

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3706 - L2 Version 3
Chandra X-Ray Center

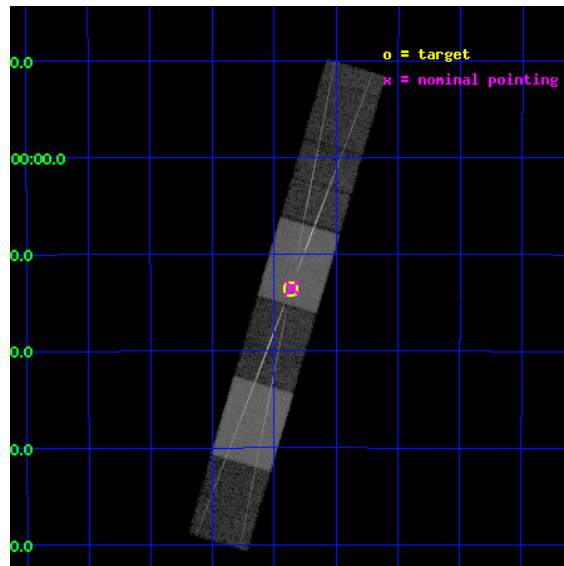
L2 Processing Date : Oct 18 2012

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1 Front

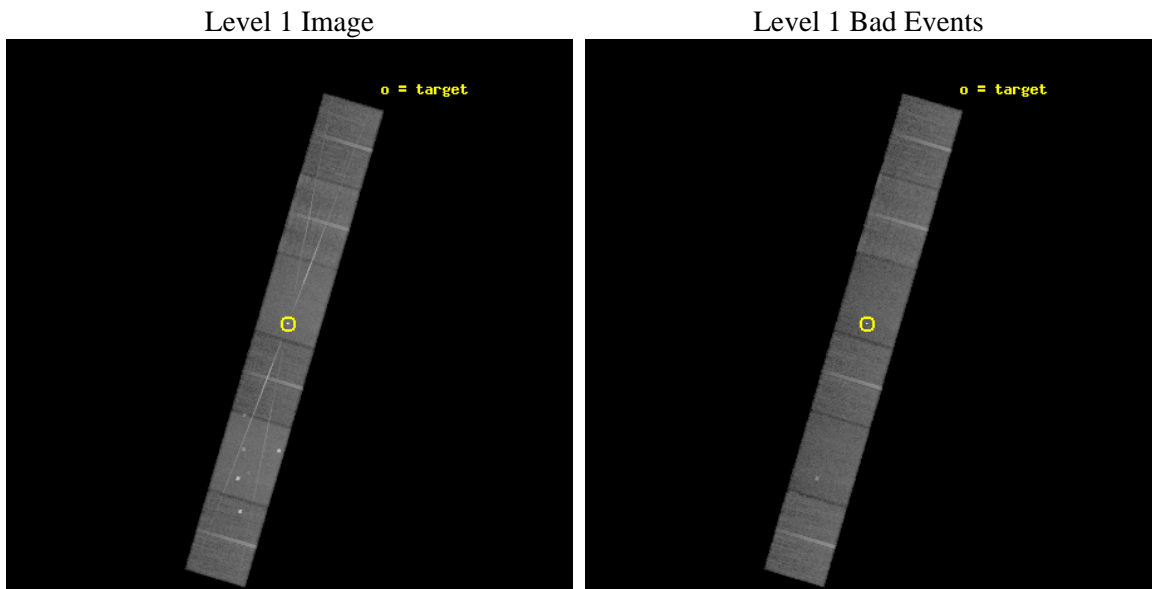
seq_num	790082	Sequence number
obs_id	3706	Observation id
title	AO4 CALIBRATION OBSERVATIONS OF PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.71433520152	Nominal RA [deg]
dec_nom	-30.224600348509	Nominal Dec [deg]
roll_nom	286.40660905825	Nominal Roll [deg]
revision	3	Processing version of data
ontime	28160.0	Sum of GTIs [s]
livetime	27705.191575103	Livetime [s]
ontime4	28160.0	Sum of GTIs [s]
ontime5	28160.0	Sum of GTIs [s]
ontime6	28160.0	Sum of GTIs [s]
ontime7	28160.0	Sum of GTIs [s]
ontime8	28160.0	Sum of GTIs [s]
ontime9	28160.0	Sum of GTIs [s]
l2events	269028	Number of level 2 events



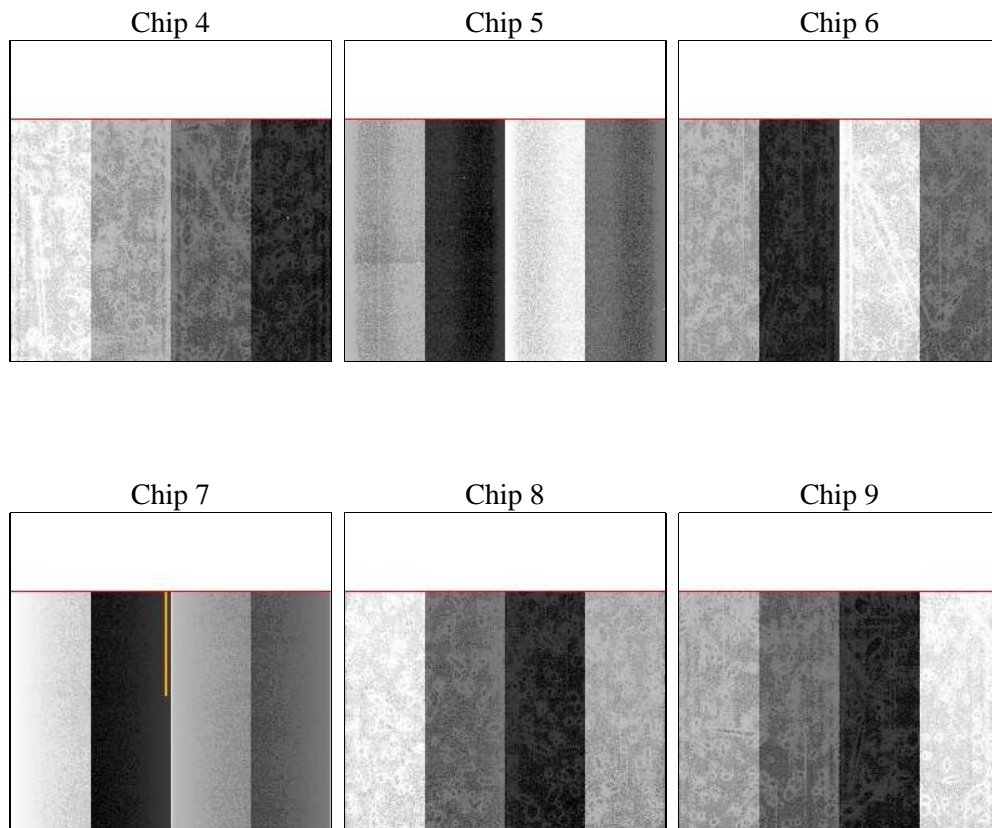
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	28160.0	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	28160.0	Sum of GTIs [s]
date	2012-10-18T06:33:25	Date and time of file creation	ontime5	28160.0	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	28160.0	Sum of GTIs [s]
			ontime7	28160.0	Sum of GTIs [s]
			ontime8	28160.0	Sum of GTIs [s]
			ontime9	28160.0	Sum of GTIs [s]
			l1events	1057891	Number of level 1 events

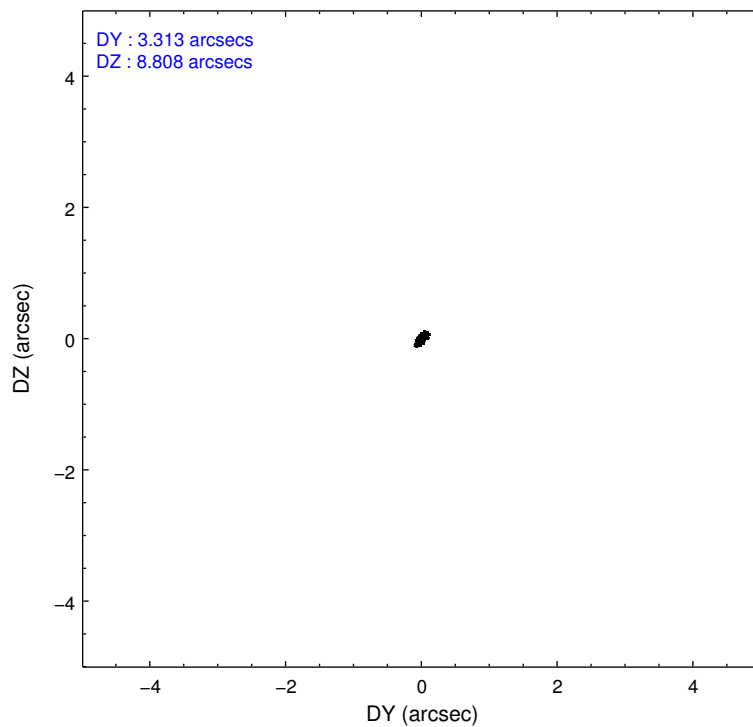
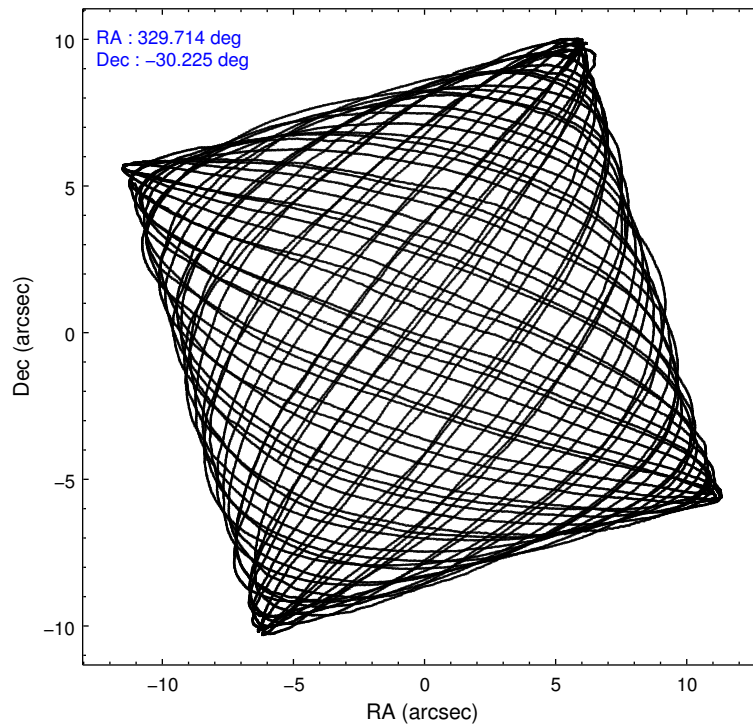
2.1.4 Events

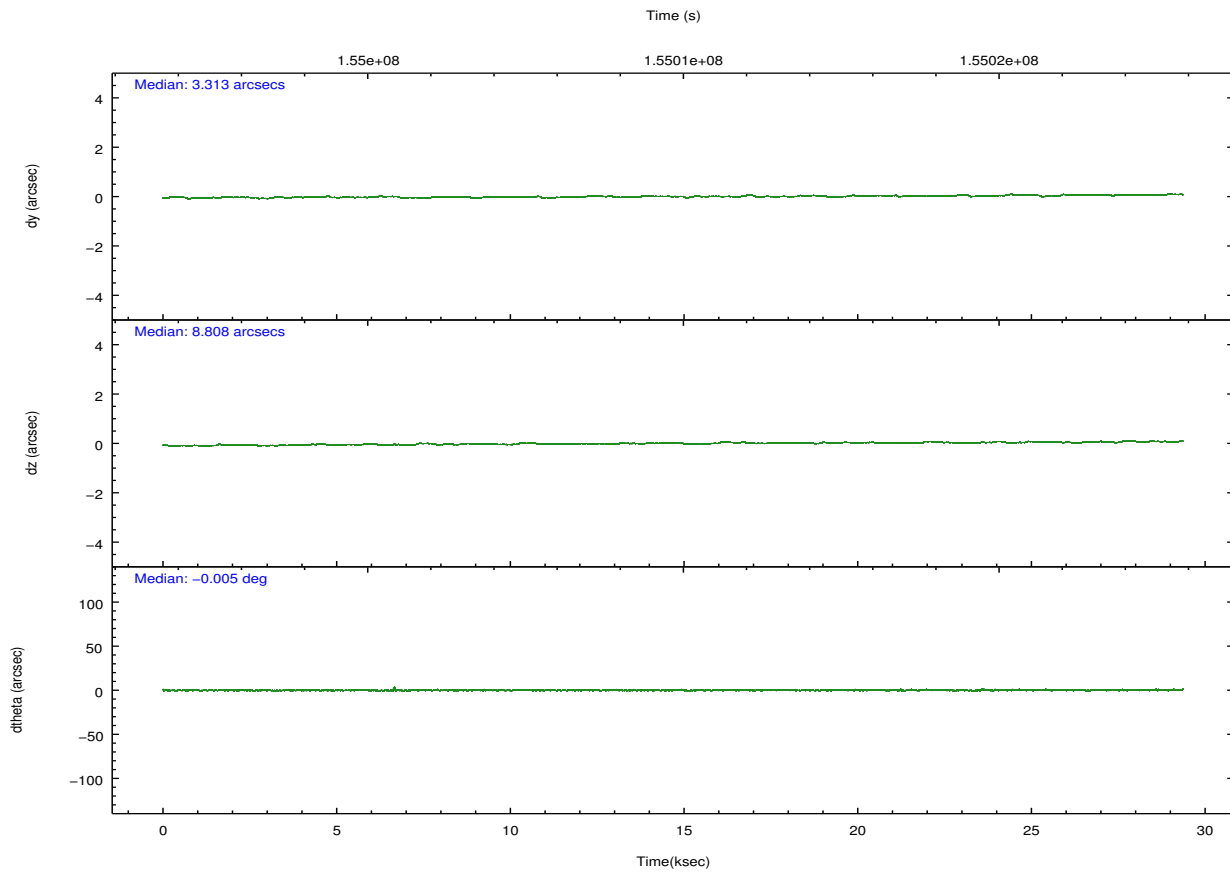
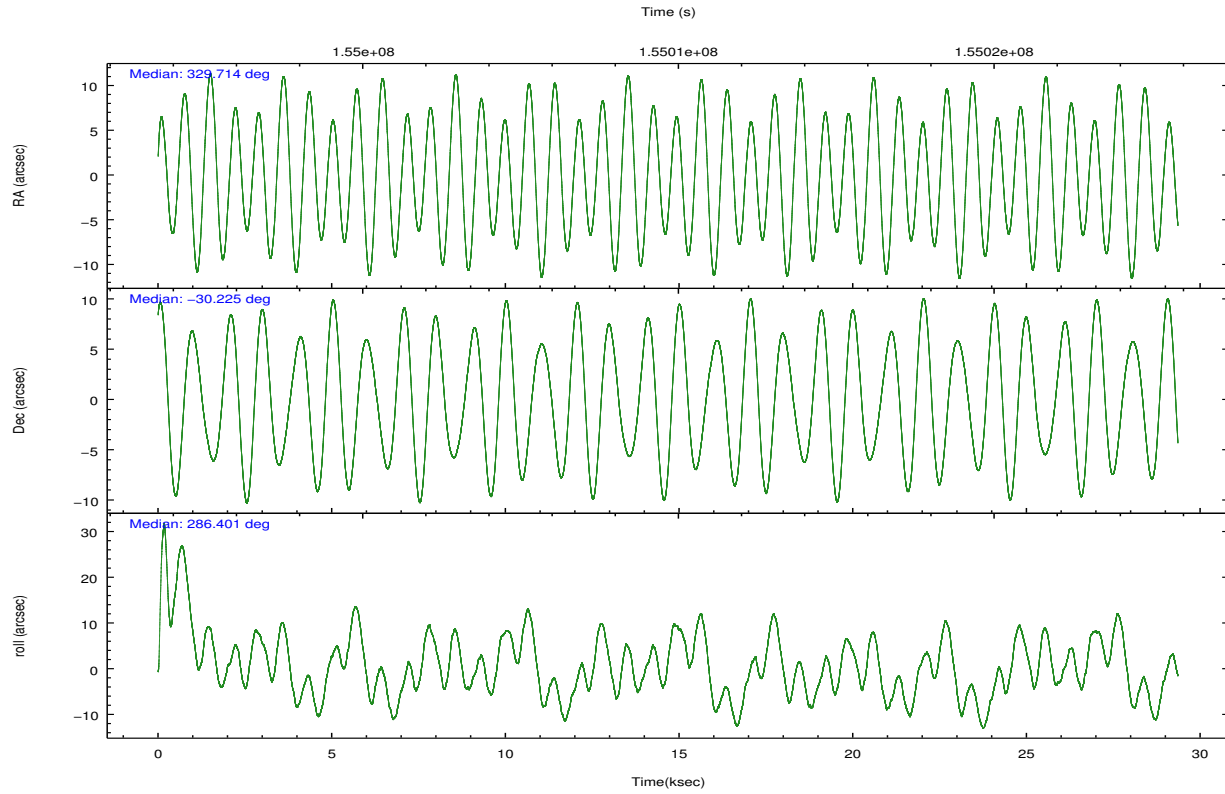
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	159582	218012	153027	203762	185872	137636	grade 0 events	15852	24903	19037	11040	19981	8814
rejected events	133697	106661	121511	110116	139757	118754		9%	11%	12%	5%	10%	6%
rejected %	83%	48%	79%	54%	75%	86%	grade 1 events	137	1257	94	421	122	63
								0%	0%	0%	0%	0%	0%
							grade 2 events	3771	29210	4698	19161	8367	3333
								2%	13%	3%	9%	4%	2%
							grade 3 events	1810	5109	2210	8792	4420	1790
								1%	2%	1%	4%	2%	1%
							grade 4 events	1800	4959	2135	8703	4092	1765
								1%	2%	1%	4%	2%	1%
							grade 5 events	5515	15206	5834	18597	7788	6463
								3%	6%	3%	9%	4%	4%
							grade 6 events	2654	47182	3440	45954	9257	3182
								1%	21%	2%	22%	4%	2%
							grade 7 events	128043	90186	115579	91094	131845	112226
								80%	41%	75%	44%	70%	81%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	329.691222	329.7143352015189	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-30.206099	-30.22460034850907	Subarray start row	1	1
[deg] Pointing Roll	286.238350	286.4066090582463	Subarray row count	774	774
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	2.5
[mm] SIM translation stage pos	-187.132523	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	154996354.184000	154994807.7141			
Observation start date	2002-11-29T22:31:30	2002-11-29T22:06:47			
[s] Observation end time (MET)	155024354.184000	155024817.66536			
Observation end date	2002-11-30T06:18:10	2002-11-30T06:26:57			
Read mode	TIMED	TIMED			

2.3 Aspect



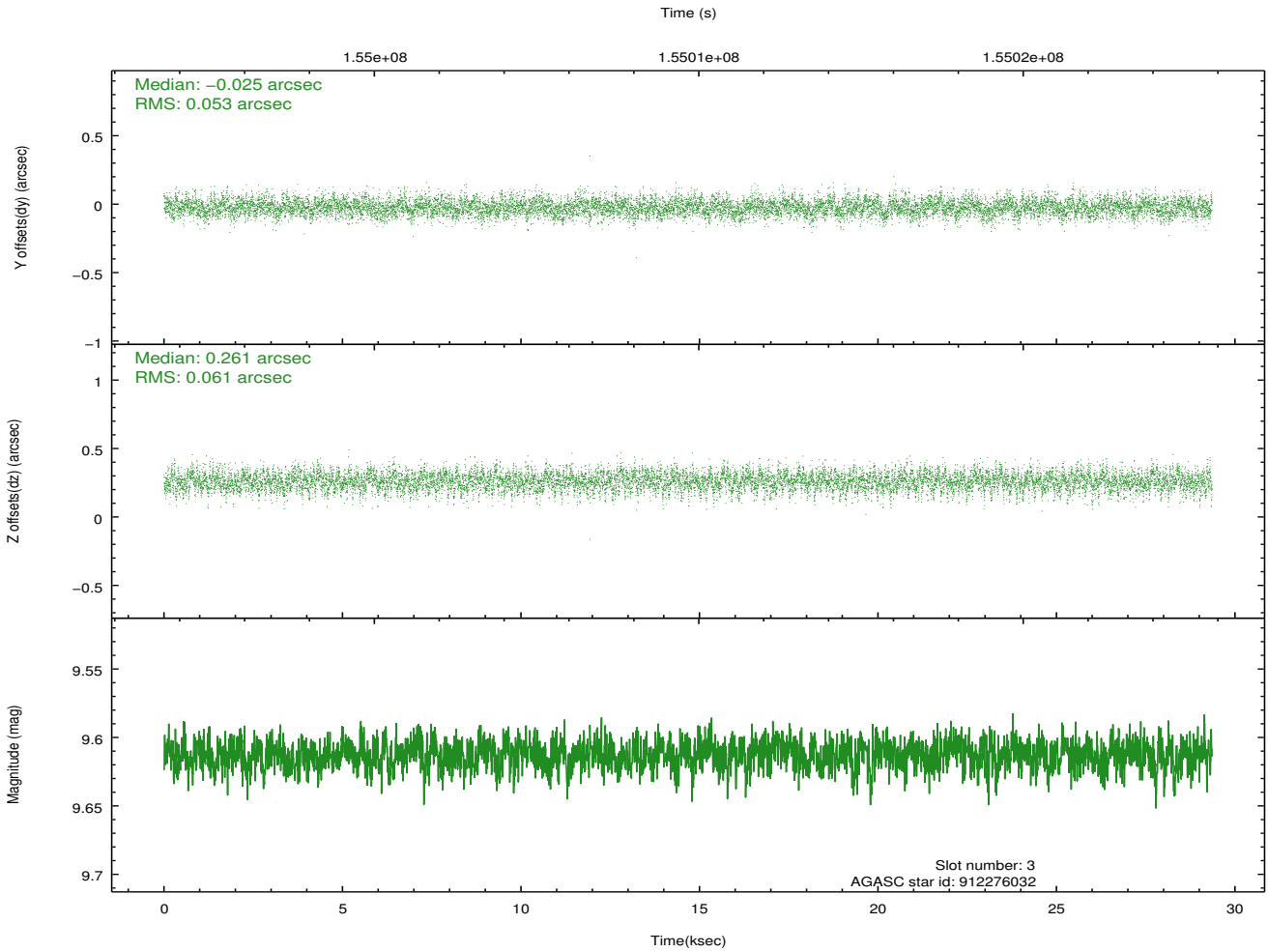
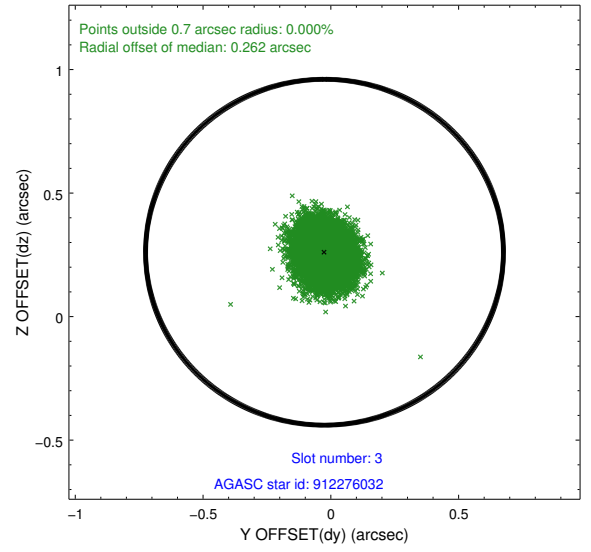
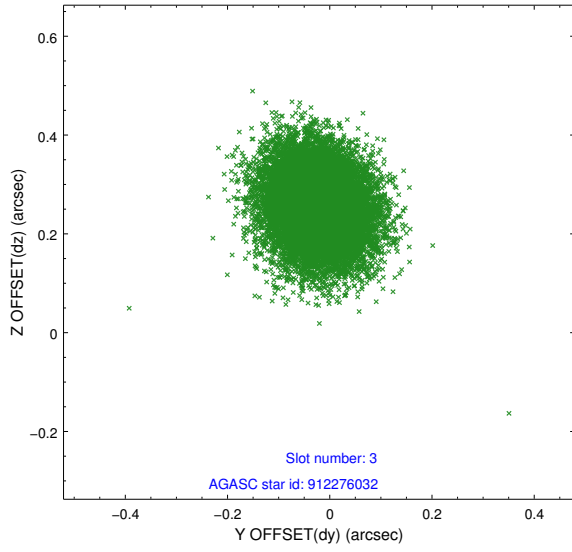


Slot Statistics

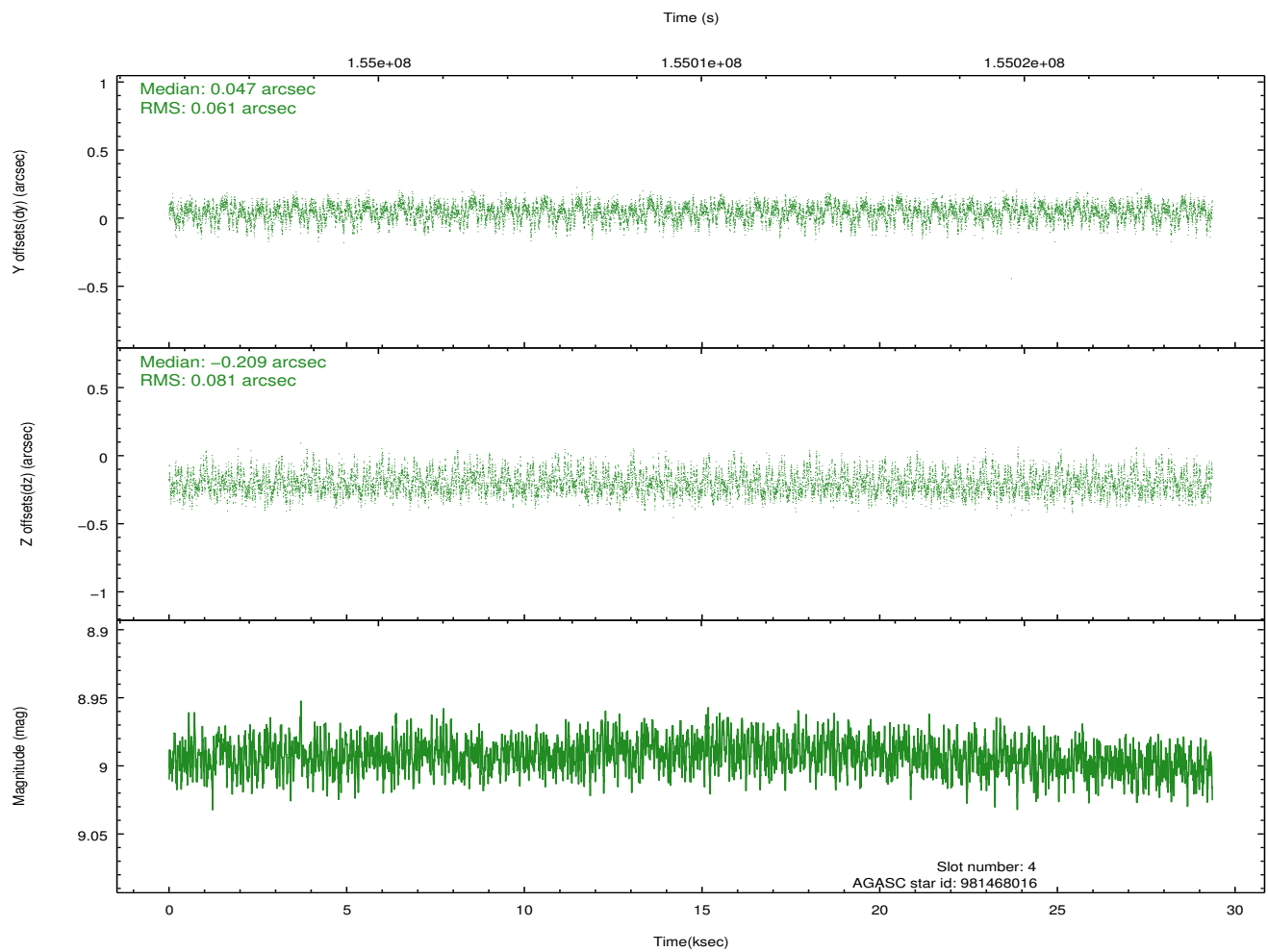
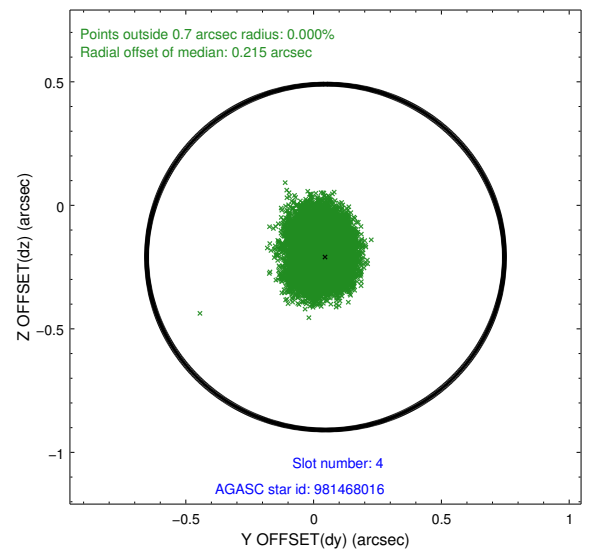
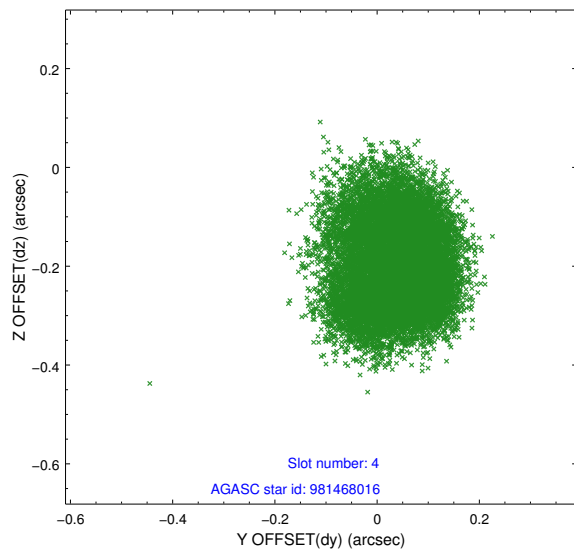
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7160	-0.054	-0.026	0.007	0.011	0.000000	0.000000	-755.78	-1792.14
1	FID	ACIS-S-4	7.20	7161	0.030	0.033	0.006	0.011	0.000000	0.000000	2157.51	116.36
2	FID	ACIS-S-5	7.23	7161	-0.006	0.001	0.007	0.014	0.000000	0.000000	-1808.51	110.01
3	GUIDE	912276032	9.61	14309	-0.025	0.261	0.085	0.140	329.395967	-29.803466	-1648.40	-480.64
4	GUIDE	981468016	8.99	14318	0.047	-0.209	0.108	0.175	328.842457	-30.034984	-1321.57	-2370.75
5	GUIDE	981468128	9.36	14318	0.069	-0.046	0.099	0.170	329.756350	-30.158334	-108.31	242.34
6	GUIDE	981478152	9.41	14048	-0.015	0.071	0.082	0.135	329.415589	-30.057192	-753.78	-675.27
7	GUIDE	912275088	9.06	14311	-0.075	-0.081	0.077	0.126	329.619228	-29.738698	-1678.51	253.97

2.4 Star Slots

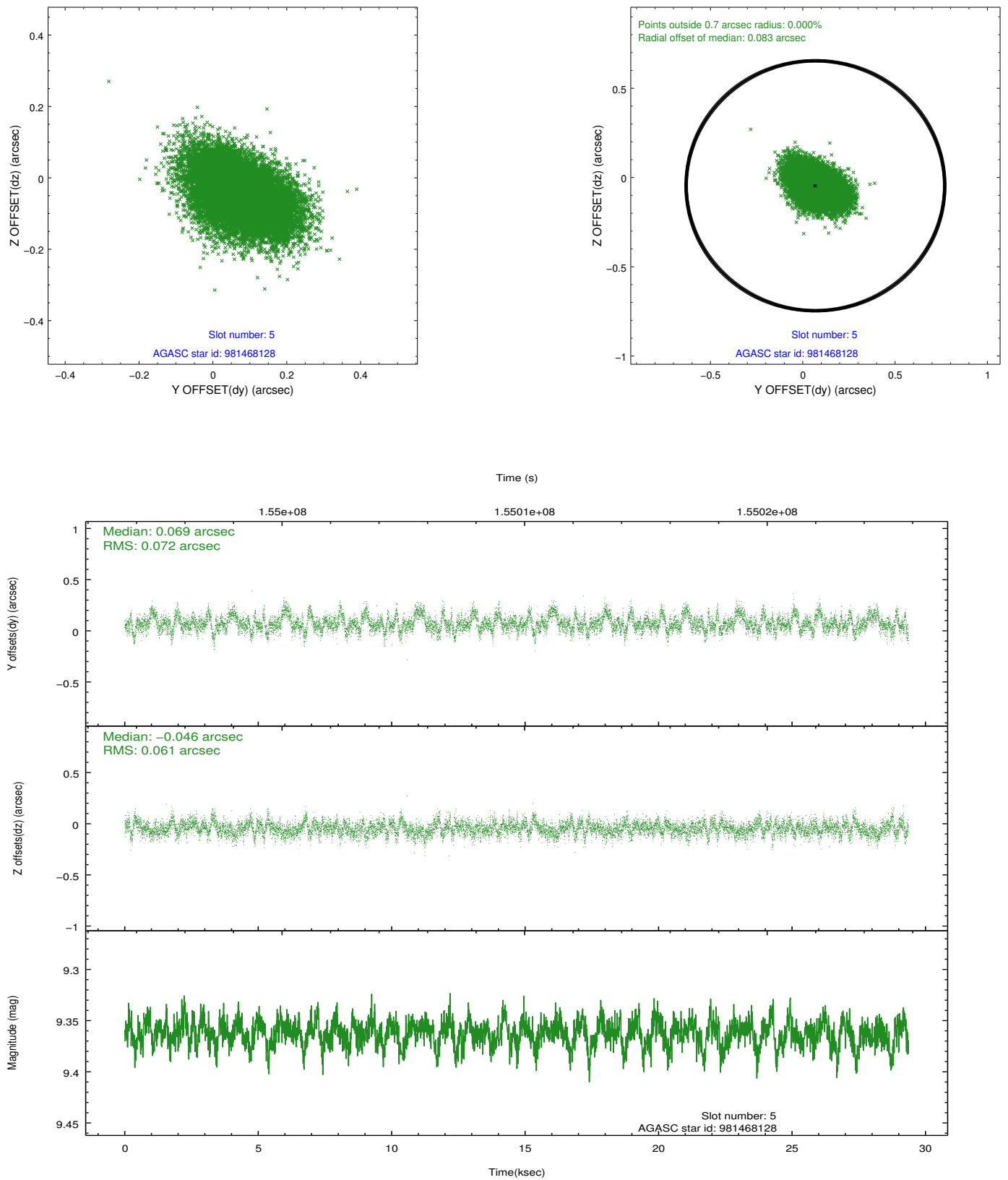
2.4.1 Slot 3



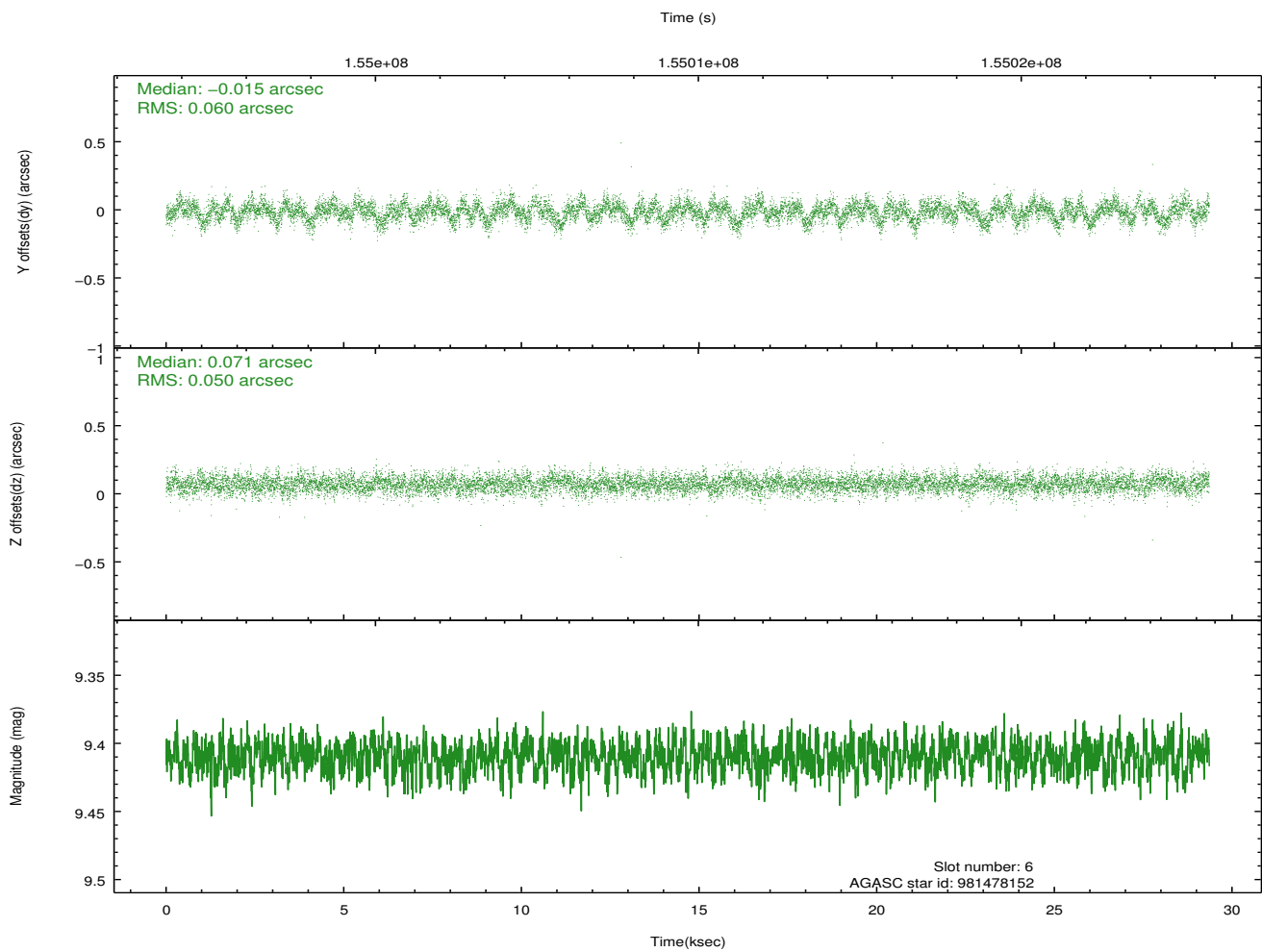
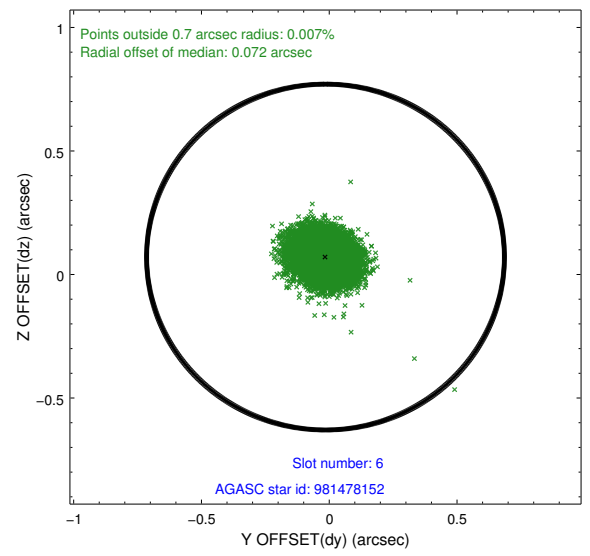
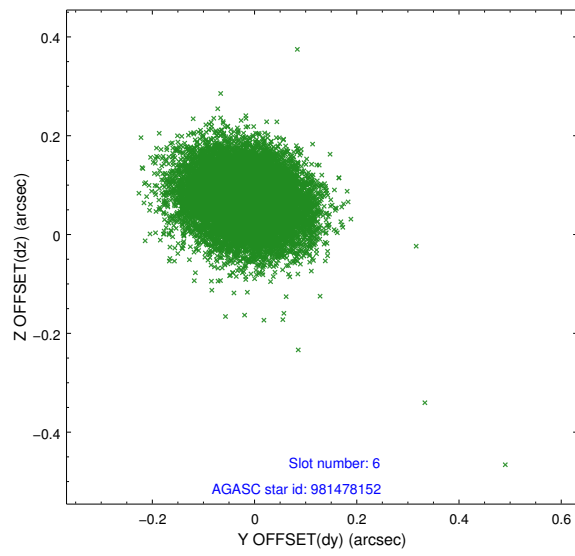
2.4.2 Slot 4



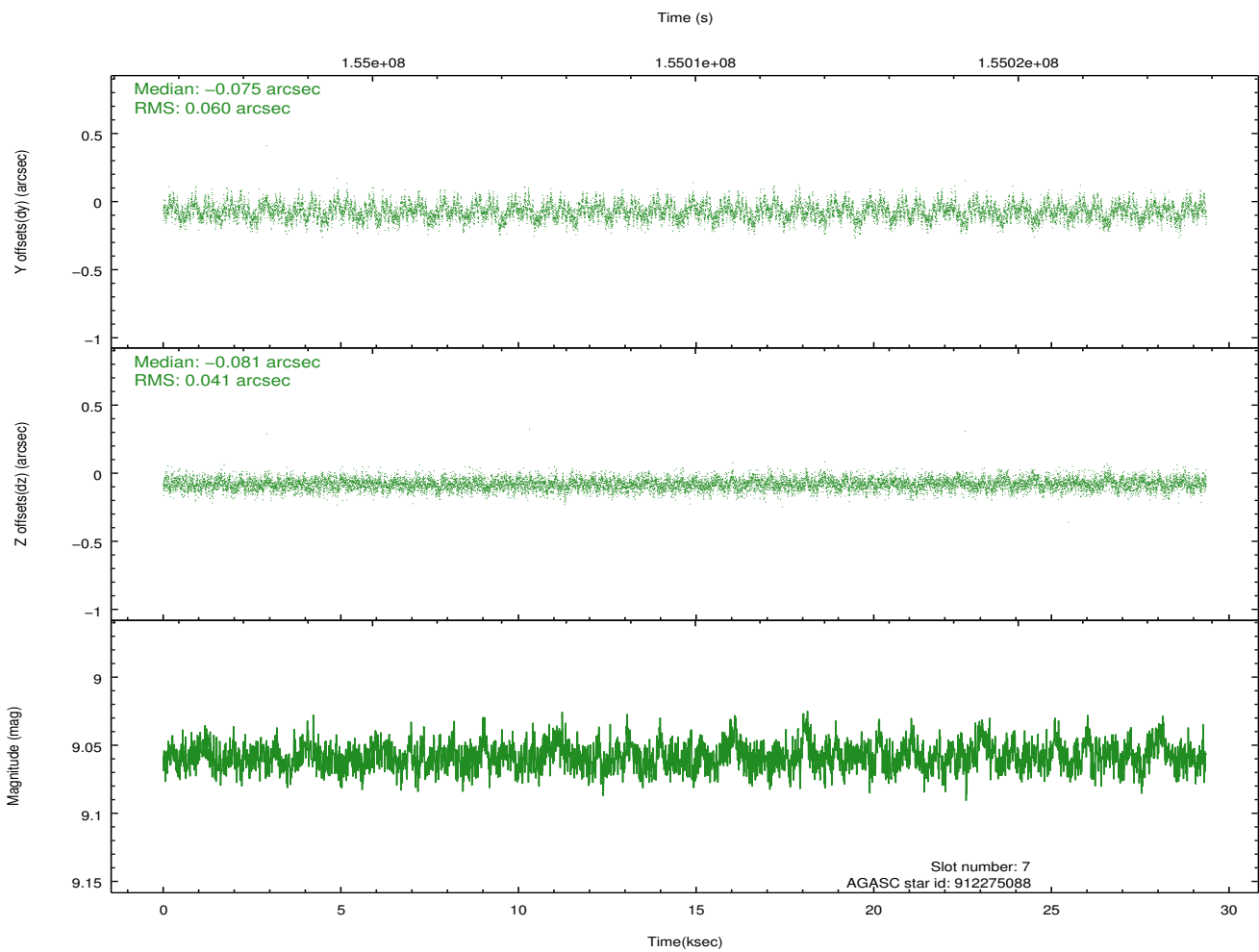
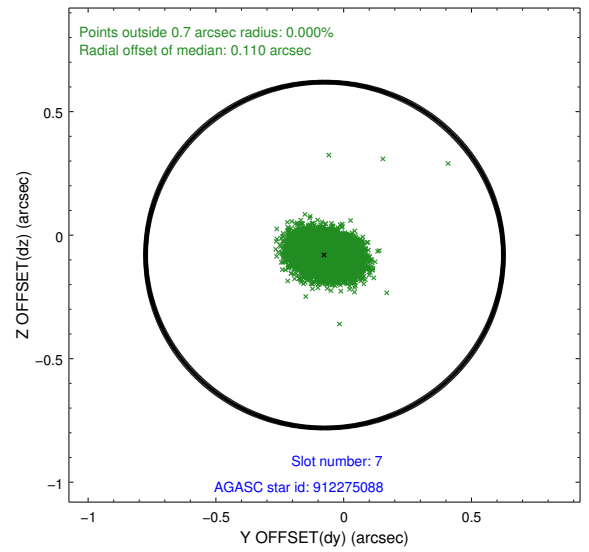
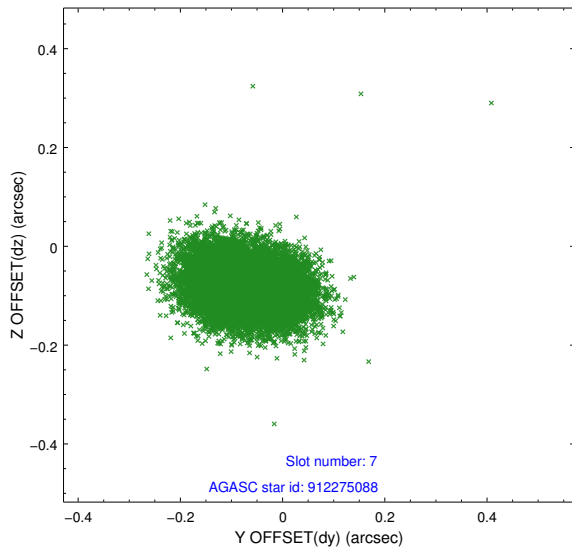
2.4.3 Slot 5



2.4.4 Slot 6

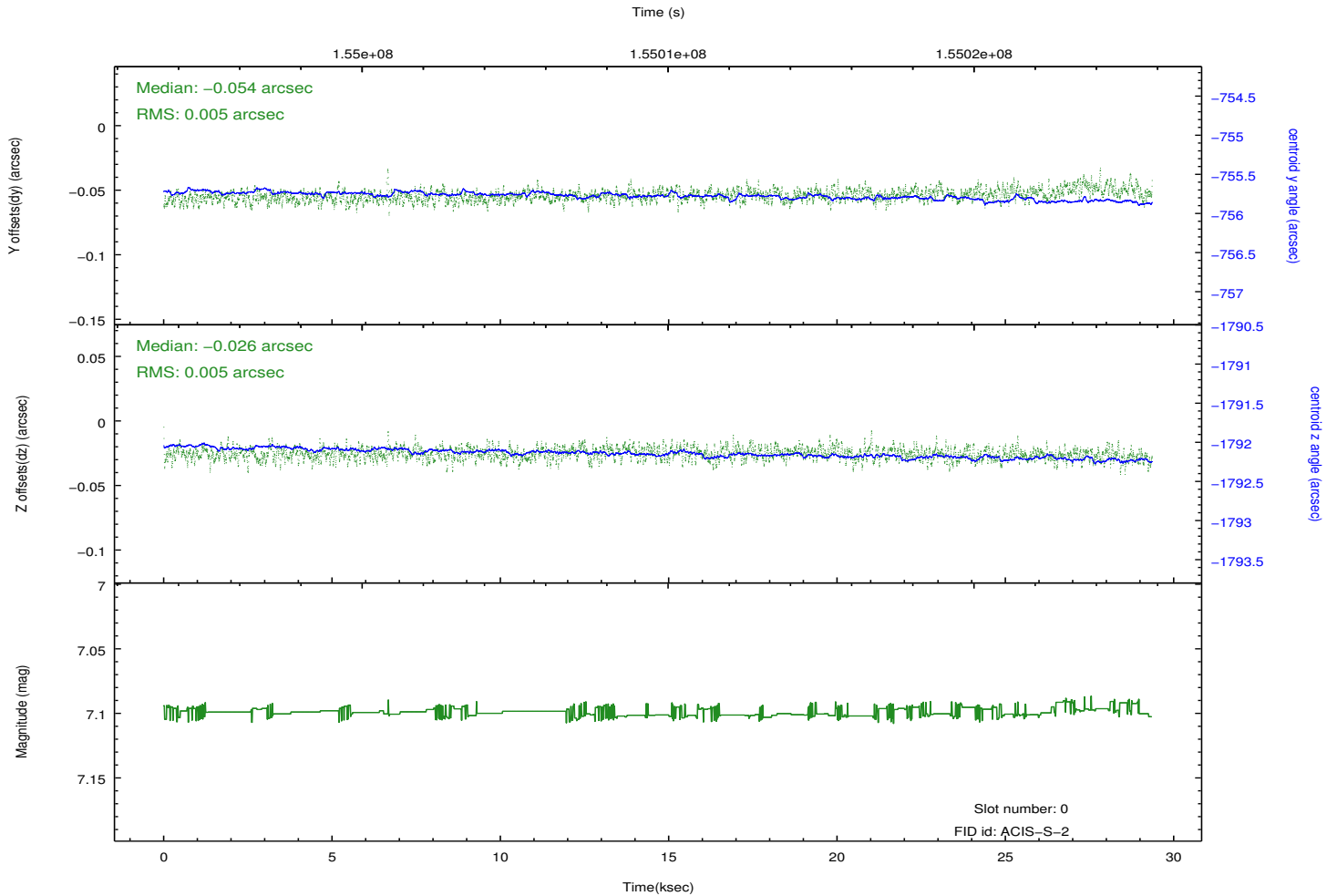
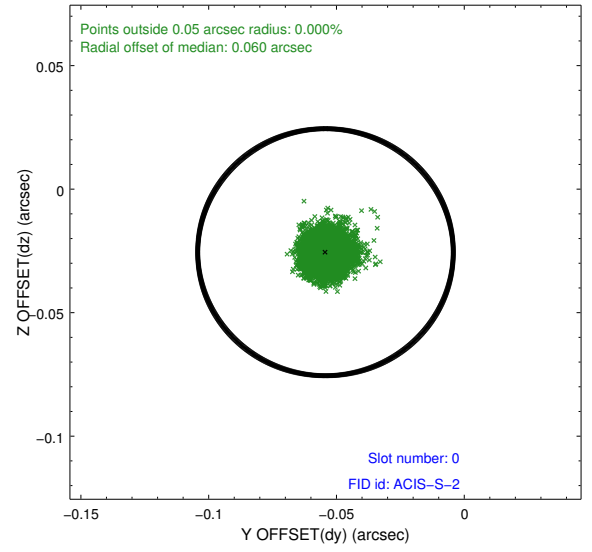
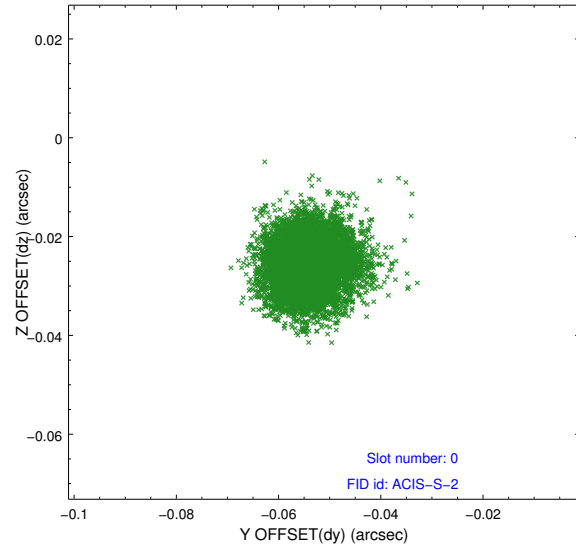


2.4.5 Slot 7

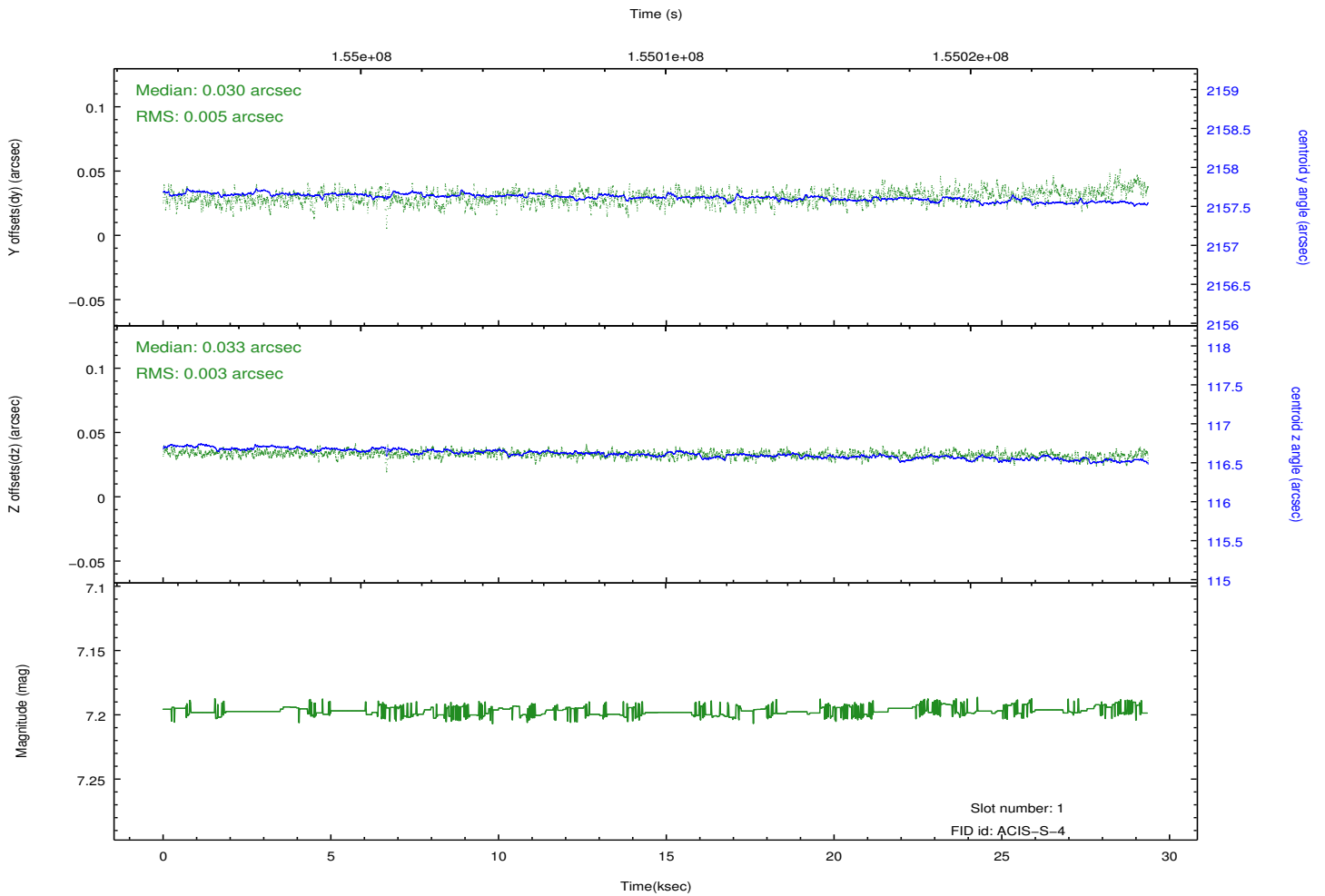
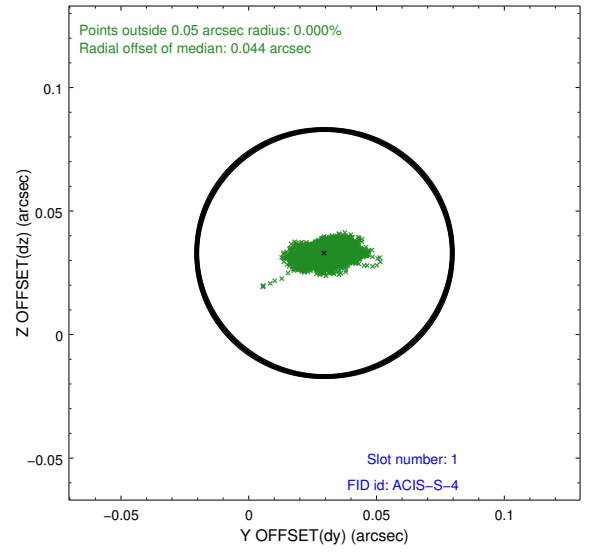
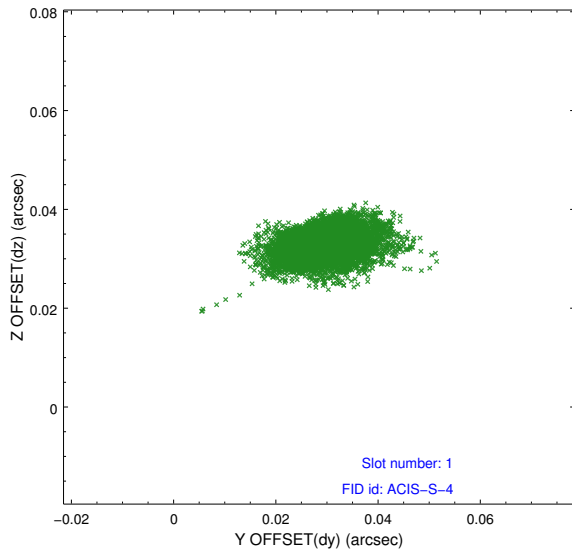


2.5 FID Slots

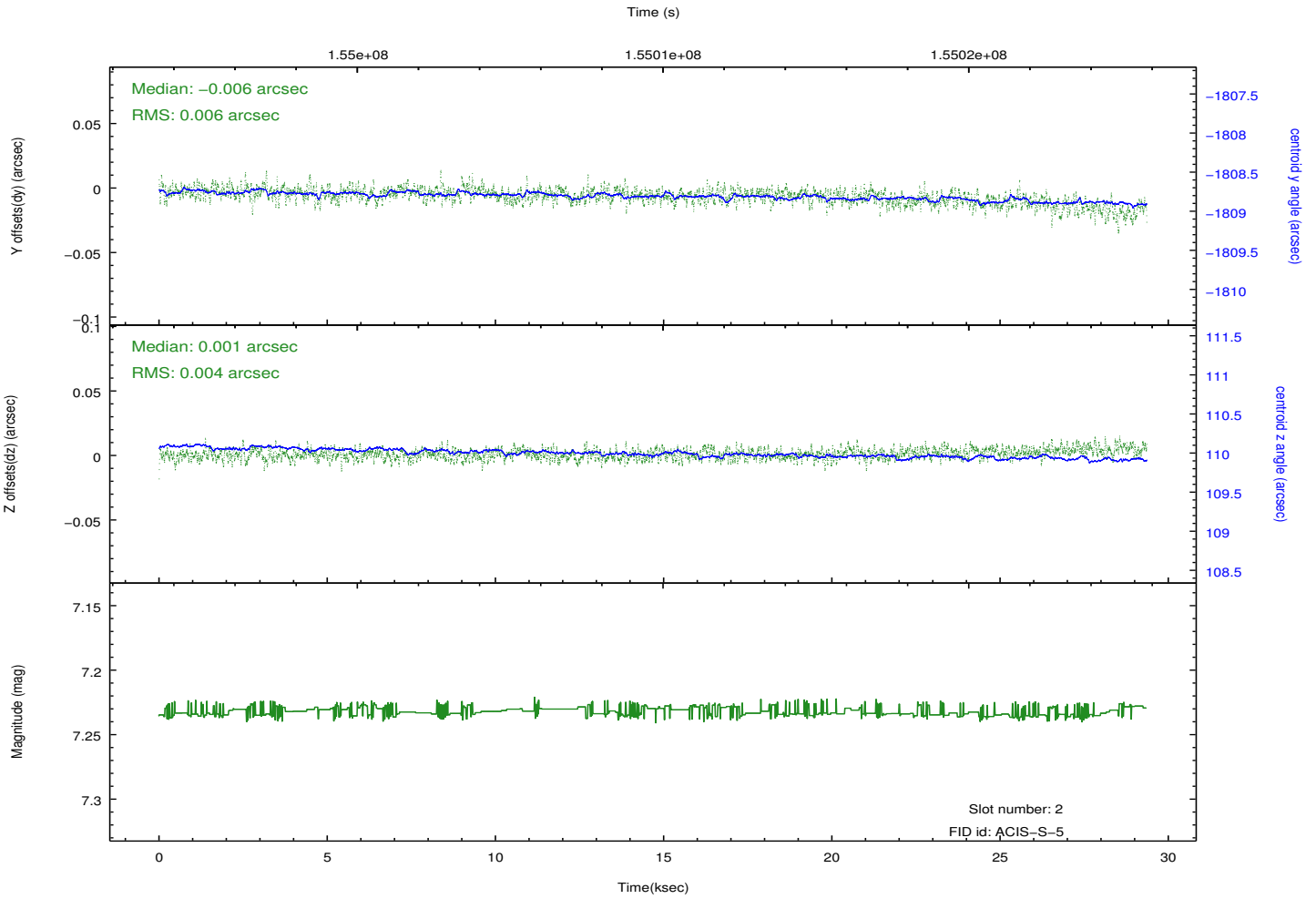
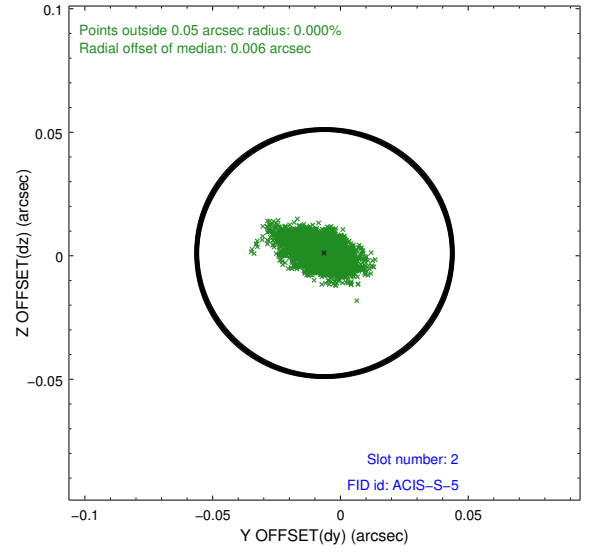
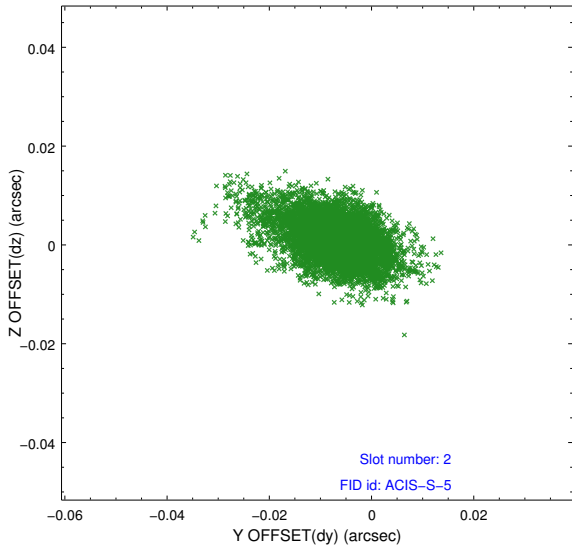
2.5.1 Slot 0



2.5.2 Slot 1

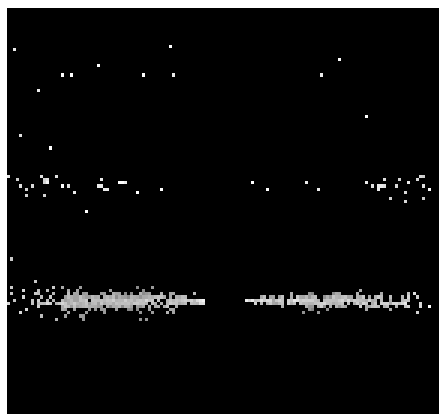


2.5.3 Slot 2

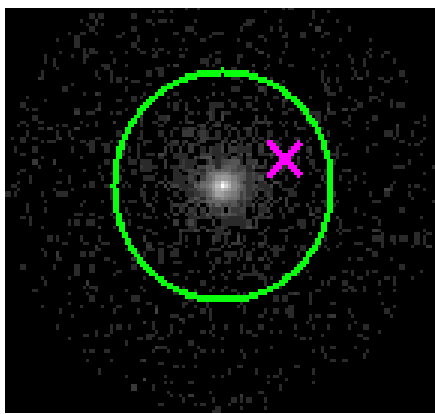


3 Gratings

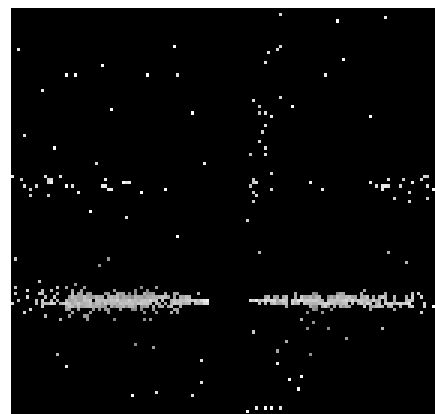
3.1 HEG Arm



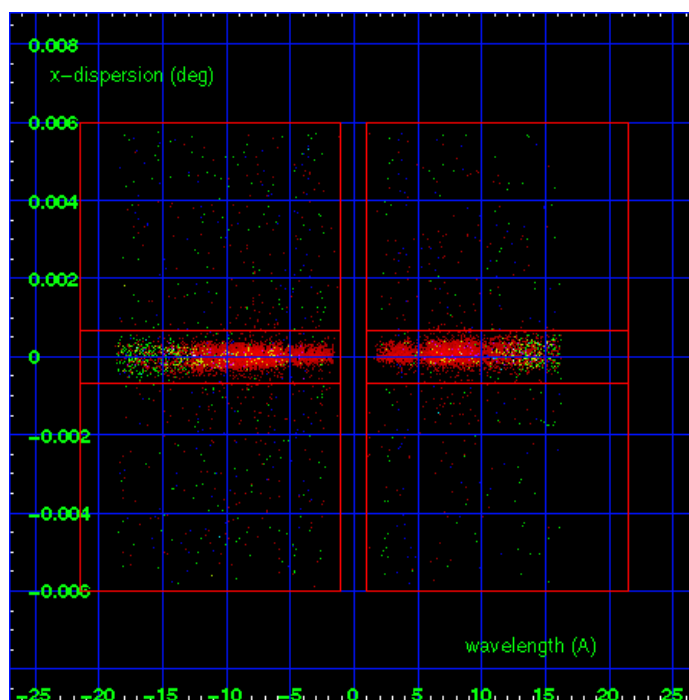
HEG Order Sort 123



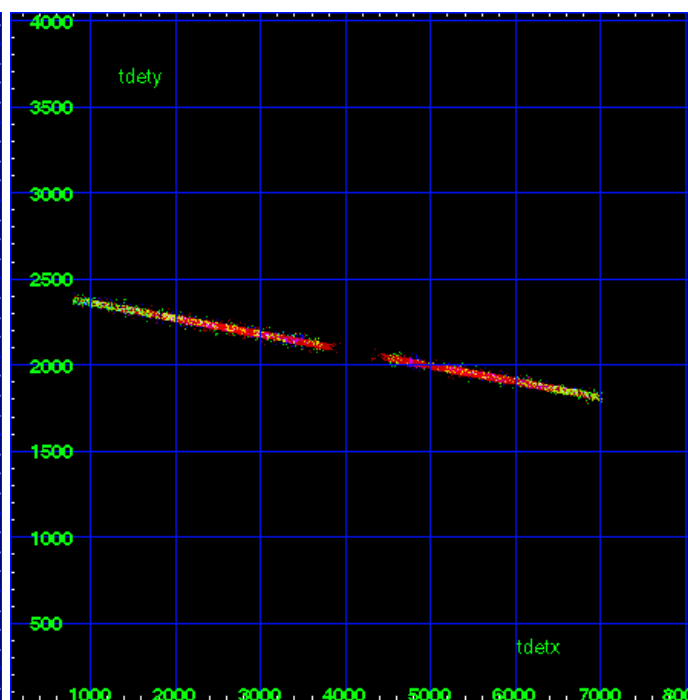
HEG Zero Order



HEG Order Sort ALL

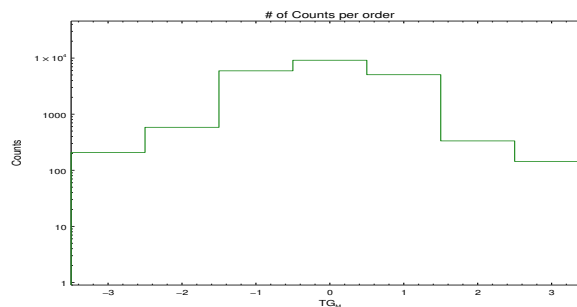


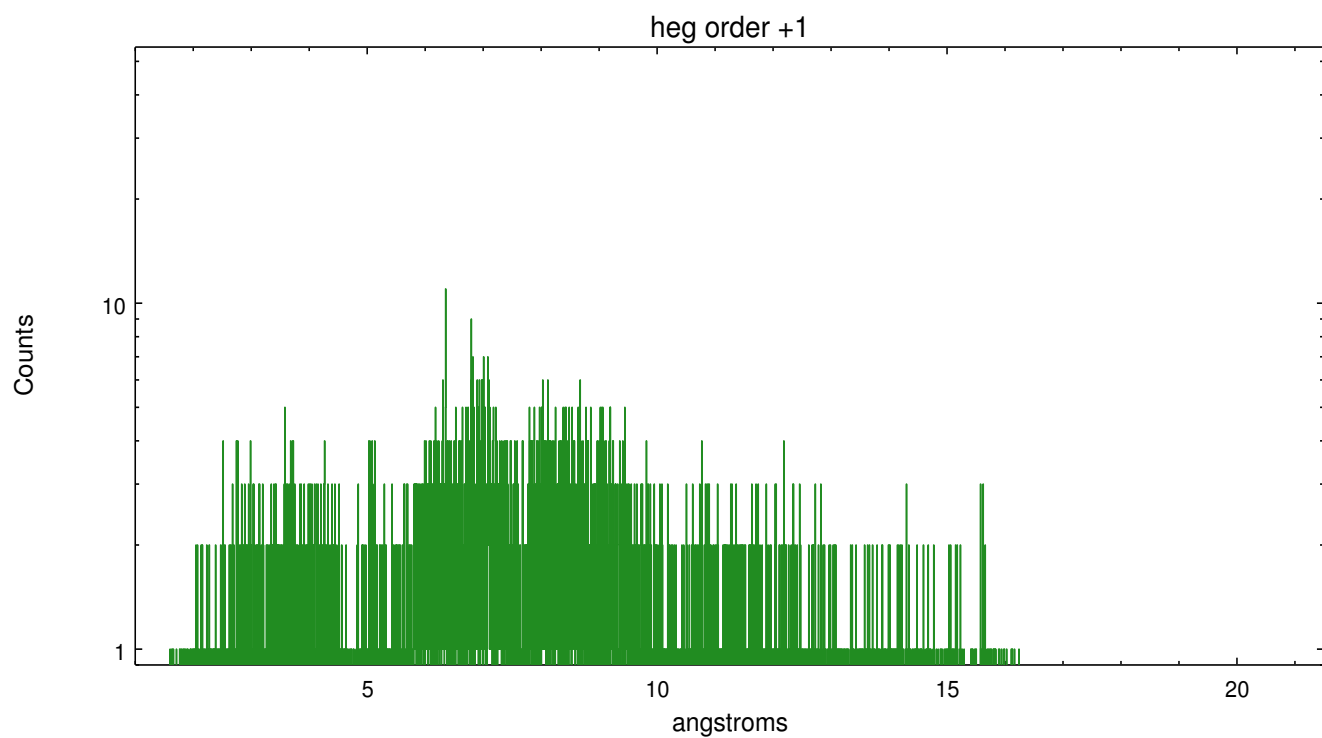
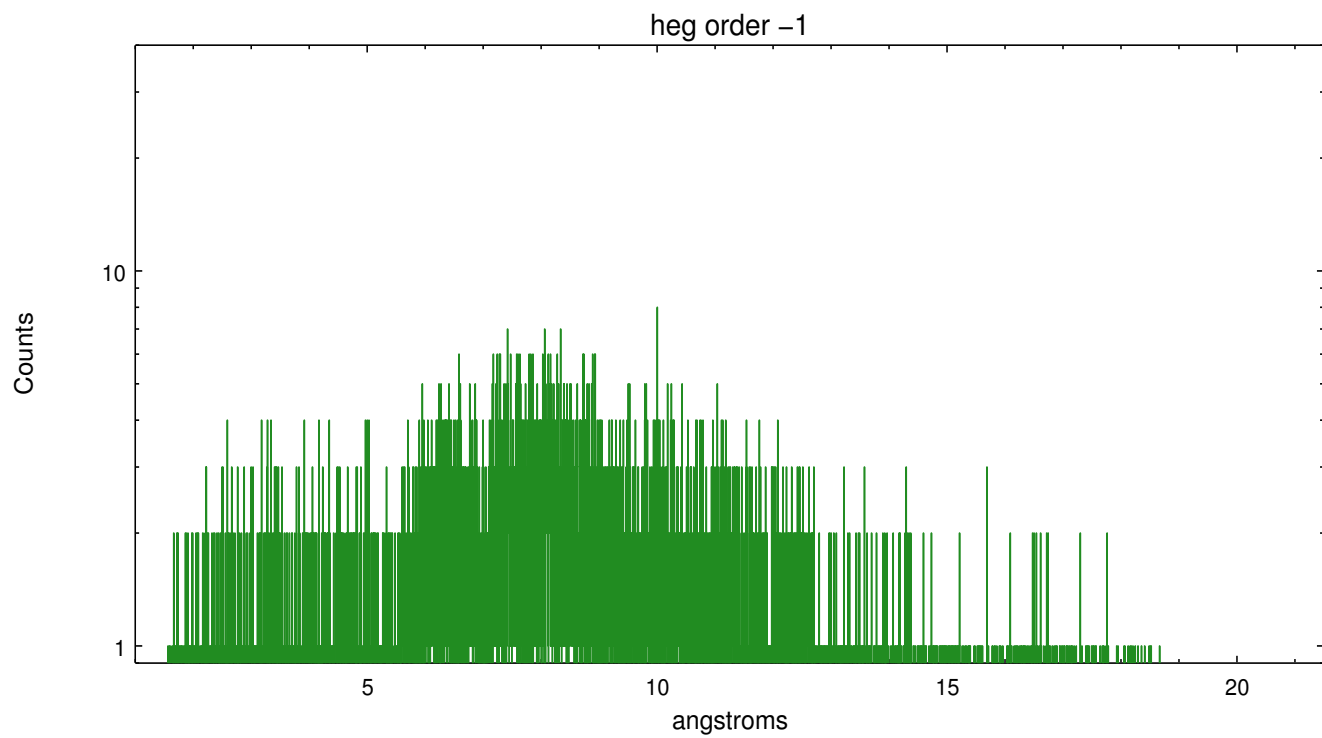
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	208	583	5928	9147	5058	334	144

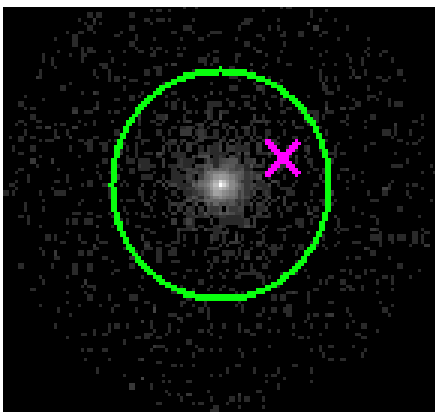




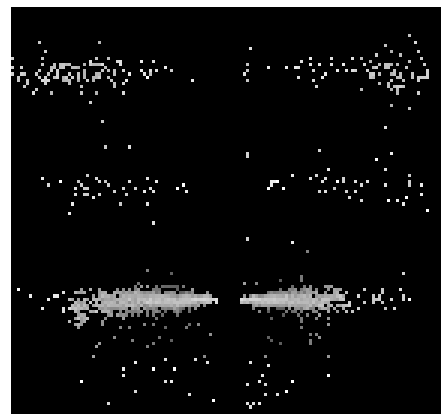
3.2 MEG Arm



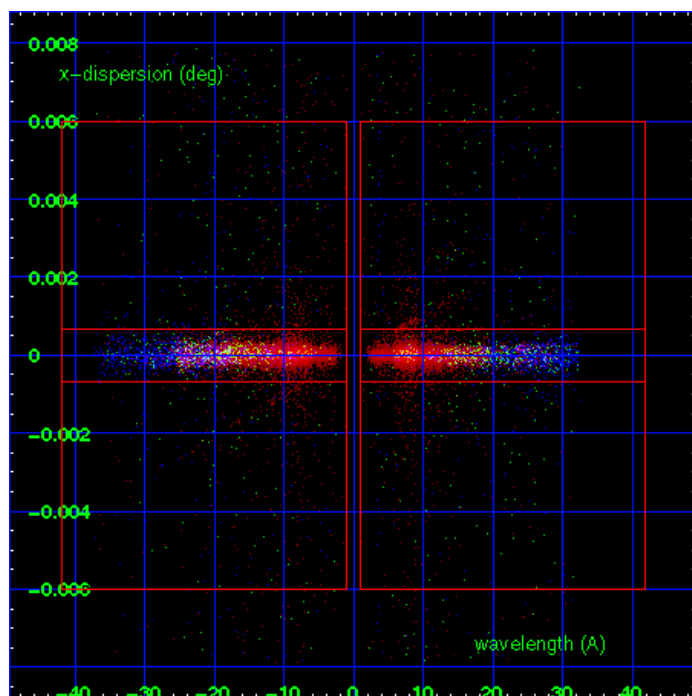
MEG Order Sort 123



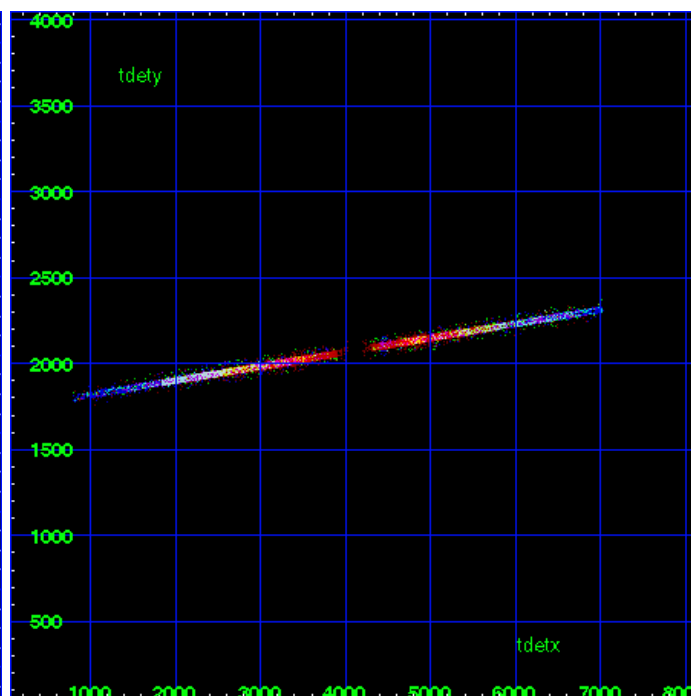
MEG Zero Order



MEG Order Sort ALL

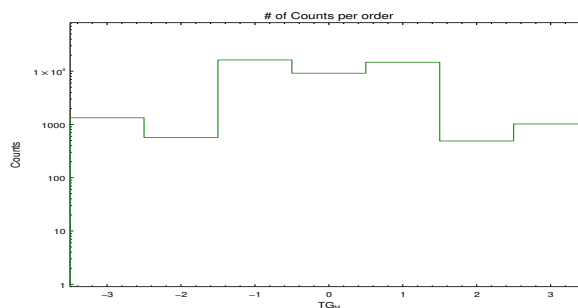


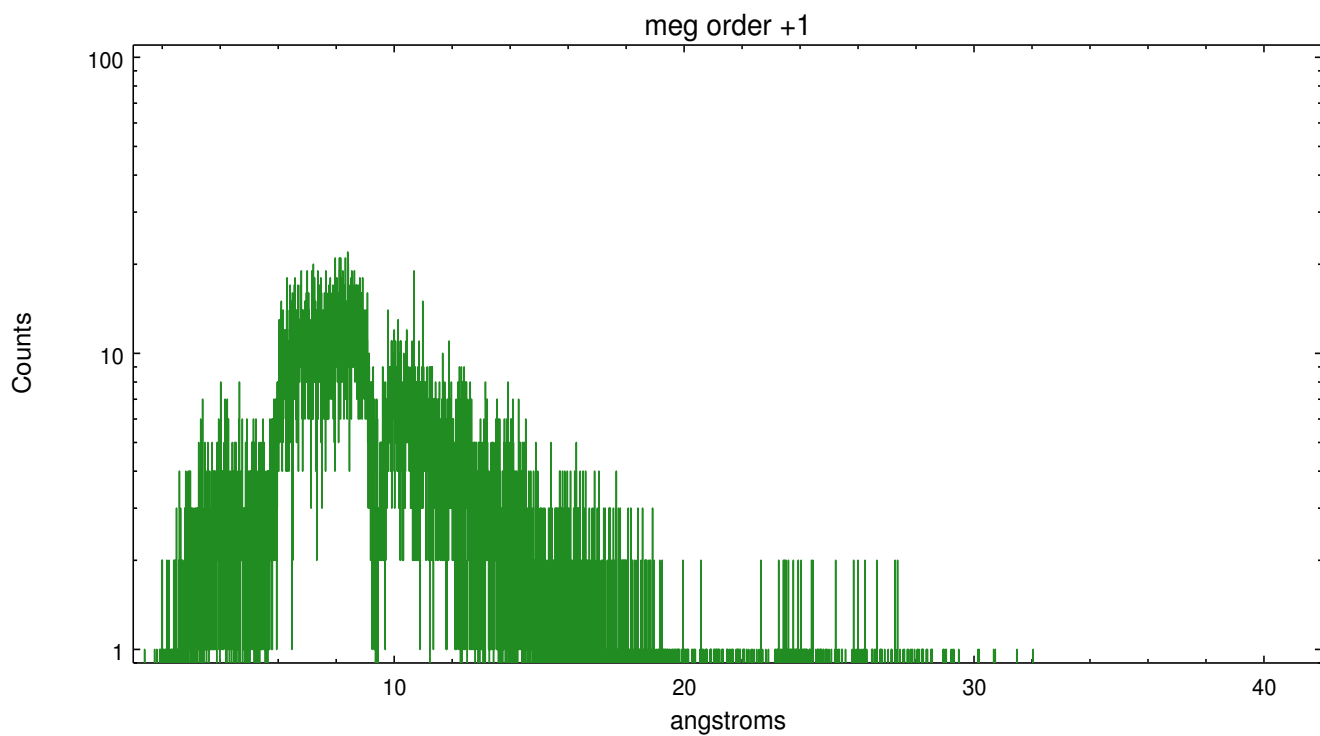
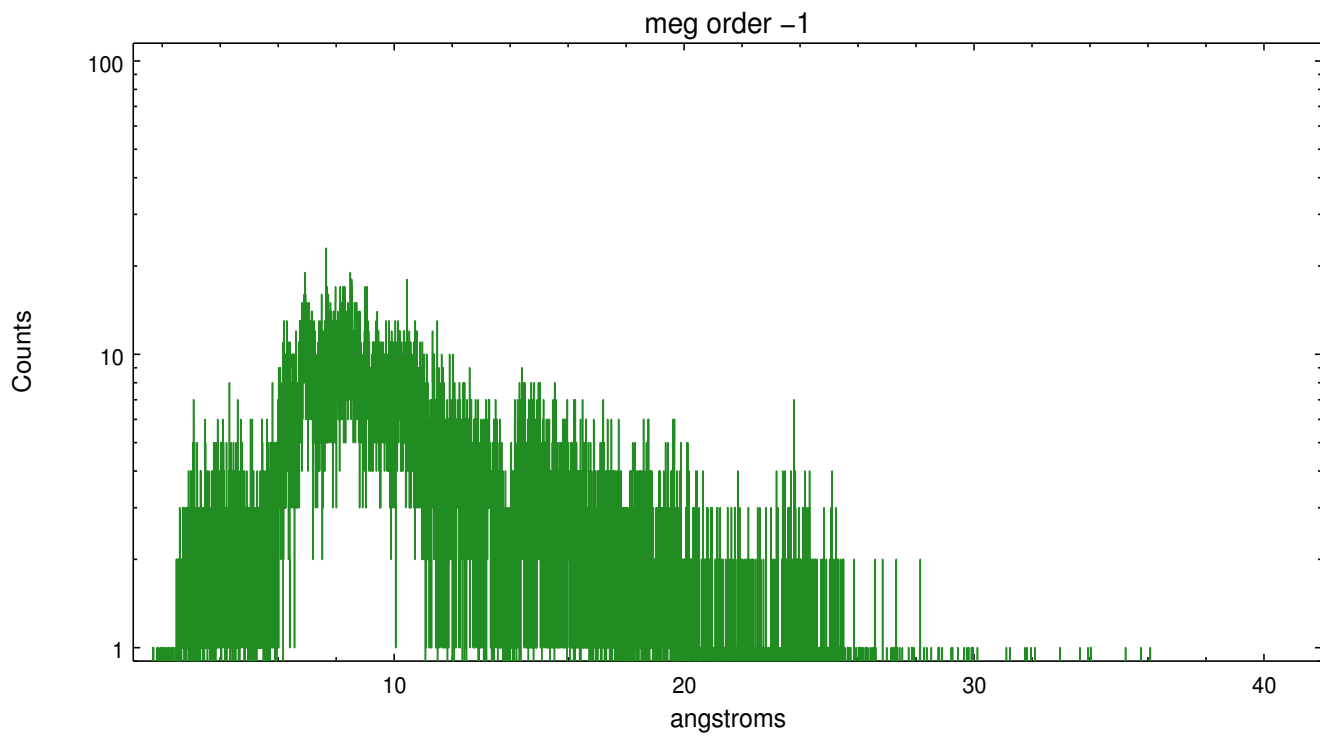
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1334	567	16266	9147	14721	490	1021





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.162

A.2 Comments