

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10693 - L2 Version 2
Chandra X-Ray Center

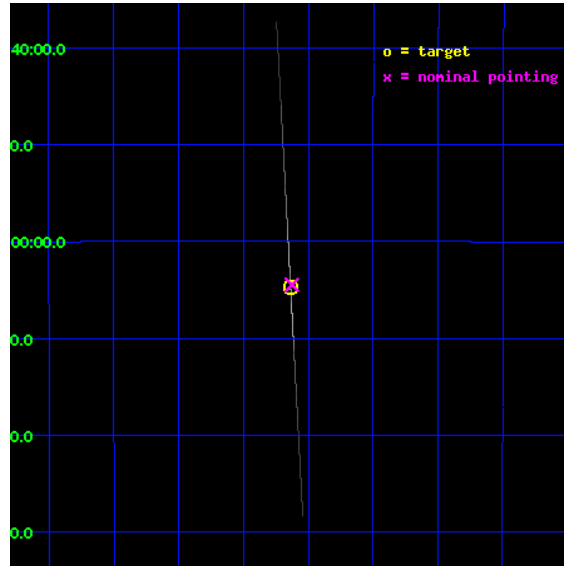
L2 Processing Date : Jun 7 2012

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1 Front

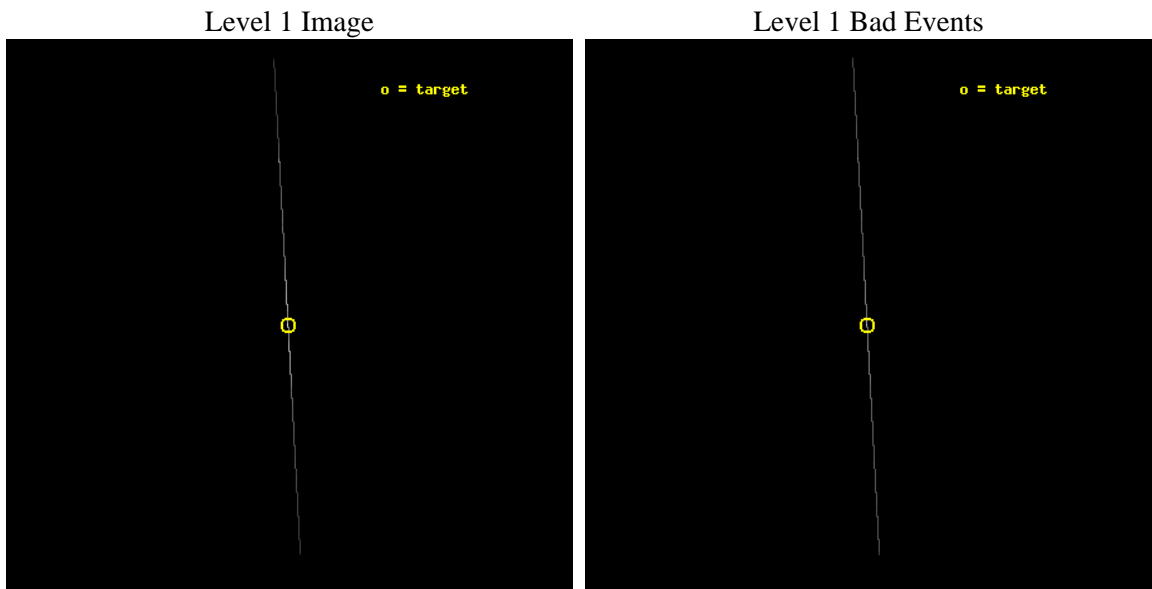
seq_num	401060	Sequence number
obs_id	10693	Observation id
title	Observe Z sources at High Mass Accretion Rates	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	GX 5-1	Source name
ra_targ	270.284167	Observer's specified target RA [deg]
dec_targ	-25.079167	Observer's specified target Dec [deg]
ra_nom	270.28161283199	Nominal RA [deg]
dec_nom	-25.074881257712	Nominal Dec [deg]
roll_nom	86.885751929047	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8146.5	Sum of GTIs [s]
livetime	8114.677734375	Livetime [s]
ontime4	8146.5	Sum of GTIs [s]
ontime5	8146.5	Sum of GTIs [s]
ontime6	8146.5	Sum of GTIs [s]
ontime7	8146.5	Sum of GTIs [s]
ontime8	8146.5	Sum of GTIs [s]
ontime9	8146.5	Sum of GTIs [s]
l2events	2171222	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	8146.5	Sum of GTIs [s]
caldbver	4.4.10	 	ontime4	8146.5	Sum of GTIs [s]
date	2012-06-07T16:55:48	Date and time of file creation	ontime5	8146.5	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8146.5	Sum of GTIs [s]
			ontime7	8146.5	Sum of GTIs [s]
			ontime8	8146.5	Sum of GTIs [s]
			ontime9	8146.5	Sum of GTIs [s]
			l1events	2488024	Number of level 1 events

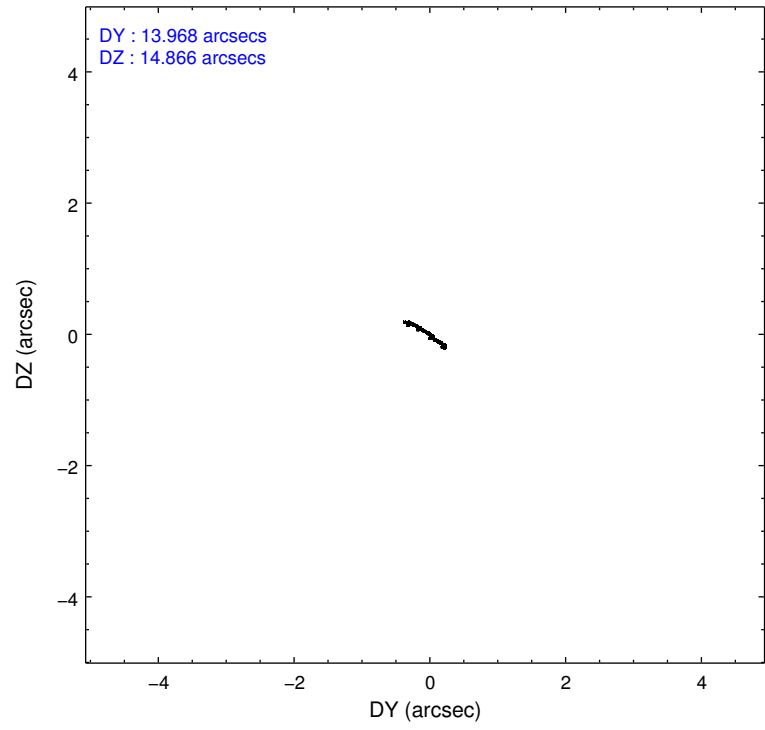
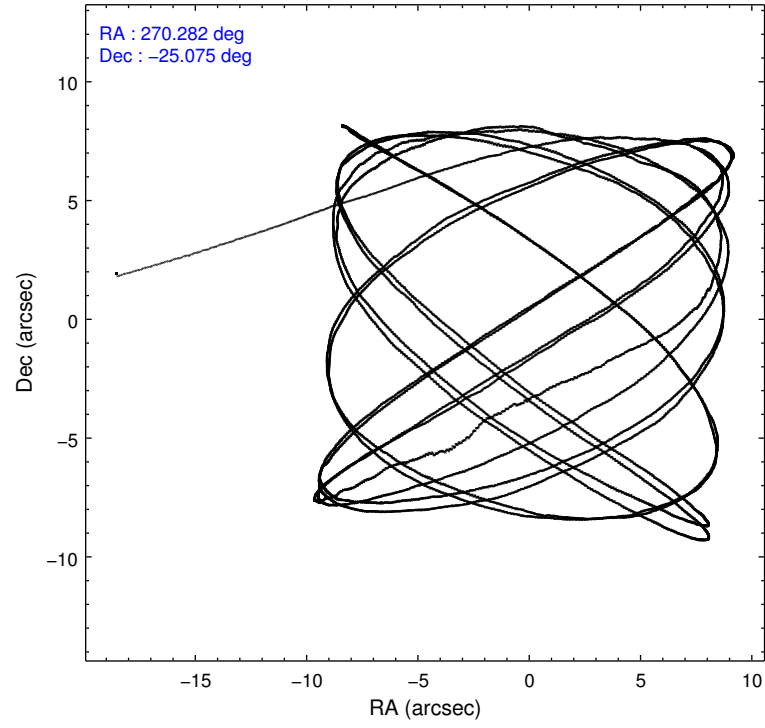
2.1.3 Events

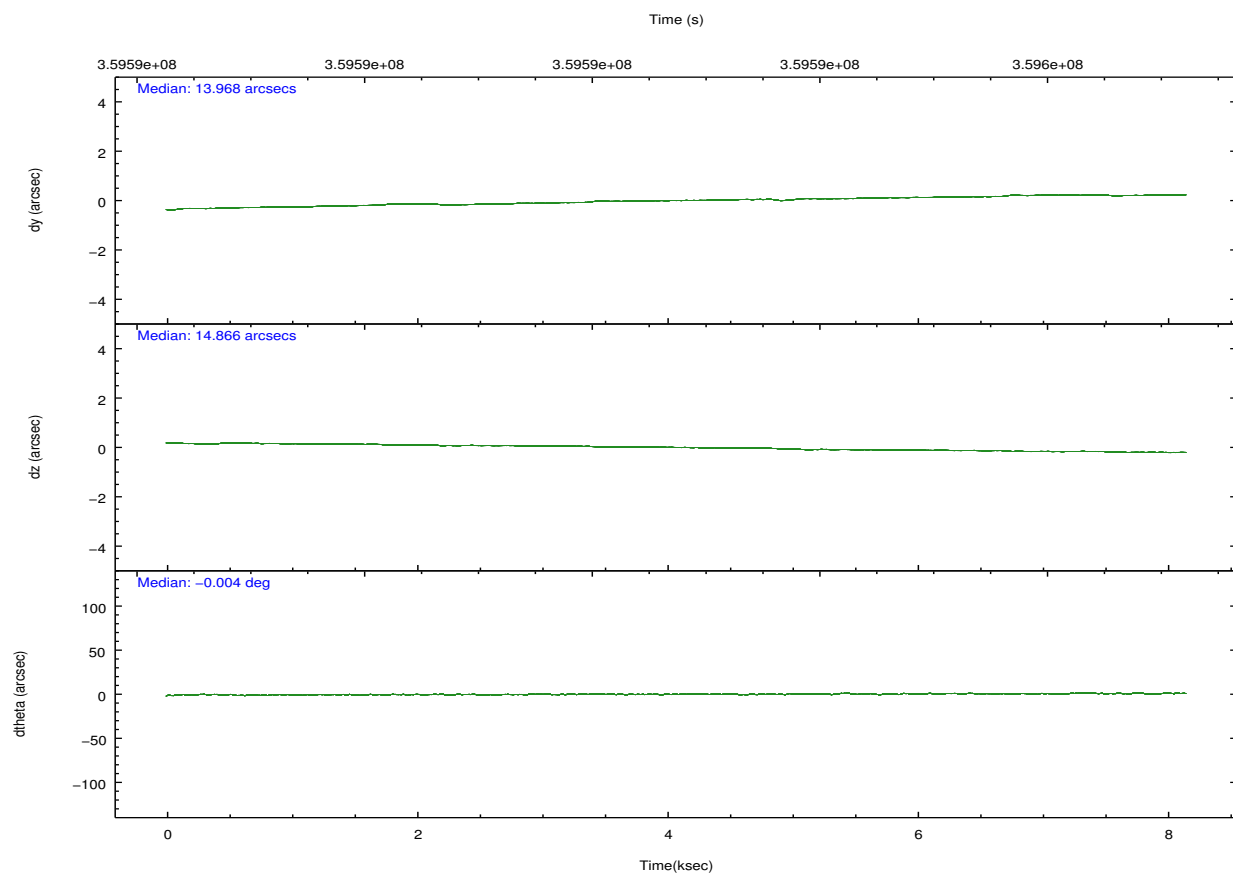
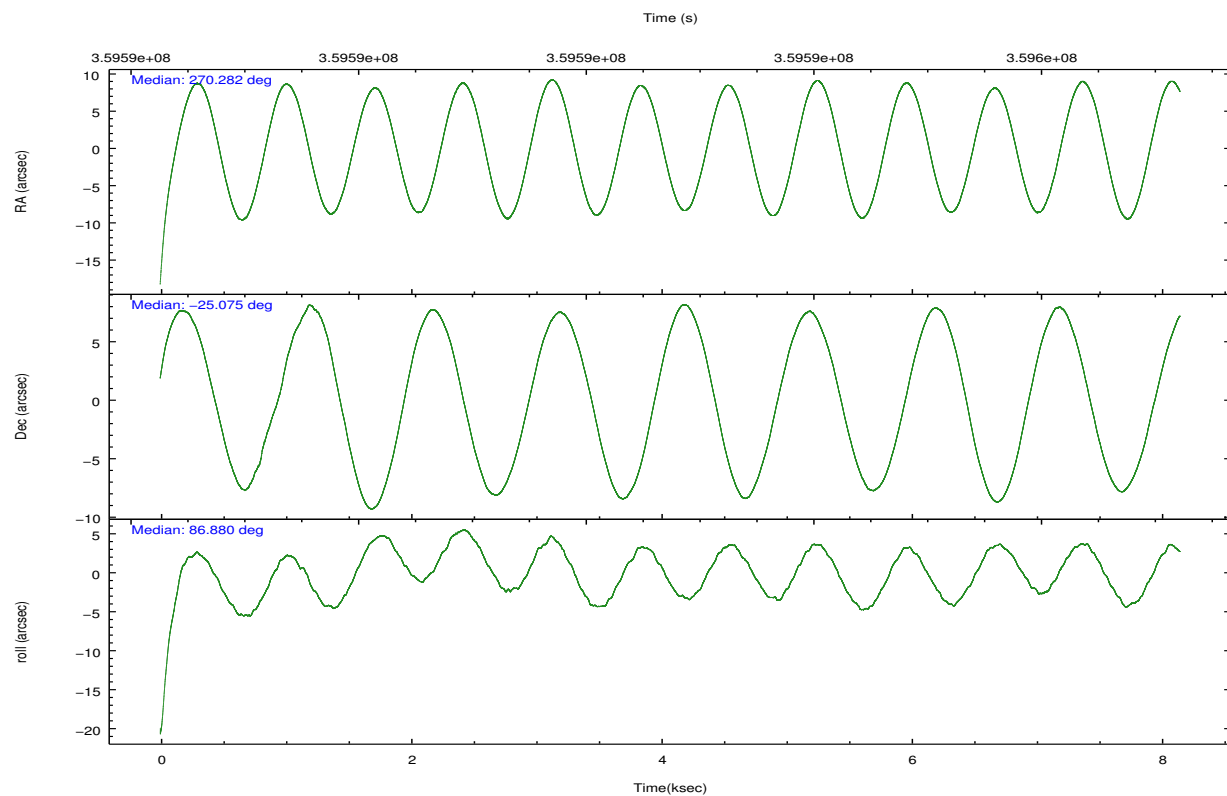
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	34285	155345	680856	1470229	108635	38674	grade 0 events	2450	31435	330528	153380	37401	4143
rejected events	5178	15707	24720	128106	11229	6031		7%	20%	48%	10%	34%	10%
rejected %	15%	10%	3%	8%	10%	15%	grade 1 events	70	118	1821	11848	234	62
								0%	0%	0%	0%	0%	0%
							grade 2 events	18849	52223	229078	380737	39542	20029
								54%	33%	33%	25%	36%	51%
							grade 3 events	2082	2812	24492	96140	5606	1900
								6%	1%	3%	6%	5%	4%
							grade 4 events	2083	2695	24446	95916	5177	2114
								6%	1%	3%	6%	4%	5%
							grade 5 events	3593	8015	8330	86298	6080	4339
								10%	5%	1%	5%	5%	11%
							grade 6 events	5158	58047	62161	645910	14595	6087
								15%	37%	9%	43%	13%	15%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

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	CC33_GRADED	CC33_GRADED	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	270.295630	270.2816128319904	CCD I2 on	N	N
[deg] Pointing Dec	-25.099118	-25.07488125771166	CCD I3 on	N	N
[deg] Pointing Roll	86.735082	86.88575192904672	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-178.832523	-178.8382187693597	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-11.3	-11.29430381364813	CCD S4 on	Y	Y
[s] Observation start time (MET)	359588811.184000	359587831.97767	CCD S5 on	O2	Y
Observation start date	2009-05-24T21:45:45	2009-05-24T21:30:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	359596811.184000	359597552.05315	On-chip summing requested	N	N
Observation end date	2009-05-24T23:59:05	2009-05-25T00:12:32	Subarray requested	NONE	NONE
Read mode	CONTINUOUS	CONTINUOUS	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0

2.3 Aspect



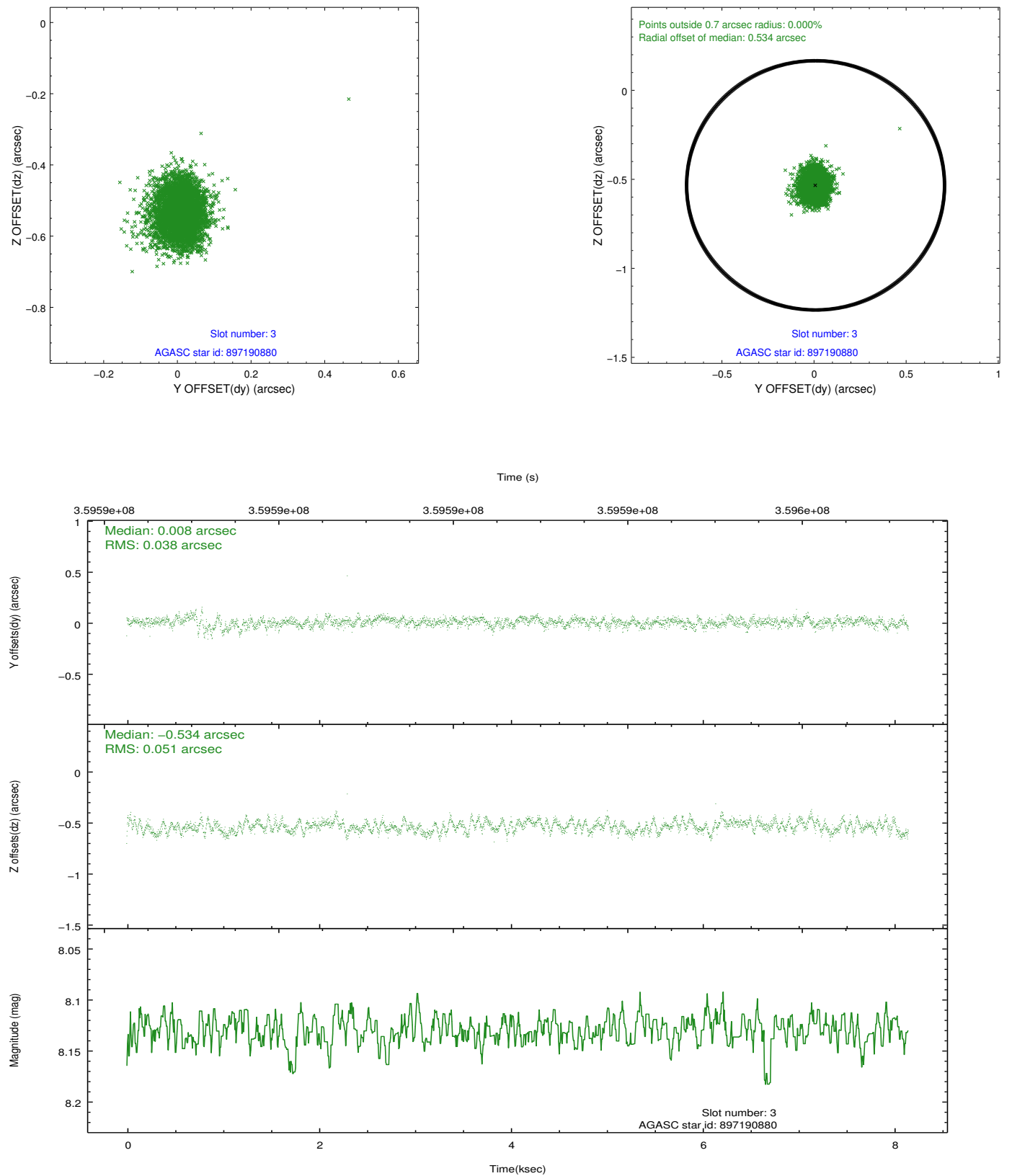


Slot Statistics

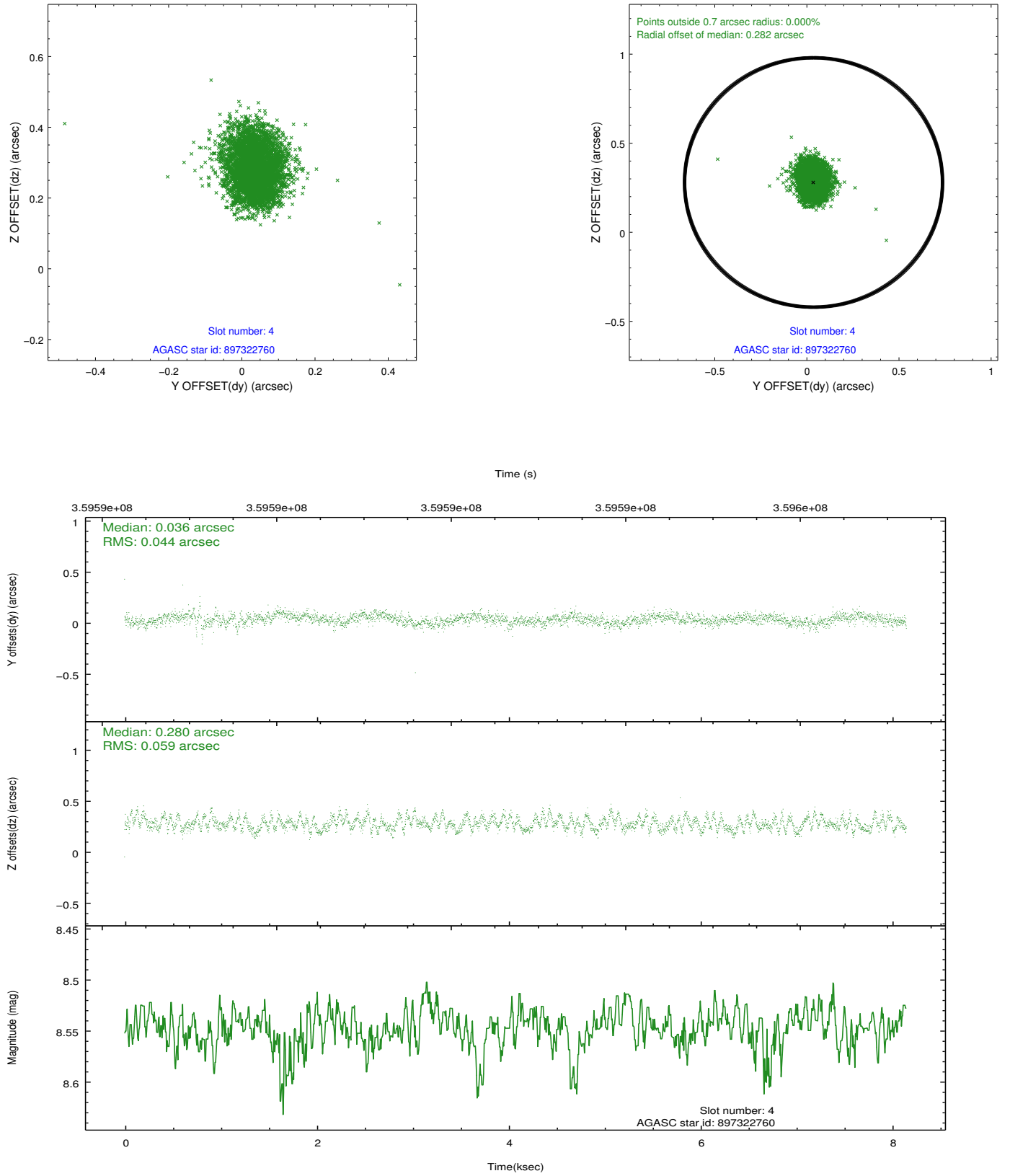
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	1986	-0.085	-0.385	0.012	0.018	0.000000	0.000000	-766.14	-1969.12
1	FID	ACIS-S-4	6.95	1988	0.179	0.143	0.010	0.017	0.000000	0.000000	2147.09	-60.97
2	FID	ACIS-S-5	7.03	1988	-0.126	0.249	0.012	0.018	0.000000	0.000000	-1818.14	-66.40
3	GUIDE	897190880	8.13	3977	0.008	-0.534	0.068	0.109	269.584058	-25.142408	-293.87	2305.53
4	GUIDE	897322760	8.55	3975	0.036	0.280	0.078	0.124	270.988015	-25.669699	-1929.49	-2359.13
5	GUIDE	897325464	8.20	3975	-0.094	0.213	0.055	0.092	270.454899	-24.555059	1984.26	-409.10
6	GUIDE	897325632	8.52	3976	-0.053	-0.156	0.077	0.124	270.212330	-24.788521	1101.29	335.47
7	GUIDE	897323472	8.47	3975	0.106	0.202	0.074	0.119	270.860121	-25.266503	-500.17	-1869.01

2.4 Star Slots

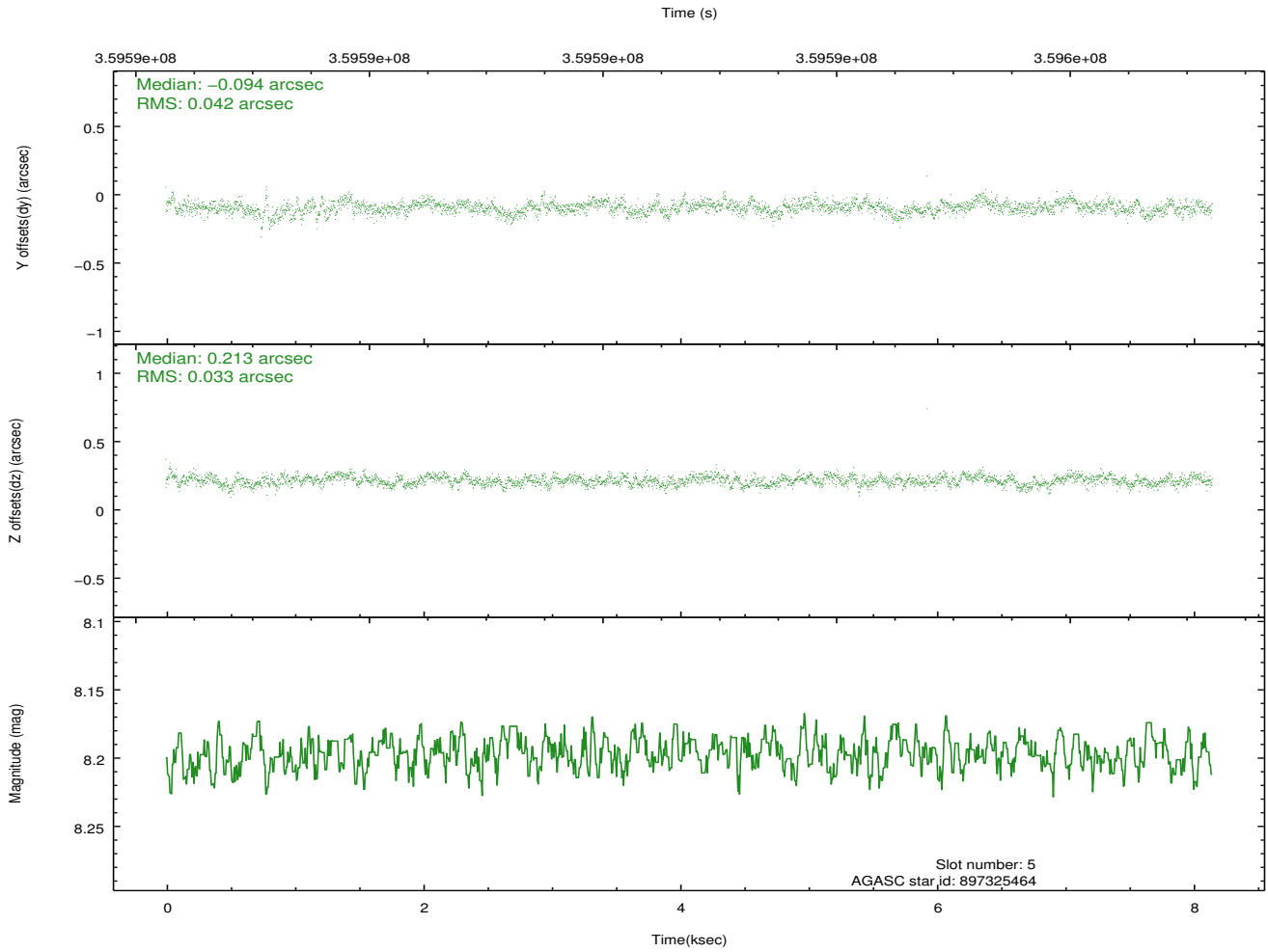
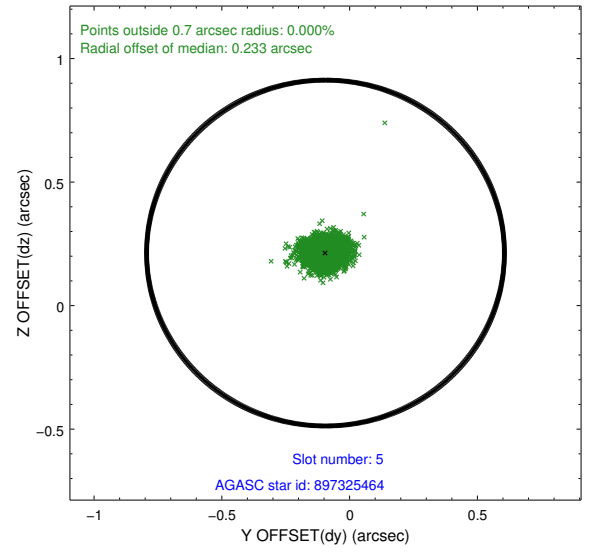
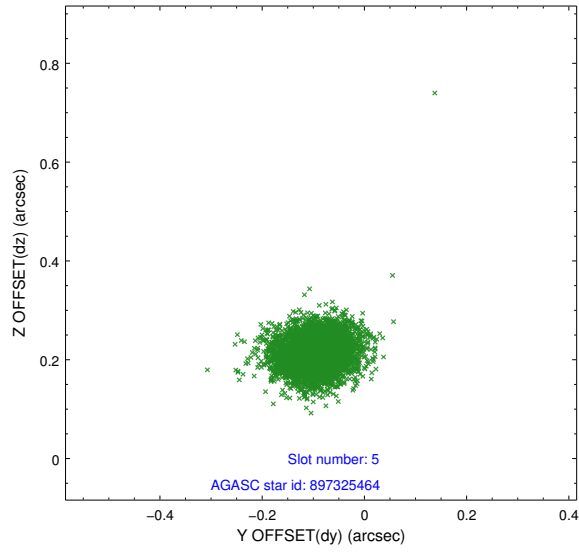
2.4.1 Slot 3



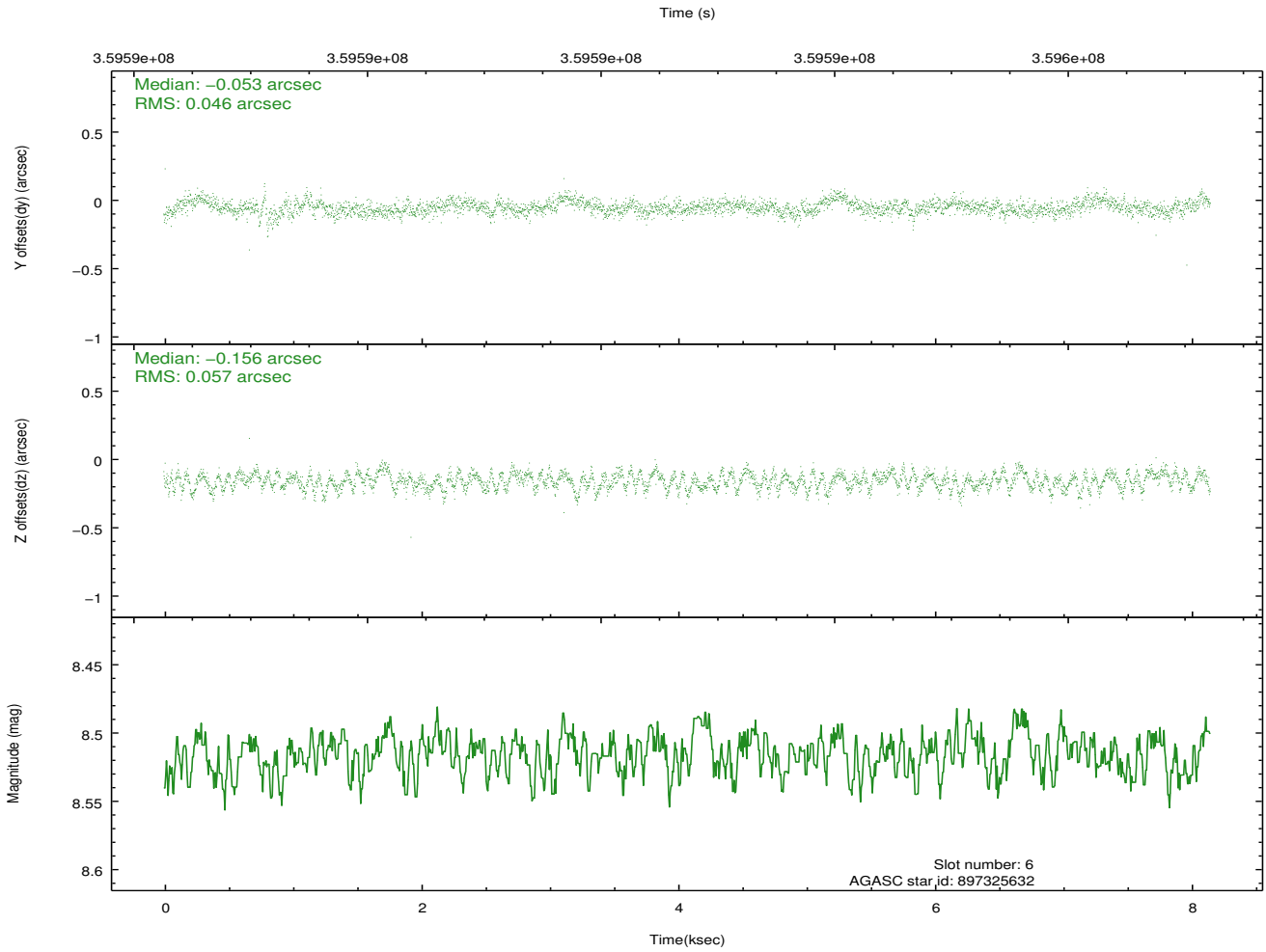
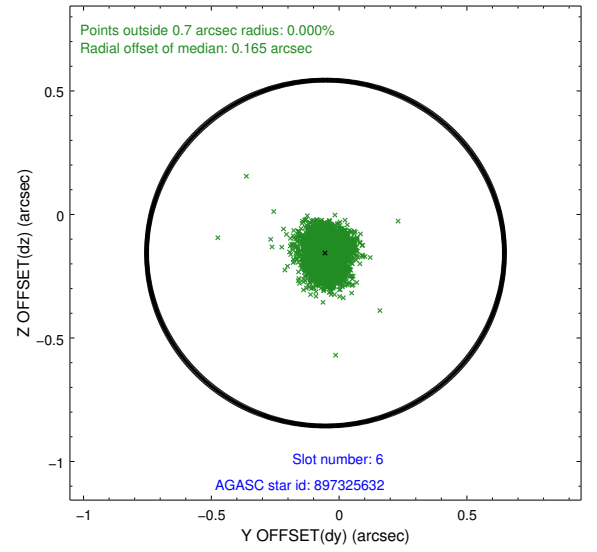
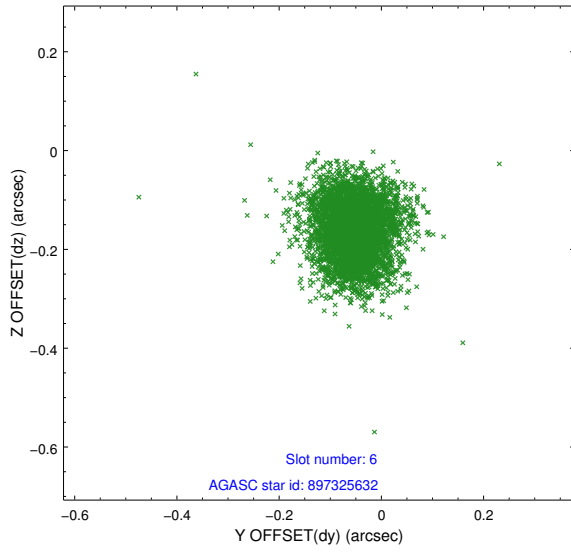
2.4.2 Slot 4



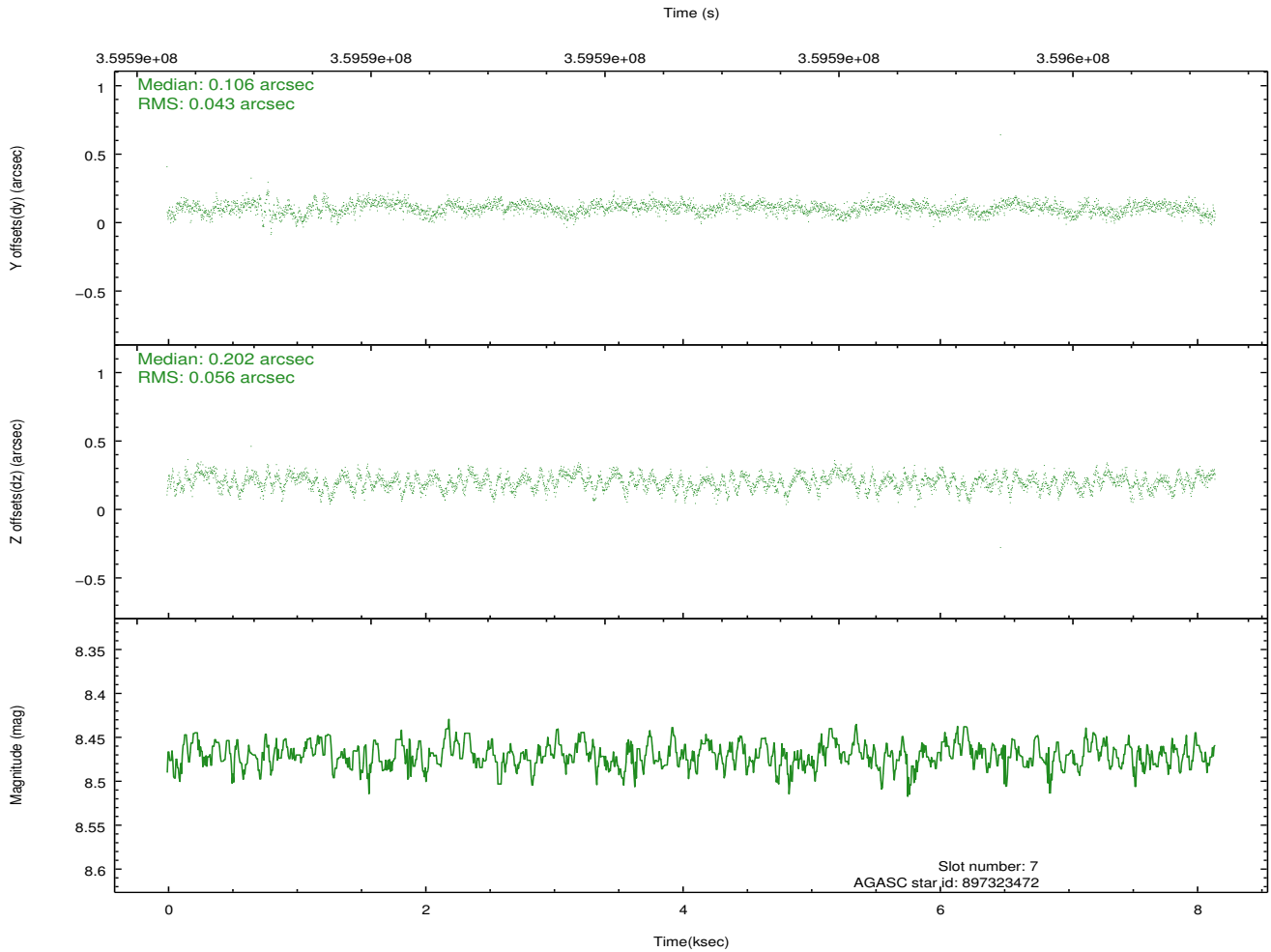
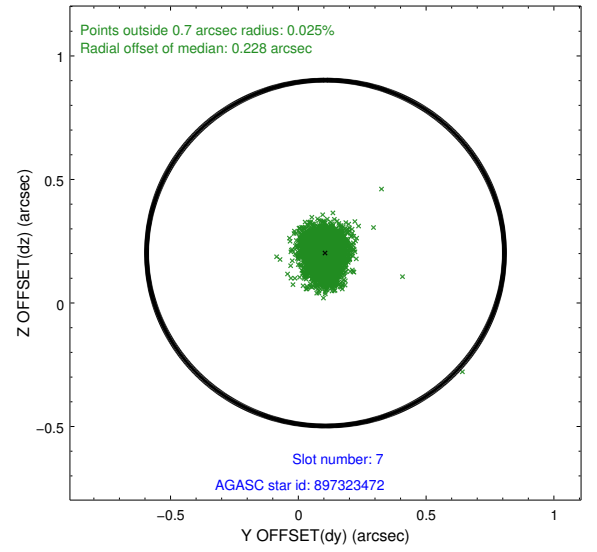
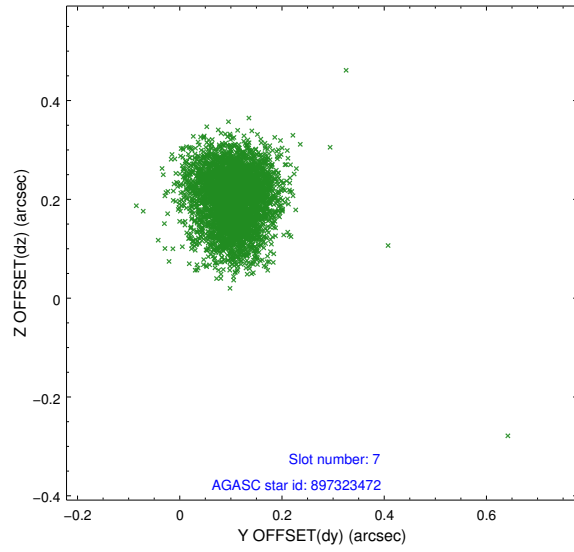
2.4.3 Slot 5



2.4.4 Slot 6

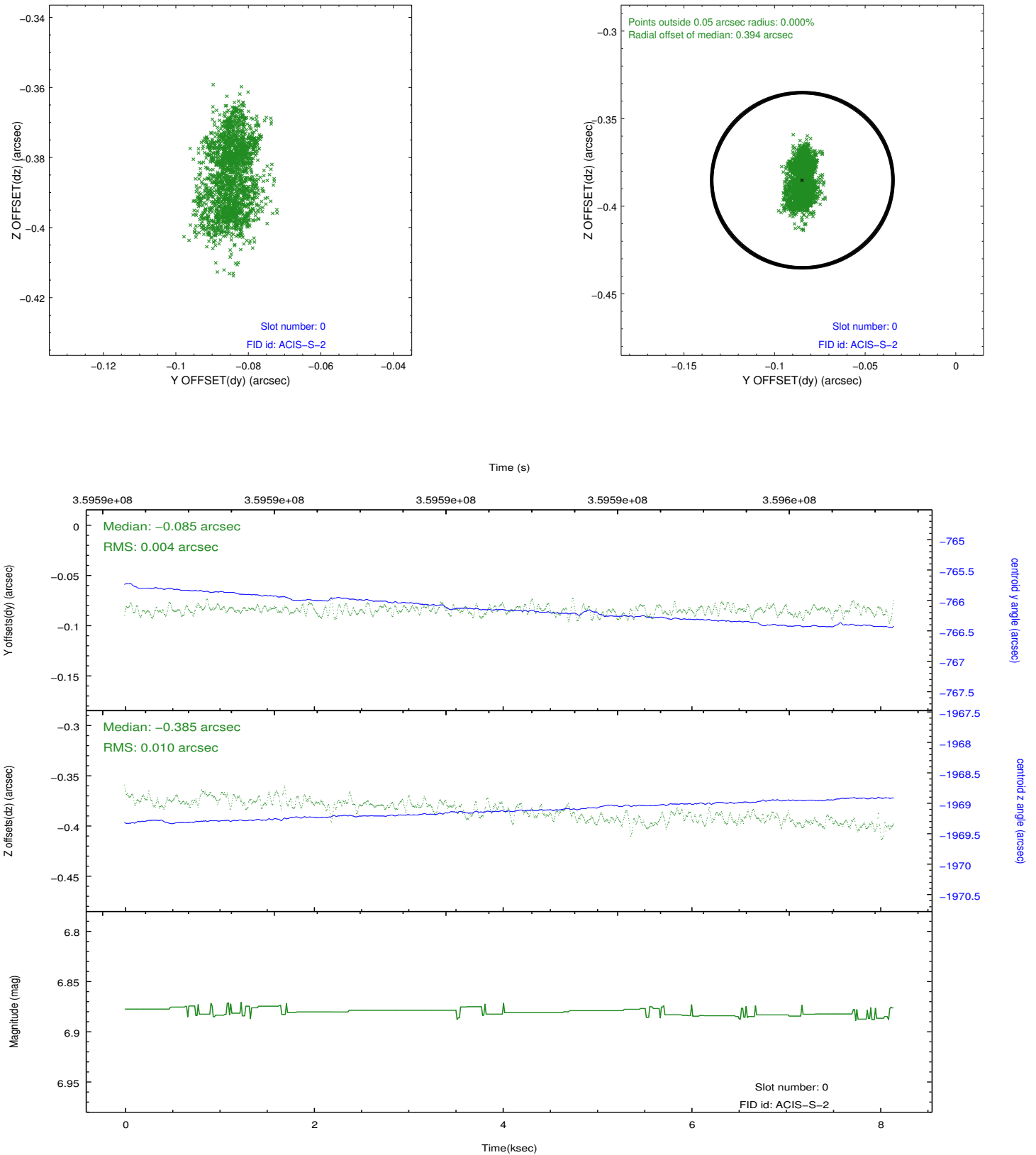


2.4.5 Slot 7

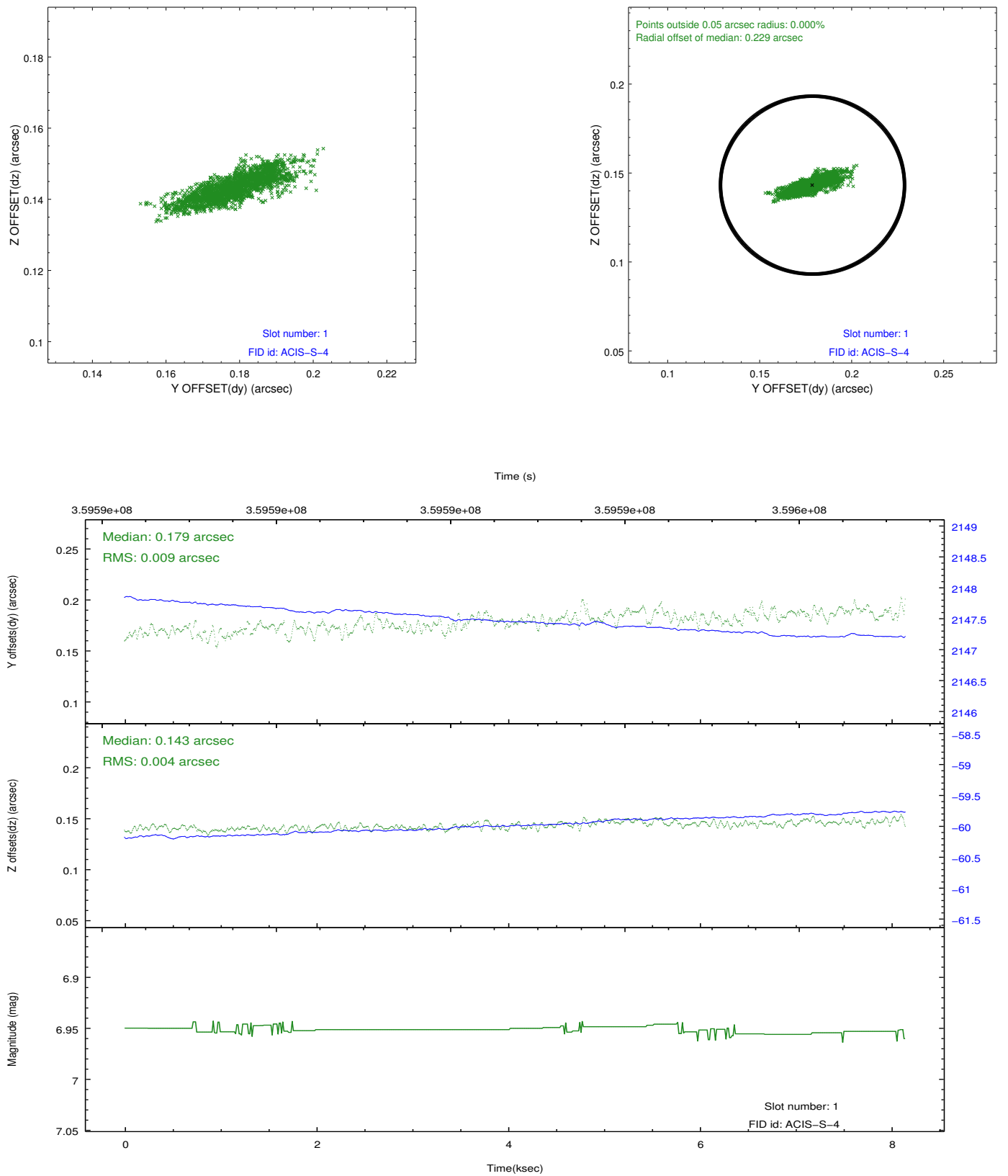


2.5 FID Slots

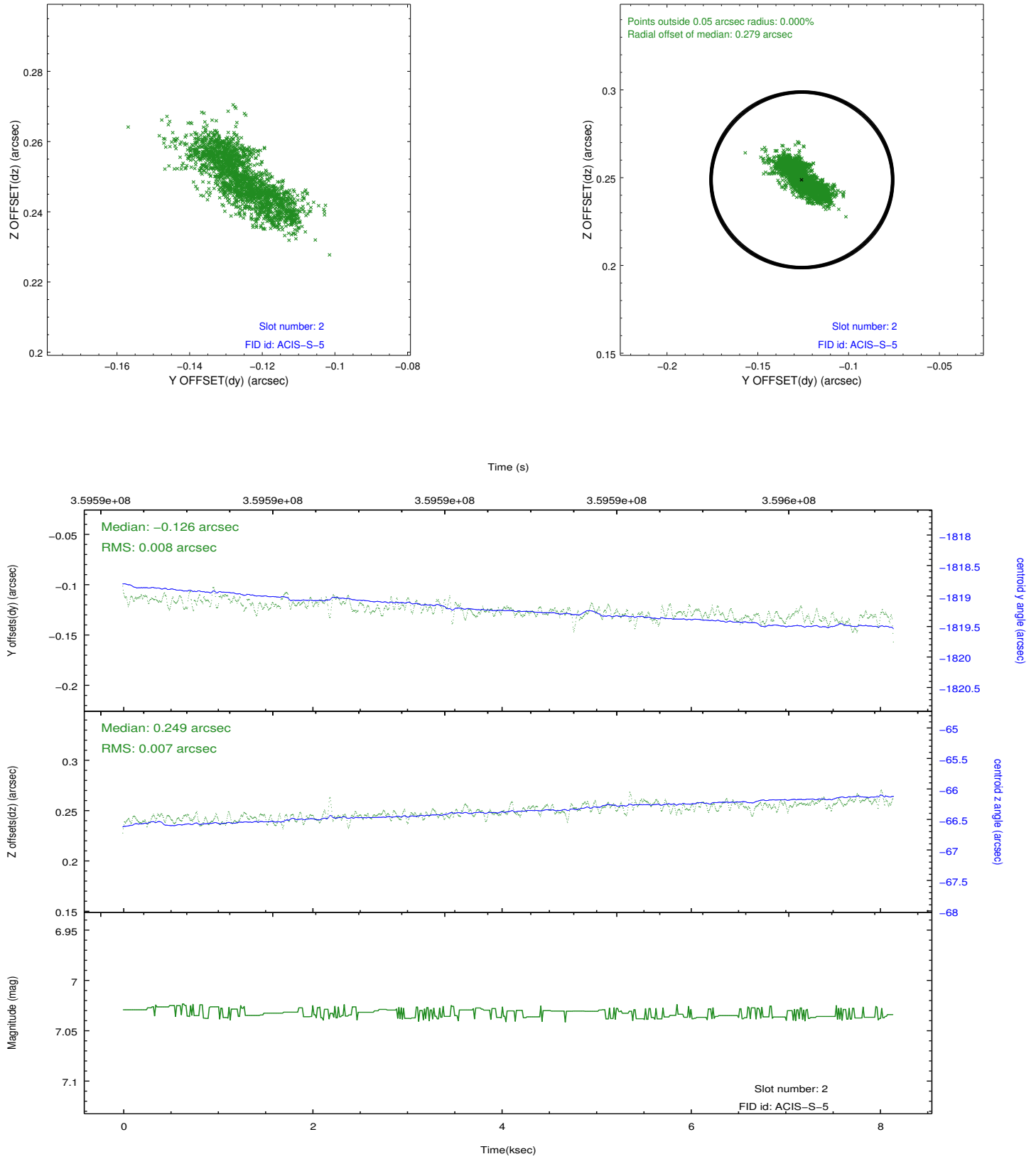
2.5.1 Slot 0



2.5.2 Slot 1

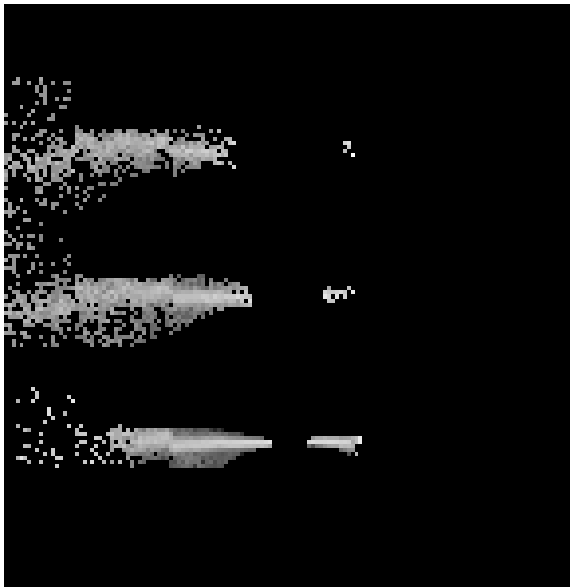


2.5.3 Slot 2

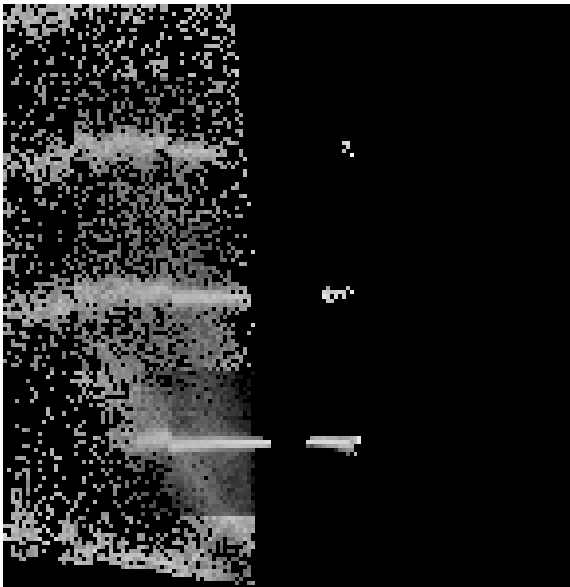


3 Gratings

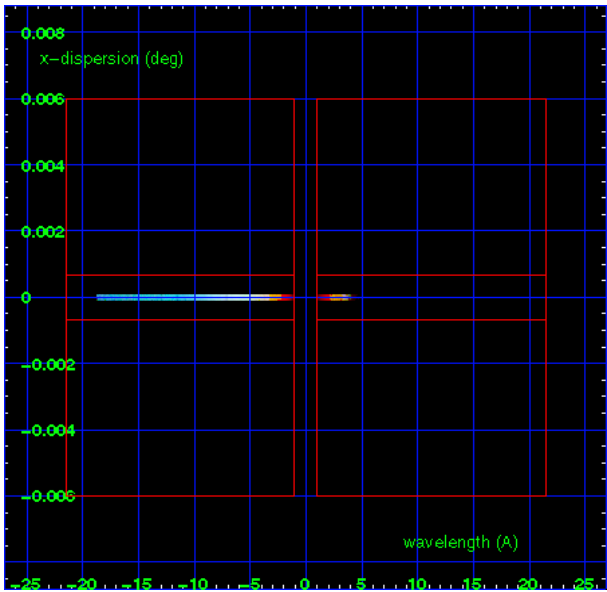
3.1 HEG Arm



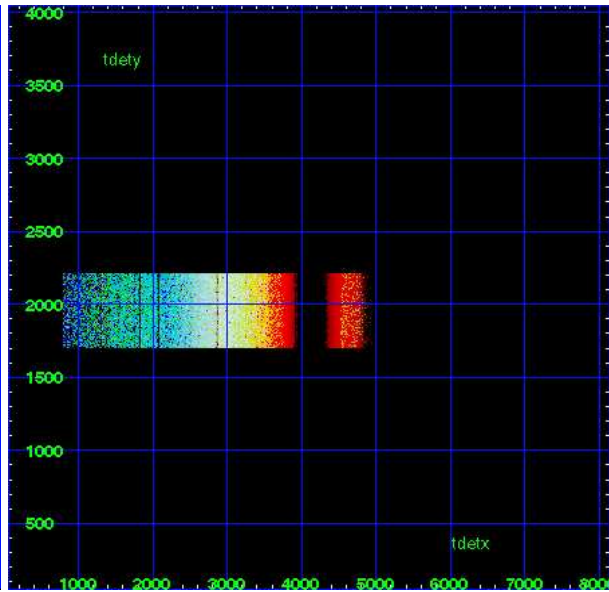
HEG Order Sort 123



HEG Order Sort ALL

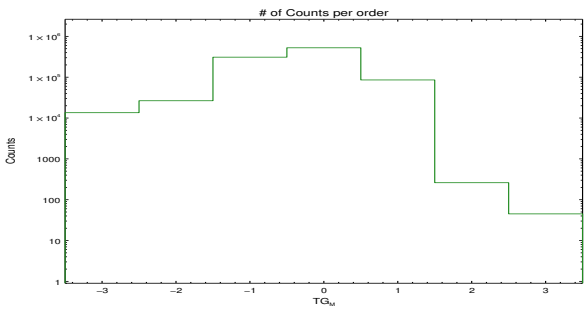


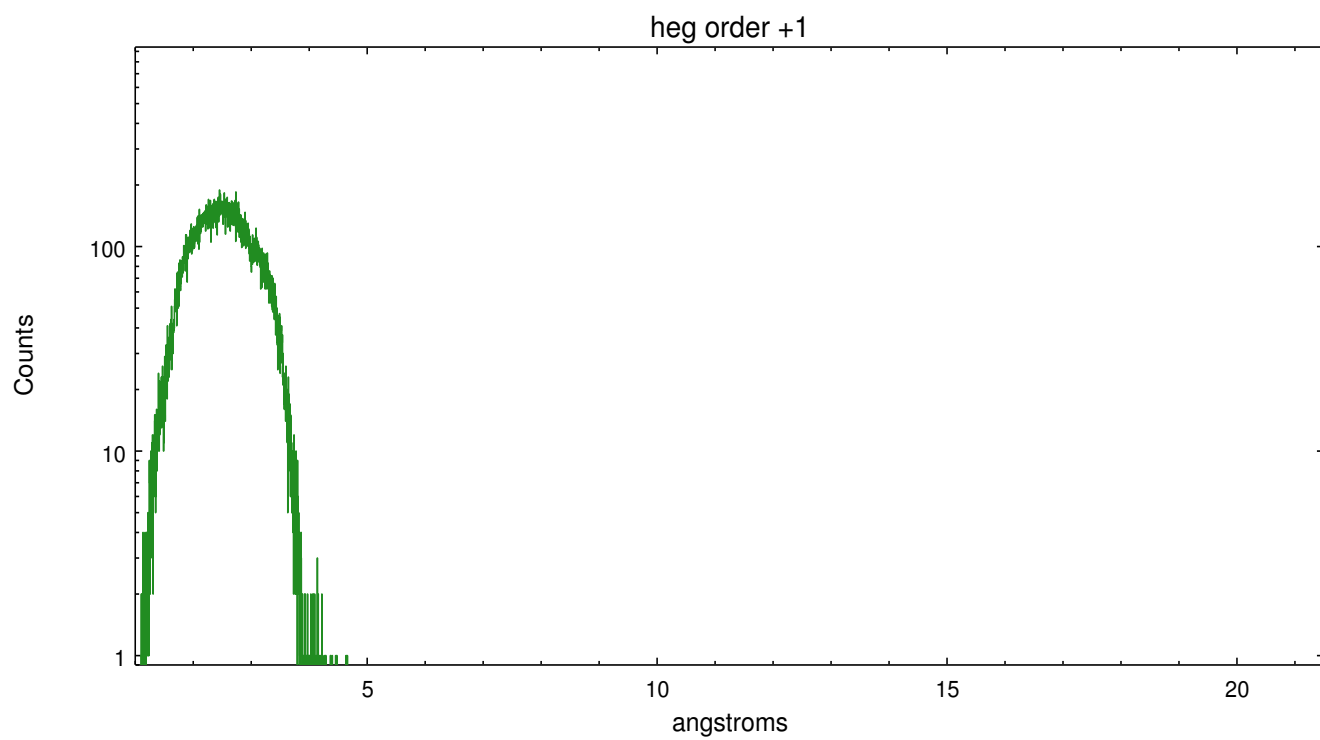
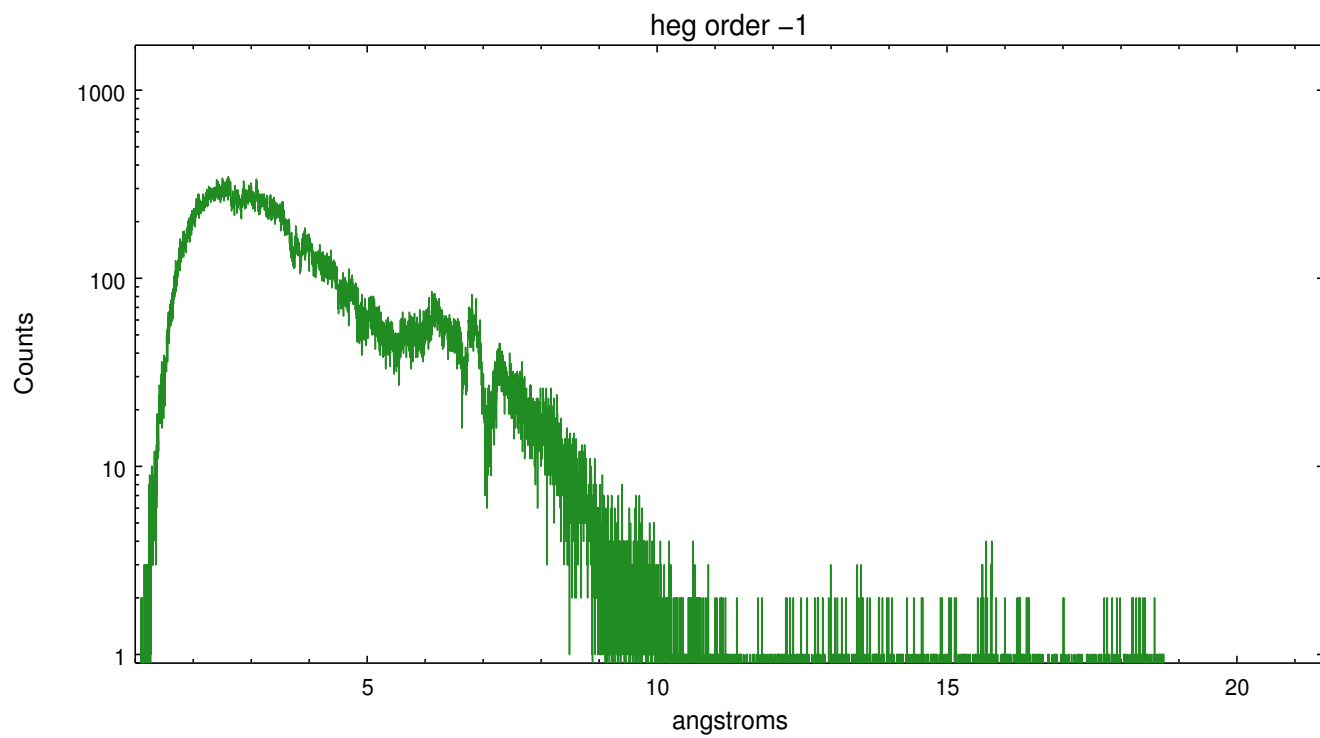
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	13534	26547	309430	525463	85715	261	45

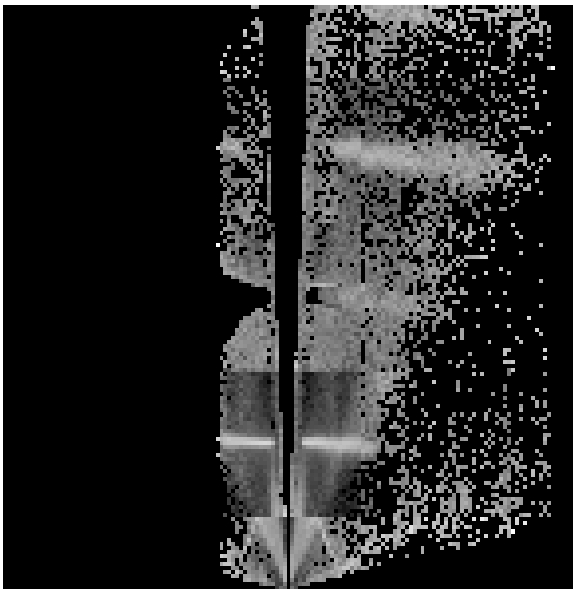




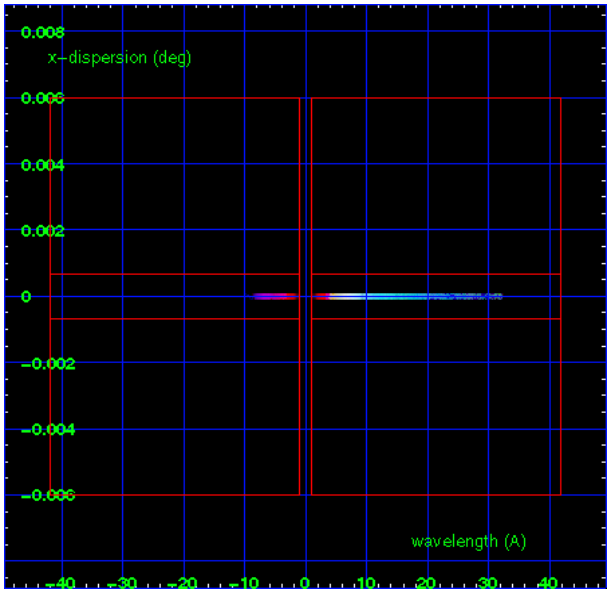
3.2 MEG Arm



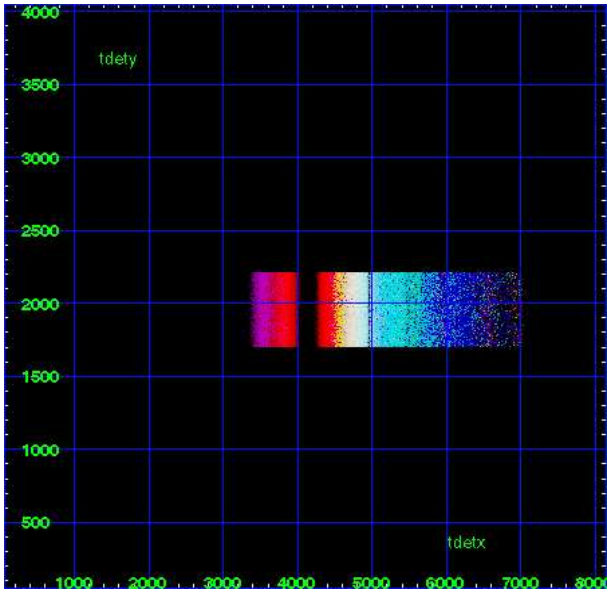
MEG Order Sort 123



MEG Order Sort ALL

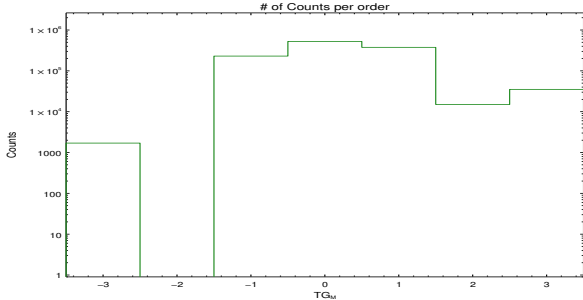


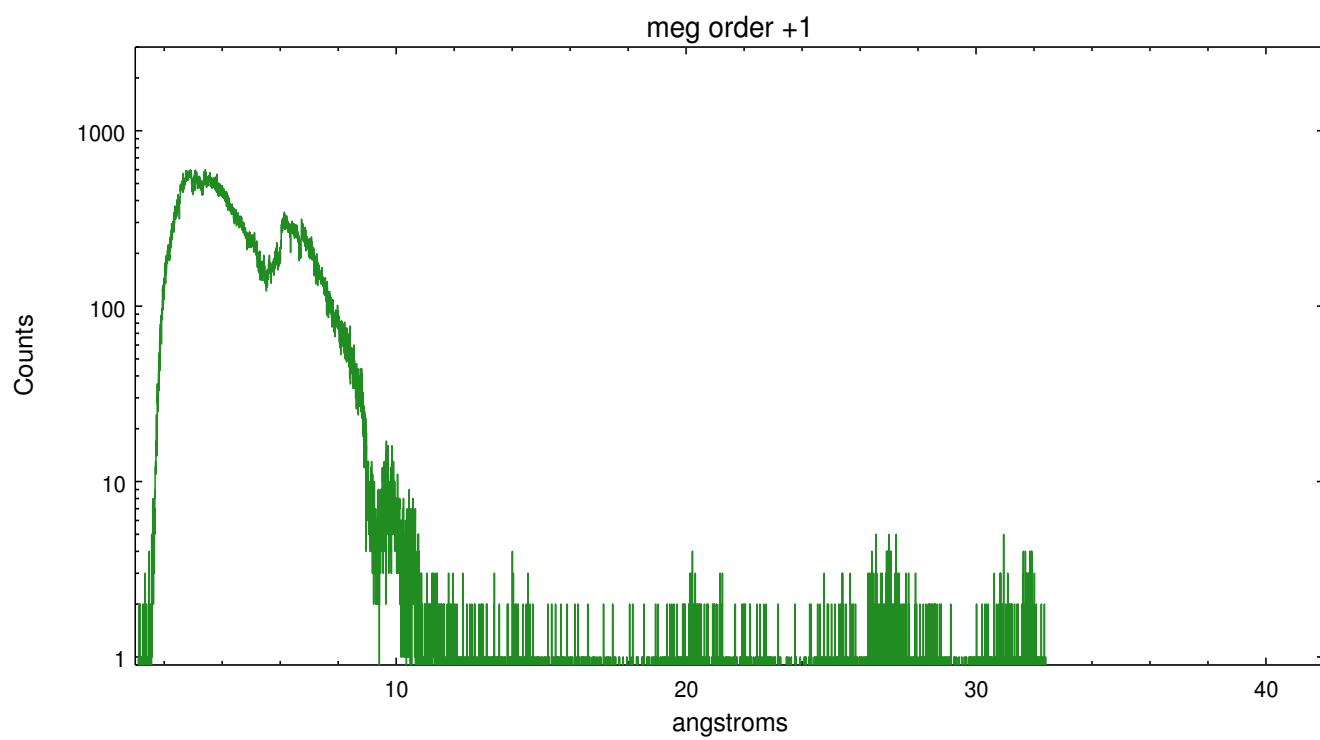
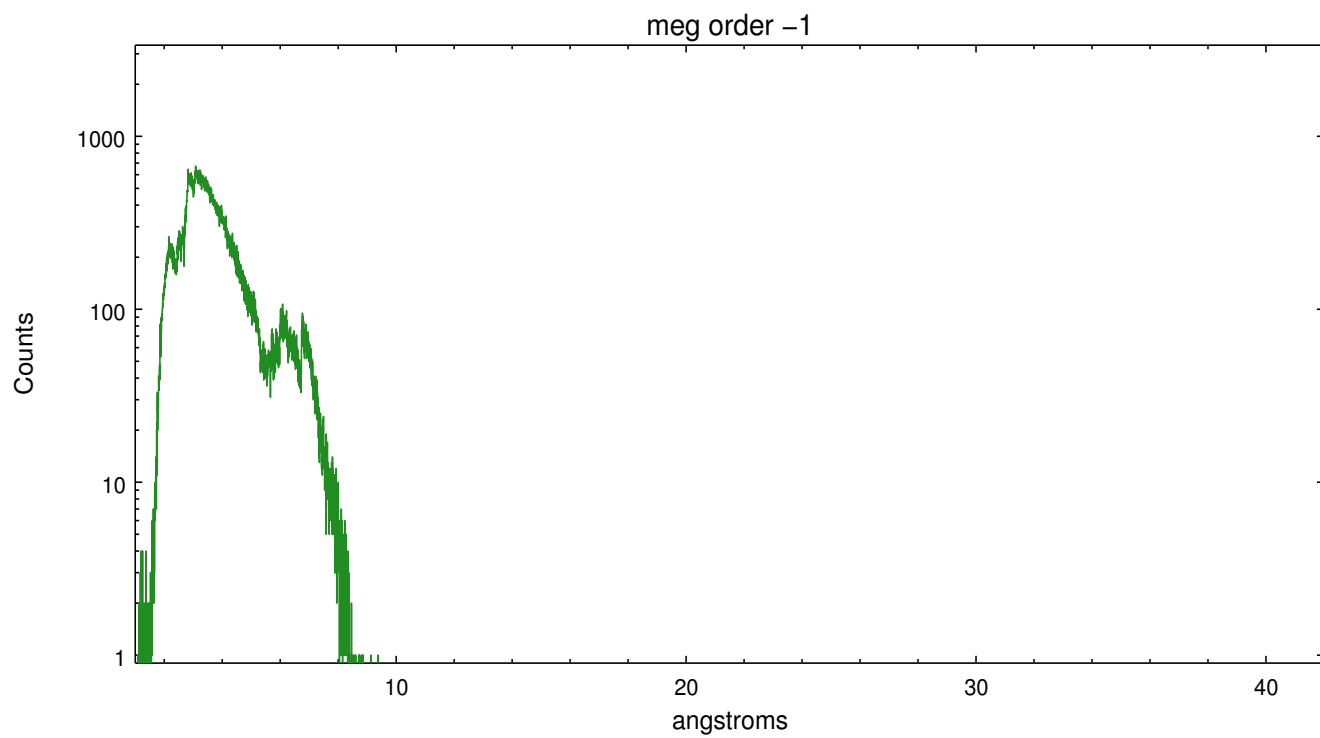
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1701	0	229864	525463	376154	15015	35156





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.06.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1465

A.2 Comments

Note: Intentional SIM offset to place two spectral arms off the detector array. Spectra are primarily HEG negative and MEG positive orders.