

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3491 - L2 Version 3
Chandra X-Ray Center

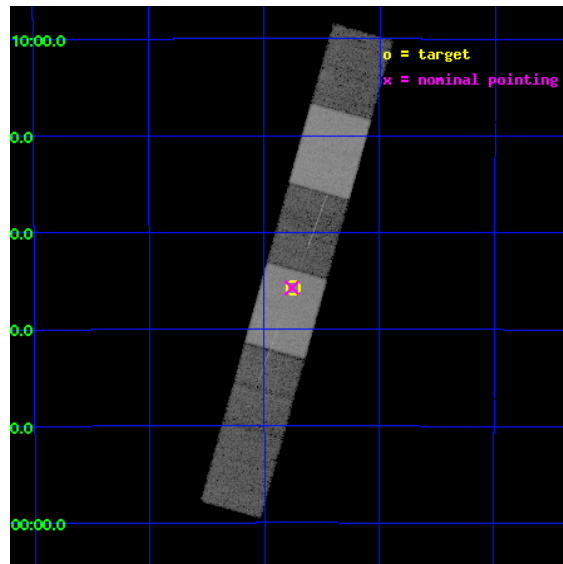
L2 Processing Date : Oct 5 2012

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

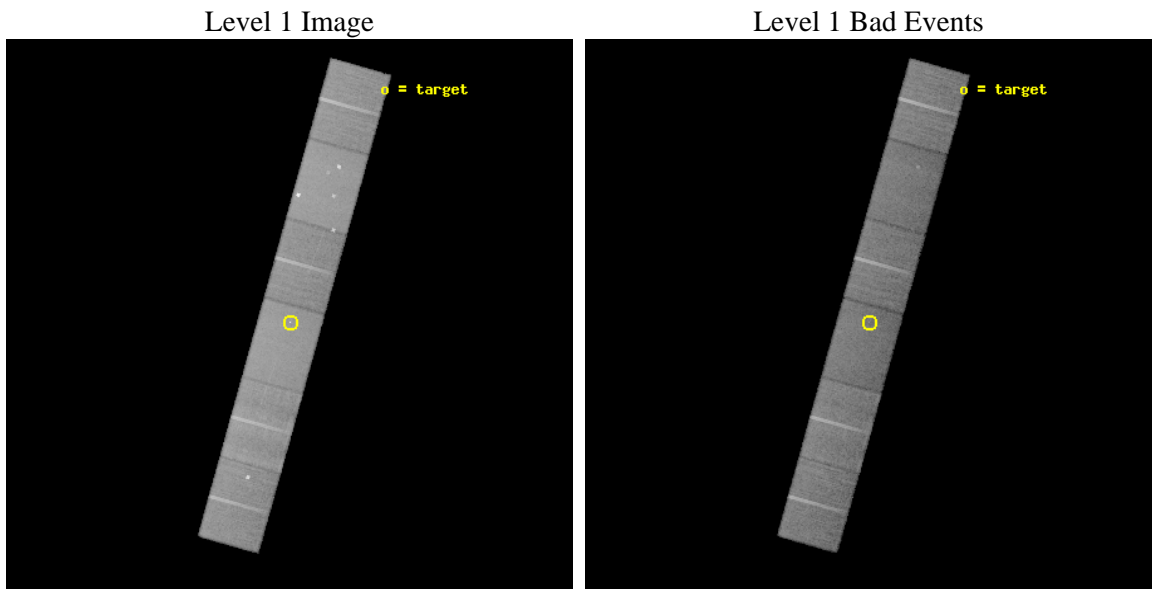
seq_num	200144	Sequence number
obs_id	3491	Observation id
title	HIGH-RESOLUTION SPECTRA OF T TAURI STARS	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	SPEEDY MIC	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	311.9375	Observer's specified target RA [deg]
dec_targ	-36.594667	Observer's specified target Dec [deg]
ra_nom	311.94000772069	Nominal RA [deg]
dec_nom	-36.595601216061	Nominal Dec [deg]
roll_nom	105.65811609619	Nominal Roll [deg]
revision	3	Processing version of data
ontime	35164.385373384	Sum of GTIs [s]
livetime	34596.450049373	Livetime [s]
ontime4	35166.967373639	Sum of GTIs [s]
ontime5	35164.34433338	Sum of GTIs [s]
ontime6	35166.844253629	Sum of GTIs [s]
ontime7	35164.385373384	Sum of GTIs [s]
ontime8	35166.803213626	Sum of GTIs [s]
ontime9	35166.762173653	Sum of GTIs [s]
l2events	267162	Number of level 2 events



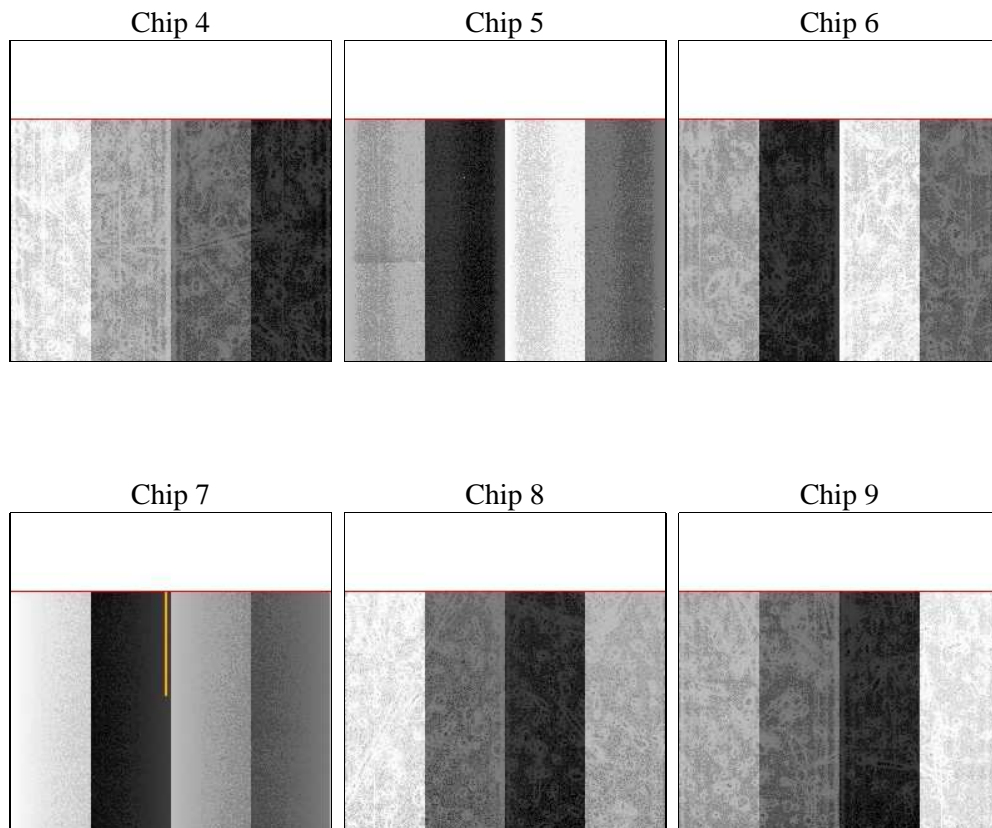
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	35164.385373384	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	35166.967373639	Sum of GTIs [s]
date	2012-10-05T17:54:26	Date and time of file creation	ontime5	35164.34433338	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	35166.844253629	Sum of GTIs [s]
			ontime7	35164.385373384	Sum of GTIs [s]
			ontime8	35166.803213626	Sum of GTIs [s]
			ontime9	35166.762173653	Sum of GTIs [s]
			l1events	1214272	Number of level 1 events

2.1.4 Events

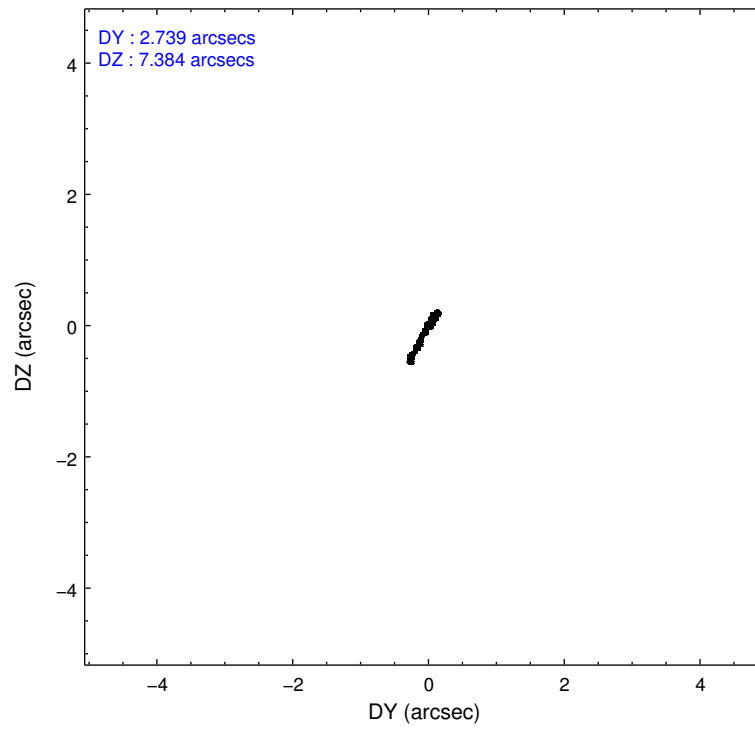
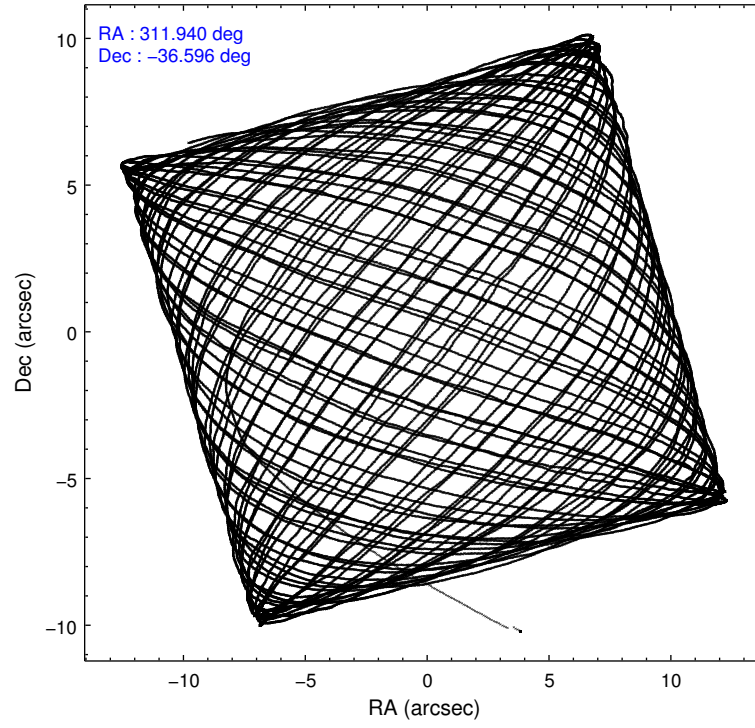
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	191829	251705	168108	216762	214373	171495	grade 0 events	8795	26000	8793	8780	15308	12454
rejected events	169808	127242	146965	124089	166628	146402		4%	10%	5%	4%	7%	7%
rejected %	88%	50%	87%	57%	77%	85%	grade 1 events	78	784	81	190	101	73
								0%	0%	0%	0%	0%	0%
							grade 2 events	5266	31849	4165	18882	9847	4345
								2%	12%	2%	8%	4%	2%
							grade 3 events	2121	5499	2104	8693	5518	2188
								1%	2%	1%	4%	2%	1%
							grade 4 events	2044	5375	2058	8588	4882	2074
								1%	2%	1%	3%	2%	1%
							grade 5 events	6056	18791	7049	20589	9003	7350
								3%	7%	4%	9%	4%	4%
							grade 6 events	3796	55745	4025	47740	12191	4036
								1%	22%	2%	22%	5%	2%
							grade 7 events	163673	107662	139833	103300	157523	138975
								85%	42%	83%	47%	73%	81%

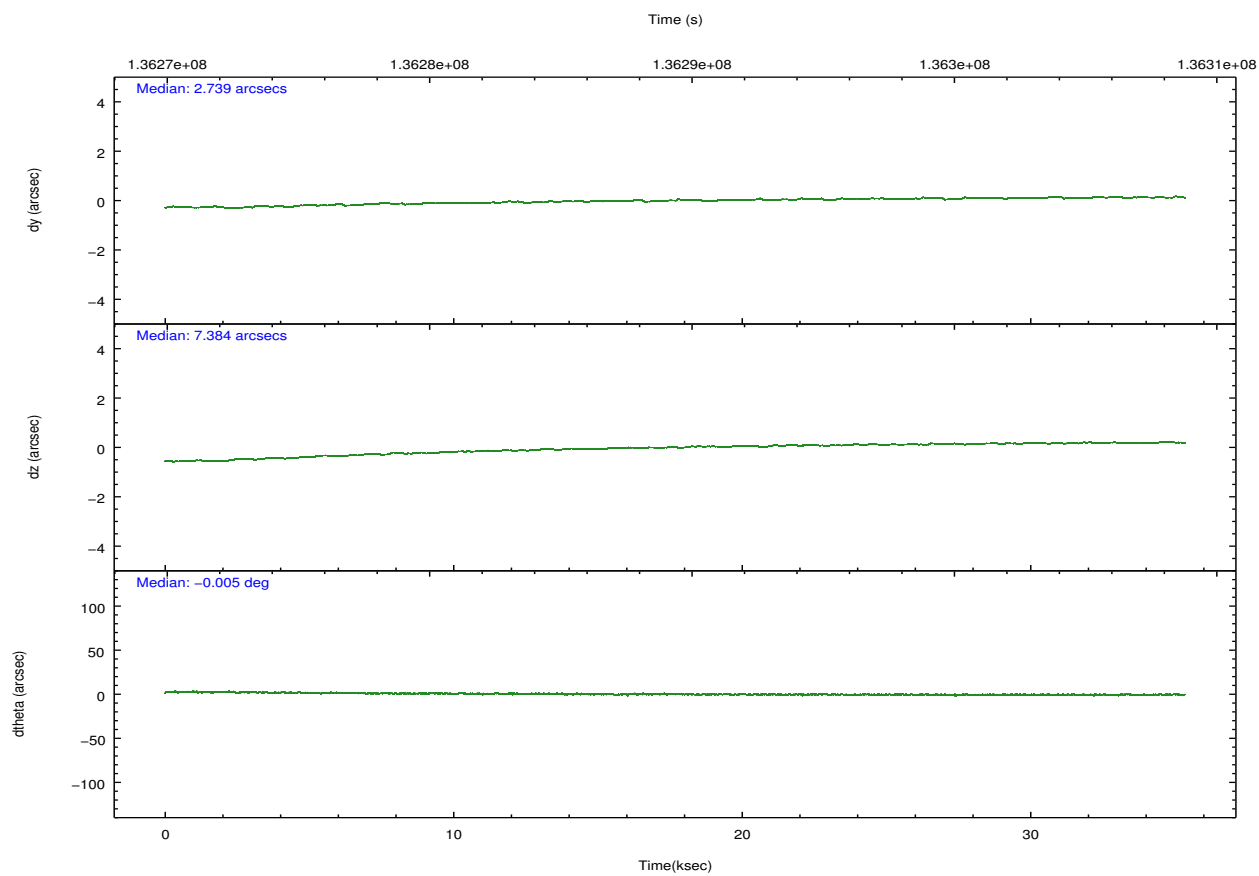
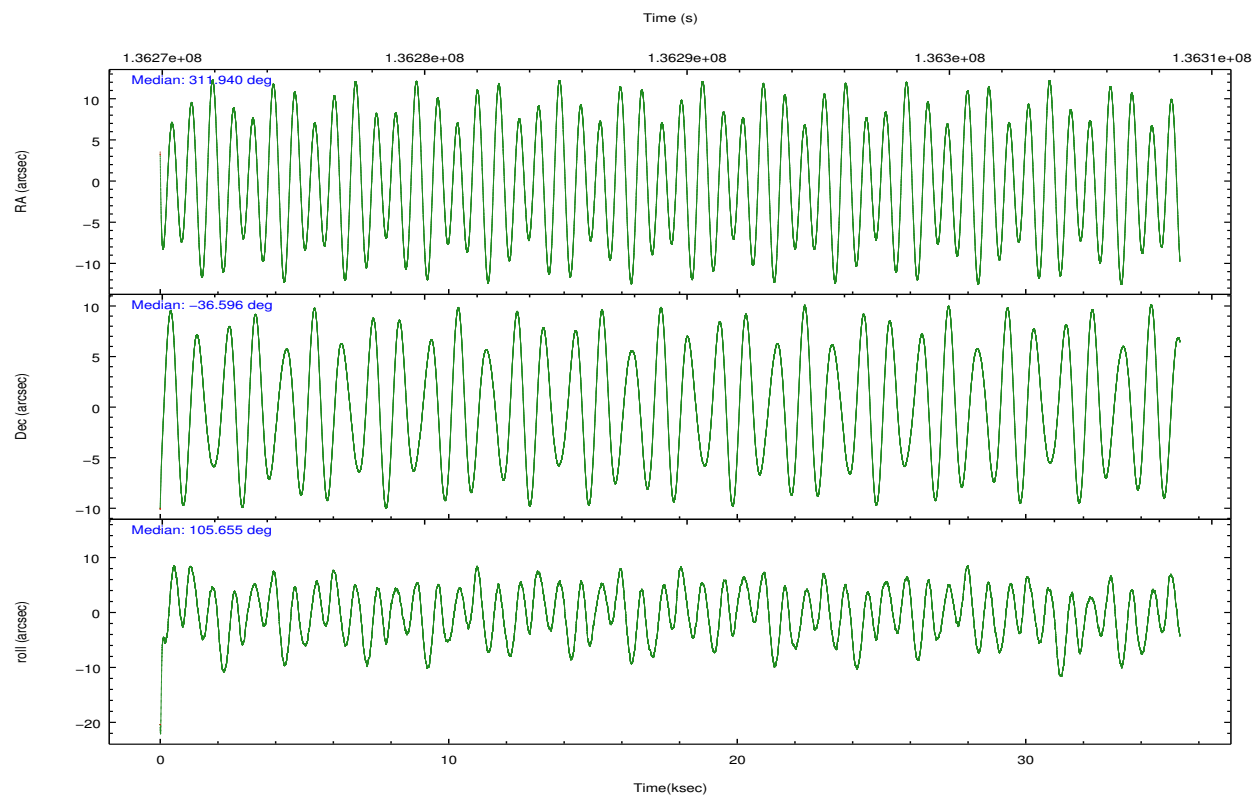
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	HETG	HETG
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	311.964572	311.9400077206943
[deg] Pointing Dec	-36.614410	-36.59560121606118
[deg] Pointing Roll	105.516141	105.6581160961884
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-187.132523	-187.1228876879999
[mm] SIM translation stage offset	-3	-3.009634895007935
[s] Observation start time (MET)	136272025.184000	136270978.1928
Observation start date	2002-04-27T05:19:21	2002-04-27T05:02:58
[s] Observation end time (MET)	136307025.184000	136307626.55679
Observation end date	2002-04-27T15:02:41	2002-04-27T15:13:46
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	CUSTOM
Subarray start row	1	1
Subarray row count	774	774
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	2.5

2.3 Aspect



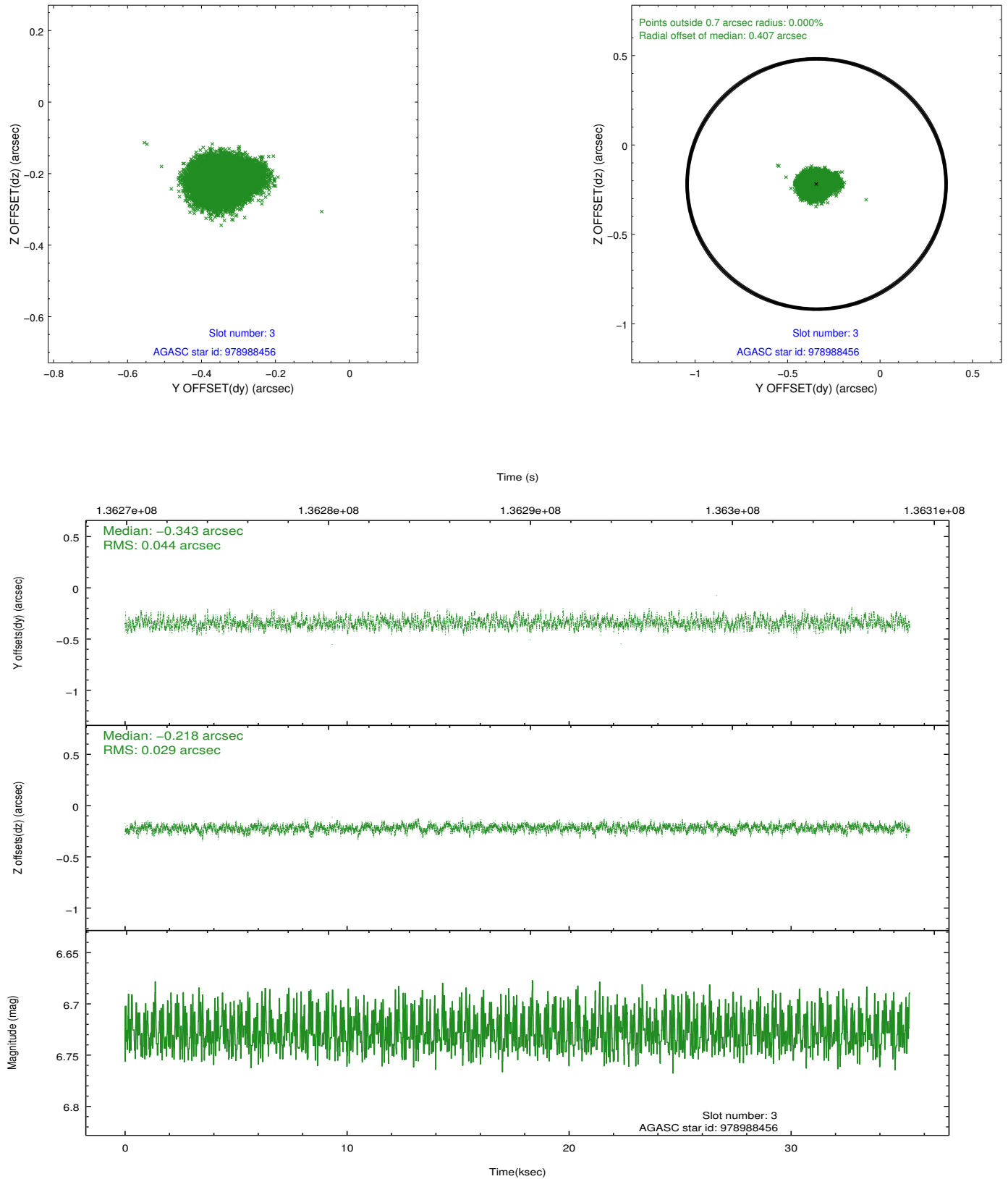


Slot Statistics

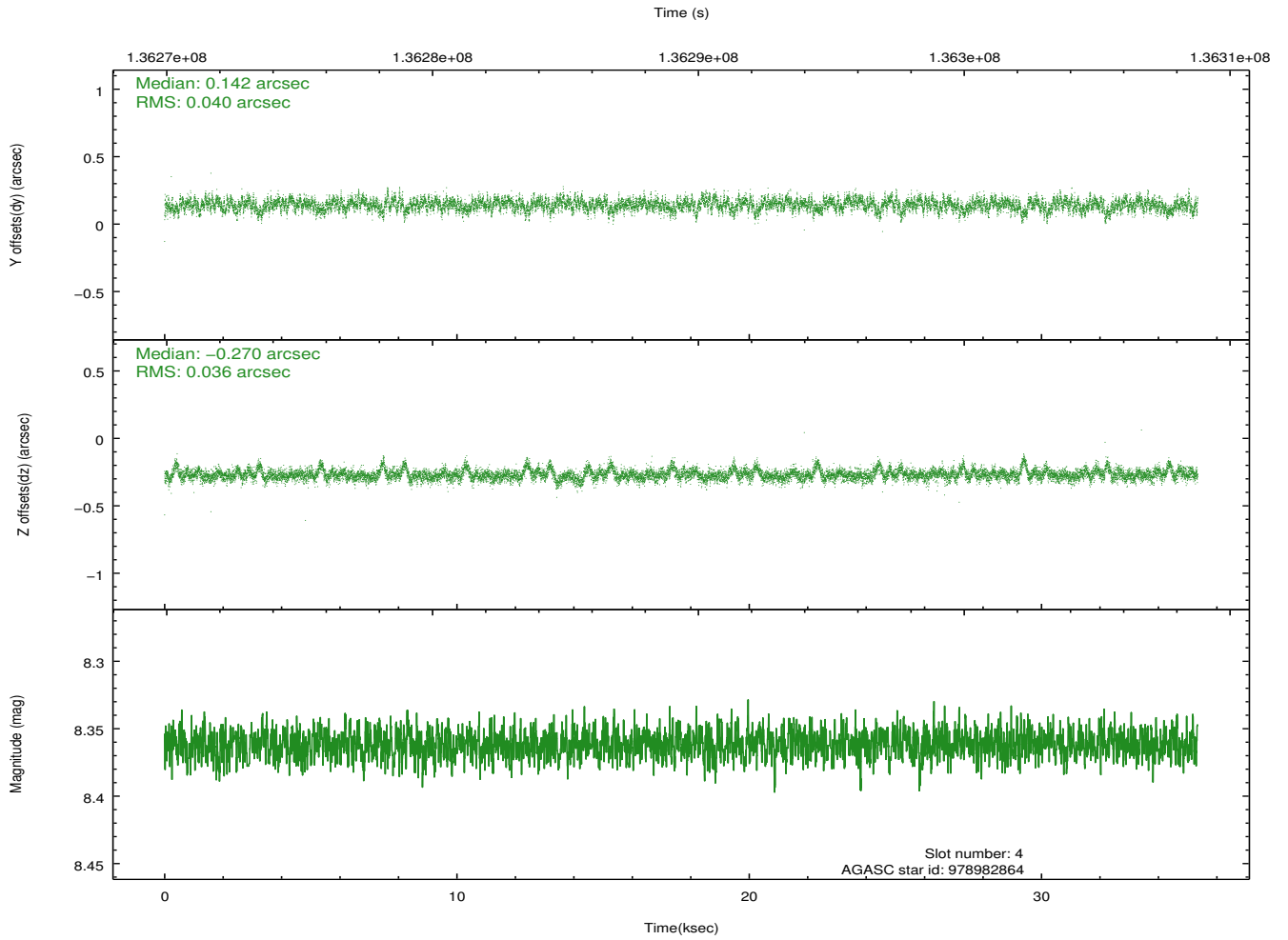
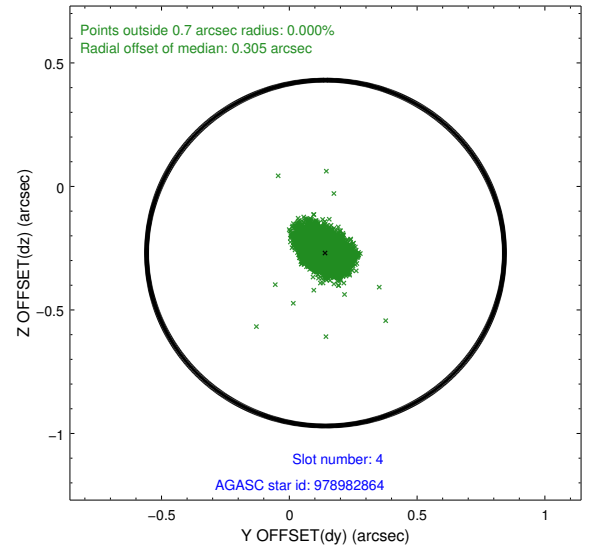
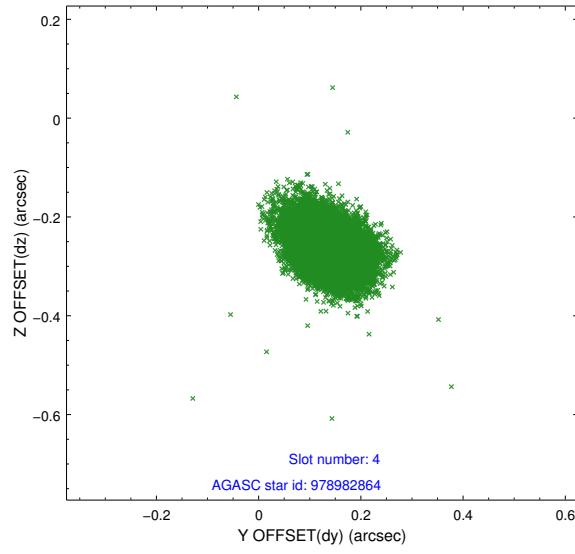
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	8622	-0.049	-0.035	0.009	0.016	0.000000	0.000000	-755.16	-1790.68
1	FID	ACIS-S-4	7.20	8622	0.005	0.033	0.008	0.014	0.000000	0.000000	2158.12	117.86
2	FID	ACIS-S-5	7.23	8622	0.013	0.010	0.009	0.015	0.000000	0.000000	-1807.92	111.50
3	GUIDE	978988456	6.73	17241	-0.343	-0.218	0.057	0.090	311.577530	-36.120150	2013.16	609.06
4	GUIDE	978982864	8.36	17242	0.142	-0.270	0.056	0.097	311.499492	-37.036400	-1109.02	1694.83
5	GUIDE	979119192	9.71	17231	0.198	0.314	0.135	0.226	312.824643	-36.828650	-1416.46	-2178.36
6	GUIDE	979116520	9.31	17236	0.267	0.249	0.075	0.121	312.776878	-37.062628	-2188.10	-1814.25
7	GUIDE	978984352	9.69	17215	-0.260	-0.075	0.123	0.197	311.180988	-36.095435	2400.85	1699.07

2.4 Star Slots

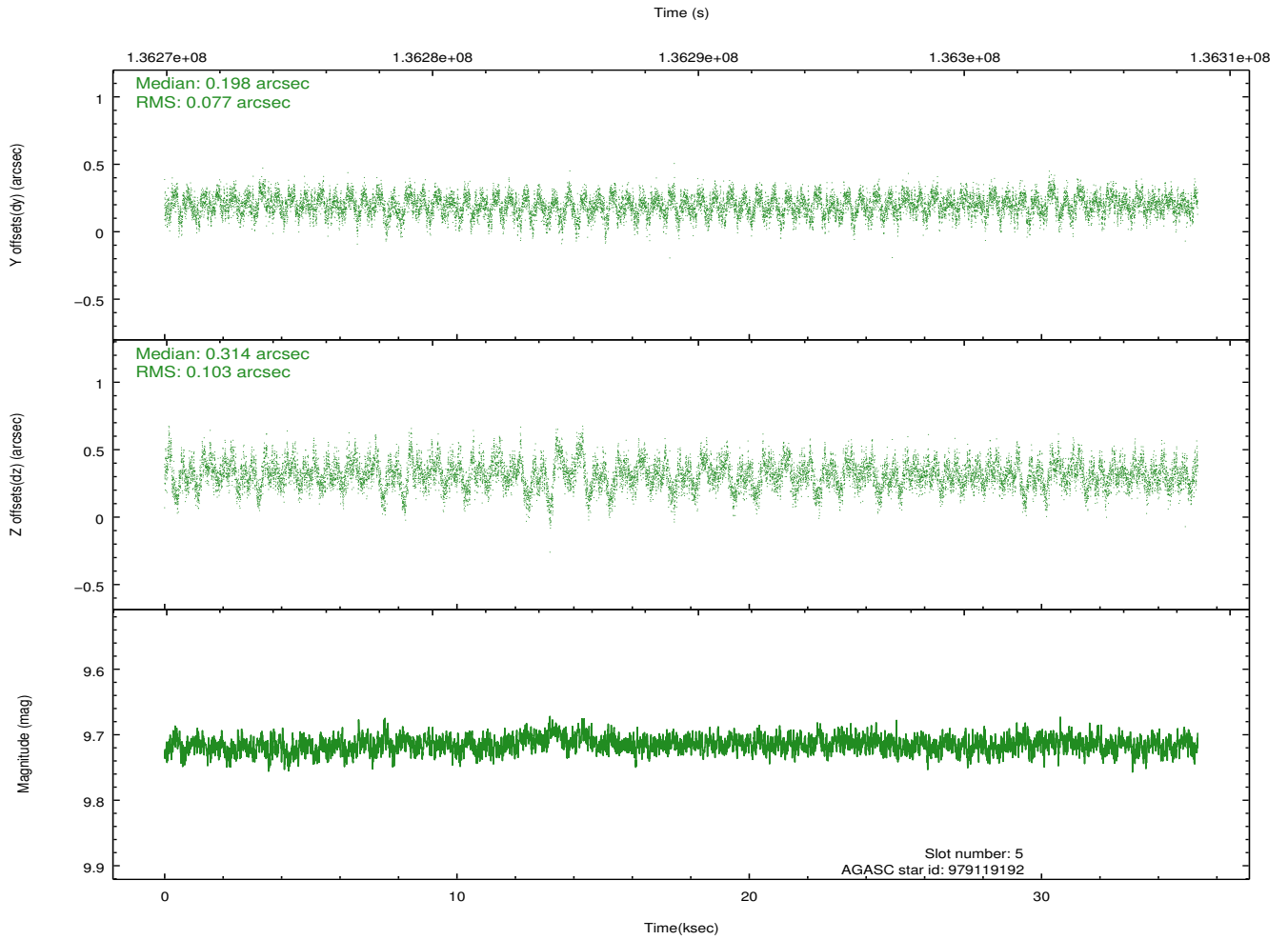
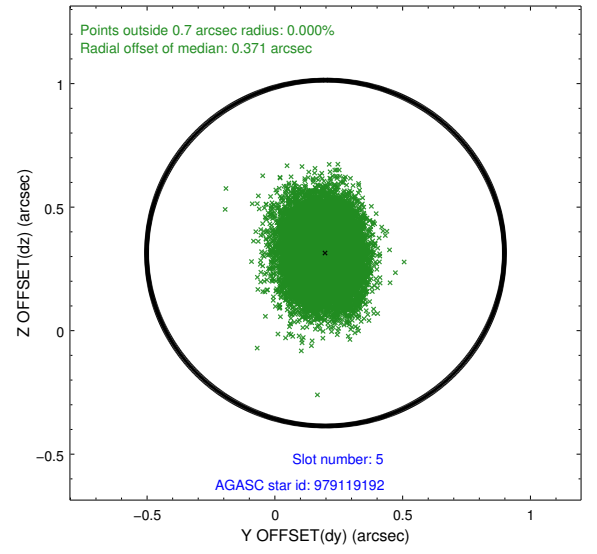
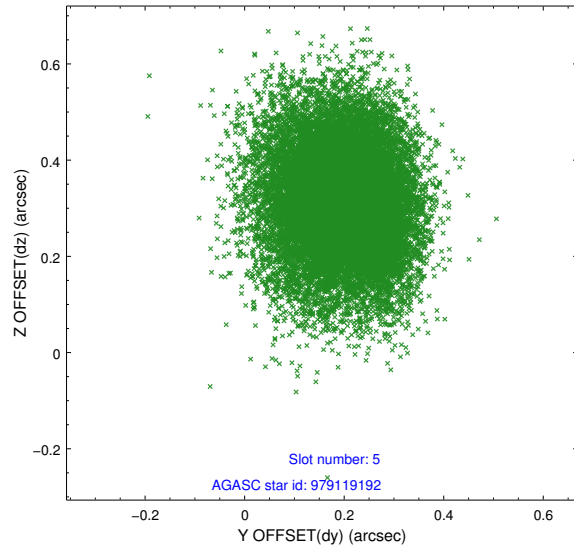
2.4.1 Slot 3



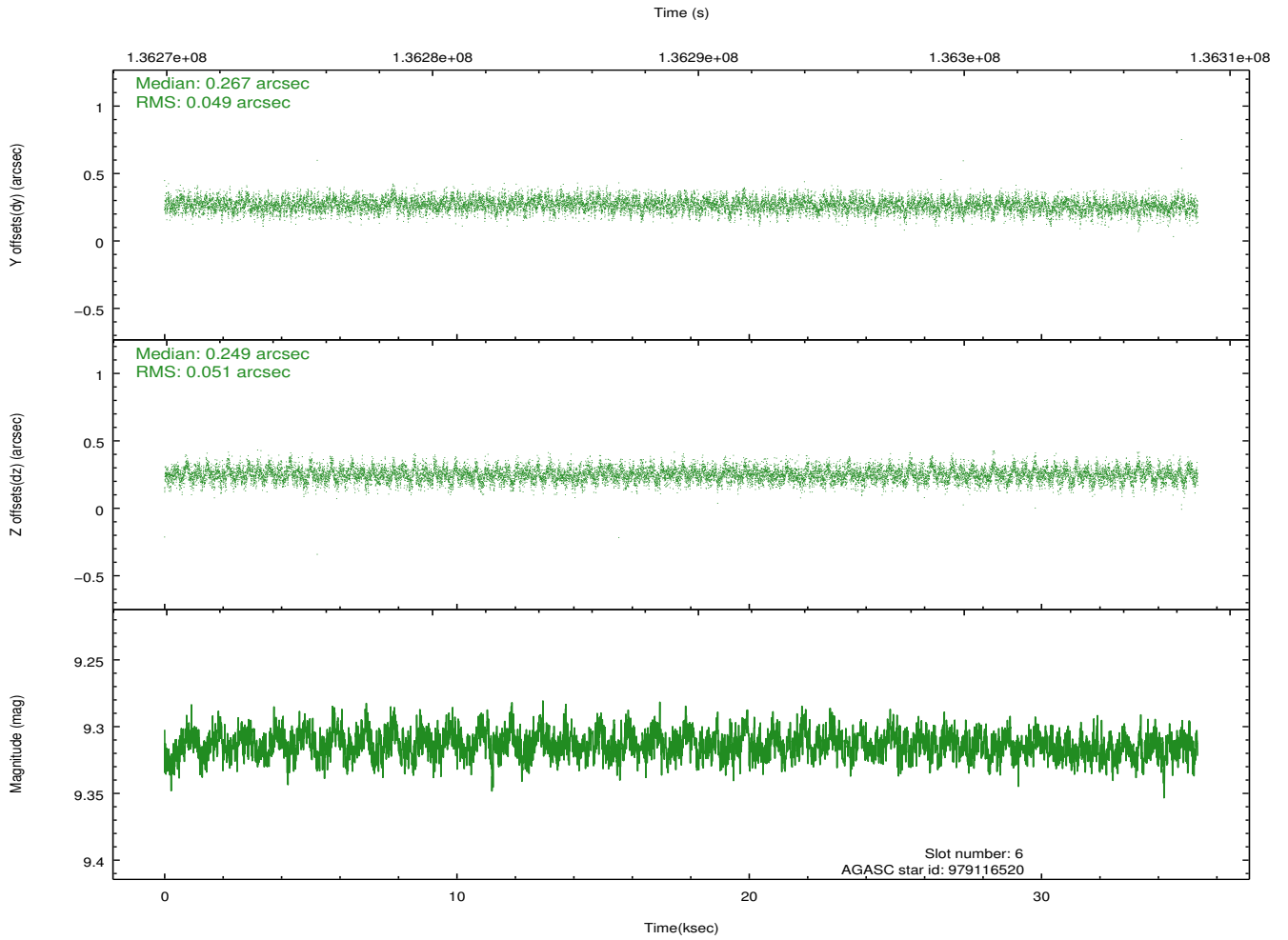
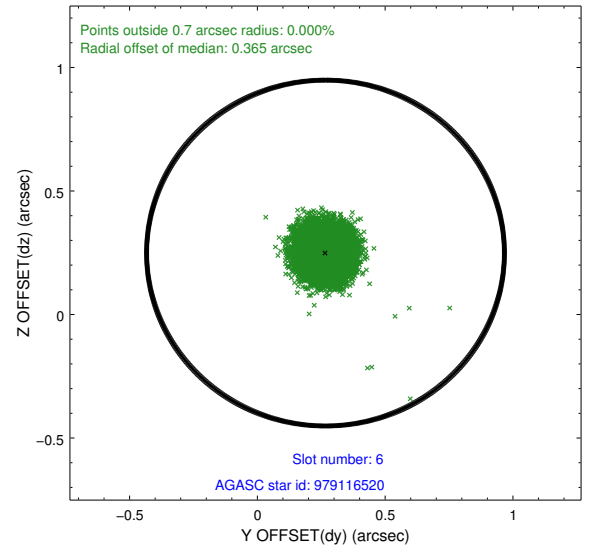
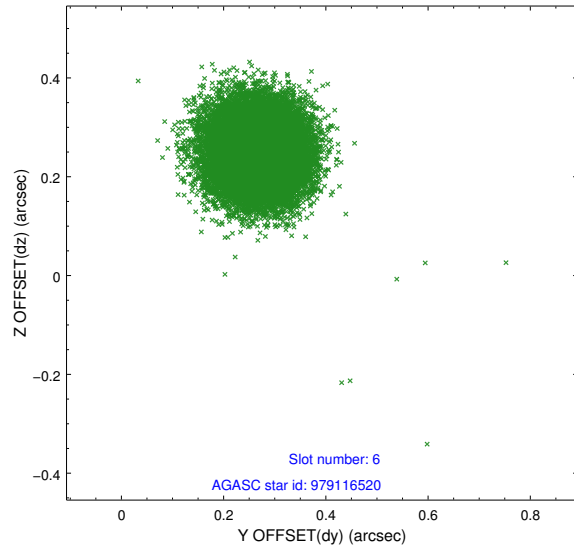
2.4.2 Slot 4



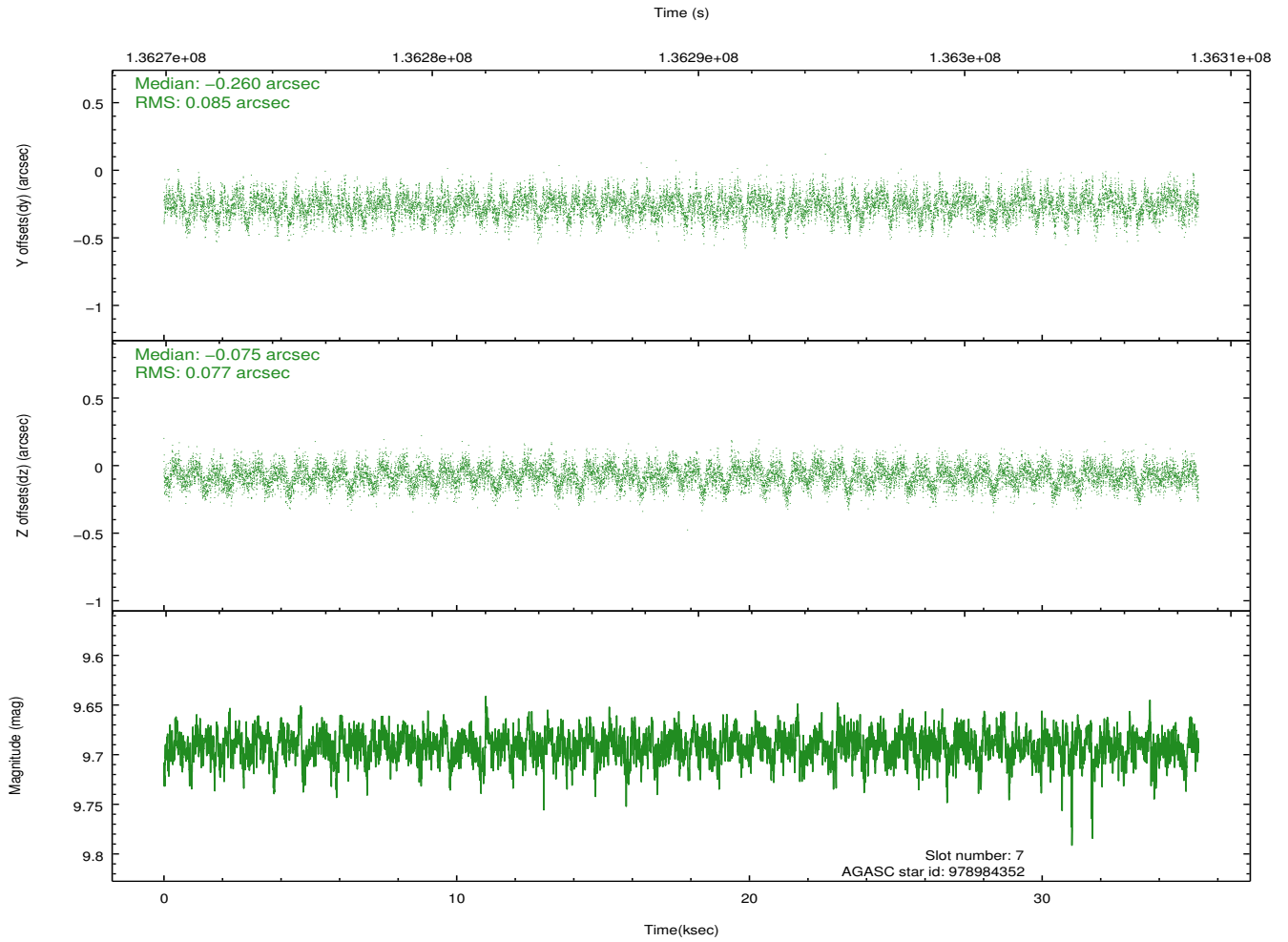
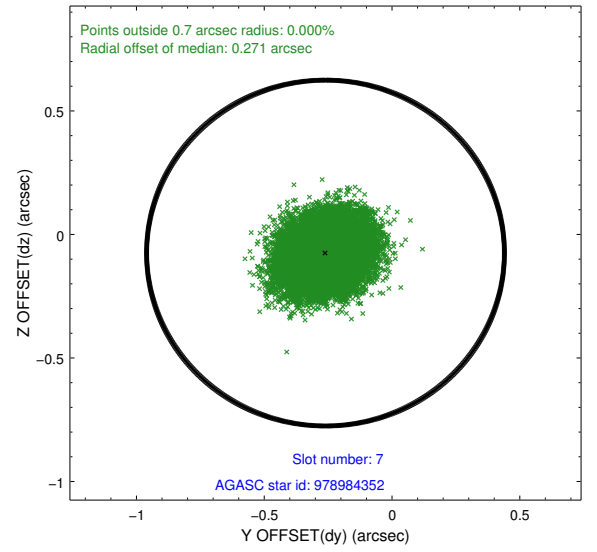
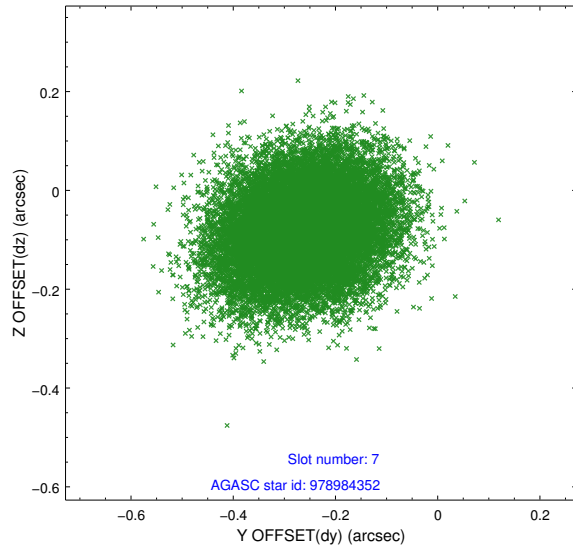
2.4.3 Slot 5



2.4.4 Slot 6

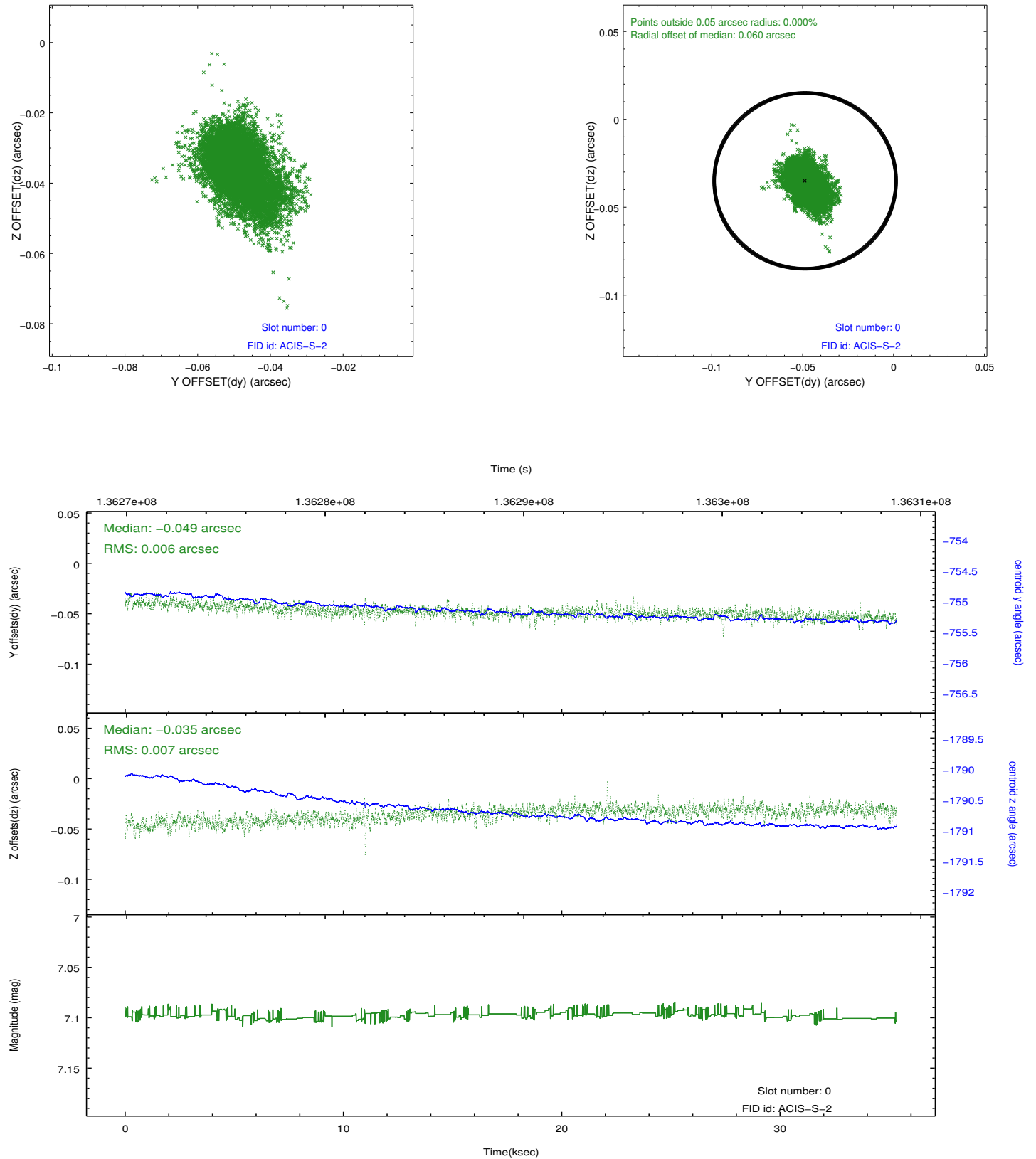


2.4.5 Slot 7

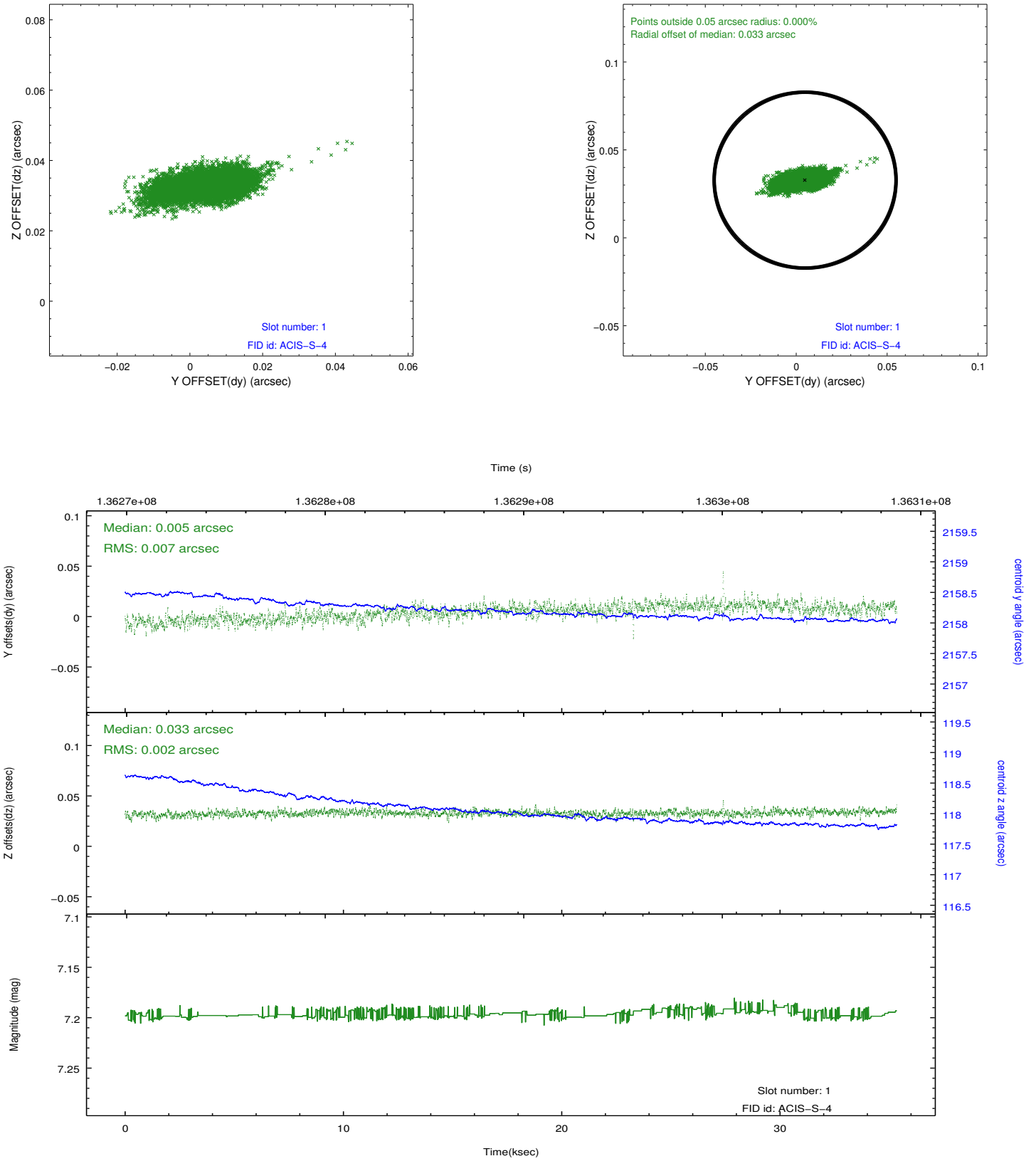


2.5 FID Slots

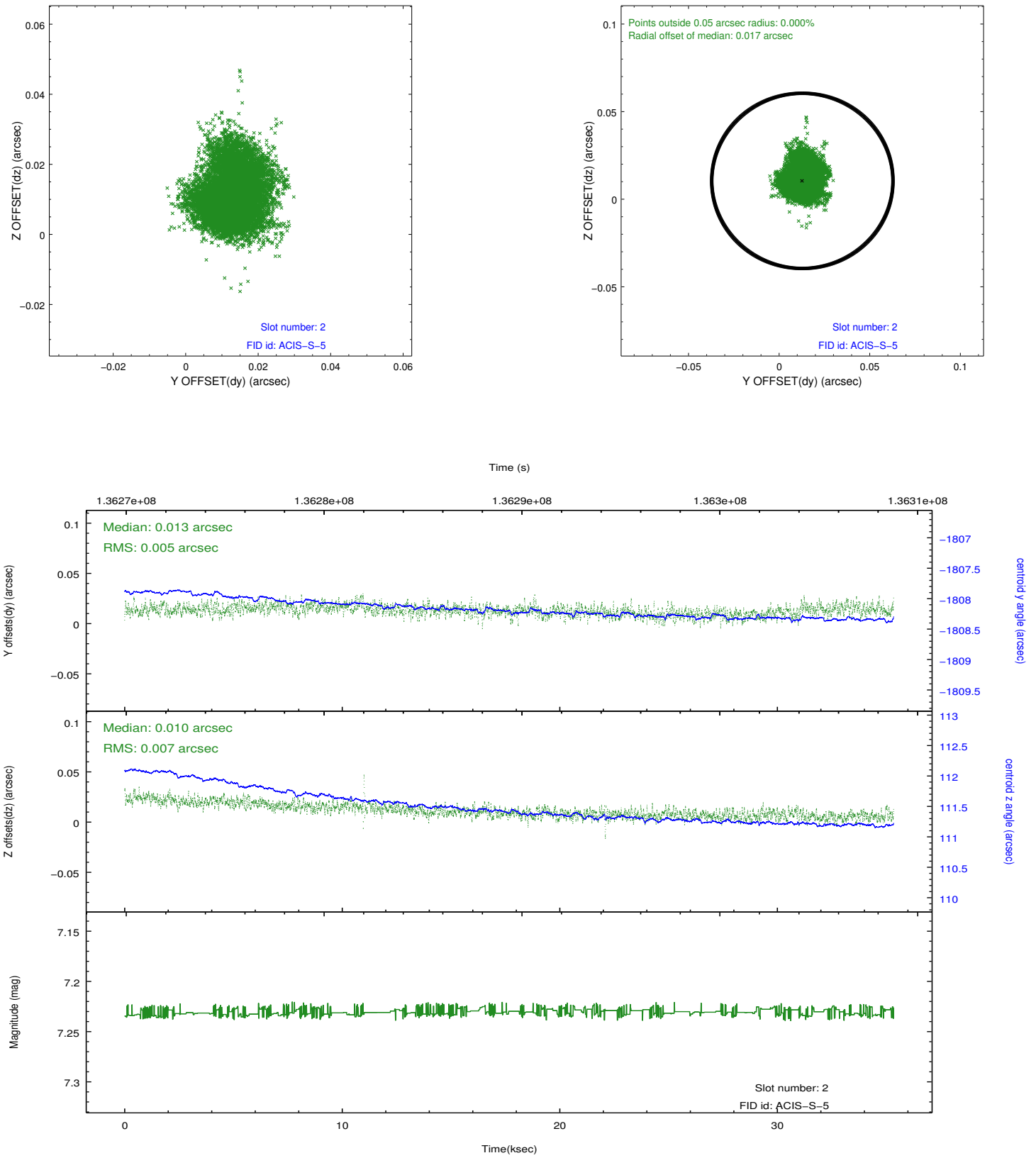
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

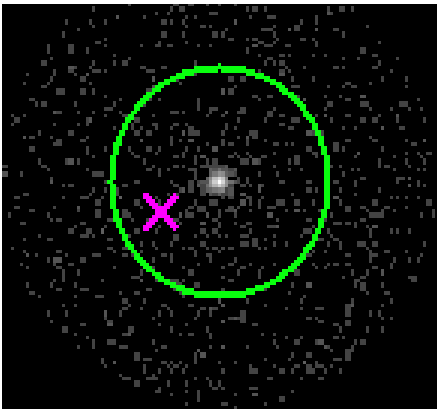


3 Gratings

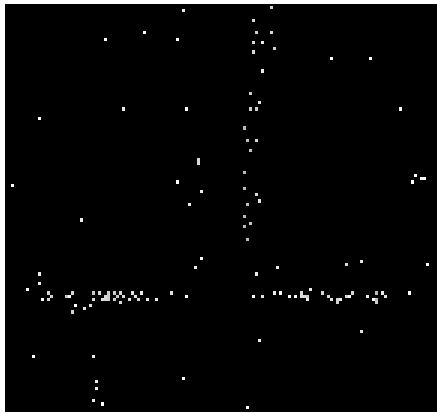
3.1 HEG Arm



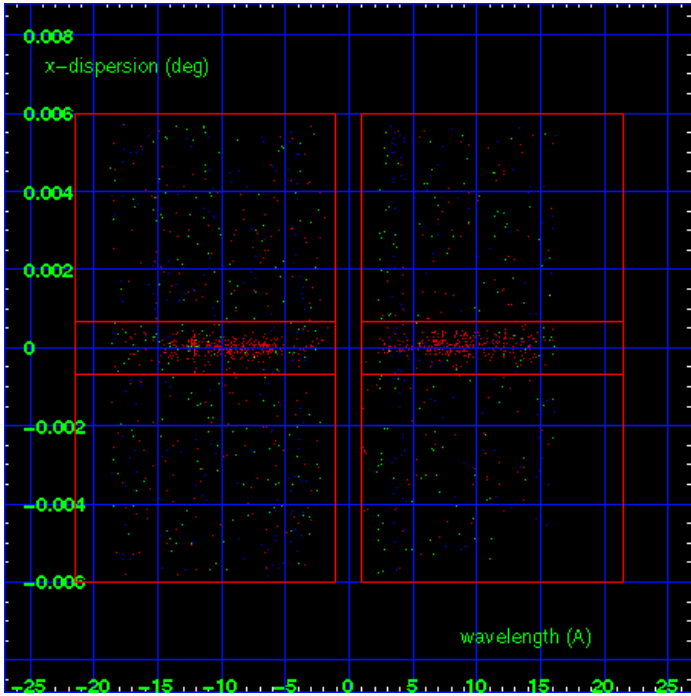
HEG Order Sort 123



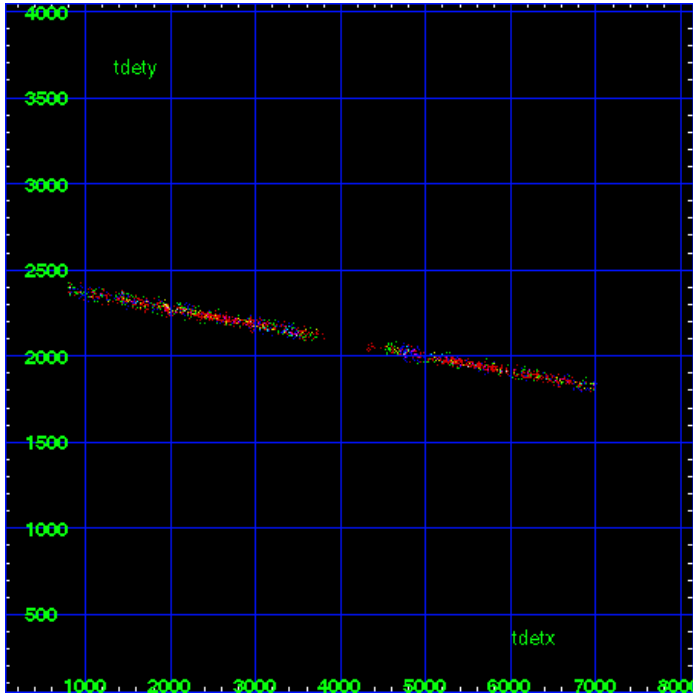
HEG Zero Order



HEG Order Sort ALL

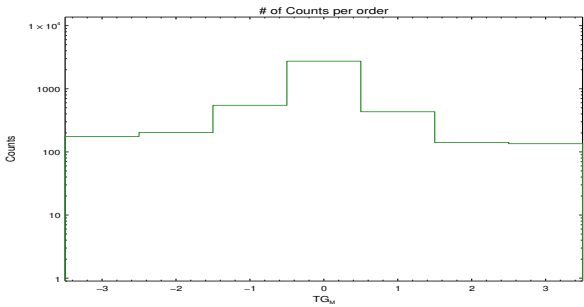


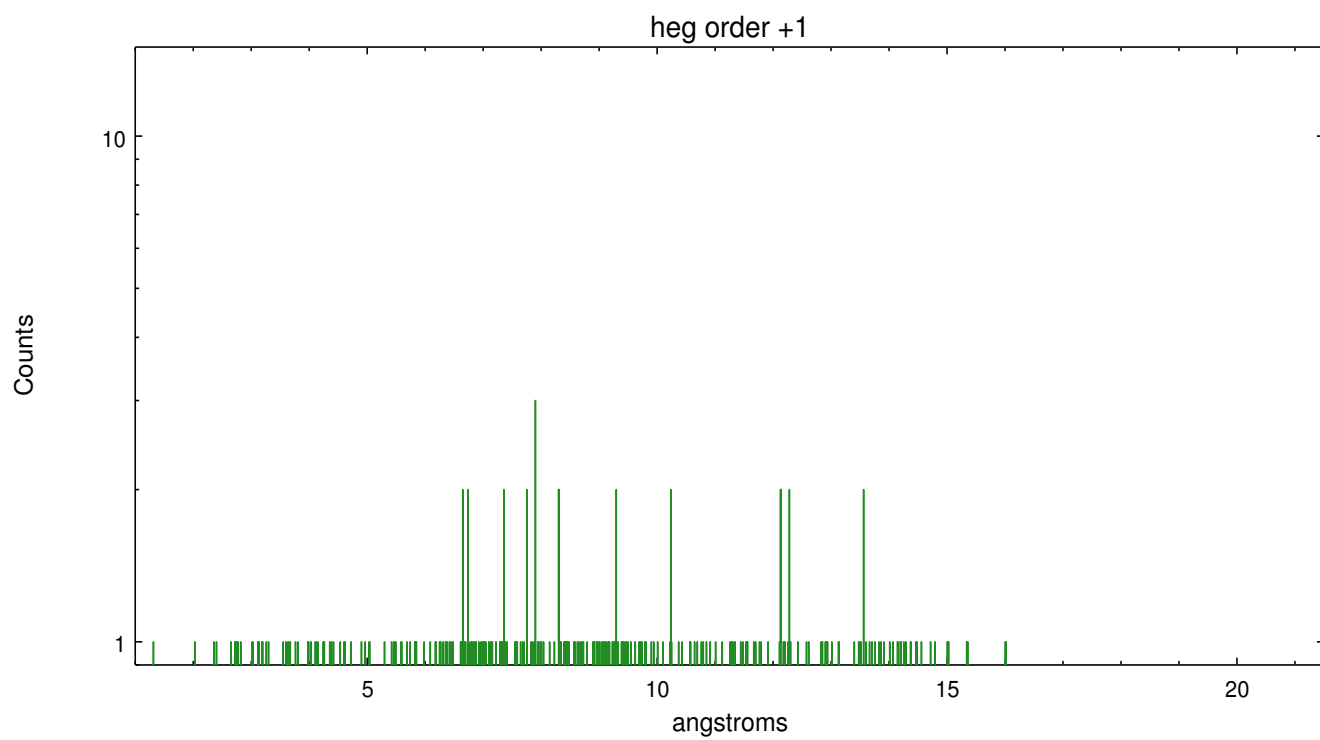
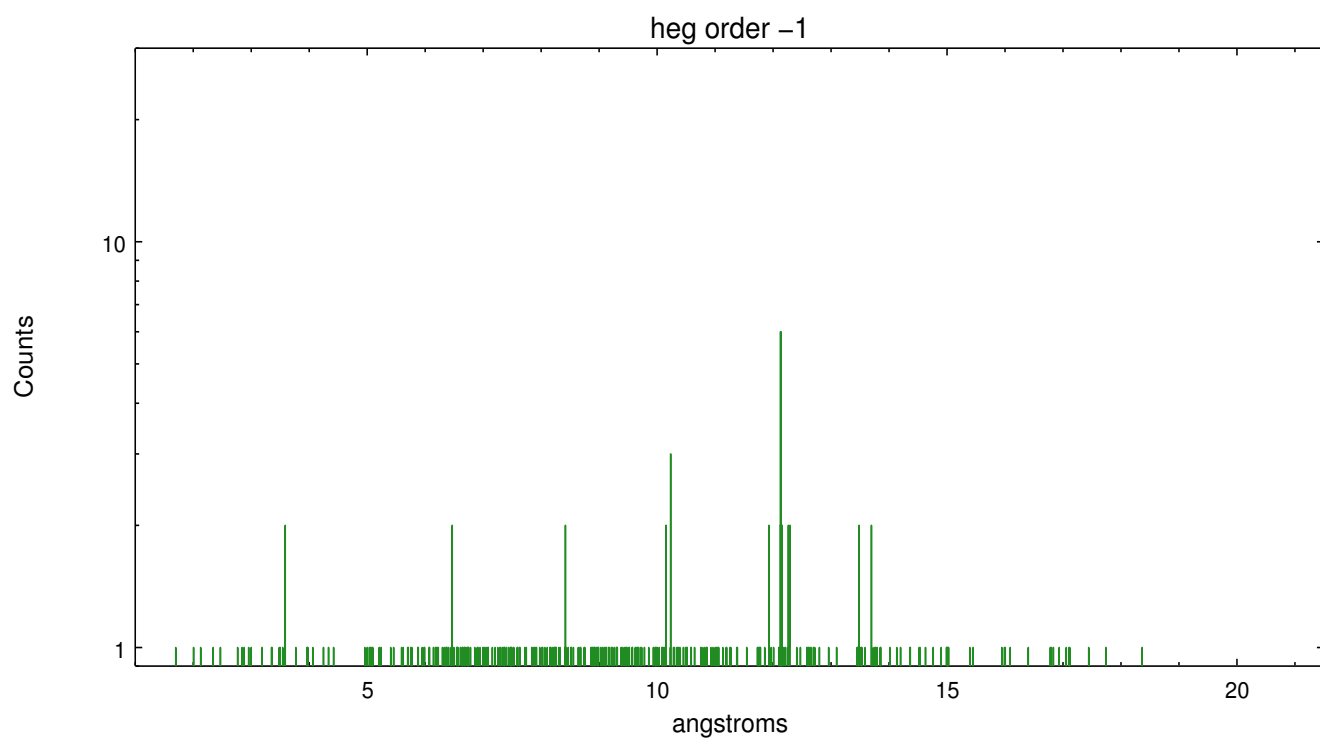
Spot Image HEG



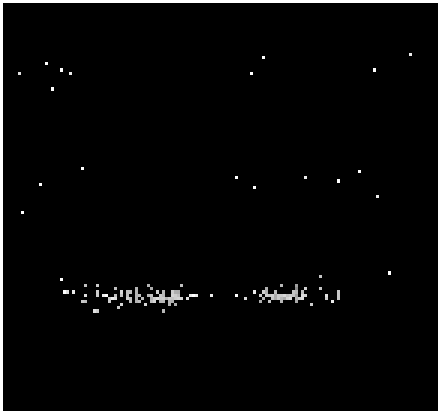
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	176	203	548	2741	433	141	135

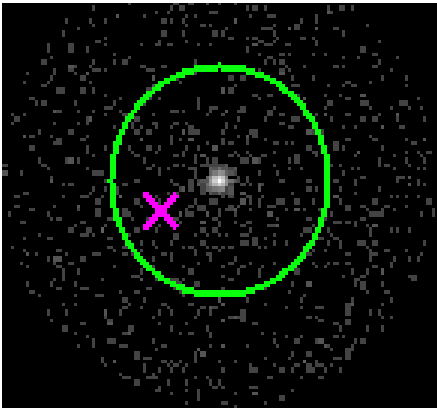




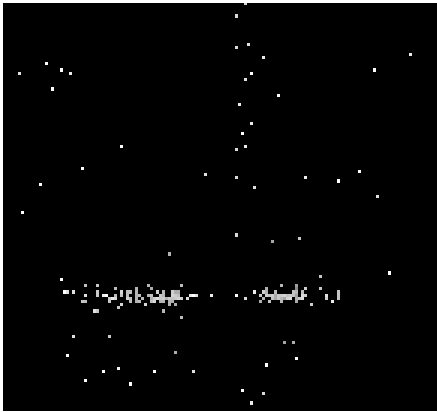
3.2 MEG Arm



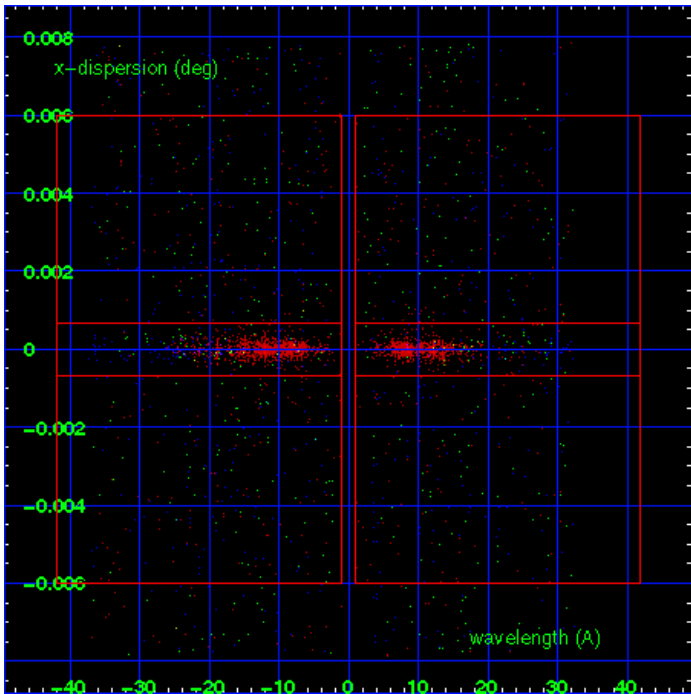
MEG Order Sort 123



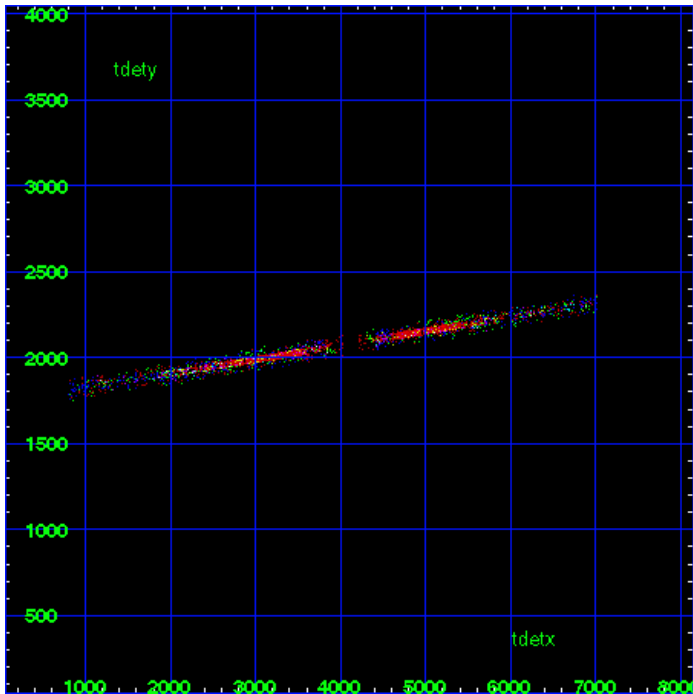
MEG Zero Order



MEG Order Sort ALL

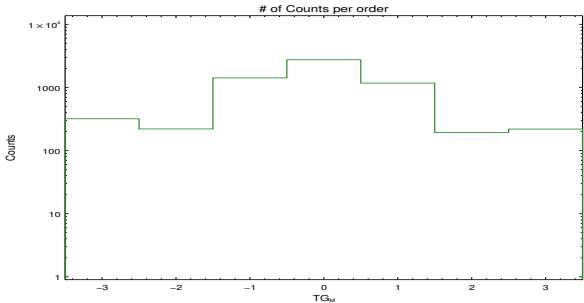


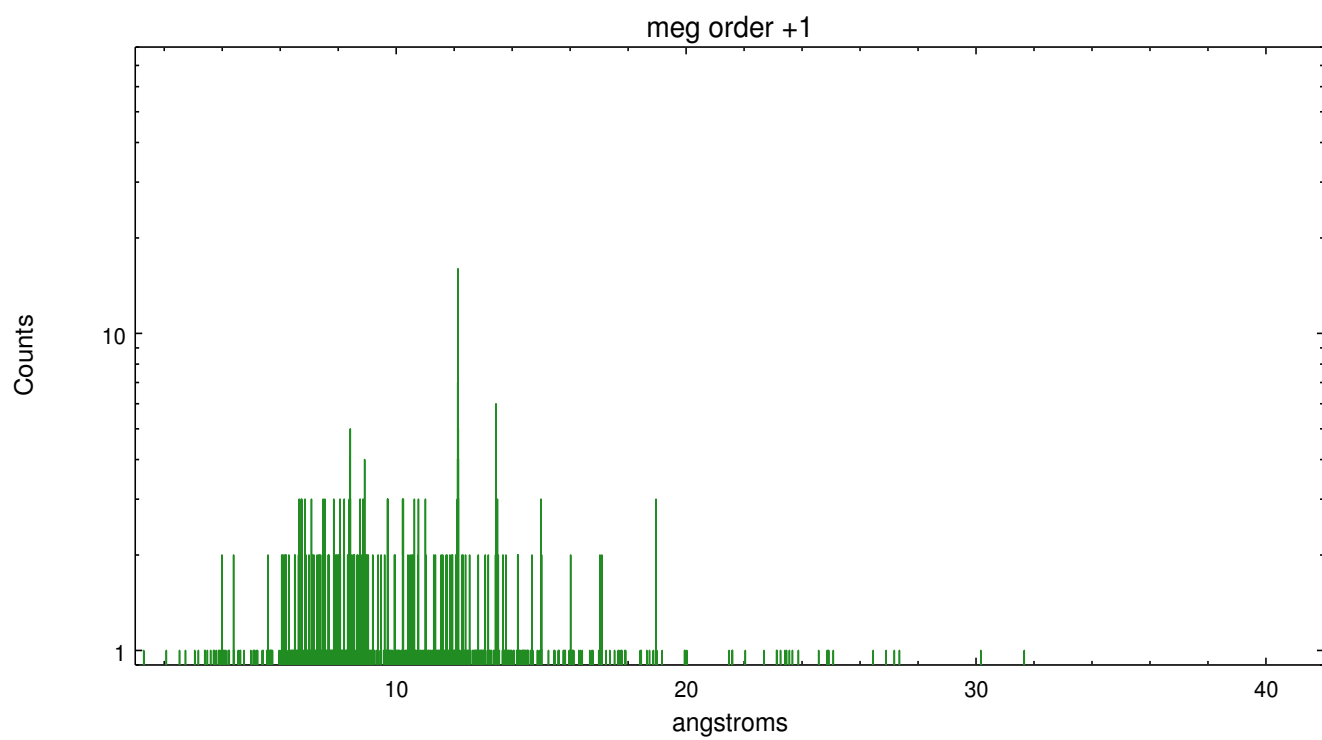
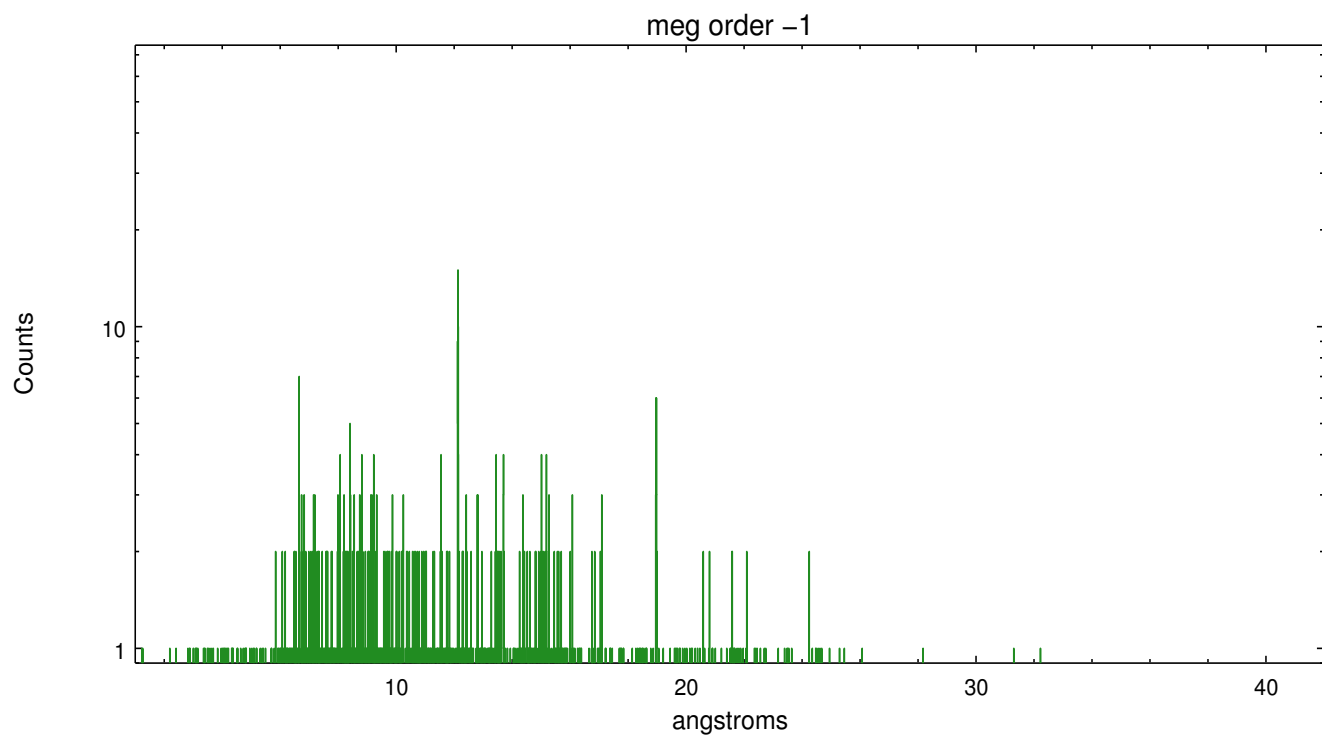
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	319	220	1417	2741	1171	193	219





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.167

A.2 Comments