

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 6636 - L2 Version 2
Chandra X-Ray Center

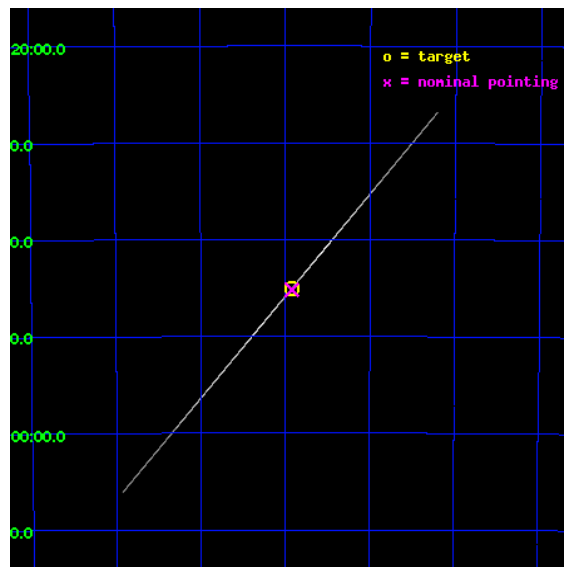
L2 Processing Date : Apr 5 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Parameters	4
2.1.3	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

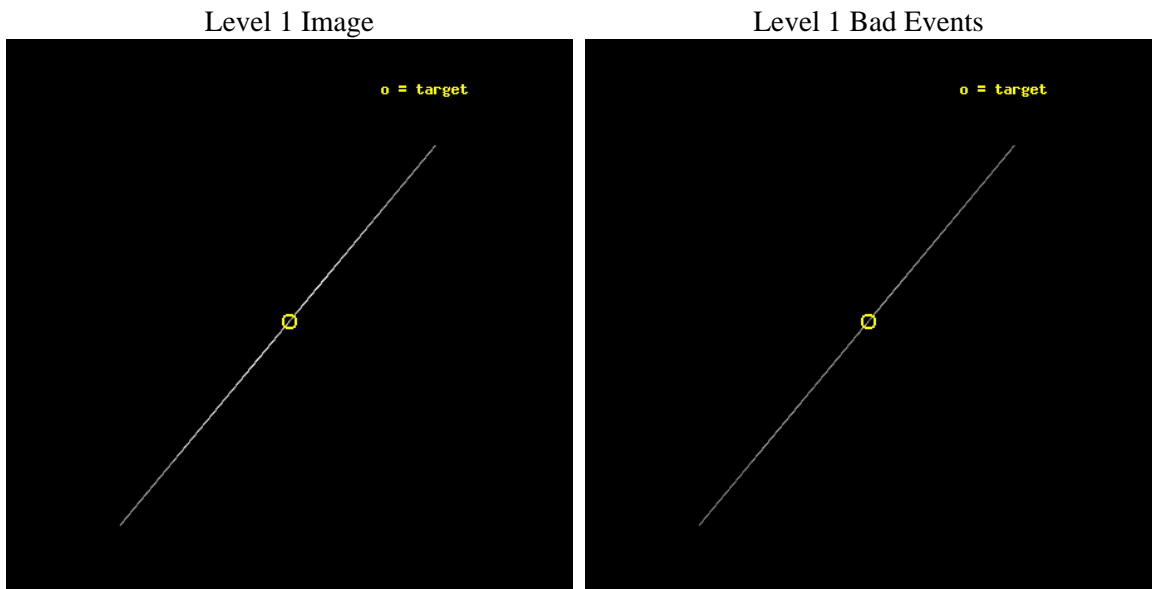
seq_num	400541	Sequence number
obs_id	6636	Observation id
title	CHAZSS: The Chandra HETGS Atoll/Z Spectroscopic Survey	Proposal ti
observer	Dr Jon Miller	Principal investigator
object	4U 1636-53	Source name
ra_targ	250.23125	Observer's specified target RA [deg]
dec_targ	-53.751389	Observer's specified target Dec [deg]
ra_nom	250.2304369729	Nominal RA [deg]
dec_nom	-53.753399482403	Nominal Dec [deg]
roll_nom	309.977707713	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25158.75	Sum of GTIs [s]
livetime	25060.473632812	Livetime [s]
ontime4	25158.75	Sum of GTIs [s]
ontime5	25158.75	Sum of GTIs [s]
ontime6	25158.75	Sum of GTIs [s]
ontime7	25158.75	Sum of GTIs [s]
ontime8	25158.75	Sum of GTIs [s]
ontime9	25158.75	Sum of GTIs [s]
l2events	2563707	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	25158.75	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	25158.75	Sum of GTIs [s]
date	2012-04-04T20:13:13	Date and time of file creation	ontime5	25158.75	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25158.75	Sum of GTIs [s]
			ontime7	25158.75	Sum of GTIs [s]
			ontime8	25158.75	Sum of GTIs [s]
			ontime9	25158.75	Sum of GTIs [s]
			l1events	2963559	Number of level 1 events

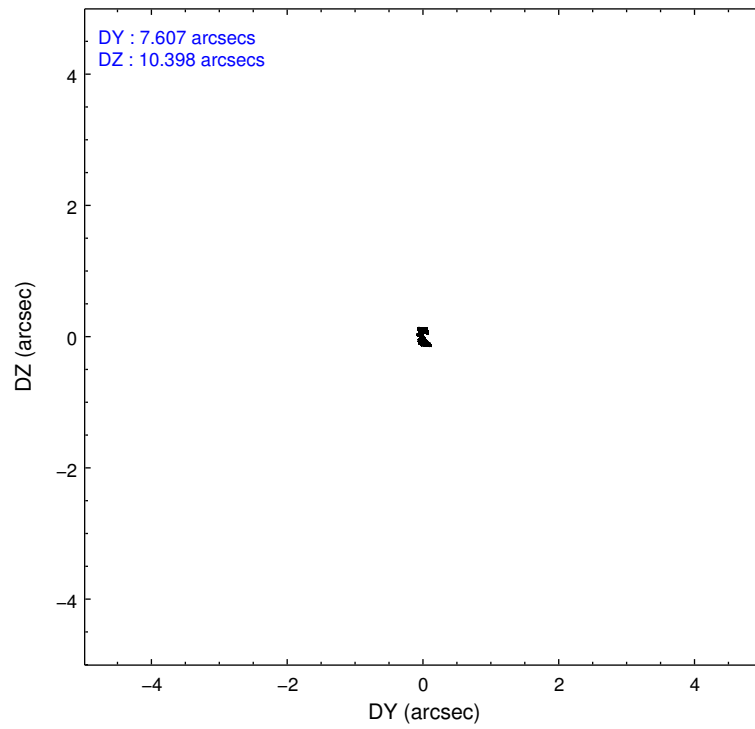
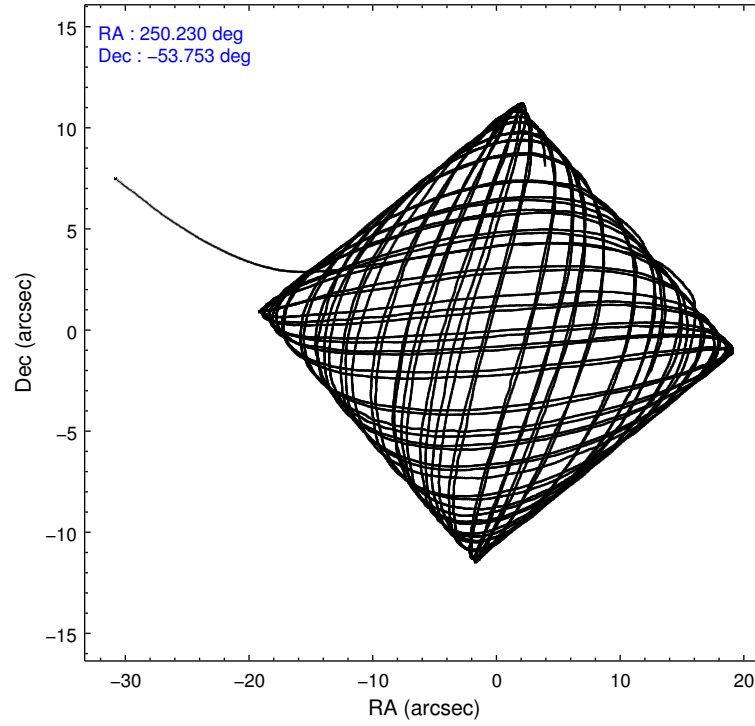
2.1.3 Events

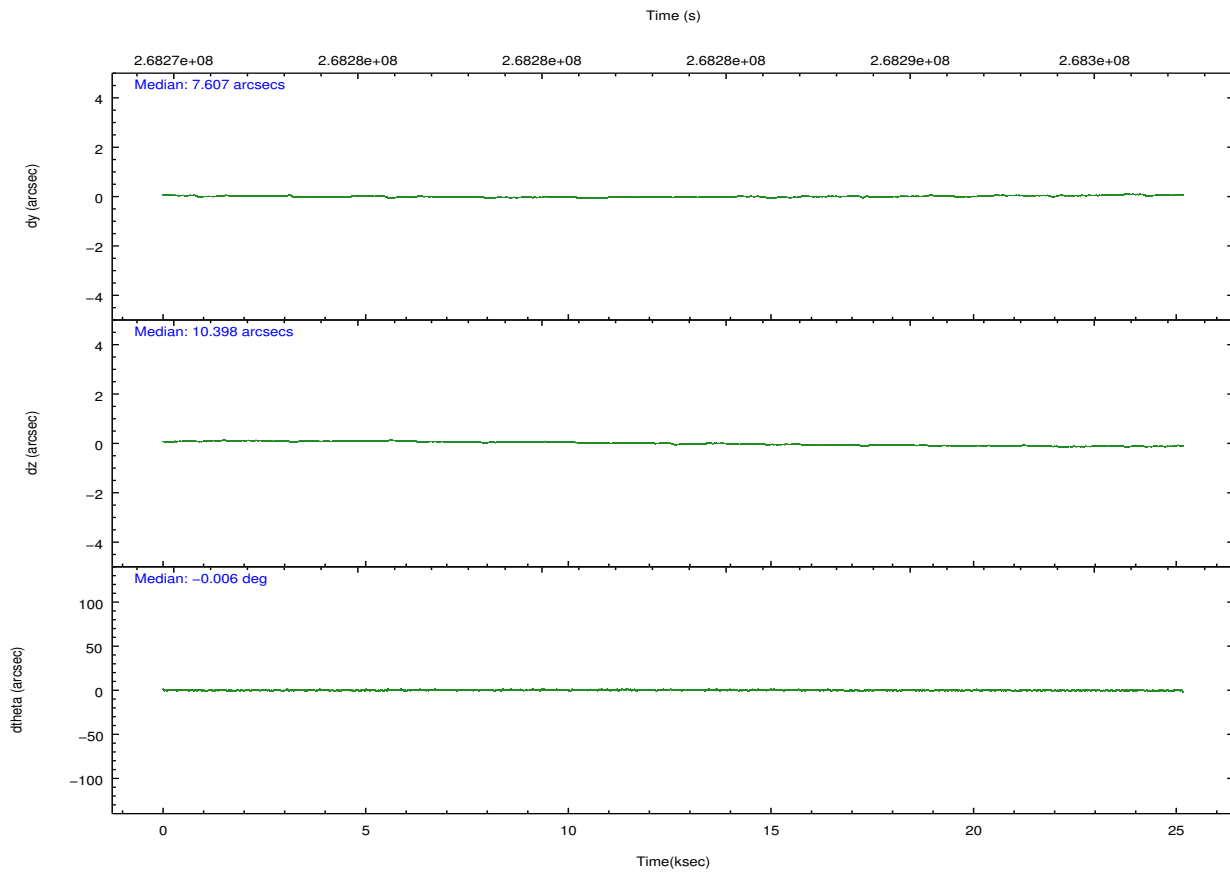
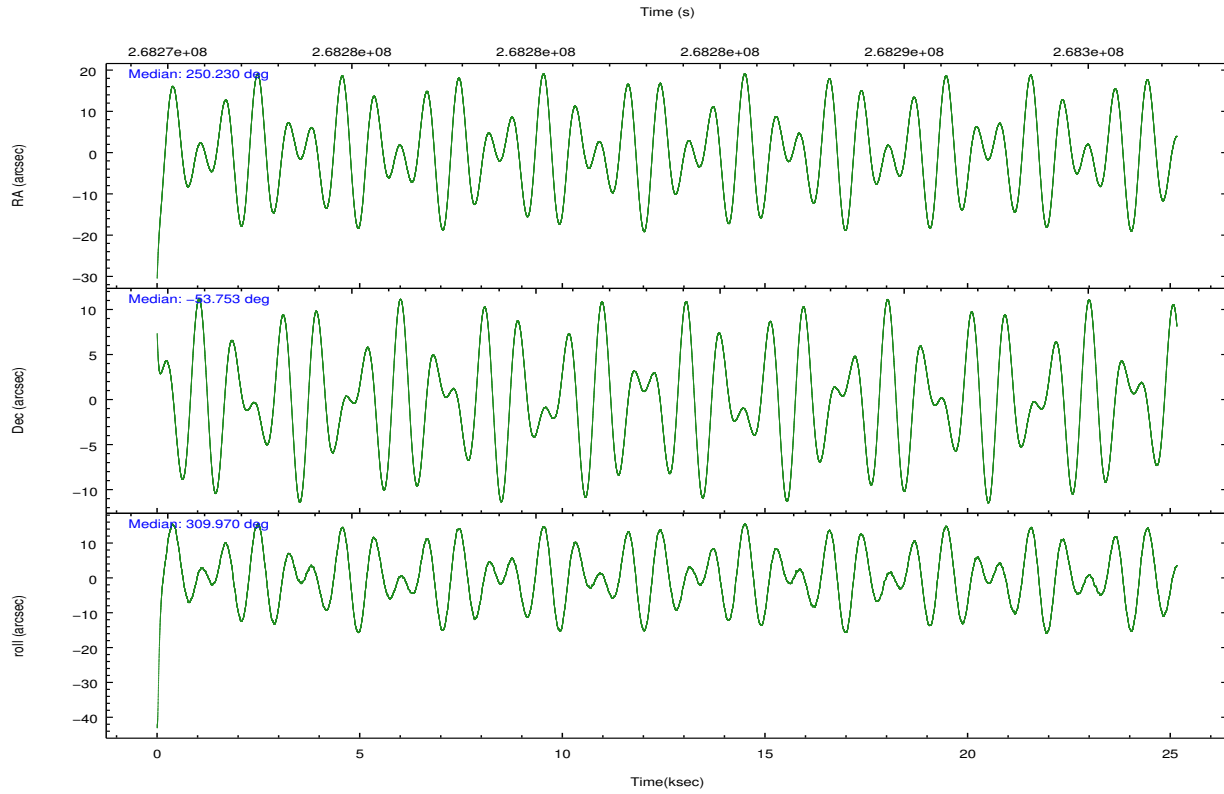
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	78855	420903	884357	1003464	474104	101876	grade 0 events	5642	75097	321908	169882	272623	10980
rejected events	11851	36554	23230	50548	26624	15499		7%	17%	36%	16%	57%	10%
rejected %	15%	8%	2%	5%	5%	15%	grade 1 events	175	326	892	1254	1019	181
								0%	0%	0%	0%	0%	0%
							grade 2 events	40642	143975	443842	286281	112062	53492
								51%	34%	50%	28%	23%	52%
							grade 3 events	5833	15601	19391	86609	19582	5459
								7%	3%	2%	8%	4%	5%
							grade 4 events	6091	15217	19123	85966	18869	5987
								7%	3%	2%	8%	3%	5%
							grade 5 events	9031	21595	14450	29588	15908	10936
								11%	5%	1%	2%	3%	10%
							grade 6 events	11441	149092	64751	343884	34041	14841
								14%	35%	7%	34%	7%	14%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

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	CC33_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	250.186948	250.2304369729018	Subarray requested	NONE	NONE
[deg] Pointing Dec	-53.744433	-53.75339948240264	Alternating exposures requested	N	N
[deg] Pointing Roll	309.786018	309.9777077129967	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.632523	-182.6373491900168			
[mm] SIM translation stage offset	-7.5	-7.495173392990978			
[s] Observation start time (MET)	268271141.184000	268269523.57703			
Observation start date	2006-07-02T23:44:36	2006-07-02T23:18:43			
[s] Observation end time (MET)	268296141.184000	268296782.94081			
Observation end date	2006-07-03T06:41:16	2006-07-03T06:53:02			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect





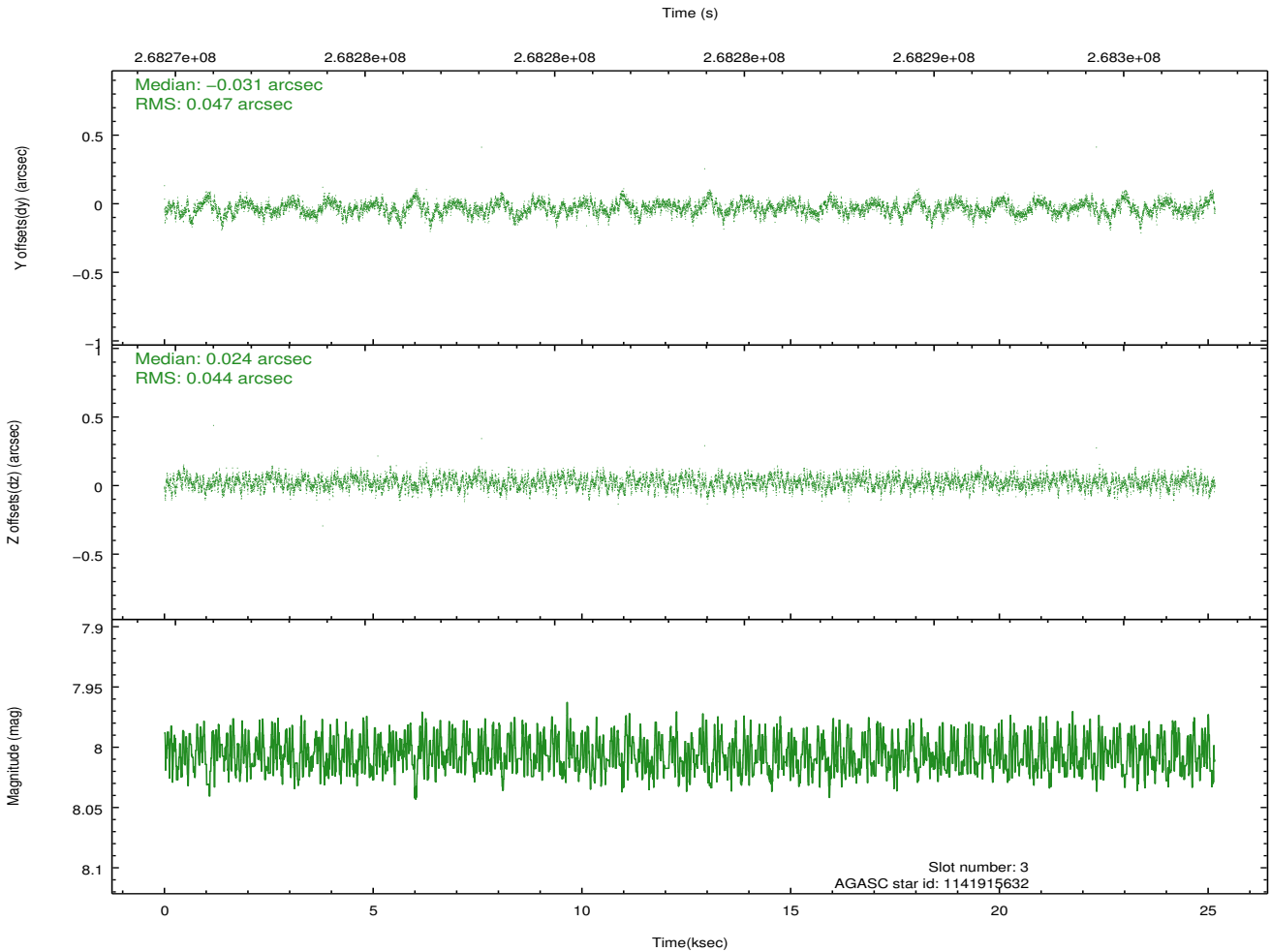
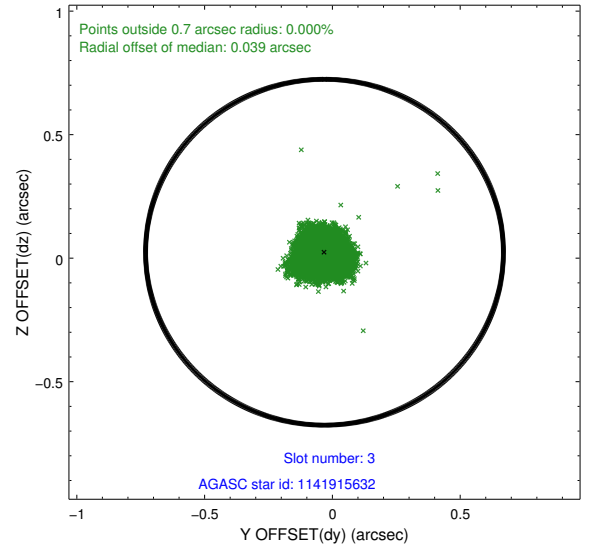
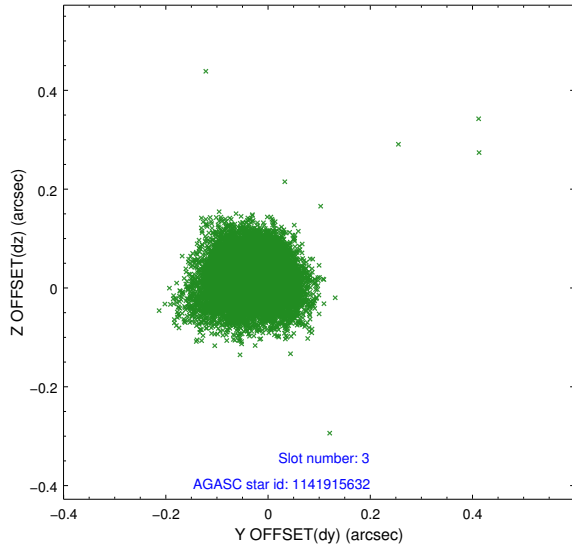
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	6138	0.021	0.040	0.007	0.013	0.000000	0.000000	936.25	-1881.65
1	FID	ACIS-S-5	7.23	6137	-0.066	0.027	0.006	0.010	0.000000	0.000000	-1812.80	15.70
2	FID	ACIS-S-6	7.41	6137	0.024	-0.055	0.007	0.012	0.000000	0.000000	401.65	659.74
3	GUIDE	1141915632	8.01	12273	-0.031	0.024	0.068	0.110	249.175229	-53.921117	-871.41	-2065.01
4	GUIDE	1141919376	7.66	12272	-0.135	-0.035	0.065	0.104	248.833386	-53.647282	-2095.49	-2013.70
5	GUIDE	1142041280	8.54	12274	0.066	0.020	0.078	0.121	250.607191	-53.463271	-199.32	1338.02
6	GUIDE	1142043648	8.35	12272	-0.104	0.013	0.071	0.112	250.954624	-53.491932	360.51	1839.57
7	GUIDE	1142049296	8.33	12268	0.205	-0.016	0.069	0.109	250.151068	-54.136674	1037.42	-961.44

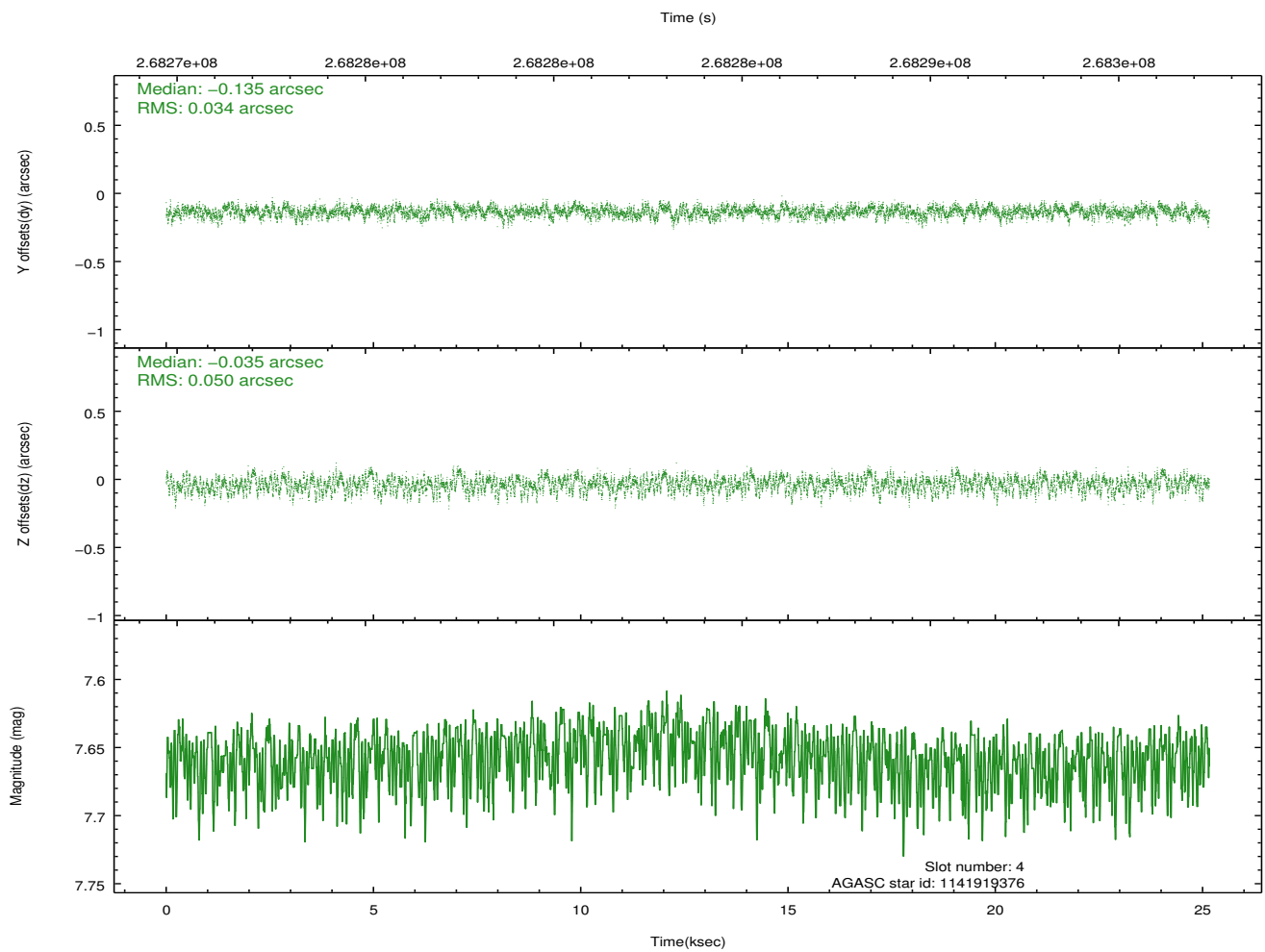
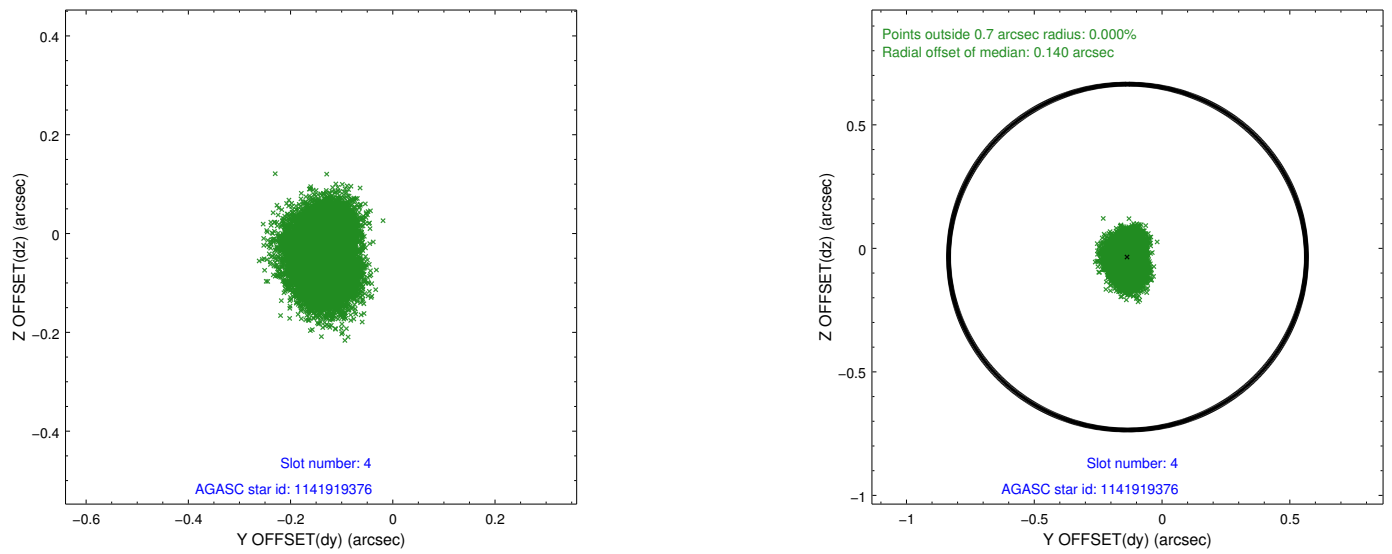
∞

2.4 Star Slots

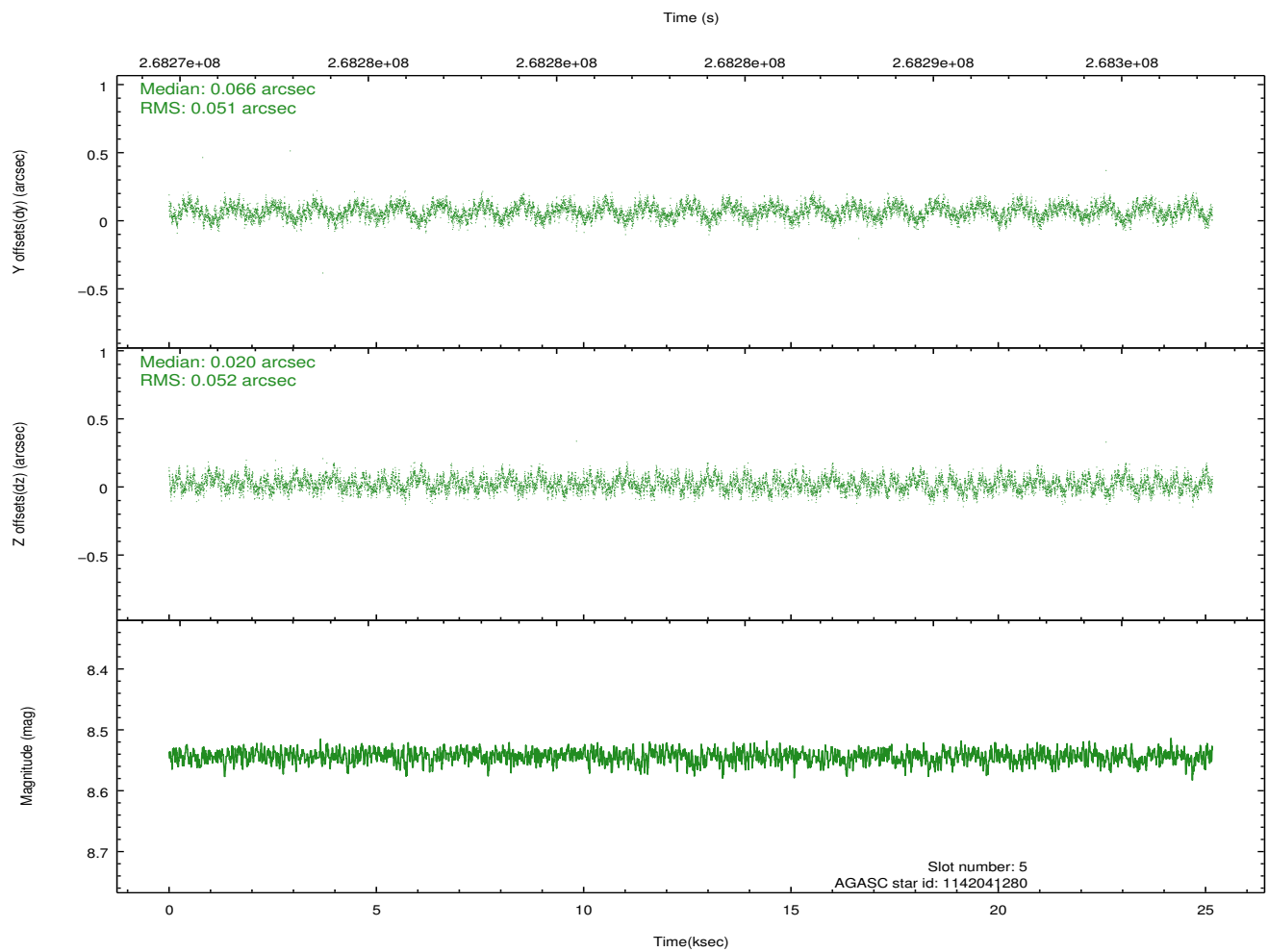
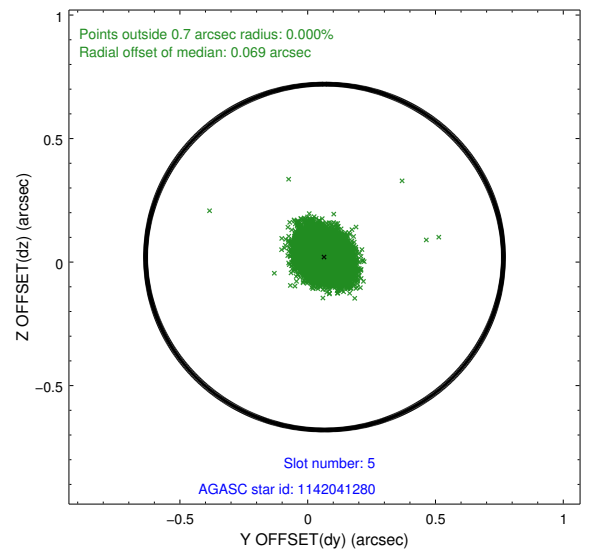
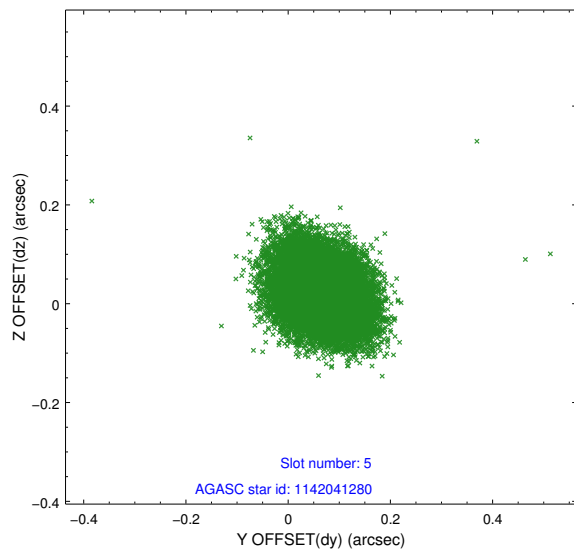
2.4.1 Slot 3



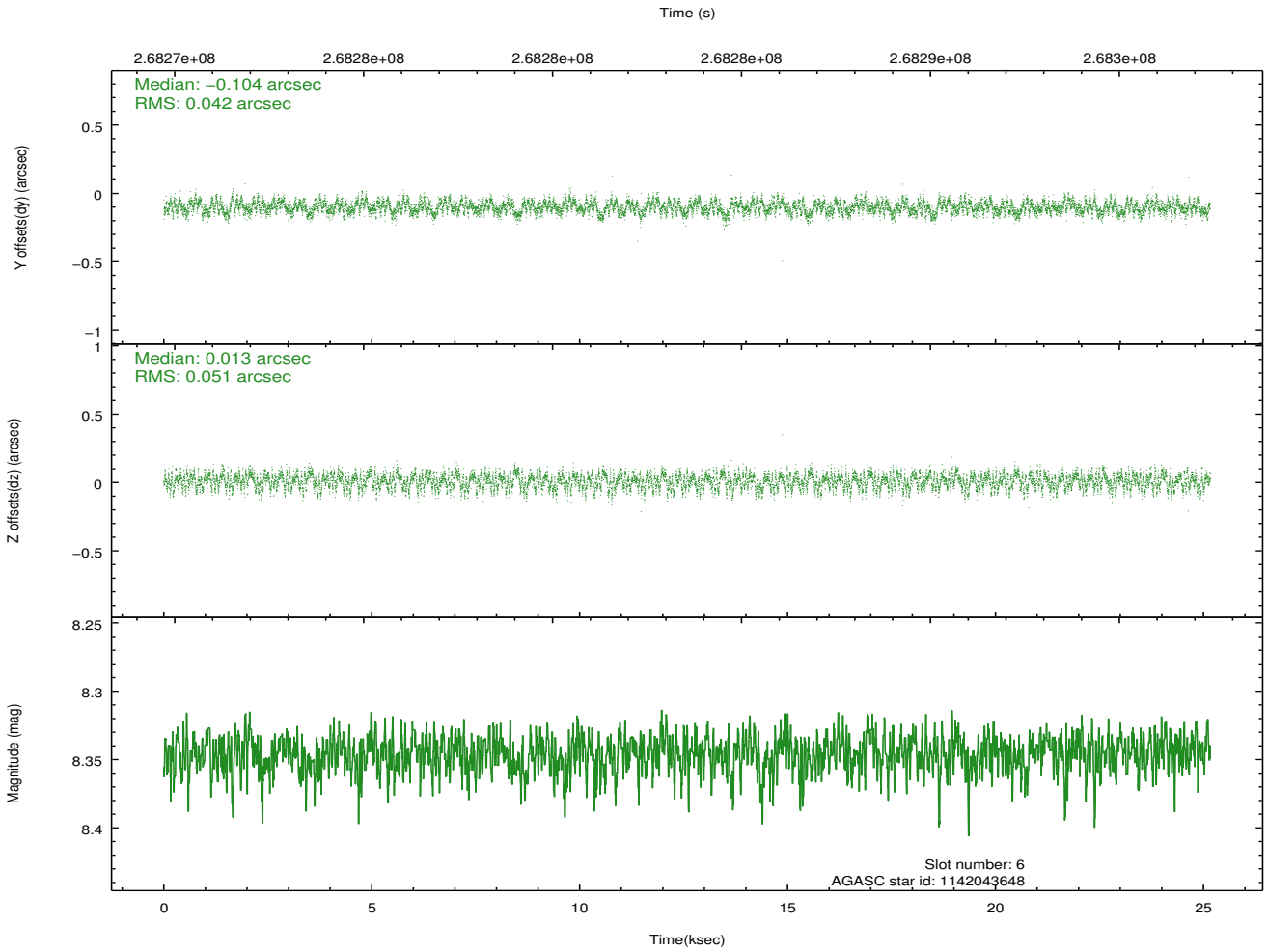
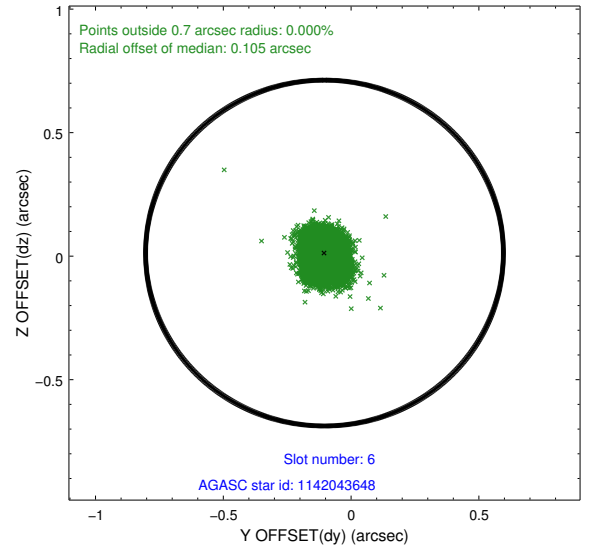
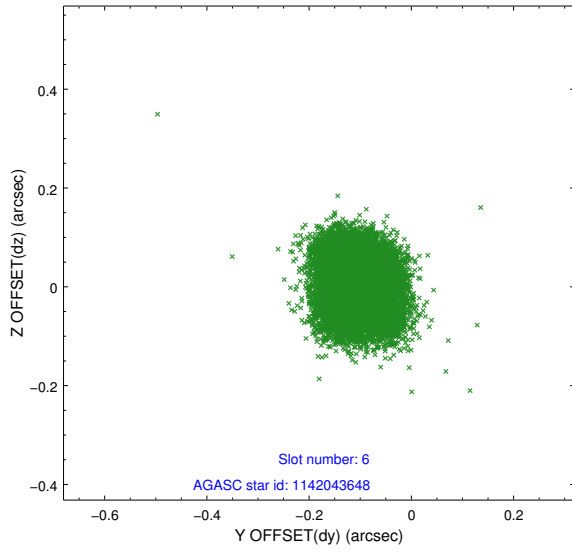
2.4.2 Slot 4



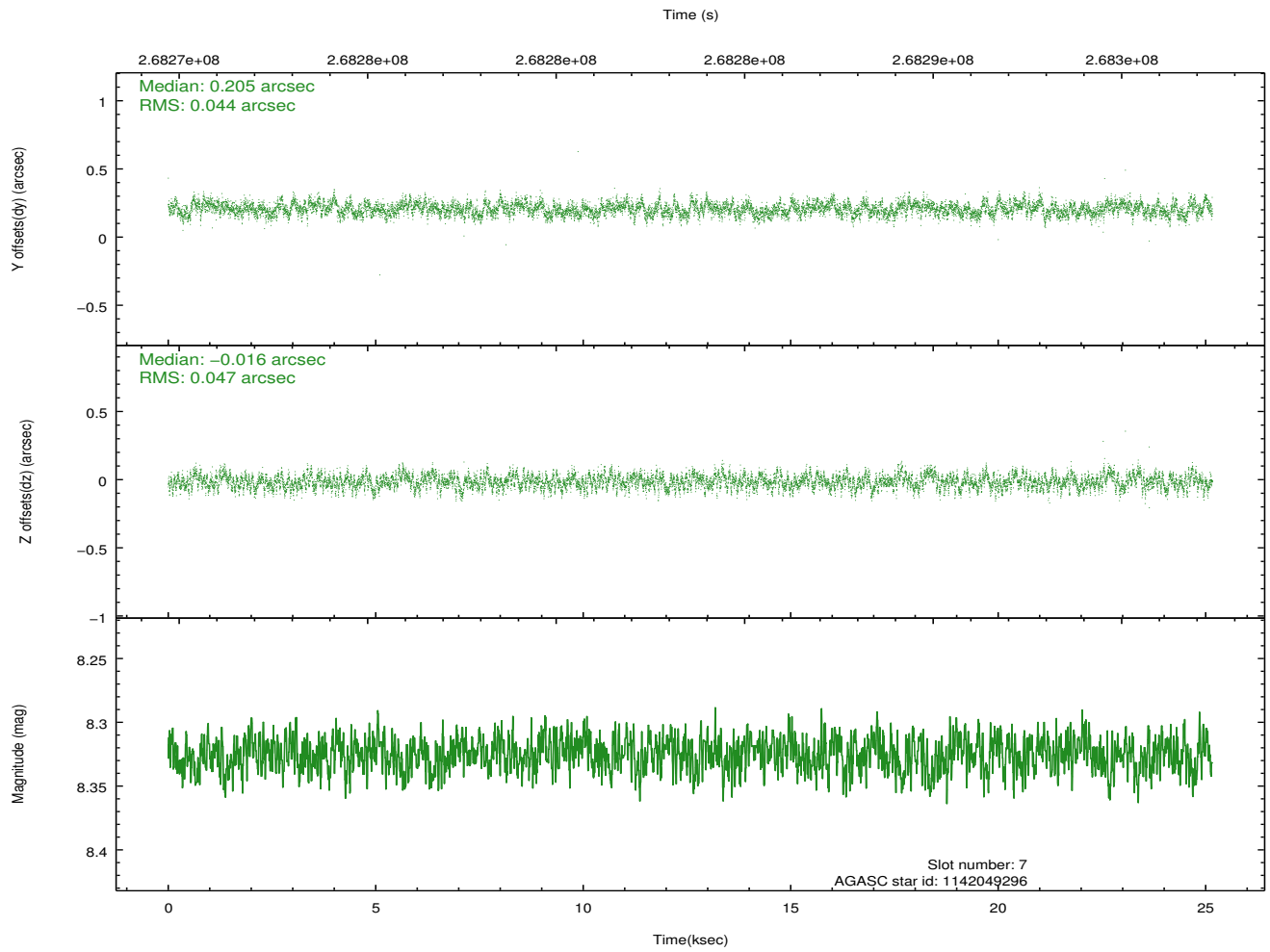
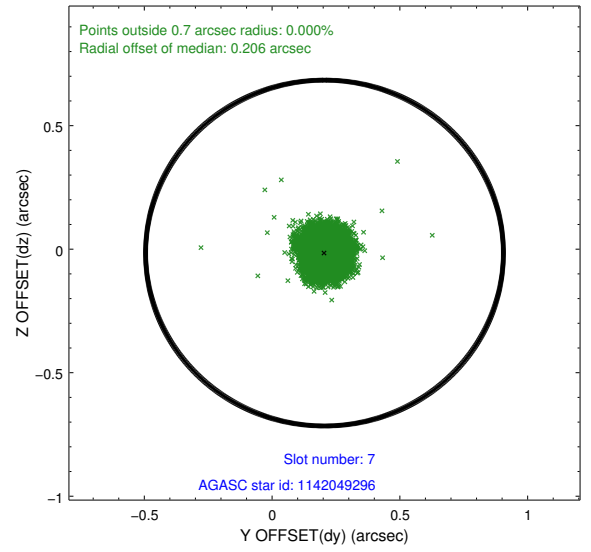
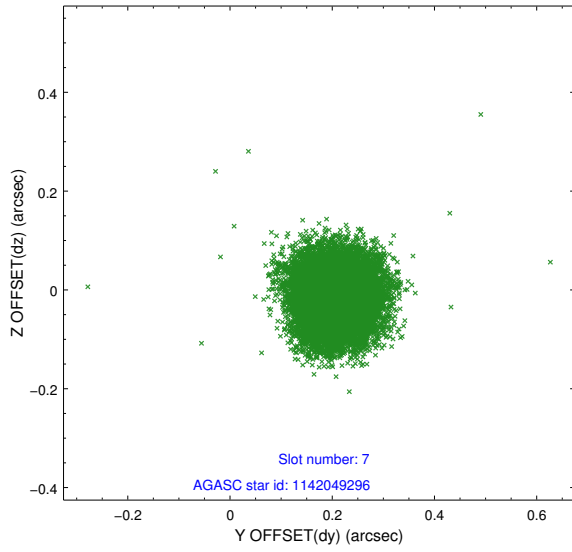
2.4.3 Slot 5



2.4.4 Slot 6

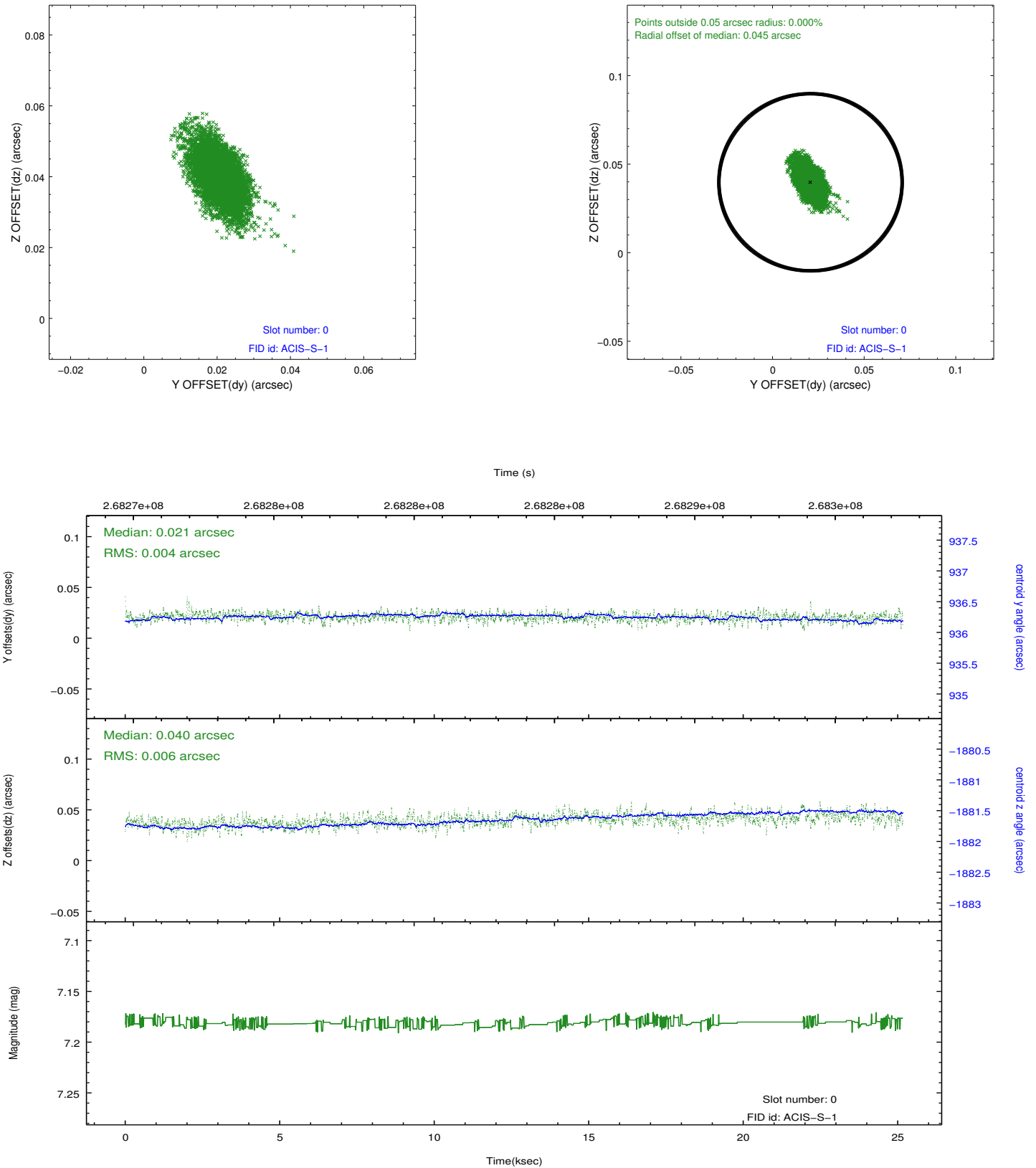


2.4.5 Slot 7

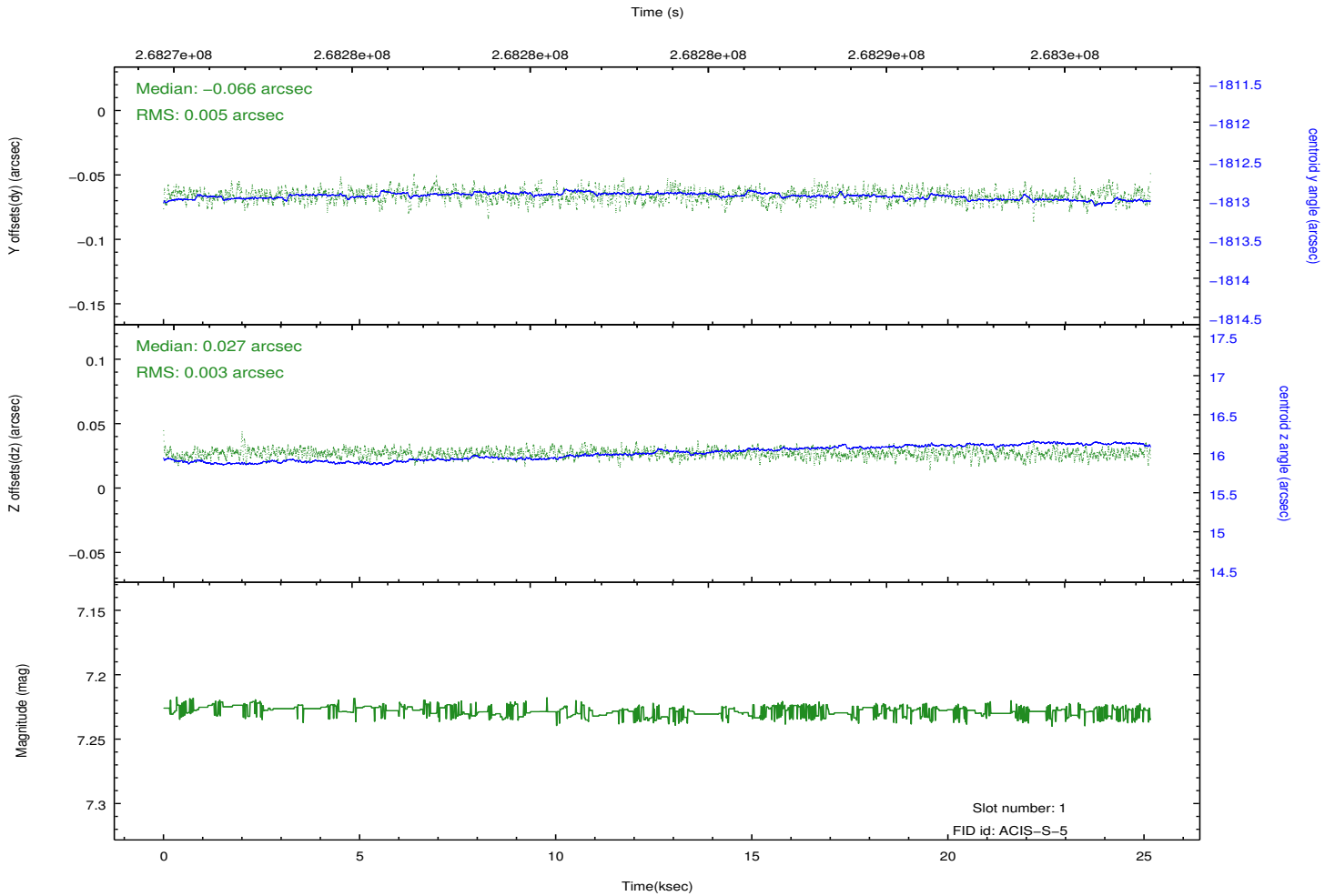
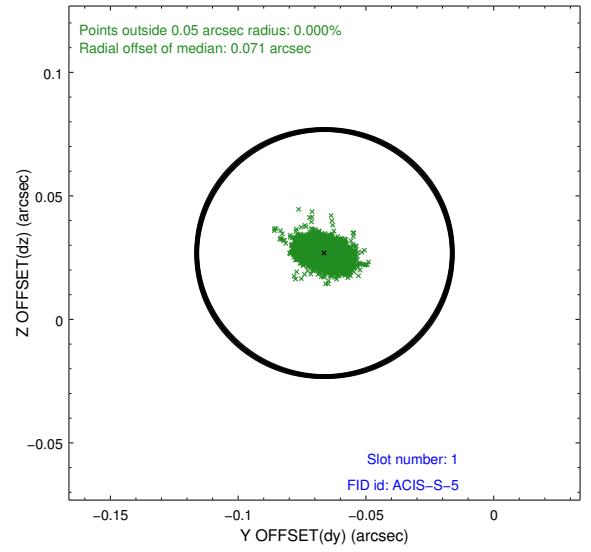
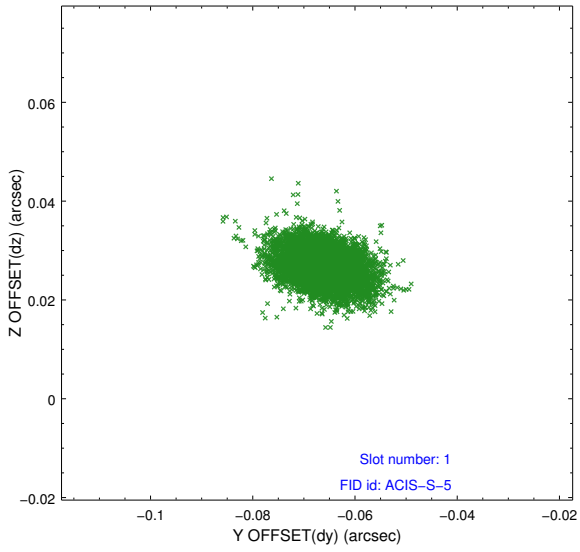


2.5 FID Slots

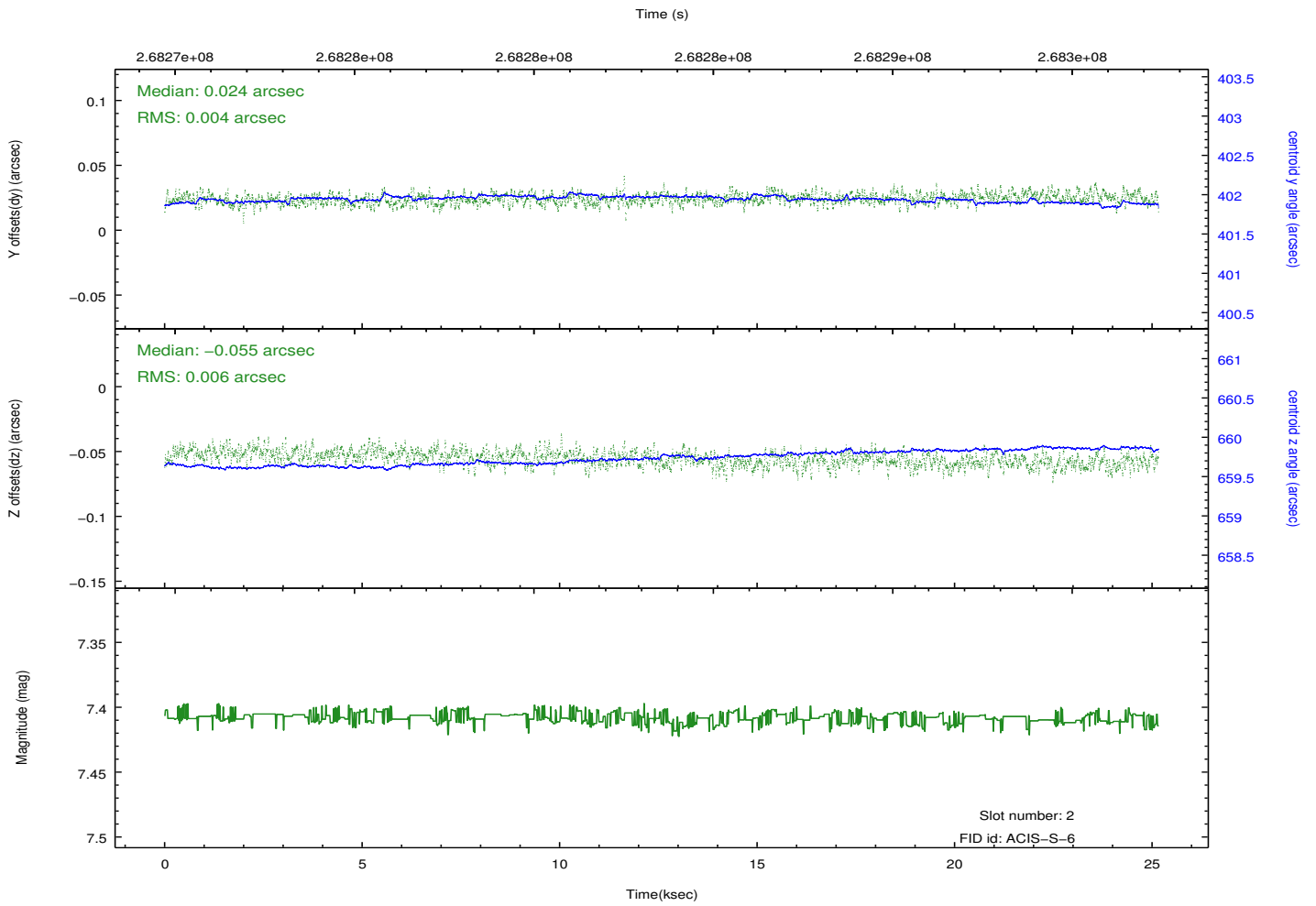
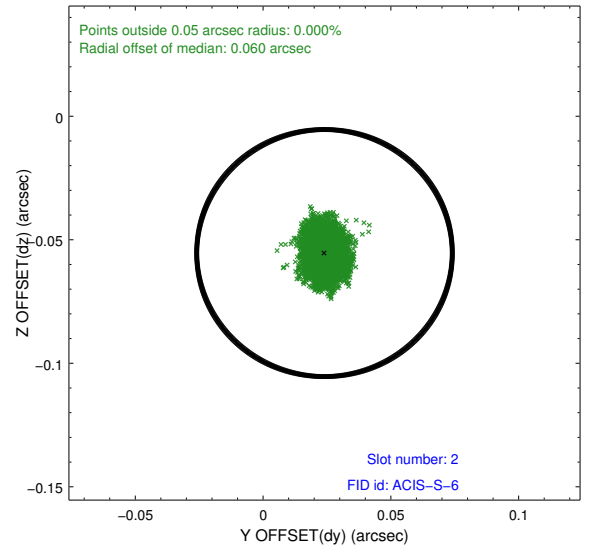
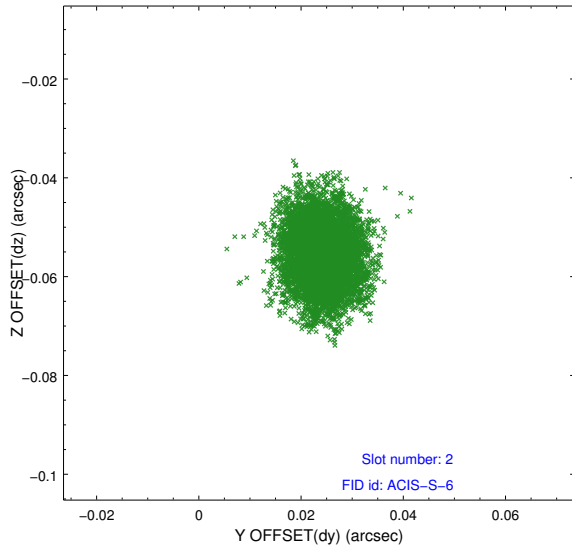
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Gratings

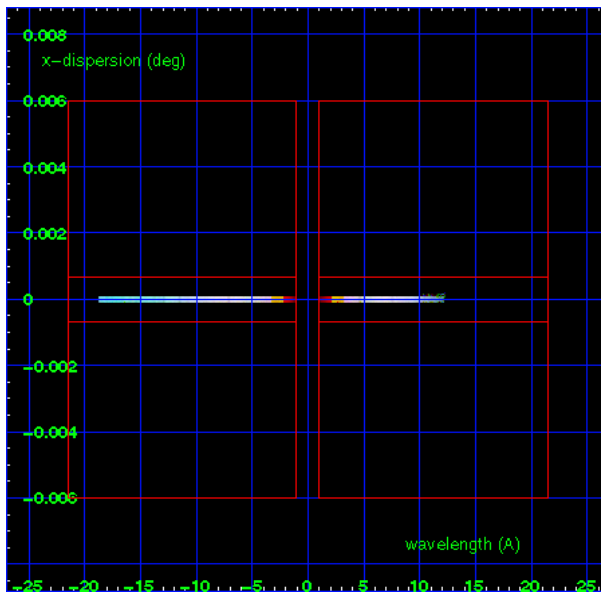
3.1 HEG Arm



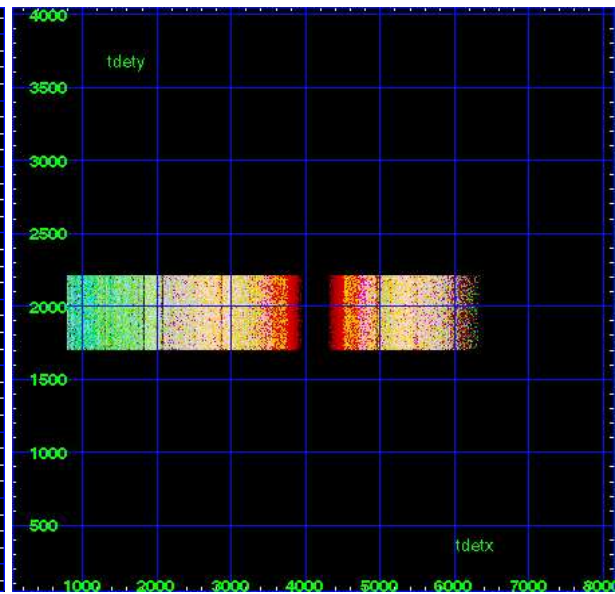
HEG Order Sort 123



HEG Order Sort ALL

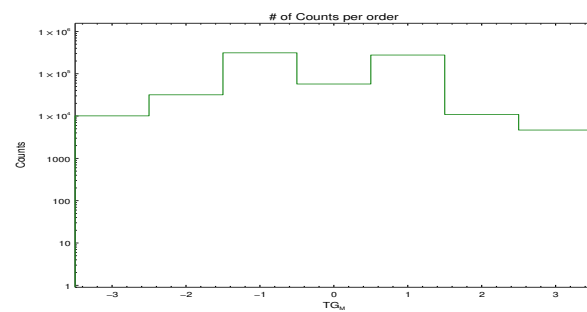


Spot Image HEG

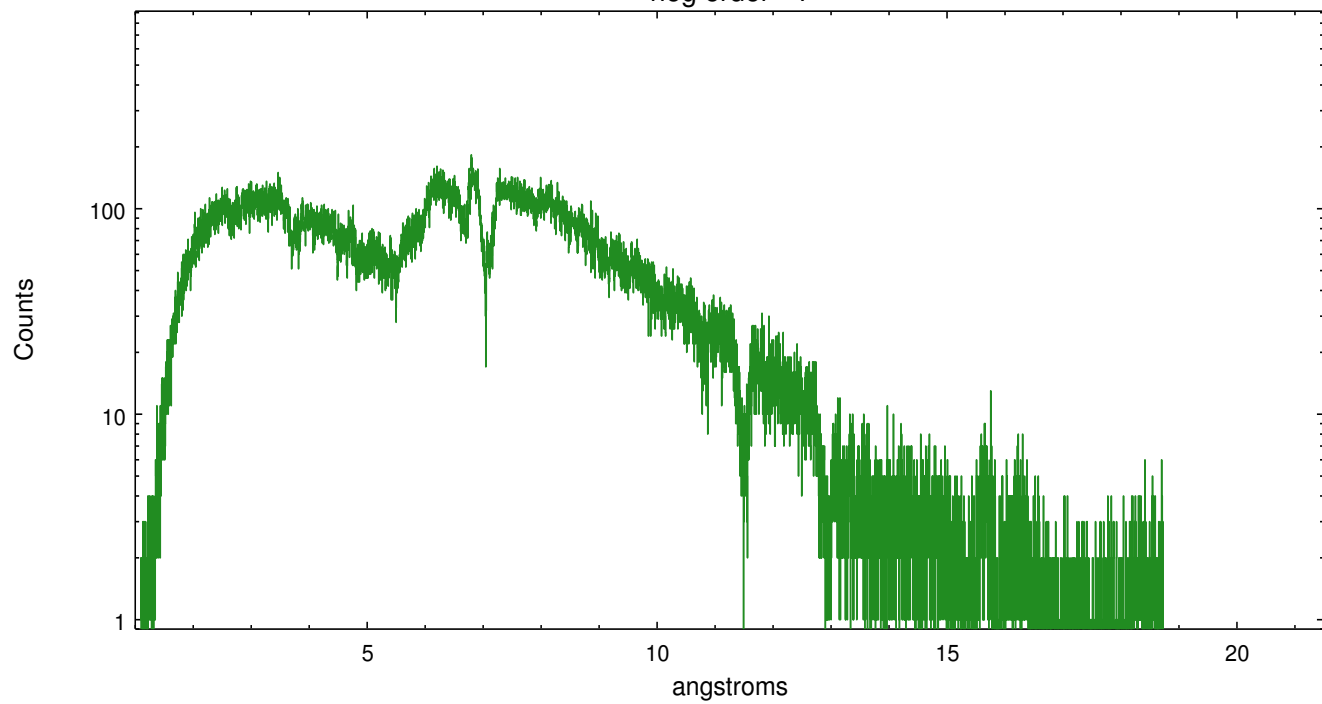


Full Detector HEG

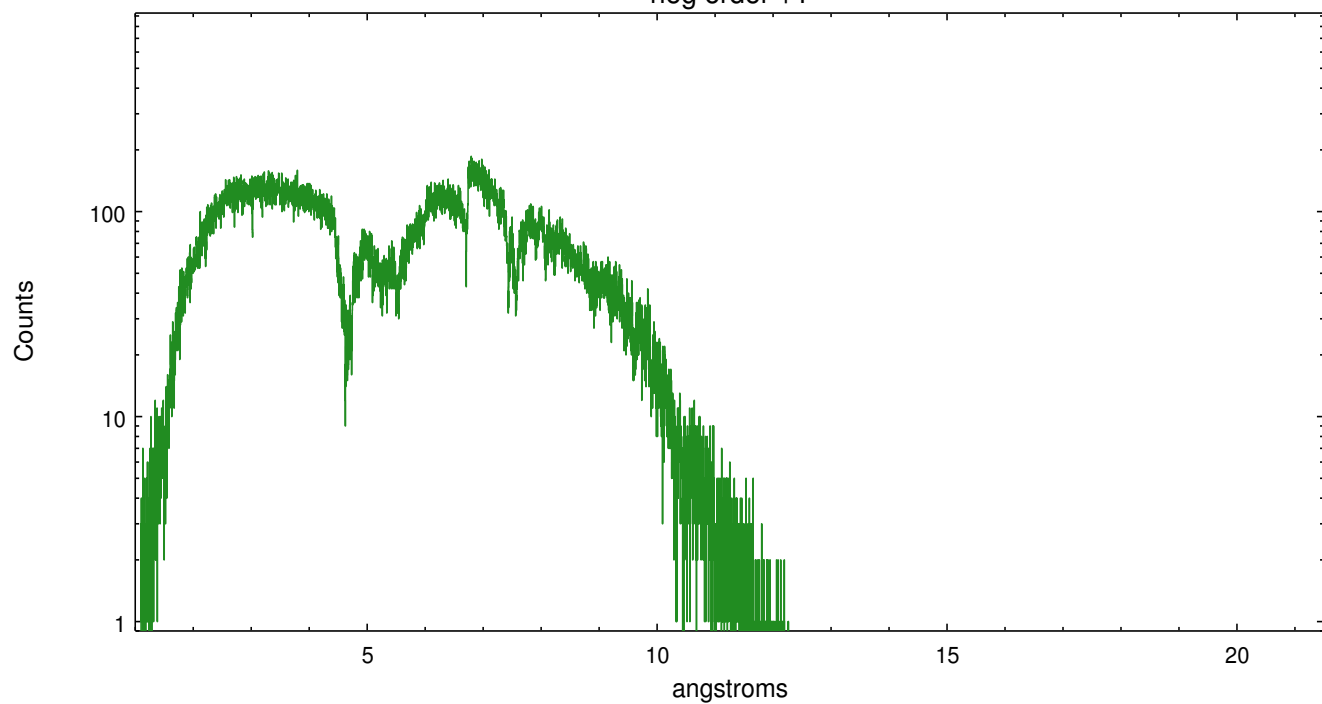
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	10110	31805	312226	57187	276679	10878	4669



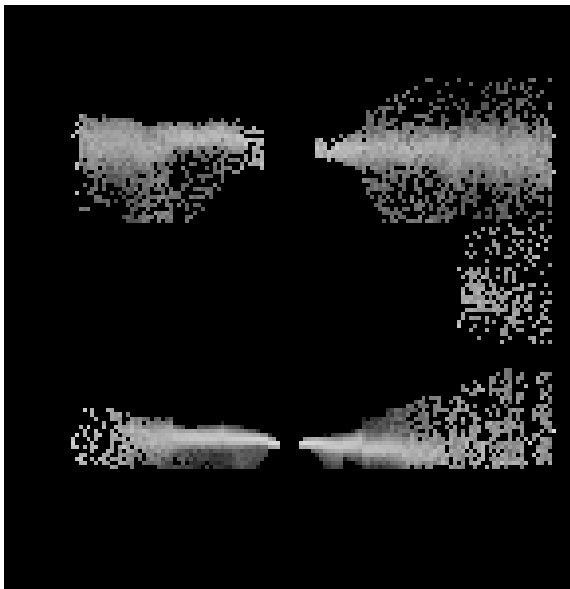
heg order -1



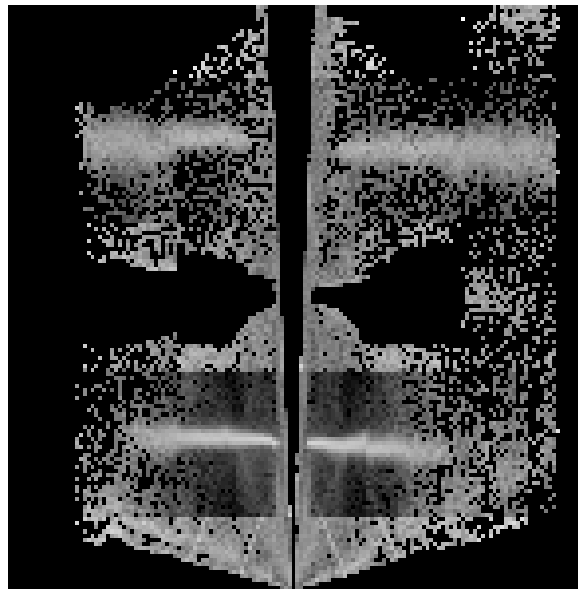
heg order +1



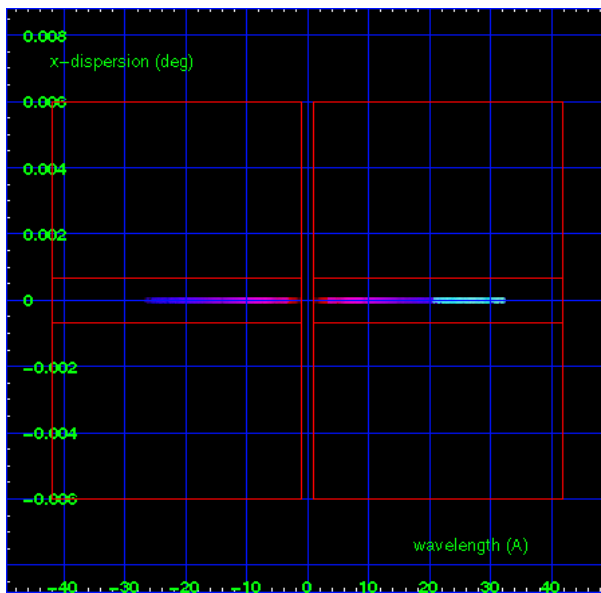
3.2 MEG Arm



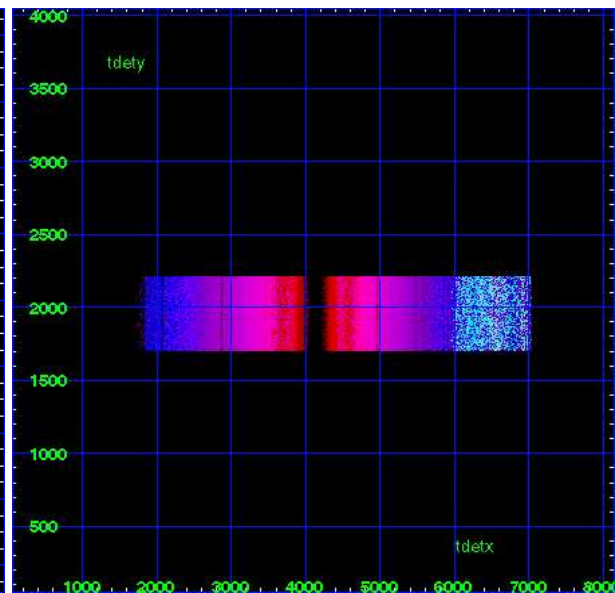
MEG Order Sort 123



MEG Order Sort ALL

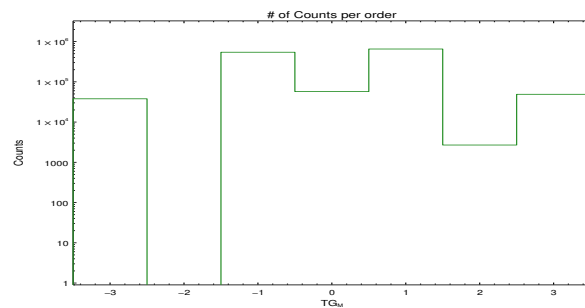


Spot Image MEG

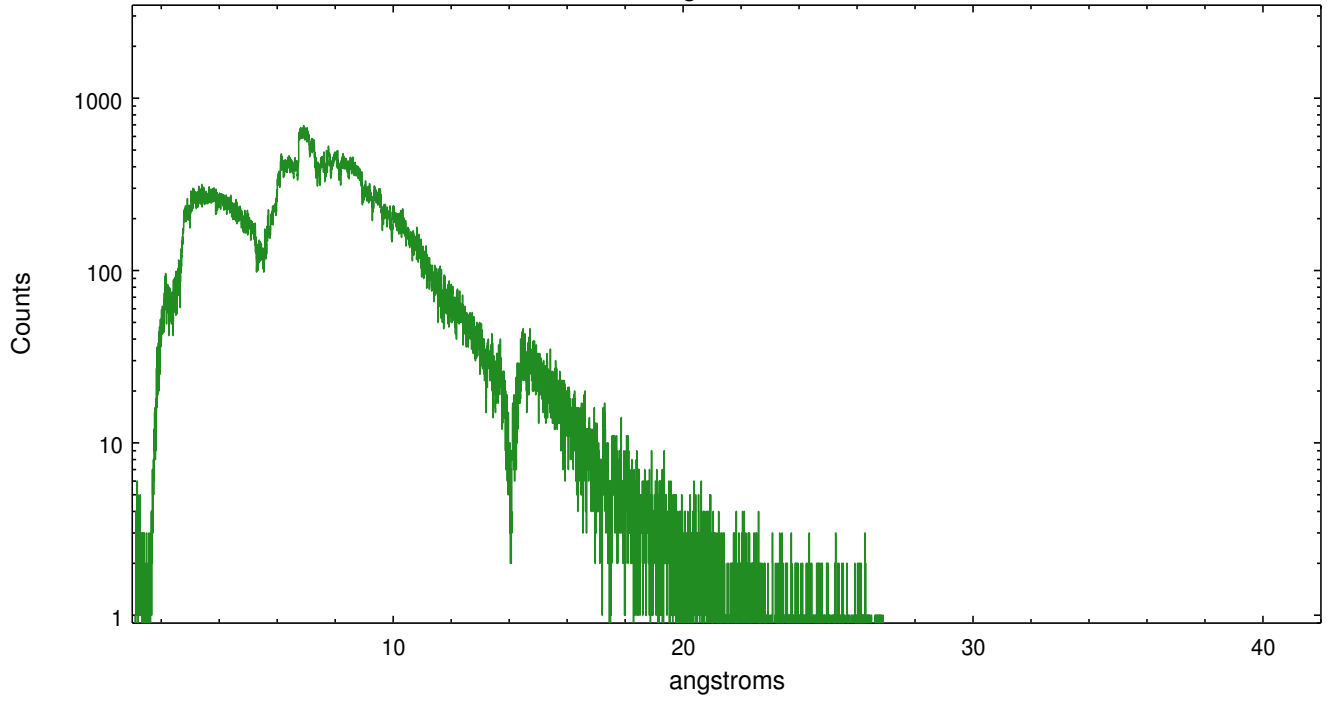


Full Detector MEG

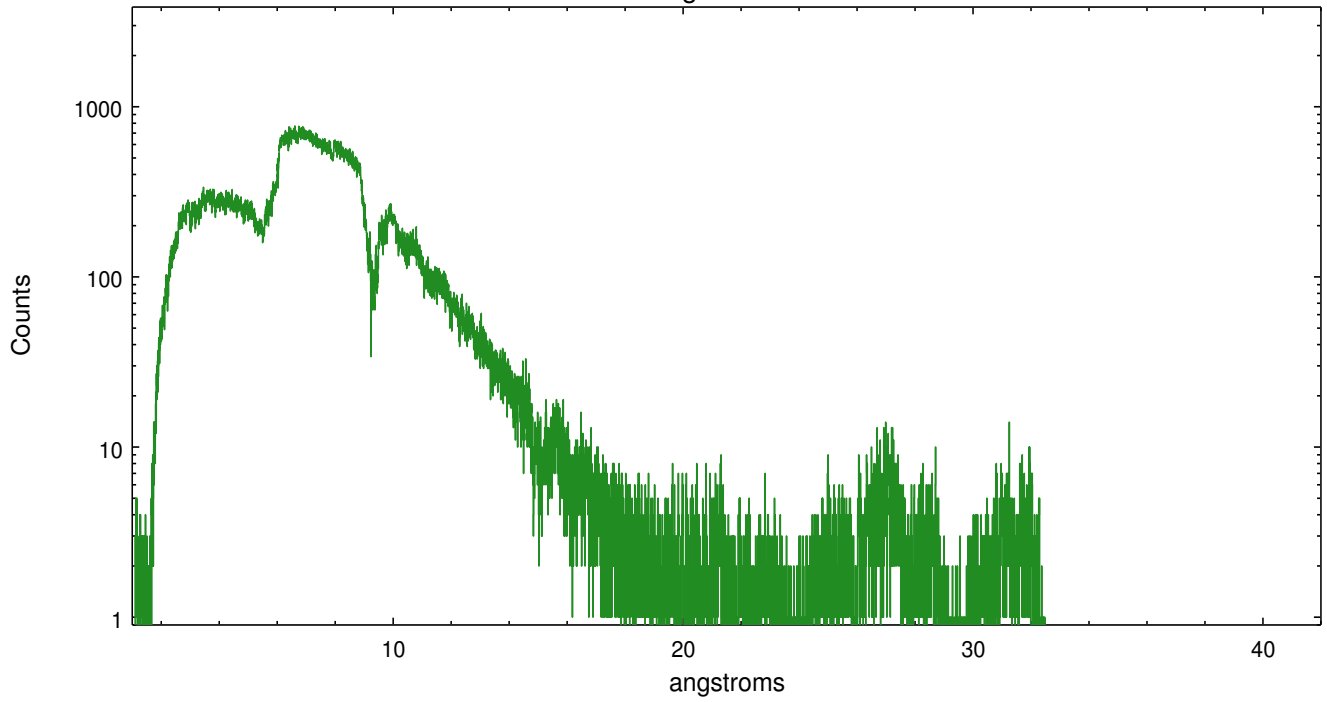
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	37888	0	543380	57187	653551	2688	48945



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.04.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.15875

A.2 Comments