

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7588 - L2 Version 3
Chandra X-Ray Center

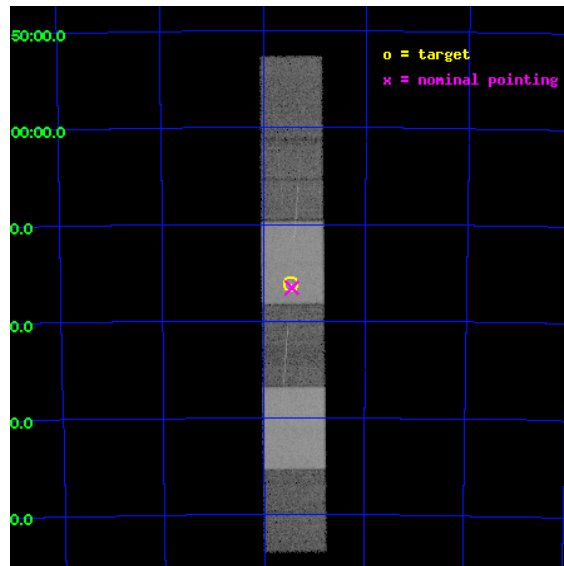
L2 Processing Date : Apr 21 2012

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1 Front

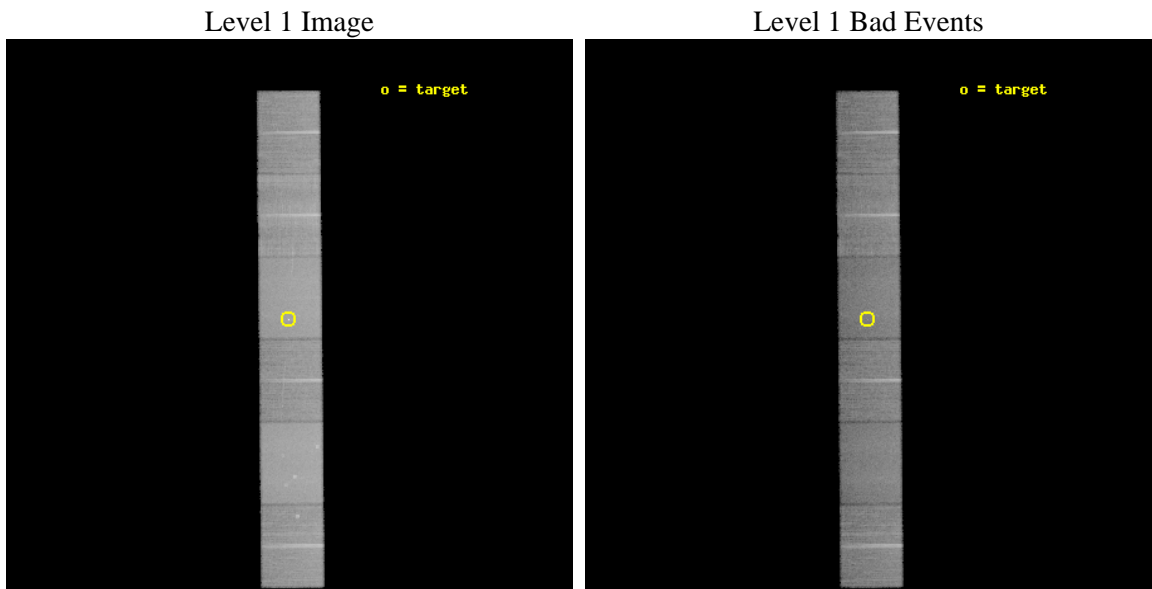
seq_num	500720	Sequence number
obs_id	7588	Observation id
title	High resolution spectral imaging of SN 1987A at 20 years: HETG observation	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	Sn 1987A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.269722	Observer's specified target Dec [deg]
ra_nom	83.86188104068	Nominal RA [deg]
dec_nom	-69.275977757217	Nominal Dec [deg]
roll_nom	269.45214925645	Nominal Roll [deg]
revision	3	Processing version of data
ontime	27657.5	Sum of GTIs [s]
livetime	27210.807385952	Livetime [s]
ontime4	27654.959009707	Sum of GTIs [s]
ontime5	27657.5	Sum of GTIs [s]
ontime6	27657.5	Sum of GTIs [s]
ontime7	27657.5	Sum of GTIs [s]
ontime8	27657.5	Sum of GTIs [s]
ontime9	27657.5	Sum of GTIs [s]
l2events	328415	Number of level 2 events



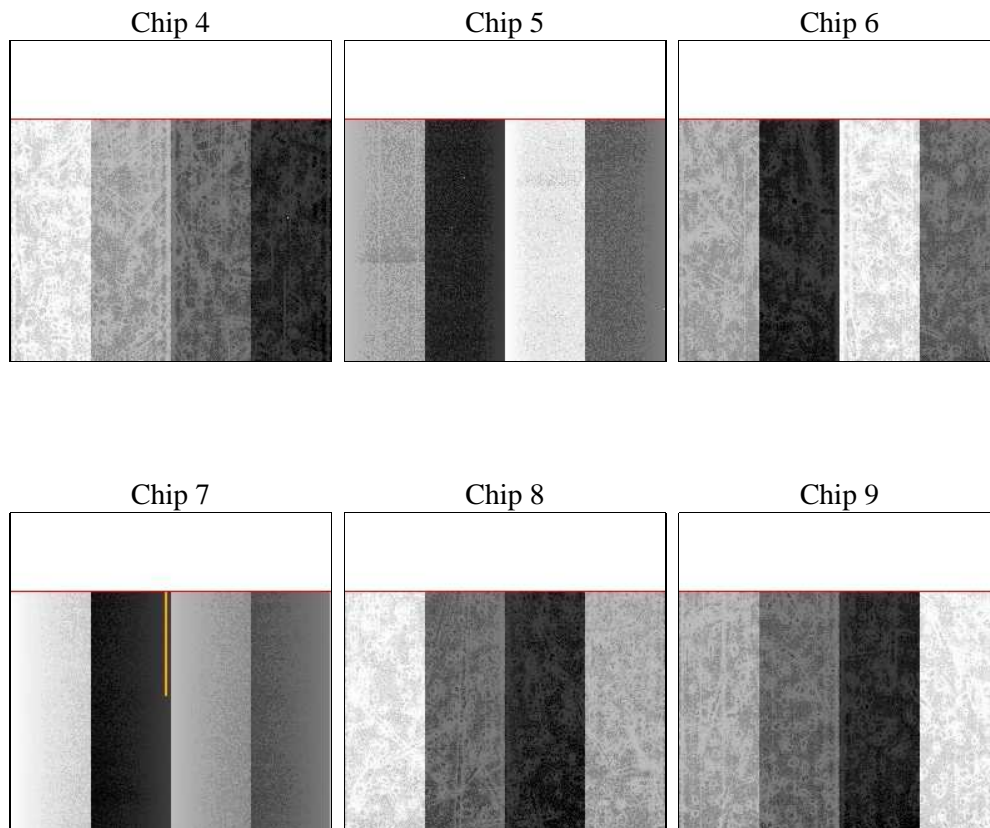
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	27657.5	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	27654.959009707	Sum of GTIs [s]
date	2012-04-21T14:40:16	Date and time of file creation	ontime5	27657.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	27657.5	Sum of GTIs [s]
			ontime7	27657.5	Sum of GTIs [s]
			ontime8	27657.5	Sum of GTIs [s]
			ontime9	27657.5	Sum of GTIs [s]
			l1events	1403380	Number of level 1 events

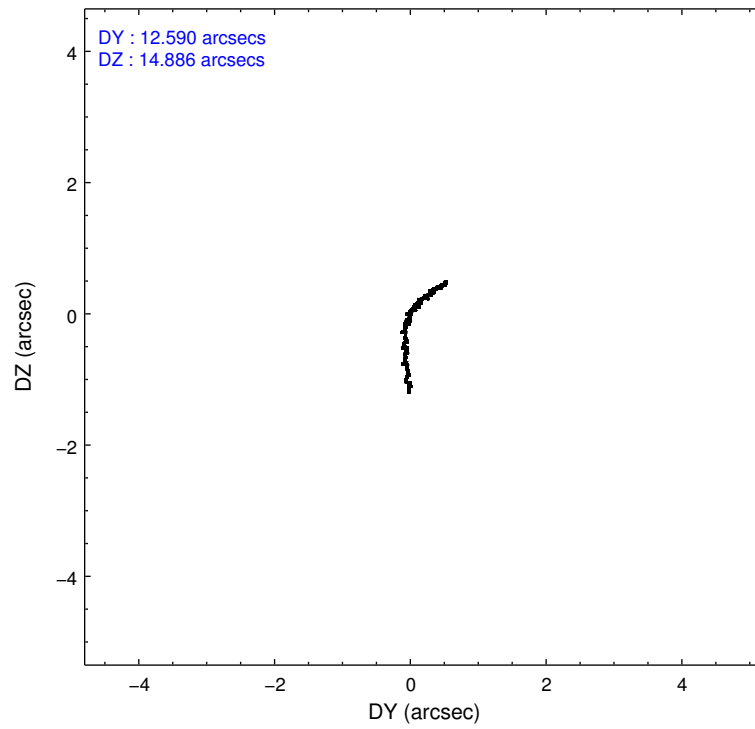
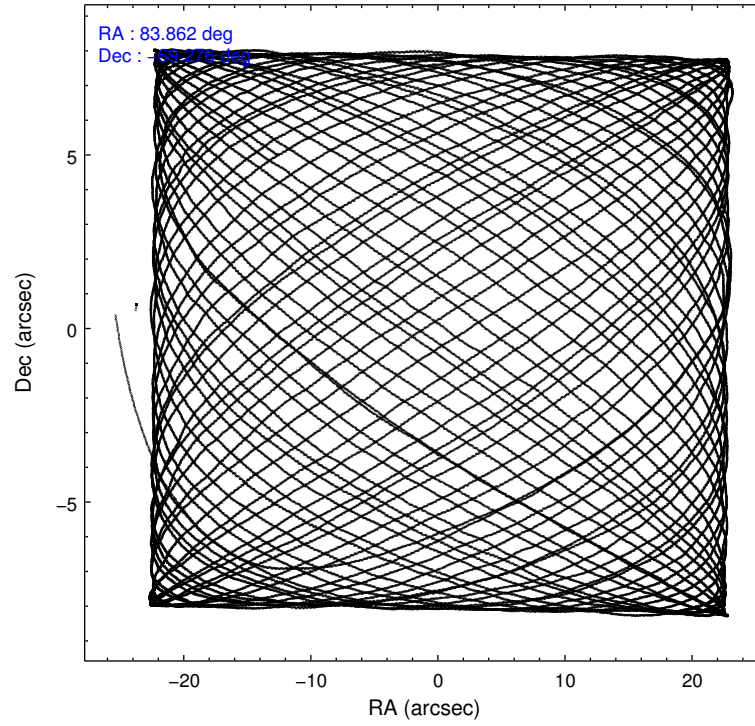
2.1.4 Events

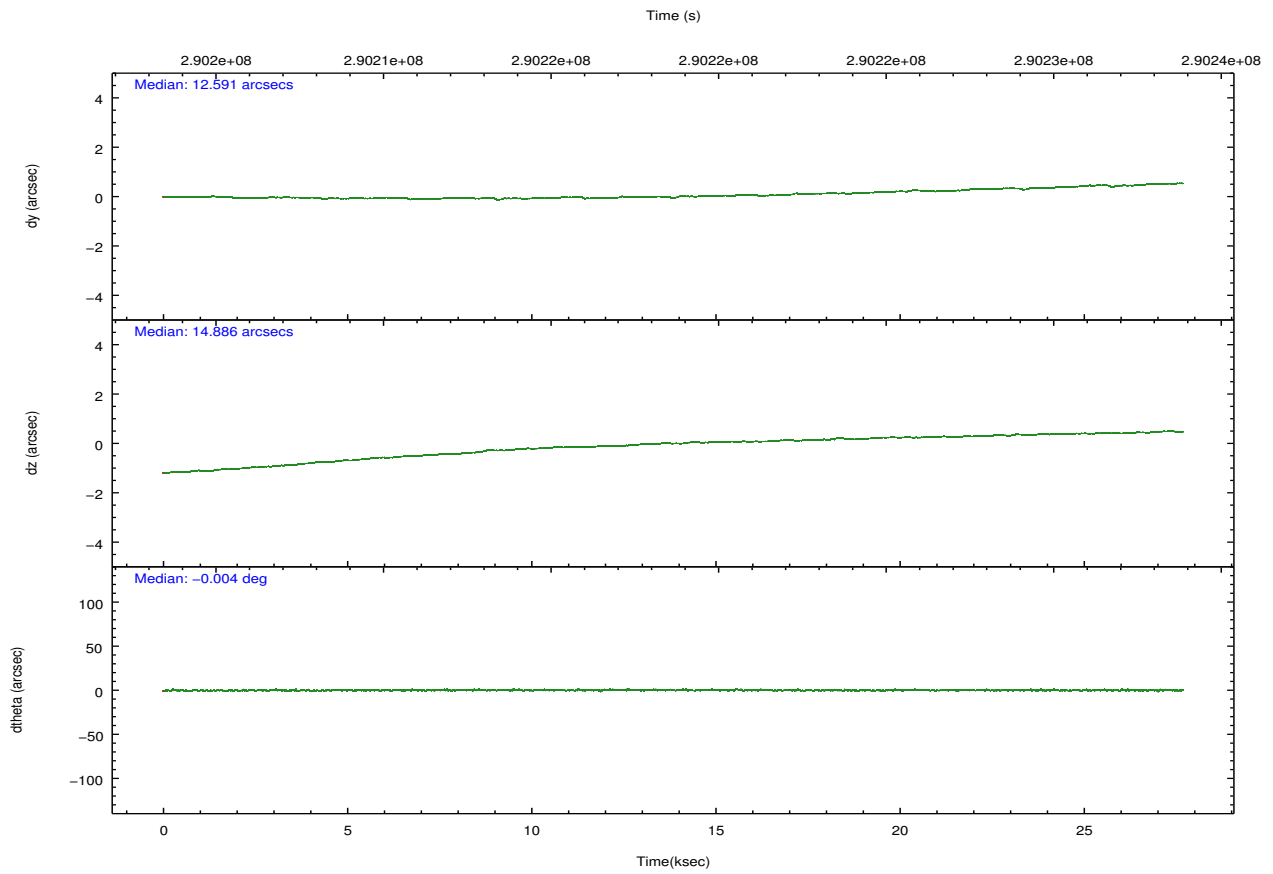
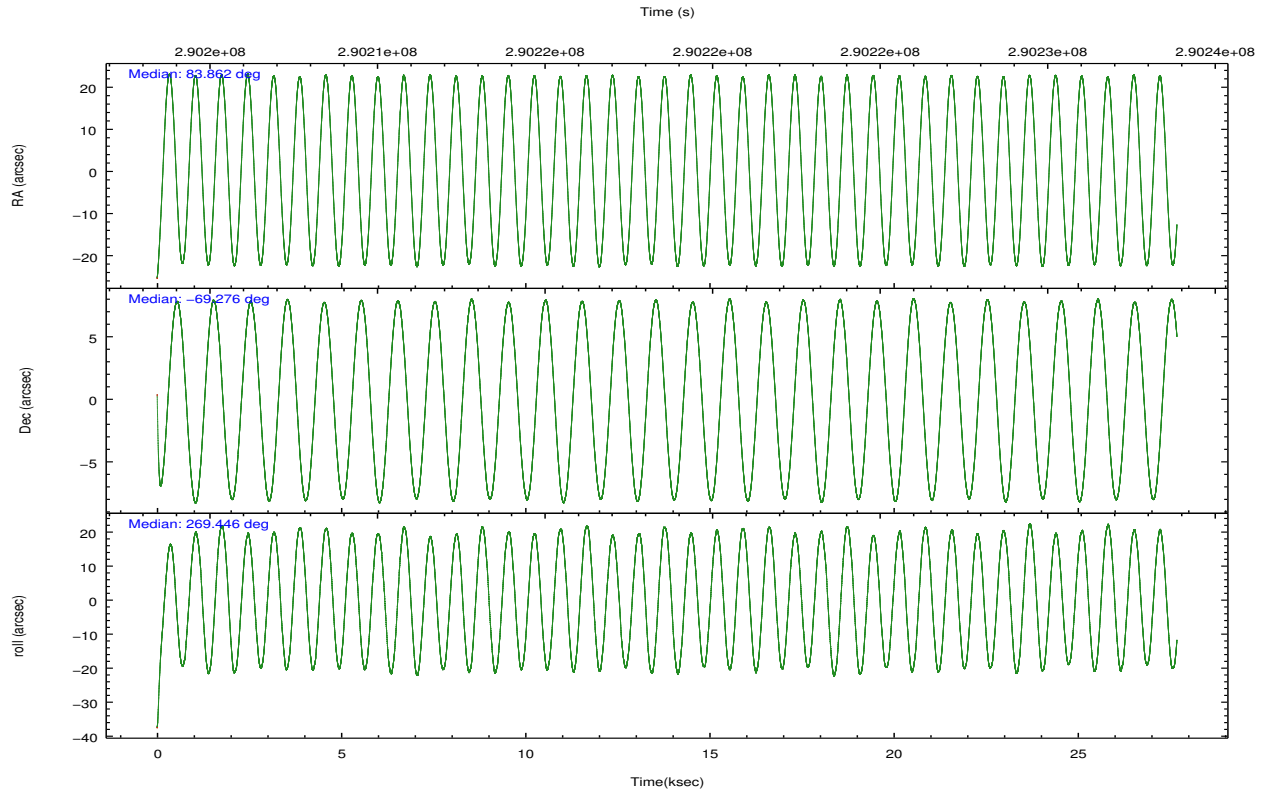
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	215129	290658	195148	265622	247780	189043	grade 0 events	12391	11176	10354	10470	18714	10119
rejected events	188345	157218	170387	151253	188886	164666		5%	3%	5%	3%	7%	5%
rejected %	87%	54%	87%	56%	76%	87%	grade 1 events	186	370	91	262	158	97
								0%	0%	0%	0%	0%	0%
							grade 2 events	5433	39831	5014	23526	12872	4739
								2%	13%	2%	8%	5%	2%
							grade 3 events	2619	5917	2417	10347	6358	2462
								1%	2%	1%	3%	2%	1%
							grade 4 events	2402	5733	2321	10209	5723	2459
								1%	1%	1%	3%	2%	1%
							grade 5 events	8502	22010	9079	24963	11791	9435
								3%	7%	4%	9%	4%	4%
							grade 6 events	3940	70785	4658	59830	15229	4599
								1%	24%	2%	22%	6%	2%
							grade 7 events	179656	134836	161214	126015	176935	155133
								83%	46%	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	83.86188104068025	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-69.252366	-69.27597775721742	Subarray start row	1	1
[deg] Pointing Roll	269.259203	269.4521492564476	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)	290204978.184000	290203961.88721			
Observation start date	2007-03-13T20:28:33	2007-03-13T20:12:41			
[s] Observation end time (MET)	290232478.184000	290233100.07609			
Observation end date	2007-03-14T04:06:53	2007-03-14T04:18:20			
Read mode	TIMED	TIMED			

2.3 Aspect



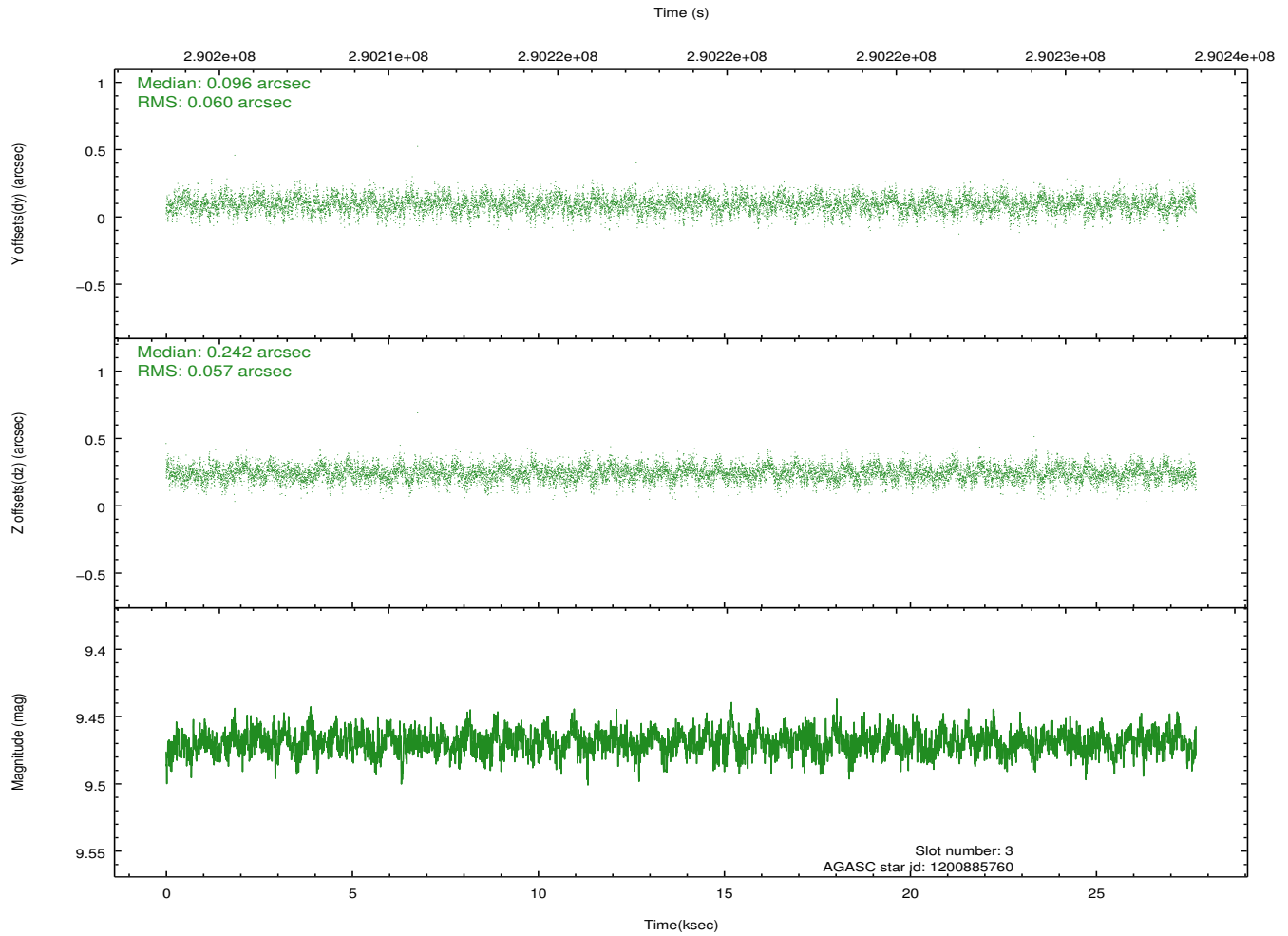
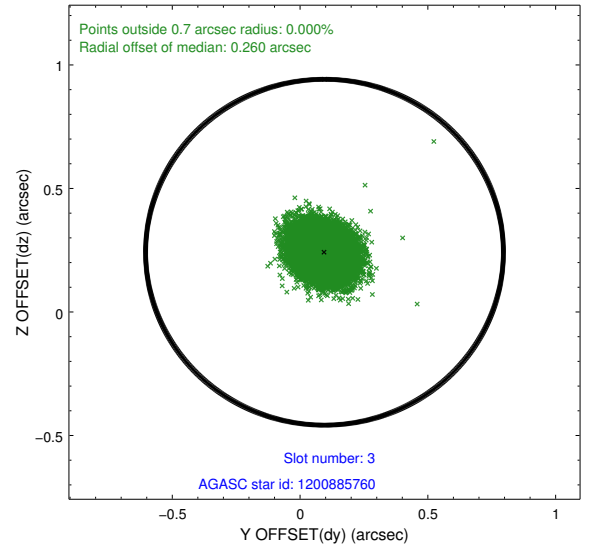
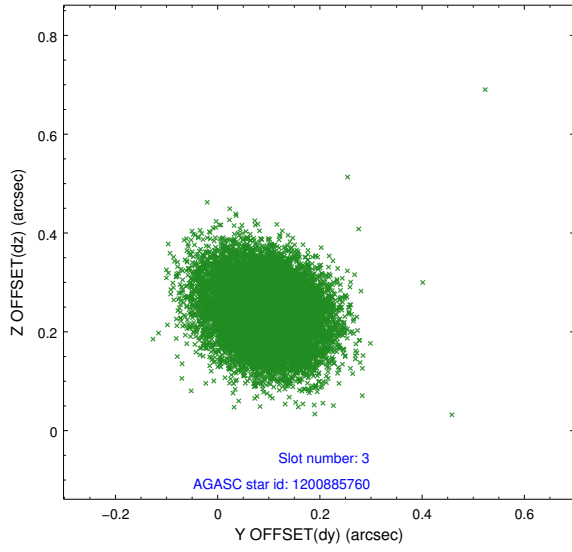


Slot Statistics

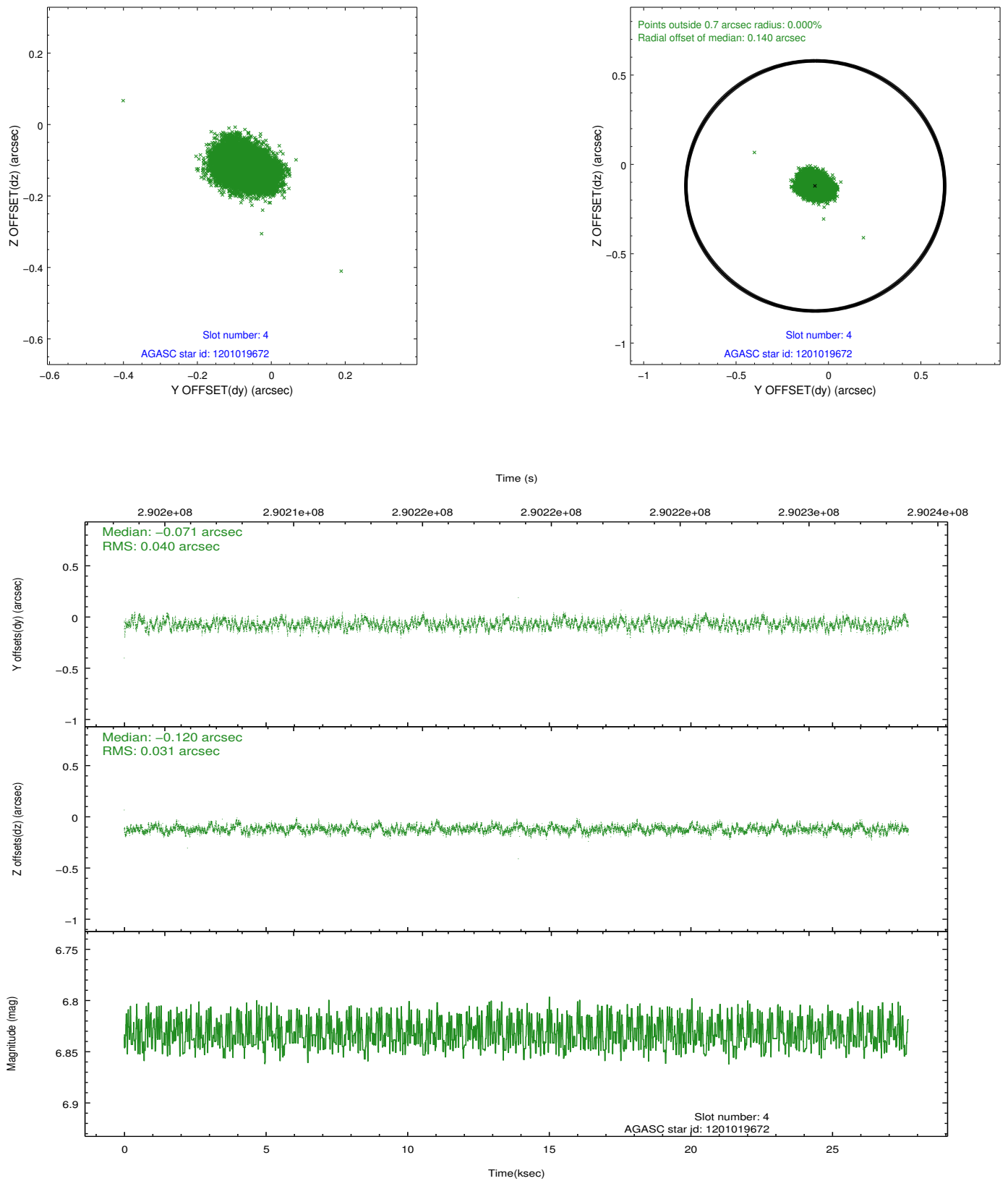
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	6754	-0.124	-0.098	0.009	0.016	0.000000	0.000000	-765.52	-1798.34
1	FID	ACIS-S-4	7.18	6754	0.130	0.058	0.007	0.012	0.000000	0.000000	2147.98	110.16
2	FID	ACIS-S-6	7.36	6754	-0.034	0.048	0.009	0.018	0.000000	0.000000	396.69	747.66
3	GUIDE	1200885760	9.47	13491	0.096	0.242	0.088	0.143	83.723637	-68.777667	-1706.62	-151.17
4	GUIDE	1201019672	6.83	13507	-0.071	-0.120	0.055	0.086	85.312192	-68.770187	-1737.50	1918.84
5	GUIDE	1201020040	8.61	13493	0.063	-0.173	0.071	0.113	85.379163	-68.879396	-1343.20	2001.38
6	GUIDE	1201540776	9.58	13487	0.007	0.008	0.113	0.182	85.107945	-69.858480	2177.92	1621.77
7	GUIDE	1201410616	9.33	13494	-0.090	0.043	0.096	0.155	82.516808	-69.784406	1953.98	-1599.08

2.4 Star Slots

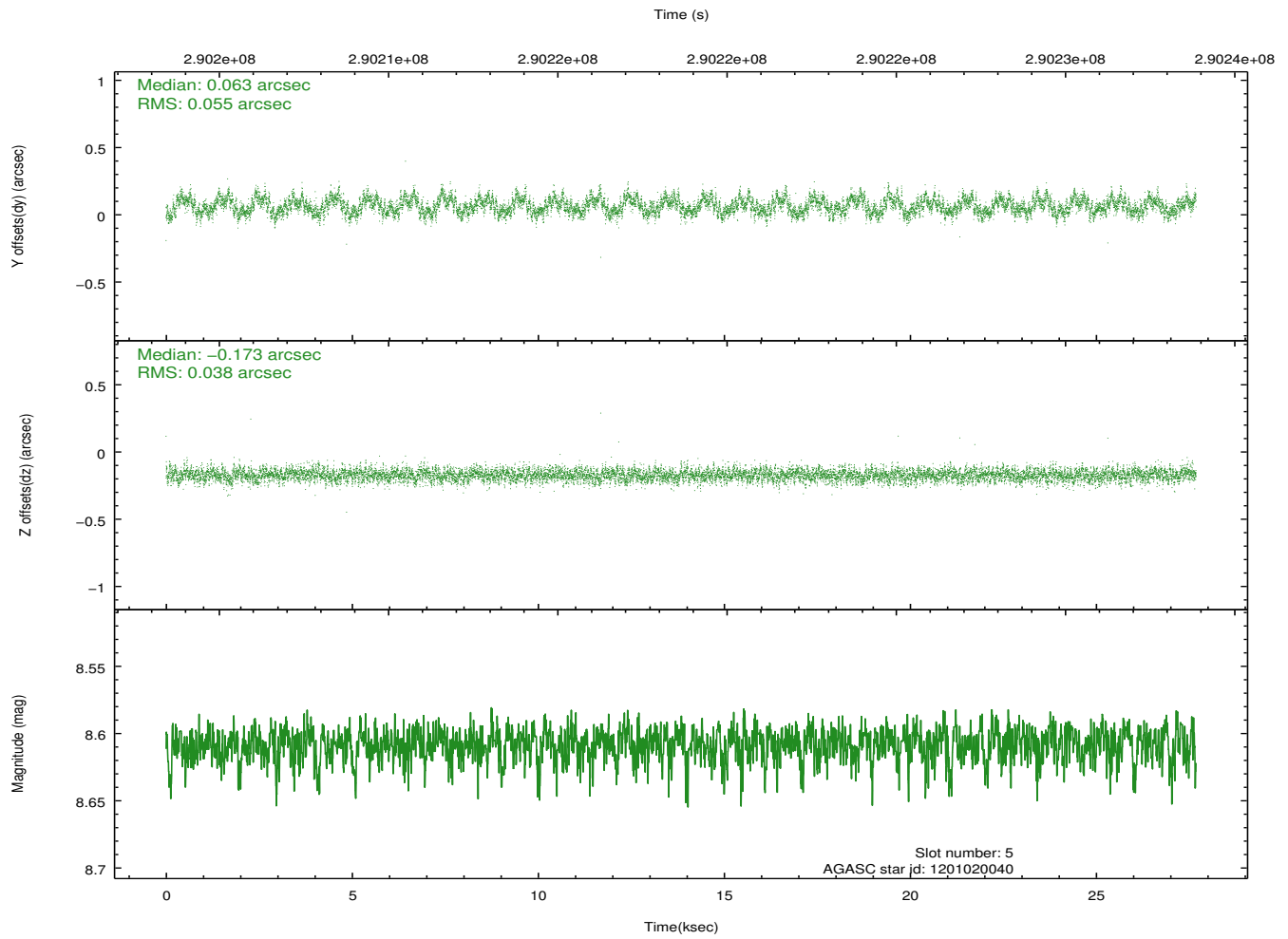
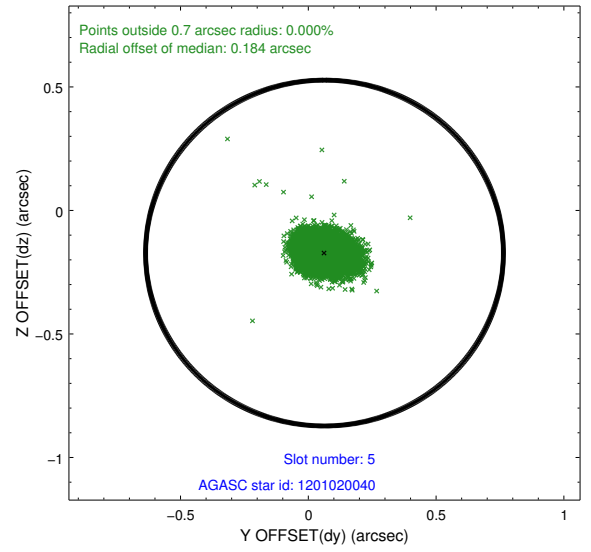
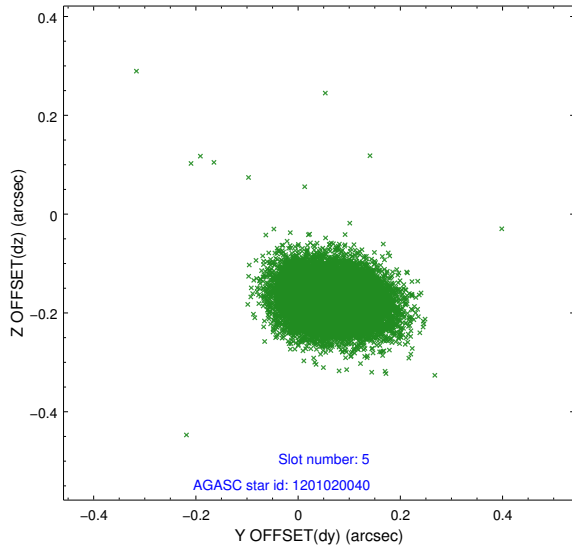
2.4.1 Slot 3



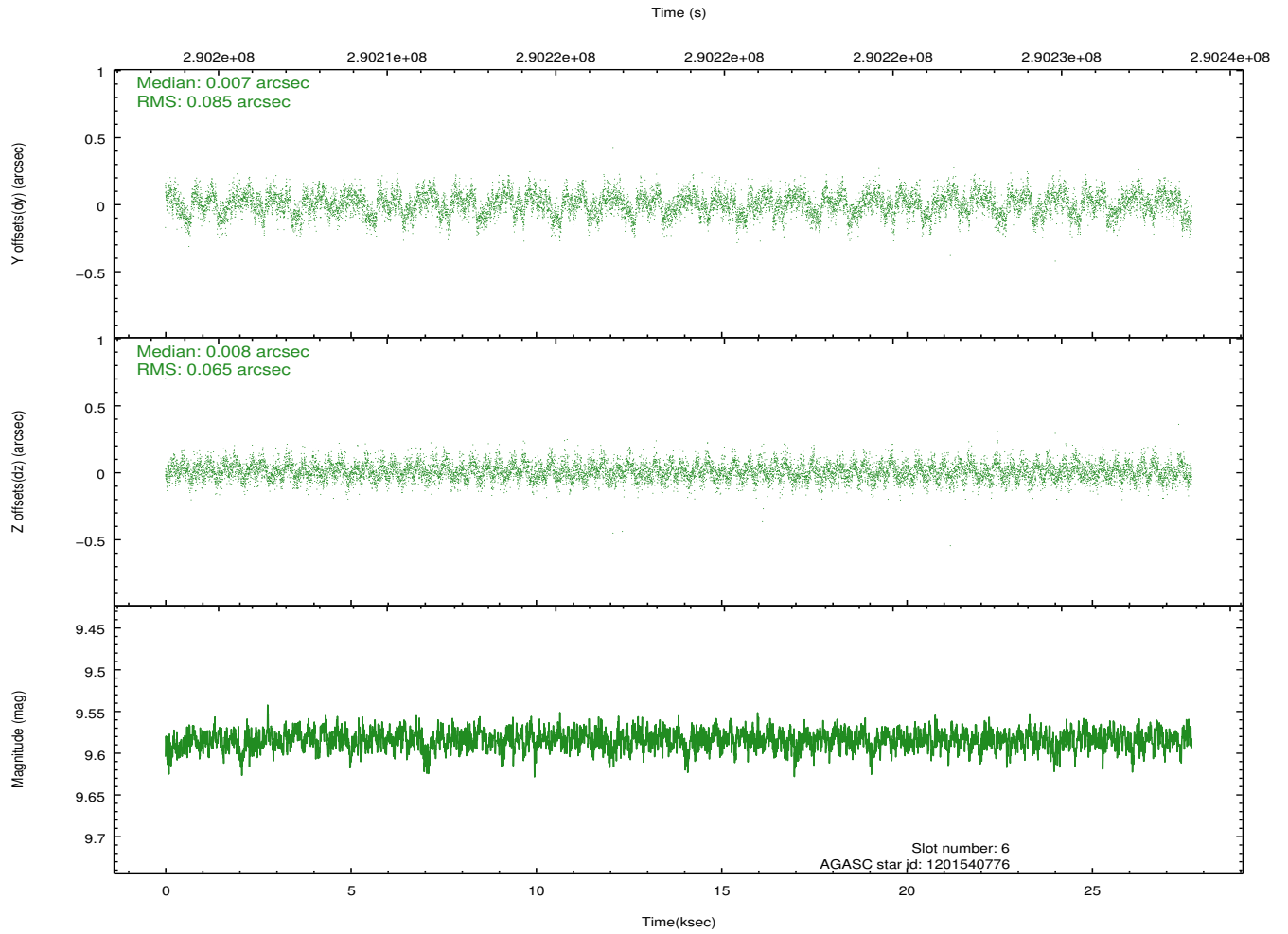
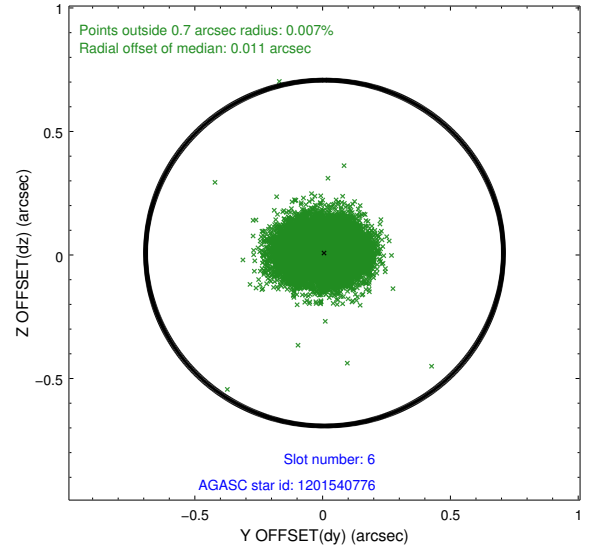
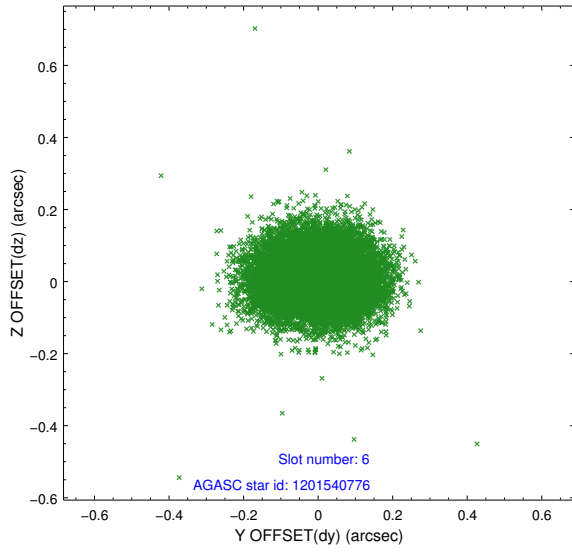
2.4.2 Slot 4



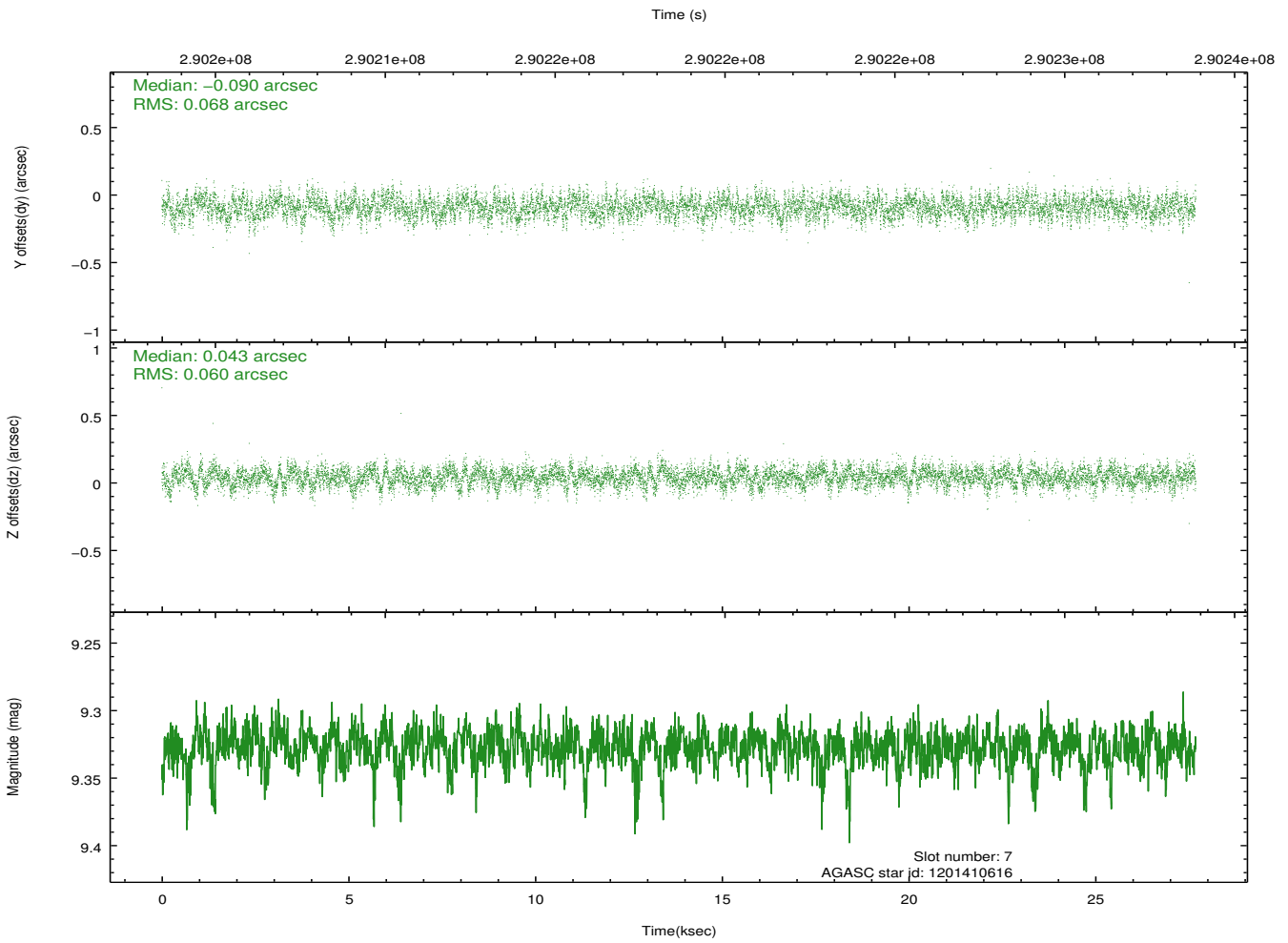
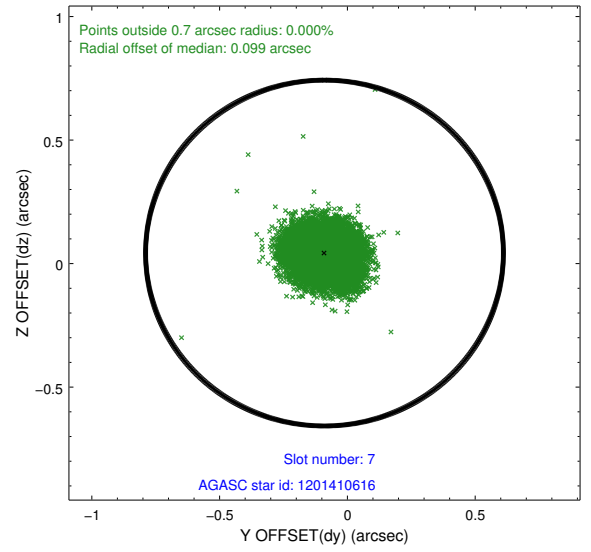
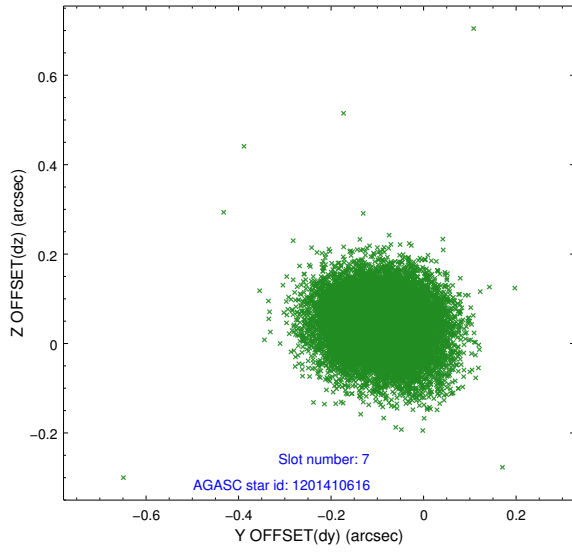
2.4.3 Slot 5



2.4.4 Slot 6

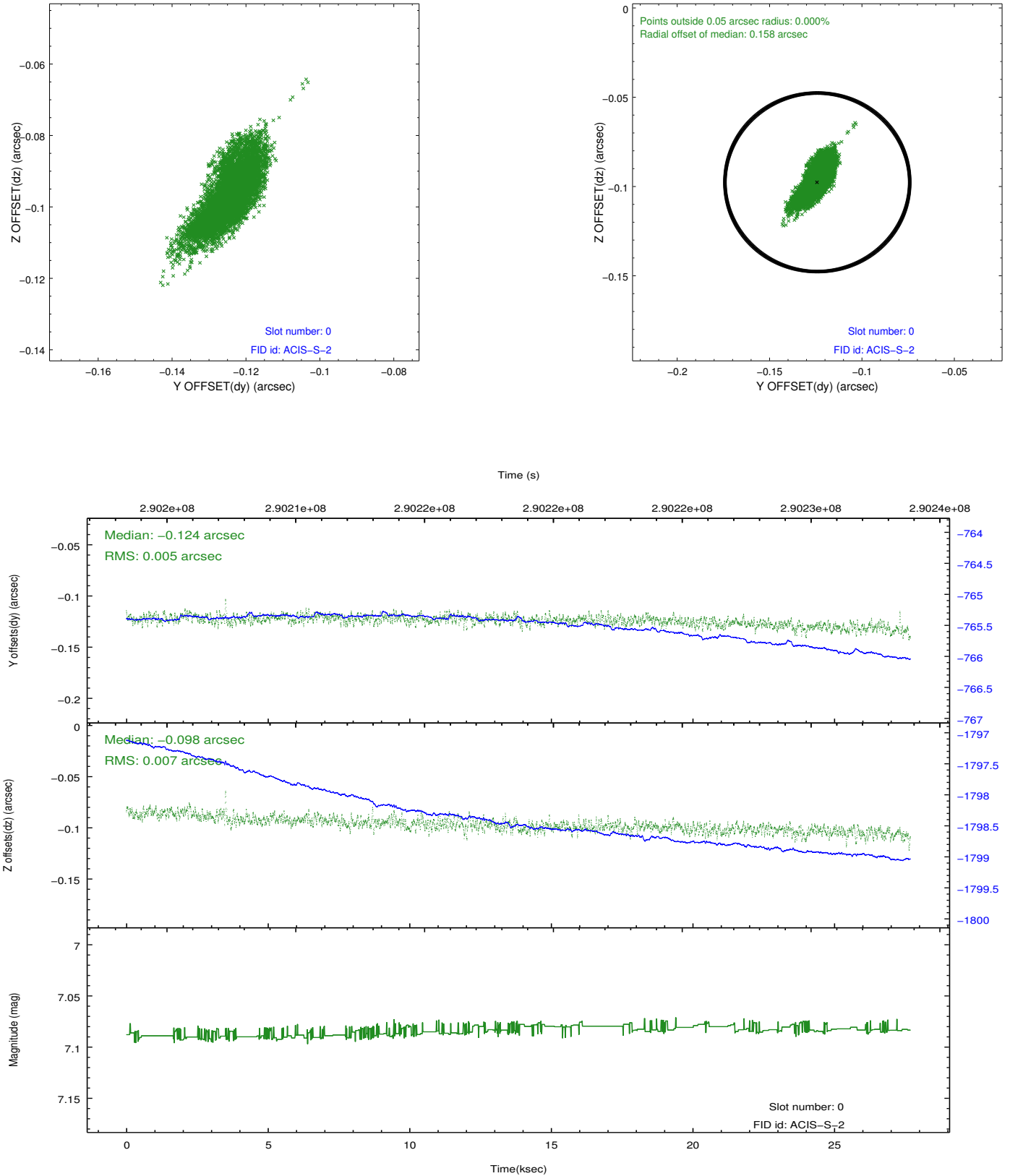


2.4.5 Slot 7

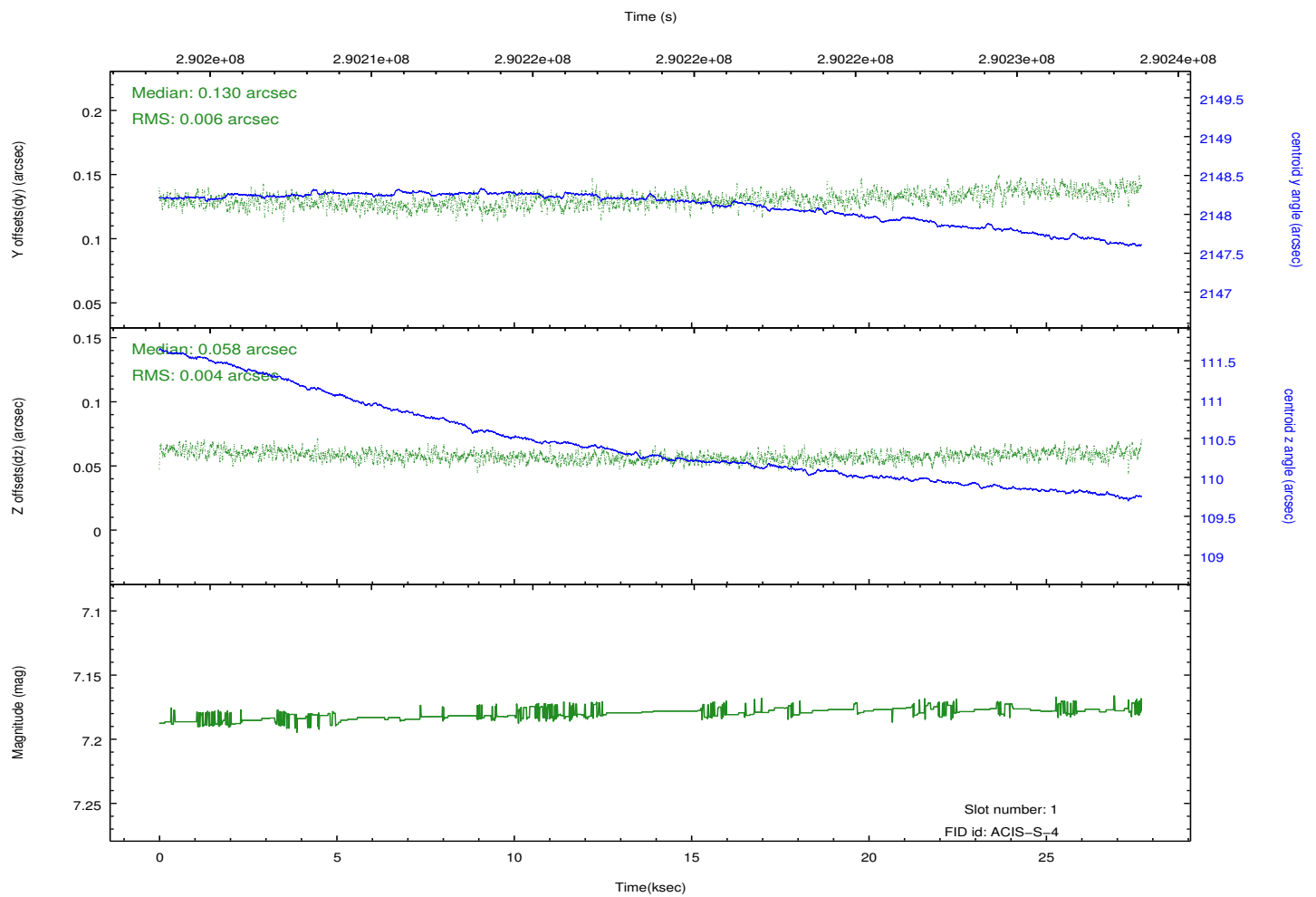
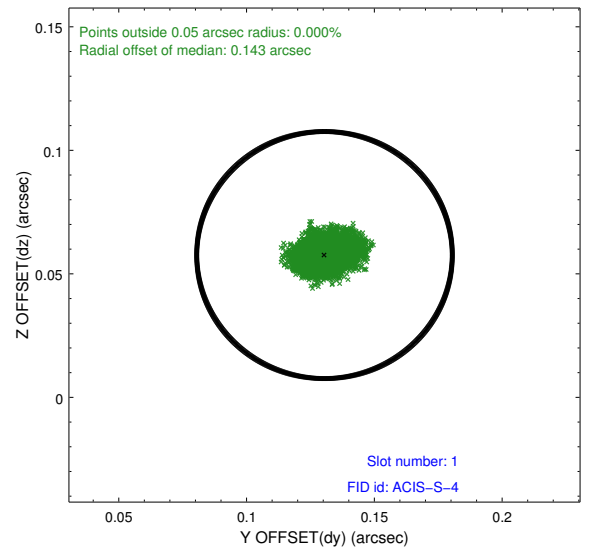
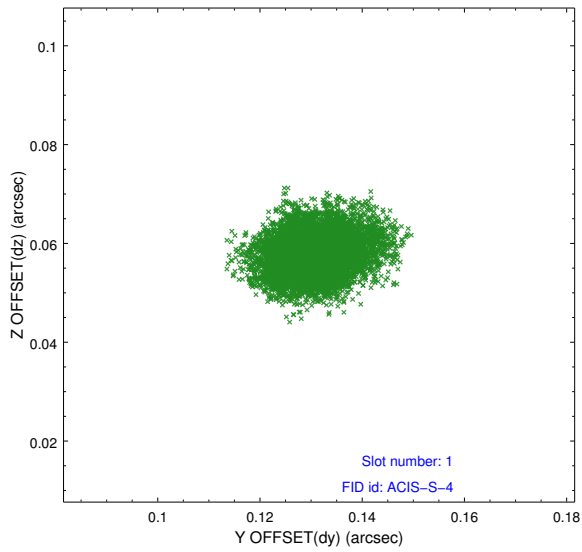


2.5 FID Slots

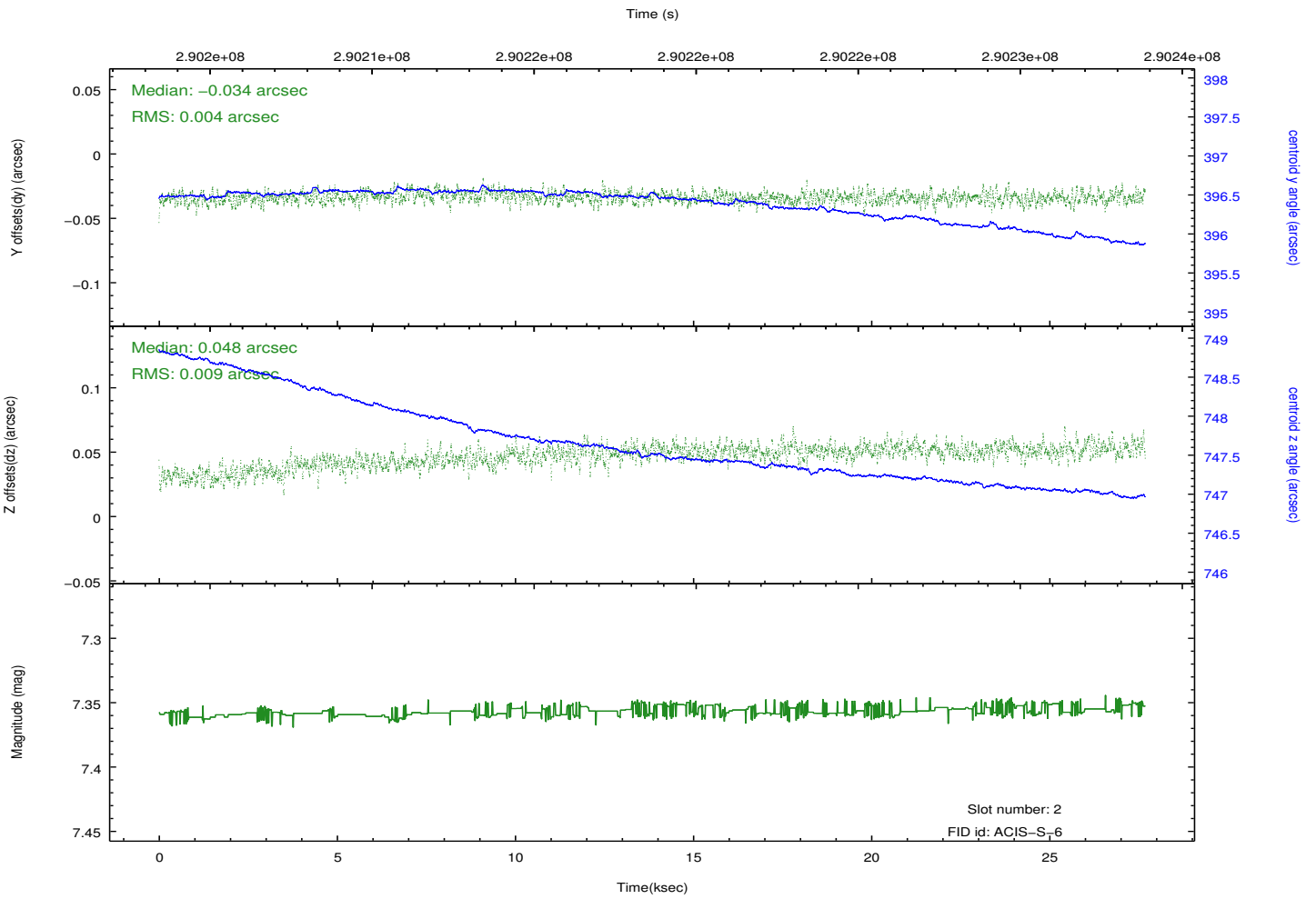
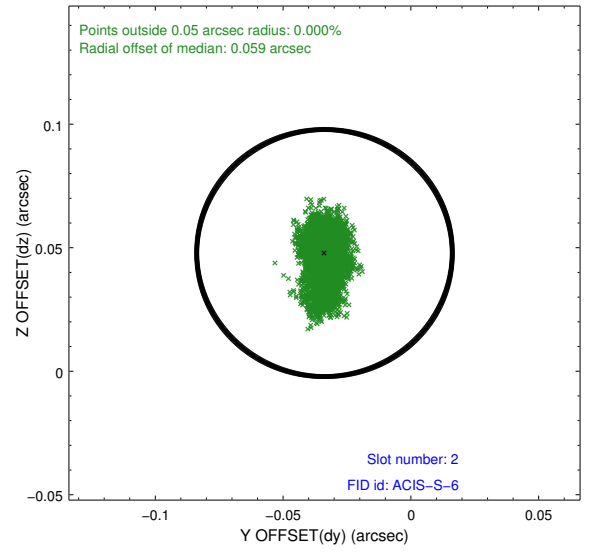
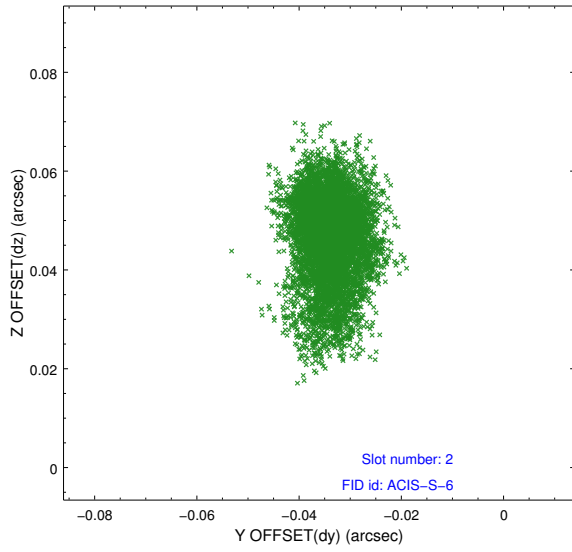
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

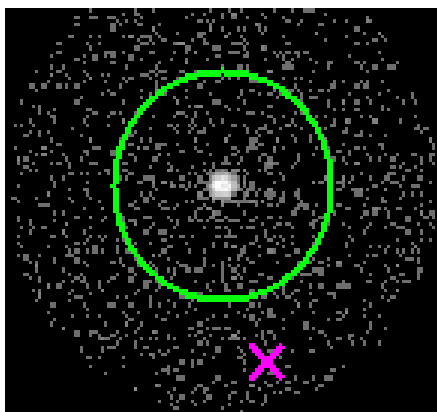


3 Gratings

3.1 HEG Arm



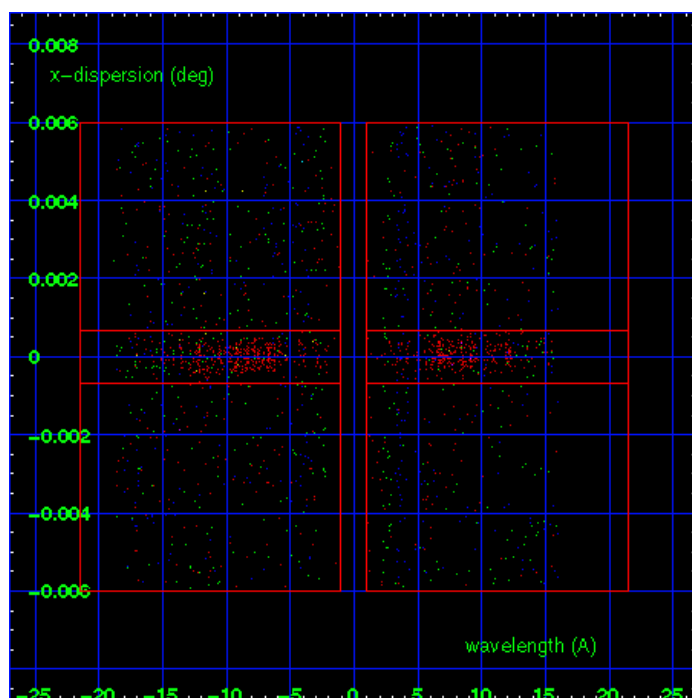
HEG Order Sort 123



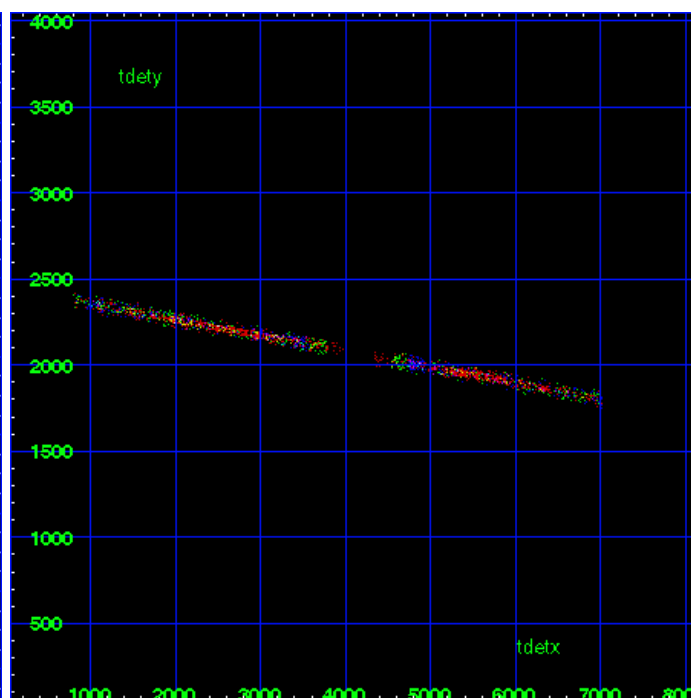
HEG Zero Order



HEG Order Sort ALL

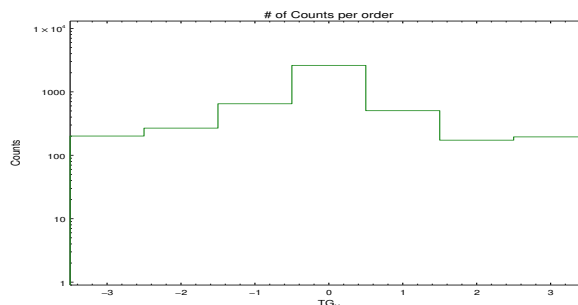


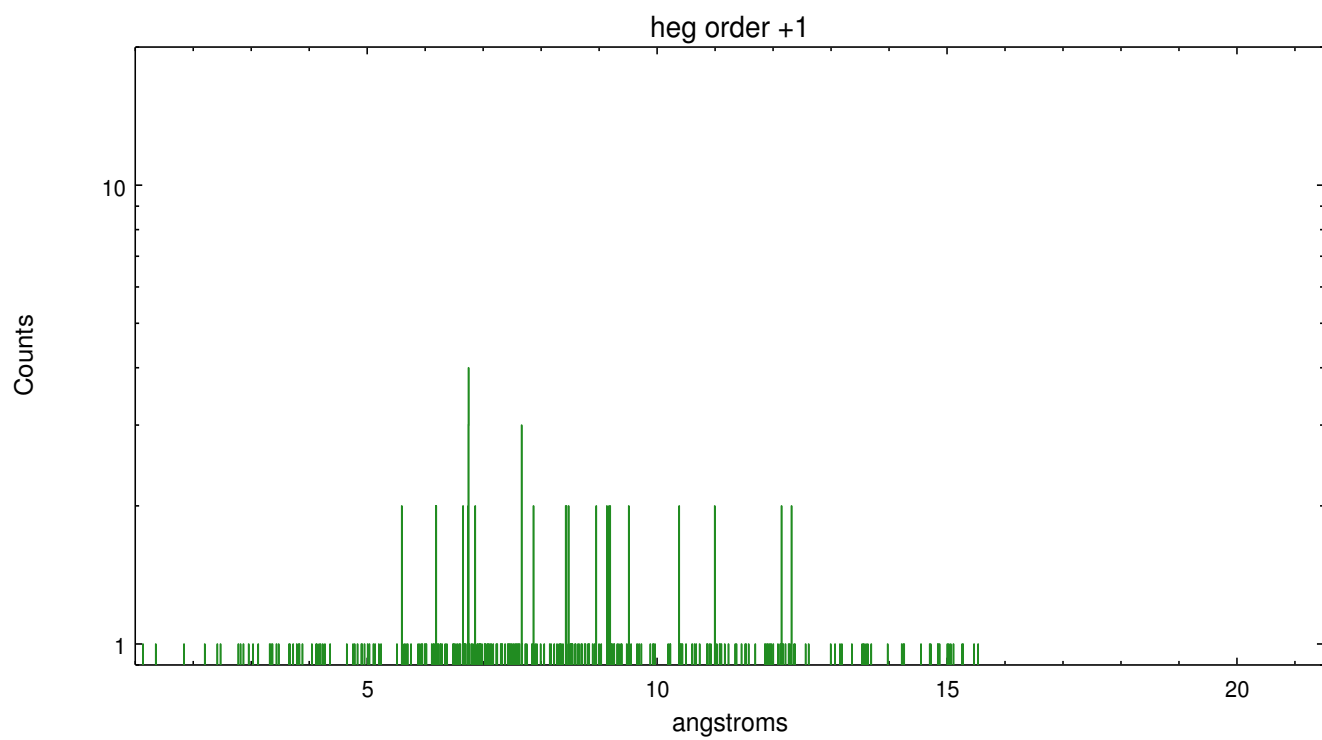
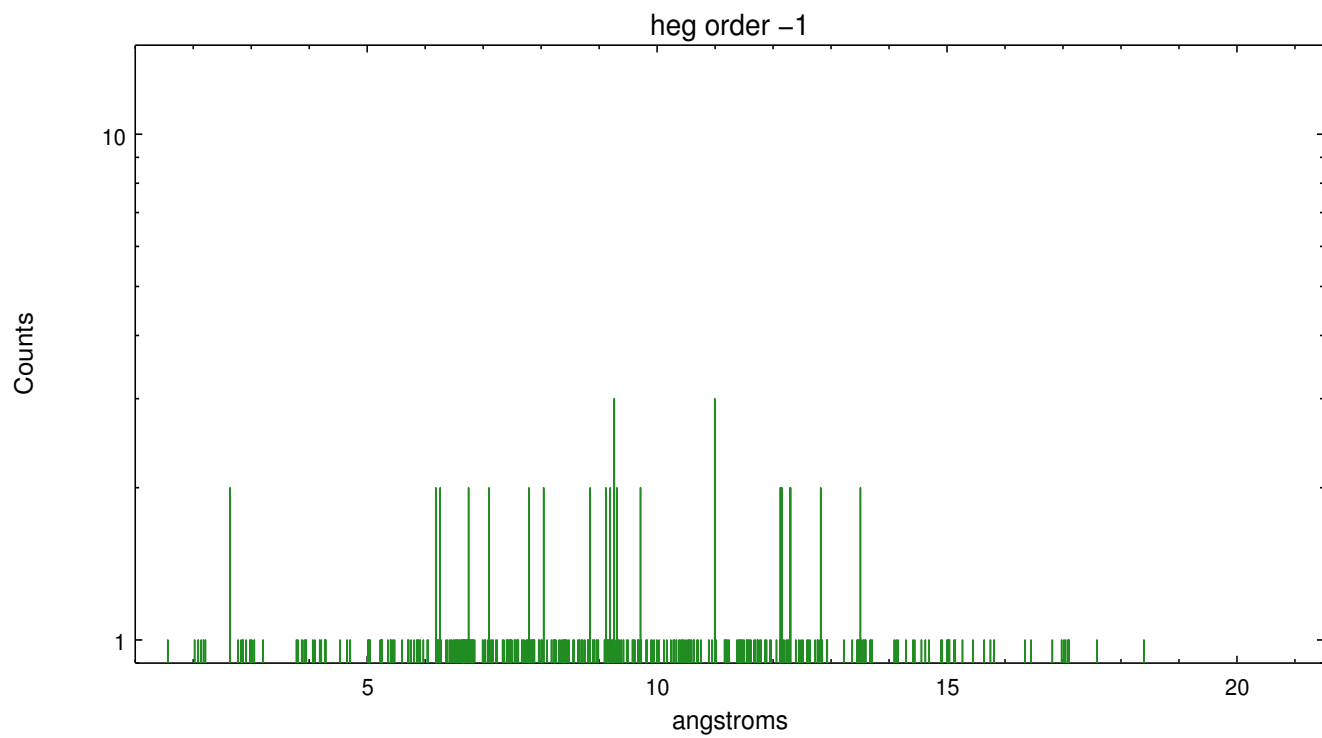
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	201	268	649	2614	505	173	195

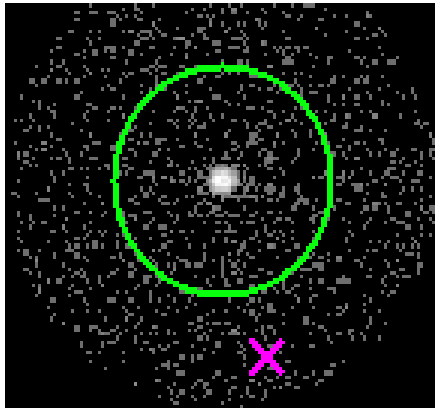




3.2 MEG Arm



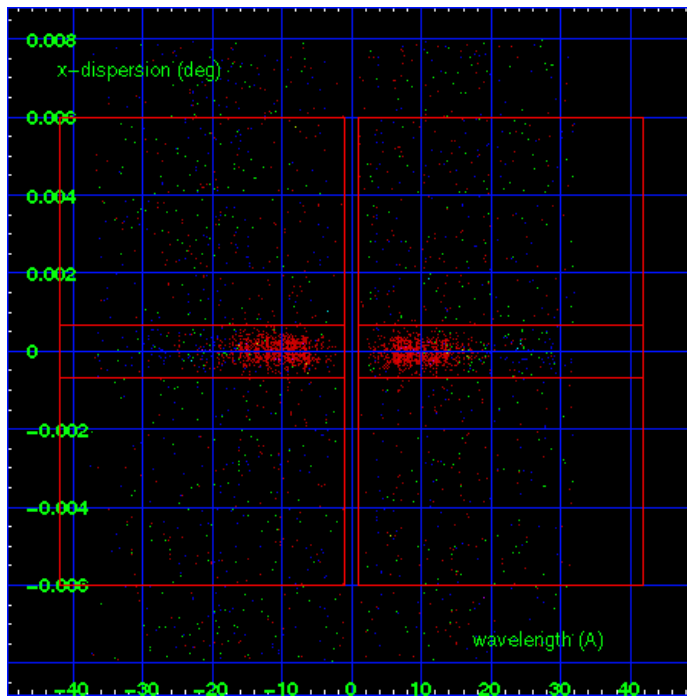
MEG Order Sort 123



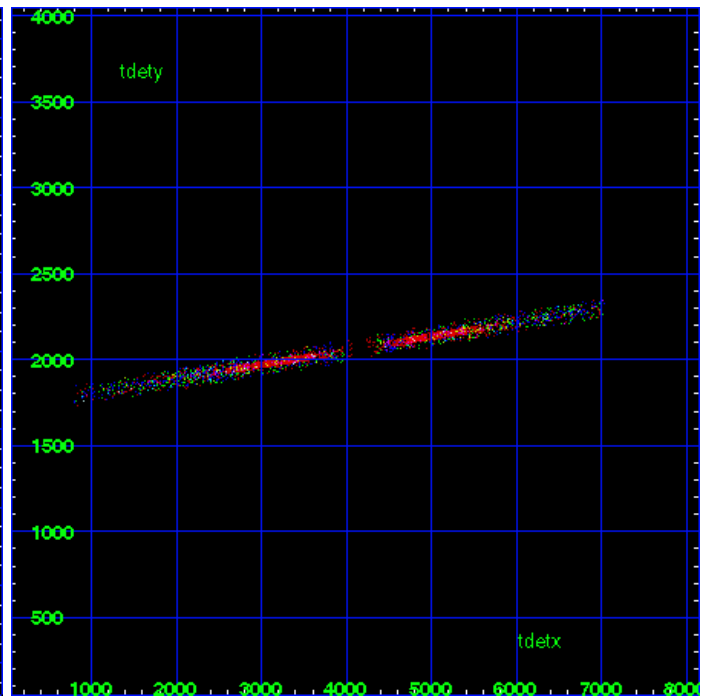
MEG Zero Order



MEG Order Sort ALL

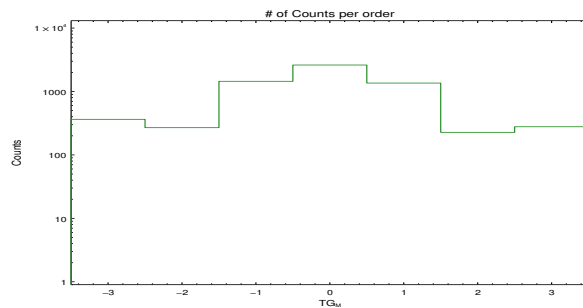


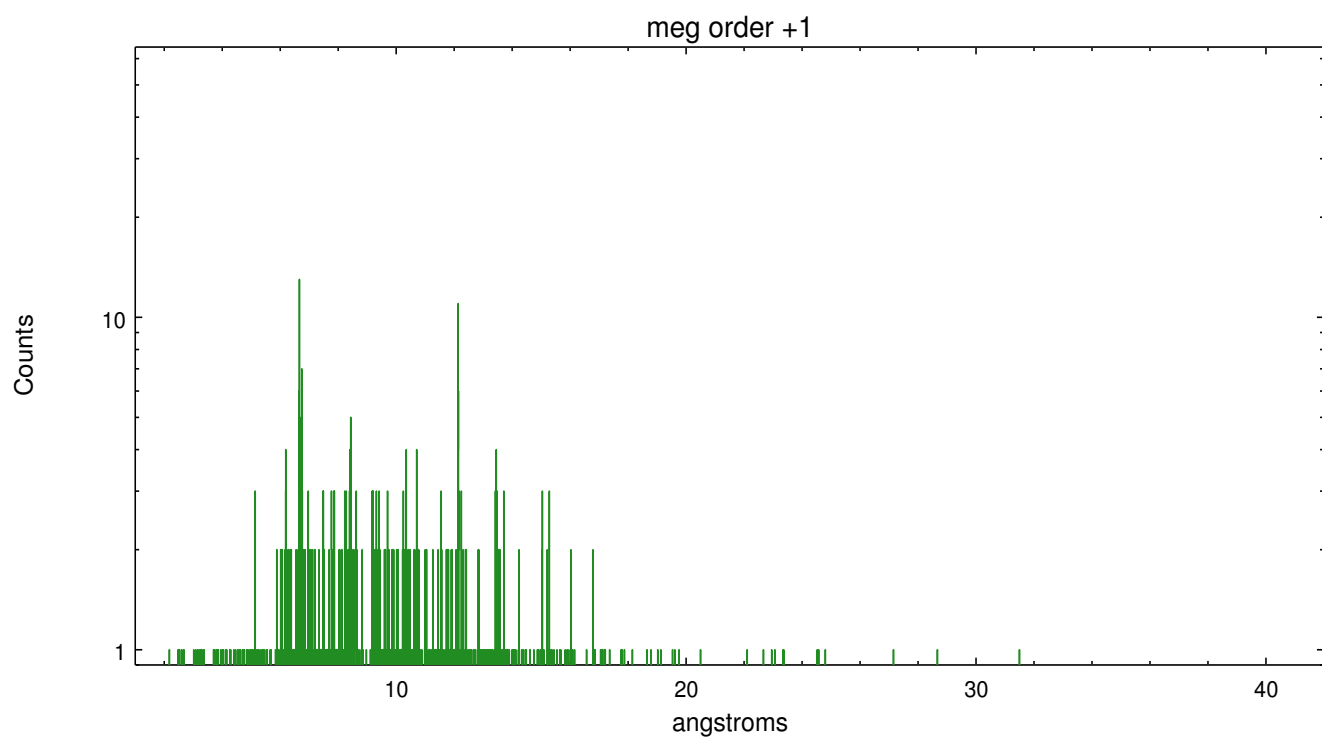
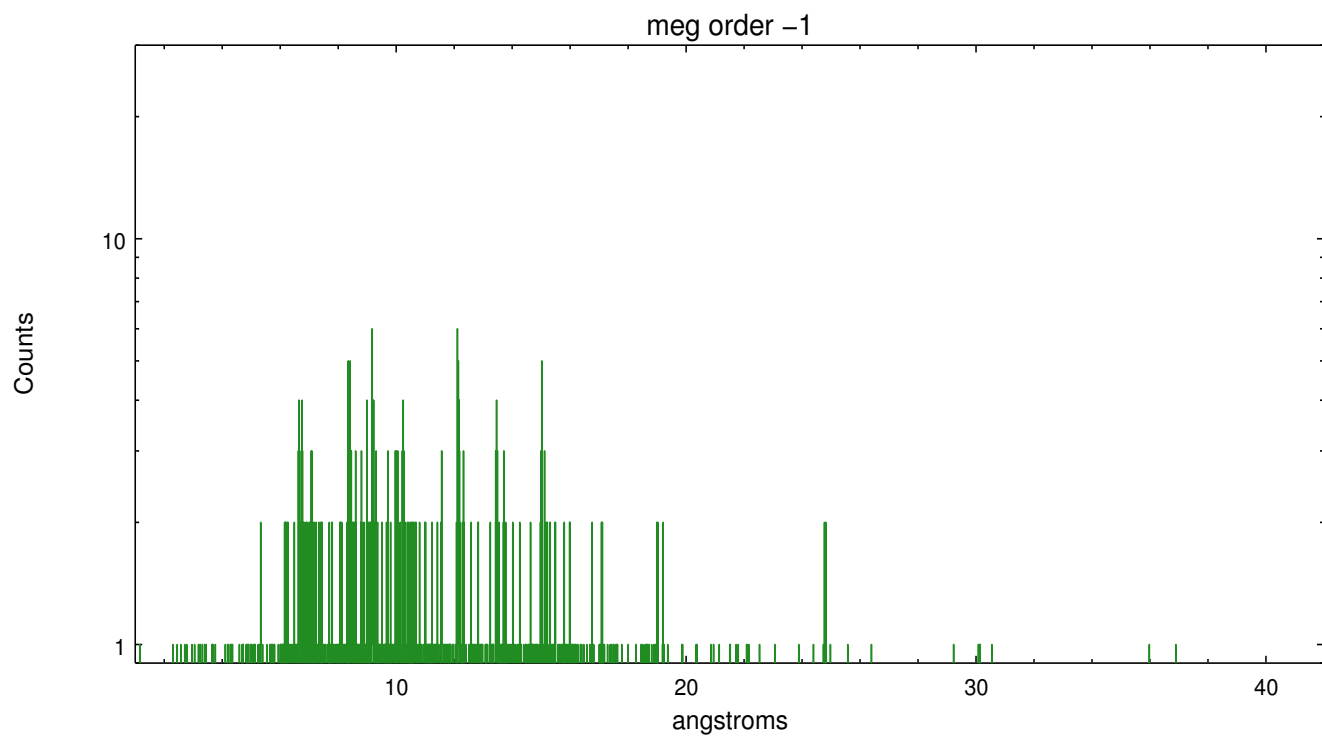
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	364	269	1447	2614	1358	227	278





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	27.6575

A.2 Comments