

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8523 - L2 Version 3
Chandra X-Ray Center

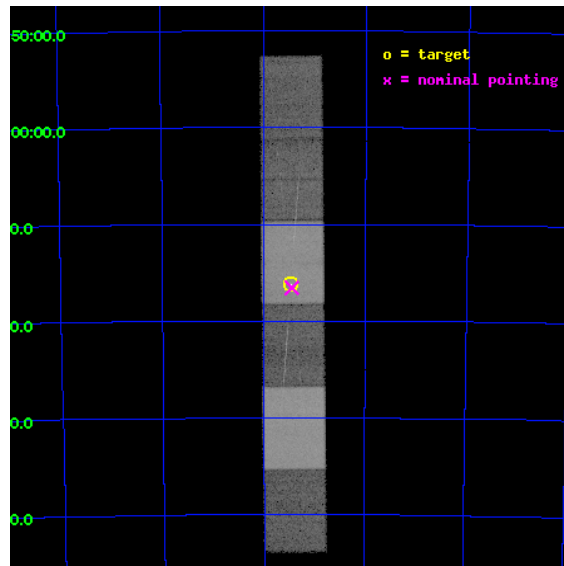
L2 Processing Date : Apr 21 2012

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1 Front

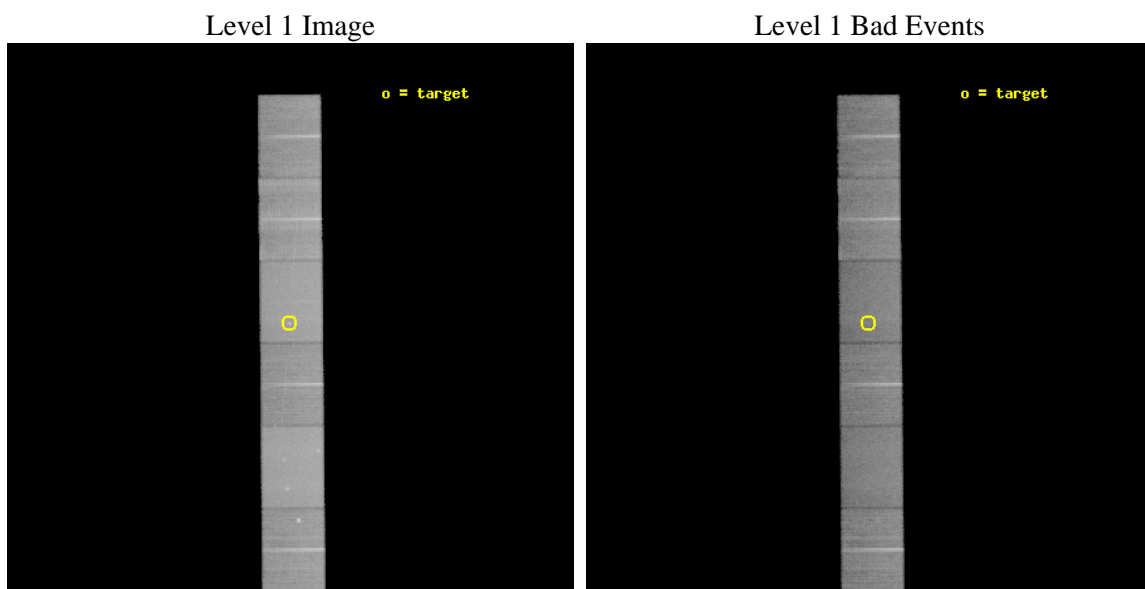
seq_num	500720	Sequence number
obs_id	8523	Observation id
title	High resolution spectral imaging of SN 1987A at 20 years: HETG observation	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	Sn 1987A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.269722	Observer's specified target Dec [deg]
ra_nom	83.861874425198	Nominal RA [deg]
dec_nom	-69.275973911904	Nominal Dec [deg]
roll_nom	269.45213649607	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30137.5	Sum of GTIs [s]
livetime	29650.753234896	Livetime [s]
ontime4	30137.5	Sum of GTIs [s]
ontime5	30137.5	Sum of GTIs [s]
ontime6	30134.959009767	Sum of GTIs [s]
ontime7	30137.5	Sum of GTIs [s]
ontime8	30137.5	Sum of GTIs [s]
ontime9	30137.5	Sum of GTIs [s]
l2events	365757	Number of level 2 events



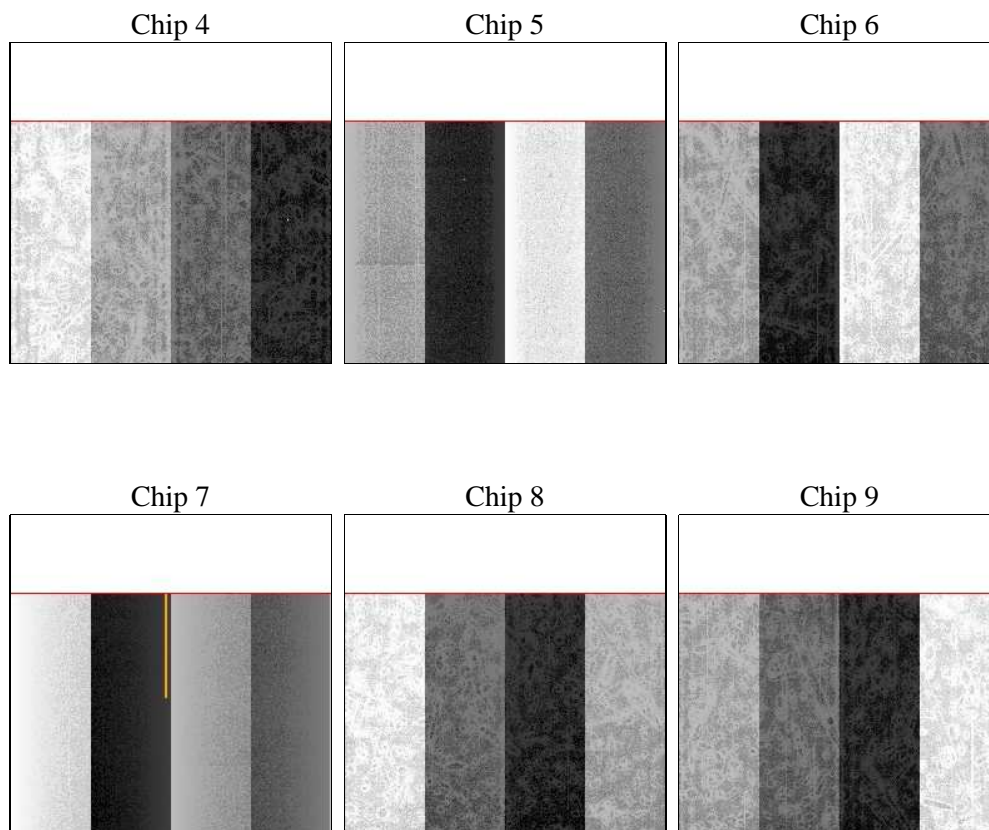
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	30137.5	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	30137.5	Sum of GTIs [s]
date	2012-04-21T14:28:16	Date and time of file creation	ontime5	30137.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	30134.959009767	Sum of GTIs [s]
			ontime7	30137.5	Sum of GTIs [s]
			ontime8	30137.5	Sum of GTIs [s]
			ontime9	30137.5	Sum of GTIs [s]
			l1events	1570961	Number of level 1 events

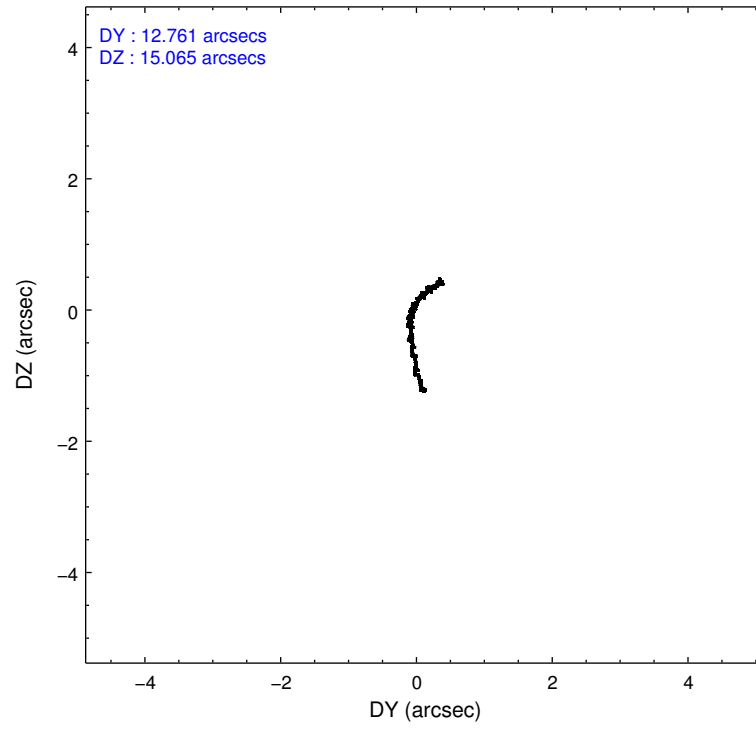
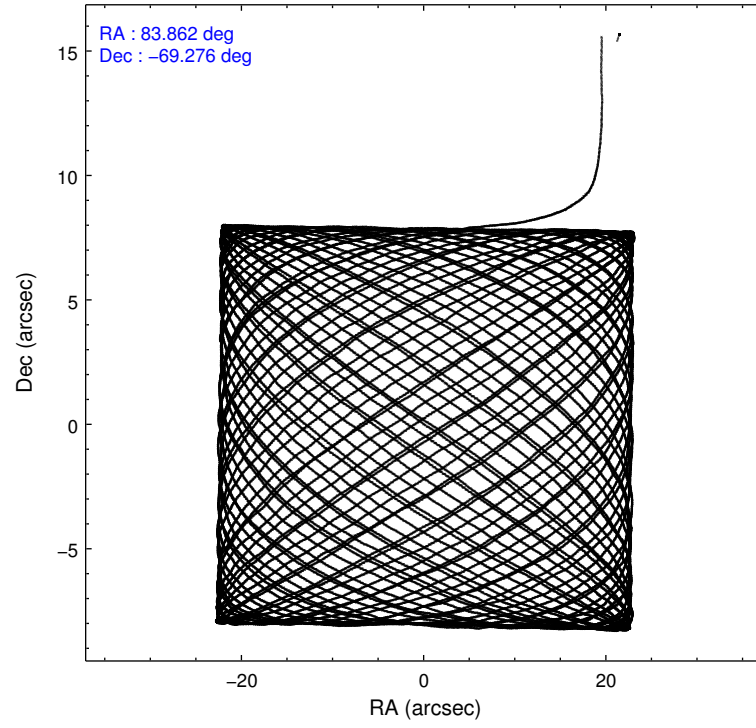
2.1.4 Events

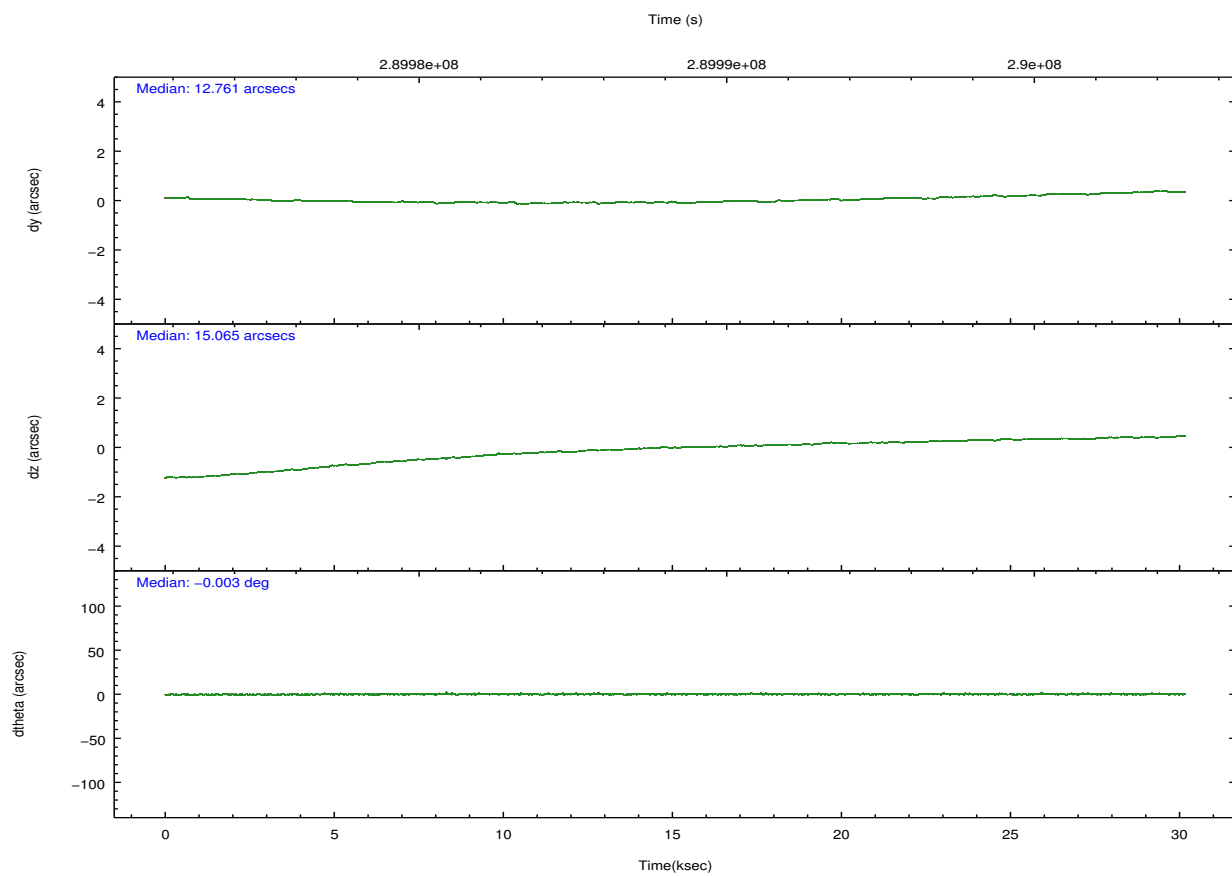
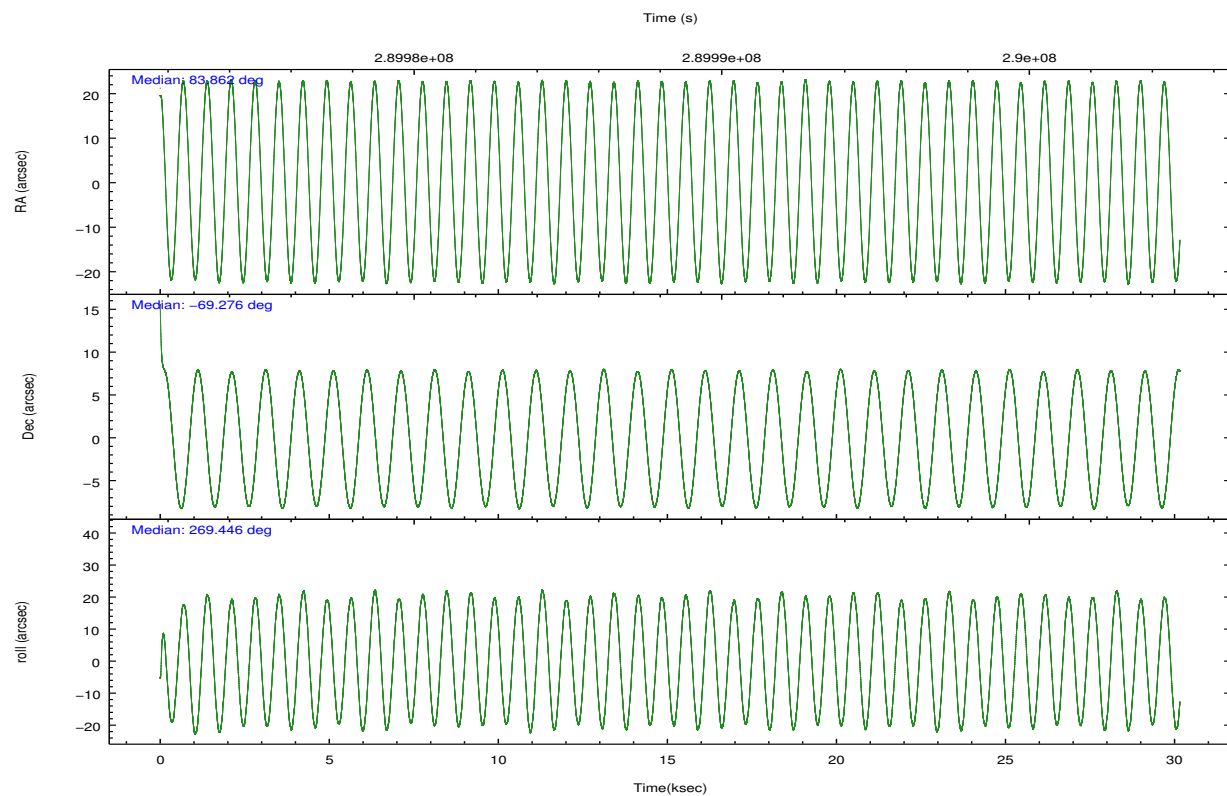
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	243421	322394	219233	295252	280146	210515	grade 0 events	15134	11741	11517	11649	20513	11122
rejected events	212188	174465	191394	168475	215579	183380		6%	3%	5%	3%	7%	5%
rejected %	87%	54%	87%	57%	76%	87%	grade 1 events	215	539	102	323	194	109
								0%	0%	0%	0%	0%	0%
							grade 2 events	5966	44595	5760	26144	14136	5410
								2%	13%	2%	8%	5%	2%
							grade 3 events	2897	6603	2741	11458	6975	2803
								1%	2%	1%	3%	2%	1%
							grade 4 events	2702	6529	2619	11319	6425	2693
								1%	2%	1%	3%	2%	1%
							grade 5 events	9561	24376	10006	27295	13084	10559
								3%	7%	4%	9%	4%	5%
							grade 6 events	4535	78473	5204	66214	16528	5110
								1%	24%	2%	22%	5%	2%
							grade 7 events	202411	149538	181284	140850	202291	172709
								83%	46%	82%	47%	72%	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	83.86187442519832	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-69.252366	-69.27597391190396	Subarray start row	1	1
[deg] Pointing Roll	269.259203	269.4521364960684	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)	289973407.184000	289972400.02619			
Observation start date	2007-03-11T04:09:02	2007-03-11T03:53:20			
[s] Observation end time (MET)	290003407.184000	290004268.8152			
Observation end date	2007-03-11T12:29:02	2007-03-11T12:44:28			
Read mode	TIMED	TIMED			

2.3 Aspect



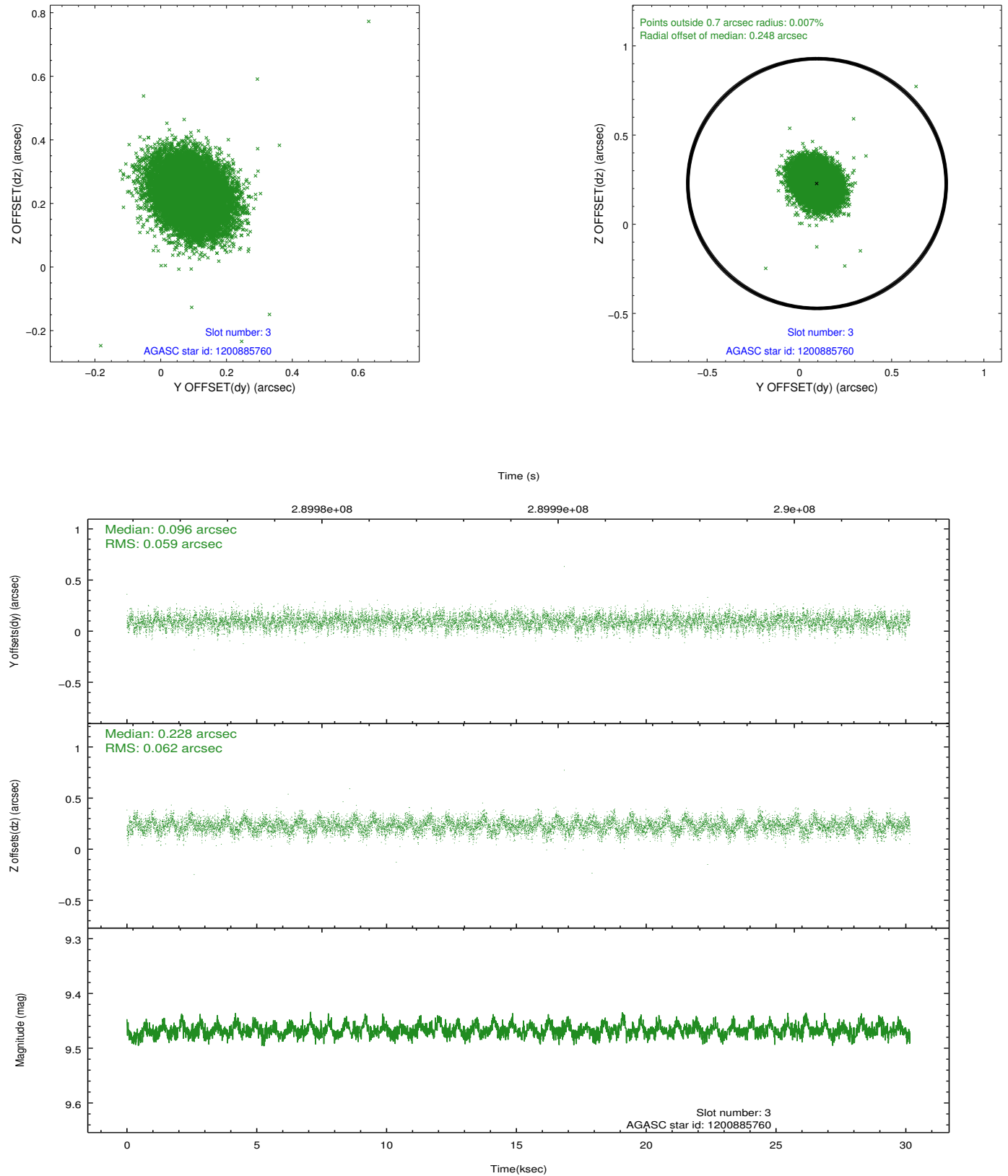


Slot Statistics

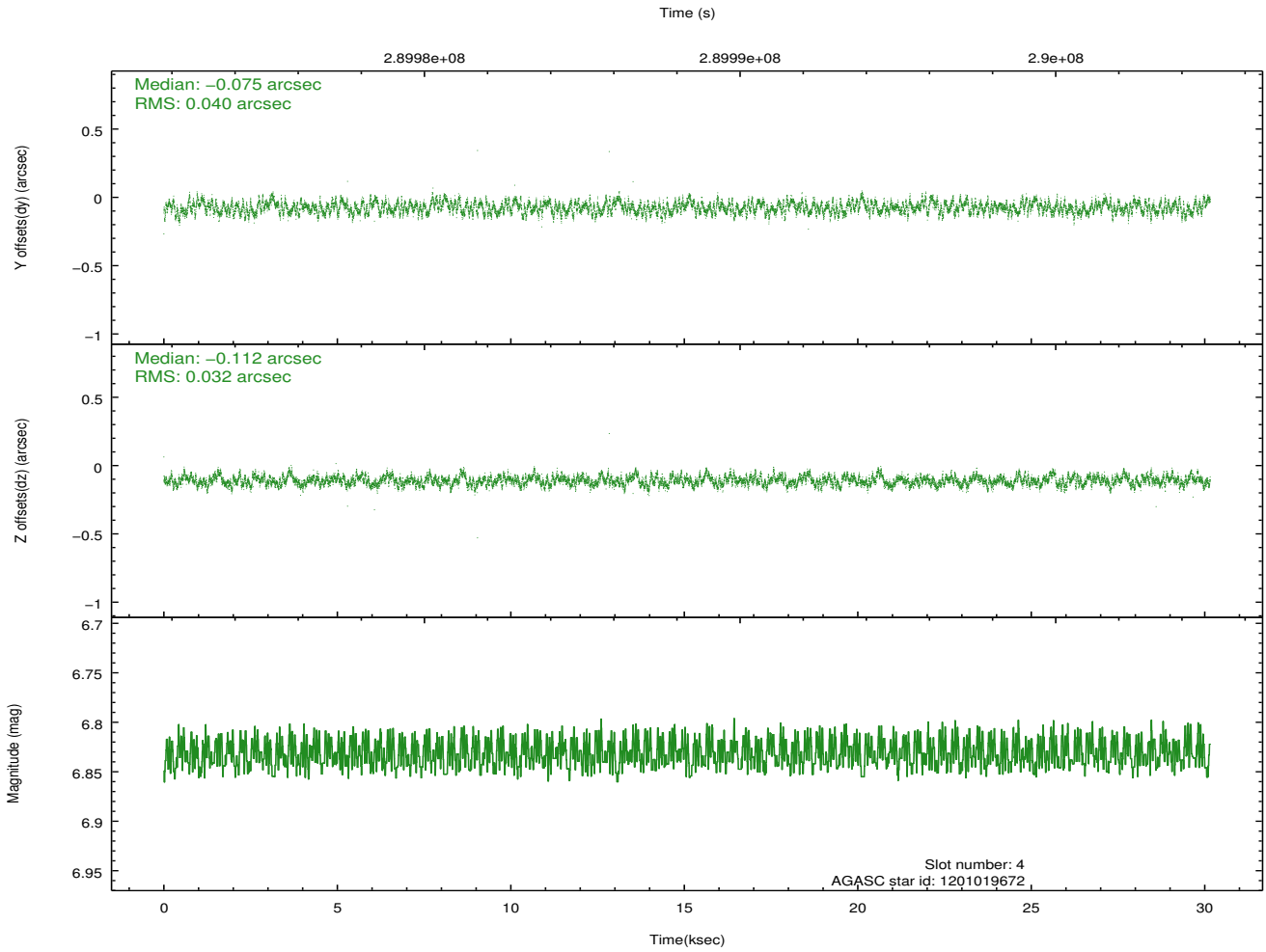
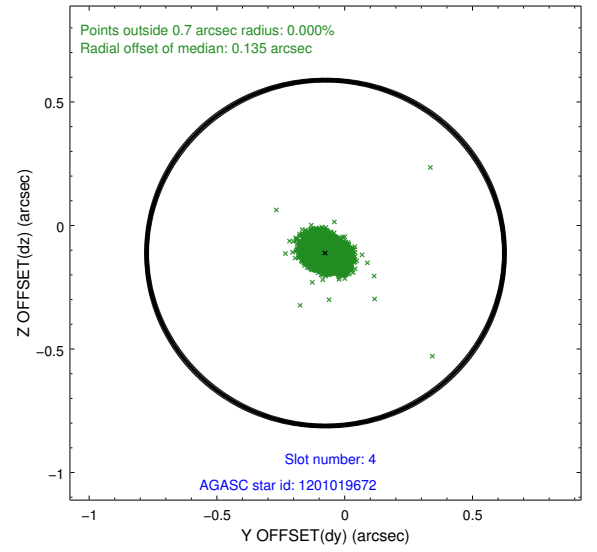
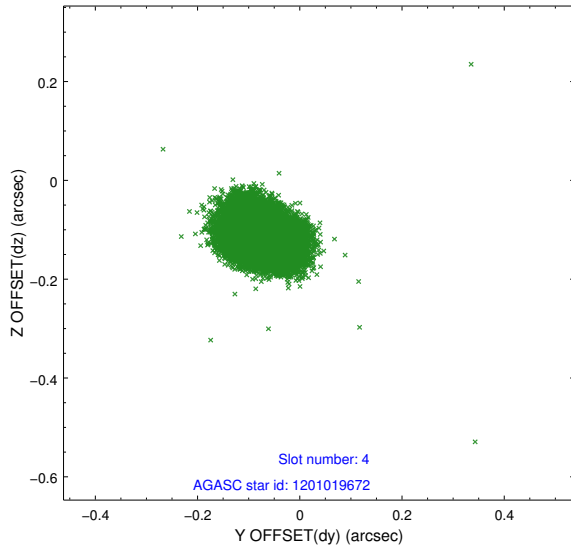
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	7357	-0.129	-0.103	0.008	0.014	0.000000	0.000000	-765.66	-1798.51
1	FID	ACIS-S-4	7.18	7356	0.136	0.059	0.007	0.011	0.000000	0.000000	2147.87	110.01
2	FID	ACIS-S-6	7.36	7355	-0.034	0.052	0.008	0.014	0.000000	0.000000	396.54	747.50
3	GUIDE	1200885760	9.47	14703	0.096	0.228	0.090	0.147	83.723637	-68.777667	-1706.60	-151.17
4	GUIDE	1201019672	6.83	14713	-0.075	-0.112	0.055	0.086	85.312192	-68.770187	-1737.48	1918.86
5	GUIDE	1201020040	8.60	14705	0.060	-0.166	0.073	0.116	85.379163	-68.879396	-1343.18	2001.39
6	GUIDE	1201540776	9.59	14698	0.013	0.009	0.112	0.183	85.107945	-69.858480	2177.94	1621.77
7	GUIDE	1201410616	9.33	14697	-0.089	0.042	0.098	0.160	82.516808	-69.784406	1953.99	-1599.07

2.4 Star Slots

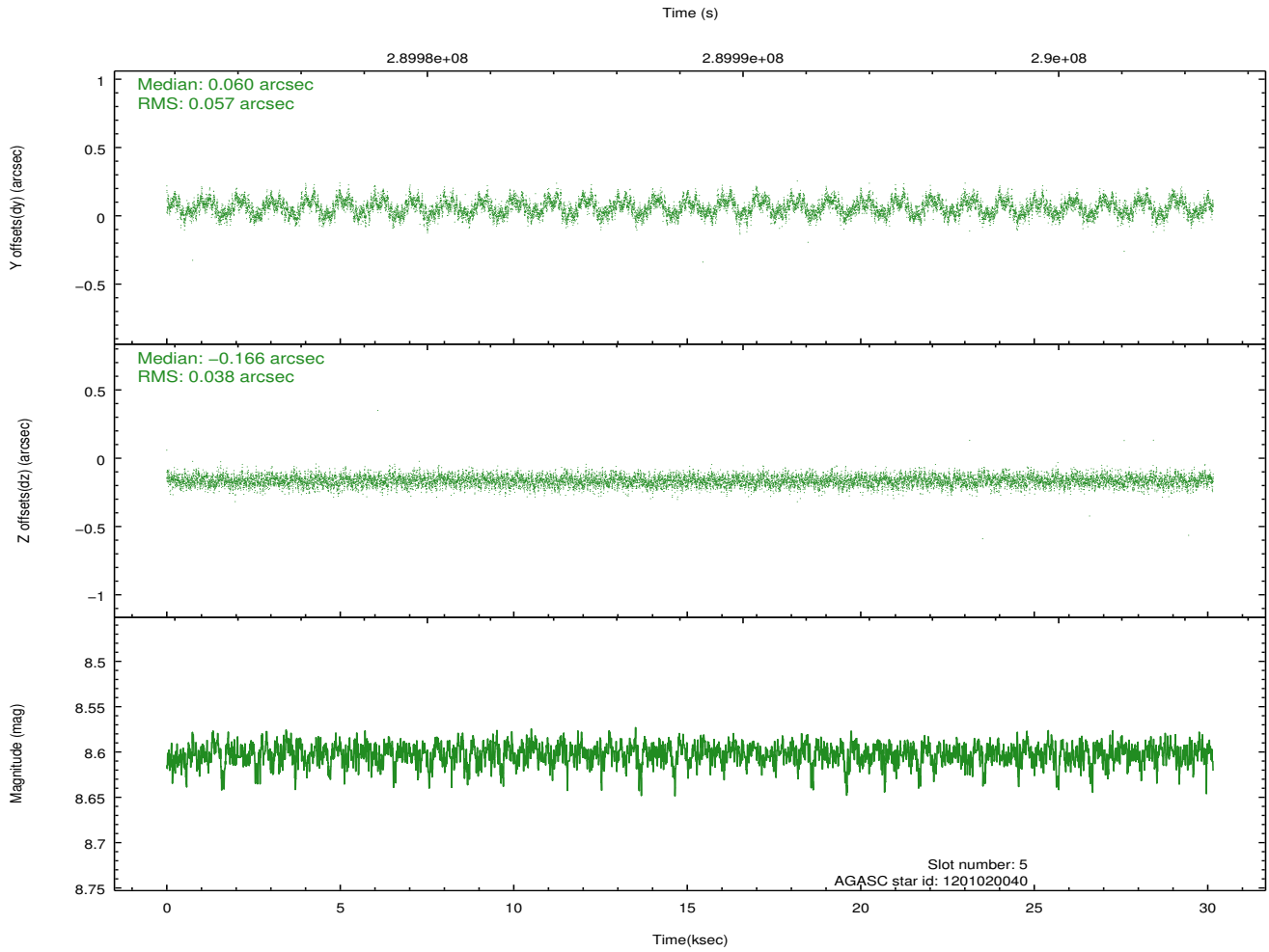
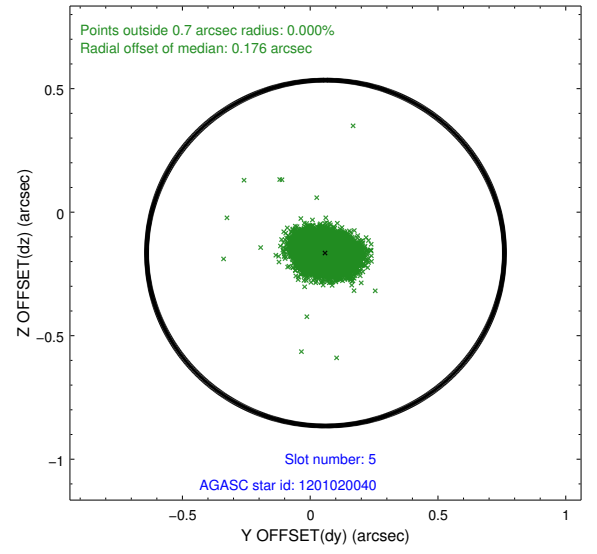
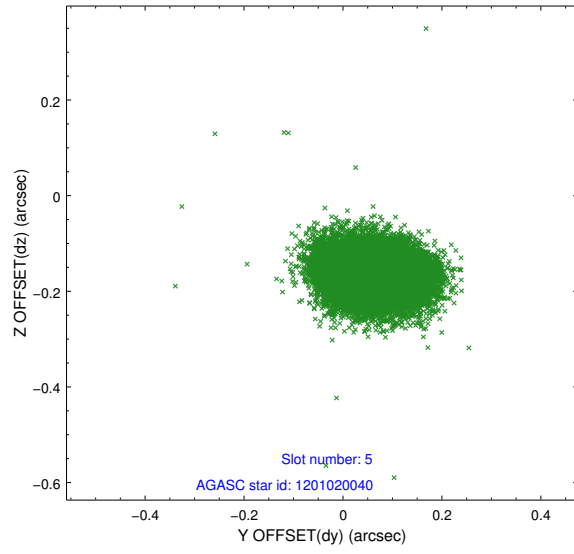
2.4.1 Slot 3



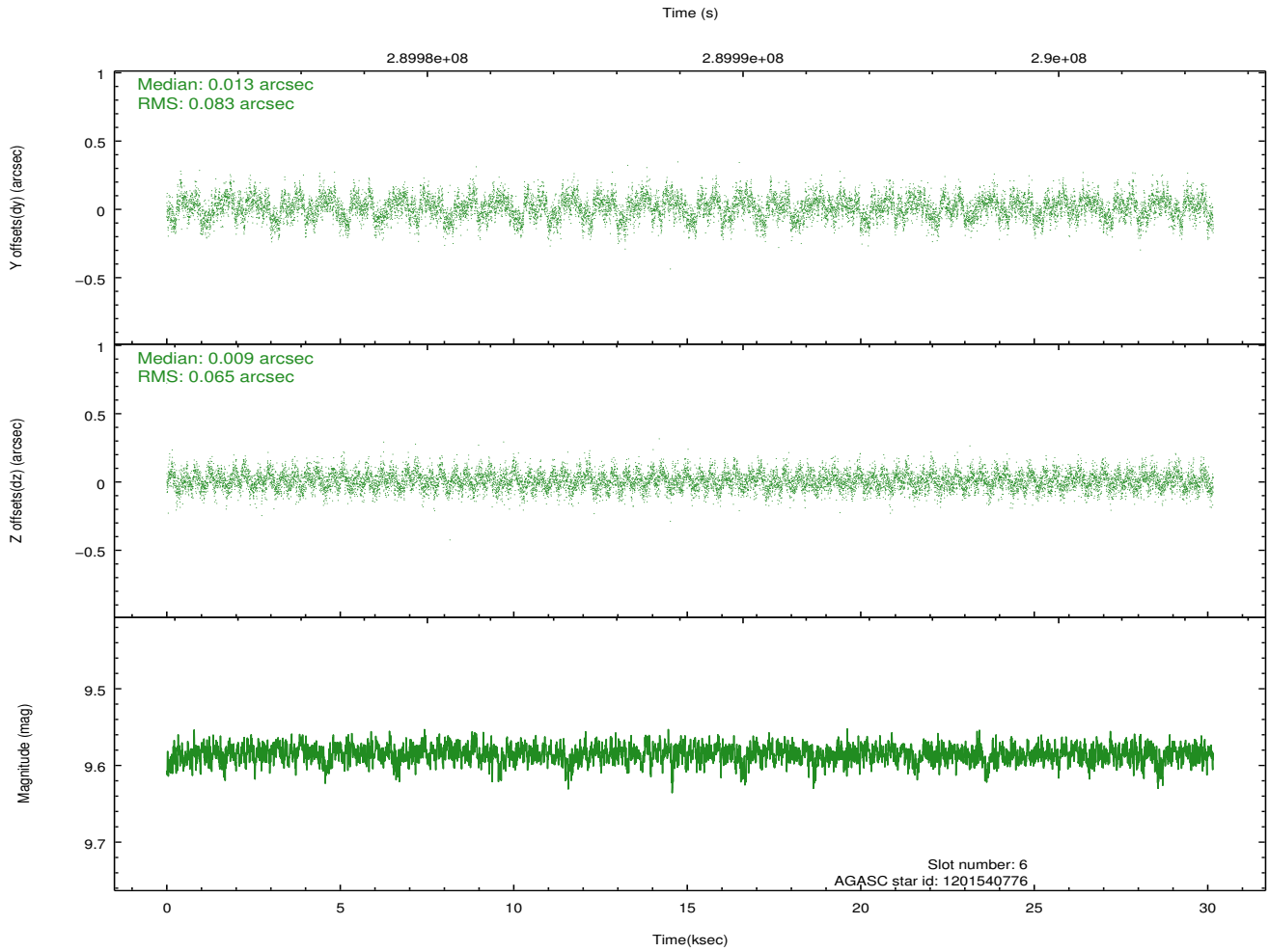
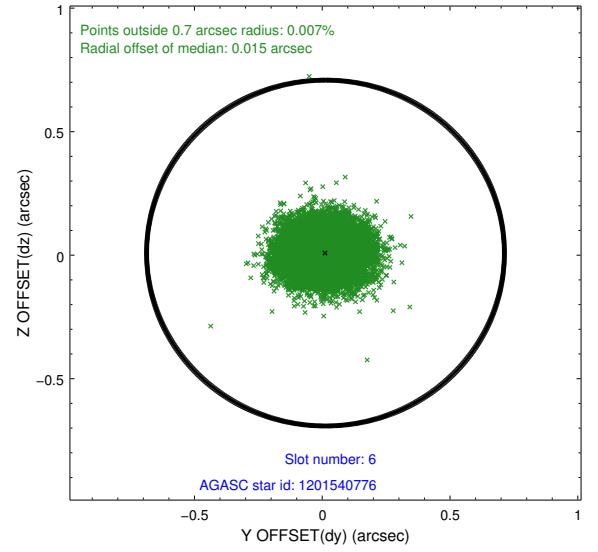
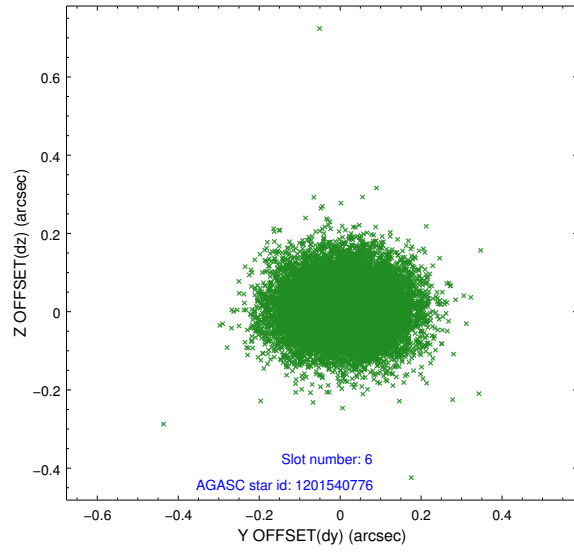
2.4.2 Slot 4



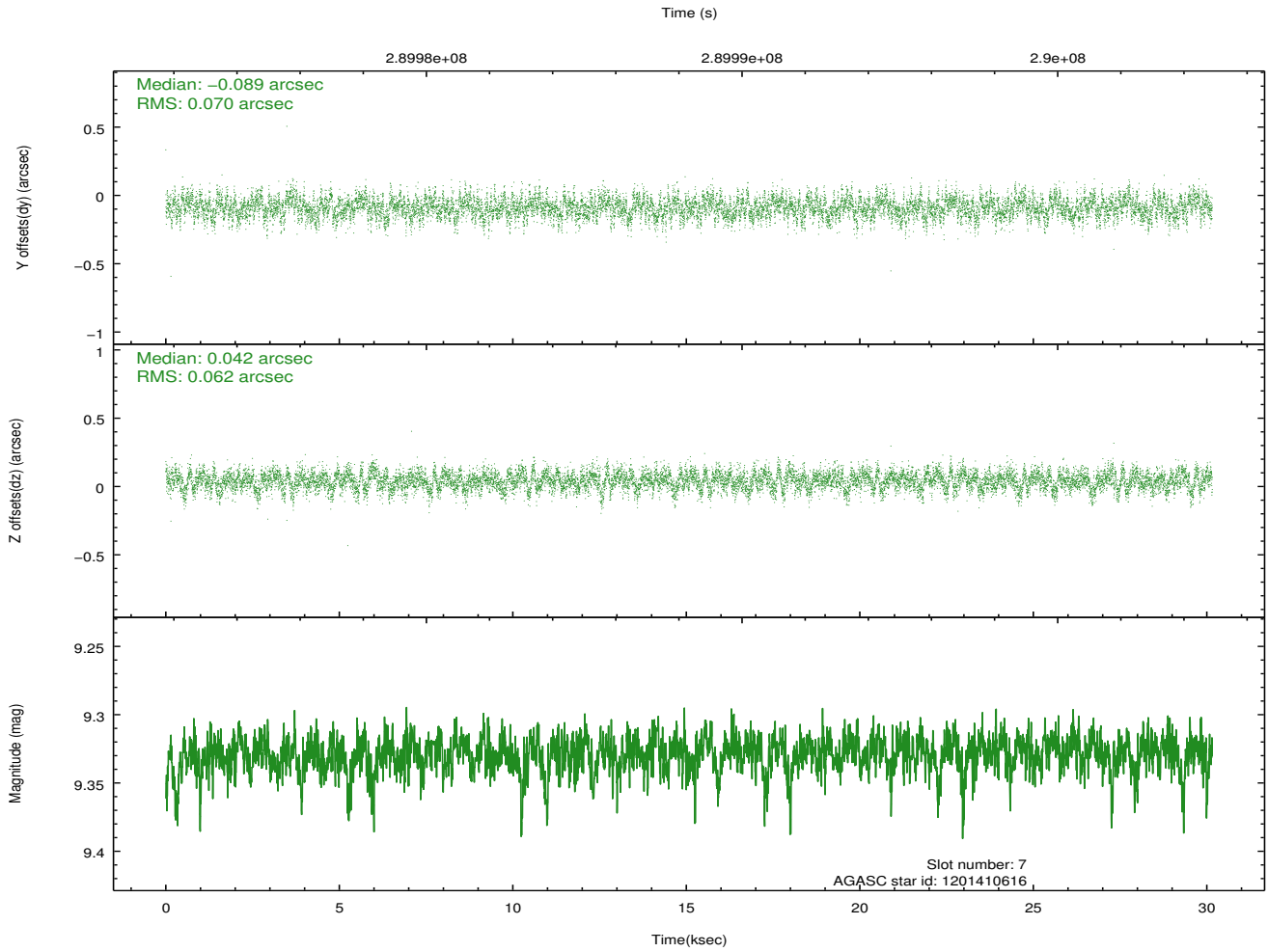
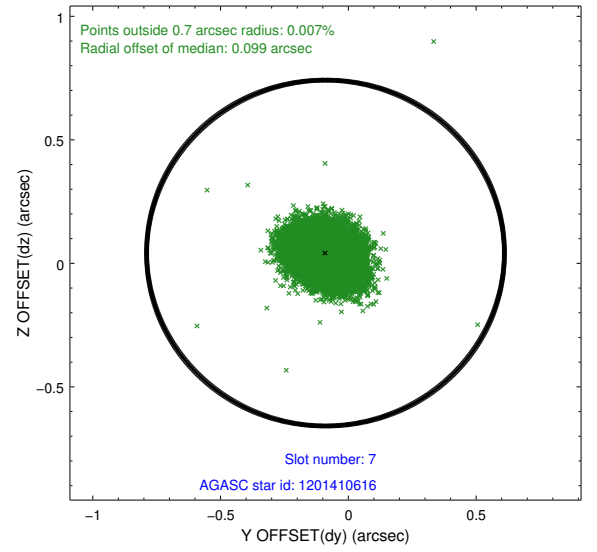
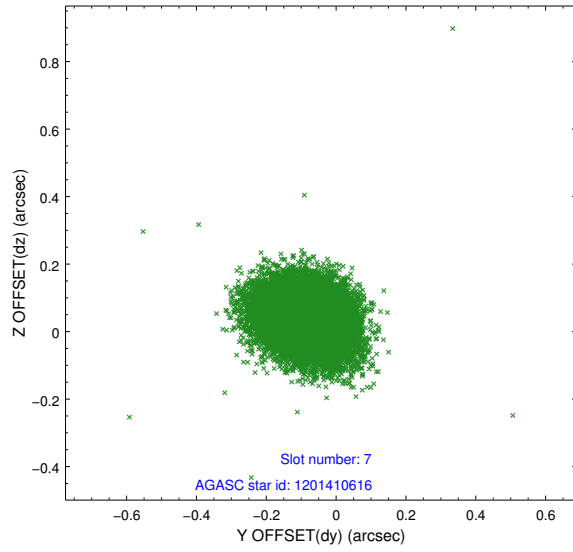
2.4.3 Slot 5



2.4.4 Slot 6

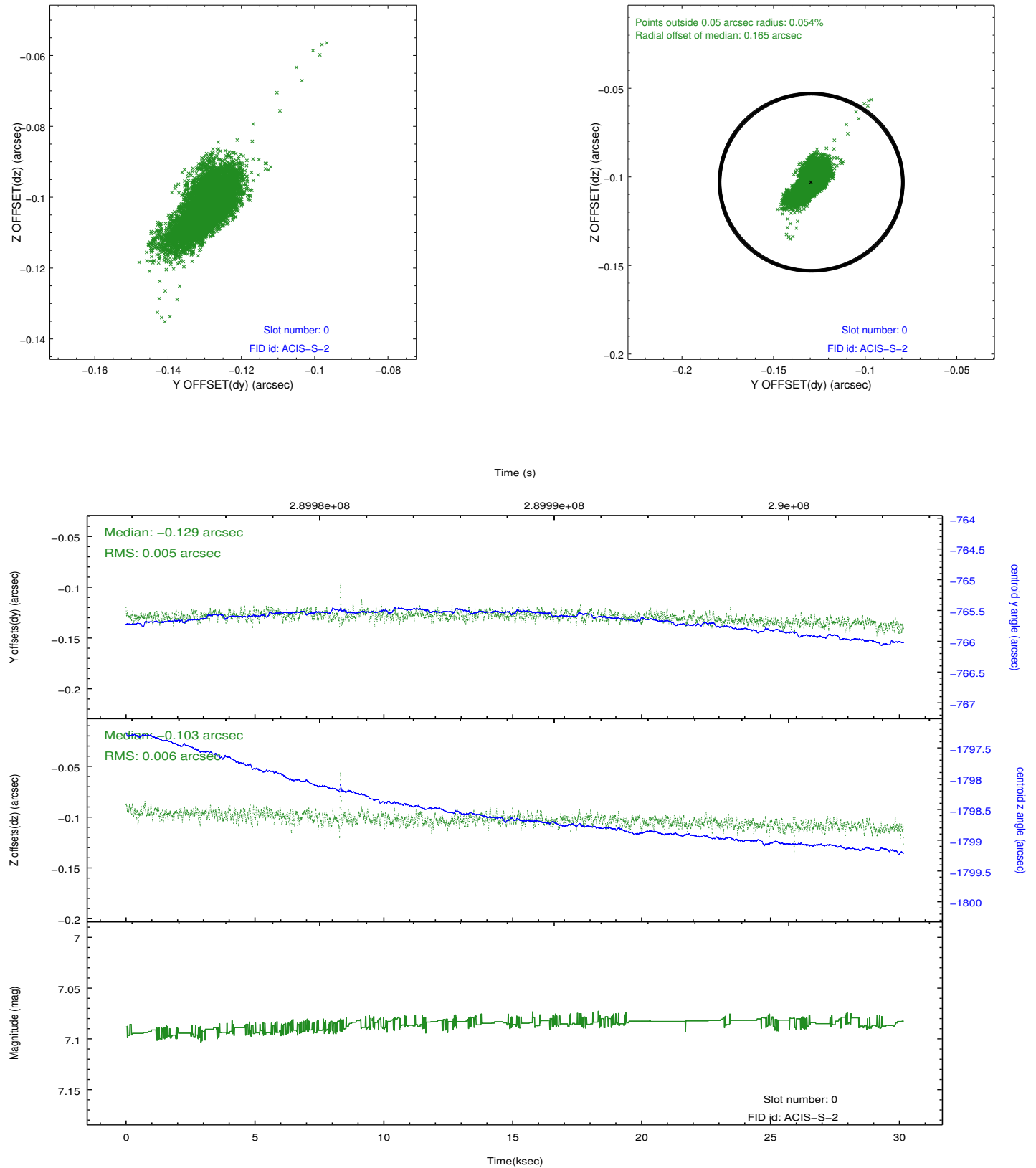


2.4.5 Slot 7

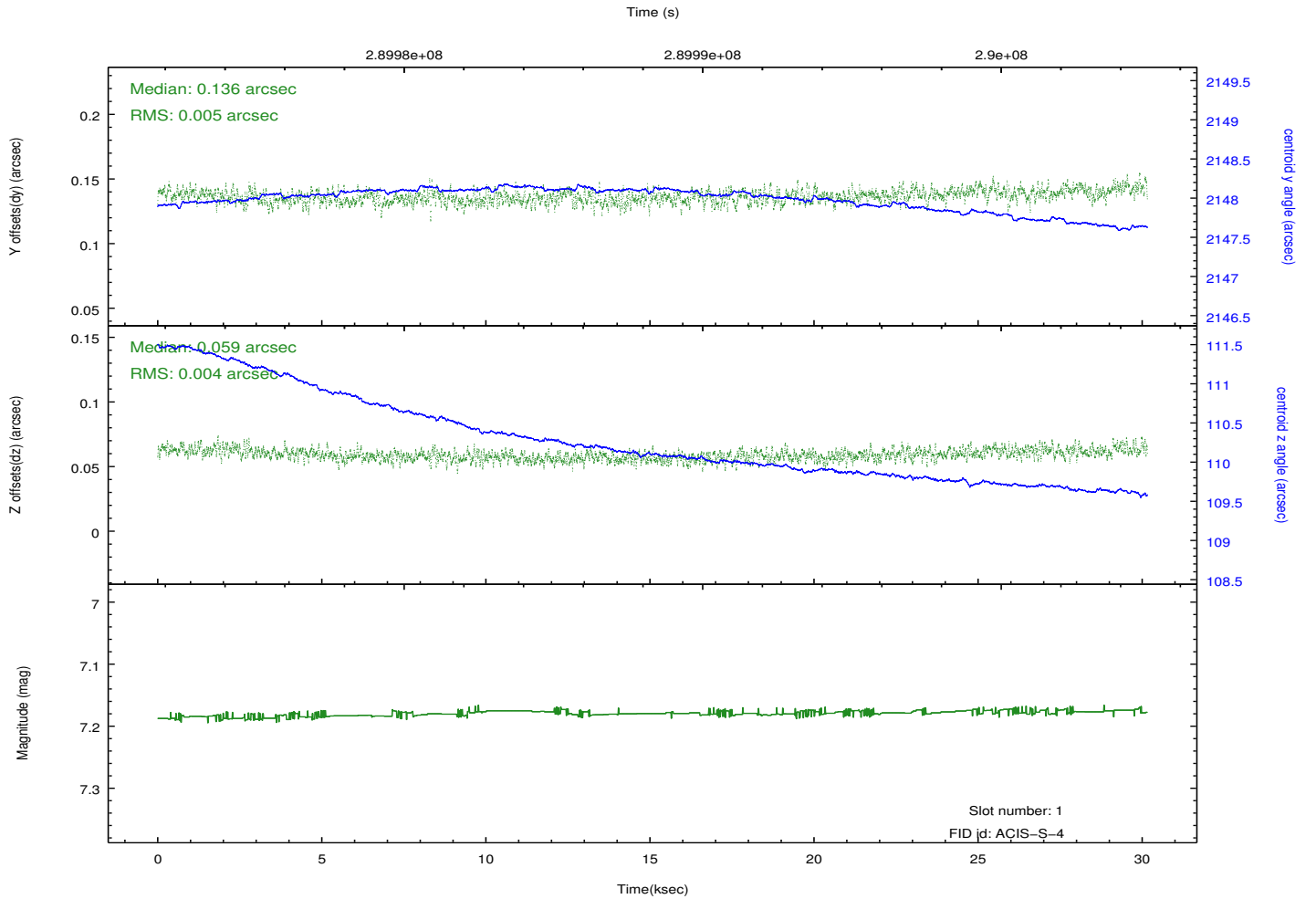
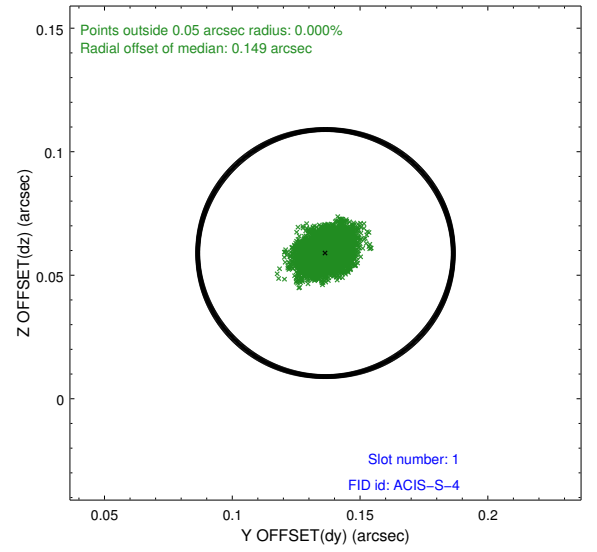
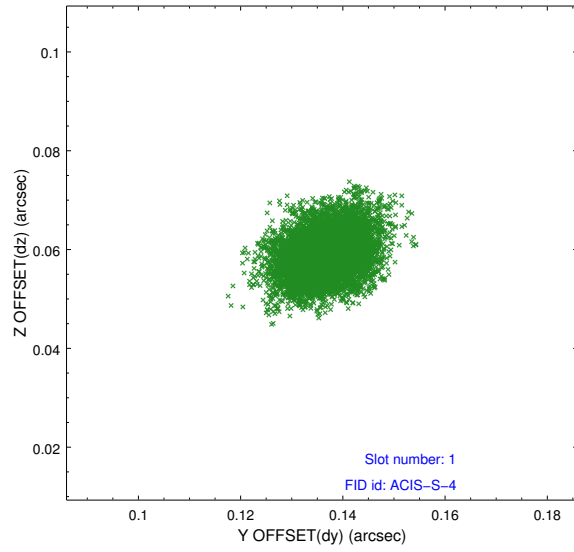


2.5 FID Slots

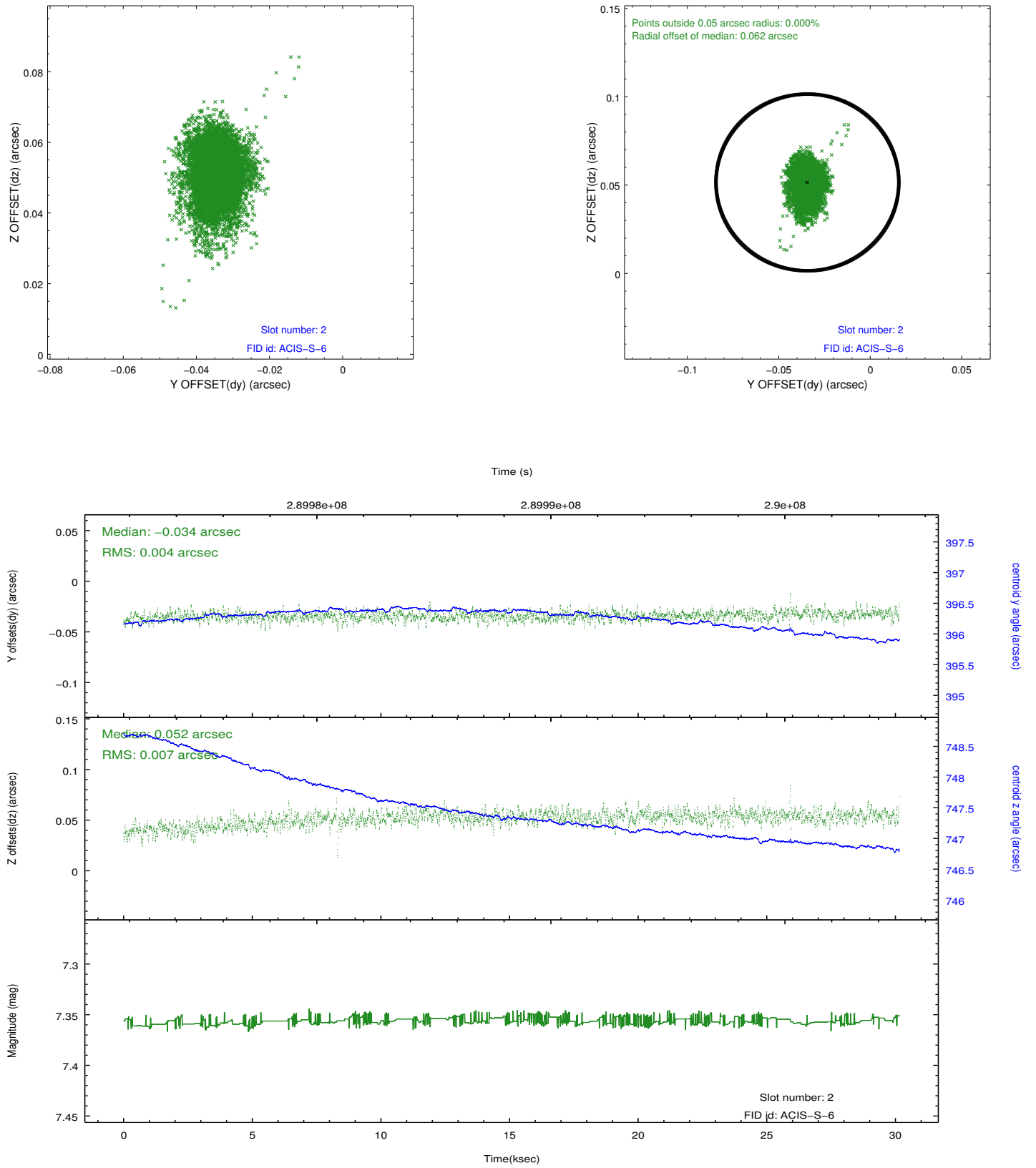
2.5.1 Slot 0



2.5.2 Slot 1

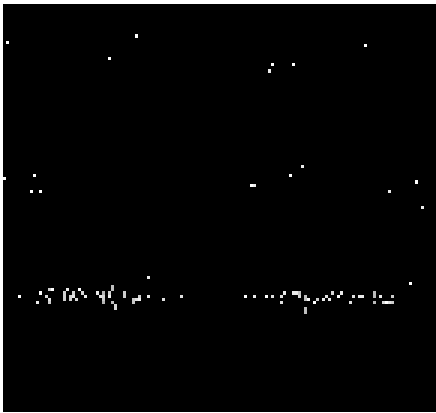


2.5.3 Slot 2

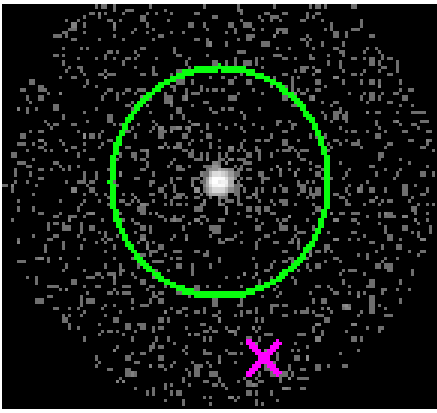


3 Gratings

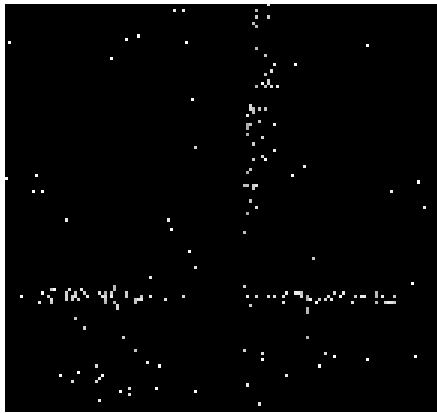
3.1 HEG Arm



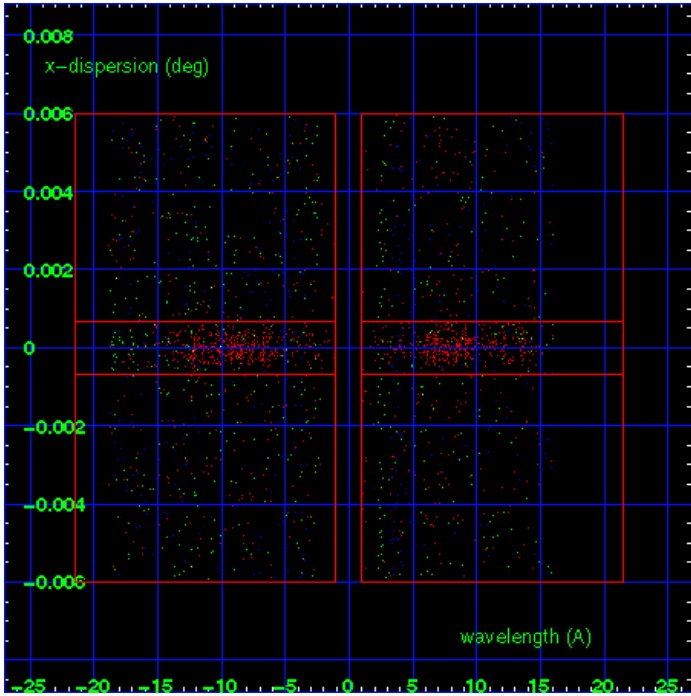
HEG Order Sort 123



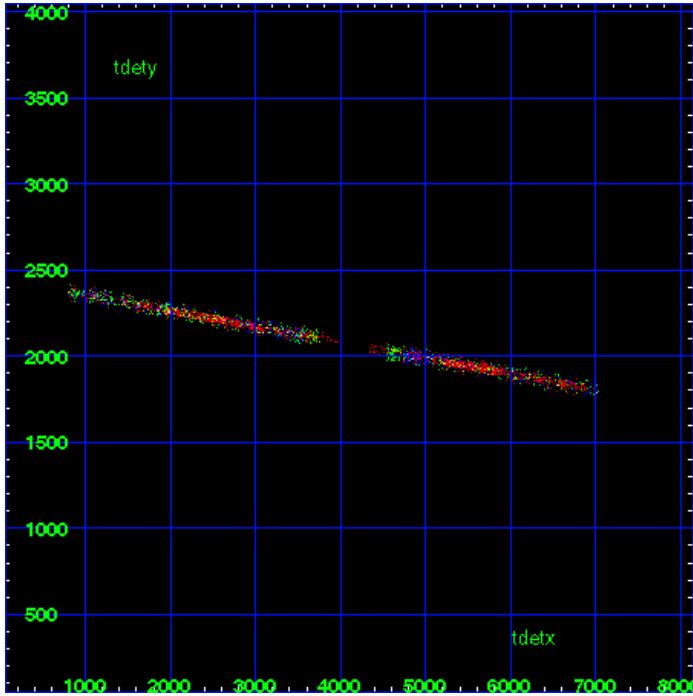
HEG Zero Order



HEG Order Sort ALL

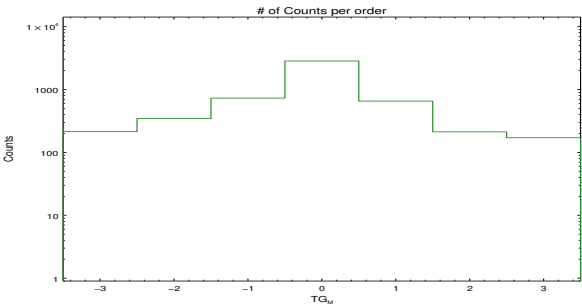


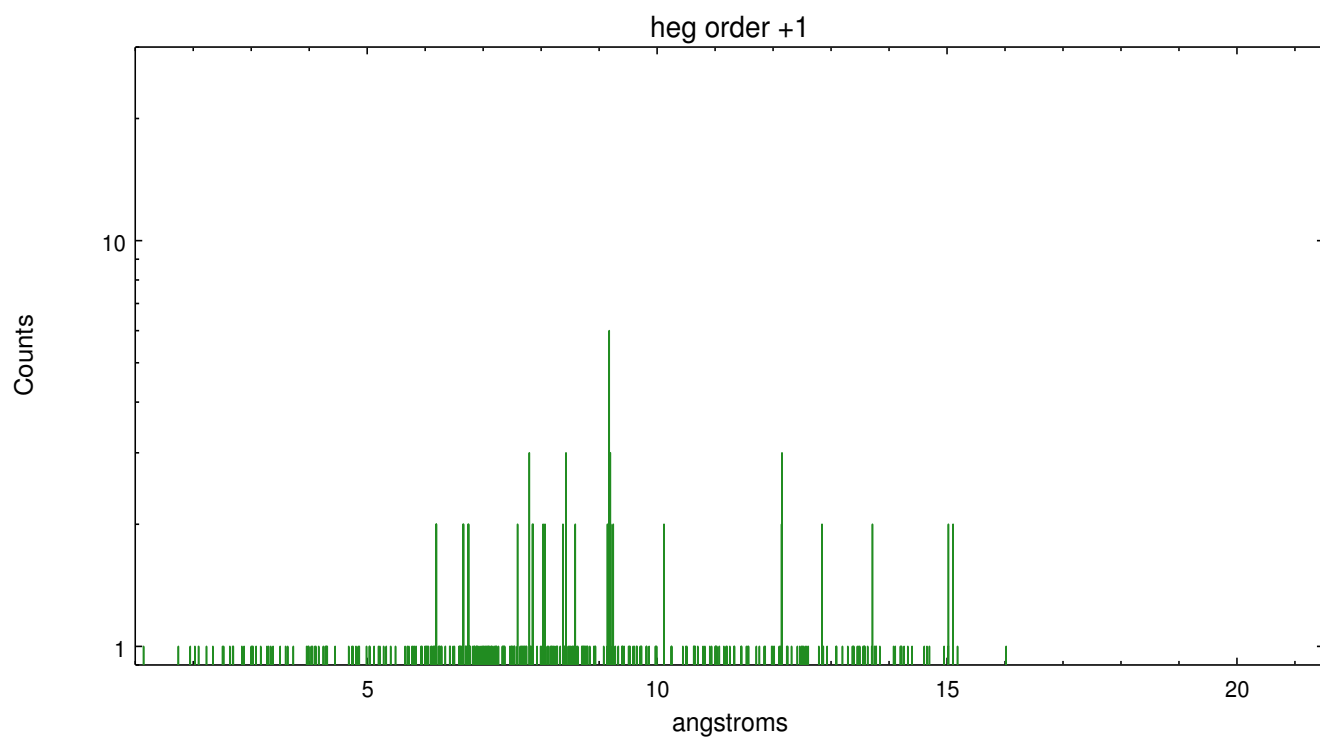
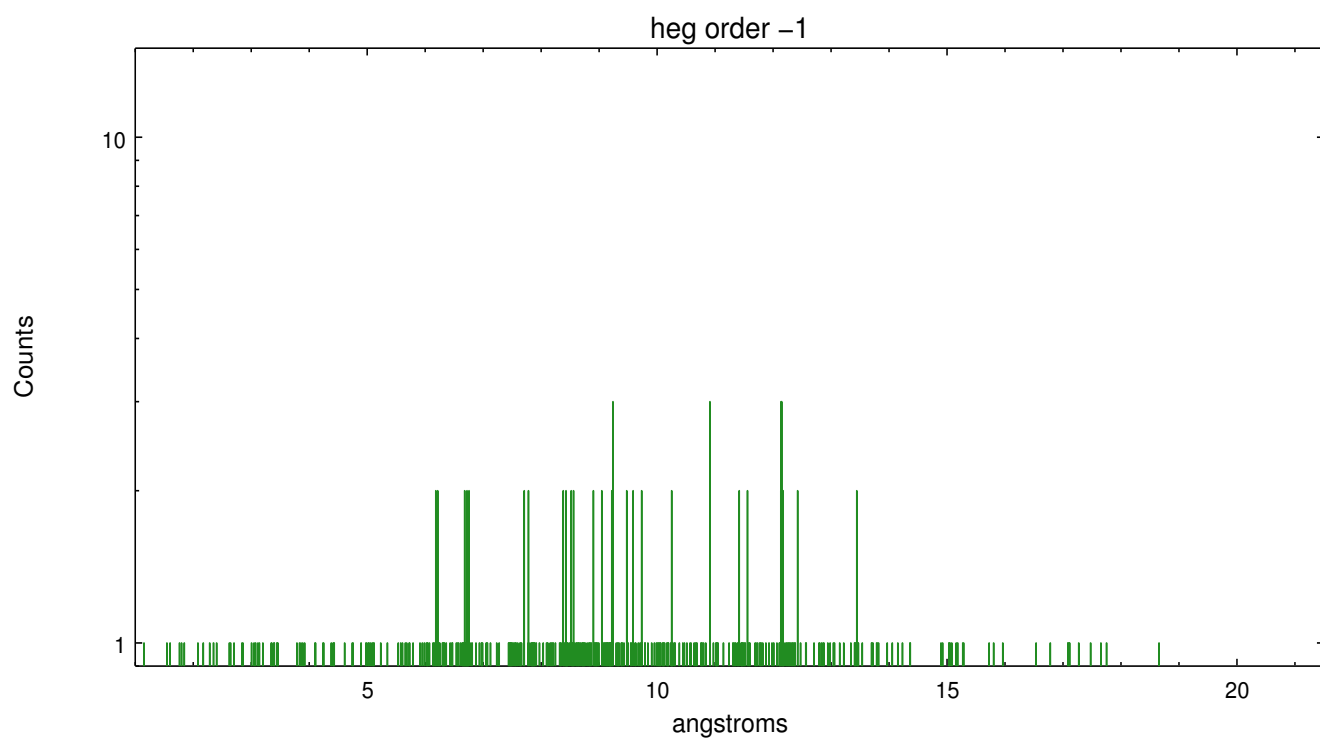
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	214	345	730	2841	654	212	171

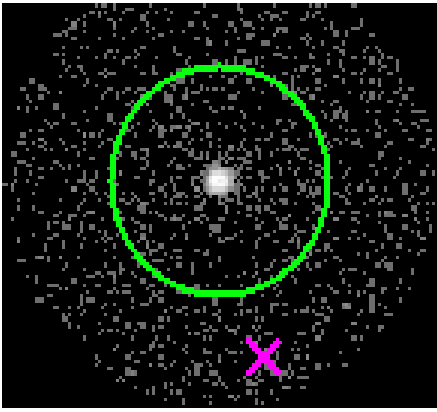




3.2 MEG Arm



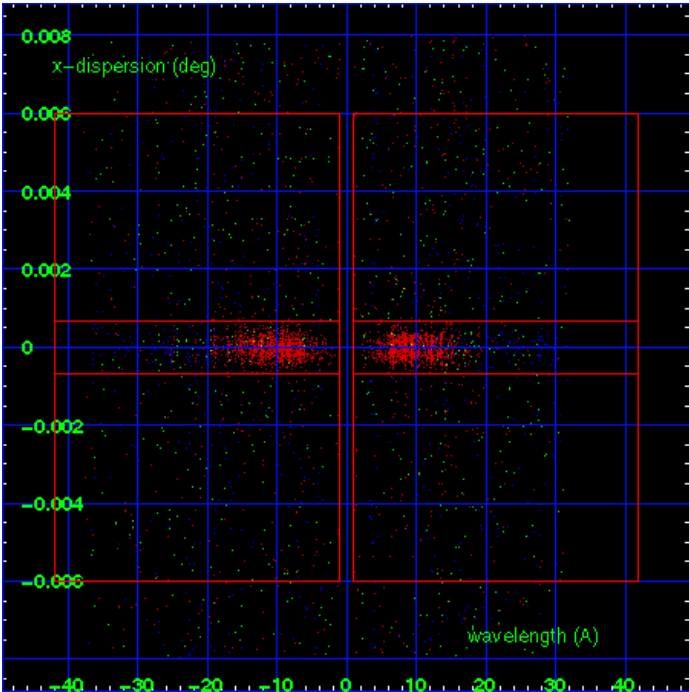
MEG Order Sort 123



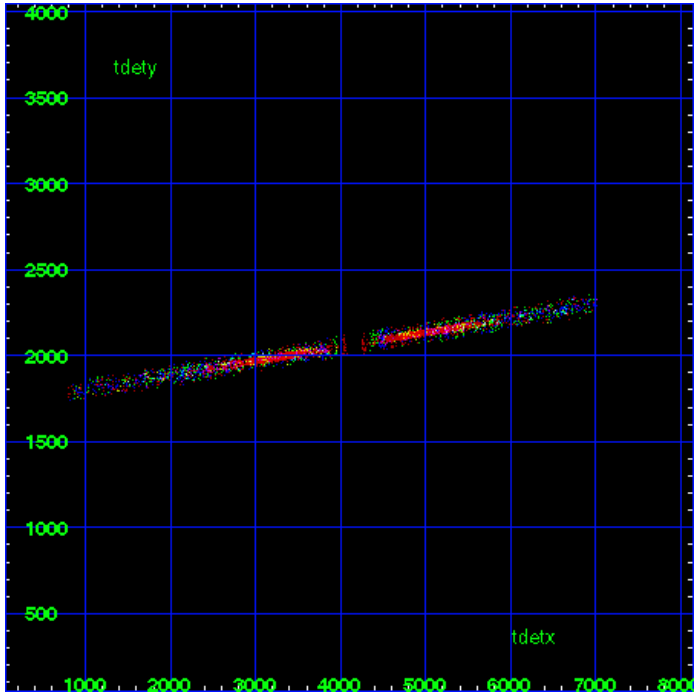
MEG Zero Order



MEG Order Sort ALL

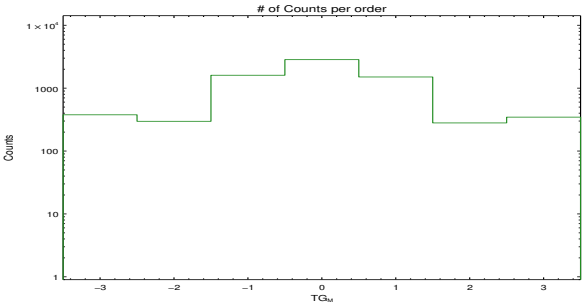


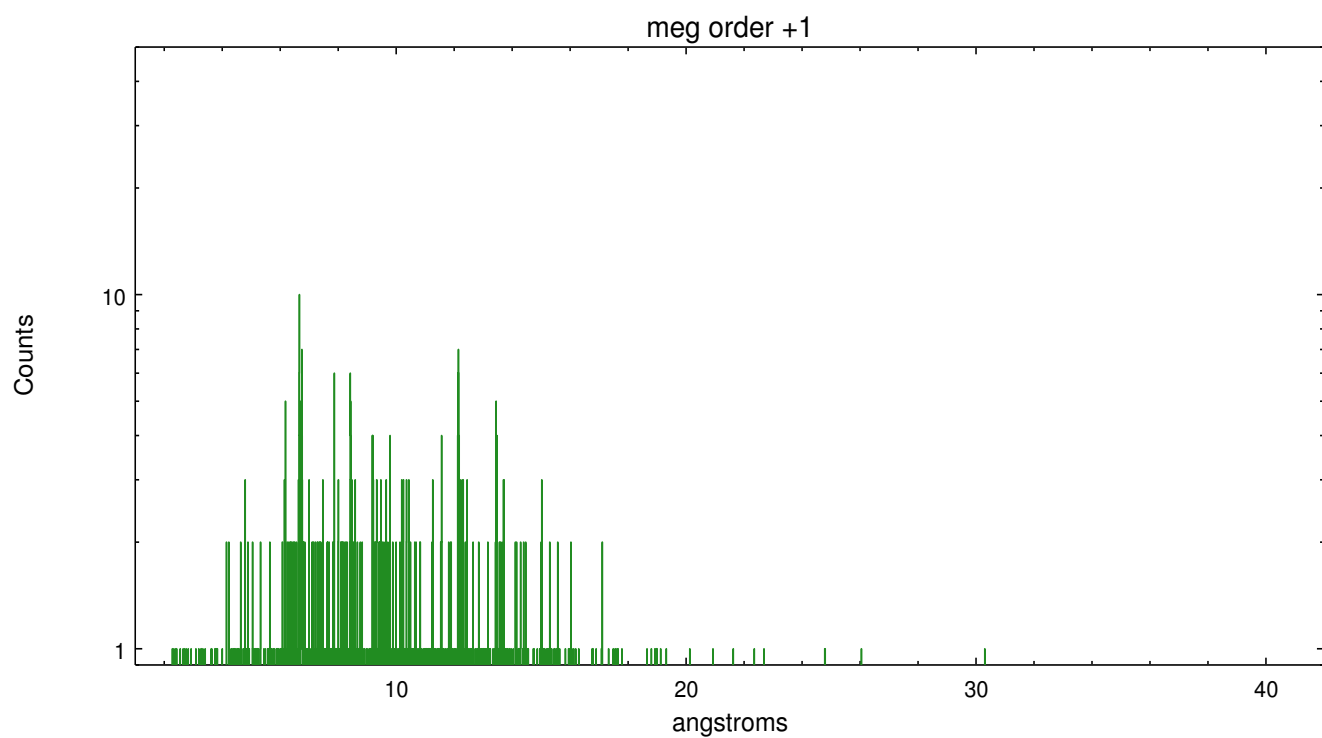
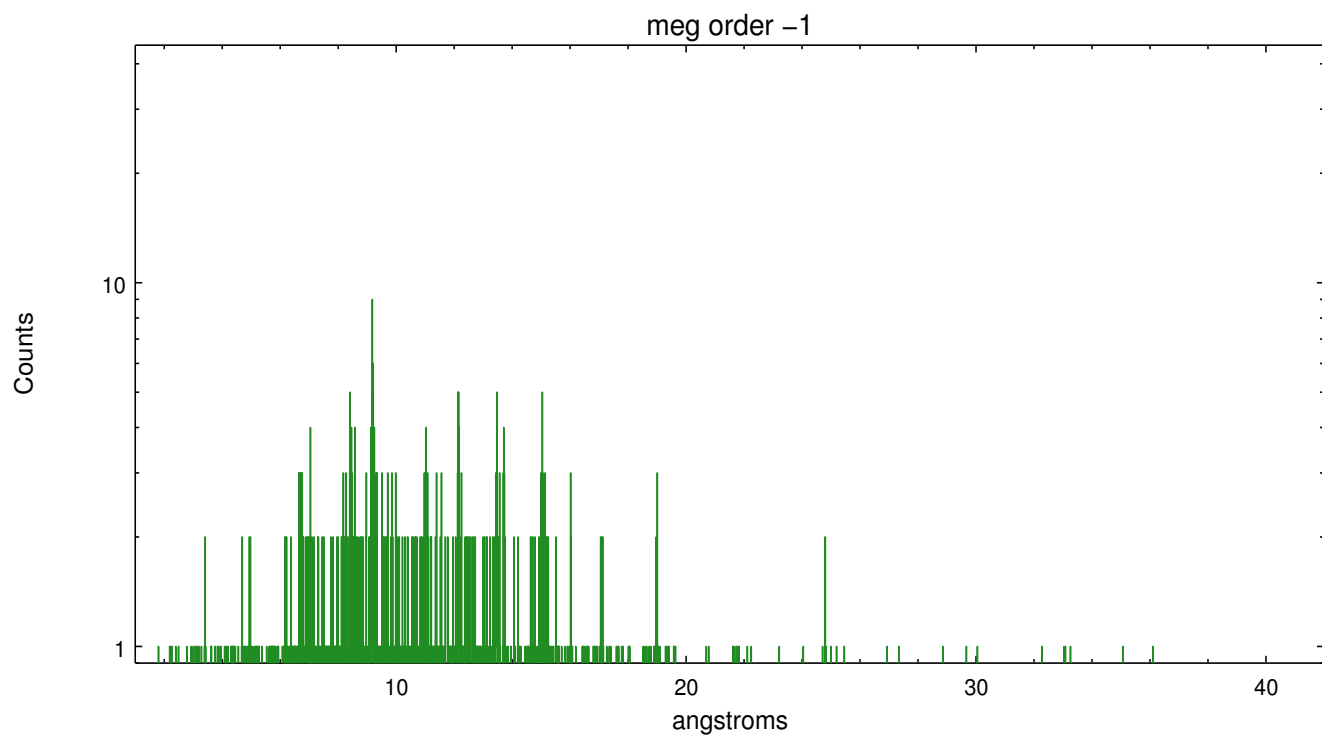
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	377	297	1604	2841	1506	280	346





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	30.1375

A.2 Comments