

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7590 - L2 Version 3
Chandra X-Ray Center

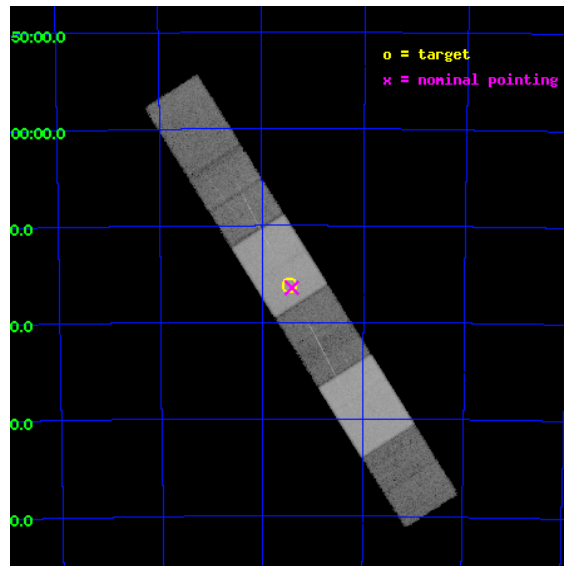
L2 Processing Date : Apr 23 2012

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1 Front

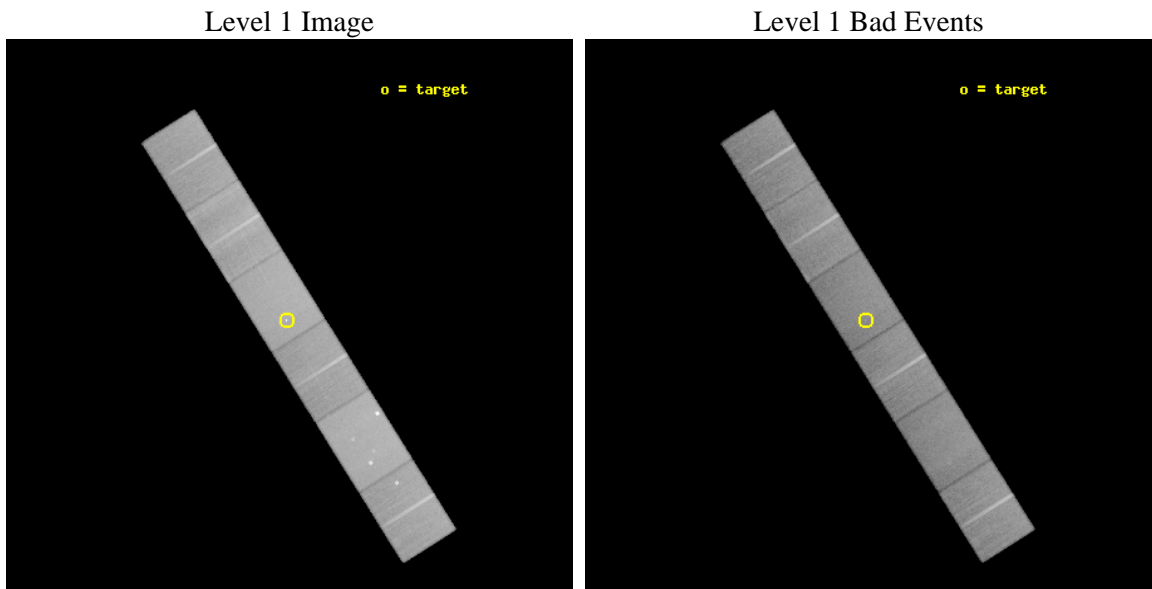
seq_num	500720	Sequence number
obs_id	7590	Observation id
title	High resolution spectral imaging of SN 1987A at 20 years: HETG observation	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	Sn 1987A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.269722	Observer's specified target Dec [deg]
ra_nom	83.853307493596	Nominal RA [deg]
dec_nom	-69.274178258006	Nominal Dec [deg]
roll_nom	237.7716256083	Nominal Roll [deg]
revision	3	Processing version of data
ontime	36134.227960944	Sum of GTIs [s]
livetime	35550.62883794	Livetime [s]
ontime4	36131.728010654	Sum of GTIs [s]
ontime5	36134.186920941	Sum of GTIs [s]
ontime6	36131.604860783	Sum of GTIs [s]
ontime7	36134.227960944	Sum of GTIs [s]
ontime8	36129.022850394	Sum of GTIs [s]
ontime9	36131.522830606	Sum of GTIs [s]
l2events	454942	Number of level 2 events



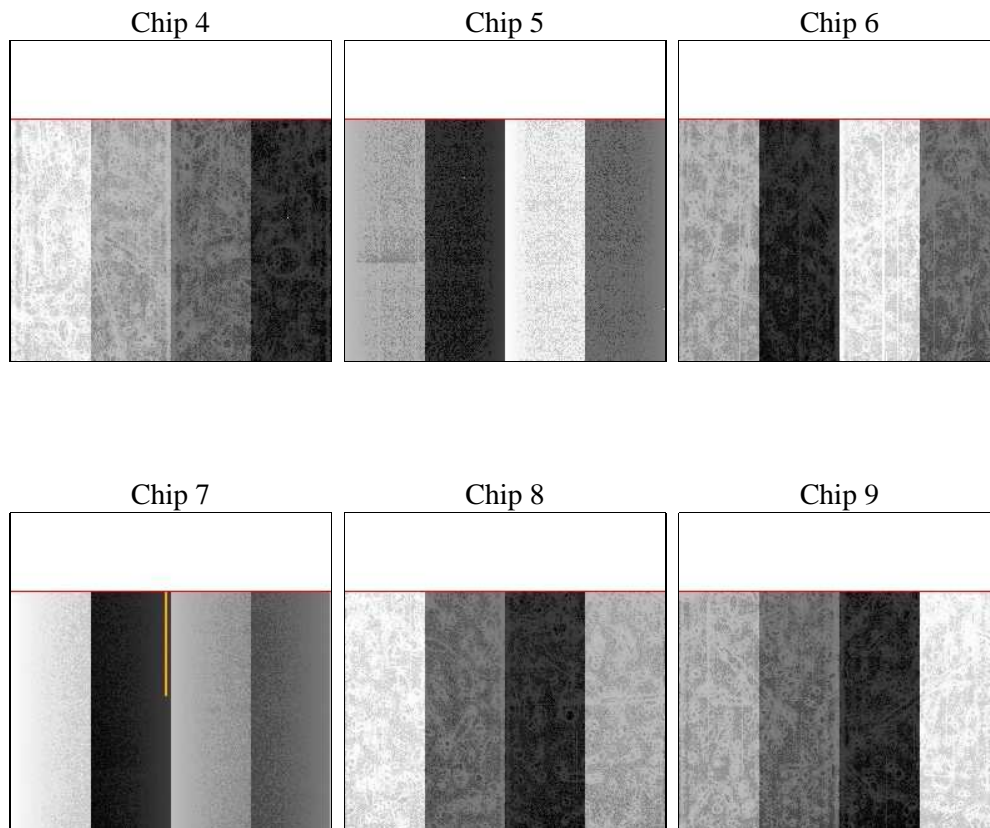
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	36134.227960944	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	36131.728010654	Sum of GTIs [s]
date	2012-04-23T10:19:49	Date and time of file creation	ontime5	36134.186920941	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	36131.604860783	Sum of GTIs [s]
			ontime7	36134.227960944	Sum of GTIs [s]
			ontime8	36129.022850394	Sum of GTIs [s]
			ontime9	36131.522830606	Sum of GTIs [s]
			l1events	1947076	Number of level 1 events

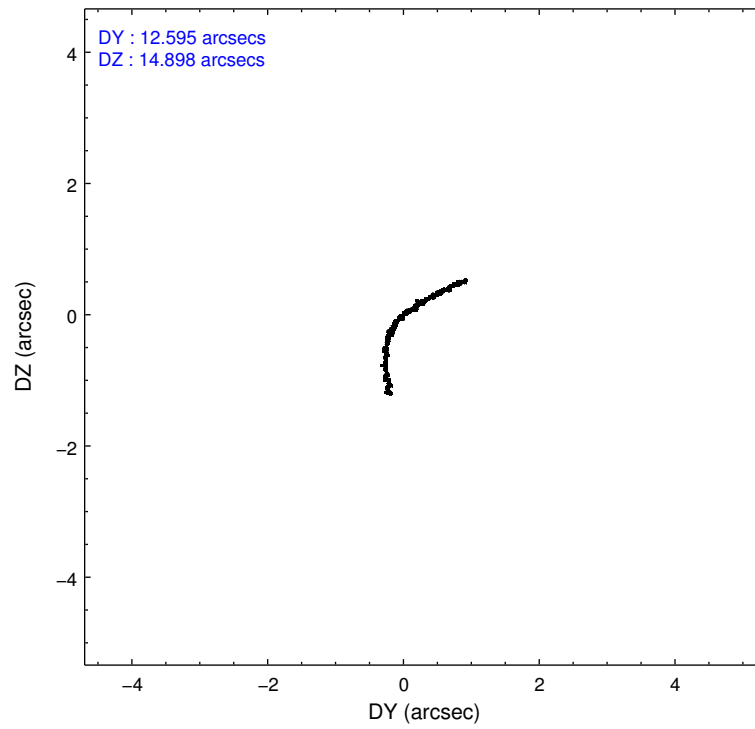
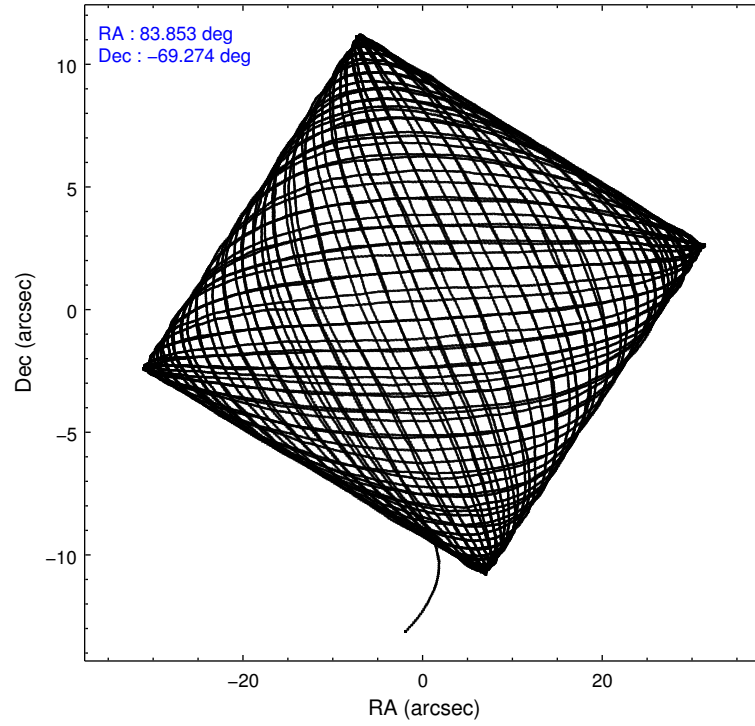
2.1.4 Events

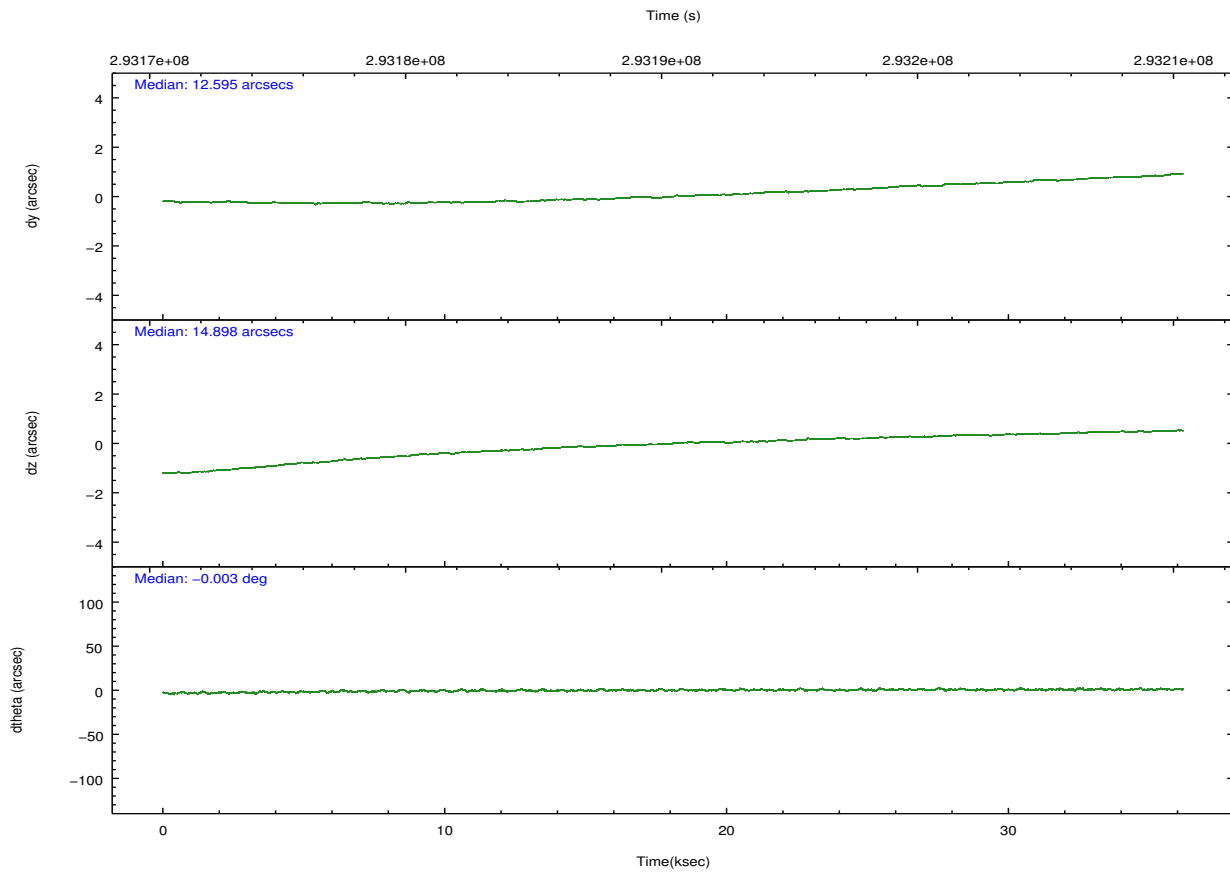
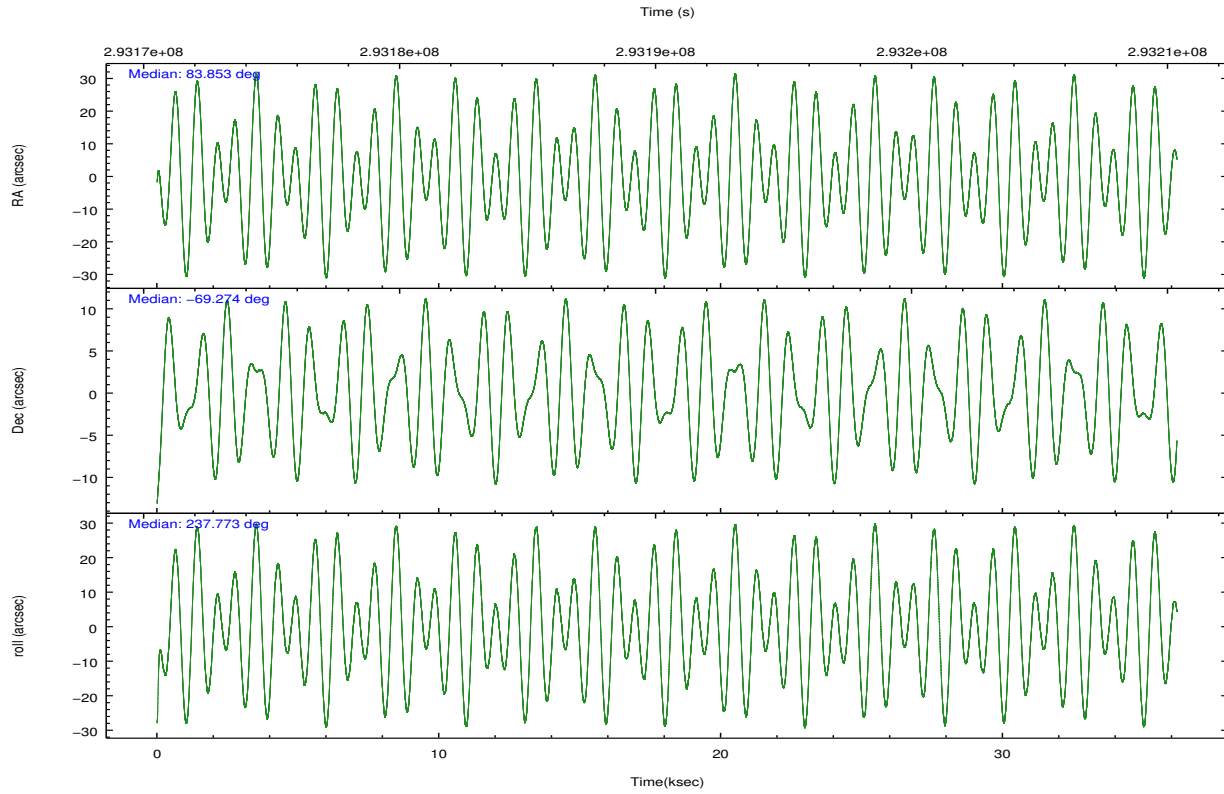
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	298555	411269	273002	363798	336358	264094	grade 0 events	18684	27833	14441	14731	26003	14640
rejected events	259887	213281	238778	205904	257454	229586		6%	6%	5%	4%	7%	5%
rejected %	87%	51%	87%	56%	76%	86%	grade 1 events	236	720	108	383	235	163
								0%	0%	0%	0%	0%	0%
							grade 2 events	7561	56211	6868	32820	16817	6764
								2%	13%	2%	9%	4%	2%
							grade 3 events	3501	8609	3317	14432	8366	3421
								1%	2%	1%	3%	2%	1%
							grade 4 events	3484	8399	3314	14204	7793	3328
								1%	2%	1%	3%	2%	1%
							grade 5 events	11750	30403	12123	34200	16075	12935
								3%	7%	4%	9%	4%	4%
							grade 6 events	5439	96955	6289	81734	19933	6358
								1%	23%	2%	22%	5%	2%
							grade 7 events	247900	182139	226542	171294	241136	216485
								83%	44%	82%	47%	71%	81%

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	83.855266	83.85330749359647	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-69.246831	-69.27417825800569	Subarray start row	1	1
[deg] Pointing Roll	237.616839	237.7716256082993	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)	293172545.184000	293171539.97853			
Observation start date	2007-04-17T04:48:00	2007-04-17T04:32:19			
[s] Observation end time (MET)	293208545.184000	293209283.04283			
Observation end date	2007-04-17T14:48:00	2007-04-17T15:01:23			
Read mode	TIMED	TIMED			

2.3 Aspect





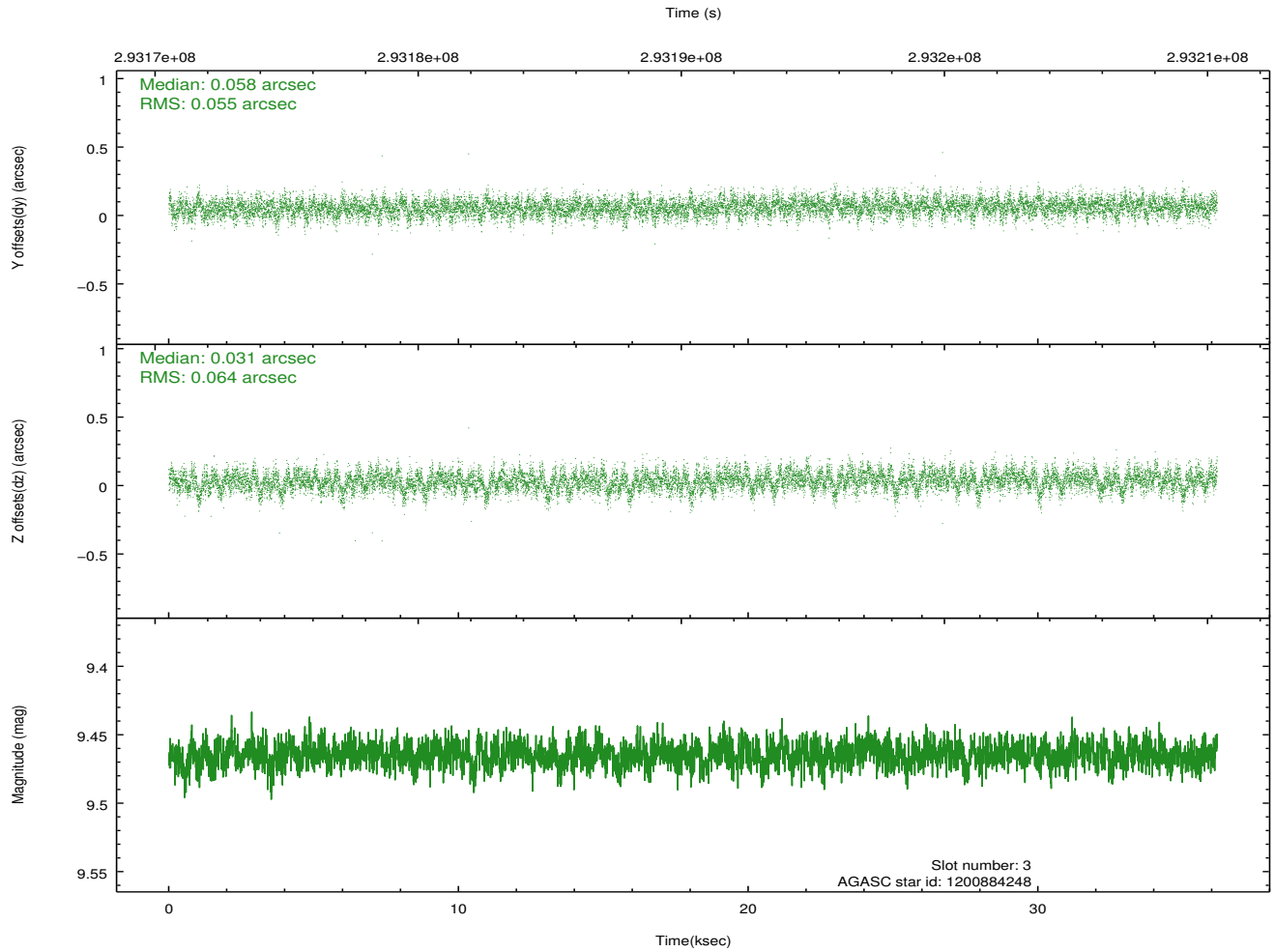
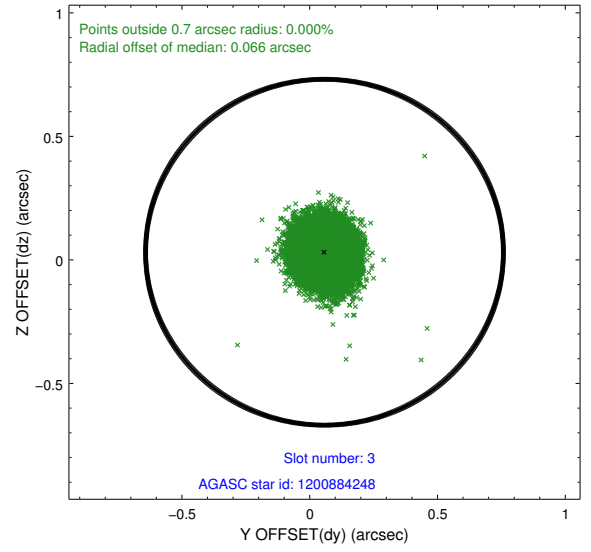
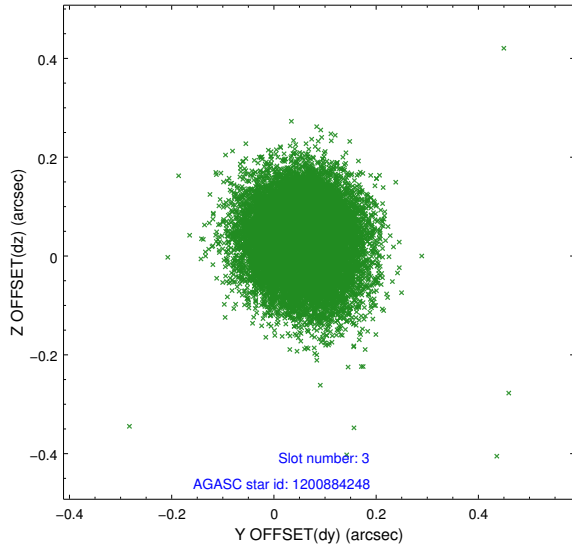
Slot Statistics

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	8822	-0.078	-0.113	0.018	0.040	0.000000	0.000000	-765.52	-1798.38
1	FID	ACIS-S-4	7.17	8824	0.185	0.068	0.014	0.028	0.000000	0.000000	2148.03	110.20
2	FID	ACIS-S-5	7.23	8824	-0.135	0.055	0.019	0.037	0.000000	0.000000	-1818.35	103.94
3	GUIDE	1200884248	9.46	17631	0.058	0.031	0.089	0.146	83.880915	-68.565170	-2090.56	-1285.63
4	GUIDE	1200885760	9.45	17636	0.073	0.098	0.131	0.219	83.723637	-68.777667	-1334.24	-1049.16
5	GUIDE	1201019200	9.46	17626	0.010	0.133	0.100	0.163	84.213591	-68.777384	-1676.12	-509.91
6	GUIDE	1201020040	8.58	17645	-0.000	-0.105	0.056	0.092	85.379163	-68.879396	-2154.94	973.92
7	GUIDE	1201542672	8.19	17638	-0.140	-0.150	0.071	0.112	84.492488	-69.957531	1741.70	2036.06

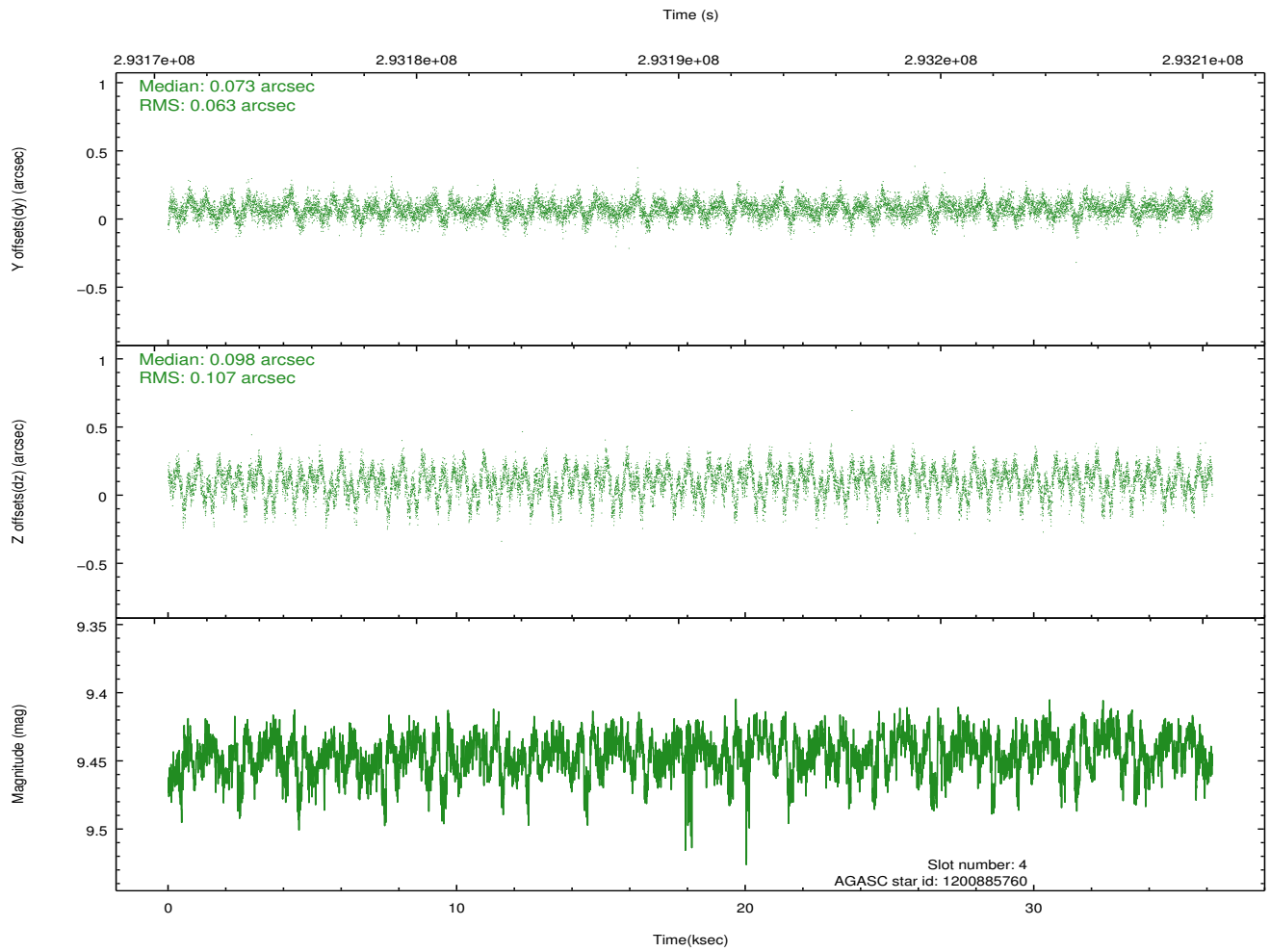
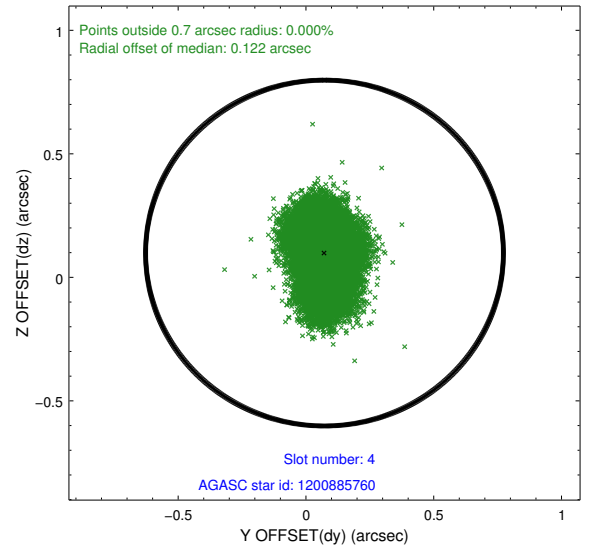
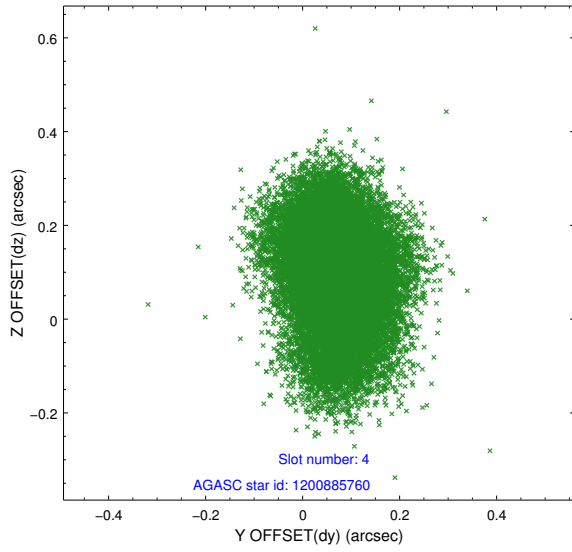
∞

2.4 Star Slots

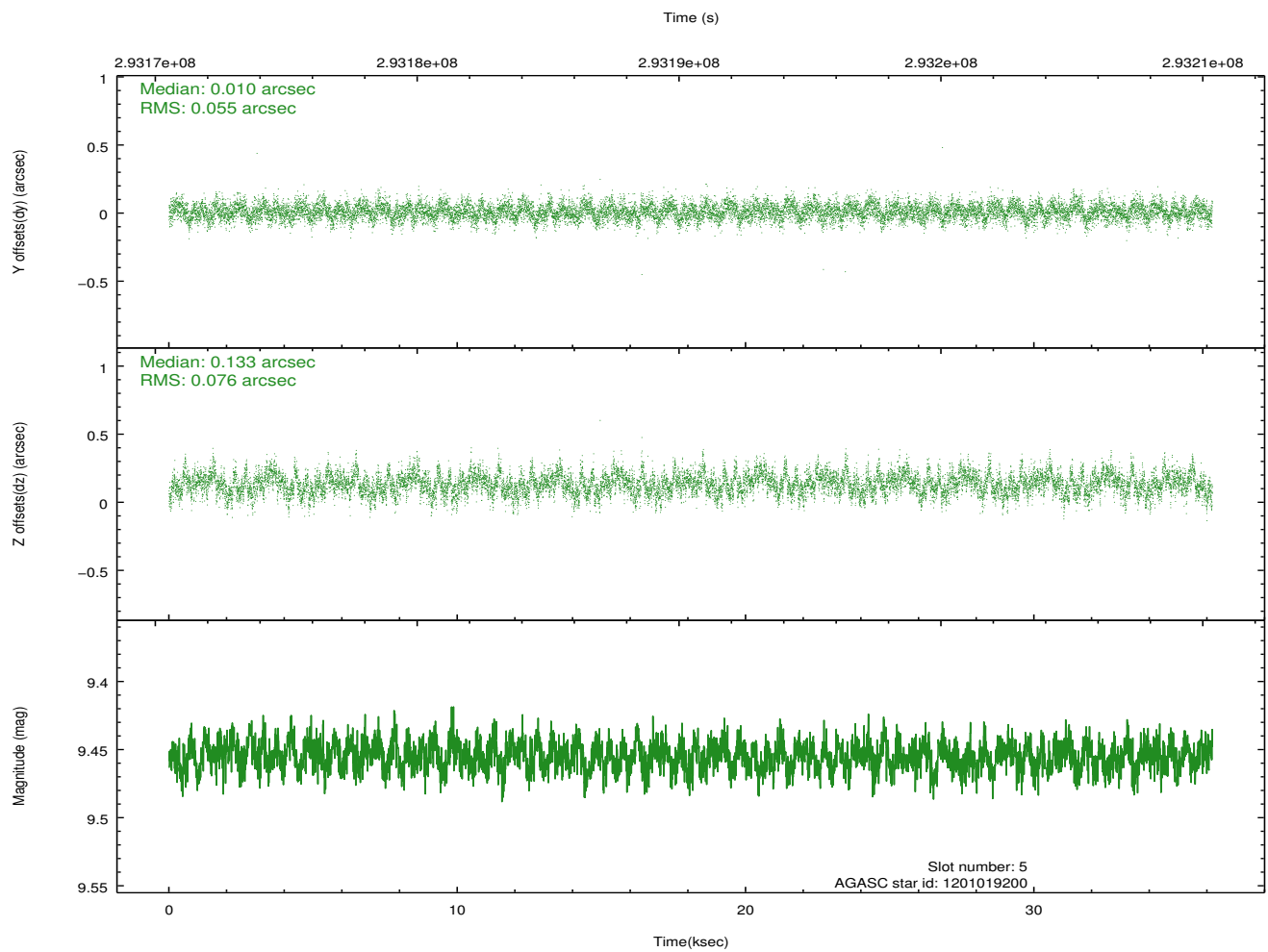
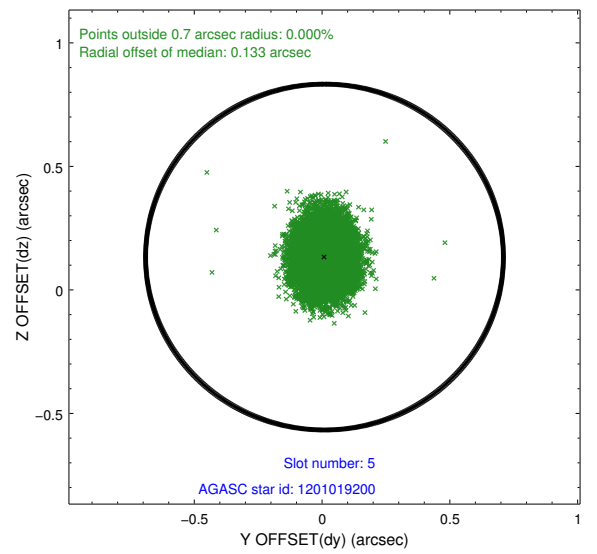
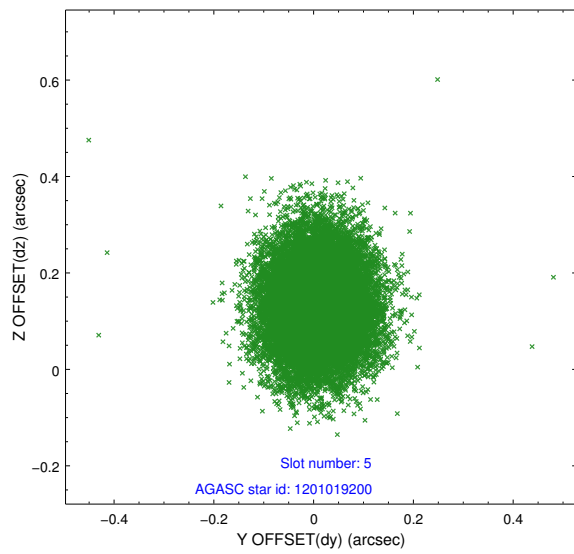
2.4.1 Slot 3



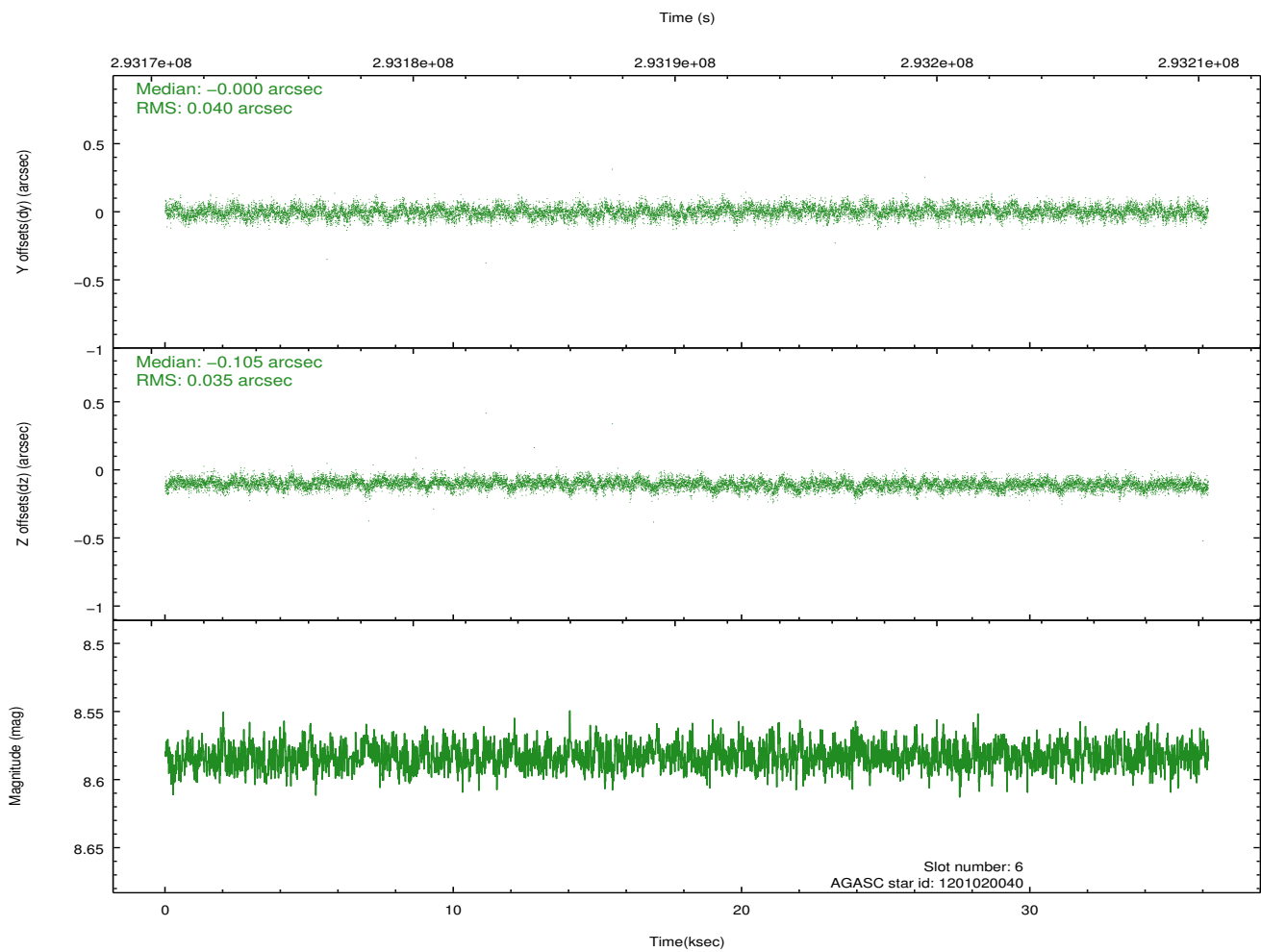
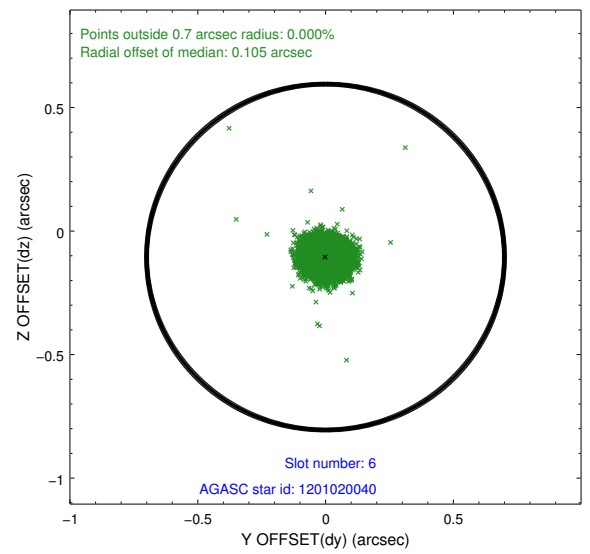
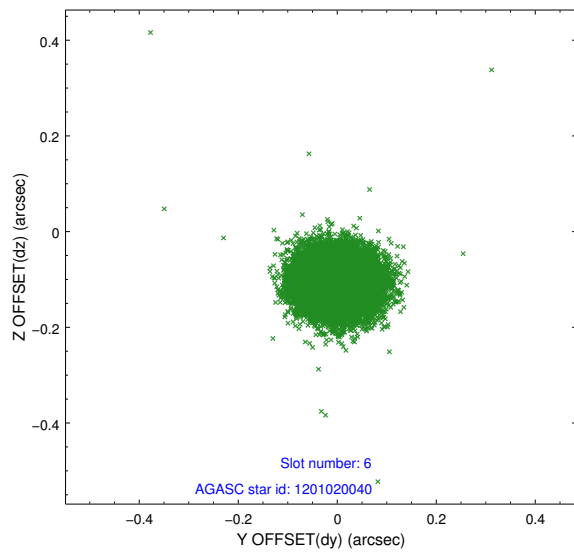
2.4.2 Slot 4



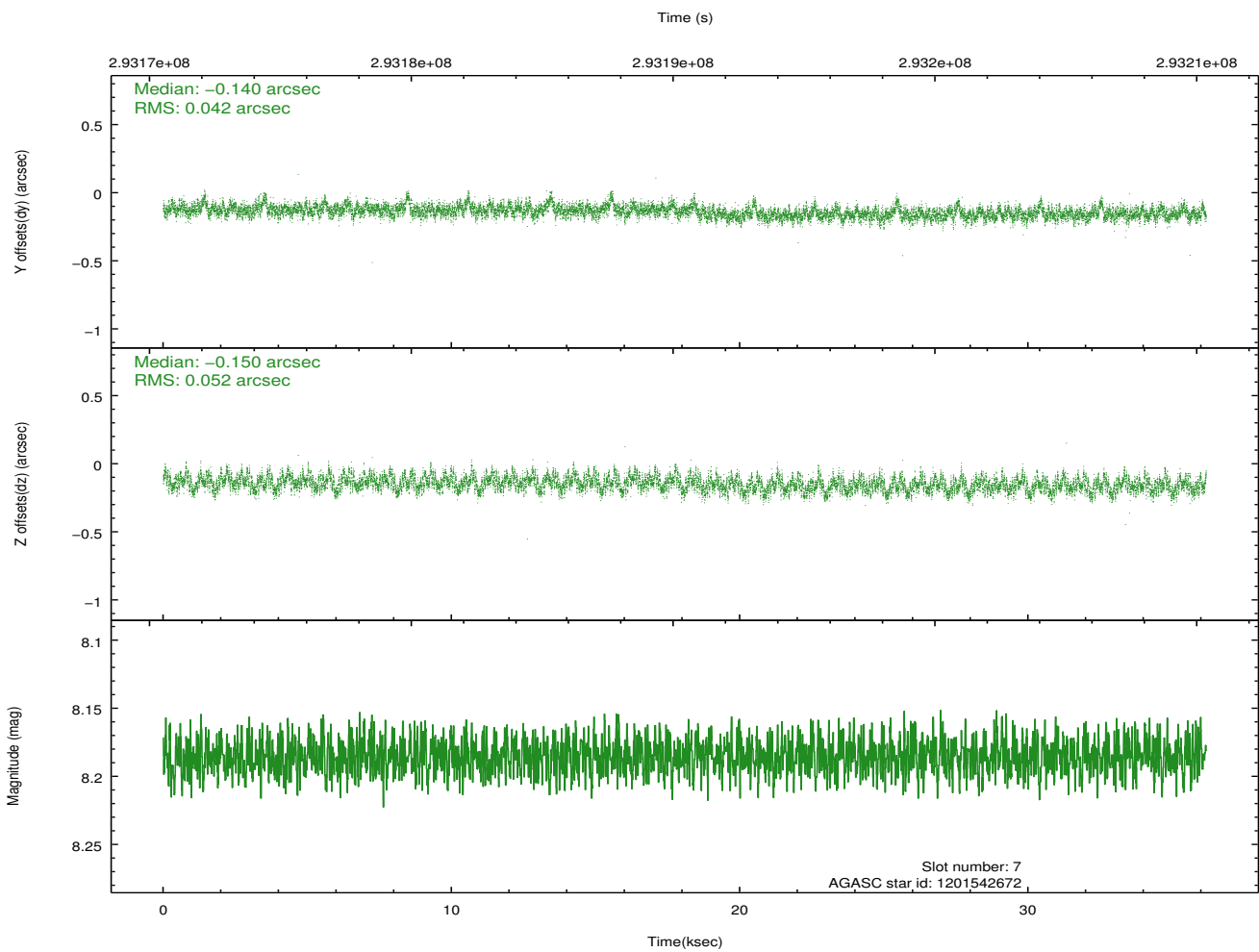
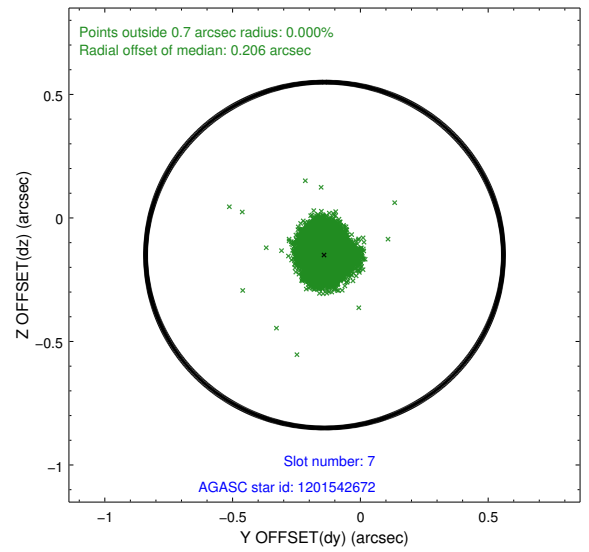
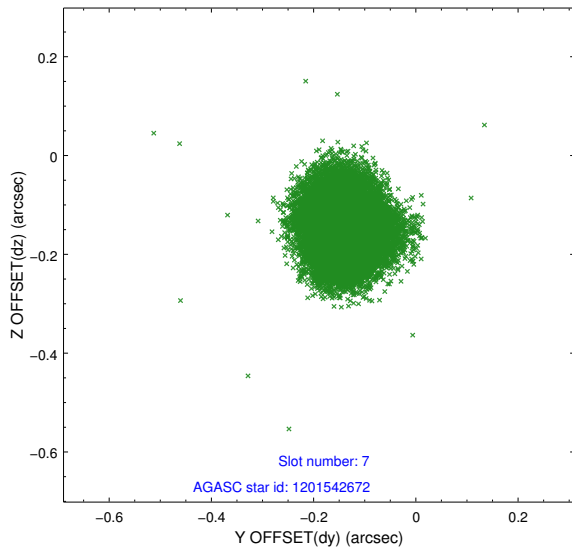
2.4.3 Slot 5



2.4.4 Slot 6

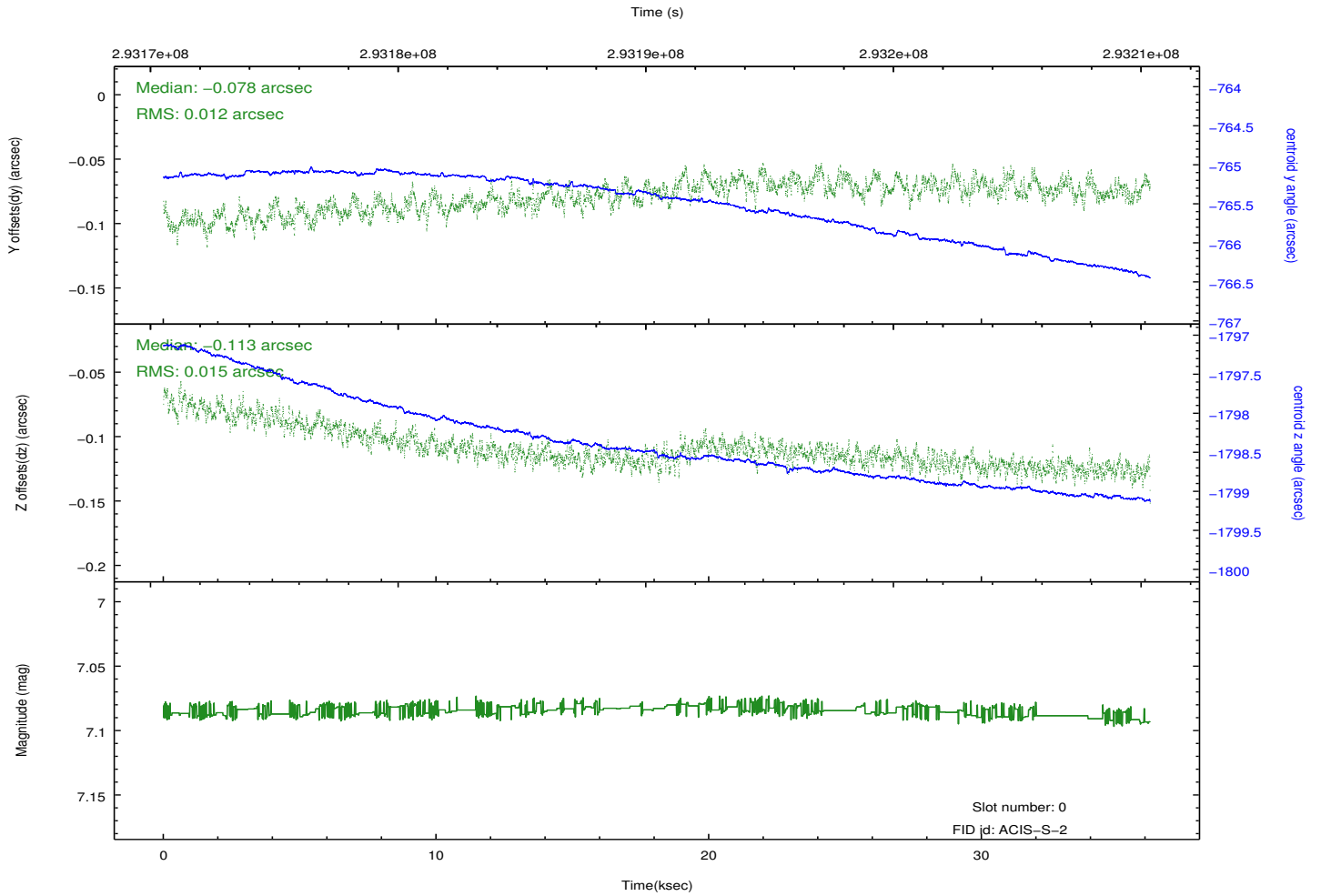
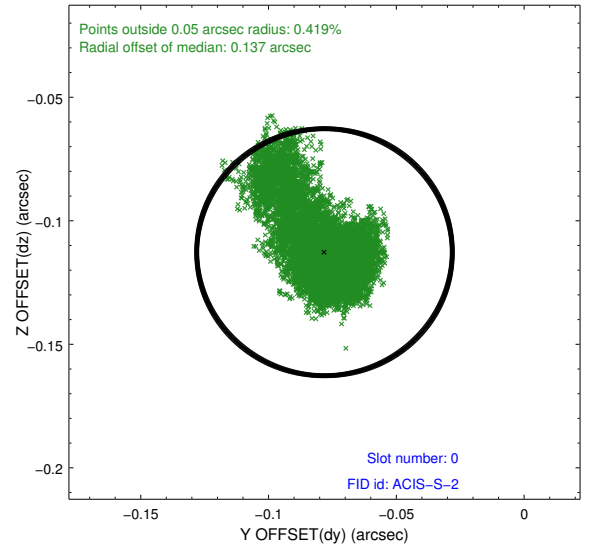
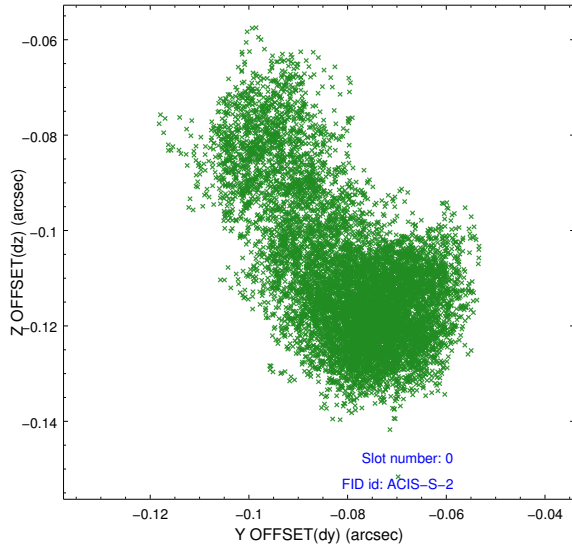


2.4.5 Slot 7

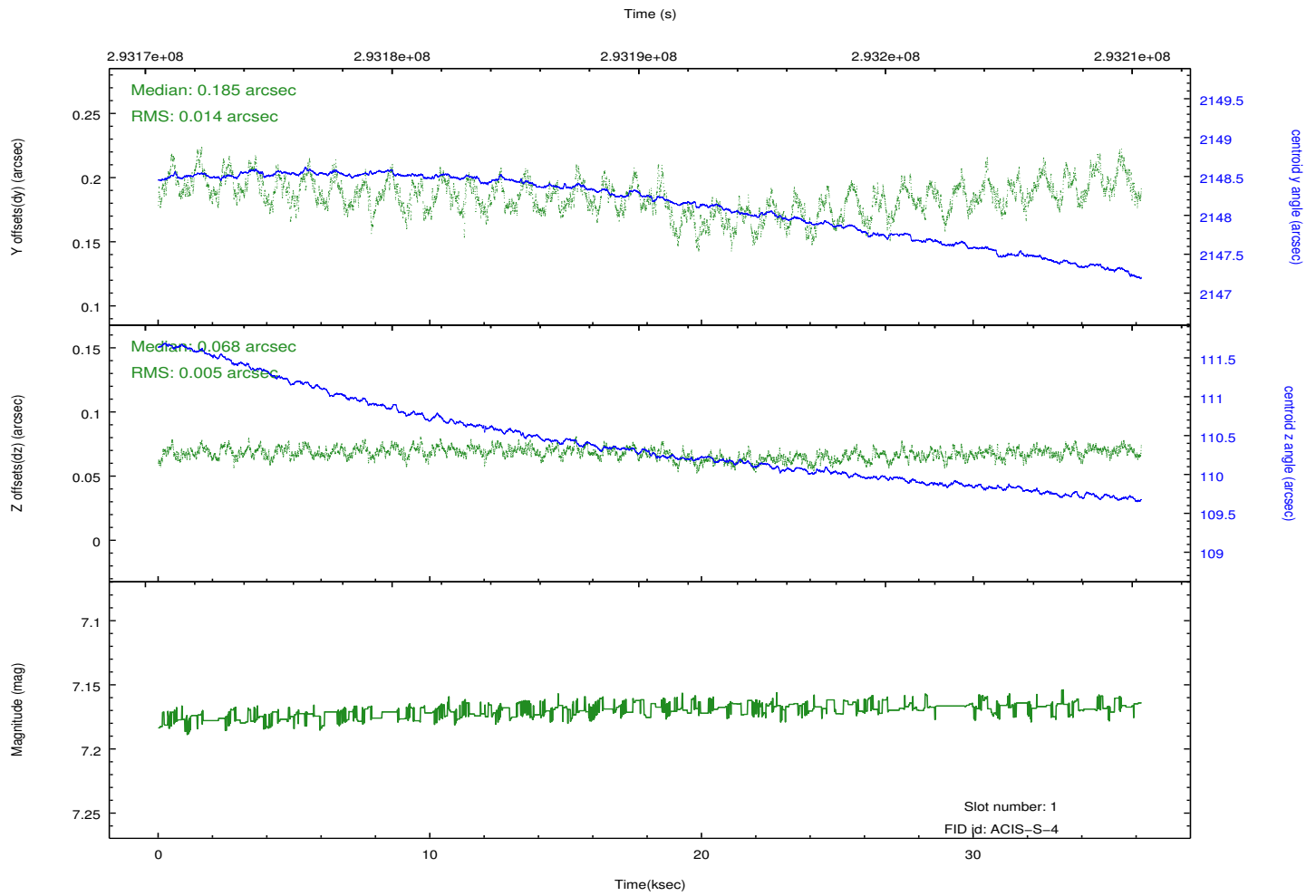
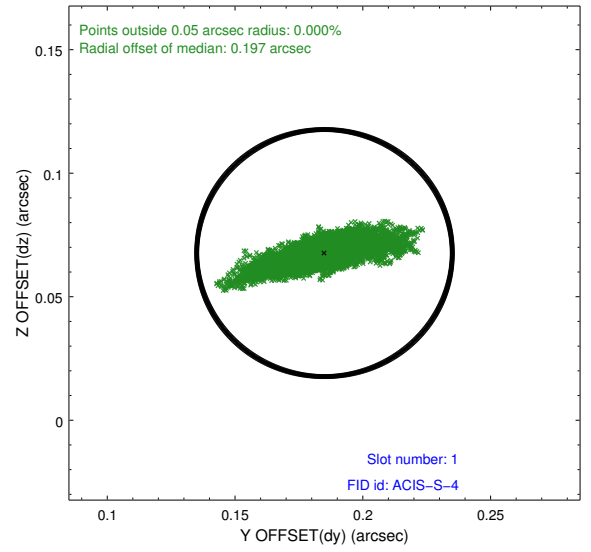
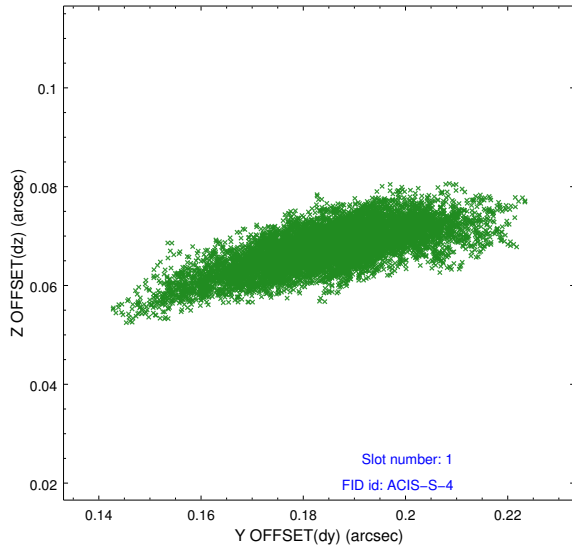


2.5 FID Slots

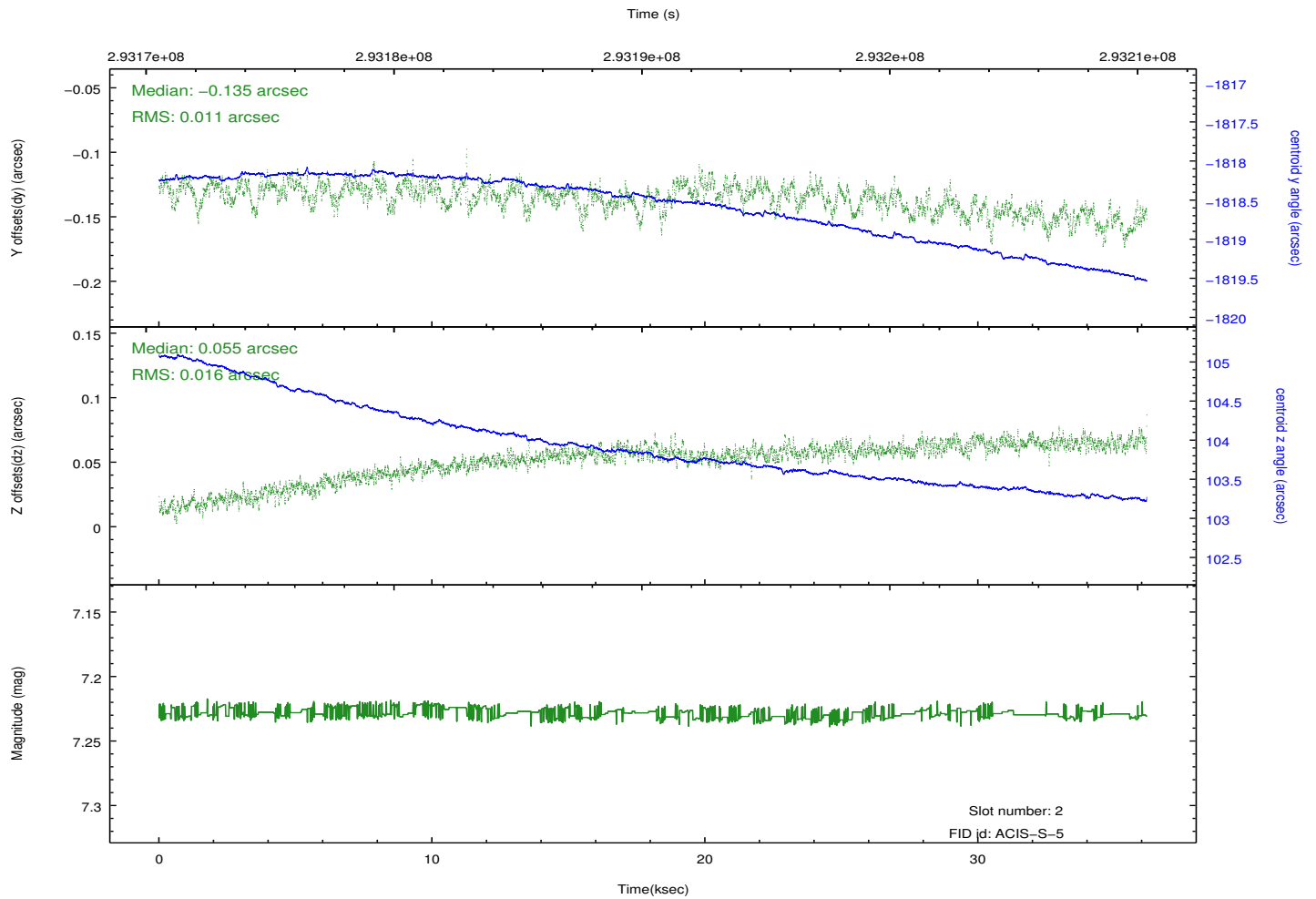
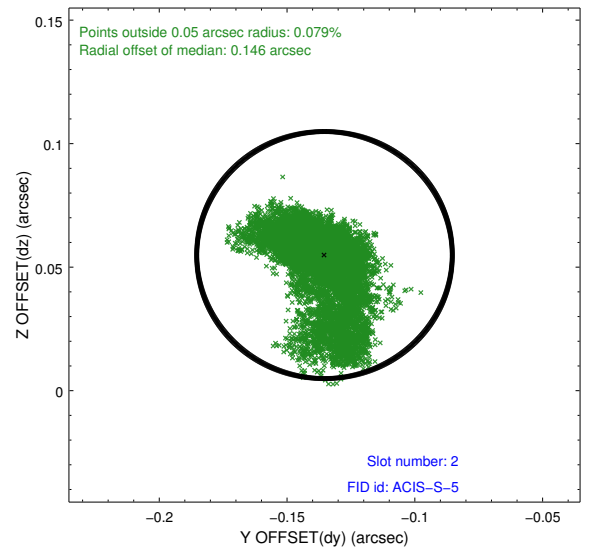
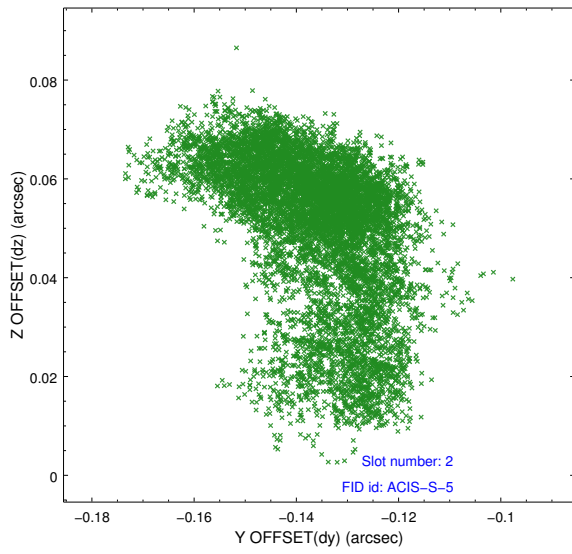
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

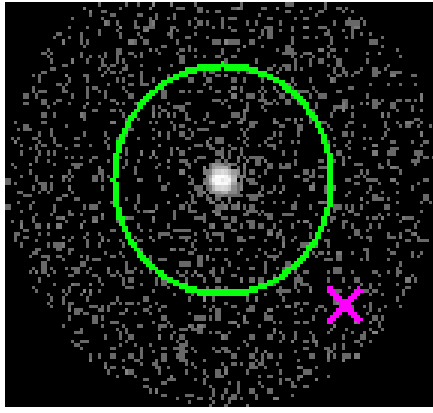


3 Gratings

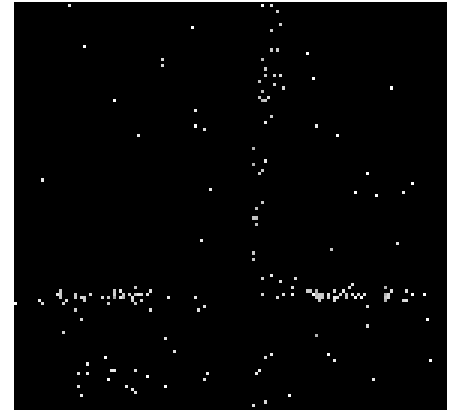
3.1 HEG Arm



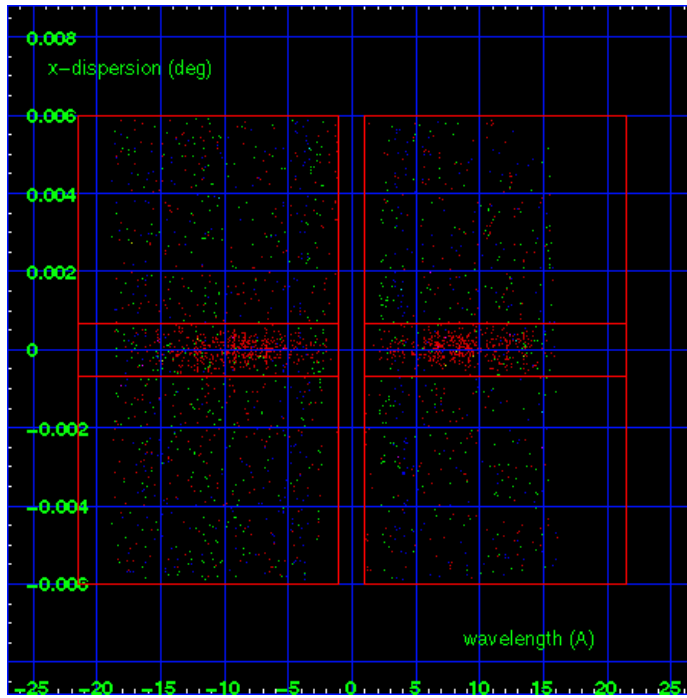
HEG Order Sort 123



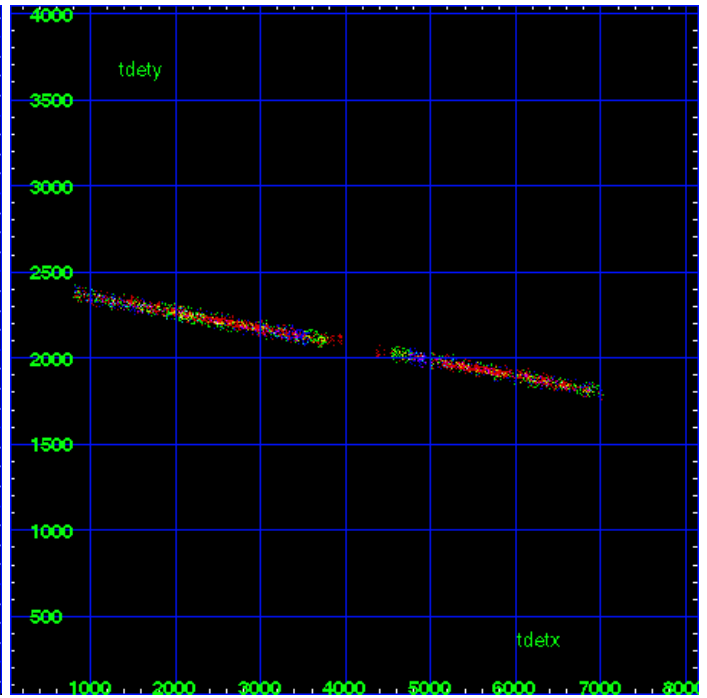
HEG Zero Order



HEG Order Sort ALL

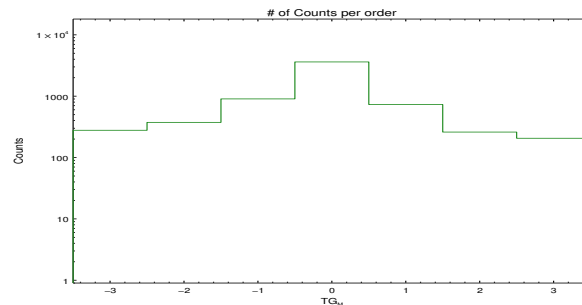


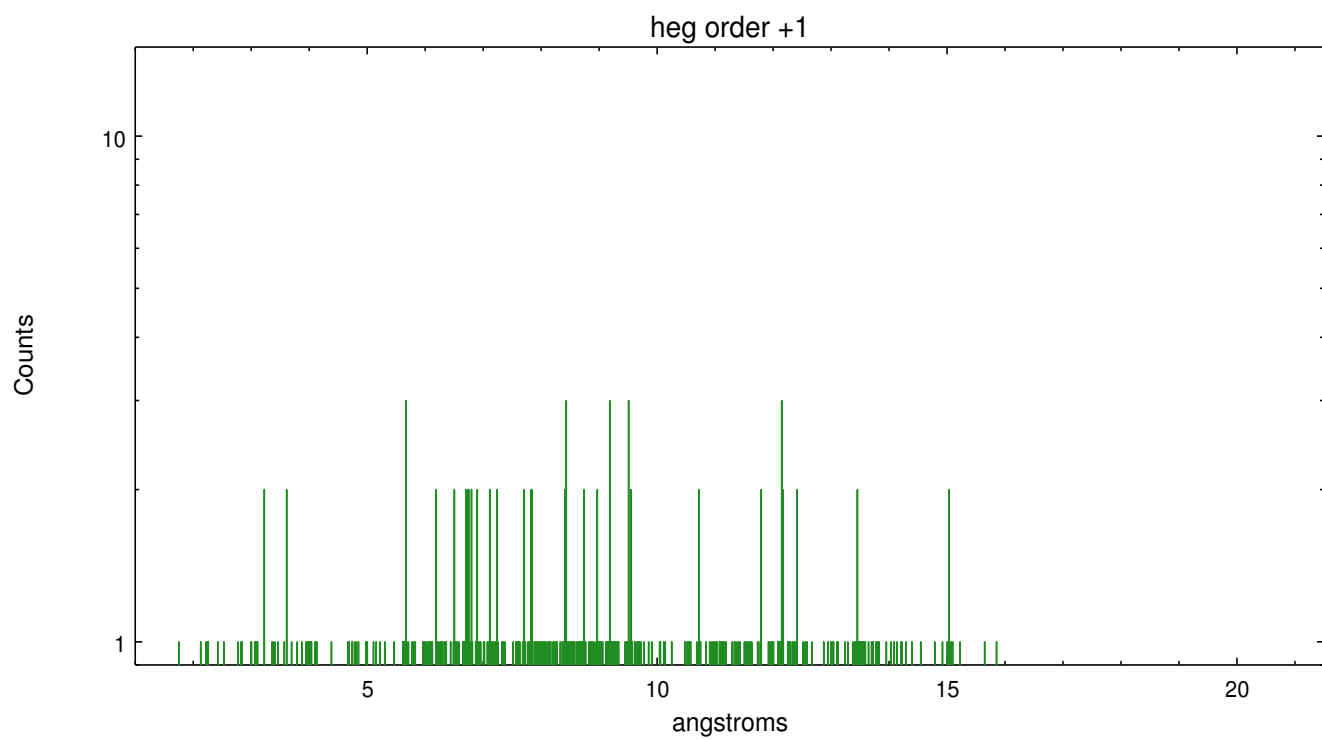
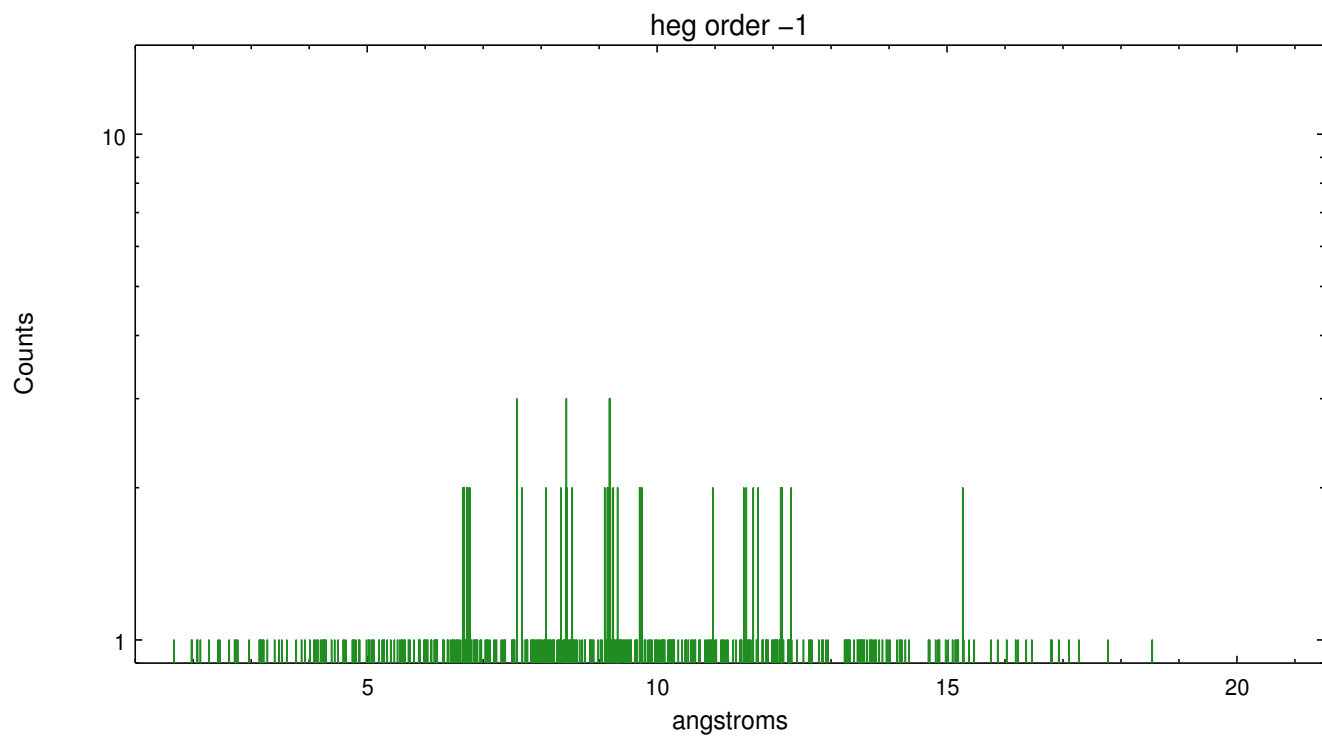
Spot Image HEG



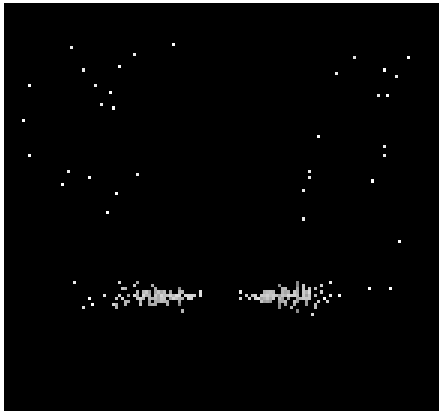
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	278	374	903	3616	731	260	206

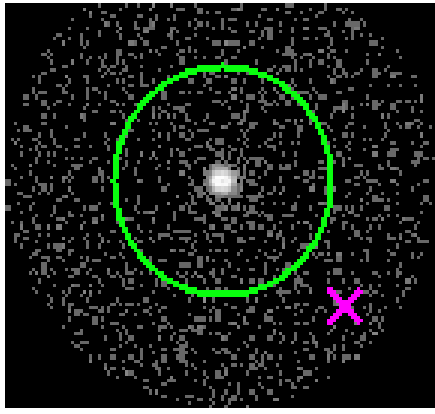




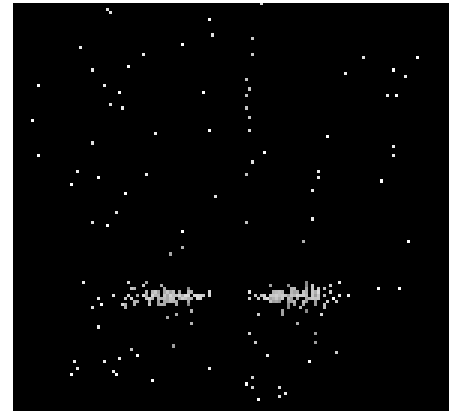
3.2 MEG Arm



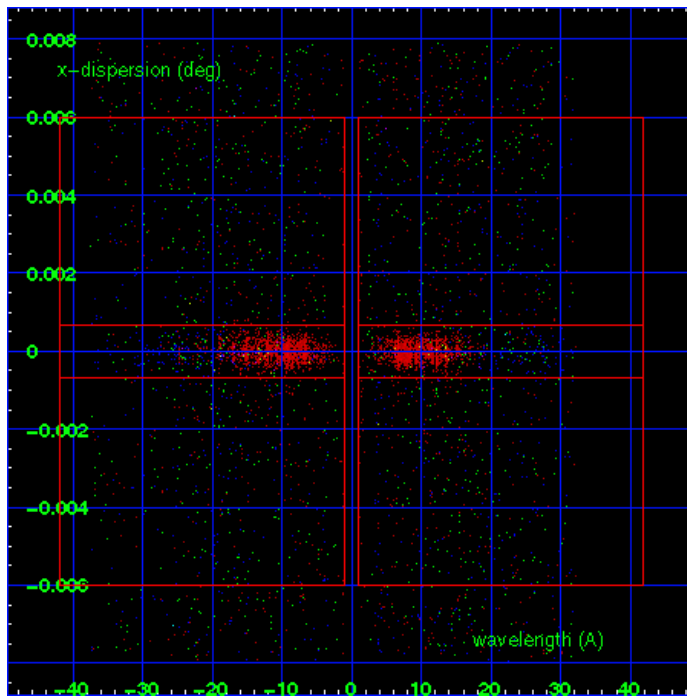
MEG Order Sort 123



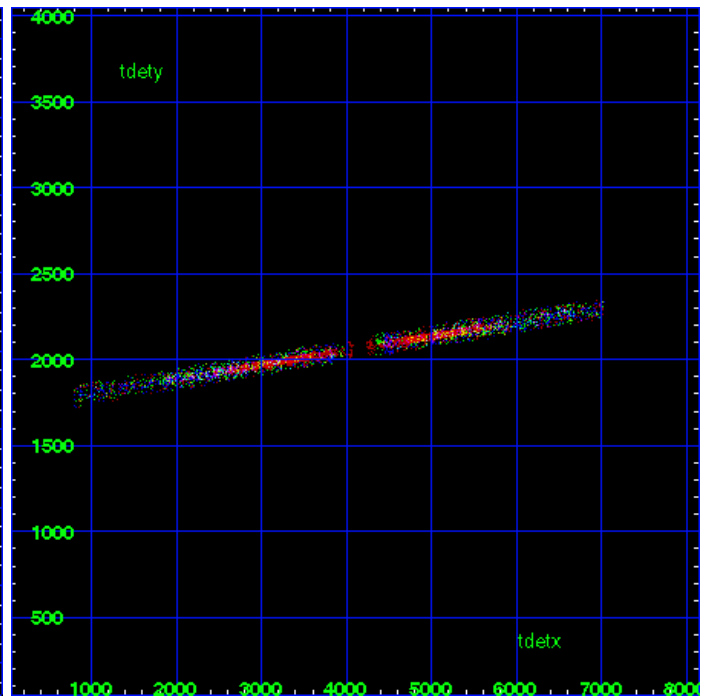
MEG Zero Order



MEG Order Sort ALL

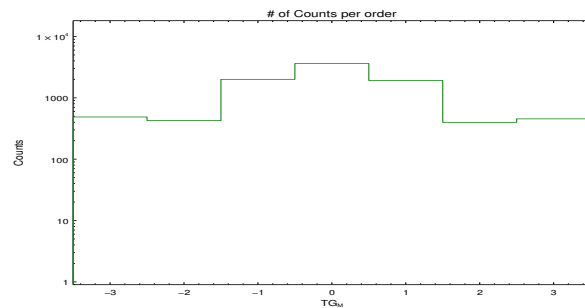


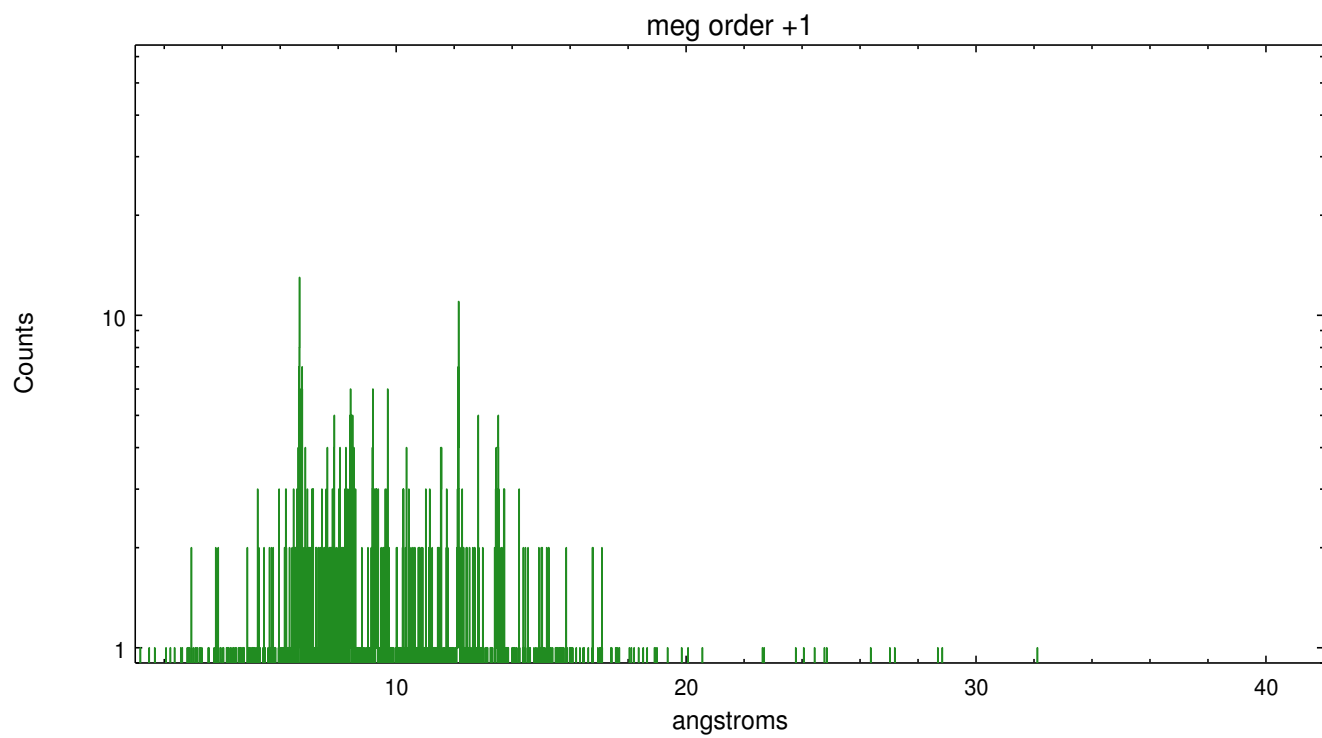
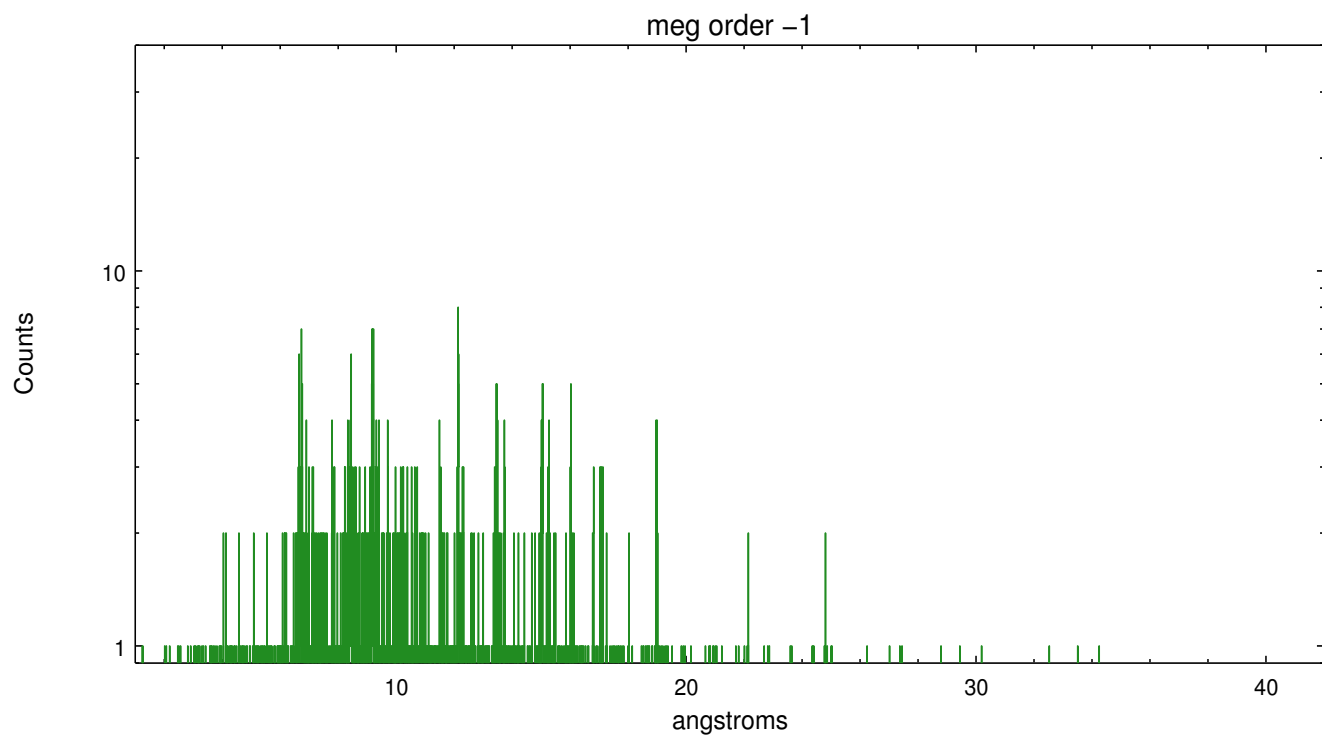
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	487	426	1999	3616	1918	398	454





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	36.135

A.2 Comments