

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 16536 - L2 Version 1
Chandra X-Ray Center

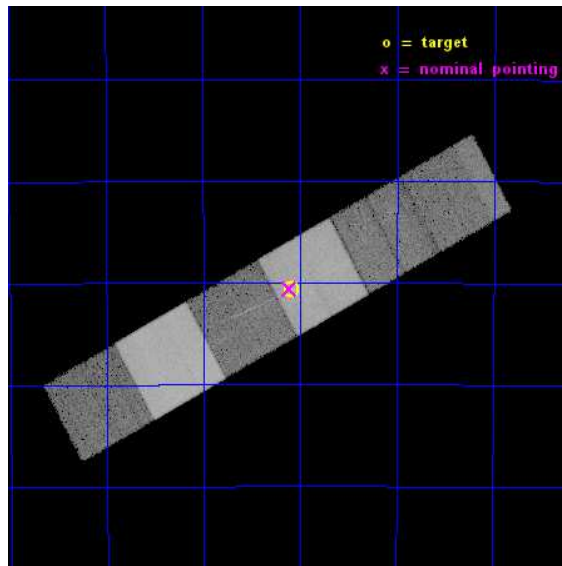
L2 Processing Date : Feb 27 2015

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1 Front

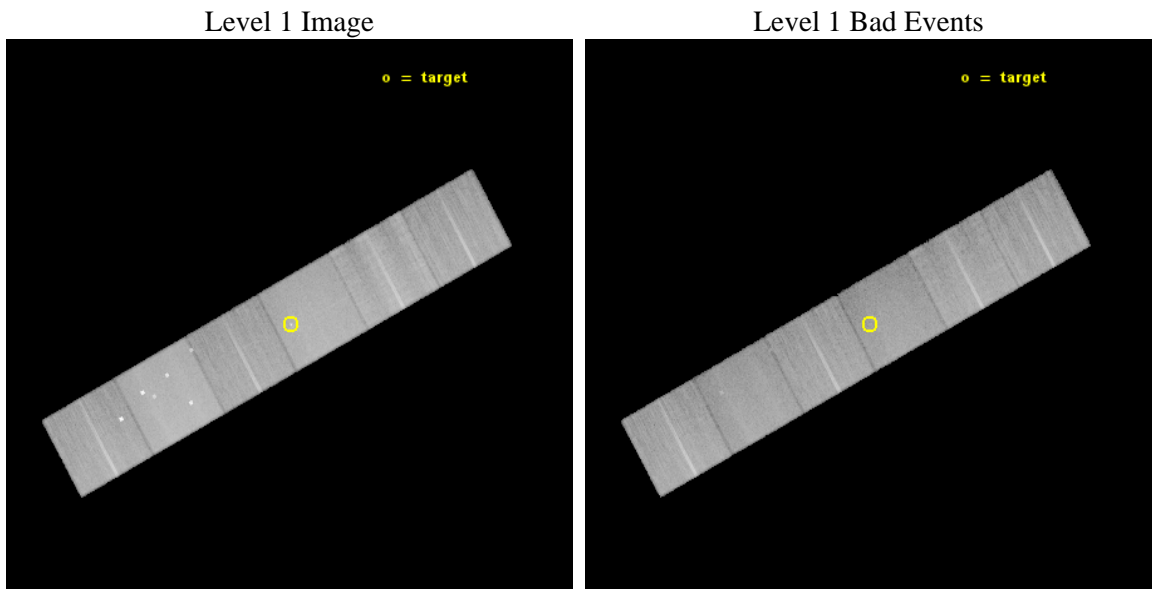
seq_num	200919	Sequence number
obs_id	16536	Observation id
title	Wind Properties in a Very Young Pup	Proposal title
observer	Dr. Norbert Schulz	Principal investigator
object	RCW38/IRS2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	134.773333	Observer's specified target RA [deg]
dec_targ	-47.511361	Observer's specified target Dec [deg]
ra_nom	134.77742432285	Nominal RA [deg]
dec_nom	-47.509920812524	Nominal Dec [deg]
roll_nom	331.15964247551	Nominal Roll [deg]
revision	1	Processing version of data
ontime	42953.600640059	Sum of GTIs [s]
livetime	42409.696285201	Livetime [s]
ontime4	42950.359549761	Sum of GTIs [s]
ontime5	42953.600640059	Sum of GTIs [s]
ontime6	42953.600640059	Sum of GTIs [s]
ontime7	42953.600640059	Sum of GTIs [s]
ontime8	42953.600640059	Sum of GTIs [s]
ontime9	42953.600640059	Sum of GTIs [s]
l2events	368255	Number of level 2 events



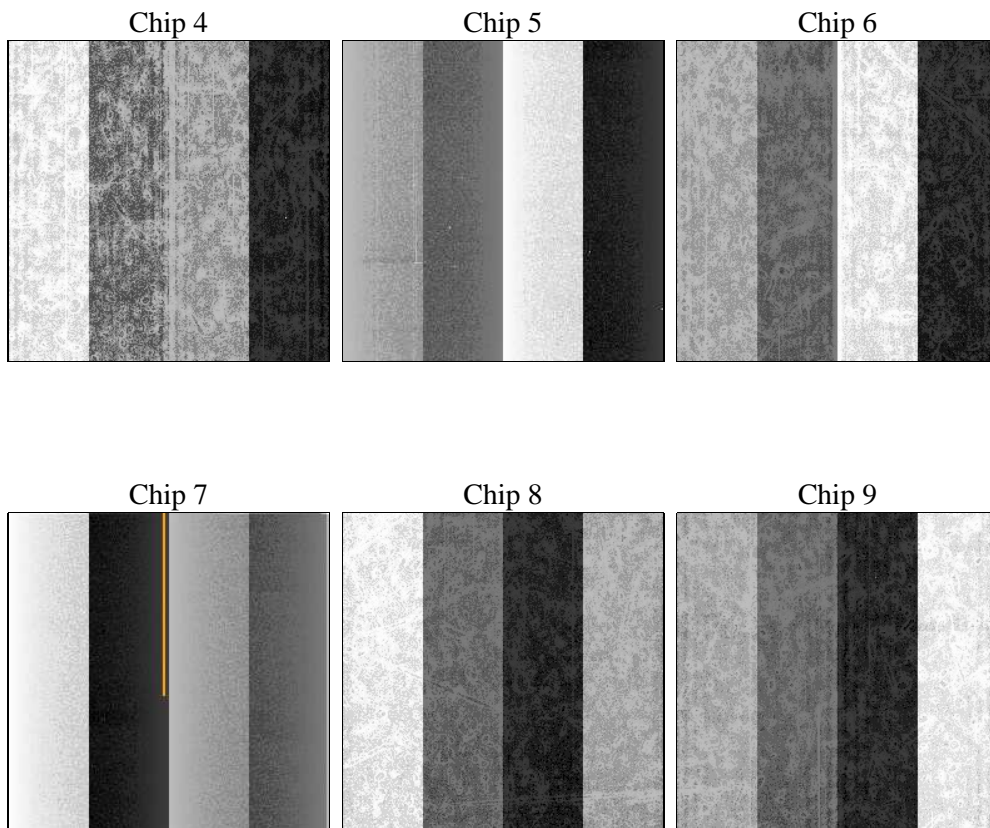
2 OBI

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	10.3.3	Processing system revision	ontime	42953.600640059	Sum of GTIs [s]
caldbver	4.6.7	 	ontime4	42950.359549761	Sum of GTIs [s]
date	2015-02-27T14:04:32	Date and time of file creation	ontime5	42953.600640059	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	42953.600640059	Sum of GTIs [s]
			ontime7	42953.600640059	Sum of GTIs [s]
			ontime8	42953.600640059	Sum of GTIs [s]
			ontime9	42953.600640059	Sum of GTIs [s]
			l1events	1626834	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zpc_pos	(4115.21 4085.27)	src1a sky pixel position

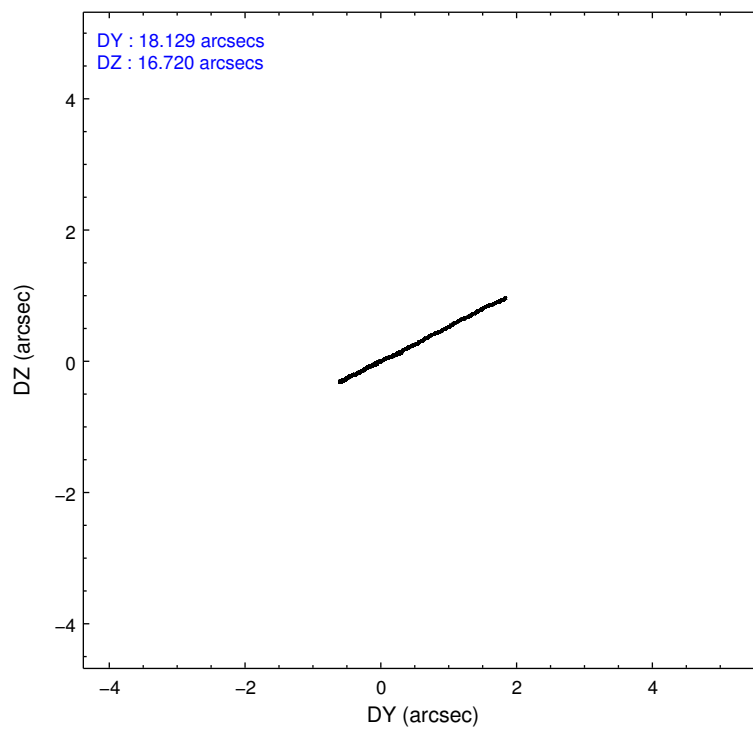
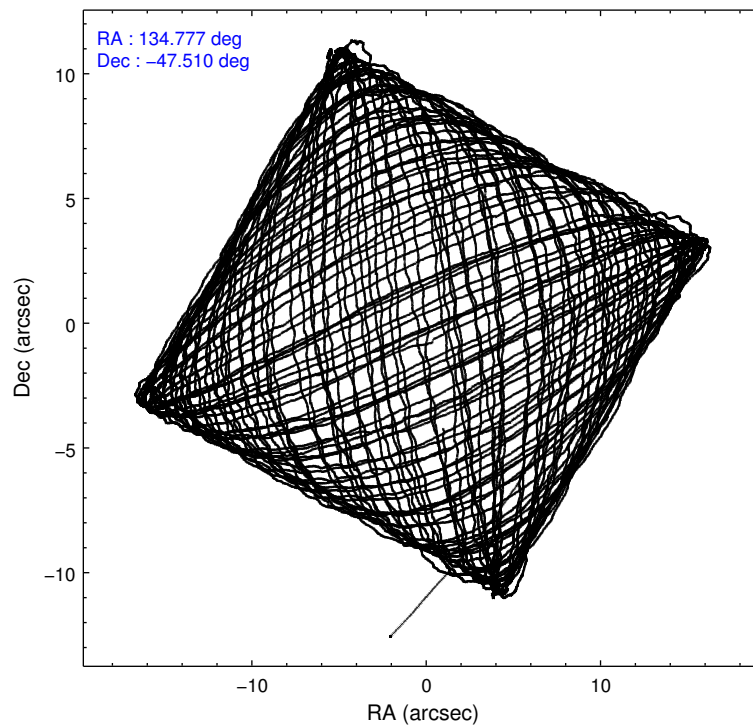
2.1.4 Events

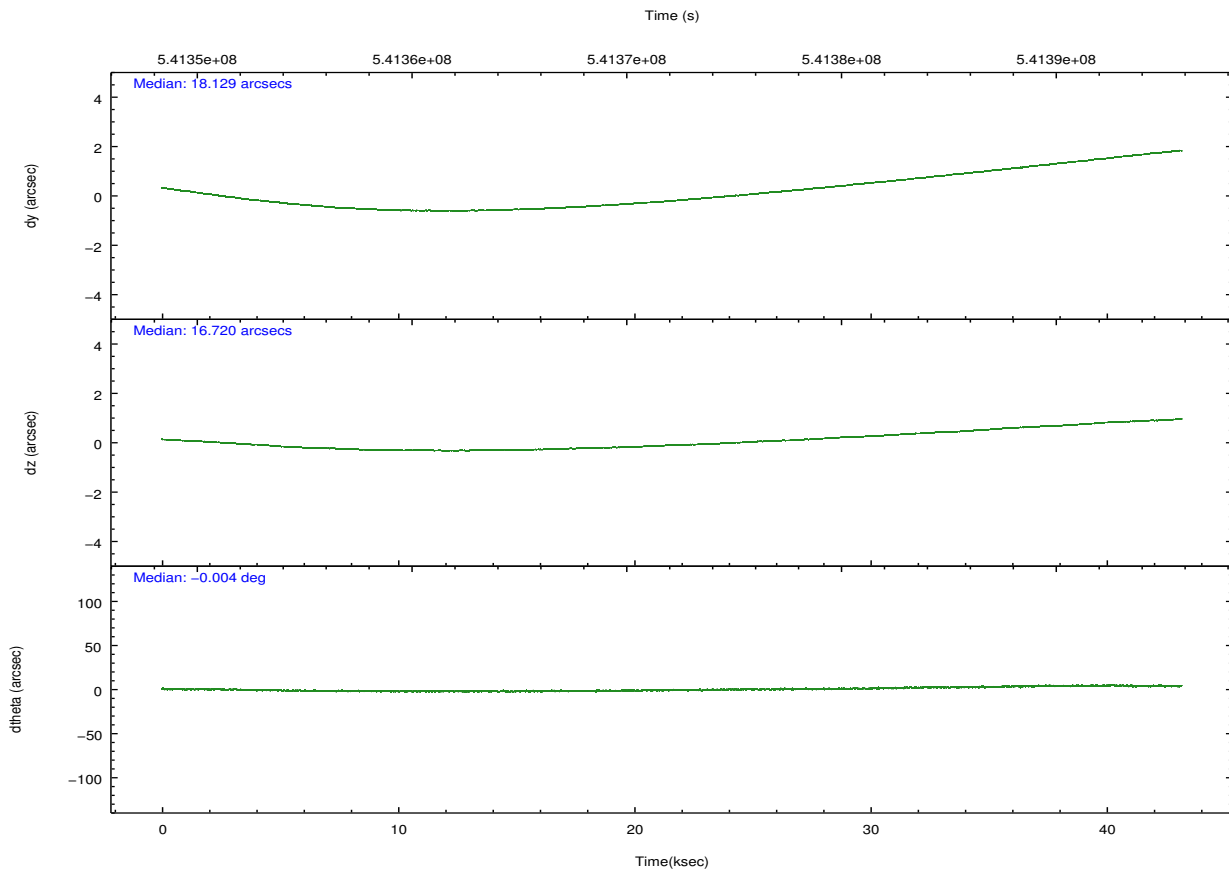
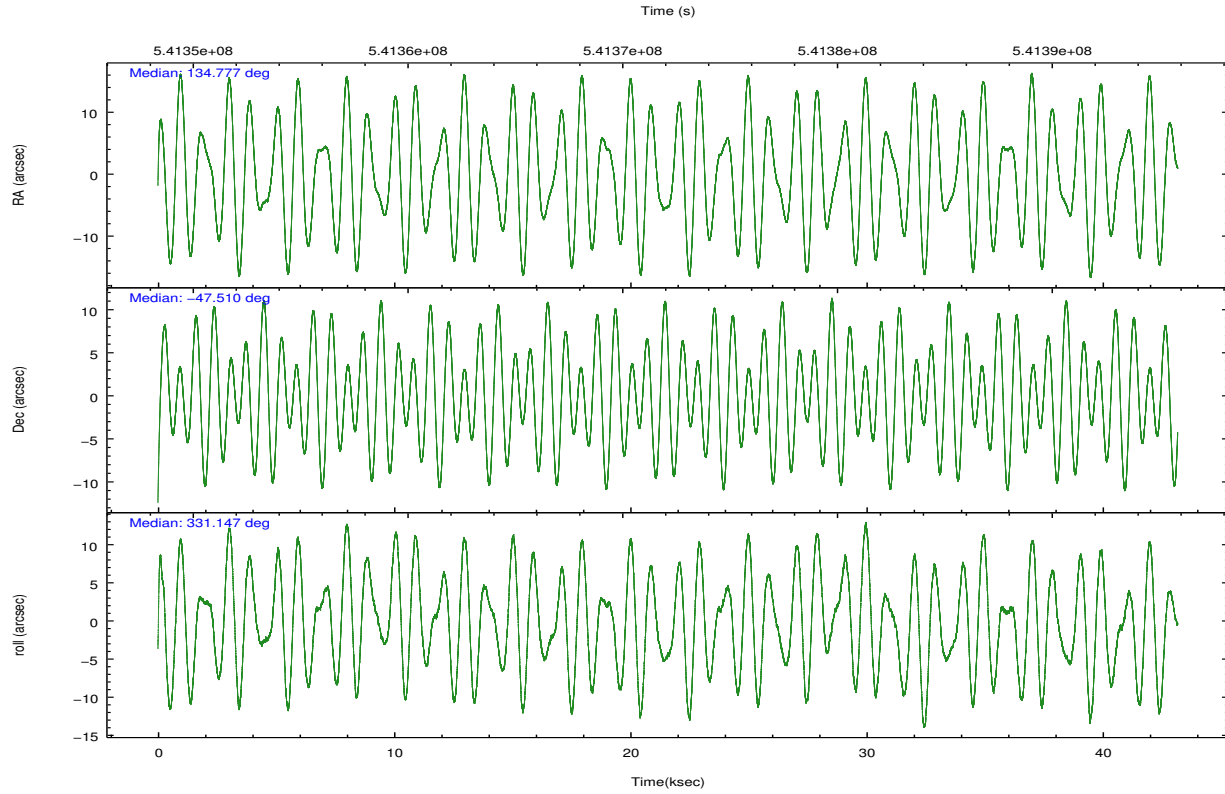
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	253320	355098	222224	291708	286104	218380	grade 0 events	15401	20430	9253	10801	21428	9418
rejected events	221784	181854	195667	165334	210998	191773		6%	5%	4%	3%	7%	4%
rejected %	87%	51%	88%	56%	73%	87%	grade 1 events	244	1100	88	323	207	116
								0%	0%	0%	0%	0%	0%
							grade 2 events	6029	51757	6049	26545	17731	5801
								2%	14%	2%	9%	6%	2%
							grade 3 events	2741	4823	2613	10034	8081	2749
								1%	1%	1%	3%	2%	1%
							grade 4 events	2699	4717	2343	9870	7718	2614
								1%	1%	1%	3%	2%	1%
							grade 5 events	11086	23246	10539	28211	15781	11816
								4%	6%	4%	9%	5%	5%
							grade 6 events	4671	91546	6305	69145	20152	6031
								1%	25%	2%	23%	7%	2%
							grade 7 events	210449	157479	185034	136779	195006	179835
								83%	44%	83%	46%	68%	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	134.736808	134.7774243228538	CCD I2 on	N	N
[deg] Pointing Dec	-47.510830	-47.50992081252411	CCD I3 on	N	N
[deg] Pointing Roll	330.973072	331.159642475508	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)	541350675.184000	541349553.0126899	CCD S5 on	O2	Y
Observation start date	2015-02-26T15:10:08	2015-02-26T14:52:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	541393675.184000	541394948.21523	On-chip summing requested	N	N
Observation end date	2015-02-27T03:06:48	2015-02-27T03:29:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





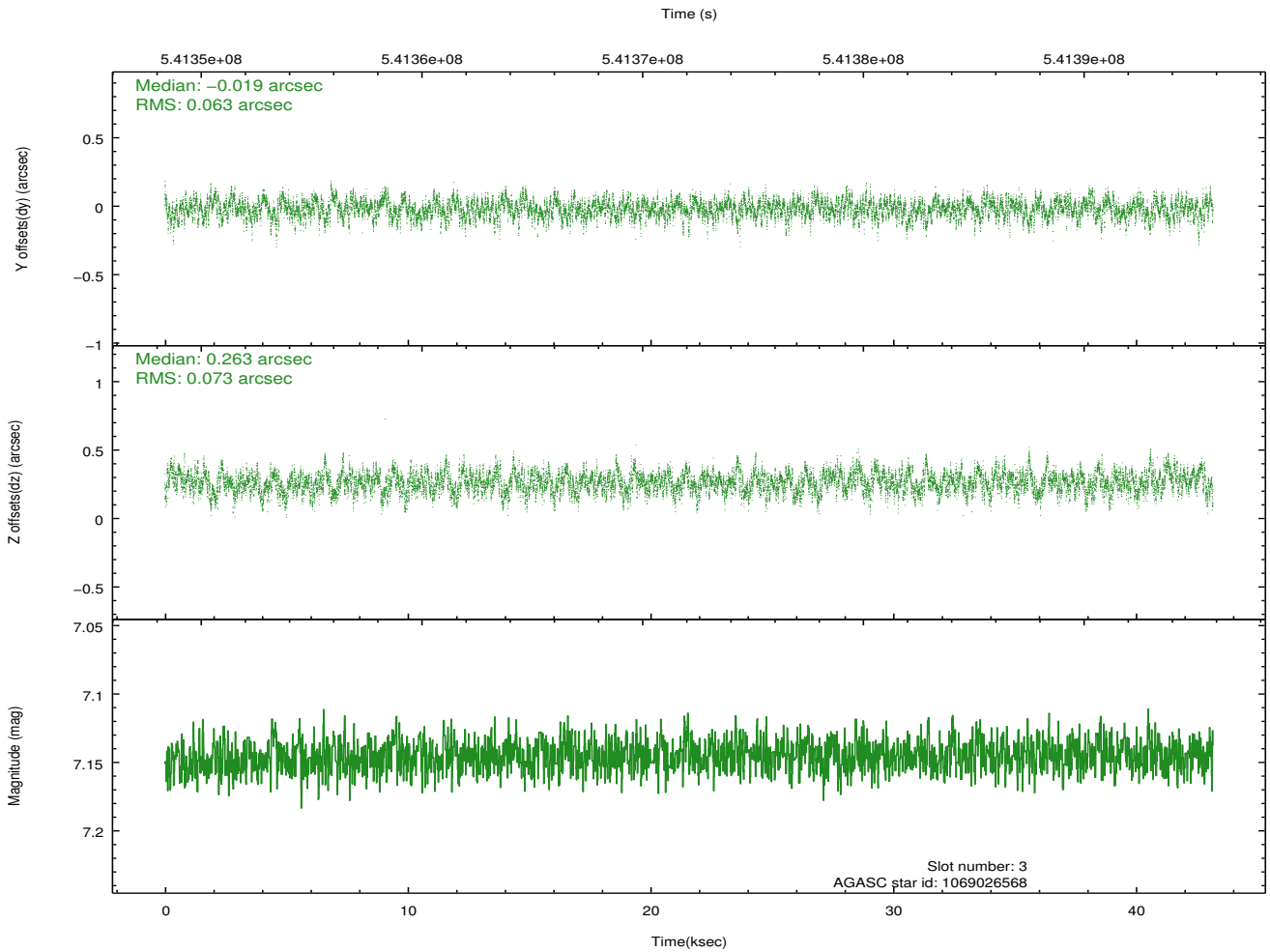
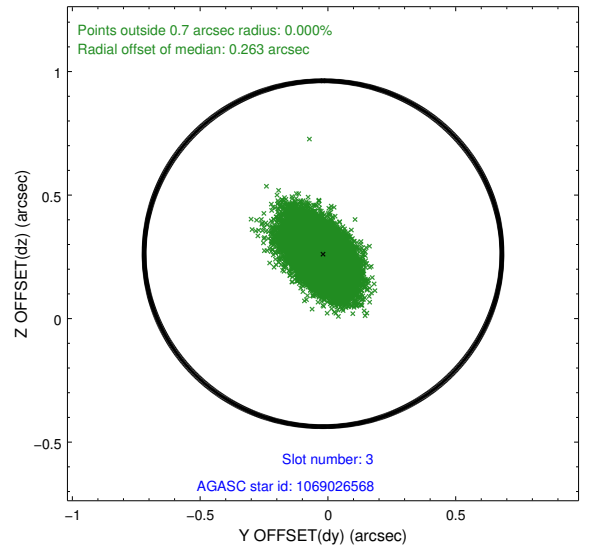
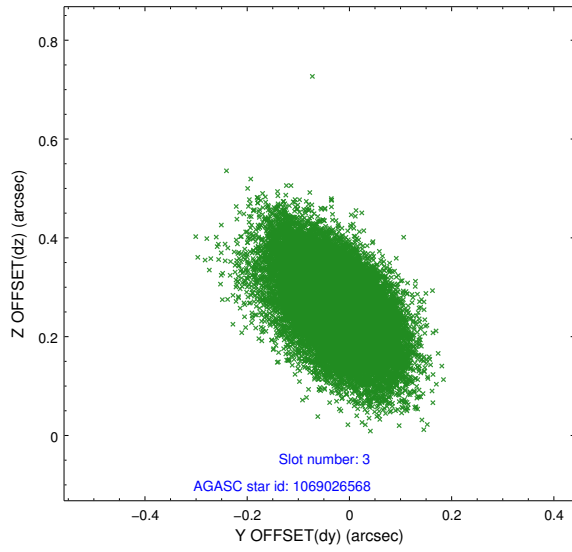
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.14	10531	-0.113	-0.059	0.020	0.045	0.000000	0.000000	-771.51	-1738.32
1	FID		ACIS-S-4	7.22	10531	0.341	0.069	0.016	0.031	0.000000	0.000000	2142.22	170.29
2	FID		ACIS-S-5	7.24	10529	-0.258	-0.002	0.014	0.021	0.000000	0.000000	-1824.49	163.89
3	GUIDE	used	1069026568	7.15	21061	-0.019	0.263	0.100	0.174	134.843519	-48.291320	1588.08	-2332.48
4	GUIDE	used	1070728224	9.37	21041	0.107	-0.079	0.158	0.251	135.106055	-47.256225	345.19	1237.48
5	GUIDE	used	1070729248	8.72	21052	0.307	-0.017	0.115	0.190	135.048995	-47.118313	-16.23	1605.59
6	GUIDE	used	1070729592	7.31	21063	-0.373	-0.057	0.077	0.126	135.107946	-47.337671	489.99	982.69
7	GUIDE	used	1070731648	8.03	21043	-0.006	-0.109	0.096	0.151	135.285038	-47.251382	719.69	1462.92

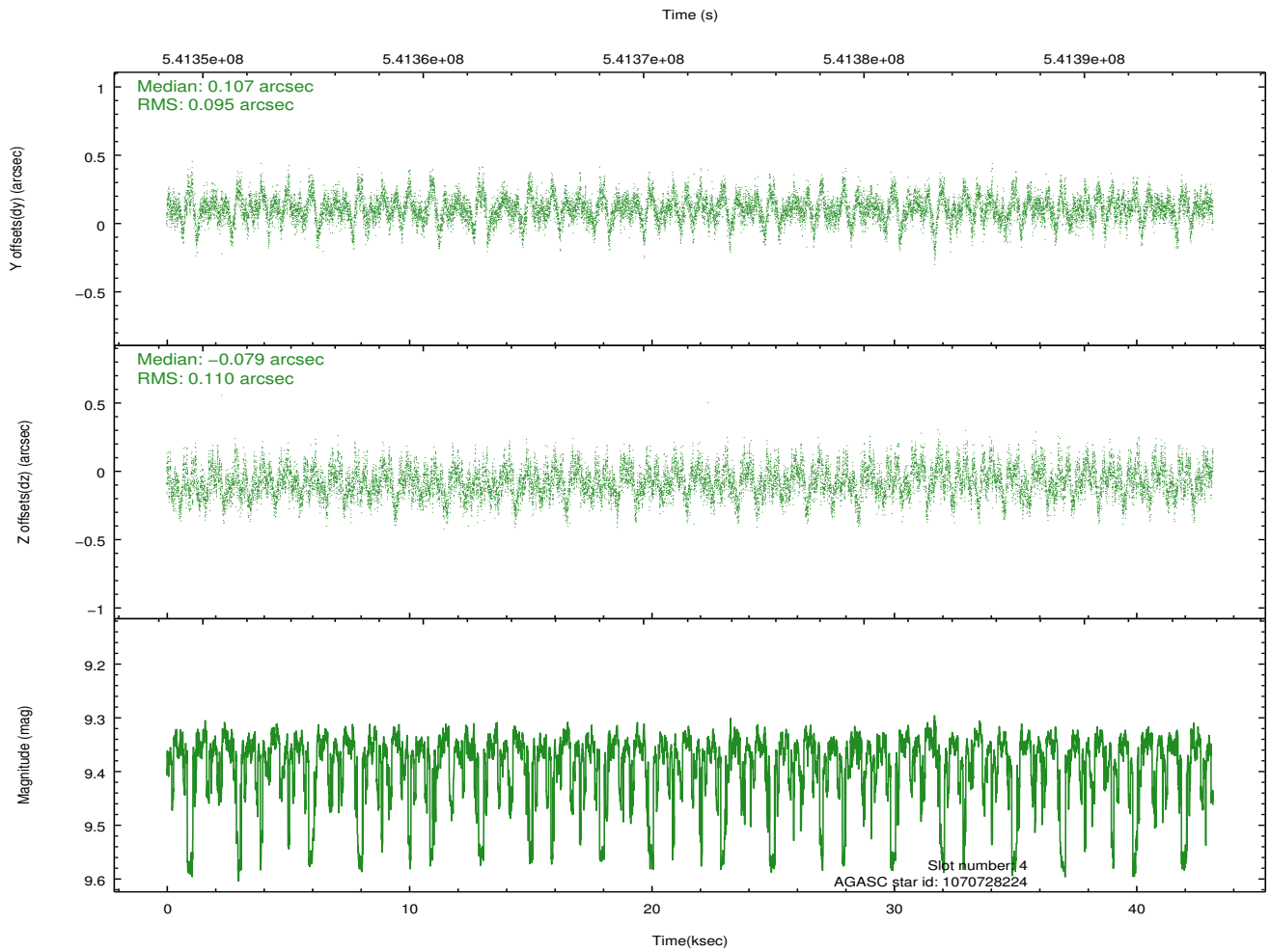
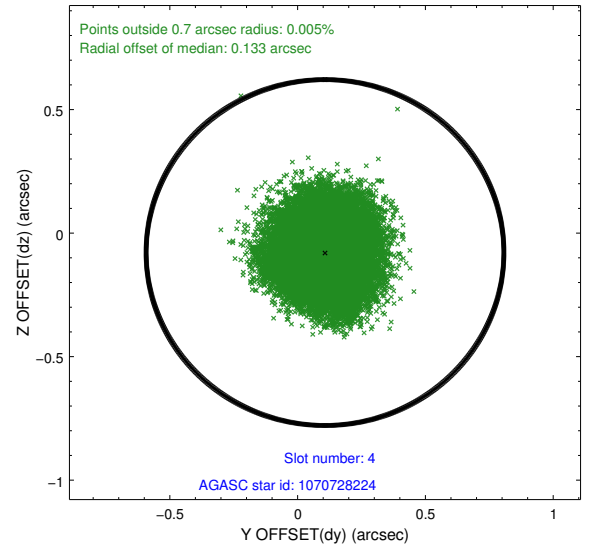
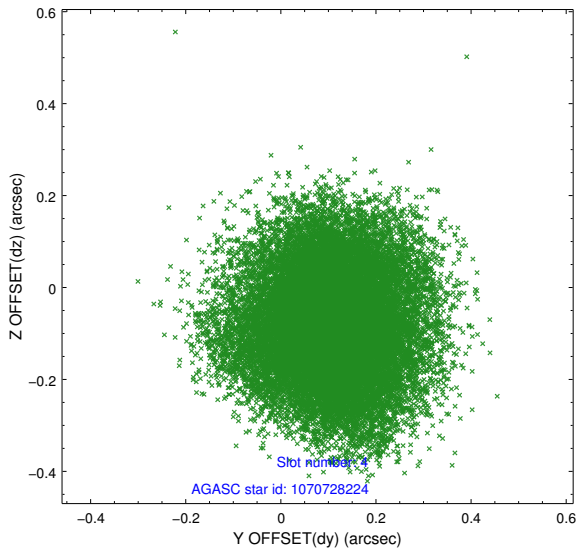
∞

2.4 Star Slots

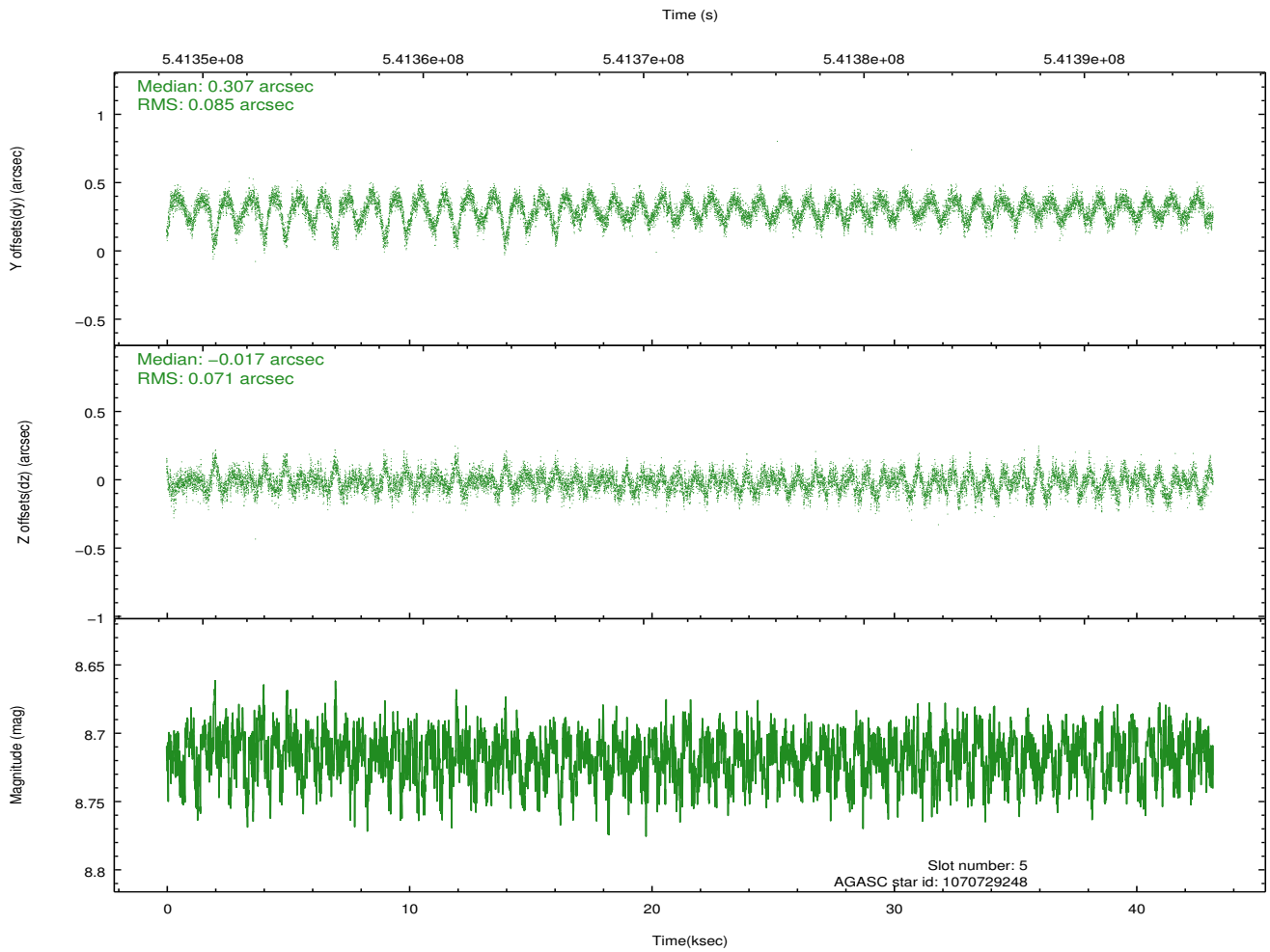
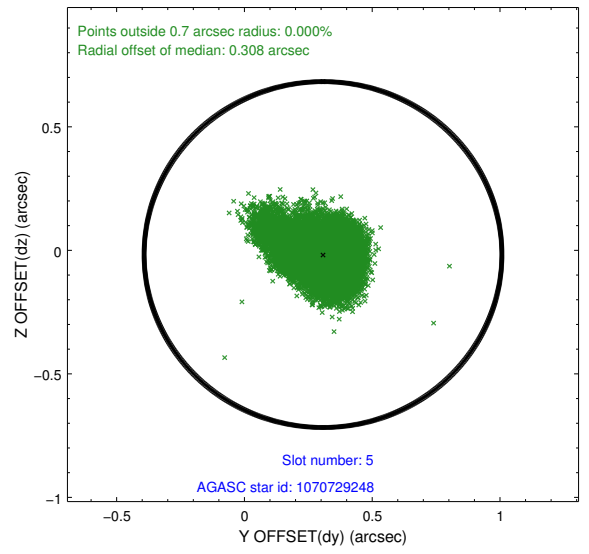
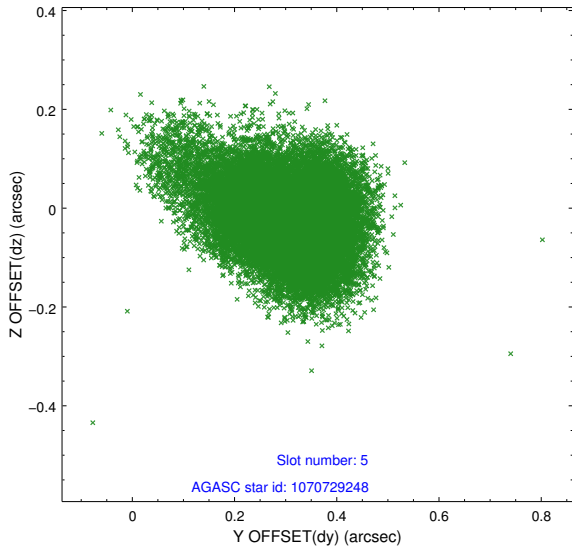
2.4.1 Slot 3



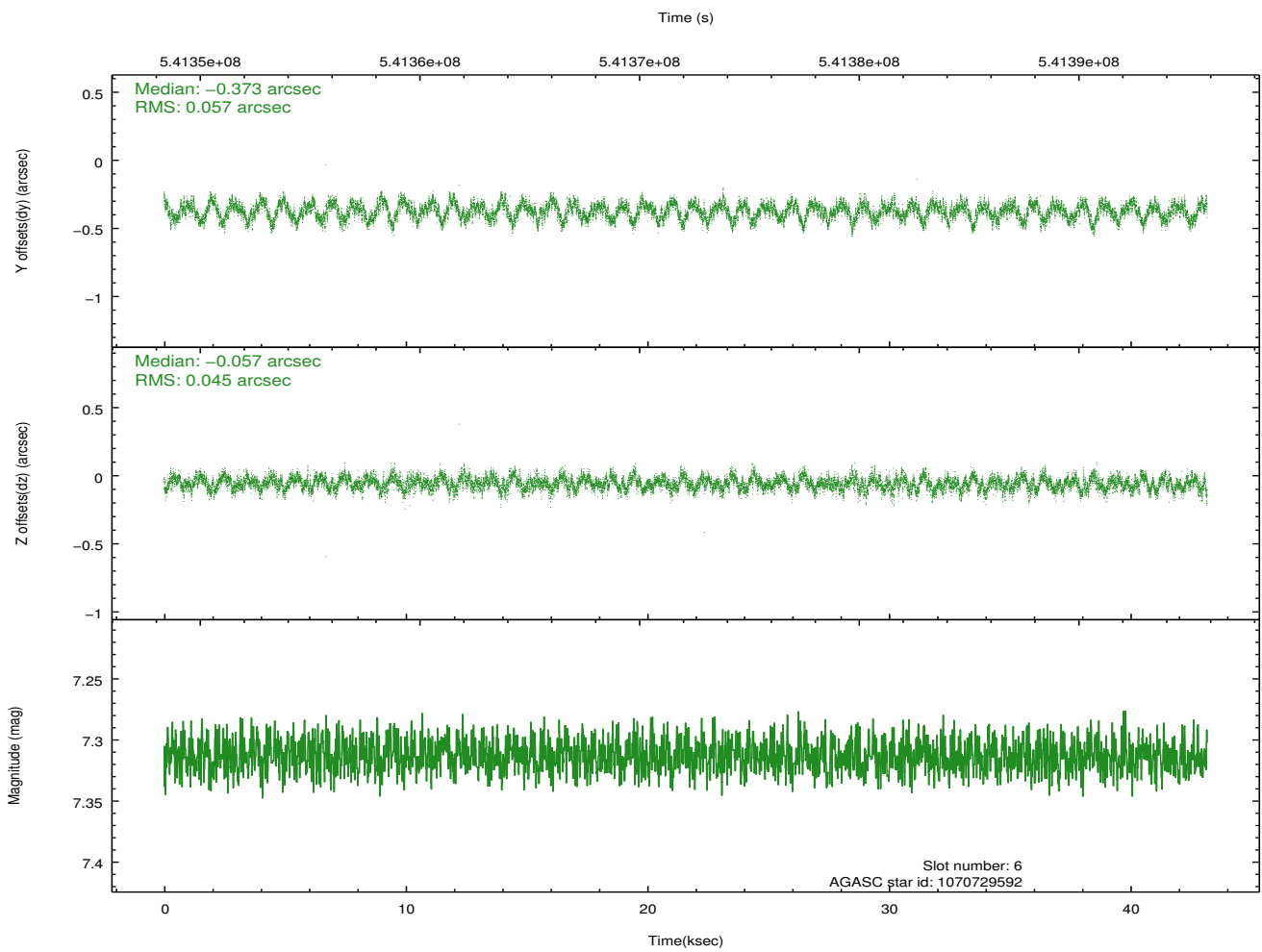
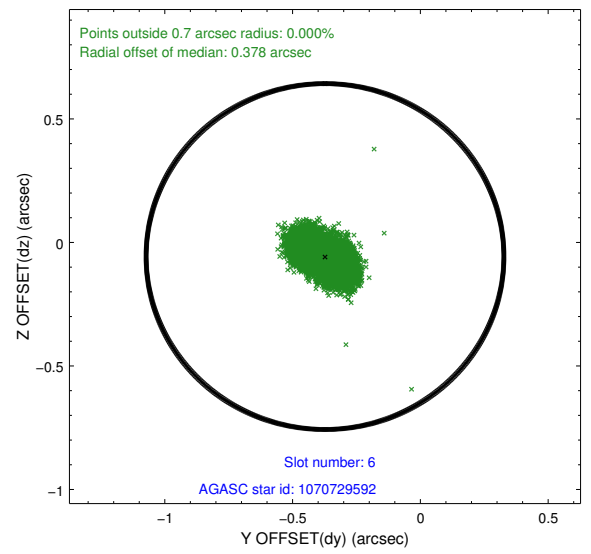
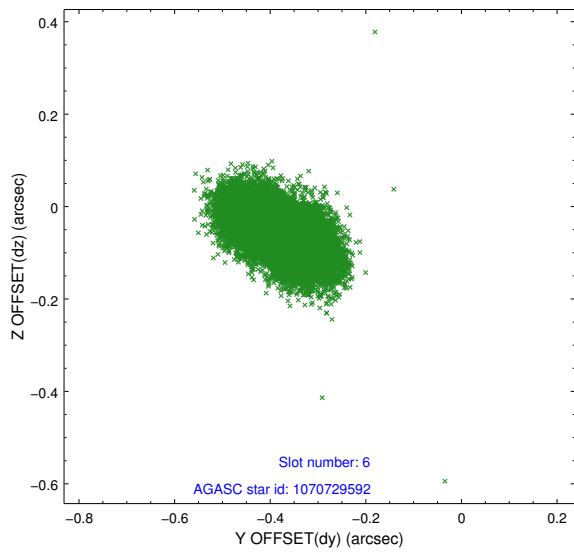
2.4.2 Slot 4



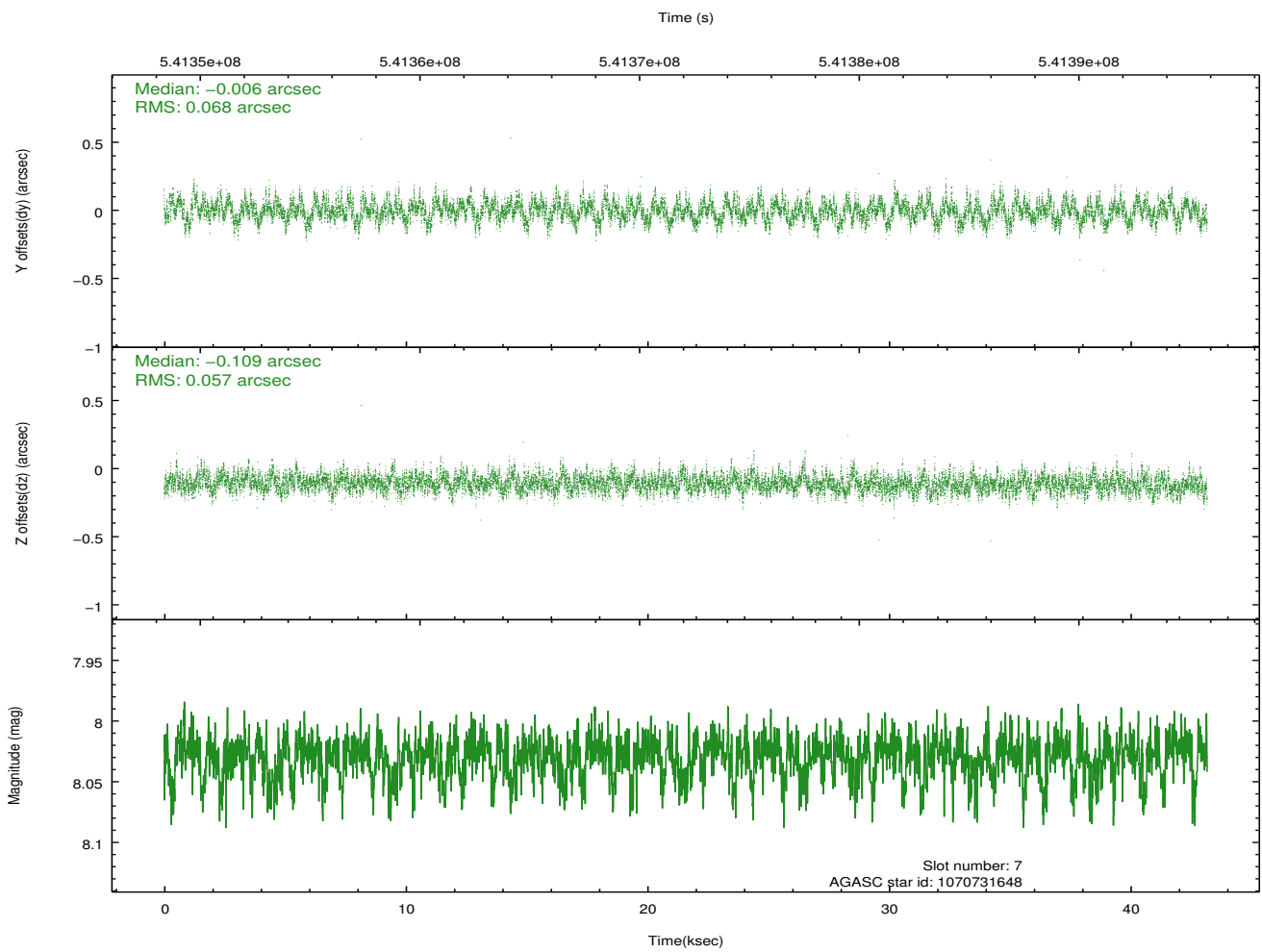
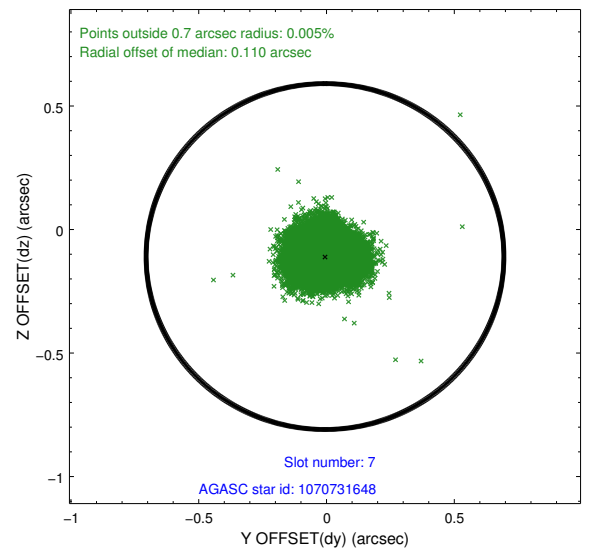
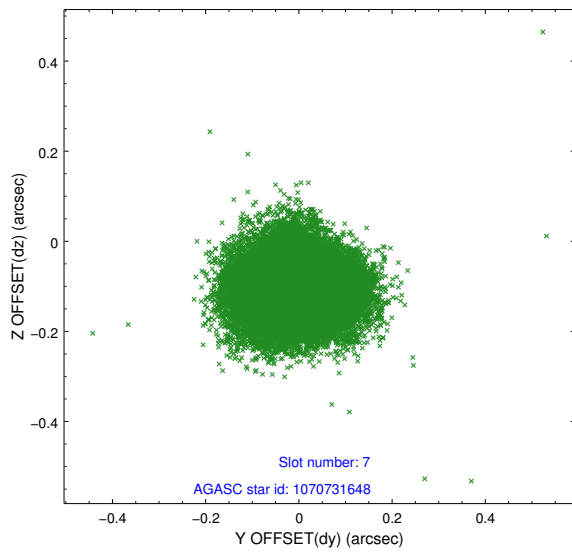
2.4.3 Slot 5



2.4.4 Slot 6

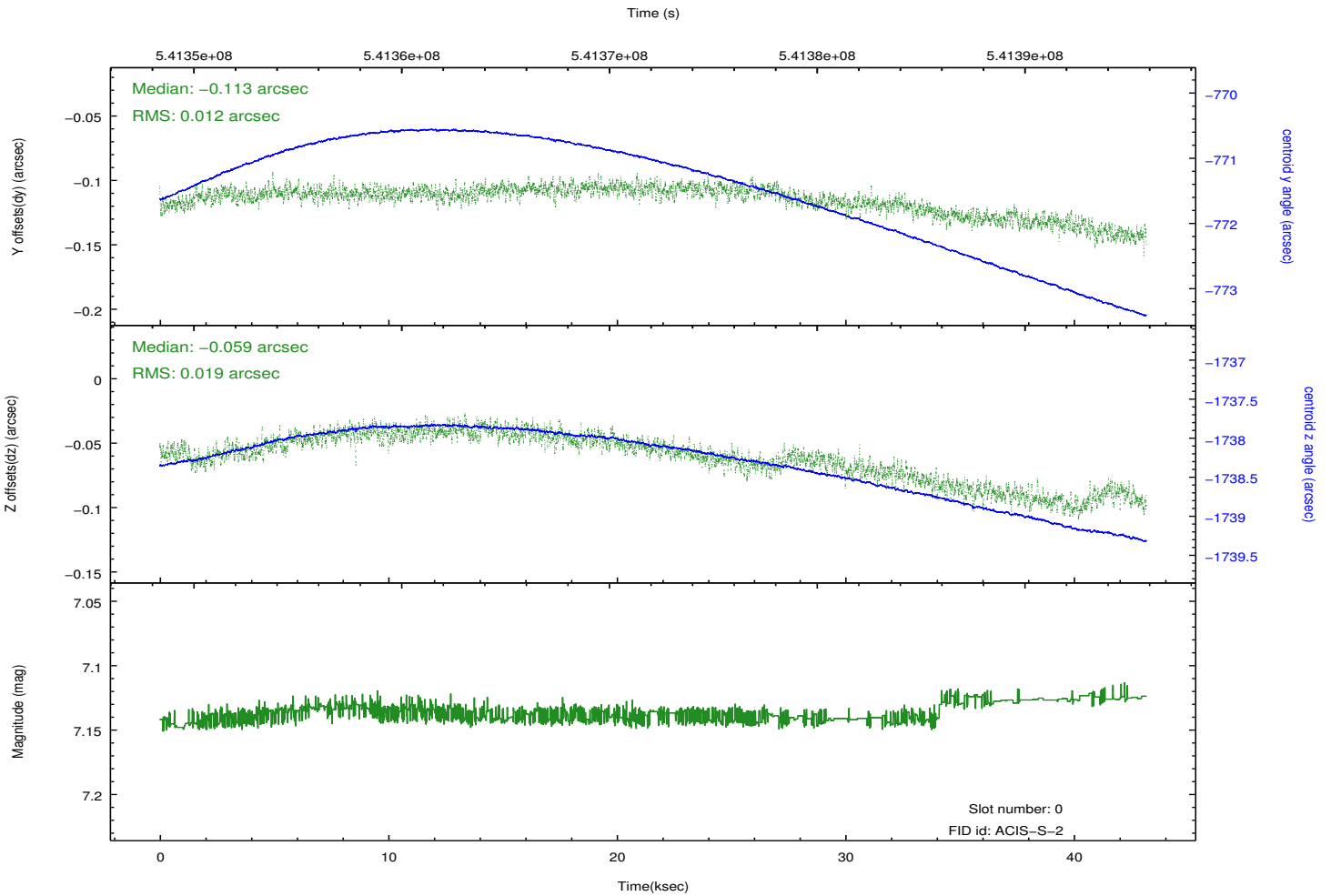
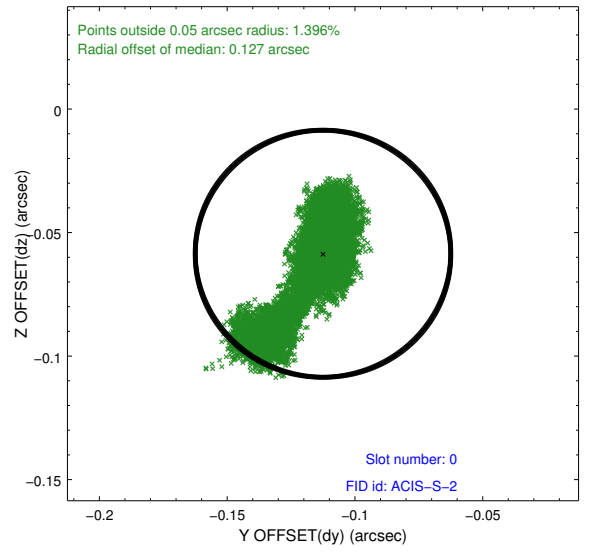
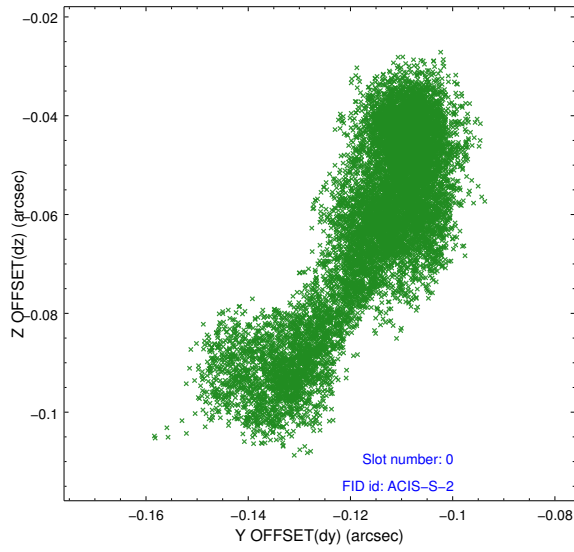


2.4.5 Slot 7

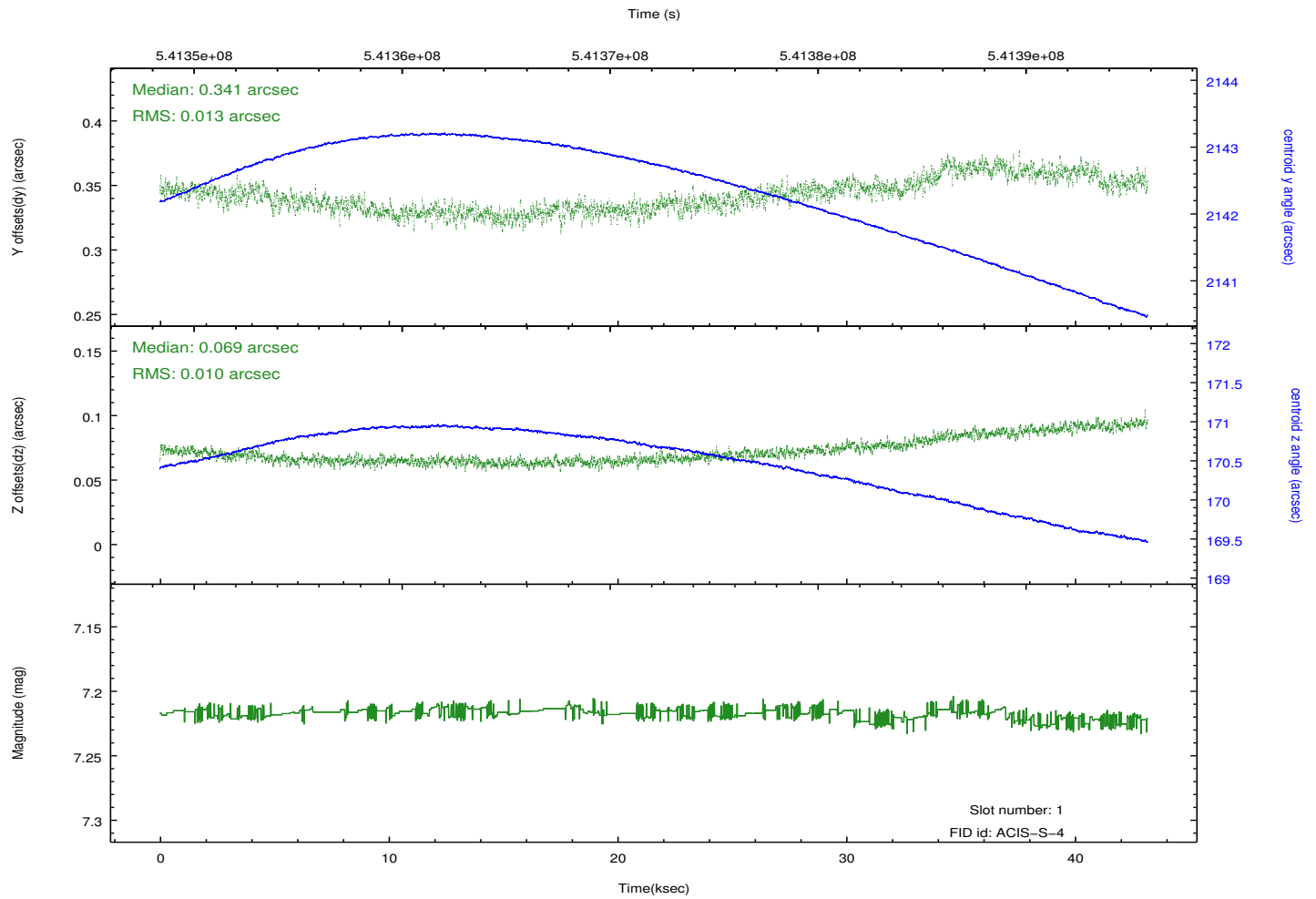
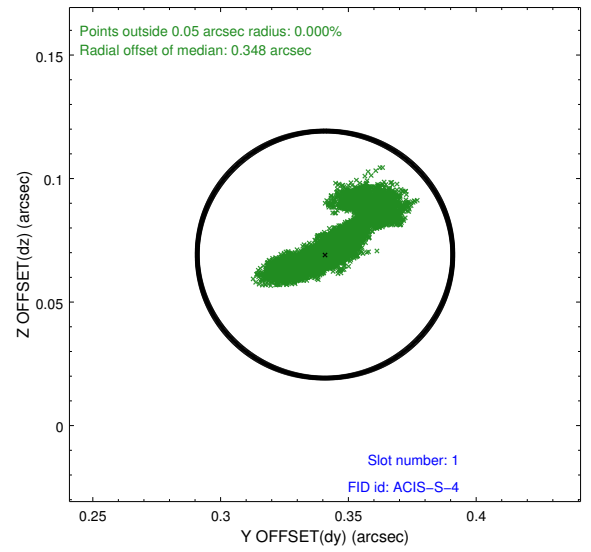
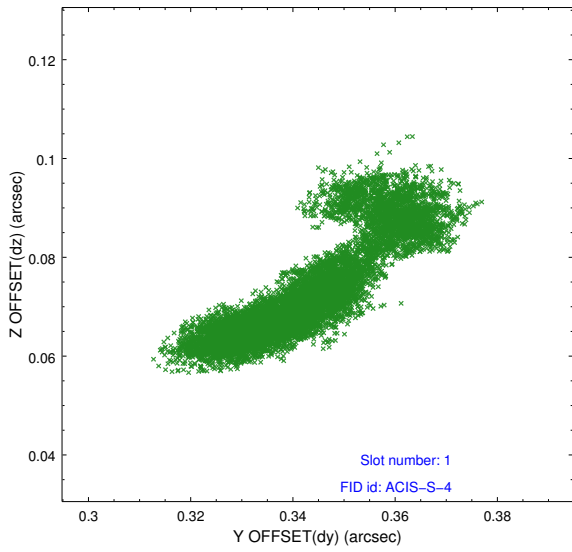


2.5 FID Slots

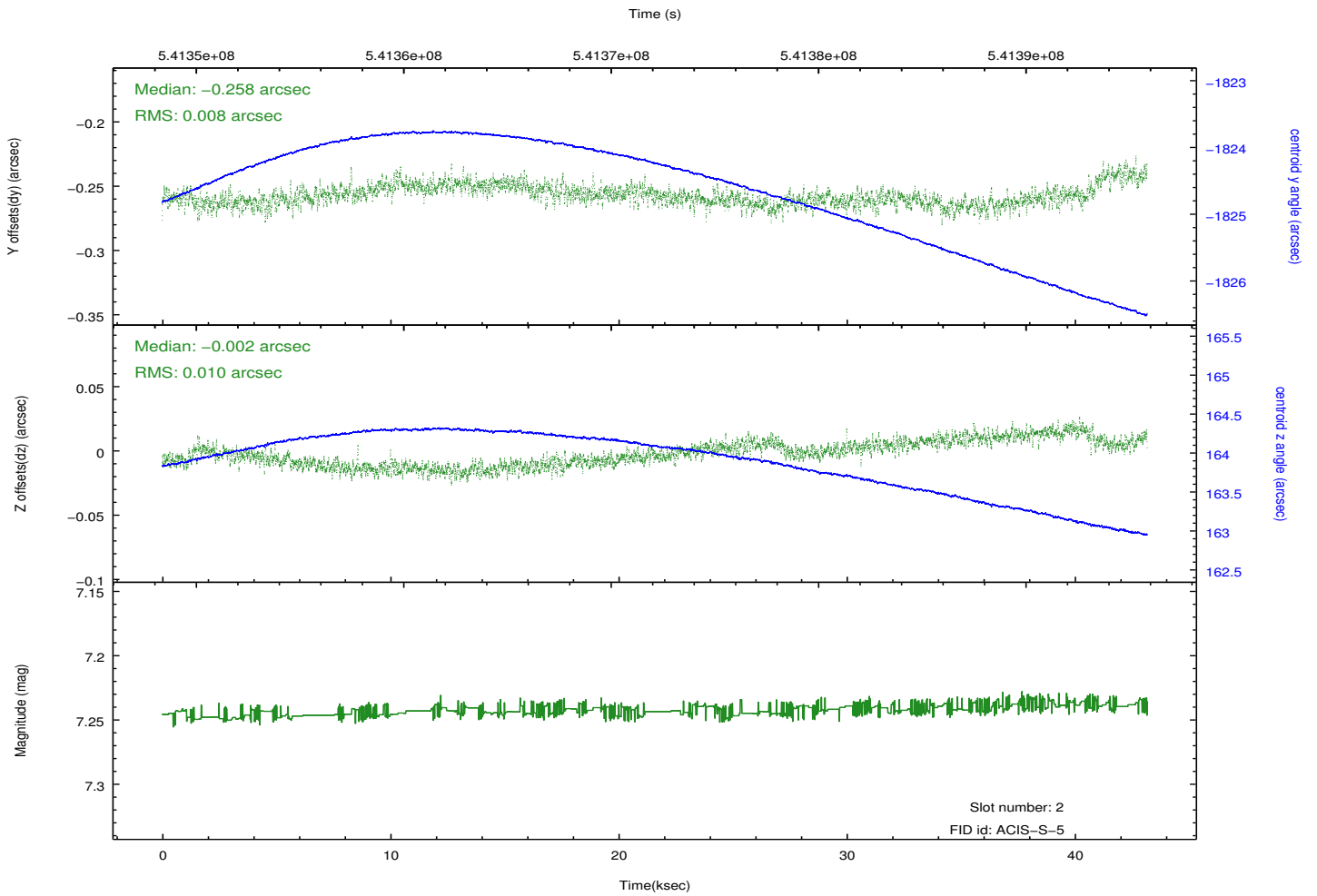
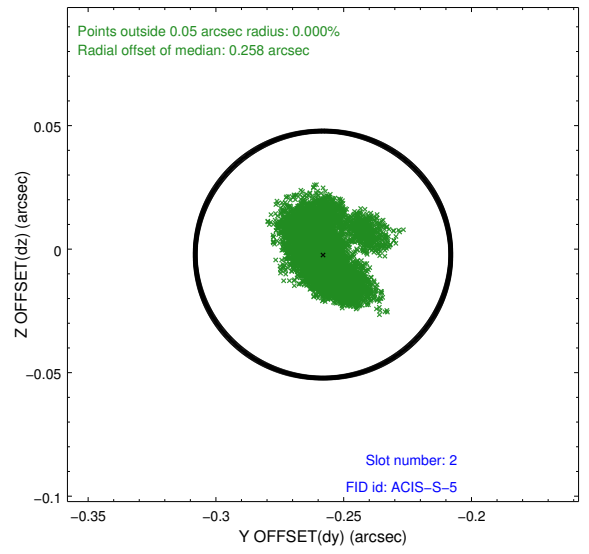
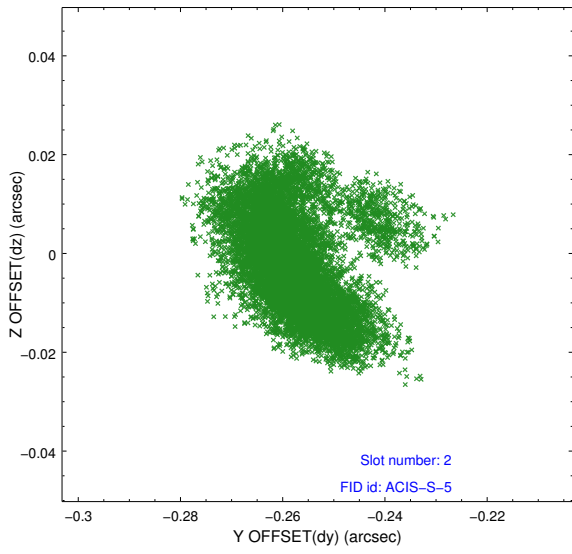
2.5.1 Slot 0



2.5.2 Slot 1

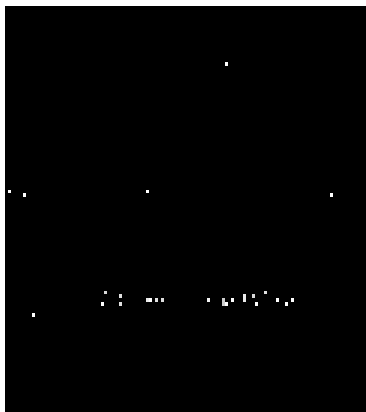


2.5.3 Slot 2

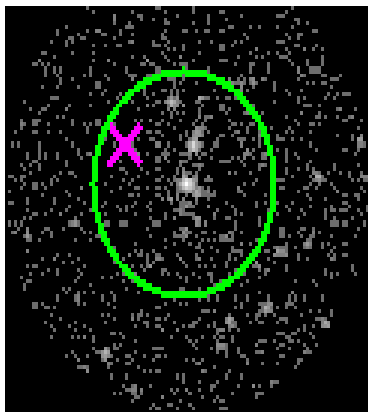


3 Gratings

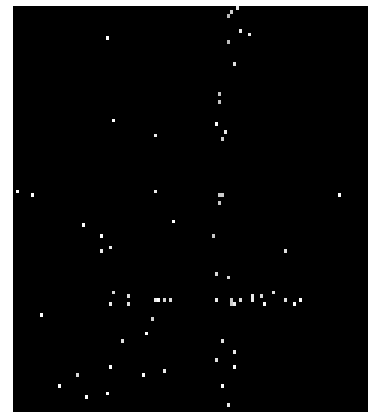
3.1 HEG Arm



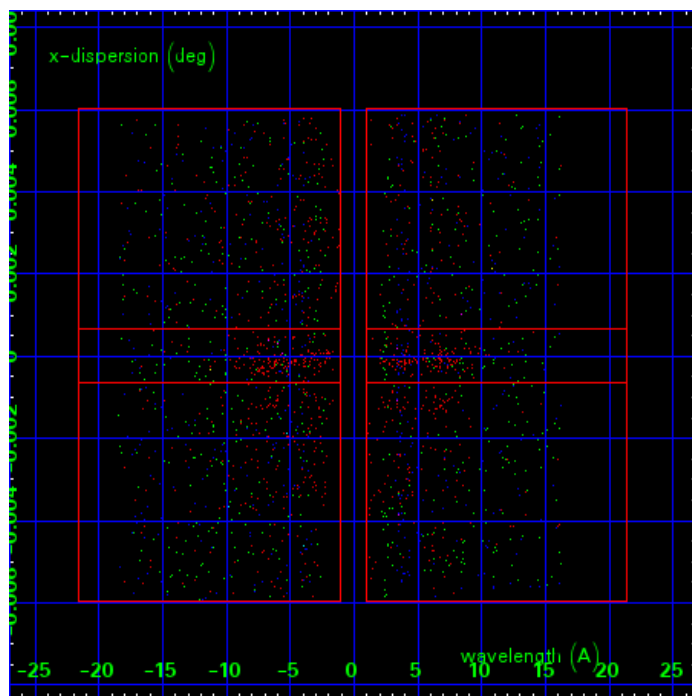
HEG Order Sort 123



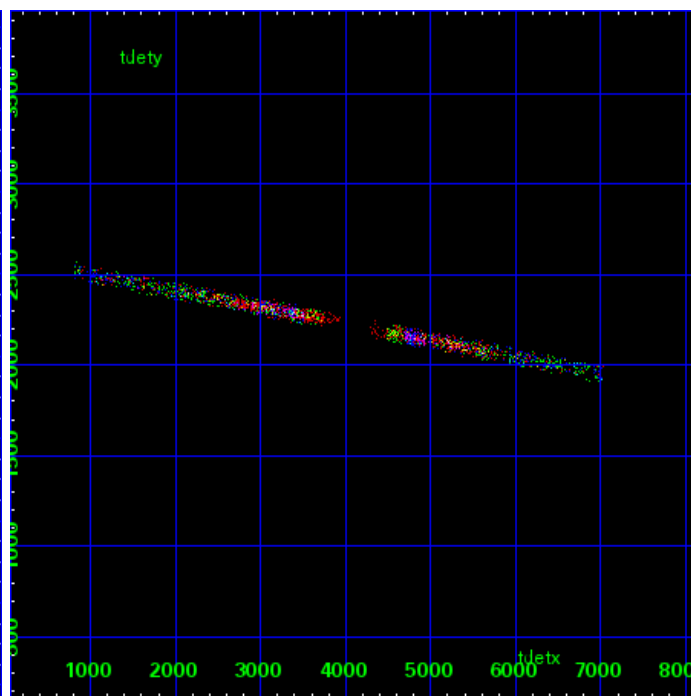
HEG Zero Order



HEG Order Sort ALL

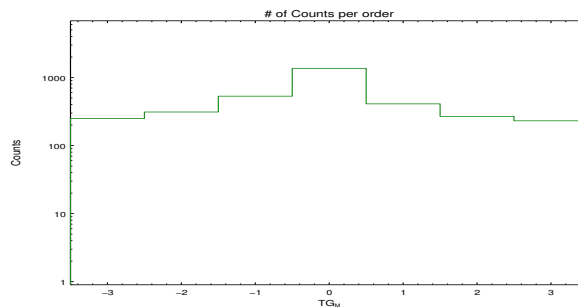


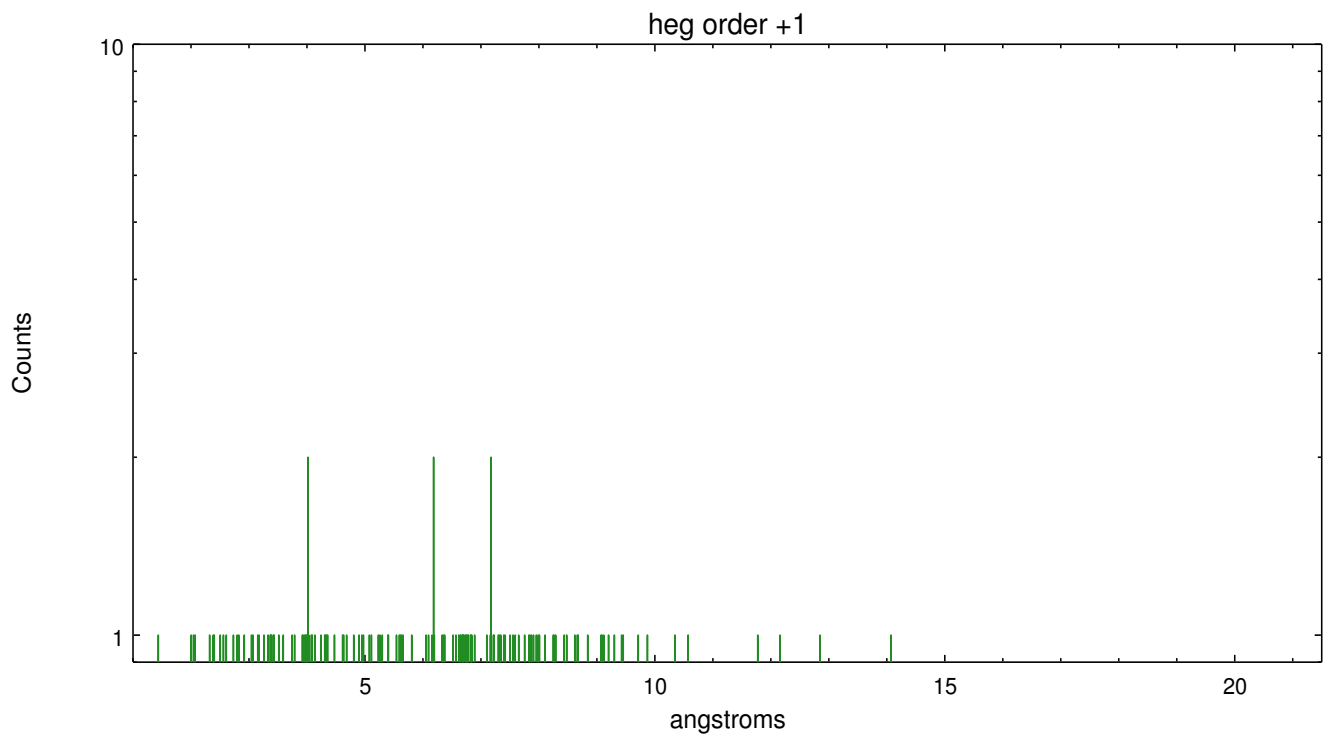
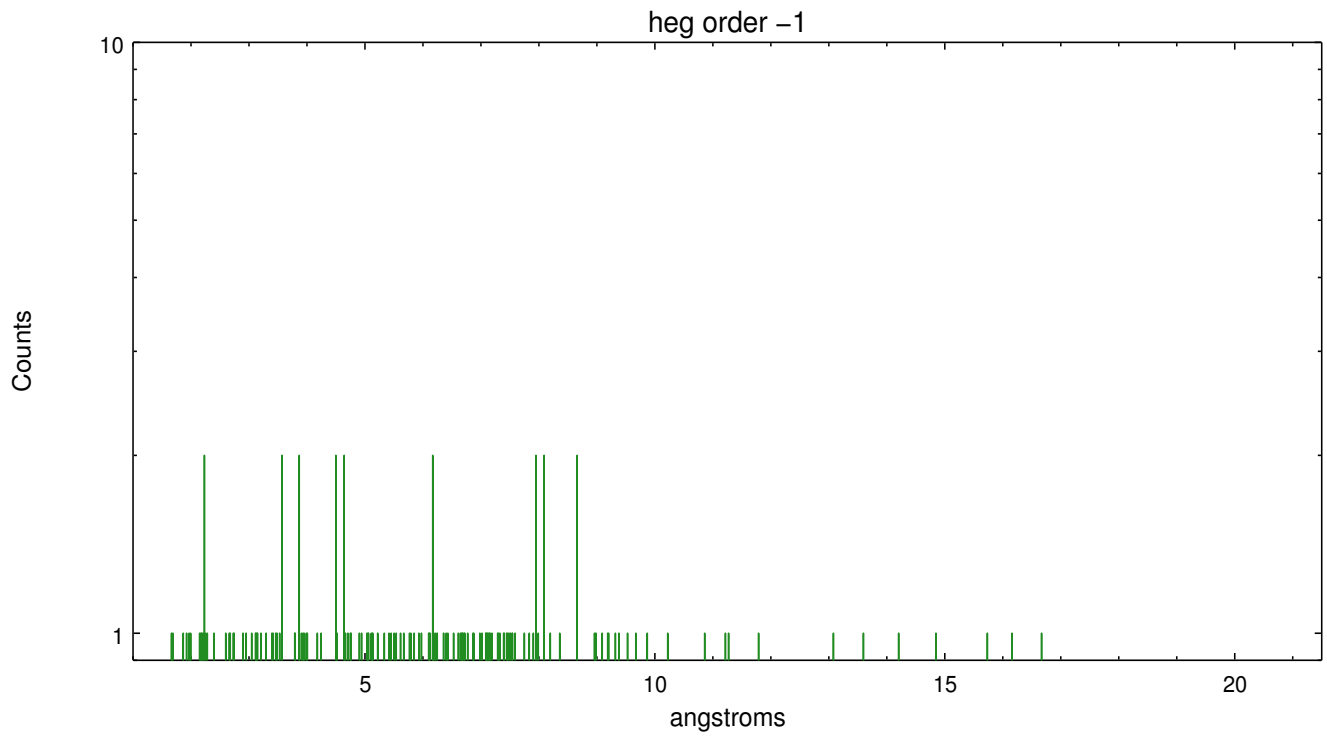
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	249	311	531	1362	410	268	231





3.2 MEG Arm



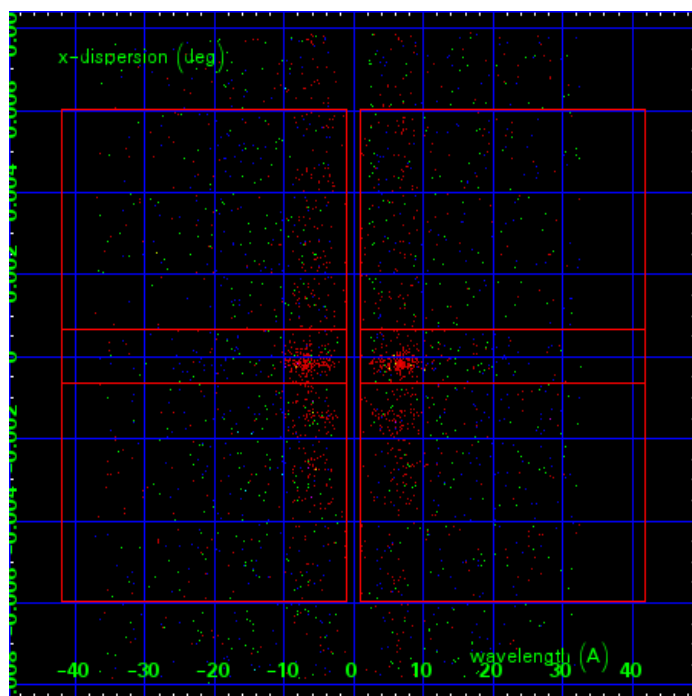
MEG Order Sort 123



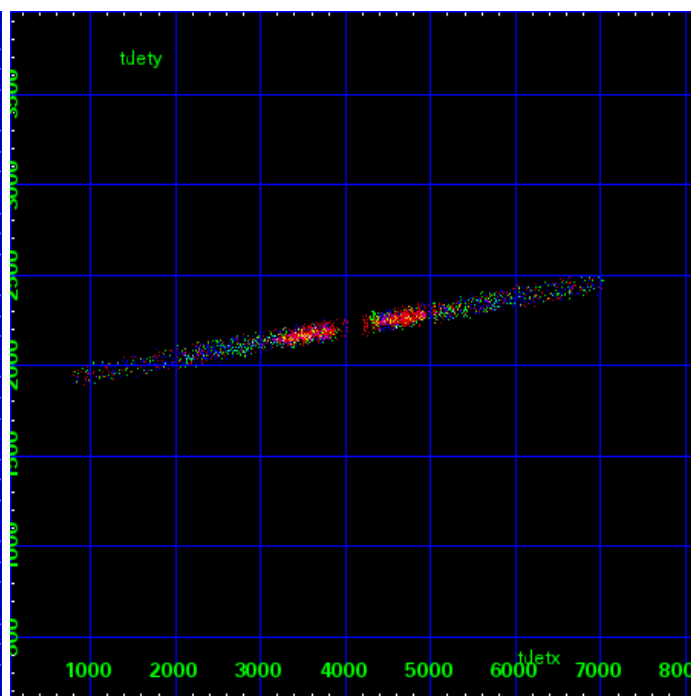
MEG Zero Order



MEG Order Sort ALL

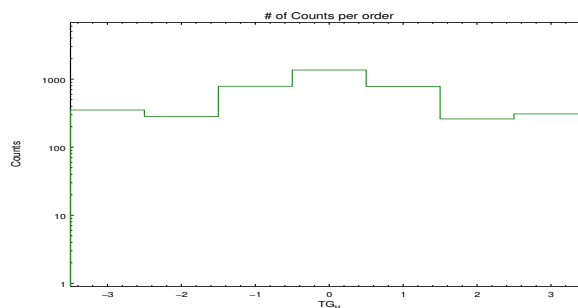


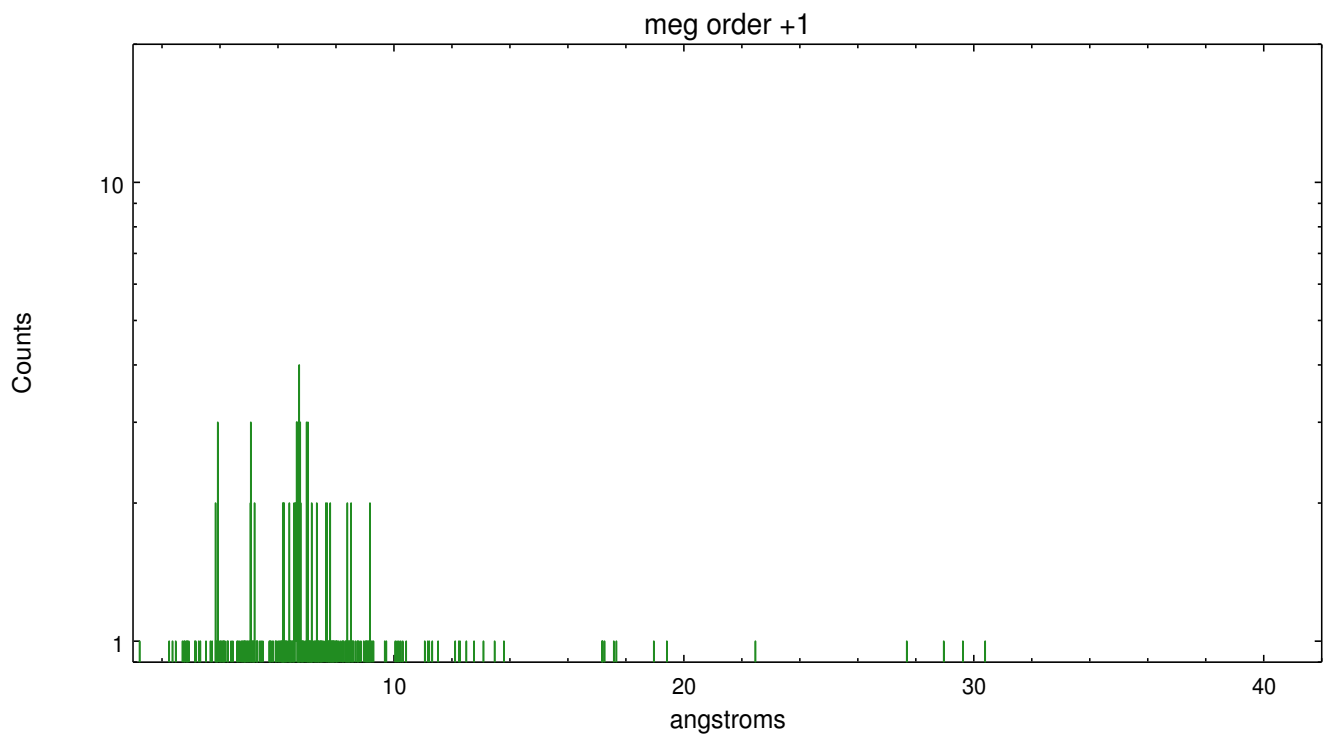
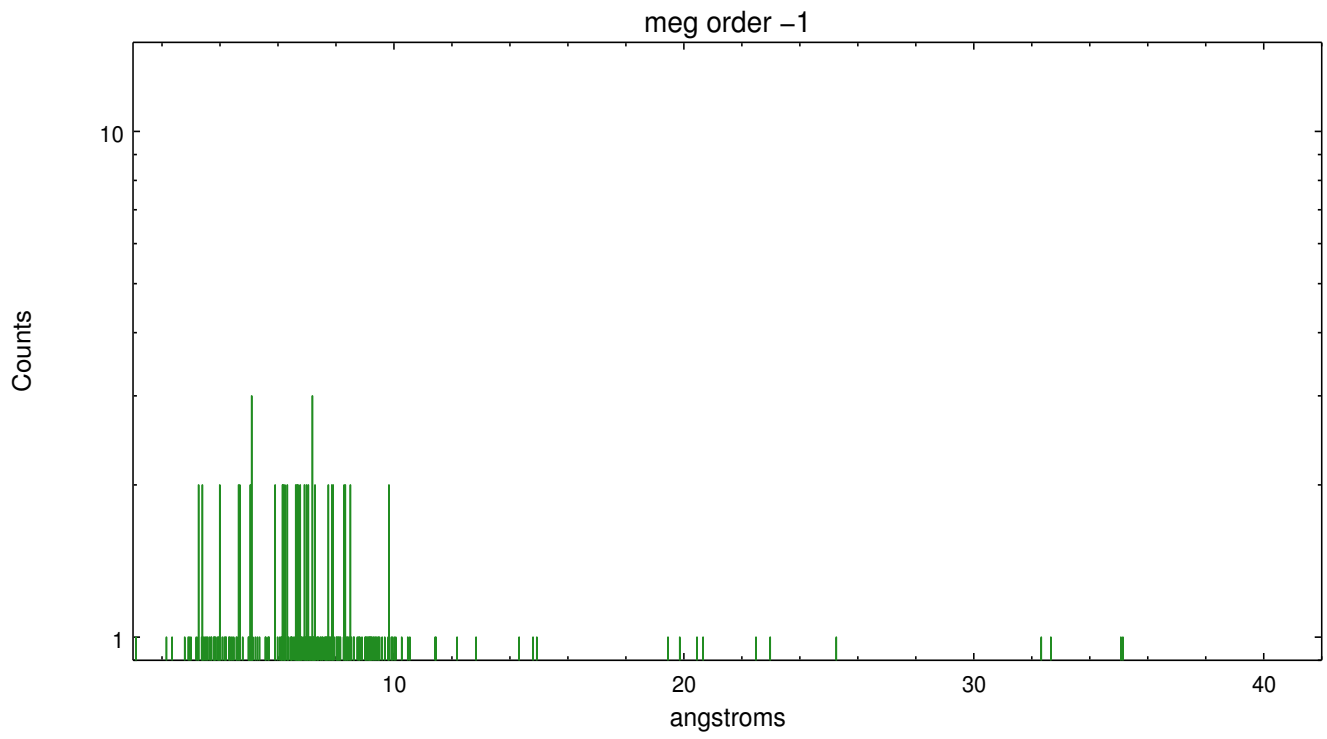
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	352	283	785	1362	782	260	308





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.03.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	42.953600640059

A.2 Comments

Zeroth order is not exactly centered on the position of the target. It is off by about 3/4 of a pixel, due to the crowded environment. The user may want to re-extract the spectrum using a refined zeroth order position.