

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18858 - L2 Version 1
Chandra X-Ray Center

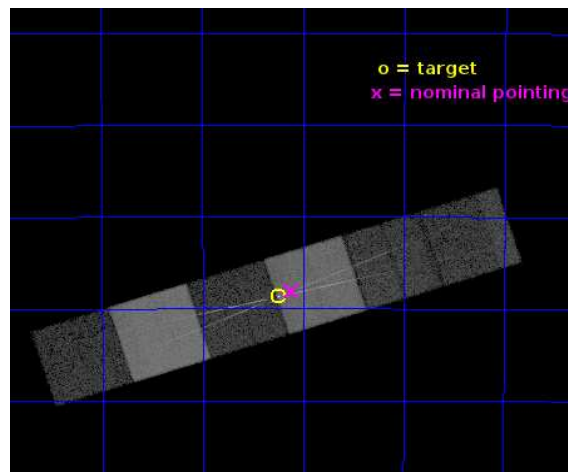
L2 Processing Date : May 26 2016

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1 Front

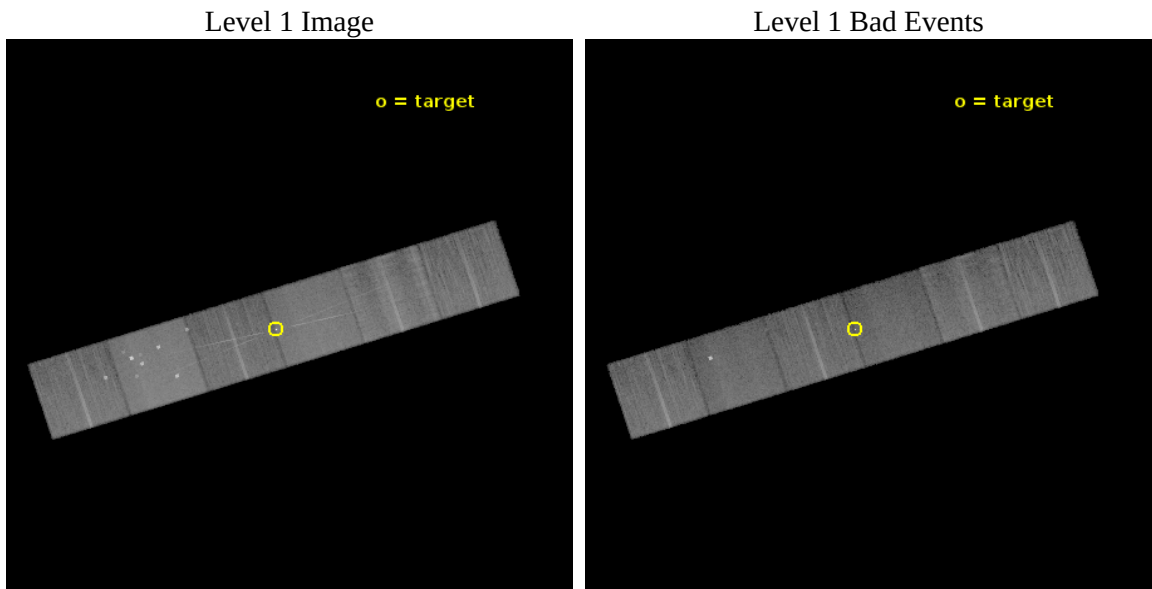
seq_num	300340	Sequence number
obs_id	18858	Observation id
title	Photoionized Features and the Soft Component in Intermediate Polars	
observer	Dr Koji Mukai	Principal investigator
object	NY Lupi	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	237.060417	Observer's specified target RA [deg]
dec_targ	-45.4775	Observer's specified target Dec [deg]
ra_nom	237.02894683759	Nominal RA [deg]
dec_nom	-45.467688674566	Nominal Dec [deg]
roll_nom	342.13420820343	Nominal Roll [deg]
revision	1	Processing version of data
ontime	23449.600349426	Sum of GTIs [s]
livetime	23152.667390148	Livetime [s]
ontime4	23449.600349426	Sum of GTIs [s]
ontime5	23449.600349426	Sum of GTIs [s]
ontime6	23449.600349426	Sum of GTIs [s]
ontime7	23449.600349426	Sum of GTIs [s]
ontime8	23446.35931921	Sum of GTIs [s]
ontime9	23449.600349426	Sum of GTIs [s]
l2events	264031	Number of level 2 events



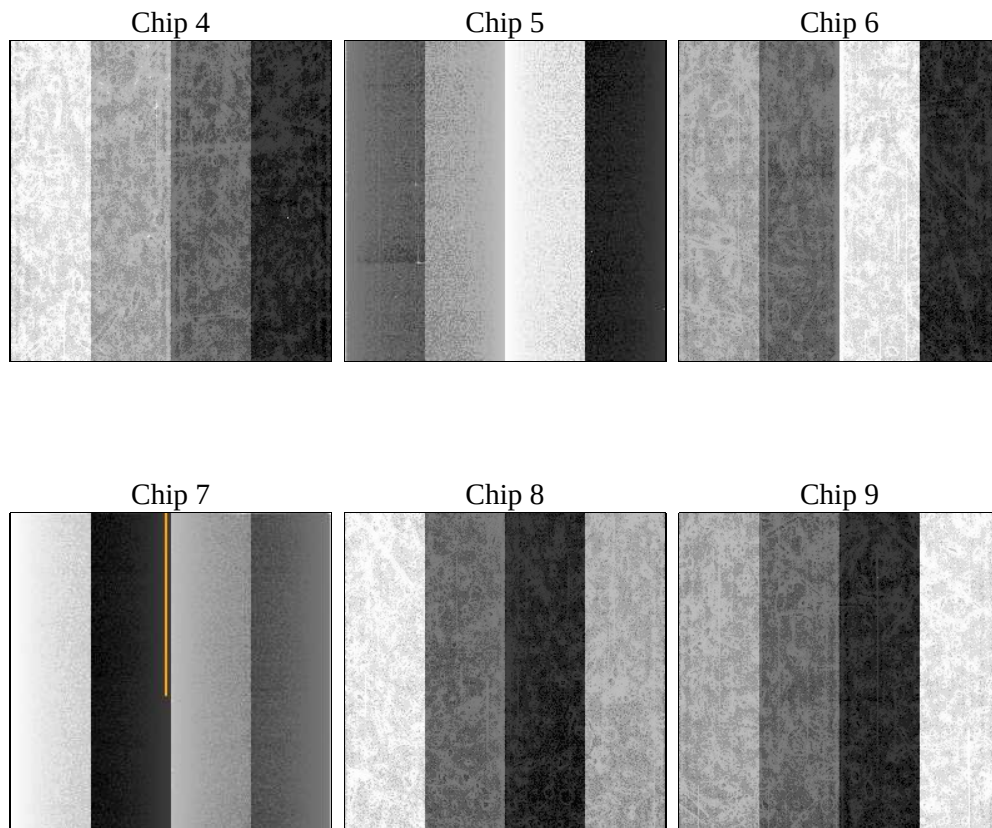
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23500.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	23449.600349426	Sum of GTIs [s]
caldsver	4.7.1	 	ontime4	23449.600349426	Sum of GTIs [s]
date	2016-05-26T15:59:48	Date and time of file creation	ontime5	23449.600349426	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	23449.600349426	Sum of GTIs [s]
			ontime7	23449.600349426	Sum of GTIs [s]
			ontime8	23446.35931921	Sum of GTIs [s]
			ontime9	23449.600349426	Sum of GTIs [s]
			l1events	1124729	Number of level 1 events
			tgmeth	TGDETECT	Method used to create src1a file
			src1a_pos	(2022.20, 4022.25)	src1a sky pixel position

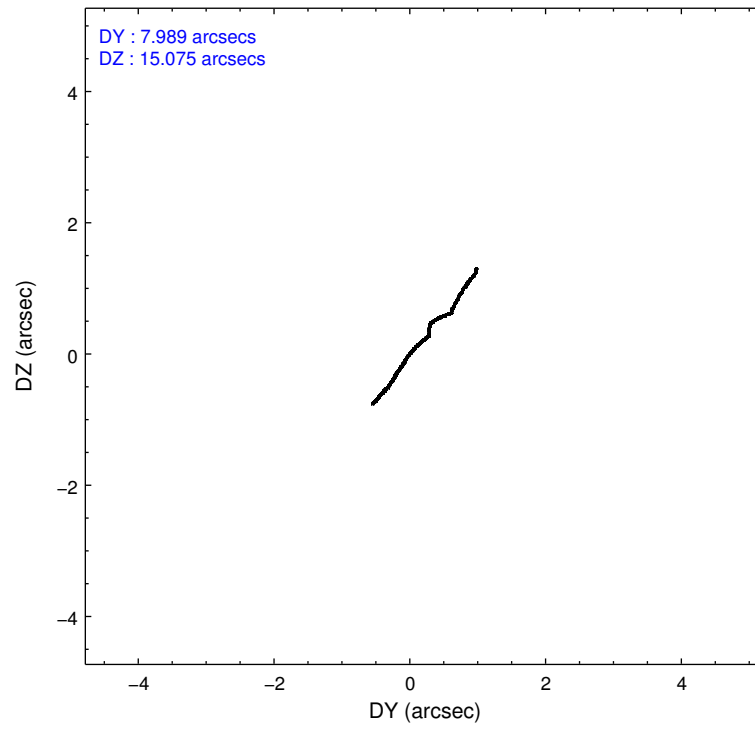
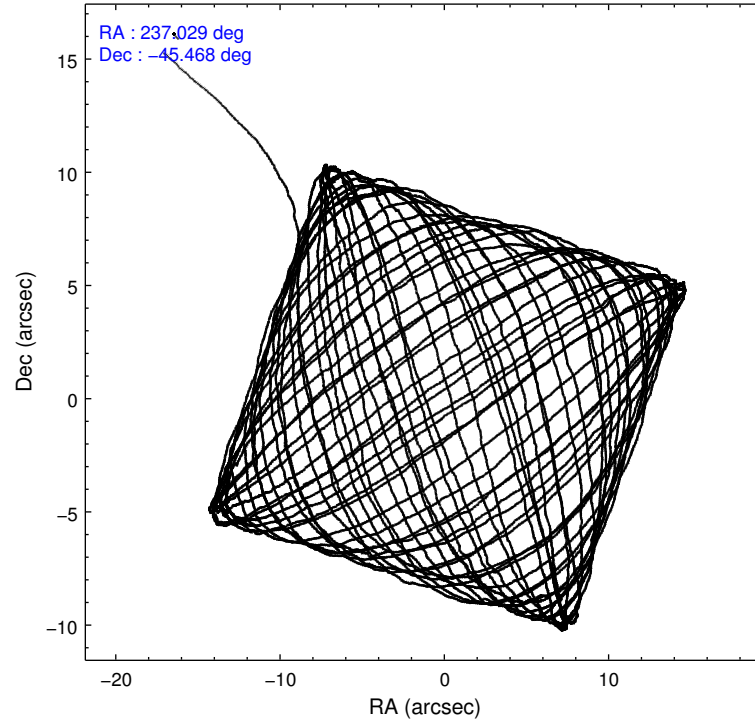
2.1.4 Events

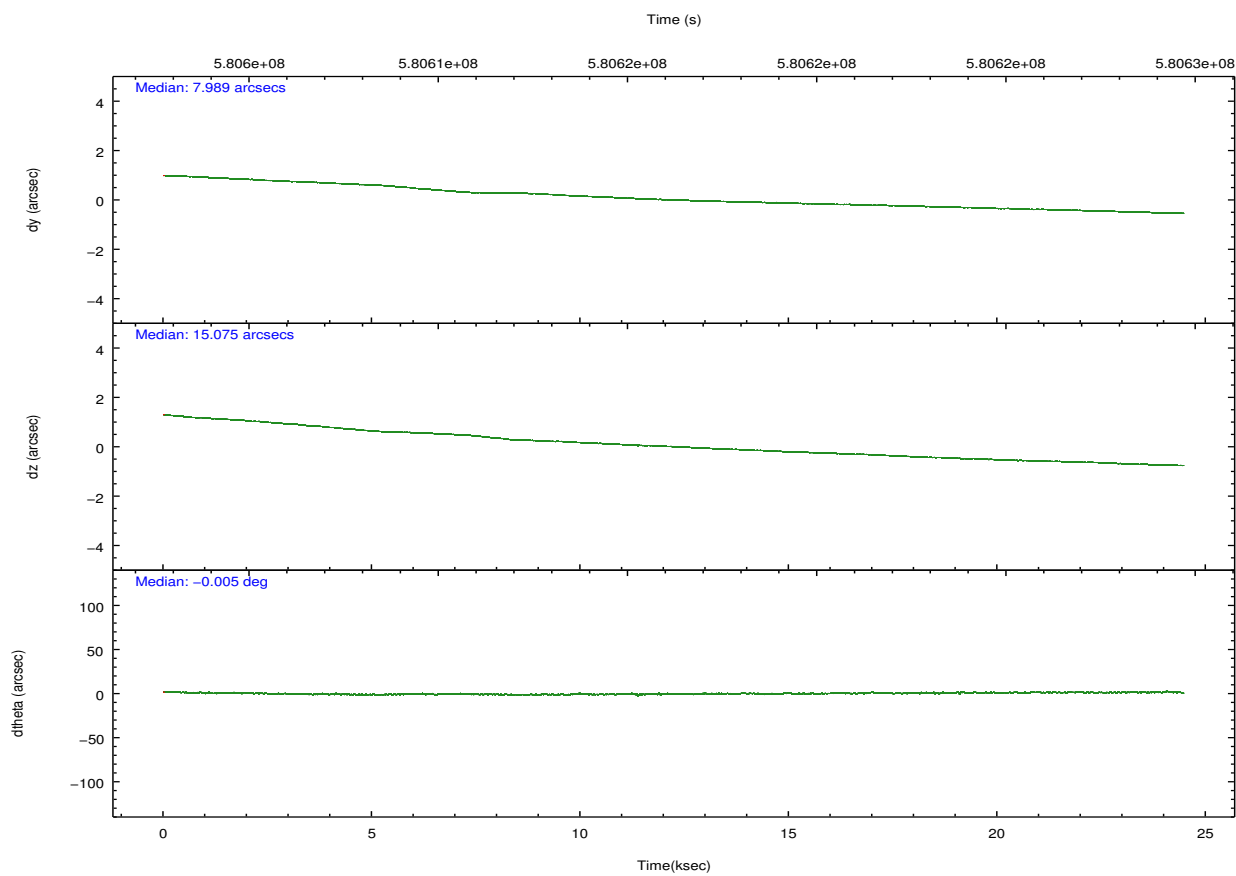
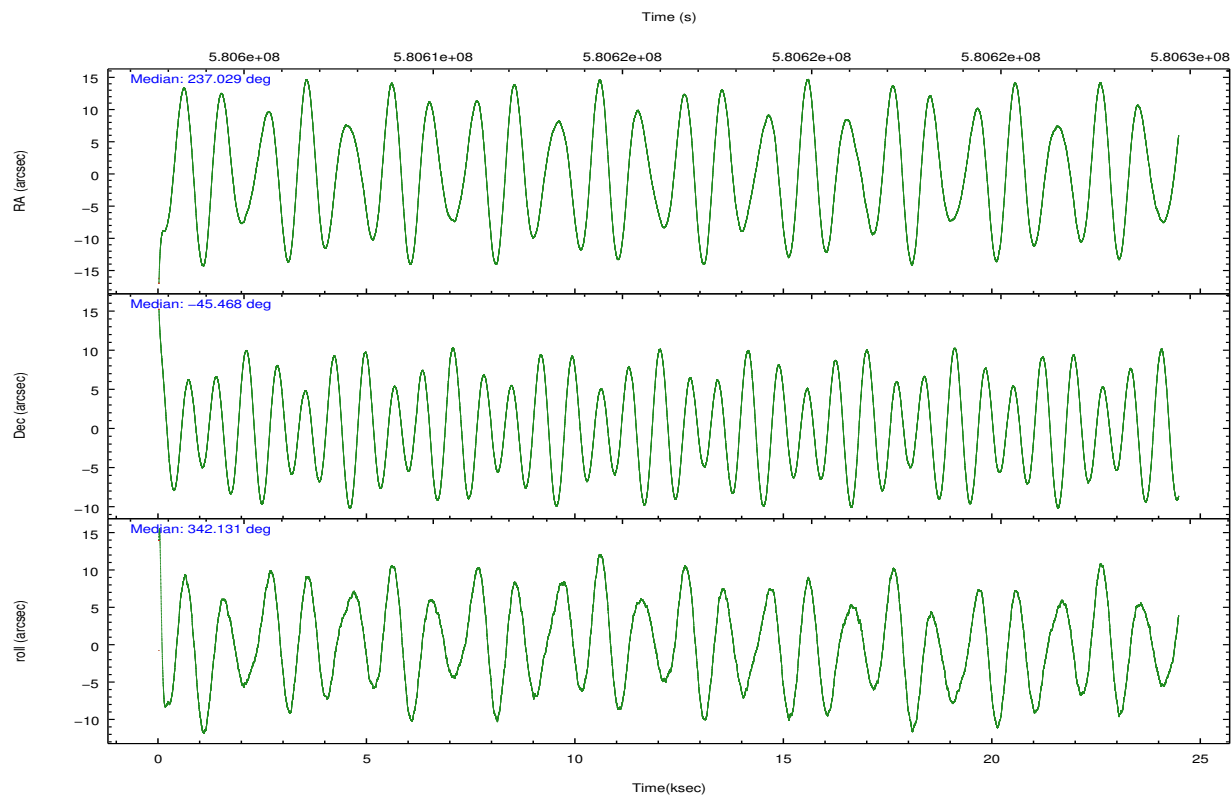
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	168316	253316	150999	202648	194506	154944	grade 0 events	8358	18898	8312	8746	15365	6570
rejected events	148808	126882	130285	110089	142354	136731		4%	7%	5%	4%	7%	4%
rejected %	88%	50%	86%	54%	73%	88%	grade 1 events	153	527	63	371	147	105
								0%	0%	0%	0%	0%	0%
							grade 2 events	4268	37336	4406	19611	12462	3978
								2%	14%	2%	9%	6%	2%
							grade 3 events	1871	4206	1849	7857	5386	1898
								1%	1%	1%	3%	2%	1%
							grade 4 events	1781	3926	1956	7548	5077	1799
								1%	1%	1%	3%	2%	1%
							grade 5 events	7193	17290	6896	19960	10627	8054
								4%	6%	4%	9%	5%	5%
							grade 6 events	3236	62086	4197	48809	13862	3969
								1%	24%	2%	24%	7%	2%
							grade 7 events	141456	109047	123320	89746	131580	128571
								84%	43%	81%	44%	67%	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	236.990814	237.0289468375893	CCD I2 on	N	N
[deg] Pointing Dec	-45.473815	-45.46768867456608	CCD I3 on	N	N
[deg] Pointing Roll	341.950383	342.1342082034258	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)	580604949.184000	580602797.59427	CCD S5 on	O2	Y
Observation start date	2016-05-25T23:08:01	2016-05-25T22:33:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	580628449.184000	580629380.45829	On-chip summing requested	N	N
Observation end date	2016-05-26T05:39:41	2016-05-26T05:56:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



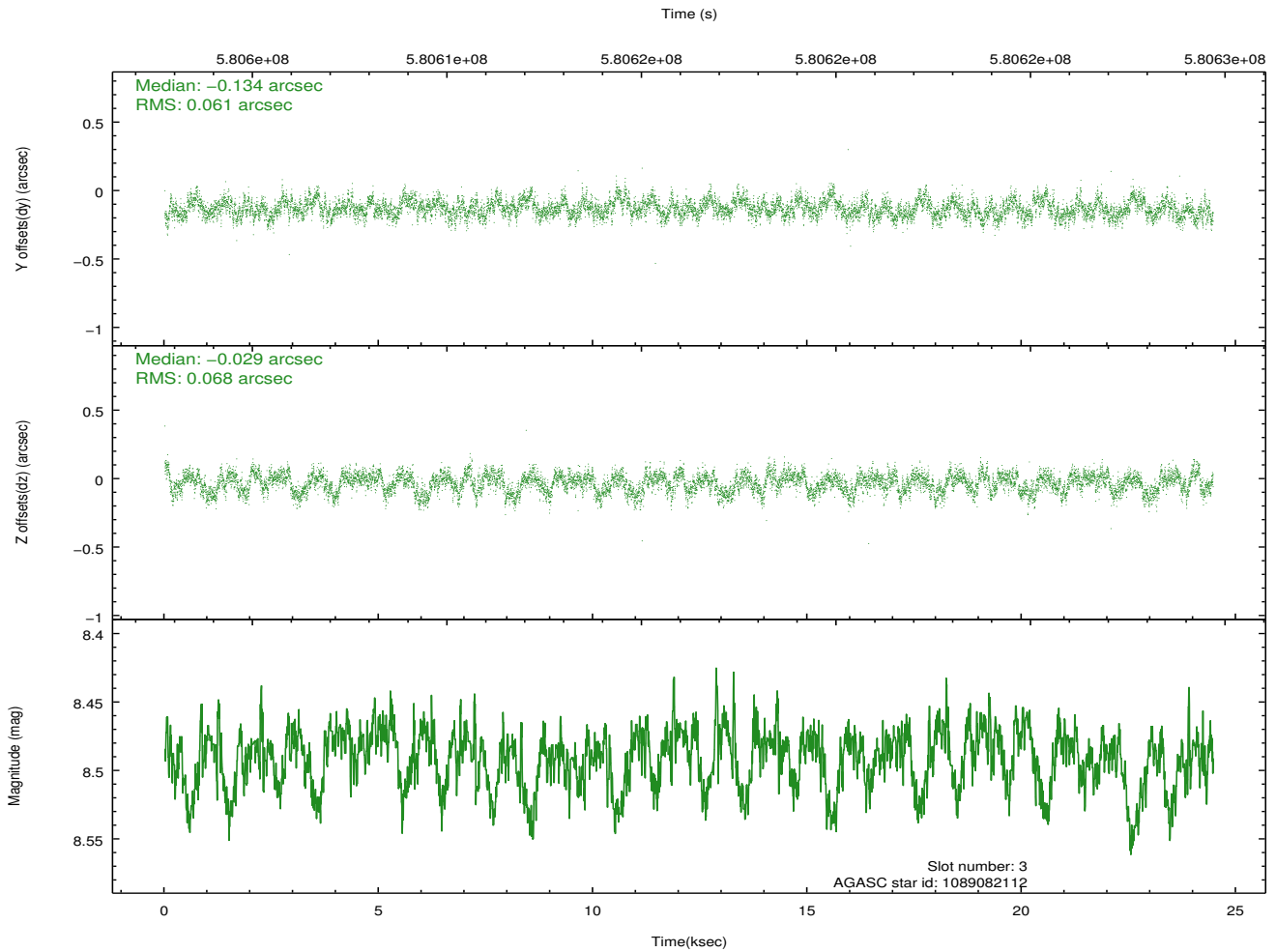
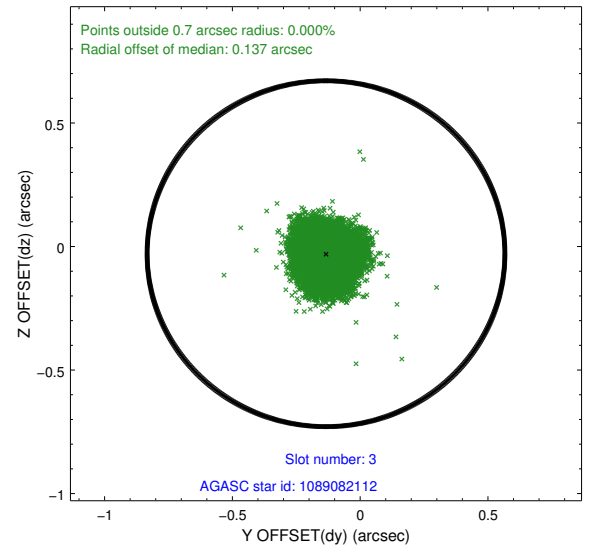
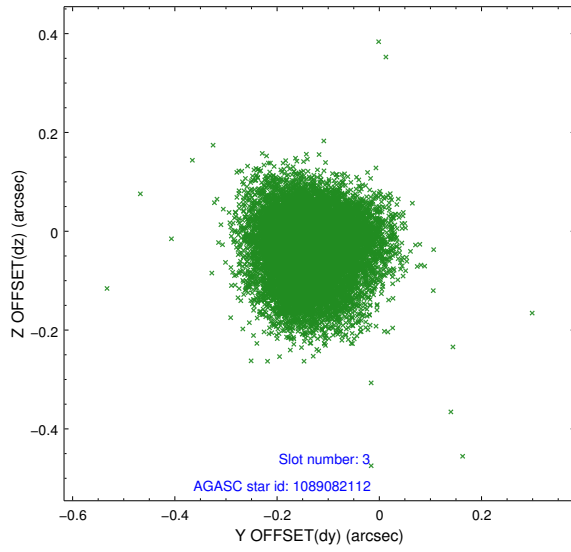


Slot Statistics

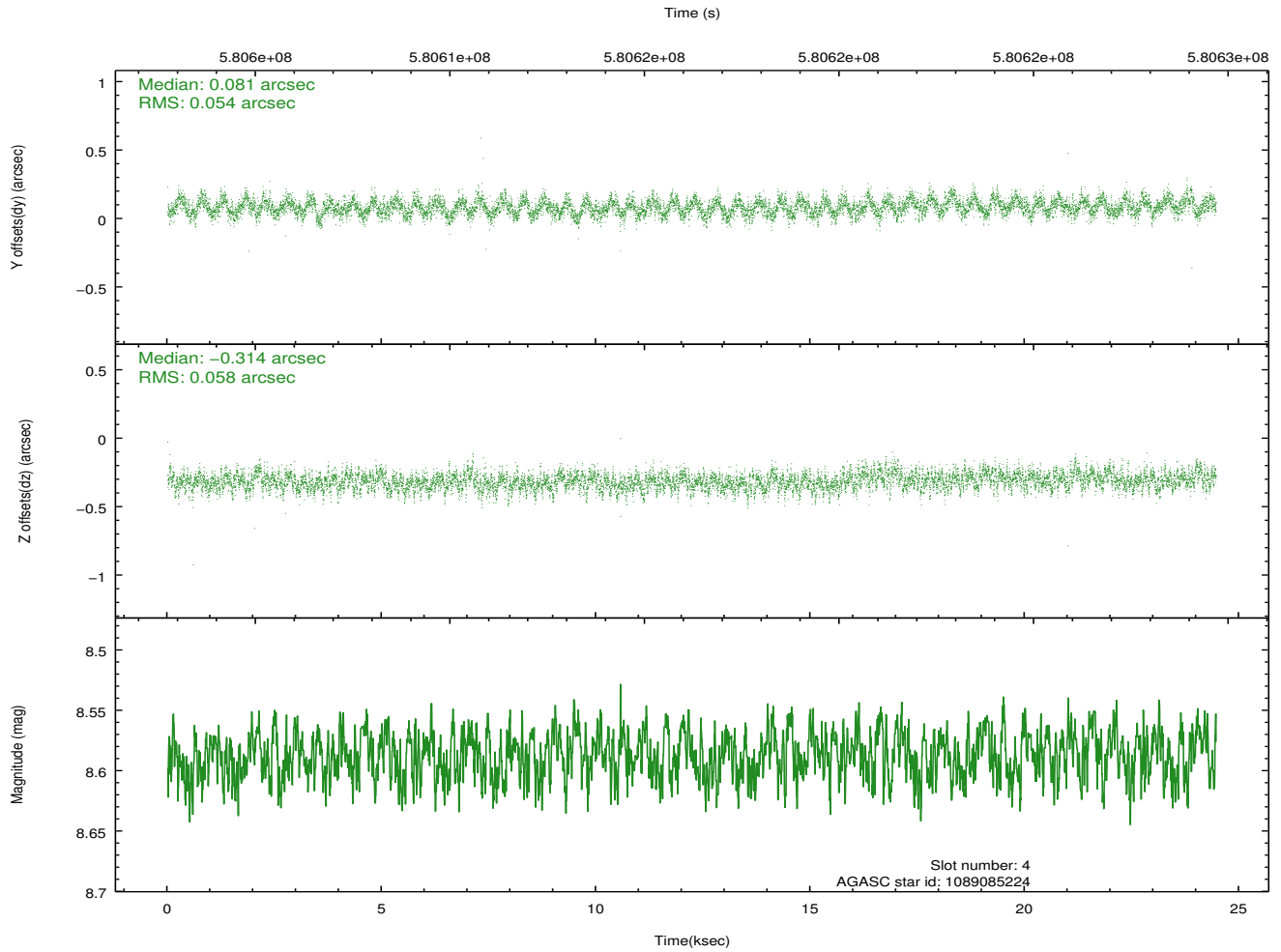
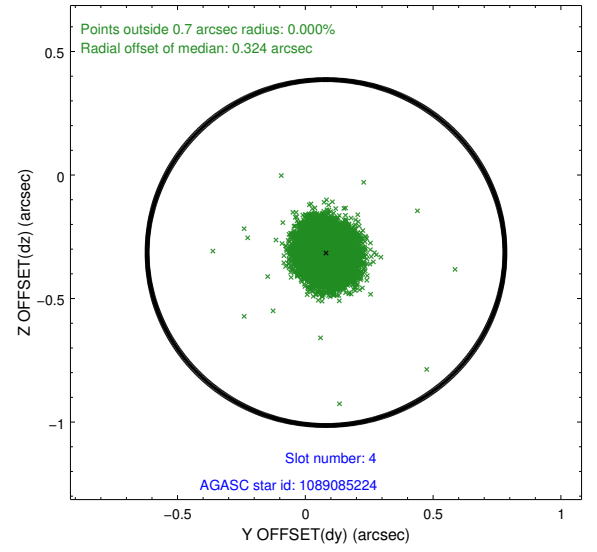
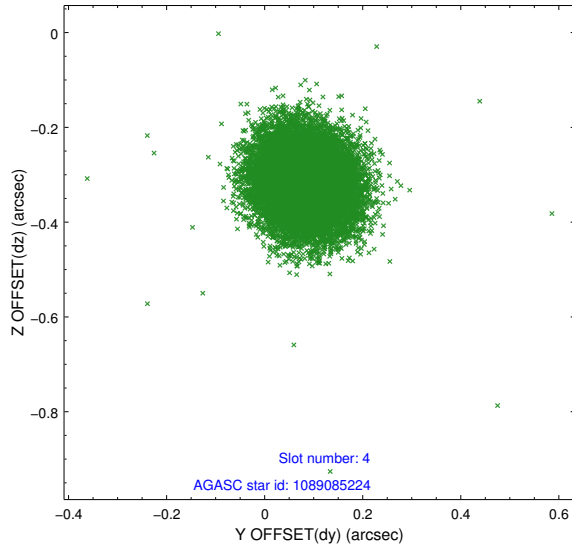
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.12	5966	-0.127	-0.053	0.016	0.028	0.000000	0.000000	-760.97	-1736.62
1	FID		ACIS-S-4	7.22	5966	0.325	0.076	0.012	0.030	0.000000	0.000000	2152.67	171.92
2	FID		ACIS-S-5	7.23	5965	-0.229	-0.015	0.019	0.031	0.000000	0.000000	-1813.79	165.58
3	GUIDE	used	1089082112	8.49	11922	-0.134	-0.029	0.098	0.152	236.546983	-45.100073	-1487.99	926.54
4	GUIDE	used	1089085224	8.59	11929	0.081	-0.314	0.085	0.135	237.980210	-45.089603	1967.42	2079.58
5	GUIDE	used	1089085664	8.24	11928	-0.136	-0.123	0.086	0.144	237.192857	-45.348317	346.66	587.52
6	GUIDE	used	1089085856	8.76	11923	-0.013	0.138	0.100	0.163	237.839757	-45.716096	2302.93	-178.66
7	GUIDE	used	1089086296	8.75	11922	0.195	0.342	0.128	0.212	236.468444	-46.045139	-601.42	-2363.49

2.4 Star Slots

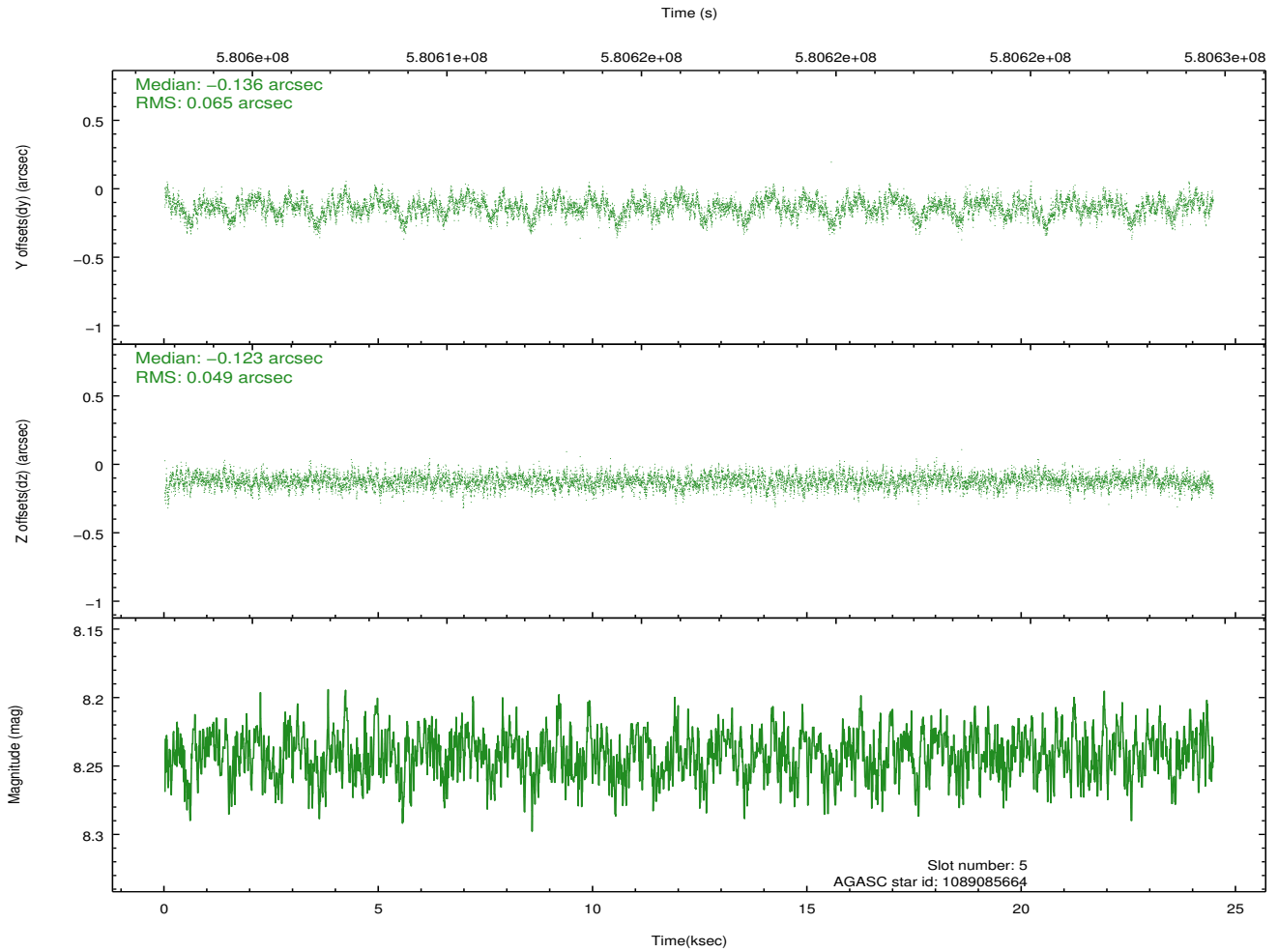
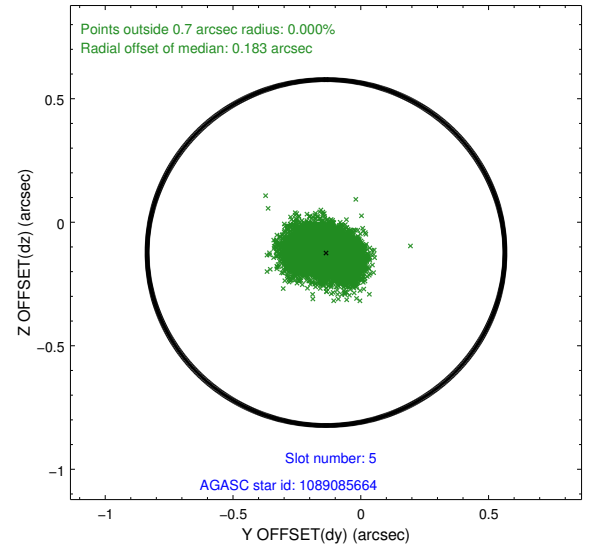
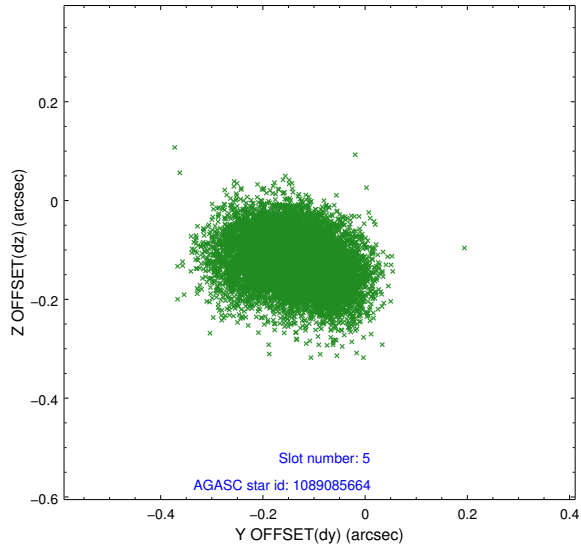
2.4.1 Slot 3



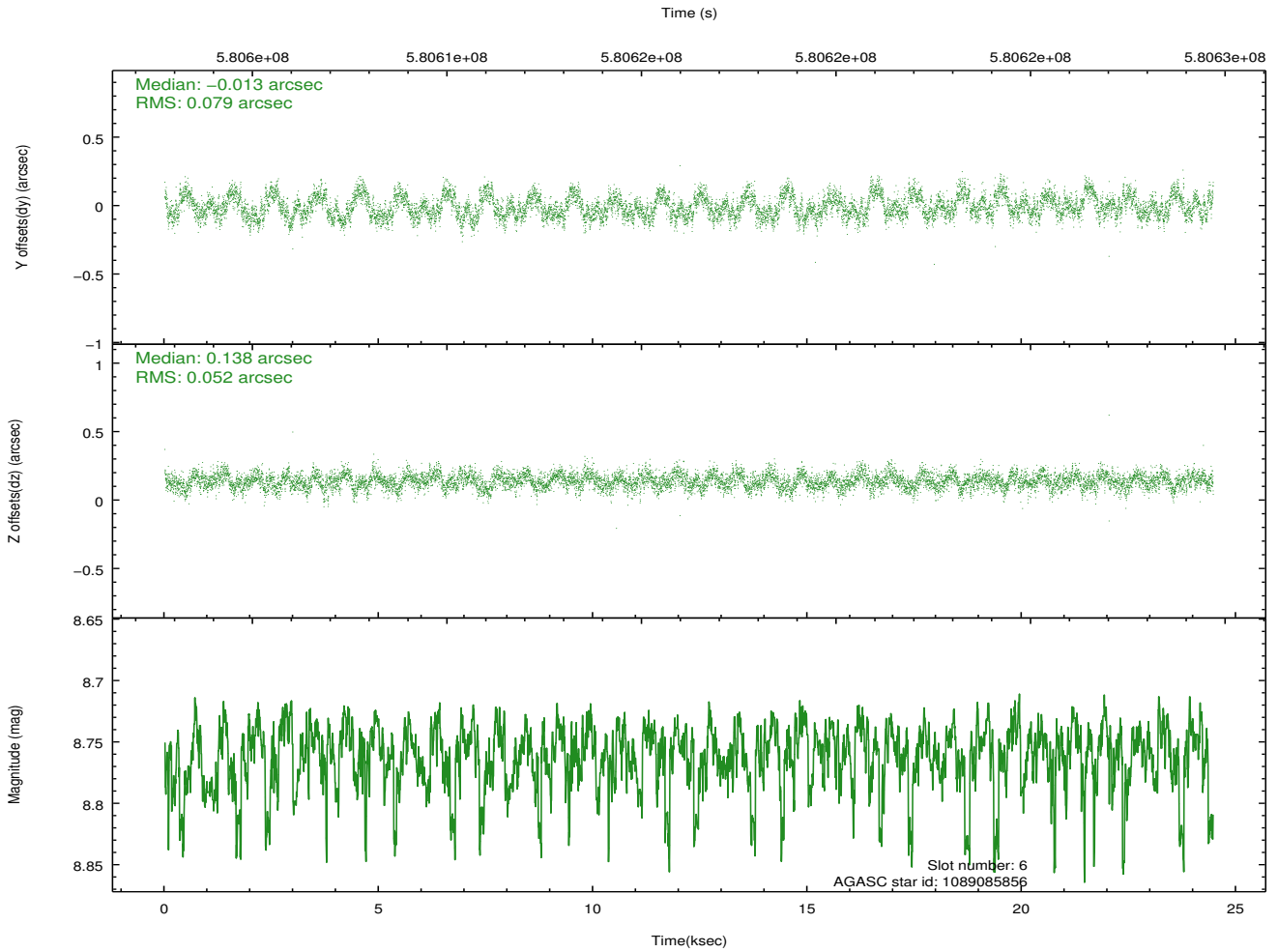
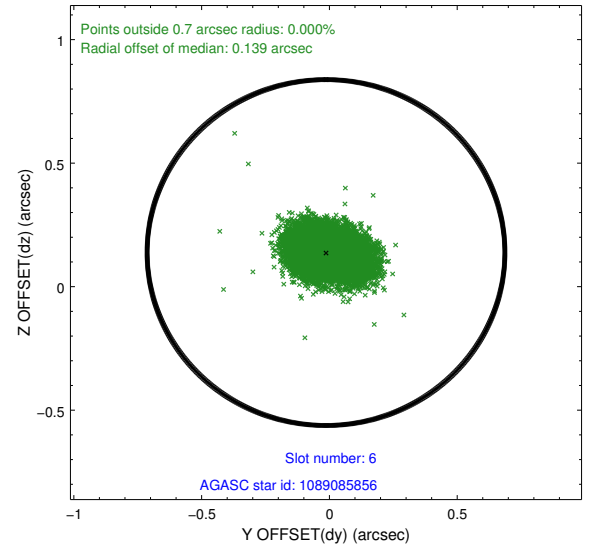
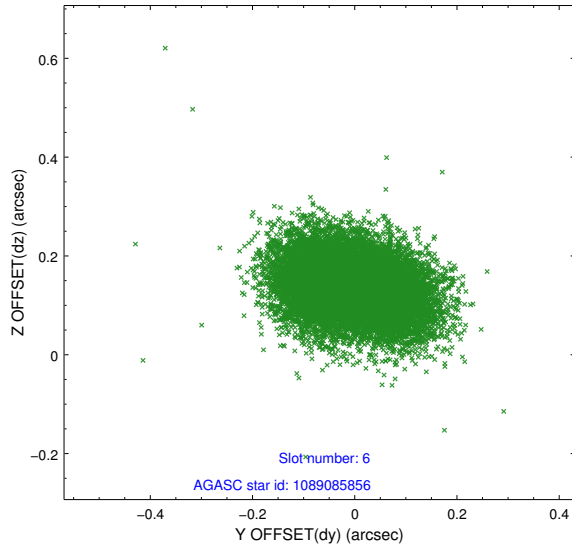
2.4.2 Slot 4



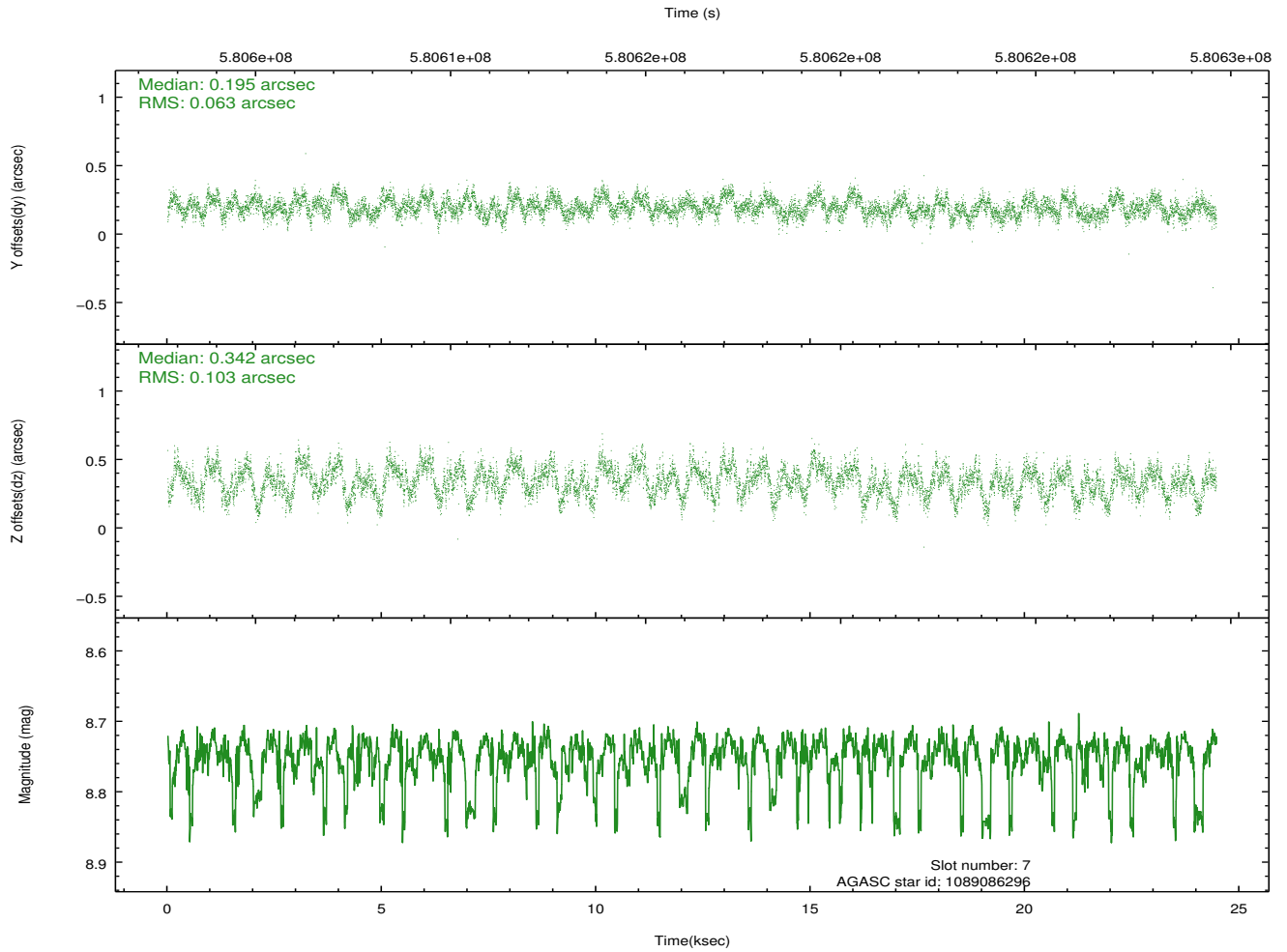
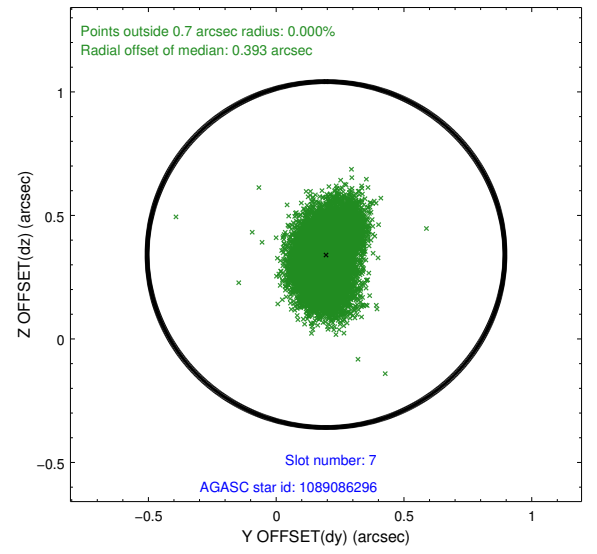
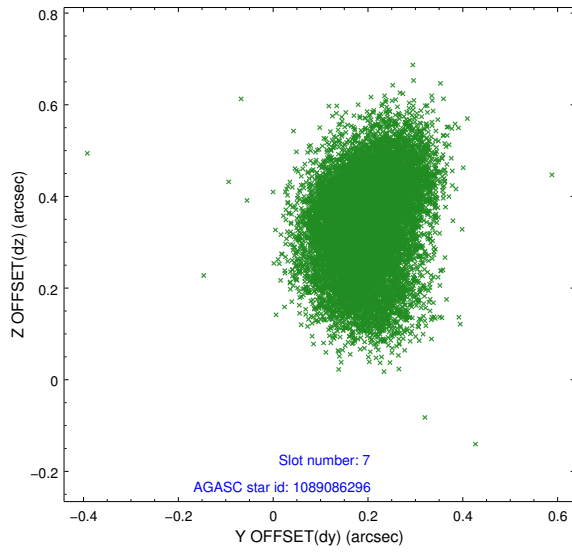
2.4.3 Slot 5



2.4.4 Slot 6

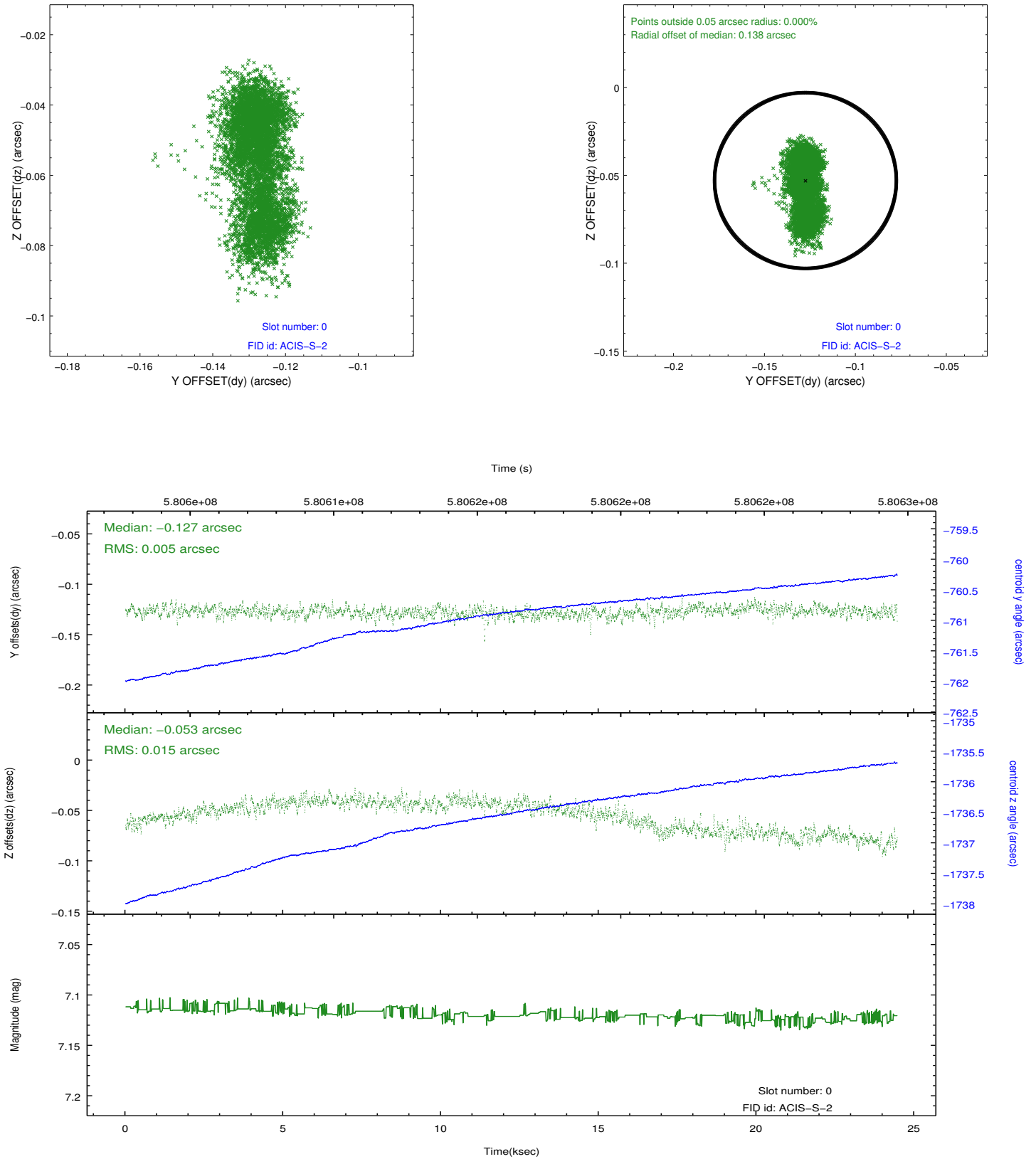


2.4.5 Slot 7

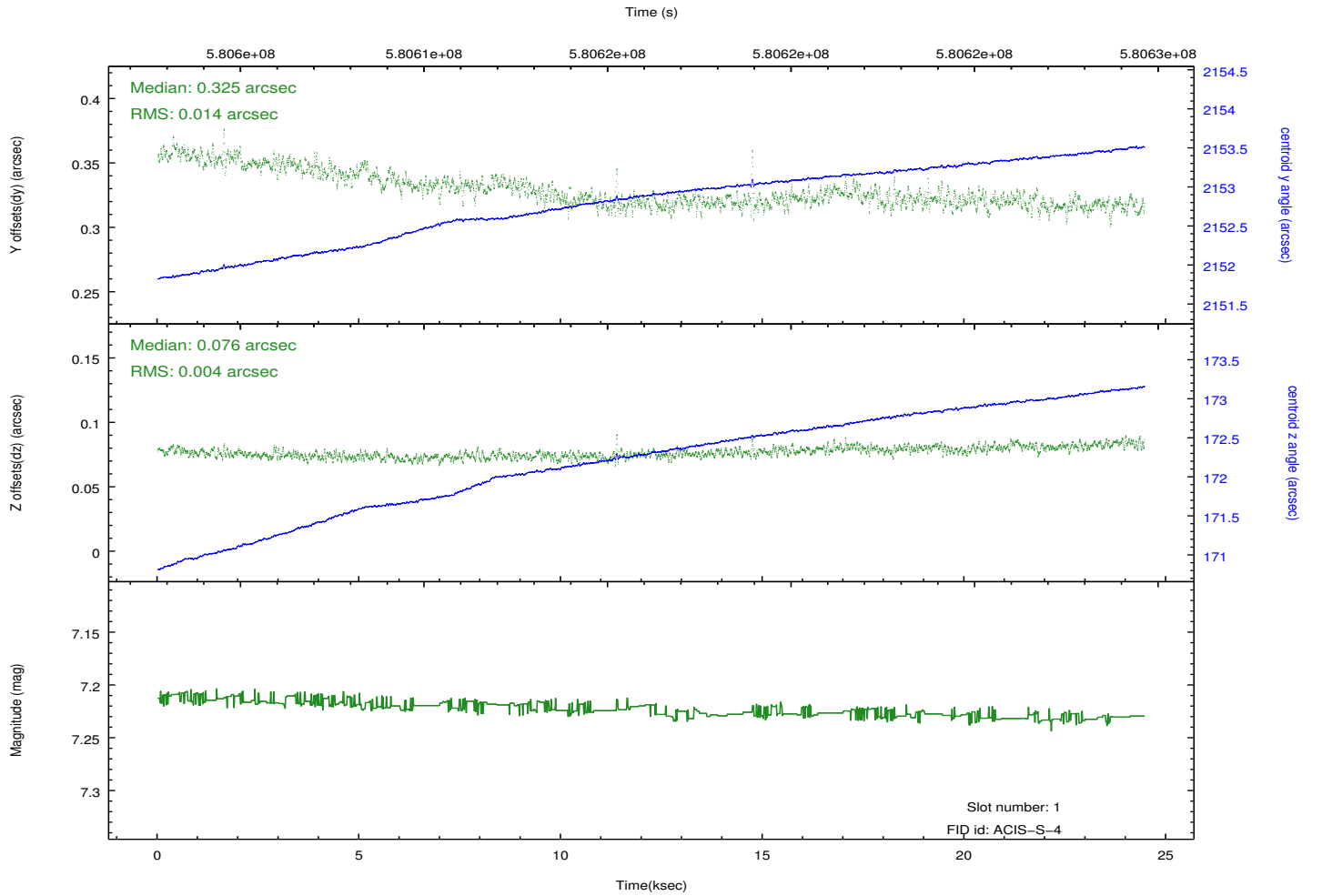
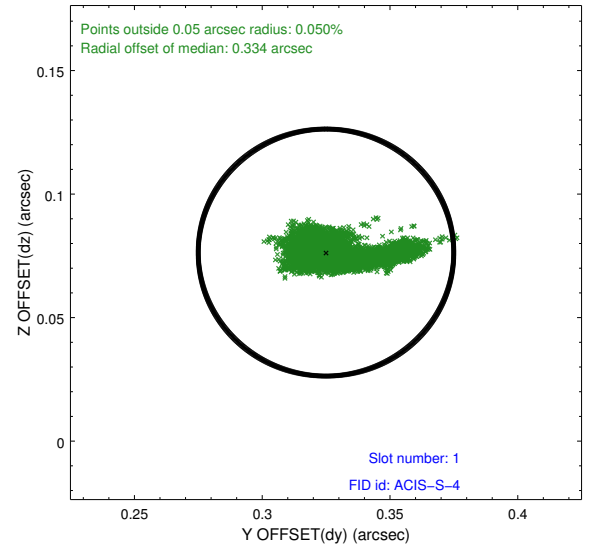
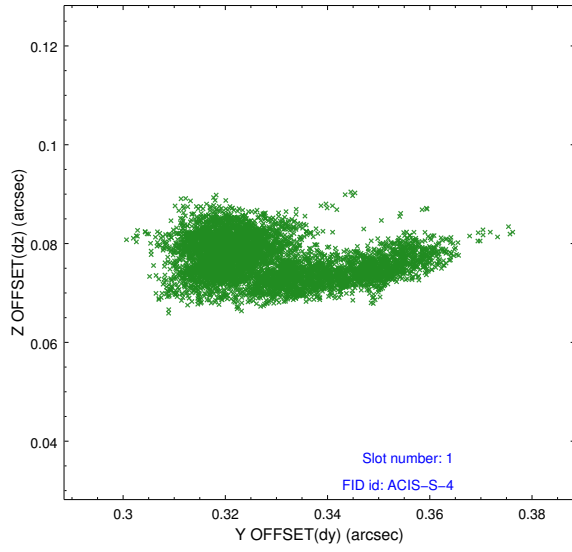


2.5 FID Slots

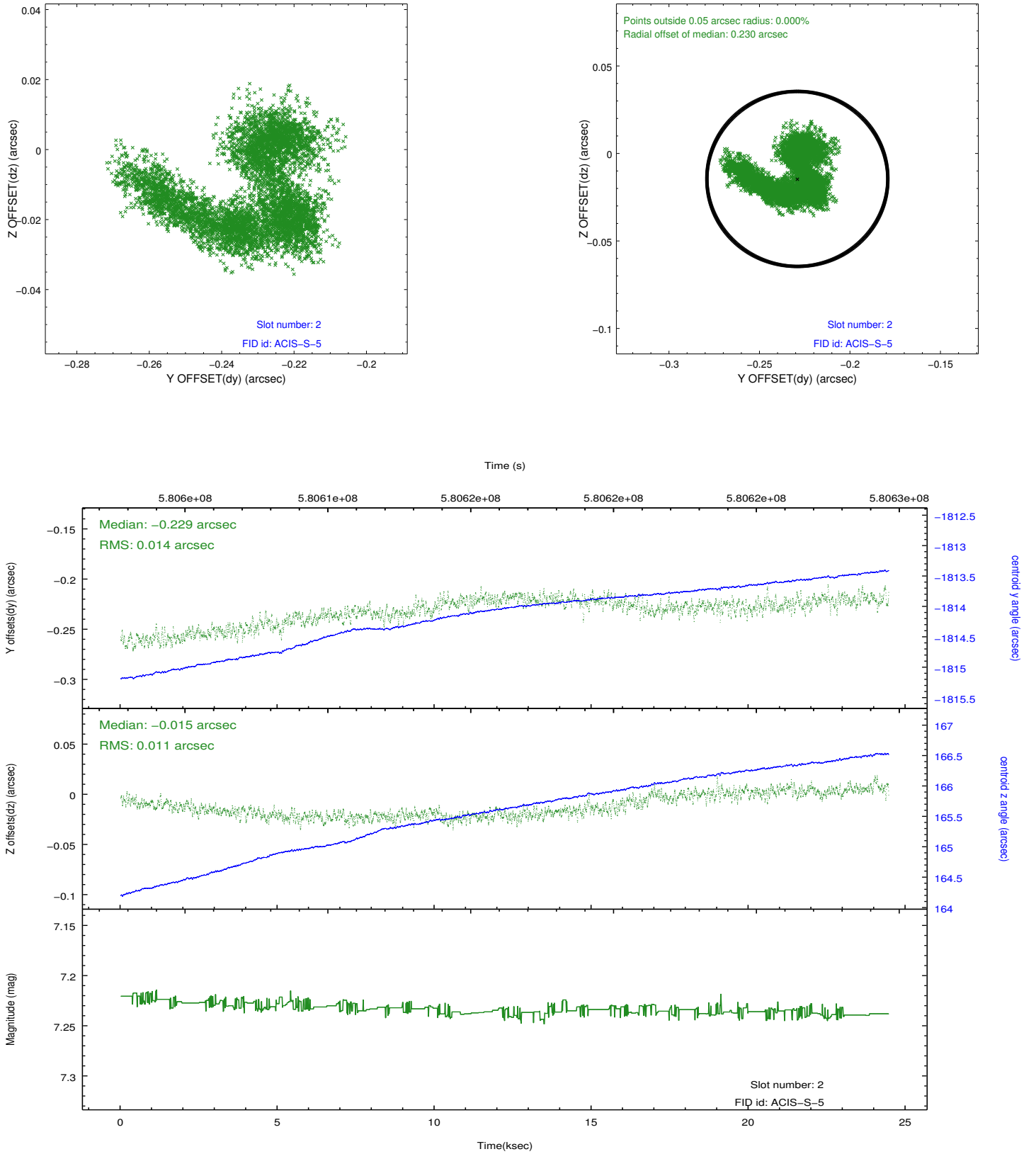
2.5.1 Slot 0



2.5.2 Slot 1

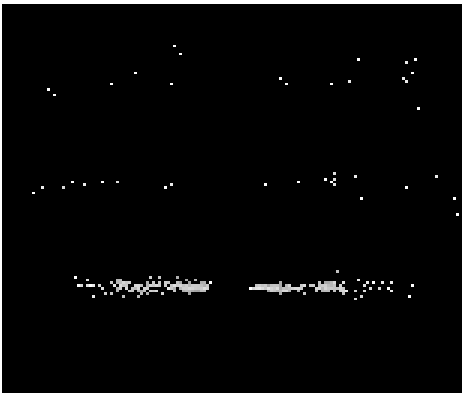


2.5.3 Slot 2

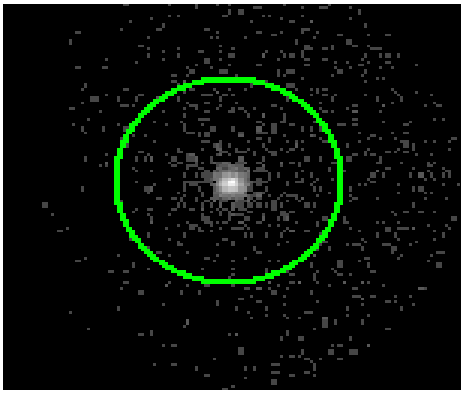


3 Gratings

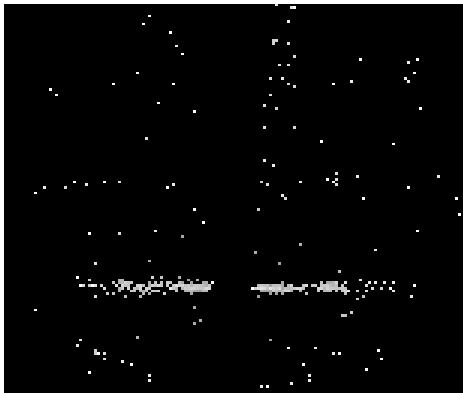
3.1 HEG Arm



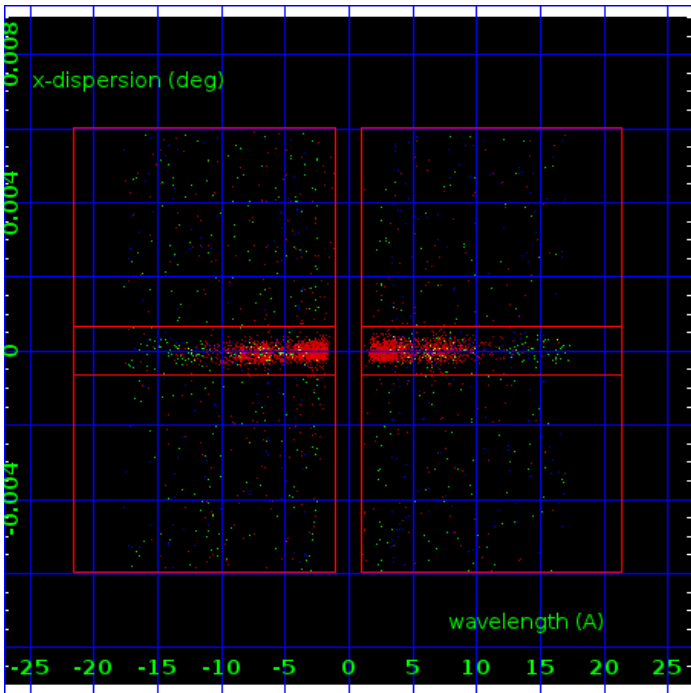
HEG Order Sort 123



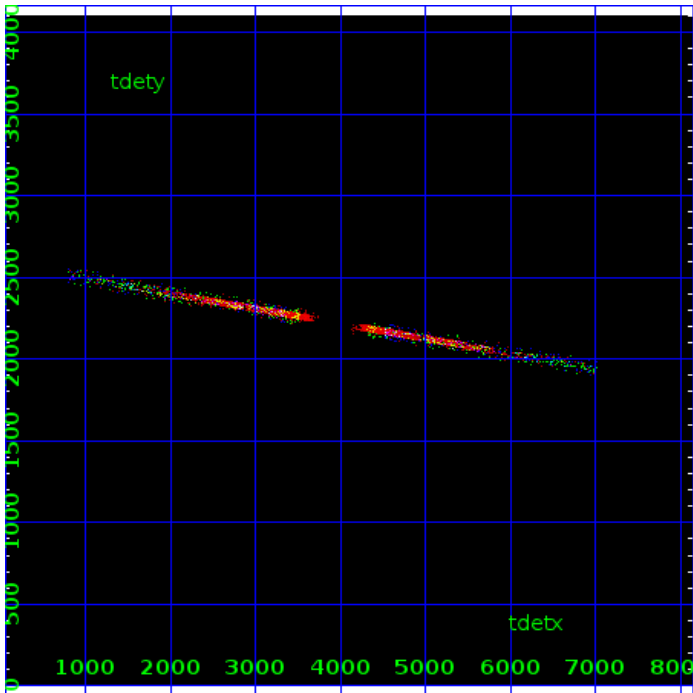
HEG Zero Order



HEG Order Sort ALL

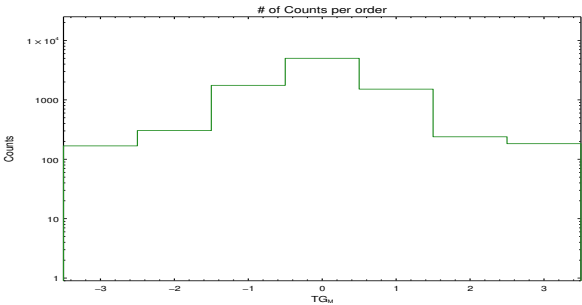


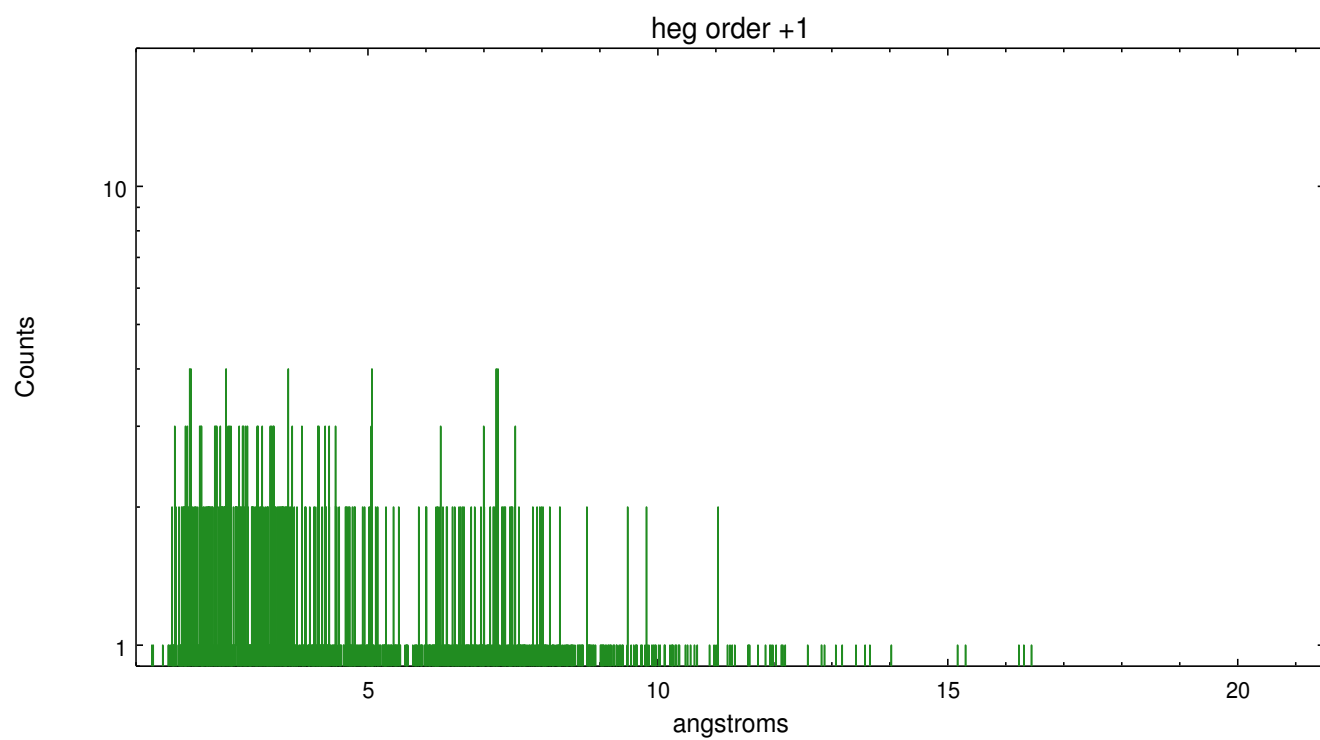
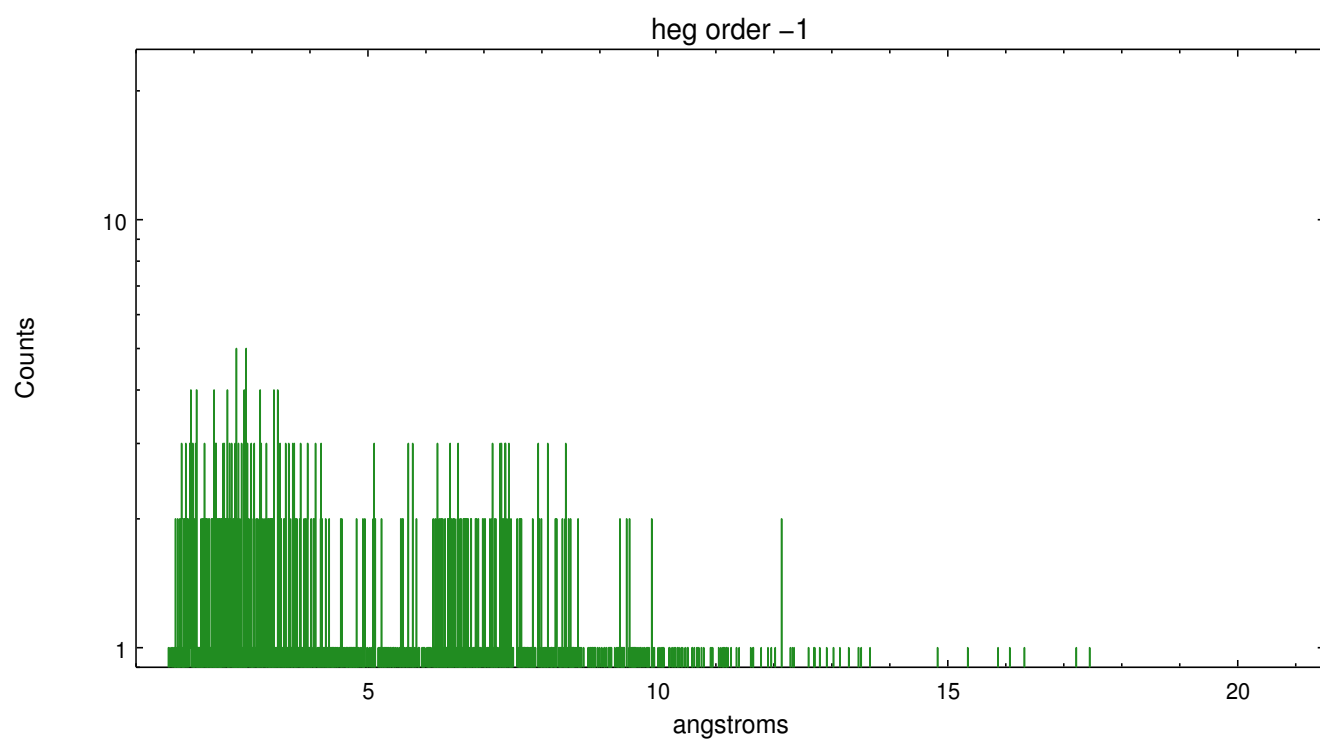
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	168	304	1755	5007	1515	239	183

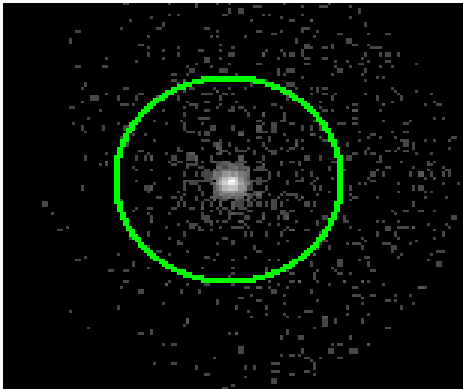




3.2 MEG Arm



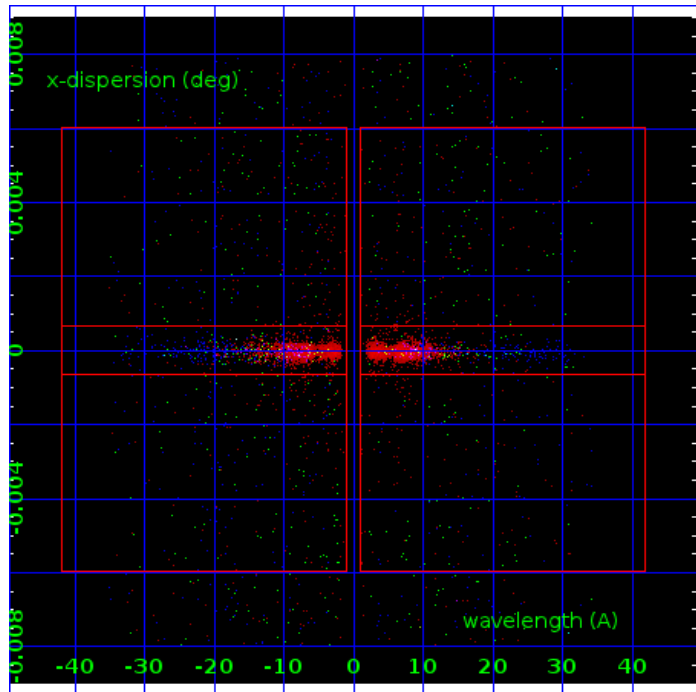
MEG Order Sort 123



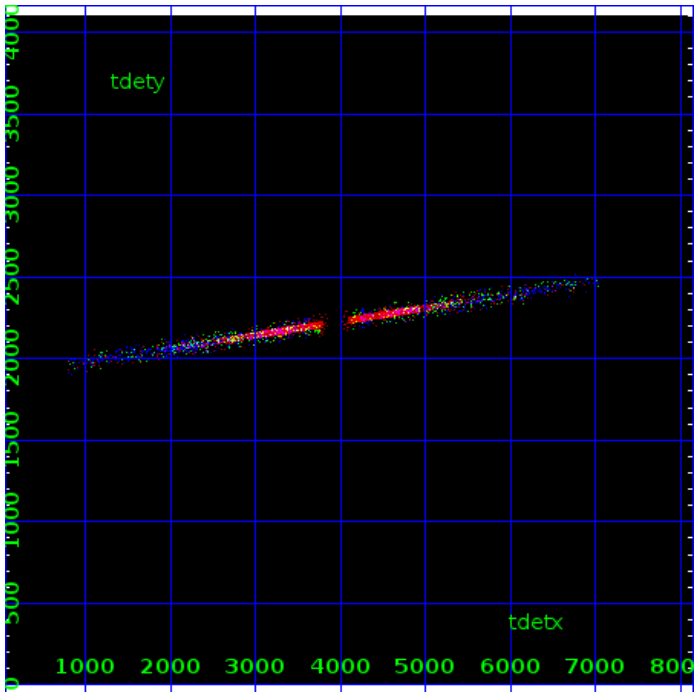
MEG Zero Order



MEG Order Sort ALL

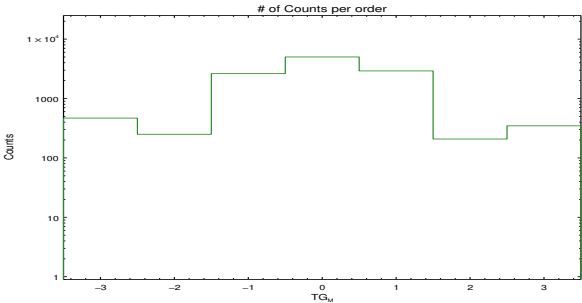


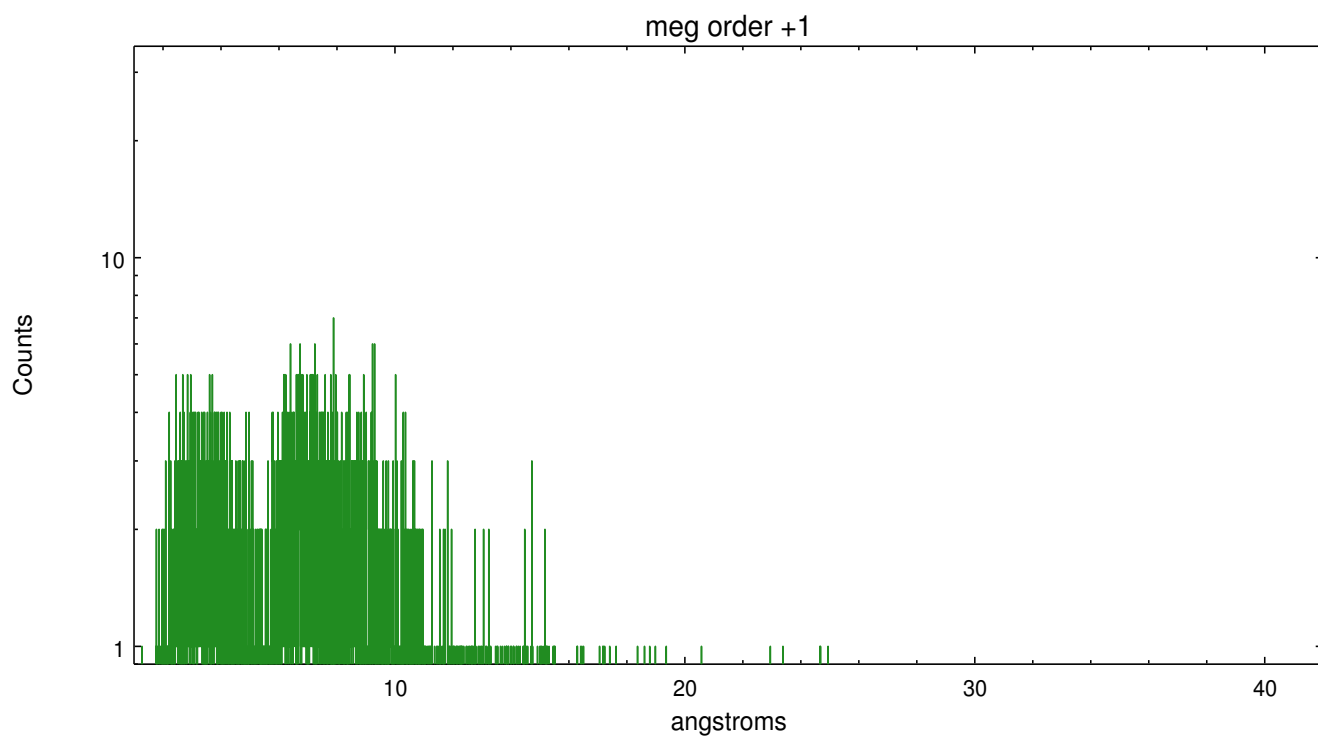
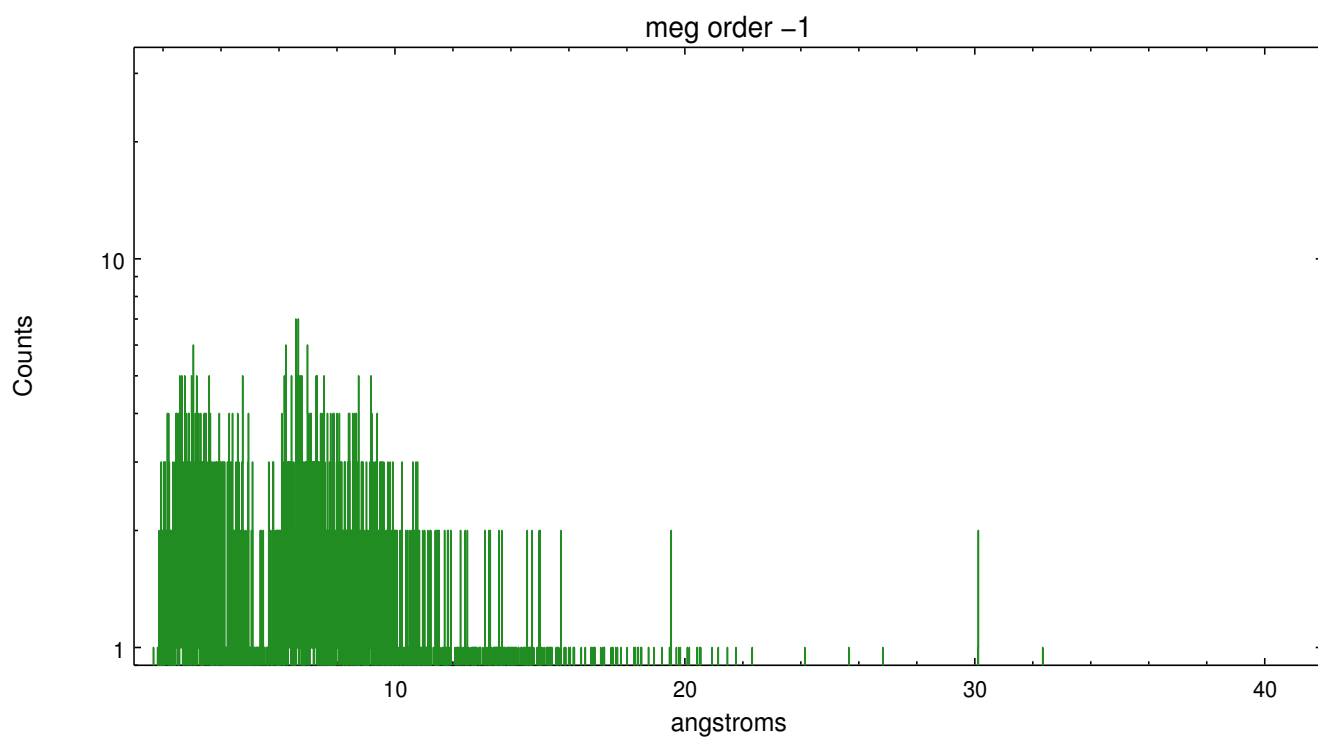
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	468	250	2621	5007	2914	208	347





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2016.05.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.449600349426

A.2 Comments