

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 16702 - L2 Version 1
Chandra X-Ray Center

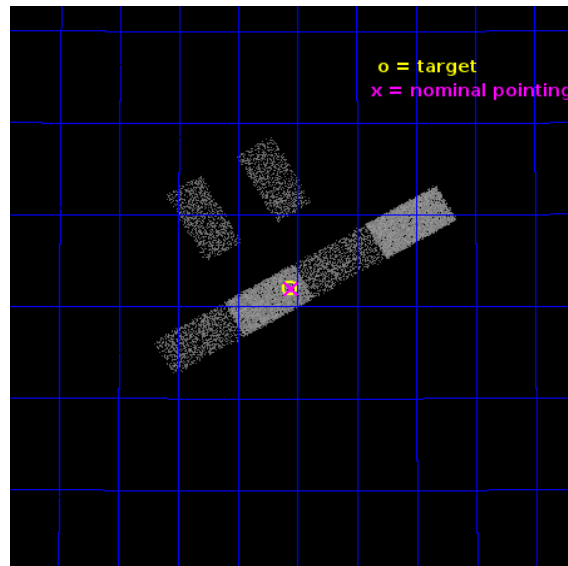
L2 Processing Date : Jul 15 2015

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1 Front

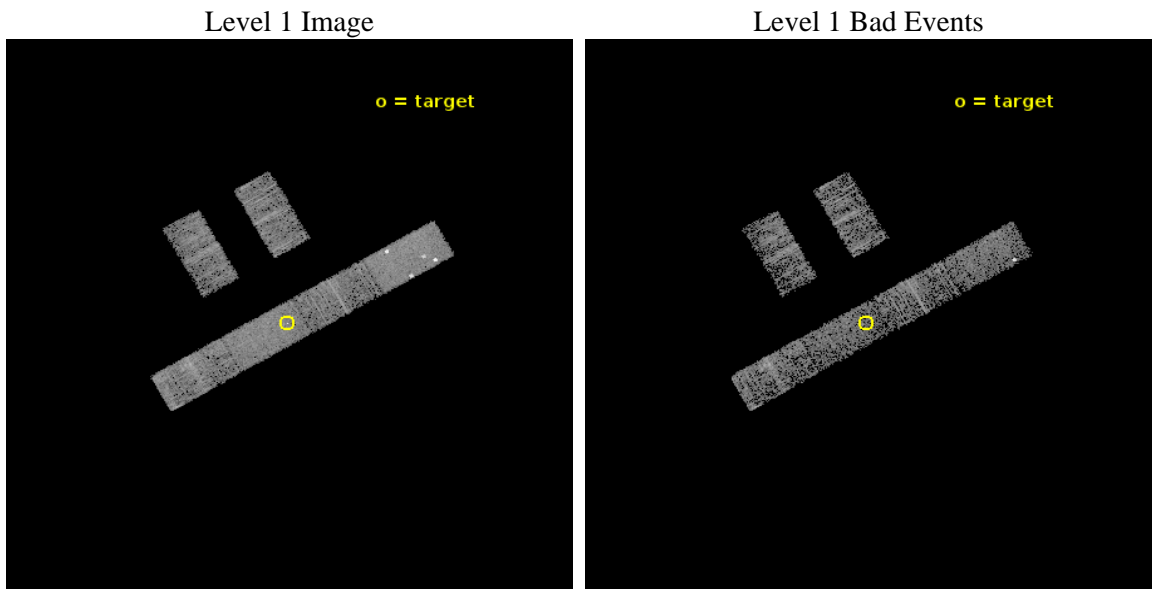
seq_num	401624	Sequence number
obs_id	16702	Observation id
title	Following a black hole X-ray transient through the transition into quiescence	Proposal title
observer	Dr. RICHARD PLOTKIN	Principal investigator
object	V404Cyg	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	306.015958	Observer's specified target RA [deg]
dec_targ	33.867281	Observer's specified target Dec [deg]
ra_nom	306.01249320942	Nominal RA [deg]
dec_nom	33.865882204809	Nominal Dec [deg]
roll_nom	150.15857975039	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4102.1998913288	Sum of GTIs [s]
livetime	4010.7546845217	Livetime [s]
ontime2	4102.1998913288	Sum of GTIs [s]
ontime3	4102.1966776848	Sum of GTIs [s]
ontime5	4102.1998913288	Sum of GTIs [s]
ontime6	4102.1998913288	Sum of GTIs [s]
ontime7	4102.1998913288	Sum of GTIs [s]
ontime8	4102.1556377411	Sum of GTIs [s]
l2events	19839	Number of level 2 events



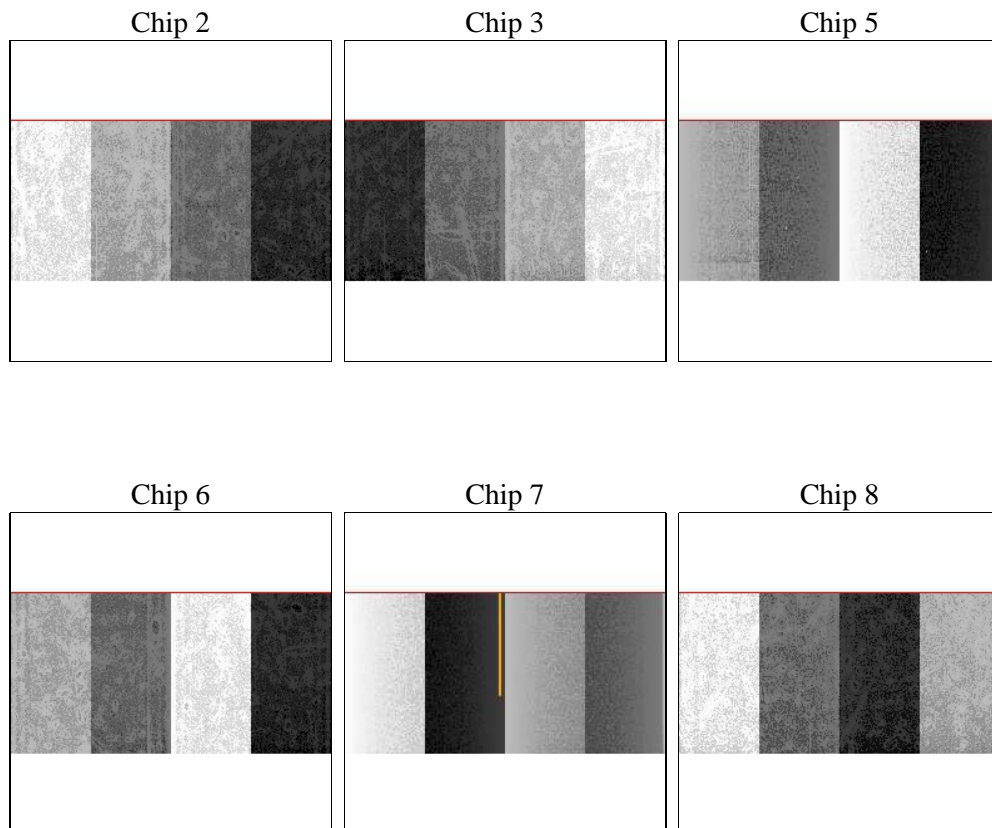
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	4102.1998913288	Sum of GTIs [s]
caldsver	4.6.8	 	ontime2	4102.1998913288	Sum of GTIs [s]
date	2015-07-15T17:41:39	Date and time of file creation	ontime3	4102.1966776848	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	4102.1998913288	Sum of GTIs [s]
			ontime6	4102.1998913288	Sum of GTIs [s]
			ontime7	4102.1998913288	Sum of GTIs [s]
			ontime8	4102.1556377411	Sum of GTIs [s]
			l1events	87178	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			ra_pos	(4076.22, 4105.65)	src1a sky pixel position

2.1.4 Events

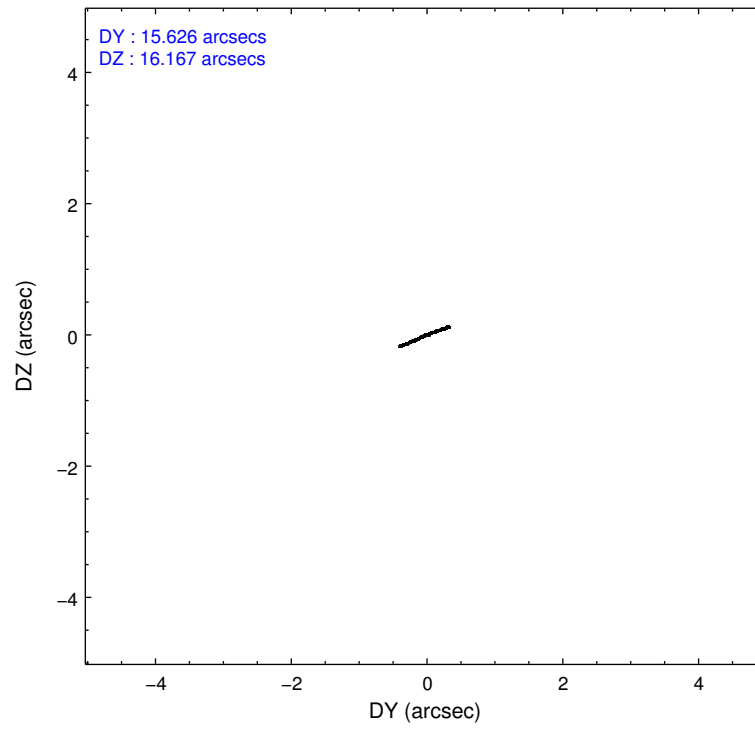
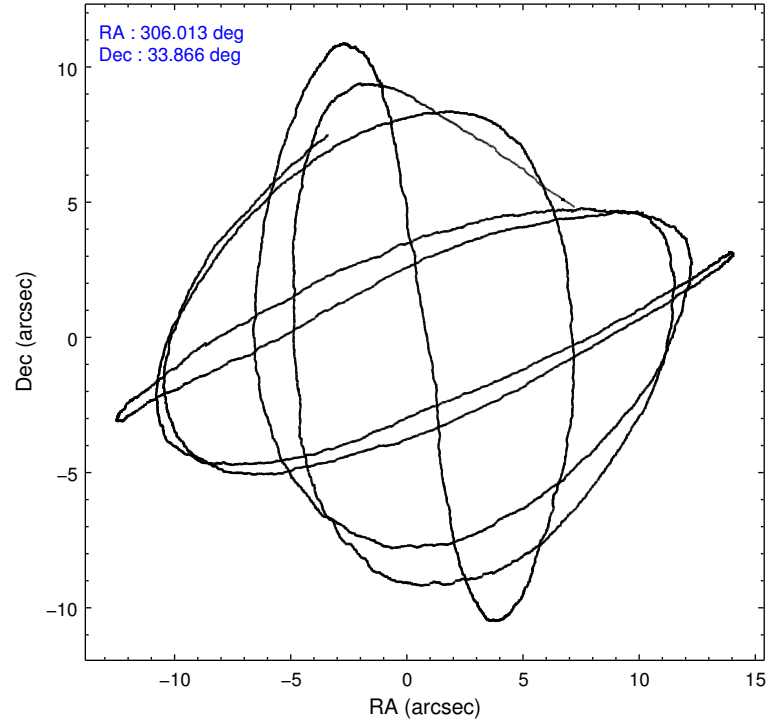
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	11671	10752	23643	11542	15190	14380
rejected events	10338	9406	10390	9912	8171	10868
rejected %	88%	87%	43%	85%	53%	75%

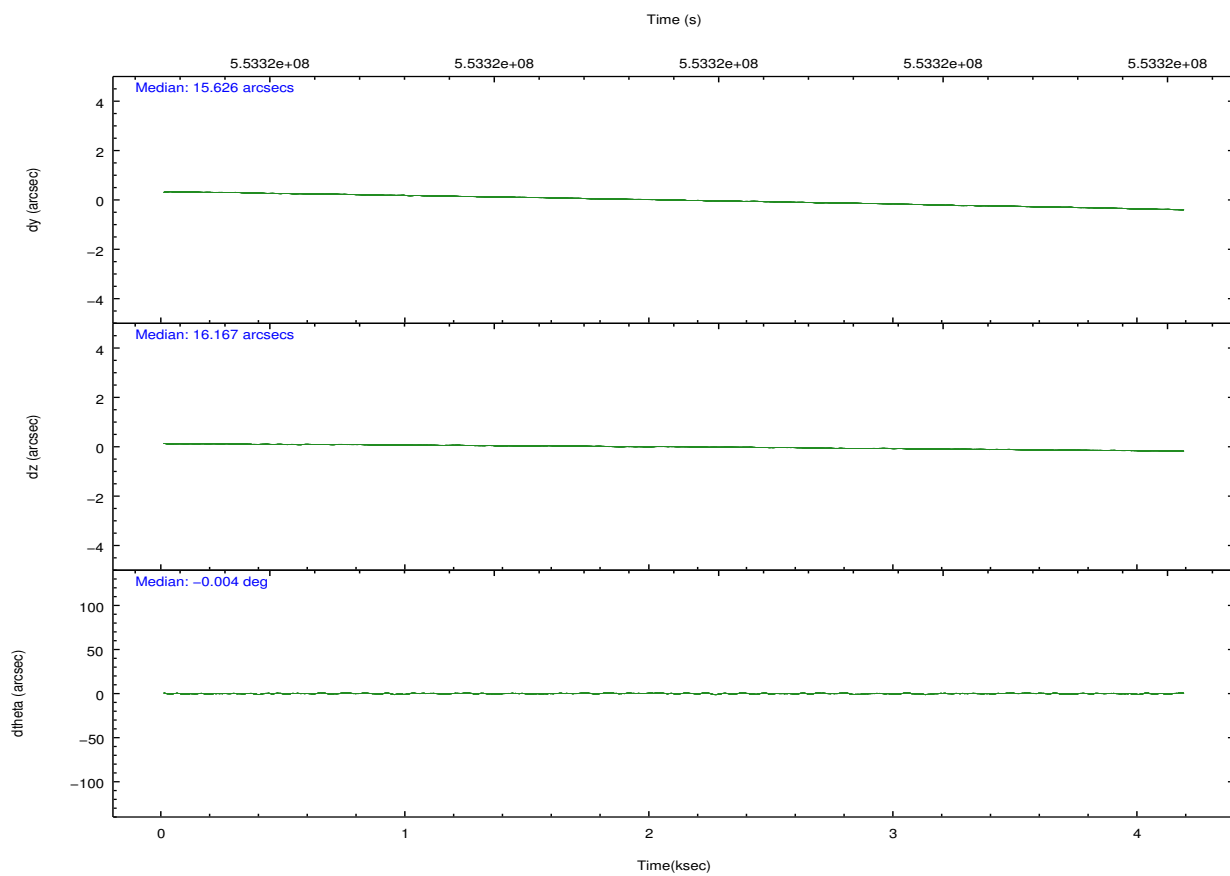
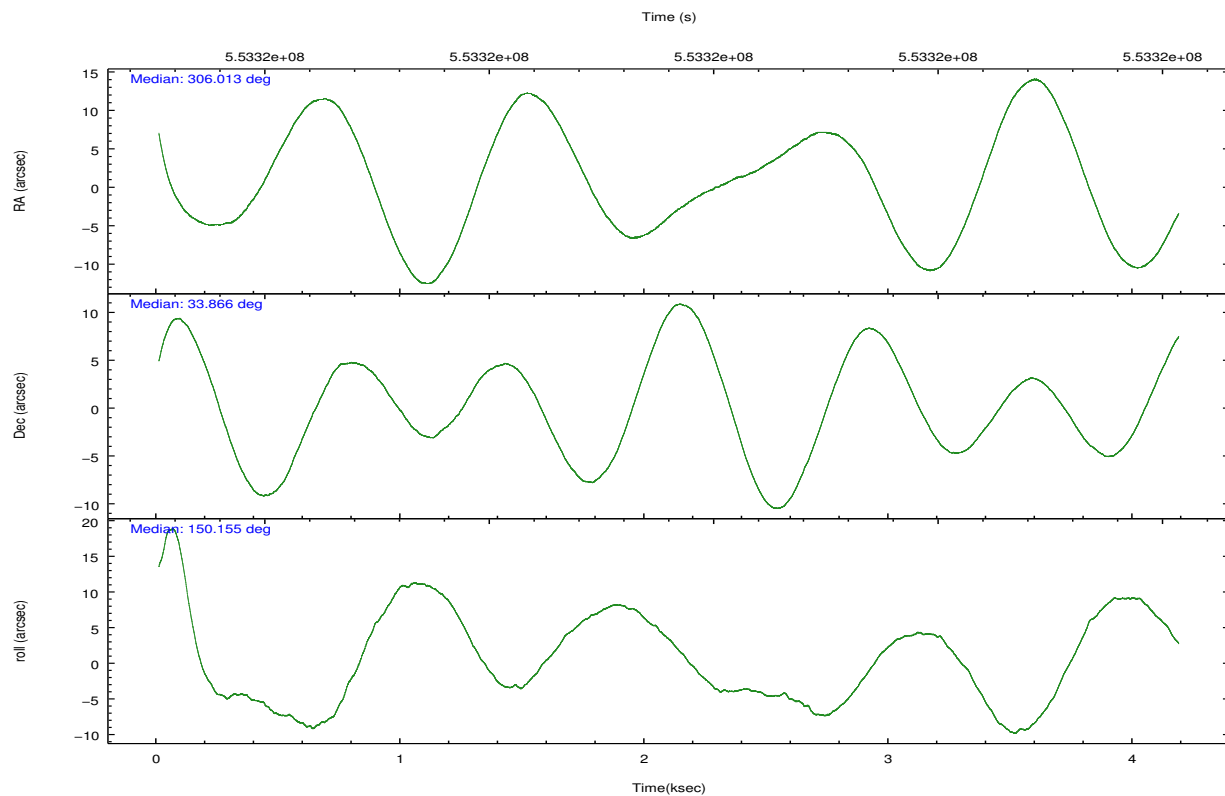
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	544	503	4302	671	765	1061
	4%	4%	18%	5%	5%	7%
grade 1 events	4	6	108	3	15	11
	0%	0%	0%	0%	0%	0%
grade 2 events	267	274	3726	319	1435	864
	2%	2%	15%	2%	9%	6%
grade 3 events	142	145	399	159	648	328
	1%	1%	1%	1%	4%	2%
grade 4 events	163	160	285	175	676	327
	1%	1%	1%	1%	4%	2%
grade 5 events	464	518	1956	555	1454	750
	3%	4%	8%	4%	9%	5%
grade 6 events	217	265	4555	308	3500	935
	1%	2%	19%	2%	23%	6%
grade 7 events	9870	8881	8312	9352	6697	10104
	84%	82%	35%	81%	44%	70%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	306.045651	306.0124932094203	CCD I2 on	Y	Y
[deg] Pointing Dec	33.866326	33.86588220480903	CCD I3 on	Y	Y
[deg] Pointing Roll	149.983450	150.1585797503879	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O1	Y
[s] Observation start time (MET)	553318914.184000	553317453.68388	CCD S5 on	N	N
Observation start date	2015-07-15T03:40:46	2015-07-15T03:17:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	553322914.184000	553324130.53426	On-chip summing requested	N	N
Observation end date	2015-07-15T04:47:26	2015-07-15T05:08:50	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.8

2.3 Aspect



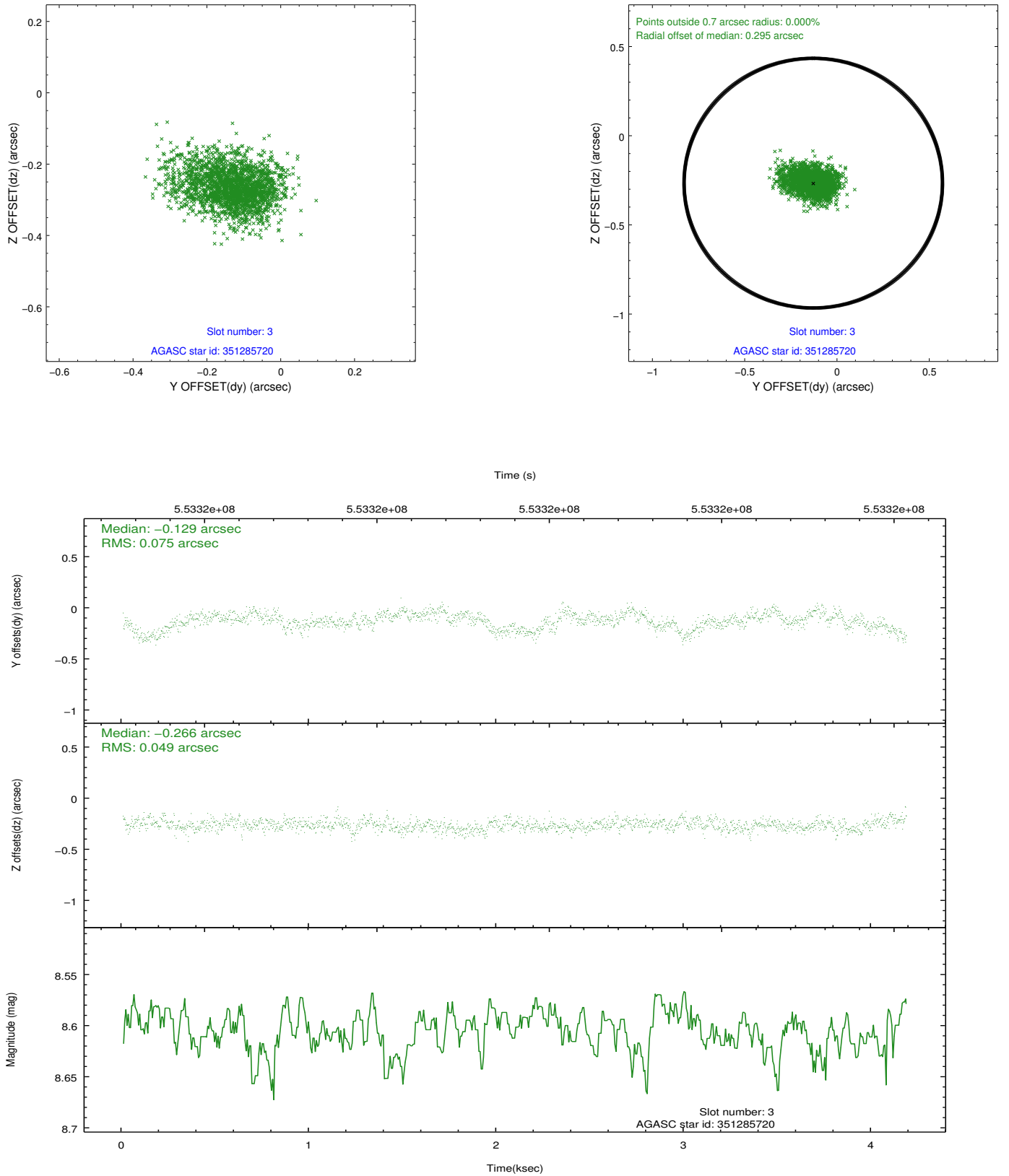


Slot Statistics

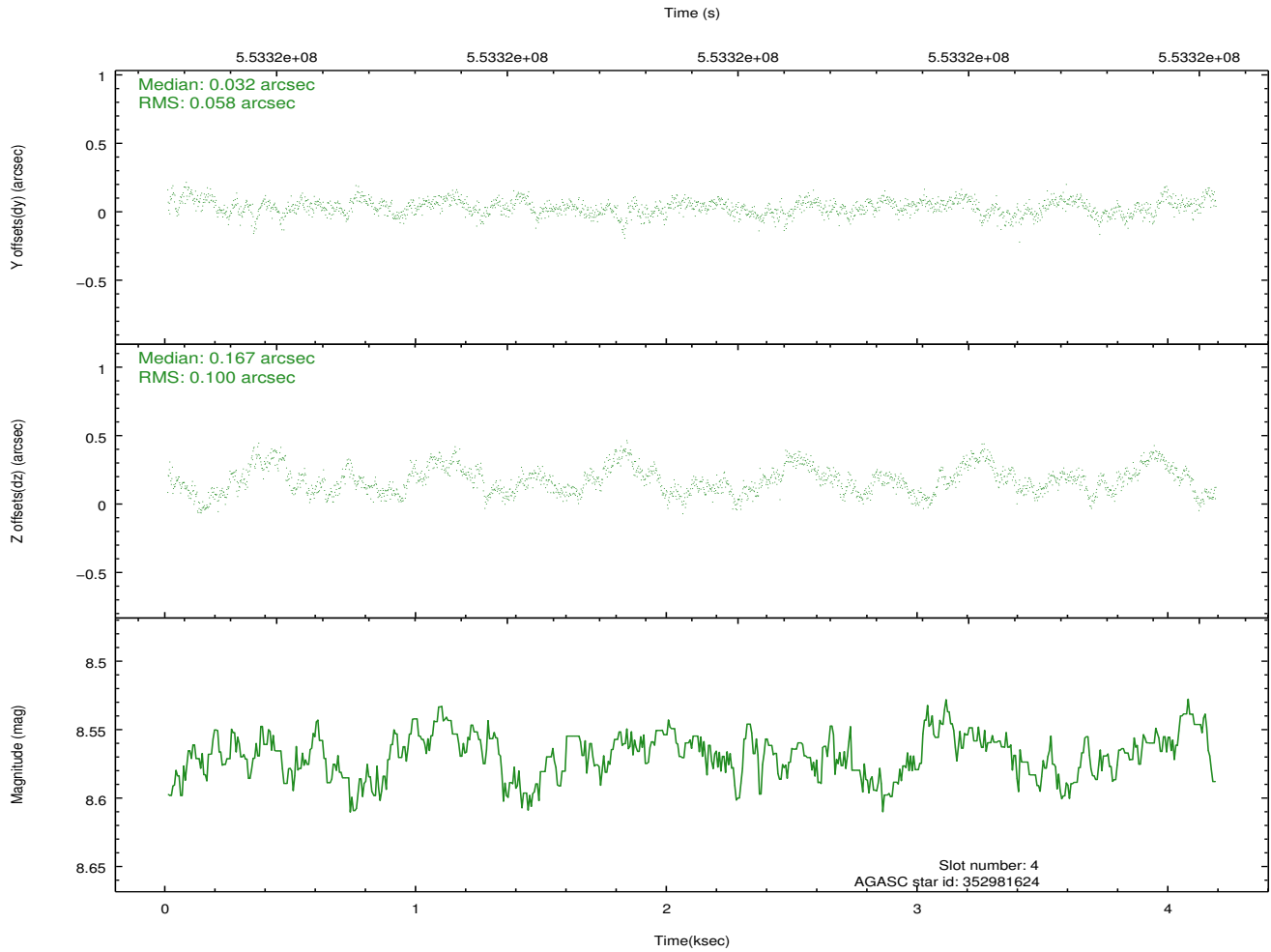
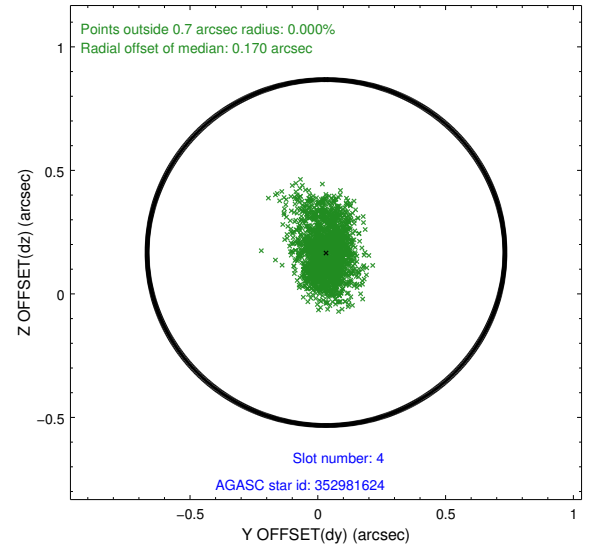
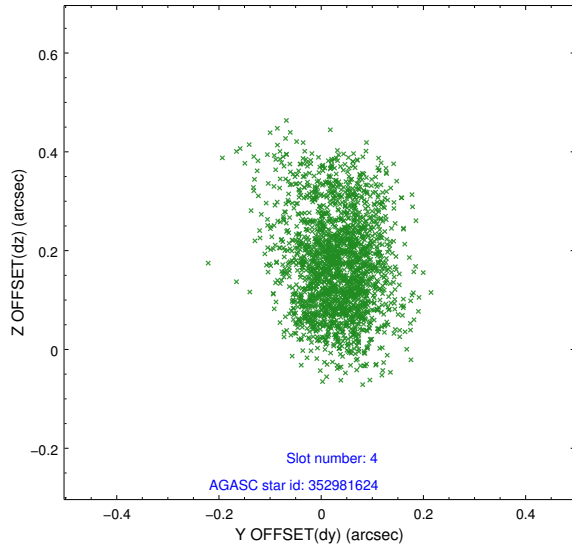
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.07	1020	-0.133	-0.035	0.008	0.012	0.000000	0.000000	-768.73	-1737.60
1	FID		ACIS-S-4	7.15	1020	0.315	0.073	0.007	0.013	0.000000	0.000000	2144.31	169.45
2	FID		ACIS-S-5	7.17	1020	-0.214	-0.030	0.008	0.014	0.000000	0.000000	-1819.75	164.71
3	GUIDE	used	351285720	8.60	2038	-0.129	-0.266	0.095	0.162	305.127244	33.817841	2296.74	1514.40
4	GUIDE	used	352981624	8.57	2039	0.032	0.167	0.121	0.207	306.081516	34.222239	549.89	-1161.94
5	GUIDE	used	352985512	8.88	2039	0.259	0.257	0.102	0.167	306.411799	34.272698	-209.61	-1813.66
6	GUIDE	used	351282120	9.24	2039	-0.159	-0.273	0.142	0.219	305.232648	33.763598	1925.63	1529.98
7	GUIDE	used	351276136	8.77	2037	0.005	0.100	0.135	0.213	305.889488	34.377539	1323.77	-1360.83

2.4 Star Slots

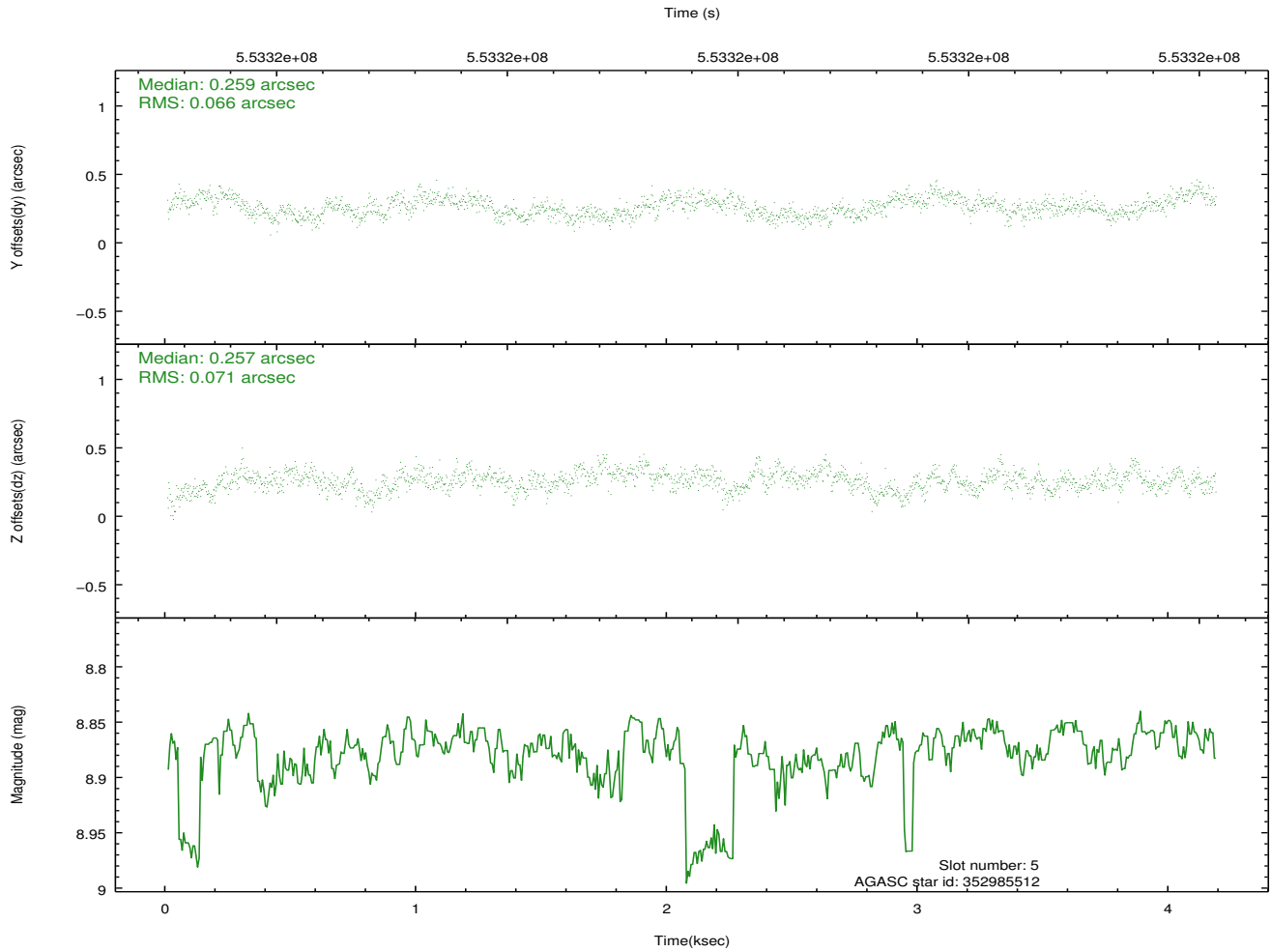
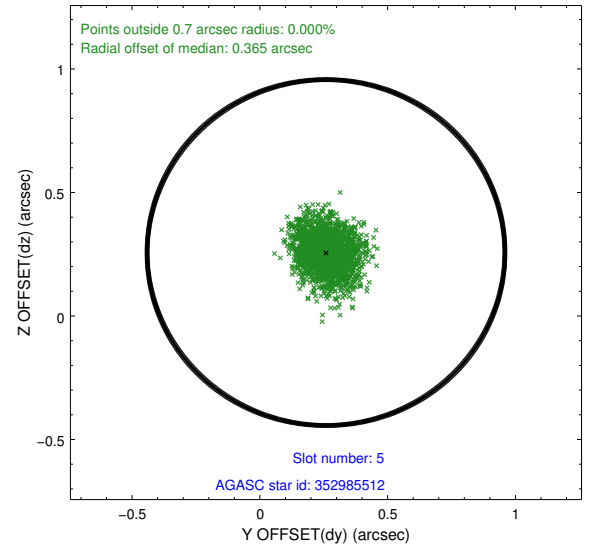
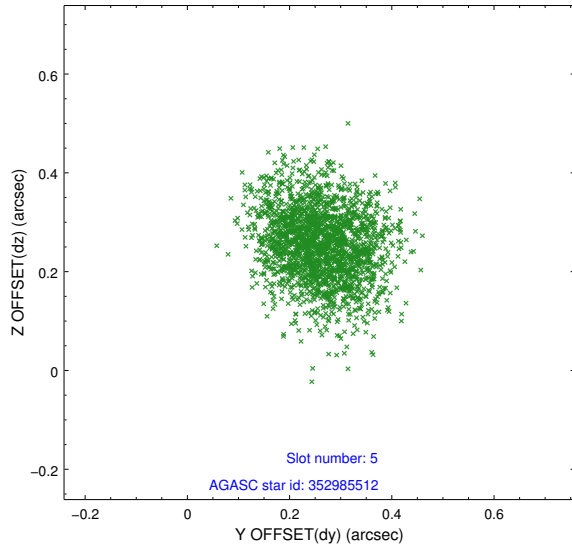
2.4.1 Slot 3



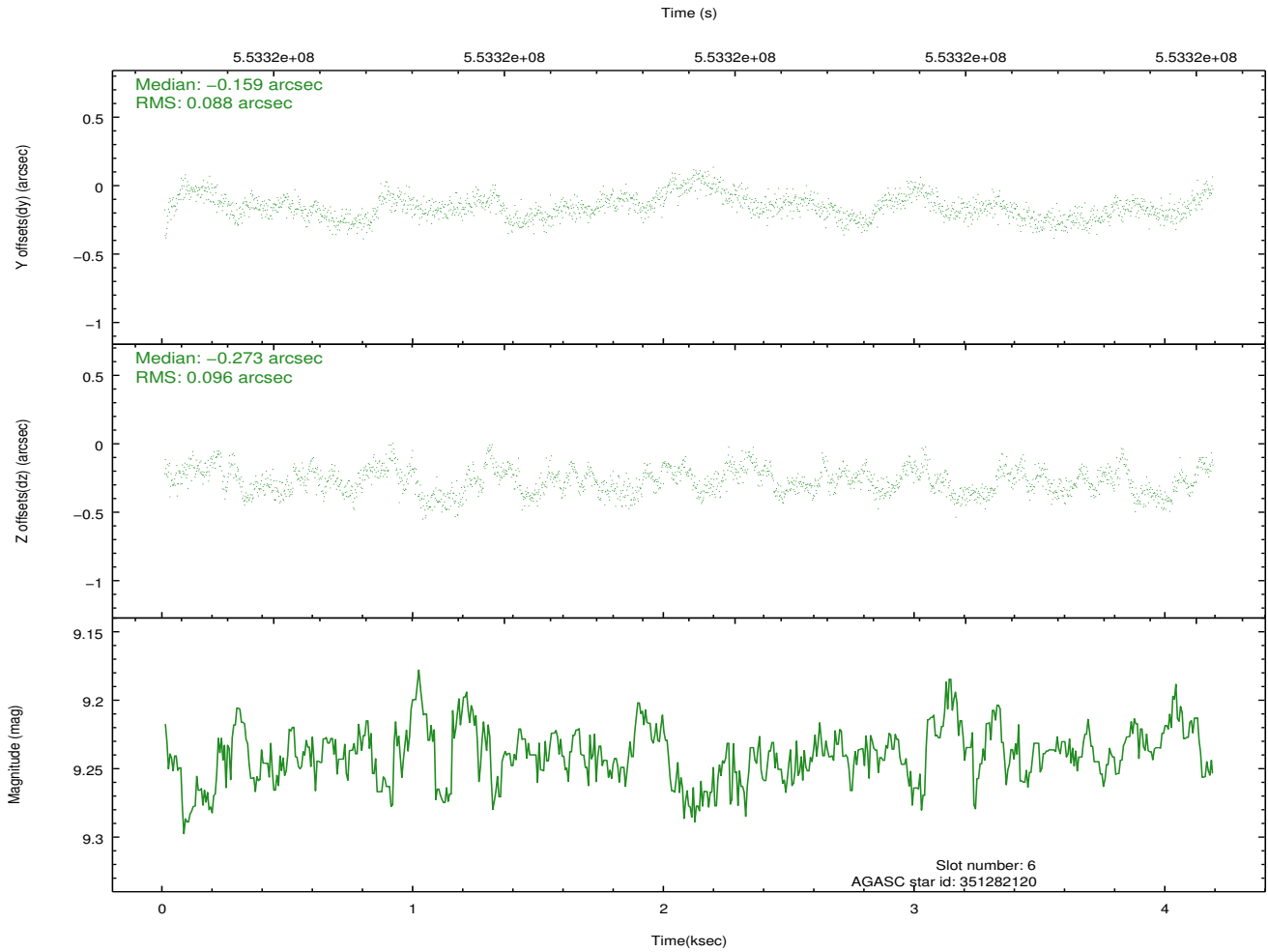
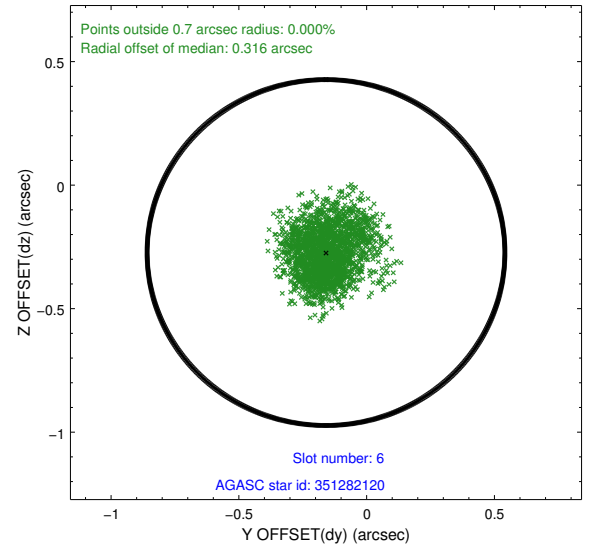
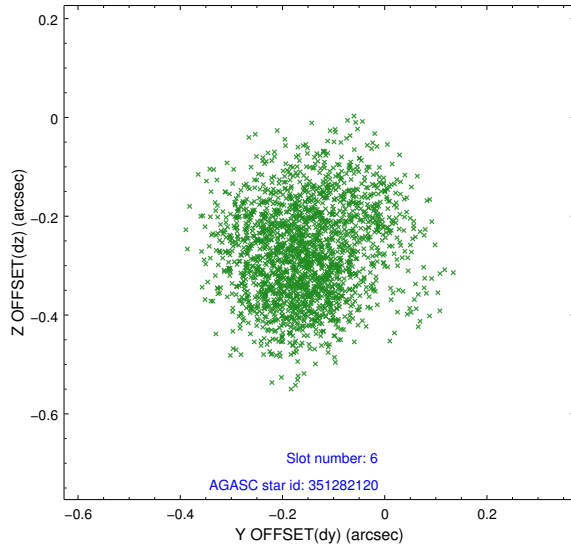
2.4.2 Slot 4



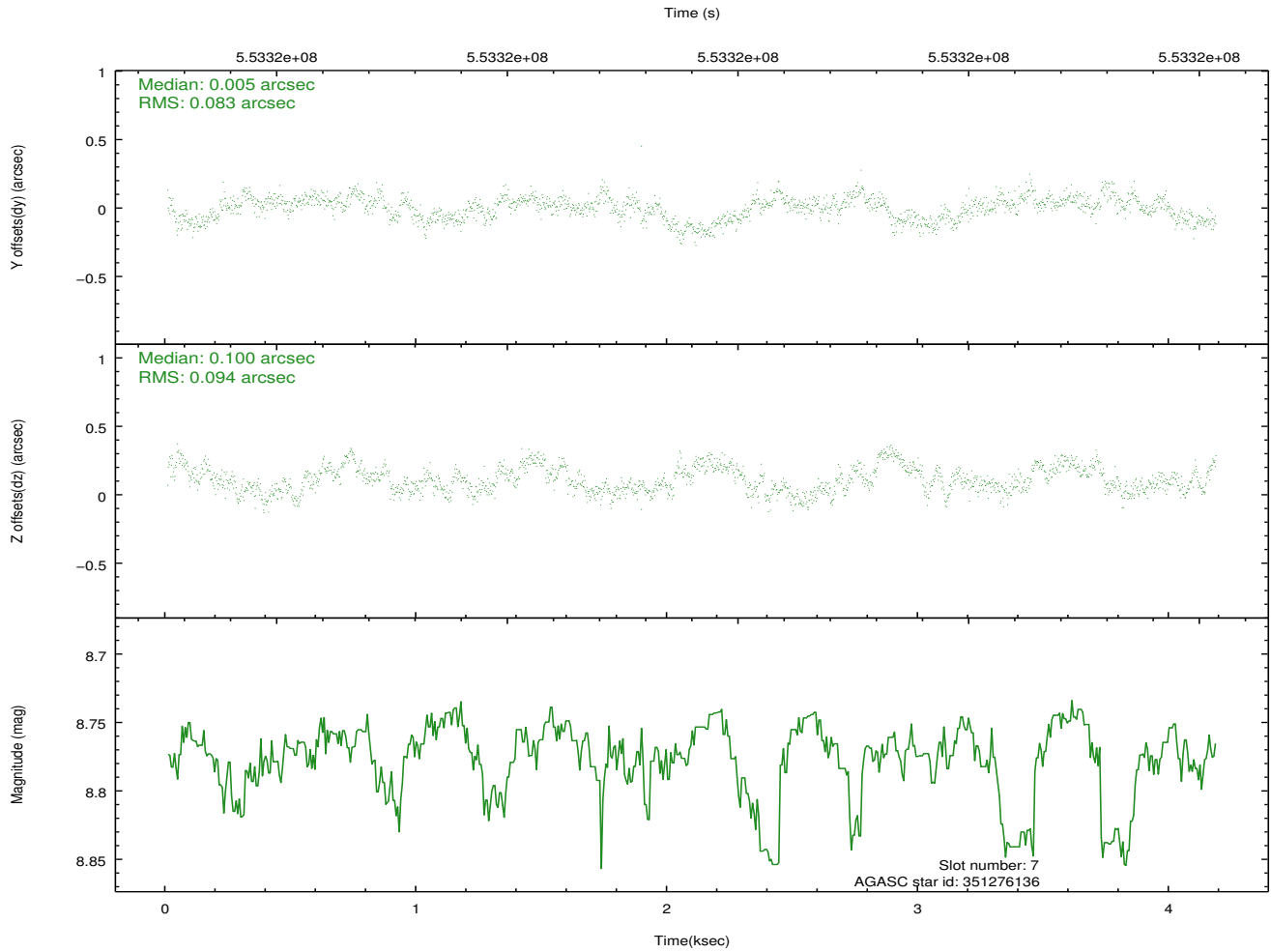
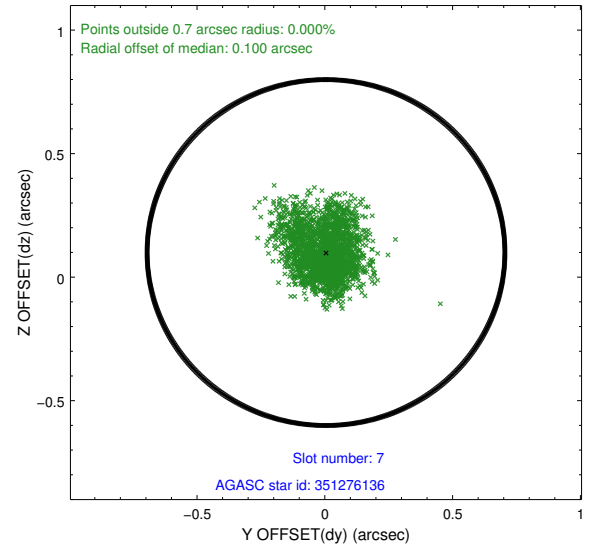
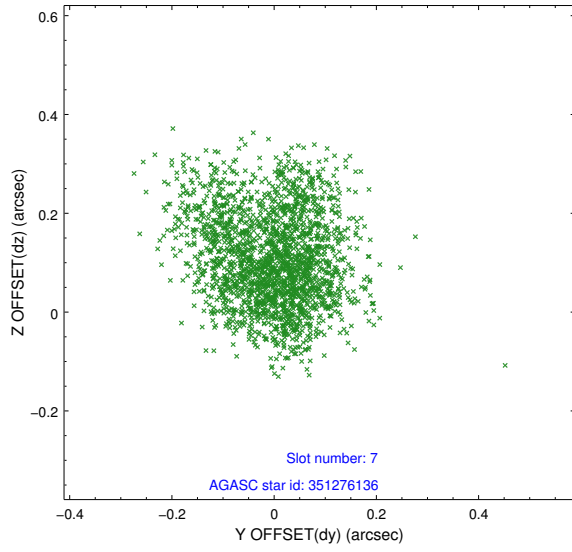
2.4.3 Slot 5



2.4.4 Slot 6

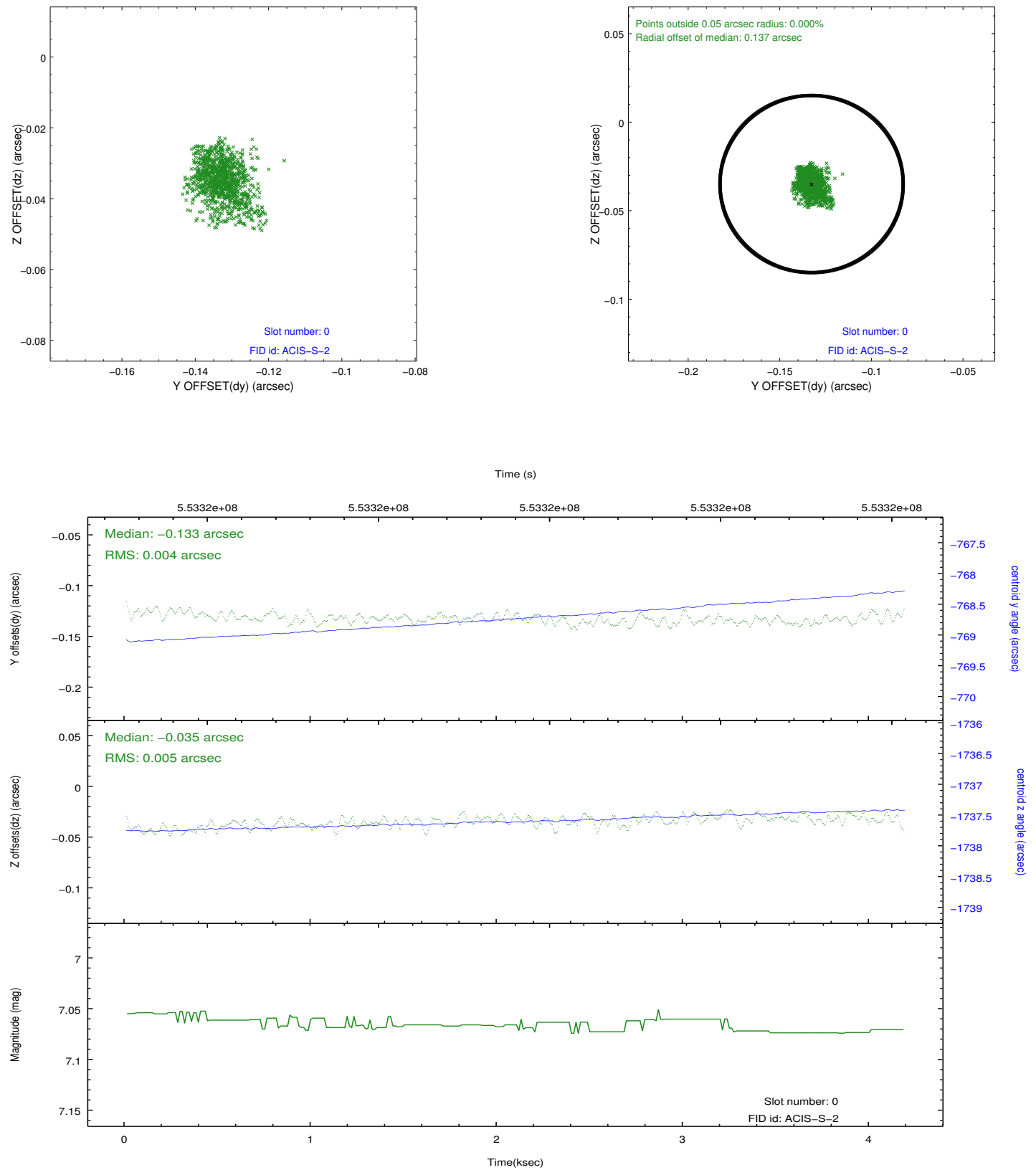


2.4.5 Slot 7

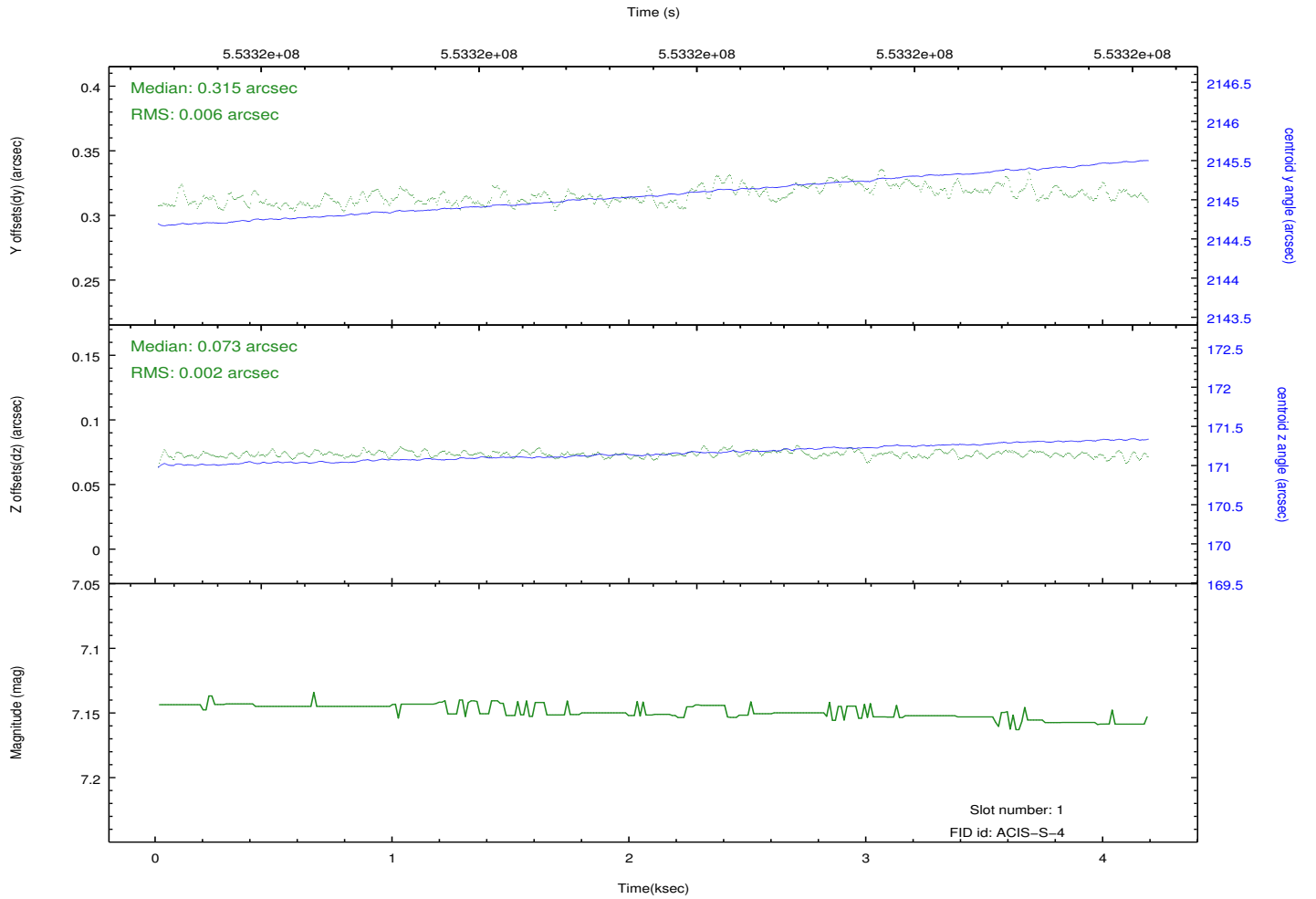
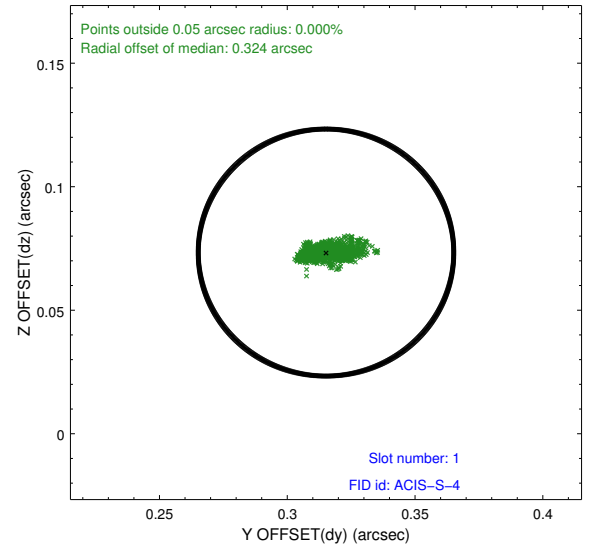
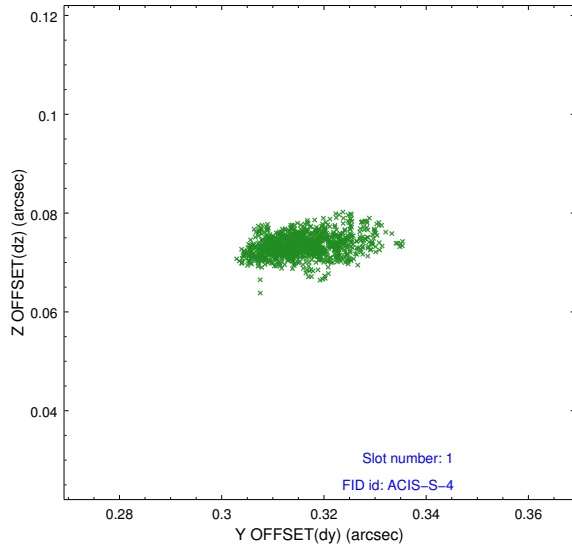


2.5 FID Slots

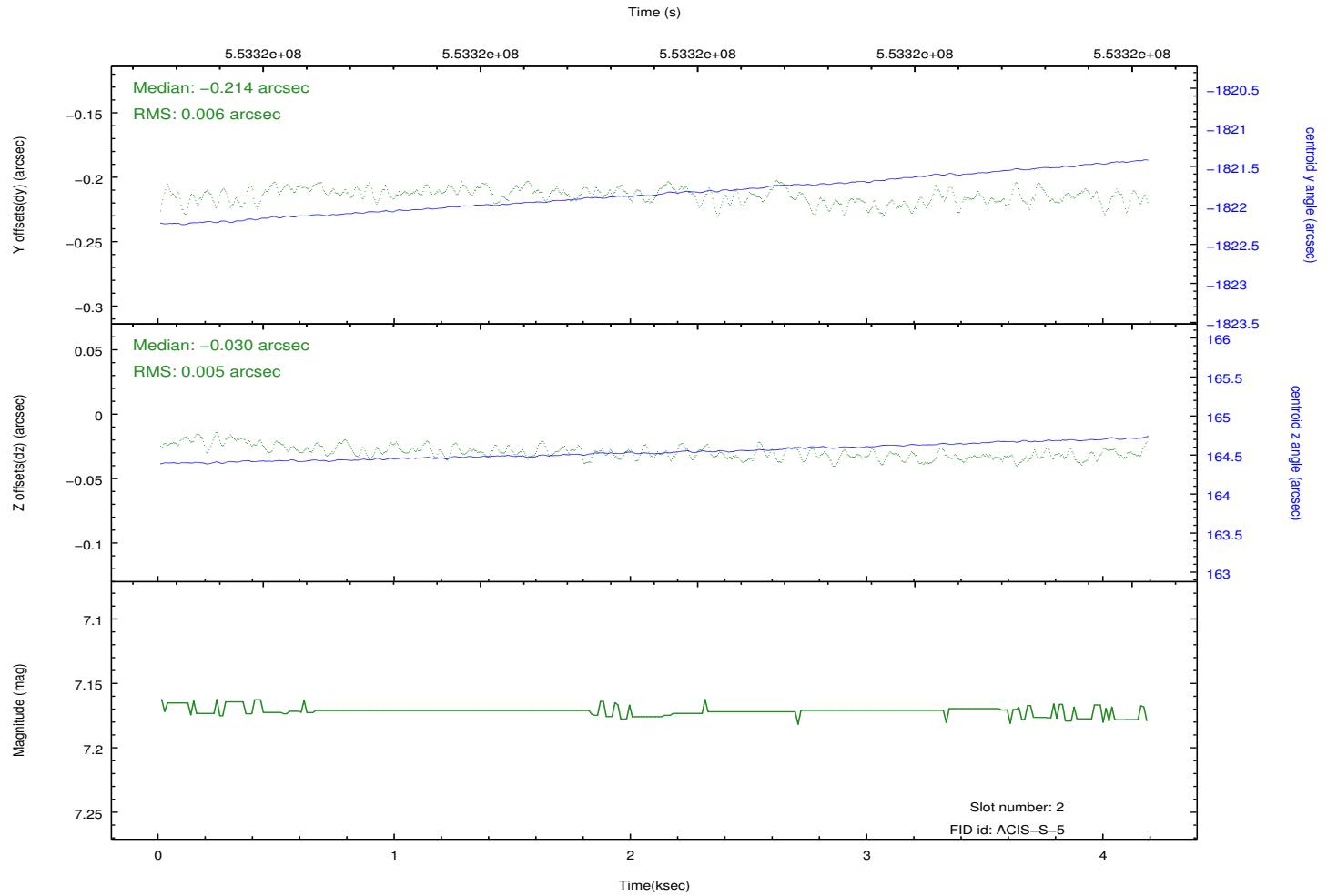
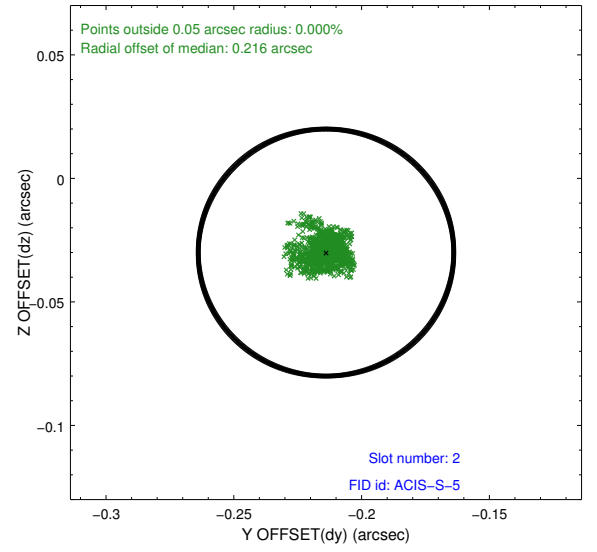
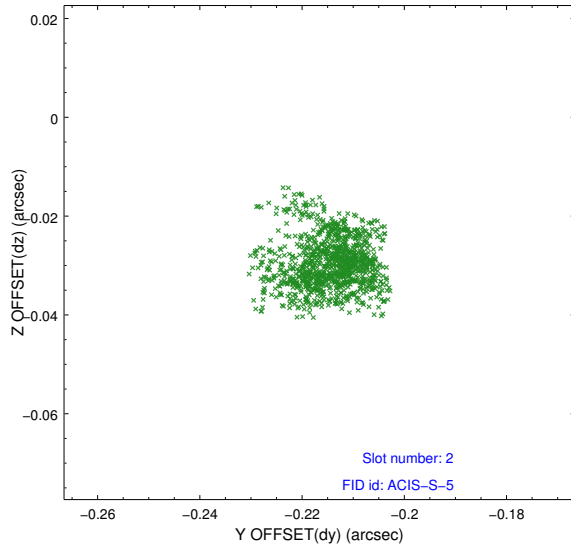
2.5.1 Slot 0



2.5.2 Slot 1

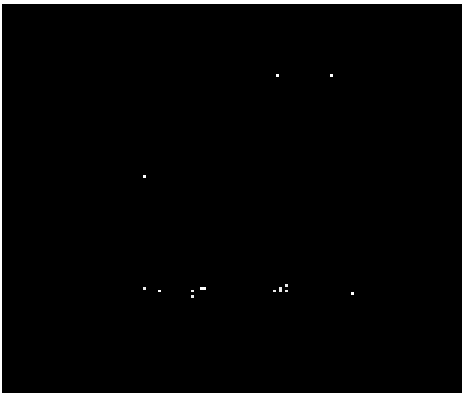


2.5.3 Slot 2

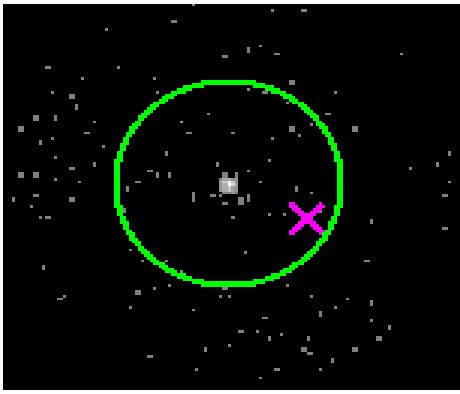


3 Gratings

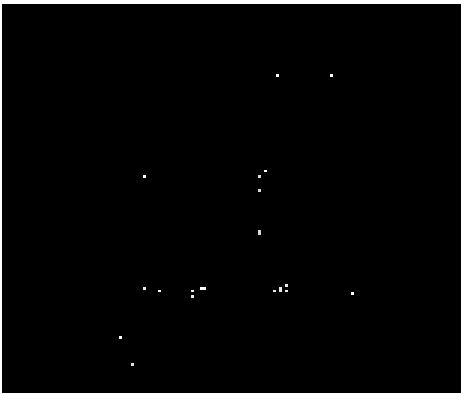
3.1 HEG Arm



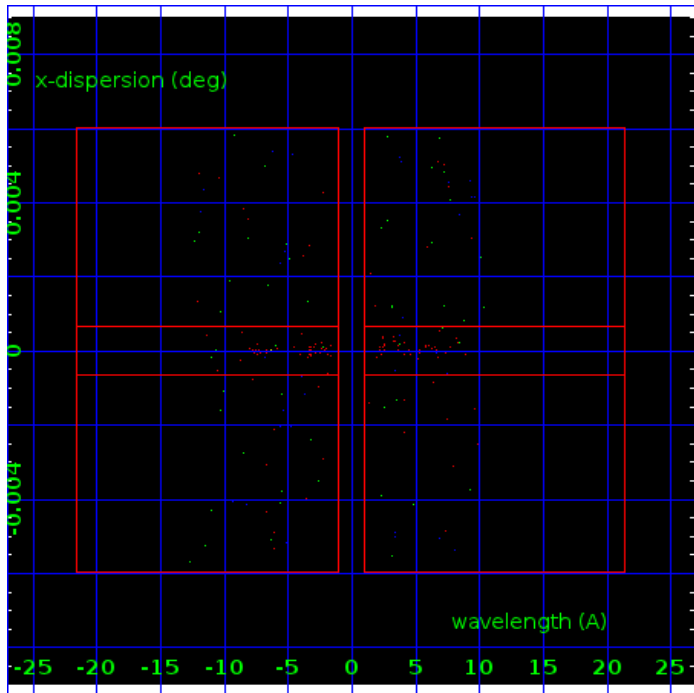
HEG Order Sort 123



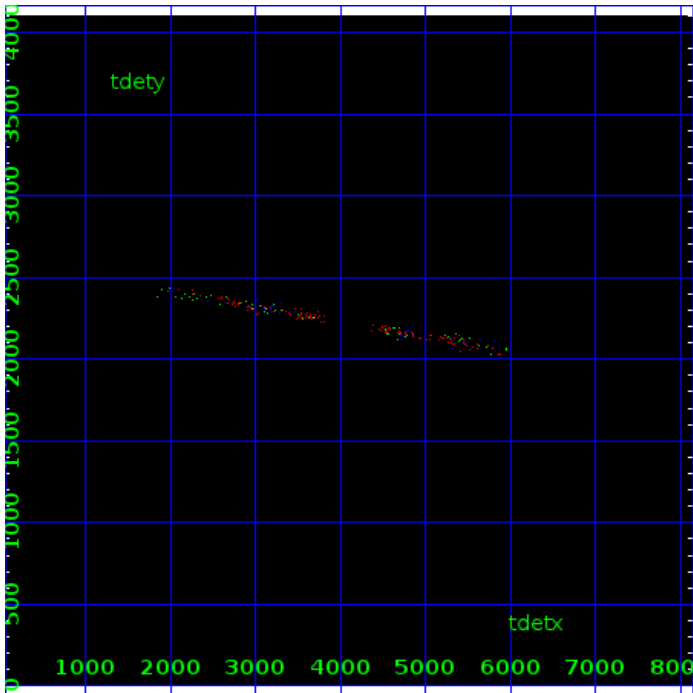
HEG Zero Order



HEG Order Sort ALL

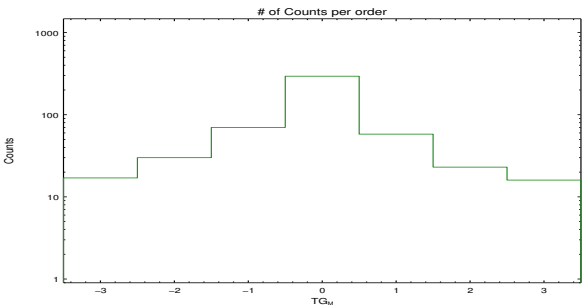


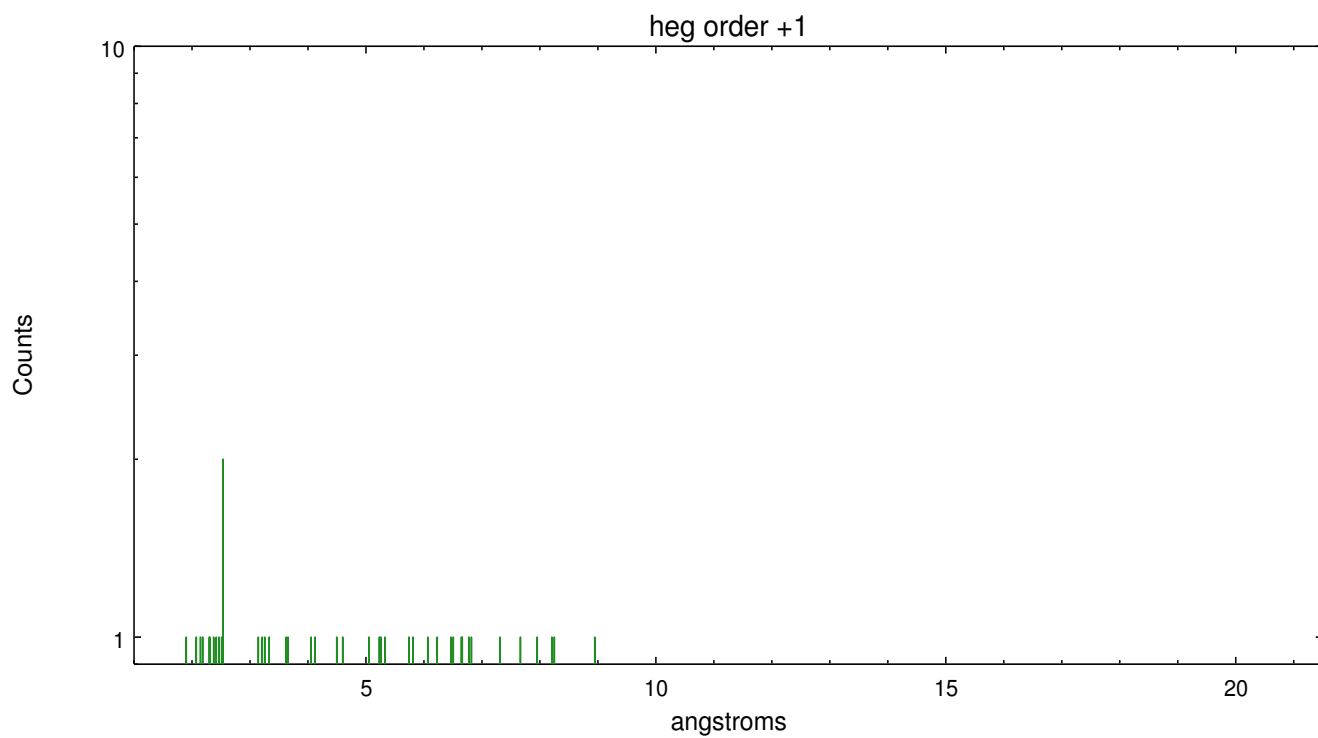
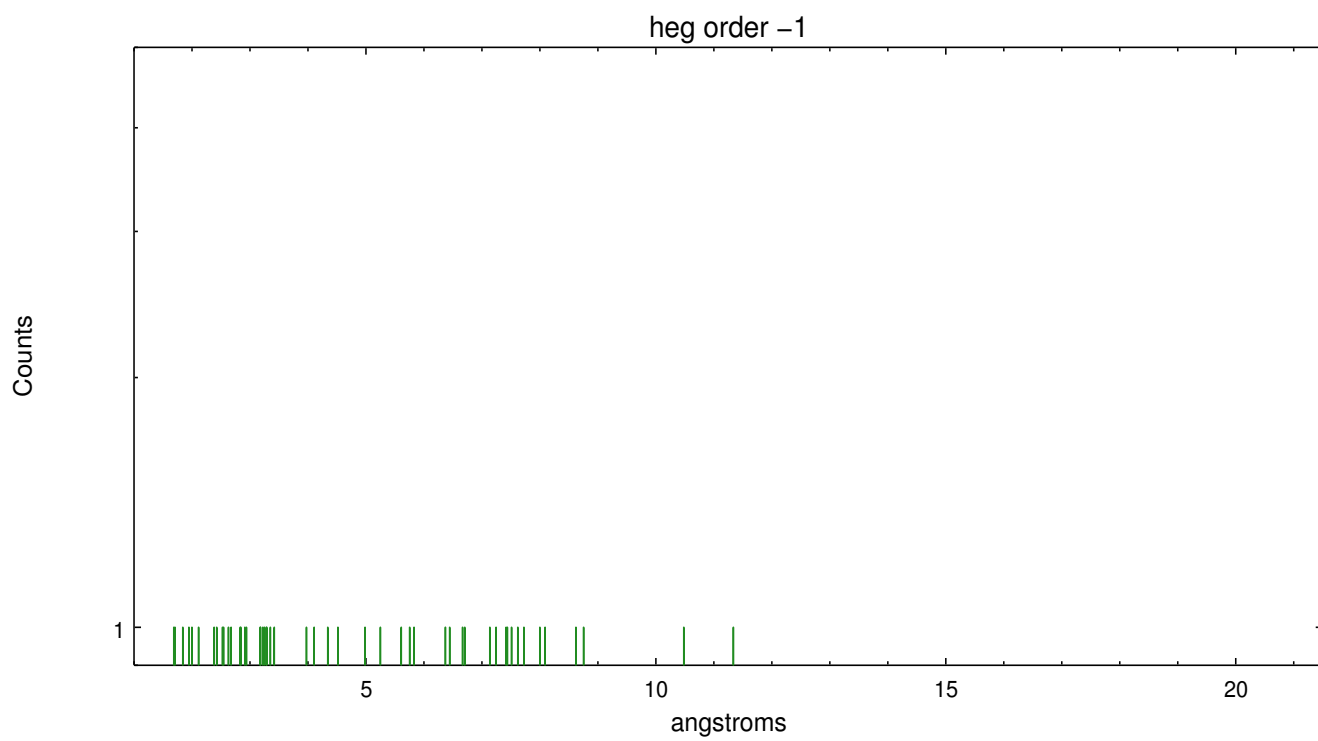
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	17	30	70	294	58	23	16

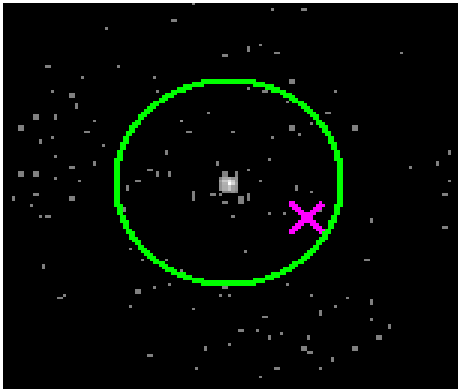




3.2 MEG Arm



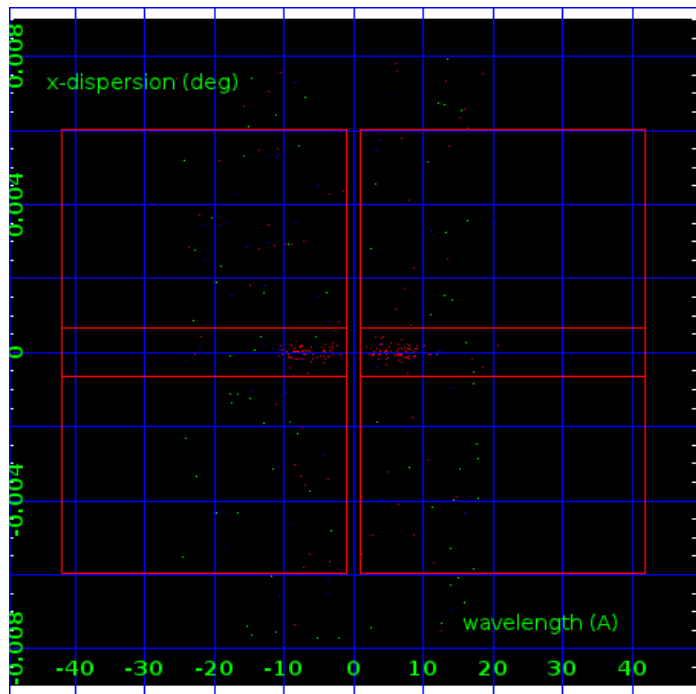
MEG Order Sort 123



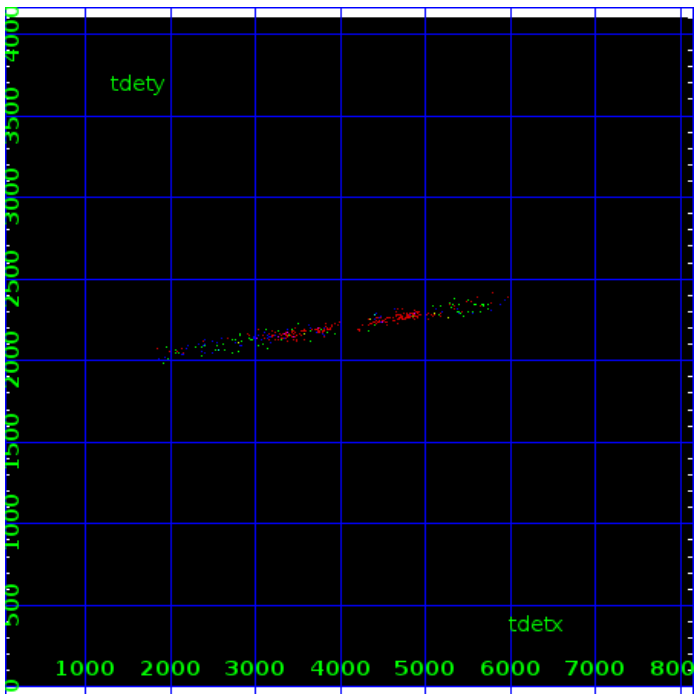
MEG Zero Order



MEG Order Sort ALL

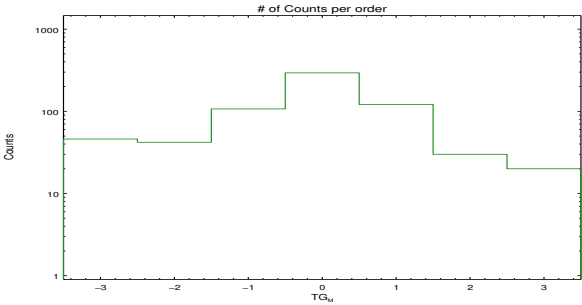


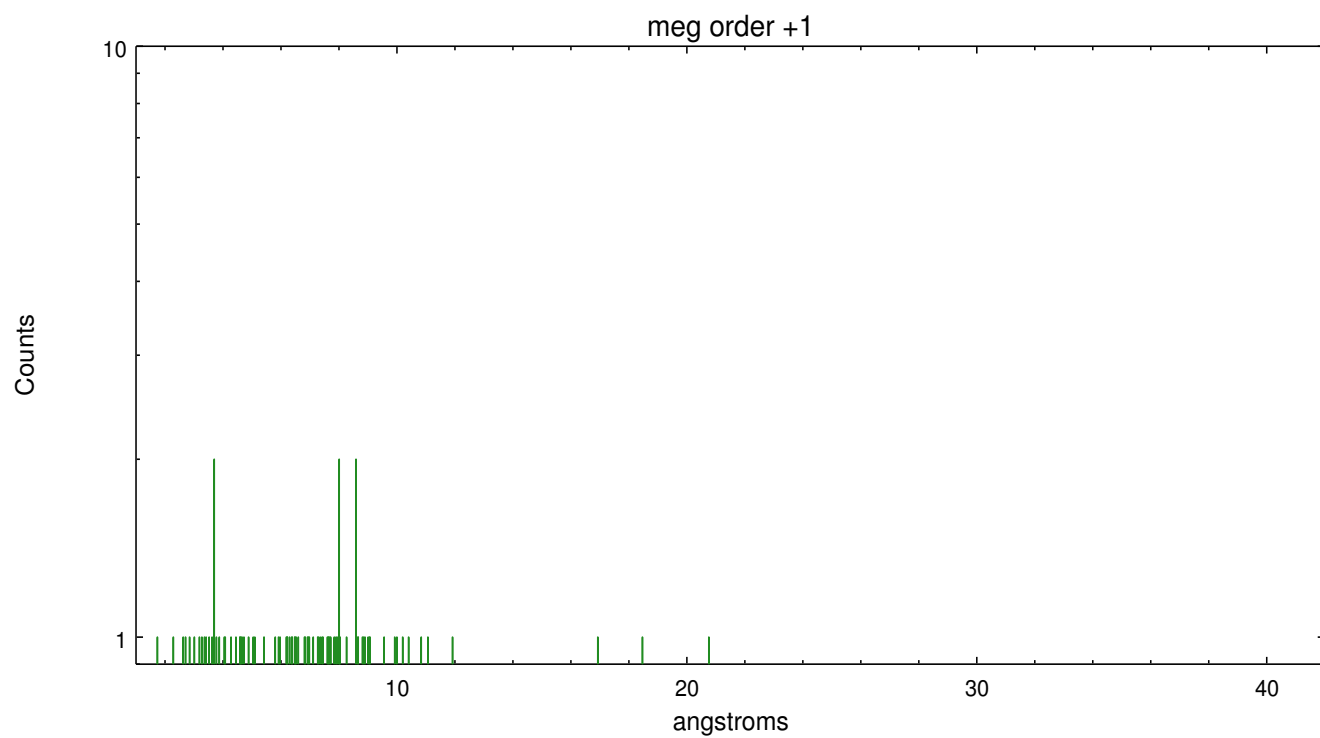
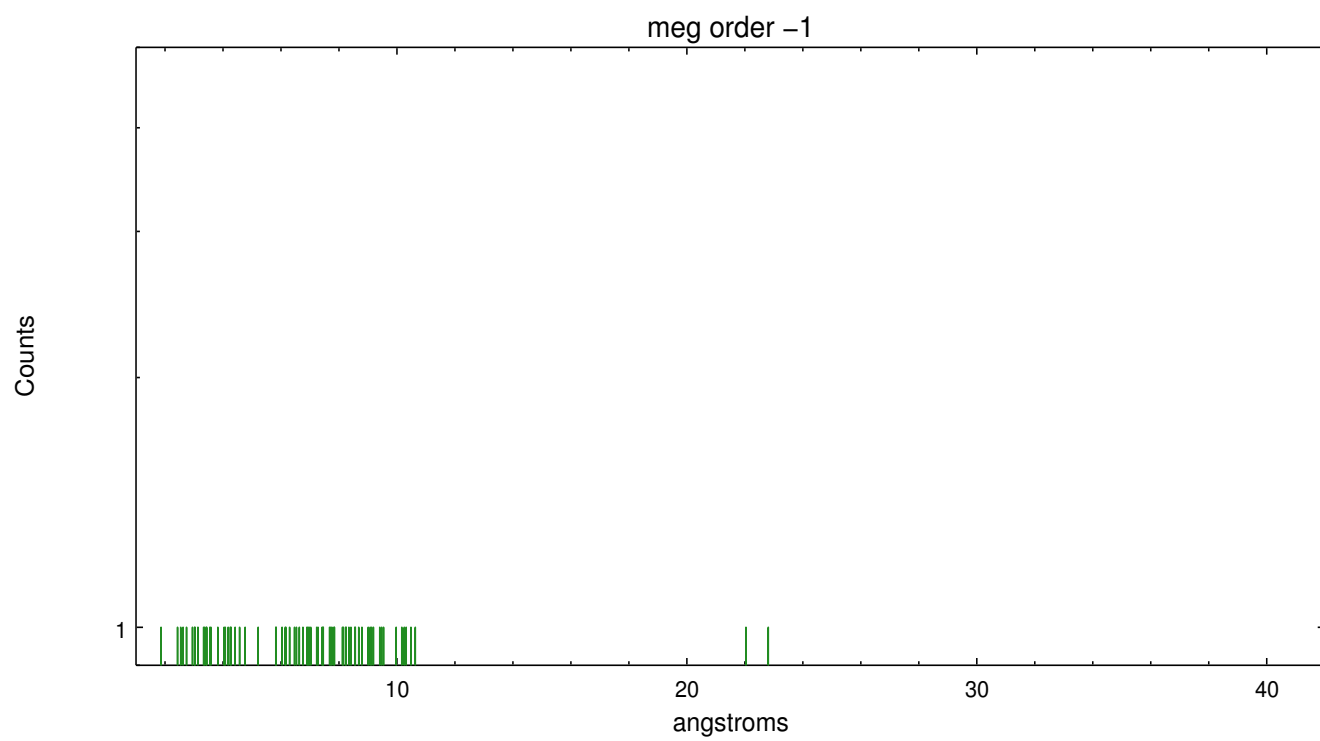
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	46	42	107	294	121	30	20





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.1021998913288

A.2 Comments