

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21963 - L2 Version 1
Chandra X-Ray Center

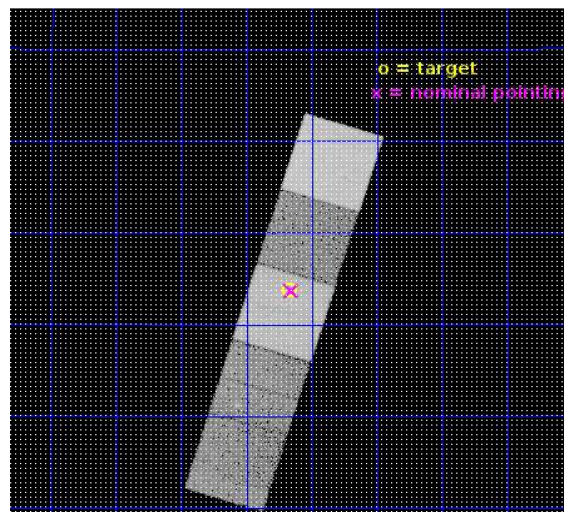
L2 Processing Date : Nov 17 2018

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1 Front

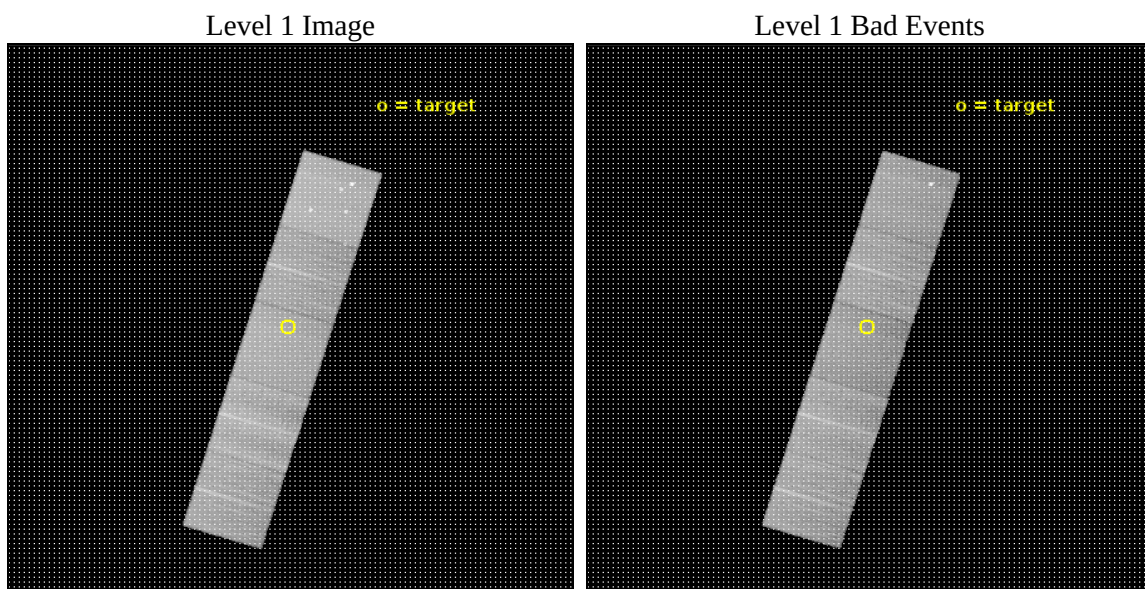
seq_num	201222	Sequence number
obs_id	21963	Observation id
title	V830 Tau: An X-ray Bright T Tauri Star Hosting a Hot Jupiter	Propo
observer	Stephen Skinner	Principal investigator
object	V830 Tau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.291792	Observer's specified target RA [deg]
dec_targ	24.56205	Observer's specified target Dec [deg]
ra_nom	68.288919494506	Nominal RA [deg]
dec_nom	24.561432354015	Nominal Dec [deg]
roll_nom	107.1578297751	Nominal Roll [deg]
revision	1	Processing version of data
ontime	23093.699302077	Sum of GTIs [s]
livetime	22791.963119362	Livetime [s]
ontime5	23093.658262134	Sum of GTIs [s]
ontime6	23093.617222071	Sum of GTIs [s]
ontime7	23093.699302077	Sum of GTIs [s]
ontime8	23093.576182127	Sum of GTIs [s]
ontime9	23093.535142064	Sum of GTIs [s]
l2events	247949	Number of level 2 events



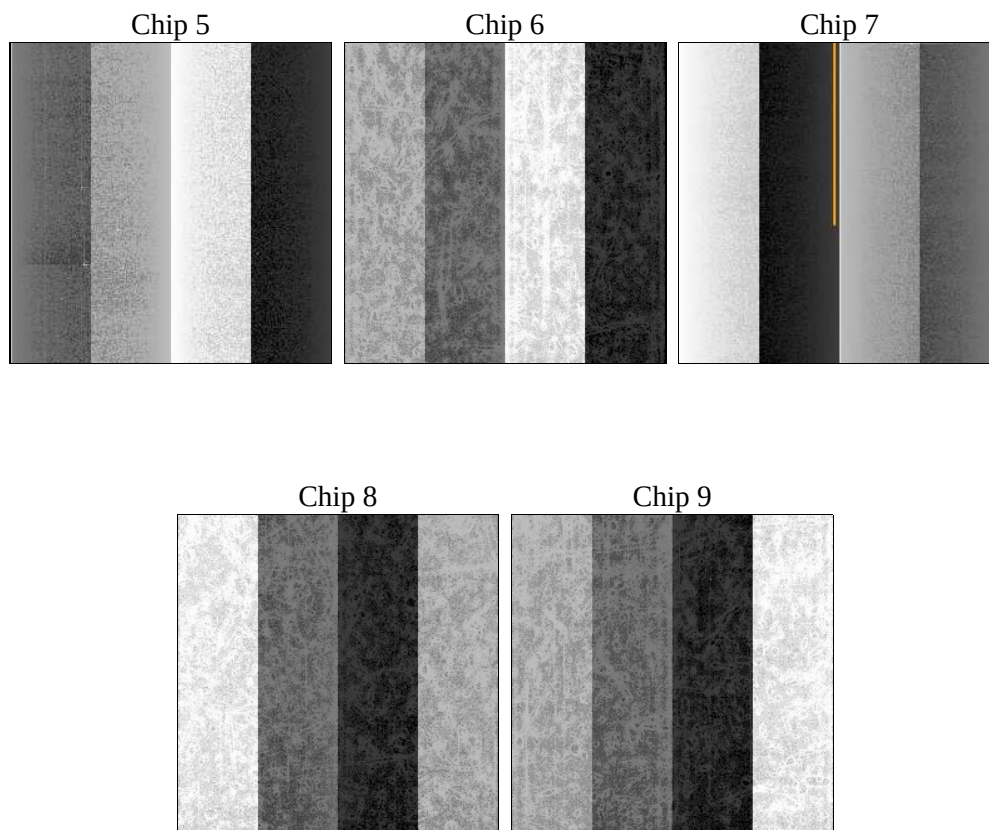
2 OBI

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	10.7	Processing system revision	ontime	23093.699302077	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime5	23093.658262134	Sum of GTIs [s]
date	2018-11-17T14:21:01	Date and time of file creation	ontime6	23093.617222071	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	23093.699302077	Sum of GTIs [s]
			ontime8	23093.576182127	Sum of GTIs [s]
			ontime9	23093.535142064	Sum of GTIs [s]
			l1events	1002625	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4077.89, 4100.43)	src1a sky pixel position

2.1.4 Events

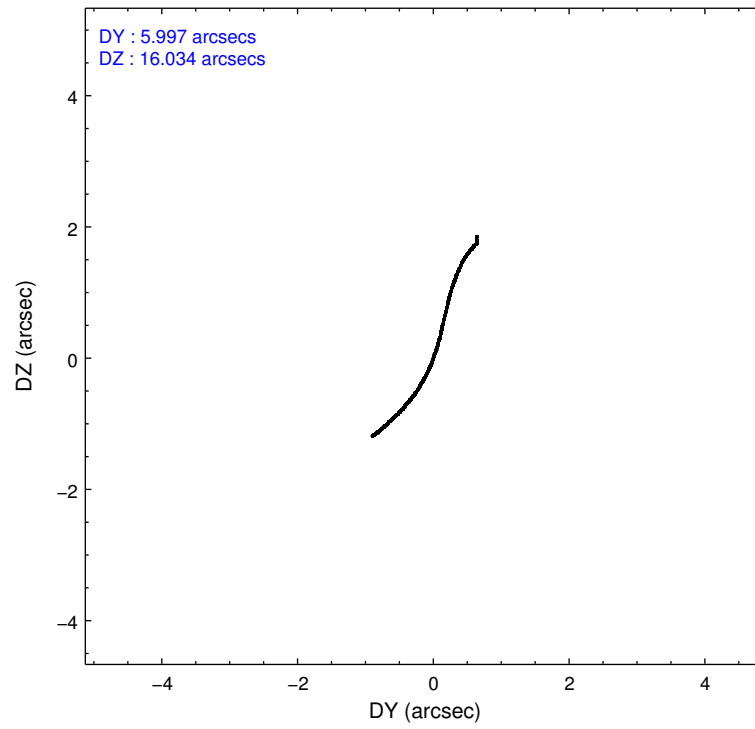
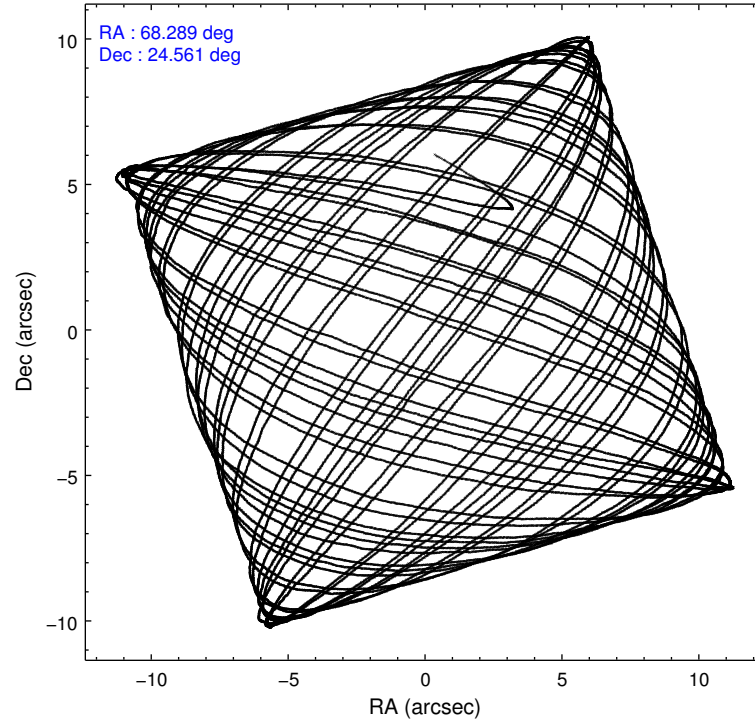
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	256777	170112	194355	213982	167399
rejected events	133458	151644	109423	158061	148087
rejected %	51%	89%	56%	73%	88%

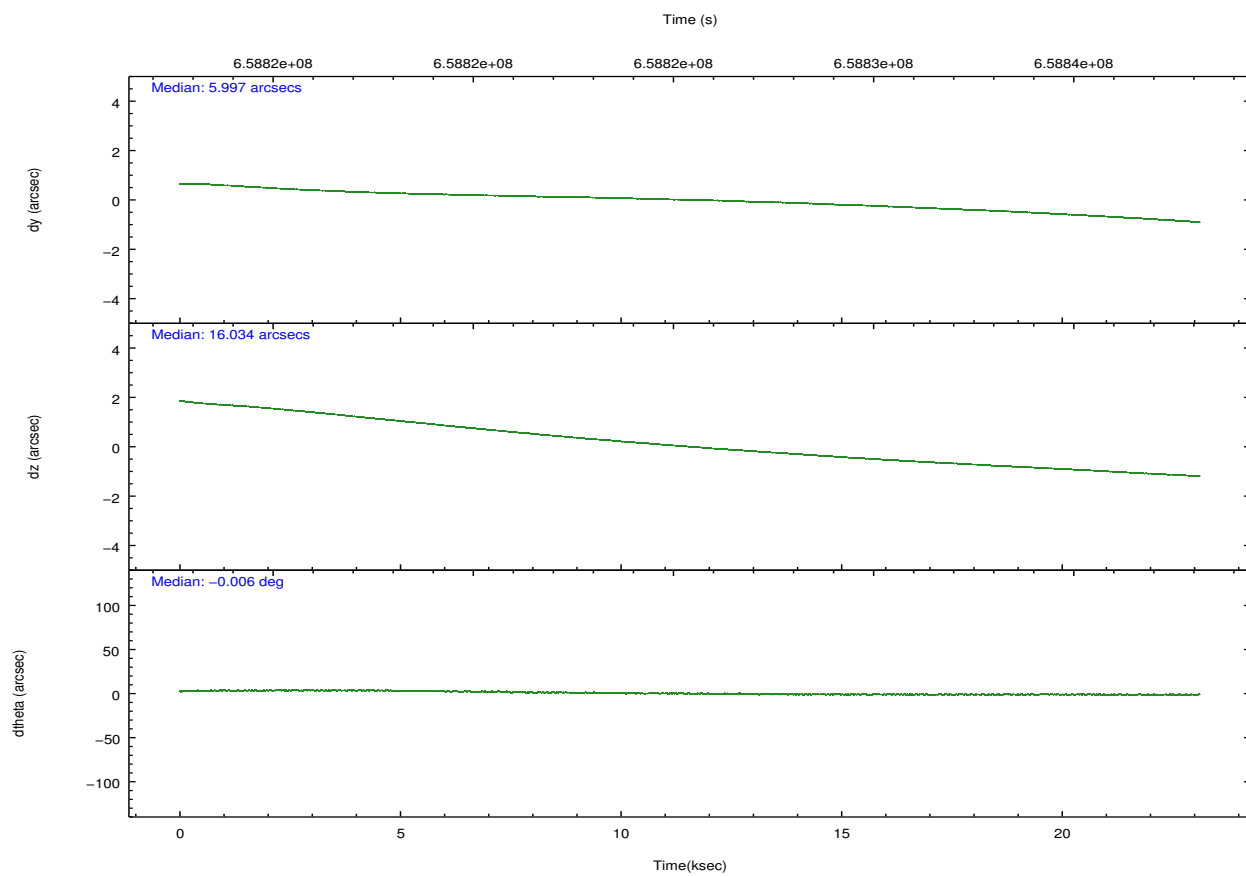
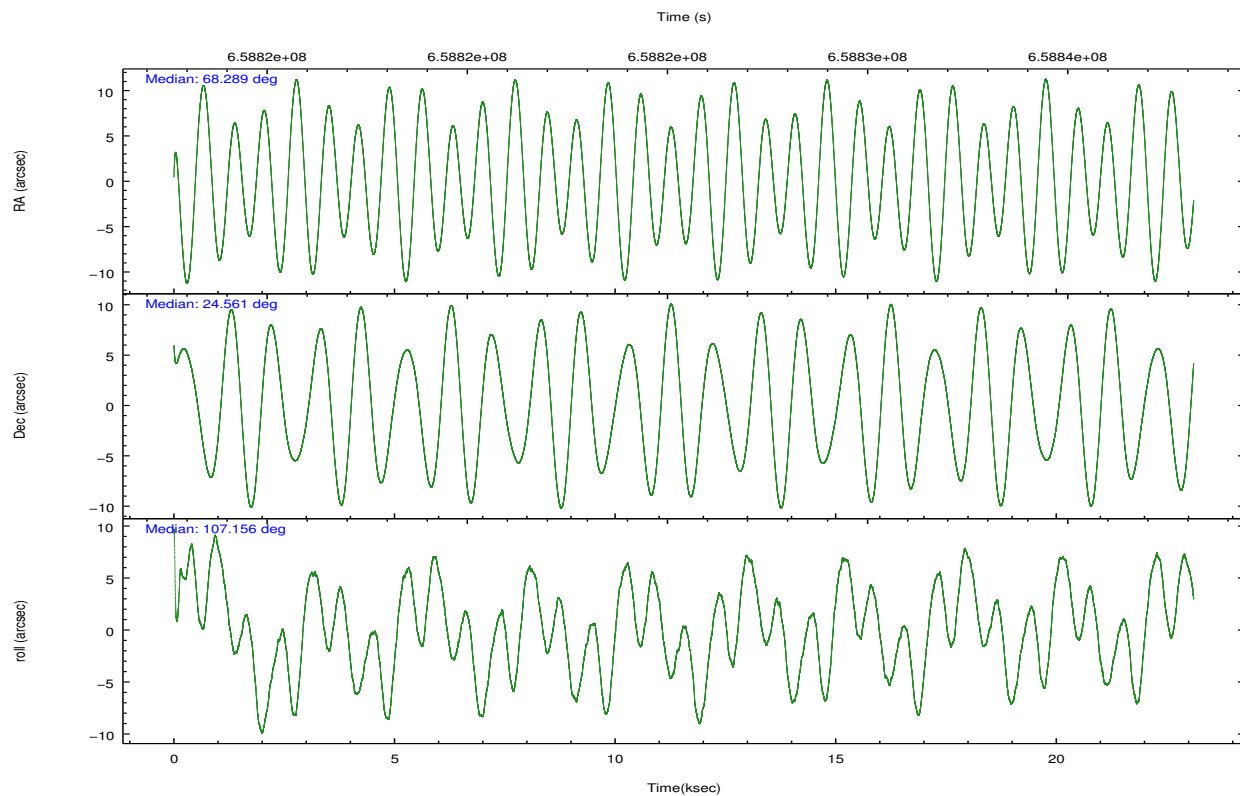
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	11038	5870	6417	13959	6711
	4%	3%	3%	6%	4%
grade 1 events	231	73	212	147	82
	0%	0%	0%	0%	0%
grade 2 events	38305	4616	17400	14198	4288
	14%	2%	8%	6%	2%
grade 3 events	2974	1783	6597	5906	2007
	1%	1%	3%	2%	1%
grade 4 events	2993	1864	6693	5469	2013
	1%	1%	3%	2%	1%
grade 5 events	17379	7114	19821	11106	8137
	6%	4%	10%	5%	4%
grade 6 events	68048	4338	47852	16397	4298
	26%	2%	24%	7%	2%
grade 7 events	115809	144454	89363	146800	139863
	45%	84%	45%	68%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	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	68.311330	68.2889194945059	CCD I2 on	N	N
[deg] Pointing Dec	24.543041	24.56143235401523	CCD I3 on	N	N
[deg] Pointing Roll	106.991879	107.1578297751029	CCD S0 on	O1	N
[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
[s] Observation start time (MET)	658813970.184000	658812648.46866	CCD S5 on	O2	Y
Observation start date	2018-11-17T03:51:41	2018-11-17T03:30:48	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	658836970.184000	658837633.87015	On-chip summing requested	N	N
Observation end date	2018-11-17T10:15:01	2018-11-17T10:27:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



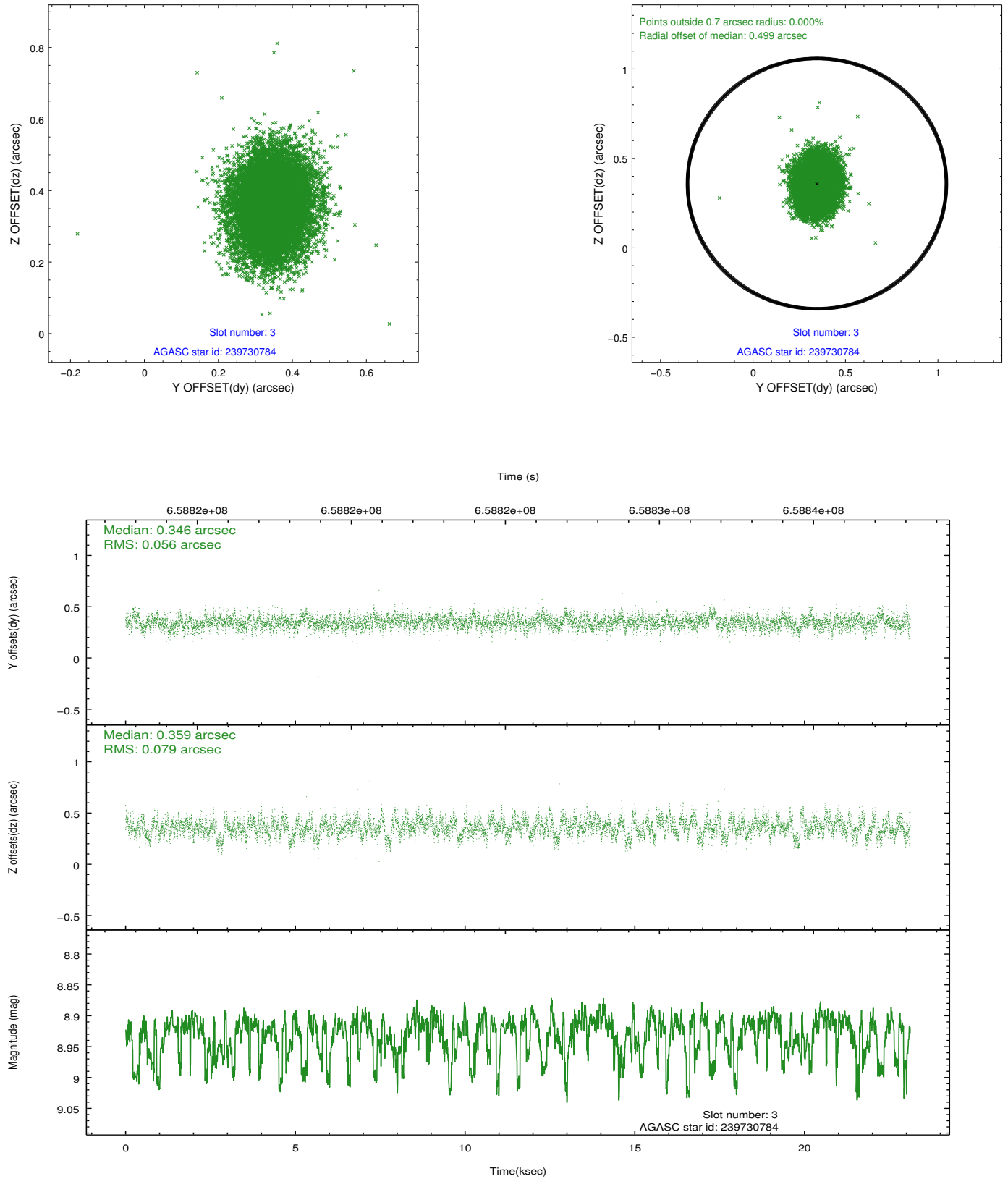


Slot Statistics

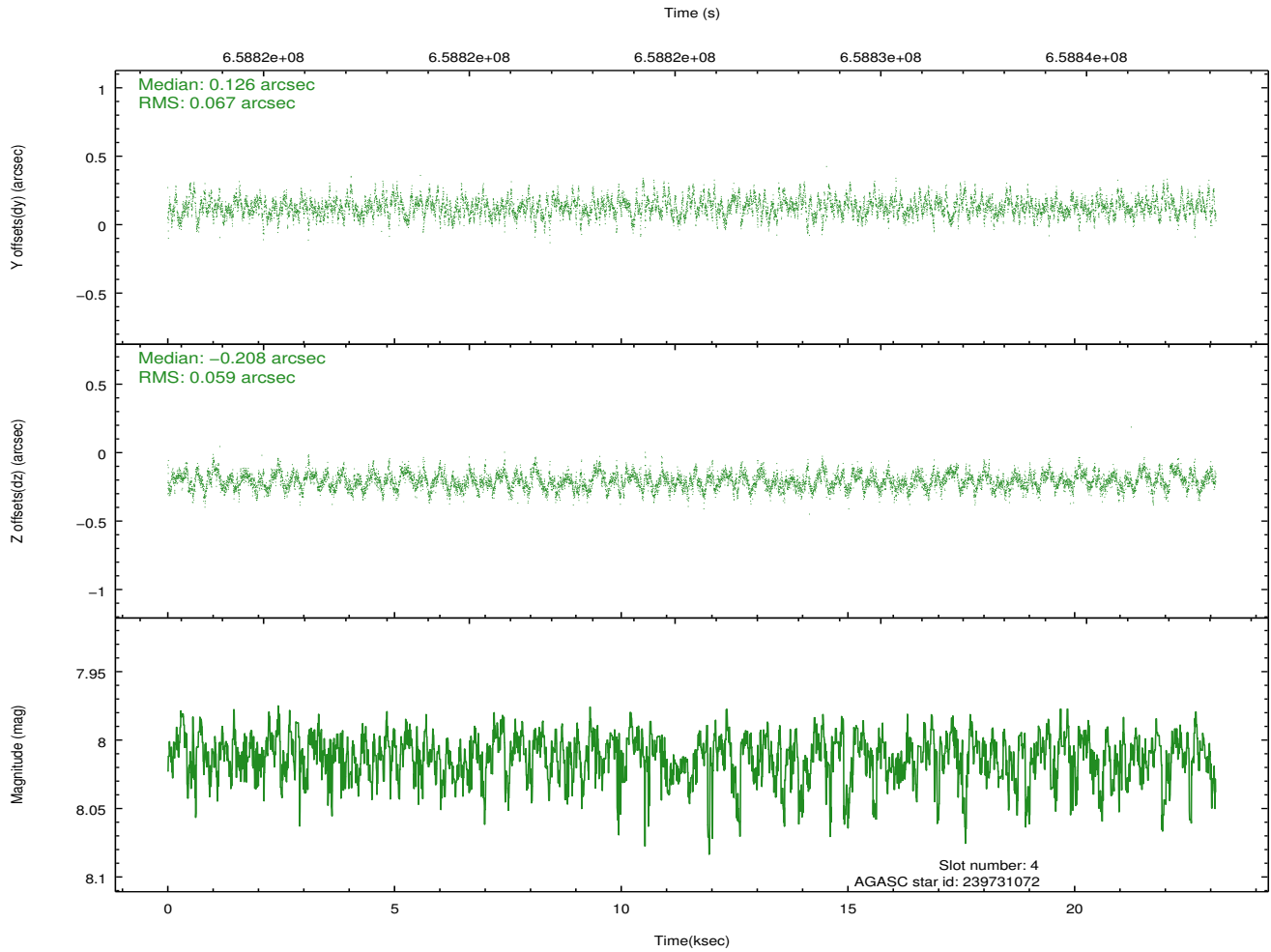
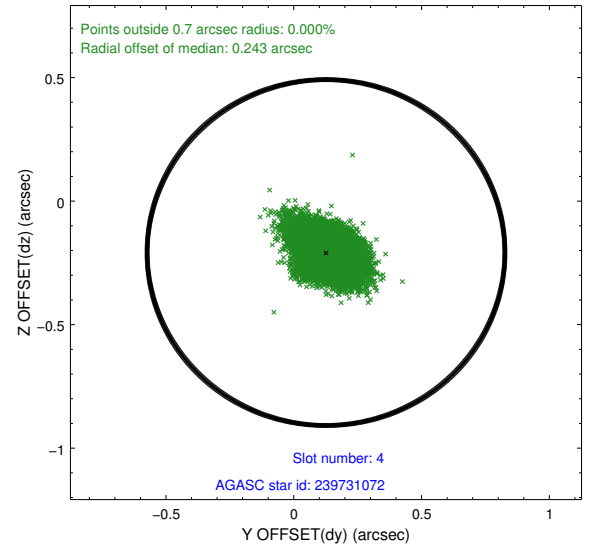
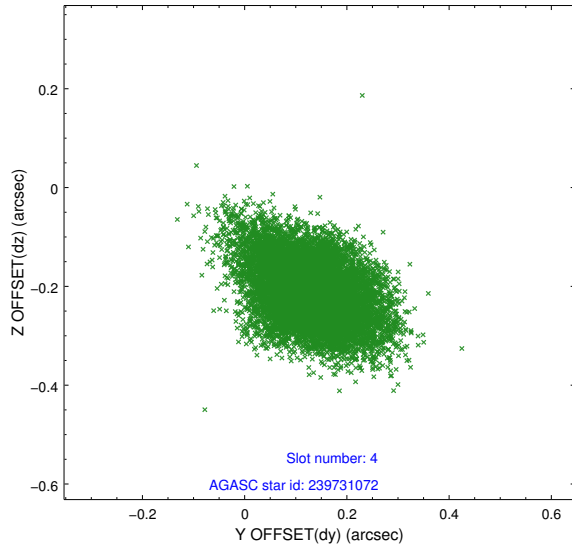
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.05	5637	1.000	-0.289	-0.111	0.022	0.055	0.000000	0.000000	-758.91	-1737
1	FID		ACIS-S-4	7.19	5638	1.000	0.555	0.168	0.028	0.038	0.000000	0.000000	2155.10	171
2	FID		ACIS-S-5	7.16	5637	1.000	-0.300	-0.051	0.023	0.050	0.000000	0.000000	-1811.63	164
3	GUIDE	used	239730784	8.93	11263	1.000	0.346	0.359	0.103	0.167	68.709044	24.244524	-1407.17	-934
4	GUIDE	used	239731072	8.01	11273	1.000	0.126	-0.208	0.092	0.159	68.370351	24.279312	-964.61	91
5	GUIDE	used	240262776	8.49	11272	1.000	-0.403	-0.155	0.089	0.153	67.818644	25.030457	2149.58	1024
6	GUIDE	used	240263016	8.62	11274	1.000	0.042	0.127	0.113	0.178	68.575597	24.979042	1250.36	-1283
7	GUIDE	used	240259472	7.85	11207	1.000	-0.113	-0.129	0.076	0.132	68.090831	25.185490	2422.18	10

2.4 Star Slots

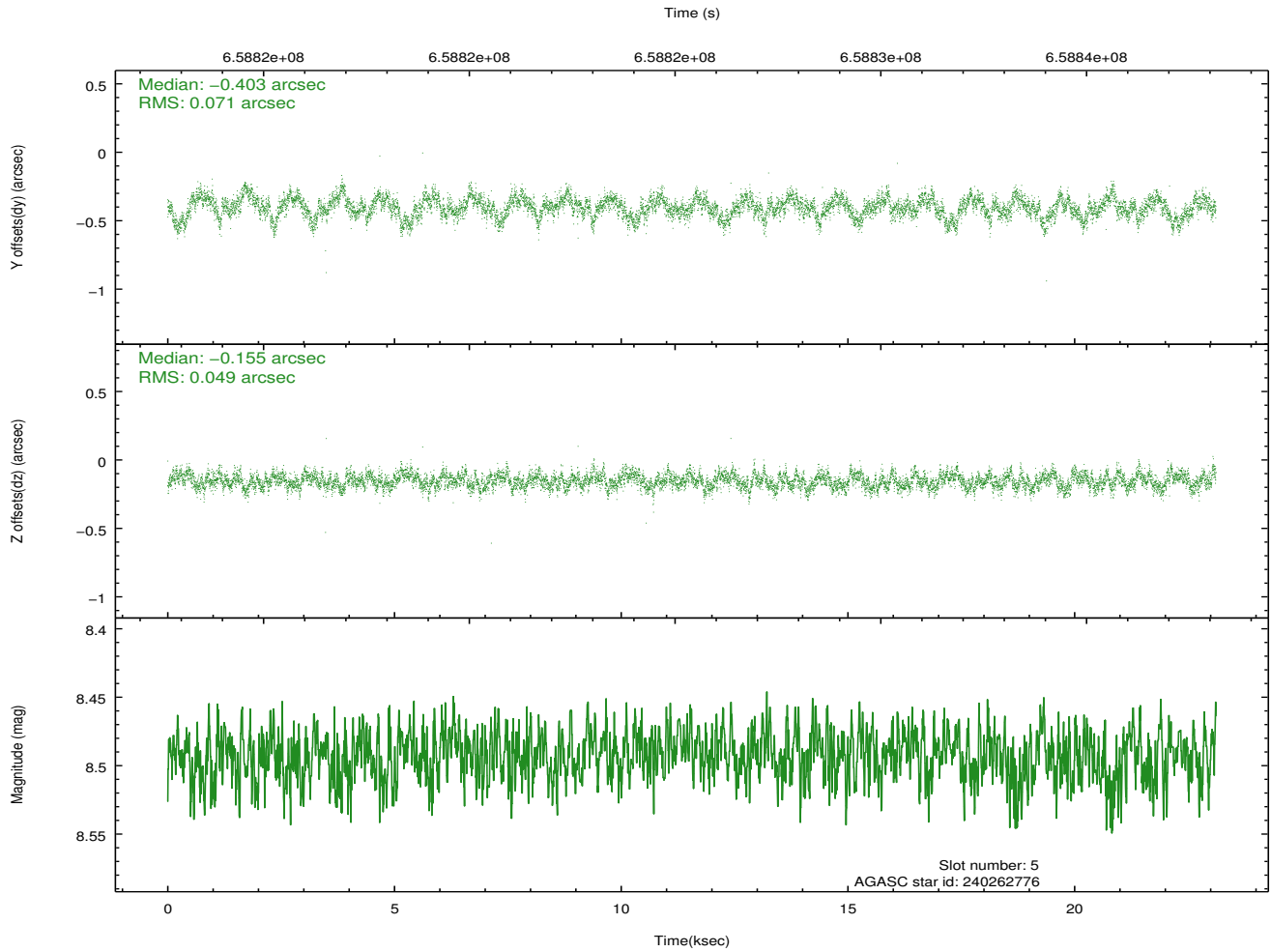
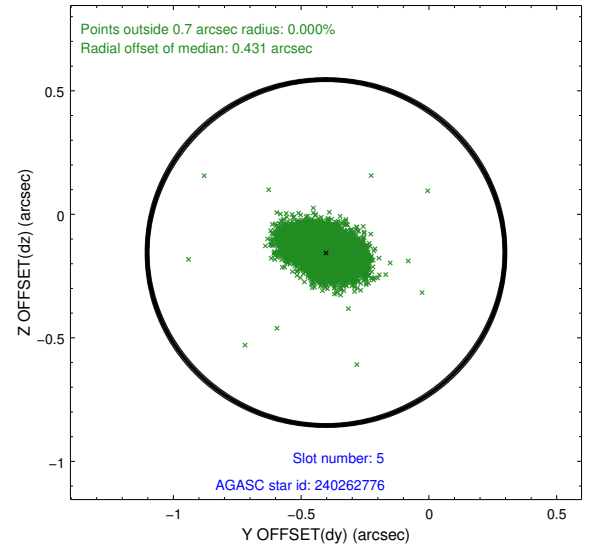
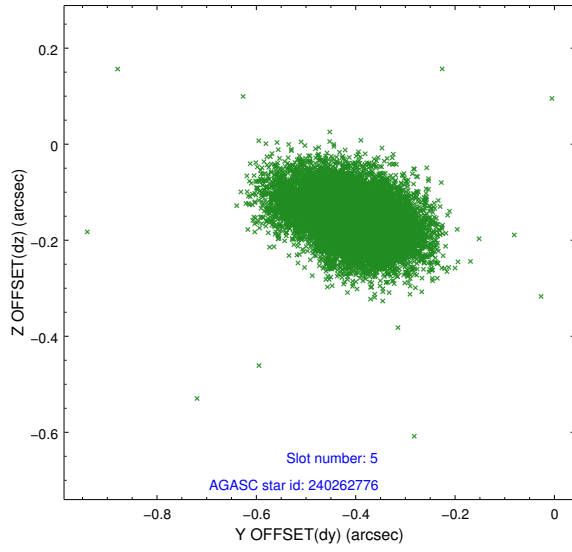
2.4.1 Slot 3



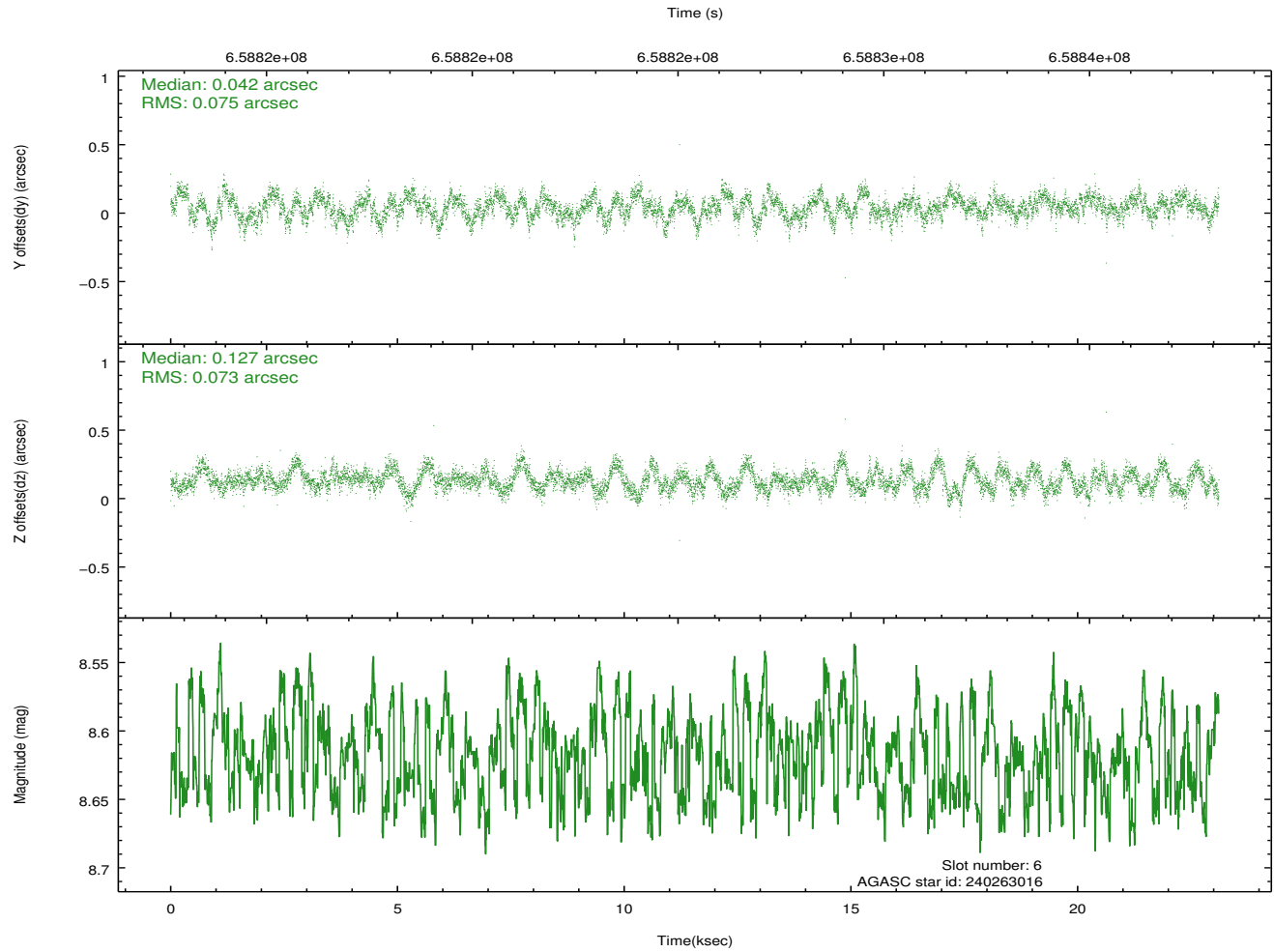
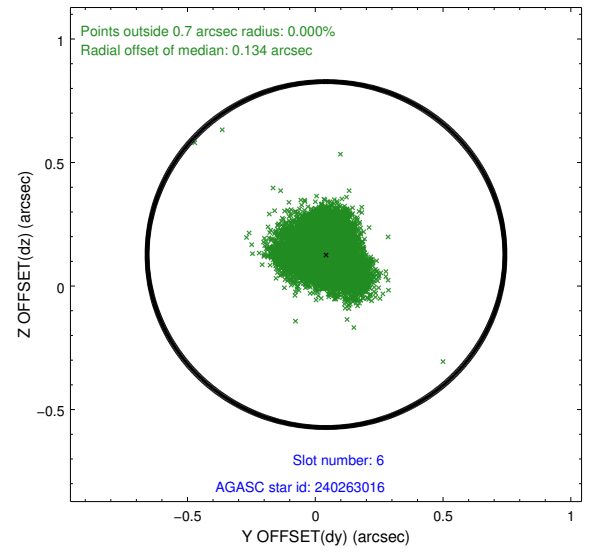
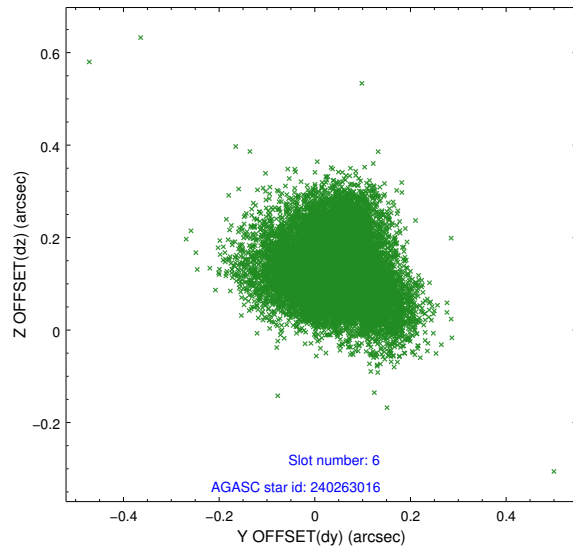
2.4.2 Slot 4



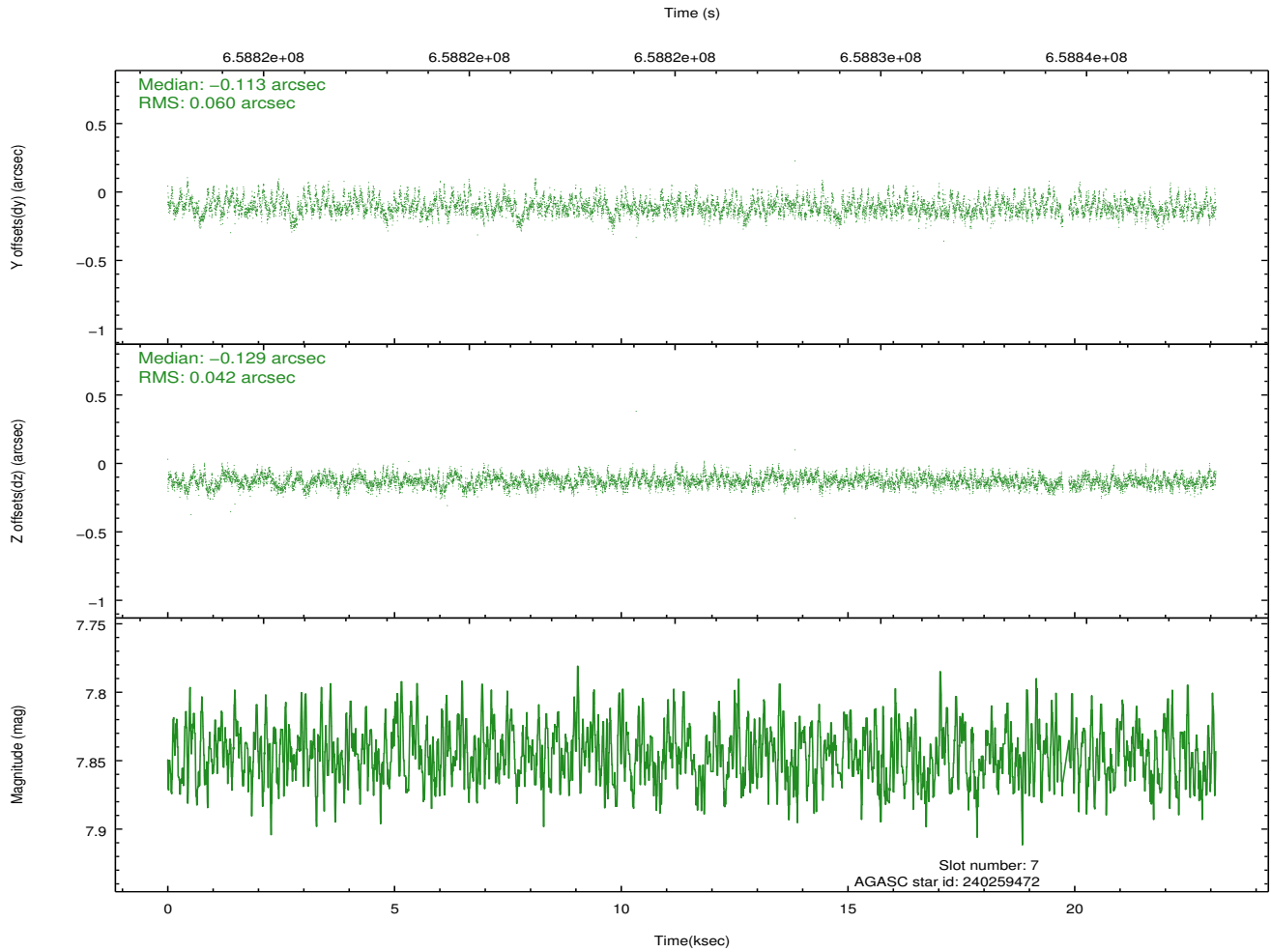
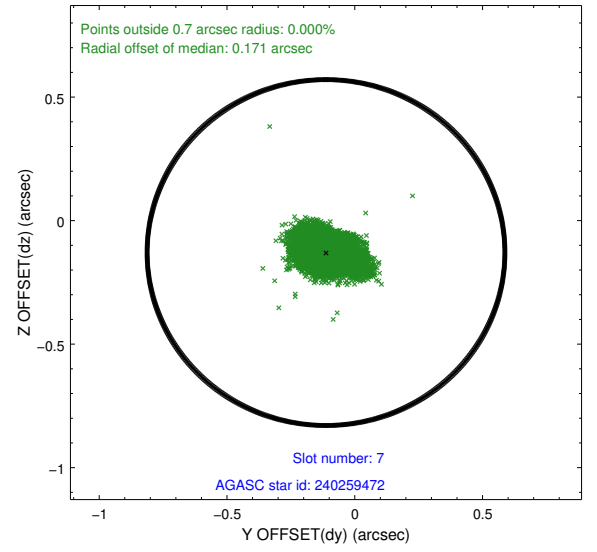
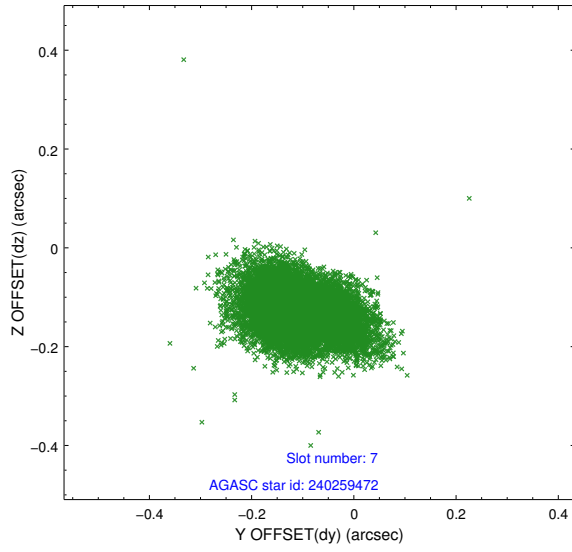
2.4.3 Slot 5



2.4.4 Slot 6

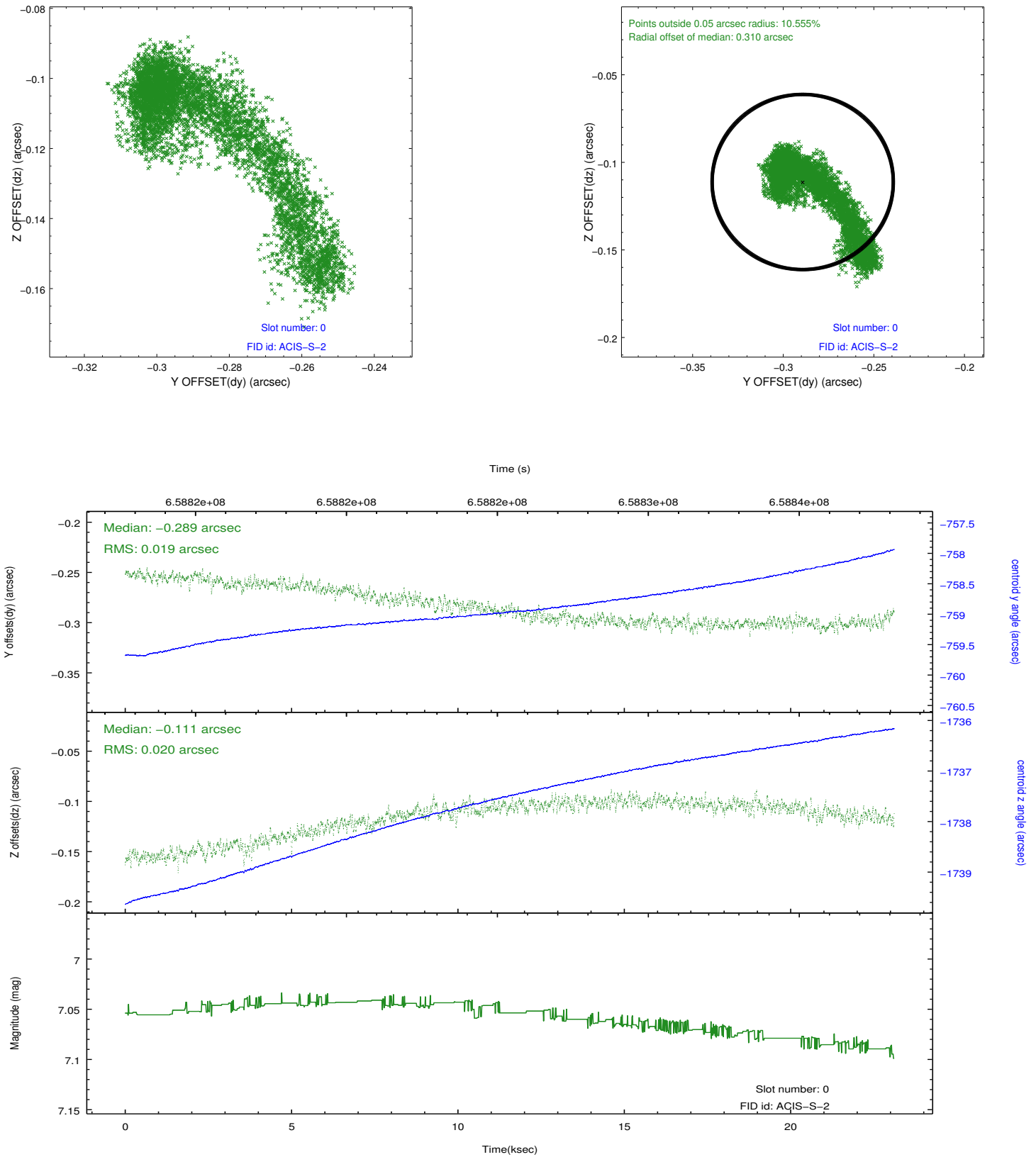


2.4.5 Slot 7

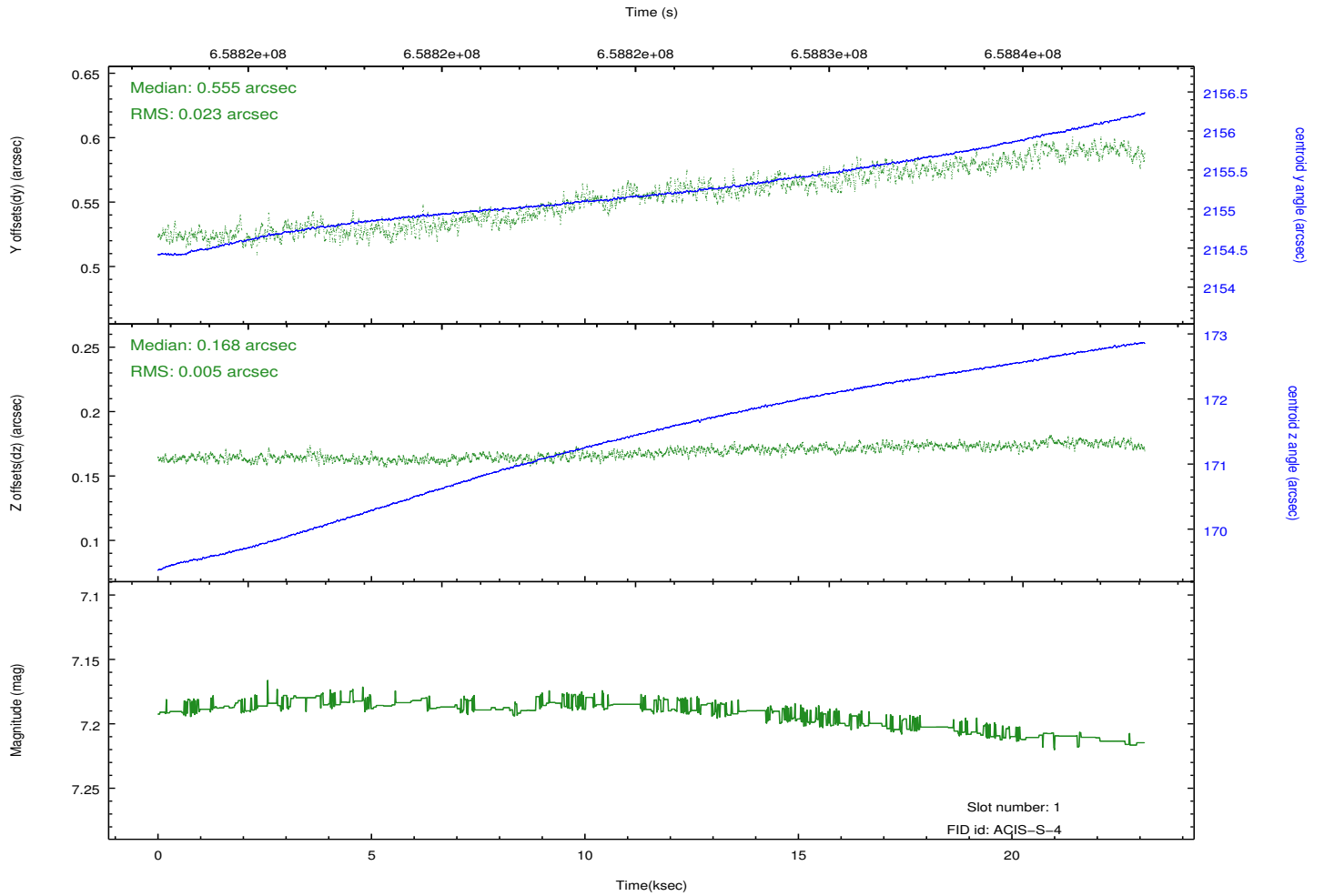
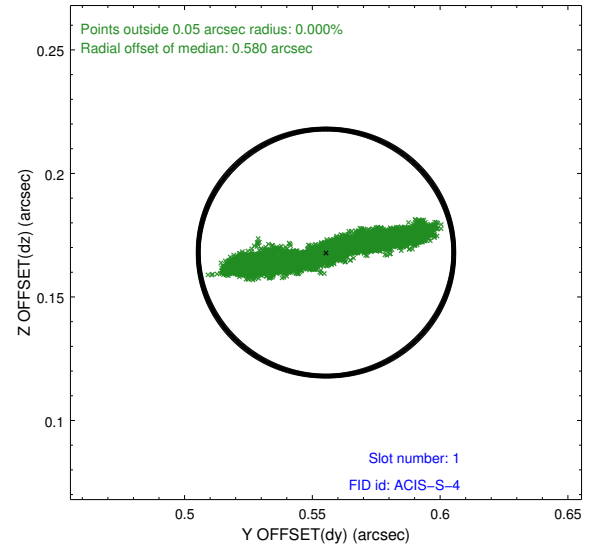
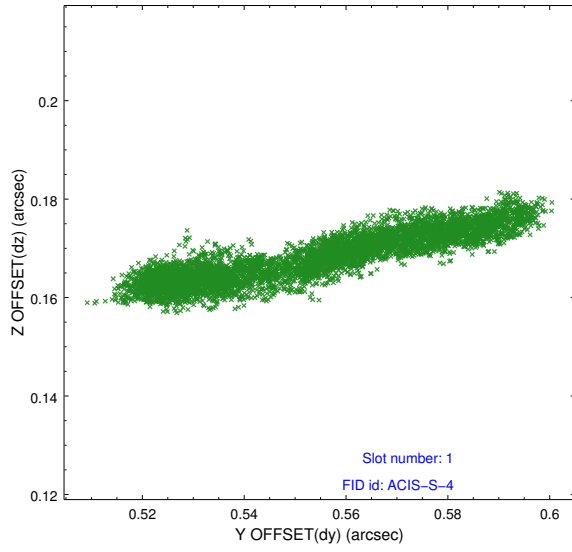


2.5 FID Slots

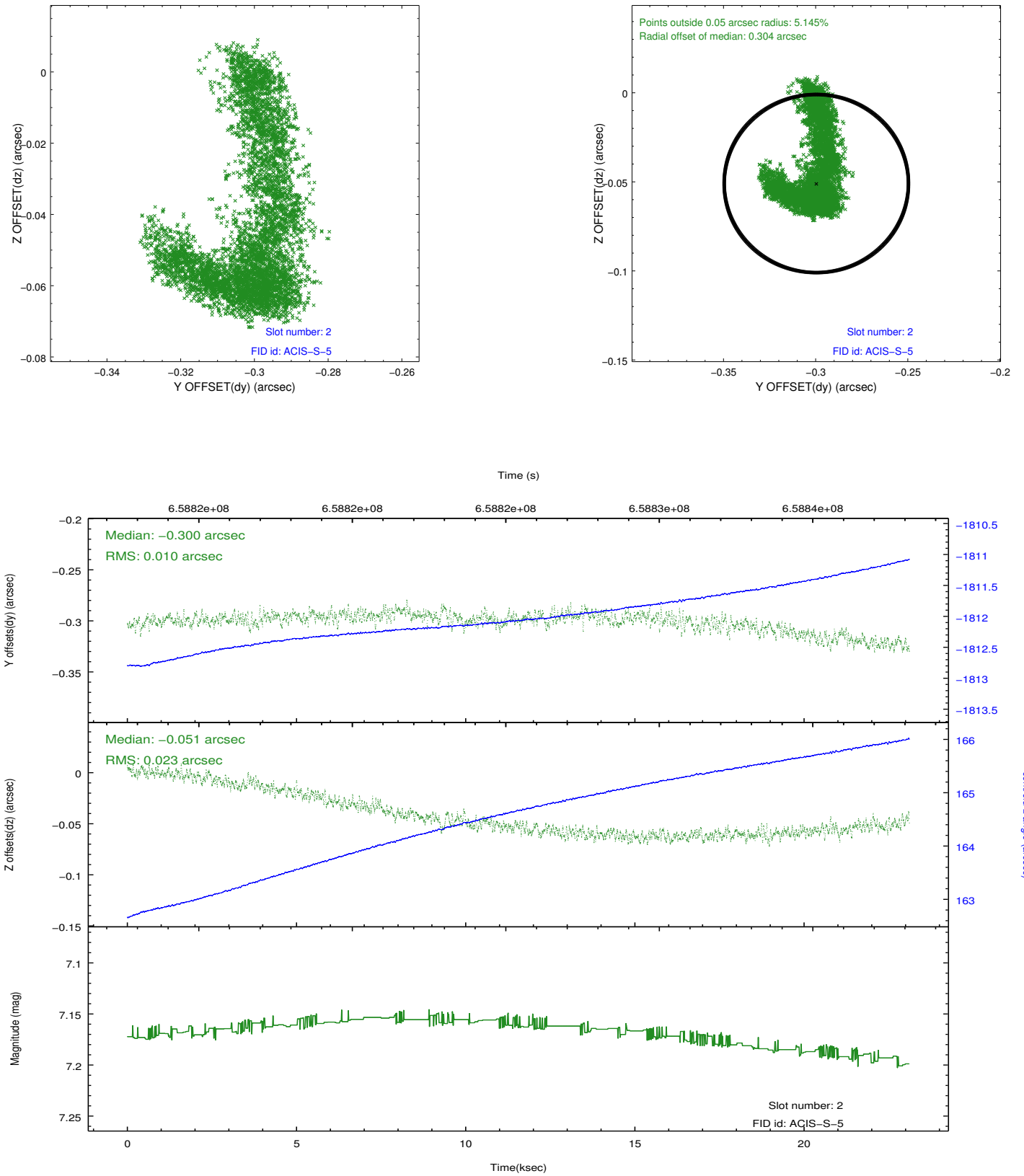
2.5.1 Slot 0



2.5.2 Slot 1

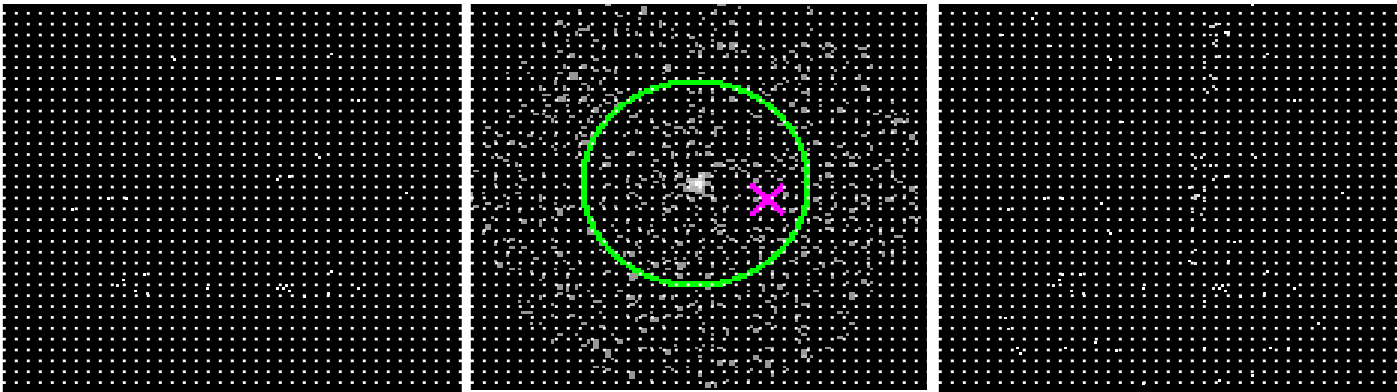


2.5.3 Slot 2



3 Gratings

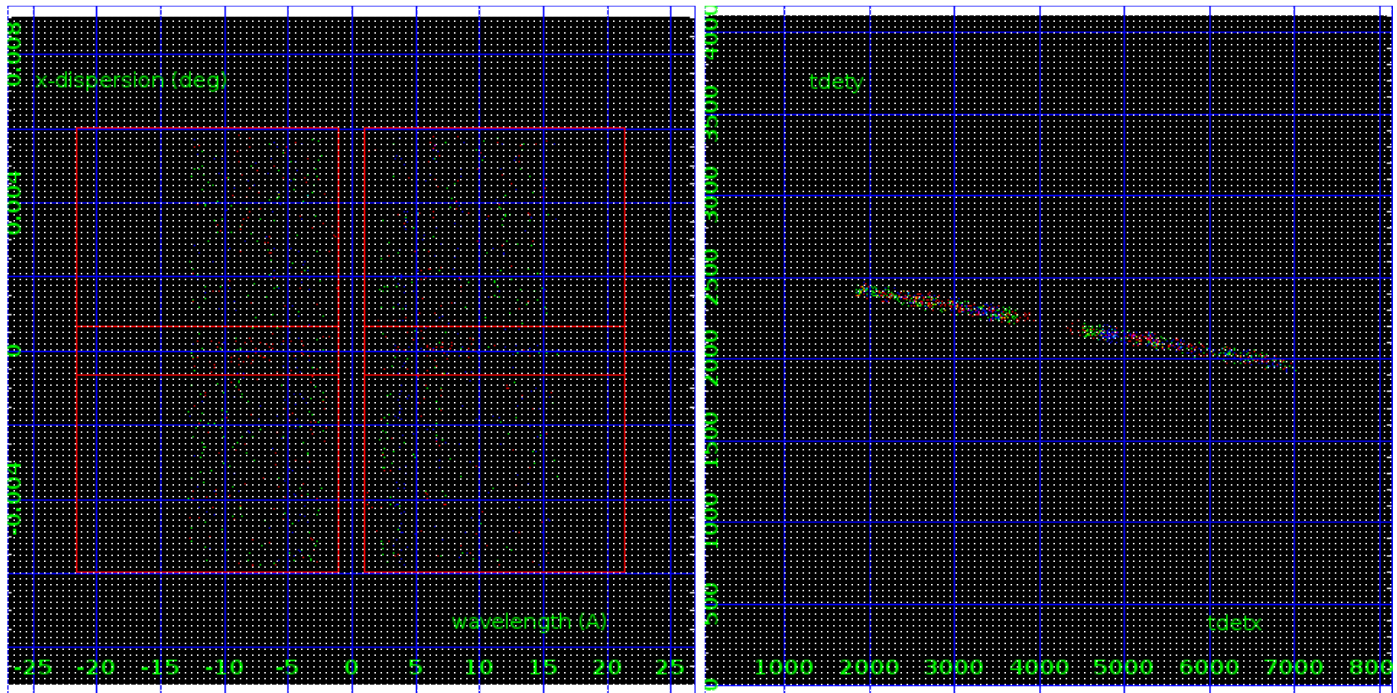
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

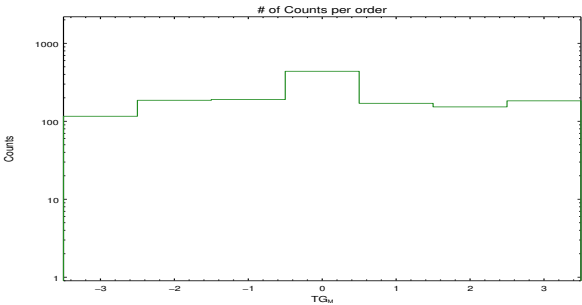
HEG Order Sort ALL

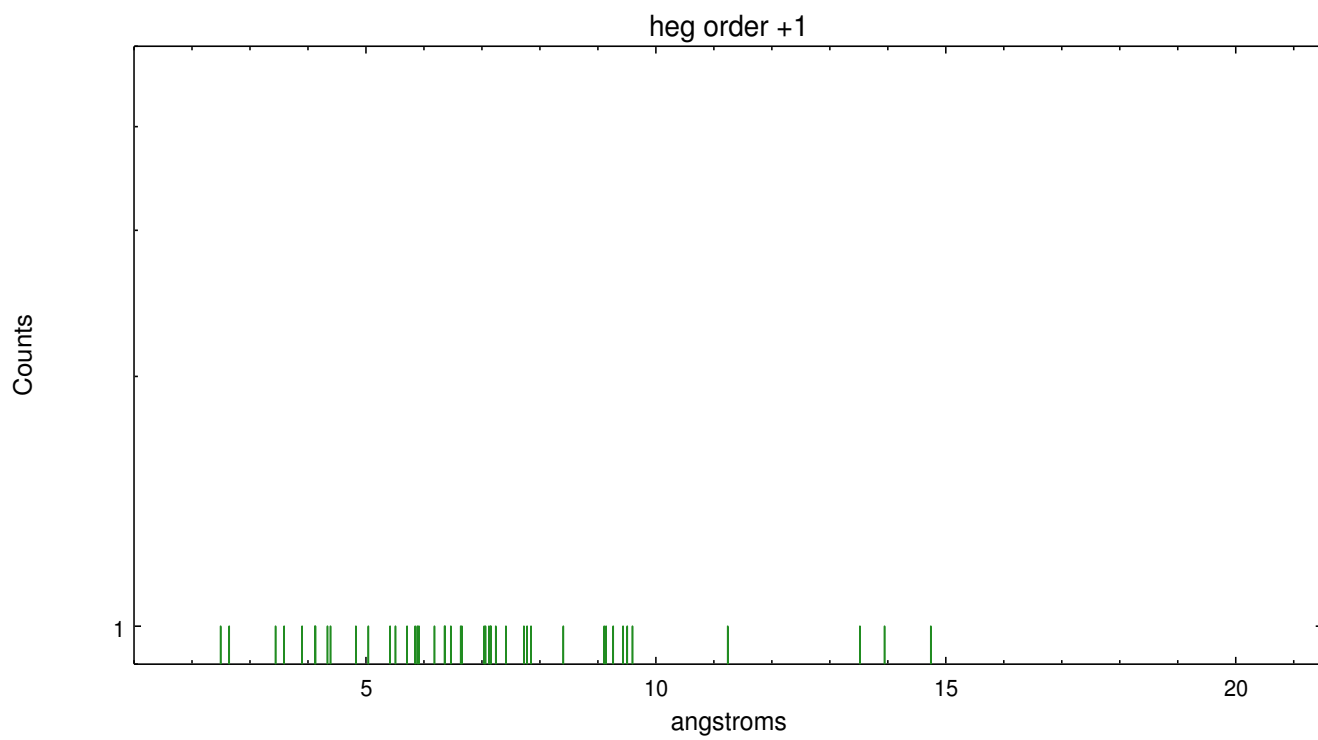
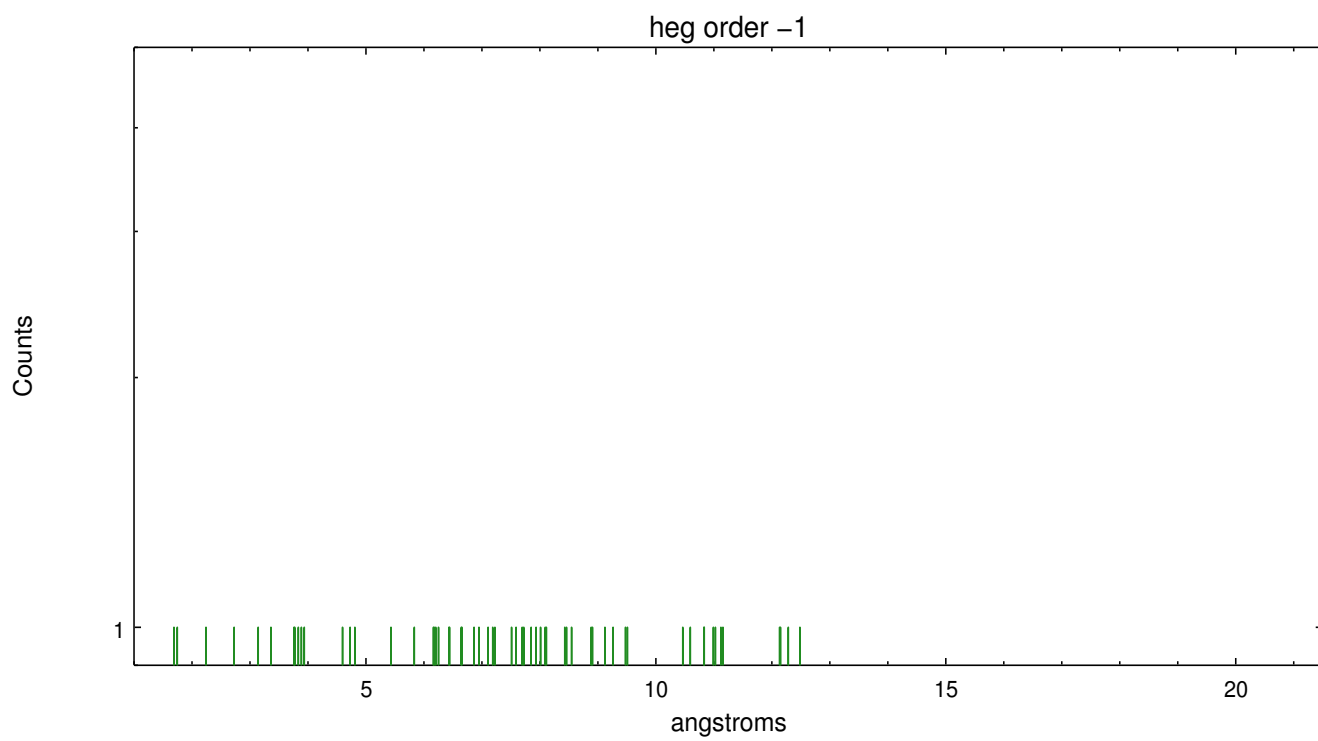


Spot Image HEG

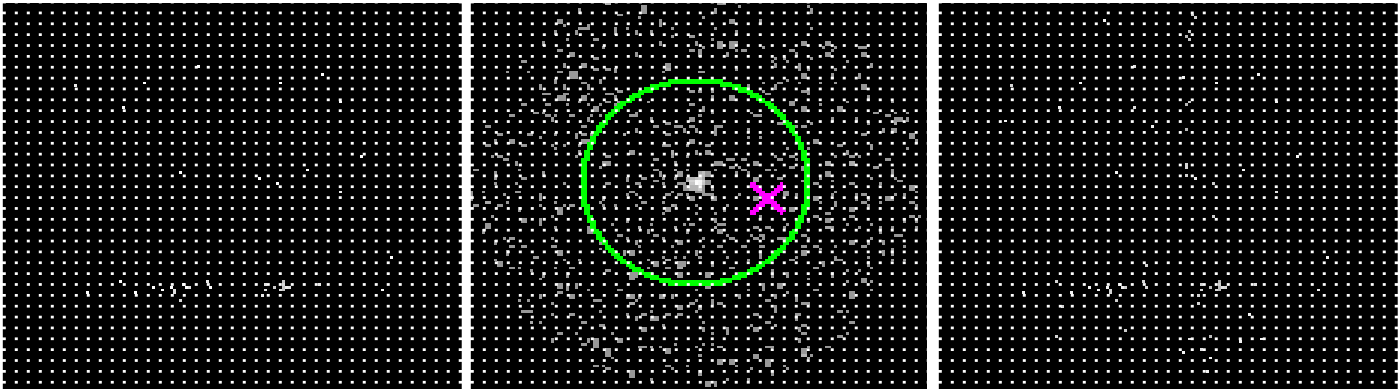
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	116	186	190	438	170	153	183





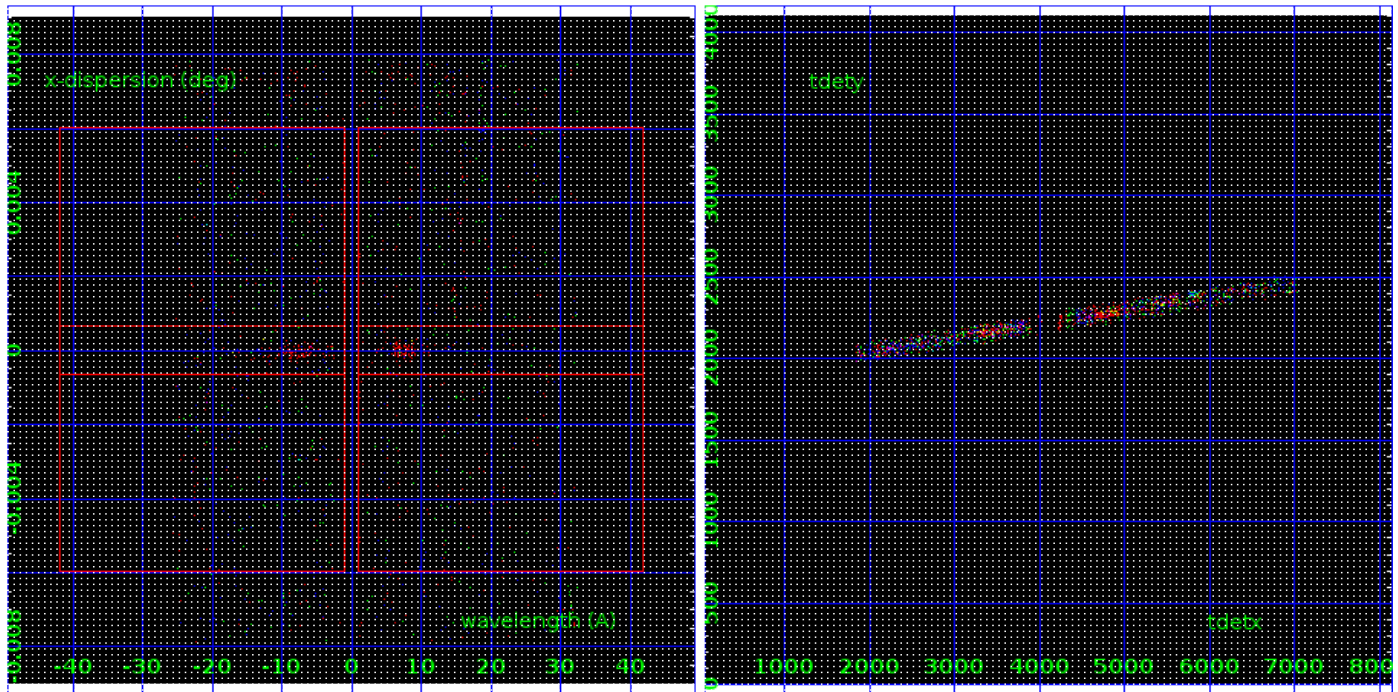
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

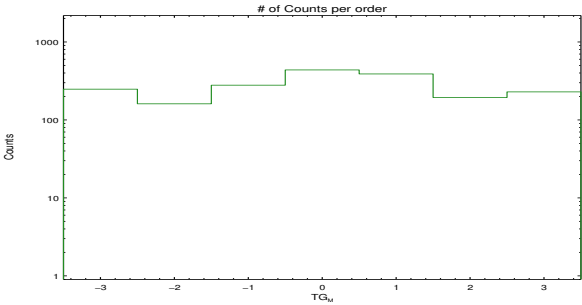
MEG Order Sort ALL

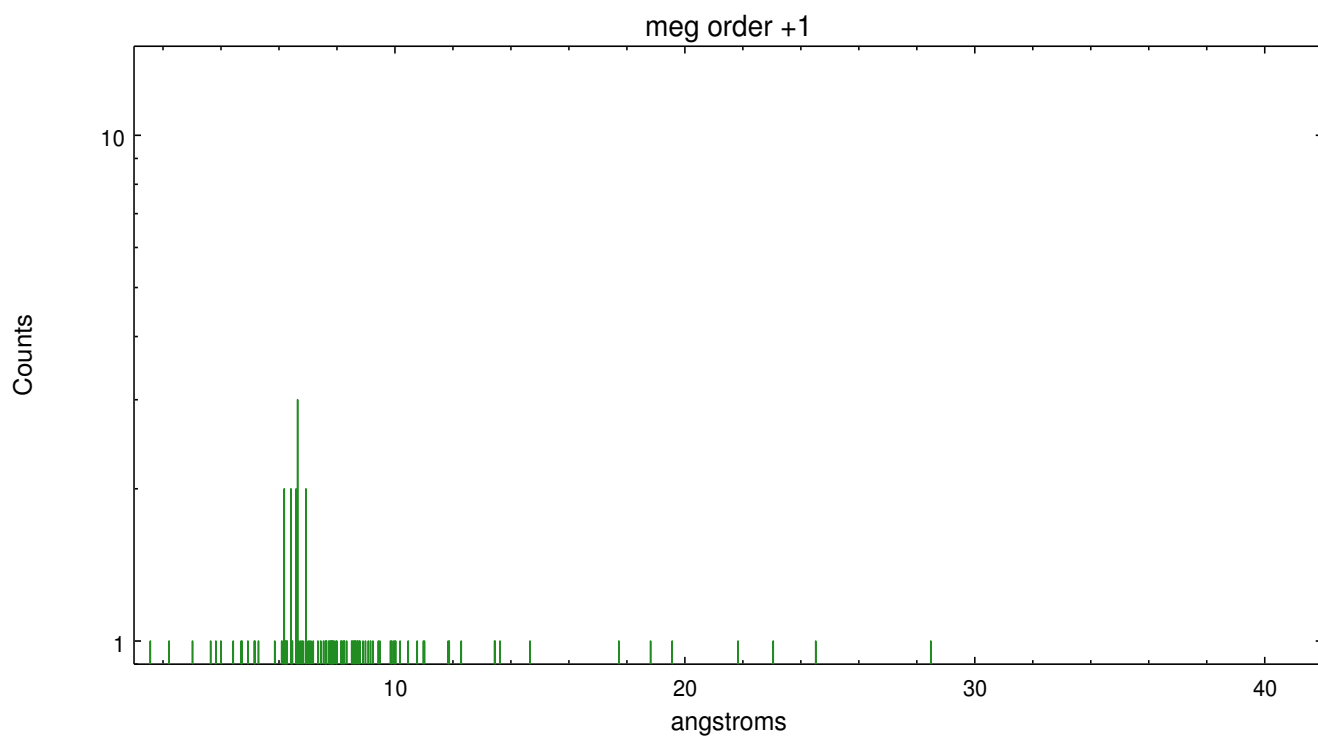
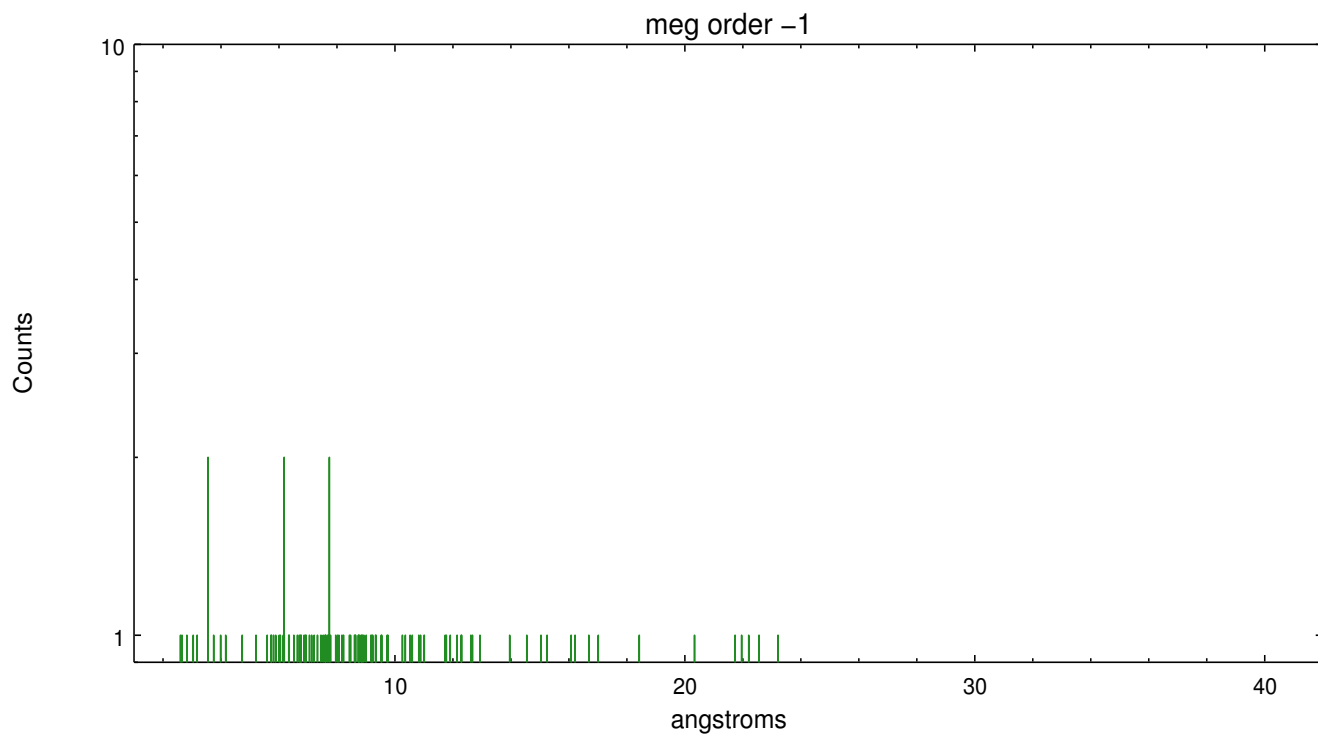


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	248	161	279	438	389	194	229





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2018.11.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.093699302077

A.2 Comments

warning: off-axis source near MEG positive order spectrum may affect background array.