

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 6286 - L2 Version 2
Chandra X-Ray Center

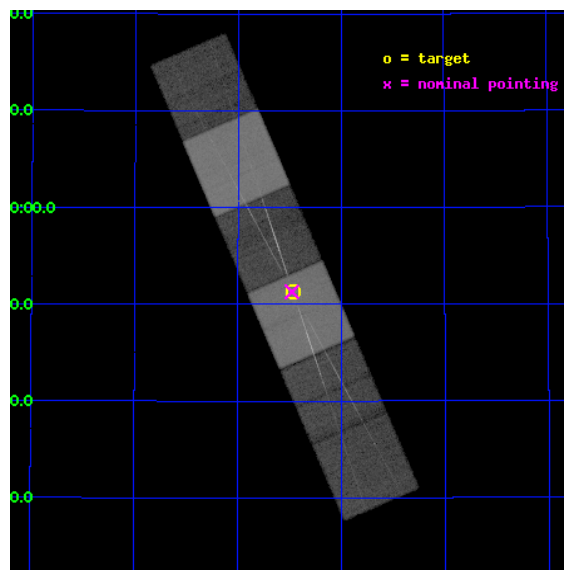
L2 Processing Date : Mar 29 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
3	Gratings	16
3.1	HEG Arm	16
3.2	MEG Arm	18
A	Summary	20
A.1	Status	20
A.2	Comments	20

1 Front

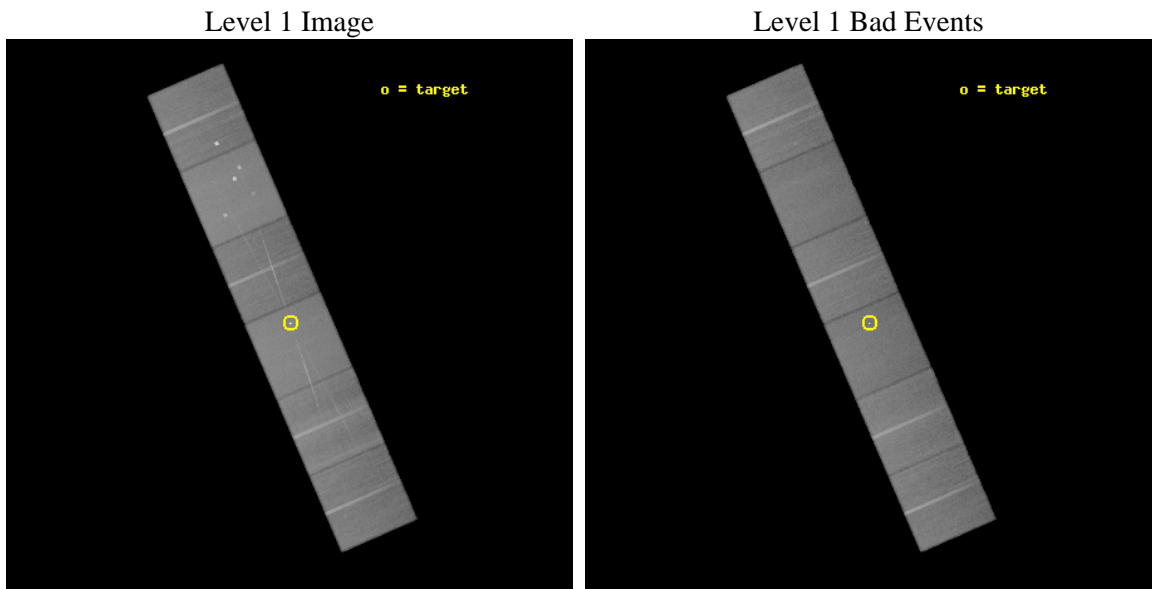
seq_num	200352	Sequence number
obs_id	6286	Observation id
title	Doppler Imaging of WR140's Collisionless Shocks at Apastron	Propo
observer	Dr Andrew Pollock	Principal investigator
object	WR 140	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	305.116667	Observer's specified target RA [deg]
dec_targ	43.854528	Observer's specified target Dec [deg]
ra_nom	305.11948504522	Nominal RA [deg]
dec_nom	43.855016633996	Nominal Dec [deg]
roll_nom	66.631781452854	Nominal Roll [deg]
revision	2	Processing version of data
ontime	47532.799822927	Sum of GTIs [s]
livetime	46930.910890753	Livetime [s]
ontime4	47532.799822927	Sum of GTIs [s]
ontime5	47532.770265698	Sum of GTIs [s]
ontime6	47532.729225695	Sum of GTIs [s]
ontime7	47532.799822927	Sum of GTIs [s]
ontime8	47532.688185692	Sum of GTIs [s]
ontime9	47529.406175435	Sum of GTIs [s]
l2events	730728	Number of level 2 events



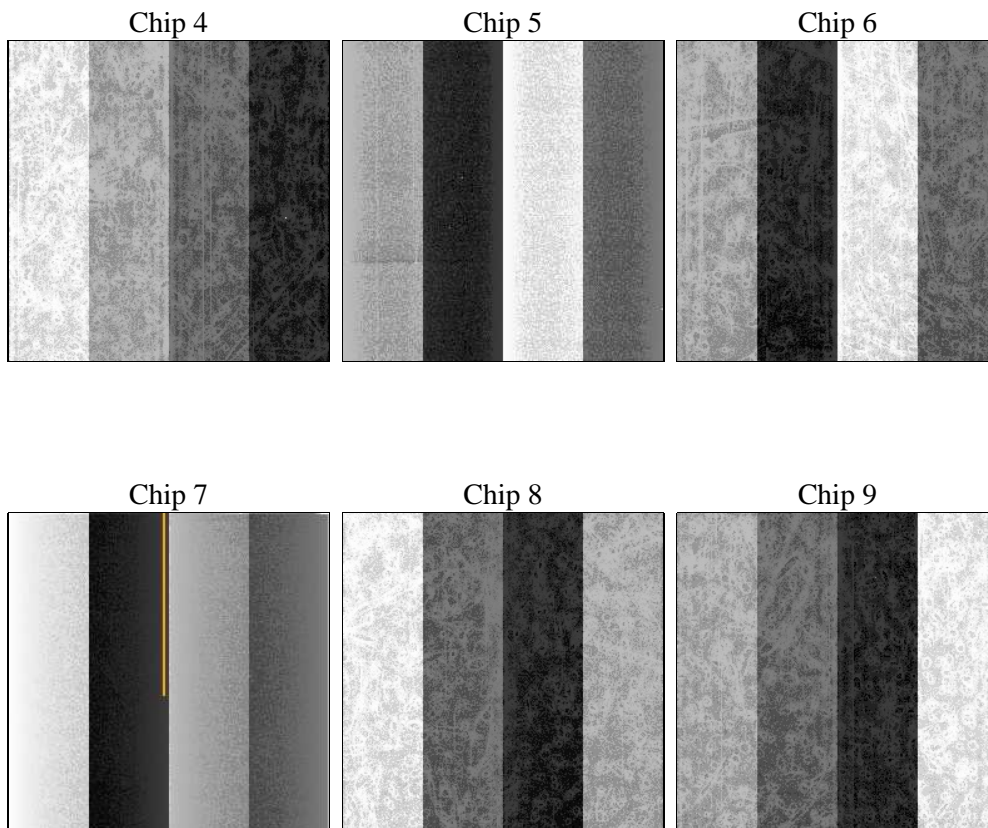
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	47581.993000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	47532.799822927	Sum of GTIs [s]
caldbver	4.4.8	 	ontime4	47532.799822927	Sum of GTIs [s]
date	2012-03-28T22:10:27	Date and time of file creation	ontime5	47532.770265698	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	47532.729225695	Sum of GTIs [s]
			ontime7	47532.799822927	Sum of GTIs [s]
			ontime8	47532.688185692	Sum of GTIs [s]
			ontime9	47529.406175435	Sum of GTIs [s]
			l1events	3112182	Number of level 1 events

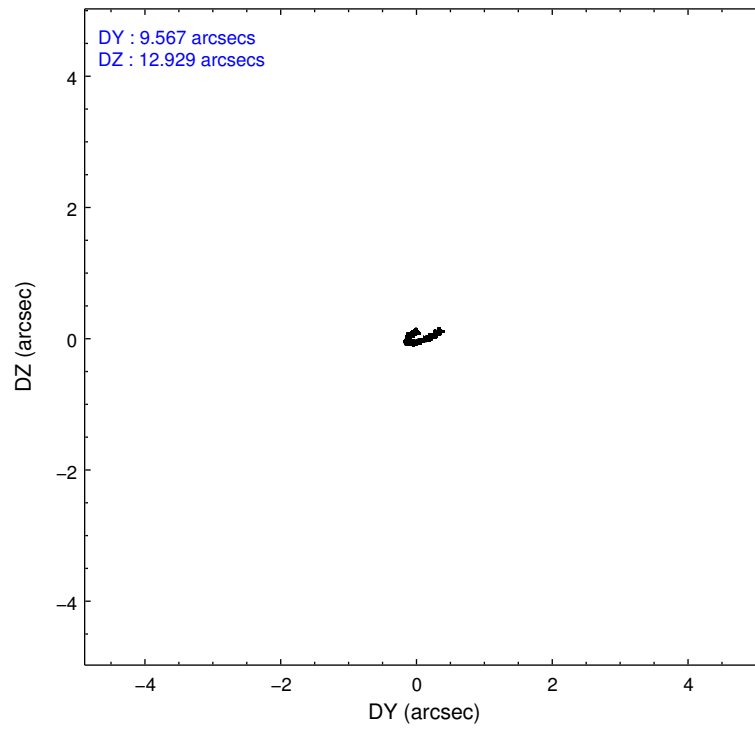
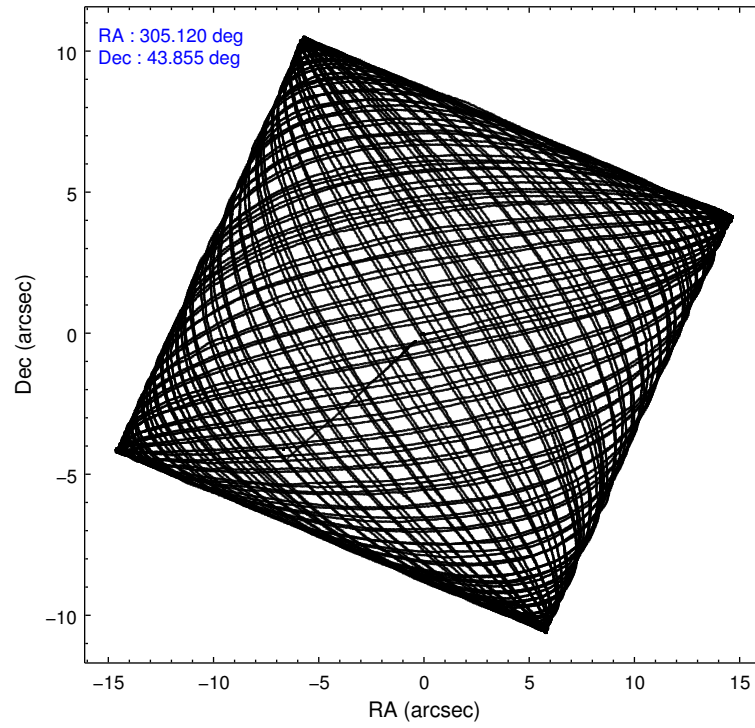
2.1.4 Events

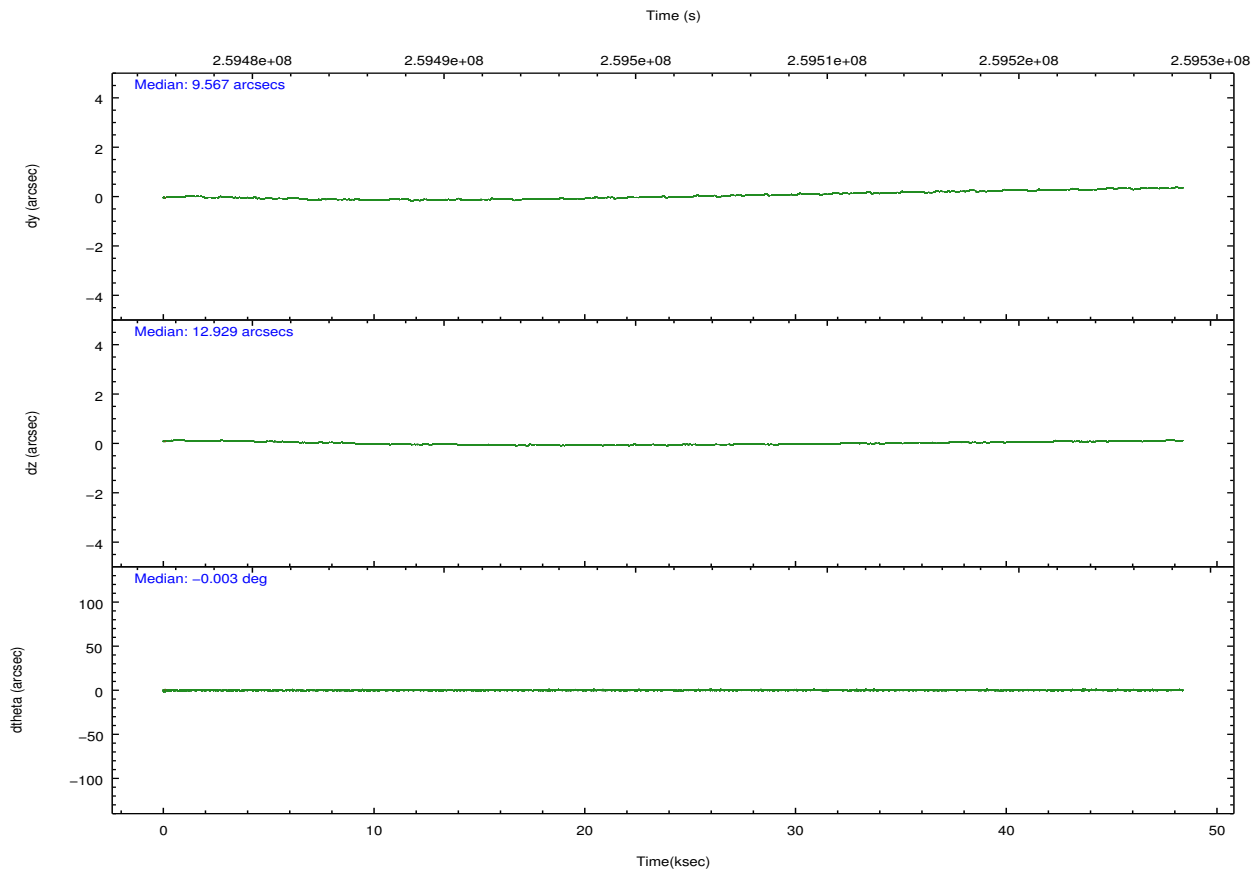
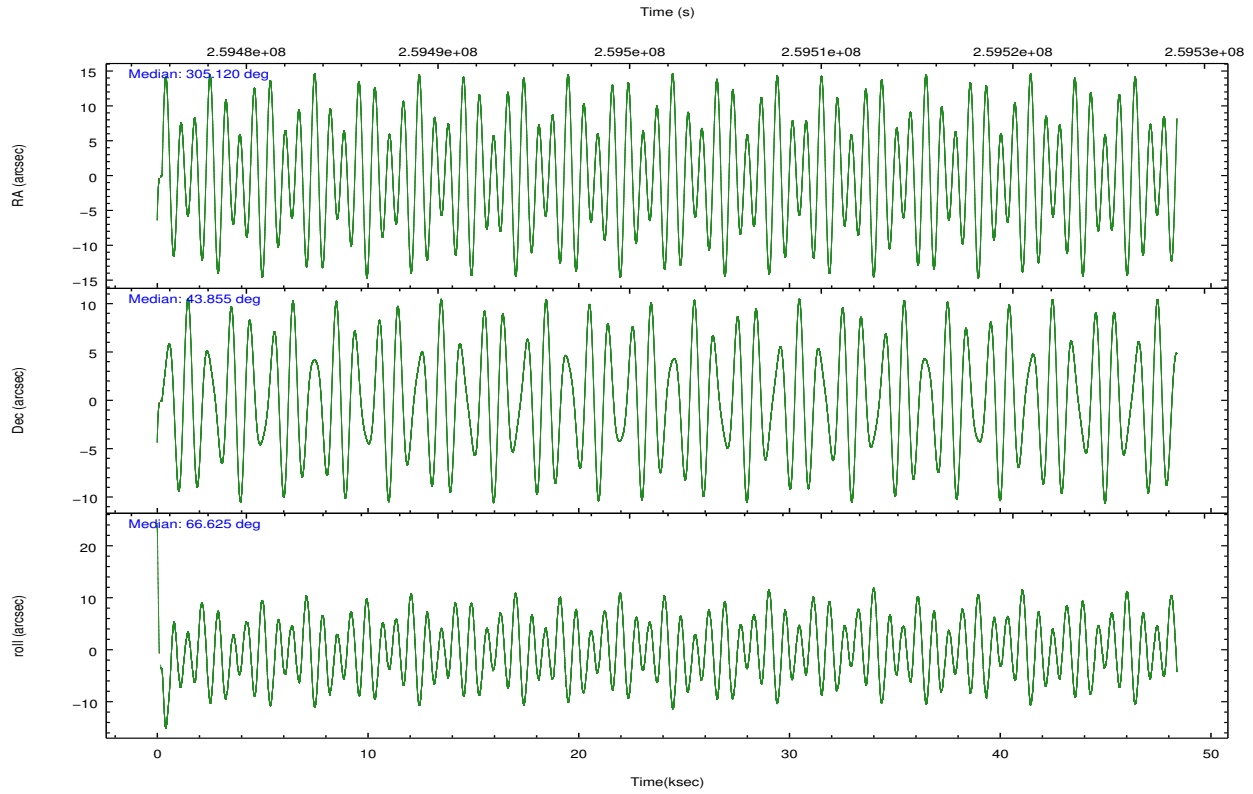
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	481070	641533	444142	593951	534059	417427	grade 0 events	38028	39826	30403	25180	41762	22590
rejected events	412958	338647	379961	335032	411014	364124		7%	6%	6%	4%	7%	5%
rejected %	85%	52%	85%	56%	76%	87%	grade 1 events	453	924	274	770	413	286
								0%	0%	0%	0%	0%	0%
							grade 2 events	11051	86741	12160	52792	26970	10449
								2%	13%	2%	8%	5%	2%
							grade 3 events	5506	11777	5413	23484	12434	5109
								1%	1%	1%	3%	2%	1%
							grade 4 events	5155	11237	5306	23166	11389	4918
								1%	1%	1%	3%	2%	1%
							grade 5 events	18581	46326	19760	55100	25944	20707
								3%	7%	4%	9%	4%	4%
							grade 6 events	8382	153364	10909	134341	30502	10245
								1%	23%	2%	22%	5%	2%
							grade 7 events	393914	291338	359917	279118	384645	343123
								81%	45%	81%	46%	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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	305.124348	305.1194850452181	Subarray requested	NONE	NONE
[deg] Pointing Dec	43.827995	43.85501663399634	Alternating exposures requested	N	N
[deg] Pointing Roll	66.471778	66.63178145285376	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	259478562.184000	259477141.84168			
Observation start date	2006-03-23T05:21:37	2006-03-23T04:59:01			
[s] Observation end time (MET)	259526144.184000	259526367.98147			
Observation end date	2006-03-23T18:34:39	2006-03-23T18:39:27			
Read mode	TIMED	TIMED			

2.3 Aspect



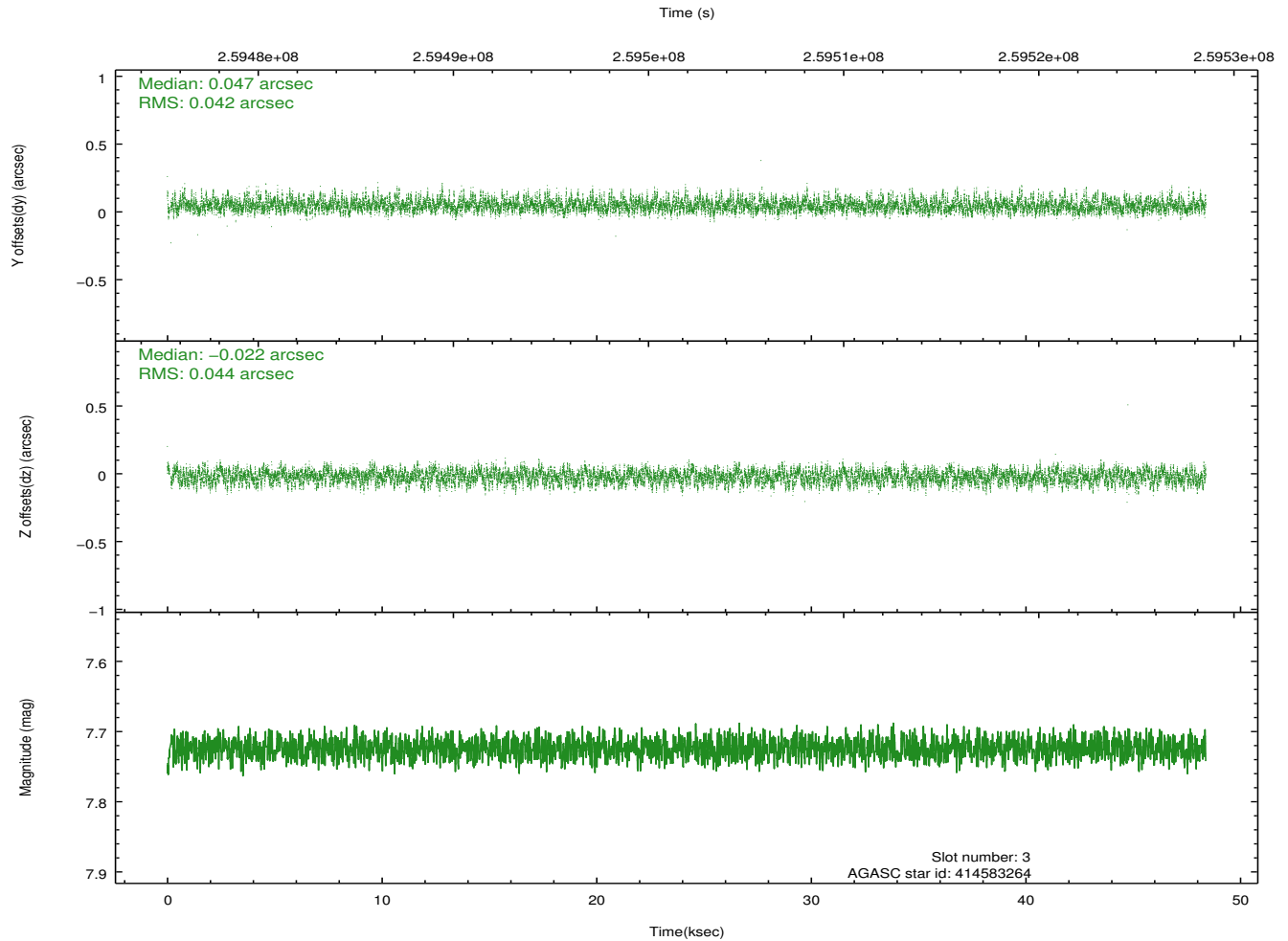
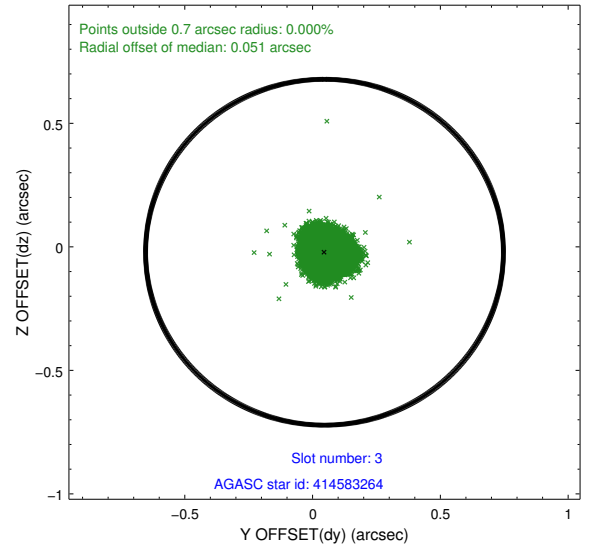
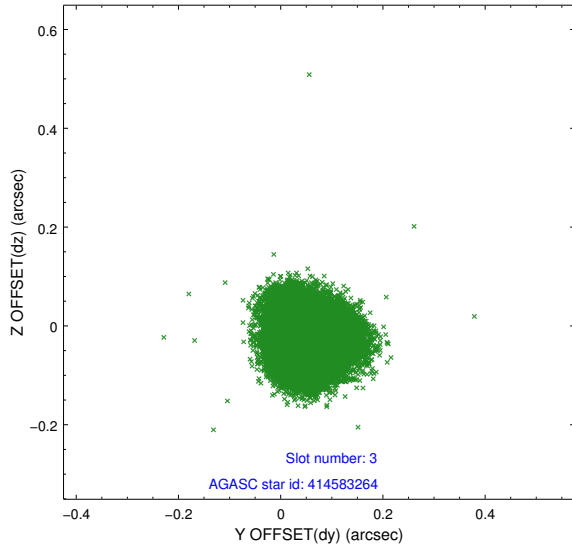


Slot Statistics

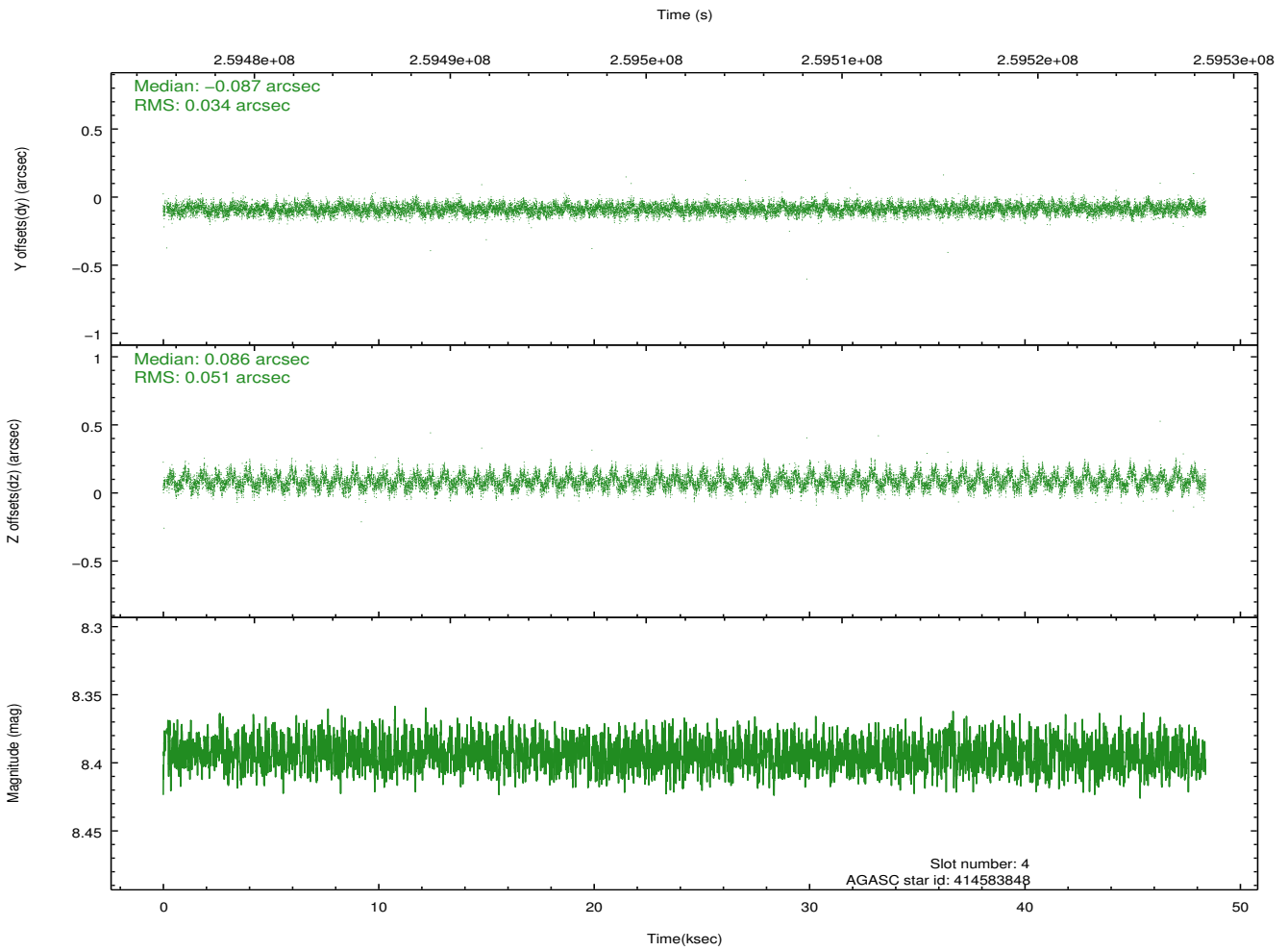
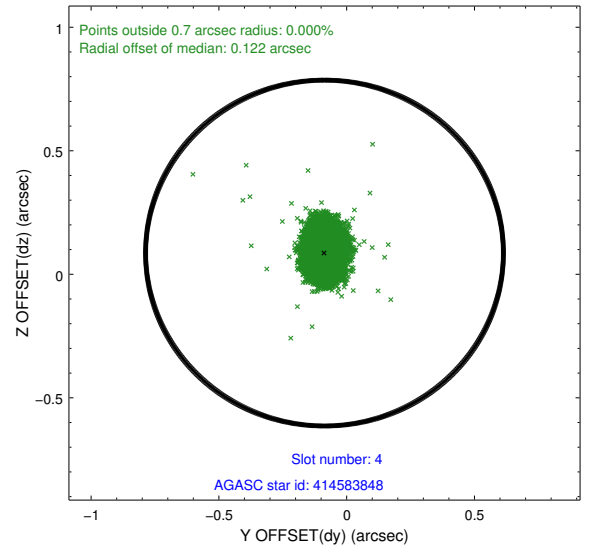
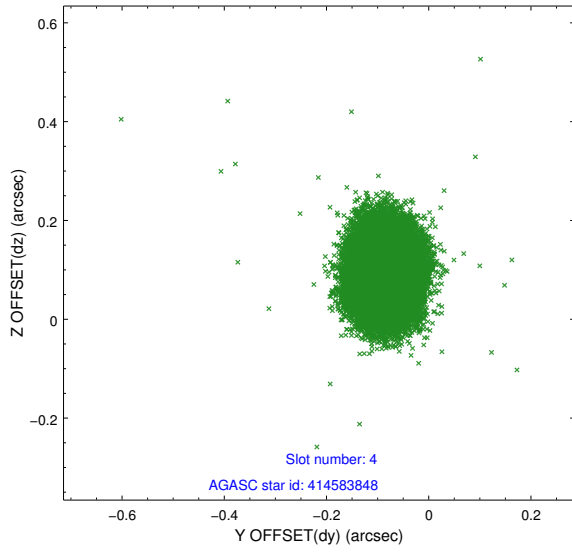
	status	id	mag	n_pts	med_dy	med_dz	dr1
	FID	ACIS-S-1	7.19	11788	0.043	-0.036	0.008
	FID	ACIS-S-4	7.20	11787	0.107	0.009	0.007
	FID	ACIS-S-5	7.23	11787	-0.177	0.040	0.006
	GUIDE	414583264	7.72	23529	0.047	-0.022	0.066
	GUIDE	414583848	8.39	23569	-0.087	0.086	0.065
	GUIDE	414585176	8.26	23566	0.088	-0.043	0.083
	GUIDE	414725232	6.90	23575	-0.052	-0.026	0.069
0.000	0.000	0.000	0.000000	0.000000	0.00	0.00	

2.4 Star Slots

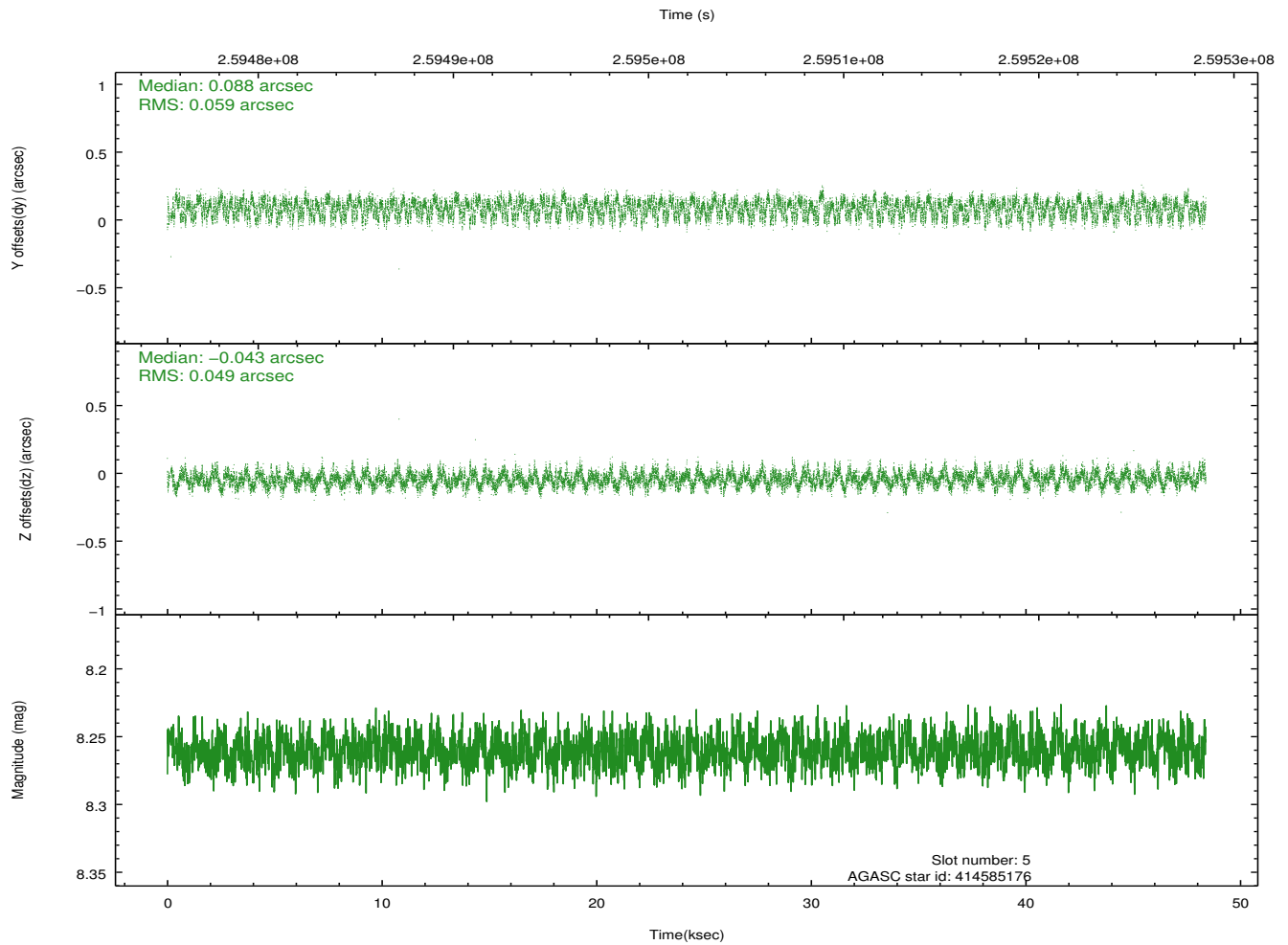
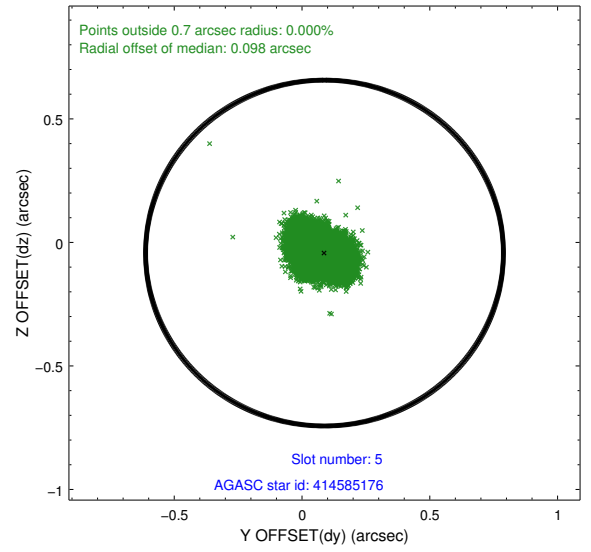
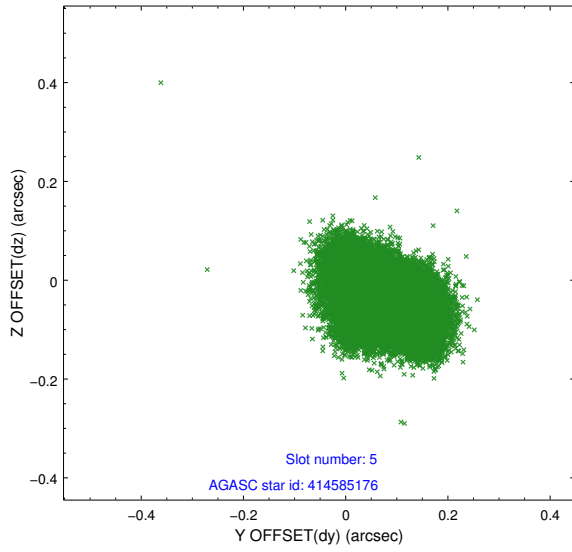
2.4.1 Slot 3



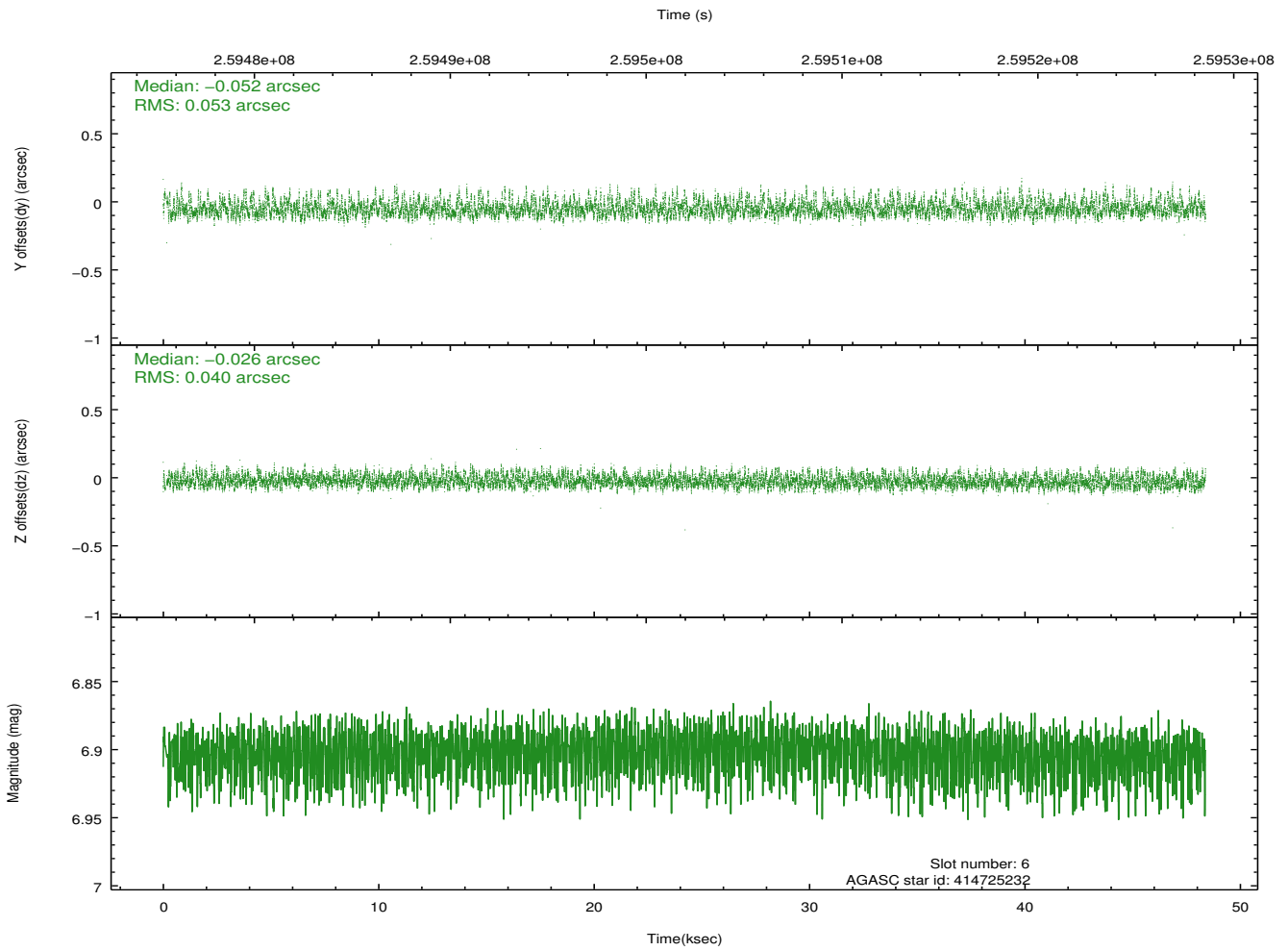
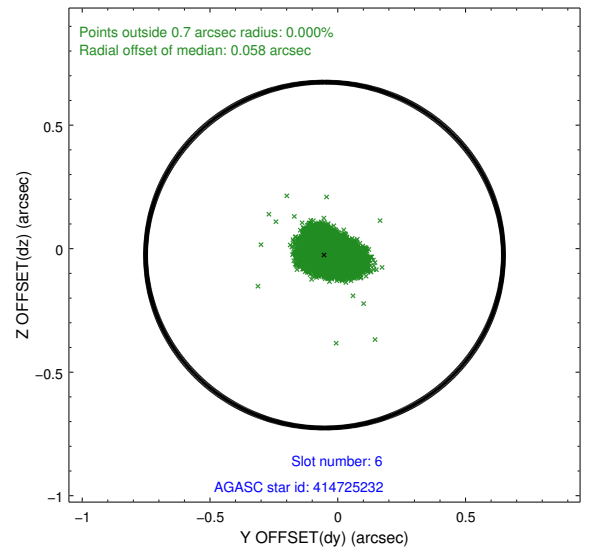
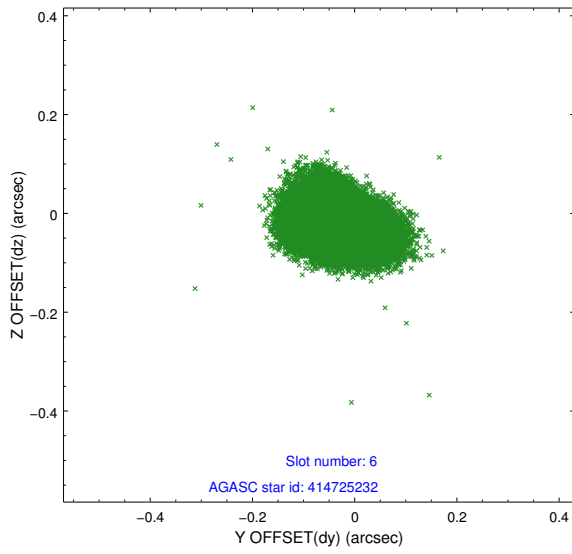
2.4.2 Slot 4



2.4.3 Slot 5

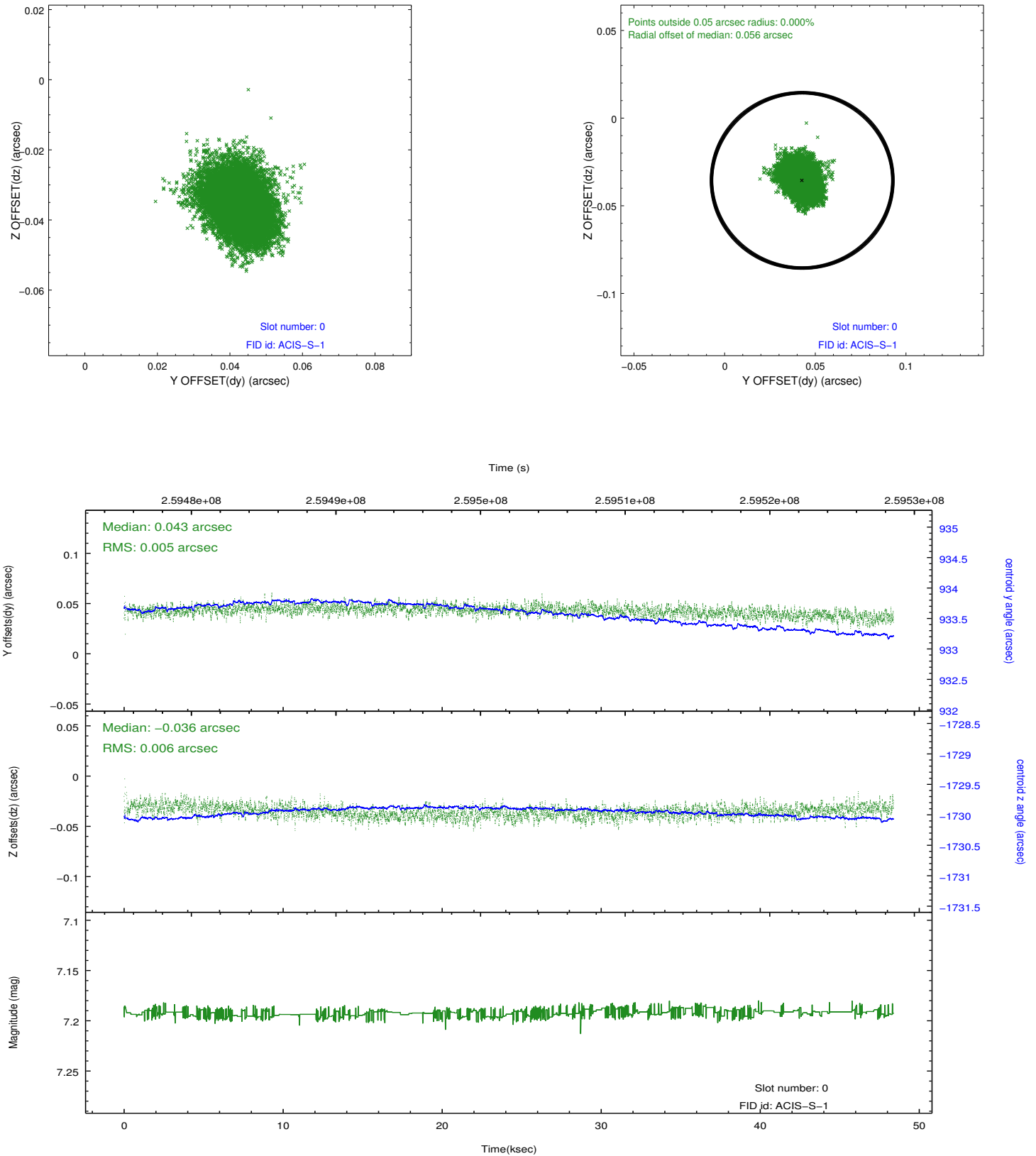


2.4.4 Slot 6

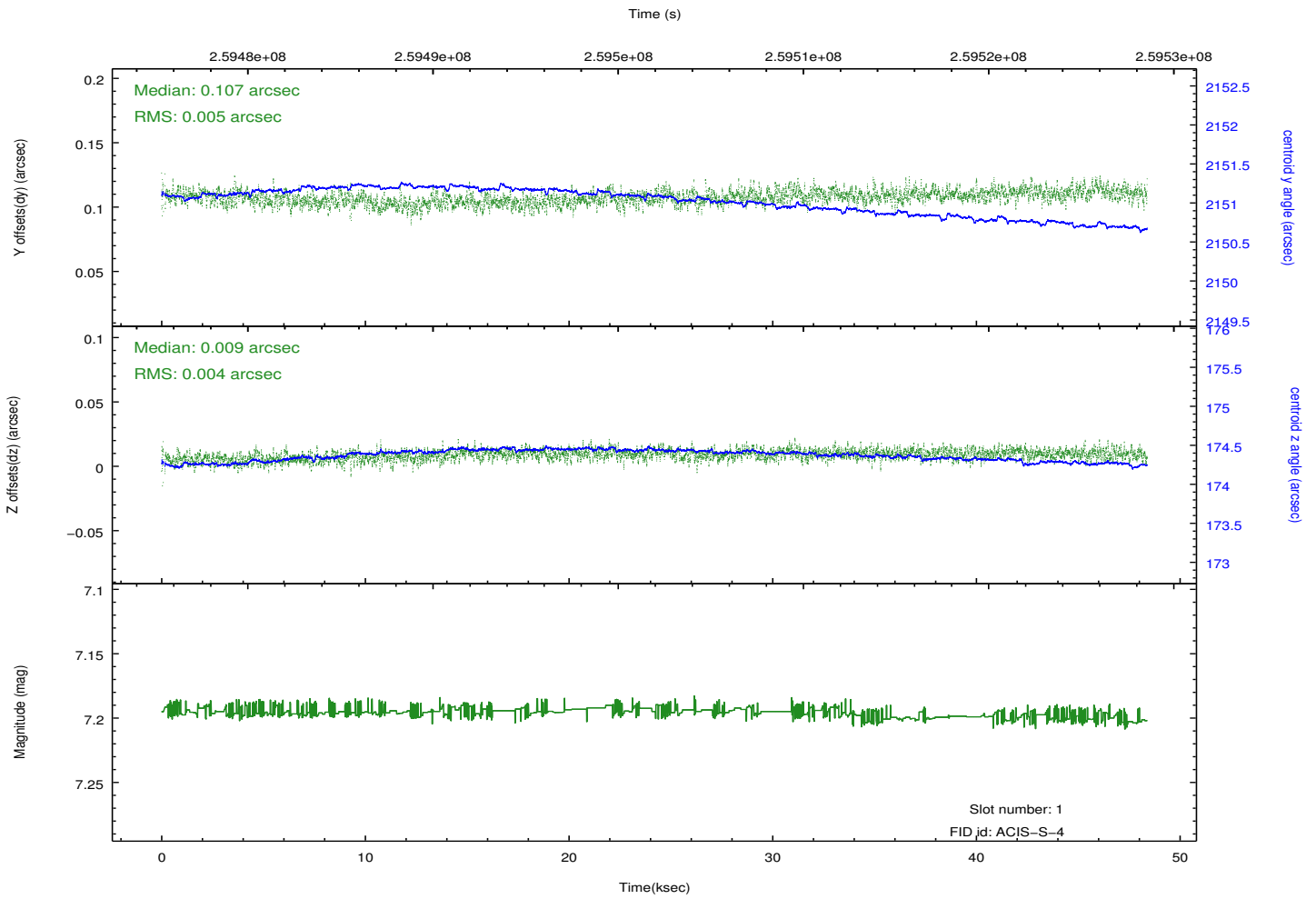
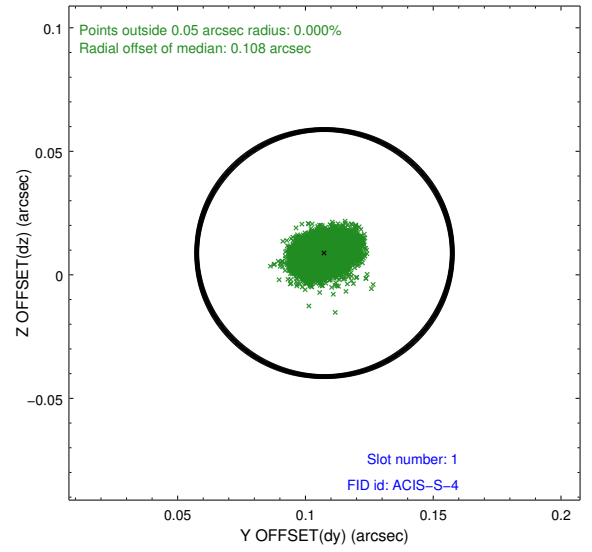
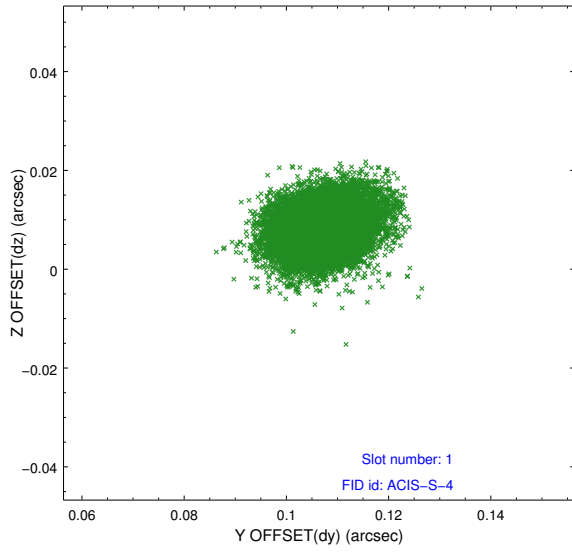


2.5 FID Slots

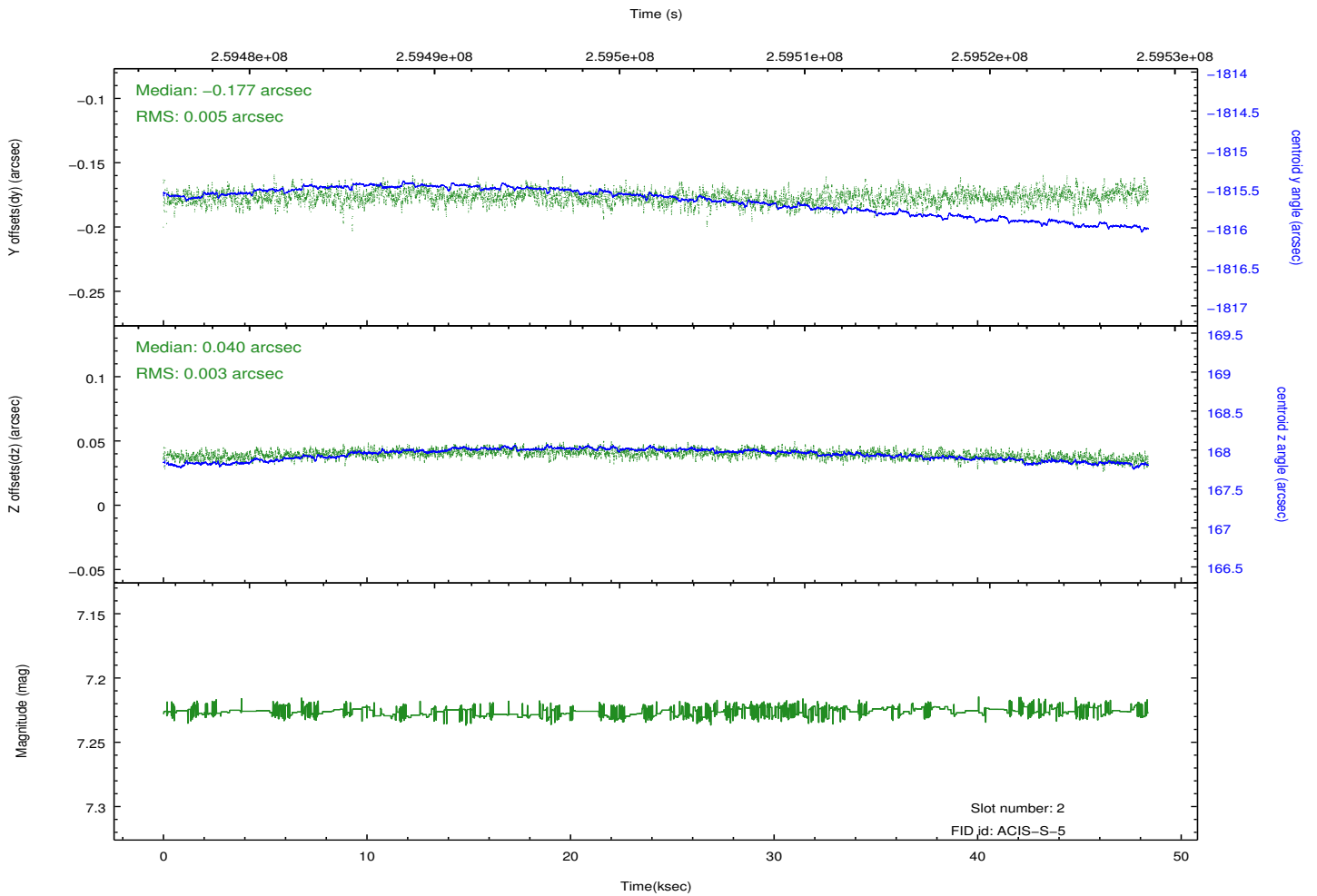
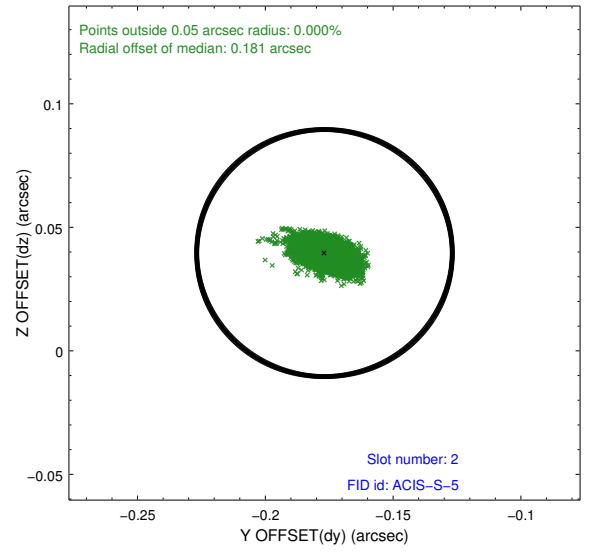
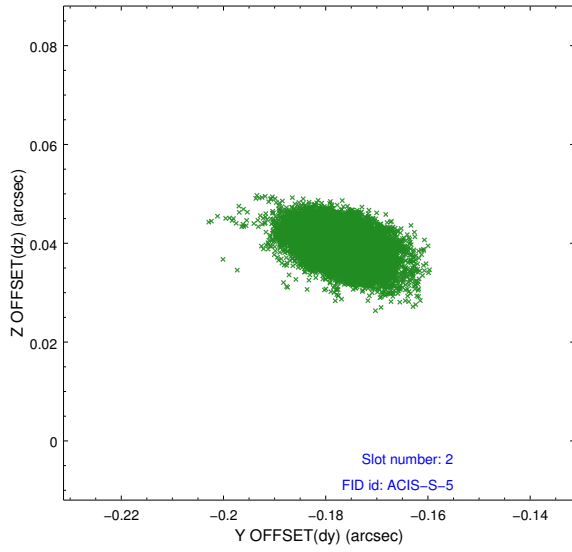
2.5.1 Slot 0



2.5.2 Slot 1

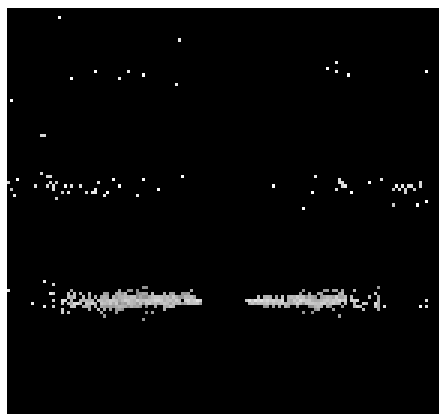


2.5.3 Slot 2

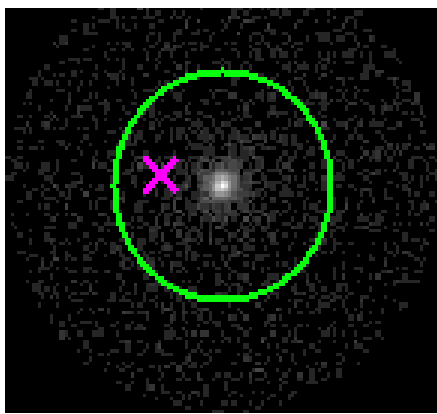


3 Gratings

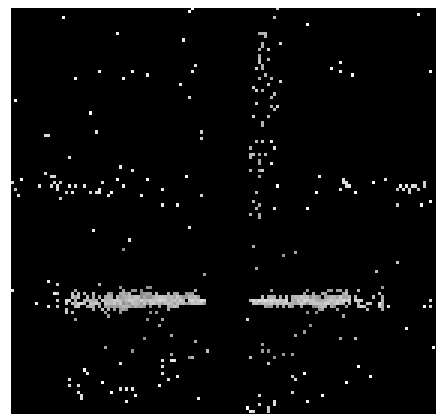
3.1 HEG Arm



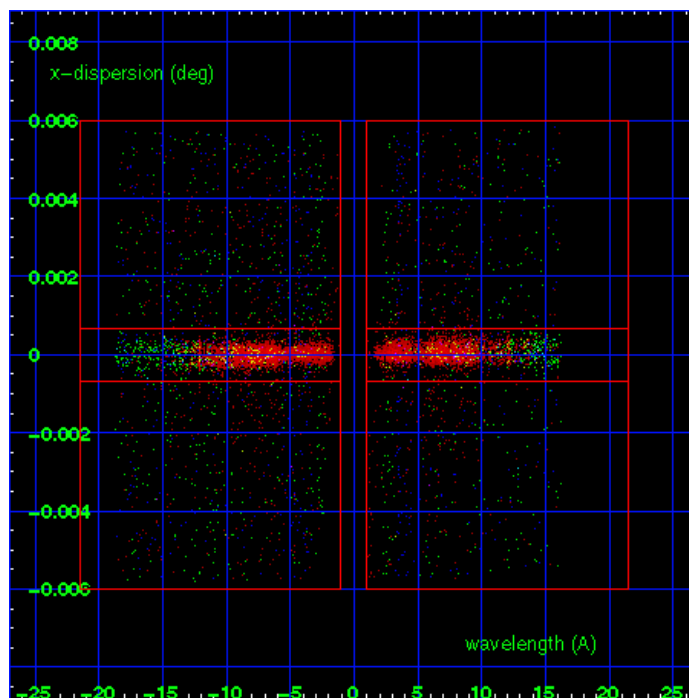
HEG Order Sort 123



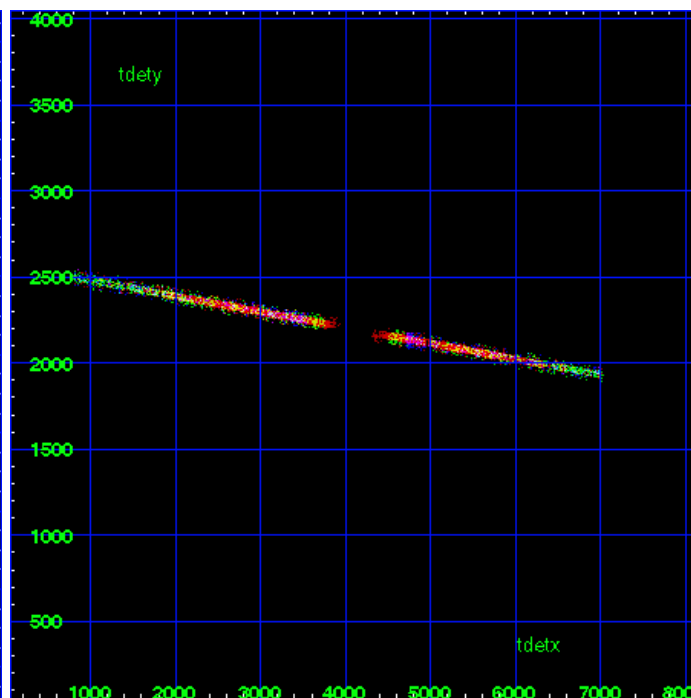
HEG Zero Order



HEG Order Sort ALL

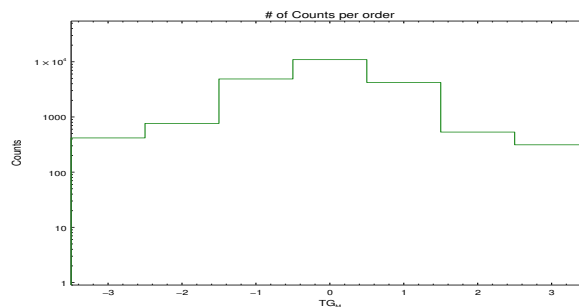


Spot Image HEG

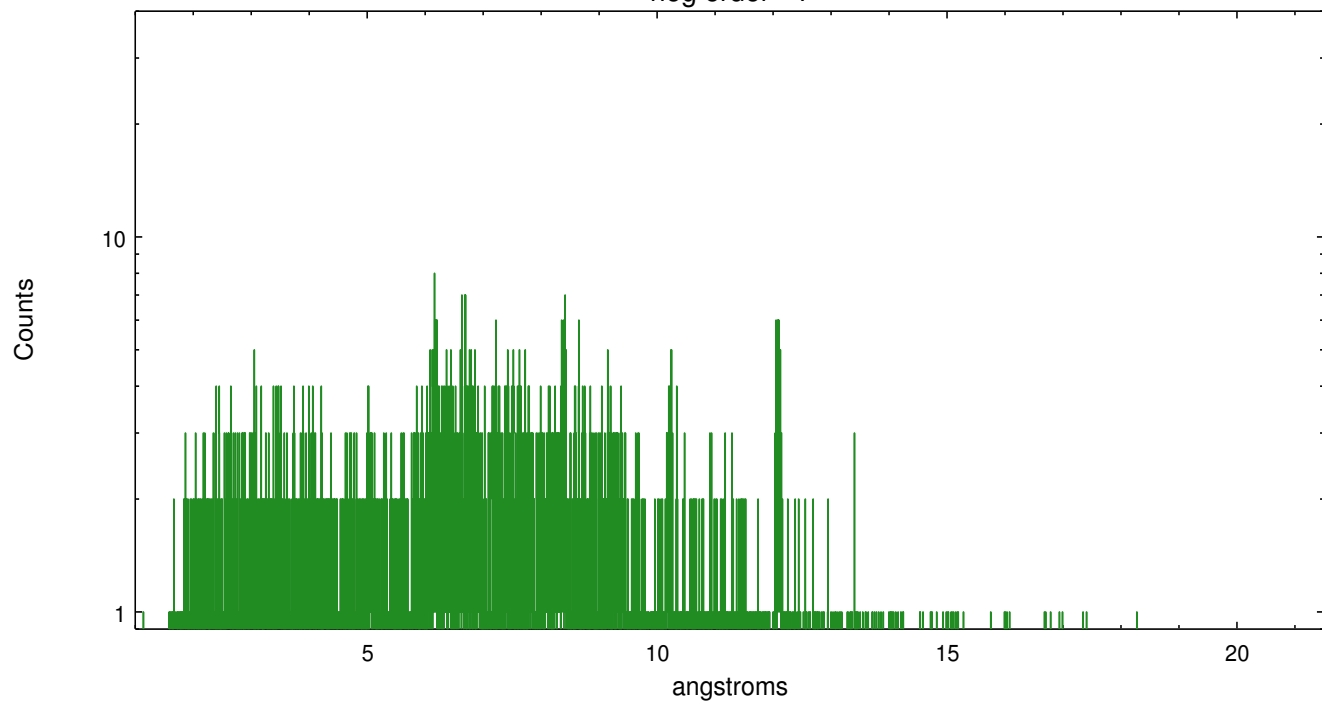


Full Detector HEG

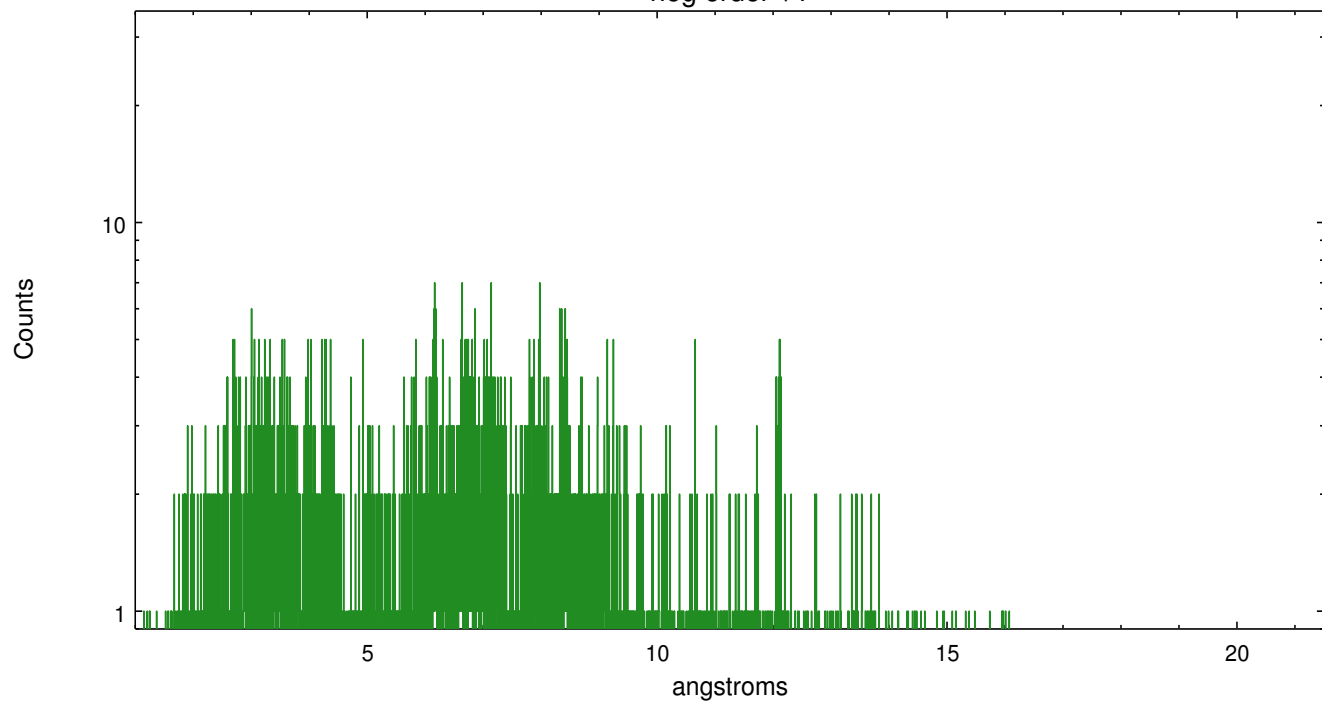
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	417	764	4880	10937	4214	532	313



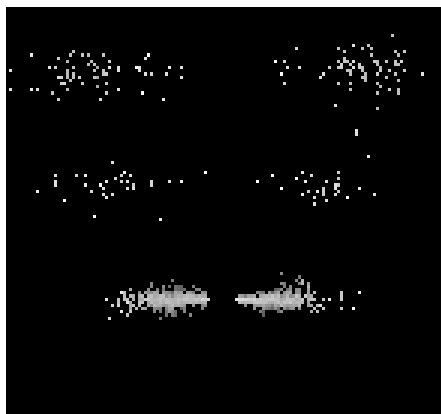
heg order -1



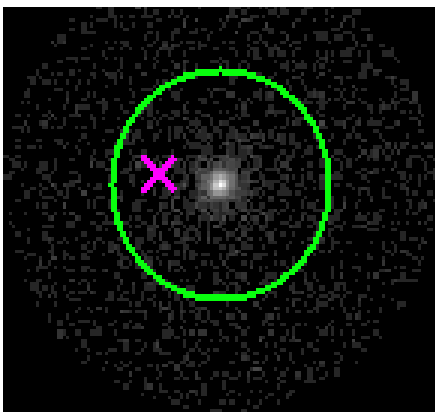
heg order +1



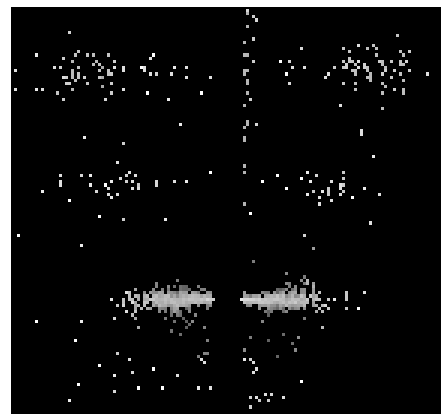
3.2 MEG Arm



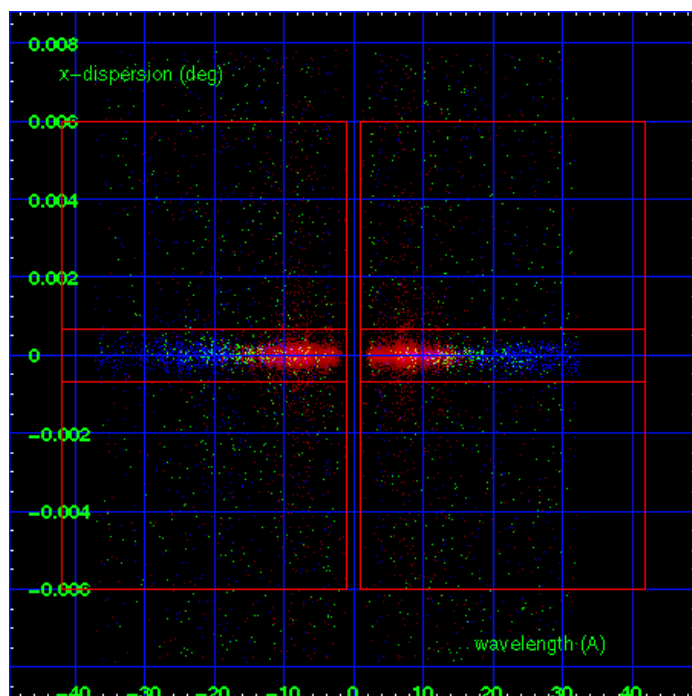
MEG Order Sort 123



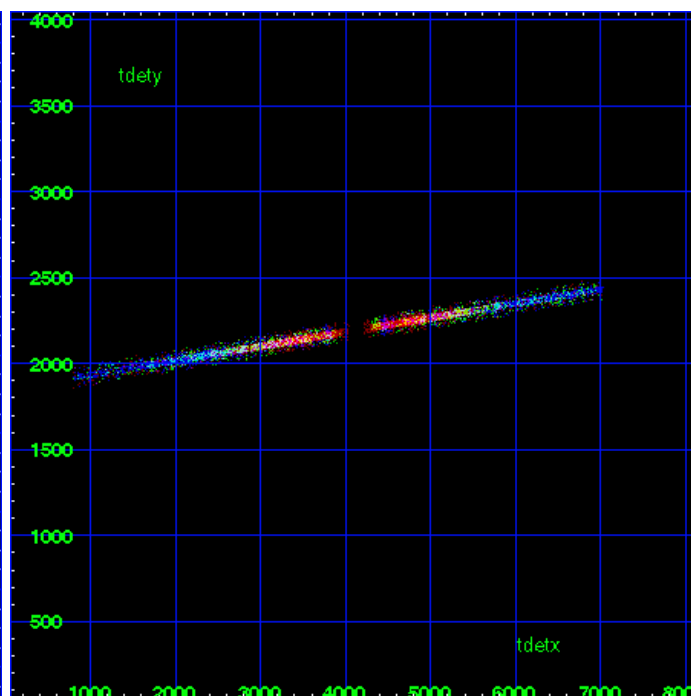
MEG Zero Order



MEG Order Sort ALL

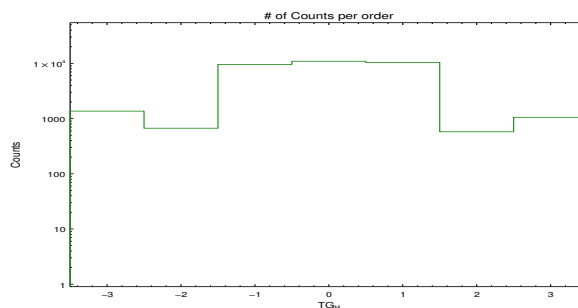


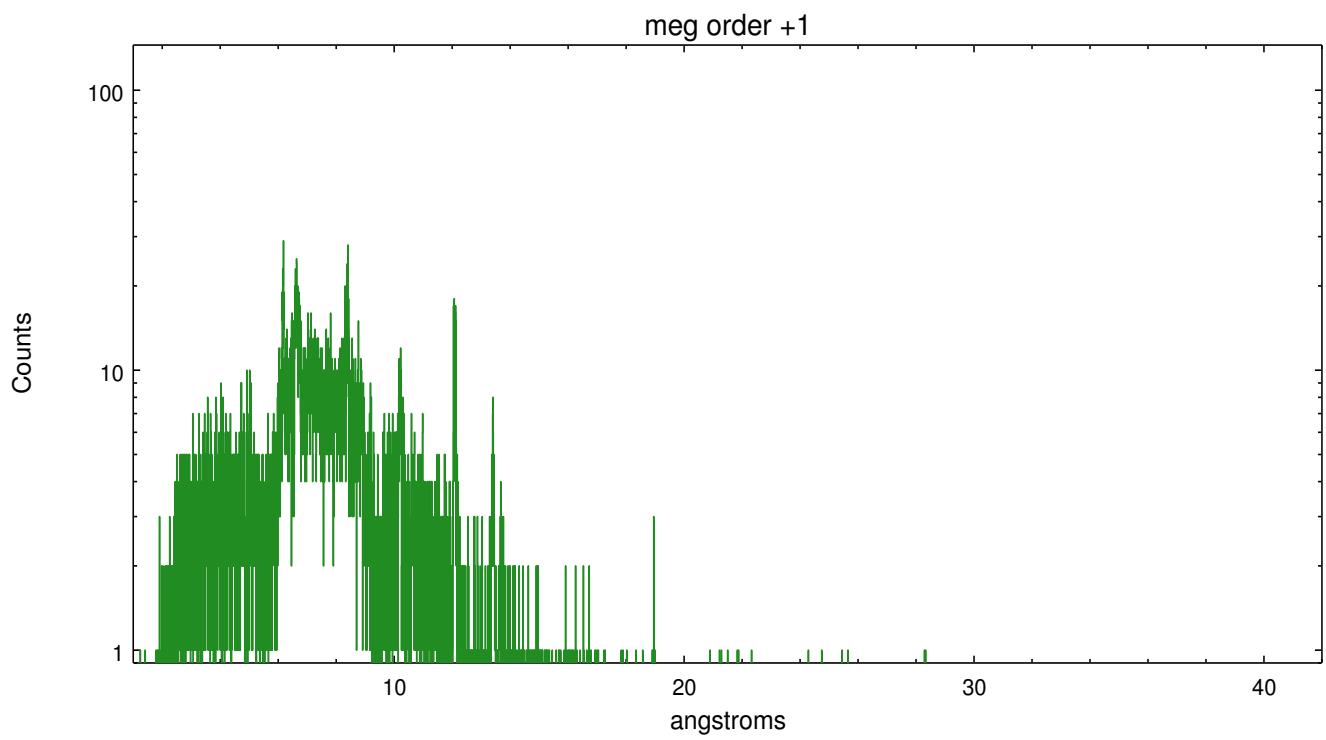
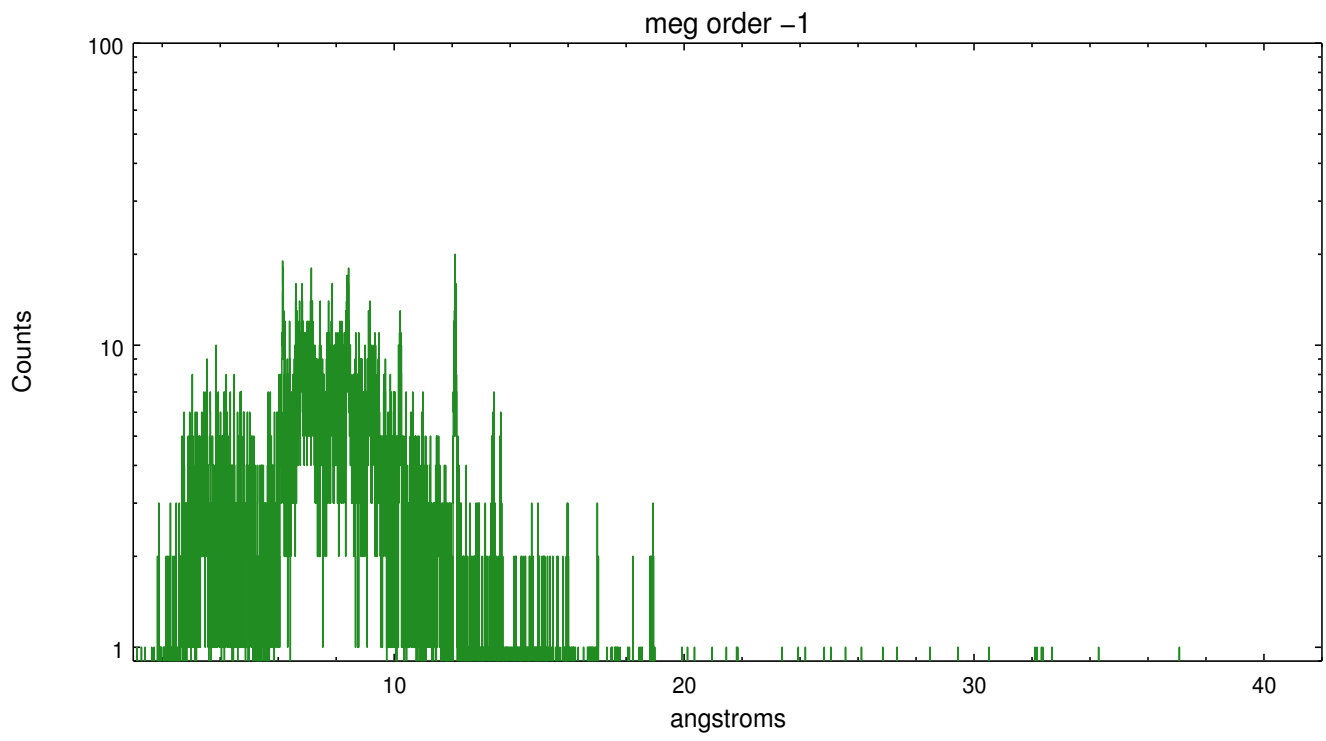
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1365	669	9589	10937	10406	577	1055





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.5327998

A.2 Comments

Optical monitoring of target during observation in slot 7.