

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7438 - L2 Version 3
Chandra X-Ray Center

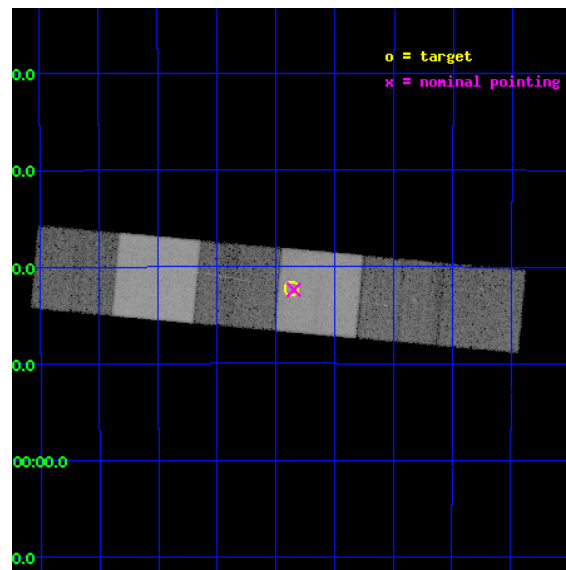
L2 Processing Date : Apr 21 2012

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1 Front

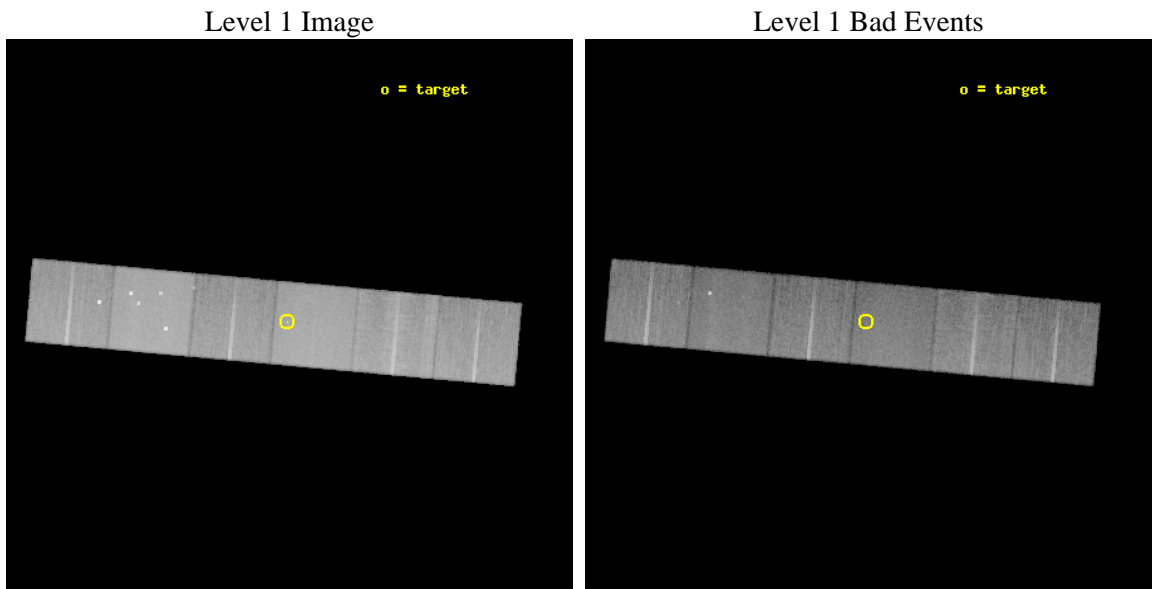
seq_num	200448	Sequence number
obs_id	7438	Observation id
title	Accretion or a Corona? Definitive Observations of the Young Accreting Star TW Hydrae	Proposal title
observer	Dr. Nancy Brickhouse	Principal investigator
object	TW Hya	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	165.466667	Observer's specified target RA [deg]
dec_targ	-34.704694	Observer's specified target Dec [deg]
ra_nom	165.4617510804	Nominal RA [deg]
dec_nom	-34.706651358322	Nominal Dec [deg]
roll_nom	5.1538246601561	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20950.180738151	Sum of GTIs [s]
livetime	20684.89693496	Livetime [s]
ontime4	20950.221778154	Sum of GTIs [s]
ontime5	20950.139698148	Sum of GTIs [s]
ontime6	20950.098658144	Sum of GTIs [s]
ontime7	20950.180738151	Sum of GTIs [s]
ontime8	20950.057618141	Sum of GTIs [s]
ontime9	20950.016578138	Sum of GTIs [s]
l2events	317934	Number of level 2 events



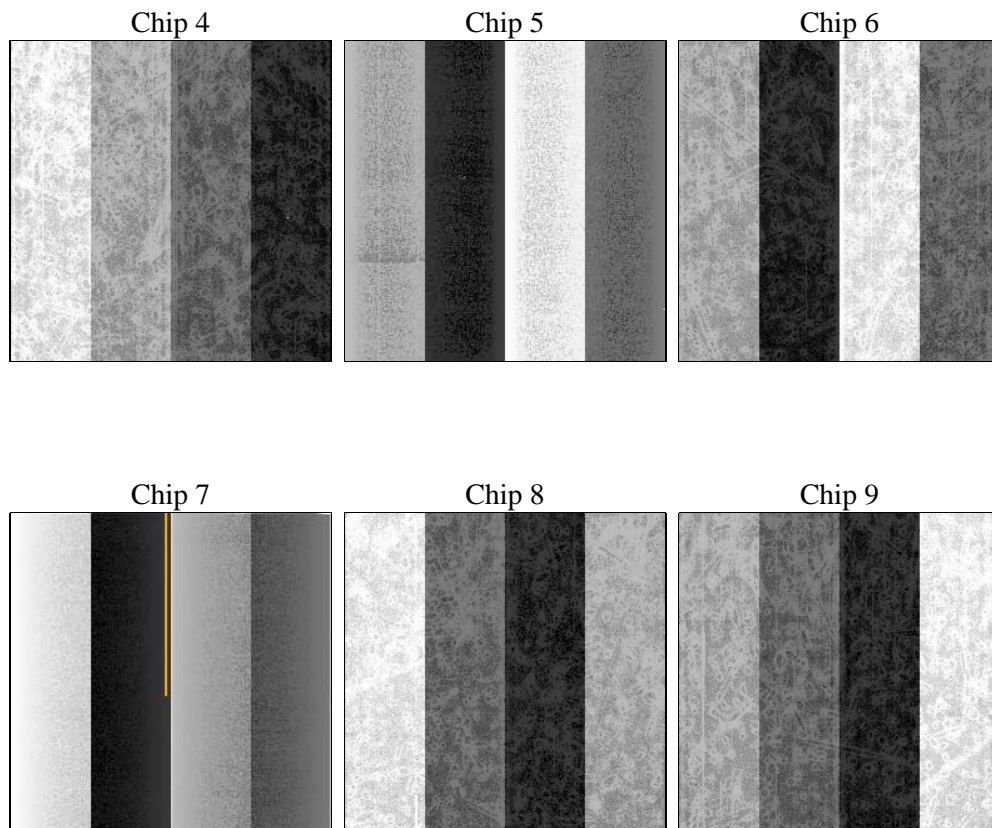
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	20950.180738151	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	20950.221778154	Sum of GTIs [s]
date	2012-04-21T01:10:08	Date and time of file creation	ontime5	20950.139698148	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	20950.098658144	Sum of GTIs [s]
			ontime7	20950.180738151	Sum of GTIs [s]
			ontime8	20950.057618141	Sum of GTIs [s]
			ontime9	20950.016578138	Sum of GTIs [s]
			l1events	1430441	Number of level 1 events

2.1.4 Events

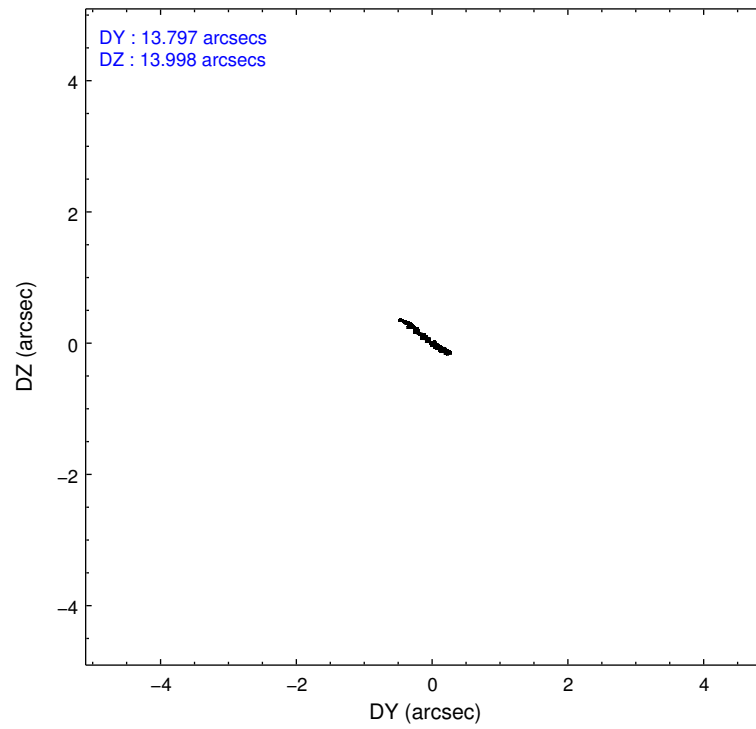
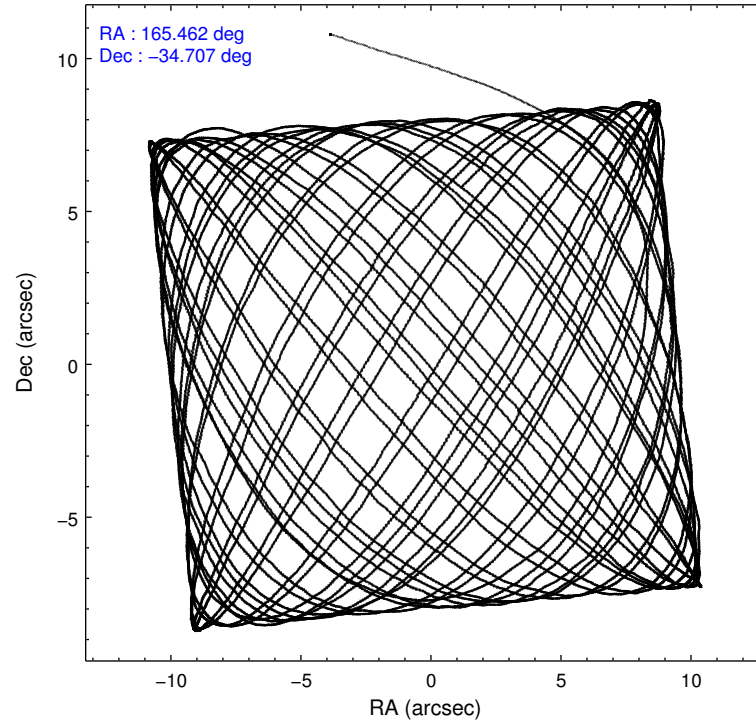
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	220901	302982	191844	264835	251329	198550	grade 0 events	16358	17251	8947	9532	17406	9862
rejected events	190942	161881	168825	154461	195093	174698		7%	5%	4%	3%	6%	4%
rejected %	86%	53%	88%	58%	77%	87%	grade 1 events	246	408	99	304	164	124
								0%	0%	0%	0%	0%	0%
							grade 2 events	5126	40664	4955	22420	12662	4805
								2%	13%	2%	8%	5%	2%
							grade 3 events	2370	6313	2197	9501	5876	2349
								1%	2%	1%	3%	2%	1%
							grade 4 events	2374	4568	2214	9386	5400	2250
								1%	1%	1%	3%	2%	1%
							grade 5 events	8822	22686	9033	25036	12361	9785
								3%	7%	4%	9%	4%	4%
							grade 6 events	3737	72368	4709	59563	14907	4593
								1%	23%	2%	22%	5%	2%
							grade 7 events	181868	138724	159690	129093	182553	164782
								82%	45%	83%	48%	72%	82%

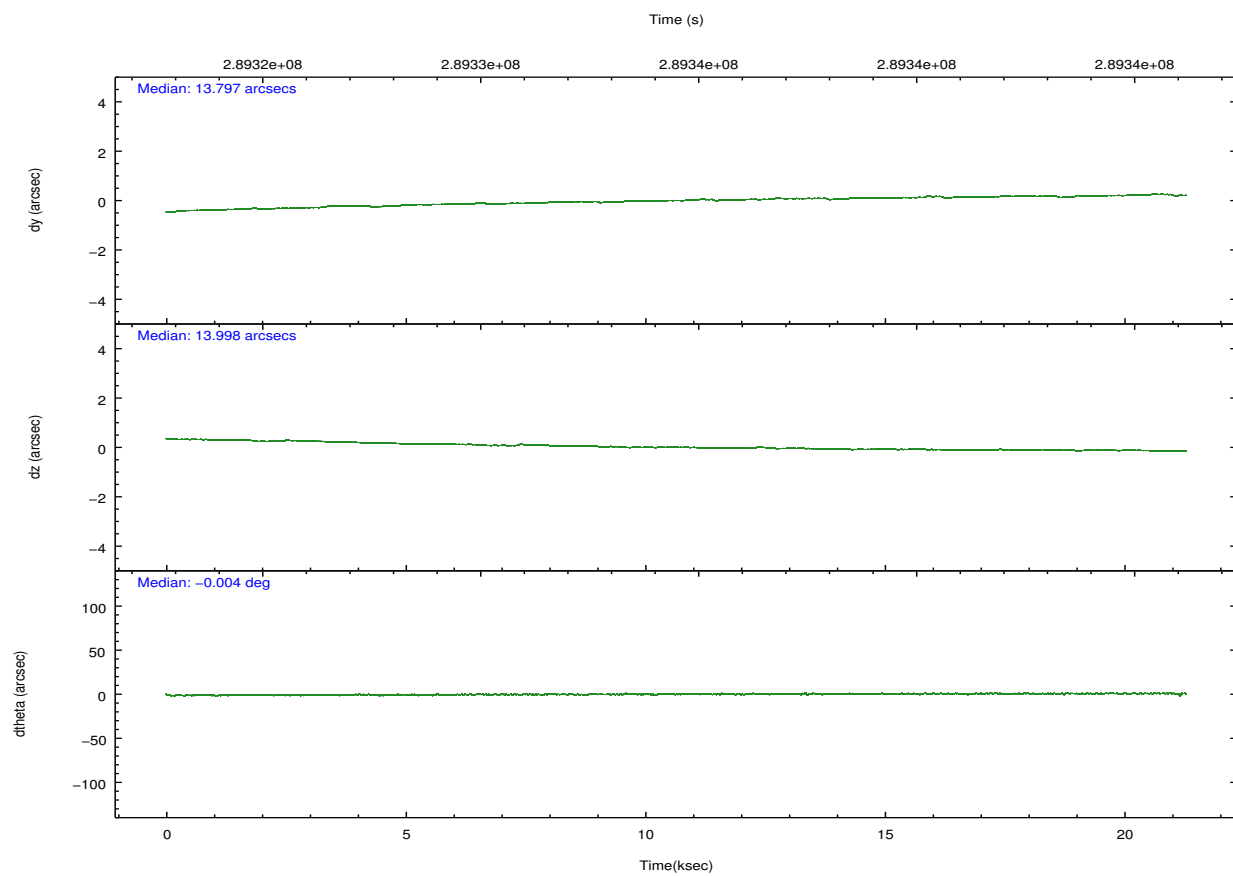
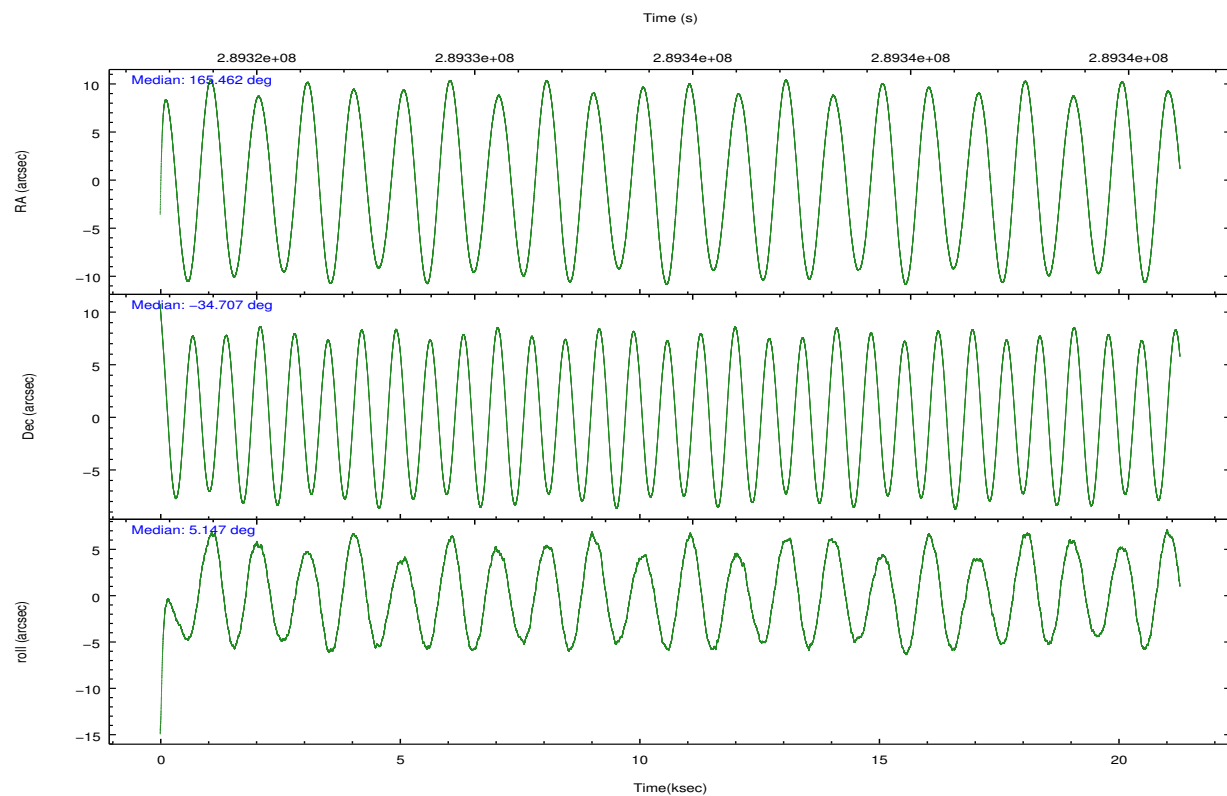
2.2 Compared Parameters

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	165.434802	165.4617510803959
[deg] Pointing Dec	-34.722714	-34.70665135832247
[deg] Pointing Roll	4.981851	5.153824660156092
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	289324112.184000	289322956.9203
Observation start date	2007-03-03T15:47:27	2007-03-03T15:29:16
[s] Observation end time (MET)	289345112.184000	289346028.6464
Observation end date	2007-03-03T21:37:27	2007-03-03T21:53:48
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	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



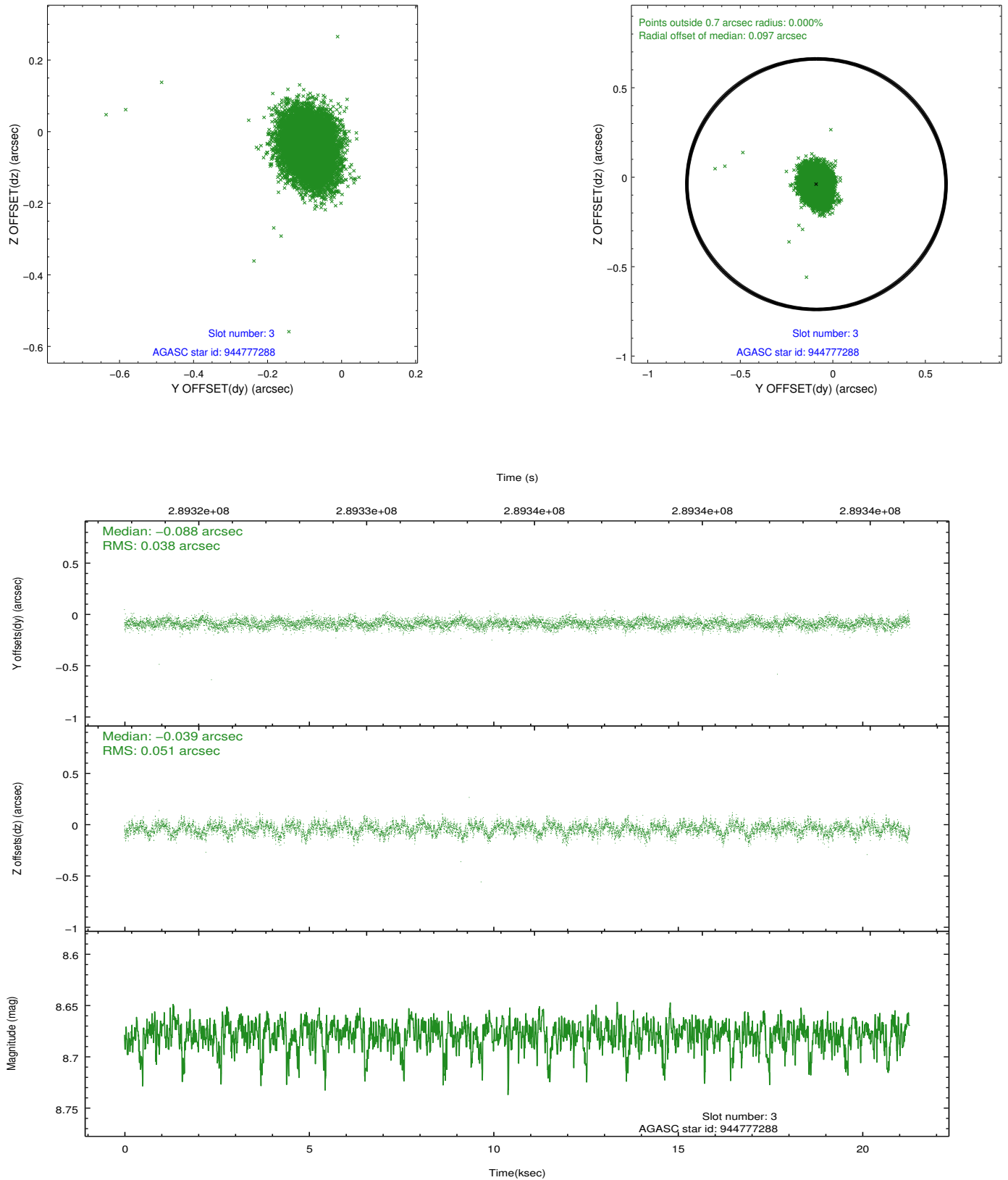


Slot Statistics

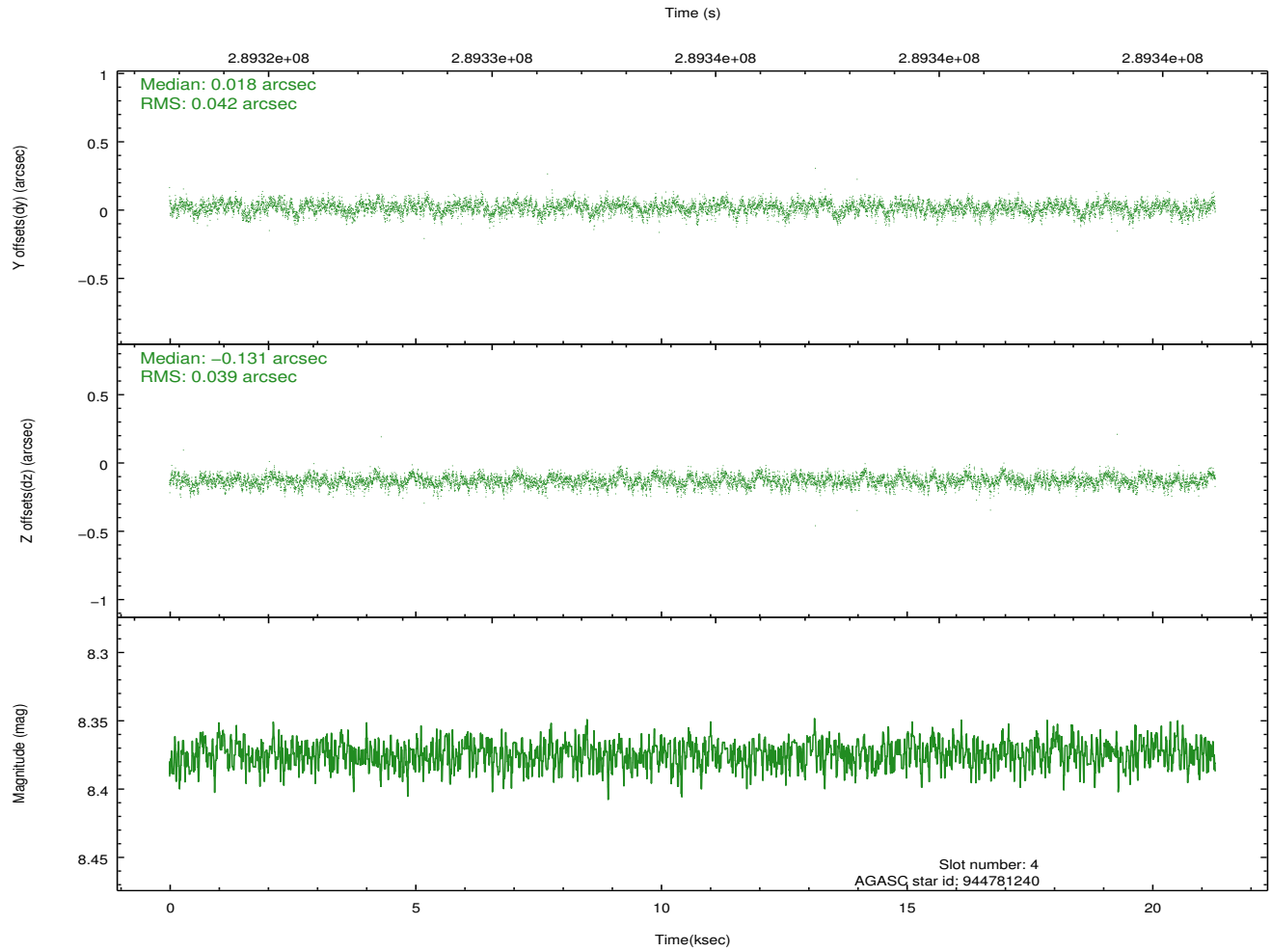
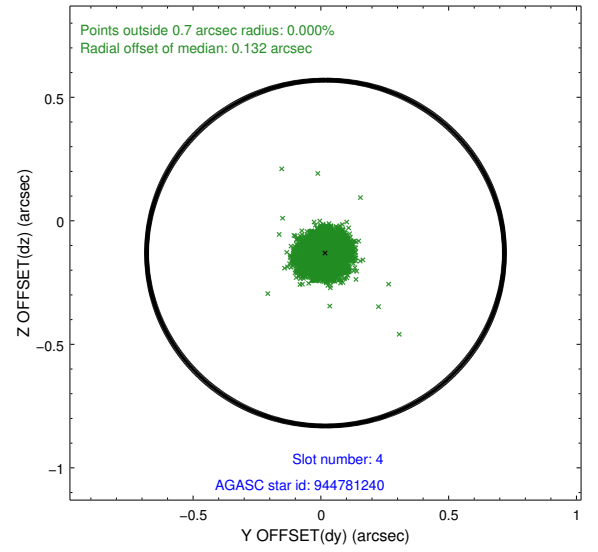
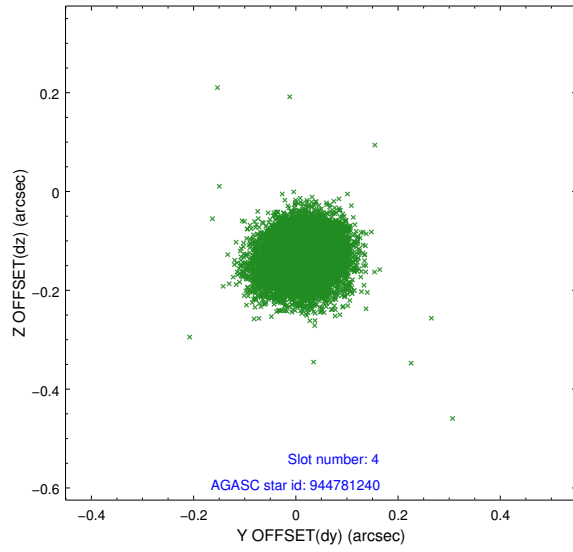
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5192	-0.054	-0.065	0.010	0.017	0.000000	0.000000	-766.75	-1735.40
1	FID	ACIS-S-4	7.20	5190	0.198	0.043	0.010	0.017	0.000000	0.000000	2146.70	173.02
2	FID	ACIS-S-5	7.23	5192	-0.175	0.030	0.007	0.012	0.000000	0.000000	-1819.50	166.86
3	GUIDE	944777288	8.68	10375	-0.088	-0.039	0.066	0.109	165.660339	-35.064275	555.58	-1283.14
4	GUIDE	944781240	8.37	10383	0.018	-0.131	0.060	0.099	164.753784	-34.626061	-1979.96	514.95
5	GUIDE	944782344	9.15	10377	0.117	-0.018	0.080	0.130	164.738510	-34.490002	-1986.01	1007.01
6	GUIDE	944767048	8.39	10384	-0.034	0.144	0.067	0.104	165.200360	-34.833238	-724.90	-336.44
7	GUIDE	944777864	8.58	10379	-0.006	0.045	0.078	0.135	166.282624	-35.266851	2311.94	-2177.86

2.4 Star Slots

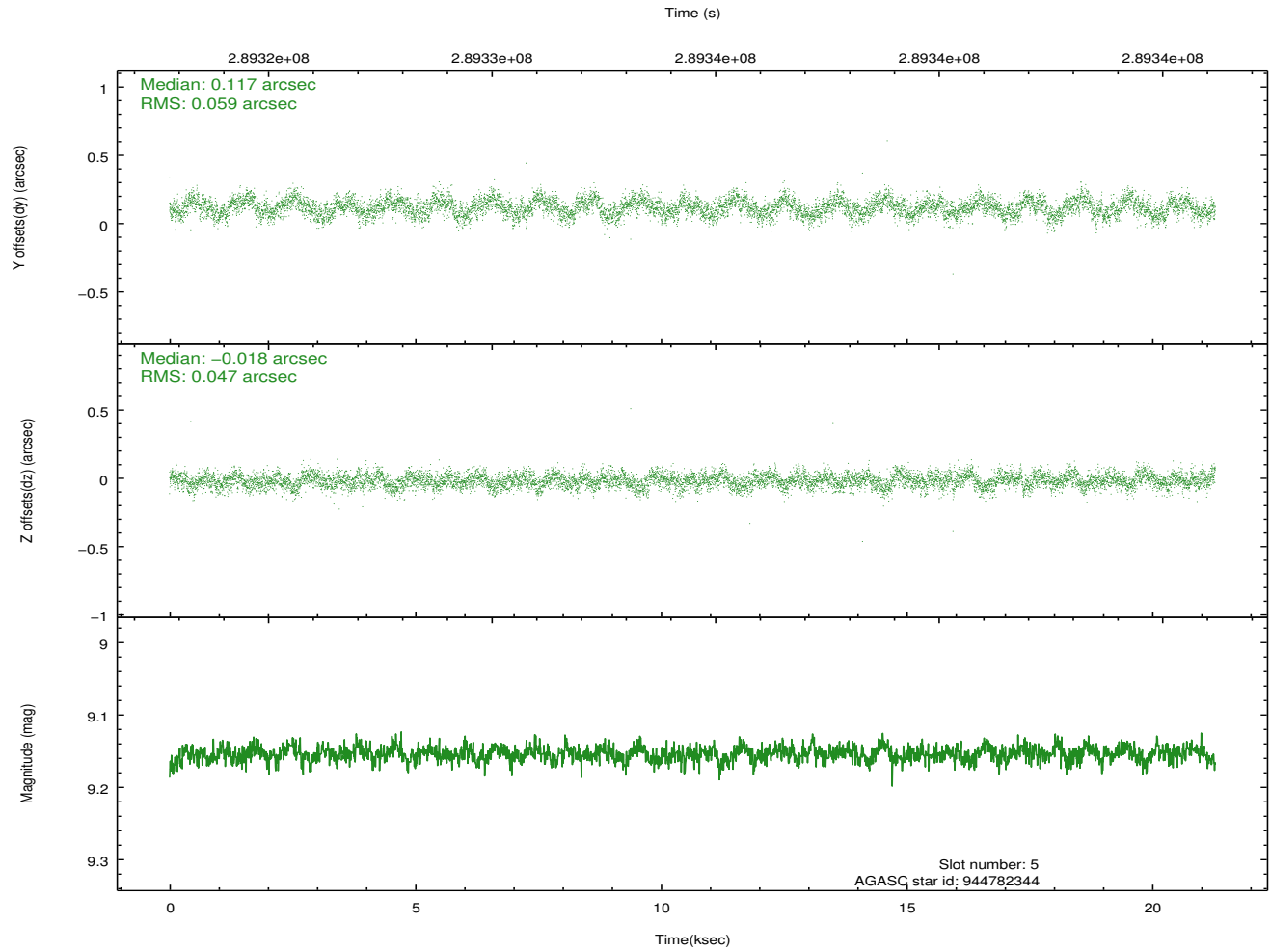
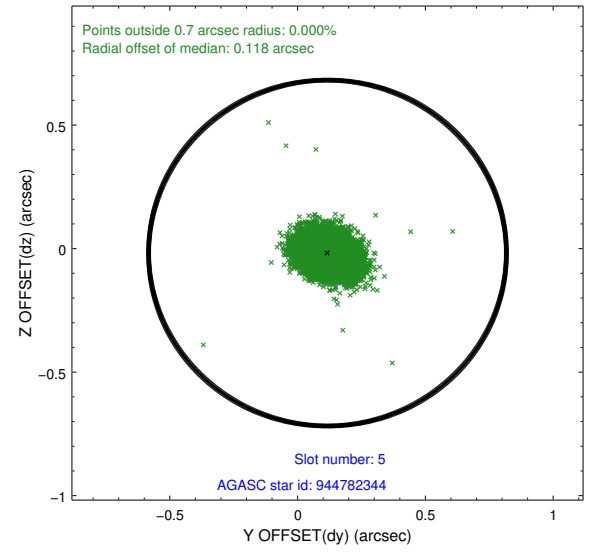
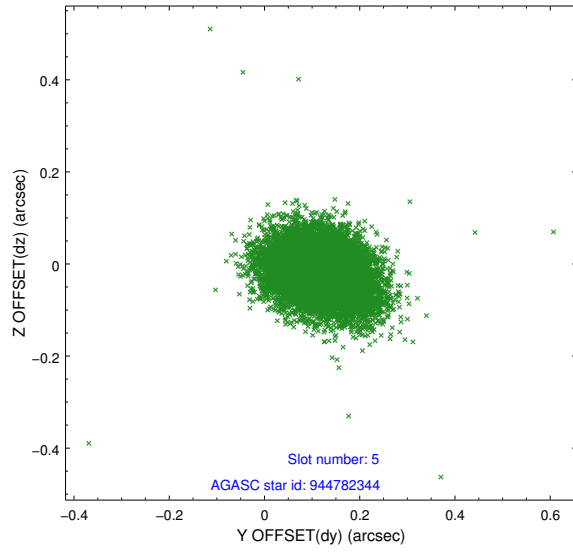
2.4.1 Slot 3



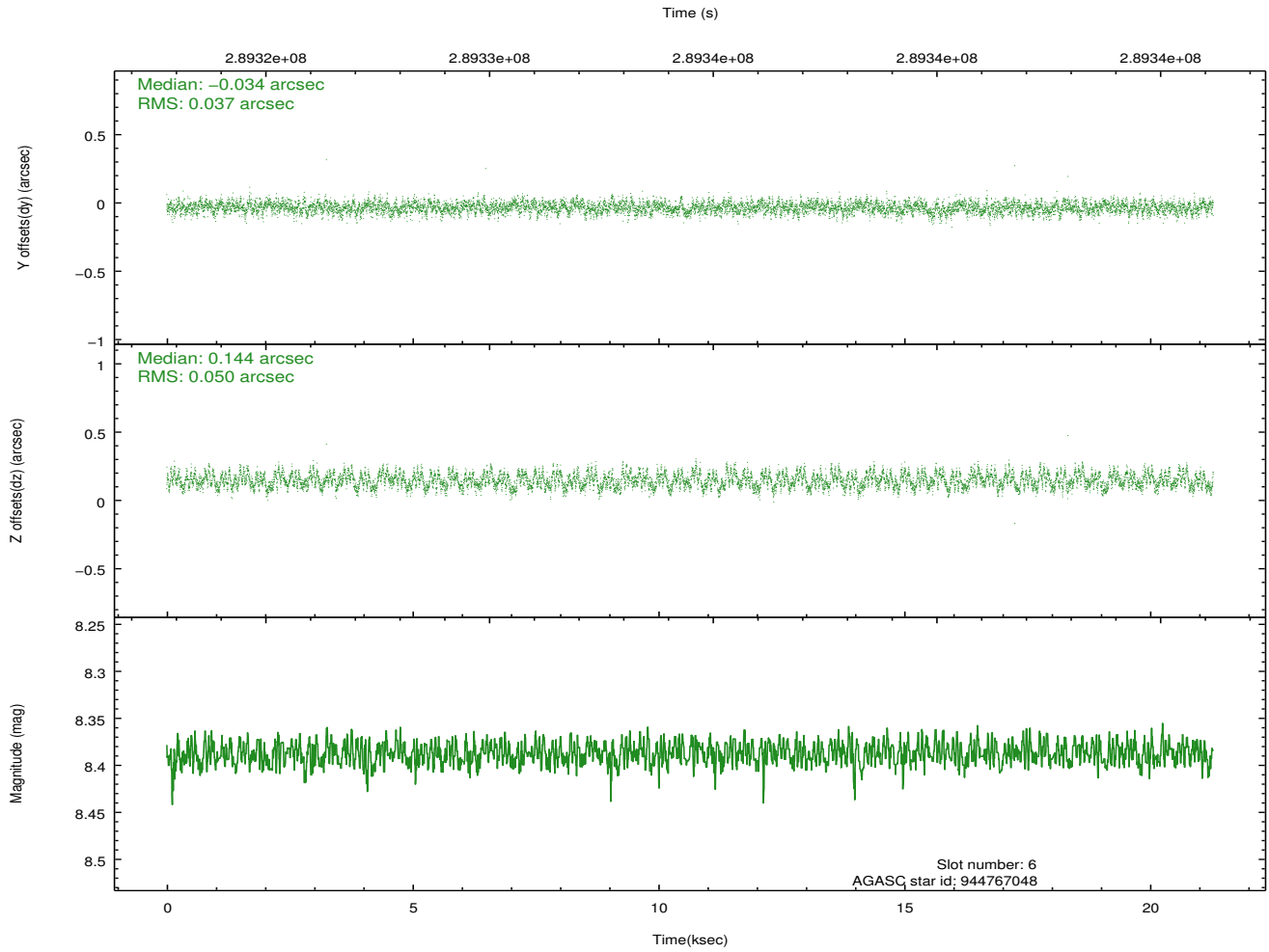
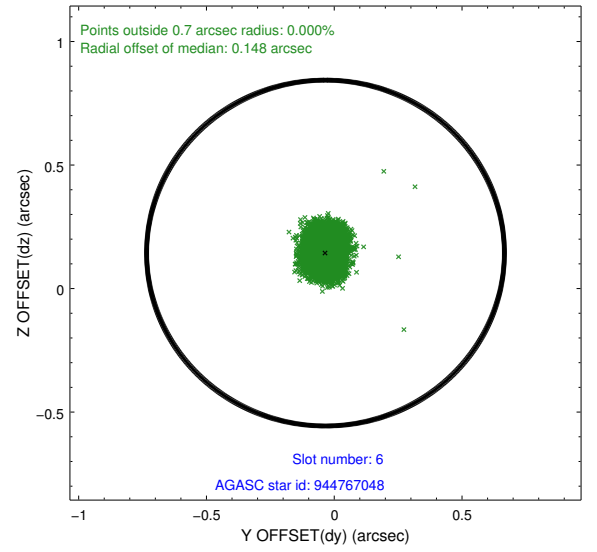
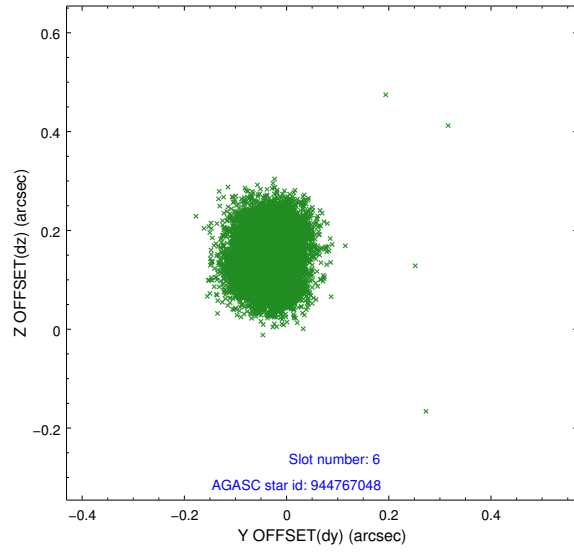
2.4.2 Slot 4



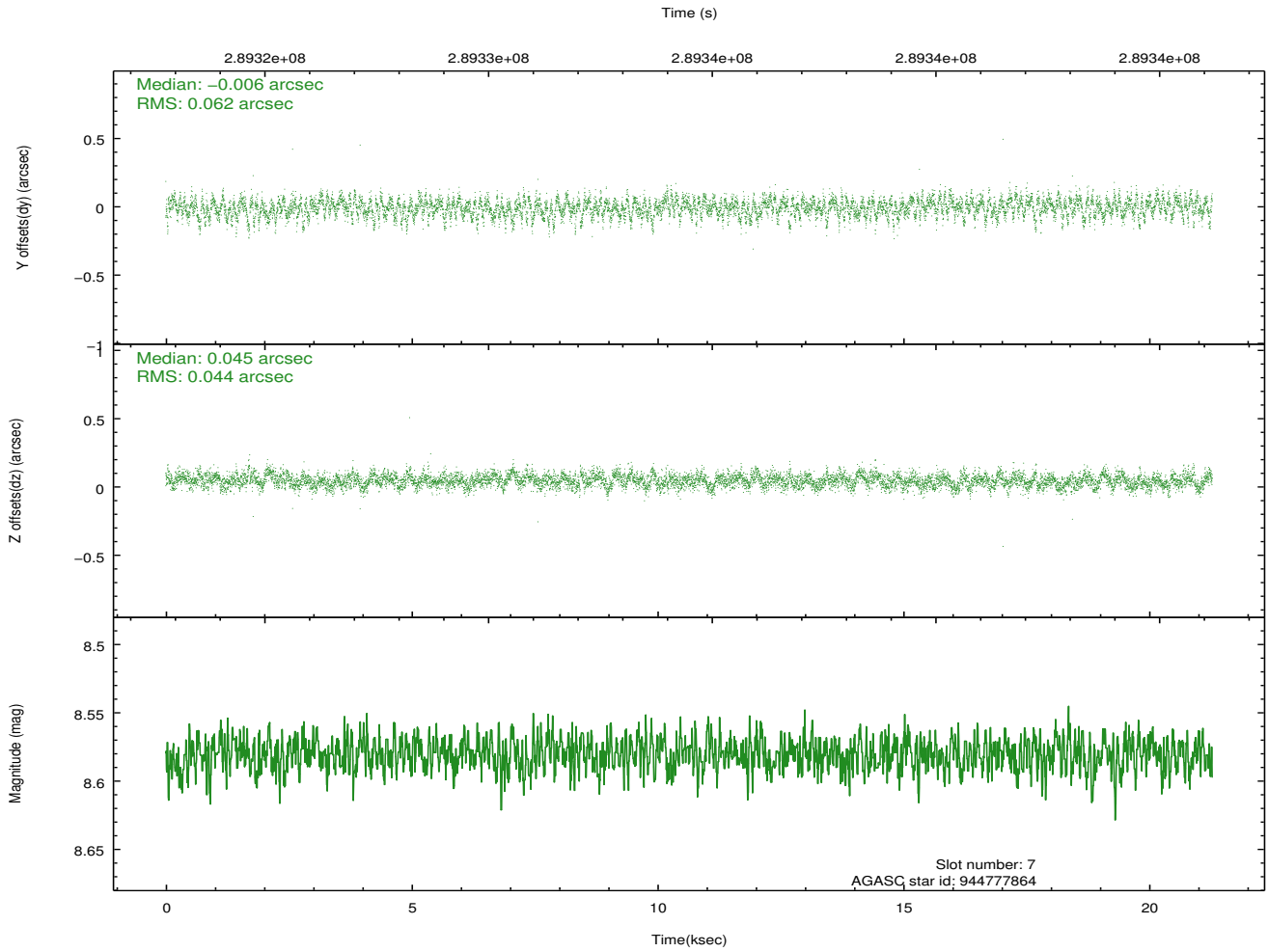
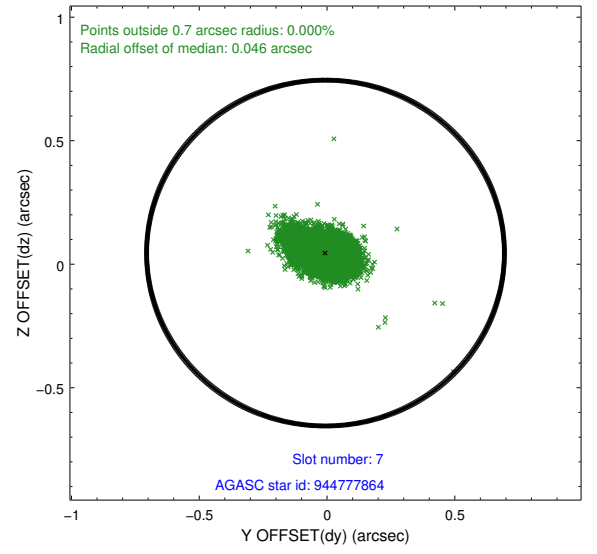
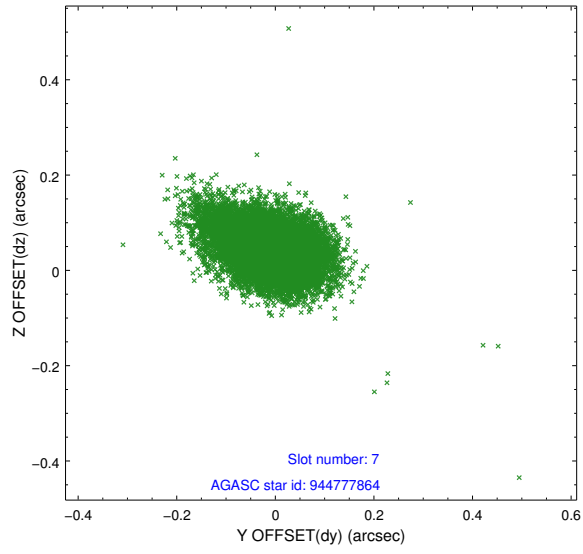
2.4.3 Slot 5



2.4.4 Slot 6

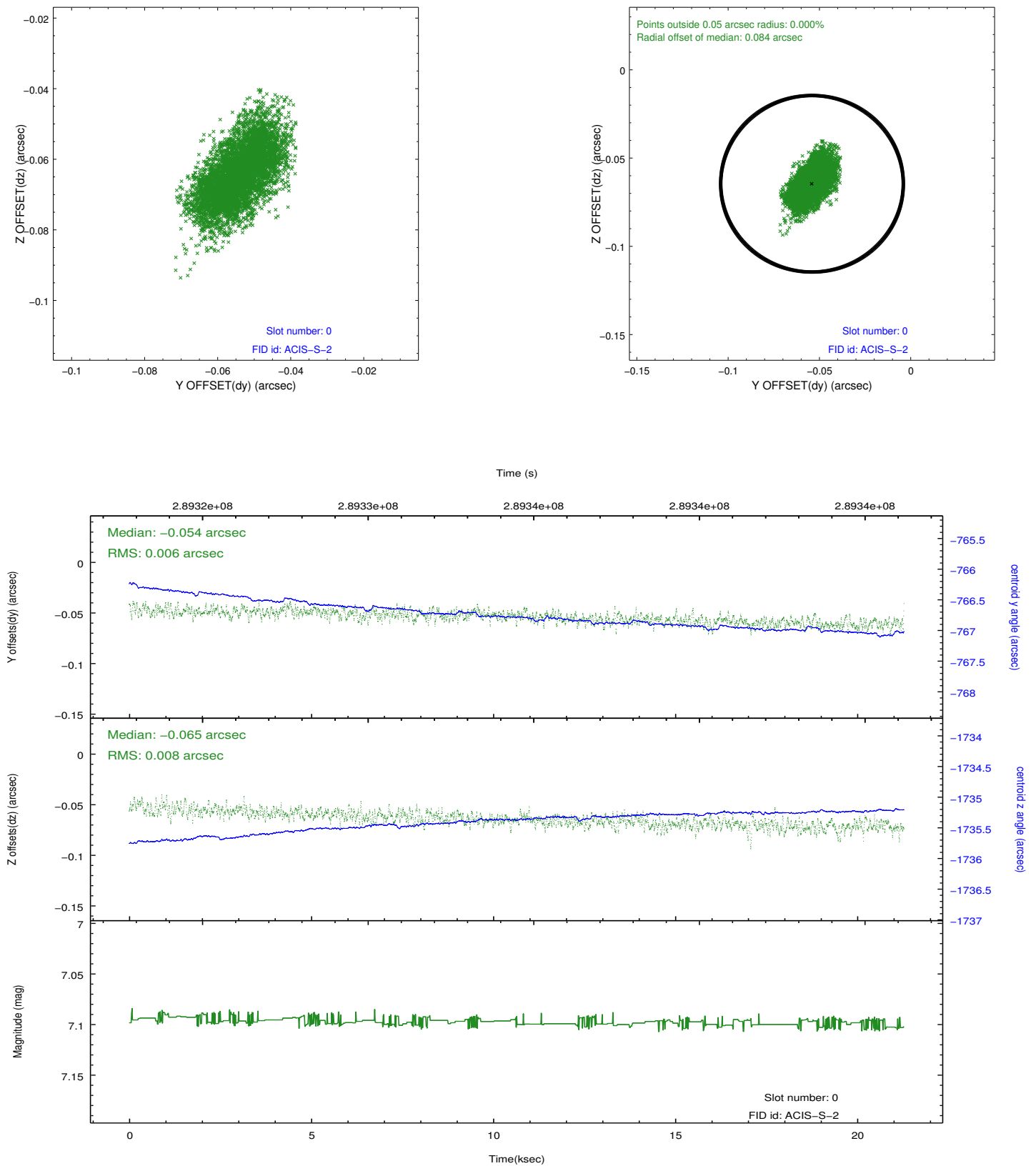


2.4.5 Slot 7

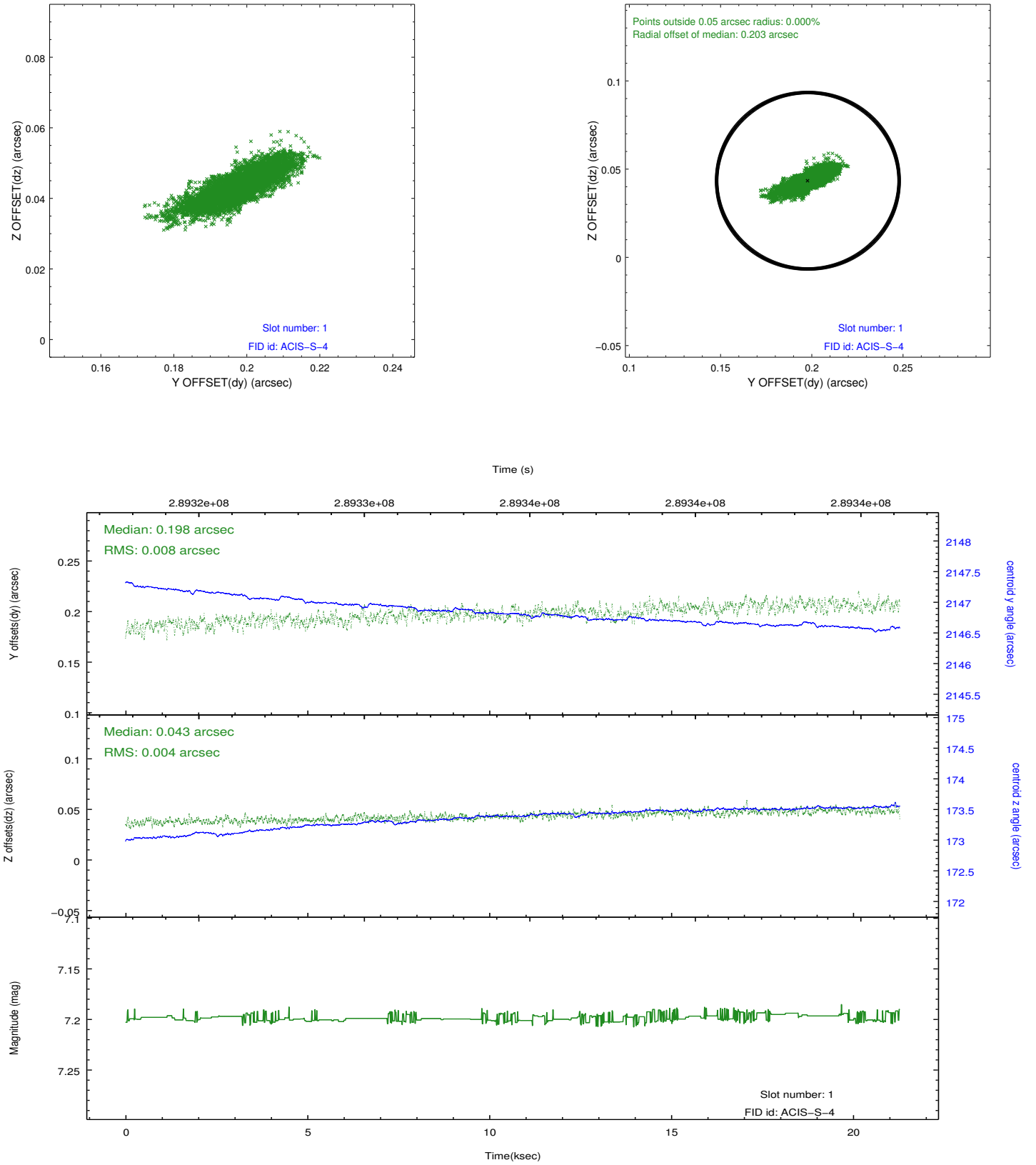


2.5 FID Slots

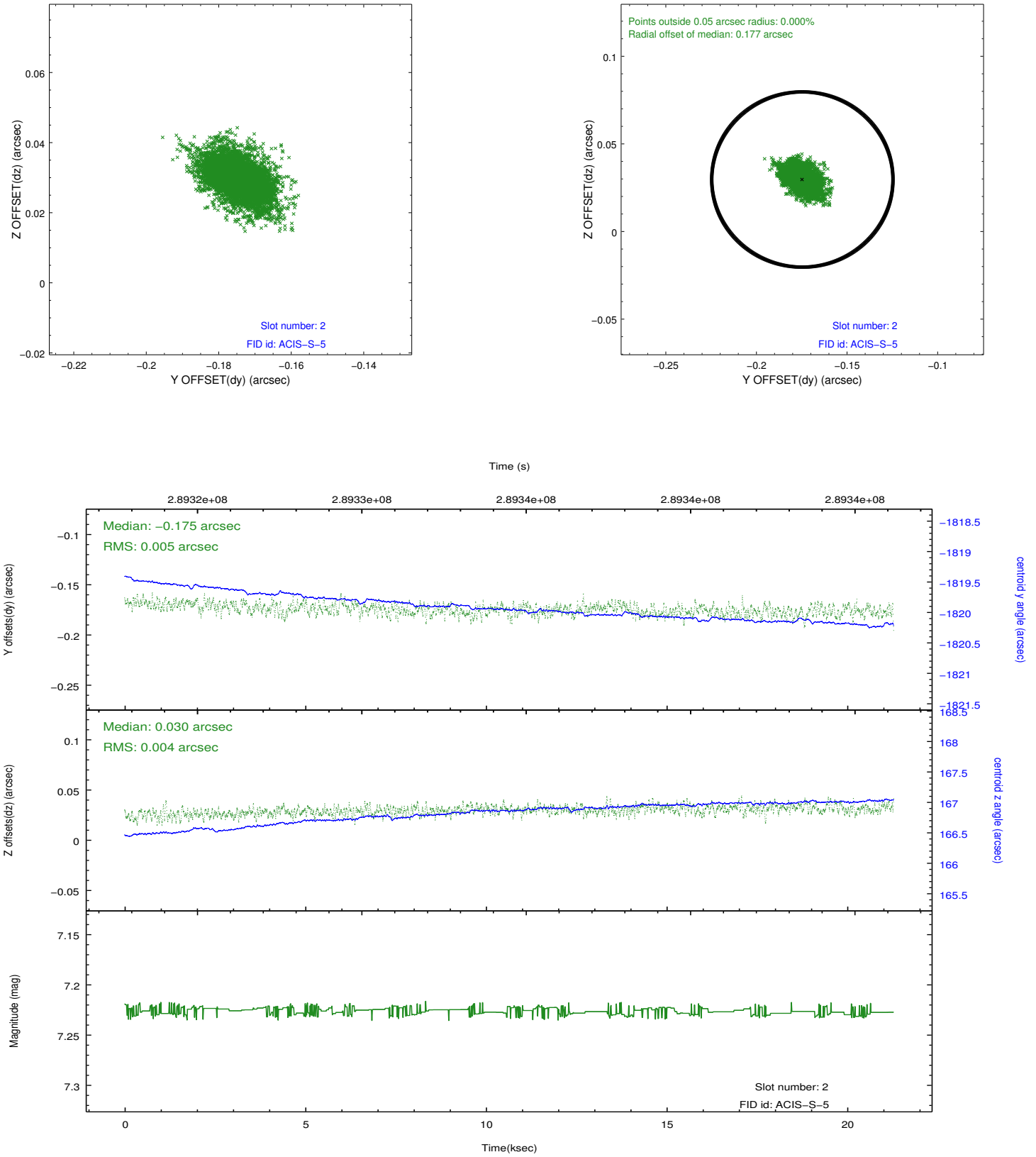
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

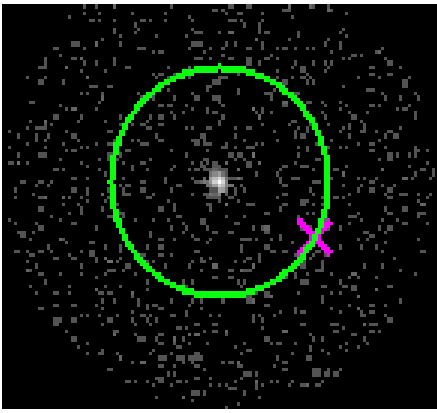


3 Gratings

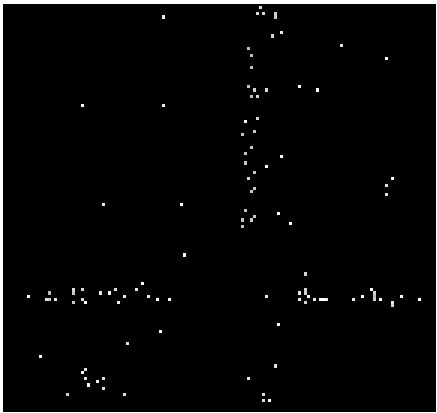
3.1 HEG Arm



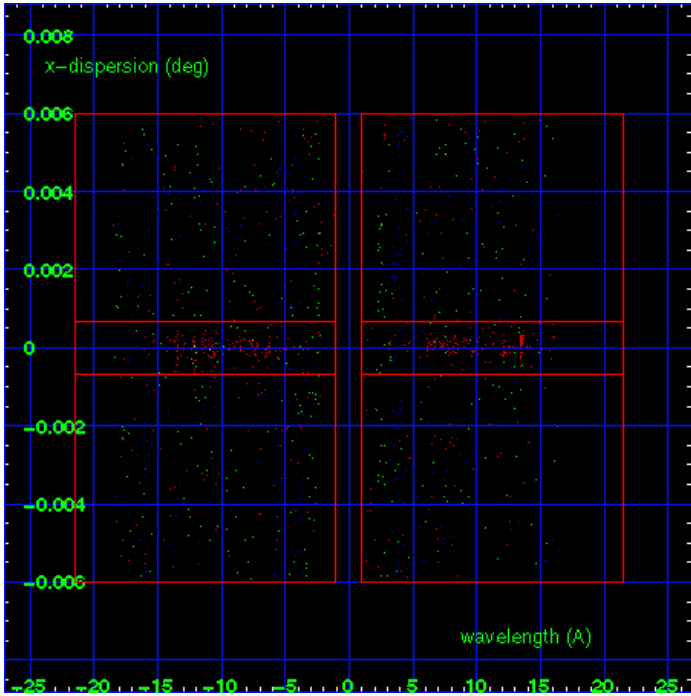
HEG Order Sort 123



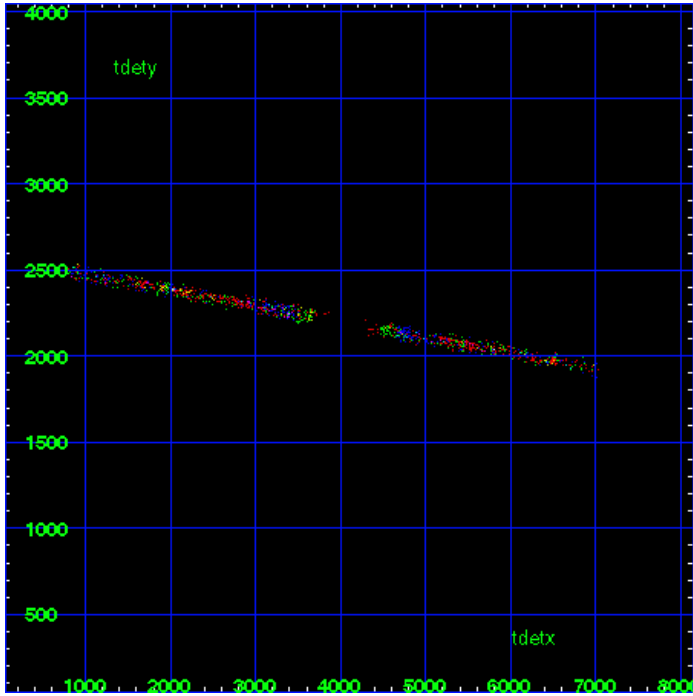
HEG Zero Order



HEG Order Sort ALL

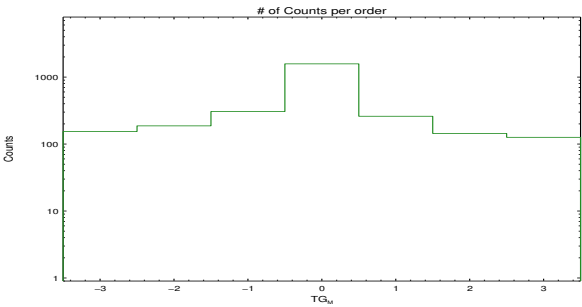


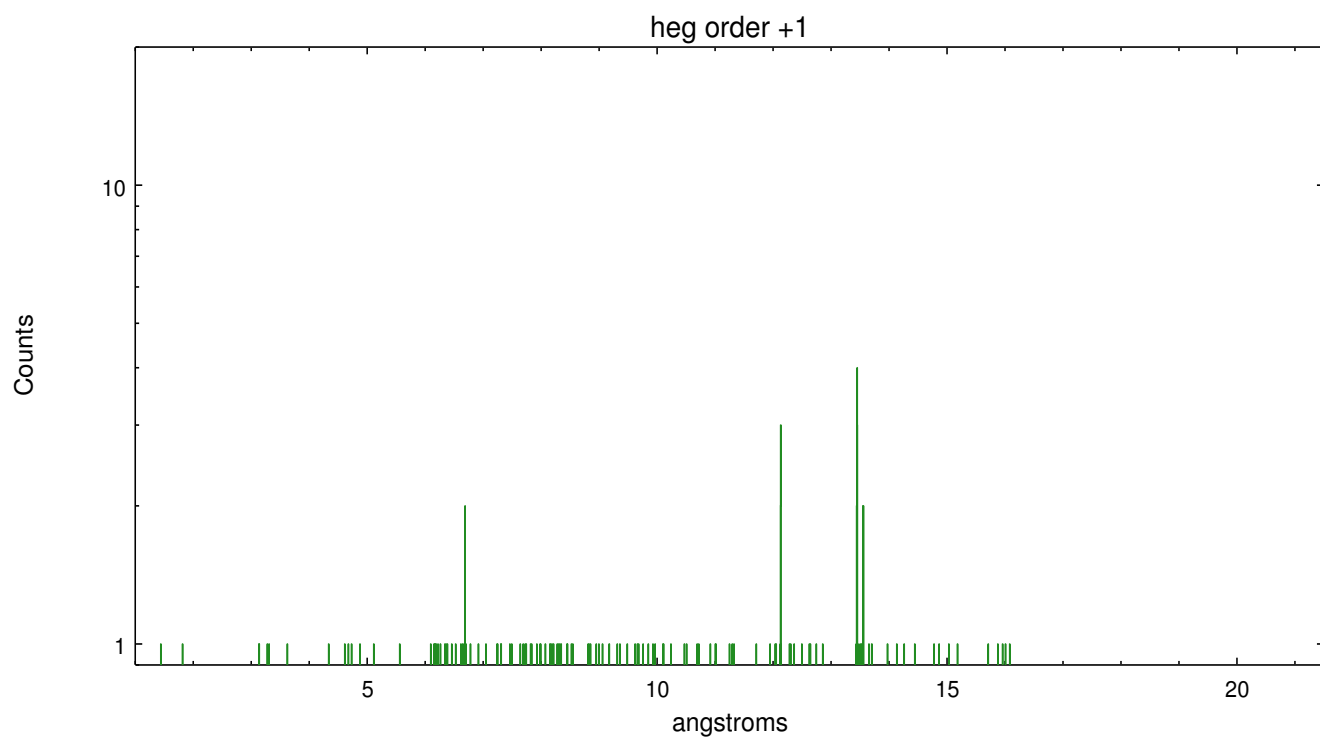
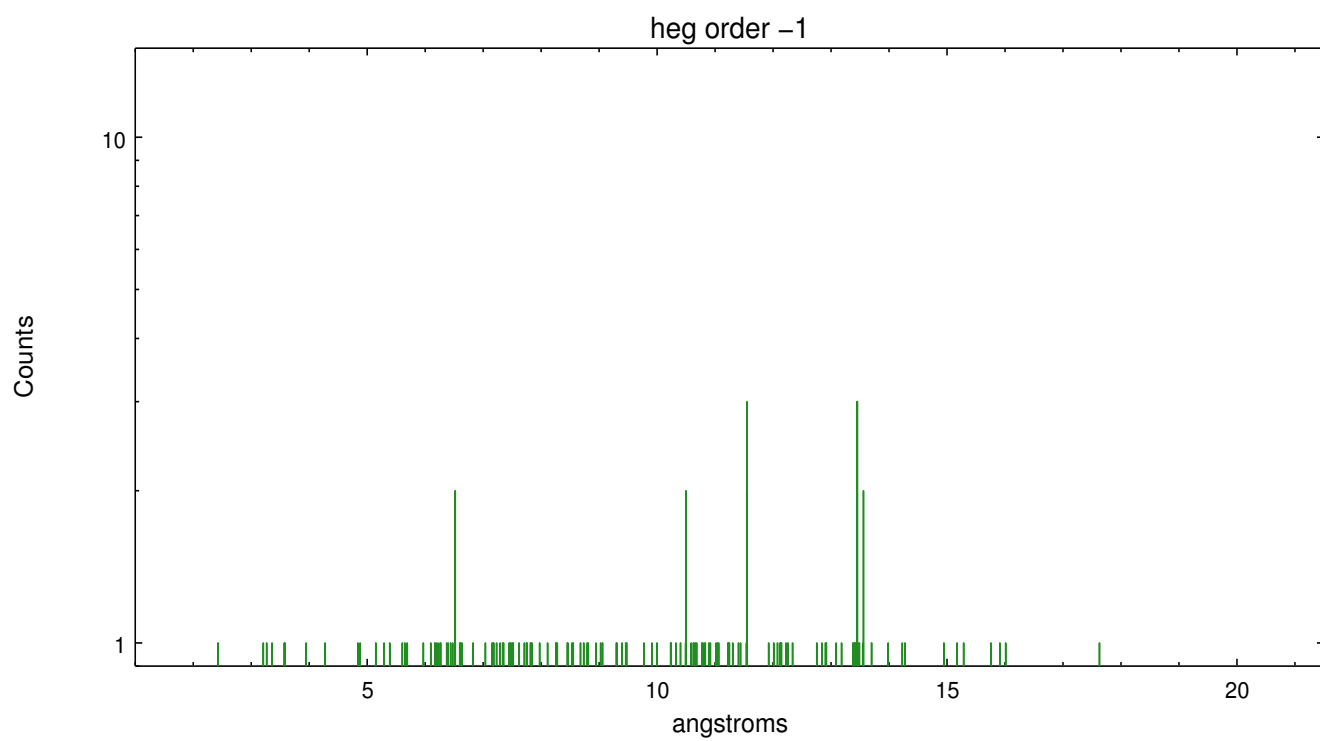
Spot Image HEG



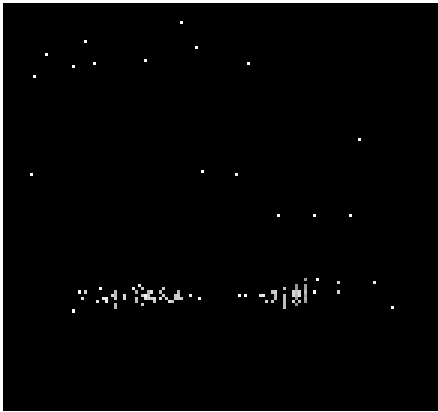
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	154	187	306	1577	260	144	126

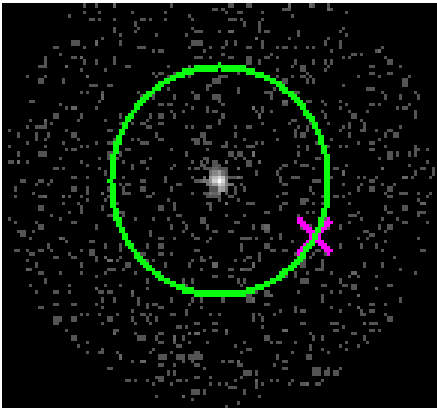




3.2 MEG Arm



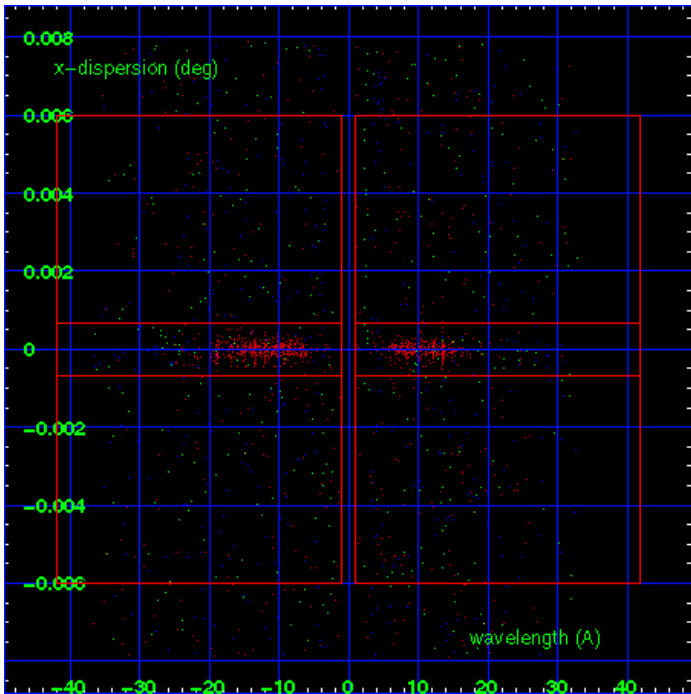
MEG Order Sort 123



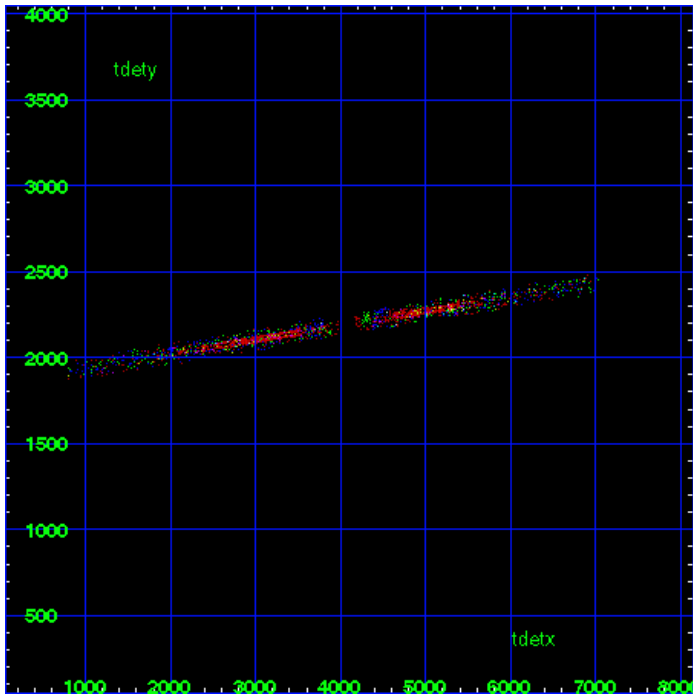
MEG Zero Order



MEG Order Sort ALL

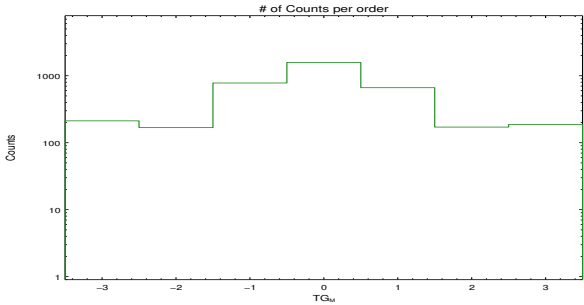


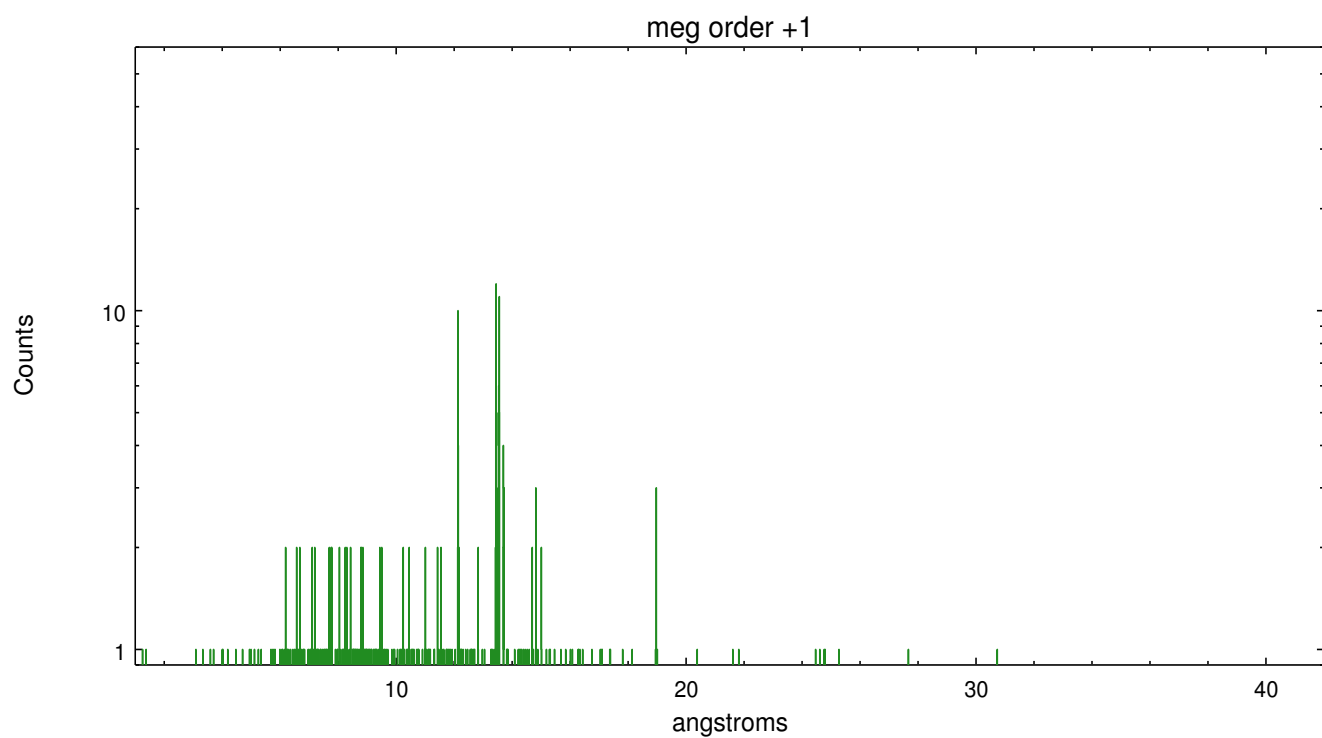
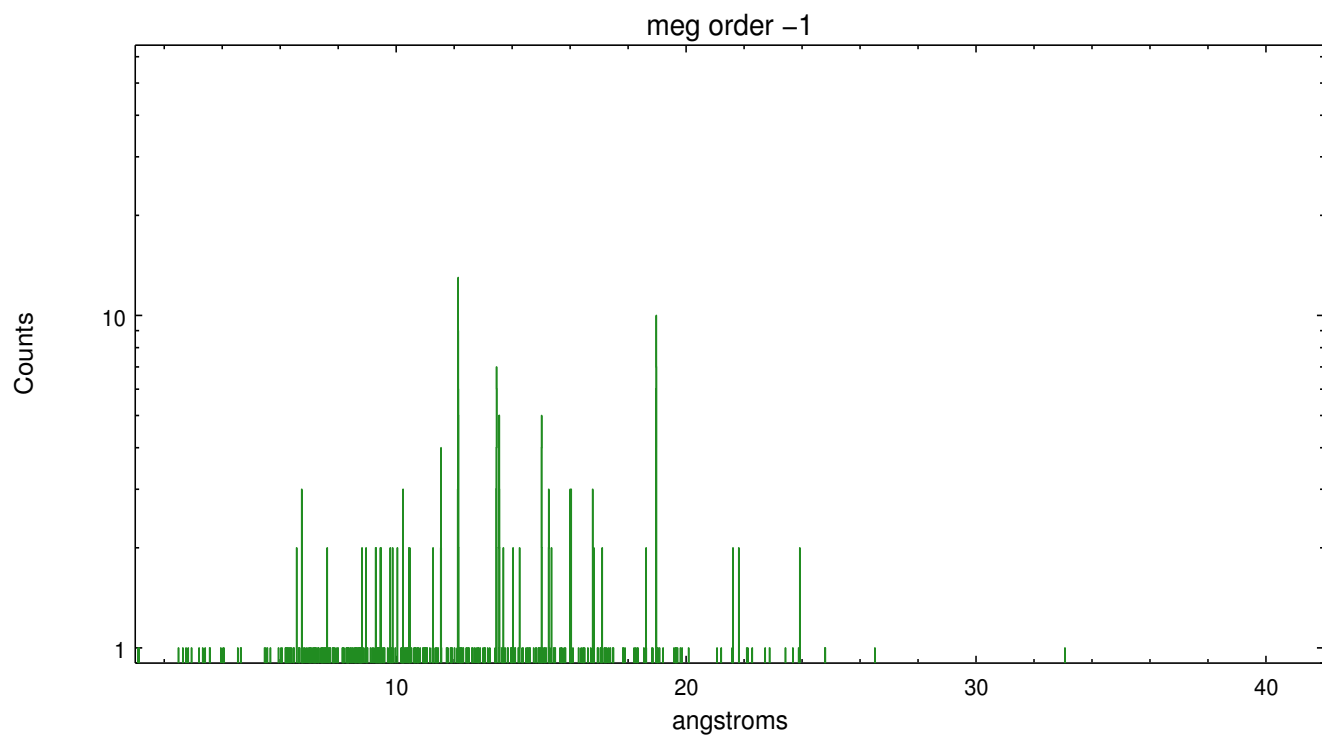
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	212	168	779	1577	663	171	187





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.04.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.9503999

A.2 Comments