

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 6579 - L2 Version 3
Chandra X-Ray Center

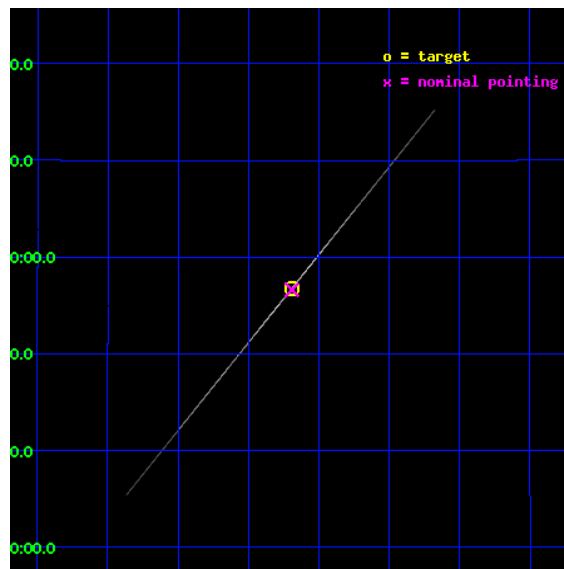
L2 Processing Date : Mar 18 2012

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

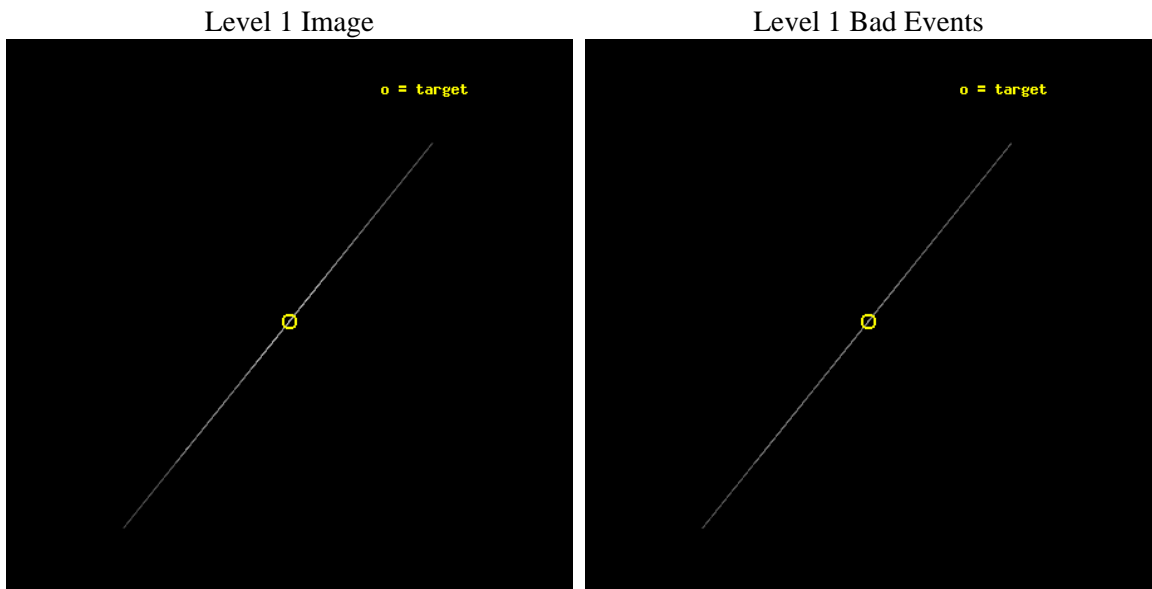
seq_num	400484	Sequence number
obs_id	6579	Observation id
title	Relativistic emission-line or warm absorber in GRS 1915+105	Propos
observer	Prof Mariano Mendez	Principal investigator
object	GRS1915+105	Source name
ra_targ	288.798333	Observer's specified target RA [deg]
dec_targ	10.945806	Observer's specified target Dec [deg]
ra_nom	288.79780668853	Nominal RA [deg]
dec_nom	10.943807685528	Nominal Dec [deg]
roll_nom	309.02182080958	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8593.0815274417	Sum of GTIs [s]
livetime	8559.5148027252	Livetime [s]
ontime4	11695.41969505	Sum of GTIs [s]
ontime5	20654.5	Sum of GTIs [s]
ontime6	8593.172795862	Sum of GTIs [s]
ontime7	8593.0815274417	Sum of GTIs [s]
ontime8	11988.722399086	Sum of GTIs [s]
ontime9	12547.575274765	Sum of GTIs [s]
l2events	3236172	Number of level 2 events



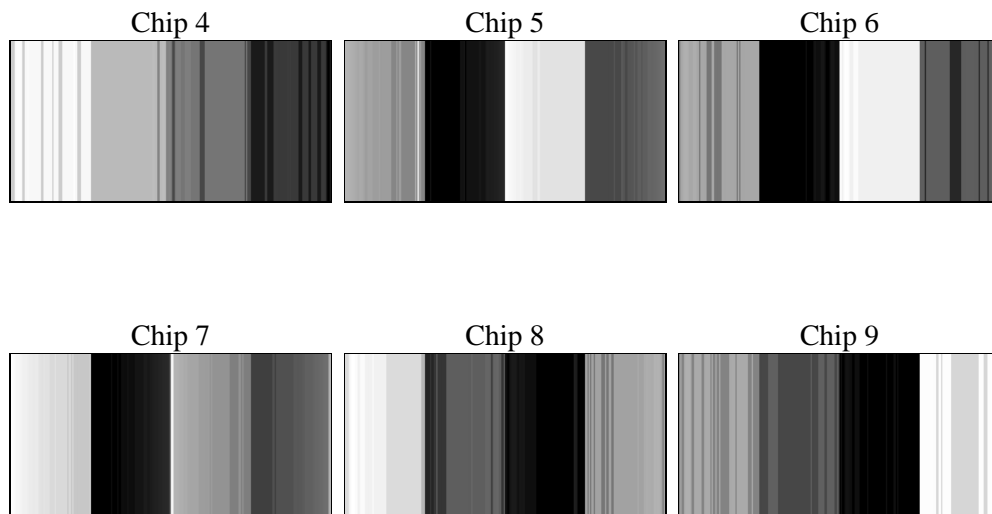
2 OBI

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	8.4.3.1	Processing system revision	ontime	8593.0815274417	Sum of GTIs [s]
caldbver	4.4.8	 	ontime4	11695.41969505	Sum of GTIs [s]
date	2012-03-18T08:41:28	Date and time of file creation	ontime5	20654.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	8593.172795862	Sum of GTIs [s]
			ontime7	8593.0815274417	Sum of GTIs [s]
			ontime8	11988.722399086	Sum of GTIs [s]
			ontime9	12547.575274765	Sum of GTIs [s]
			l1events	3632938	Number of level 1 events

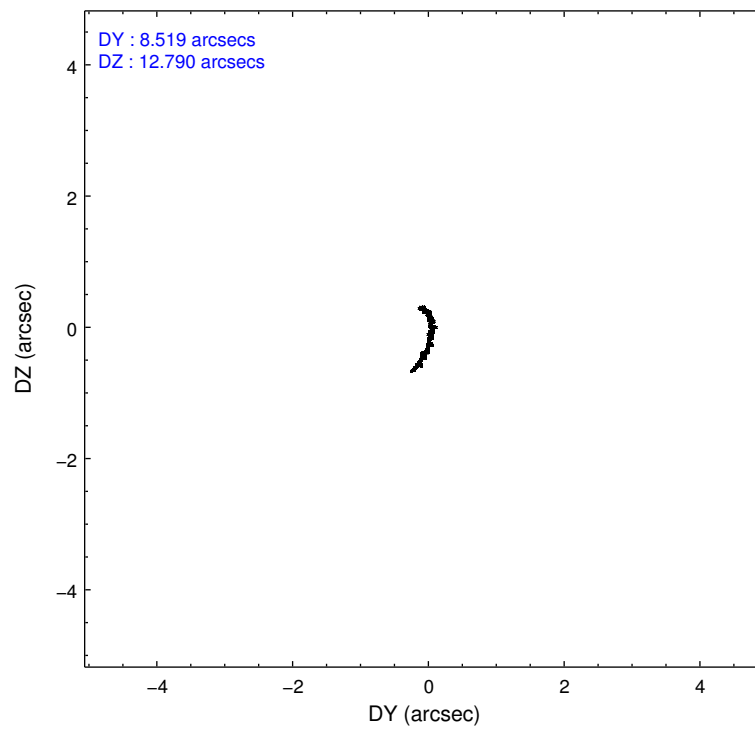
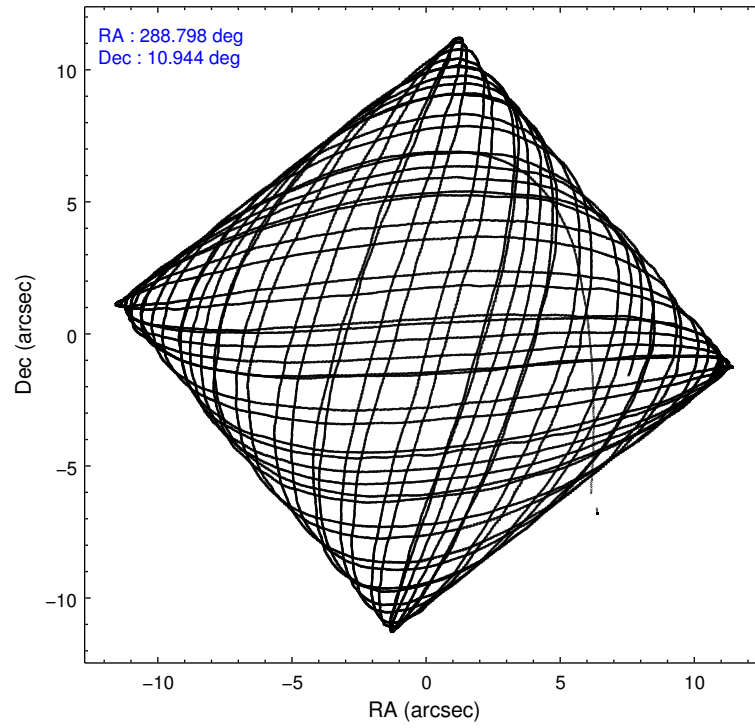
2.1.4 Events

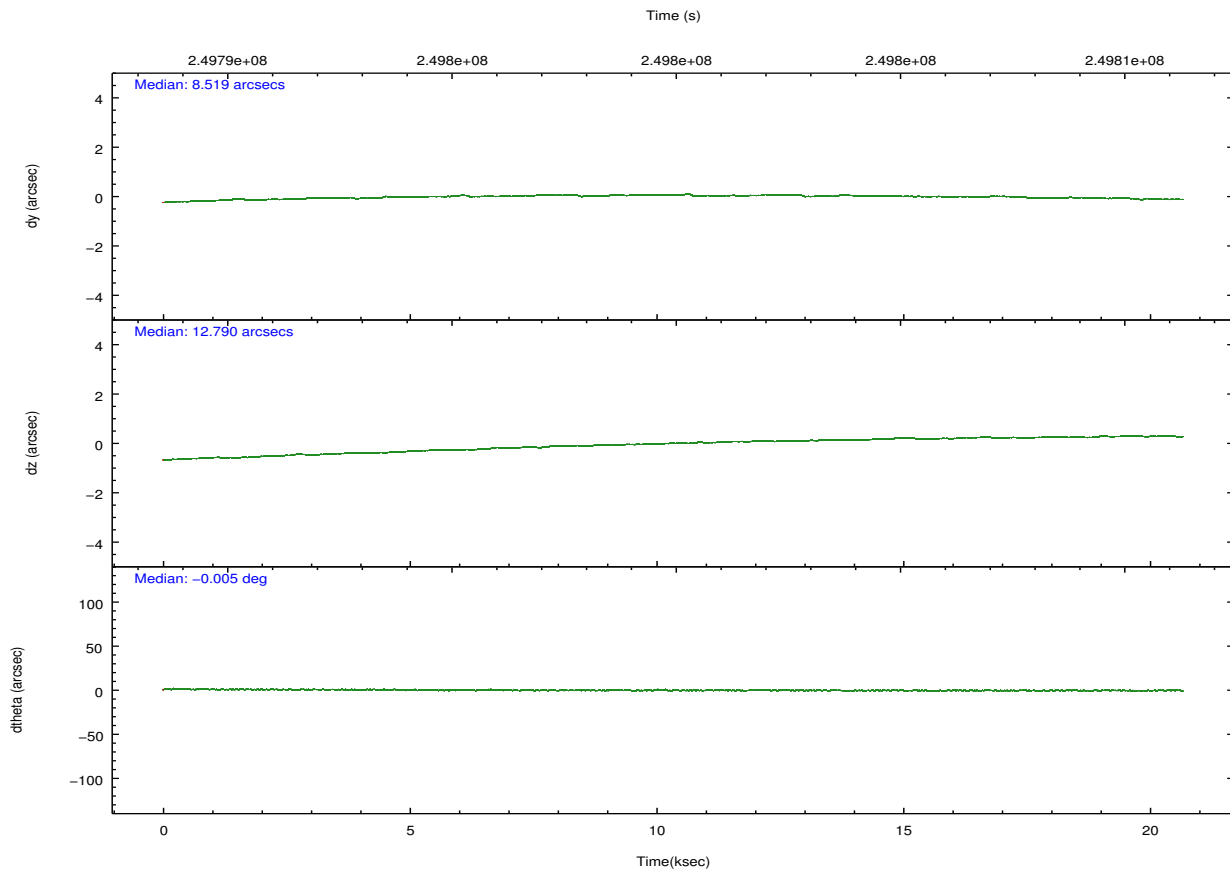
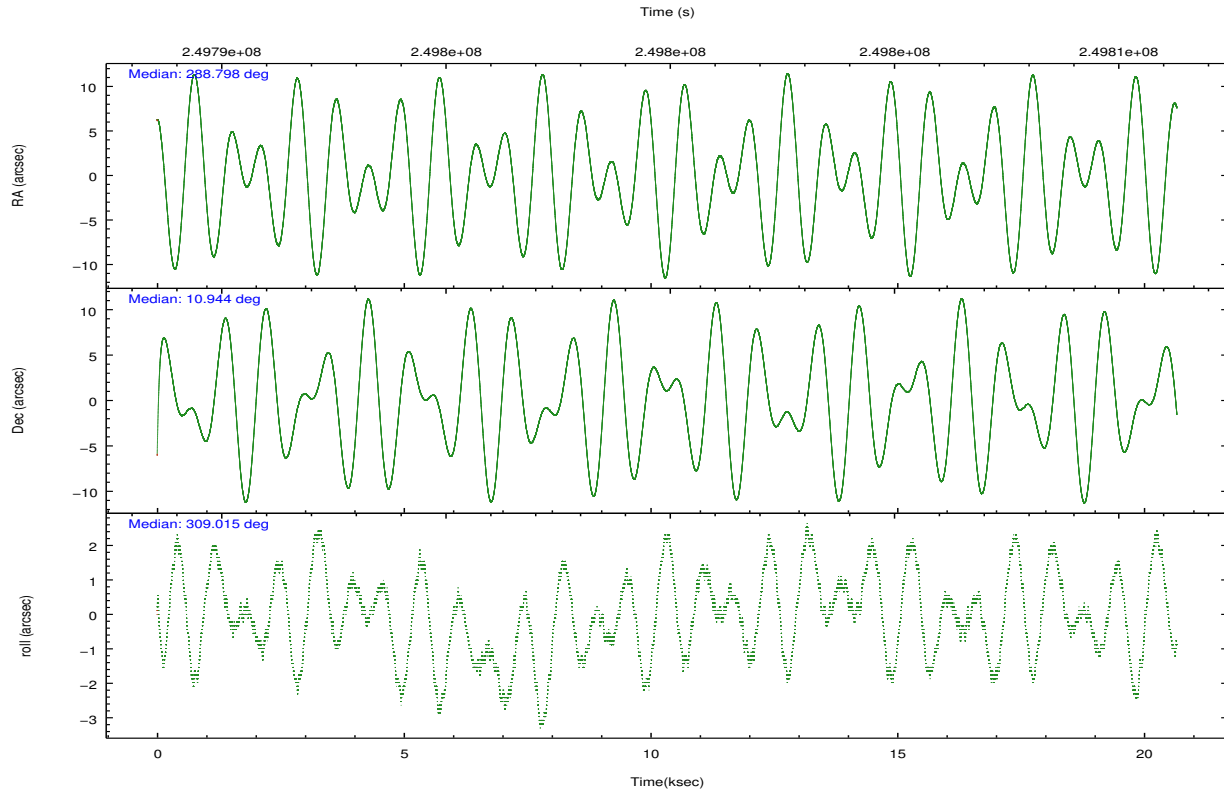
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	54598	375902	907052	1912291	305151	77944	grade 0 events	9439	65203	31260	318123	83429	16305
rejected events	6251	30702	27960	118606	13290	7330		17%	17%	3%	16%	27%	20%
rejected %	11%	8%	3%	6%	4%	9%	grade 1 events	126	306	224	16437	376	128
								0%	0%	0%	0%	0%	0%
							grade 2 events	28810	137764	748955	483187	168988	40912
								52%	36%	82%	25%	55%	52%
							grade 3 events	3002	11931	3549	175171	8357	3066
								5%	3%	0%	9%	2%	3%
							grade 4 events	3125	11804	3406	173817	8202	3310
								5%	3%	0%	9%	2%	4%
							grade 5 events	4114	19214	8074	75511	7542	5290
								7%	5%	0%	3%	2%	6%
							grade 6 events	5982	129680	111584	670045	28257	8933
								10%	34%	12%	35%	9%	11%
							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	288.771775	288.7978066885257	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.953186	10.9438076855277	Alternating exposures requested	N	N
[deg] Pointing Roll	308.870134	309.021820809583	[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)	249789755.184000	249788629.72981			
Observation start date	2005-12-01T02:01:31	2005-12-01T01:43:49			
[s] Observation end time (MET)	249810255.184000	249811264.80586			
Observation end date	2005-12-01T07:43:11	2005-12-01T08:01:04			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



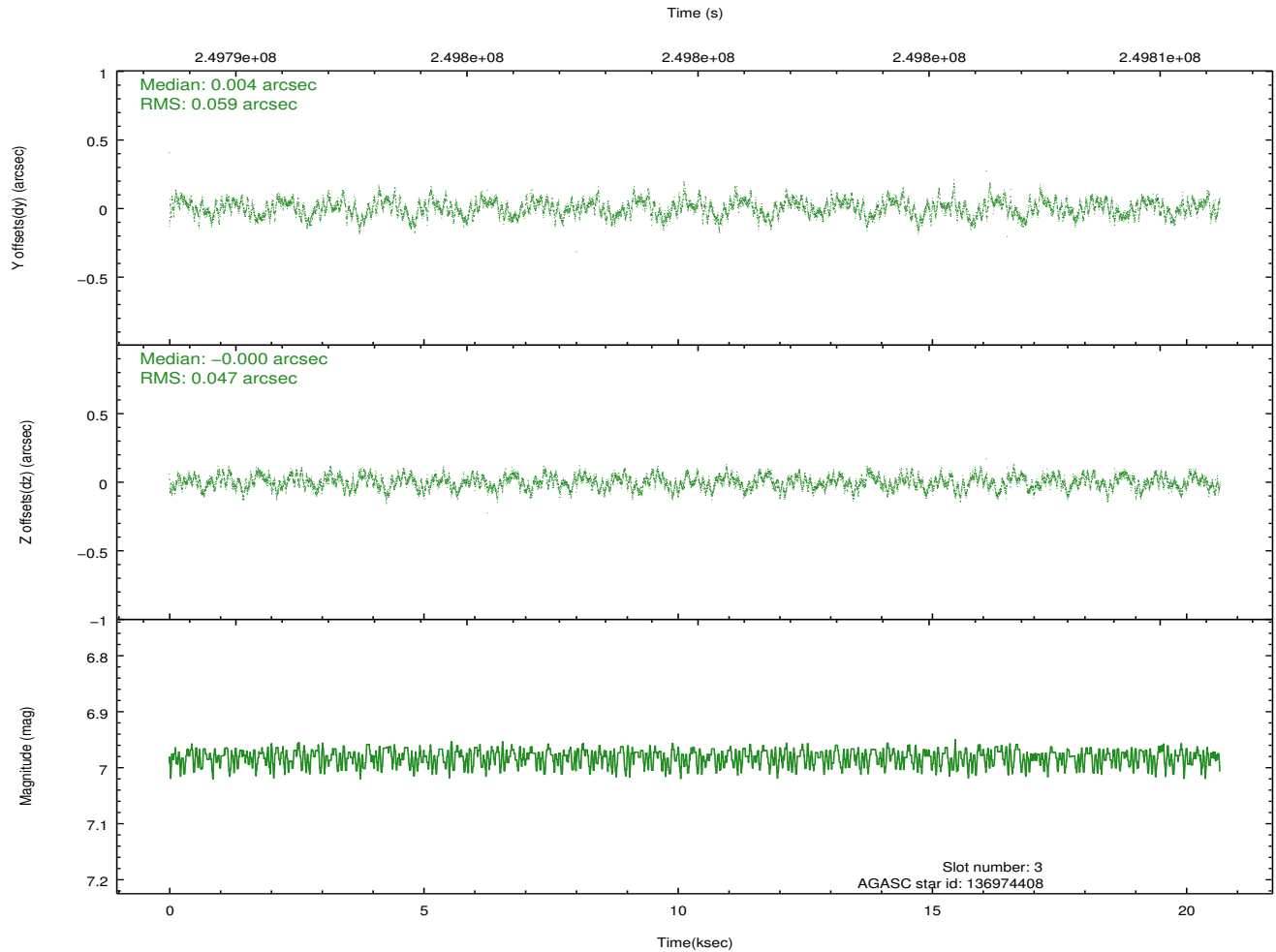
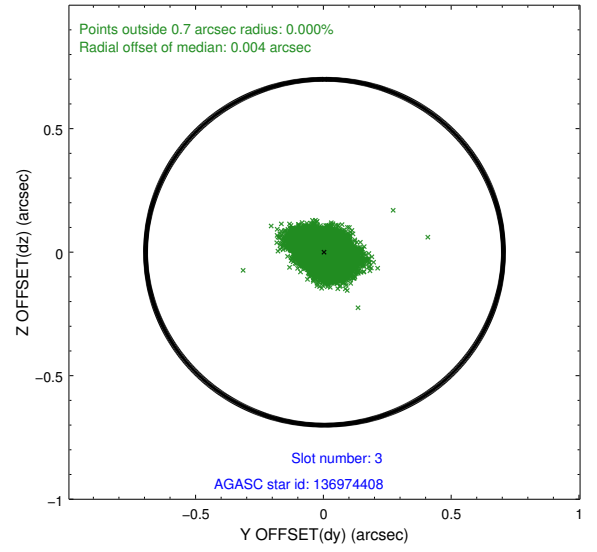
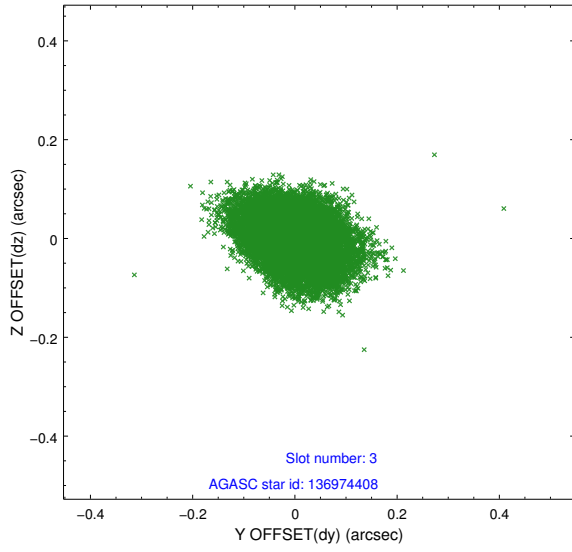


Slot Statistics

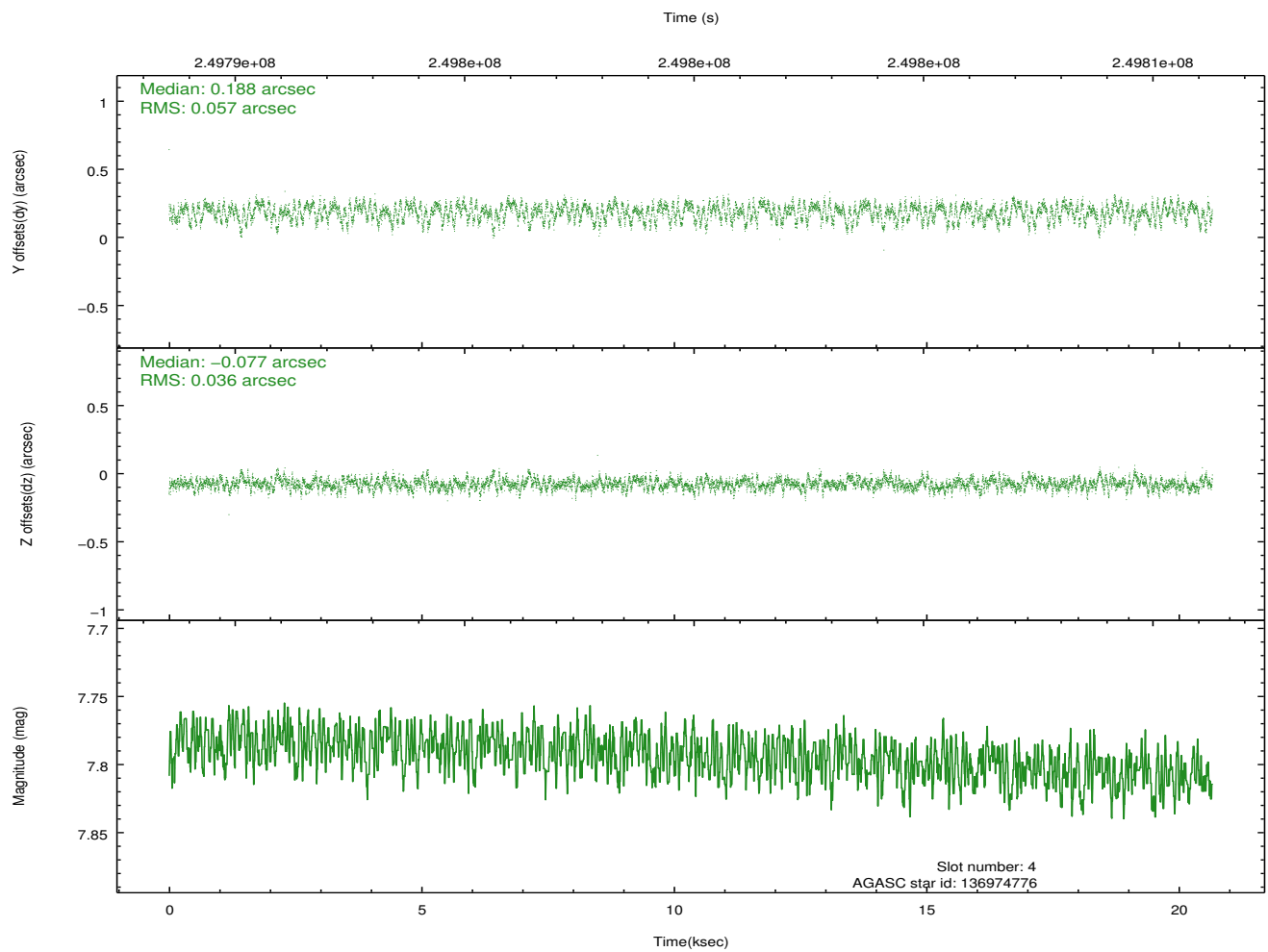
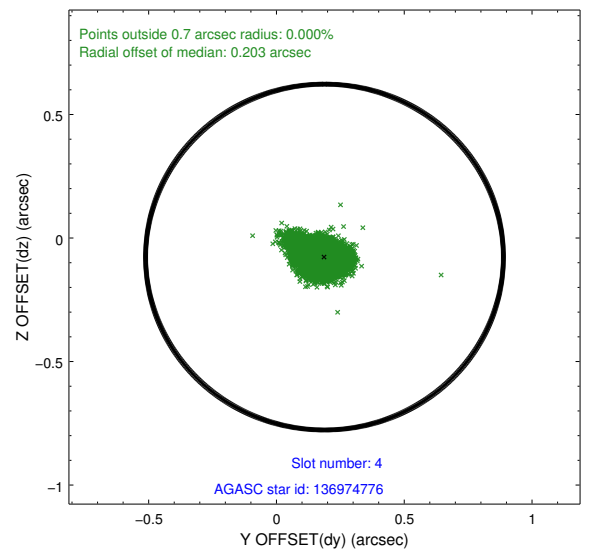
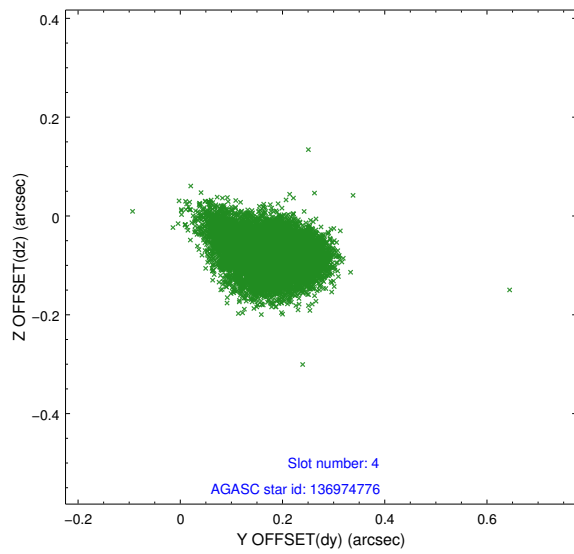
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5041	-0.075	-0.068	0.008	0.015	0.000000	0.000000	-761.13	-1796.21
1	FID	ACIS-S-4	7.20	5039	0.155	0.055	0.007	0.013	0.000000	0.000000	2152.27	112.24
2	FID	ACIS-S-5	7.23	5041	-0.112	0.022	0.009	0.014	0.000000	0.000000	-1813.81	106.02
3	GUIDE	136974408	6.98	10081	0.004	-0.000	0.081	0.126	288.806802	10.212409	2154.83	-1576.57
4	GUIDE	136974776	7.79	10076	0.188	-0.077	0.070	0.118	288.742109	10.409402	1459.23	-1310.20
5	GUIDE	136977584	8.42	10081	0.072	-0.043	0.060	0.097	288.635599	10.555283	813.55	-1274.01
6	GUIDE	137497048	7.97	10080	-0.070	0.004	0.056	0.090	288.896055	11.554718	-1409.31	1700.43
7	GUIDE	137498872	7.05	10080	-0.187	0.118	0.051	0.077	288.350862	11.344926	-2030.86	-270.87

2.4 Star Slots

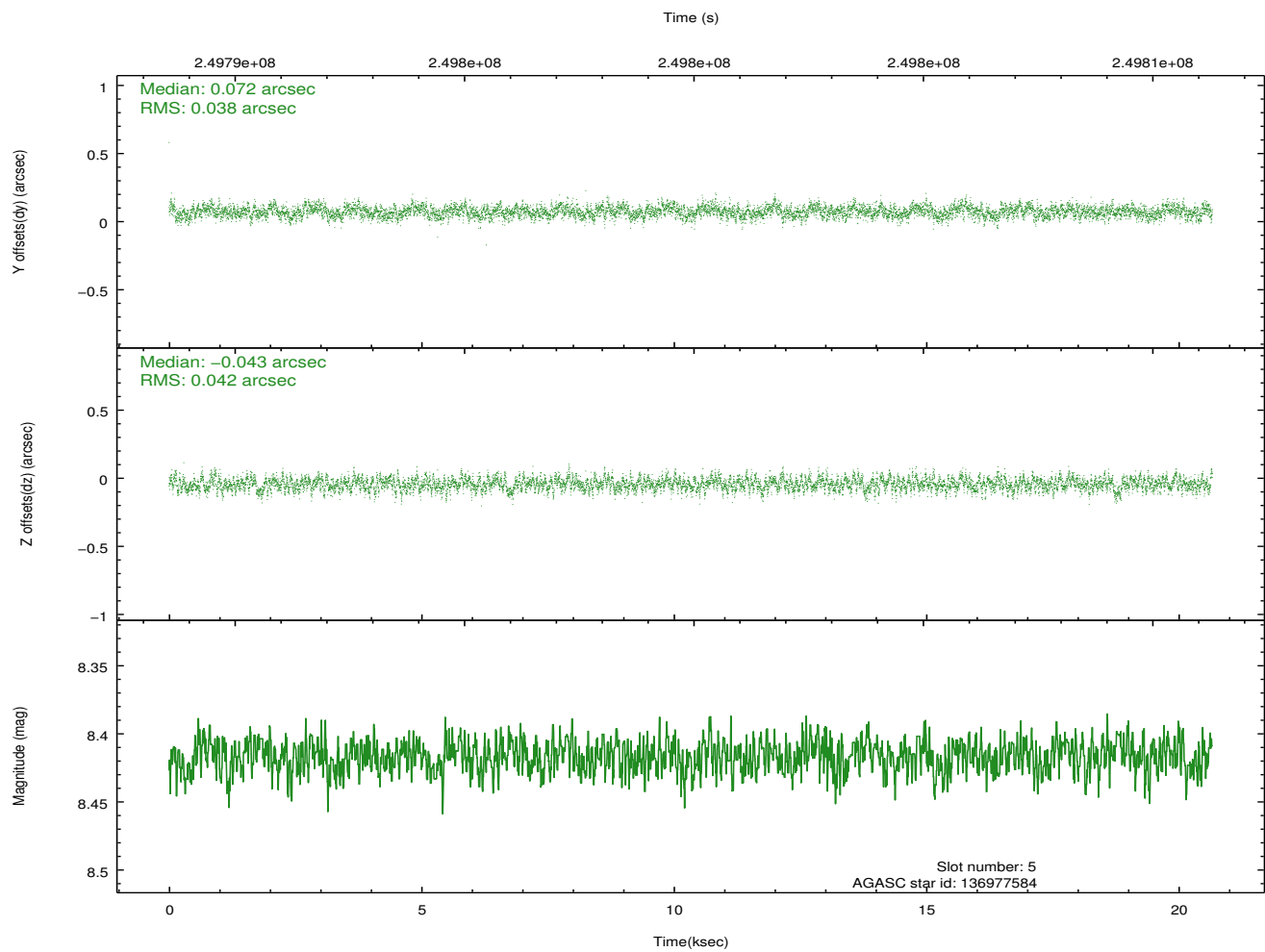
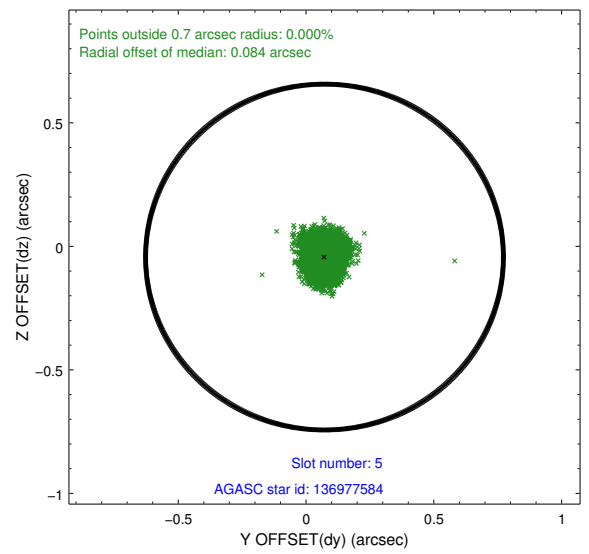
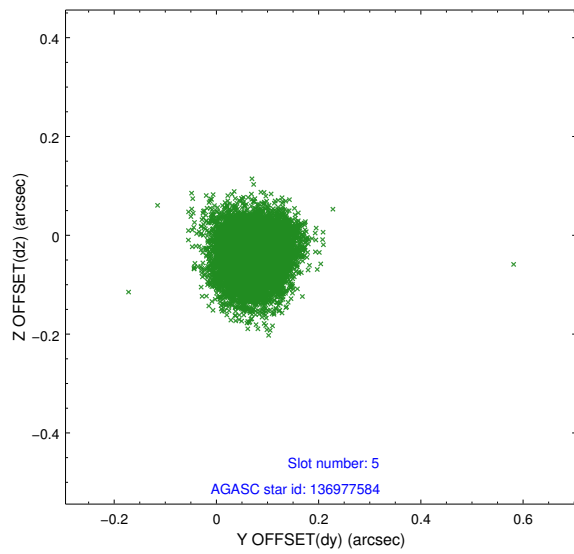
2.4.1 Slot 3



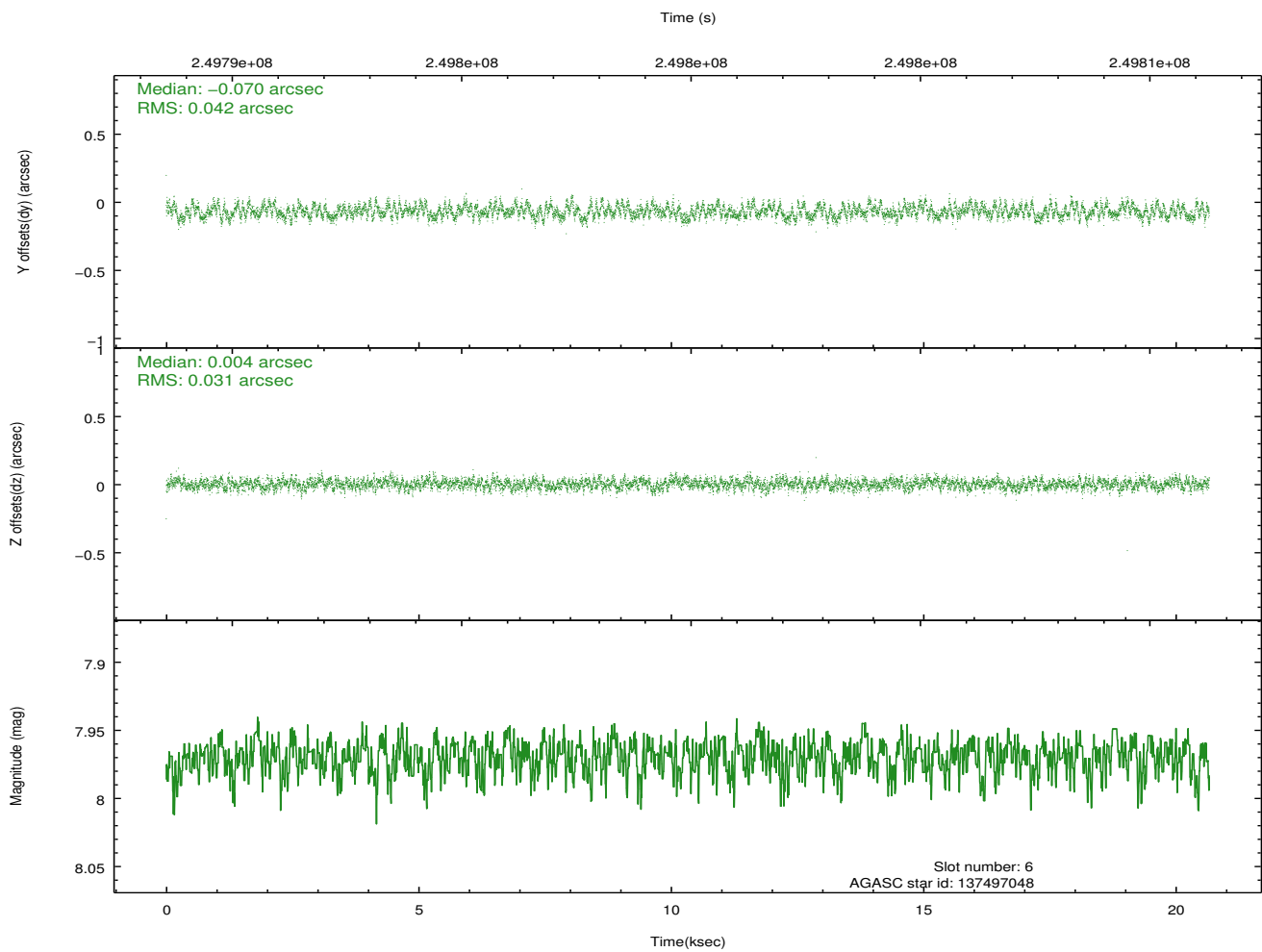
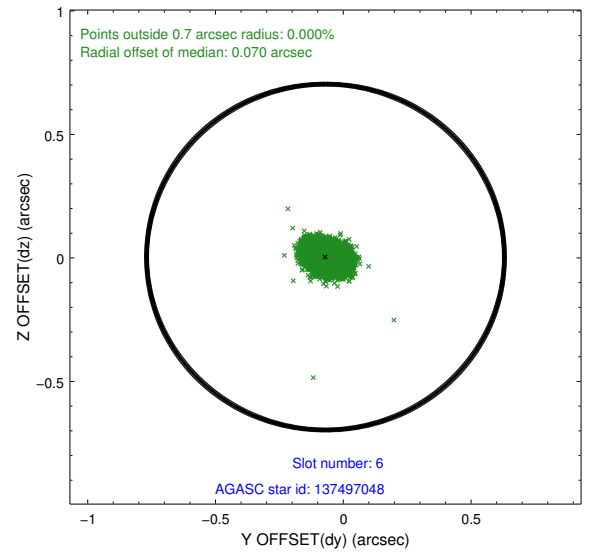
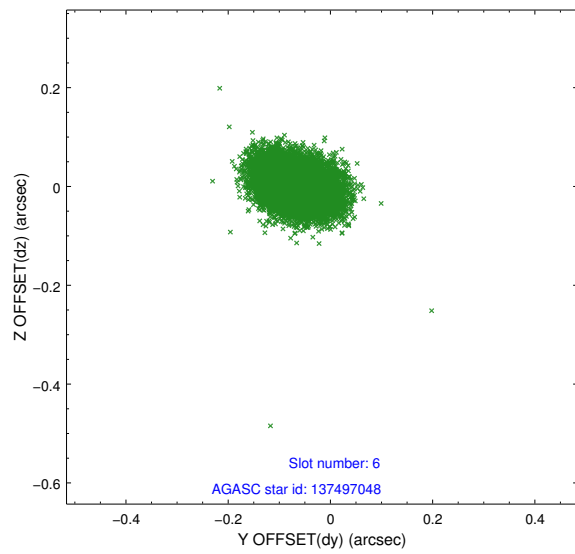
2.4.2 Slot 4



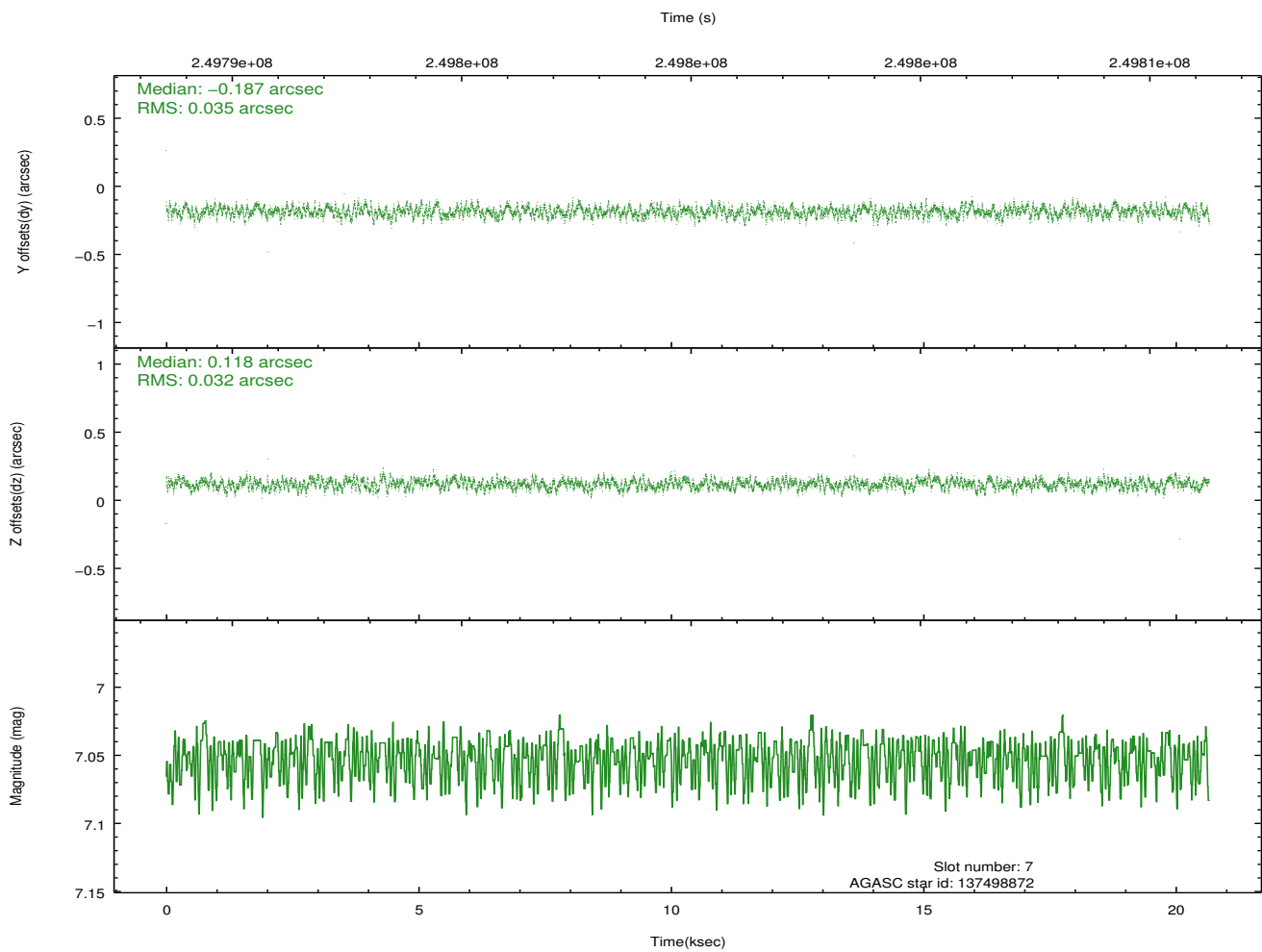
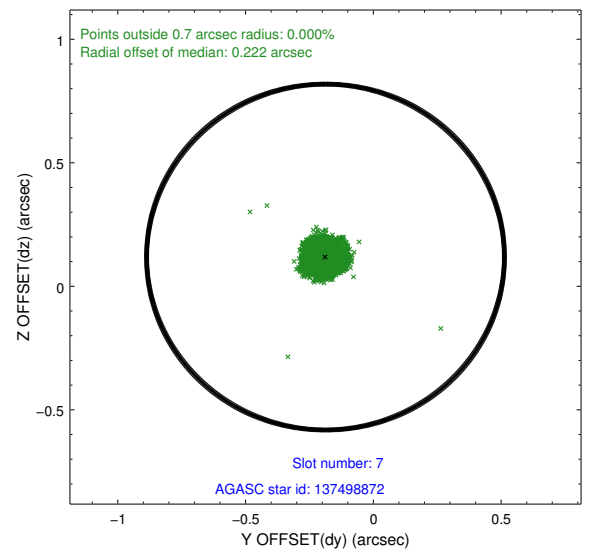
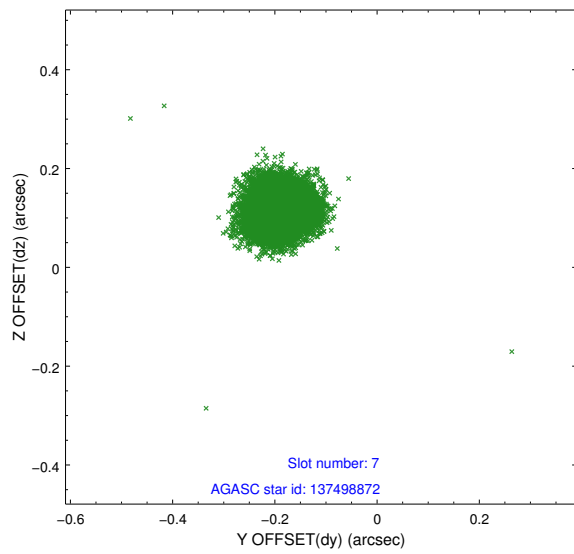
2.4.3 Slot 5



2.4.4 Slot 6

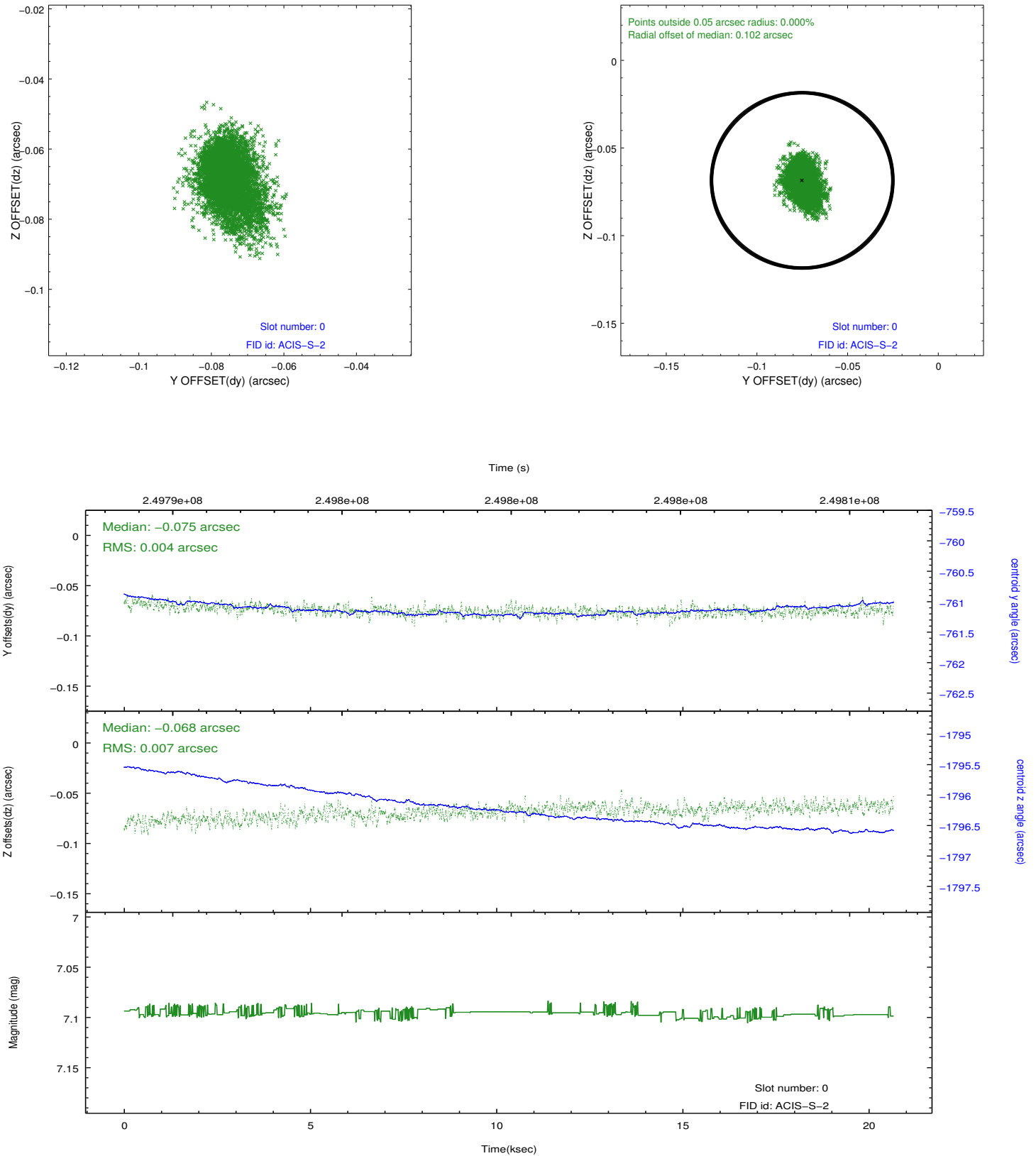


2.4.5 Slot 7

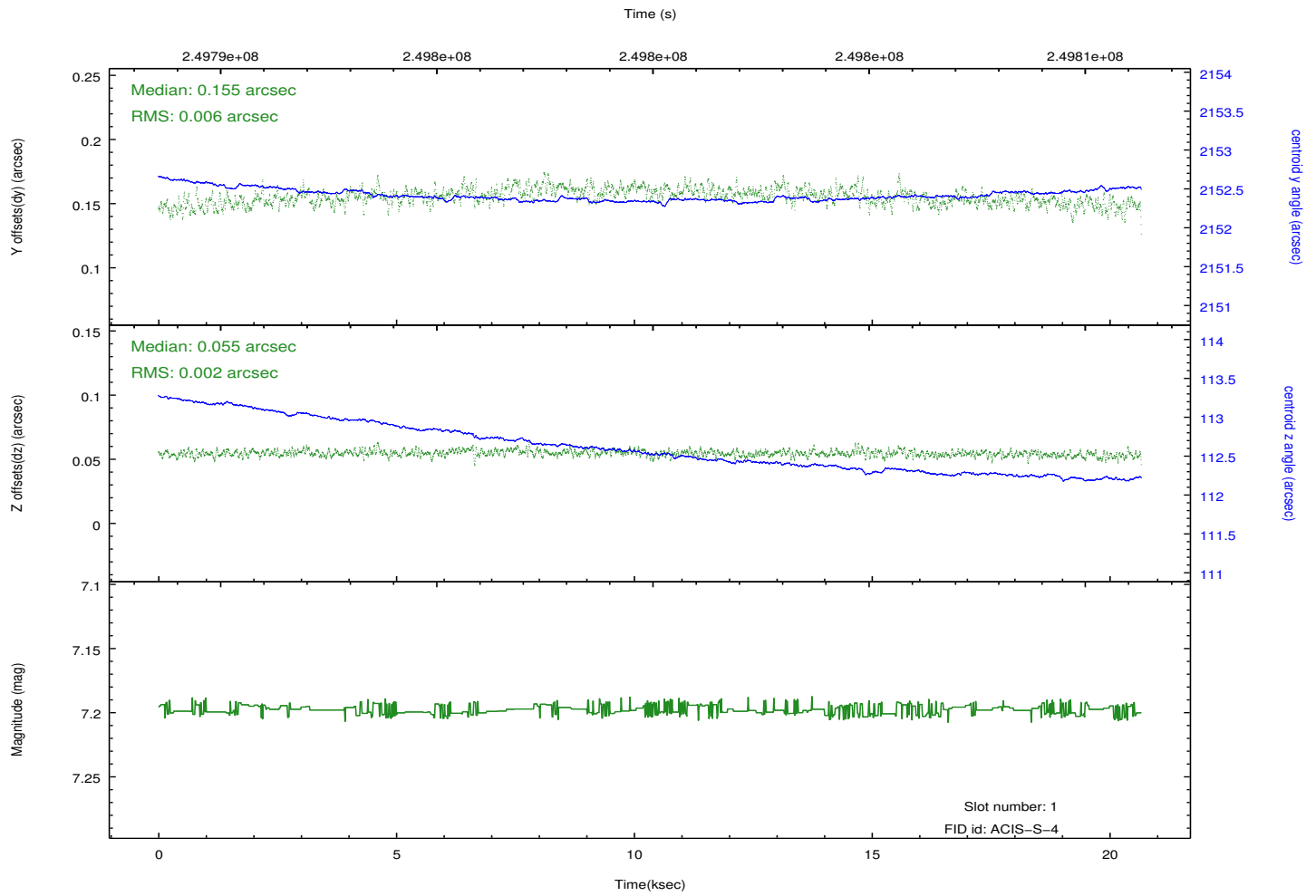
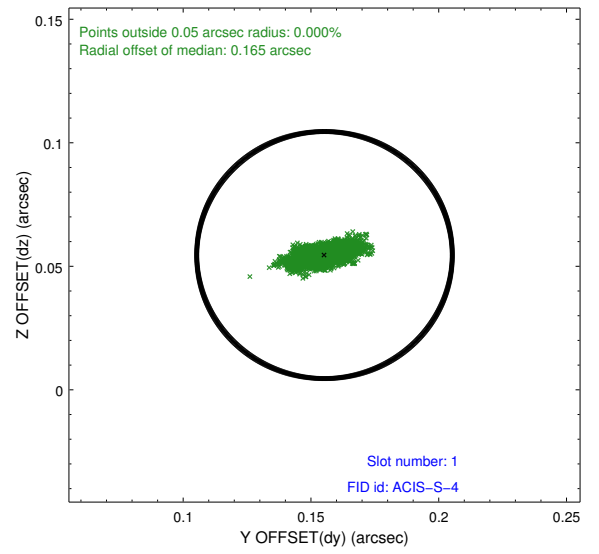
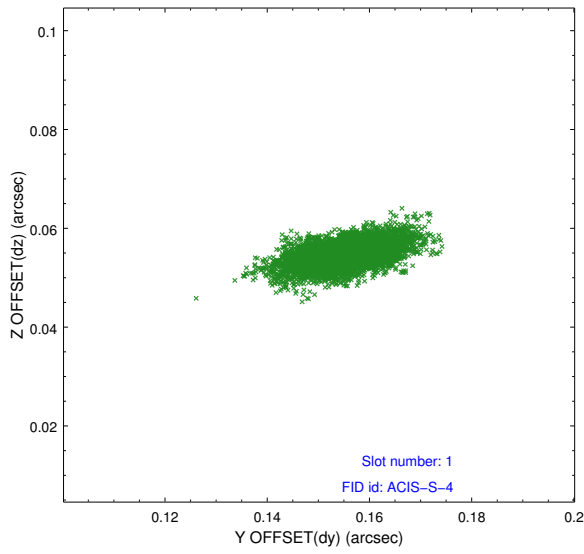


2.5 FID Slots

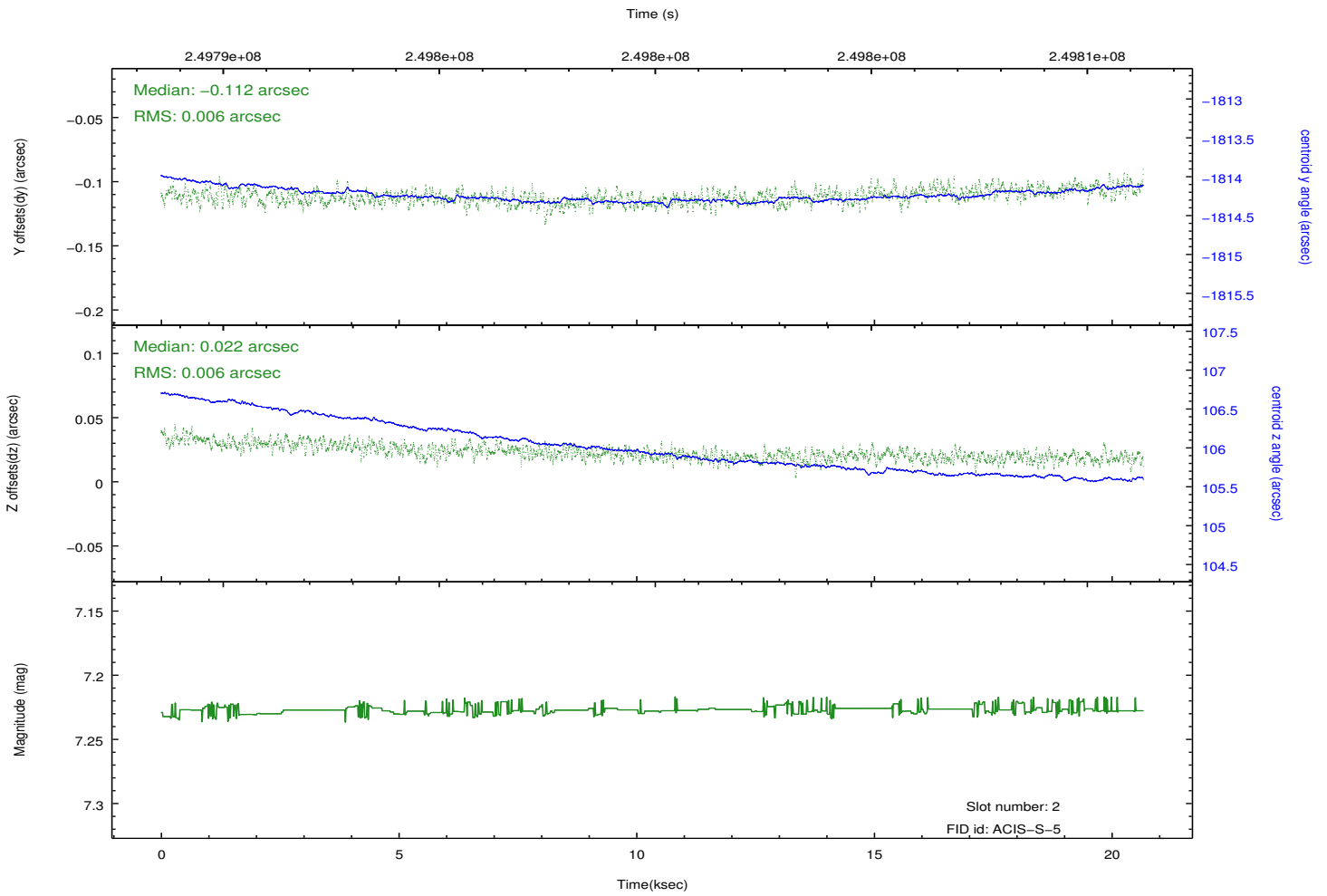
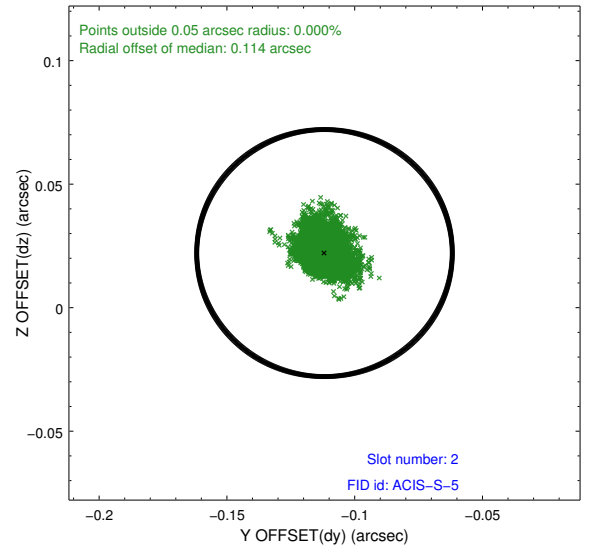
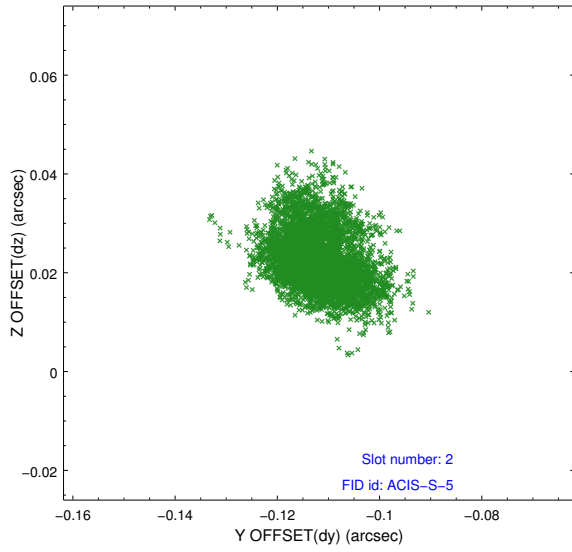
2.5.1 Slot 0



2.5.2 Slot 1

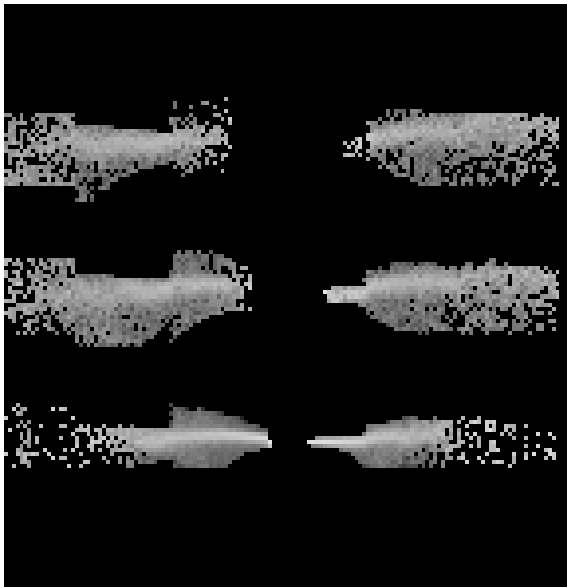


2.5.3 Slot 2

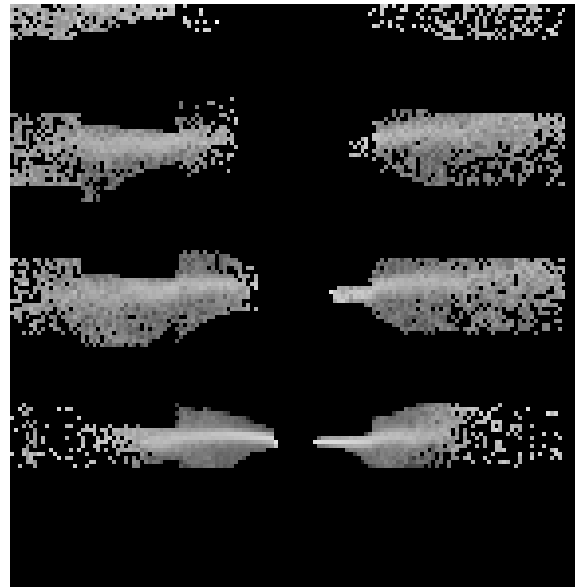


3 Gratings

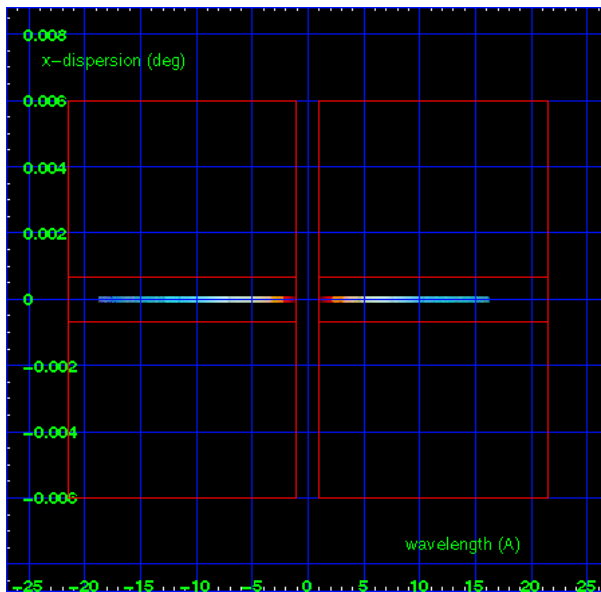
3.1 HEG Arm



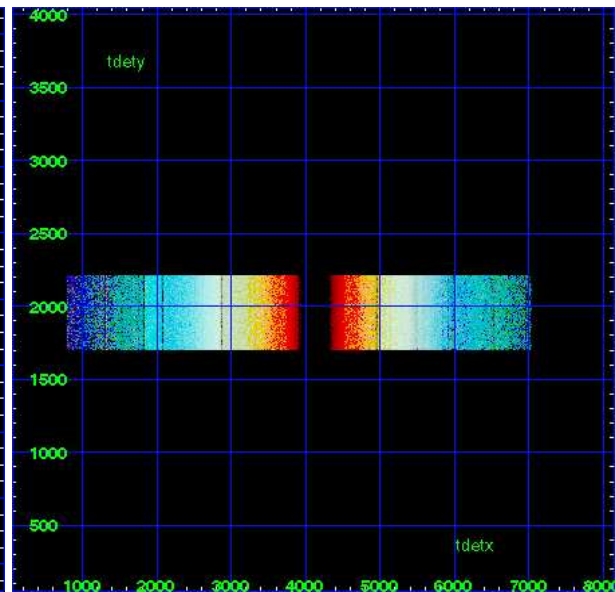
HEG Order Sort 123



HEG Order Sort ALL

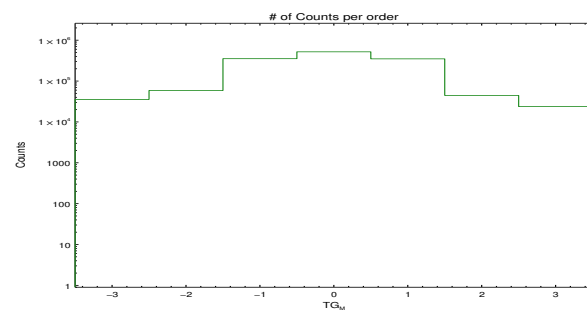


Spot Image HEG

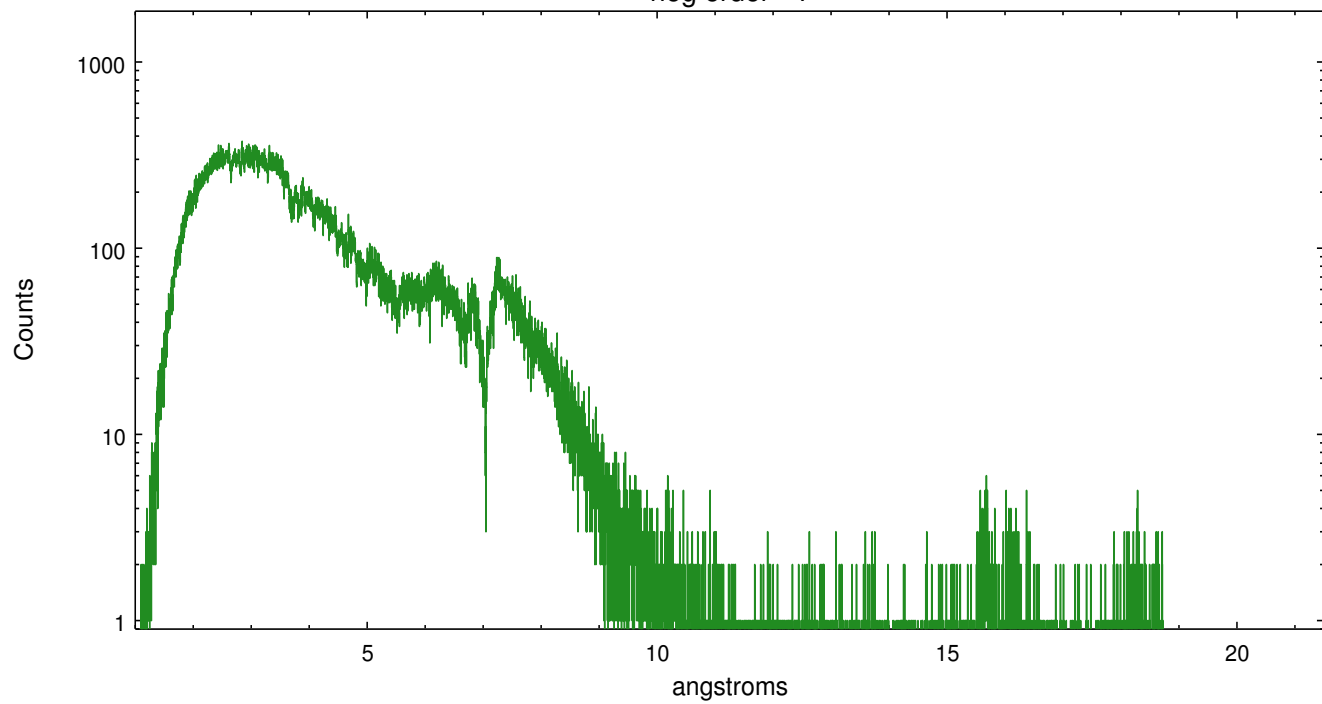


Full Detector HEG

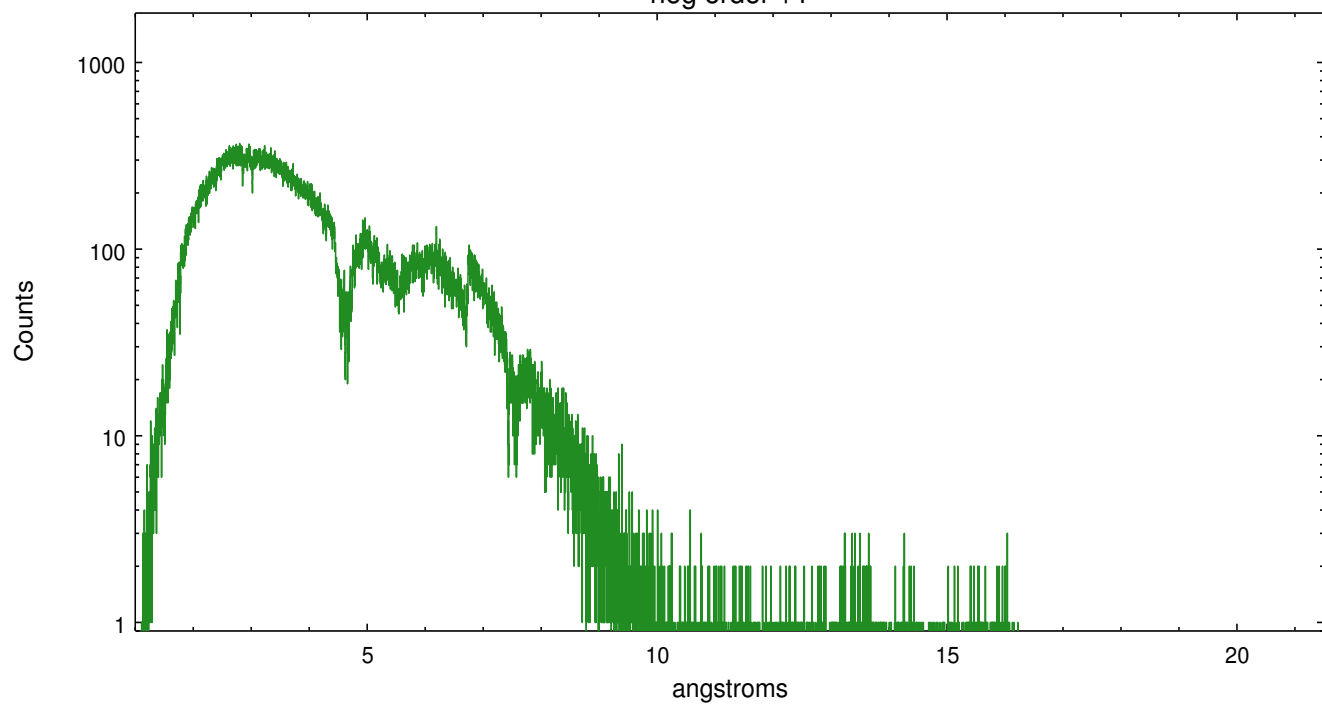
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	35560	58796	353461	519970	349787	44521	23756



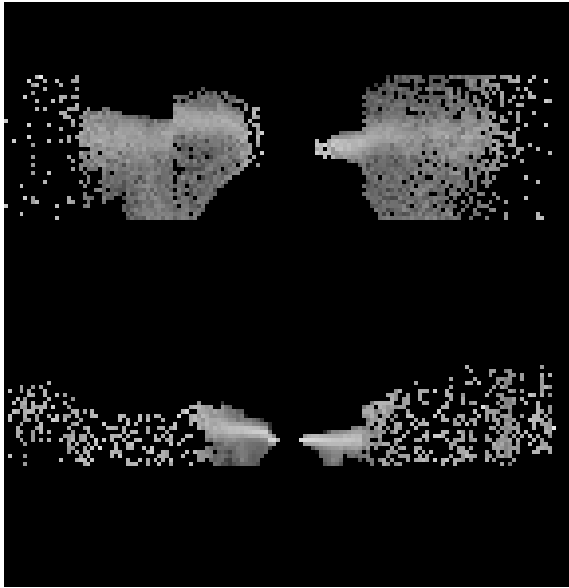
heg order -1



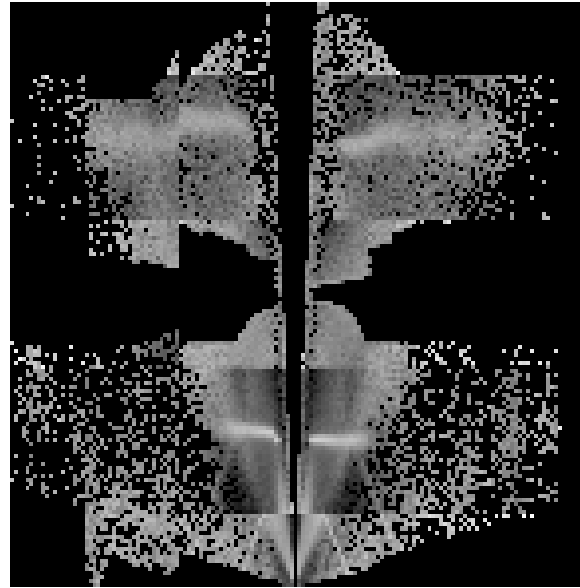
heg order +1



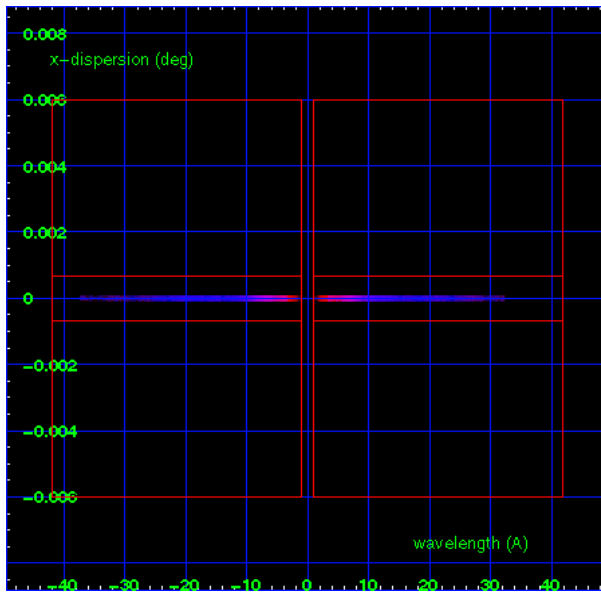
3.2 MEG Arm



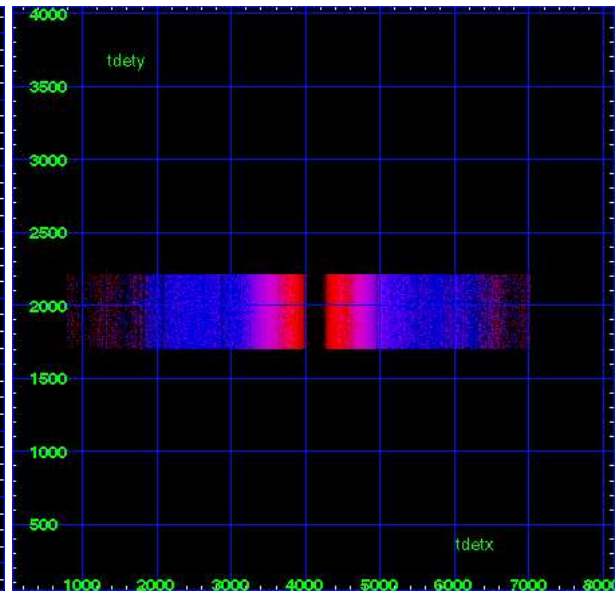
MEG Order Sort 123



MEG Order Sort ALL

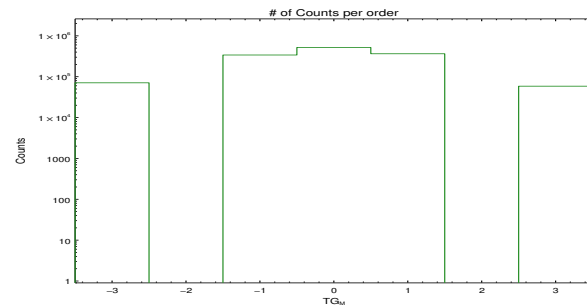


Spot Image MEG

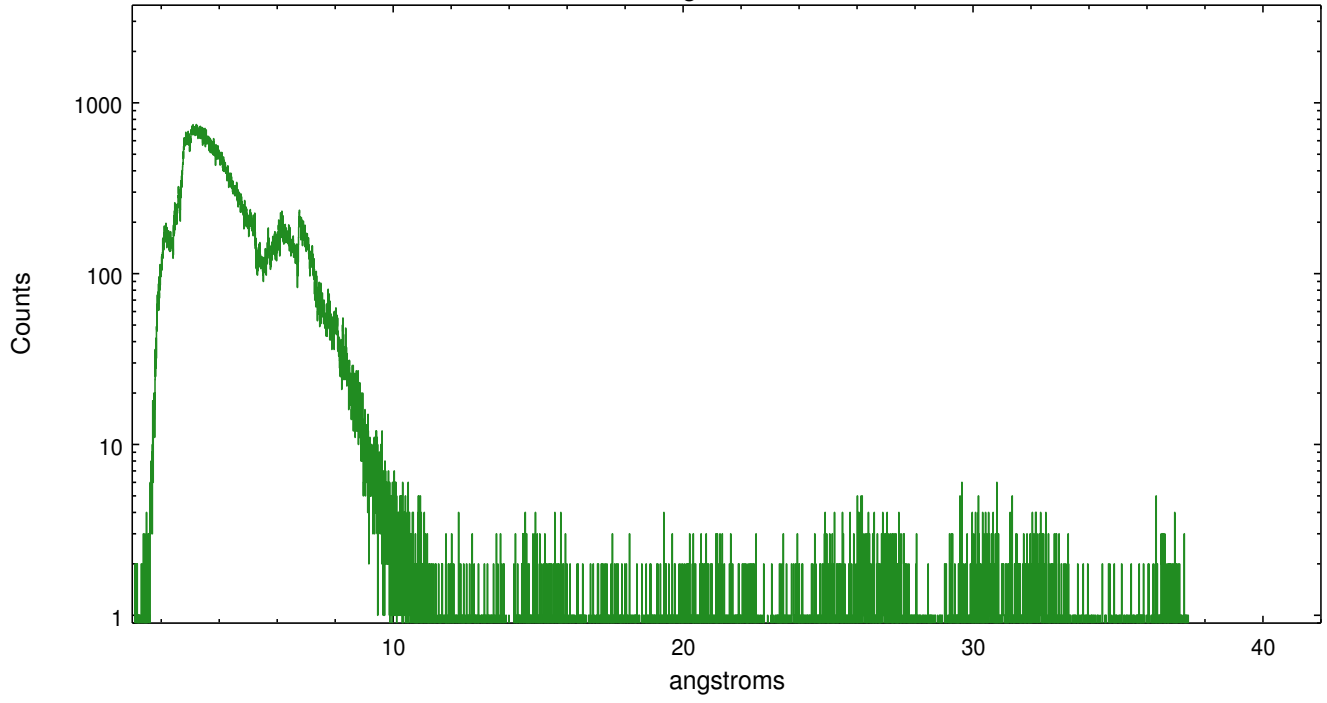


Full Detector MEG

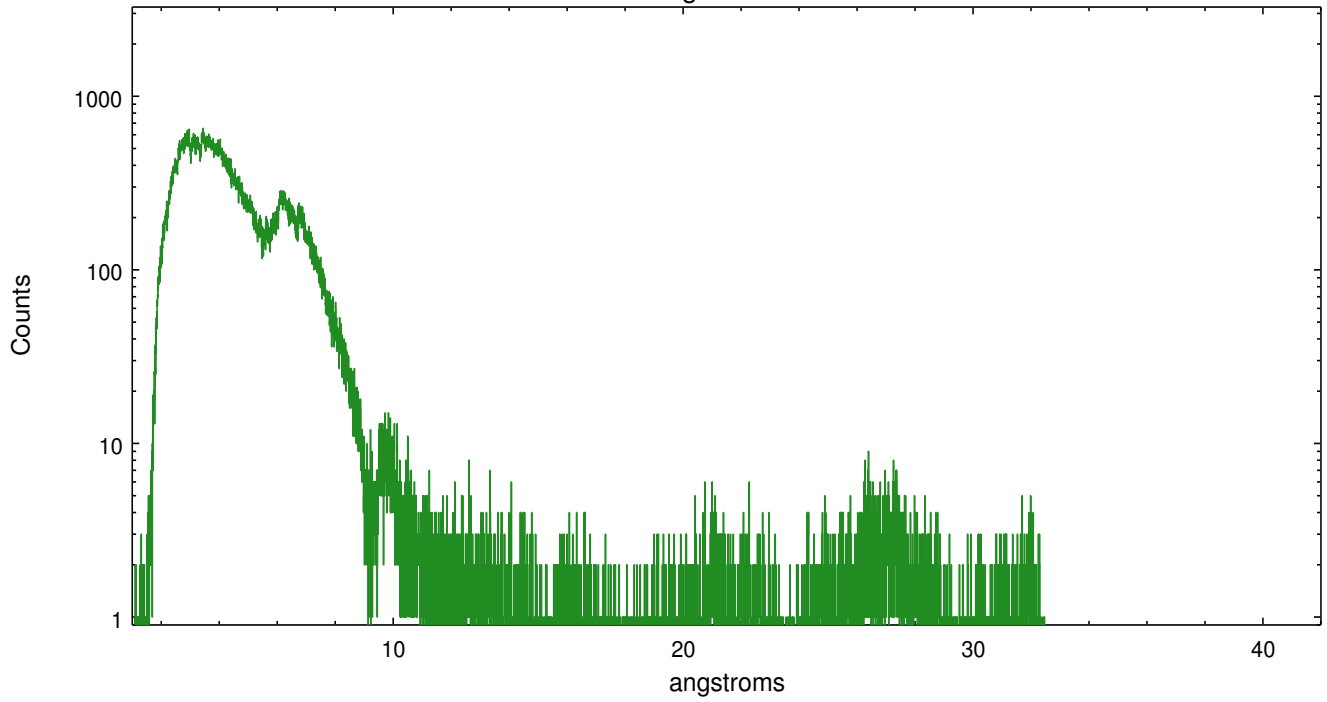
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	70923	0	339744	519970	364559	0	58594



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 integration time for some CCDs. The exposure duration was as planned (20 ks).