

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19719 - L2 Version 1
Chandra X-Ray Center

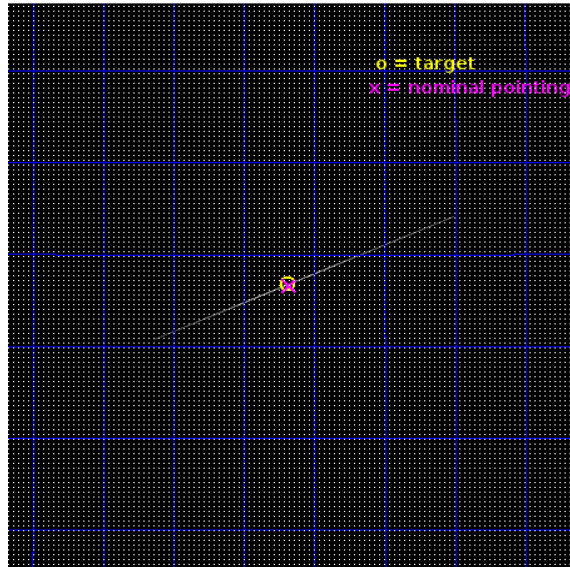
L2 Processing Date : Jun 25 2017

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1 Front

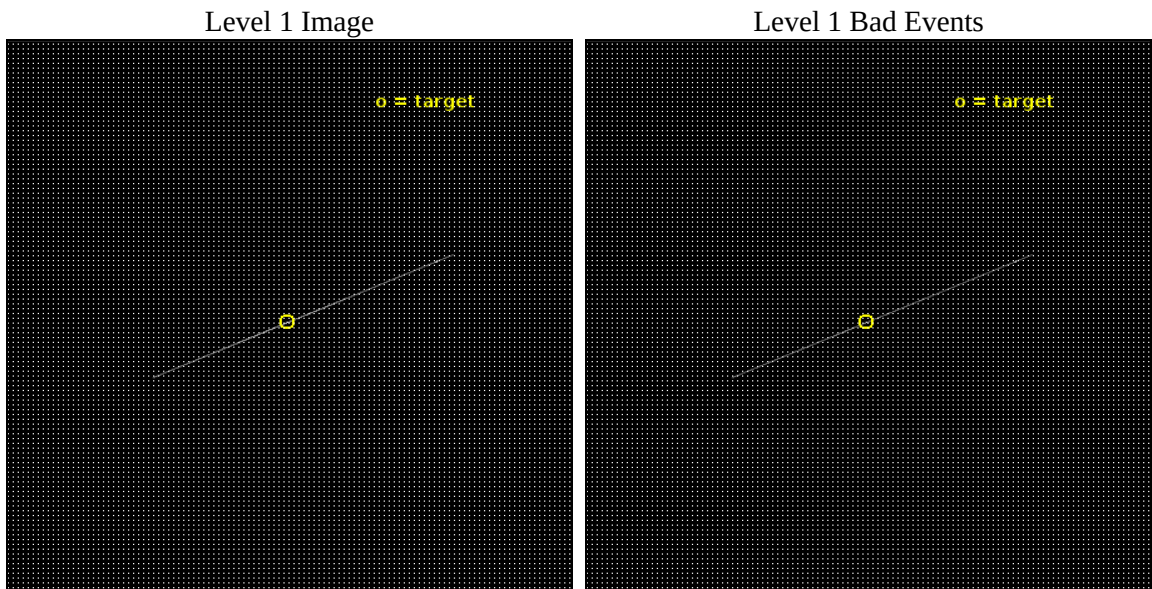
seq_num	401886	Sequence number
obs_id	19719	Observation id
title	A Chandra Legacy for GRS 1915+105	Proposal title
observer	Claude Canizares	Principal investigator
object	GRS 1915+105	Source name
ra_targ	288.798333	Observer's specified target RA [deg]
dec_targ	10.945778	Observer's specified target Dec [deg]
ra_nom	288.79421403147	Nominal RA [deg]
dec_nom	10.943385034349	Nominal Dec [deg]
roll_nom	156.85165451983	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25129.25	Sum of GTIs [s]
livetime	25031.088867188	Livetime [s]
ontime5	25129.25	Sum of GTIs [s]
ontime6	25129.25	Sum of GTIs [s]
ontime7	25129.25	Sum of GTIs [s]
ontime8	25129.25	Sum of GTIs [s]
l2events	3829525	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	25129.25	Sum of GTIs [s]
caldsver	4.7.5	 	ontime5	25129.25	Sum of GTIs [s]
date	2017-06-25T13:52:14	Date and time of file creation	ontime6	25129.25	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	25129.25	Sum of GTIs [s]
			ontime8	25129.25	Sum of GTIs [s]
			l1events	8052369	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4068.37, 4114.57)	src1a sky pixel position

2.1.3 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	2201068	1361849	3777282	712170
rejected events	952765	387133	1217959	458953
rejected %	43%	28%	32%	64%

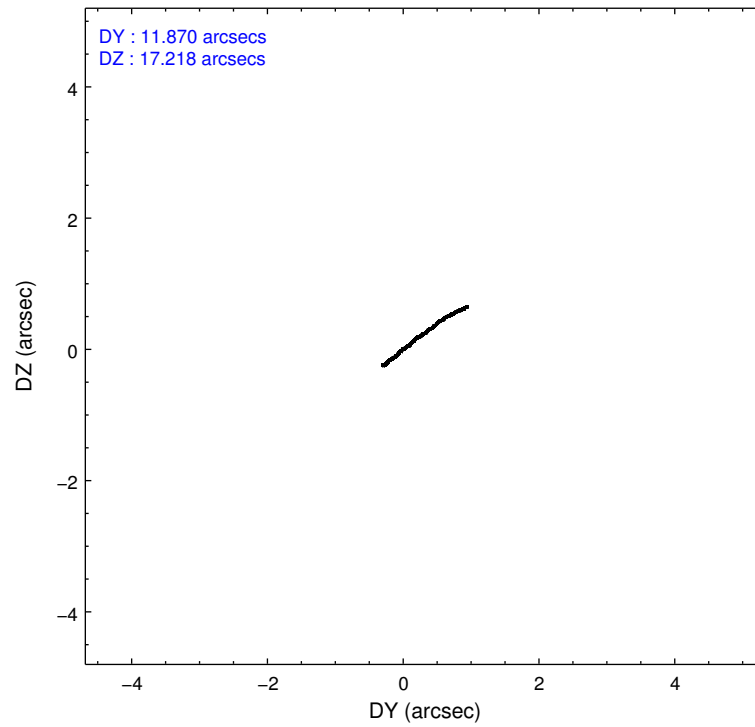
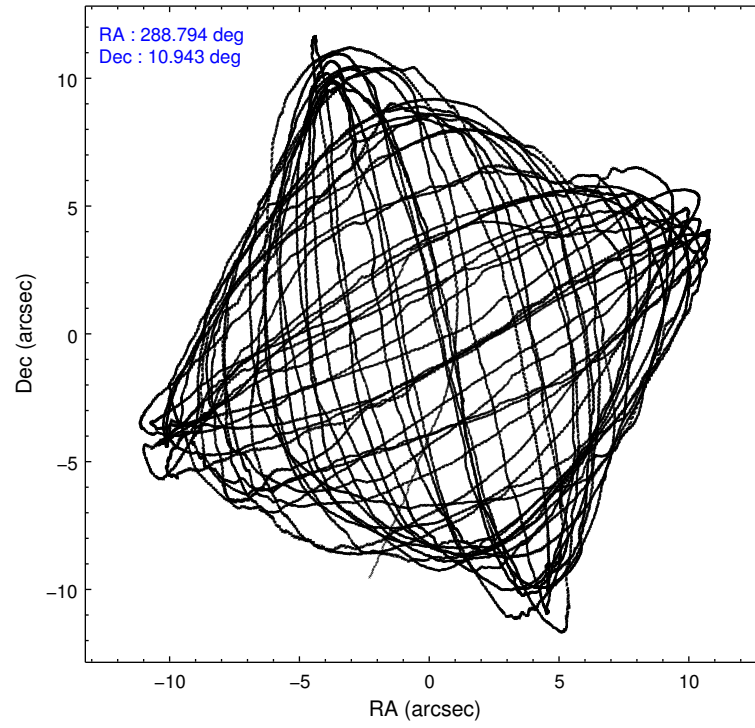
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	336798	8708	179922	22942
	15%	0%	4%	3%
grade 1 events	535	168	12952	334
	0%	0%	0%	0%
grade 2 events	784741	827373	980504	172791
	35%	60%	25%	24%
grade 3 events	4434	4414	100758	9031
	0%	0%	2%	1%
grade 4 events	4014	4008	101006	8656
	0%	0%	2%	1%
grade 5 events	16876	13057	129604	13662
	0%	0%	3%	1%
grade 6 events	118426	130337	1197451	39841
	5%	9%	31%	5%
grade 7 events	935244	373784	1075085	444913
	42%	27%	28%	62%

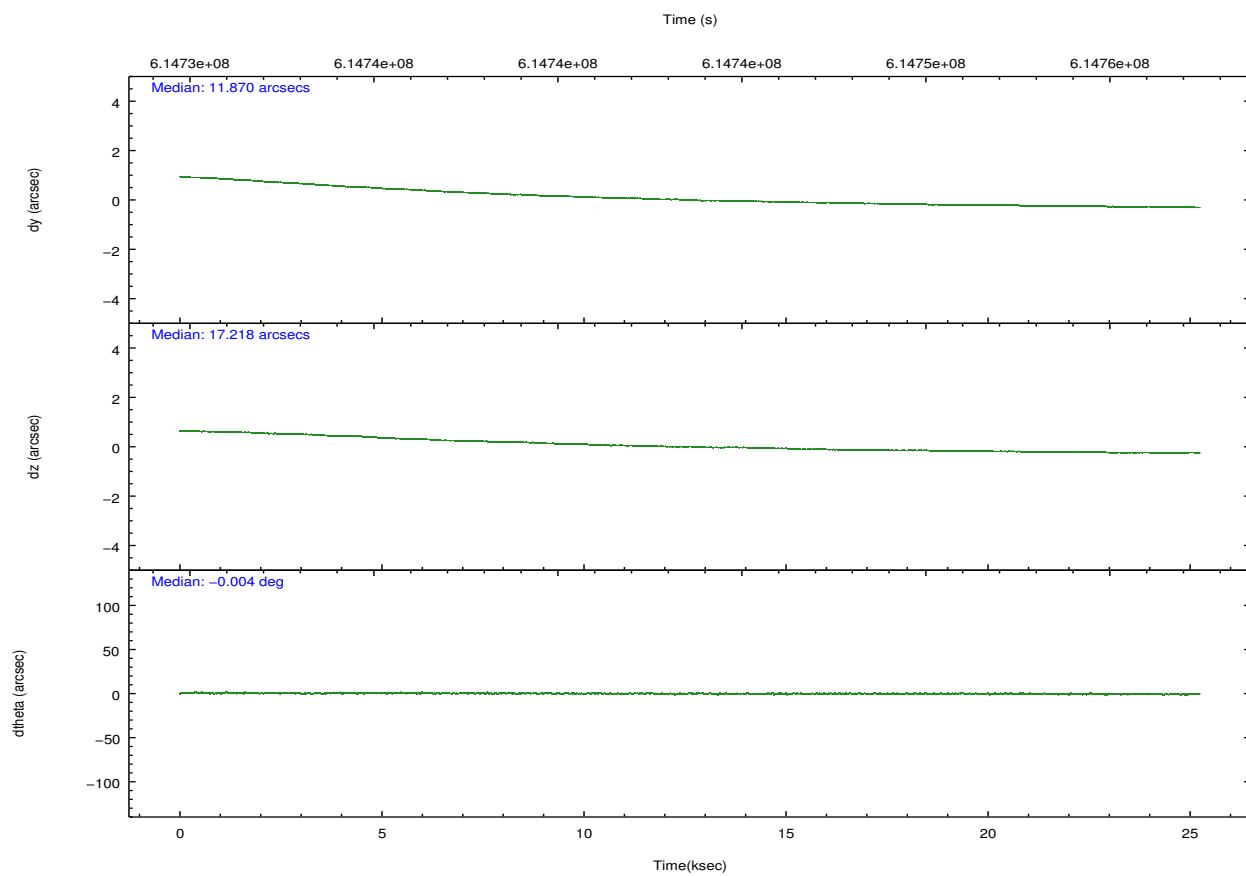
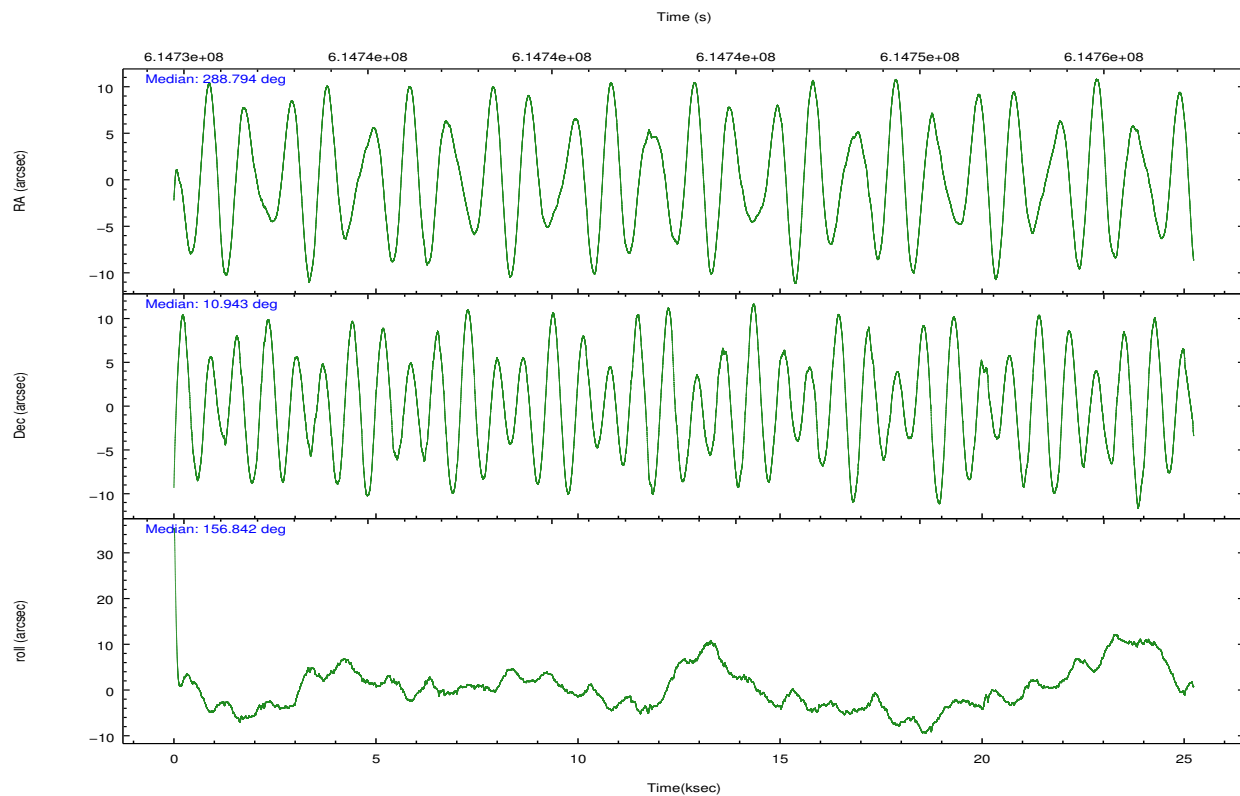
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	HETG	HETG
Data mode	CC33_GRADED	CC33_GRADED
Observation mode	POINTING	POINTING
[deg] Pointing RA	288.821926	288.7942140314651
[deg] Pointing Dec	10.947016	10.94338503434883
[deg] Pointing Roll	156.689743	156.851654519832
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	614731206.184000	614730550.7407399
Observation start date	2017-06-24T22:38:57	2017-06-24T22:29:10
[s] Observation end time (MET)	614756206.184000	614756760.50477
Observation end date	2017-06-25T05:35:37	2017-06-25T05:46:00
Read mode	CONTINUOUS	CONTINUOUS

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	Y	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	O1	N
Number of optional ACIS chips dropped	1	1
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0

2.3 Aspect



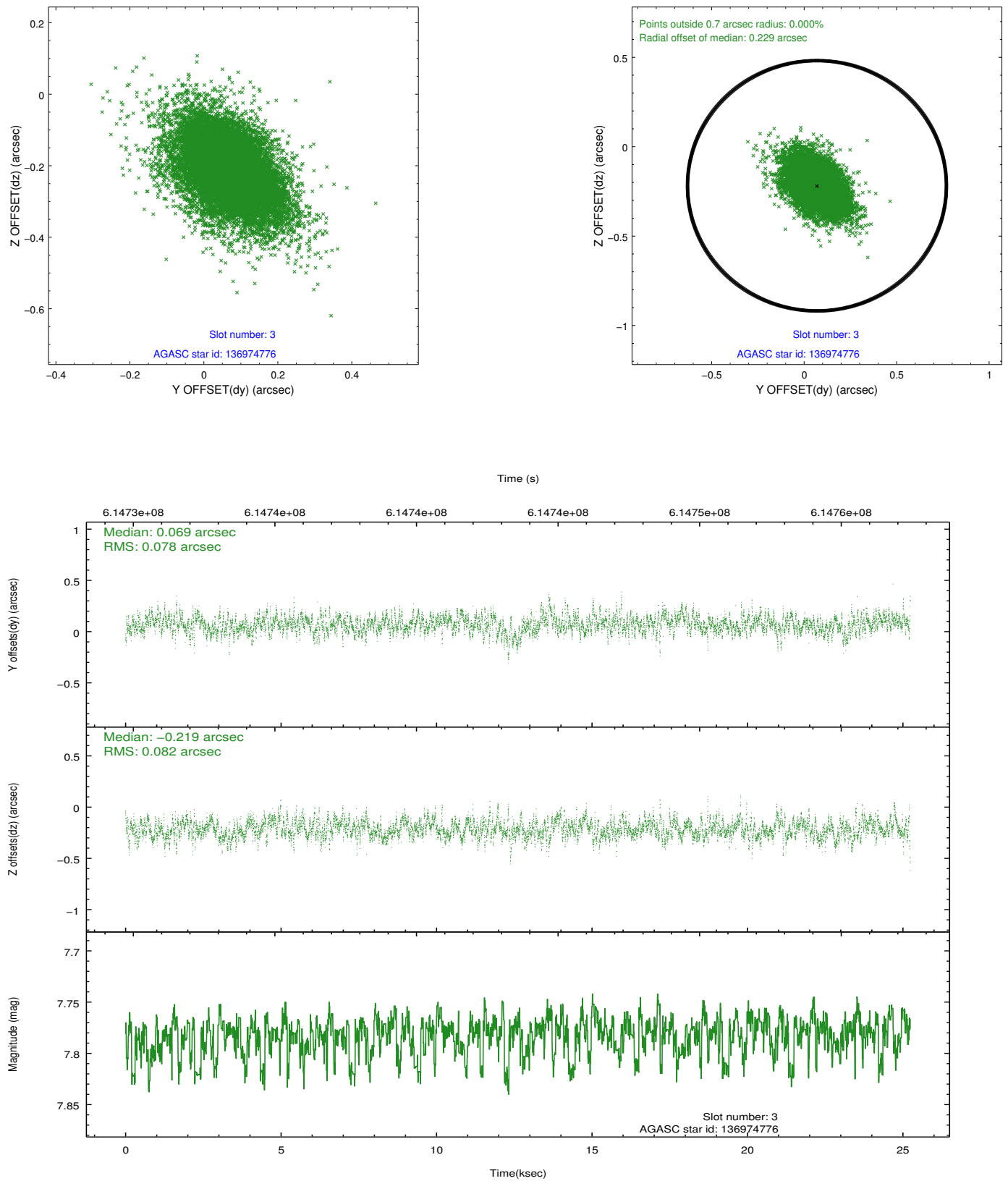


Slot Statistics

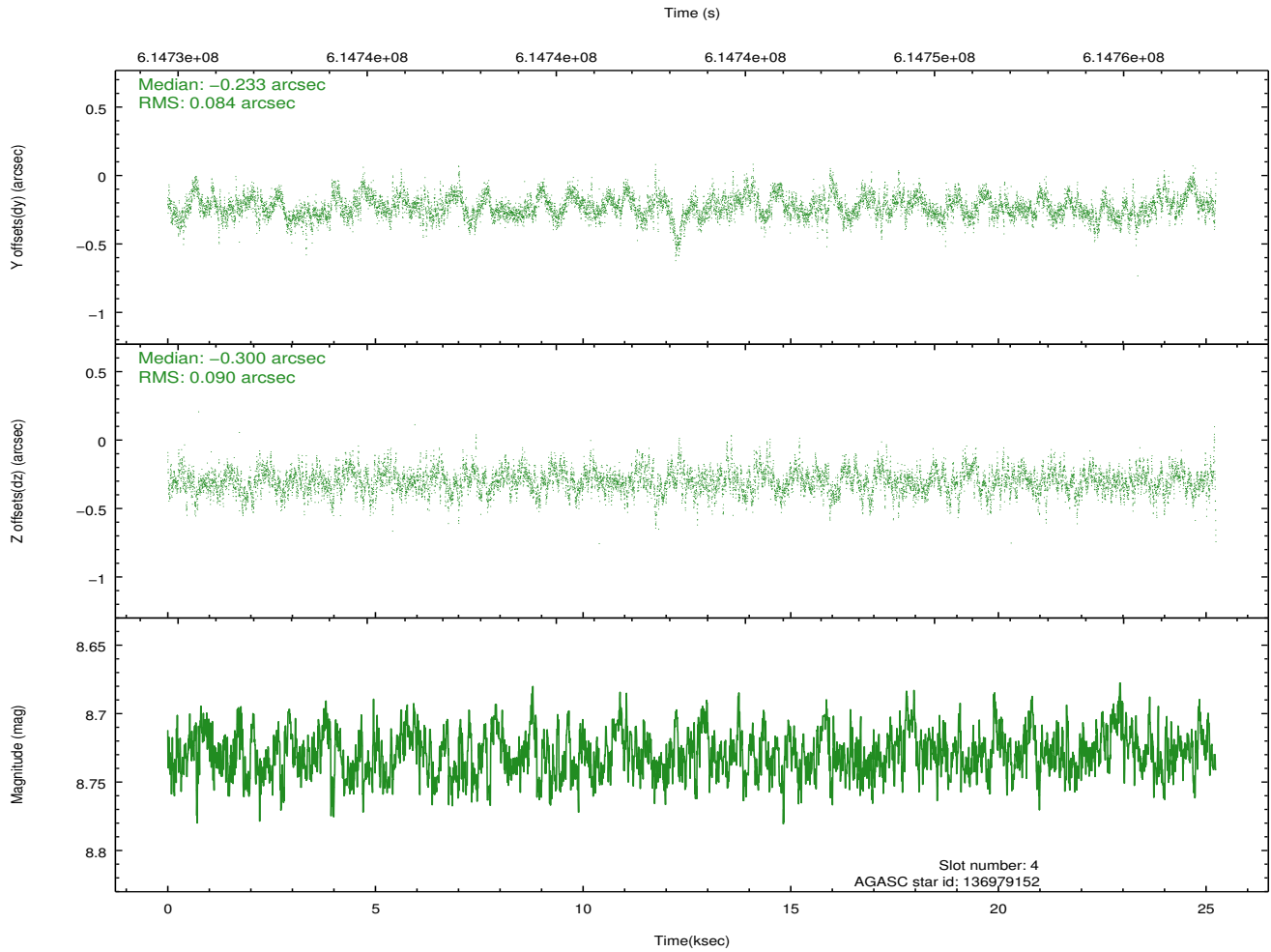
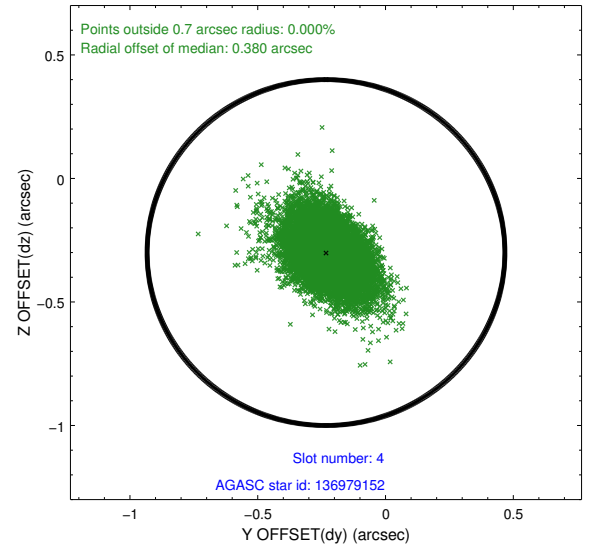
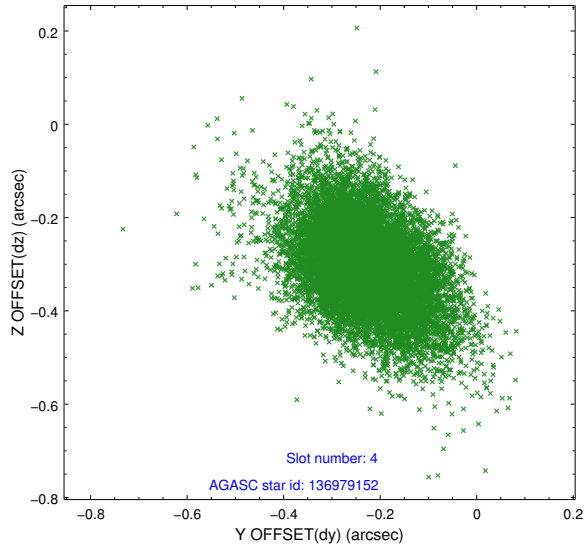
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	6156	-0.144	-0.097	0.016	0.025	0.000000	0.000000	-765.01	-1738.78
1	FID		ACIS-S-4	7.21	6156	0.413	0.096	0.010	0.034	0.000000	0.000000	2148.77	169.78
2	FID		ACIS-S-5	7.22	6155	-0.301	0.010	0.021	0.040	0.000000	0.000000	-1817.87	163.49
3	GUIDE	used	136974776	7.78	12310	0.069	-0.219	0.116	0.201	288.742109	10.409402	-506.28	1889.07
4	GUIDE	used	136979152	8.73	12299	-0.233	-0.300	0.125	0.221	288.538081	10.461256	230.73	2003.24
5	GUIDE	used	137102976	8.51	12304	0.308	0.336	0.108	0.187	289.193436	10.979652	-1158.25	-627.76
6	GUIDE	used	137497048	7.94	12307	-0.091	0.221	0.099	0.177	288.896055	11.554718	621.97	-2110.74
7	GUIDE	used	137498872	7.07	12310	-0.060	-0.039	0.089	0.167	288.350862	11.344926	2094.39	-658.21

2.4 Star Slots

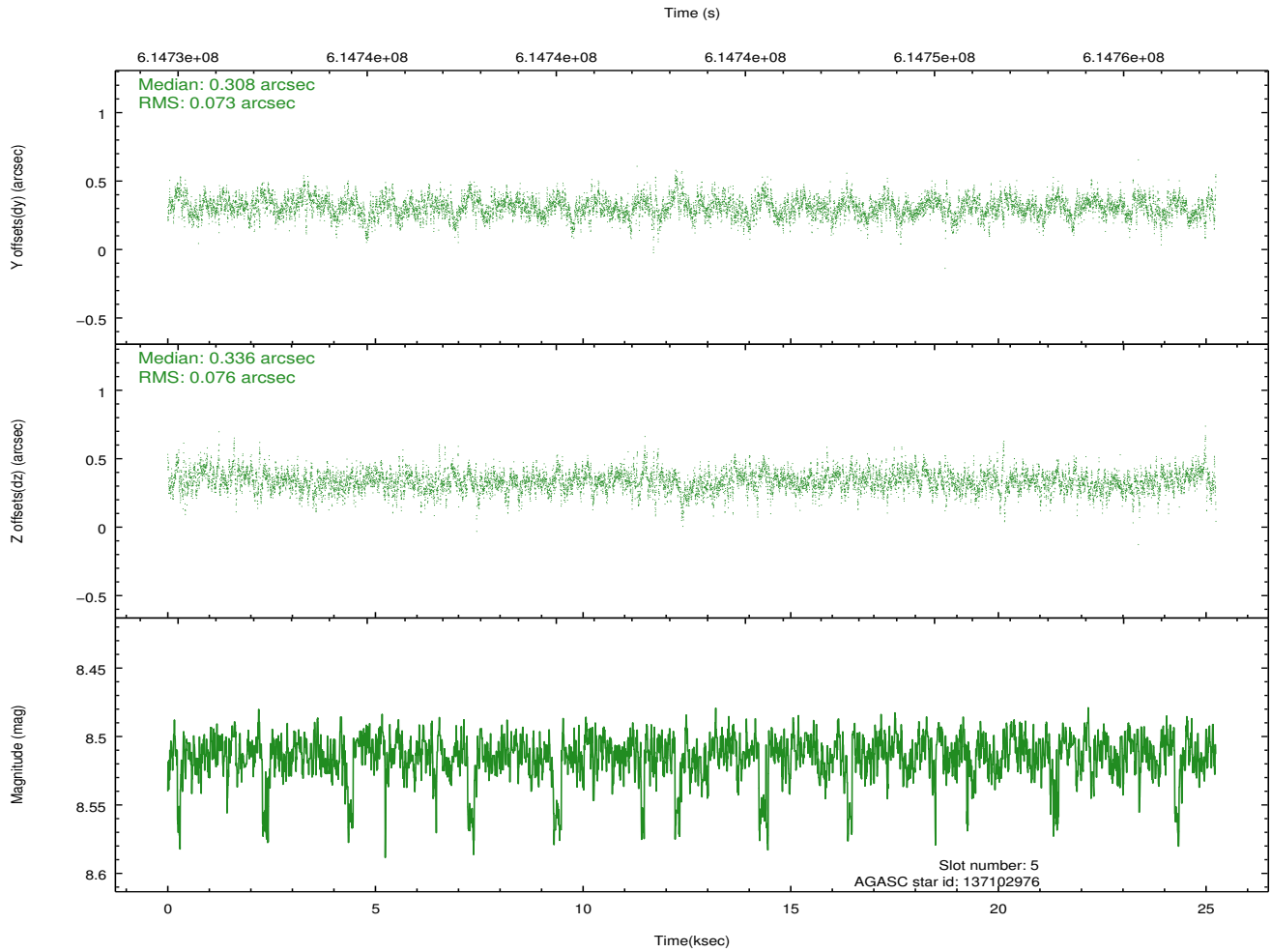
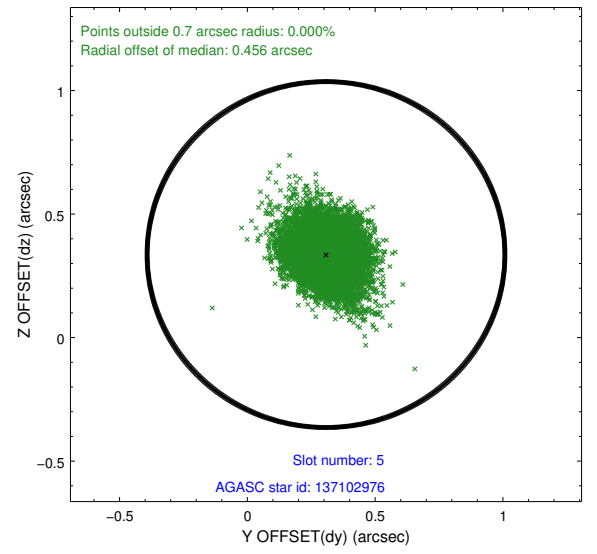
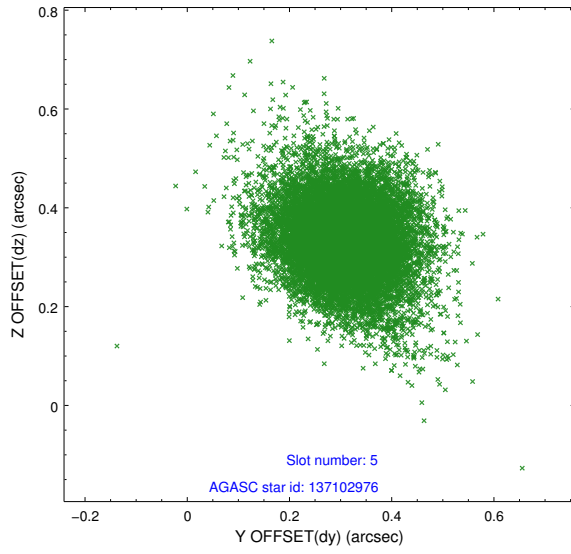
2.4.1 Slot 3



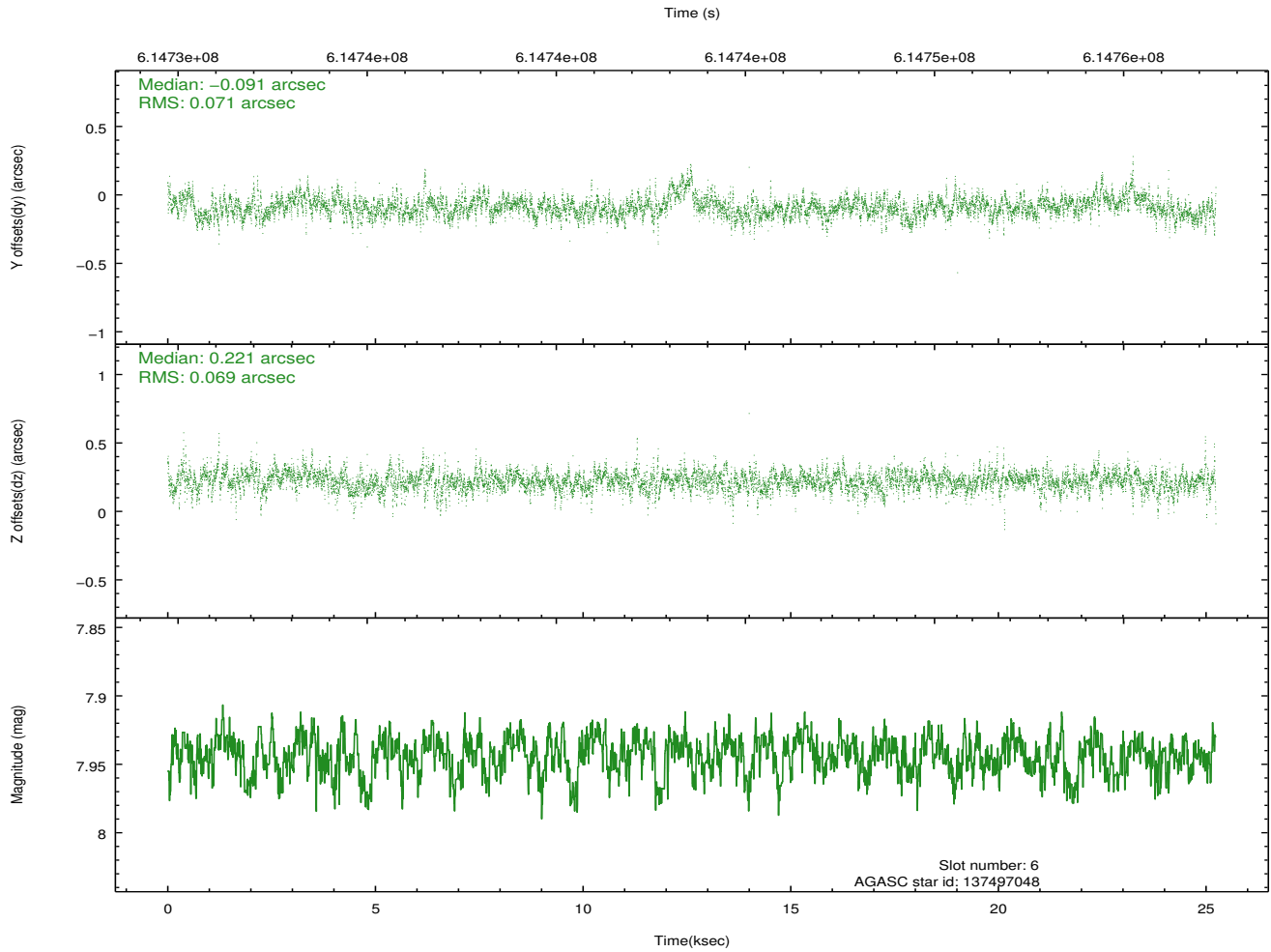
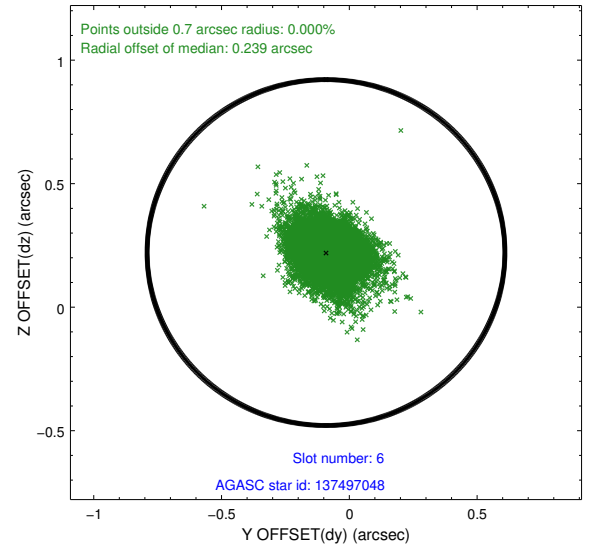
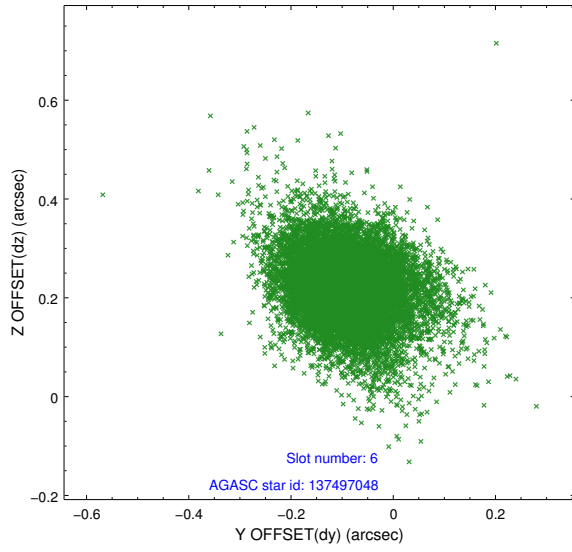
2.4.2 Slot 4



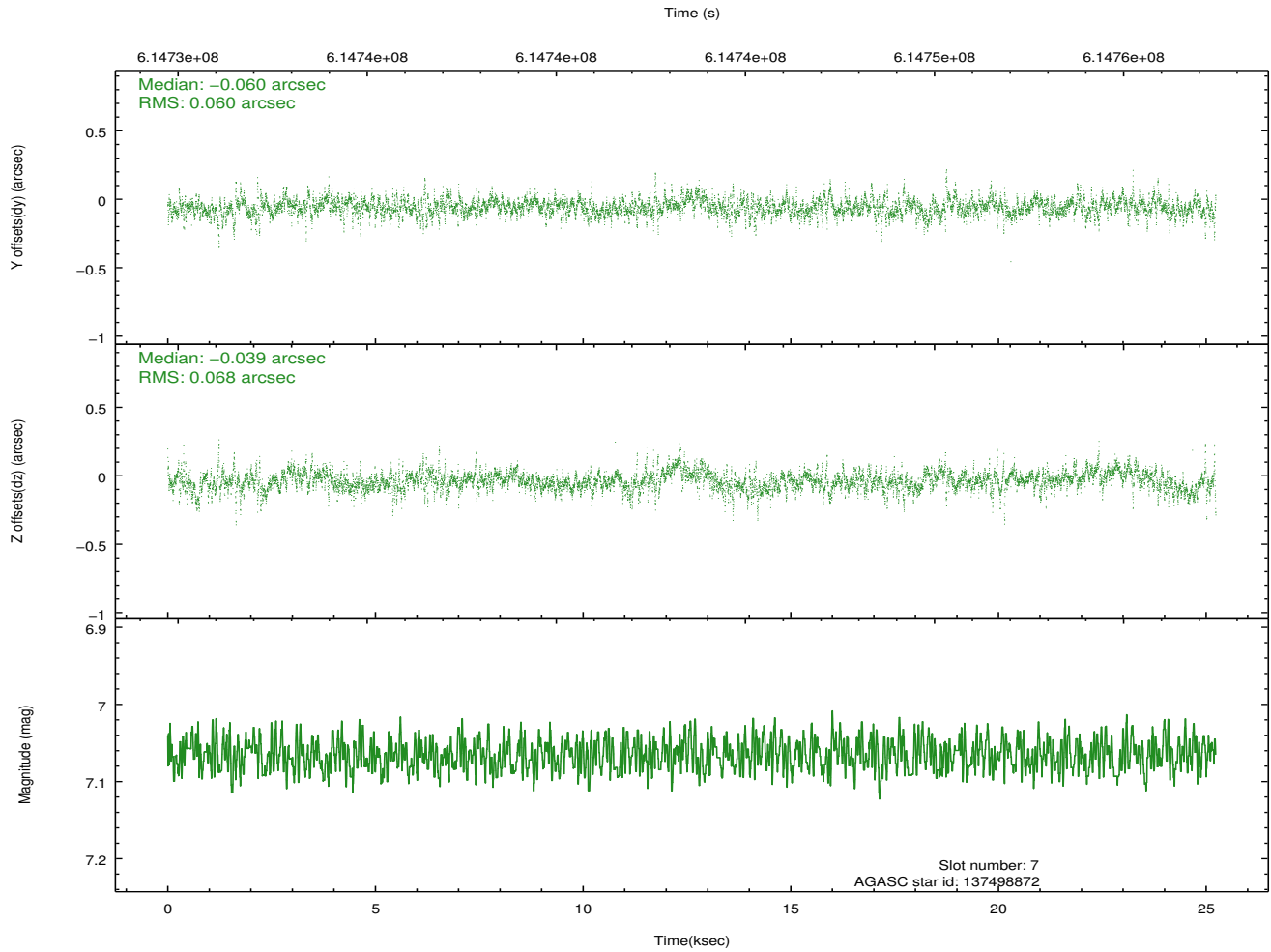
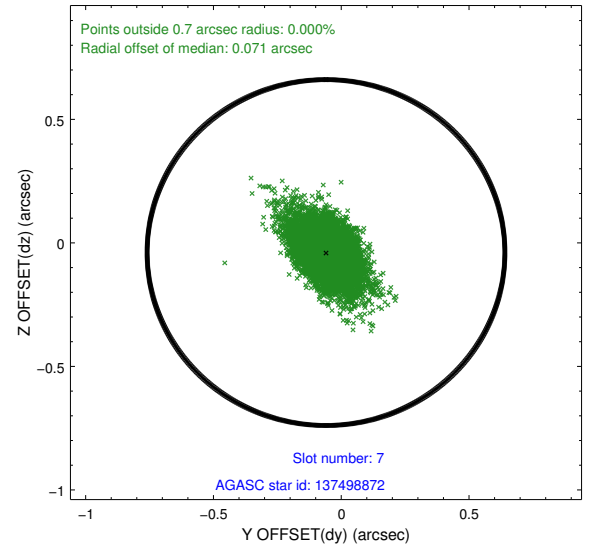
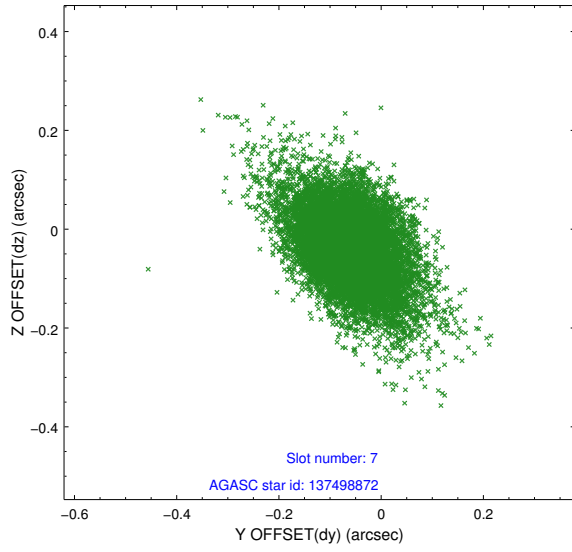
2.4.3 Slot 5



2.4.4 Slot 6

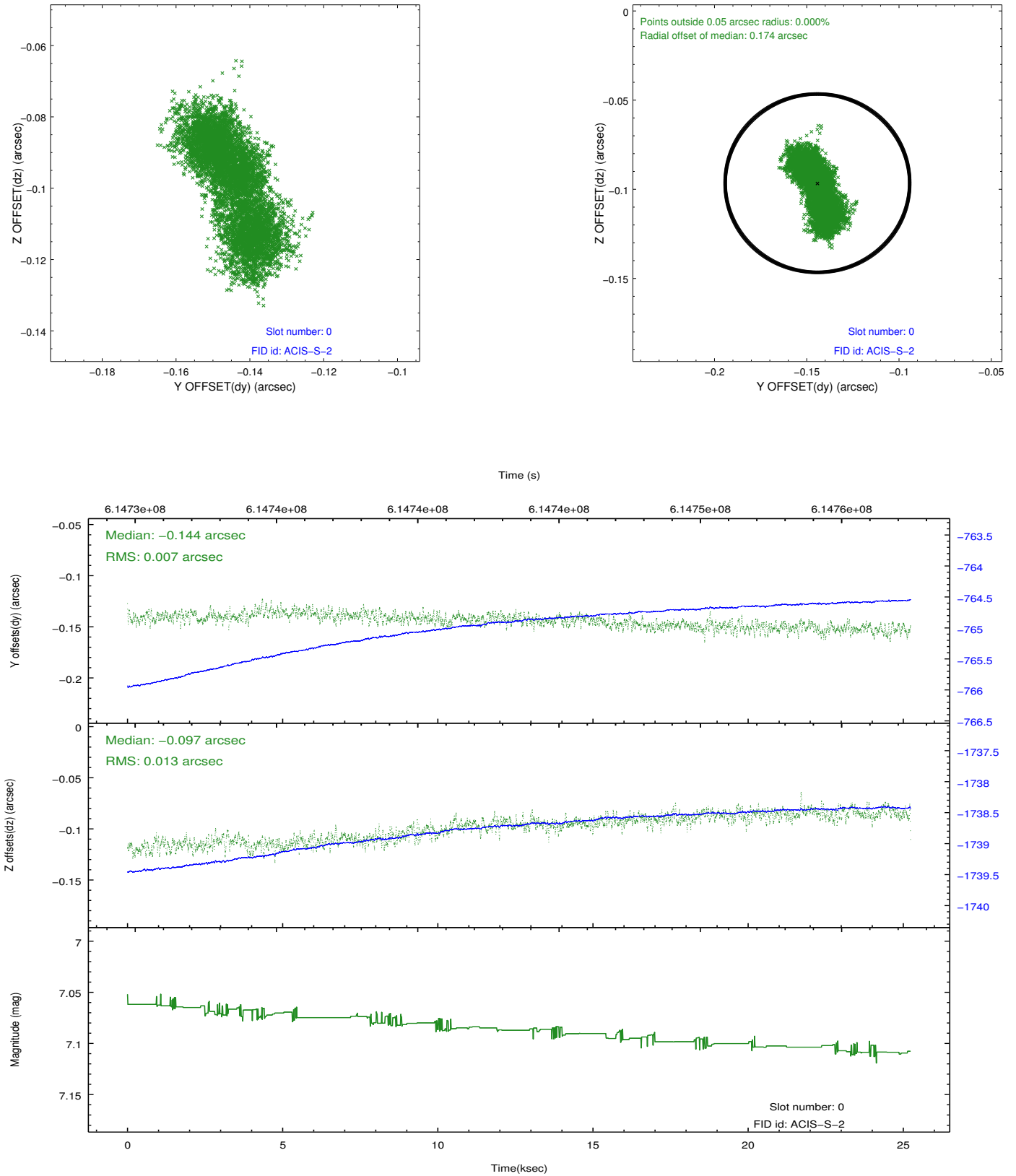


2.4.5 Slot 7

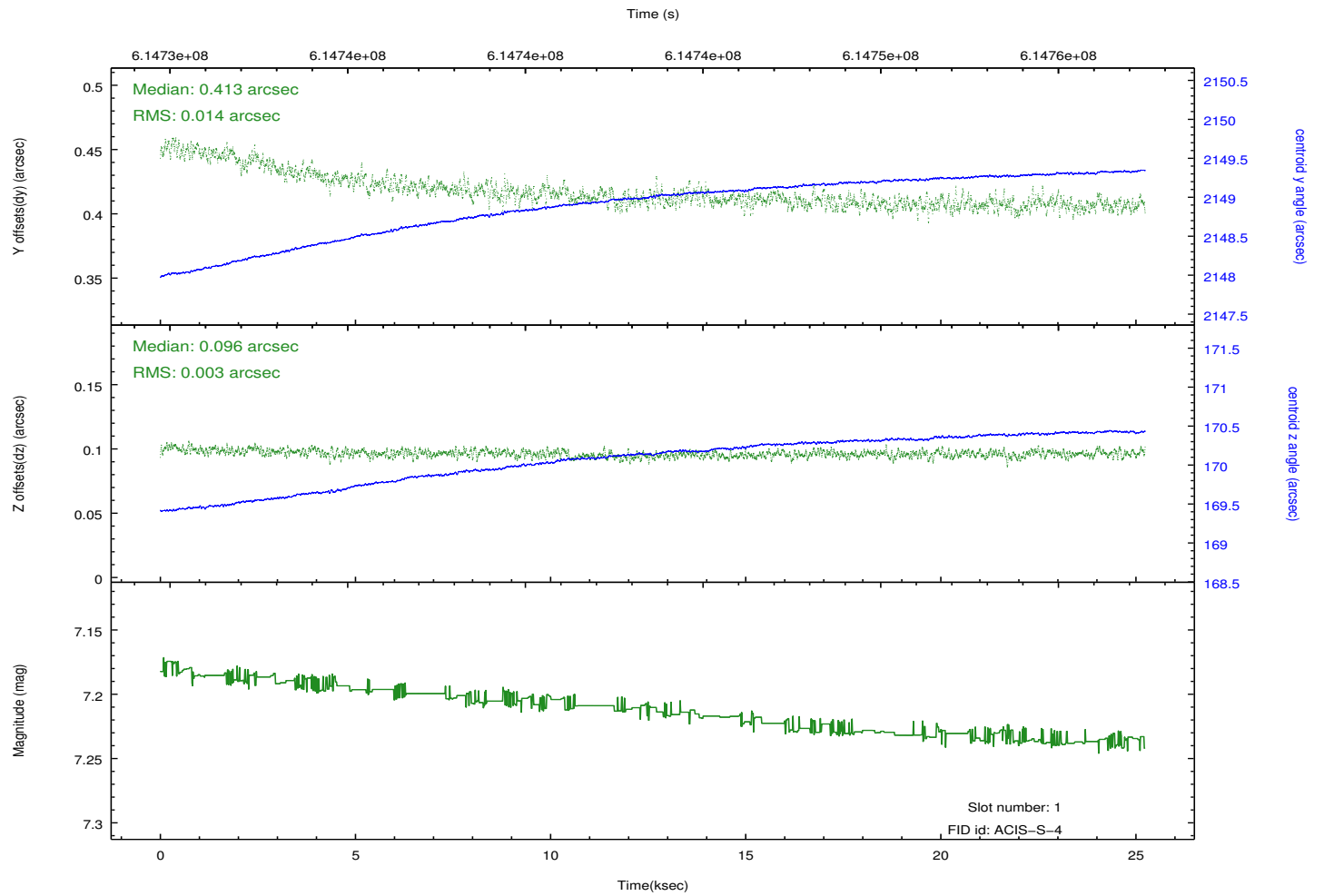
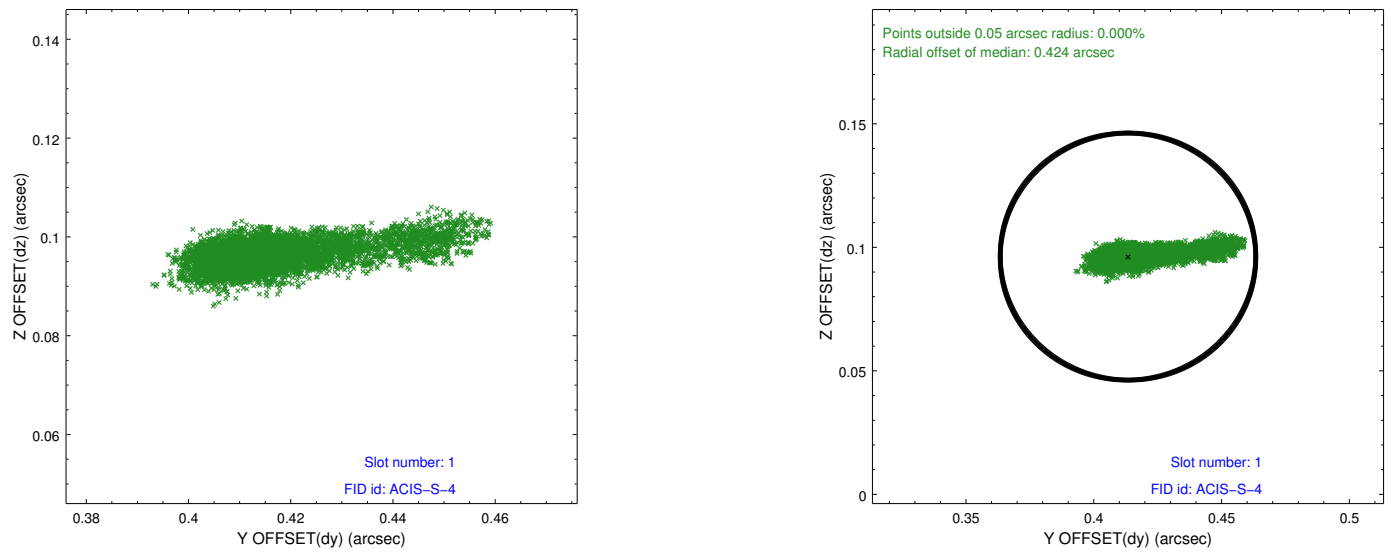


2.5 FID Slots

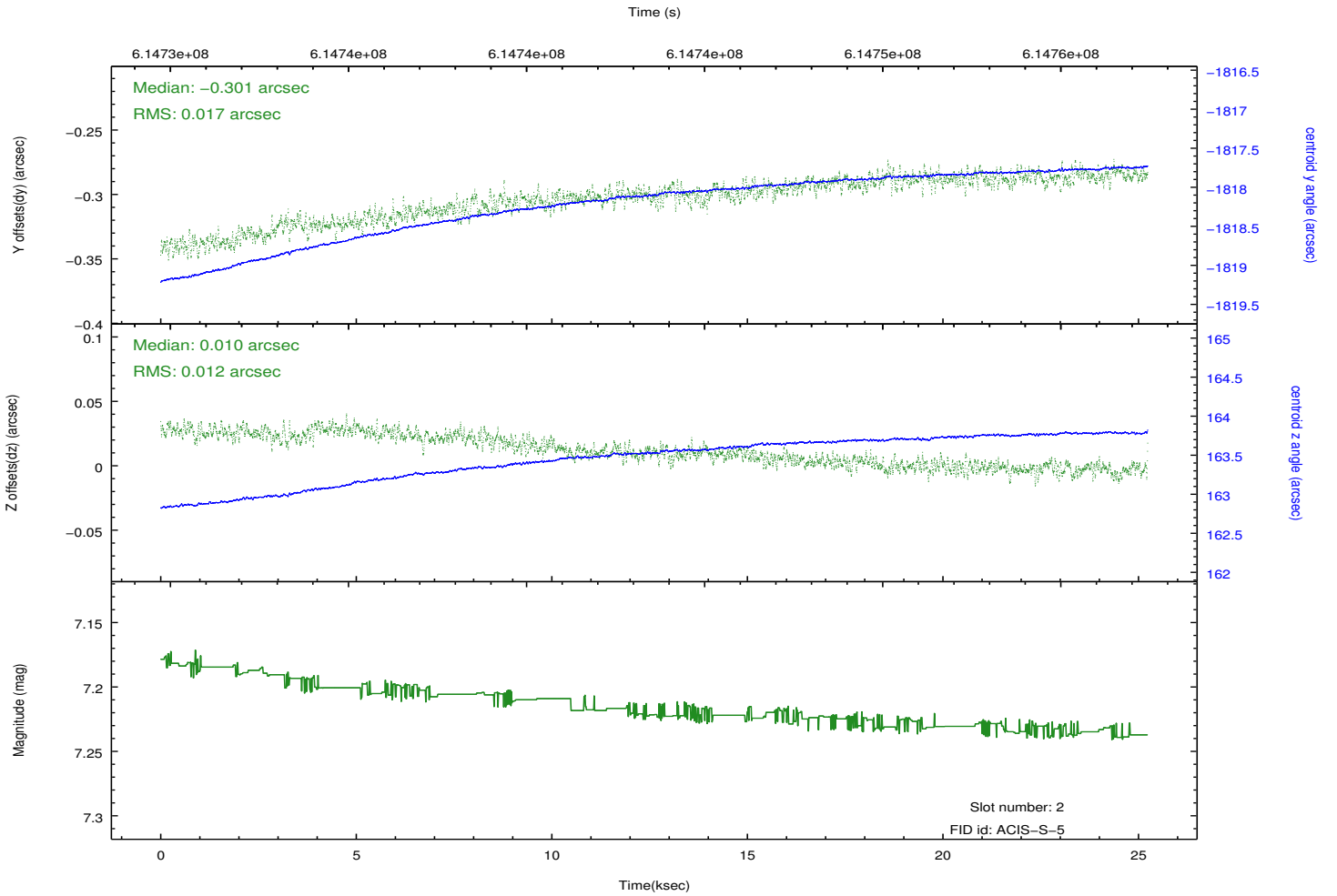
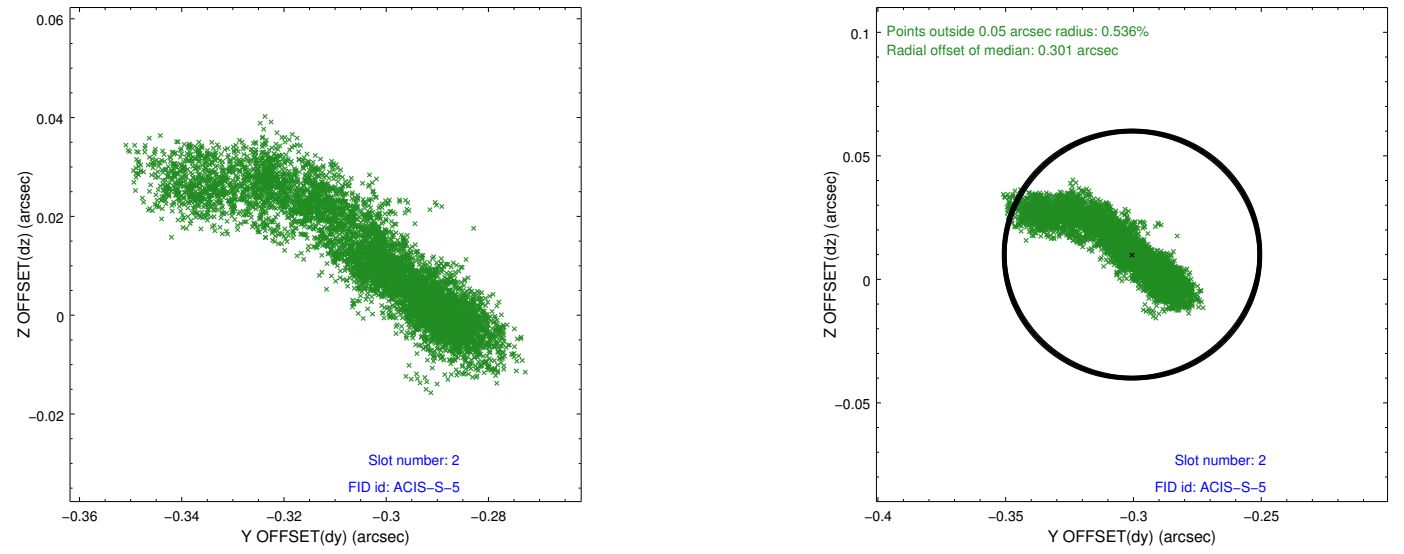
2.5.1 Slot 0



2.5.2 Slot 1

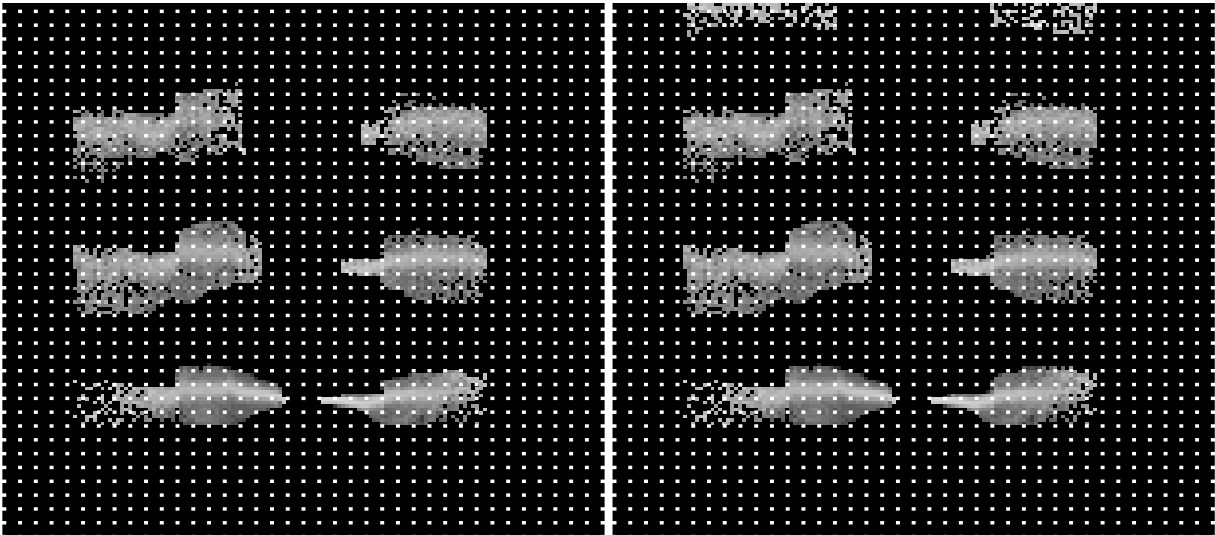


2.5.3 Slot 2



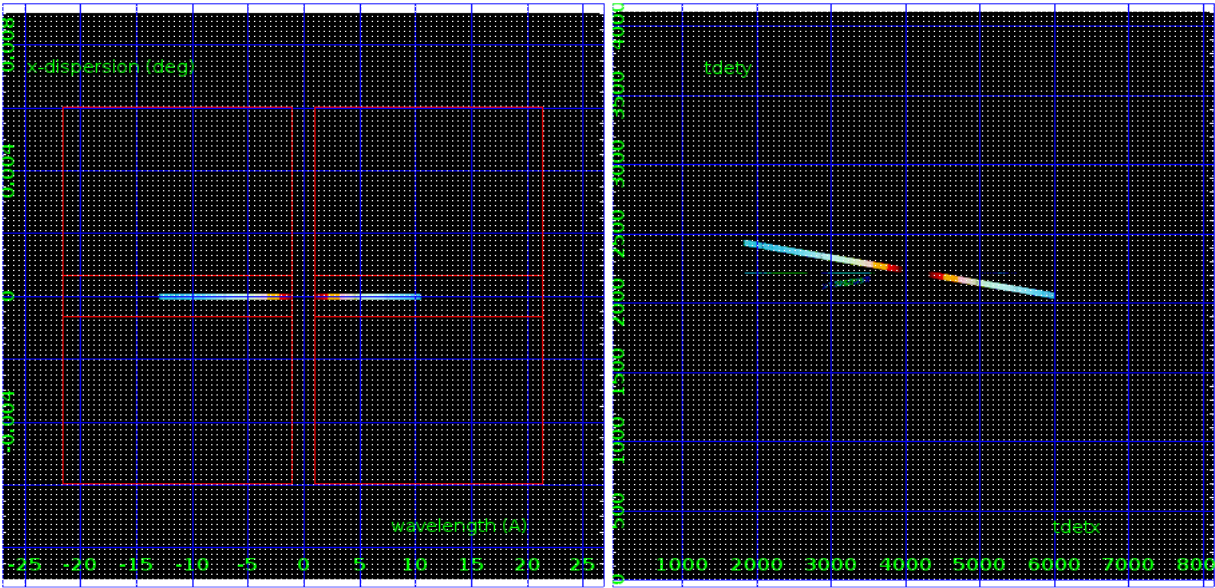
3 Gratings

3.1 HEG Arm



HEG Order Sort 123

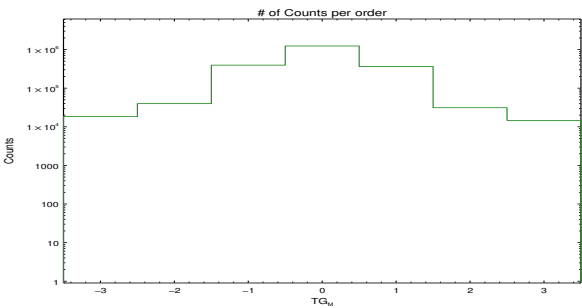
HEG Order Sort ALL

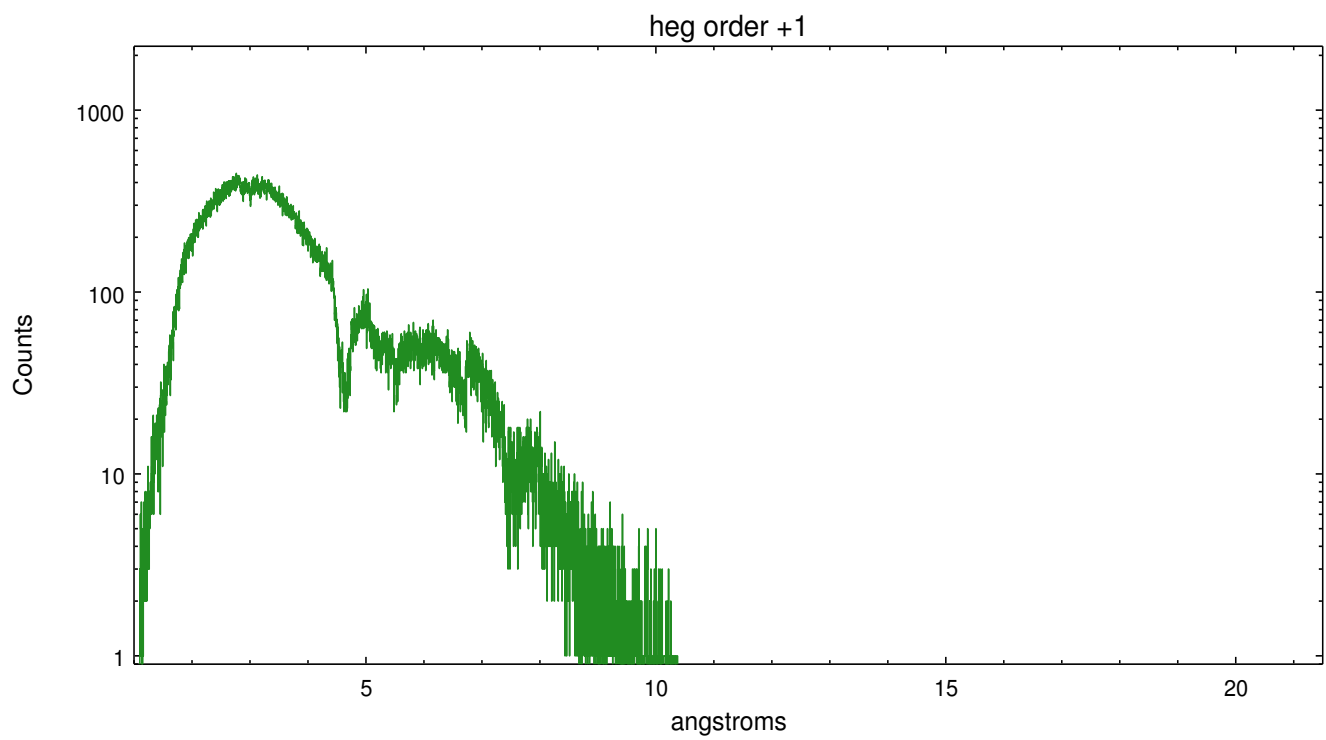
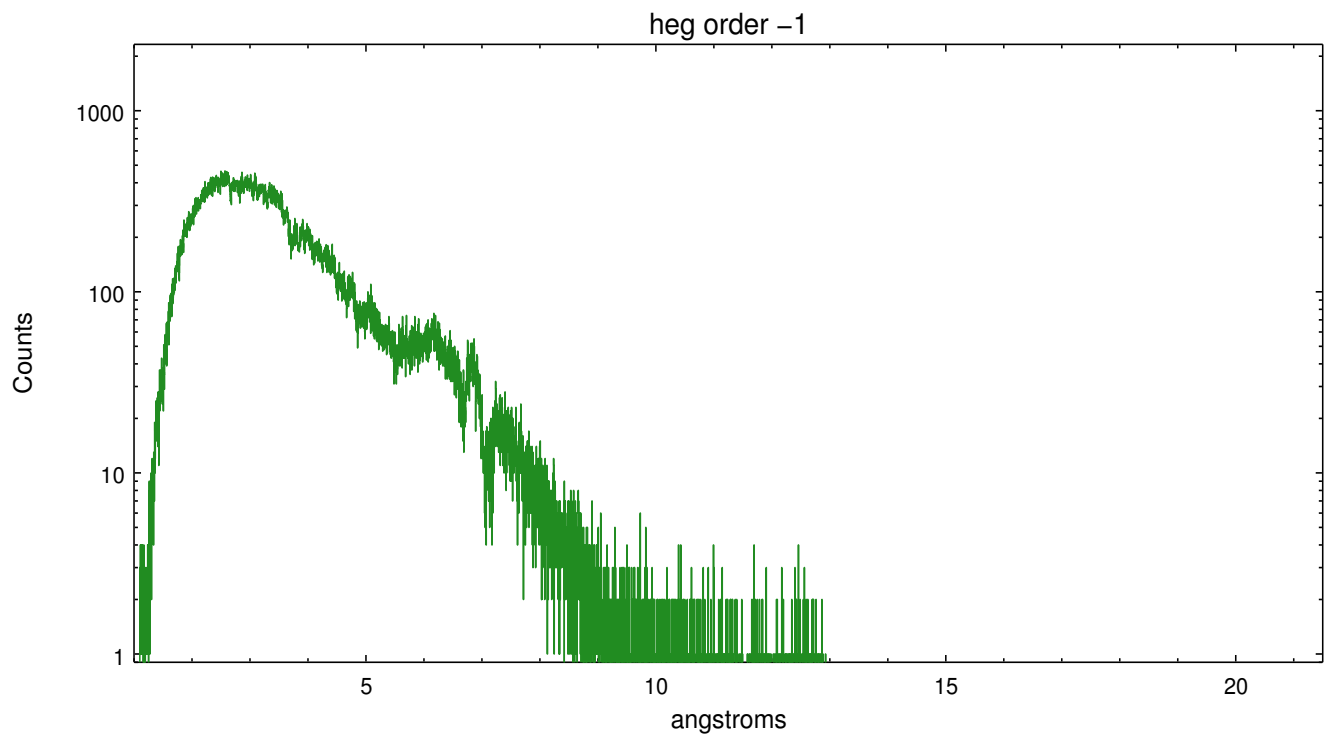


Spot Image HEG

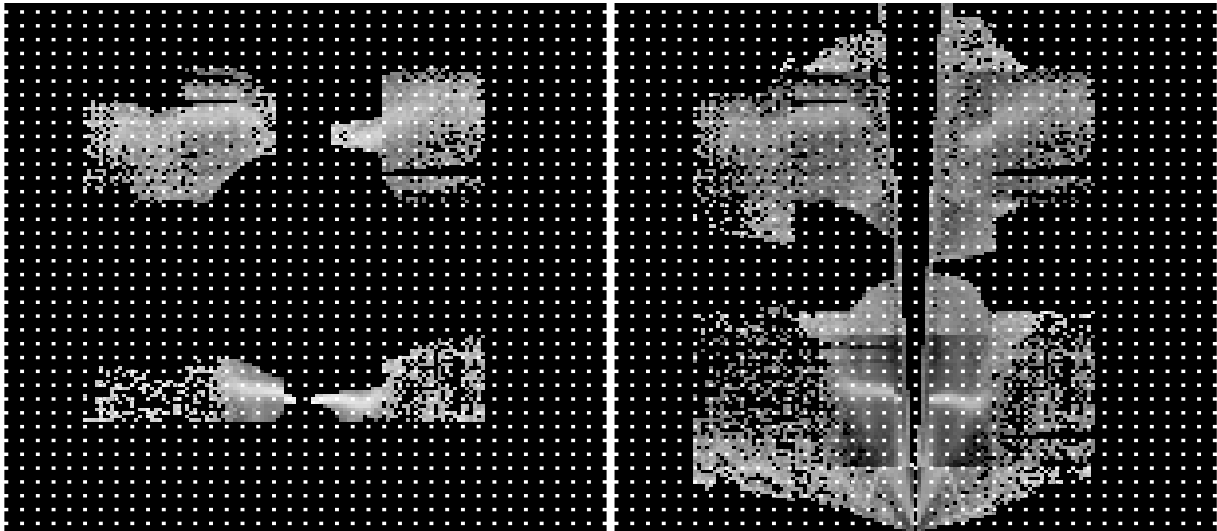
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	18411	39793	394754	1238601	362975	31227	14616



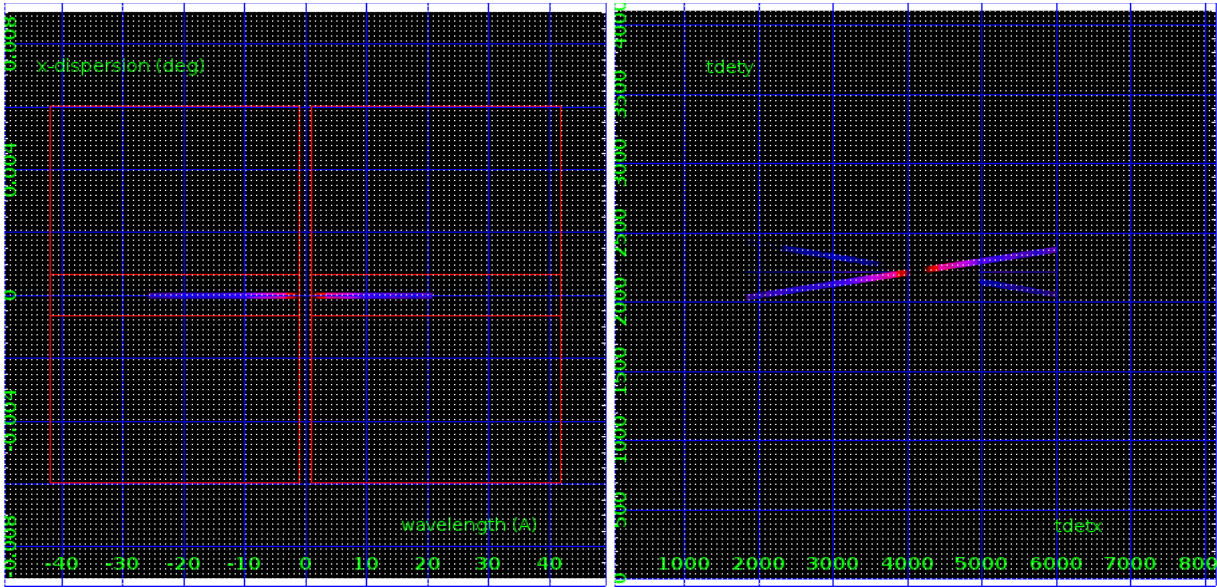


3.2 MEG Arm



MEG Order Sort 123

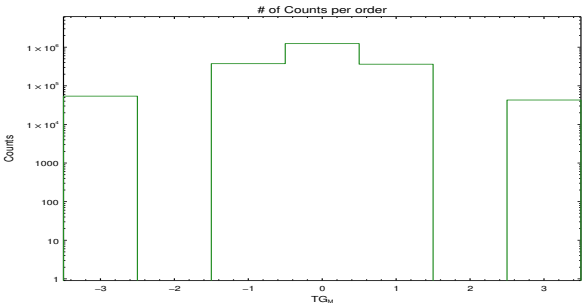
MEG Order Sort ALL

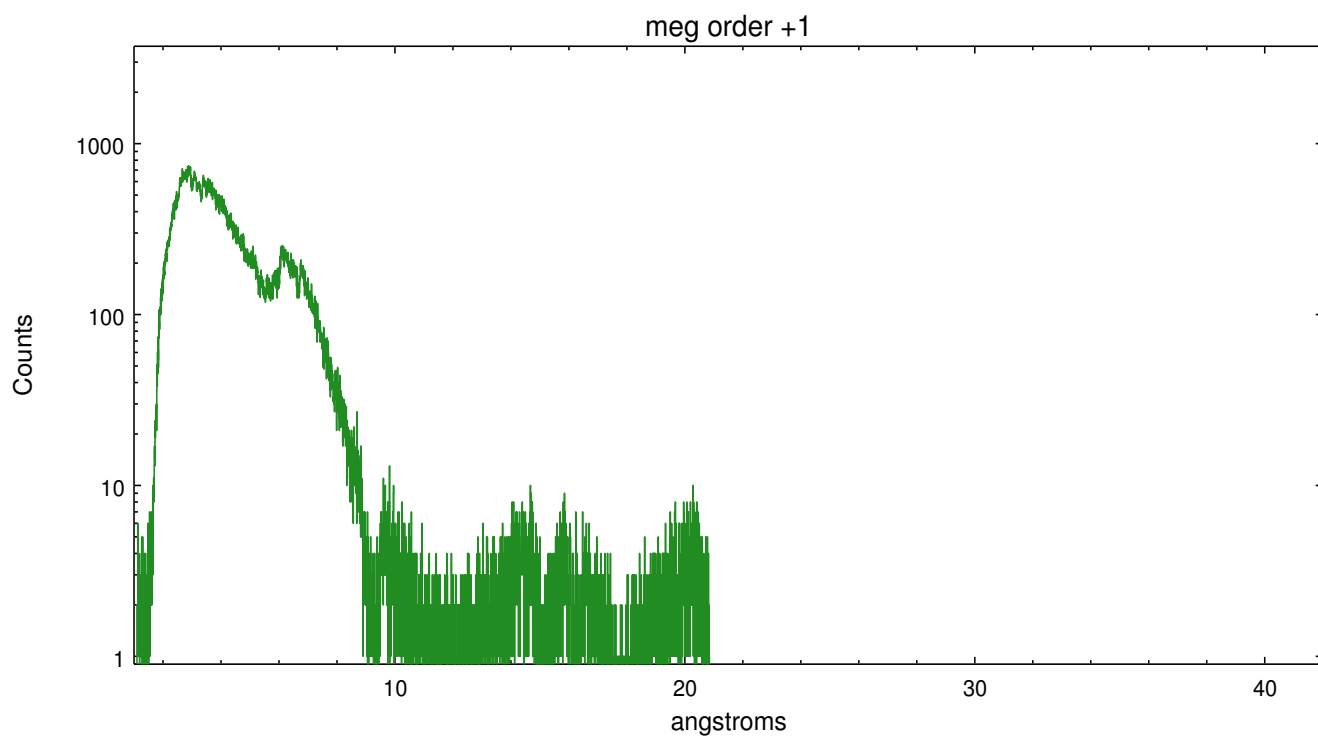
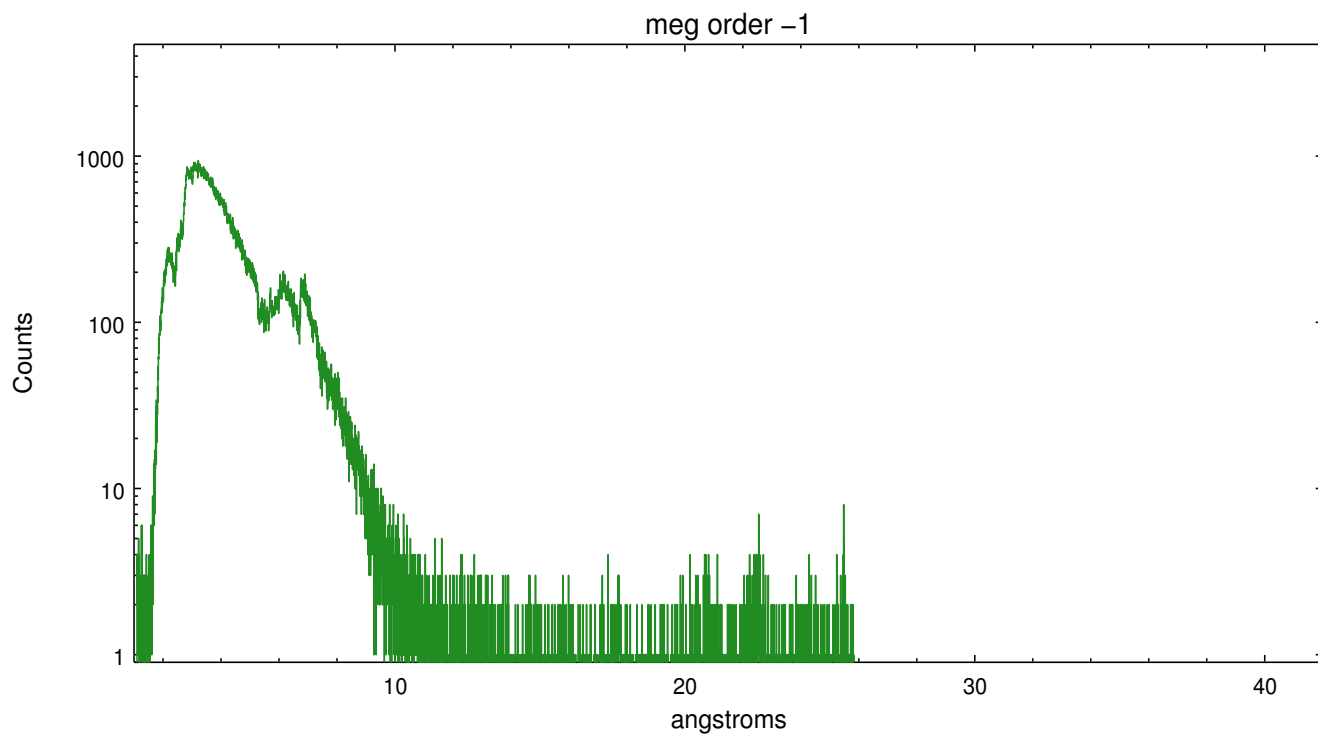


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	53996	0	374831	1238601	362597	0	42860





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2017.06.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.12925

A.2 Comments