

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18844 - L2 Version 1
Chandra X-Ray Center

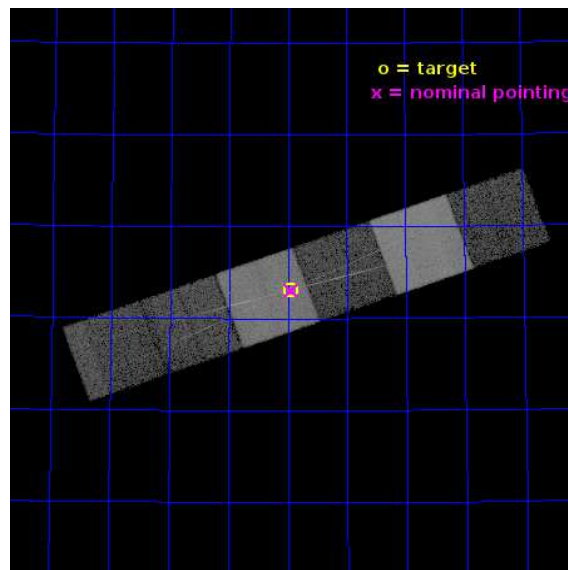
L2 Processing Date : May 7 2016

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1 Front

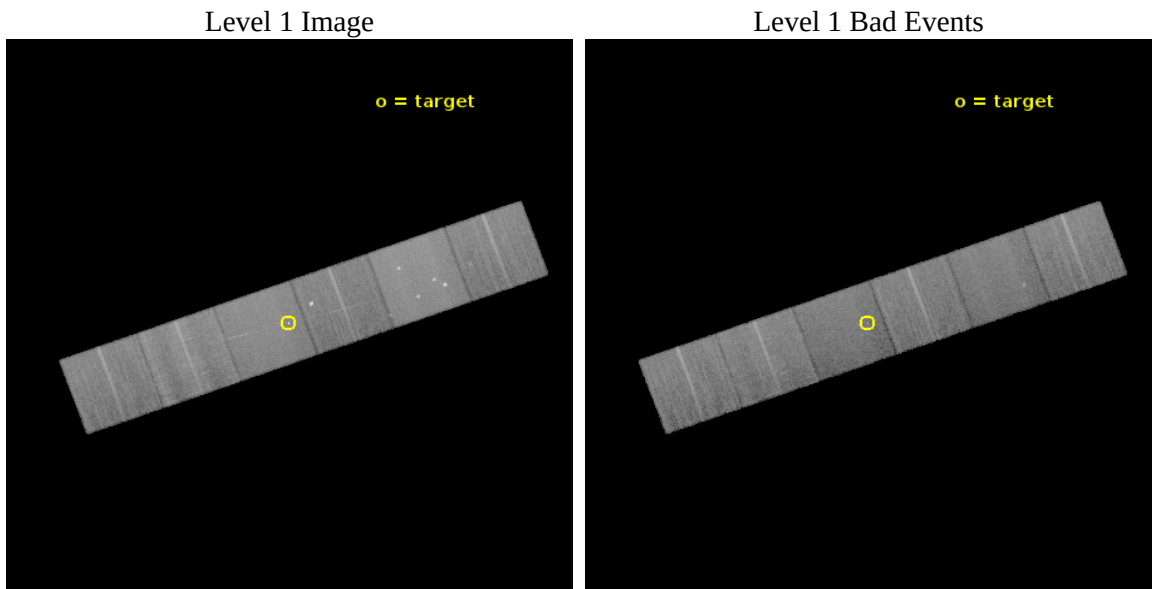
seq_num	703212	Sequence number
obs_id	18844	Observation id
title	Picturing Feedback in Action: from the innermost nuclear region to the Galaxy Scale	Proposal title
observer	Dr. Fabrizio Nicastro	Principal investigator
object	Mkn 876	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	243.488333	Observer's specified target RA [deg]
dec_targ	65.719444	Observer's specified target Dec [deg]
ra_nom	243.48462517254	Nominal RA [deg]
dec_nom	65.717392378008	Nominal Dec [deg]
roll_nom	160.16001838799	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22950.400341988	Sum of GTIs [s]
livetime	22659.788553785	Livetime [s]
ontime4	22950.400341988	Sum of GTIs [s]
ontime5	22950.400341988	Sum of GTIs [s]
ontime6	22950.400341988	Sum of GTIs [s]
ontime7	22950.400341988	Sum of GTIs [s]
ontime8	22950.400341988	Sum of GTIs [s]
ontime9	22950.400341988	Sum of GTIs [s]
l2events	241768	Number of level 2 events



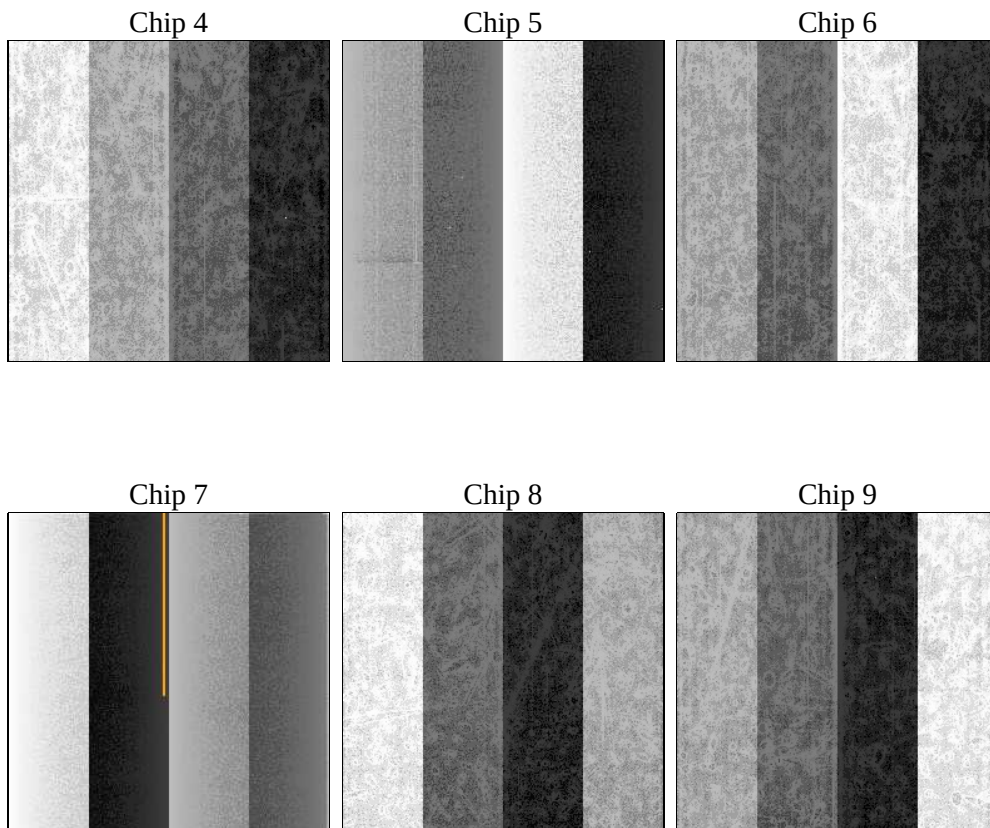
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	22950.400341988	Sum of GTIs [s]
caldsver	4.7.1	 	ontime4	22950.400341988	Sum of GTIs [s]
date	2016-05-08T03:04:13	Date and time of file creation	ontime5	22950.400341988	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	22950.400341988	Sum of GTIs [s]
			ontime7	22950.400341988	Sum of GTIs [s]
			ontime8	22950.400341988	Sum of GTIs [s]
			ontime9	22950.400341988	Sum of GTIs [s]
			l1events	1054813	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			ra_pos	(4085.89, 4111.06)	src1a sky pixel position

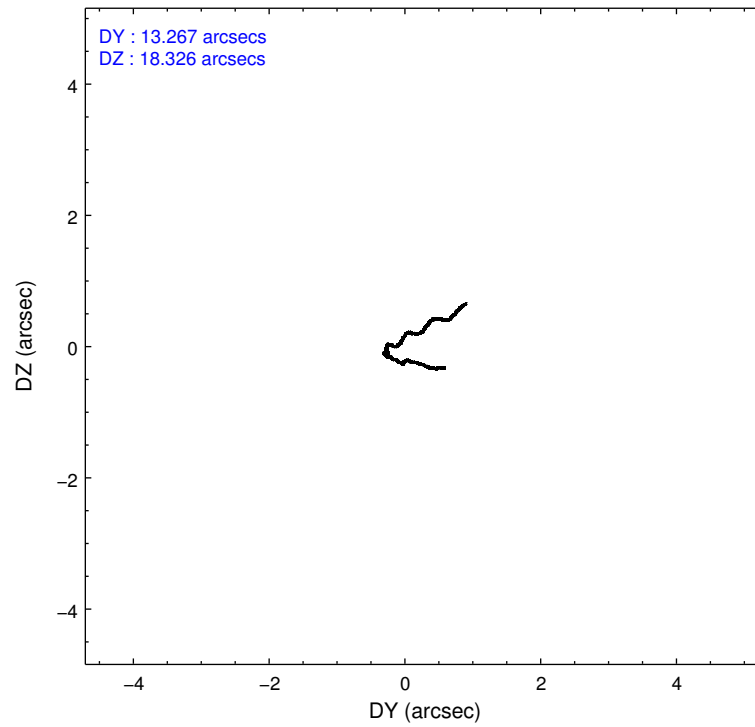
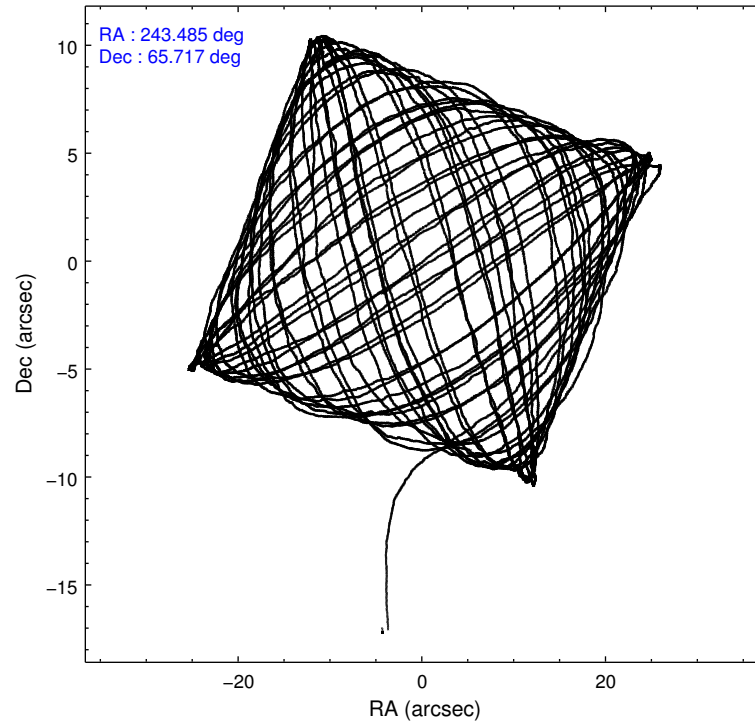
2.1.4 Events

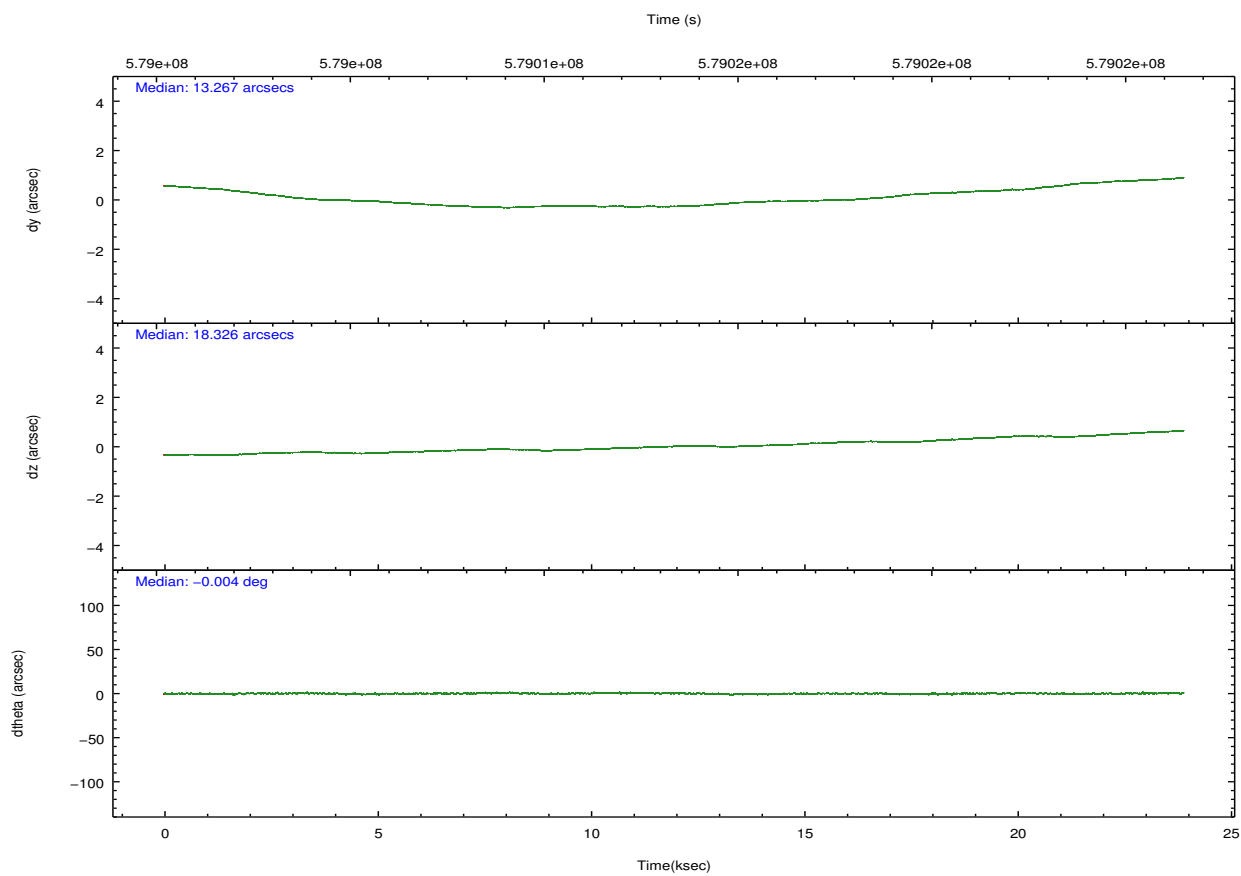
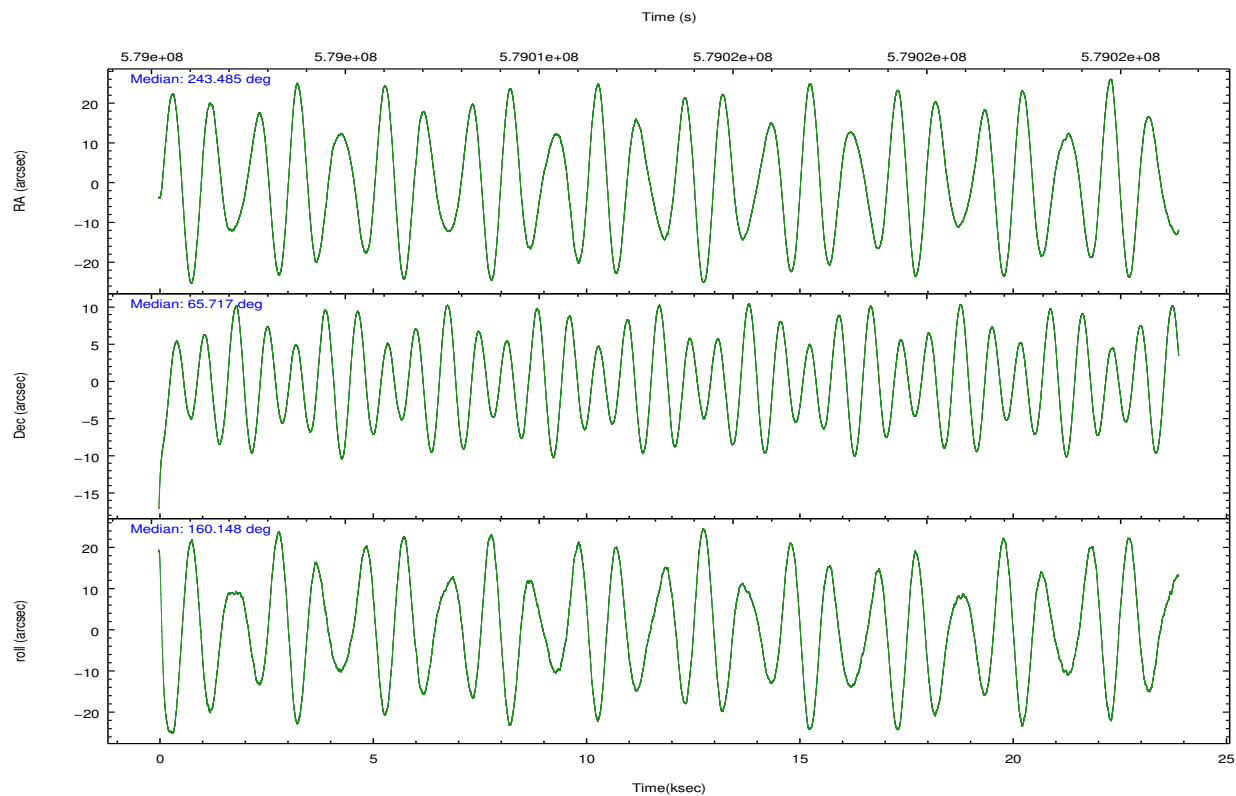
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	161287	229599	149112	185774	183042	145999	grade 0 events	6257	11849	6366	7417	13721	5944
rejected events	144544	116993	127156	103285	135140	128850		3%	5%	4%	3%	7%	4%
rejected %	89%	50%	85%	55%	73%	88%	grade 1 events	151	933	67	259	145	84
								0%	0%	0%	0%	0%	0%
							grade 2 events	4029	34747	8512	17393	11504	3833
								2%	15%	5%	9%	6%	2%
							grade 3 events	1834	3182	1556	6483	4942	1837
								1%	1%	1%	3%	2%	1%
							grade 4 events	1661	3158	1631	6379	4542	1664
								1%	1%	1%	3%	2%	1%
							grade 5 events	6675	15254	6764	17917	10054	7617
								4%	6%	4%	9%	5%	5%
							grade 6 events	2965	59691	3896	44830	13204	3882
								1%	25%	2%	24%	7%	2%
							grade 7 events	137715	100785	120320	85096	124930	121138
								85%	43%	80%	45%	68%	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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	243.550147	243.4846251725408	CCD I2 on	N	N
[deg] Pointing Dec	65.722568	65.71739237800784	CCD I3 on	N	N
[deg] Pointing Roll	159.943654	160.1600183879868	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	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	579002286.184000	579000572.85261	CCD S5 on	Y	Y
Observation start date	2016-05-07T09:56:58	2016-05-07T09:29:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	579025286.184000	579026801.57911	On-chip summing requested	N	N
Observation end date	2016-05-07T16:20:18	2016-05-07T16:46:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



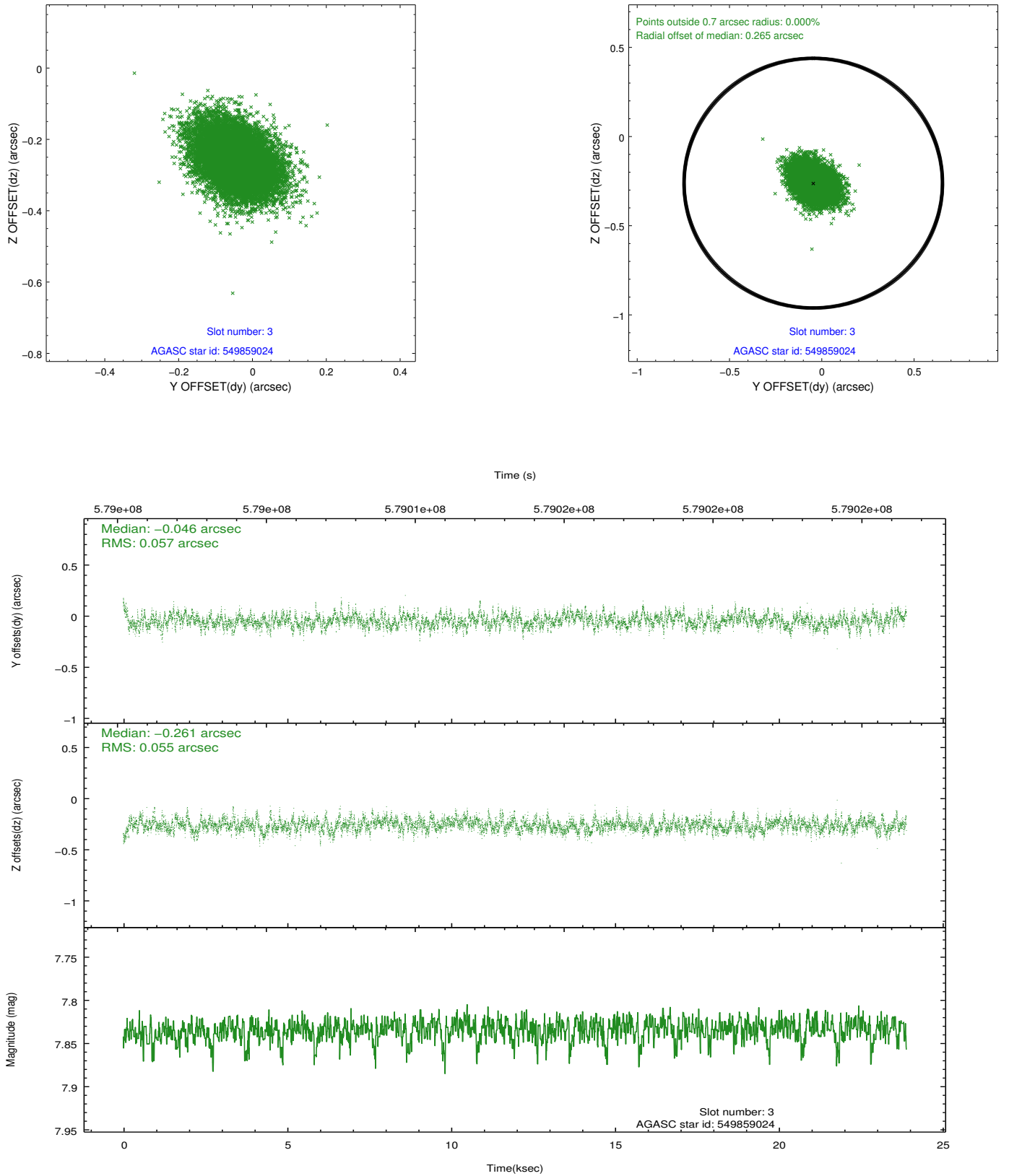


Slot Statistics

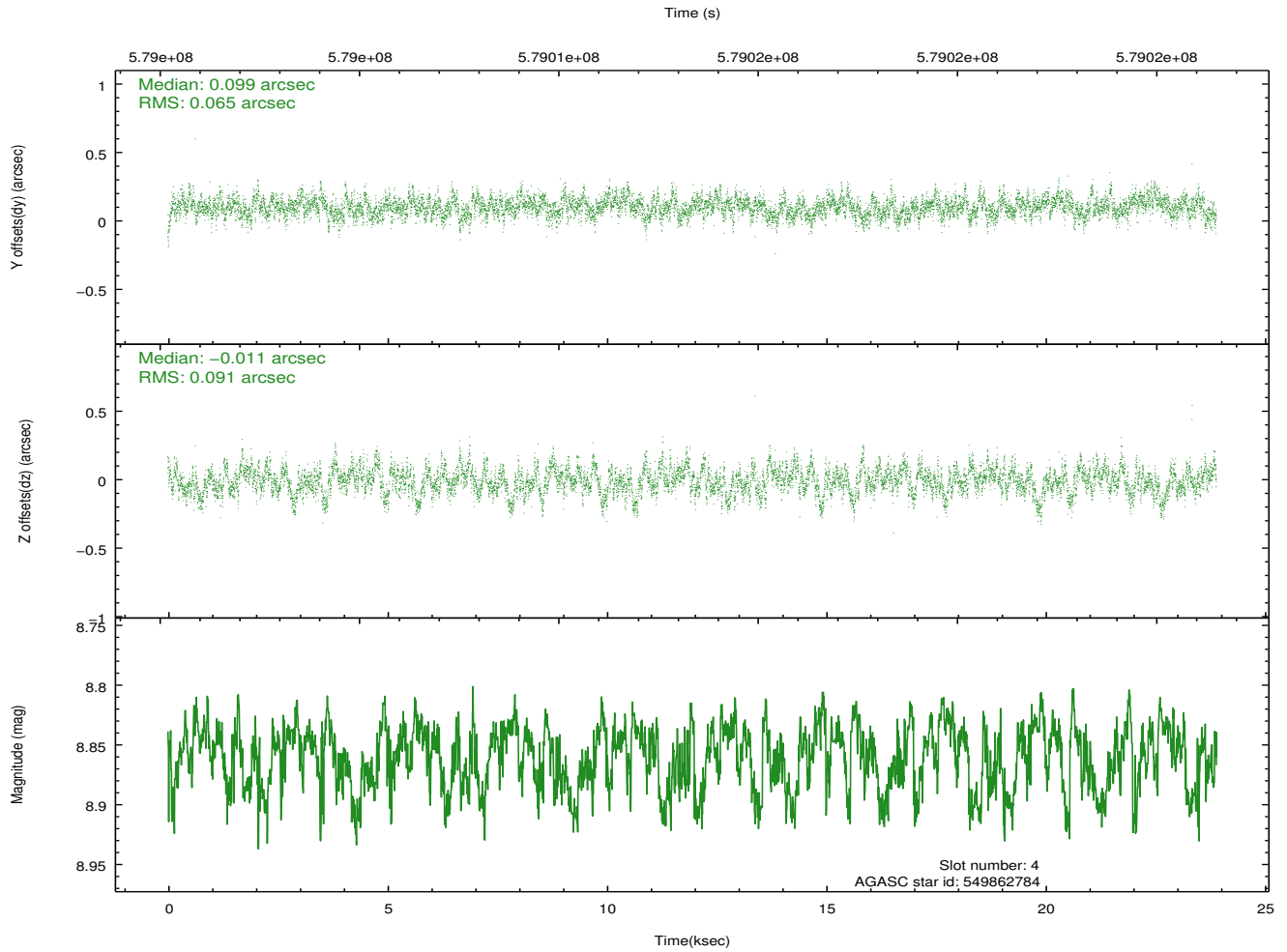
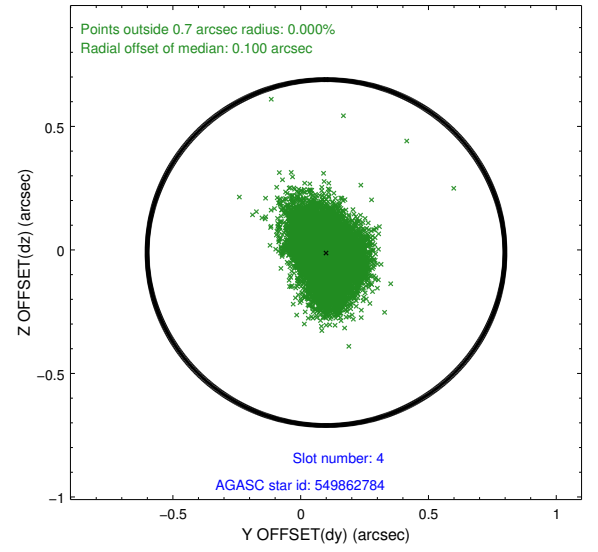
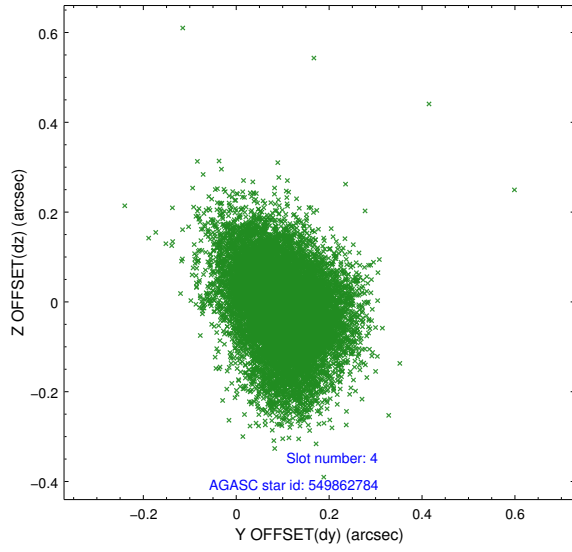
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	5830	-0.127	-0.121	0.015	0.033	0.000000	0.000000	-766.42	-1739.96
1	FID		ACIS-S-4	7.22	5831	0.406	0.094	0.017	0.041	0.000000	0.000000	2147.32	168.61
2	FID		ACIS-S-5	7.23	5831	-0.310	0.034	0.011	0.018	0.000000	0.000000	-1819.29	162.35
3	GUIDE	used	549859024	7.83	11653	-0.046	-0.261	0.083	0.140	243.777882	65.072262	-1126.85	2079.37
4	GUIDE	used	549862784	8.86	11653	0.099	-0.011	0.118	0.198	243.335157	66.115006	779.98	-1218.95
5	GUIDE	used	549863464	7.50	11661	-0.147	0.187	0.108	0.173	243.630740	66.376841	699.20	-2251.75
6	GUIDE	used	549864184	9.06	11647	-0.000	-0.161	0.141	0.228	243.727034	65.246202	-838.46	1519.24
7	GUIDE	used	549864952	8.94	11656	0.099	0.250	0.102	0.166	244.861755	65.614211	-1957.66	-320.85

2.4 Star Slots

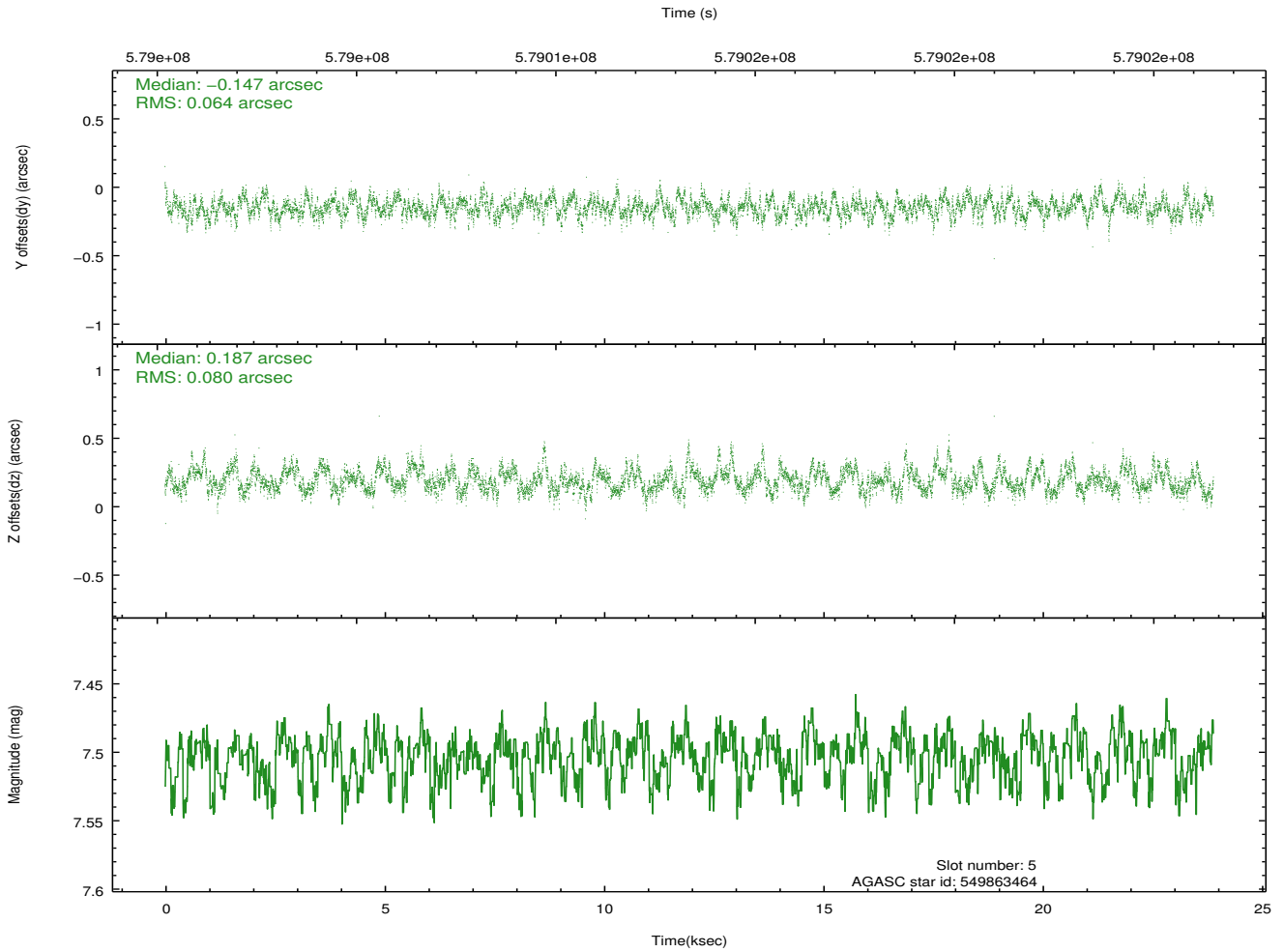
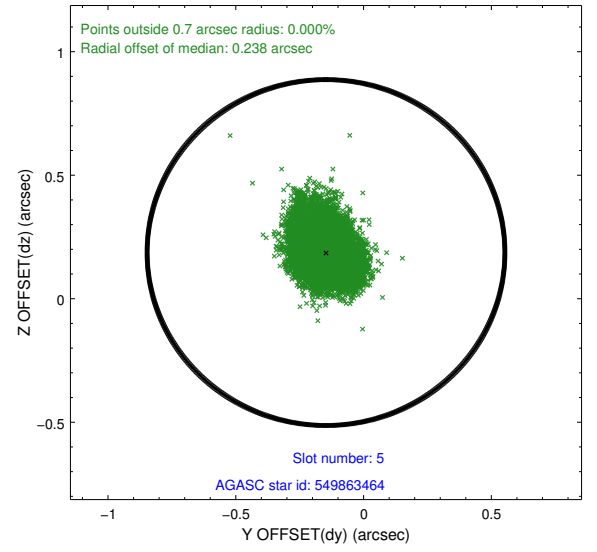
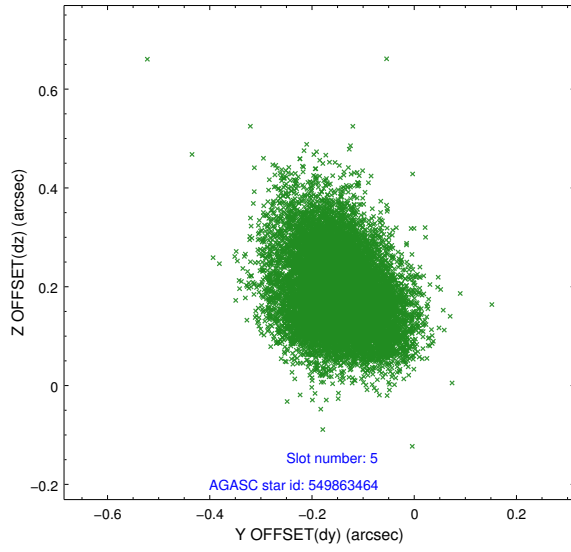
2.4.1 Slot 3



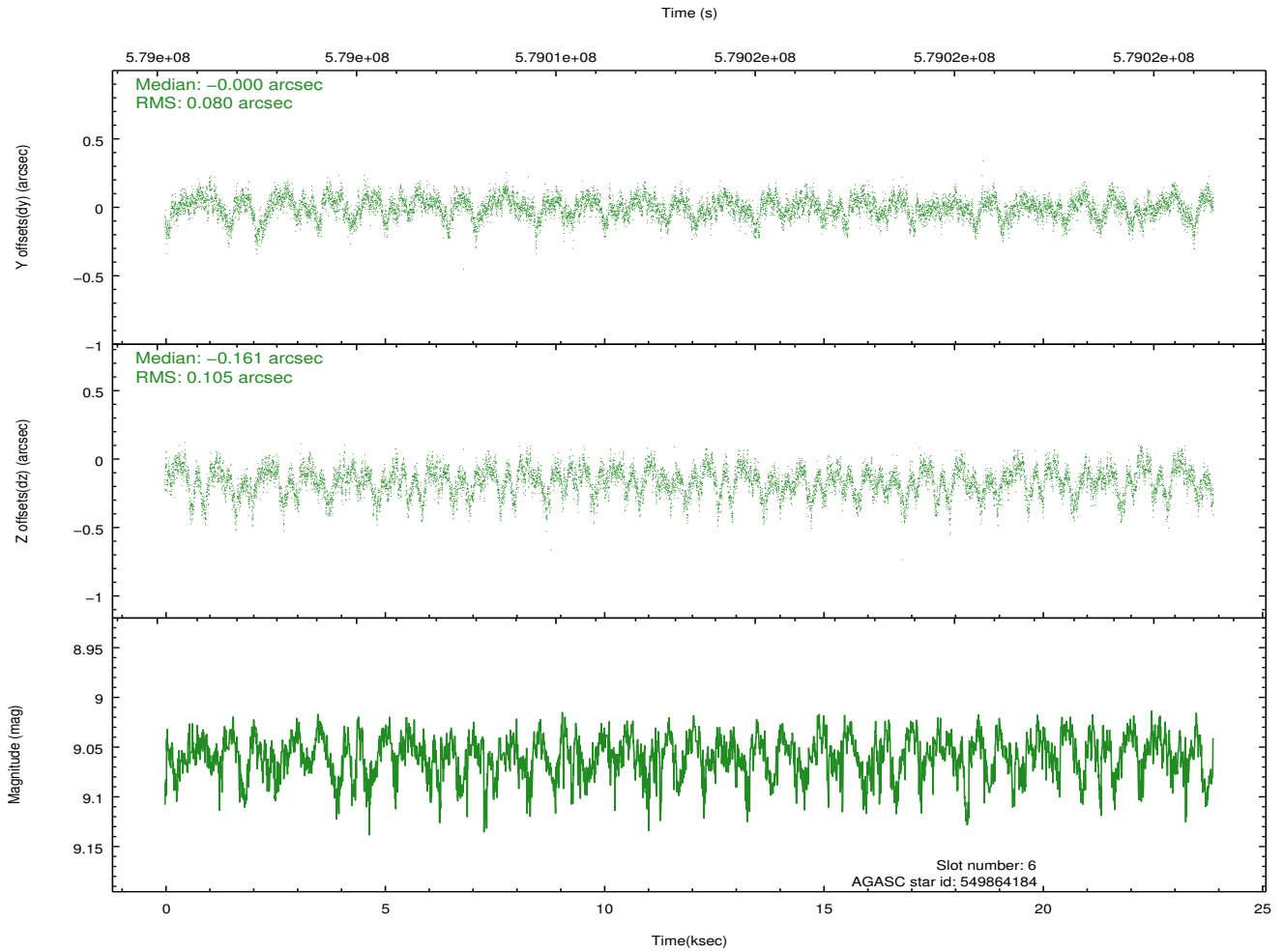
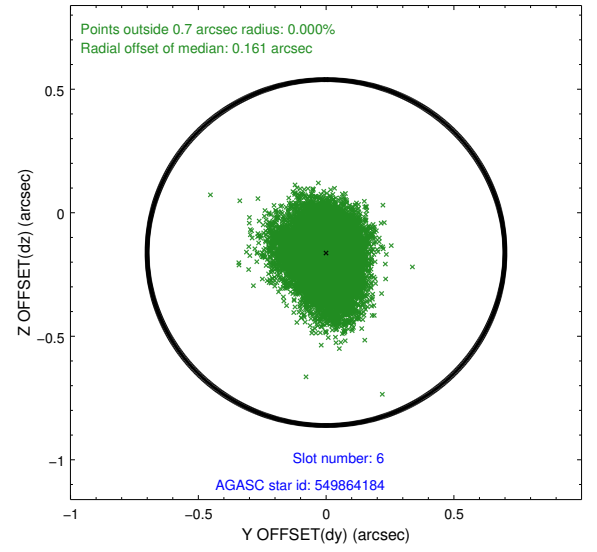
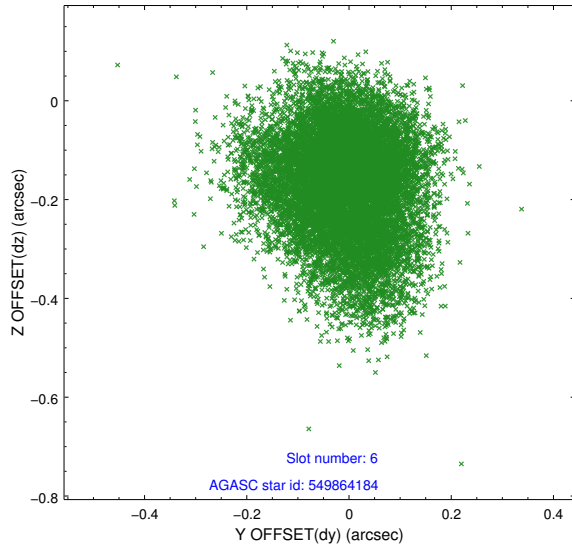
2.4.2 Slot 4



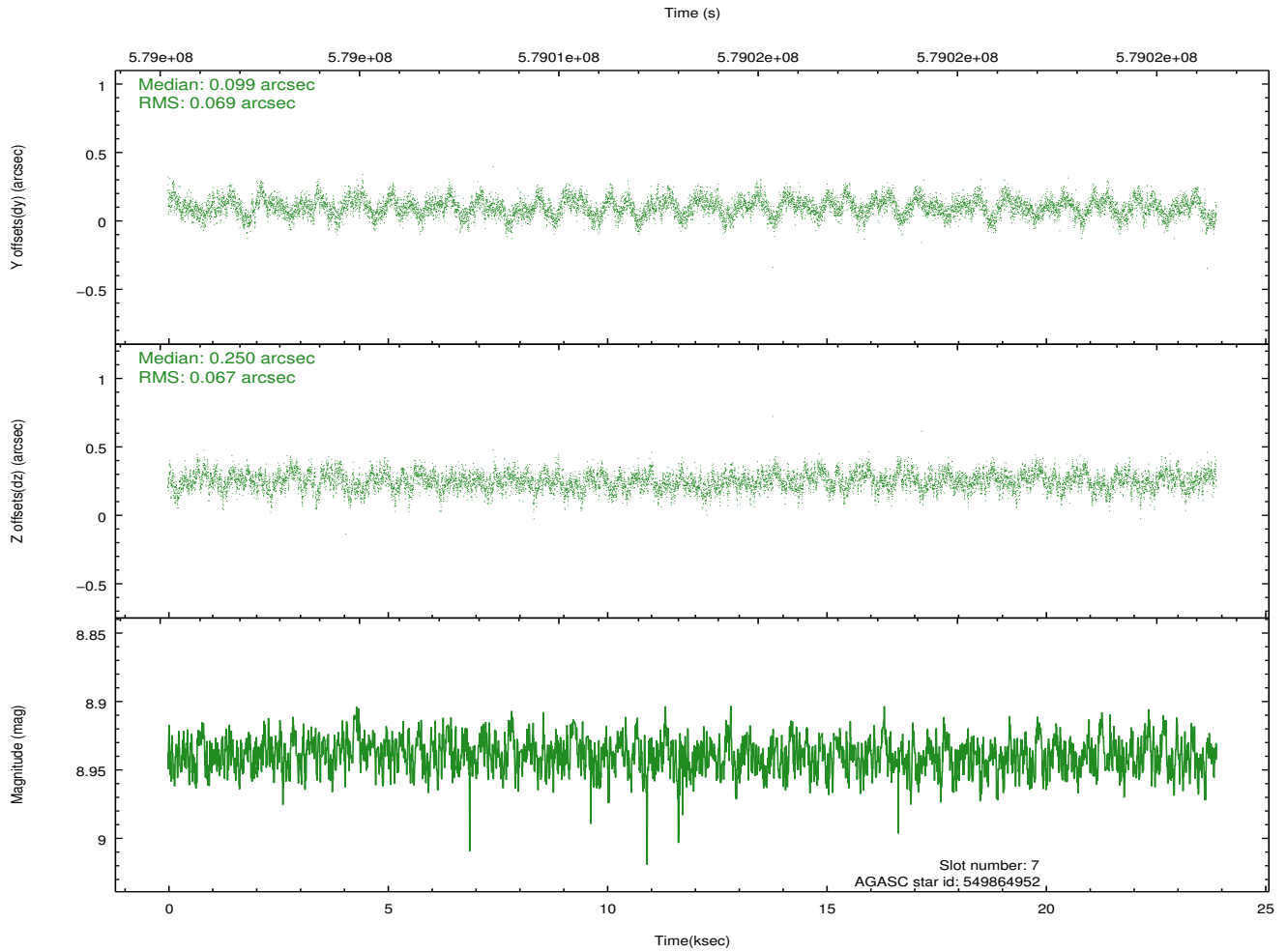
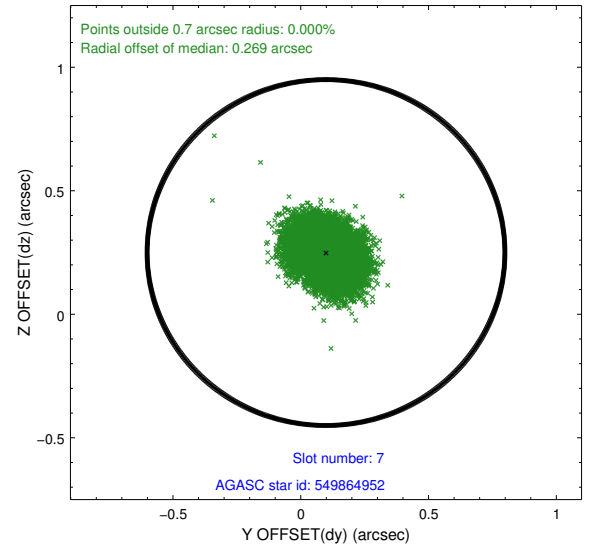
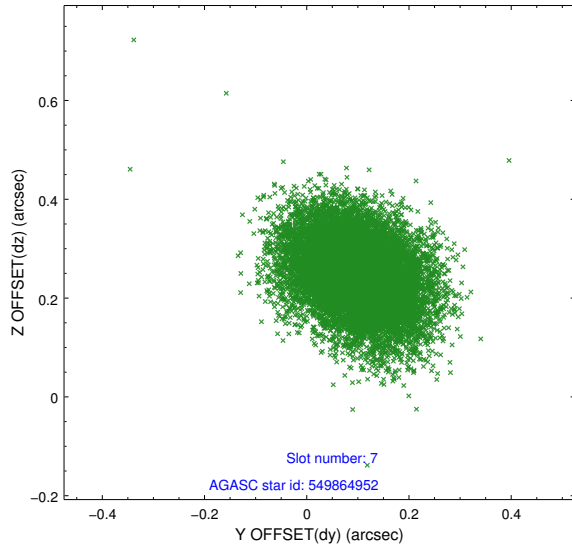
2.4.3 Slot 5



2.4.4 Slot 6

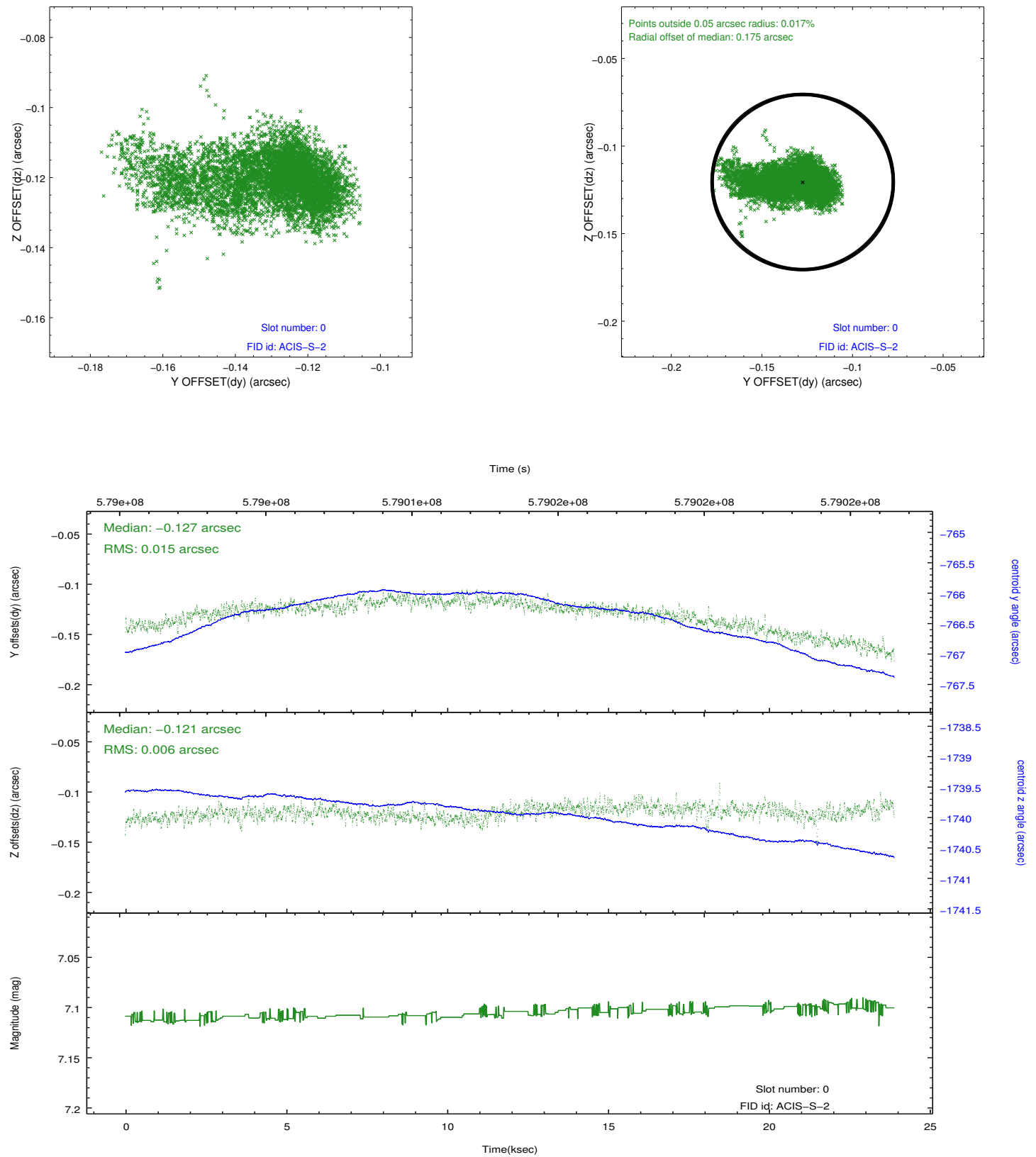


2.4.5 Slot 7

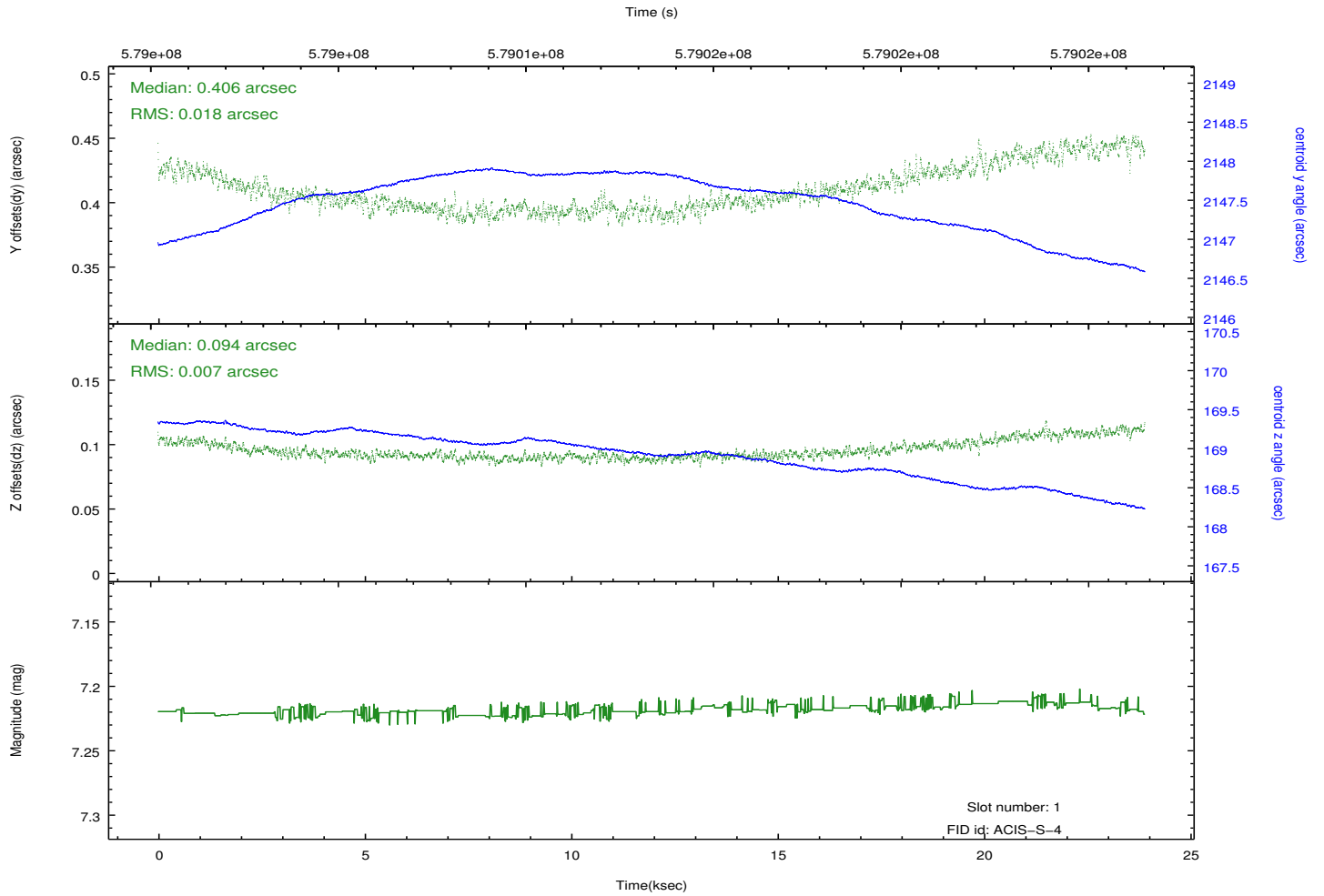
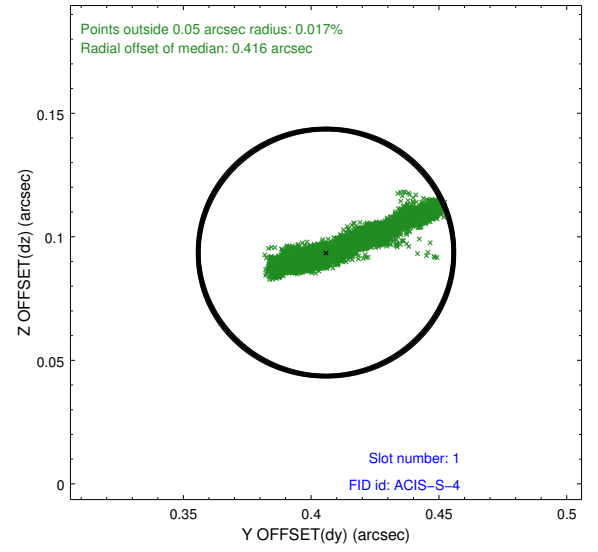
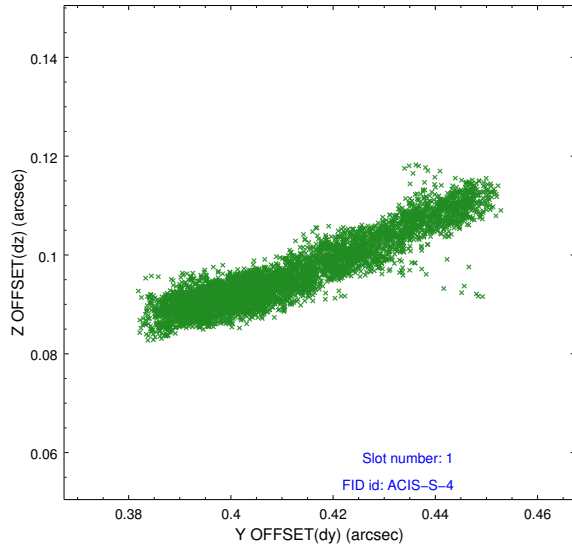


2.5 FID Slots

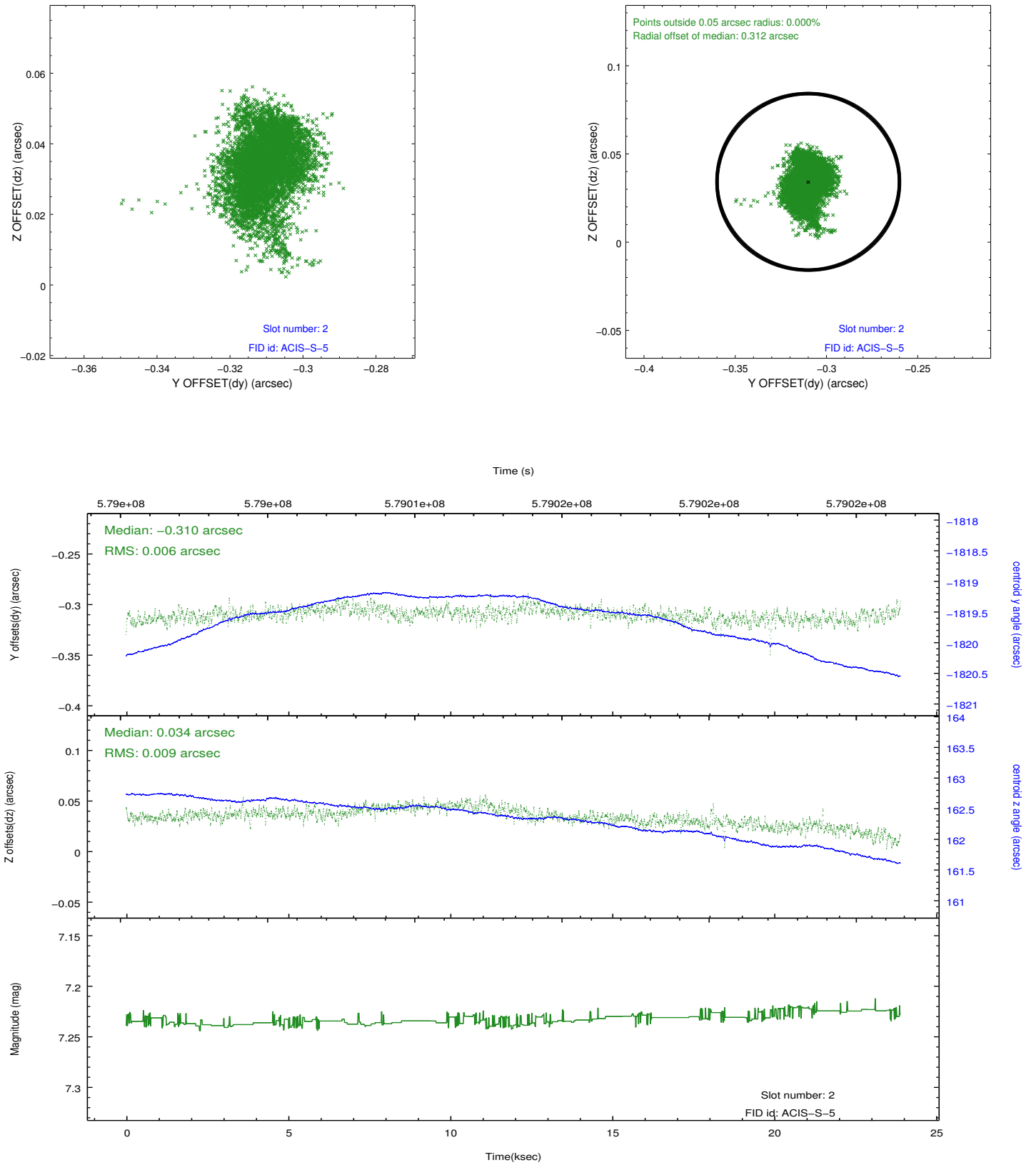
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

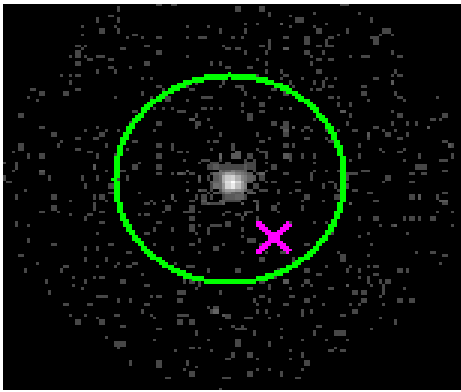


3 Gratings

3.1 HEG Arm



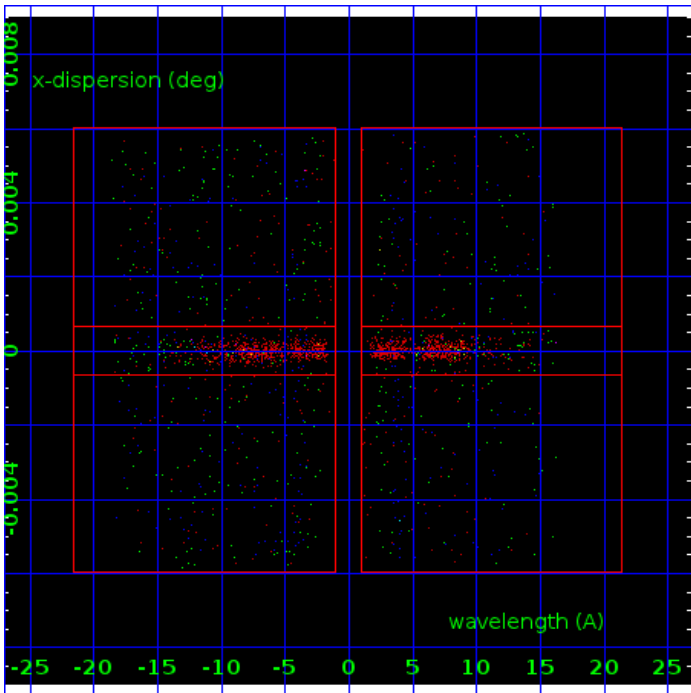
HEG Order Sort 123



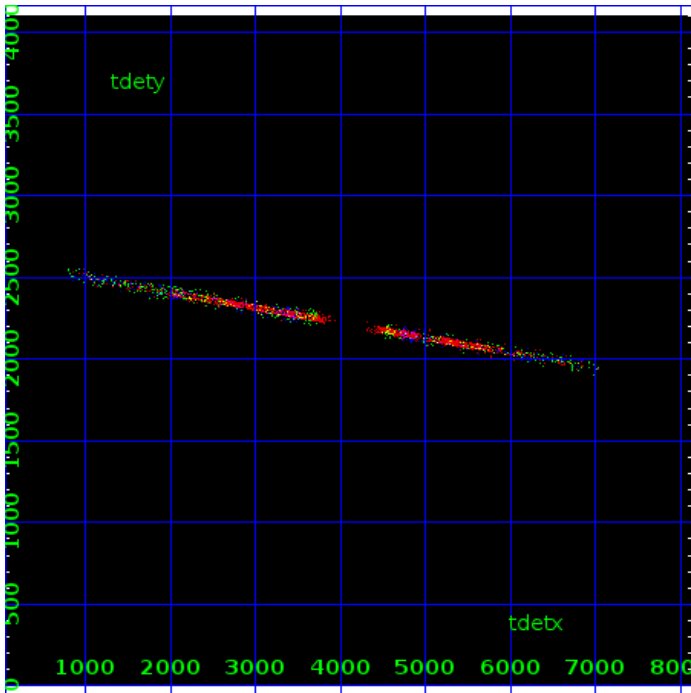
HEG Zero Order



HEG Order Sort ALL

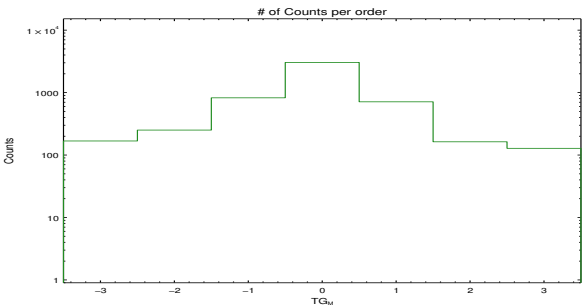


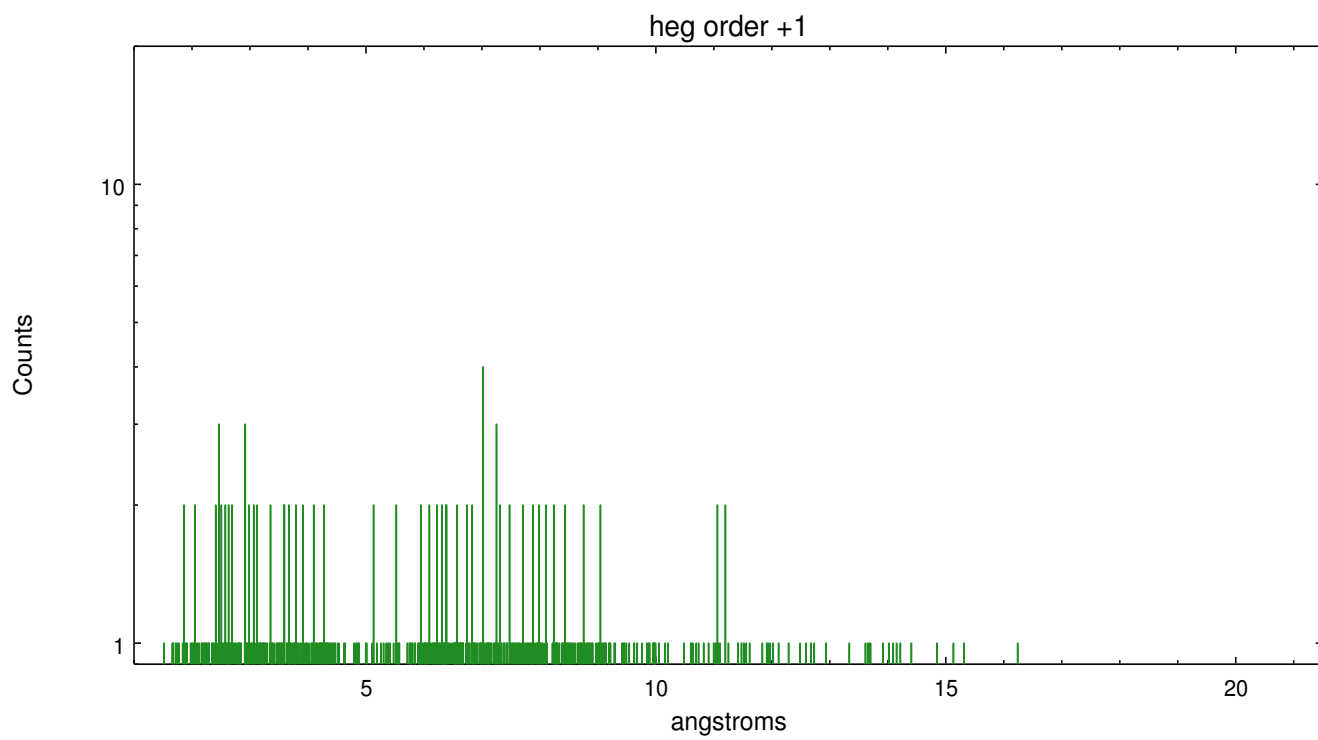
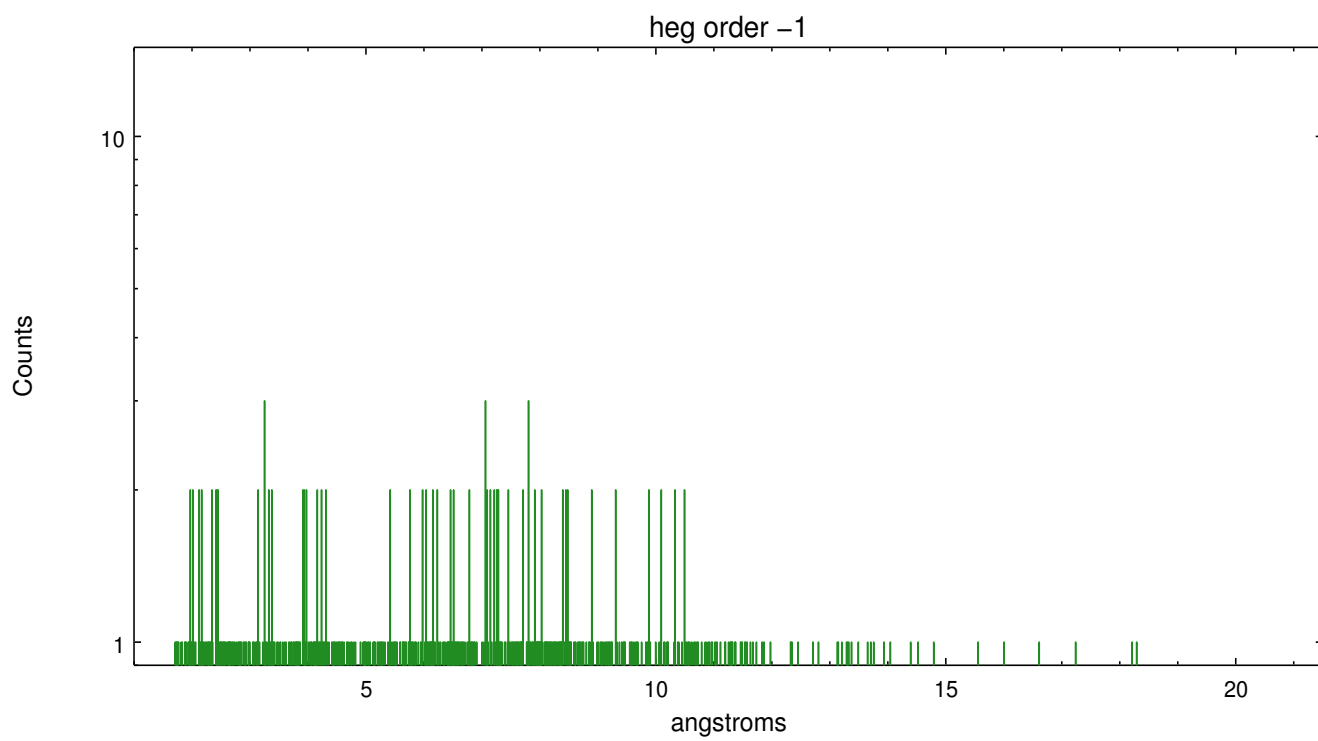
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	168	251	825	3041	712	163	128

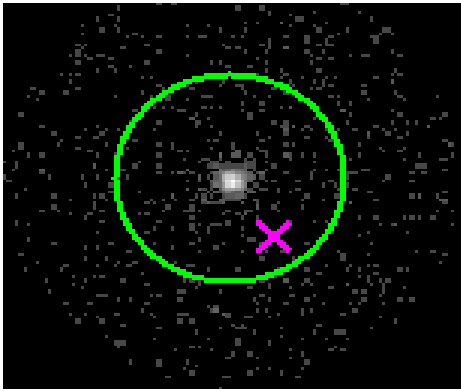




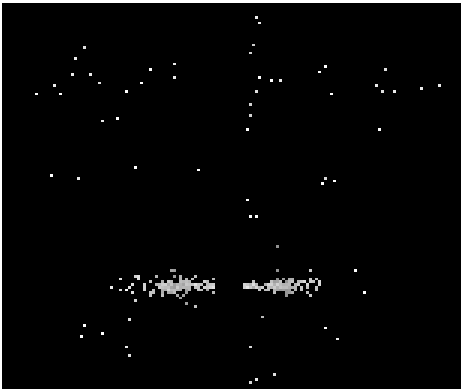
3.2 MEG Arm



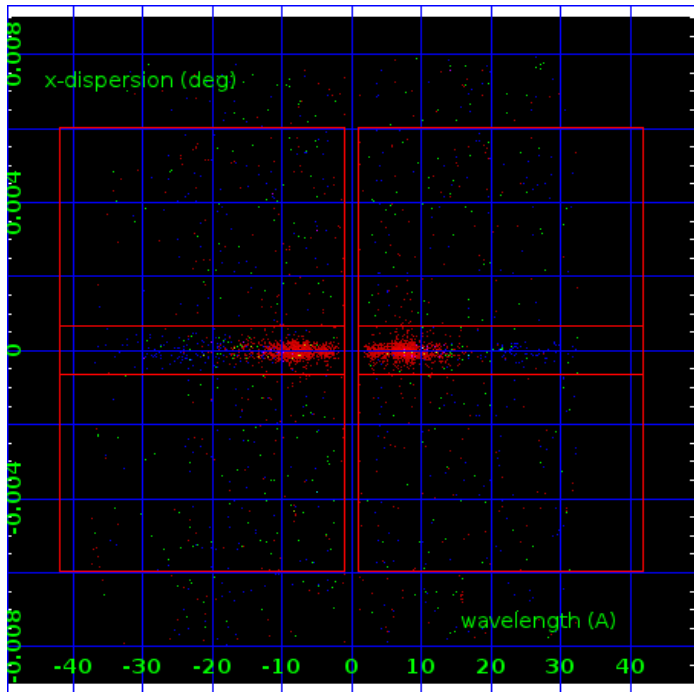
MEG Order Sort 123



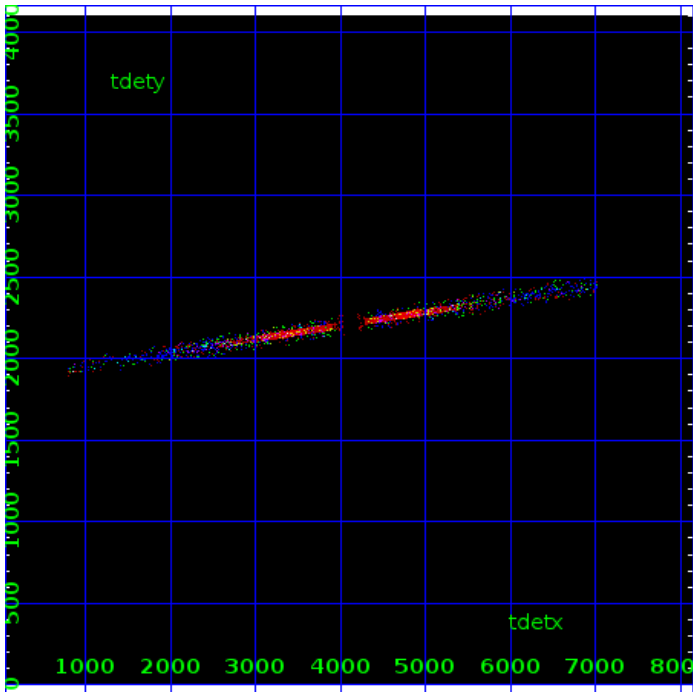
MEG Zero Order



MEG Order Sort ALL

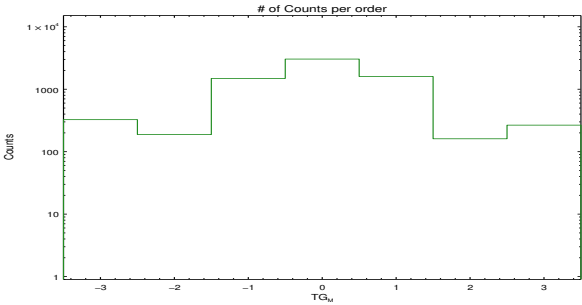


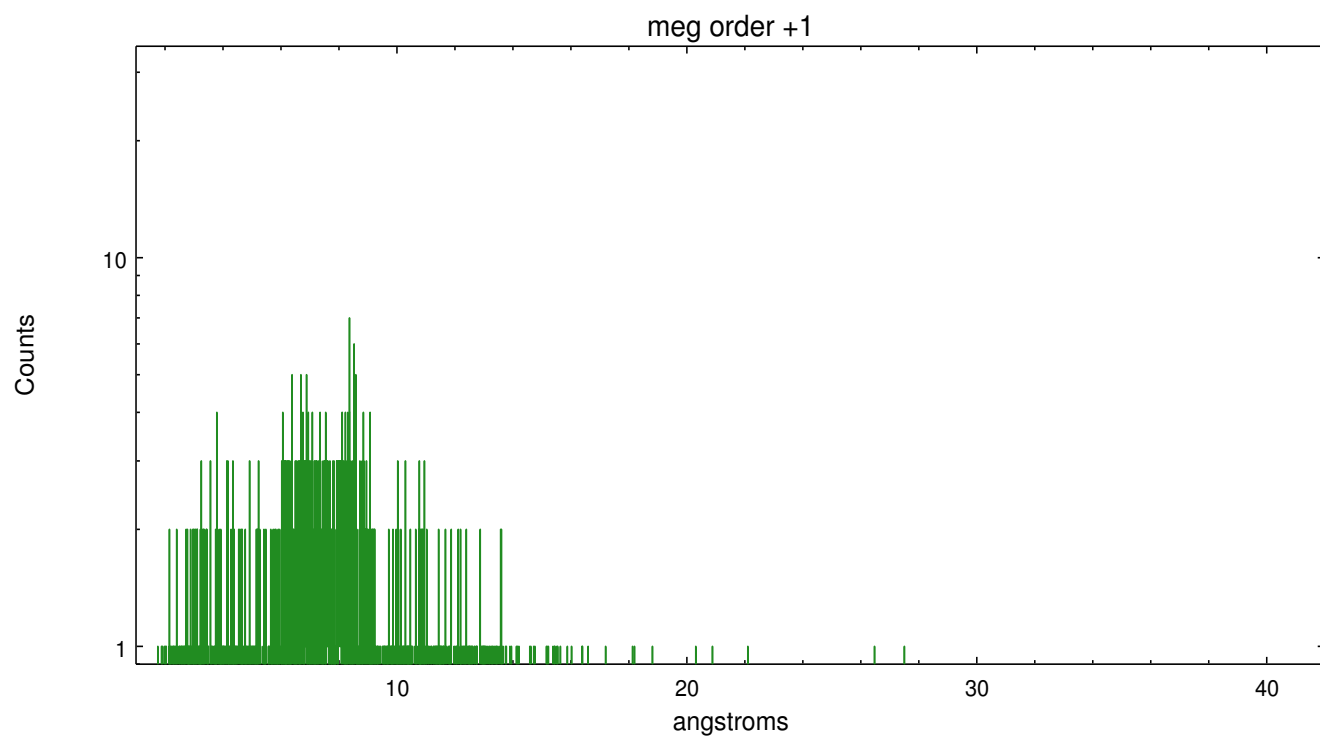
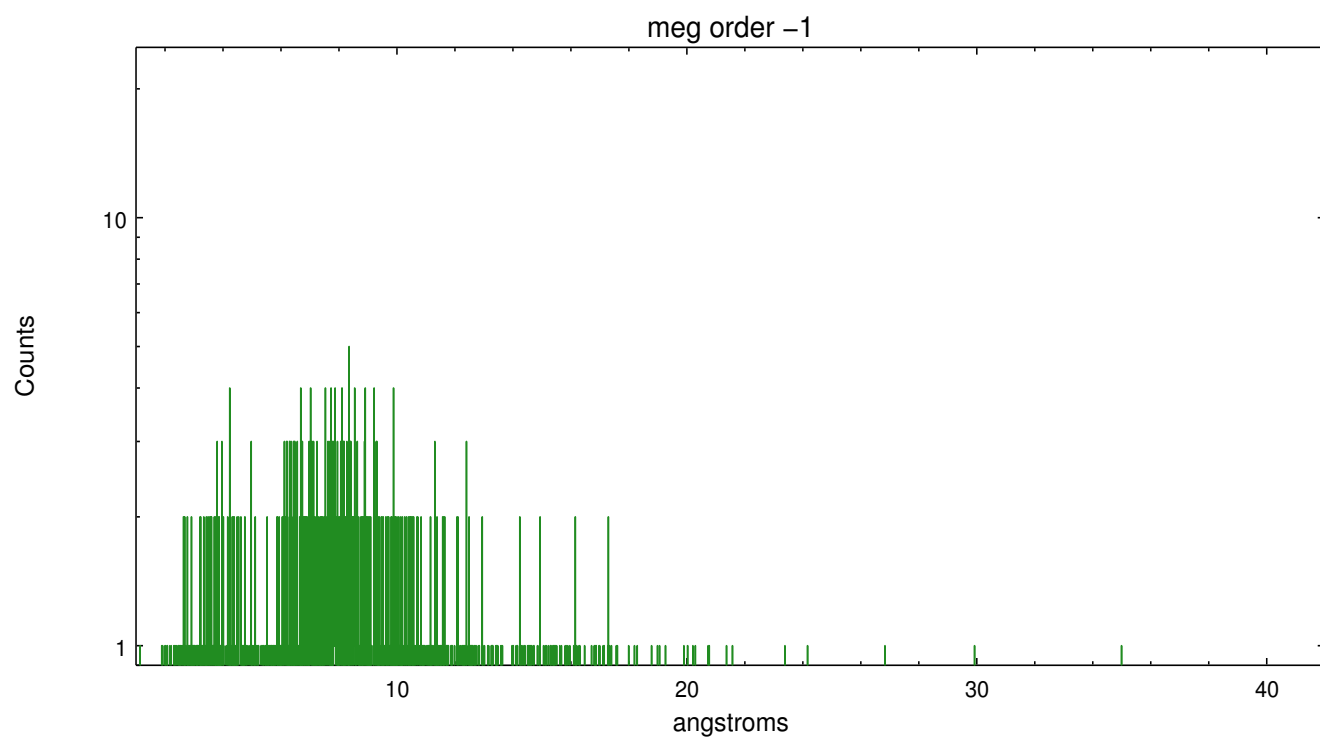
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	326	188	1489	3041	1598	161	266





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.05.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.950400341988

A.2 Comments