

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 6581 - L2 Version 3
Chandra X-Ray Center

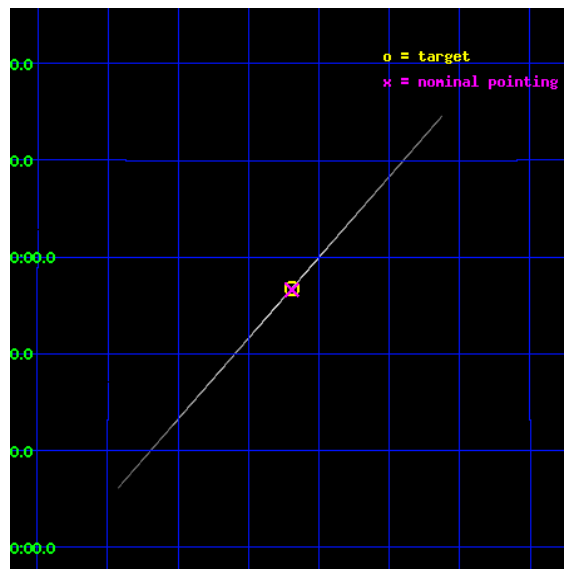
L2 Processing Date : Mar 18 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	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

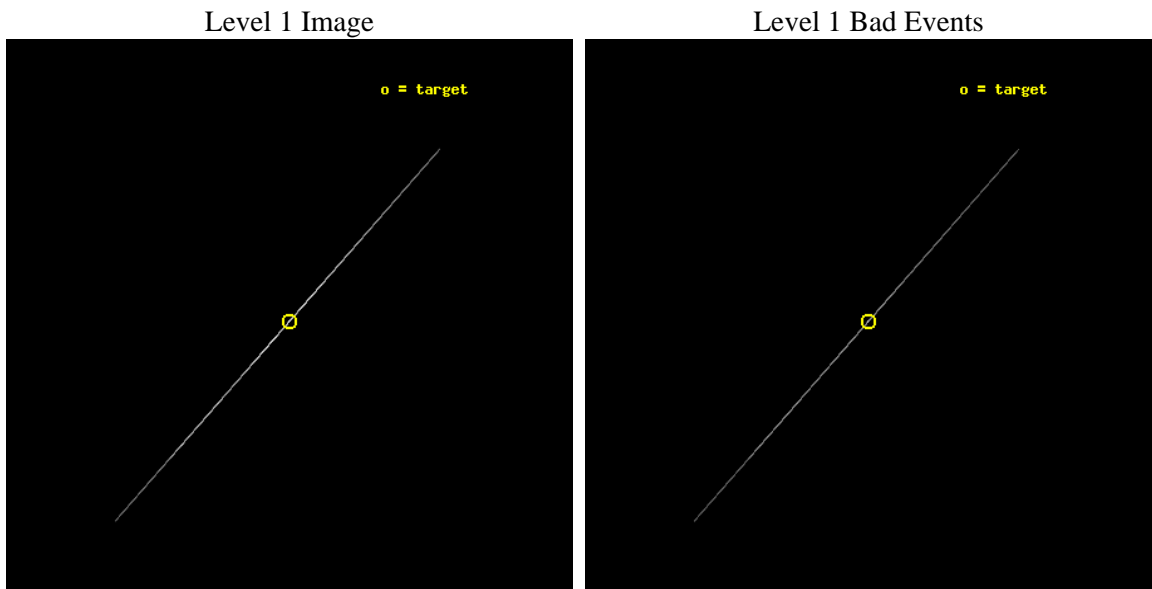
seq_num	400486	Sequence number
obs_id	6581	Observation id
title	Relativistic emission-line or warm absorber in GRS 1915+105	Propos
observer	Prof Mariano Mendez	Principal investigator
object	GRS1915+105	Source name
ra_targ	288.798333	Observer's specified target RA [deg]
dec_targ	10.945806	Observer's specified target Dec [deg]
ra_nom	288.79791928344	Nominal RA [deg]
dec_nom	10.943754078845	Nominal Dec [deg]
roll_nom	311.3829216725	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4109.1891126335	Sum of GTIs [s]
livetime	4093.1375926622	Livetime [s]
ontime4	9399.4865570366	Sum of GTIs [s]
ontime5	20648.25	Sum of GTIs [s]
ontime6	5002.1399112642	Sum of GTIs [s]
ontime7	4109.1891126335	Sum of GTIs [s]
ontime8	9283.4494657218	Sum of GTIs [s]
ontime9	10191.088026166	Sum of GTIs [s]
l2events	3319215	Number of level 2 events



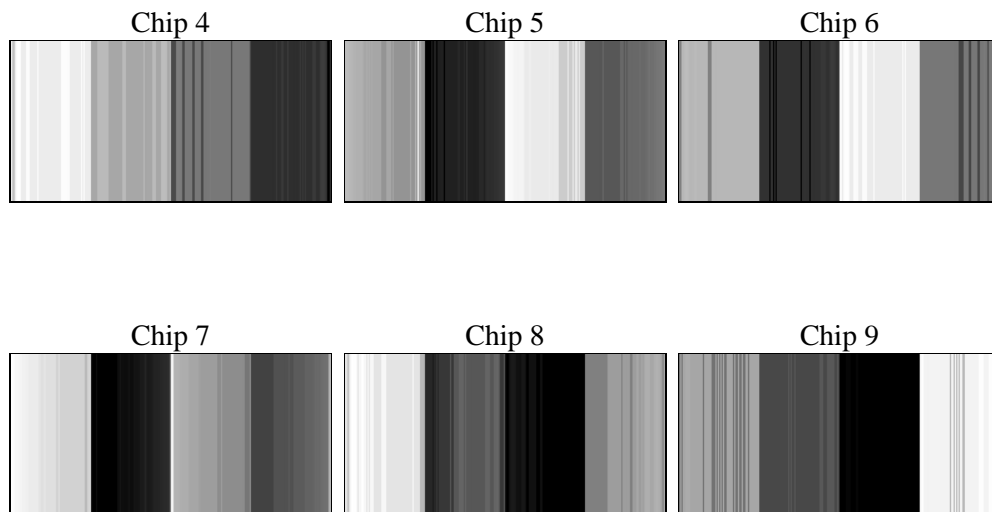
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	4109.1891126335	Sum of GTIs [s]
caldbver	4.4.8	 	ontime4	9399.4865570366	Sum of GTIs [s]
date	2012-03-18T09:14:24	Date and time of file creation	ontime5	20648.25	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	5002.1399112642	Sum of GTIs [s]
			ontime7	4109.1891126335	Sum of GTIs [s]
			ontime8	9283.4494657218	Sum of GTIs [s]
			ontime9	10191.088026166	Sum of GTIs [s]
			l1events	3693970	Number of level 1 events

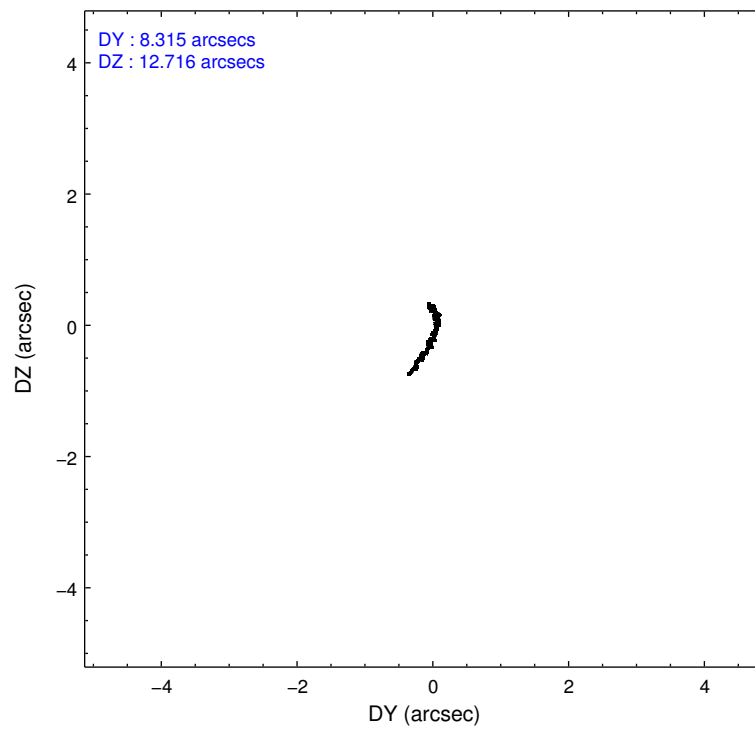
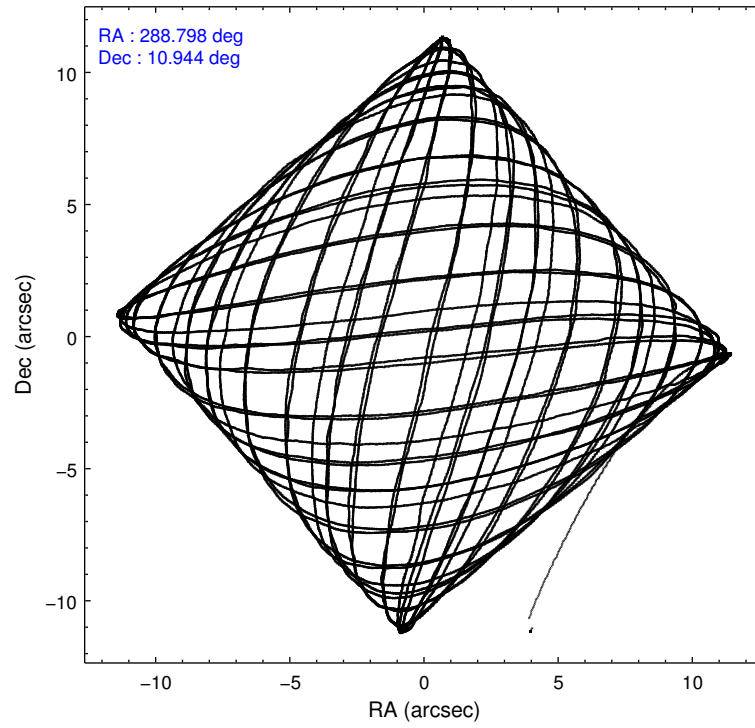
2.1.4 Events

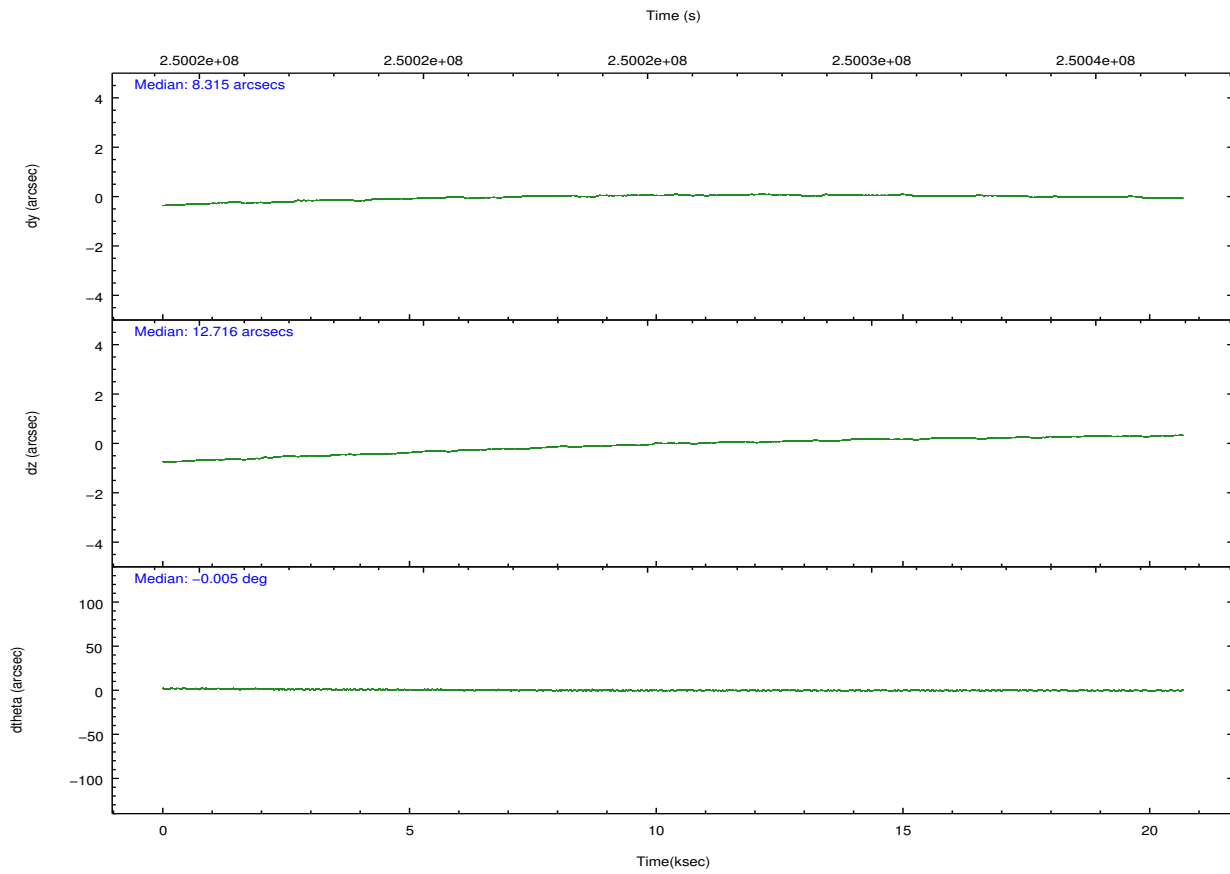
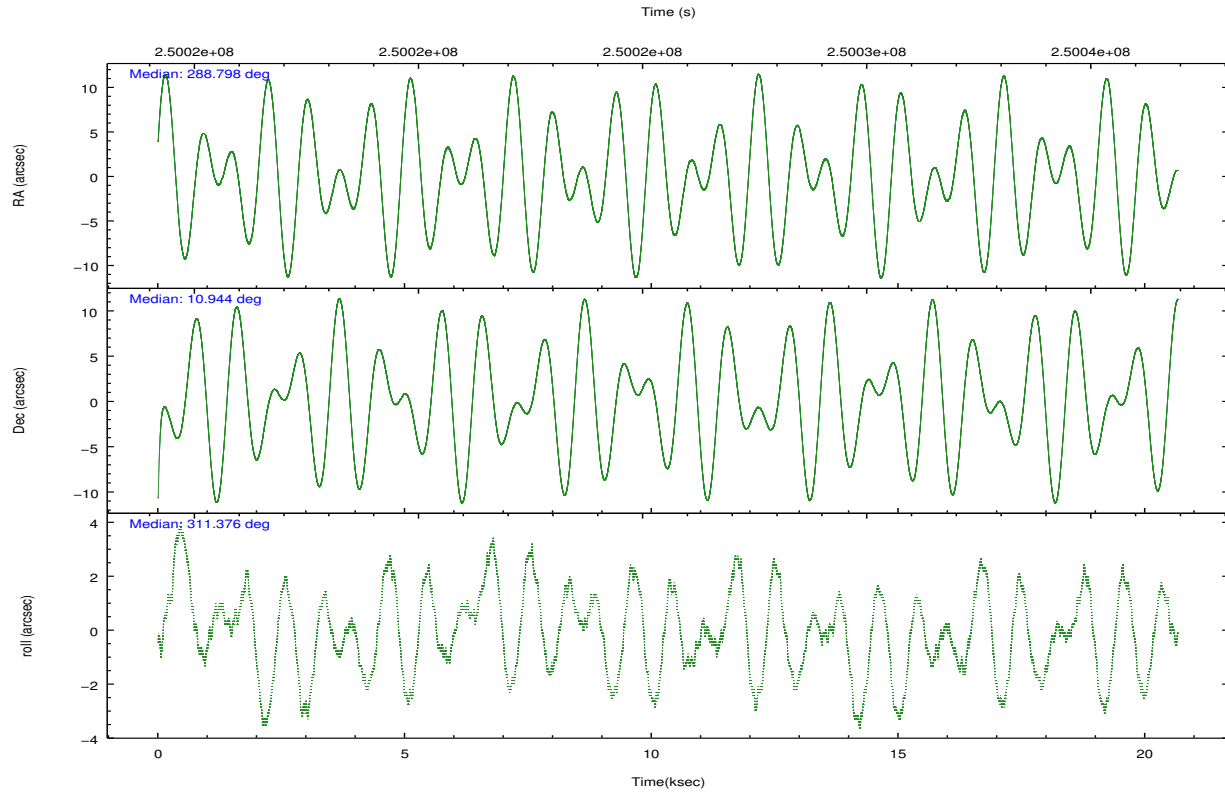
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	62685	508947	1084002	1564041	377873	96422	grade 0 events	11537	70823	21734	293787	95077	20915
rejected events	5902	39315	35442	67118	13318	6892		18%	13%	2%	18%	25%	21%
rejected %	9%	7%	3%	4%	3%	7%	grade 1 events	94	350	165	8594	403	139
								0%	0%	0%	0%	0%	0%
							grade 2 events	36135	206793	896926	405444	223169	54315
								57%	40%	82%	25%	59%	56%
							grade 3 events	2524	16233	2386	150420	8471	3013
								4%	3%	0%	9%	2%	3%
							grade 4 events	2572	15904	2281	149183	8279	3106
								4%	3%	0%	9%	2%	3%
							grade 5 events	3353	21568	8560	37575	6471	4643
								5%	4%	0%	2%	1%	4%
							grade 6 events	6470	177276	151950	519038	36003	10291
								10%	34%	14%	33%	9%	10%
							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_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	288.771486	288.7979192834381	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.952116	10.94375407884493	Alternating exposures requested	N	N
[deg] Pointing Roll	311.231318	311.3829216724985	[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	-187.132523	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	250015406.184000	250014286.56524			
Observation start date	2005-12-03T16:42:22	2005-12-03T16:24:46			
[s] Observation end time (MET)	250035906.184000	250036899.60379			
Observation end date	2005-12-03T22:24:02	2005-12-03T22:41:39			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



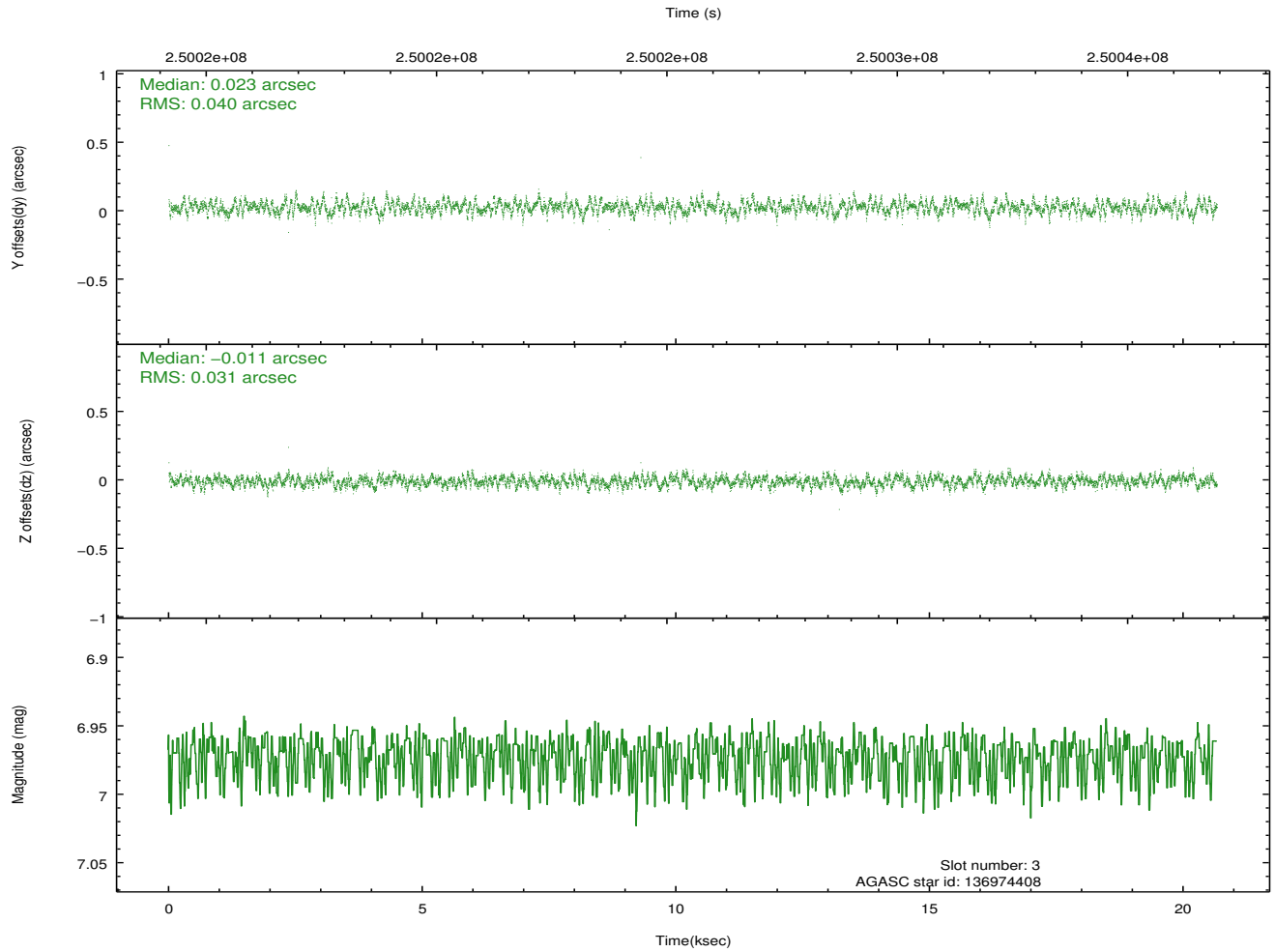
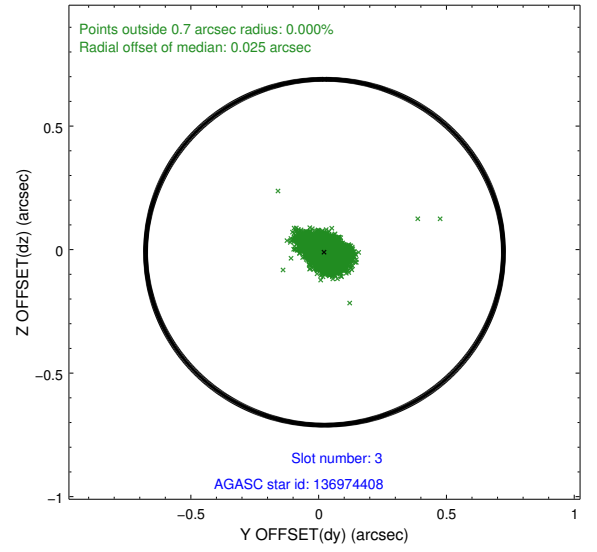
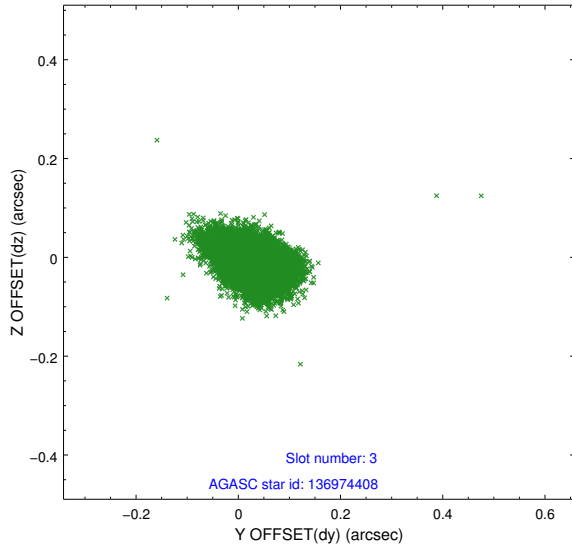


Slot Statistics

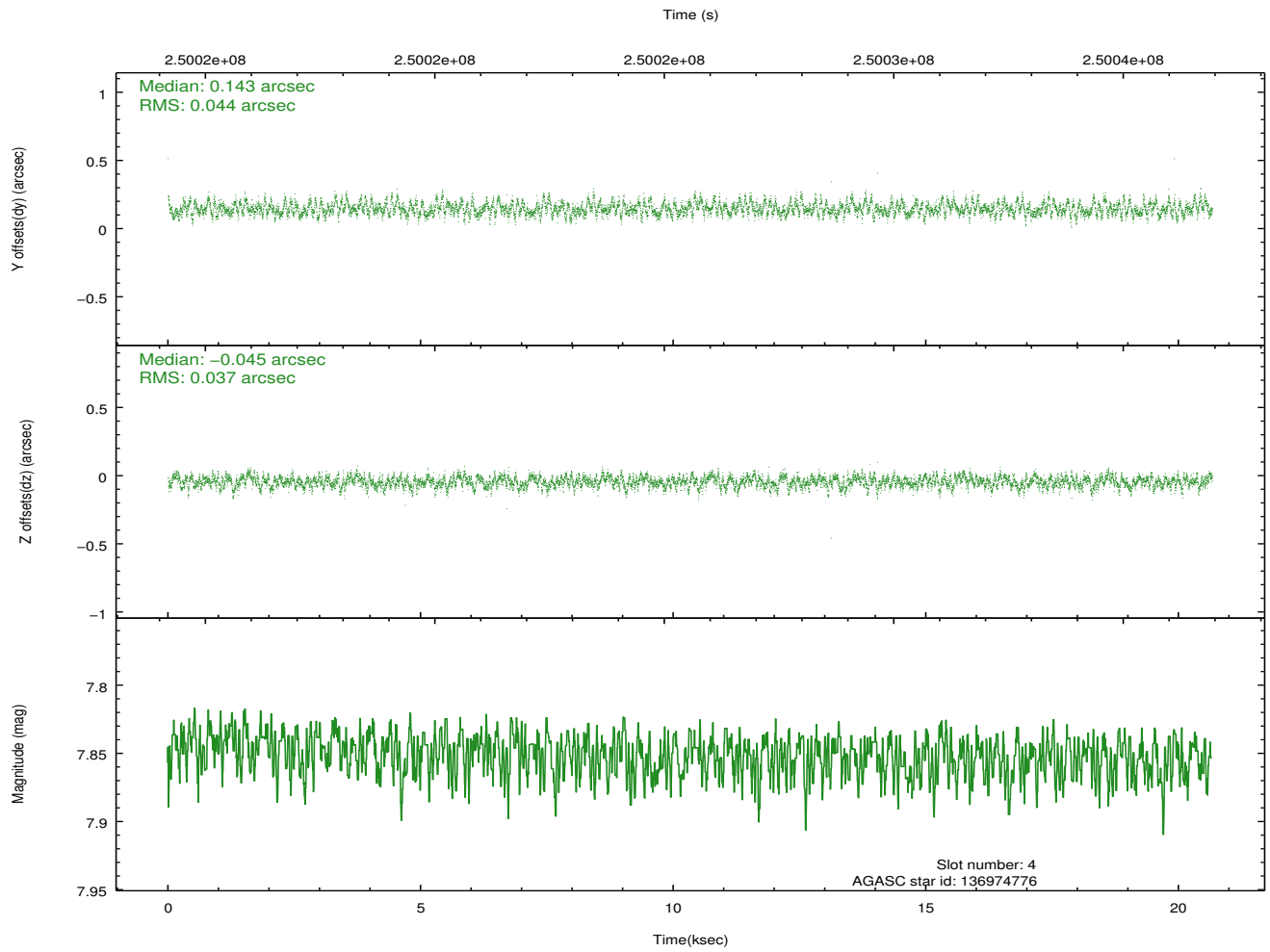
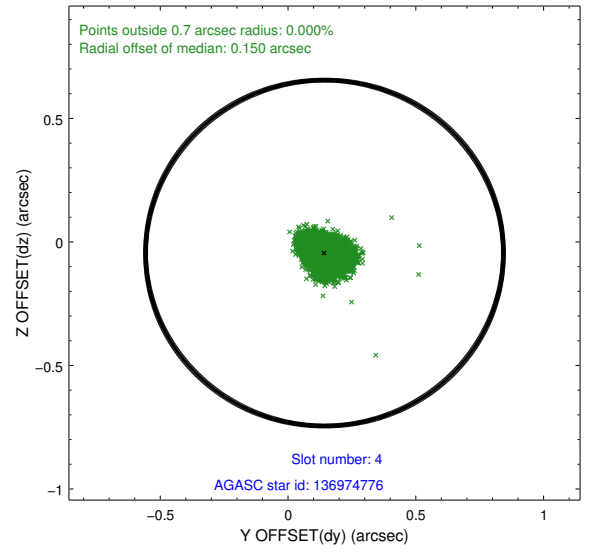
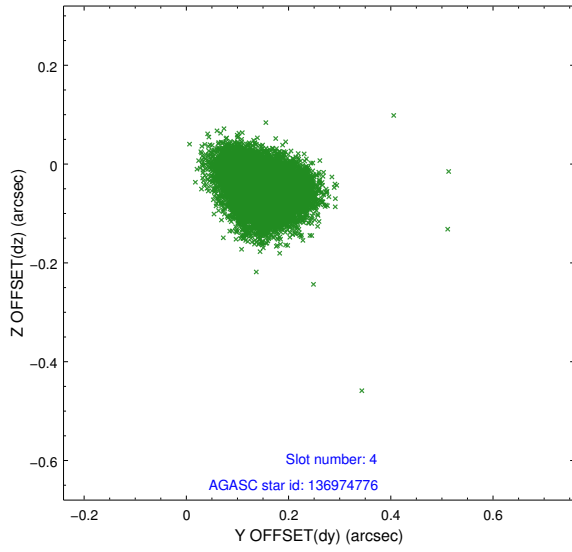
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	5040	-0.070	-0.067	0.009	0.016	0.000000	0.000000	-760.90	-1796.11
1	FID	ACIS-S-4	7.20	5041	0.144	0.052	0.008	0.015	0.000000	0.000000	2152.48	112.34
2	FID	ACIS-S-5	7.23	5041	-0.105	0.023	0.009	0.015	0.000000	0.000000	-1813.58	106.12
3	GUIDE	136974408	6.97	10082	0.023	-0.011	0.054	0.089	288.806802	10.212409	2085.56	-1660.72
4	GUIDE	136974776	7.85	10079	0.143	-0.045	0.062	0.098	288.742109	10.409402	1401.46	-1365.87
5	GUIDE	137102976	8.51	10082	0.033	0.008	0.061	0.101	289.193436	10.979652	907.73	1187.63
6	GUIDE	137497048	7.97	10017	-0.030	-0.043	0.075	0.124	288.896055	11.554718	-1340.53	1760.52
7	GUIDE	137498872	7.06	10081	-0.171	0.090	0.071	0.104	288.350862	11.344926	-2042.80	-183.68

2.4 Star Slots

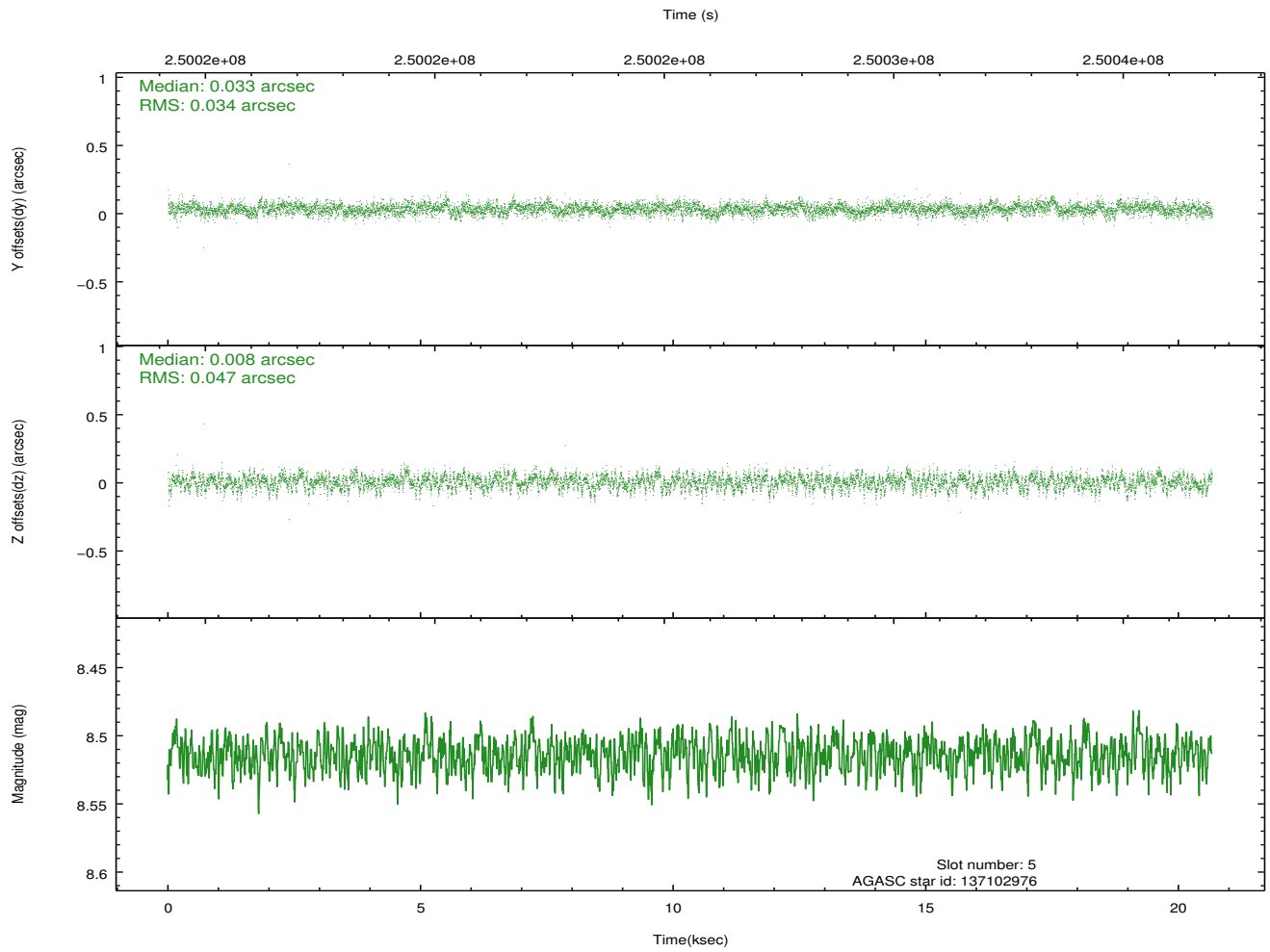
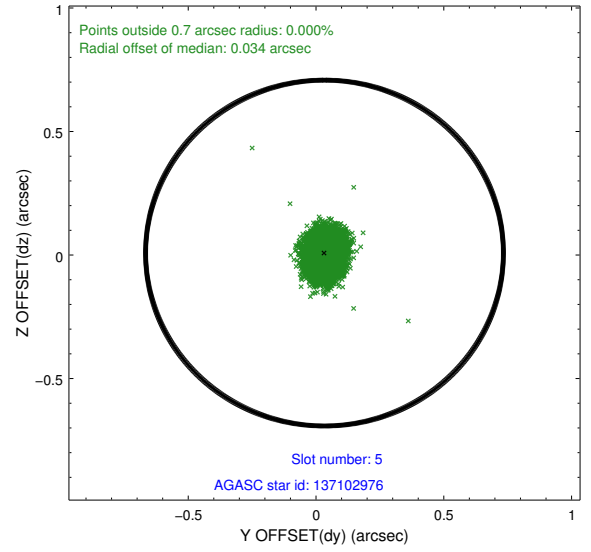
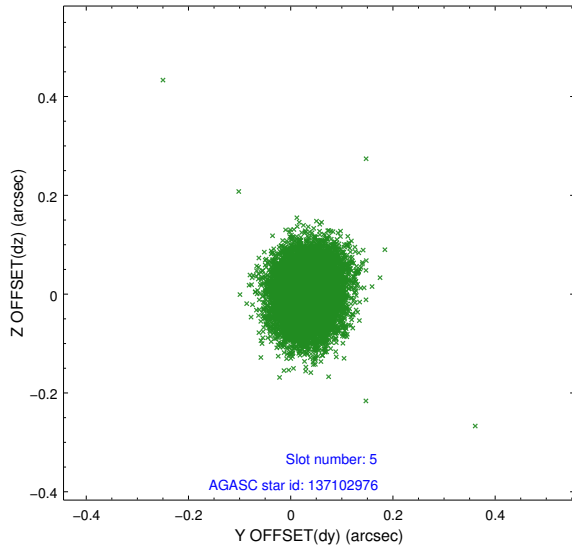
2.4.1 Slot 3



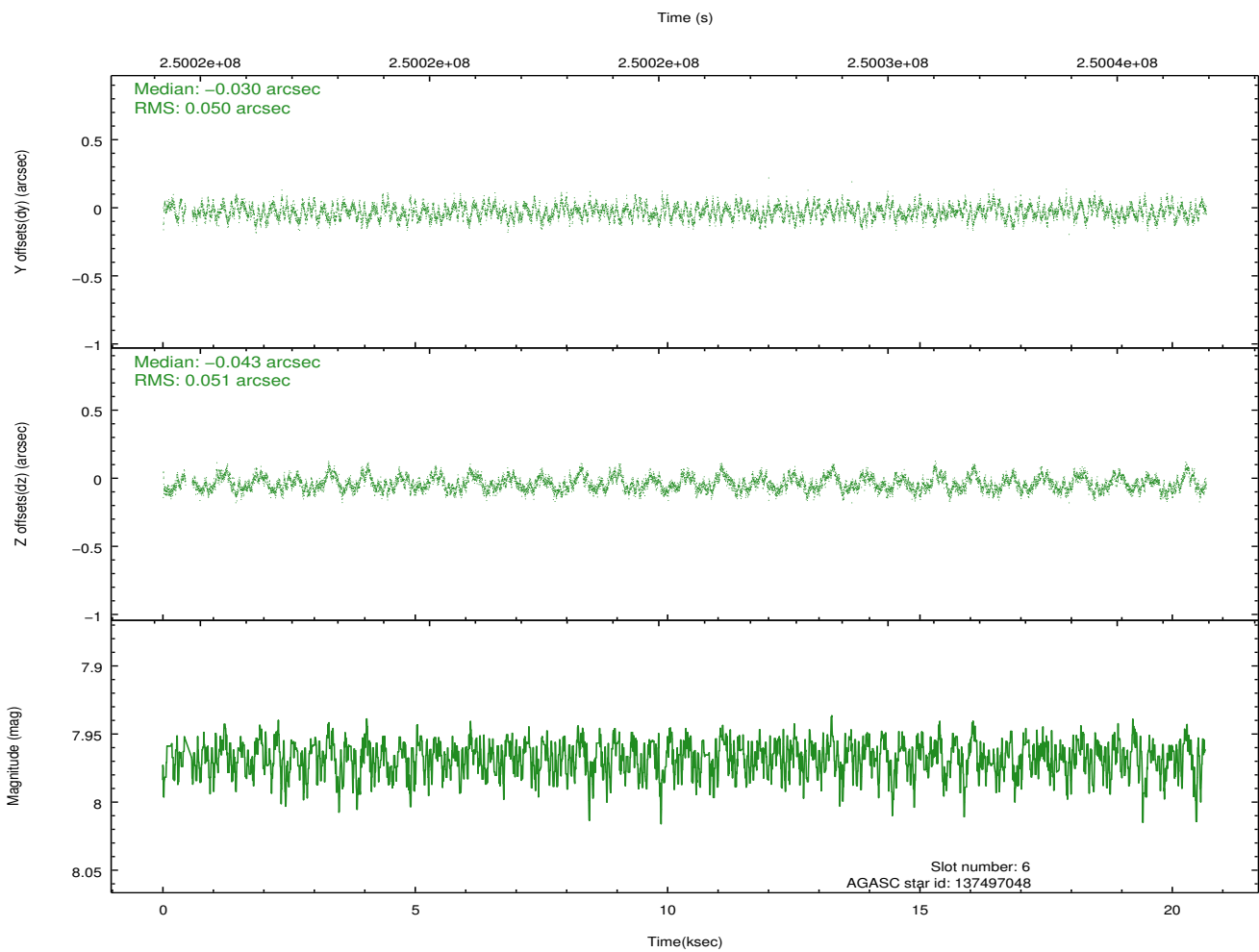
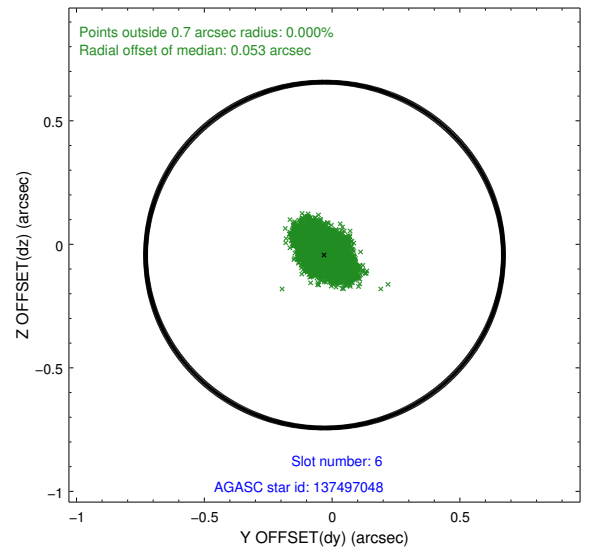
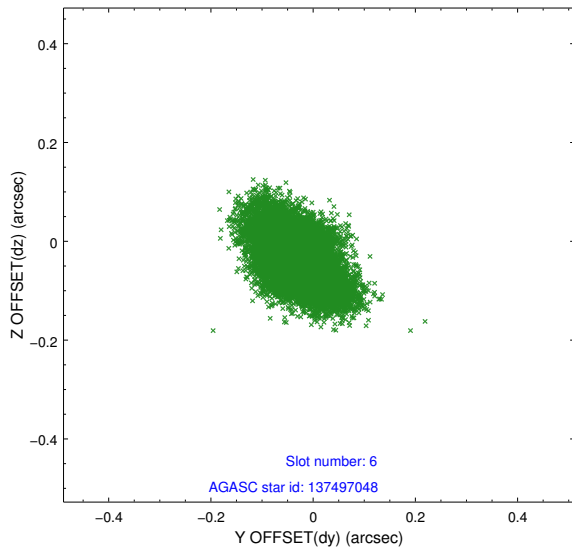
2.4.2 Slot 4



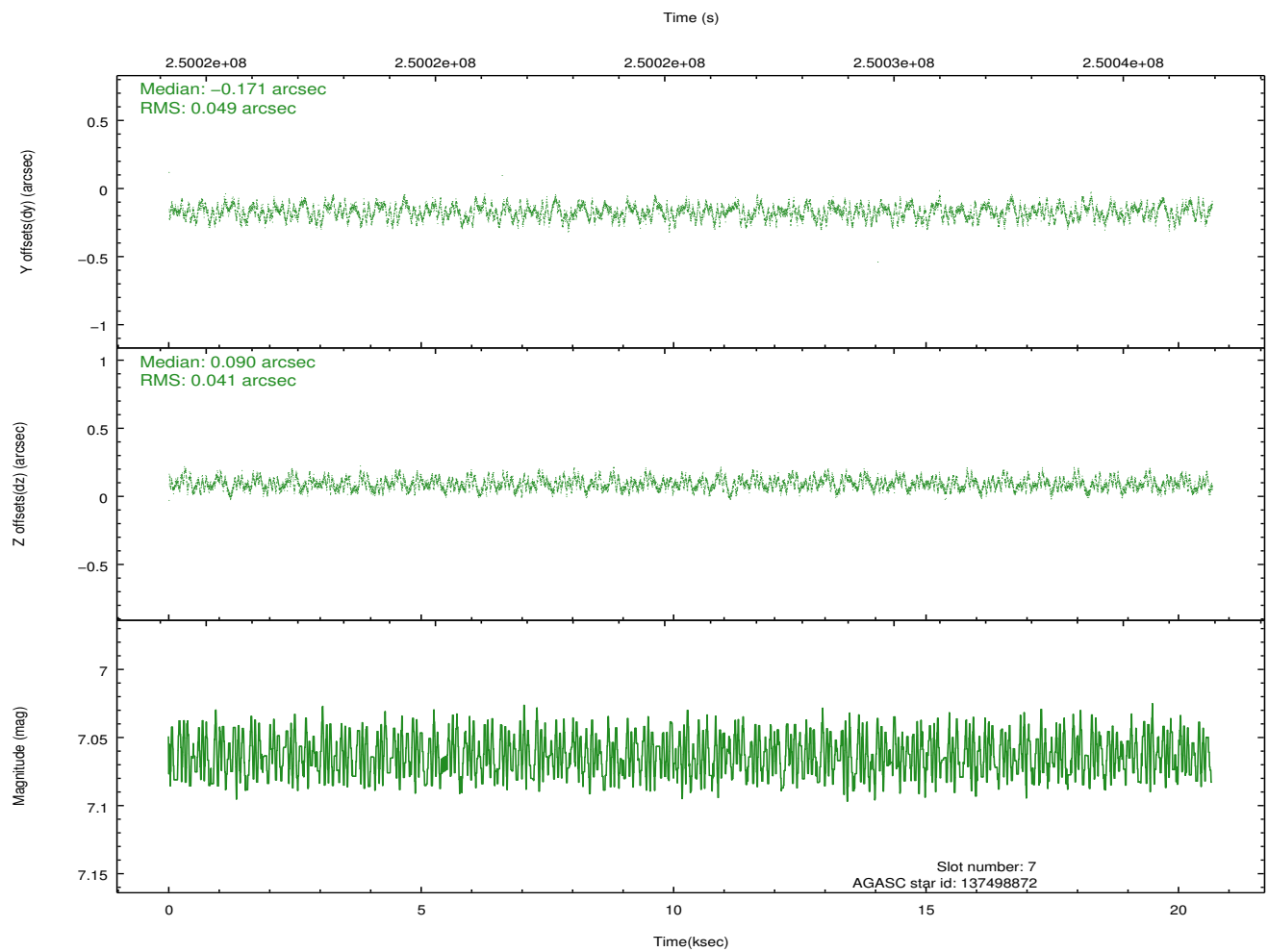
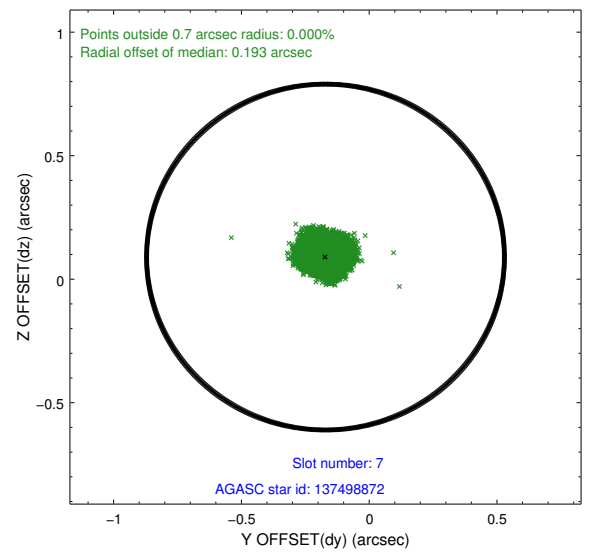
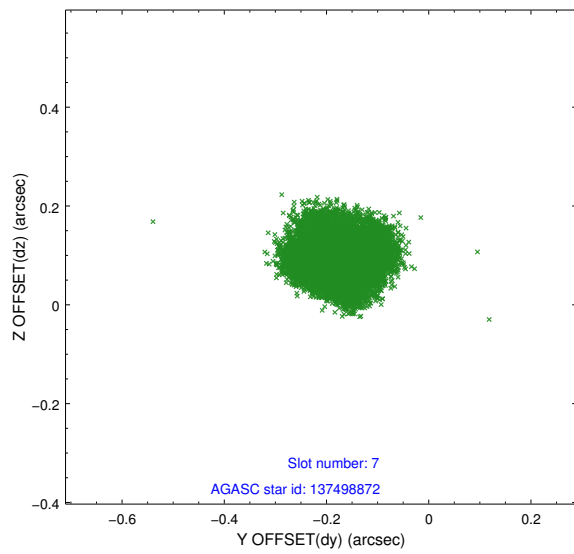
2.4.3 Slot 5



2.4.4 Slot 6

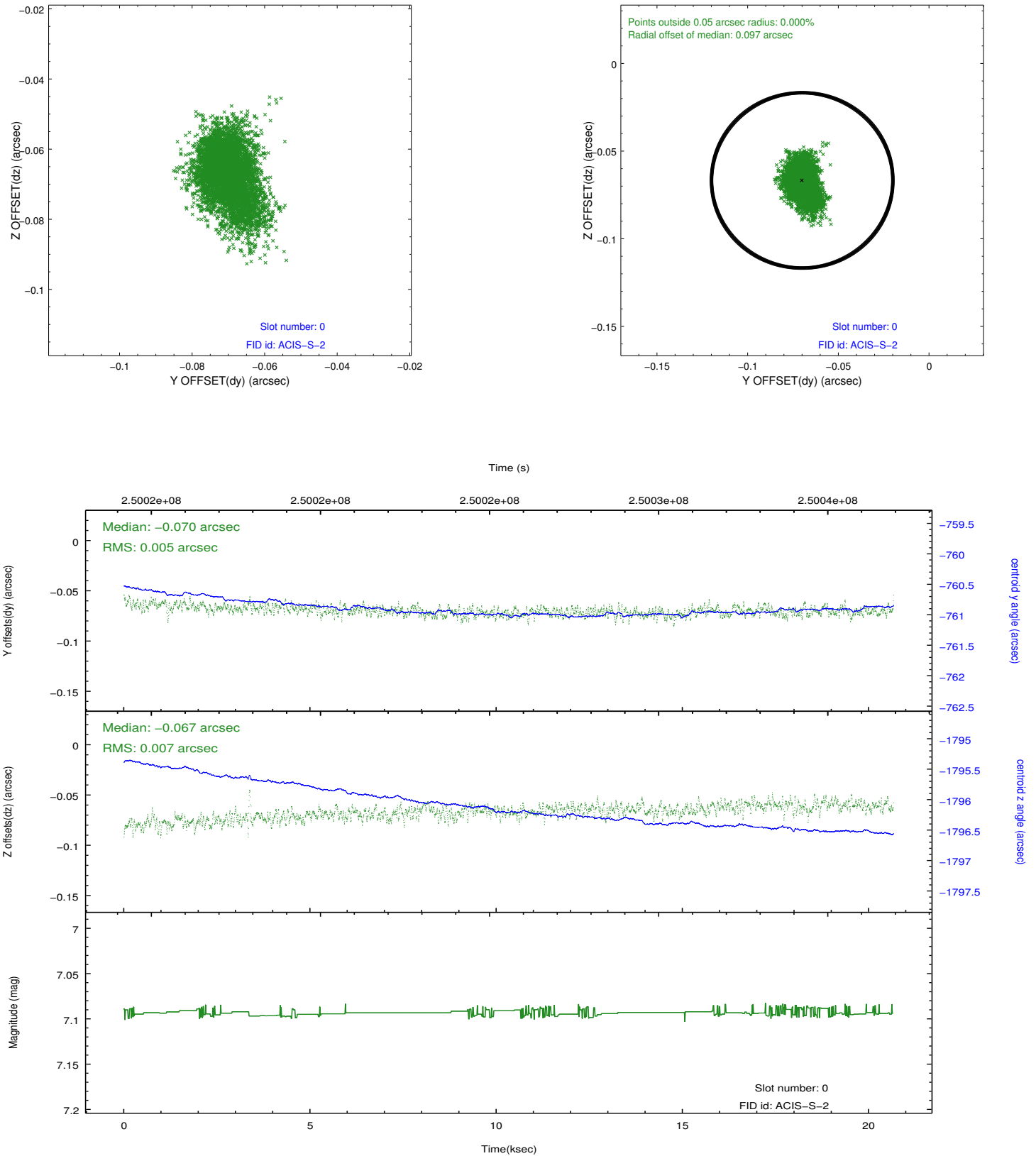


2.4.5 Slot 7

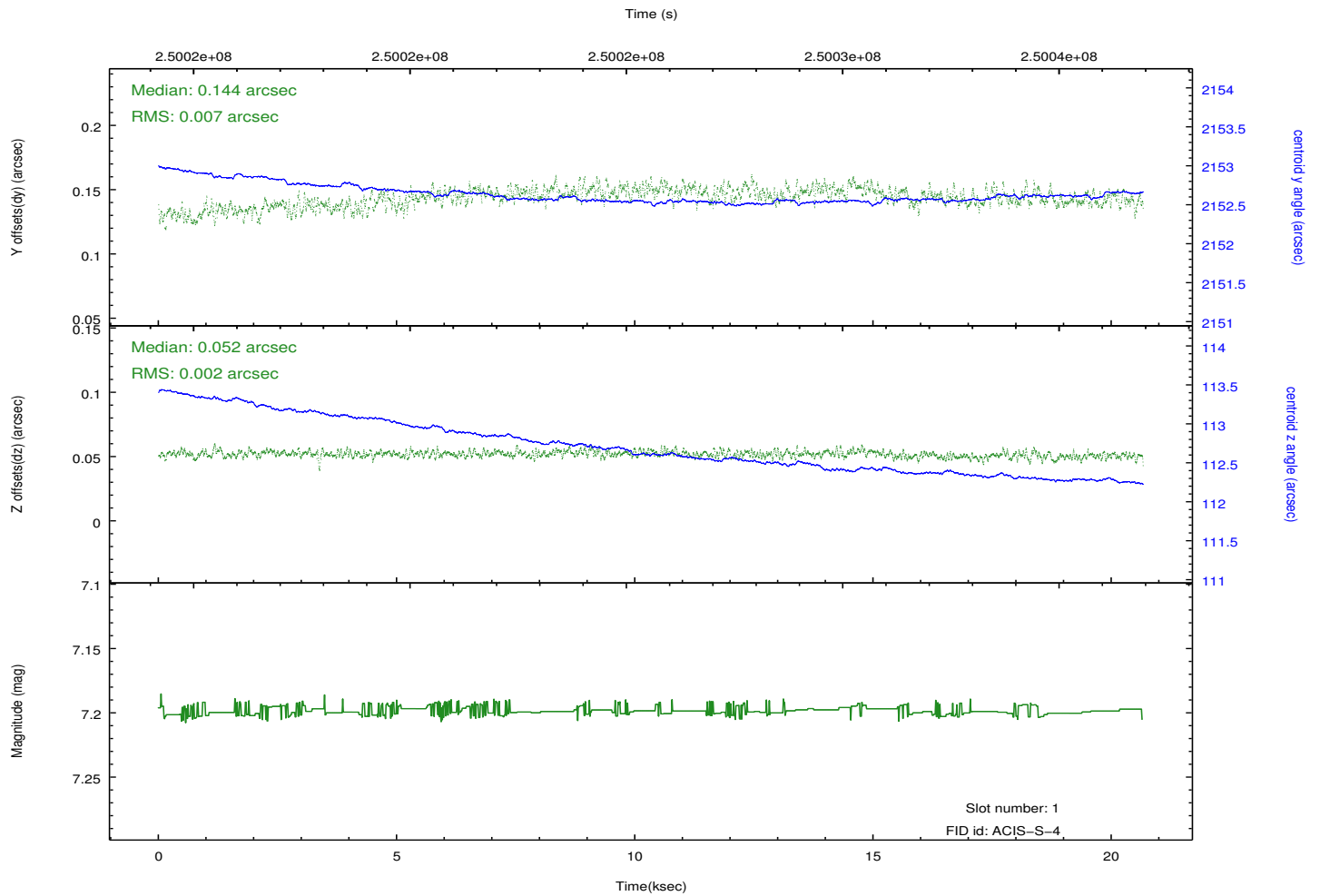
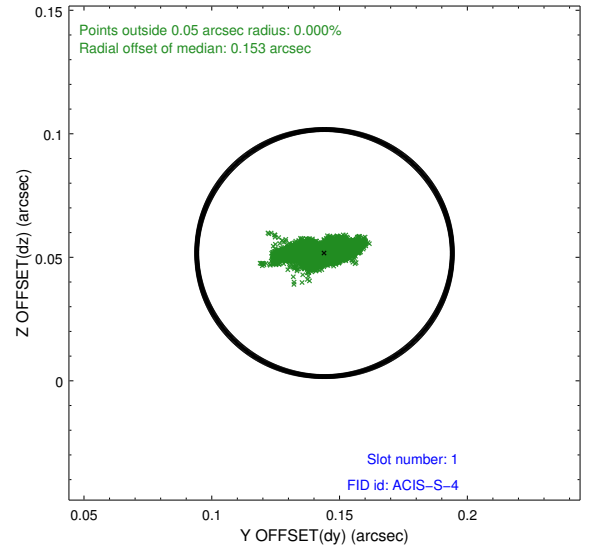
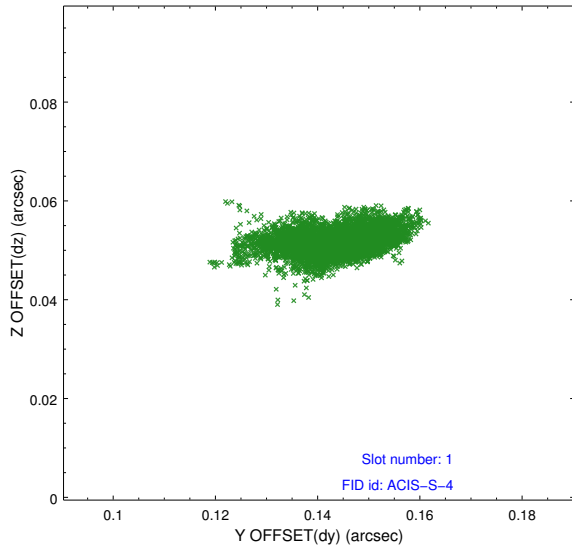


2.5 FID Slots

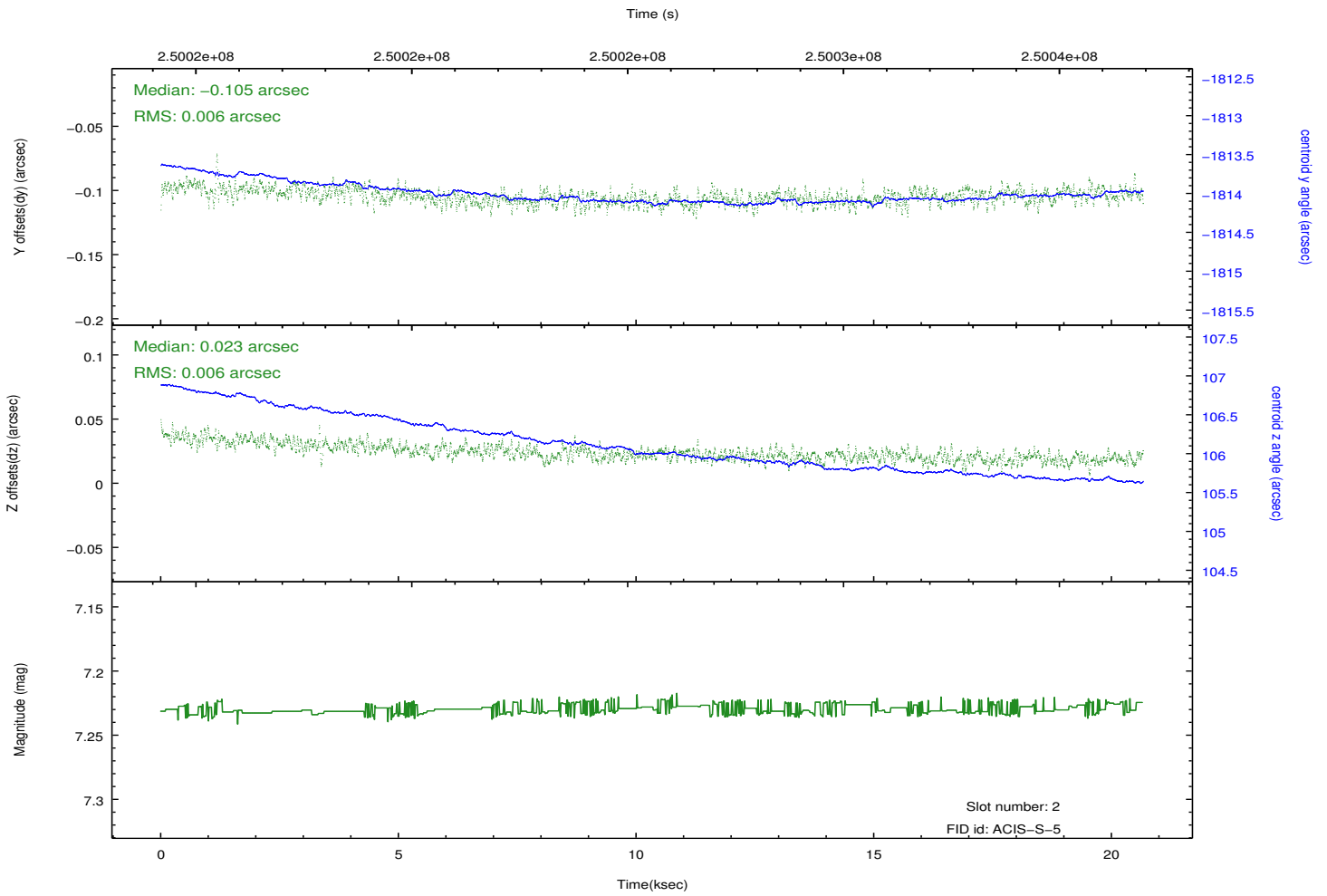
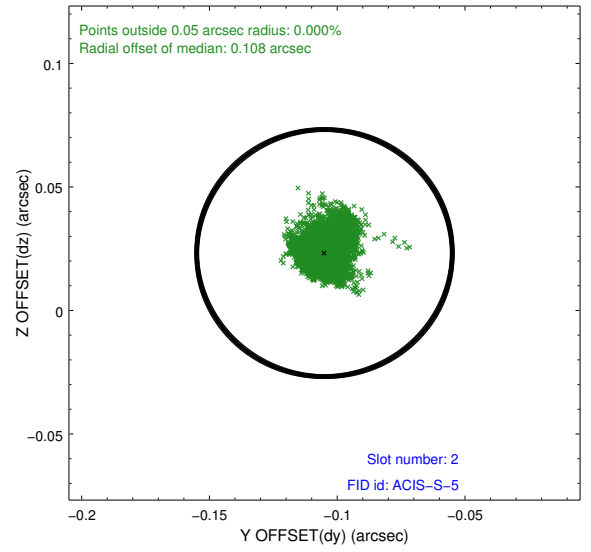
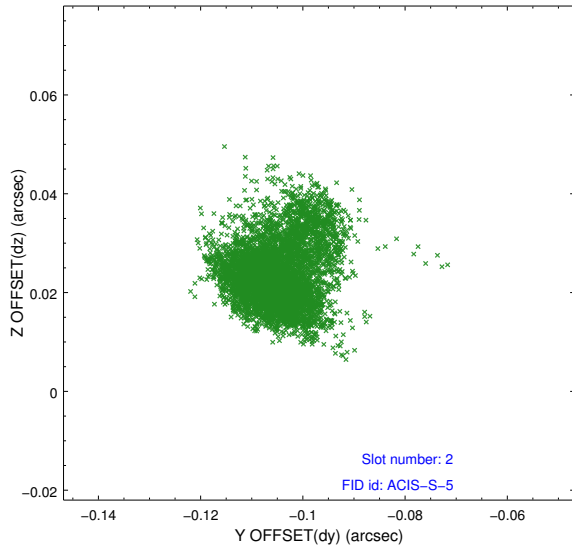
2.5.1 Slot 0



2.5.2 Slot 1

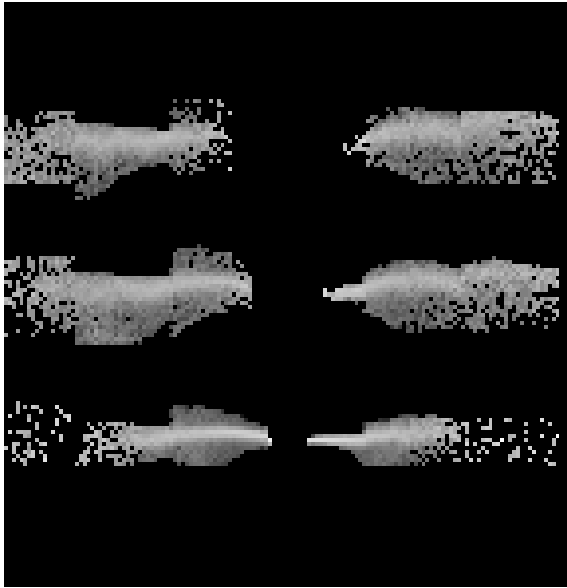


2.5.3 Slot 2

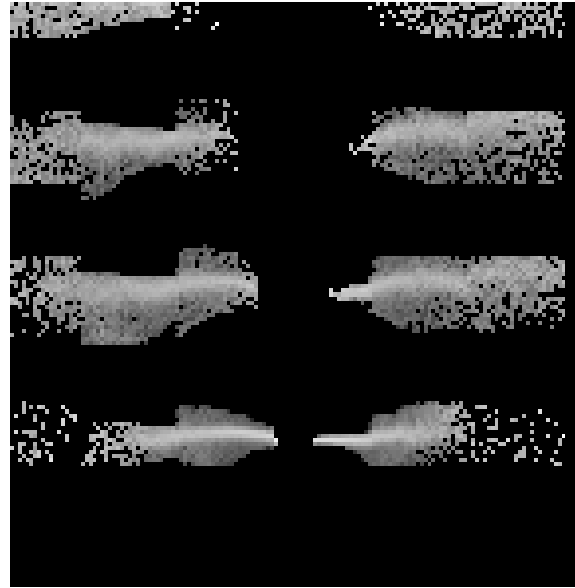


3 Gratings

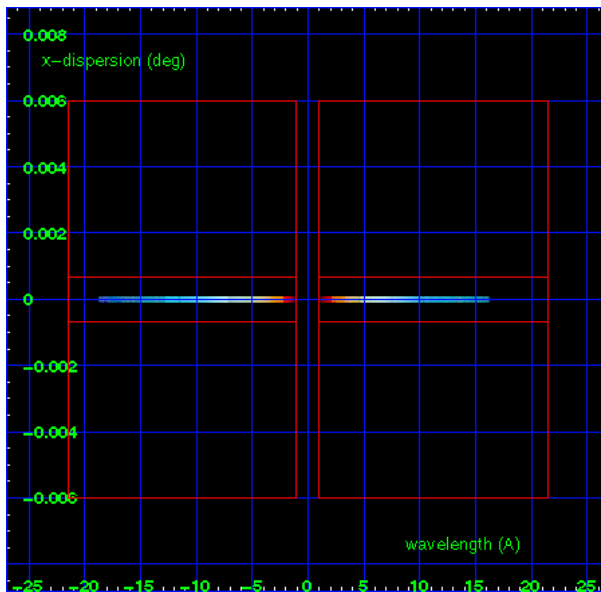
3.1 HEG Arm



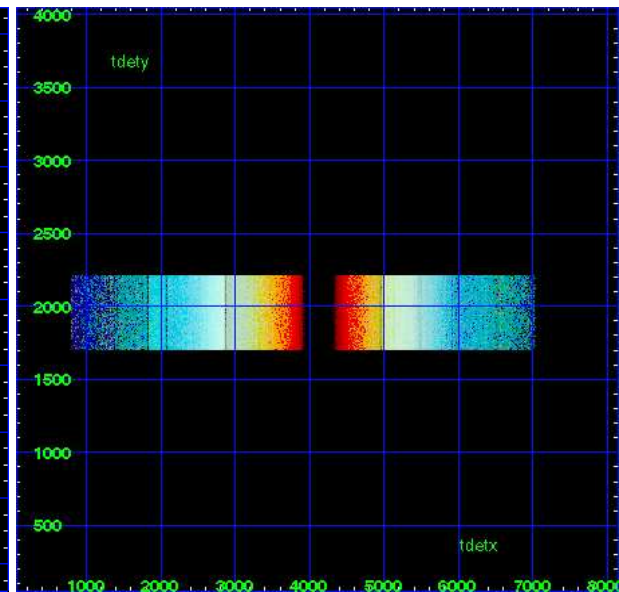
HEG Order Sort 123



HEG Order Sort ALL

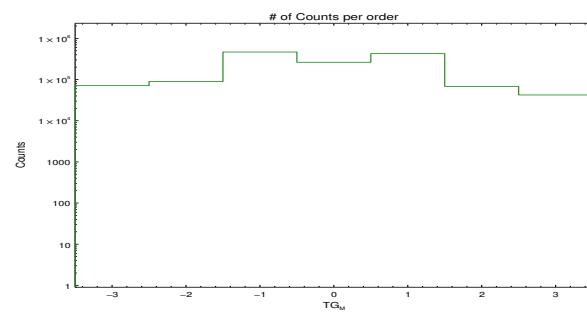


Spot Image HEG

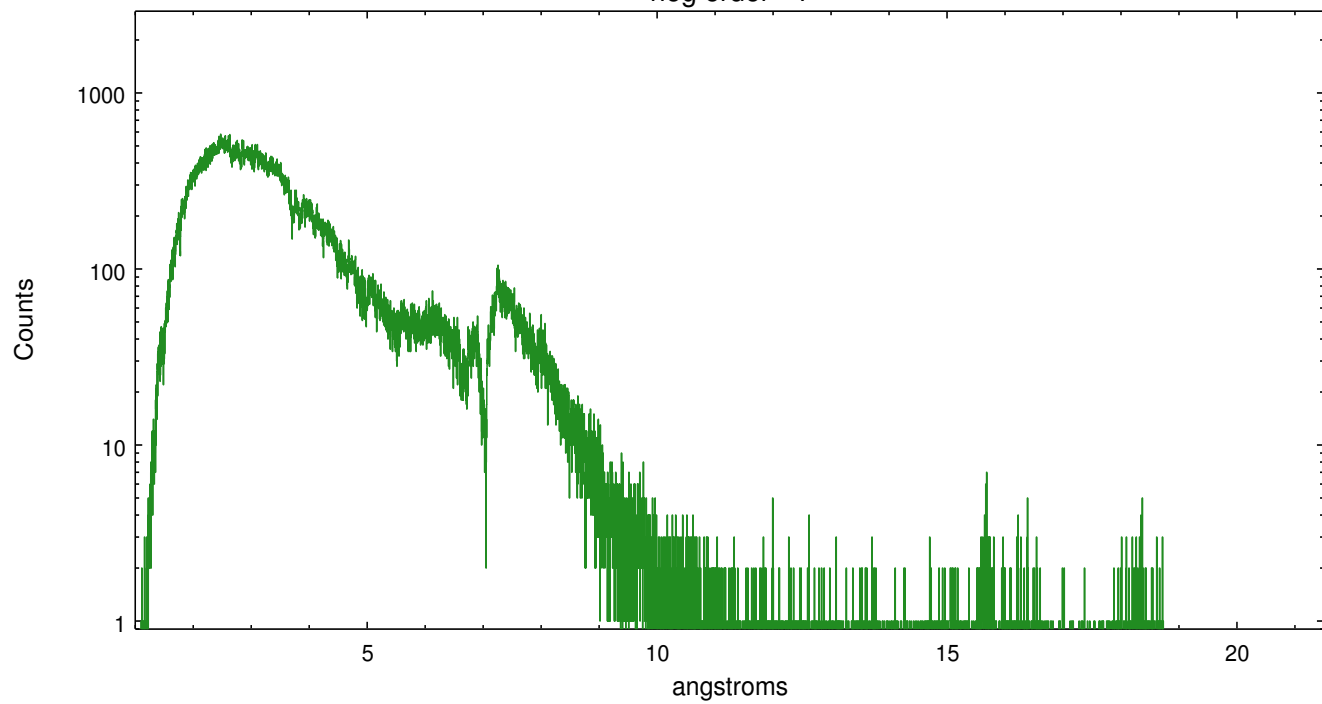


Full Detector HEG

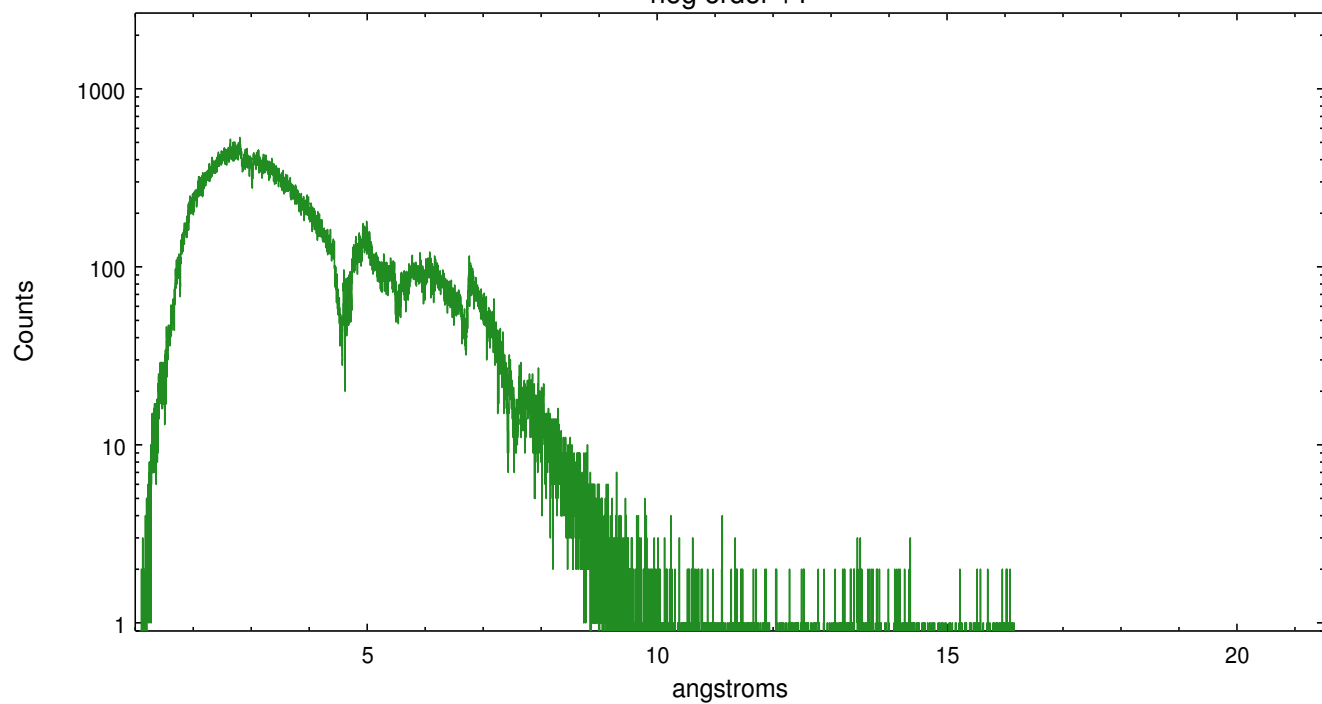
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	71214	89696	466972	262947	427136	68124	42296



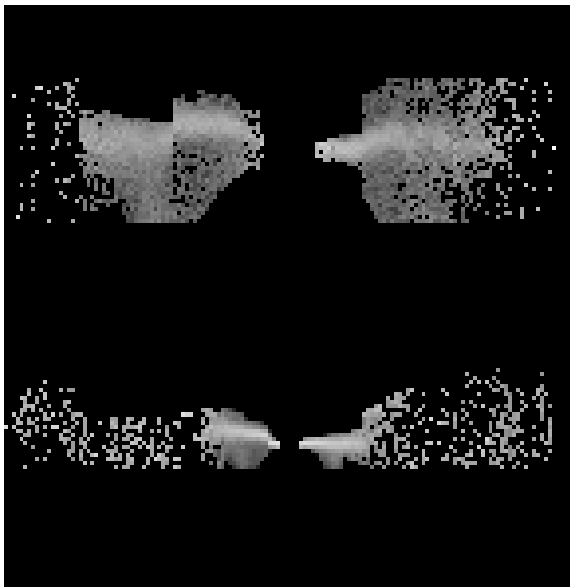
heg order -1



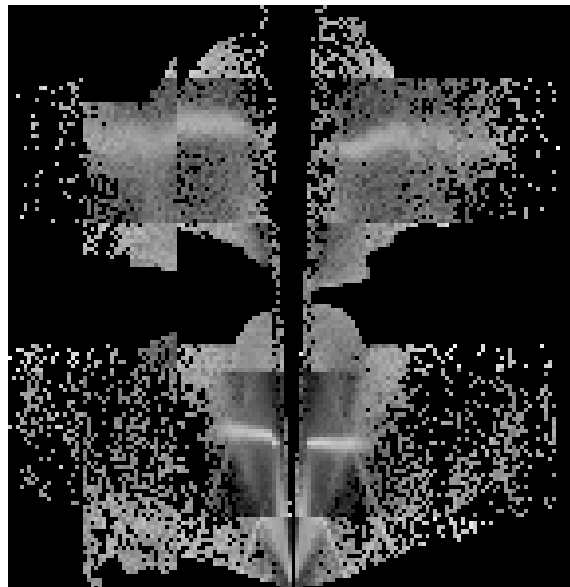
heg order +1



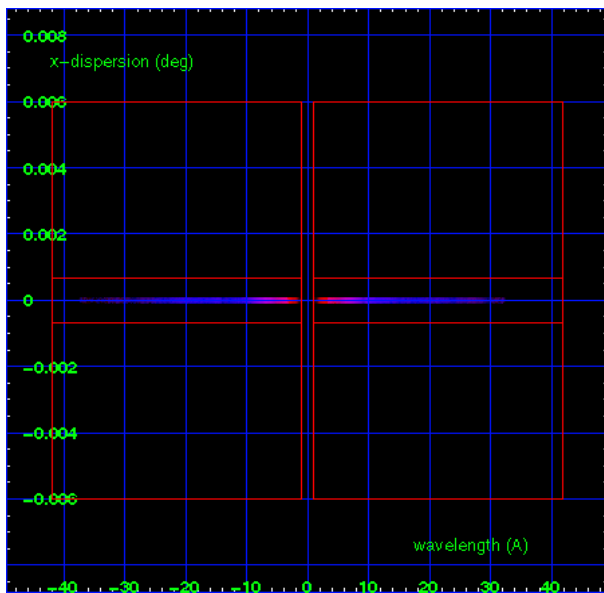
3.2 MEG Arm



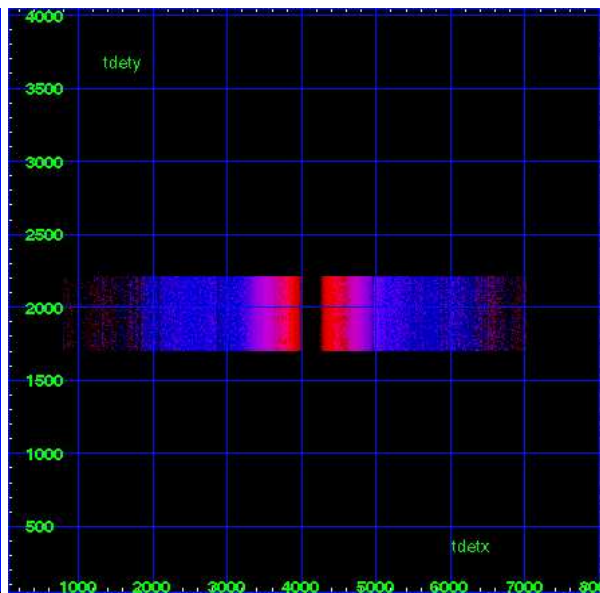
MEG Order Sort 123



MEG Order Sort ALL

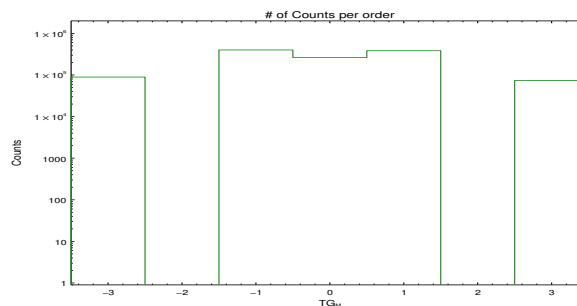


Spot Image MEG

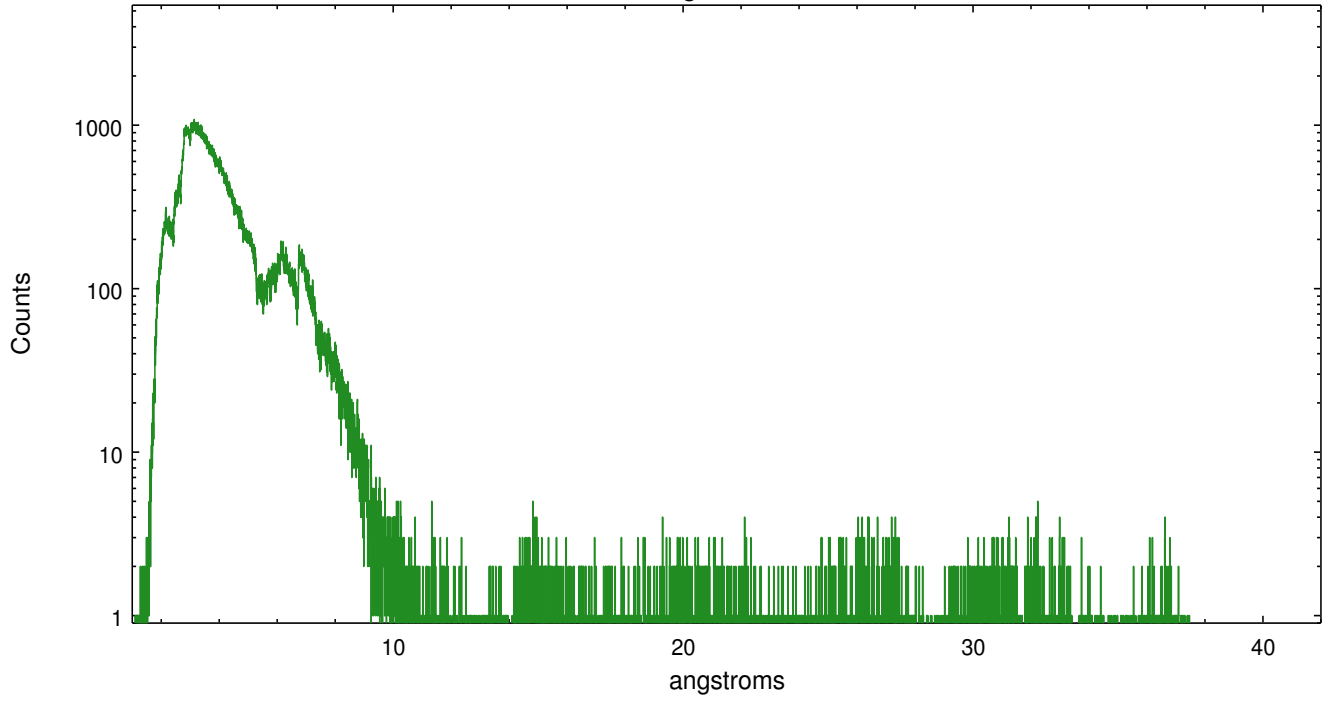


Full Detector MEG

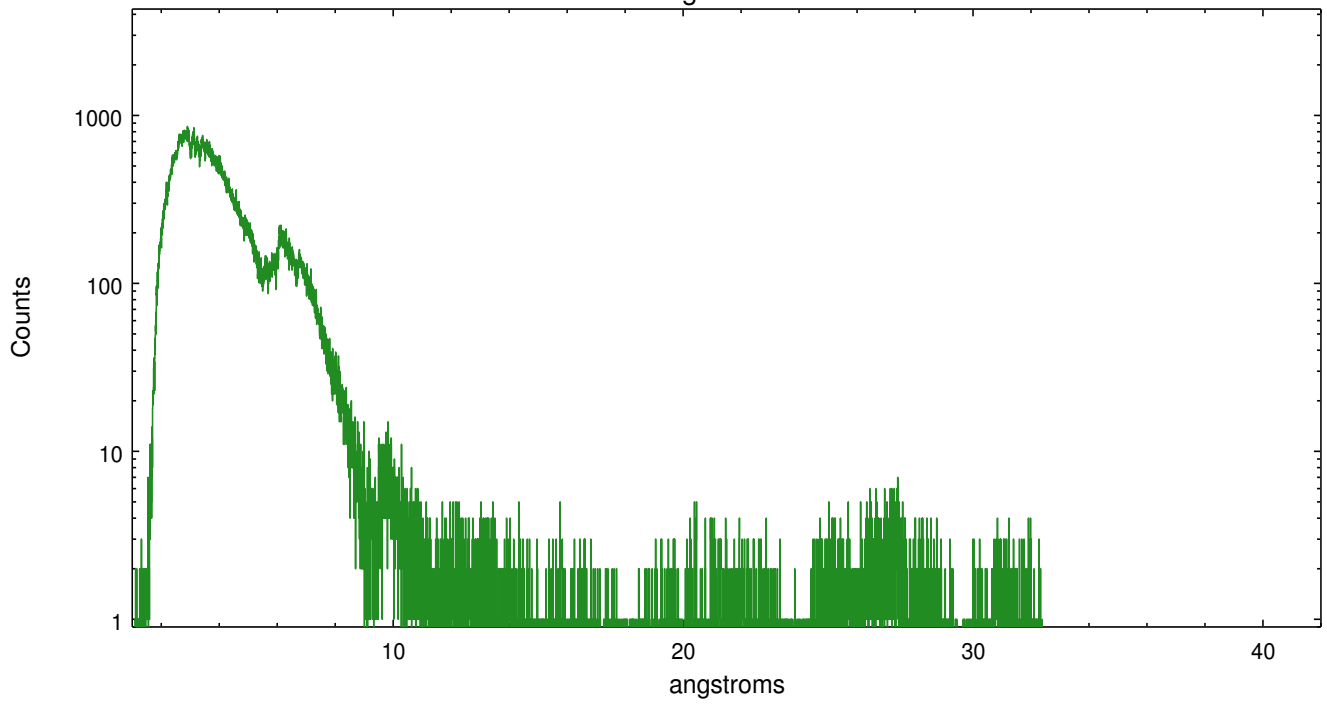
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	89036	0	399285	262947	383311	0	73526



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.03.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.65

A.2 Comments

Telemetry saturation reduces the effective exposure time for some CCDs. The exposure duration was as planned (20ks).