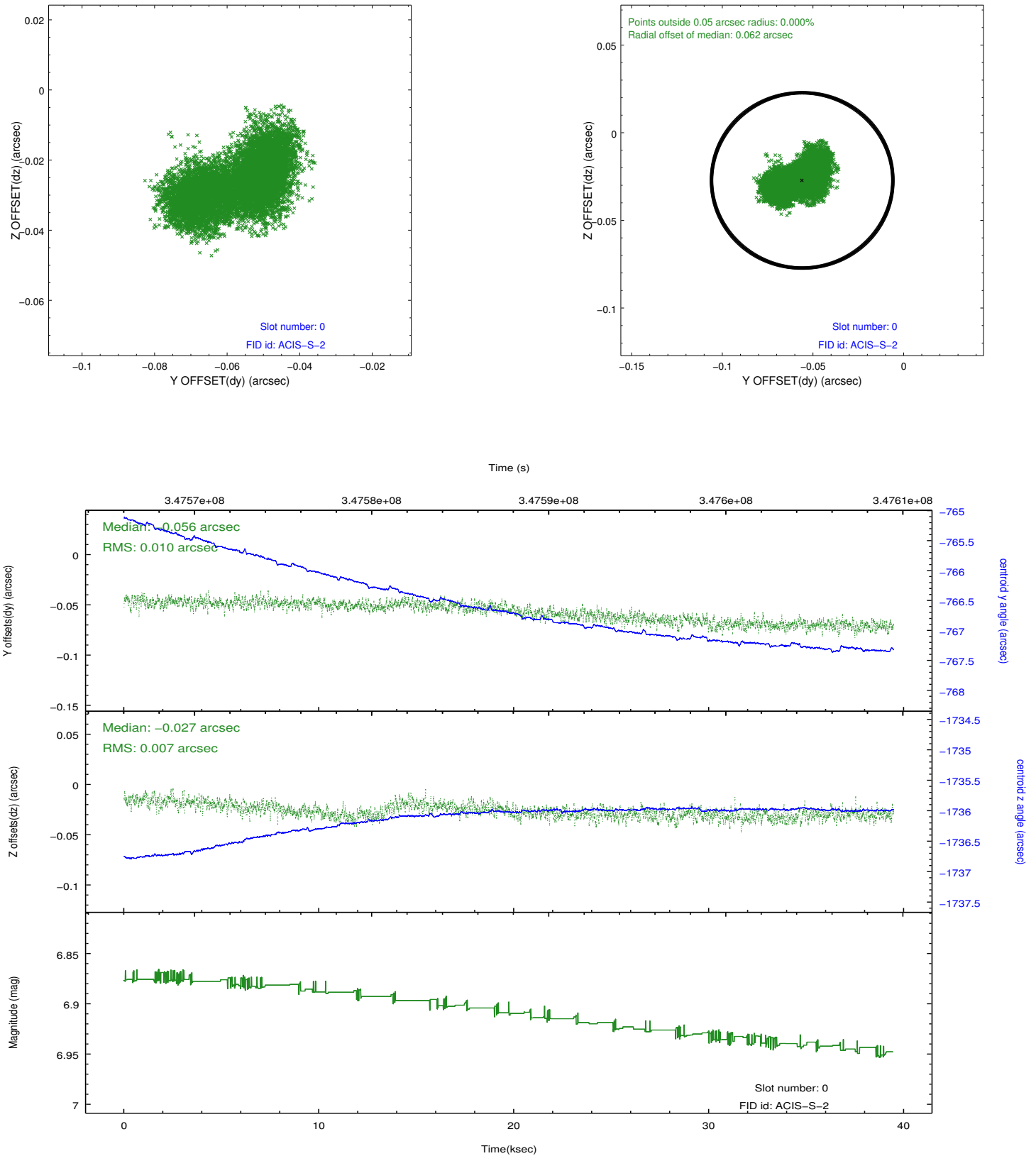


2.4.5 Slot 7

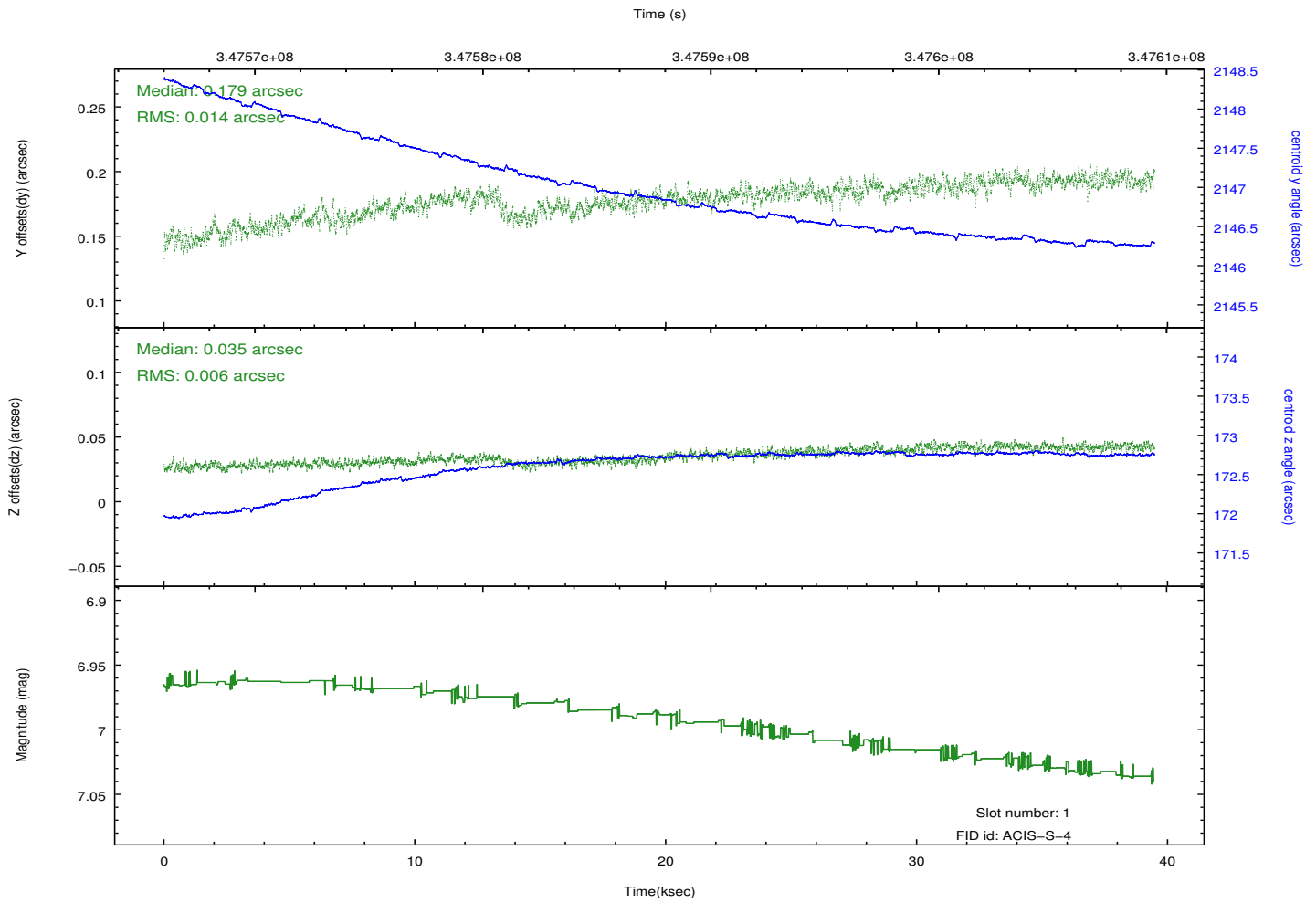
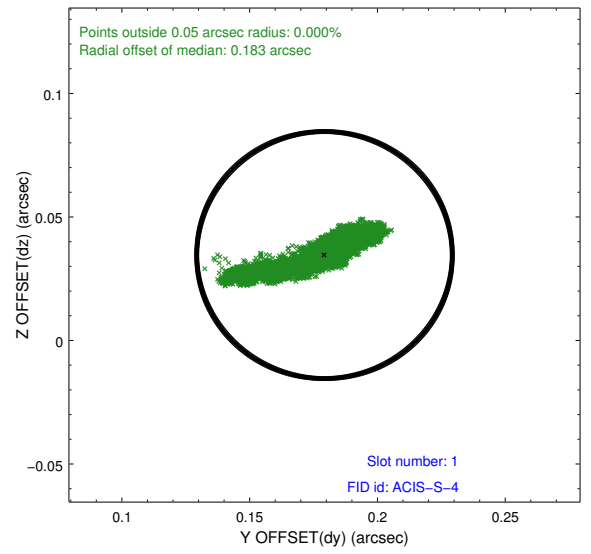
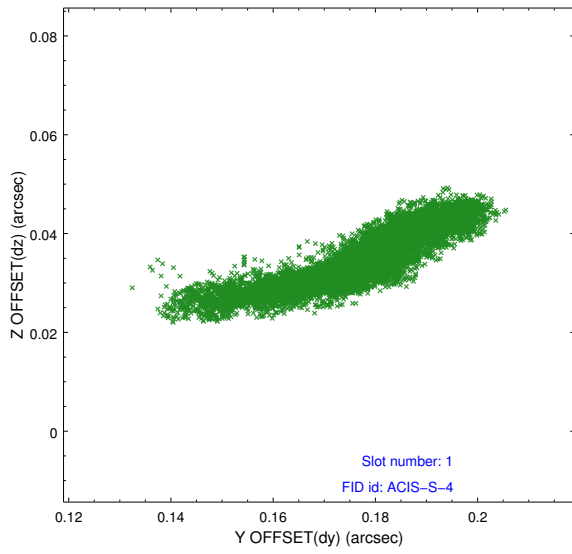


2.5 FID Slots

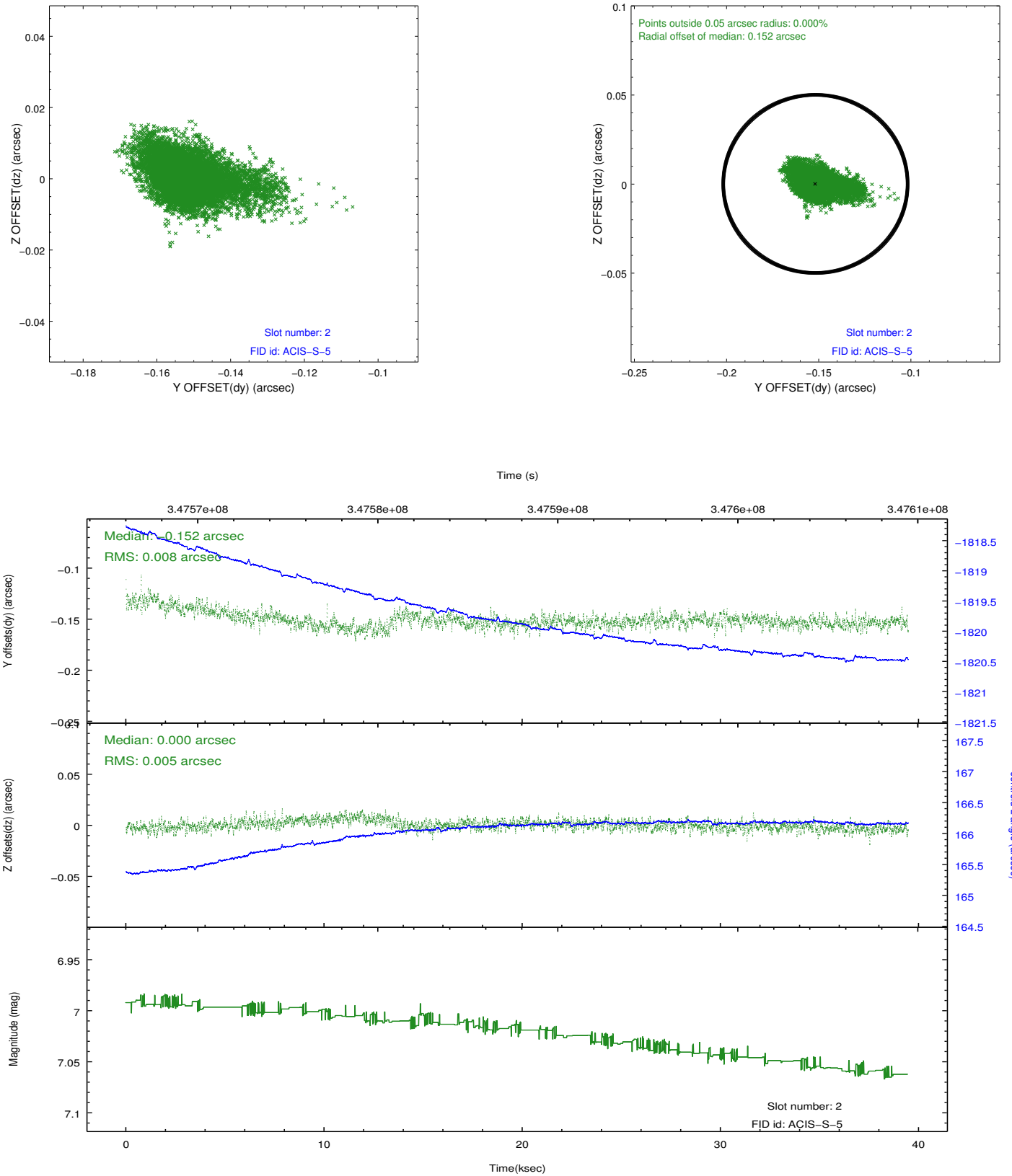
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

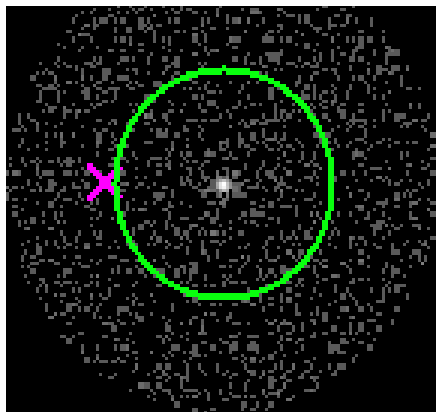


3 Gratings

3.1 HEG Arm



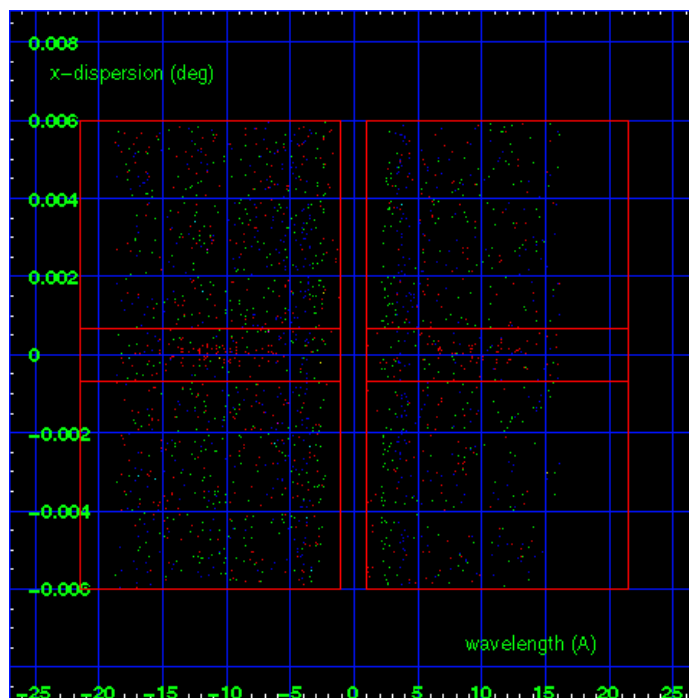
HEG Order Sort 123



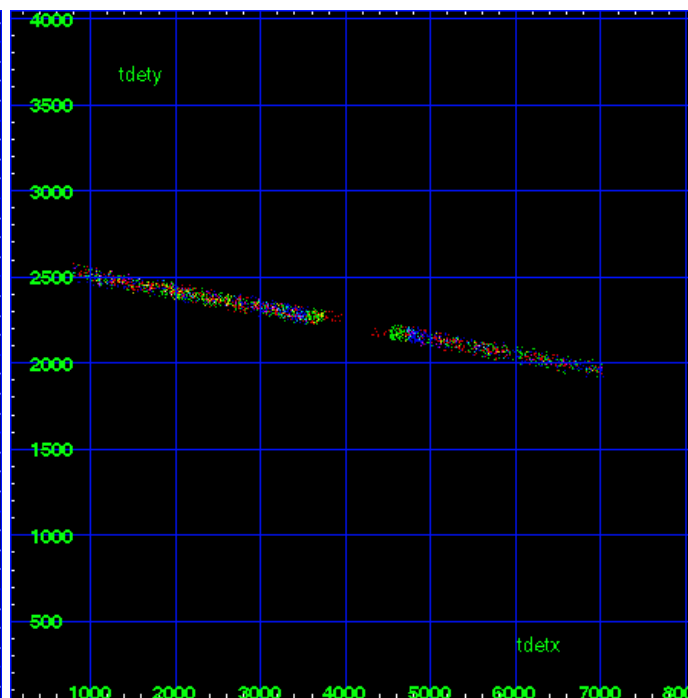
HEG Zero Order



HEG Order Sort ALL

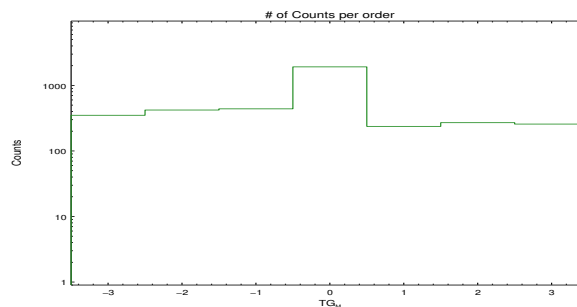


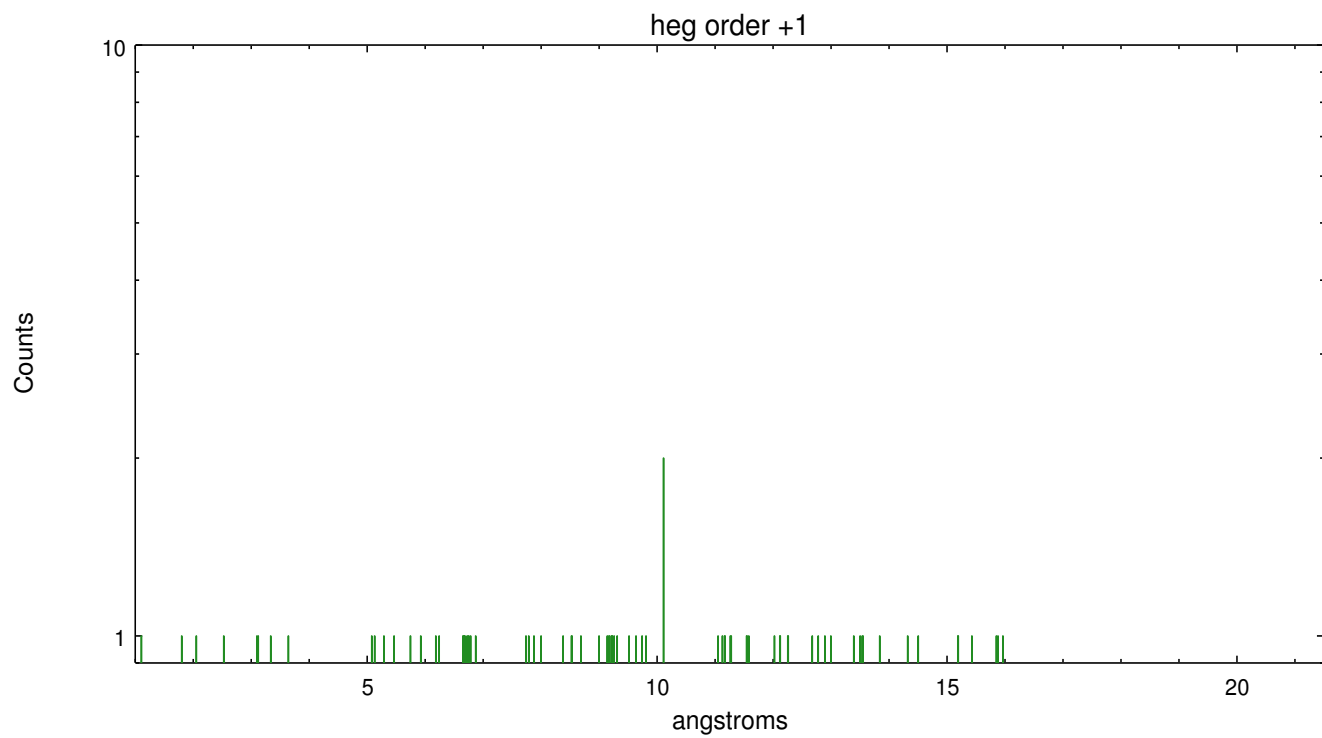
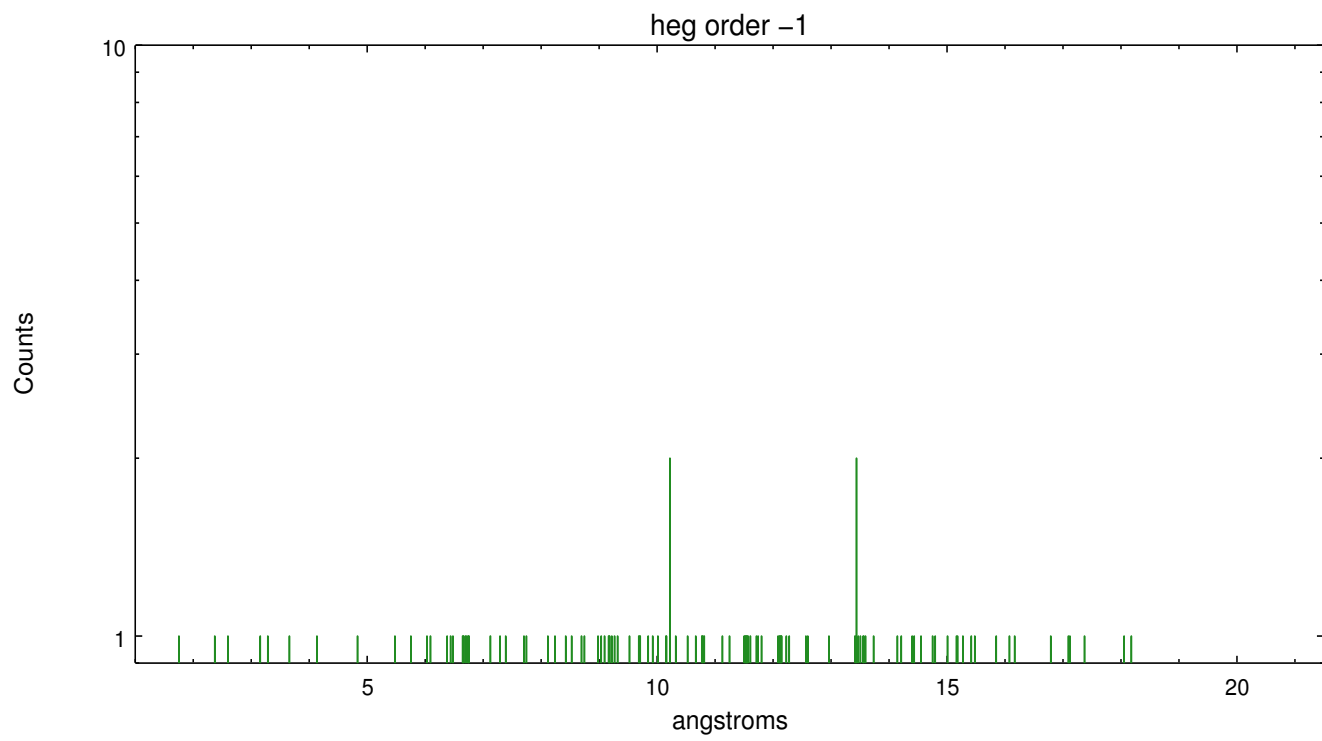
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	350	421	439	1918	237	270	257

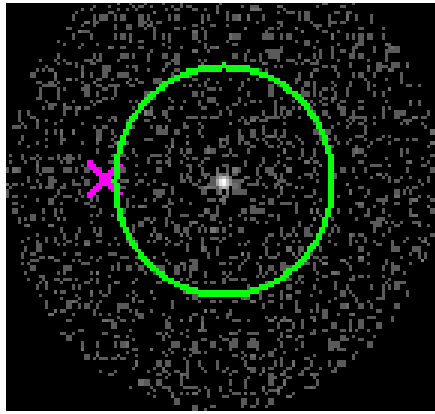




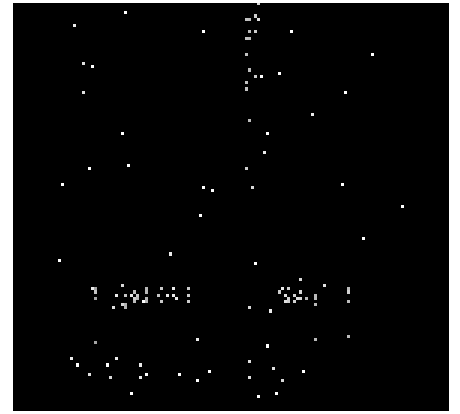
3.2 MEG Arm



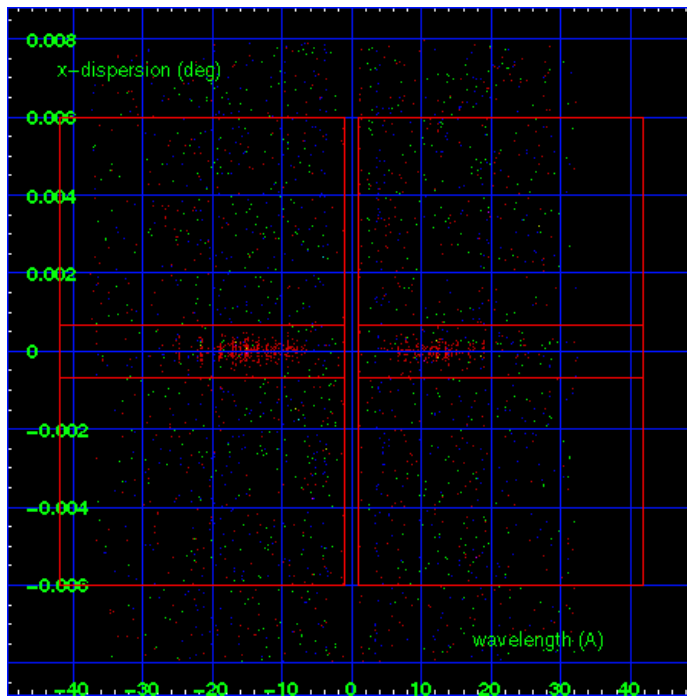
MEG Order Sort 123



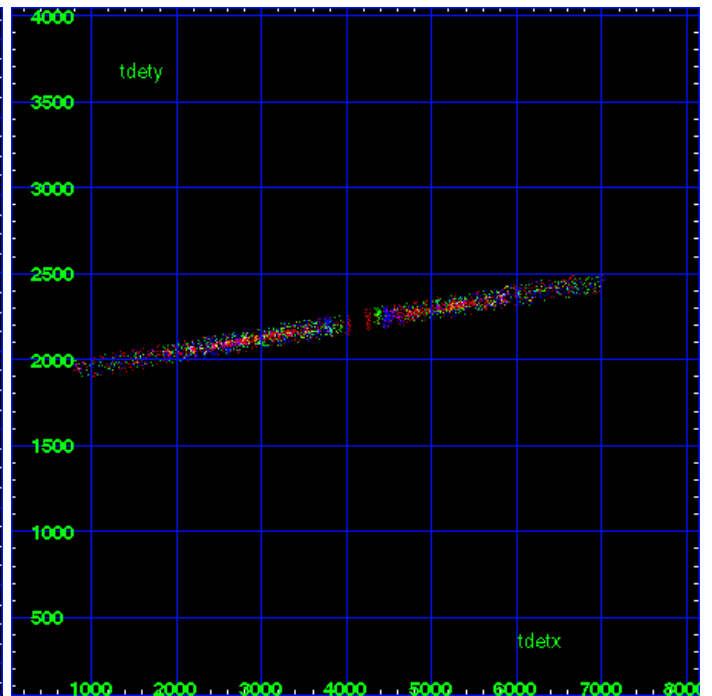
MEG Zero Order



MEG Order Sort ALL

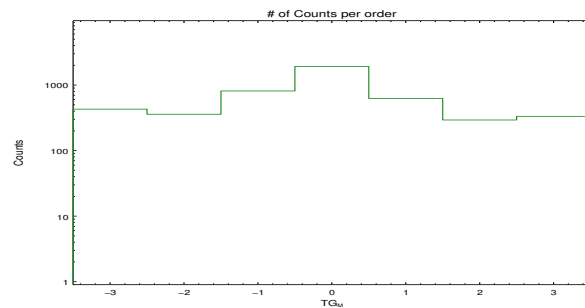


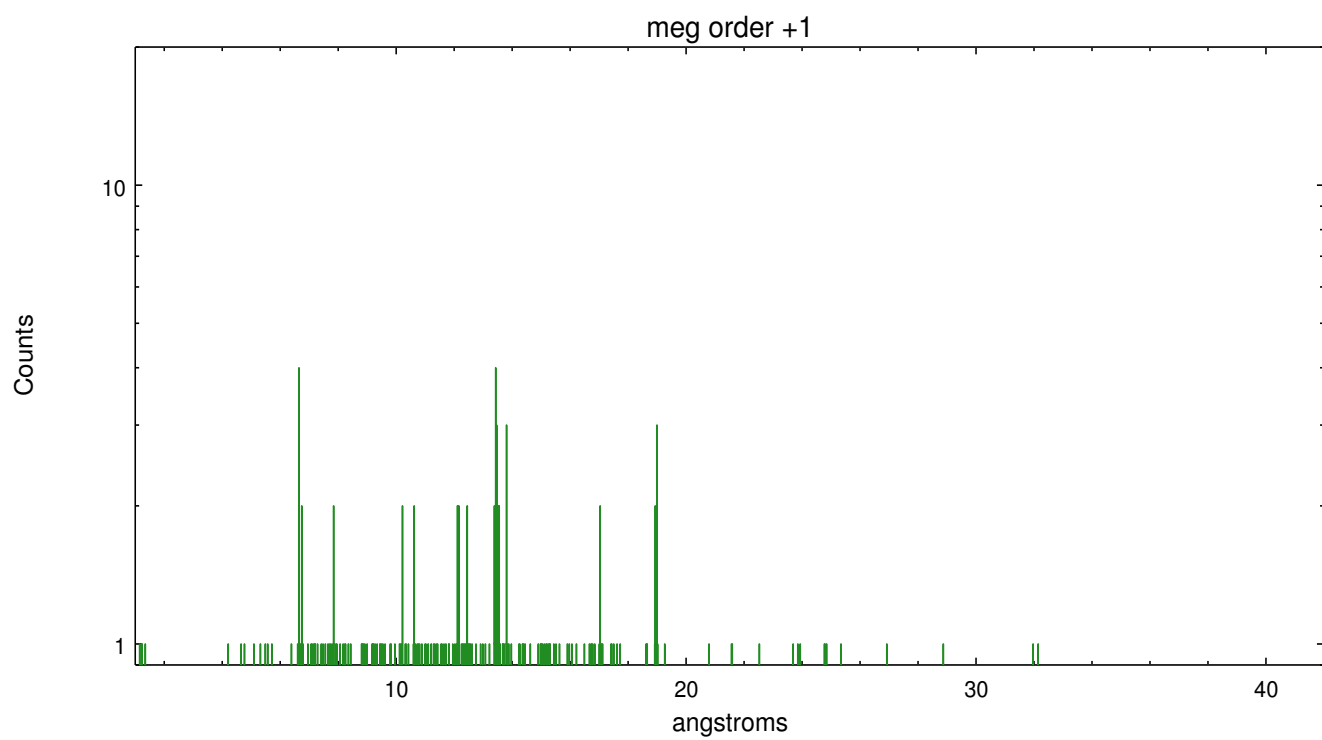
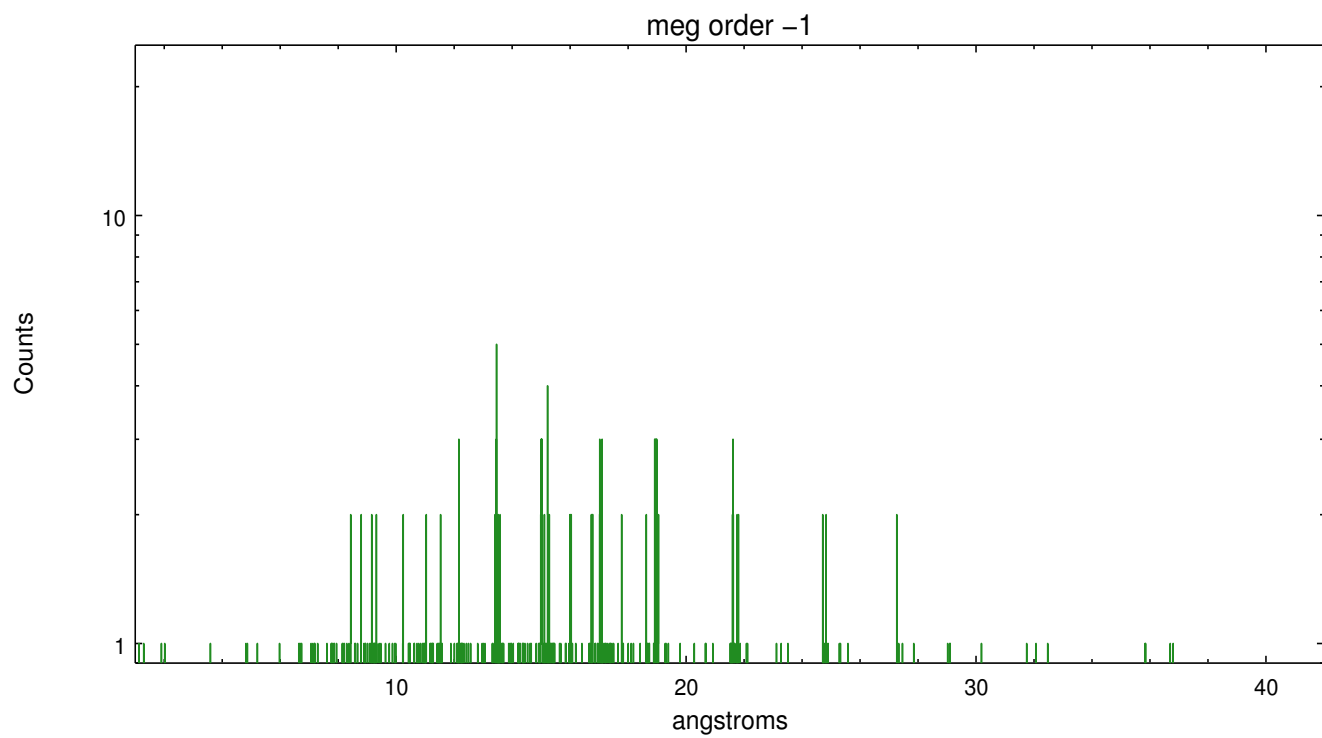
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	429	358	812	1918	624	293	333





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.9983998

A.2 Comments