

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10895 - L2 Version 2
Chandra X-Ray Center

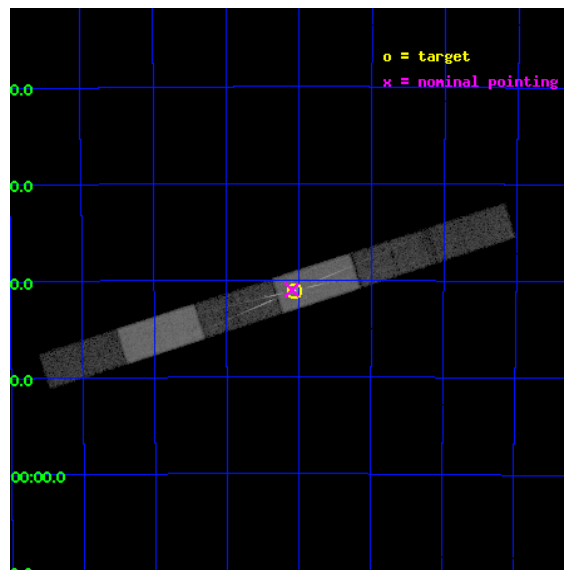
L2 Processing Date : Jun 2 2012

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1 Front

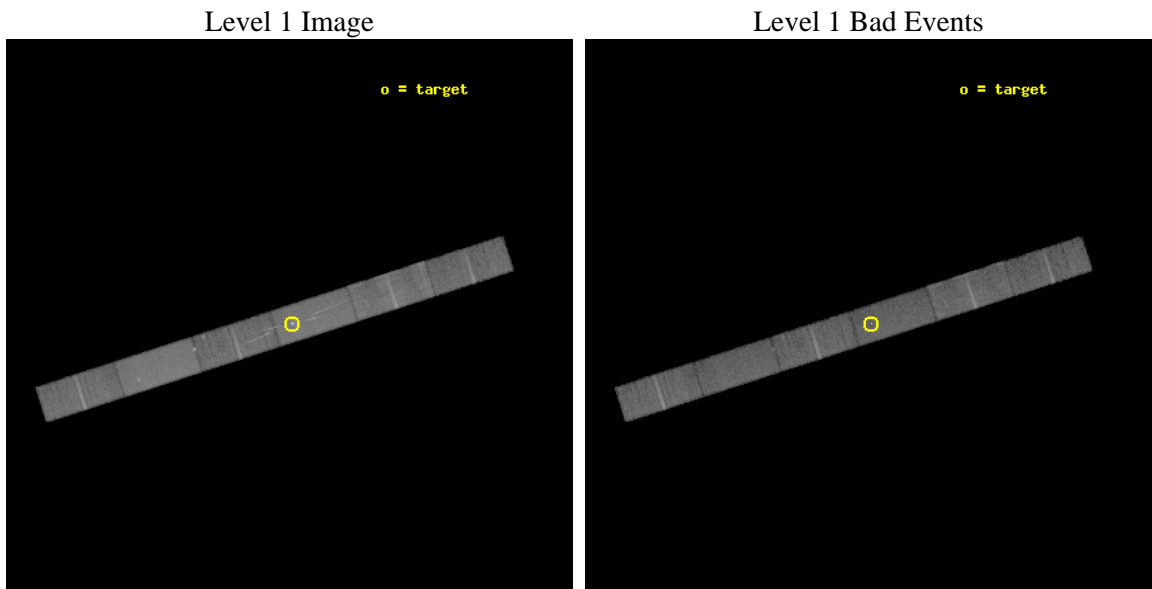
seq_num	200559	Sequence number
obs_id	10895	Observation id
title	Testing Shock Dynamics in Eta Carinae with HETGS After the 2009 Periastron Passage	Proposal title
observer	Dr Michael Corcoran	Principal investigator
object	Eta Car, Post-Minimum	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.265	Observer's specified target RA [deg]
dec_targ	-59.684528	Observer's specified target Dec [deg]
ra_nom	161.27438744246	Nominal RA [deg]
dec_nom	-59.683387782402	Nominal Dec [deg]
roll_nom	342.16473102649	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15675.0	Sum of GTIs [s]
livetime	15257.553340601	Livetime [s]
ontime4	15675.0	Sum of GTIs [s]
ontime5	15675.0	Sum of GTIs [s]
ontime6	15673.458969891	Sum of GTIs [s]
ontime7	15675.0	Sum of GTIs [s]
ontime8	15675.0	Sum of GTIs [s]
ontime9	15675.0	Sum of GTIs [s]
l2events	144964	Number of level 2 events



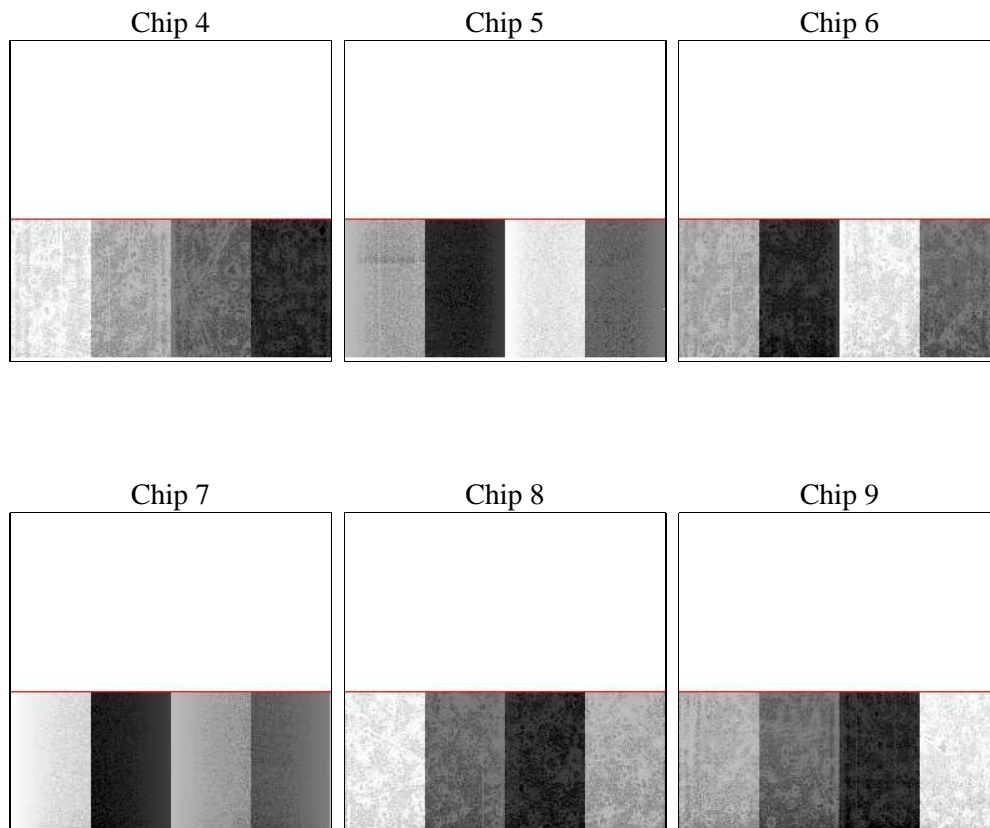
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	15675.0	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	15675.0	Sum of GTIs [s]
date	2012-06-02T15:05:31	Date and time of file creation	ontime5	15675.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15673.458969891	Sum of GTIs [s]
			ontime7	15675.0	Sum of GTIs [s]
			ontime8	15675.0	Sum of GTIs [s]
			ontime9	15675.0	Sum of GTIs [s]
			l1events	559968	Number of level 1 events

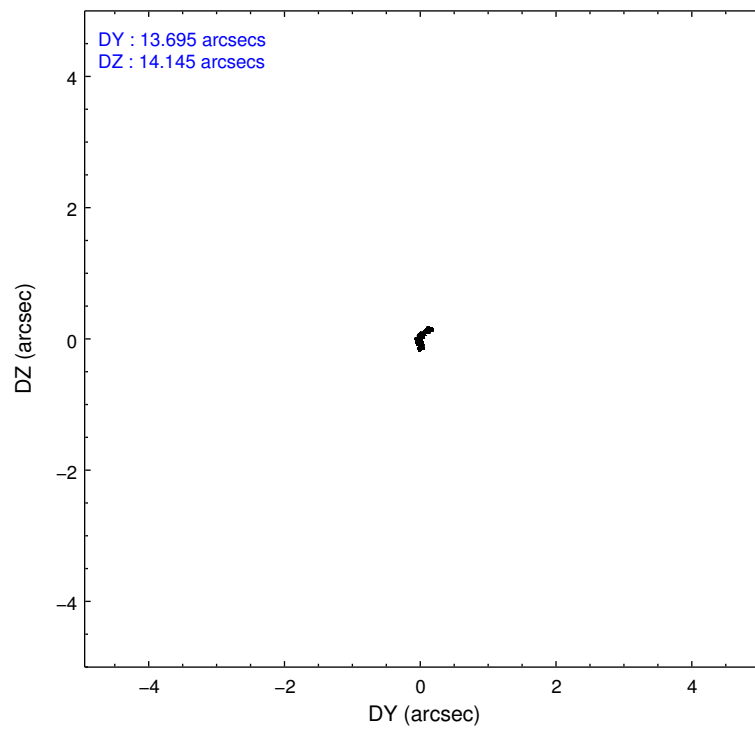
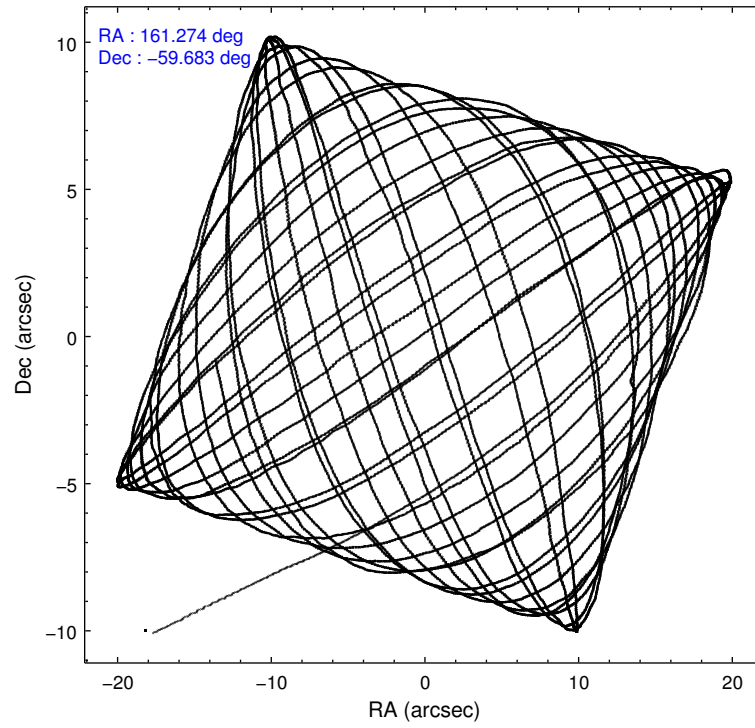
2.1.4 Events

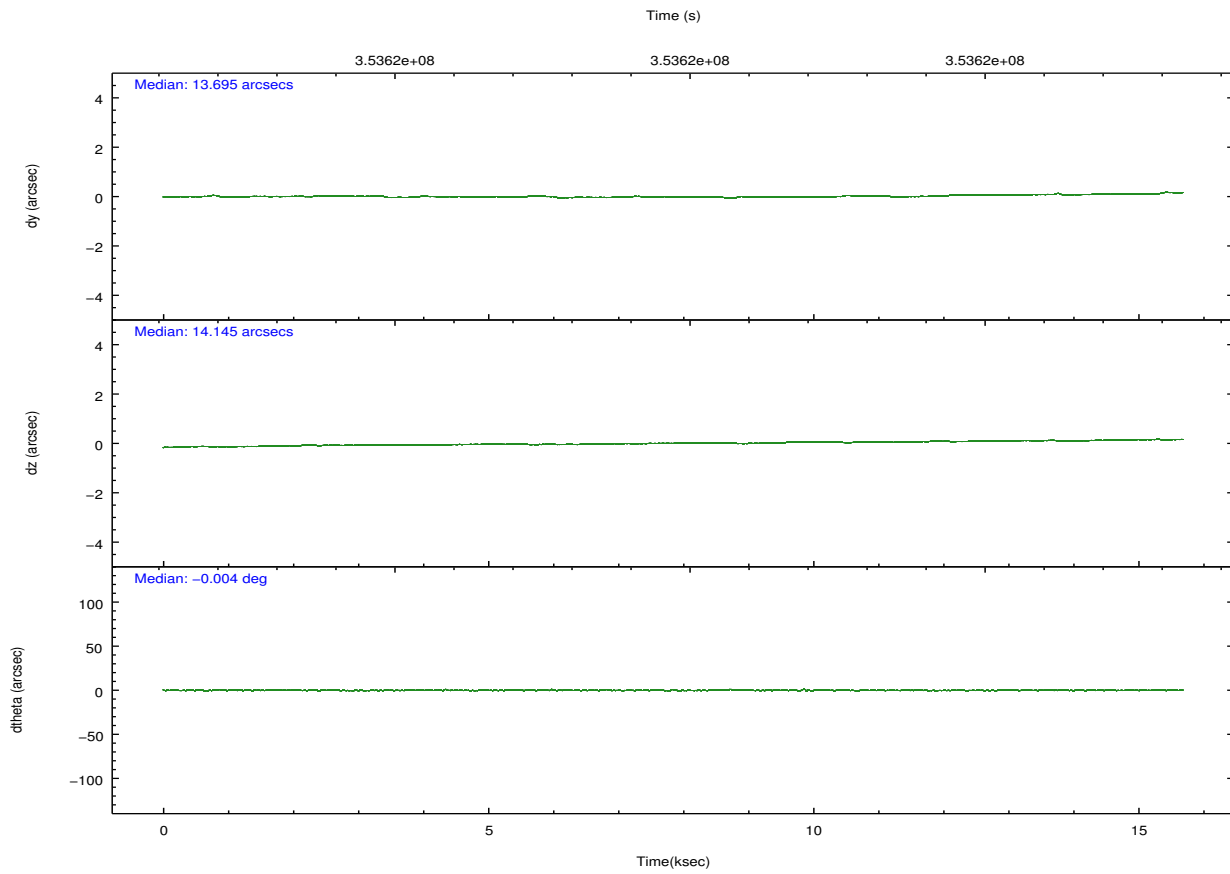
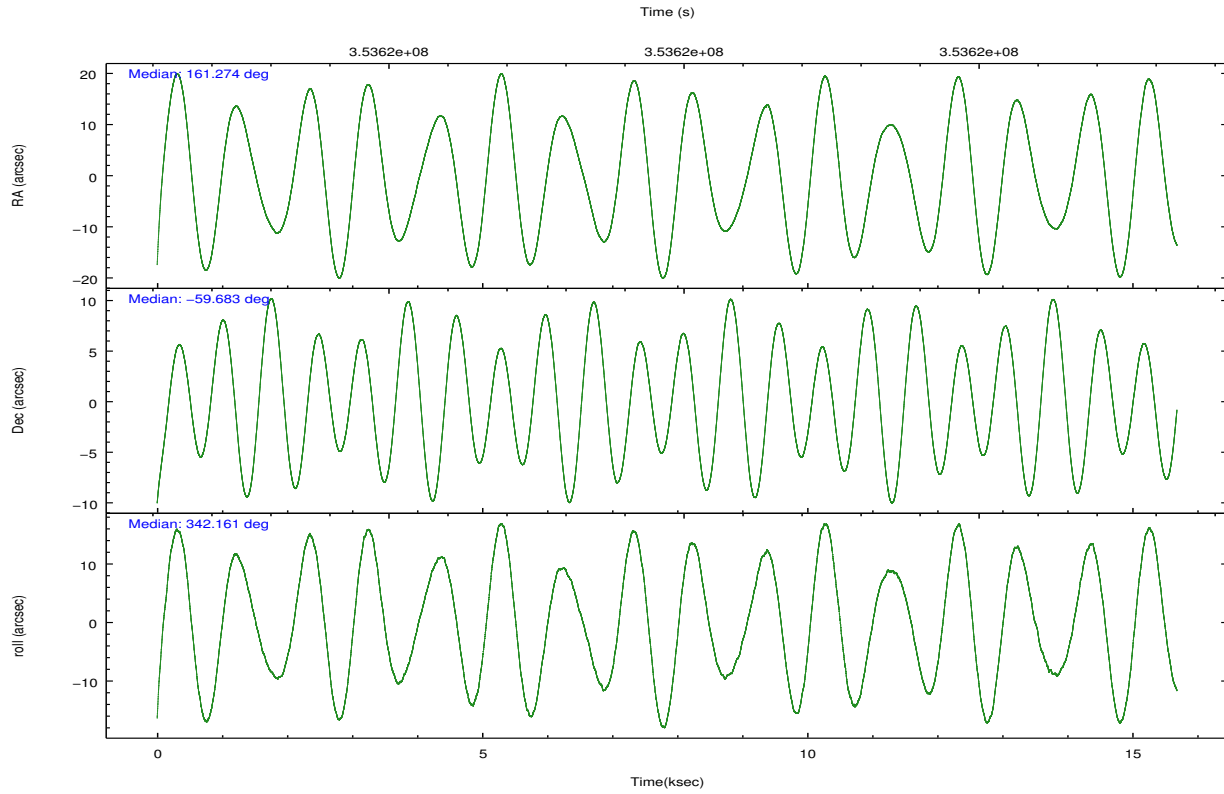
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	82869	113229	81704	115003	97276	69887	grade 0 events	4333	5332	6702	6328	7988	4284
rejected events	72427	60133	67725	58928	73267	59799		5%	4%	8%	5%	8%	6%
rejected %	87%	53%	82%	51%	75%	85%	grade 1 events	46	410	65	222	64	36
								0%	0%	0%	0%	0%	0%
							grade 2 events	2328	15362	2548	11839	5039	1893
								2%	13%	3%	10%	5%	2%
							grade 3 events	1088	2960	1298	5260	2498	1095
								1%	2%	1%	4%	2%	1%
							grade 4 events	1076	2863	1279	5272	2382	1044
								1%	2%	1%	4%	2%	1%
							grade 5 events	3180	8891	3344	9644	4413	3484
								3%	7%	4%	8%	4%	4%
							grade 6 events	1619	26591	2155	27395	6103	1774
								1%	23%	2%	23%	6%	2%
							grade 7 events	69199	50820	64313	49043	68789	56277
								83%	44%	78%	42%	70%	80%

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	161.221534	161.2743874424581	CCD I2 on	N	N
[deg] Pointing Dec	-59.689498	-59.68338778240165	CCD I3 on	N	N
[deg] Pointing Roll	341.962474	342.1647310264901	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	-183.332523	-183.3237572673427	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.8	-6.808765315665084	CCD S4 on	Y	Y
[s] Observation start time (MET)	353612048.184000	353611092.55517	CCD S5 on	O2	Y
Observation start date	2009-03-16T17:33:02	2009-03-16T17:18:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	353627548.184000	353628302.81853	On-chip summing requested	N	N
Observation end date	2009-03-16T21:51:22	2009-03-16T22:05:02	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	15	15
			Subarray row count	440	440
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.5

2.3 Aspect



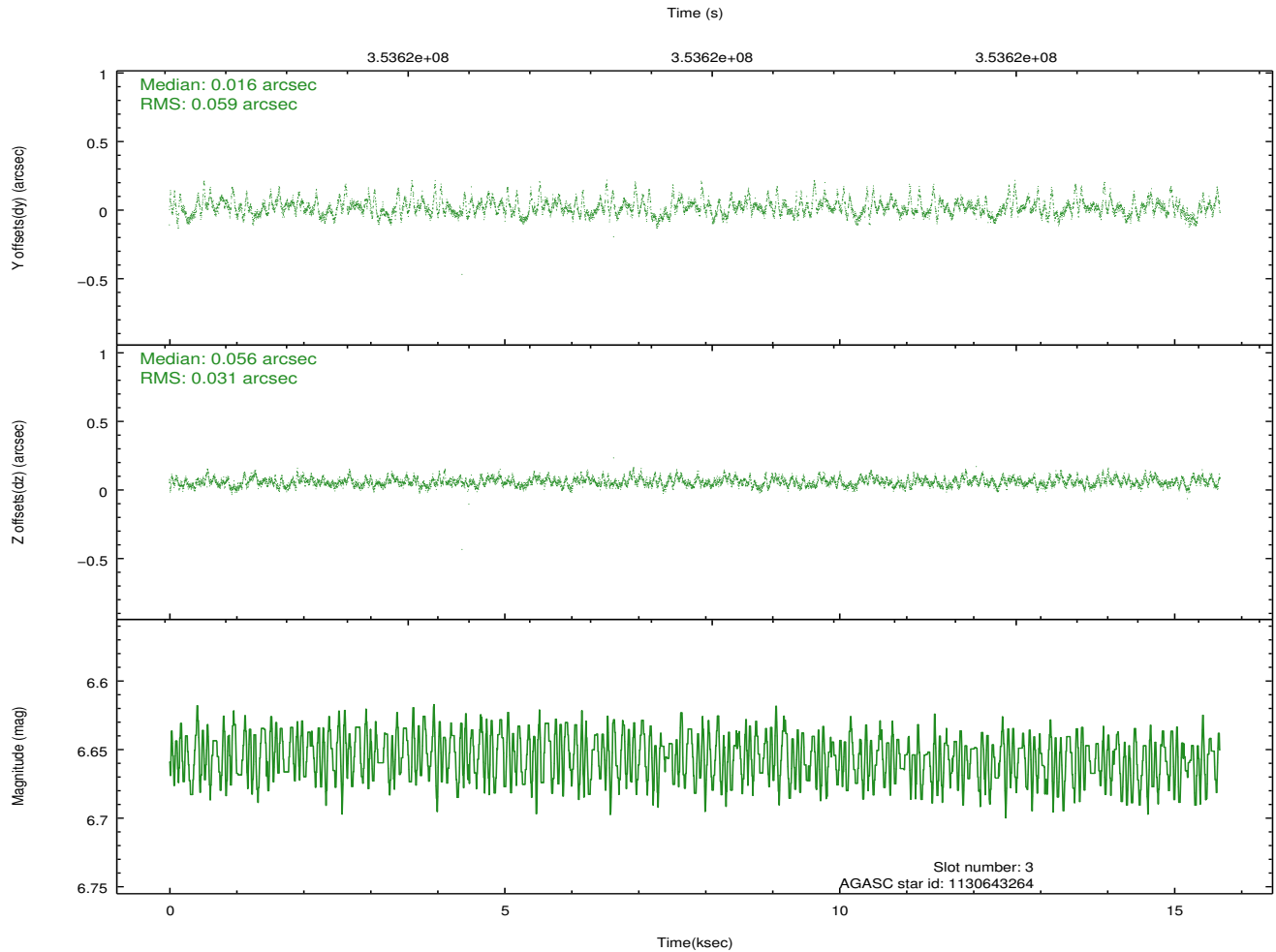
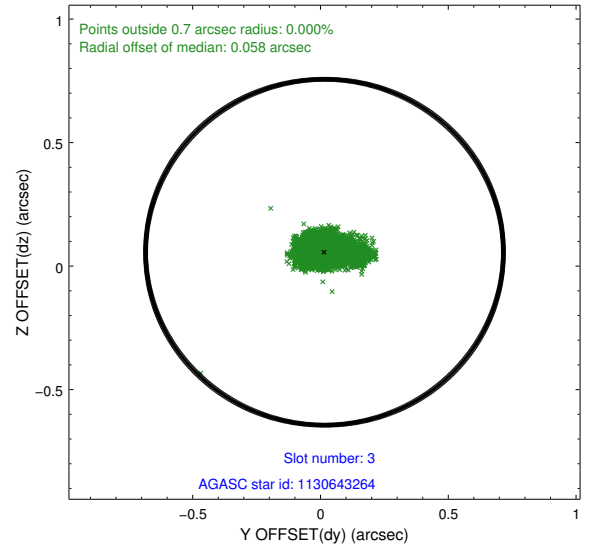
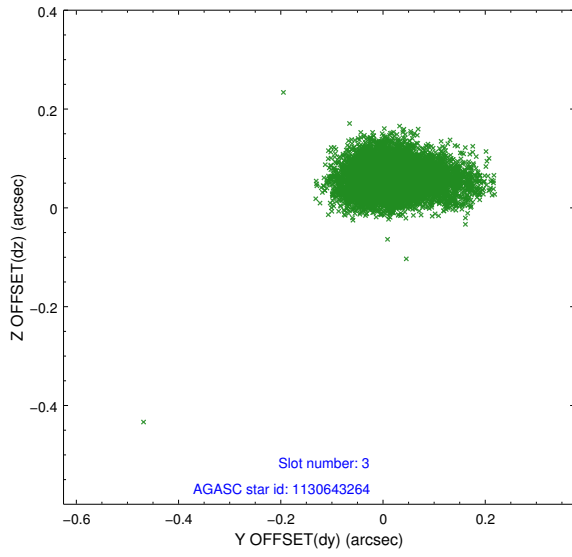


Slot Statistics

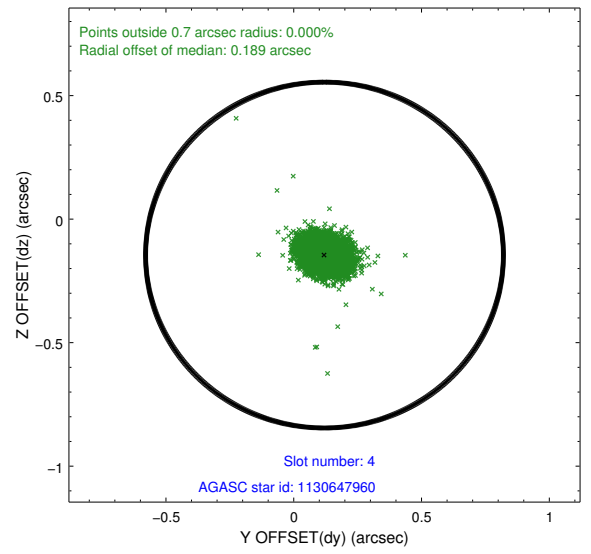
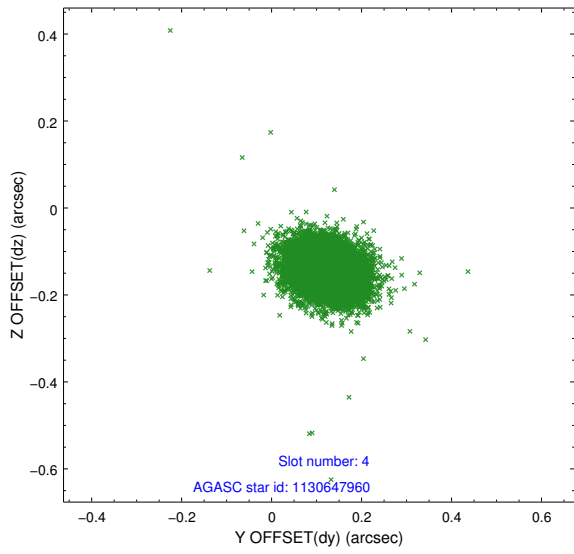
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	3826	-0.084	-0.078	0.007	0.012	0.000000	0.000000	-766.24	-1875.90
1	FID	ACIS-S-4	7.04	3826	0.194	0.061	0.007	0.015	0.000000	0.000000	2147.18	32.40
2	FID	ACIS-S-5	7.10	3826	-0.142	0.025	0.007	0.012	0.000000	0.000000	-1818.78	26.34
3	GUIDE	1130643264	6.66	7652	0.016	0.056	0.066	0.123	160.322990	-59.676912	-1563.29	-472.90
4	GUIDE	1130647960	8.62	7646	0.120	-0.145	0.063	0.103	160.287471	-59.247776	-2123.56	968.12
5	GUIDE	1130640672	8.27	7650	-0.047	-0.028	0.059	0.098	162.096044	-59.540805	1354.68	993.57
6	GUIDE	1130646160	8.63	7645	-0.068	-0.089	0.062	0.102	162.161730	-59.561264	1491.41	958.73
7	GUIDE	1174012960	7.14	7650	-0.026	0.203	0.054	0.085	160.855674	-60.332270	97.59	-2403.26

2.4 Star Slots

2.4.1 Slot 3



2.4.2 Slot 4

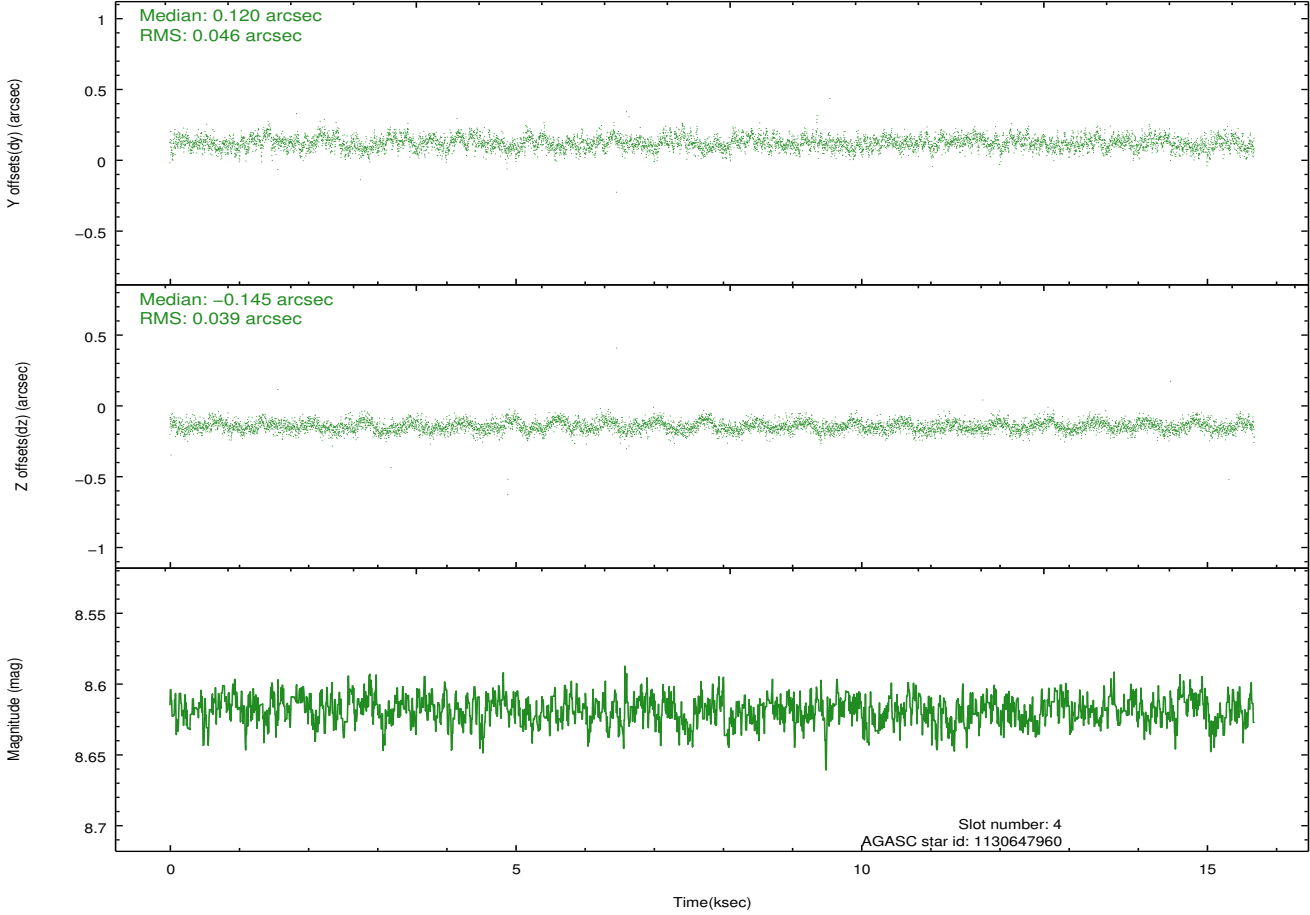


Time (s)

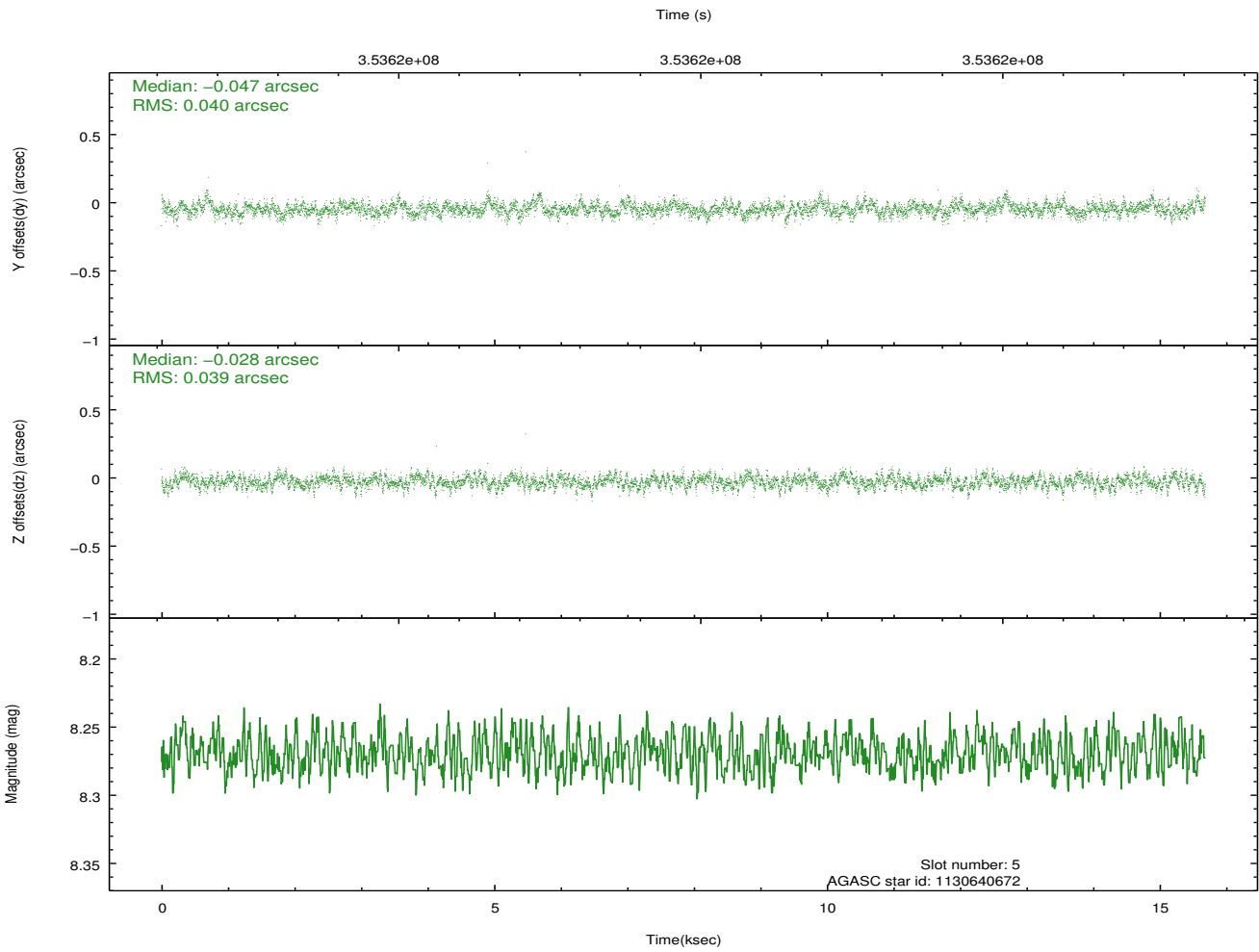
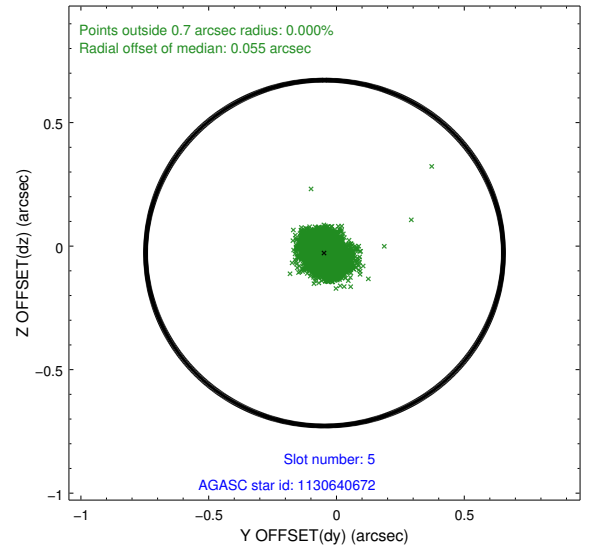
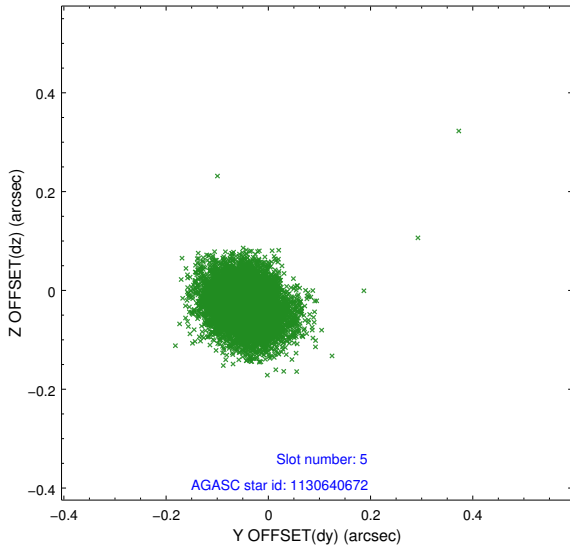
3.5362e+08

3.5362e+08

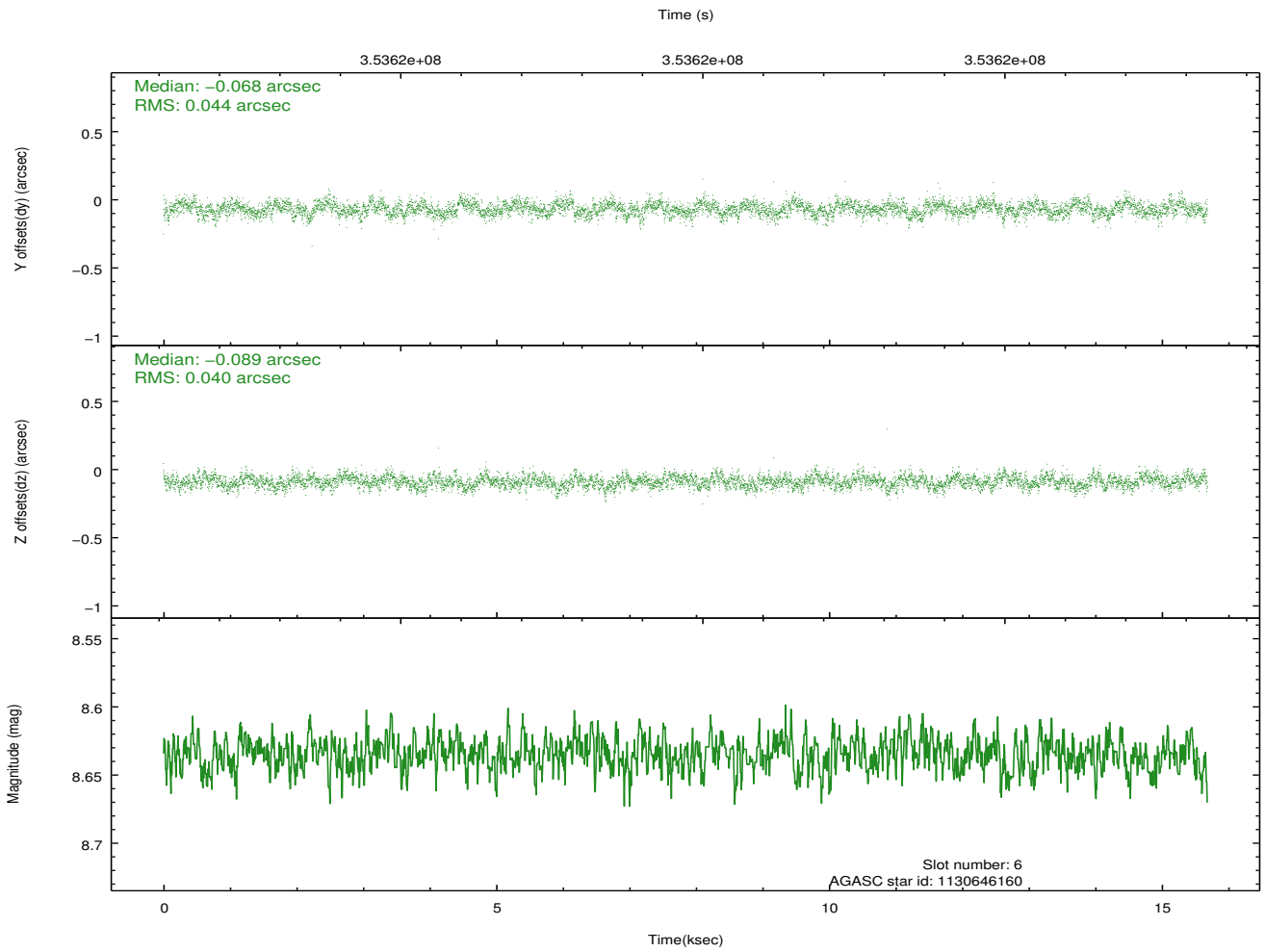
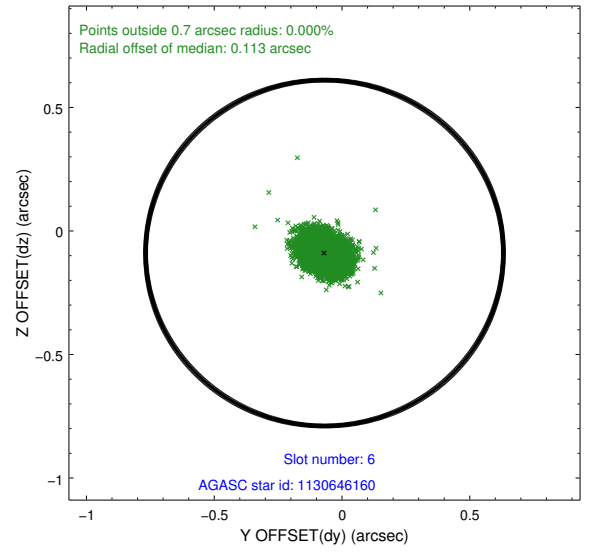
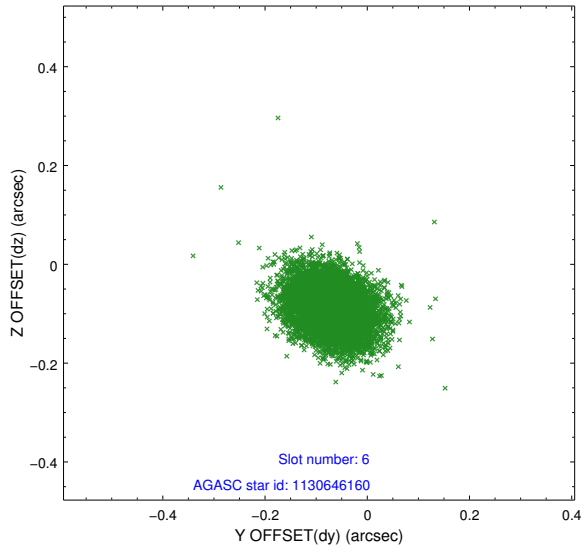
3.5362e+08



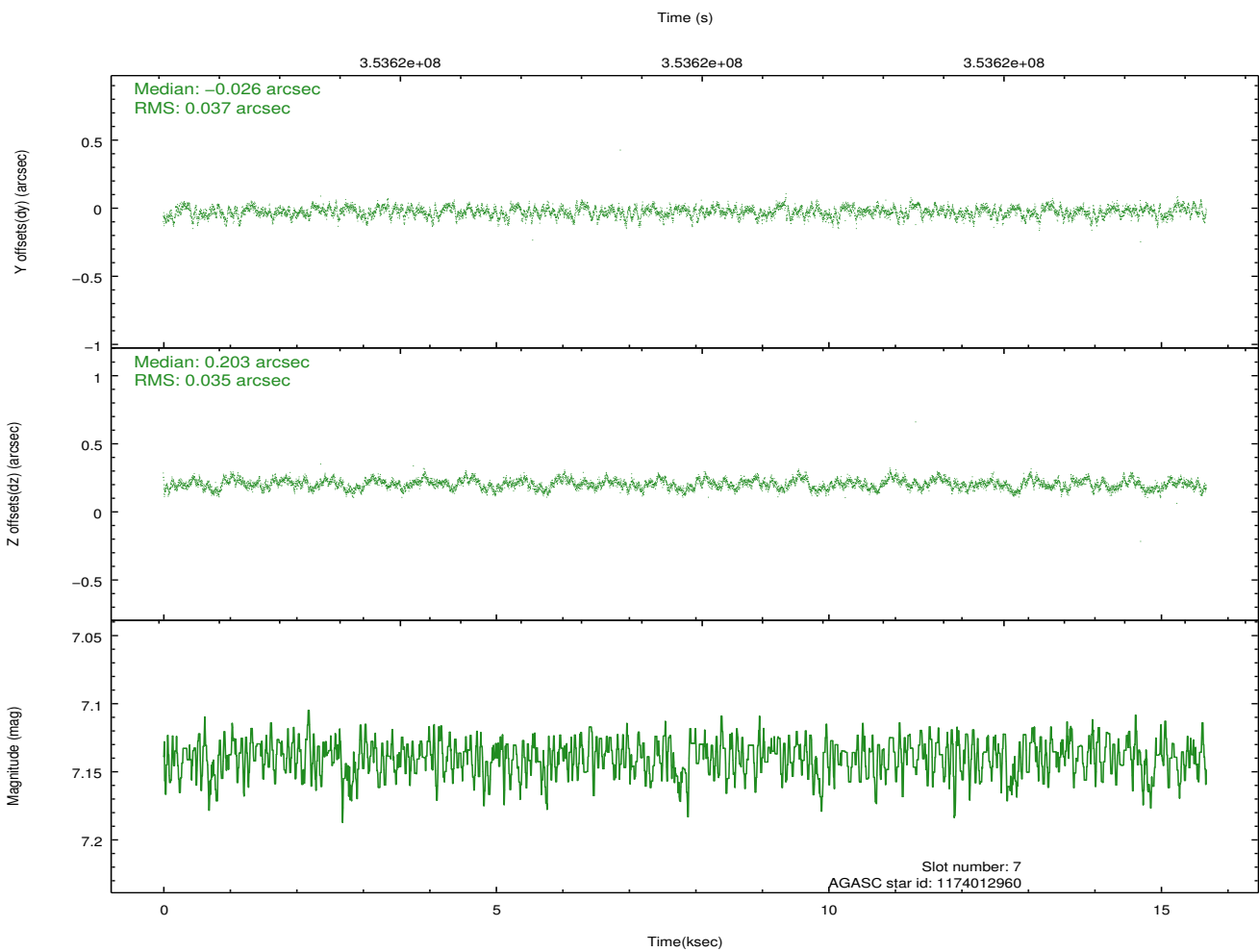
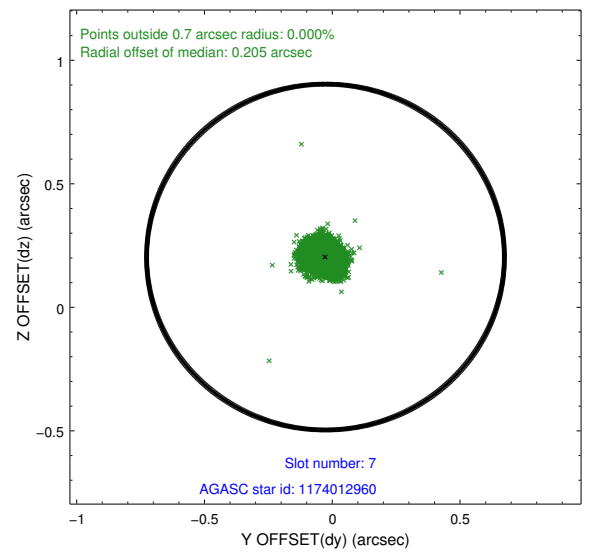
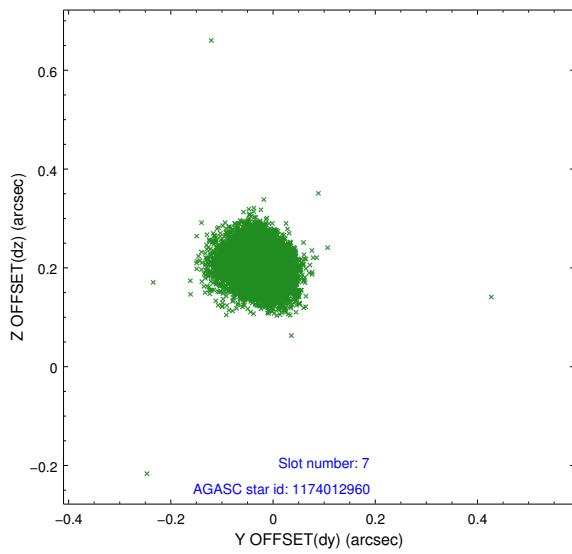
2.4.3 Slot 5



2.4.4 Slot 6

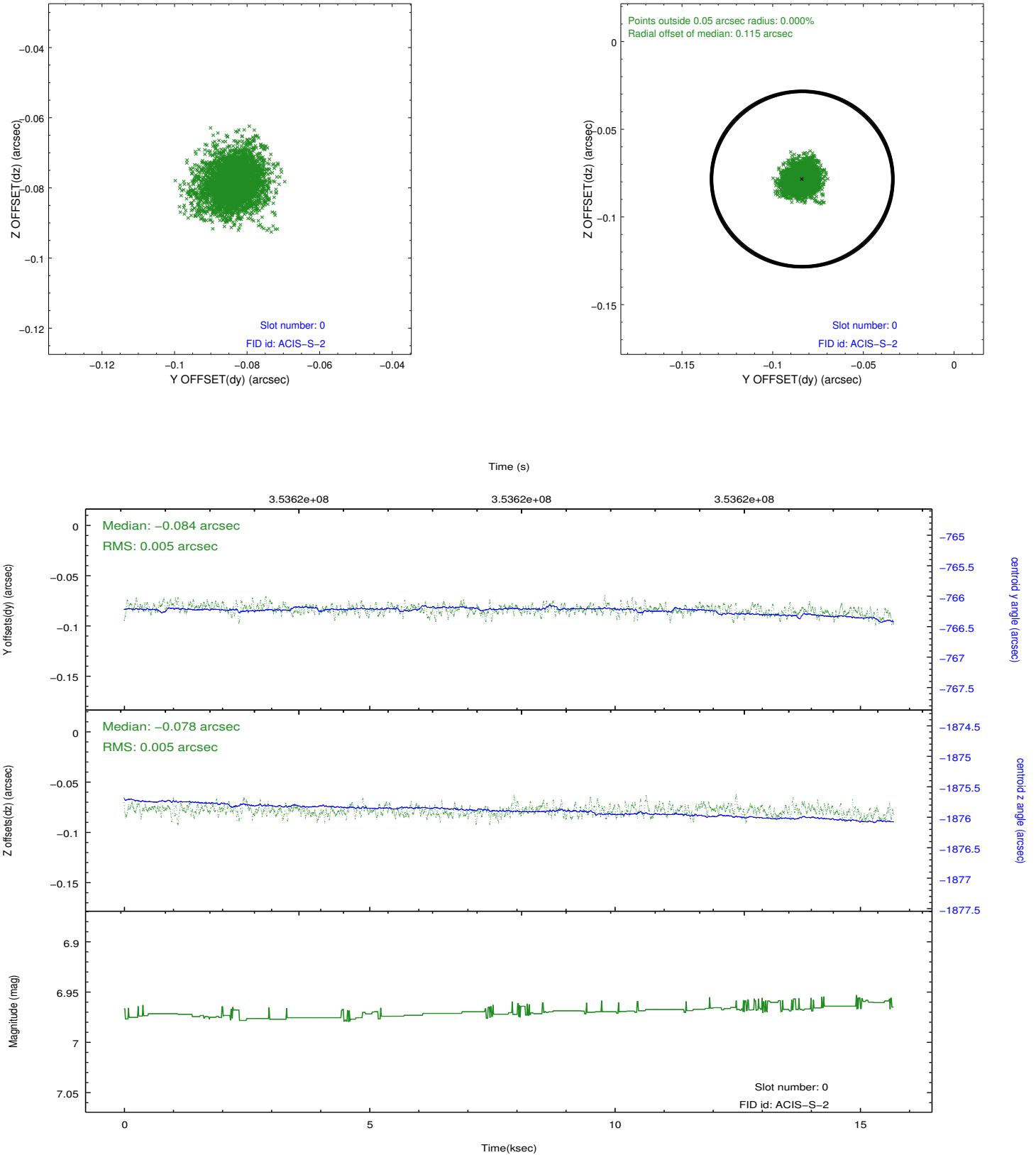


2.4.5 Slot 7

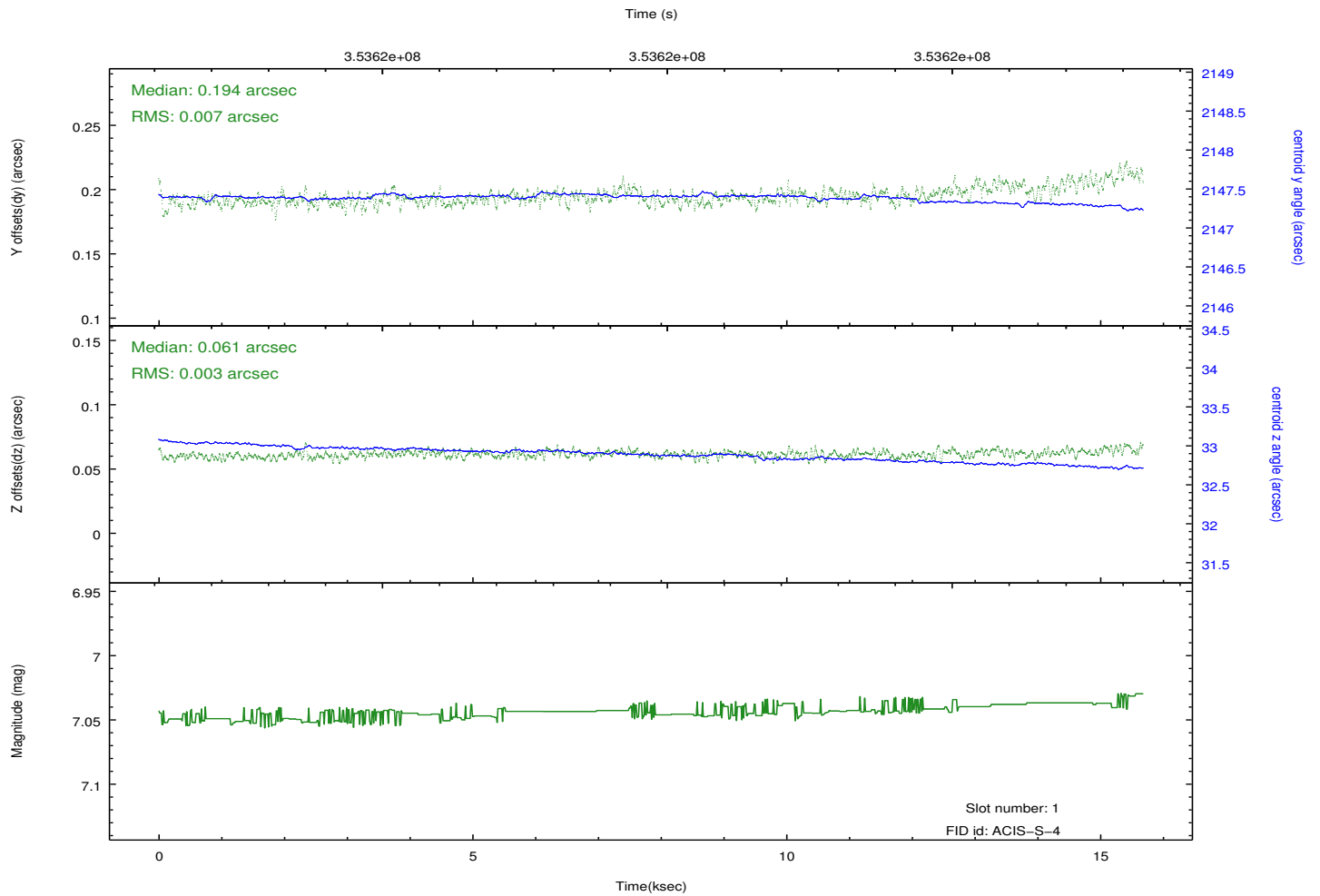
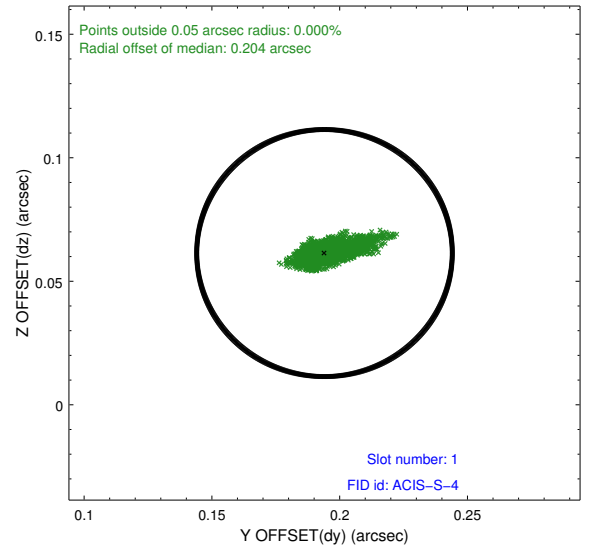
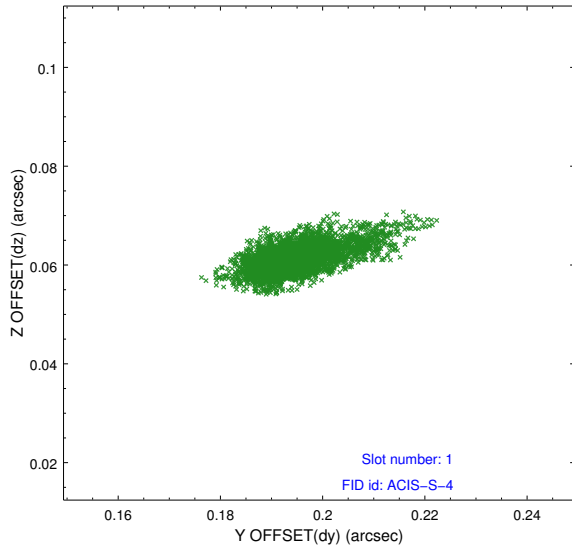


2.5 FID Slots

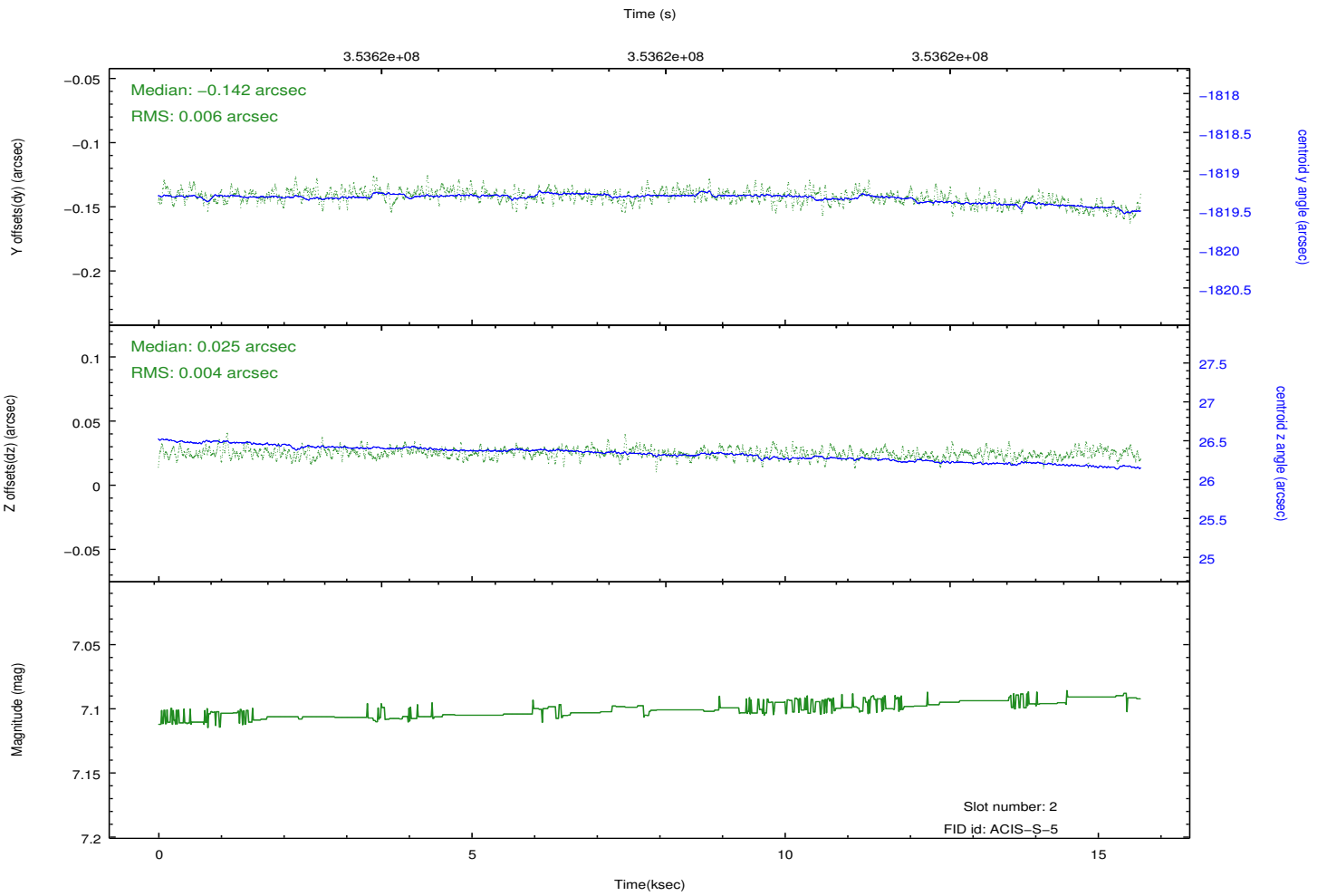
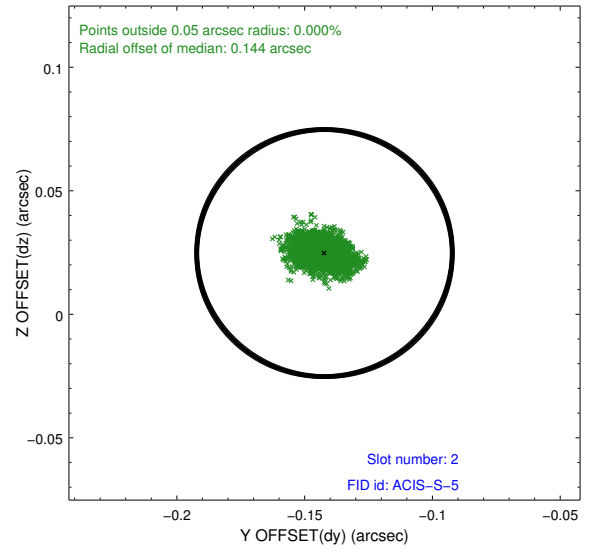
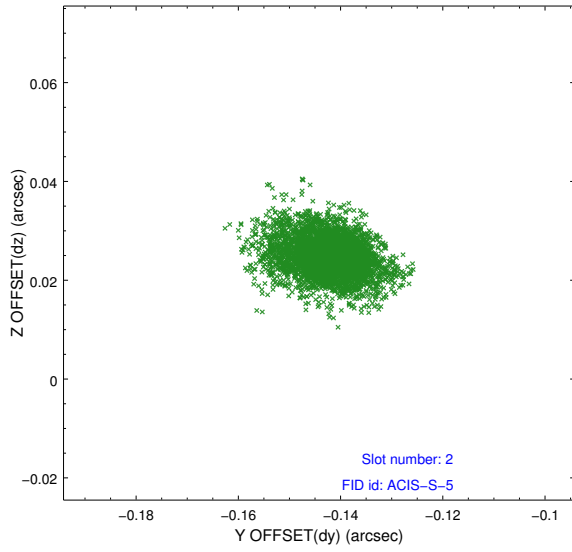
2.5.1 Slot 0



2.5.2 Slot 1

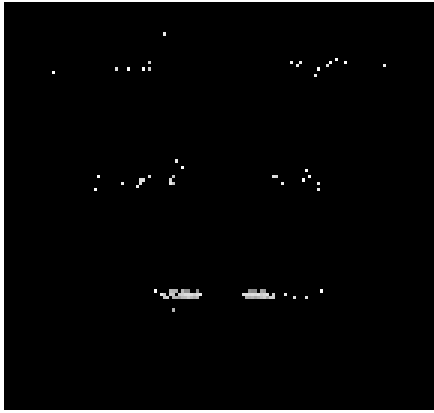


2.5.3 Slot 2

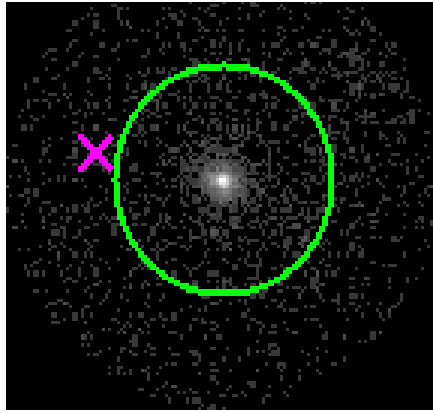


3 Gratings

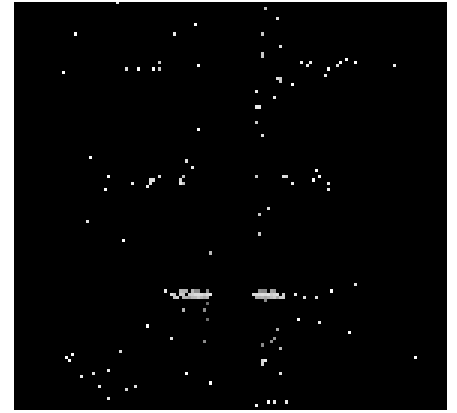
3.1 HEG Arm



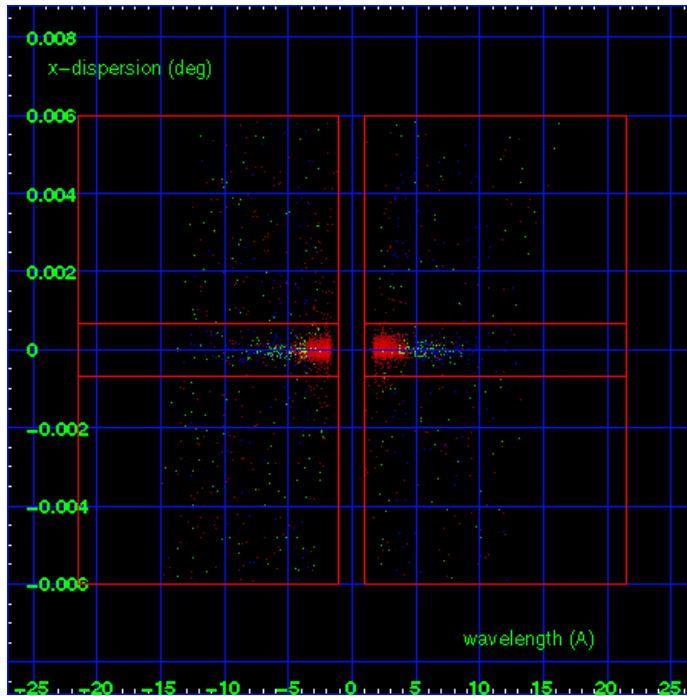
HEG Order Sort 123



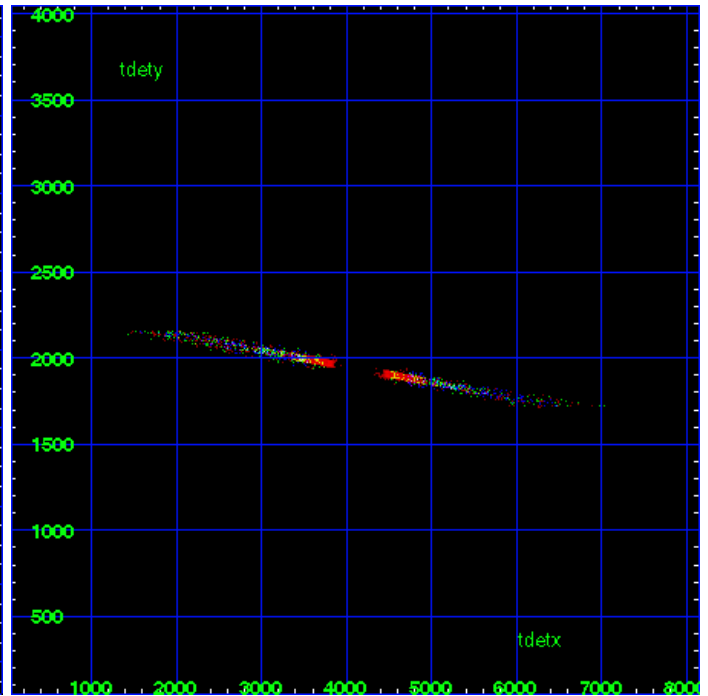
HEG Zero Order



HEG Order Sort ALL

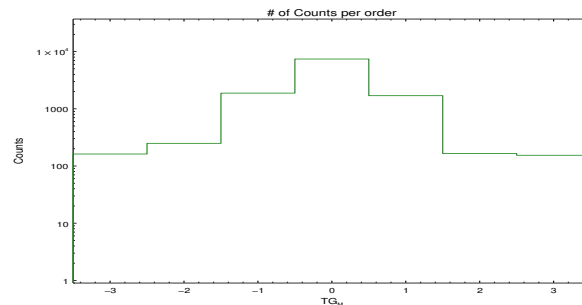


Spot Image HEG

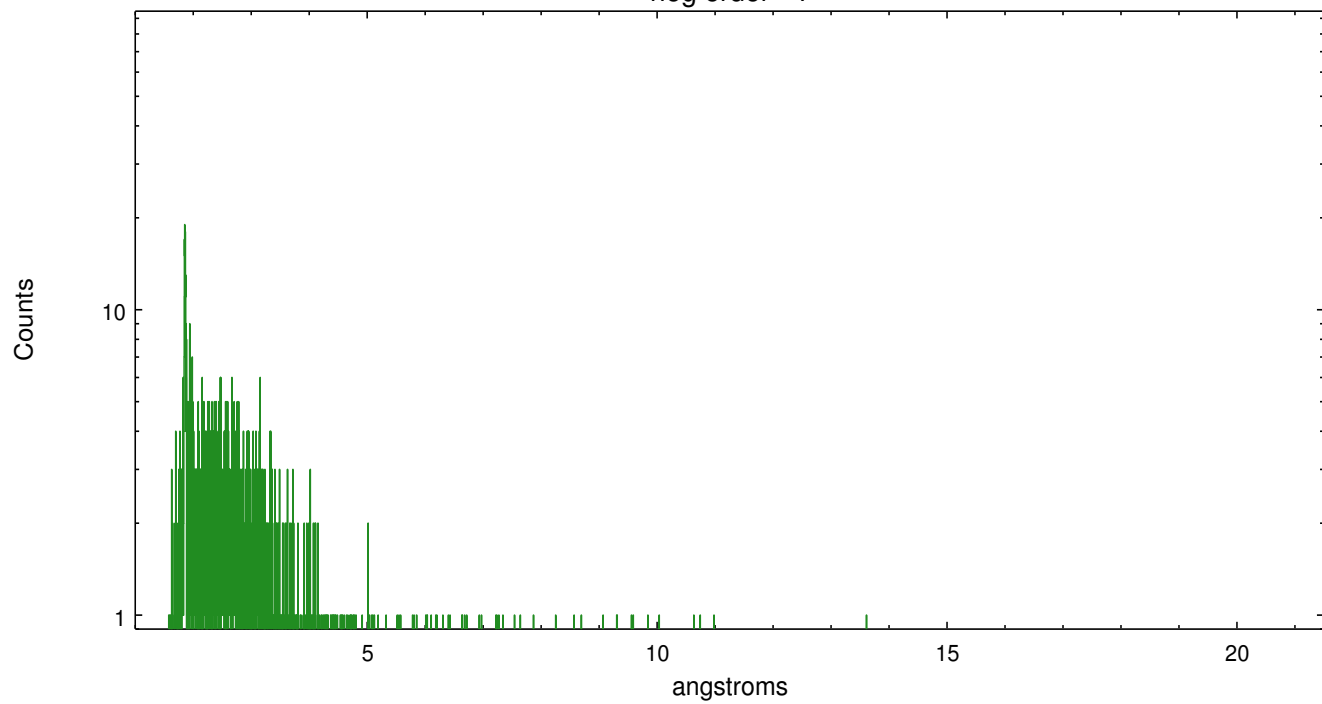


Full Detector HEG

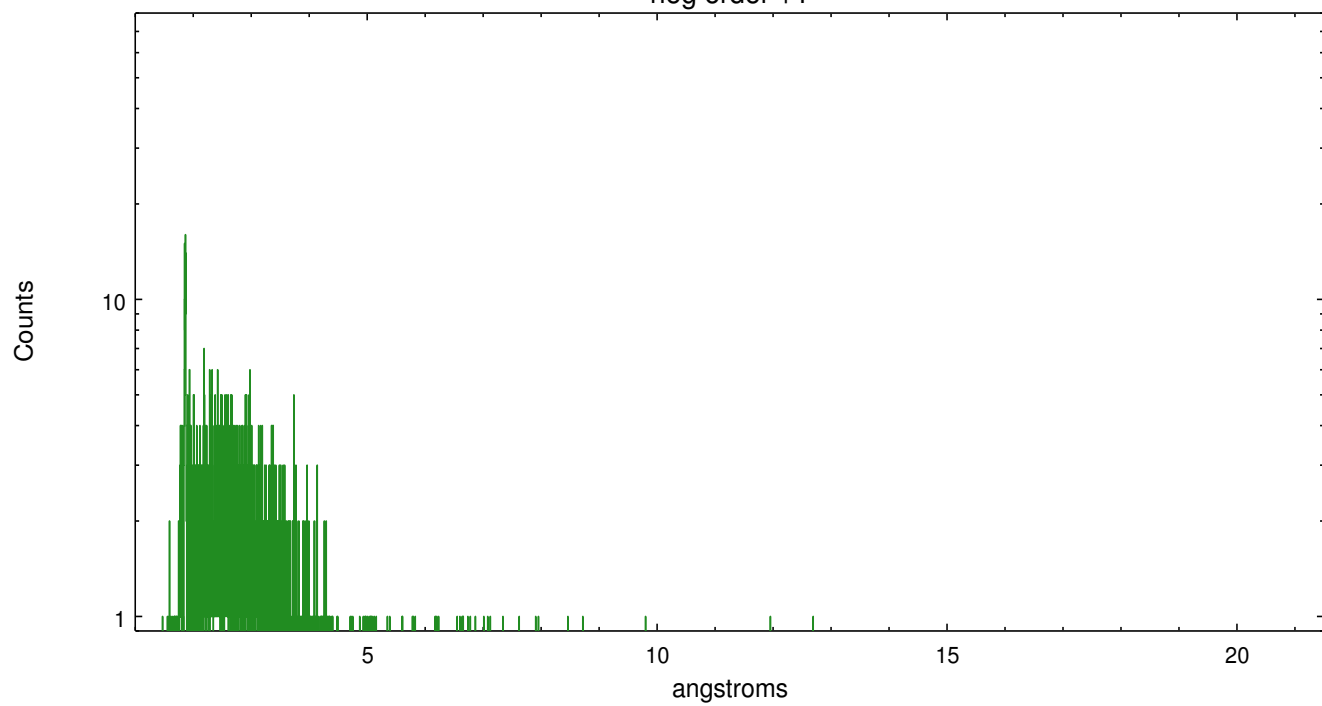
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	162	249	1879	7410	1696	165	154



heg order -1



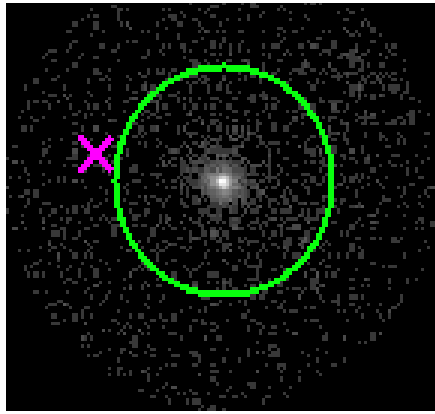
heg order +1



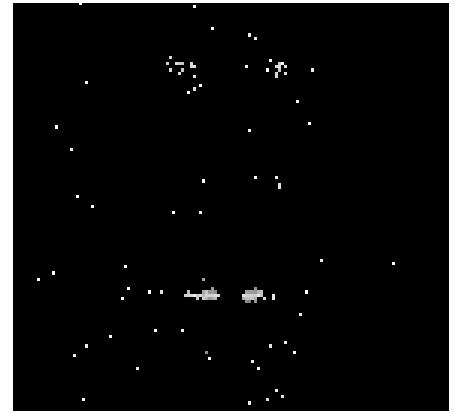
3.2 MEG Arm



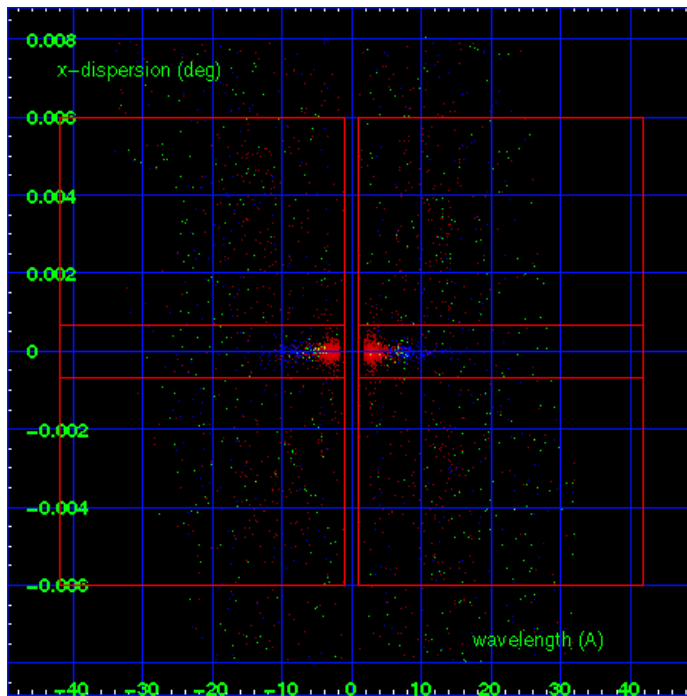
MEG Order Sort 123



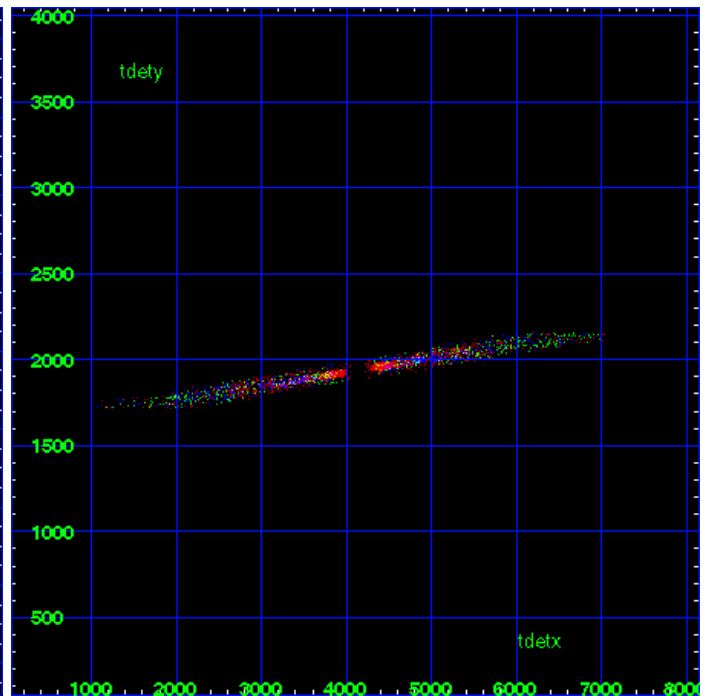
MEG Zero Order



MEG Order Sort ALL

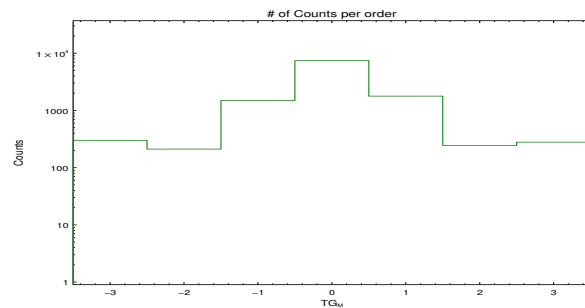


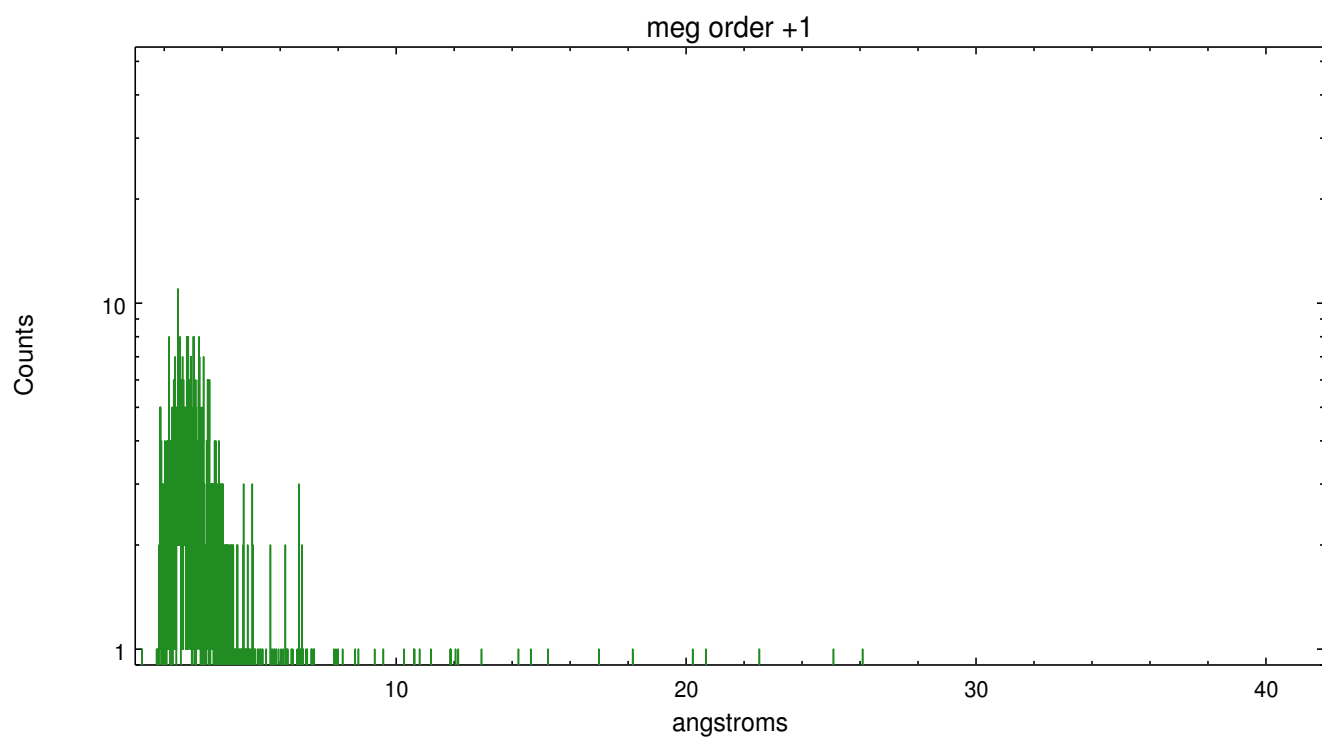
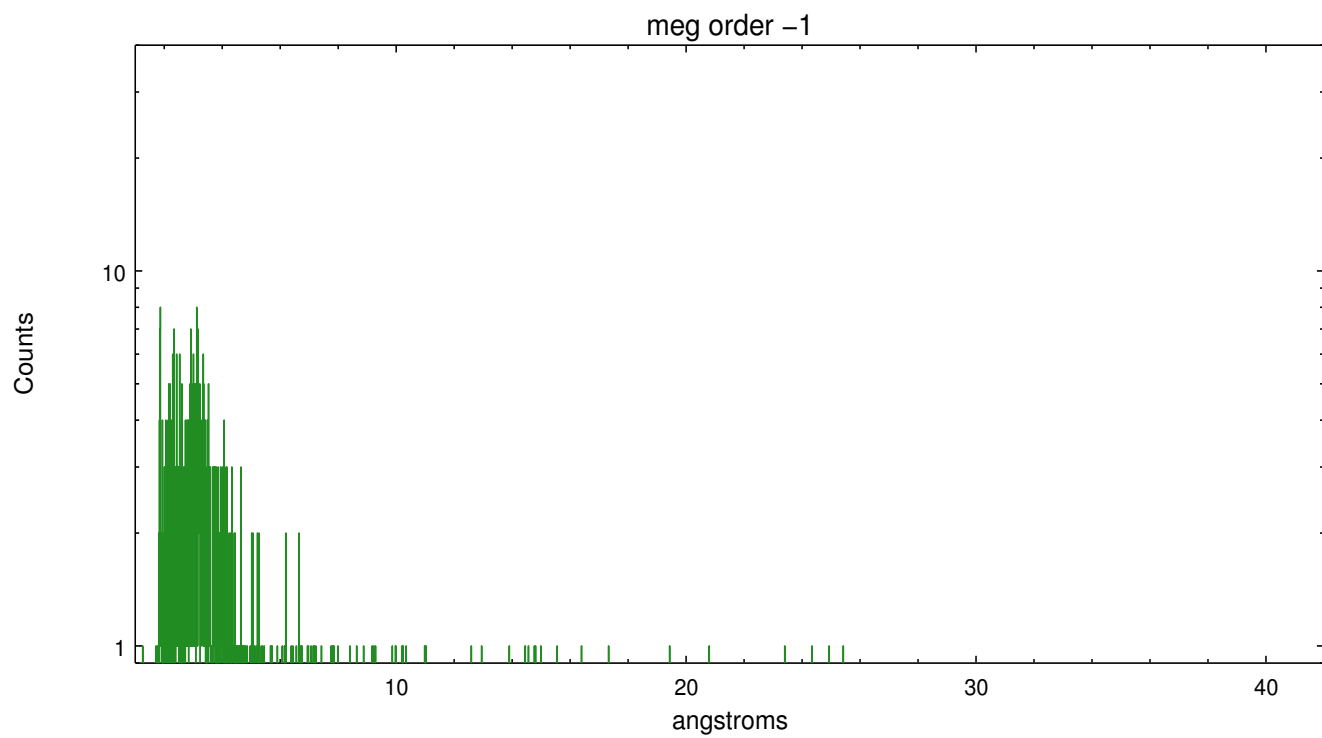
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	300	211	1488	7410	1778	244	279





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.675

A.2 Comments

Spatially complex field. Extraction centered on zeroth order position that was automatically selected by the software (tgdetect).