

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18753 - L2 Version 1
Chandra X-Ray Center

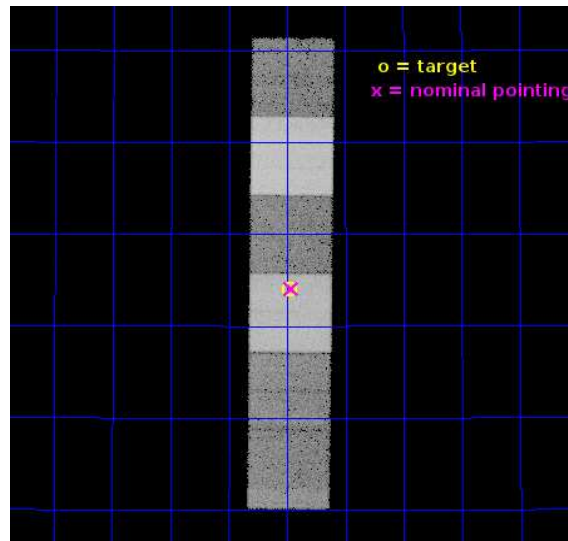
L2 Processing Date : Apr 12 2016

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1 Front

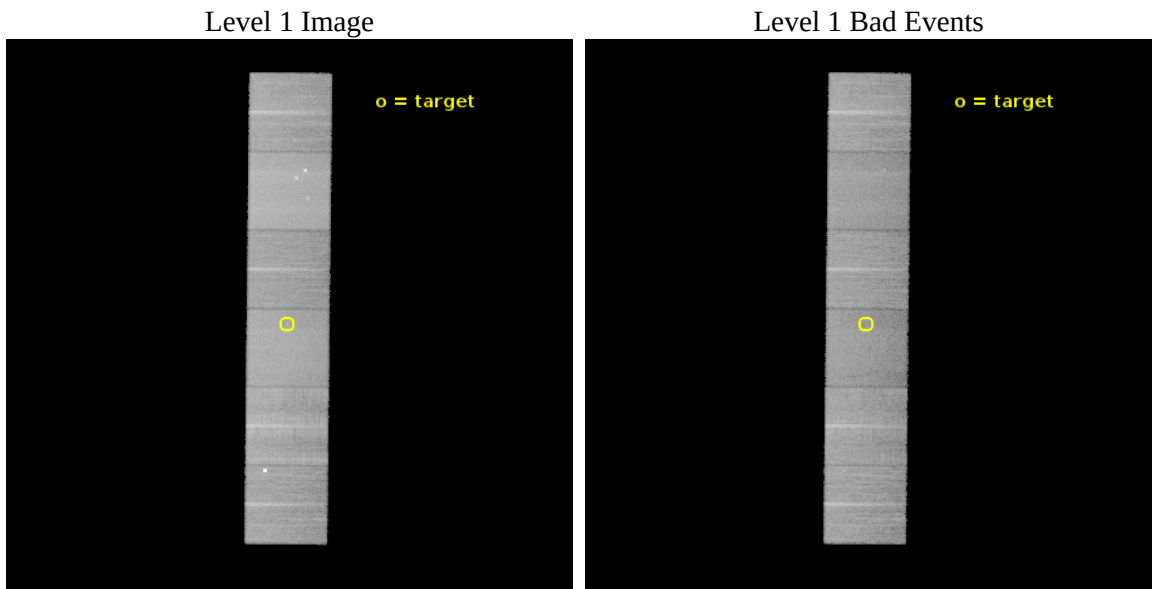
seq_num	200976	Sequence number
obs_id	18753	Observation id
title	HD191612 - constraining the structure of a massive magnetosphere	P
observer	Yael Naze	Principal investigator
object	HD191612	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	302.369167	Observer's specified target RA [deg]
dec_targ	35.733694	Observer's specified target Dec [deg]
ra_nom	302.36598599478	Nominal RA [deg]
dec_nom	35.734514865657	Nominal Dec [deg]
roll_nom	90.558489796944	Nominal Roll [deg]
revision	1	Processing version of data
ontime	29922.547077894	Sum of GTIs [s]
livetime	29543.649769599	Livetime [s]
ontime4	29922.588117838	Sum of GTIs [s]
ontime5	29922.506037831	Sum of GTIs [s]
ontime6	29922.464997888	Sum of GTIs [s]
ontime7	29922.547077894	Sum of GTIs [s]
ontime8	29922.423957825	Sum of GTIs [s]
ontime9	29922.382917881	Sum of GTIs [s]
l2events	304997	Number of level 2 events



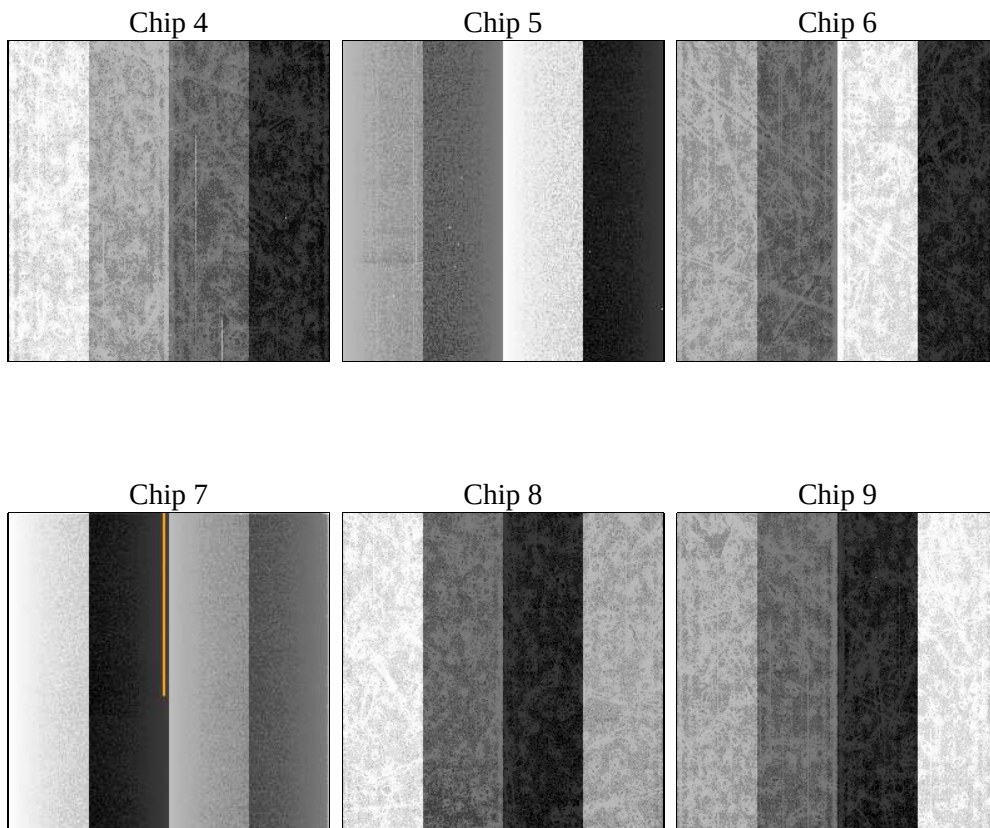
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	29922.547077894	Sum of GTIs [s]
caldsver	4.7.1	 	ontime4	29922.588117838	Sum of GTIs [s]
date	2016-04-12T12:18:40	Date and time of file creation	ontime5	29922.506037831	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	29922.464997888	Sum of GTIs [s]
			ontime7	29922.547077894	Sum of GTIs [s]
			ontime8	29922.423957825	Sum of GTIs [s]
			ontime9	29922.382917881	Sum of GTIs [s]
			l1events	1371165	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			src1a_pos	(4078.02, 4000.51)	src1a sky pixel position

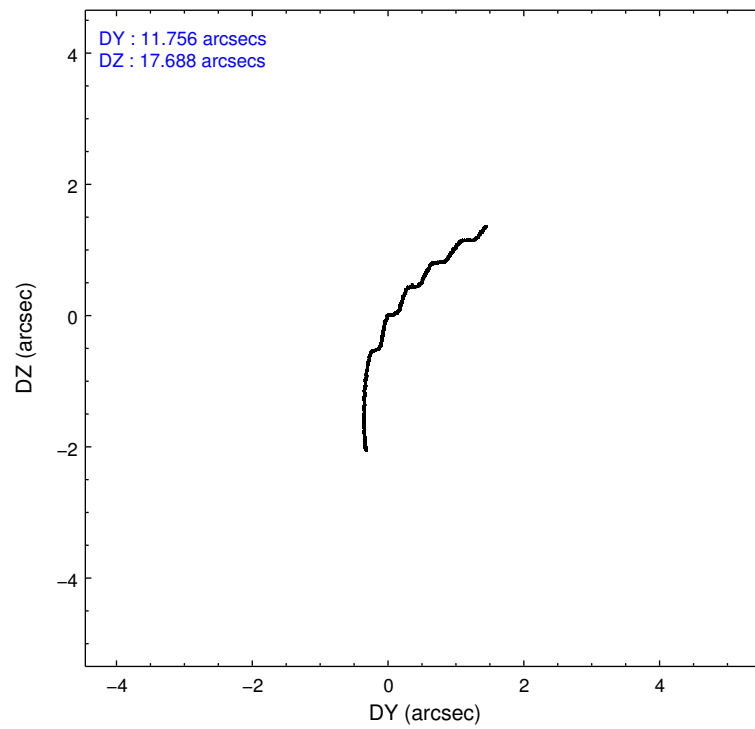
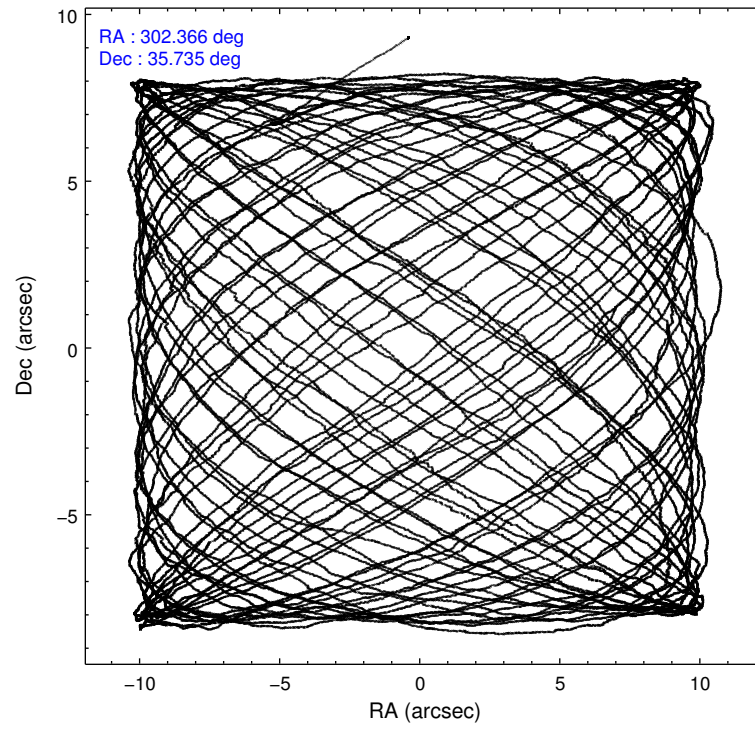
2.1.4 Events

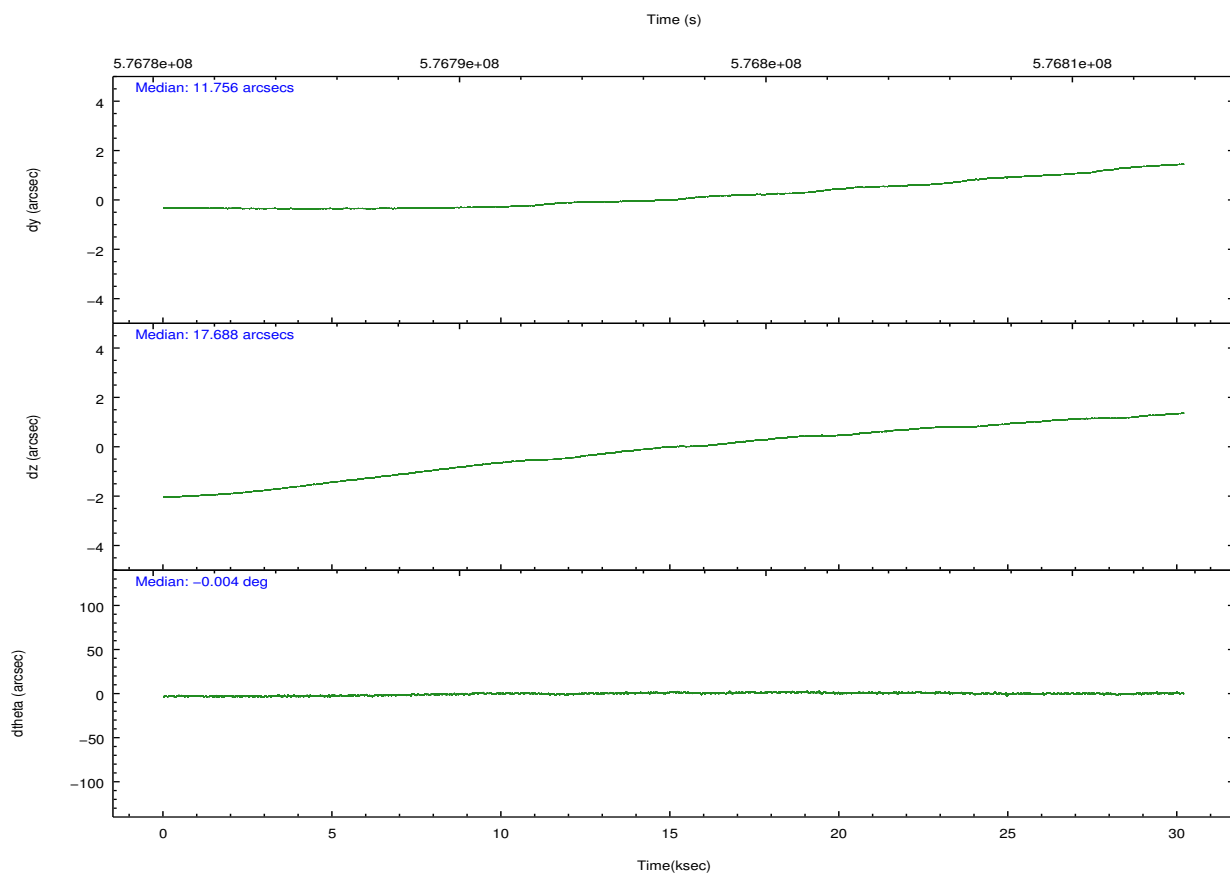
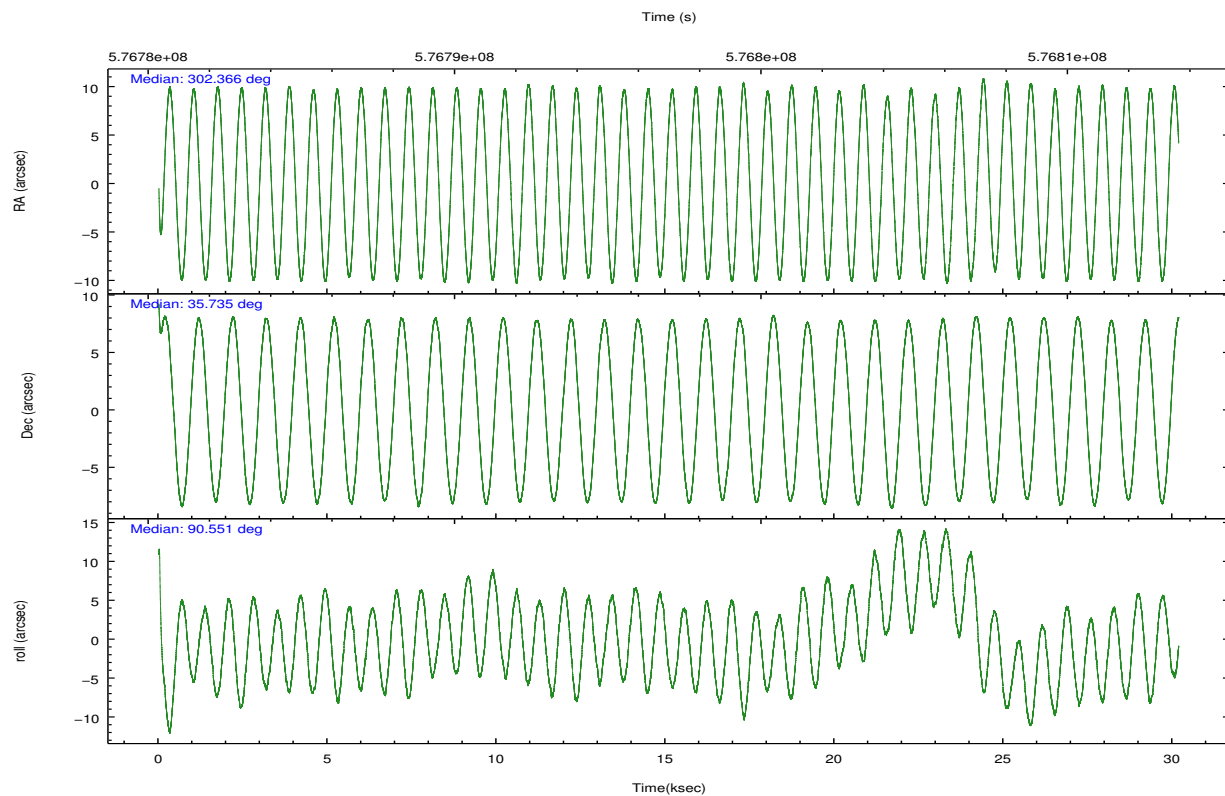
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	214103	289764	187690	236734	242883	199991	grade 0 events	8472	9535	6575	8136	18082	16405
rejected events	191792	152105	166961	135290	179780	169164		3%	3%	3%	3%	7%	8%
rejected %	89%	52%	88%	57%	74%	84%	grade 1 events	182	807	104	301	208	187
								0%	0%	0%	0%	0%	0%
							grade 2 events	5352	42756	5045	21324	15382	5009
								2%	14%	2%	9%	6%	2%
							grade 3 events	2390	4189	2015	8035	6282	2222
								1%	1%	1%	3%	2%	1%
							grade 4 events	2327	4036	1972	7675	5942	2208
								1%	1%	1%	3%	2%	1%
							grade 5 events	8924	20077	8514	23132	13154	9733
								4%	6%	4%	9%	5%	4%
							grade 6 events	3774	77173	5126	56309	17420	4988
								1%	26%	2%	23%	7%	2%
							grade 7 events	182682	131191	158339	111822	166413	159239
								85%	45%	84%	47%	68%	79%

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	302.383540	302.365985994782	CCD I2 on	N	N
[deg] Pointing Dec	35.711050	35.73451486565709	CCD I3 on	N	N
[deg] Pointing Roll	90.391614	90.55848979694375	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
Phase constraints	Y	Y	CCD S5 on	O2	Y
[d] Phase period	537.200000	537.200000	Number of optional ACIS chips dropped	0	0
[d] Phase epoch (MJD)	56637.800000	56637.800000	On-chip summing requested	N	N
Phase start	0.400000	0.400000	Subarray requested	NONE	NONE
Phase end	0.600000	0.600000	Alternating exposures requested	N	N
Phase start error	0.010000	0.010000	[s] Primary exposure time	0.000000	3.2
Phase end error	0.010000	0.010000			
[s] Observation start time (MET)	576782092.184000	576780964.95075			
Observation start date	2016-04-11T17:13:44	2016-04-11T16:56:04			
[s] Observation end time (MET)	576812092.184000	576812974.67758			
Observation end date	2016-04-12T01:33:44	2016-04-12T01:49:34			
Read mode	TIMED	TIMED			

2.3 Aspect



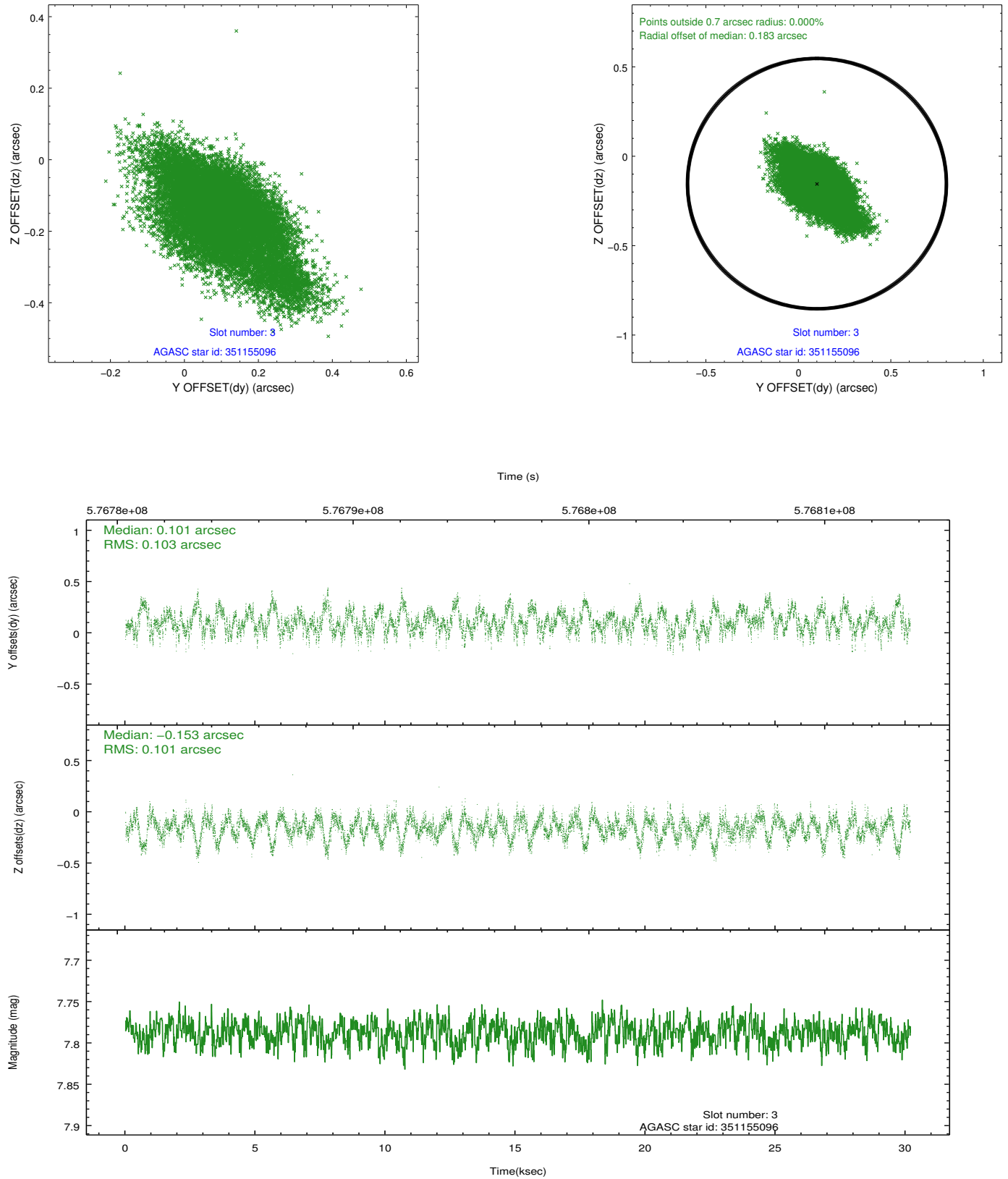


Slot Statistics

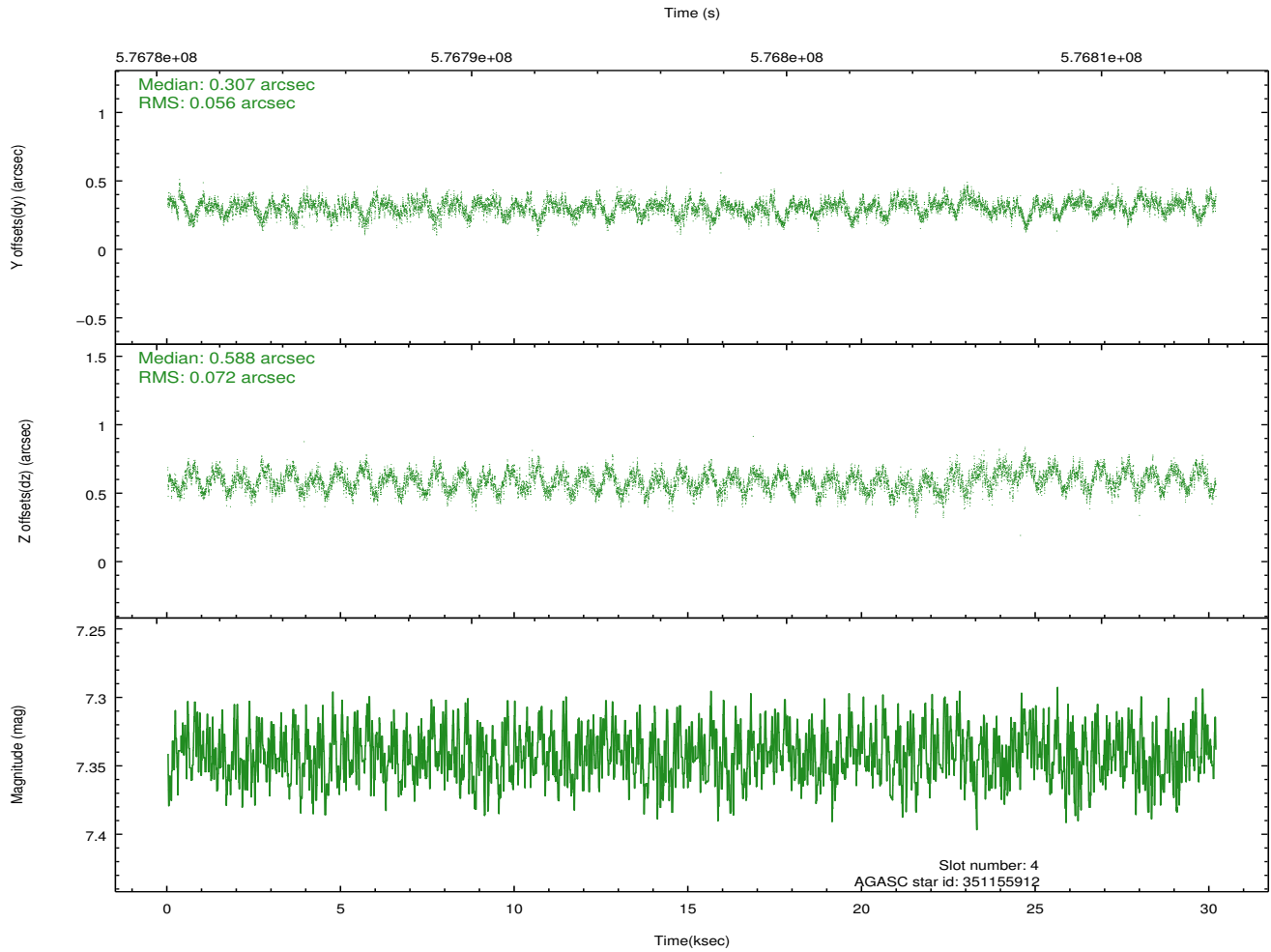
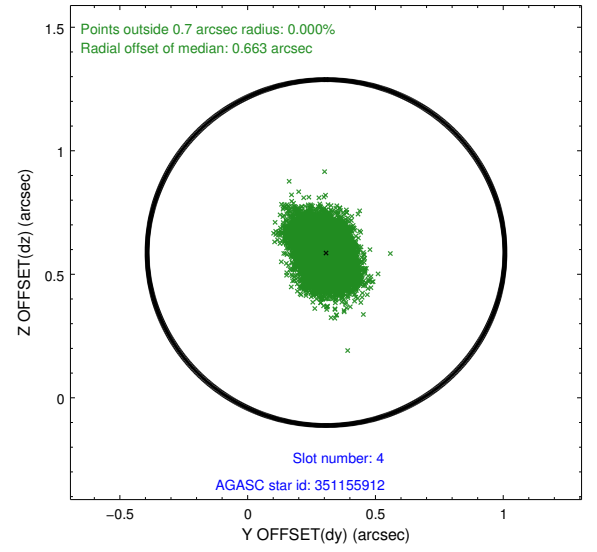
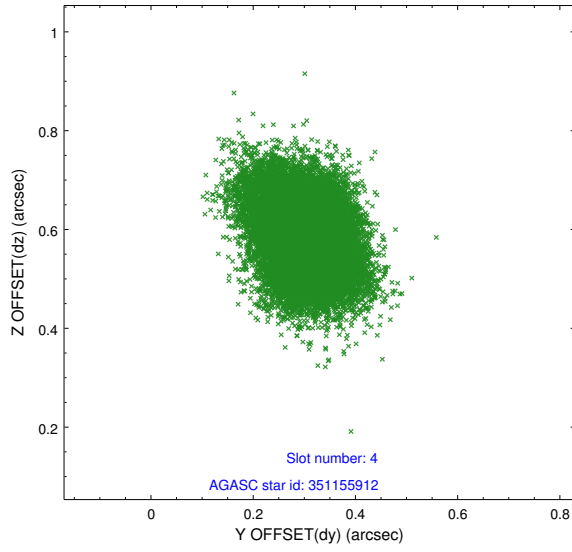
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	7360	0.004	-0.091	0.023	0.055	0.000000	0.000000	-764.87	-1738.99
1	FID		ACIS-S-5	7.25	7359	-0.163	0.020	0.032	0.055	0.000000	0.000000	-1818.17	163.01
2	FID		ACIS-S-6	7.35	7359	0.141	0.081	0.014	0.022	0.000000	0.000000	396.83	807.05
3	GUIDE	used	351155096	7.79	14717	0.101	-0.153	0.146	0.268	301.647496	35.132041	-2061.75	2181.08
4	GUIDE	used	351155912	7.34	14721	0.307	0.588	0.098	0.157	303.180509	35.178047	-1924.68	-2330.82
5	GUIDE	used	351676240	6.48	14720	-0.100	-0.400	0.077	0.126	302.195311	36.147798	1575.96	536.47
6	GUIDE	used	351681856	8.13	14711	-0.377	-0.237	0.085	0.137	301.861303	35.912846	740.44	1517.77
7	GUIDE	used	351684480	8.24	14713	0.065	0.215	0.113	0.186	302.973035	36.197373	1744.54	-1723.82

2.4 Star Slots

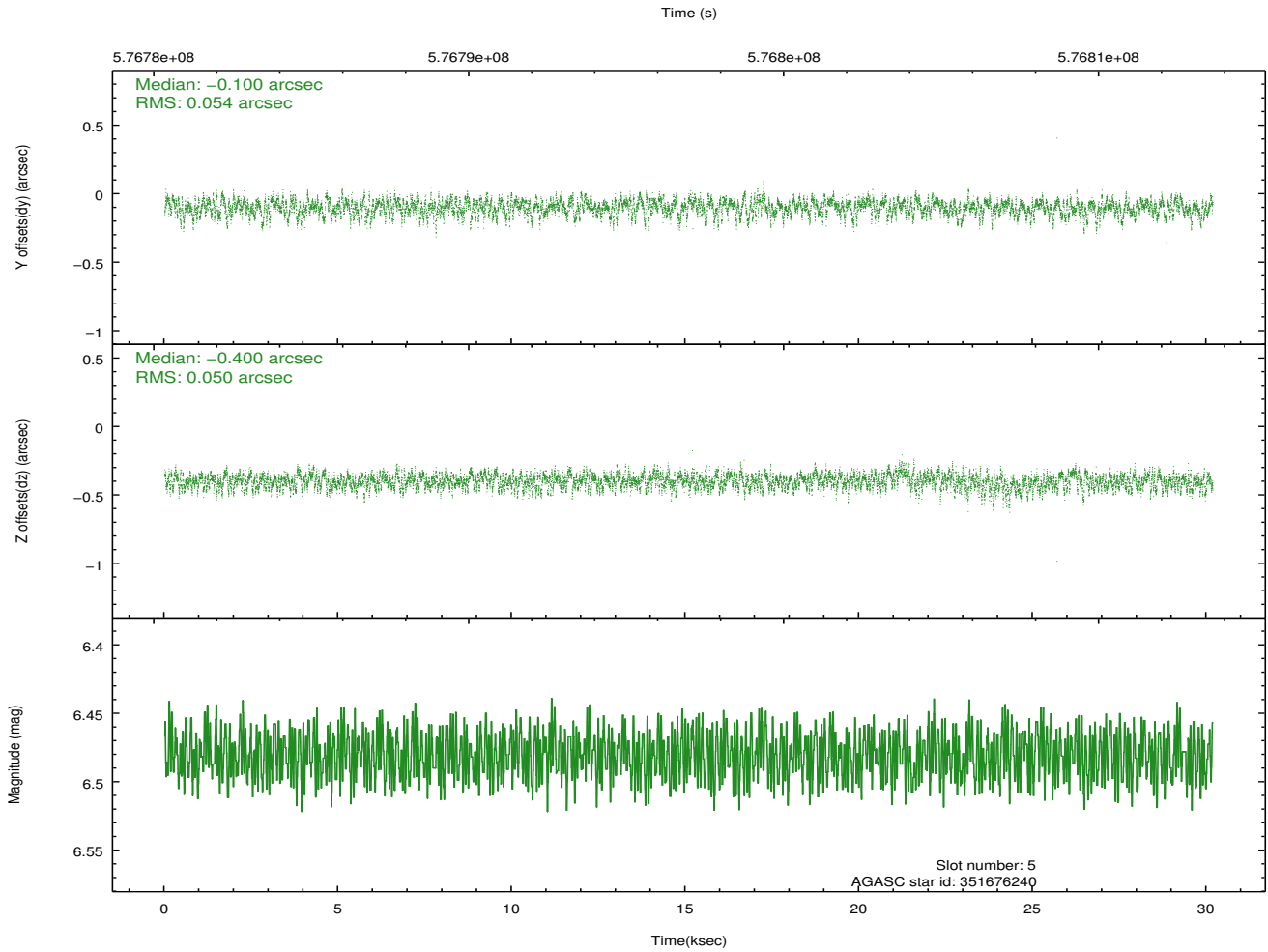
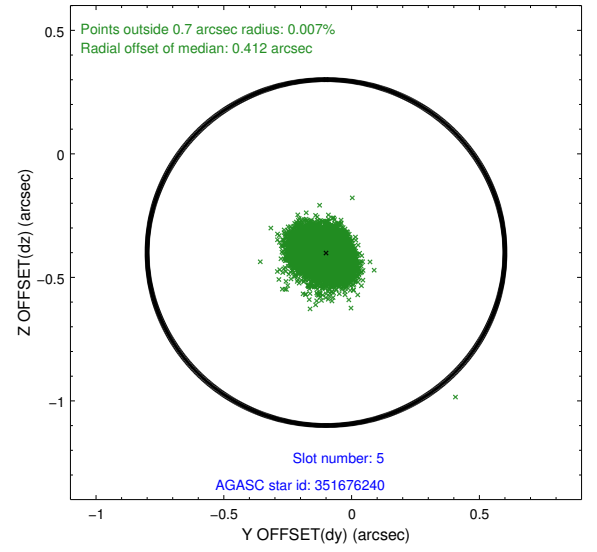
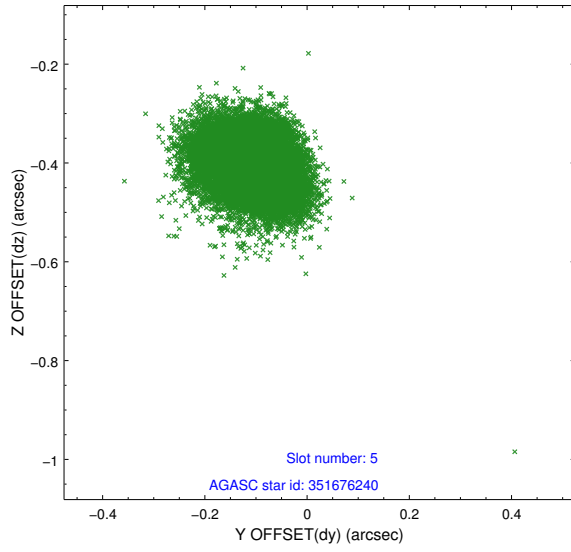
2.4.1 Slot 3



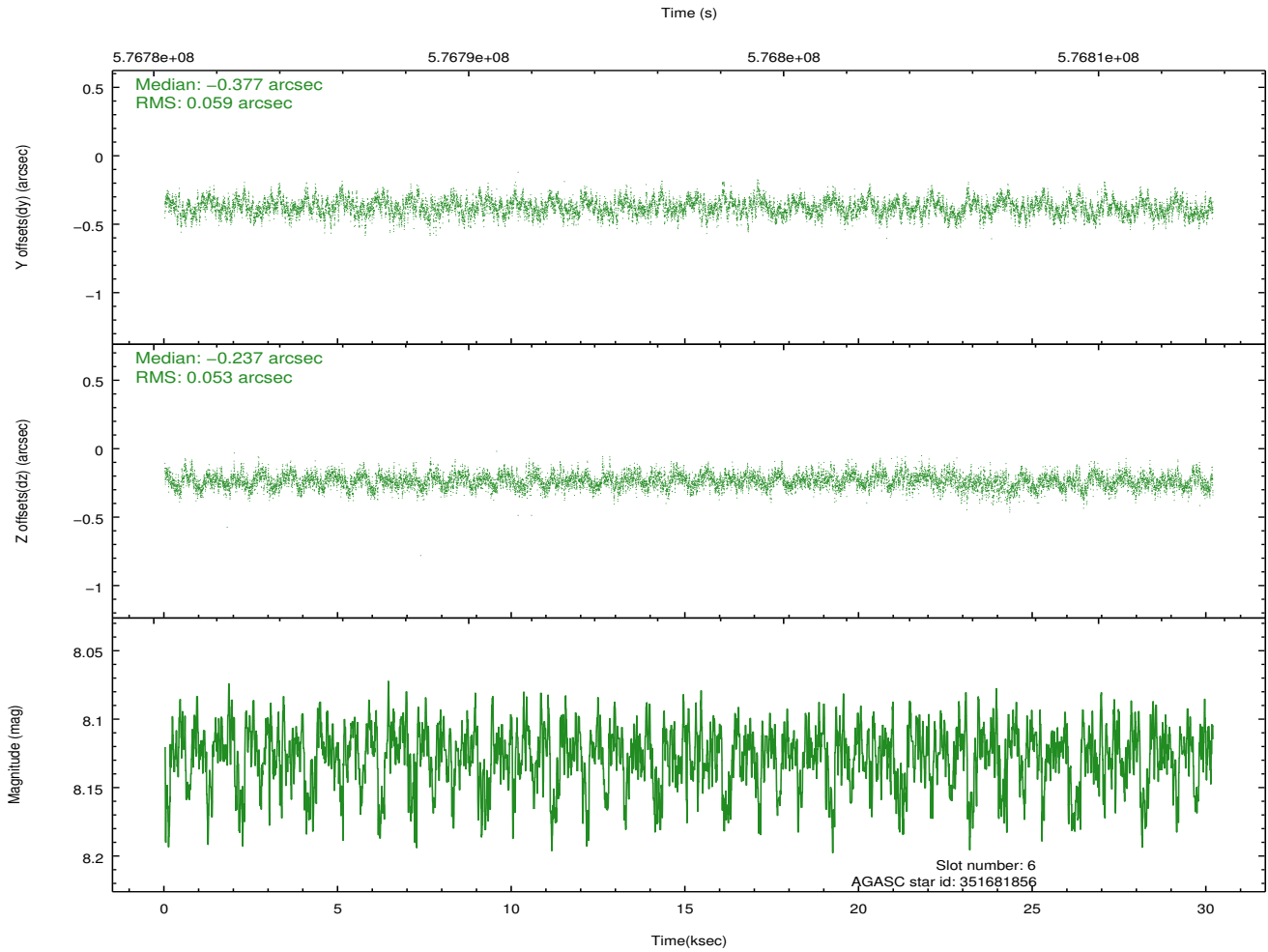
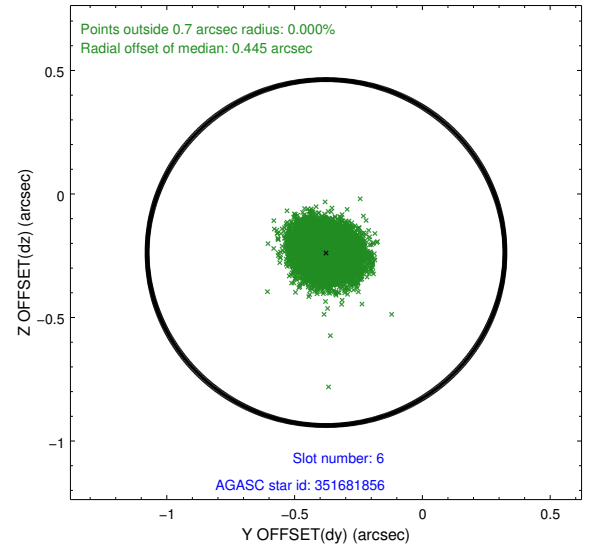
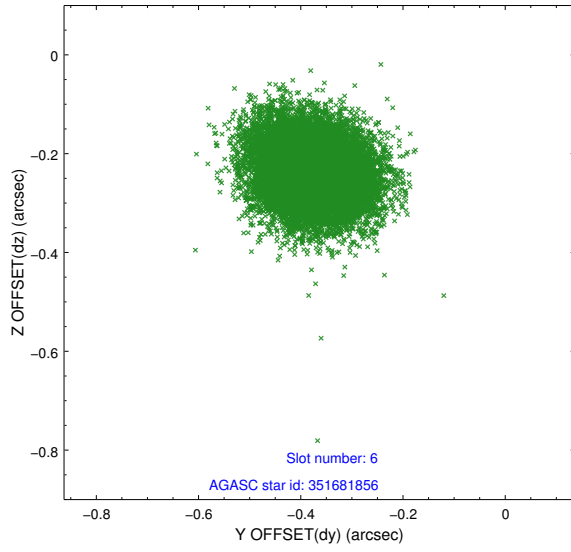
2.4.2 Slot 4



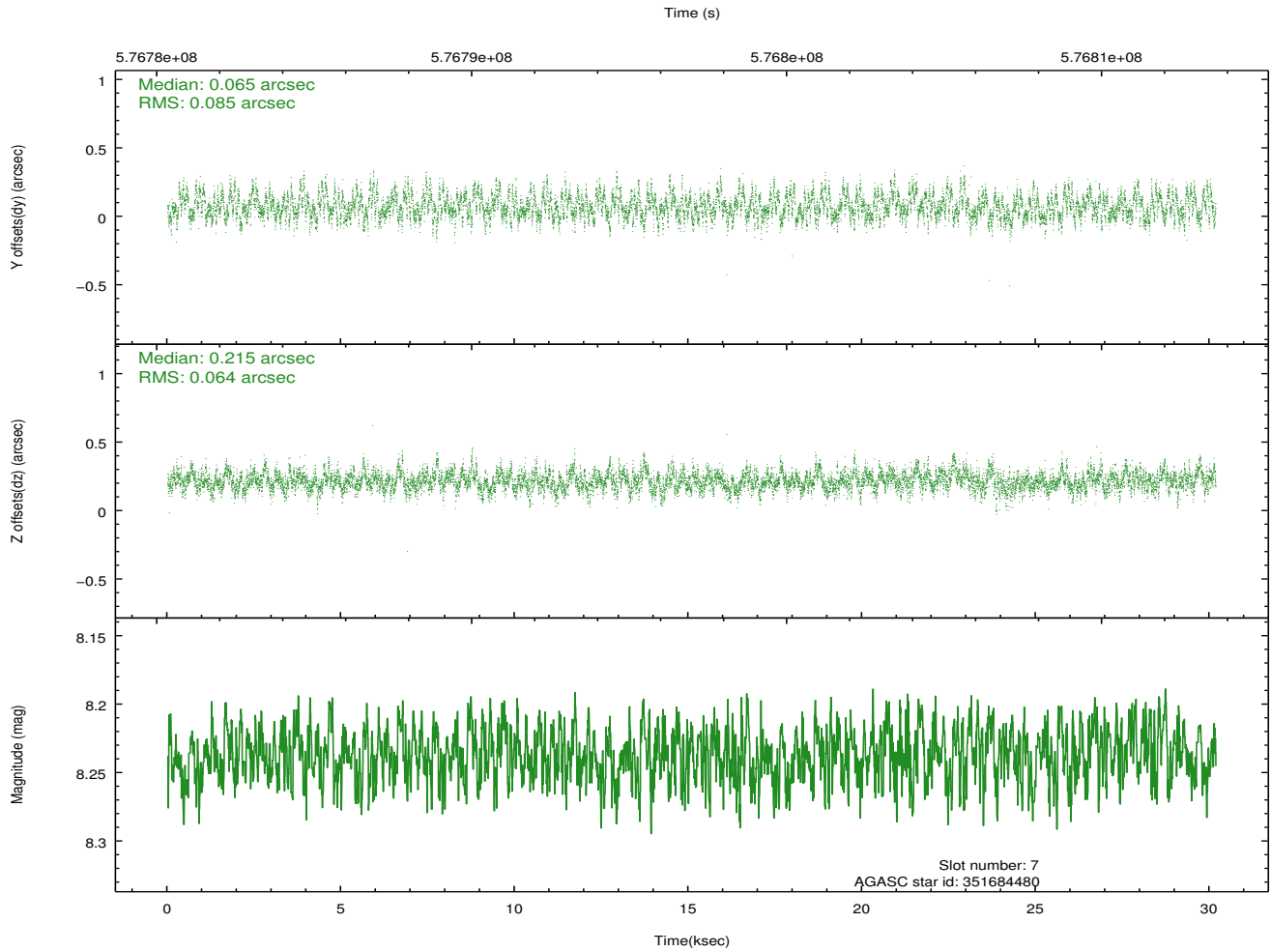
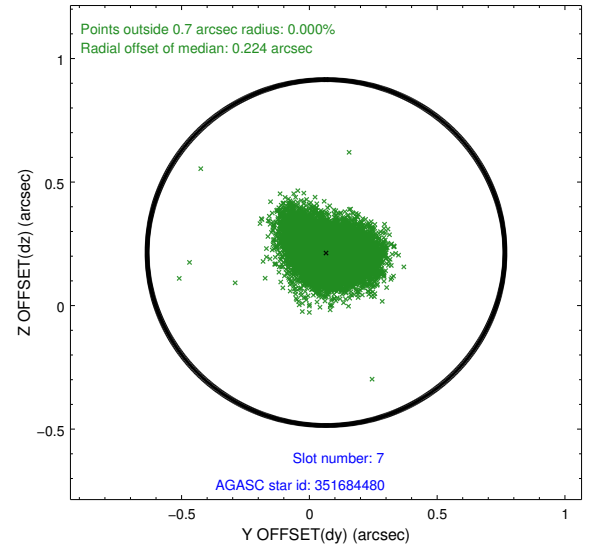
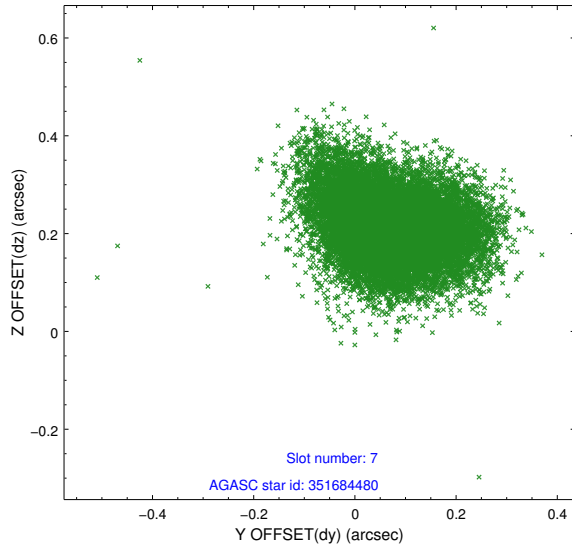
2.4.3 Slot 5



2.4.4 Slot 6

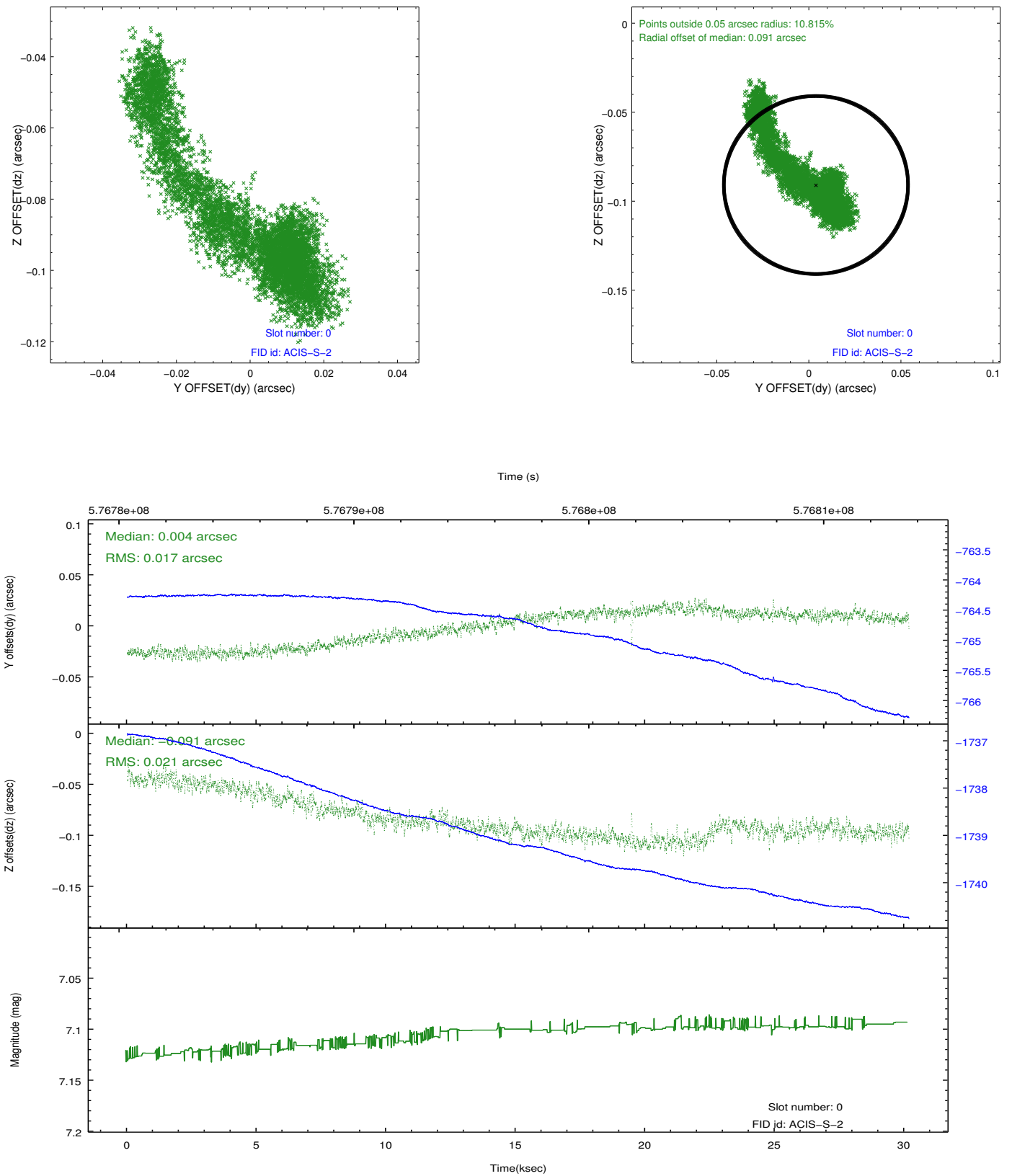


2.4.5 Slot 7

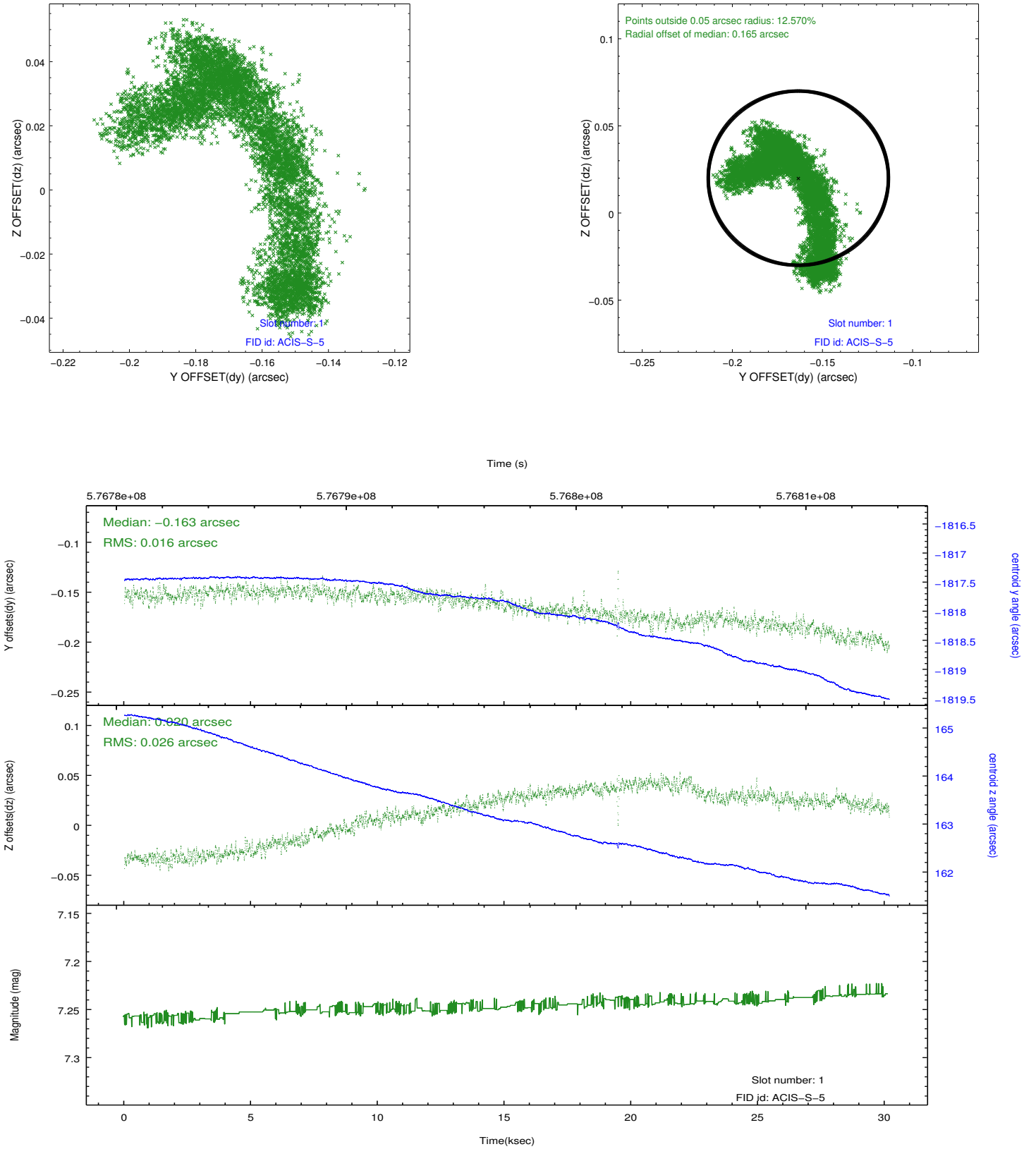


2.5 FID Slots

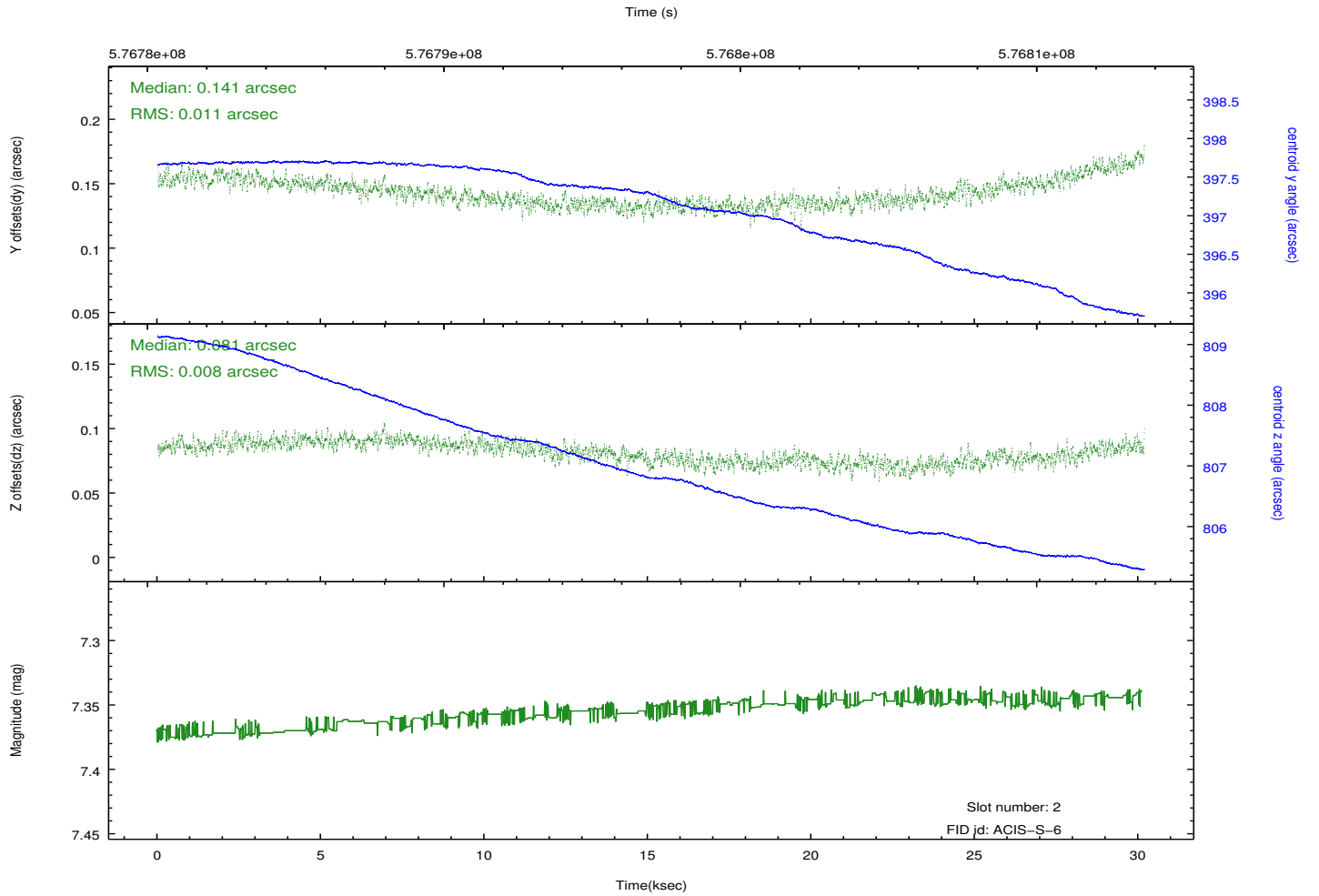
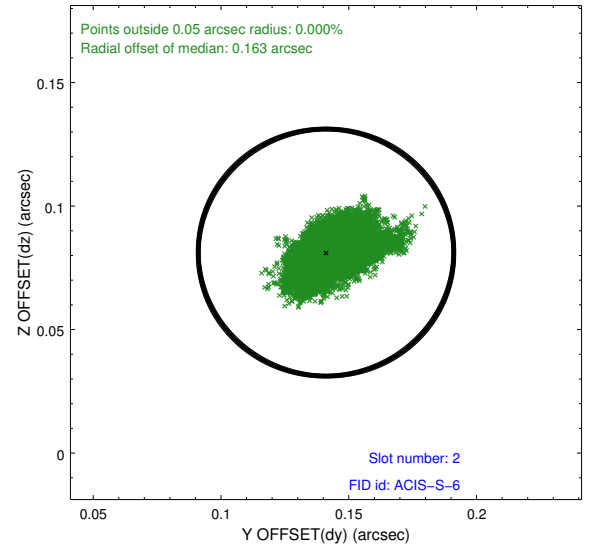
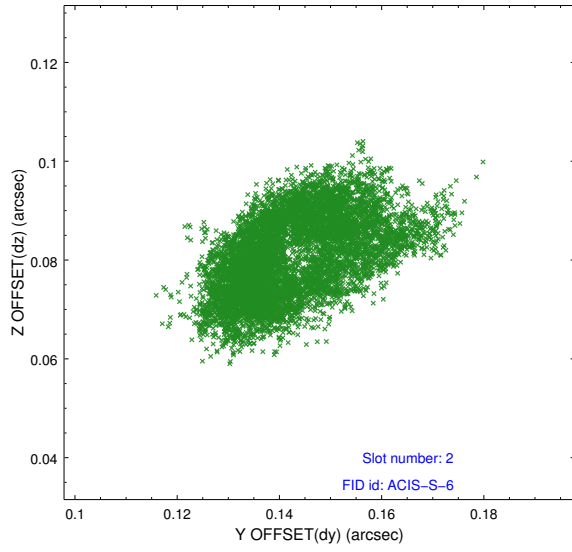
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

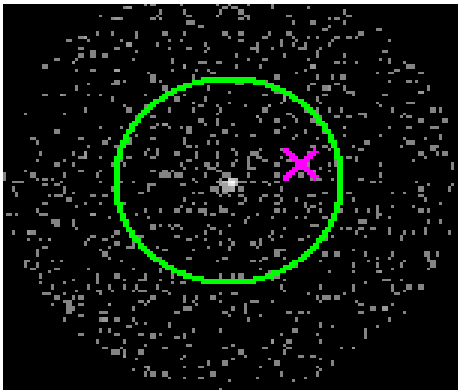


3 Gratings

3.1 HEG Arm



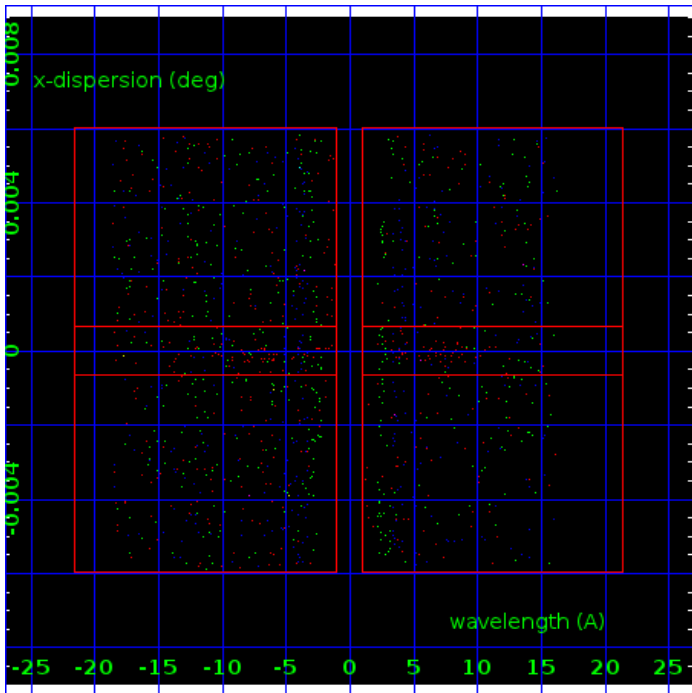
HEG Order Sort 123



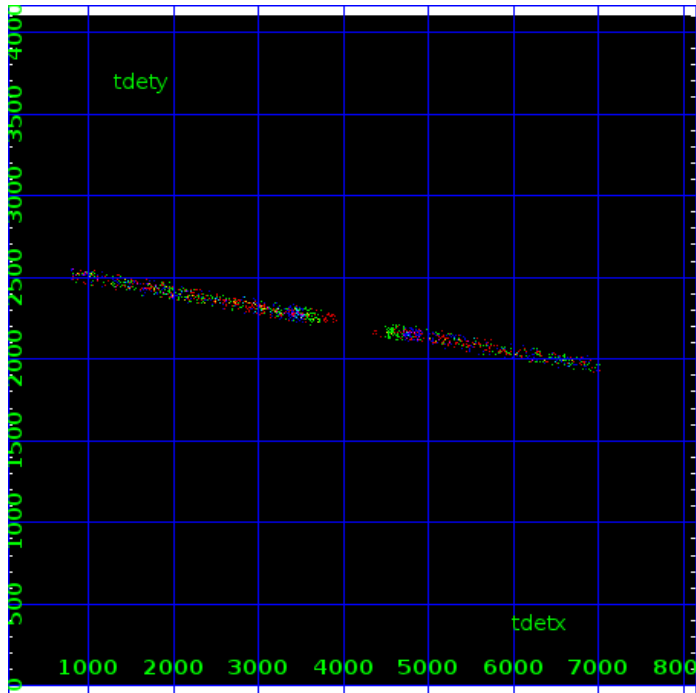
HEG Zero Order



HEG Order Sort ALL

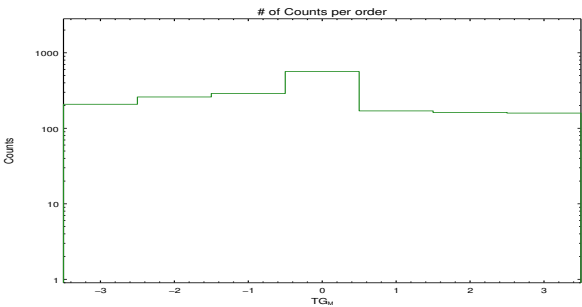


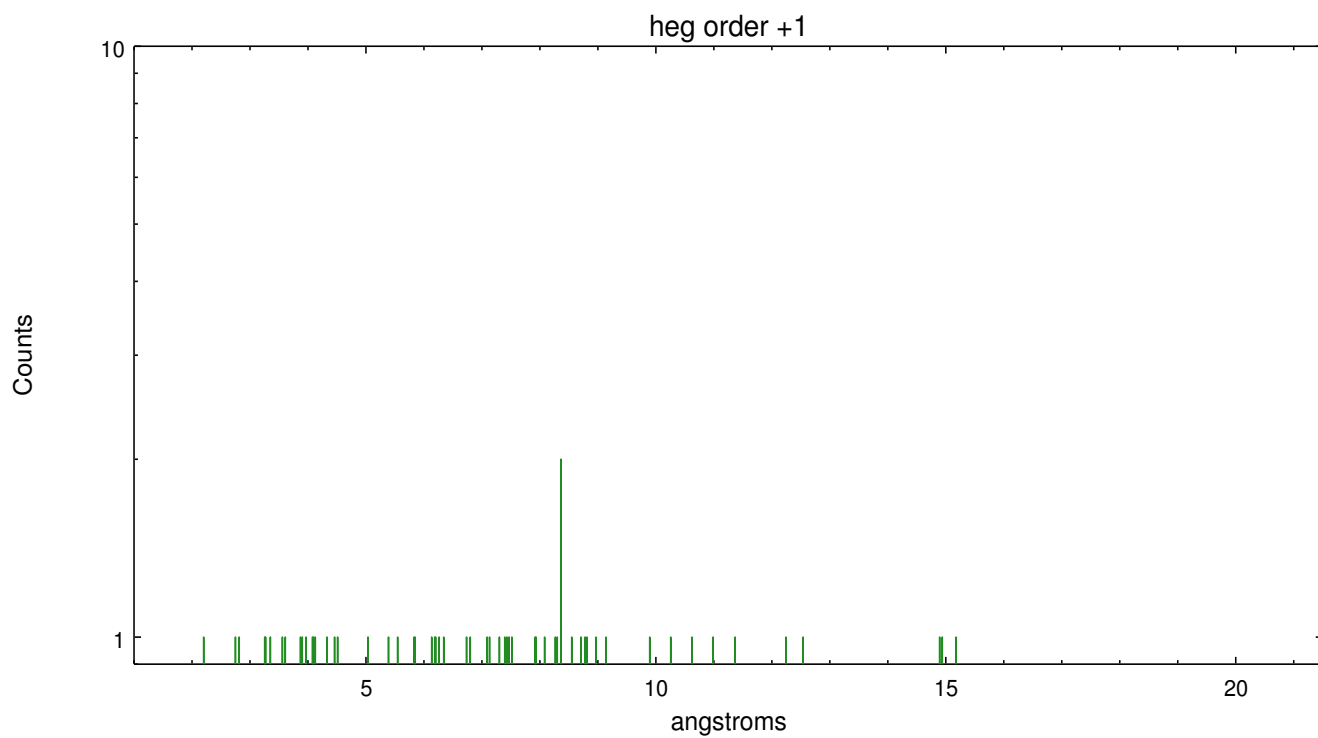
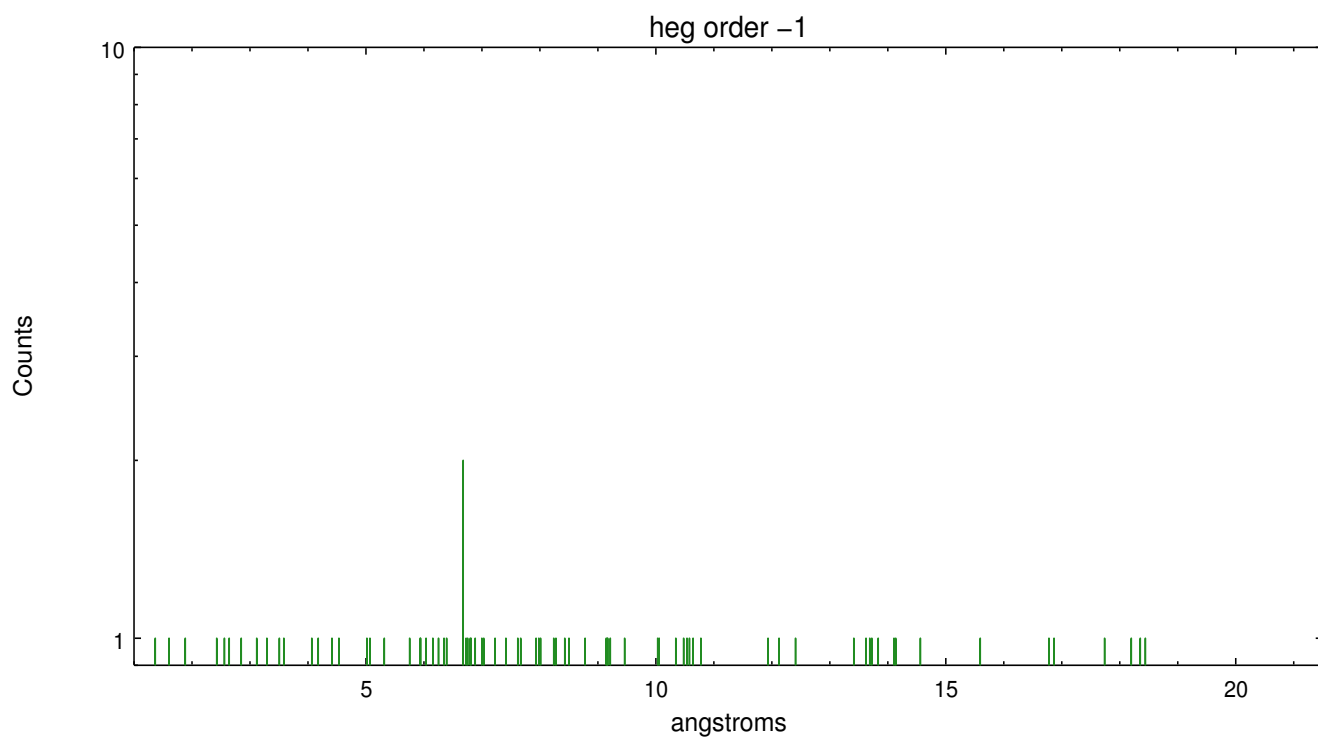
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	208	260	289	564	170	162	159

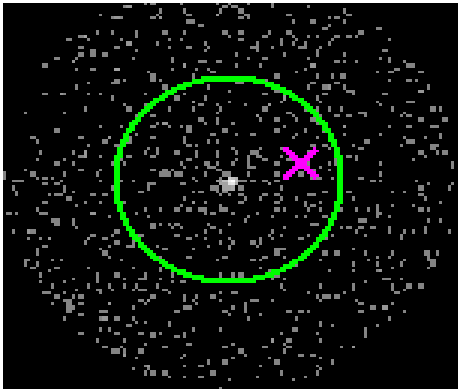




3.2 MEG Arm



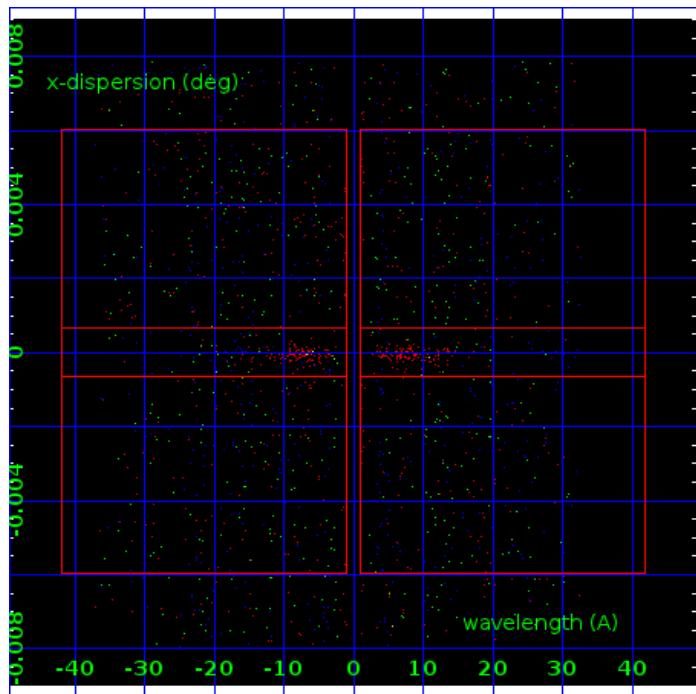
MEG Order Sort 123



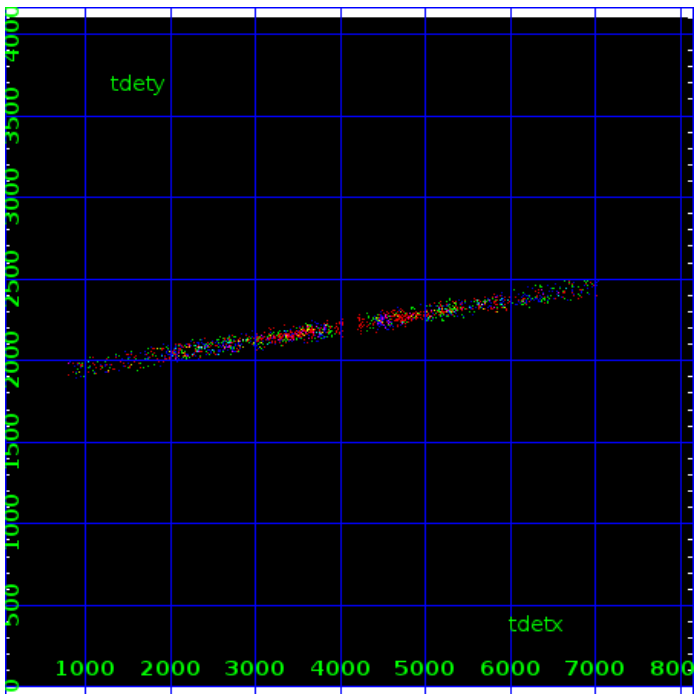
MEG Zero Order



MEG Order Sort ALL

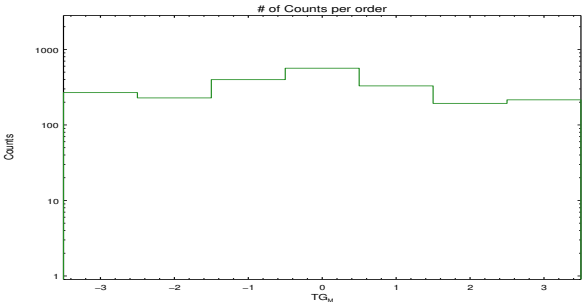


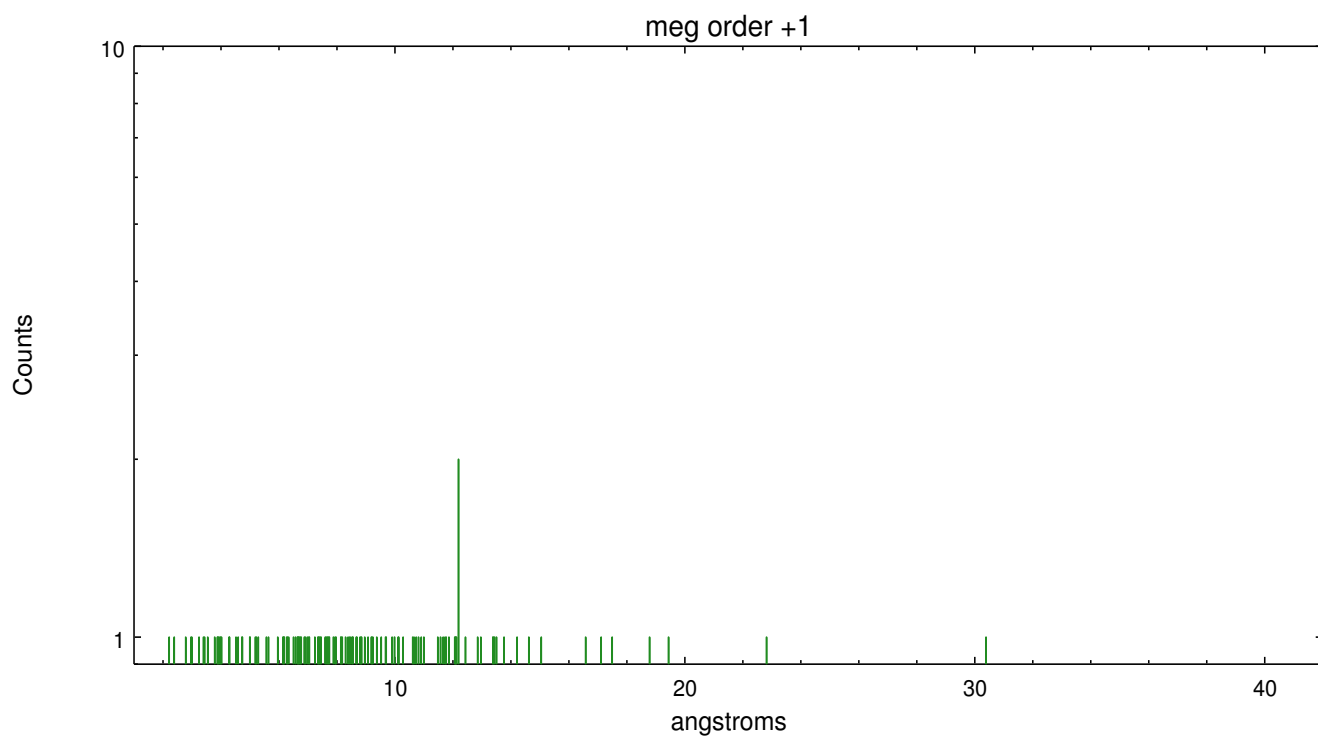
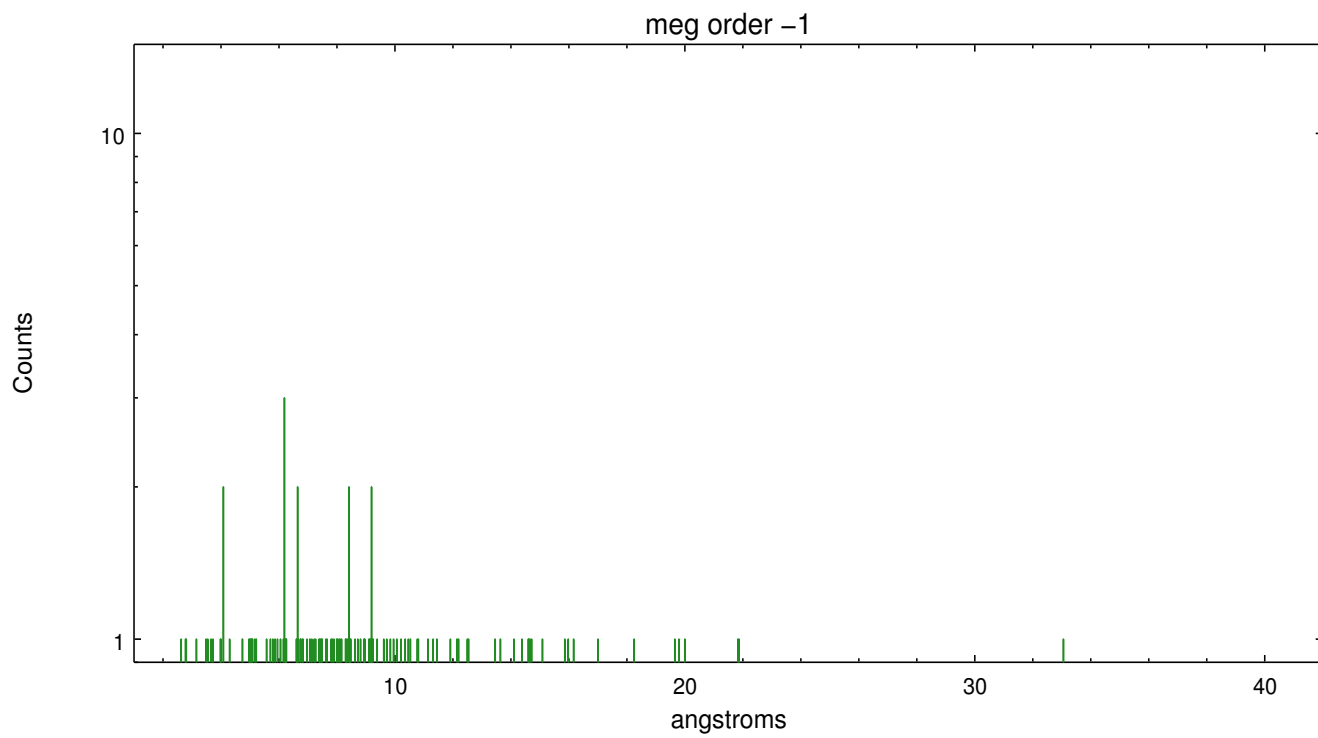
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	268	228	398	564	329	193	215





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.04.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.922547077894

A.2 Comments