

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8542 - L2 Version 3
Chandra X-Ray Center

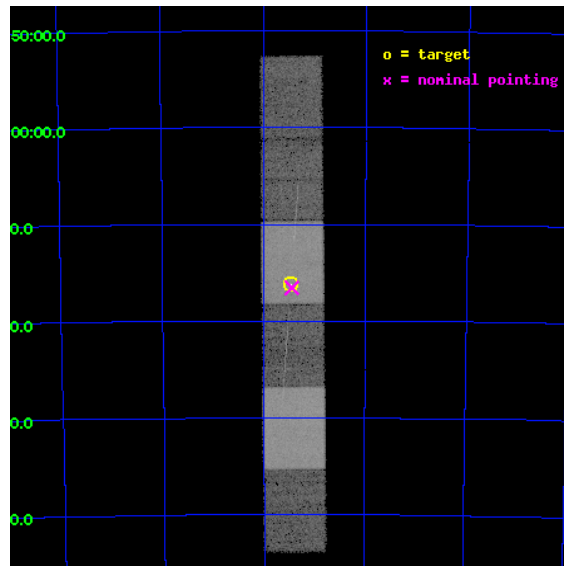
L2 Processing Date : Apr 22 2012

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1 Front

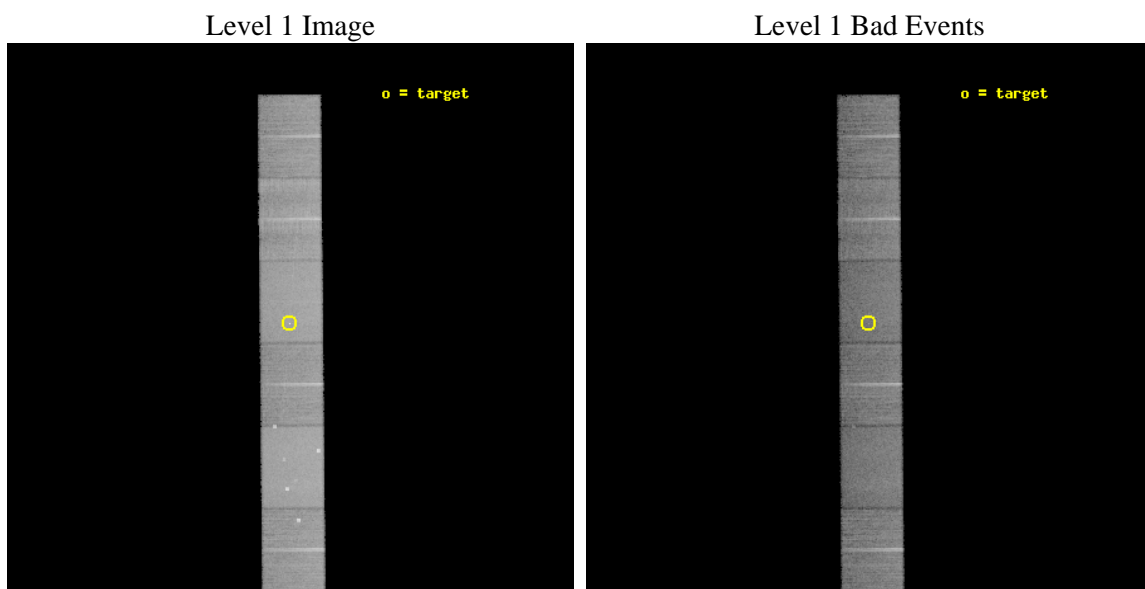
seq_num	500720	Sequence number
obs_id	8542	Observation id
title	High resolution spectral imaging of SN 1987A at 20 years: HETG observation	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	Sn 1987A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.269722	Observer's specified target Dec [deg]
ra_nom	83.861922088399	Nominal RA [deg]
dec_nom	-69.275985346524	Nominal Dec [deg]
roll_nom	269.45218446074	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18147.5	Sum of GTIs [s]
livetime	17854.402134559	Livetime [s]
ontime4	18144.958979845	Sum of GTIs [s]
ontime5	18147.5	Sum of GTIs [s]
ontime6	18147.5	Sum of GTIs [s]
ontime7	18147.5	Sum of GTIs [s]
ontime8	18144.958999693	Sum of GTIs [s]
ontime9	18147.5	Sum of GTIs [s]
l2events	225212	Number of level 2 events



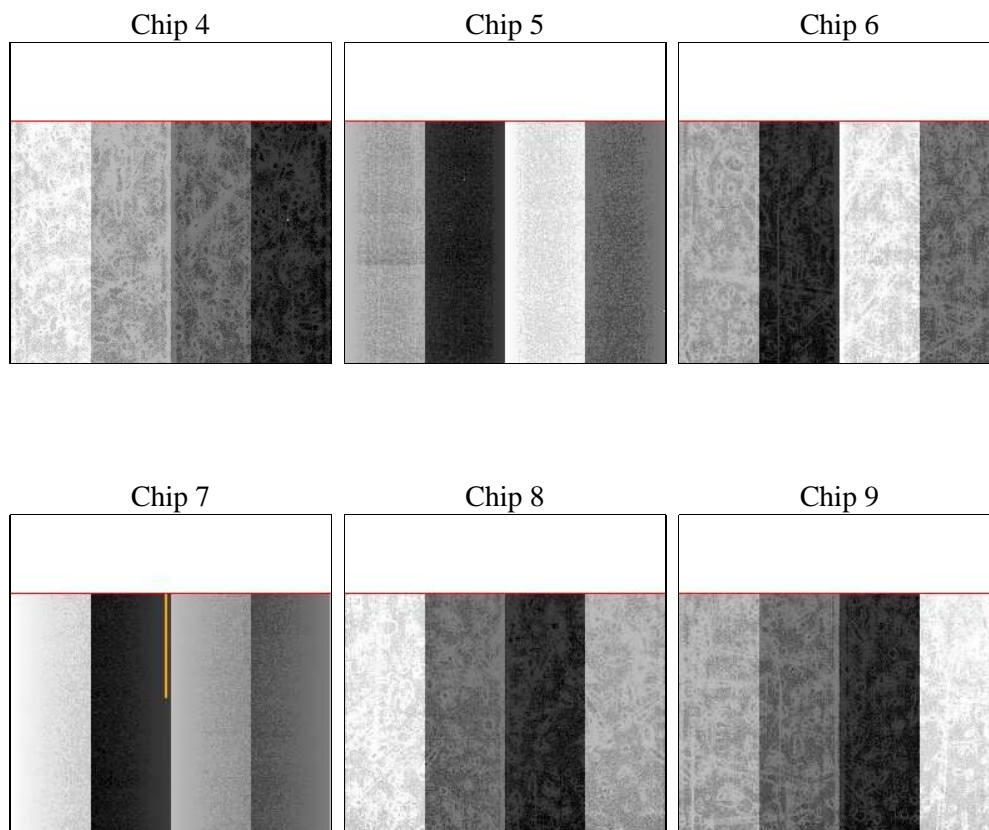
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	18147.5	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	18144.958979845	Sum of GTIs [s]
date	2012-04-22T04:37:15	Date and time of file creation	ontime5	18147.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	18147.5	Sum of GTIs [s]
			ontime7	18147.5	Sum of GTIs [s]
			ontime8	18144.958999693	Sum of GTIs [s]
			ontime9	18147.5	Sum of GTIs [s]
			l1events	971079	Number of level 1 events

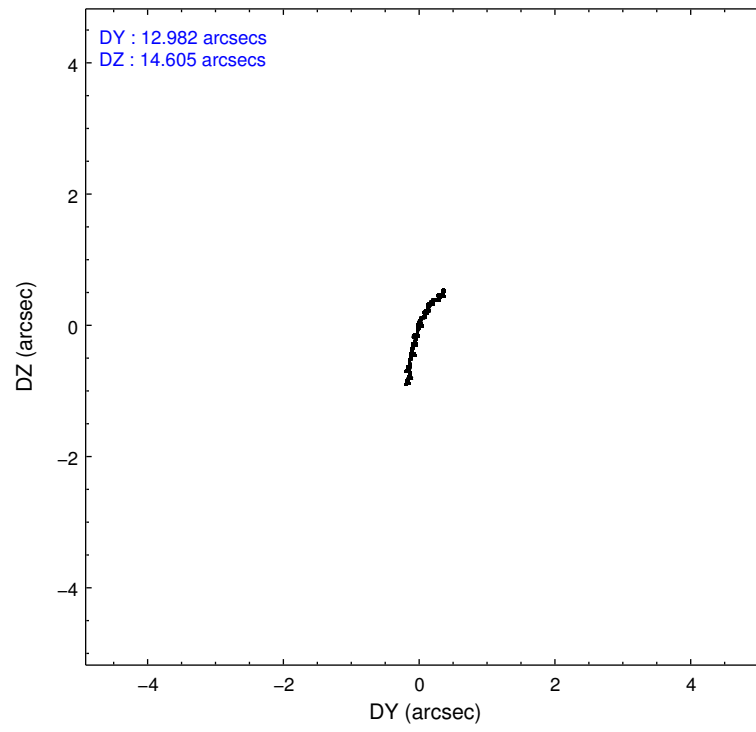
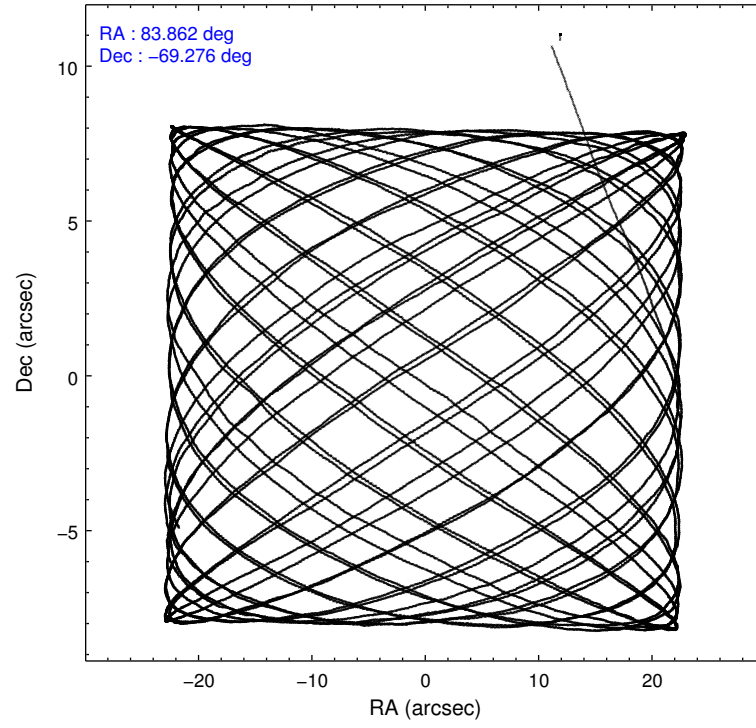
2.1.4 Events

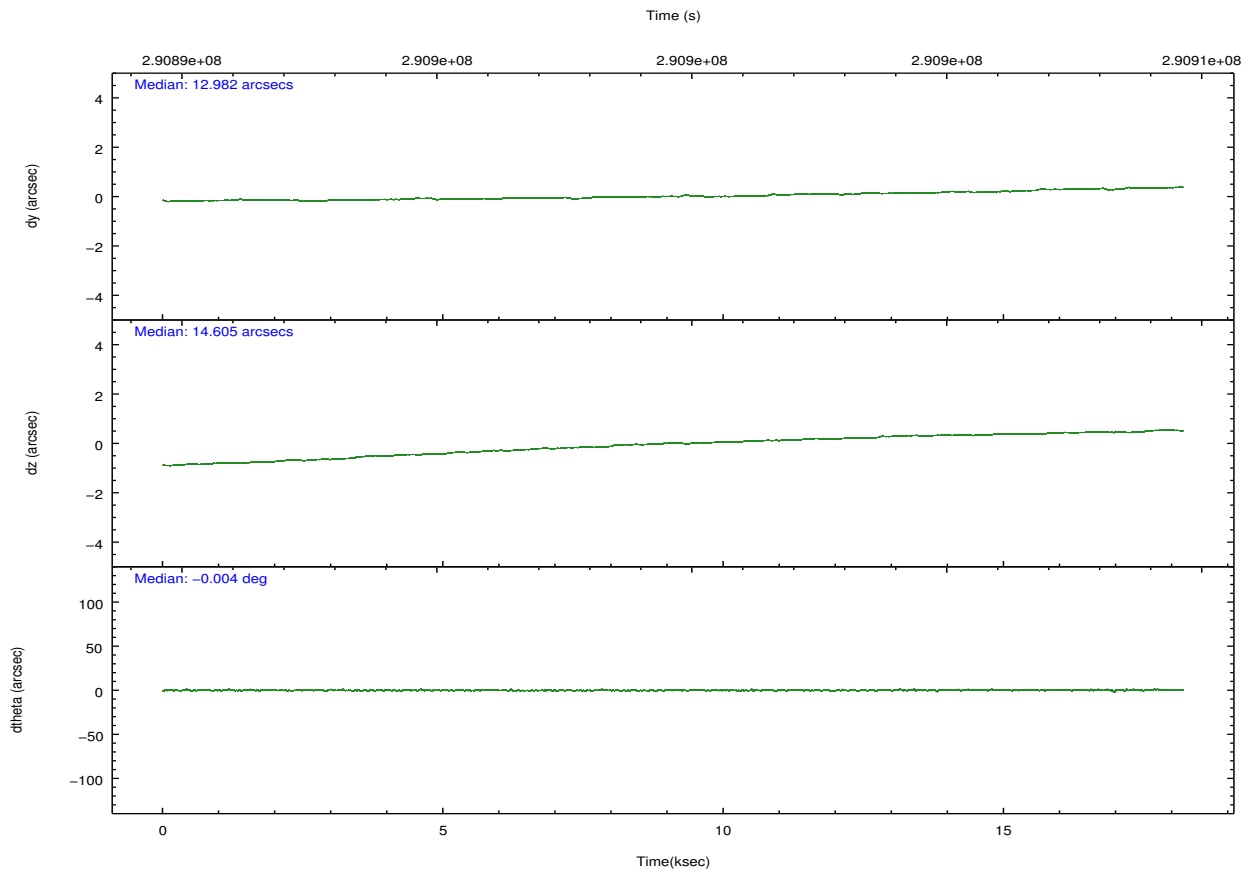
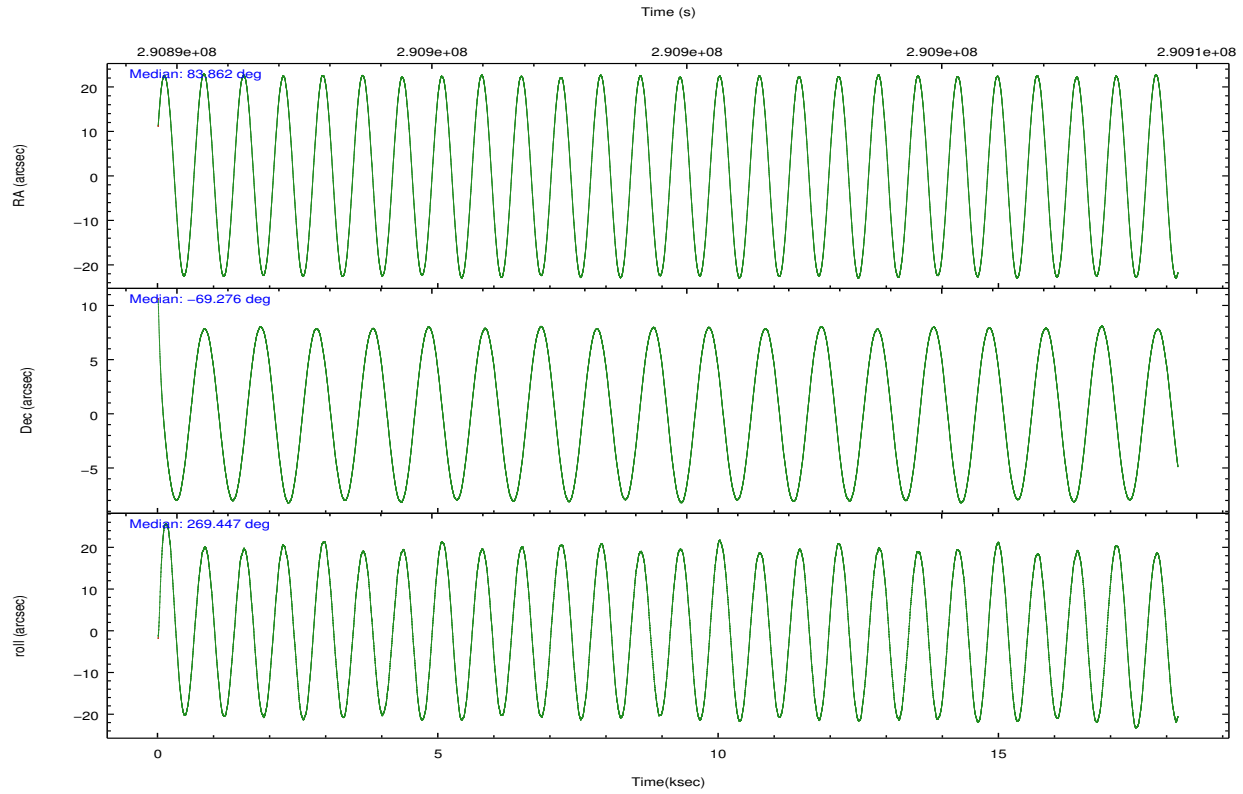
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	147685	203985	134817	181877	170799	131916	grade 0 events	10439	11997	7100	7236	12830	6982
rejected events	127449	106443	117914	103304	130517	115177		7%	5%	5%	3%	7%	5%
rejected %	86%	52%	87%	56%	76%	87%	grade 1 events	129	380	63	195	108	70
								0%	0%	0%	0%	0%	0%
							grade 2 events	3720	28689	3420	16330	8745	3276
								2%	14%	2%	8%	5%	2%
							grade 3 events	1756	4298	1576	7168	4345	1694
								1%	2%	1%	3%	2%	1%
							grade 4 events	1652	4054	1670	6915	3948	1612
								1%	1%	1%	3%	2%	1%
							grade 5 events	5858	15280	6049	17106	8017	6494
								3%	7%	4%	9%	4%	4%
							grade 6 events	2677	48534	3143	40959	10429	3180
								1%	23%	2%	22%	6%	2%
							grade 7 events	121454	90753	111796	85968	122377	108608
								82%	44%	82%	47%	71%	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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.823043	83.86192208839924	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-69.252366	-69.27598534652417	Subarray start row	1	1
[deg] Pointing Roll	269.259203	269.4521844607449	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	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
[s] Observation start time (MET)	290890730.184000	290889716.13233			
Observation start date	2007-03-21T18:57:45	2007-03-21T18:41:56			
[s] Observation end time (MET)	290908730.184000	290909129.63326			
Observation end date	2007-03-21T23:57:45	2007-03-22T00:05:29			
Read mode	TIMED	TIMED			

2.3 Aspect



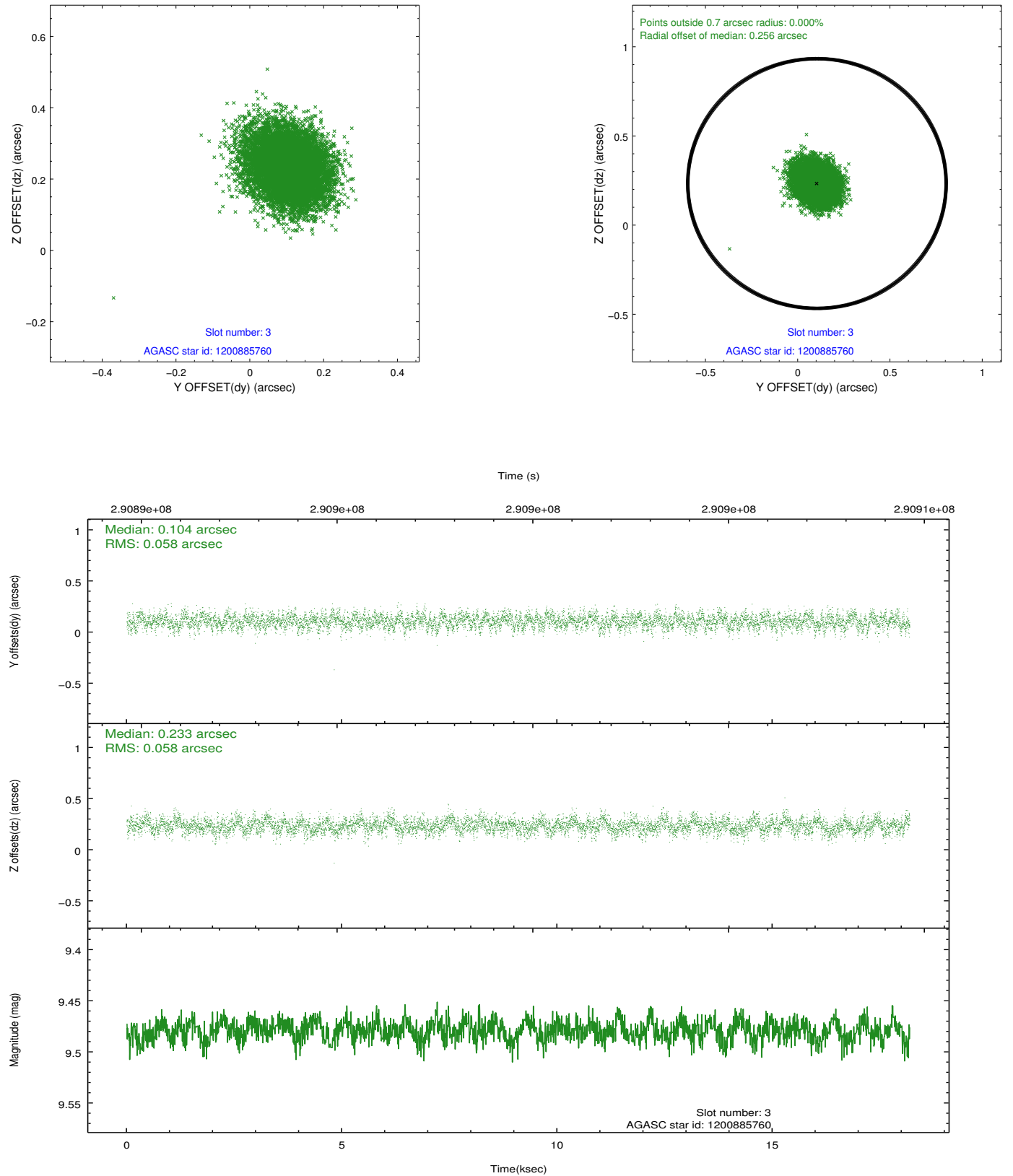


Slot Statistics

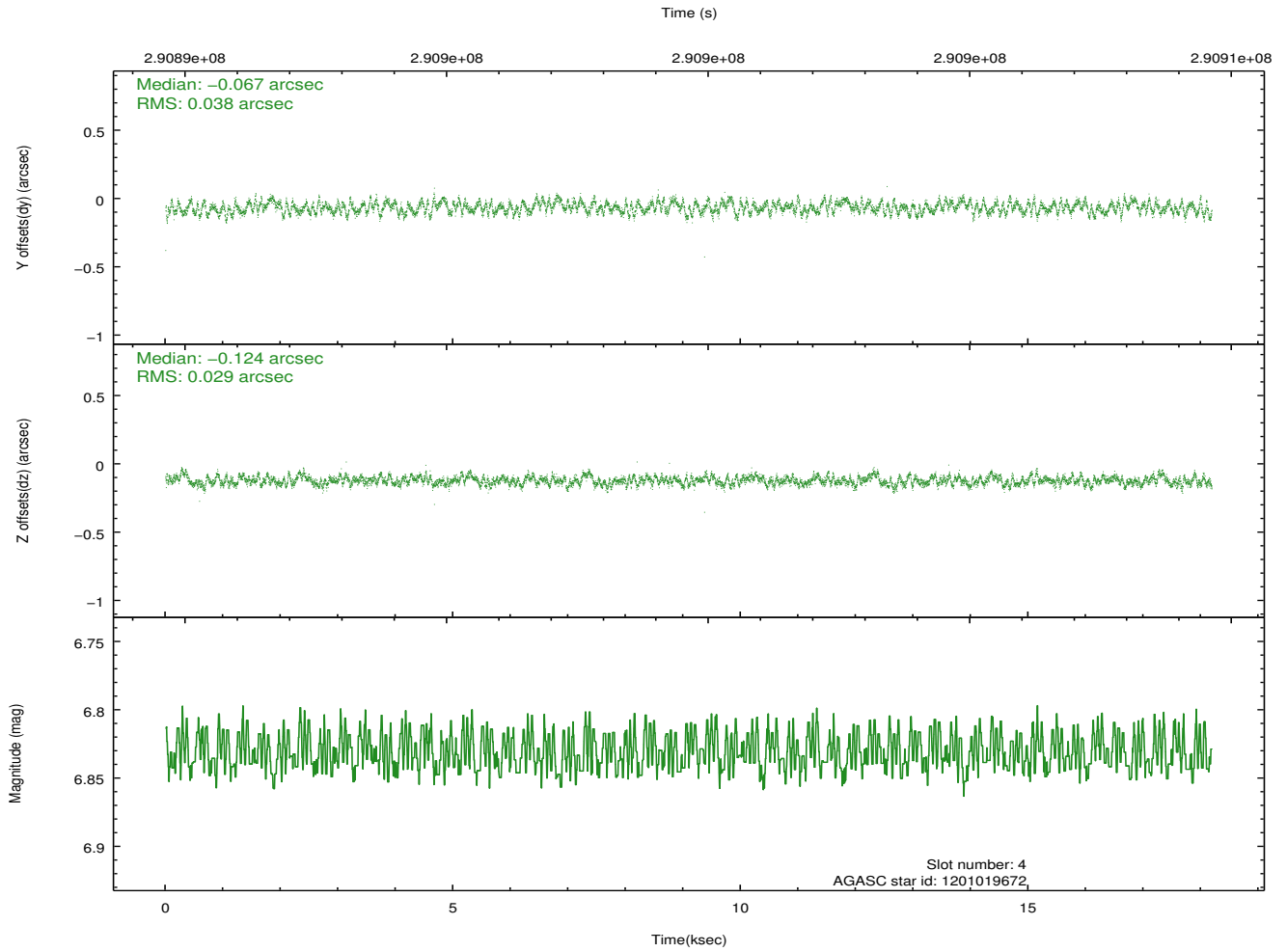
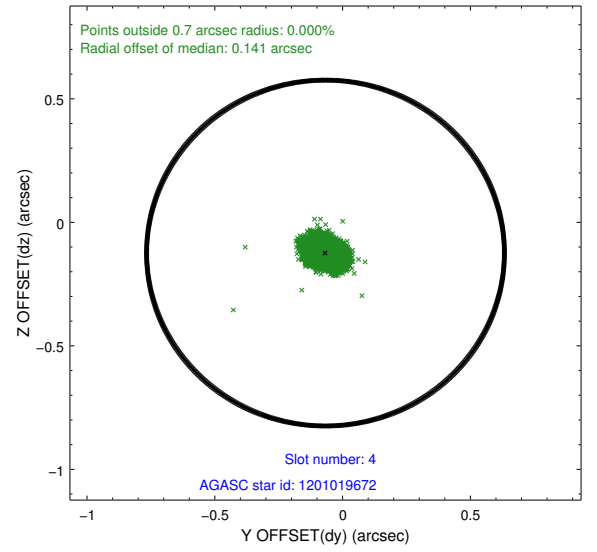
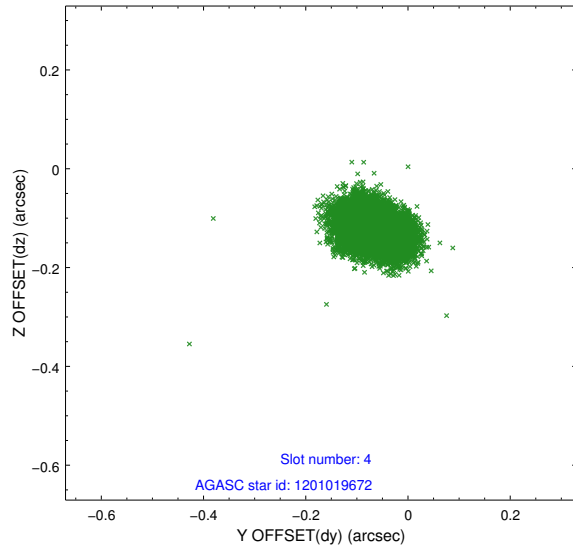
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	4437	-0.129	-0.101	0.009	0.016	0.000000	0.000000	-765.87	-1798.12
1	FID	ACIS-S-4	7.18	4437	0.136	0.061	0.006	0.011	0.000000	0.000000	2147.59	110.25
2	FID	ACIS-S-6	7.36	4437	-0.034	0.048	0.009	0.017	0.000000	0.000000	396.51	747.90
3	GUIDE	1200885760	9.48	8867	0.104	0.233	0.087	0.141	83.723637	-68.777667	-1706.64	-151.21
4	GUIDE	1201019672	6.83	8873	-0.067	-0.124	0.052	0.081	85.312192	-68.770187	-1737.58	1918.80
5	GUIDE	1201020040	8.59	8874	0.065	-0.173	0.068	0.110	85.379163	-68.879396	-1343.29	2001.42
6	GUIDE	1201540776	9.59	8858	0.013	0.017	0.113	0.184	85.107945	-69.858480	2177.85	1621.79
7	GUIDE	1201410616	9.32	8862	-0.109	0.045	0.095	0.152	82.516808	-69.784406	1953.99	-1599.08

2.4 Star Slots

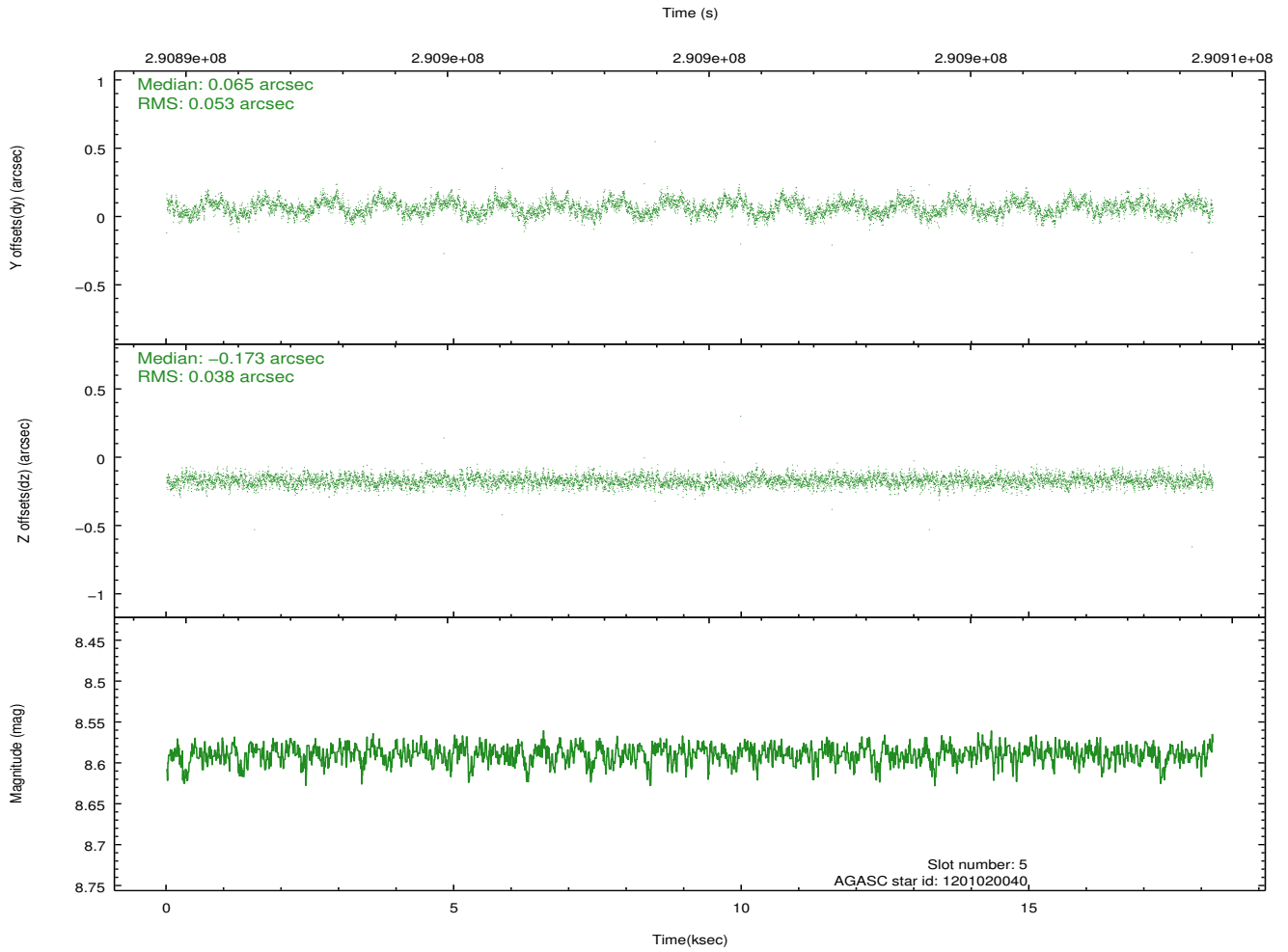
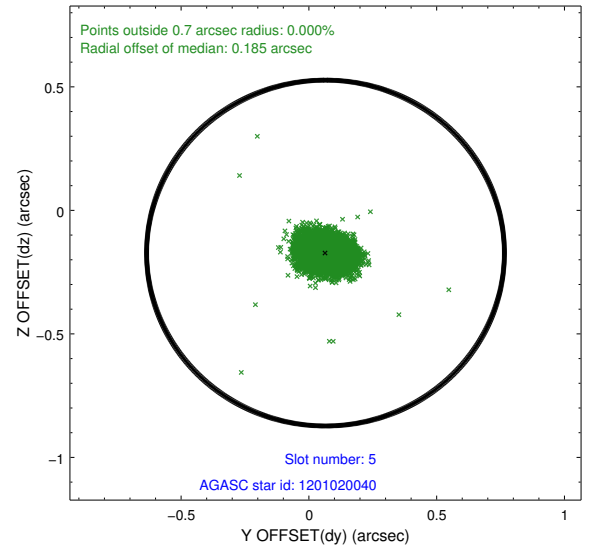
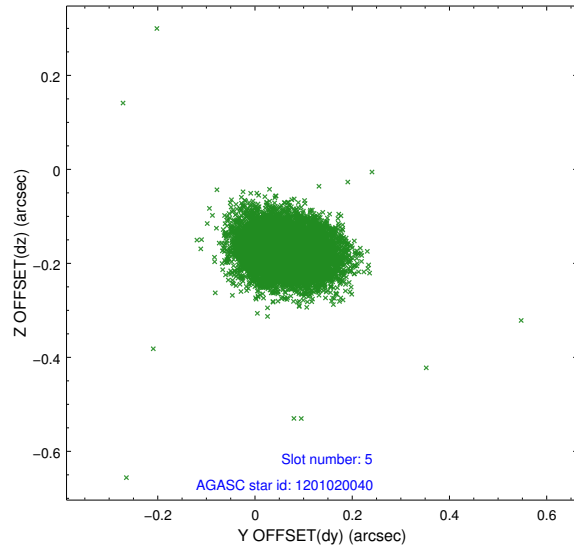
2.4.1 Slot 3



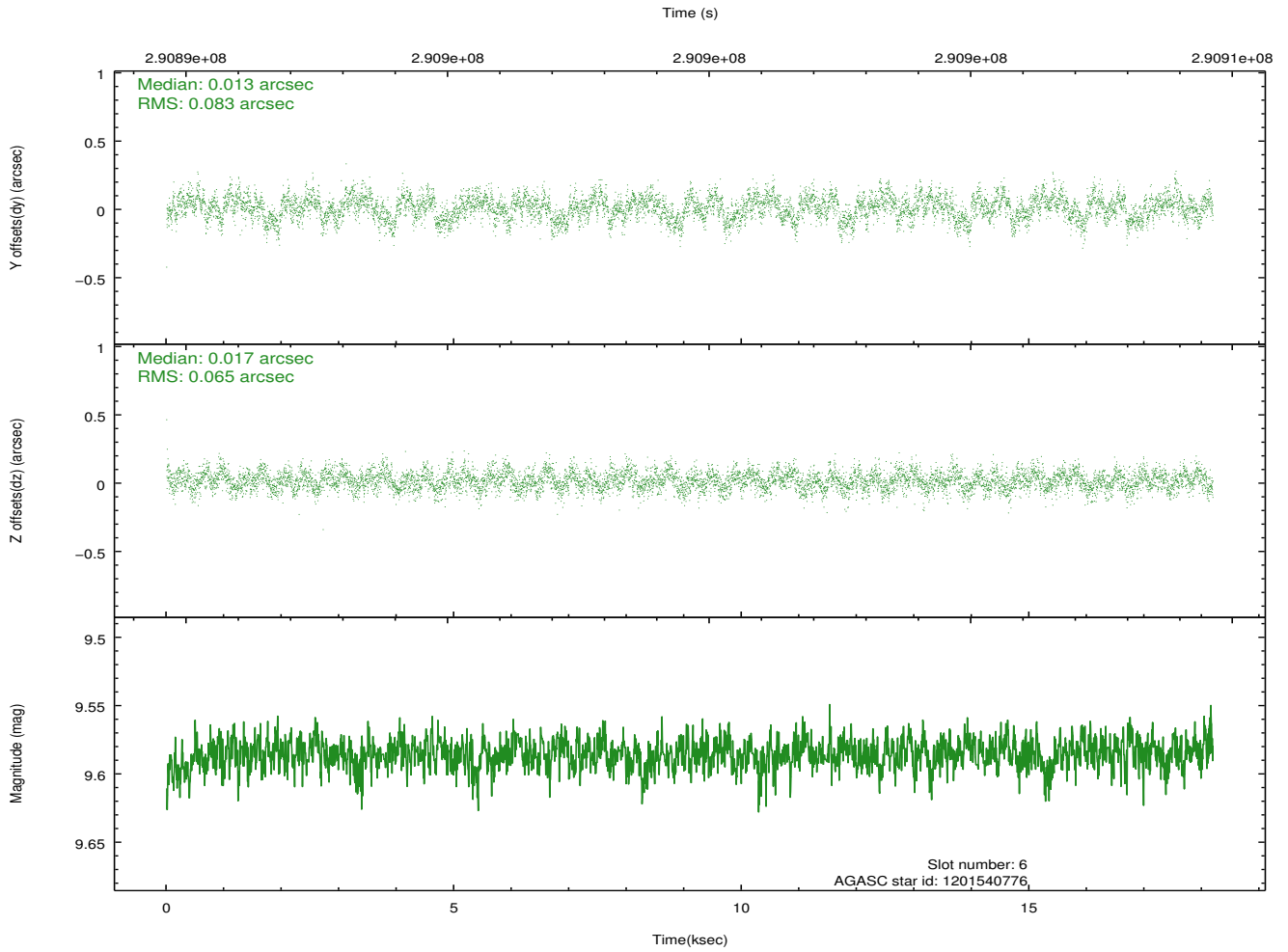
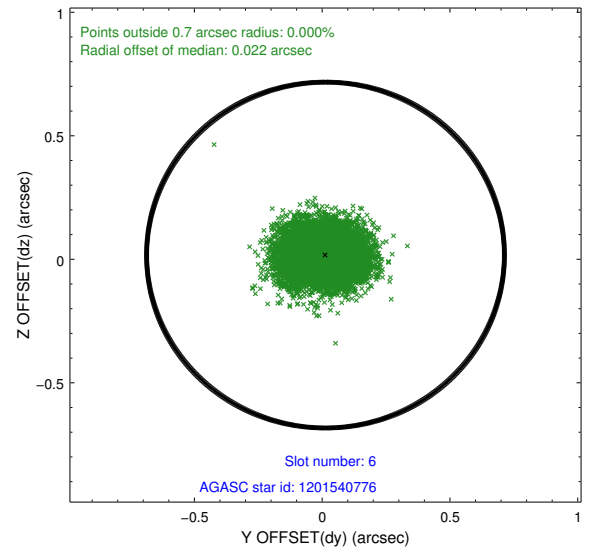
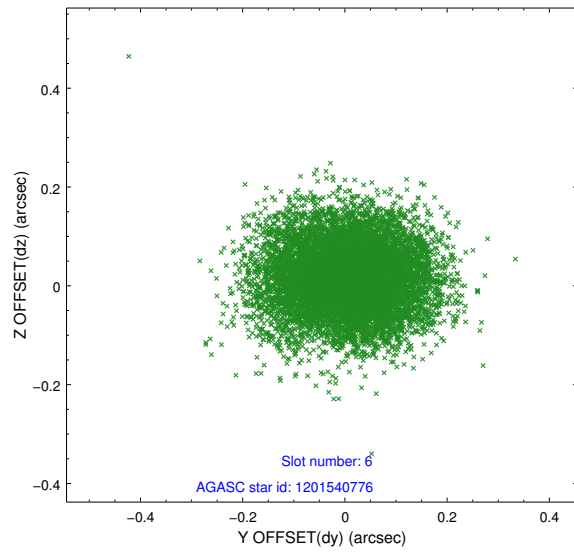
2.4.2 Slot 4



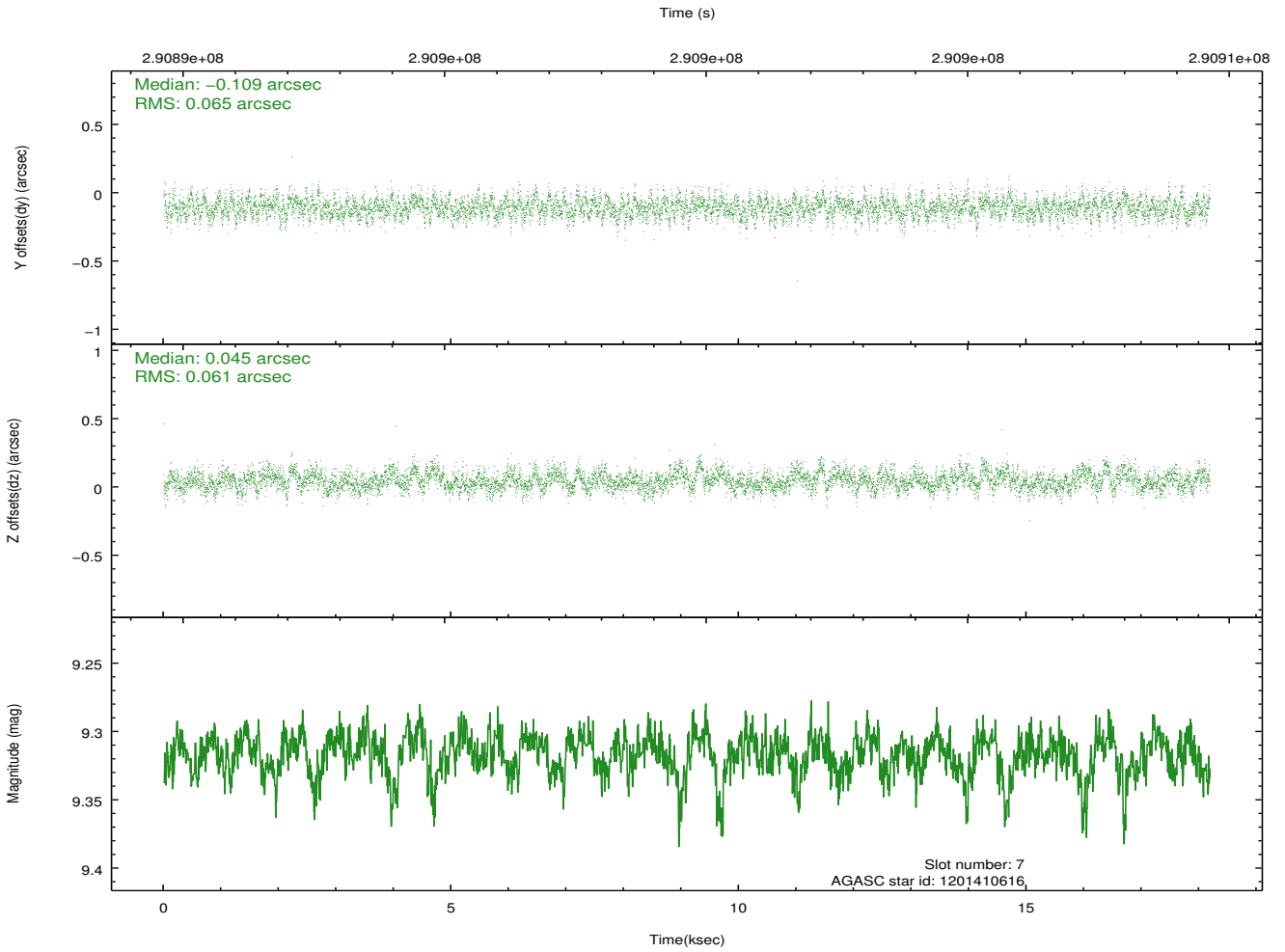
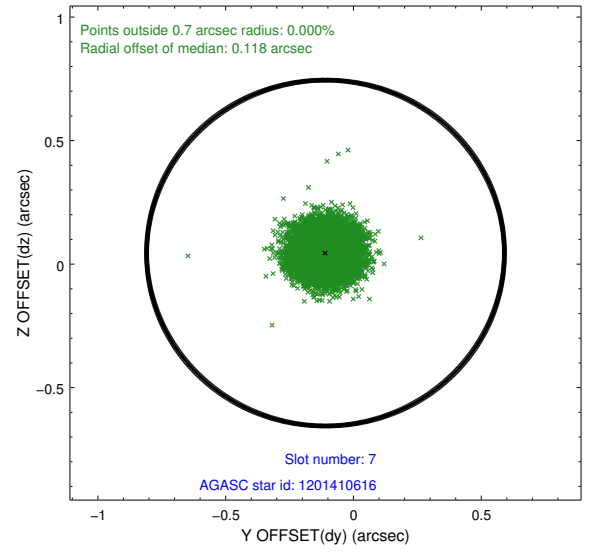
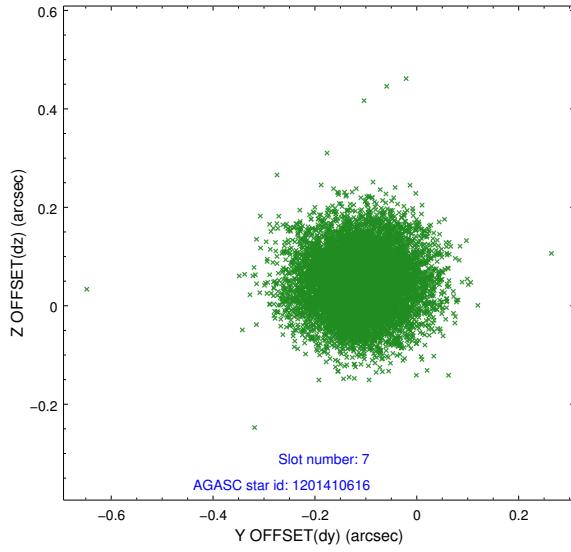
2.4.3 Slot 5



2.4.4 Slot 6

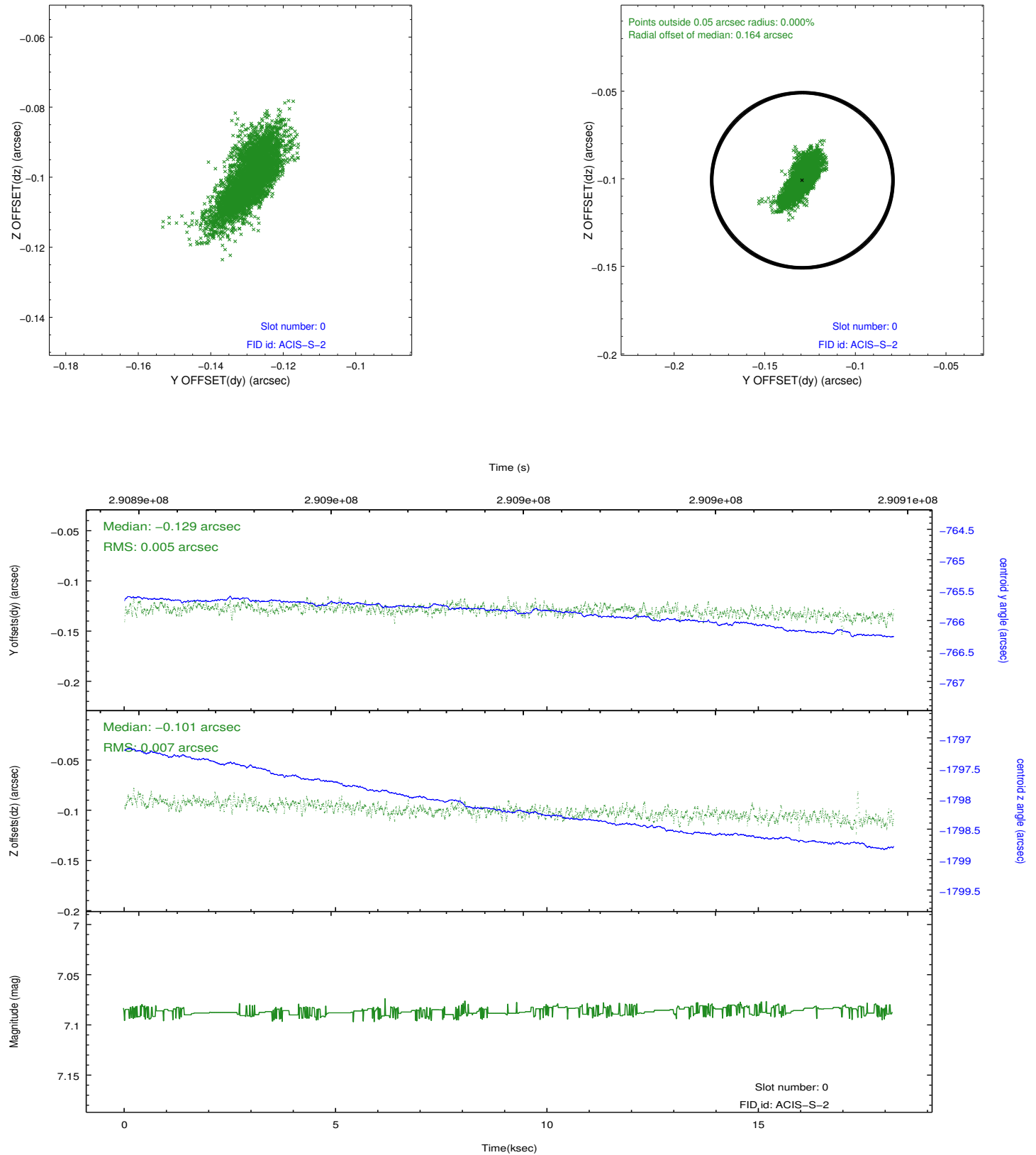


2.4.5 Slot 7

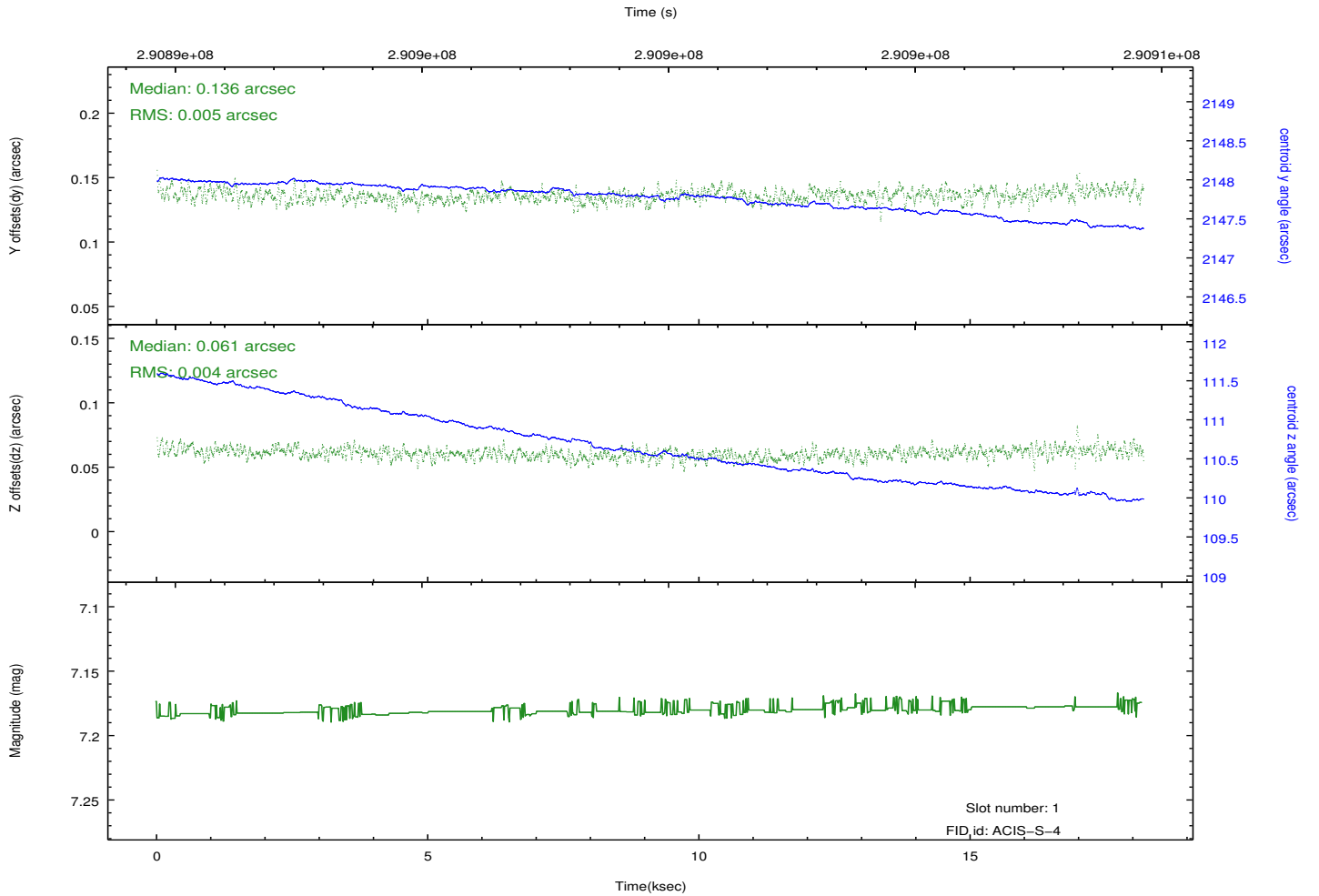
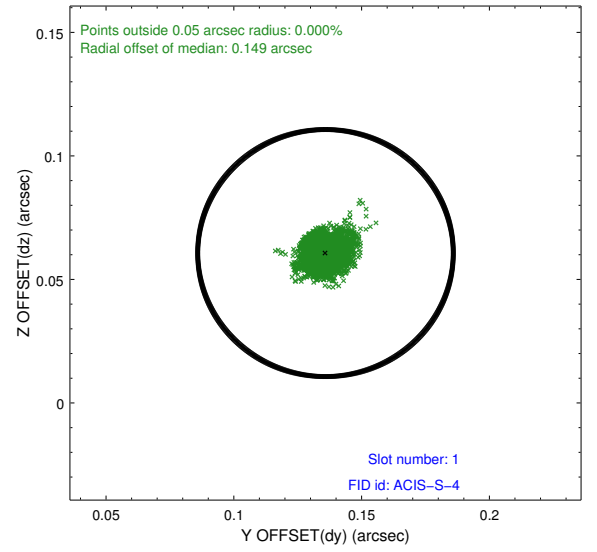
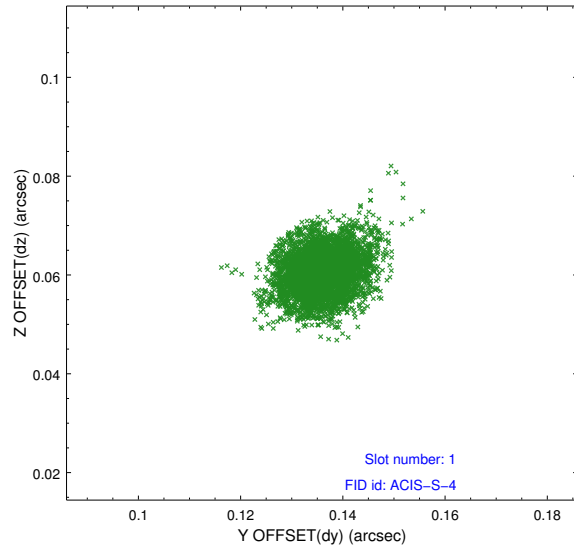


2.5 FID Slots

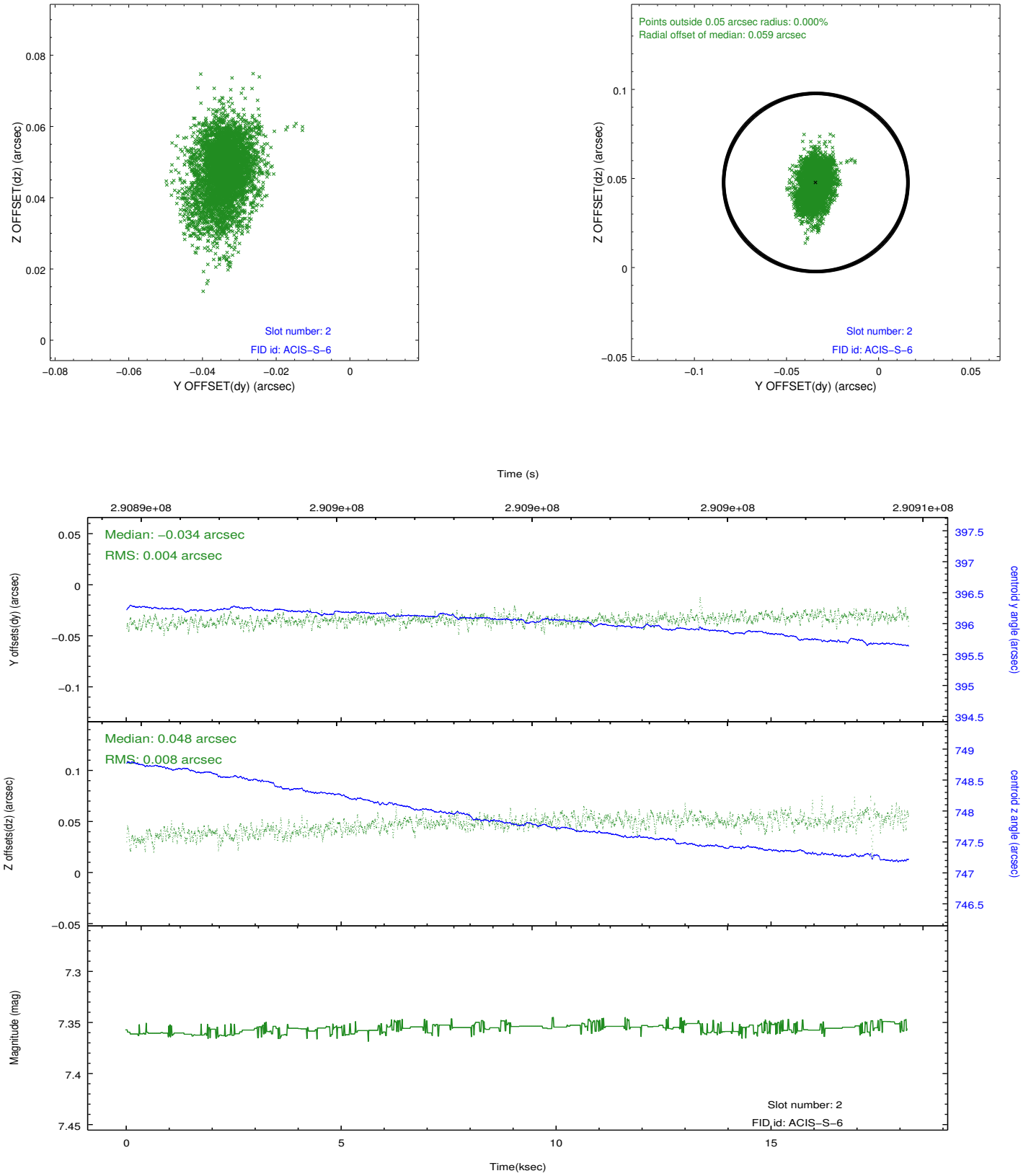
2.5.1 Slot 0



2.5.2 Slot 1

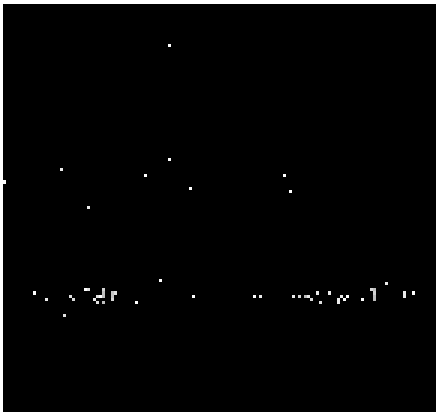


2.5.3 Slot 2

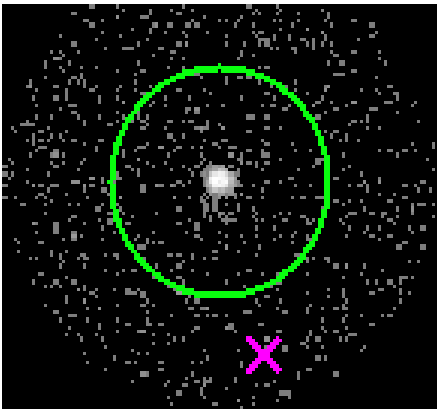


3 Gratings

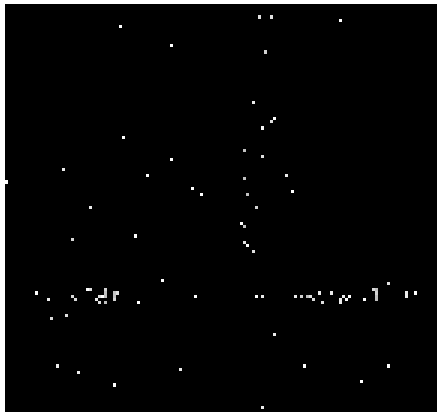
3.1 HEG Arm



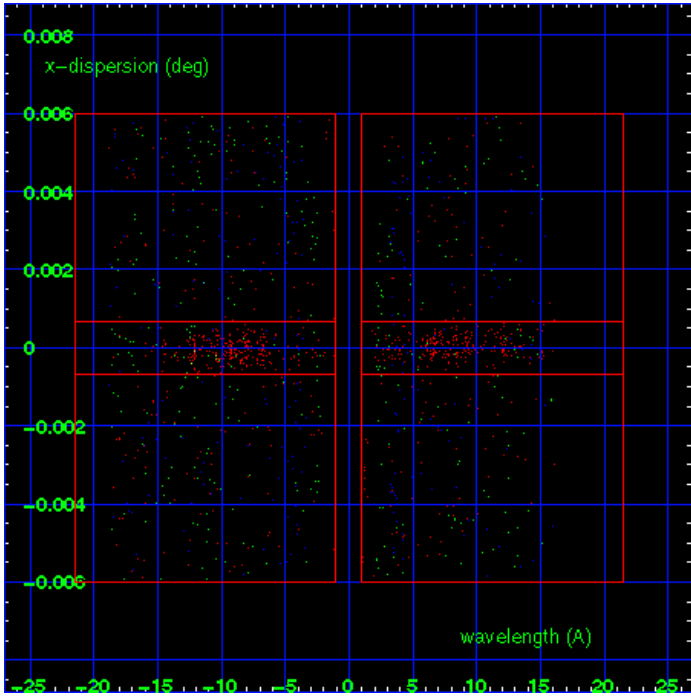
HEG Order Sort 123



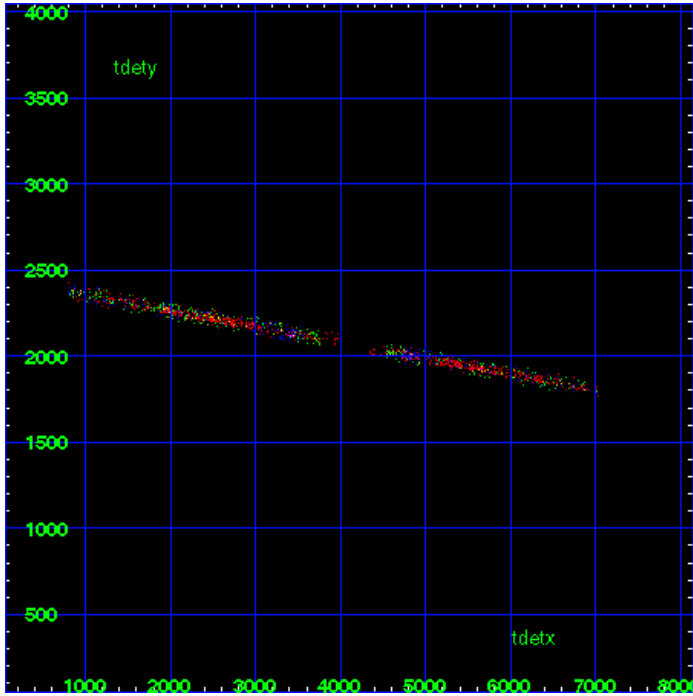
HEG Zero Order



HEG Order Sort ALL

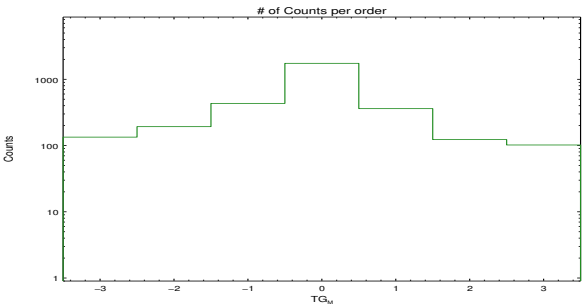


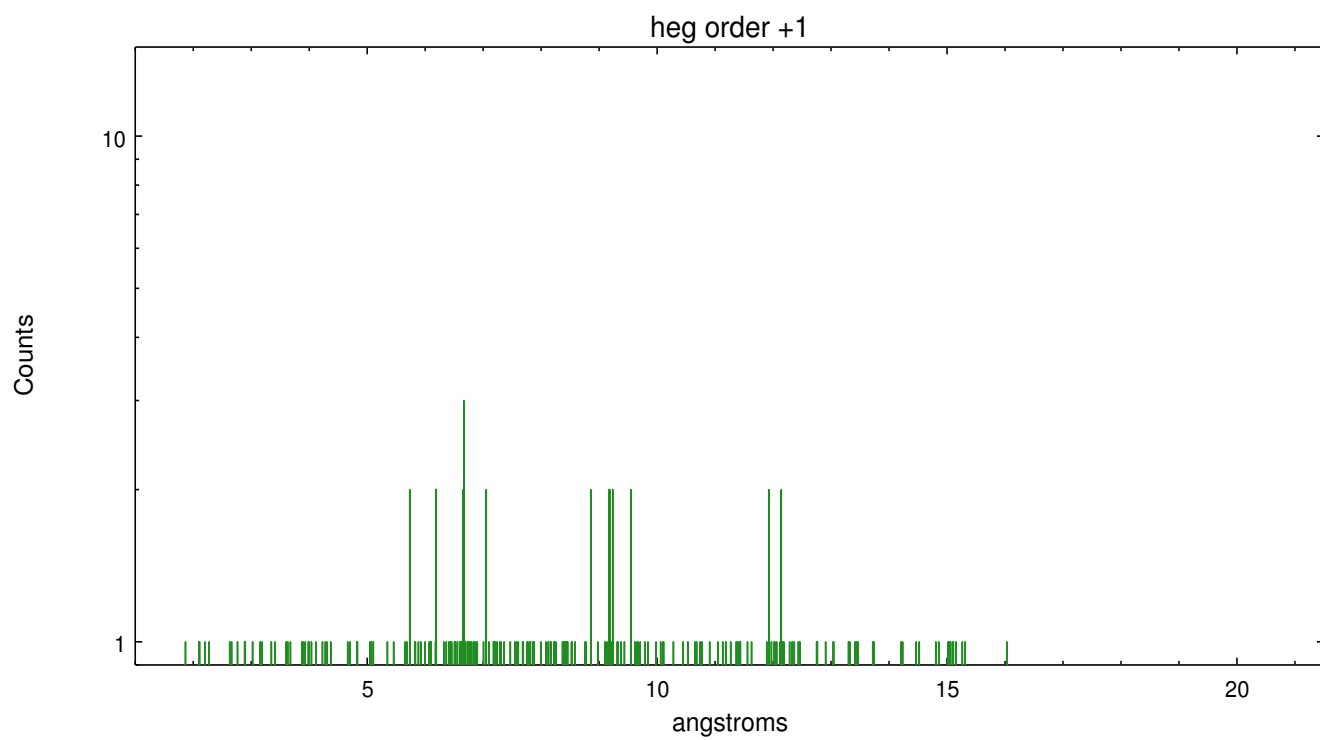
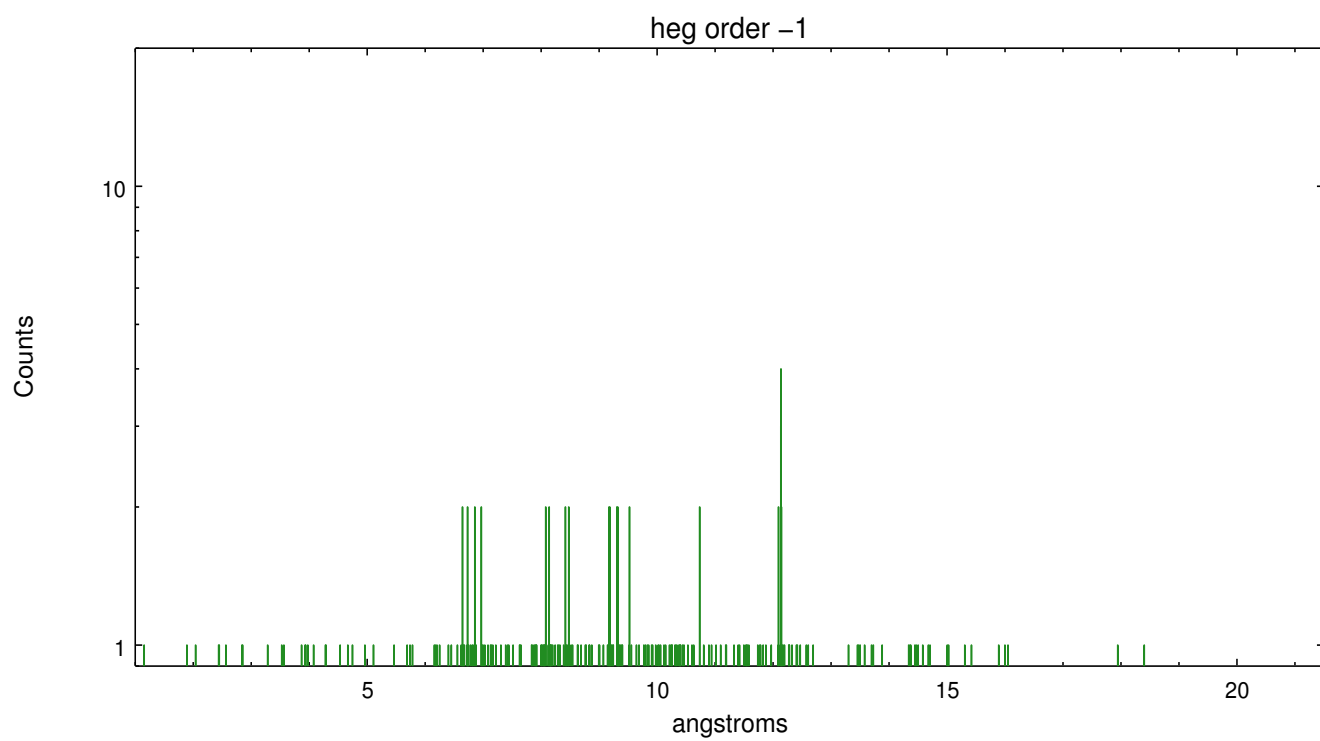
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	134	193	433	1743	361	123	102

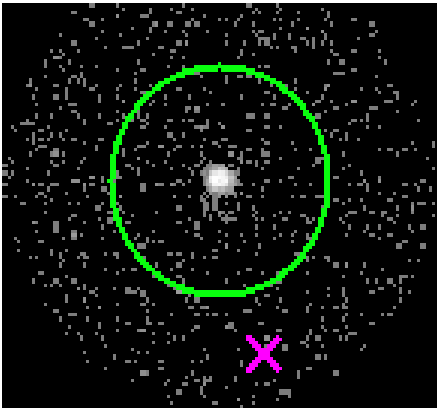




3.2 MEG Arm



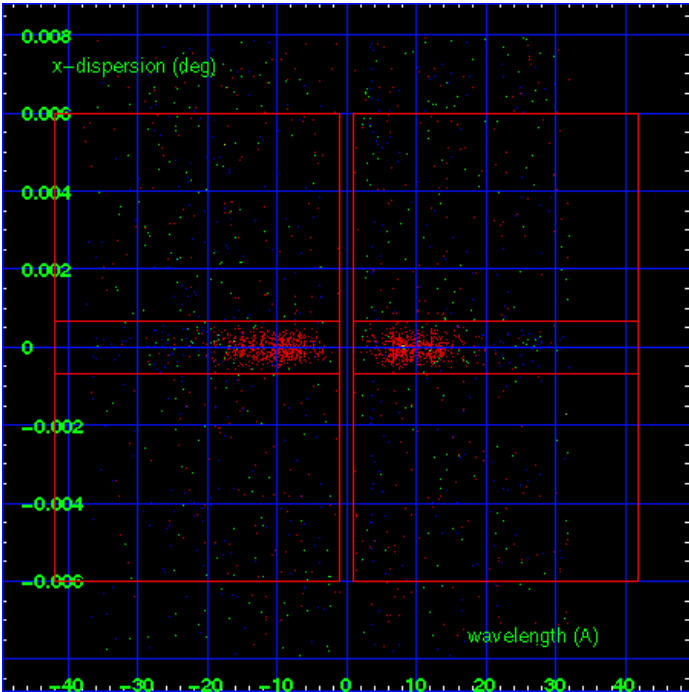
MEG Order Sort 123



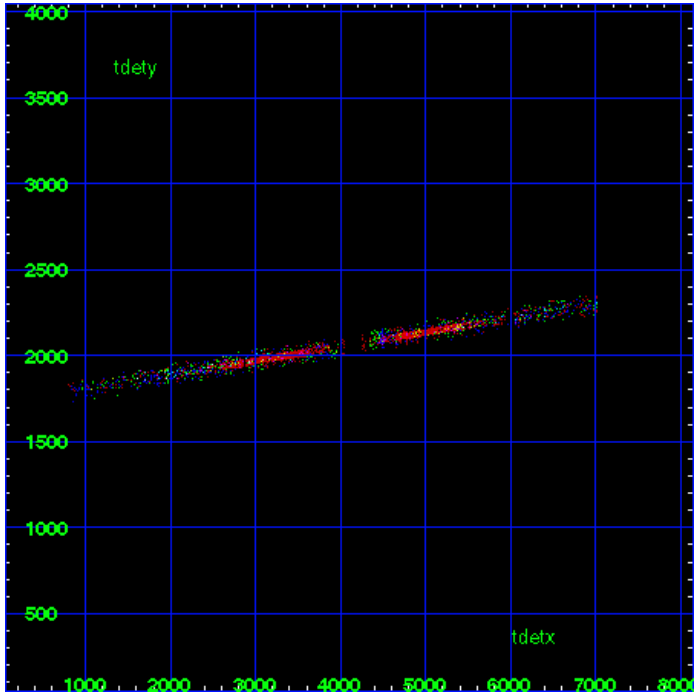
MEG Zero Order



MEG Order Sort ALL

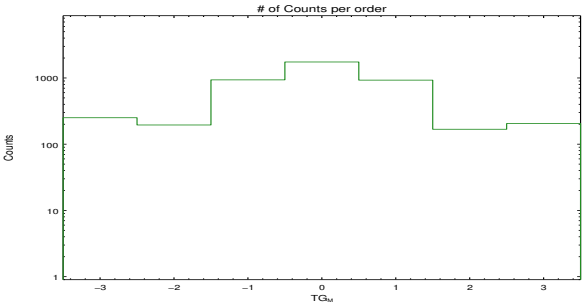


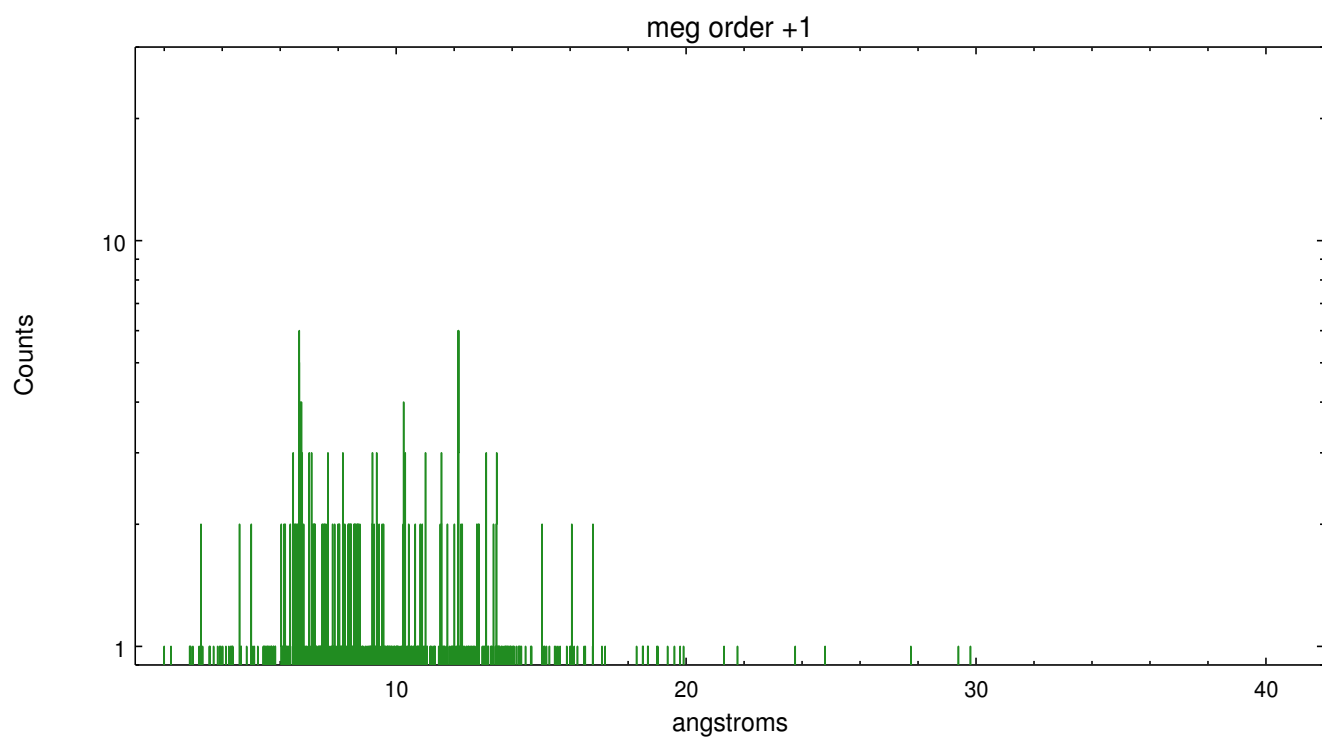
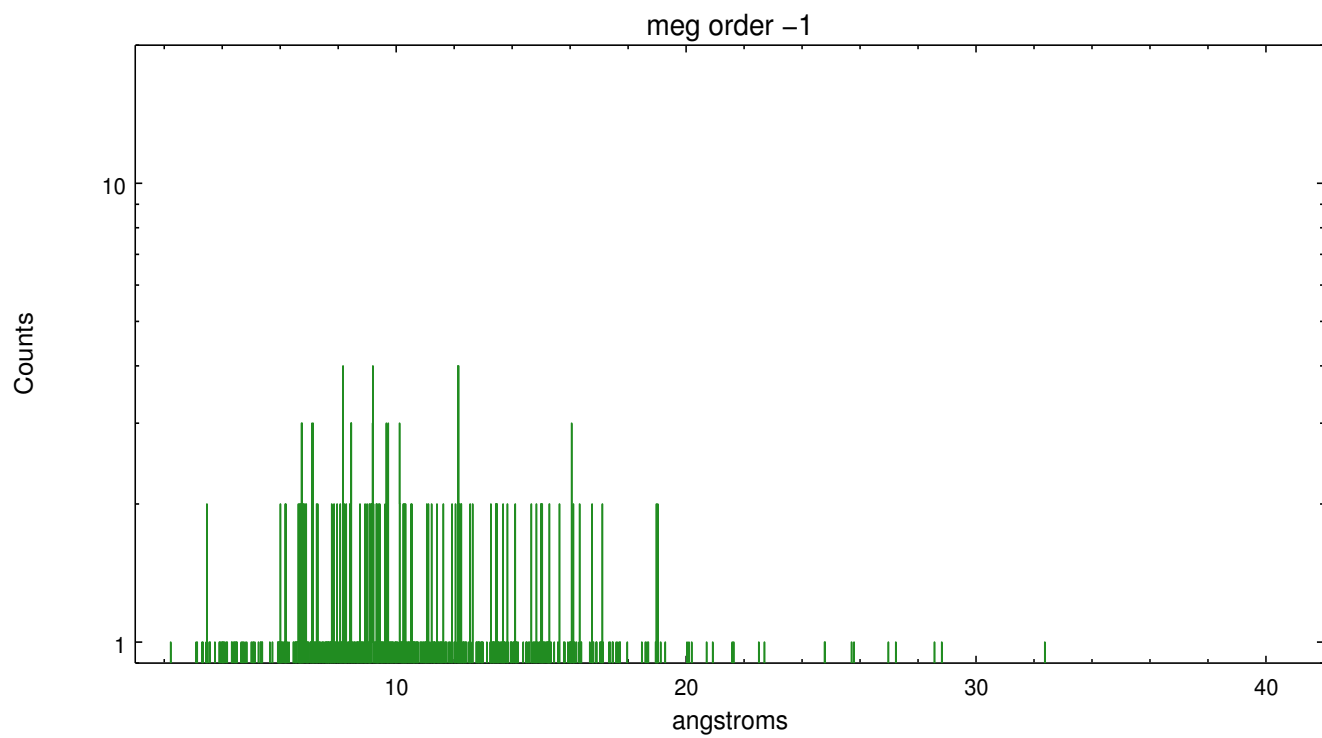
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	251	195	936	1743	927	168	205





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.04.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.1475

A.2 Comments