

V&V Reference Report

L2 ASCDS Version : 10.4

Observation 16653 - L2 Version 1
Chandra X-Ray Center

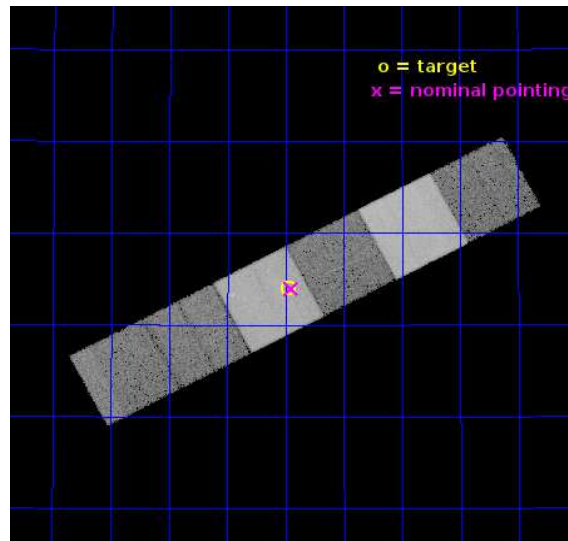
L2 Processing Date : Jul 5 2015

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

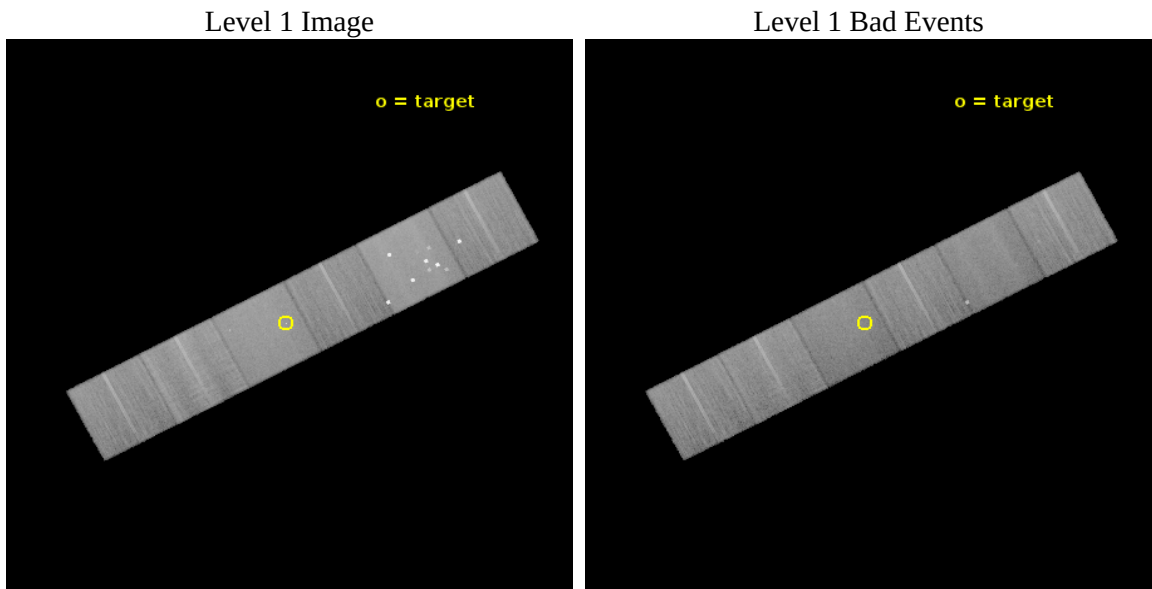
seq_num	200975	Sequence number
obs_id	16653	Observation id
title	HD191612 - constraining the structure of a massive magnetosphere	P
observer	Dr Yael Naze	Principal investigator
object	HD191612	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	302.369167	Observer's specified target RA [deg]
dec_targ	35.733694	Observer's specified target Dec [deg]
ra_nom	302.36260407241	Nominal RA [deg]
dec_nom	35.732632532035	Nominal Dec [deg]
roll_nom	152.16046234395	Nominal Roll [deg]
revision	1	Processing version of data
ontime	38505.362454414	Sum of GTIs [s]
livetime	38017.784369871	Livetime [s]
ontime4	38502.162433982	Sum of GTIs [s]
ontime5	38505.321414351	Sum of GTIs [s]
ontime6	38505.280374408	Sum of GTIs [s]
ontime7	38505.362454414	Sum of GTIs [s]
ontime8	38505.239334345	Sum of GTIs [s]
ontime9	38505.198294401	Sum of GTIs [s]
l2events	333733	Number of level 2 events



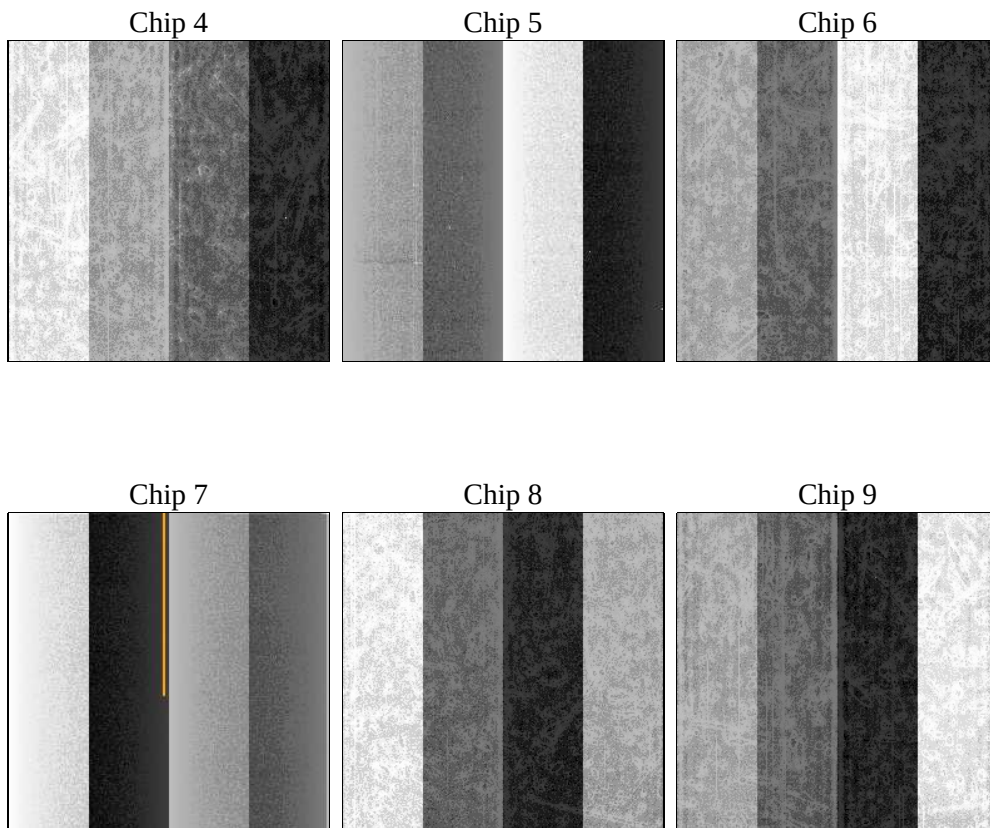
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	38550.418000	[s] Scheduled observation exposure time
ascdsver	10.4	Processing system revision	ontime	38505.362454414	Sum of GTIs [s]
caldsver	4.6.7	 	ontime4	38502.162433982	Sum of GTIs [s]
date	2015-07-05T16:39:36	Date and time of file creation	ontime5	38505.321414351	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	38505.280374408	Sum of GTIs [s]
			ontime7	38505.362454414	Sum of GTIs [s]
			ontime8	38505.239334345	Sum of GTIs [s]
			ontime9	38505.198294401	Sum of GTIs [s]
			l1events	1553582	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			ra_pos	(4057.52, 4104.26)	src1a sky pixel position

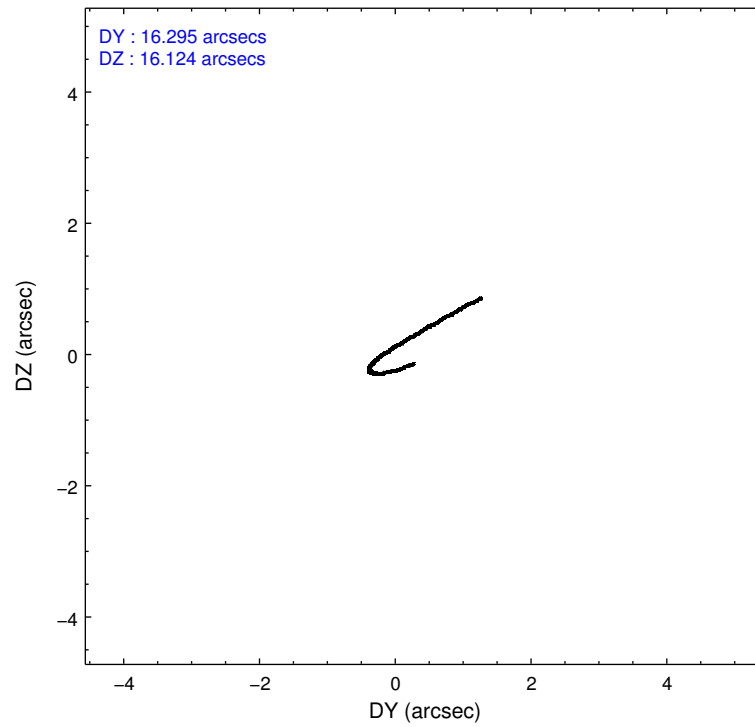
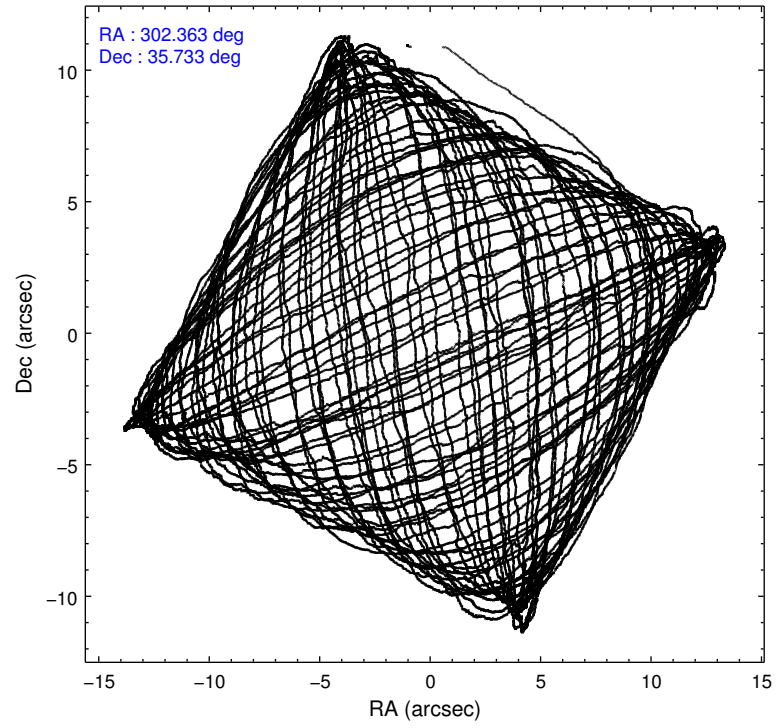
2.1.4 Events

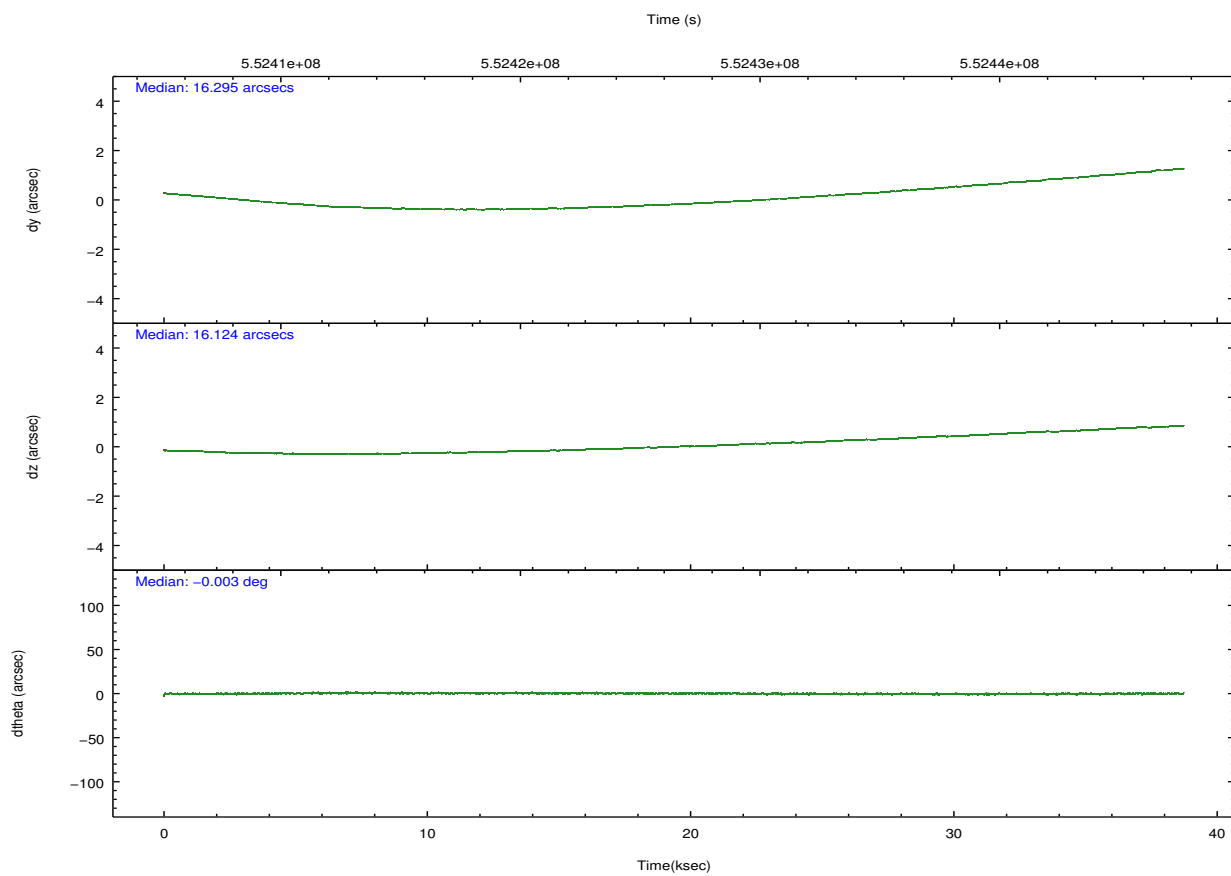
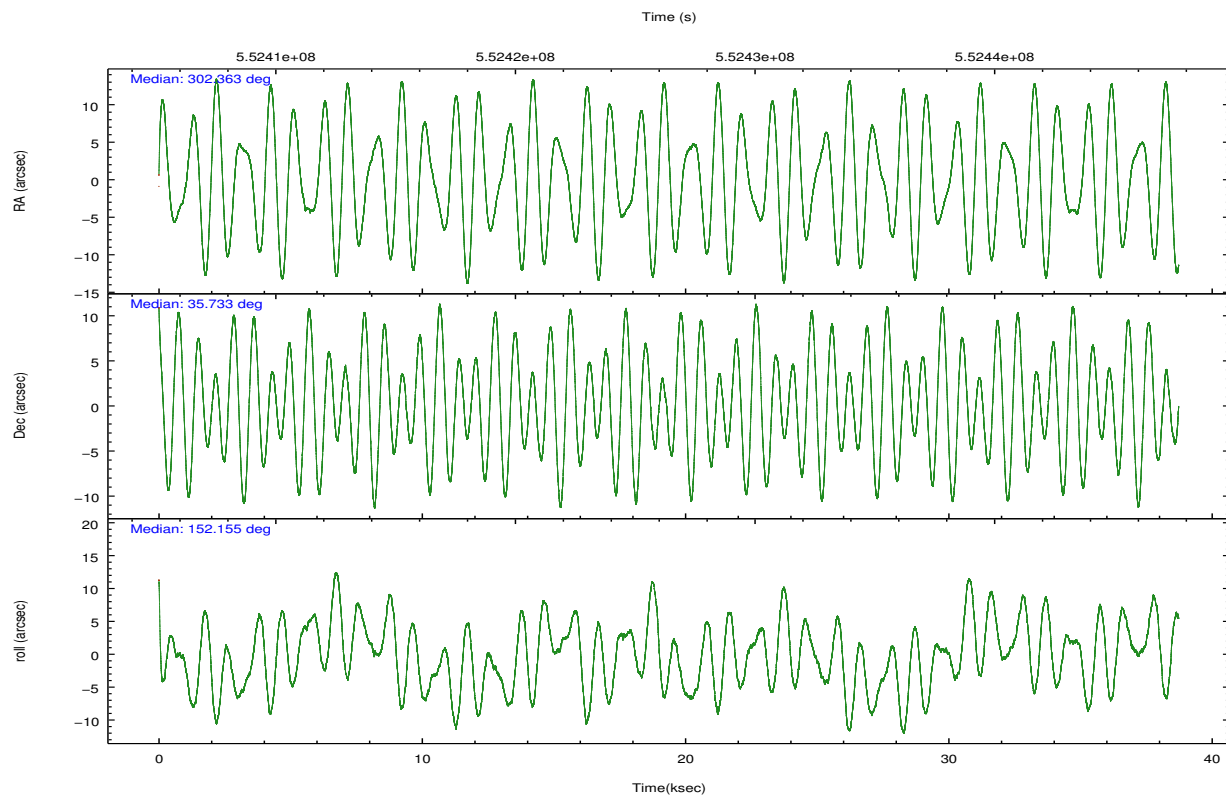
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	242294	380096	204377	264580	262134	200101	grade 0 events	19218	50020	7469	9200	18155	8381
rejected events	208315	169974	181320	152297	195795	176094		7%	13%	3%	3%	6%	4%
rejected %	85%	44%	88%	57%	74%	88%	grade 1 events	236	953	90	312	176	106
								0%	0%	0%	0%	0%	0%
							grade 2 events	5558	58032	5589	23538	16399	5366
								2%	15%	2%	8%	6%	2%
							grade 3 events	2629	8045	2158	8575	6793	2466
								1%	2%	1%	3%	2%	1%
							grade 4 events	2441	7799	2220	8539	6467	2284
								1%	2%	1%	3%	2%	1%
							grade 5 events	10205	22714	9789	25596	14640	10946
								4%	5%	4%	9%	5%	5%
							grade 6 events	4138	86245	5622	62447	18529	5514
								1%	22%	2%	23%	7%	2%
							grade 7 events	197869	146288	171440	126373	180975	165038
								81%	38%	83%	47%	69%	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	302.396361	302.3626040724115	CCD I2 on	N	N
[deg] Pointing Dec	35.734030	35.73263253203524	CCD I3 on	N	N
[deg] Pointing Roll	151.984117	152.1604623439514	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	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
Phase constraints	Y	Y	CCD S5 on	O2	Y
[d] Phase period	537.200000	537.200000	Number of optional ACIS chips dropped	0	0
[d] Phase epoch (MJD)	56637.800000	56637.800000	On-chip summing requested	N	N
Phase start	0.900000	0.900000	Subarray requested	NONE	NONE
Phase end	0.100000	0.100000	Alternating exposures requested	N	N
Phase start error	0.010000	0.010000	[s] Primary exposure time	0.000000	3.2
Phase end error	0.010000	0.010000			
[s] Observation start time (MET)	552407218.184000	552405558.7950701			
Observation start date	2015-07-04T14:25:50	2015-07-04T13:59:18			
[s] Observation end time (MET)	552445768.184000	552445990.94734			
Observation end date	2015-07-05T01:08:20	2015-07-05T01:13:10			
Read mode	TIMED	TIMED			

2.3 Aspect



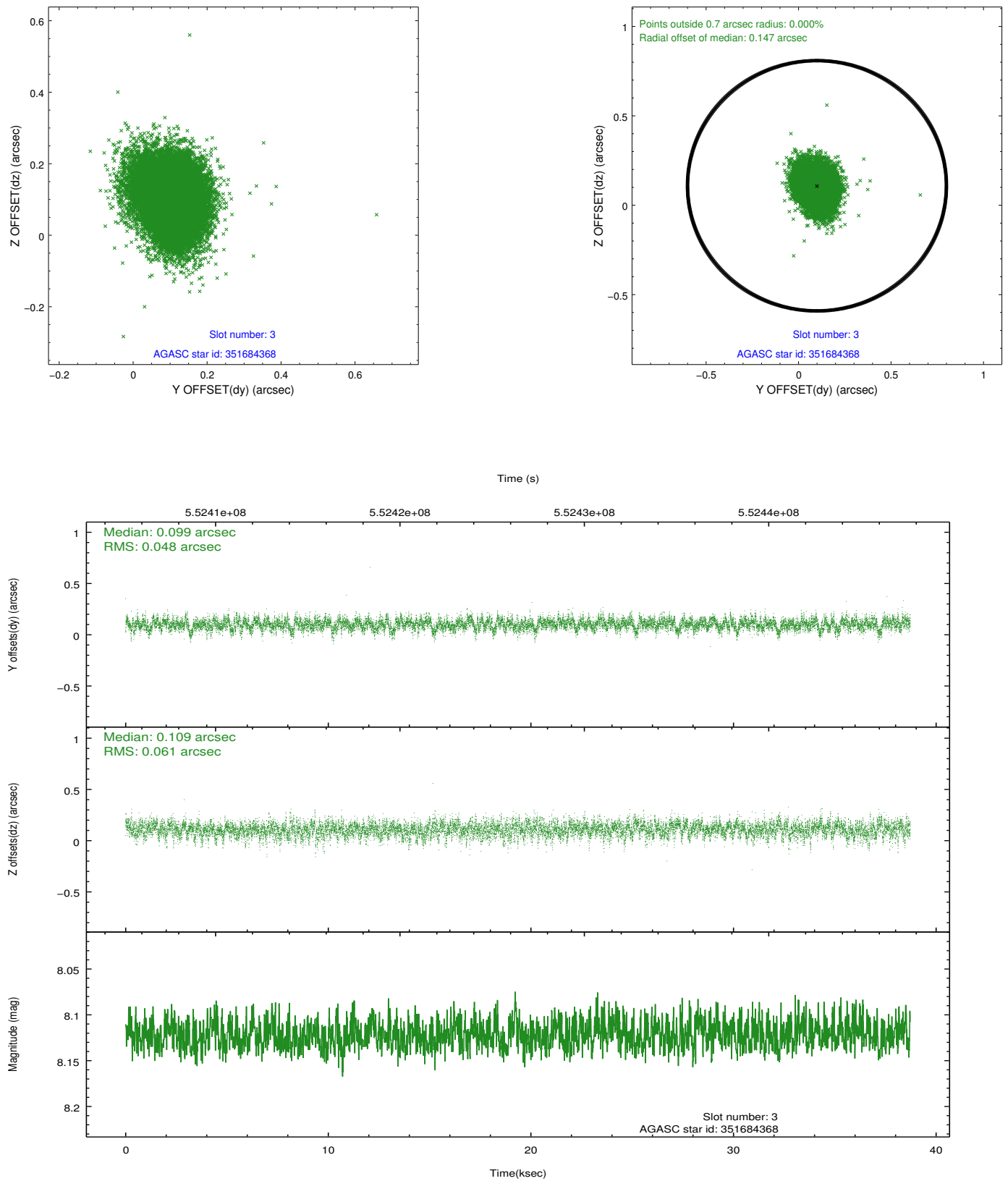


Slot Statistics

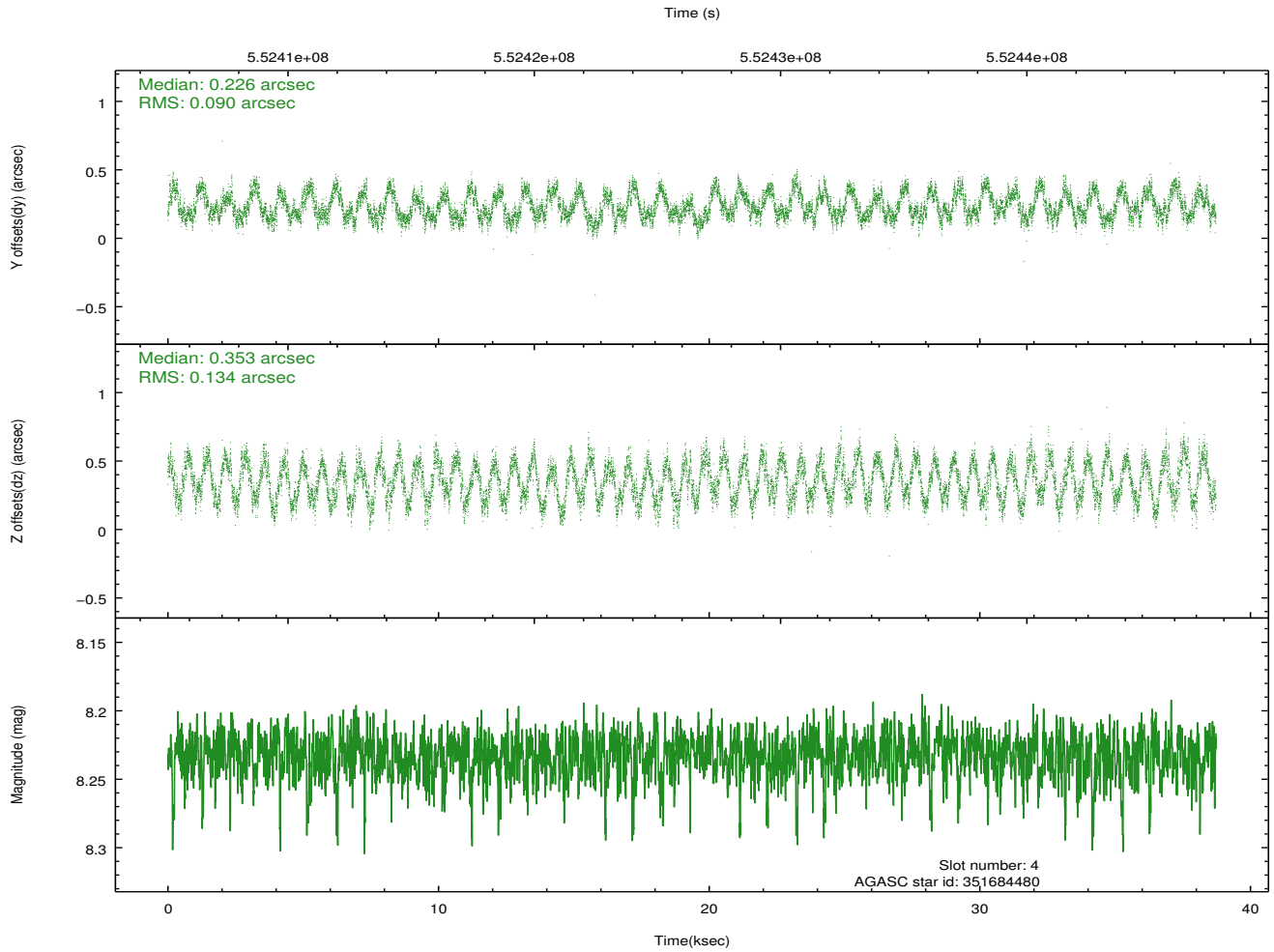
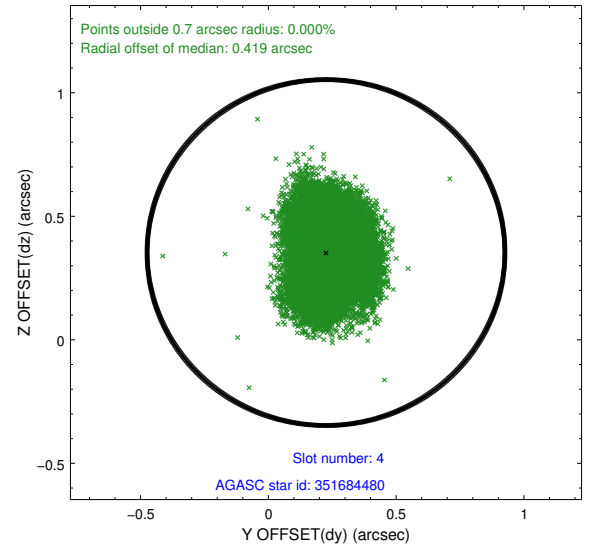
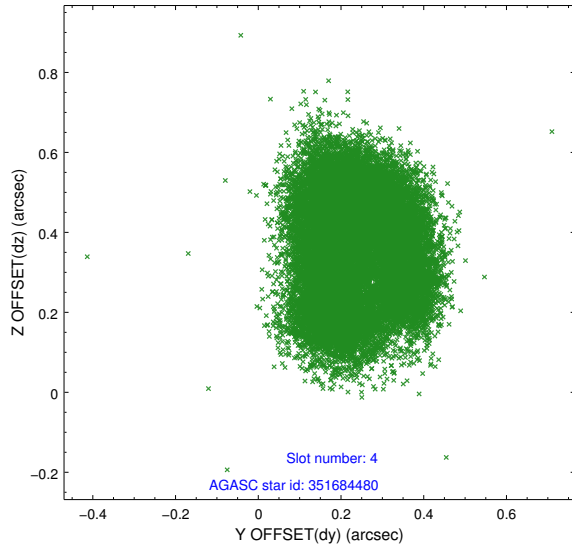
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.08	9447	-0.172	-0.106	0.009	0.016	0.000000	0.000000	-769.63	-1737.63
1	FID		ACIS-S-4	7.16	9447	0.218	0.088	0.009	0.014	0.000000	0.000000	2144.05	170.98
2	FID		ACIS-S-6	7.31	9447	-0.074	0.025	0.010	0.021	0.000000	0.000000	392.51	808.37
3	GUIDE	used	351684368	8.12	18890	0.099	0.109	0.080	0.135	302.607758	35.866756	-319.17	-711.73
4	GUIDE	used	351684480	8.23	18887	0.226	0.353	0.177	0.251	302.973035	36.197373	-692.42	-2263.34
5	GUIDE	used	351692784	8.57	18880	-0.192	-0.214	0.092	0.153	301.645698	35.740635	1951.57	1002.05
6	GUIDE	used	351011688	8.04	18888	-0.371	-0.404	0.122	0.191	301.415835	35.607774	2326.80	1736.99
7	GUIDE	used	351693800	8.12	18882	0.229	0.160	0.102	0.167	302.737590	35.953172	-505.67	-1164.59

2.4 Star Slots

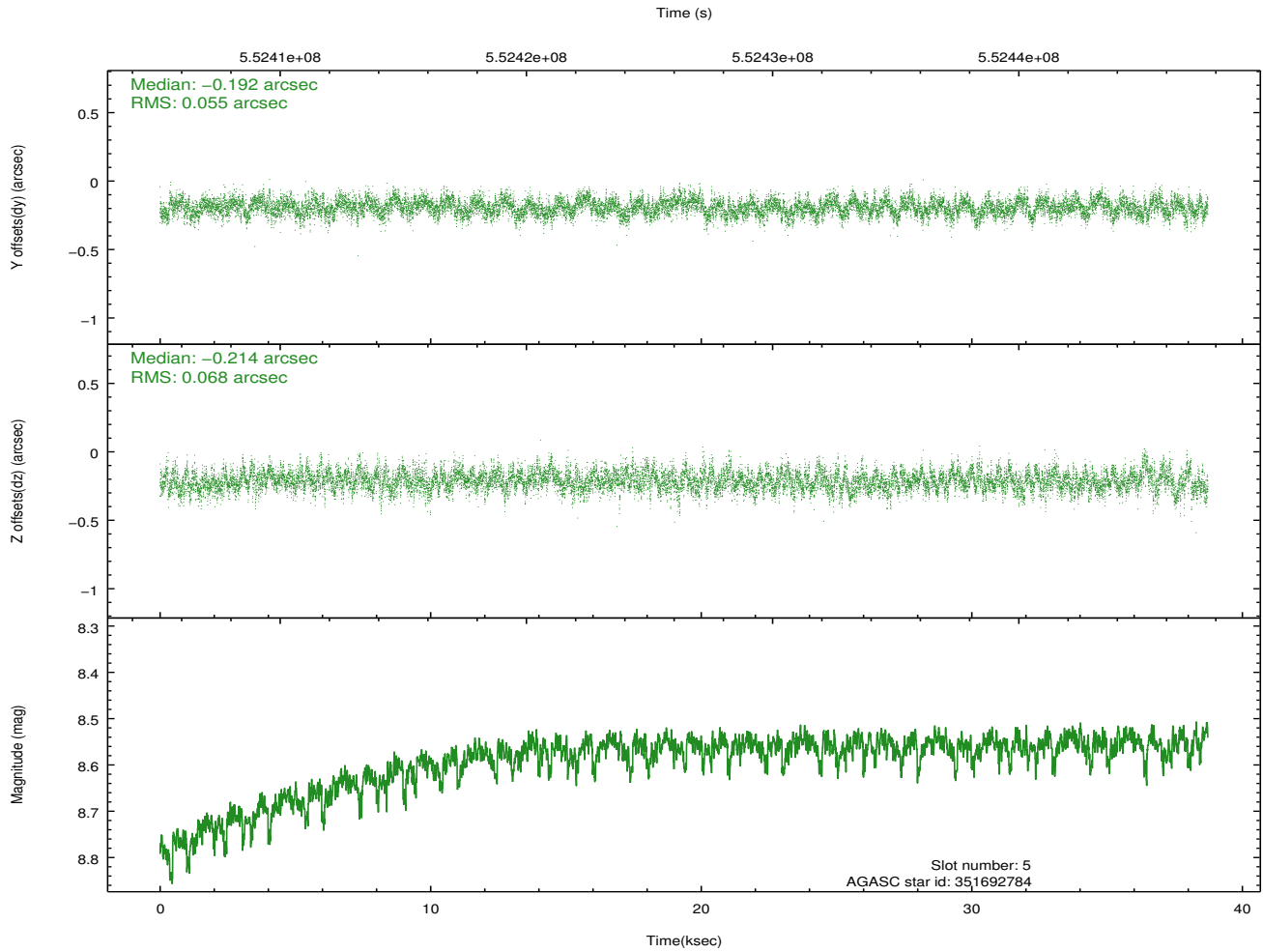
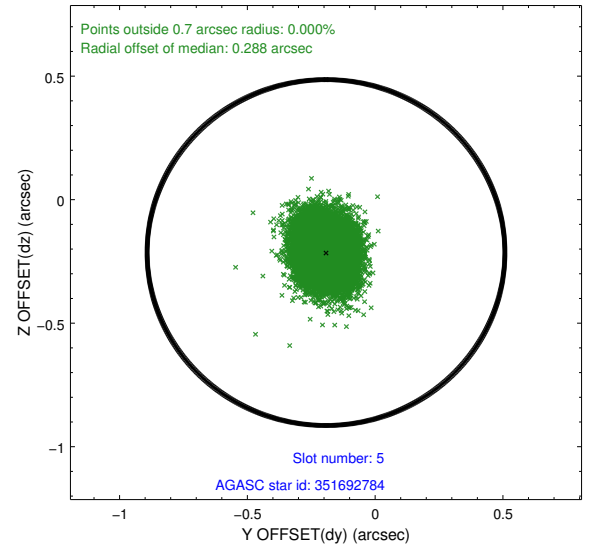
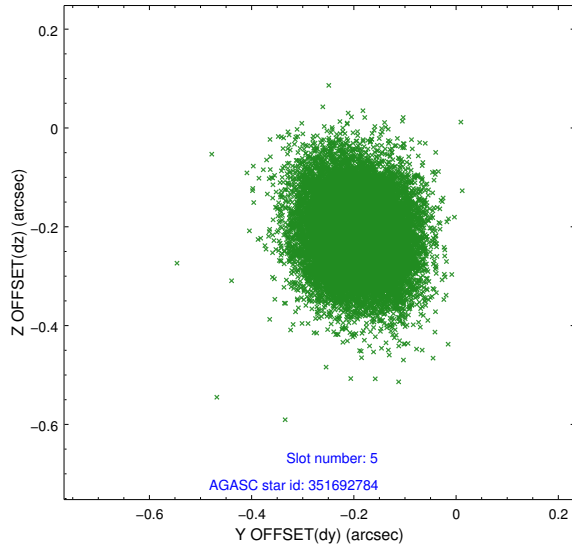
2.4.1 Slot 3



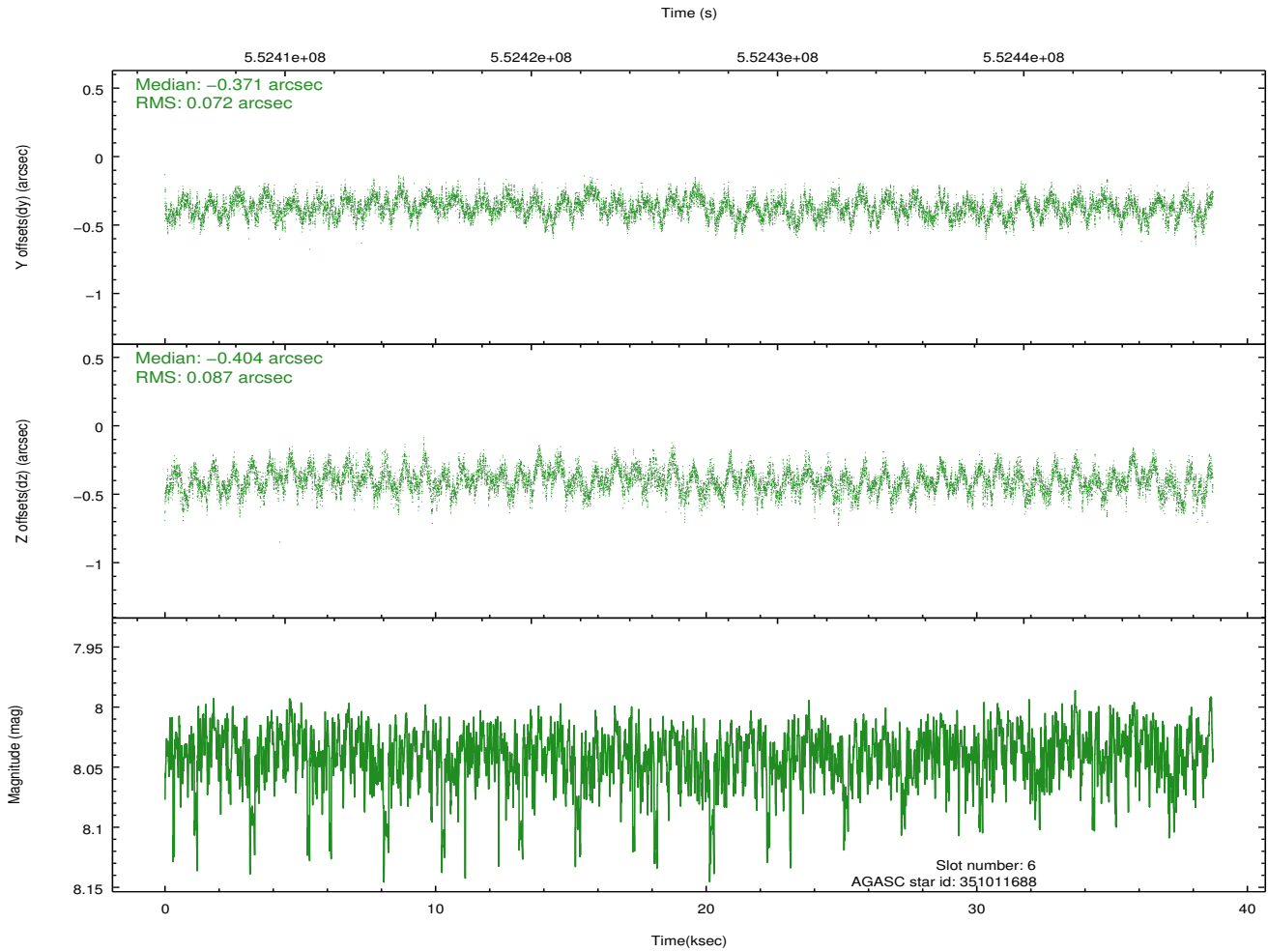
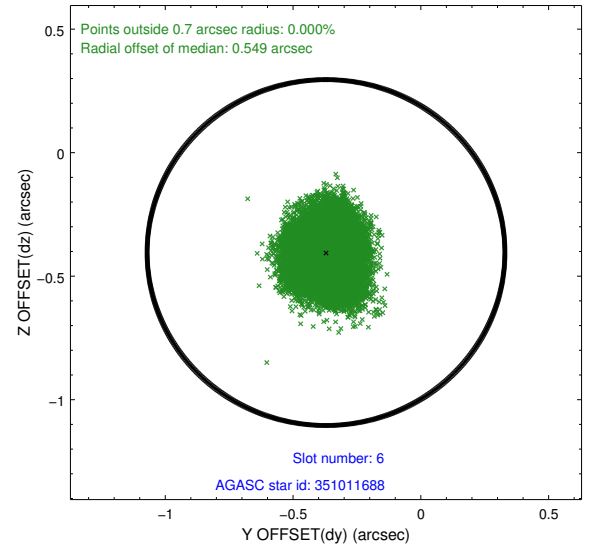
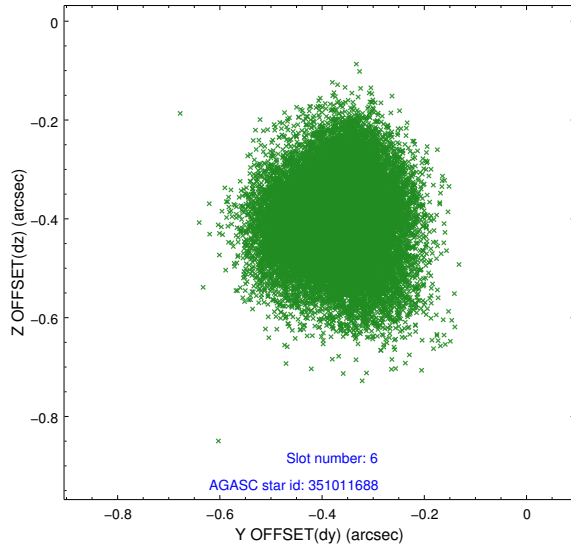
2.4.2 Slot 4



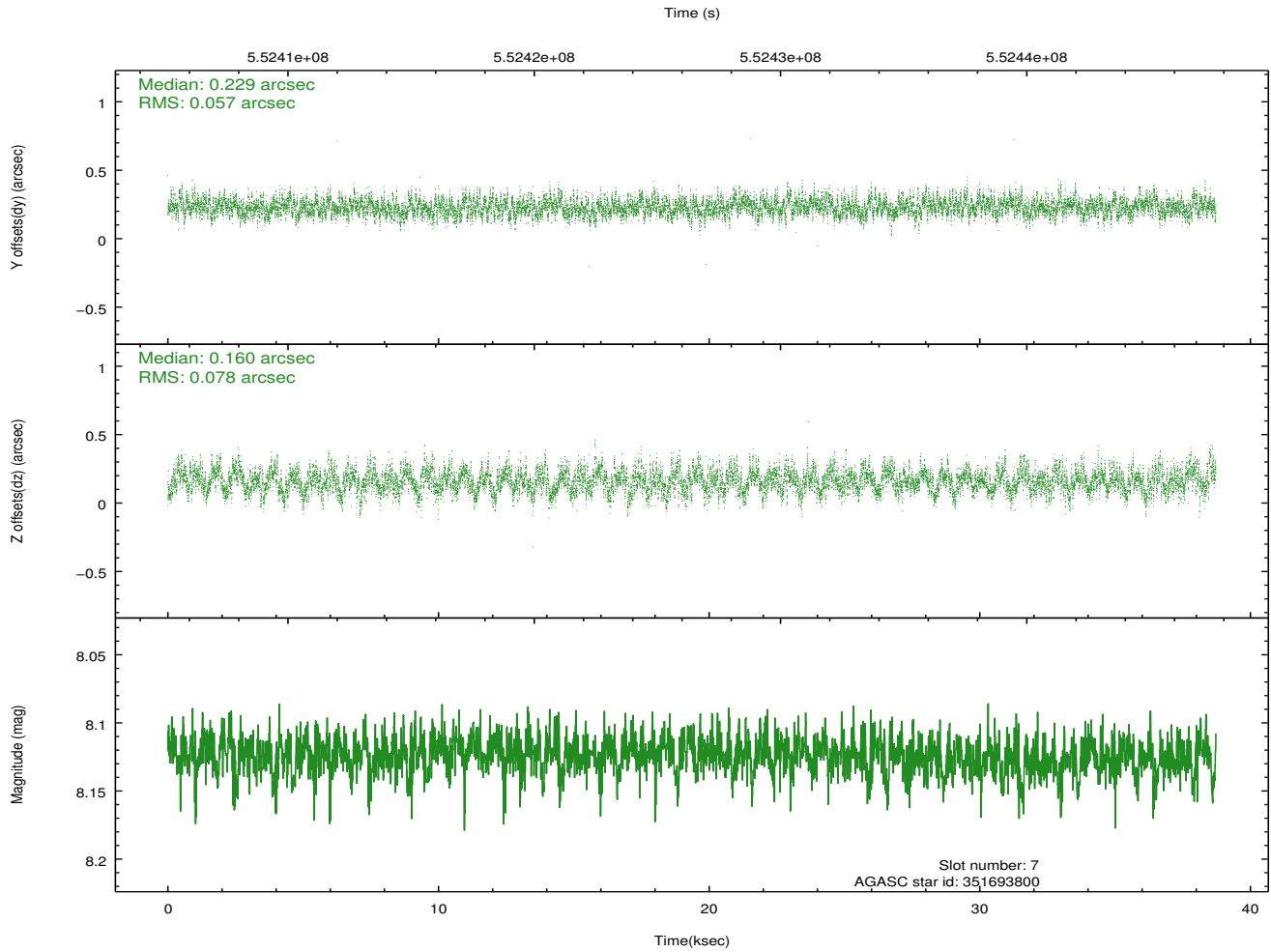
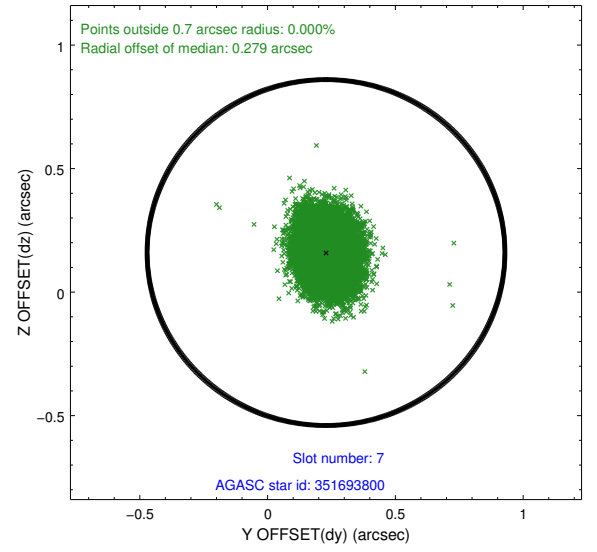
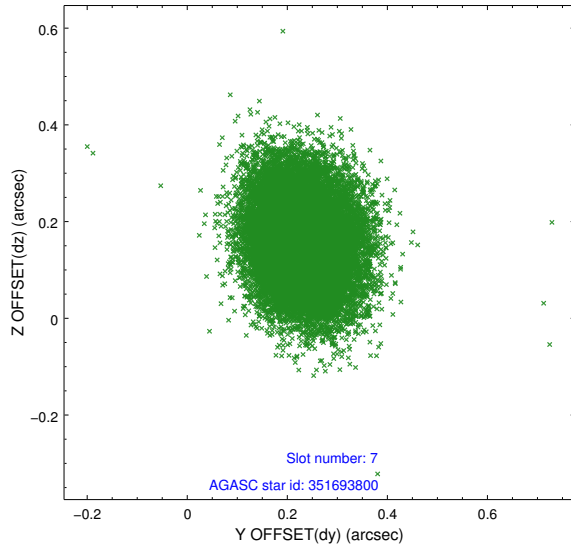
2.4.3 Slot 5



2.4.4 Slot 6

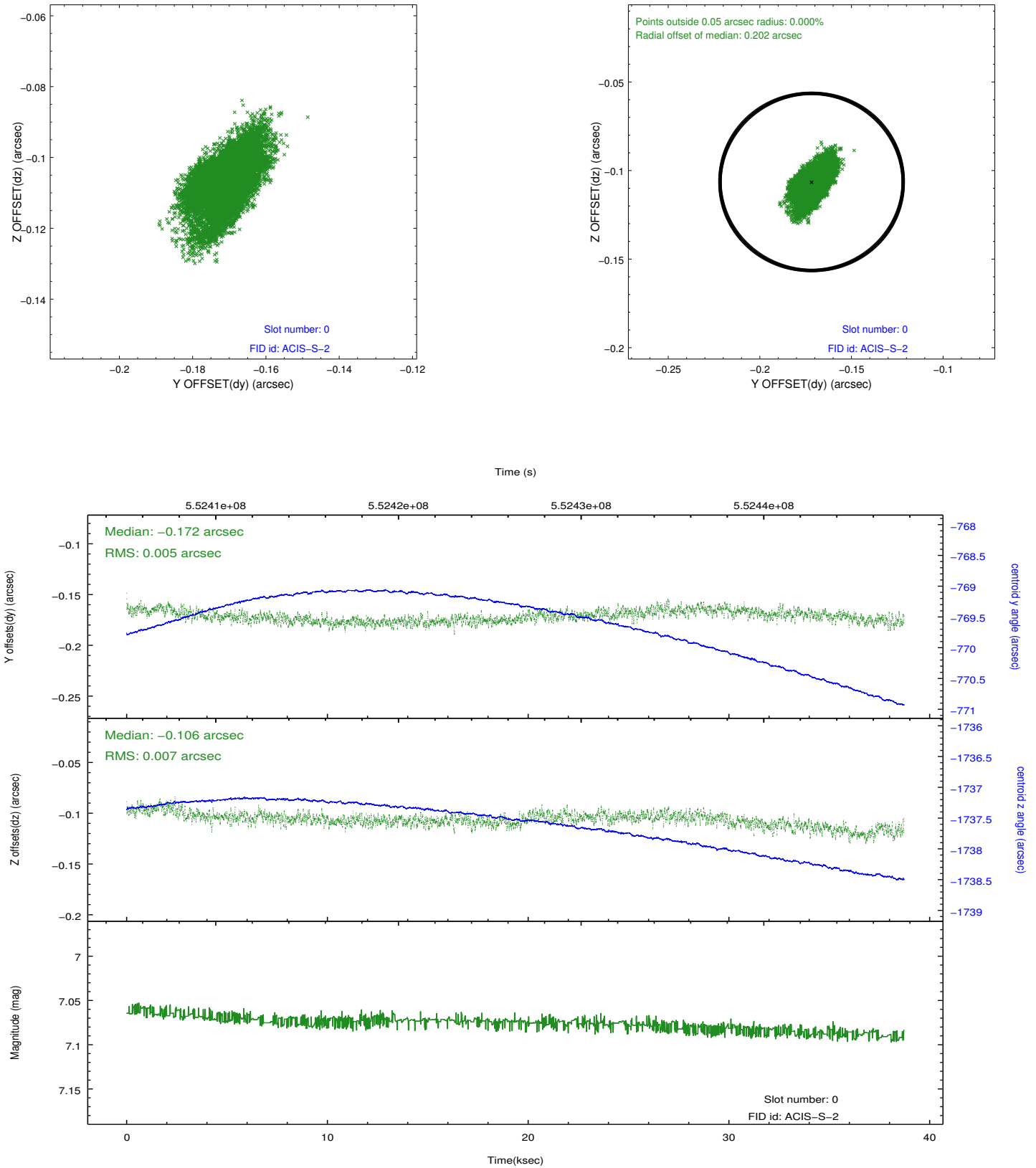


2.4.5 Slot 7

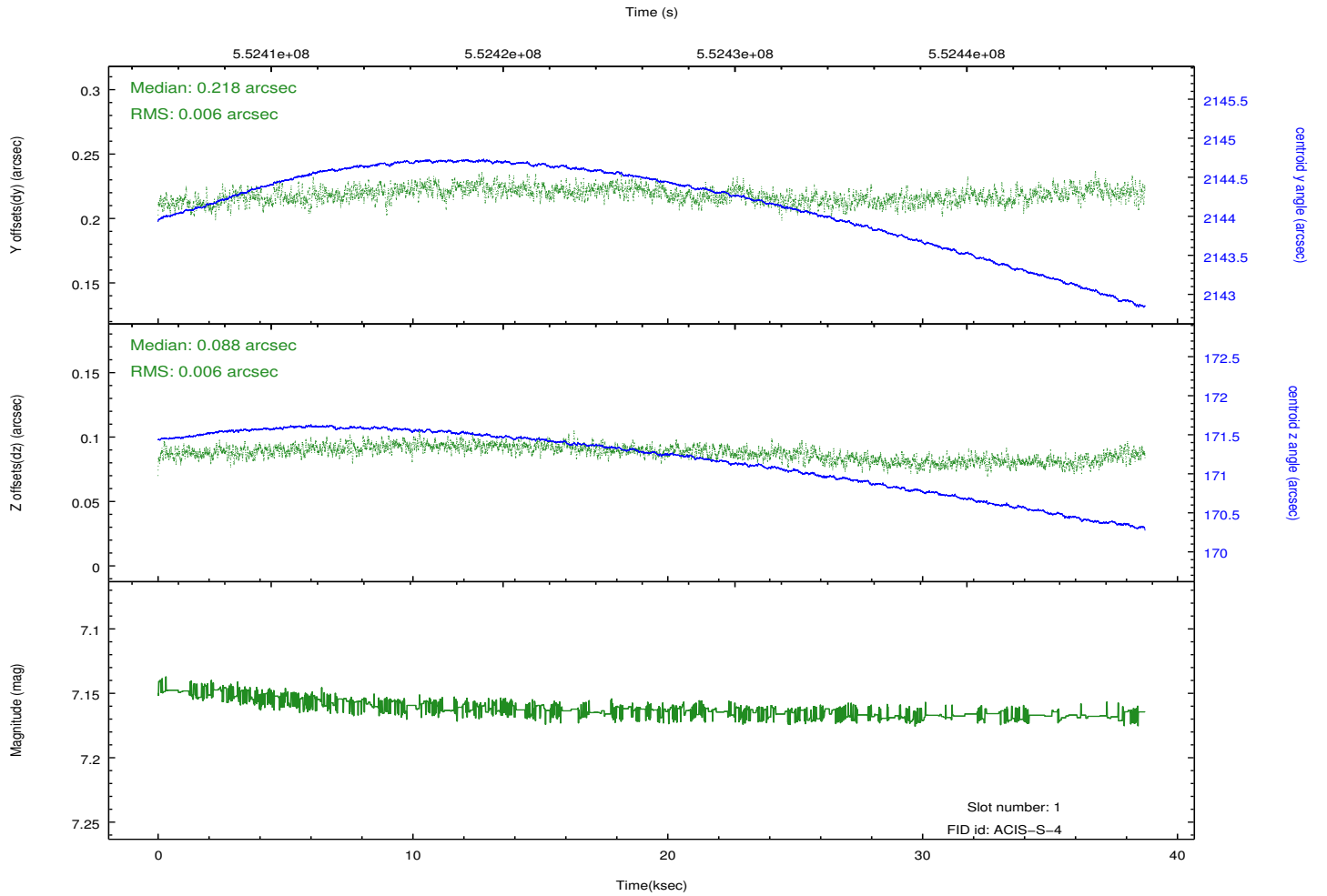
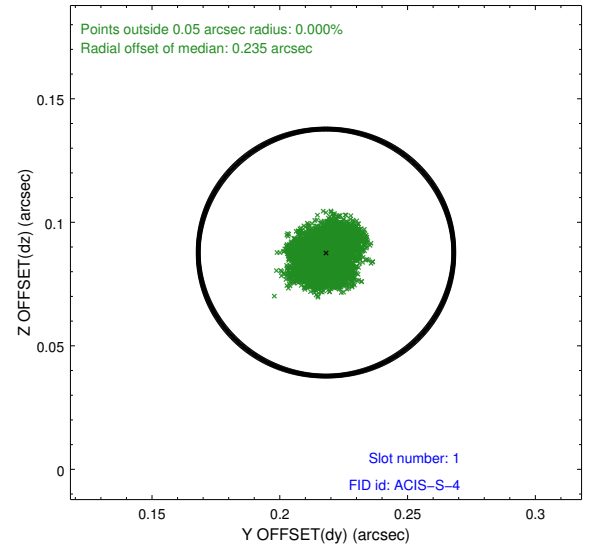
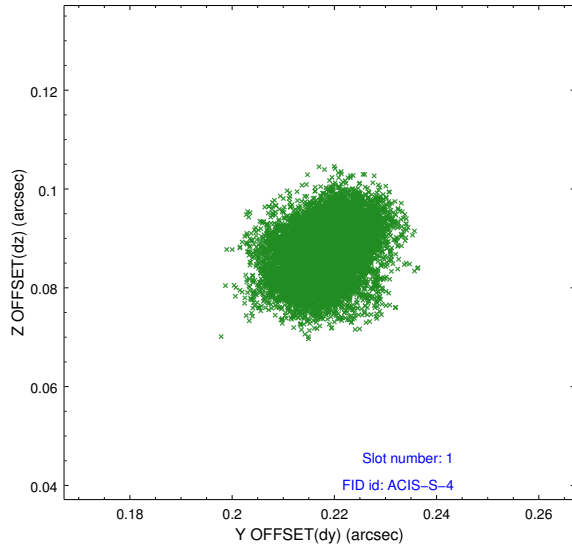


2.5 FID Slots

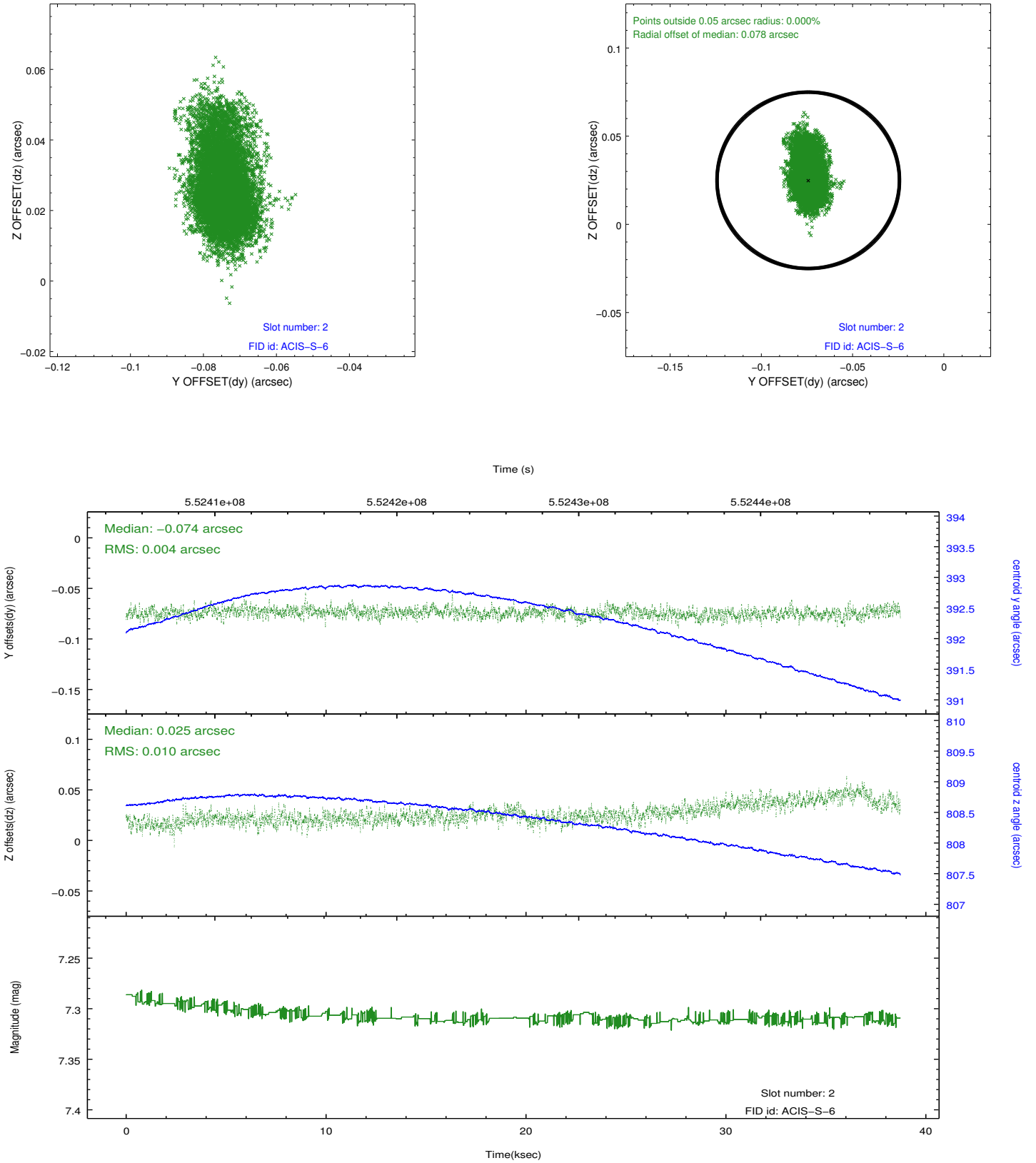
2.5.1 Slot 0



2.5.2 Slot 1

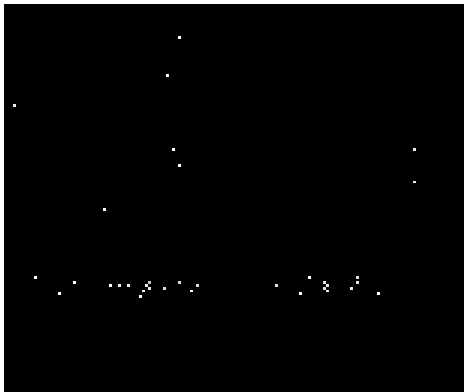


2.5.3 Slot 2

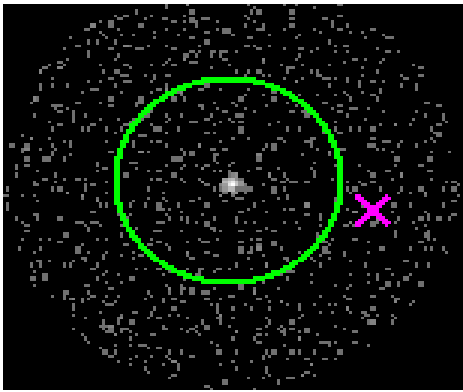


3 Gratings

3.1 HEG Arm



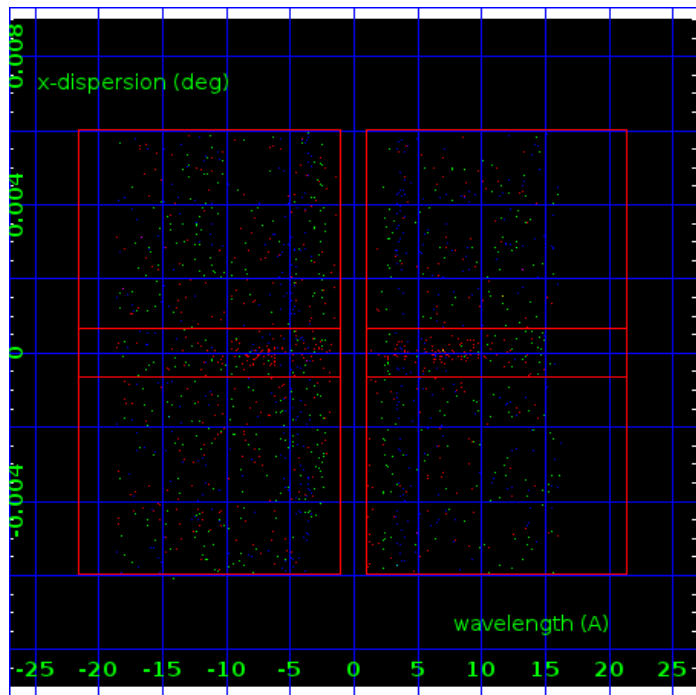
HEG Order Sort 123



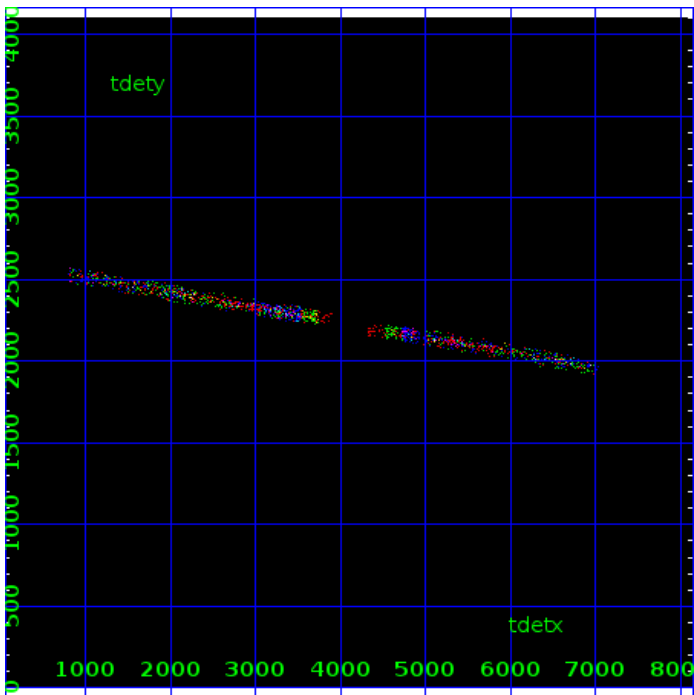
HEG Zero Order



HEG Order Sort ALL

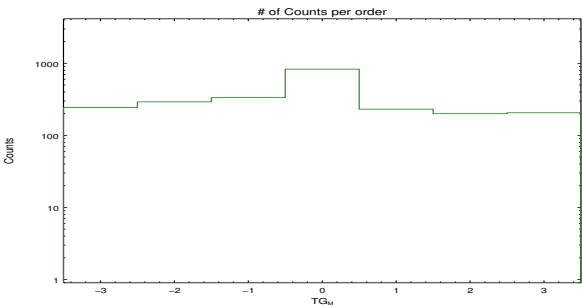


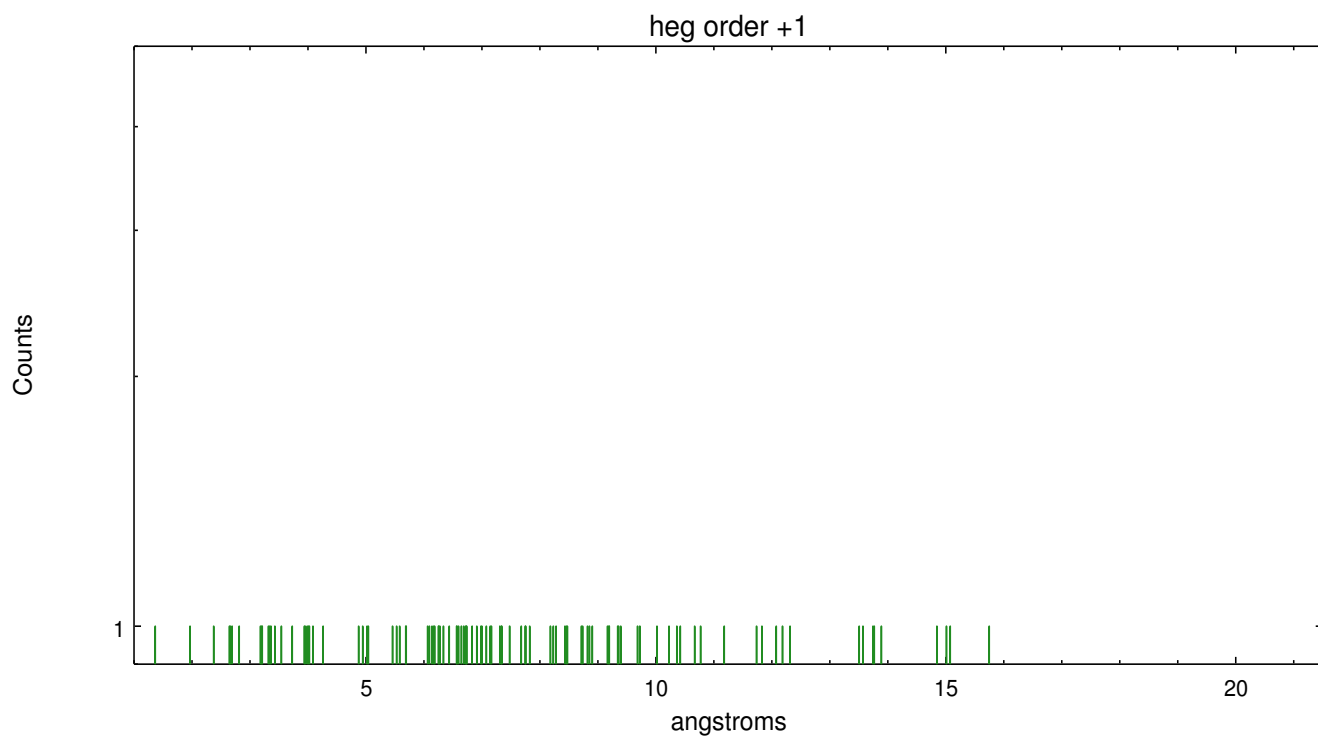
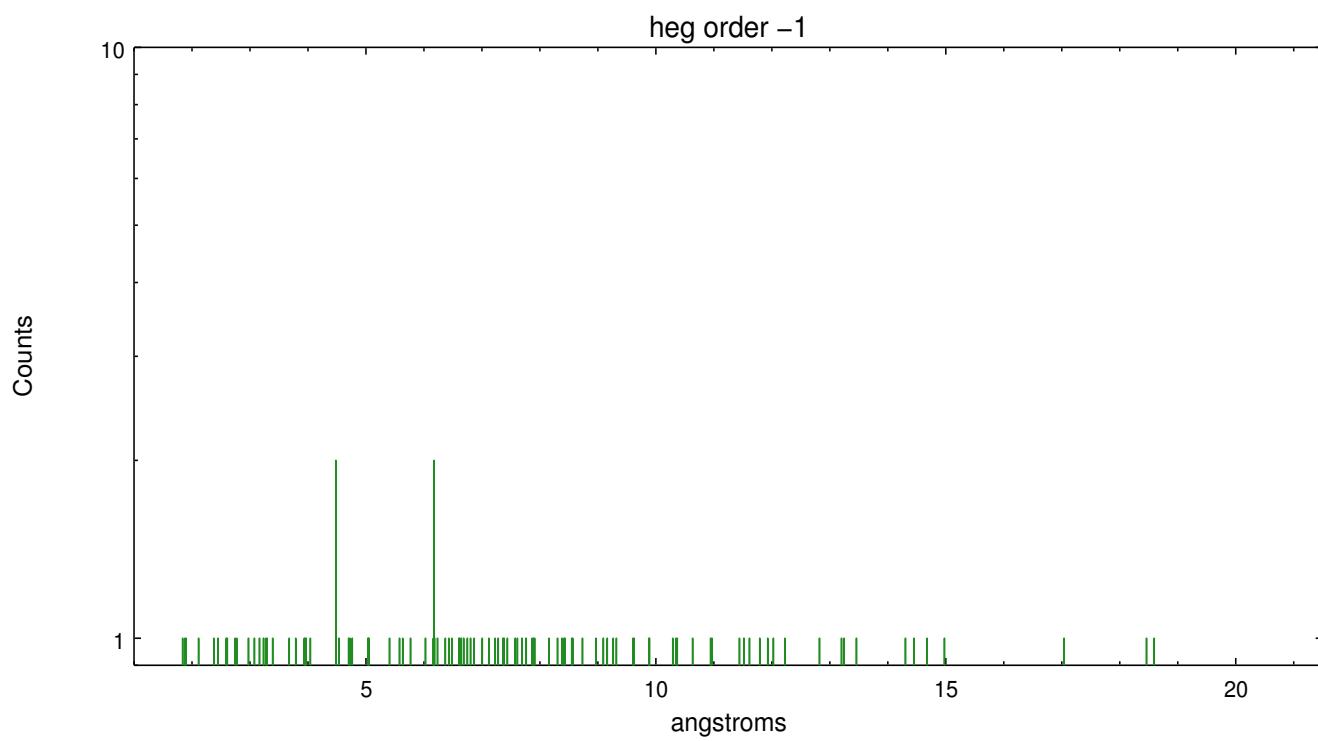
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	243	292	334	830	231	200	206

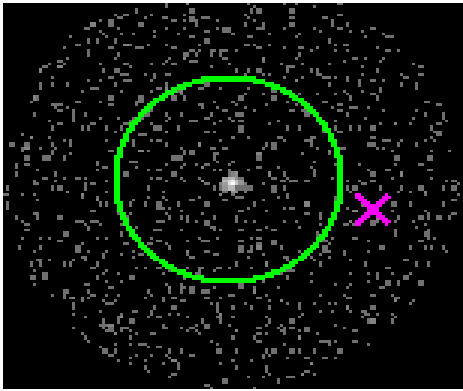




3.2 MEG Arm



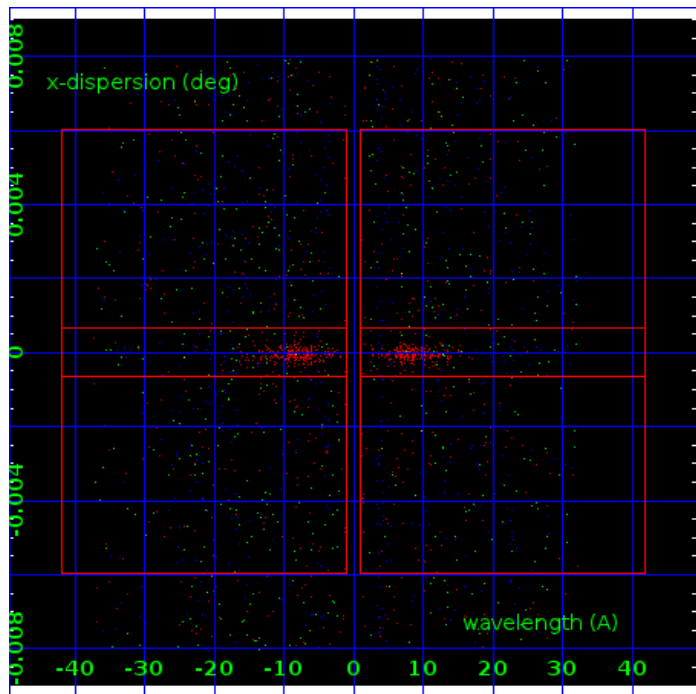
MEG Order Sort 123



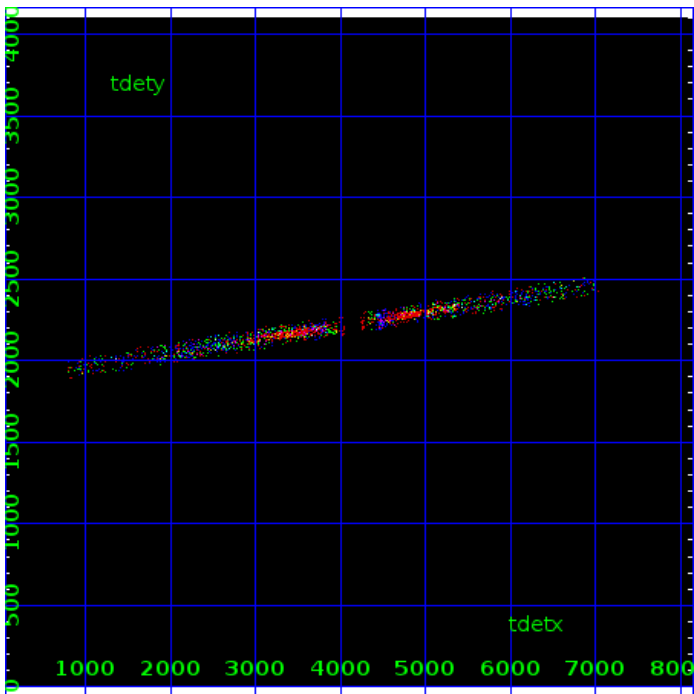
MEG Zero Order



MEG Order Sort ALL

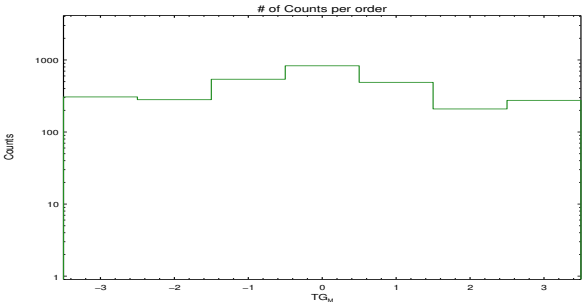


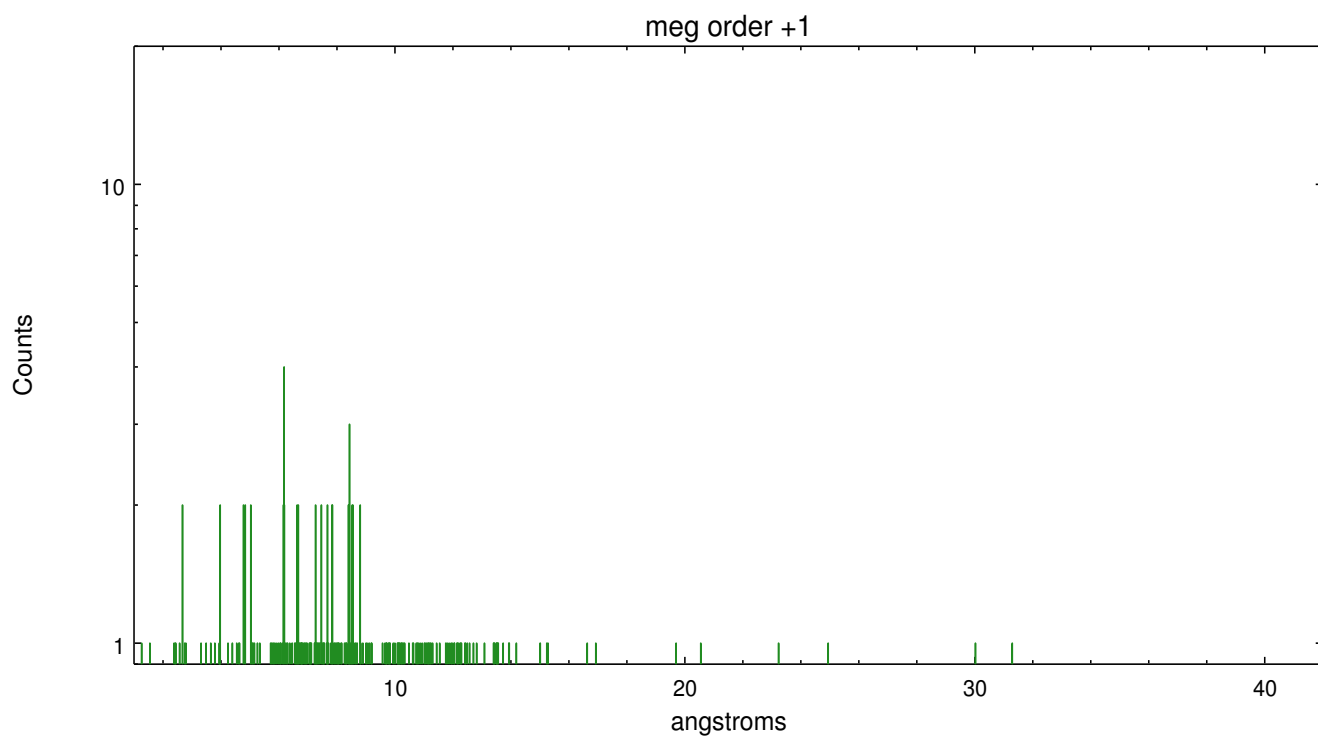
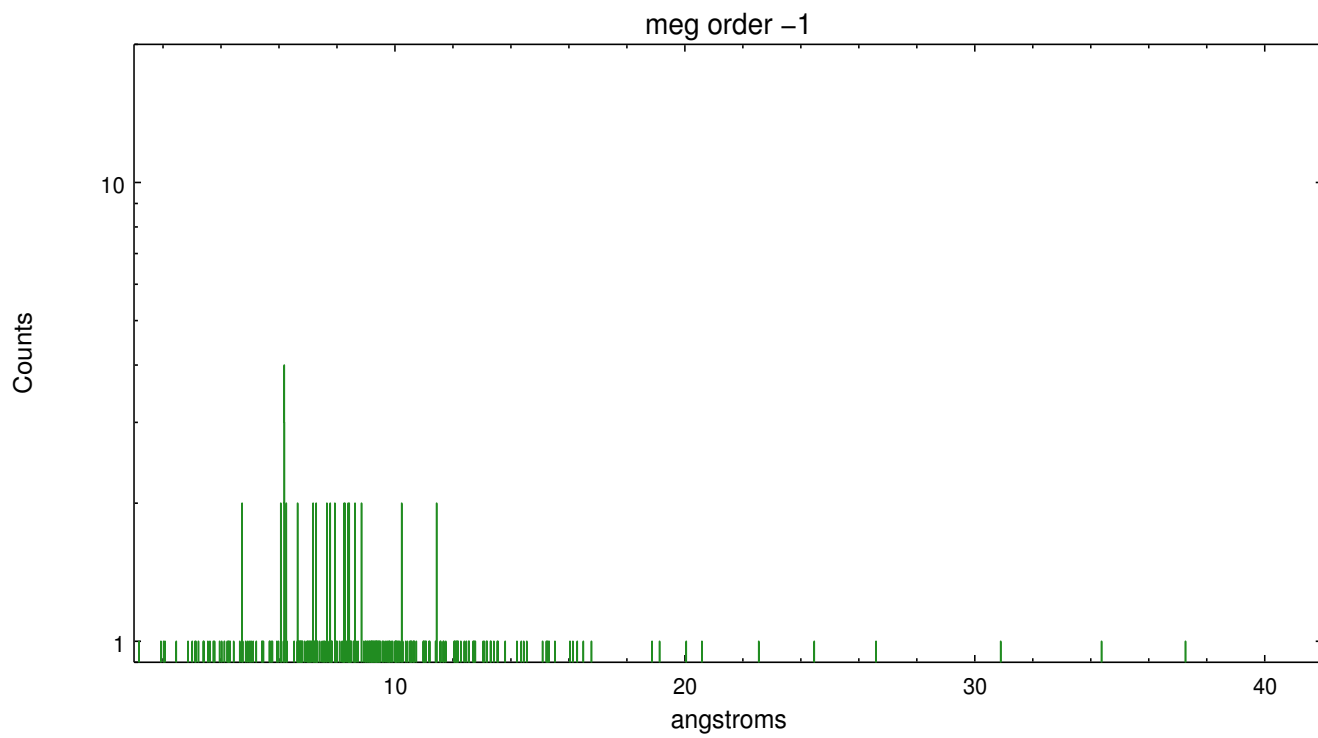
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	307	281	540	830	489	209	275





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.07.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.505362454414

A.2 Comments