

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21166 - L2 Version 1
Chandra X-Ray Center

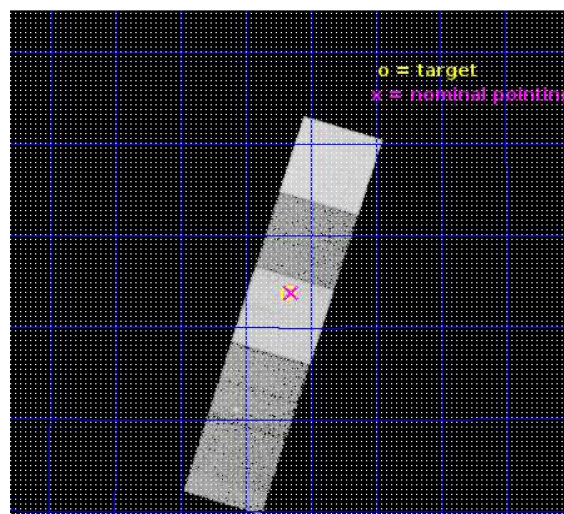
L2 Processing Date : Nov 16 2018

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1 Front

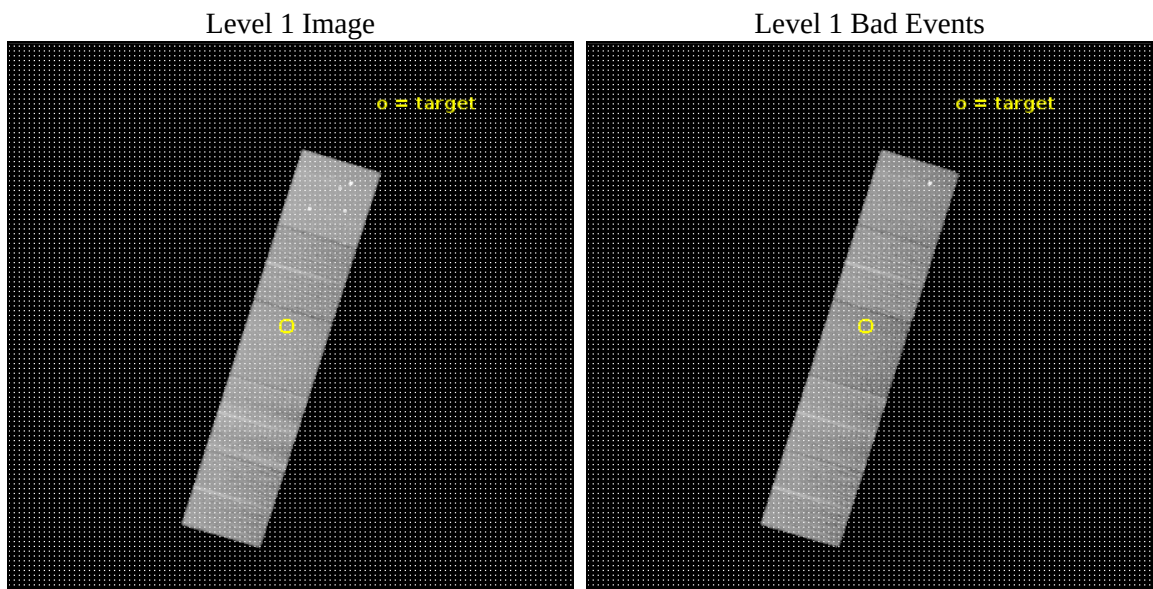
seq_num	201222	Sequence number
obs_id	21166	Observation id
title	V830 Tau: An X-ray Bright T Tauri Star Hosting a Hot Jupiter	Propo
observer	Stephen Skinner	Principal investigator
object	V830 Tau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.291792	Observer's specified target RA [deg]
dec_targ	24.56205	Observer's specified target Dec [deg]
ra_nom	68.286857158553	Nominal RA [deg]
dec_nom	24.563444933631	Nominal Dec [deg]
roll_nom	107.15865653213	Nominal Roll [deg]
revision	1	Processing version of data
ontime	23253.100178957	Sum of GTIs [s]
livetime	22949.281306436	Livetime [s]
ontime5	23253.100178957	Sum of GTIs [s]
ontime6	23253.100178957	Sum of GTIs [s]
ontime7	23253.100178957	Sum of GTIs [s]
ontime8	23253.100178957	Sum of GTIs [s]
ontime9	23253.100178957	Sum of GTIs [s]
l2events	248171	Number of level 2 events



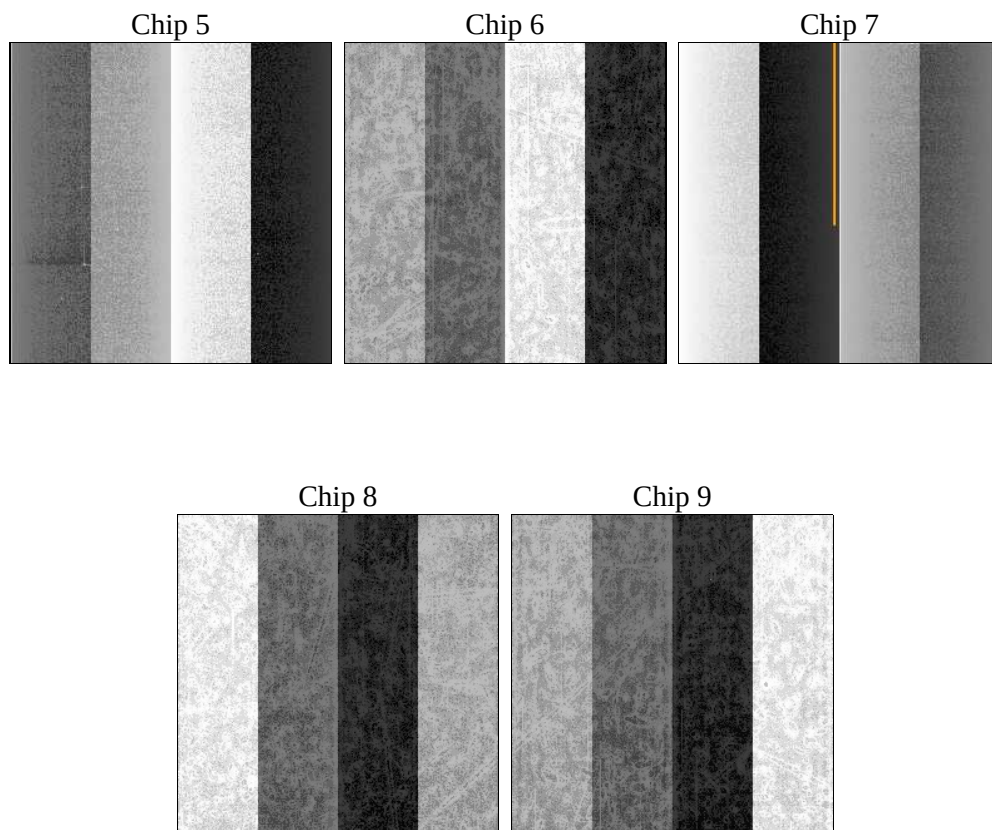
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23158.989000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	23253.100178957	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime5	23253.100178957	Sum of GTIs [s]
date	2018-11-16T07:13:53	Date and time of file creation	ontime6	23253.100178957	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	23253.100178957	Sum of GTIs [s]
			ontime8	23253.100178957	Sum of GTIs [s]
			ontime9	23253.100178957	Sum of GTIs [s]
			l1events	1012022	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4063.40, 4085.14)	src1a sky pixel position

2.1.4 Events

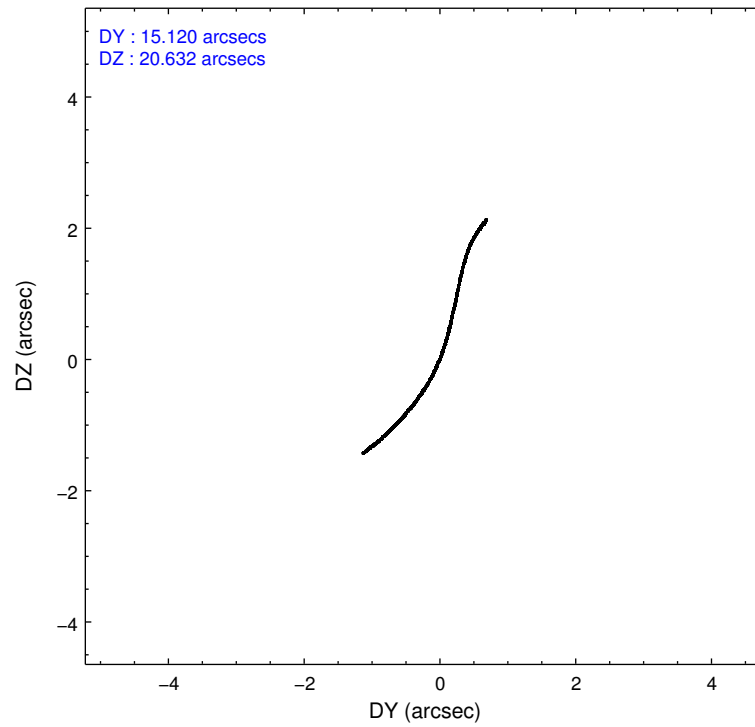
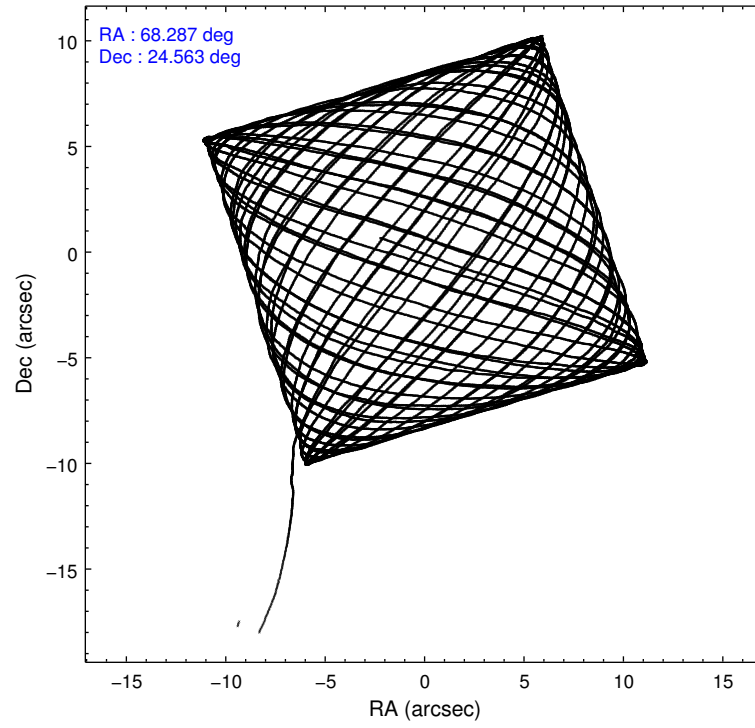
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	265332	166565	195127	217029	167969
rejected events	135100	148110	109960	158603	148500
rejected %	50%	88%	56%	73%	88%

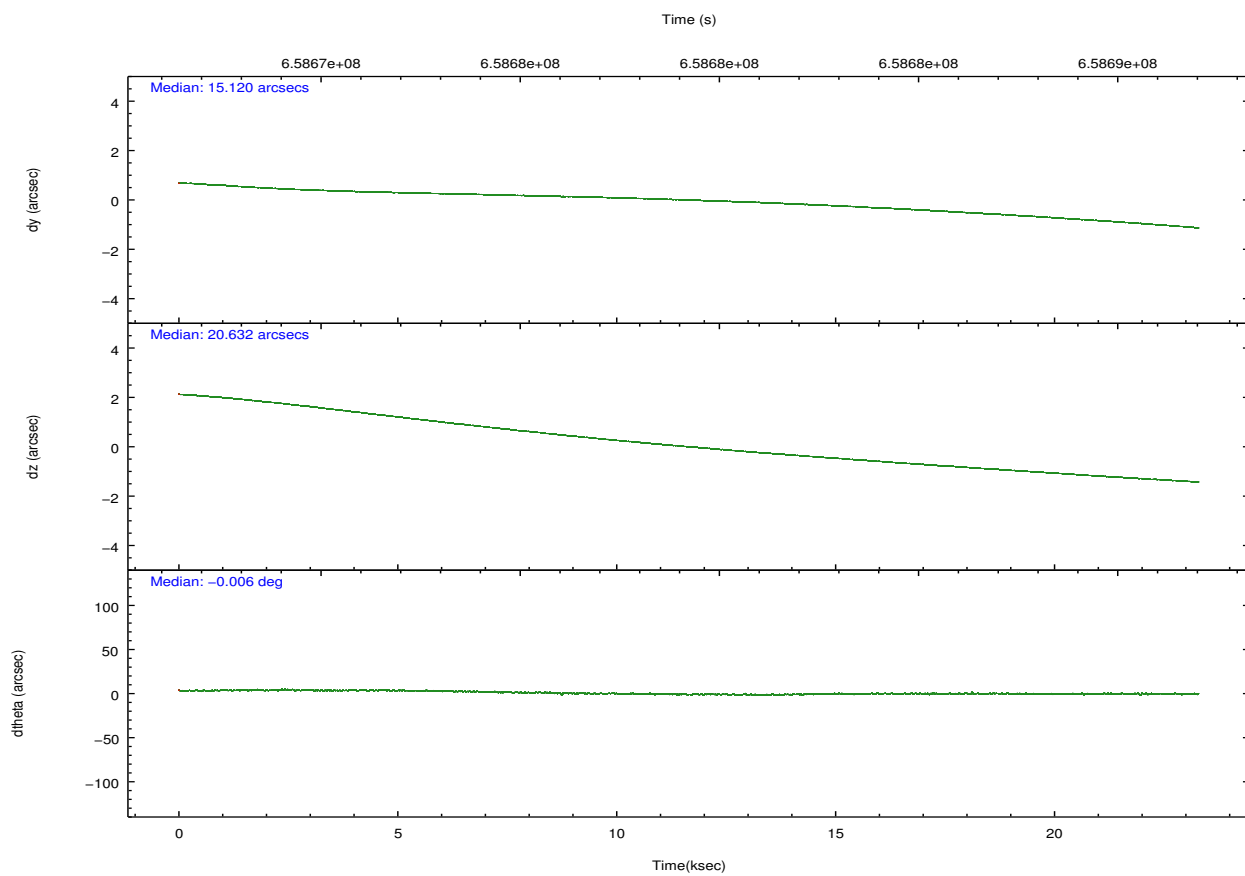
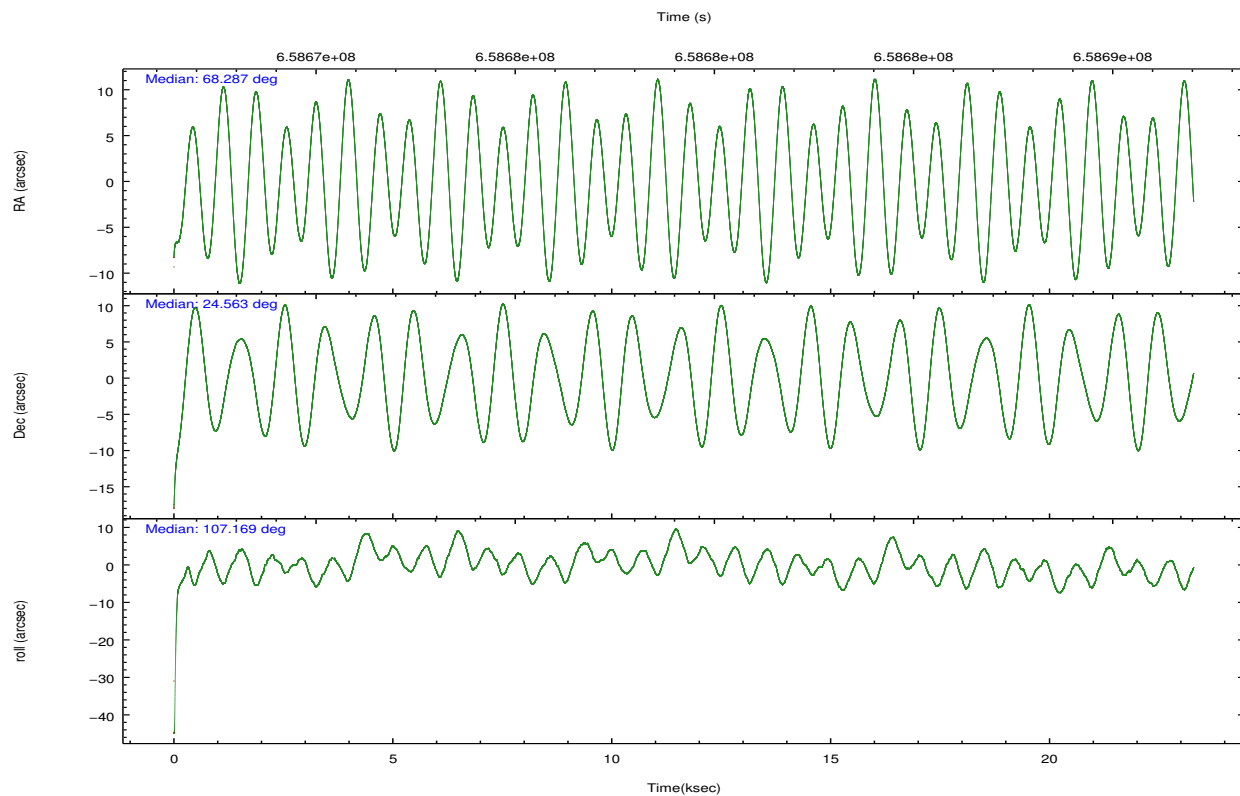
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	15191	6009	6357	14625	6970
	5%	3%	3%	6%	4%
grade 1 events	222	87	183	170	95
	0%	0%	0%	0%	0%
grade 2 events	38995	4545	17562	14953	4232
	14%	2%	9%	6%	2%
grade 3 events	4129	1830	6681	6252	2024
	1%	1%	3%	2%	1%
grade 4 events	3205	1746	6632	5857	1861
	1%	1%	3%	2%	1%
grade 5 events	17866	7380	20189	11485	8184
	6%	4%	10%	5%	4%
grade 6 events	68749	4331	47959	16765	4388
	25%	2%	24%	7%	2%
grade 7 events	116975	140637	89564	146922	140215
	44%	84%	45%	67%	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	68.309245	68.28685715855286	CCD I2 on	N	N
[deg] Pointing Dec	24.545069	24.56344493363103	CCD I3 on	N	N
[deg] Pointing Roll	106.992744	107.1586565321328	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)	658667712.184000	658666388.13495	CCD S5 on	O2	Y
Observation start date	2018-11-15T11:14:03	2018-11-15T10:53:08	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	658690871.184000	658691955.73647	On-chip summing requested	N	N
Observation end date	2018-11-15T17:40:02	2018-11-15T17:59:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



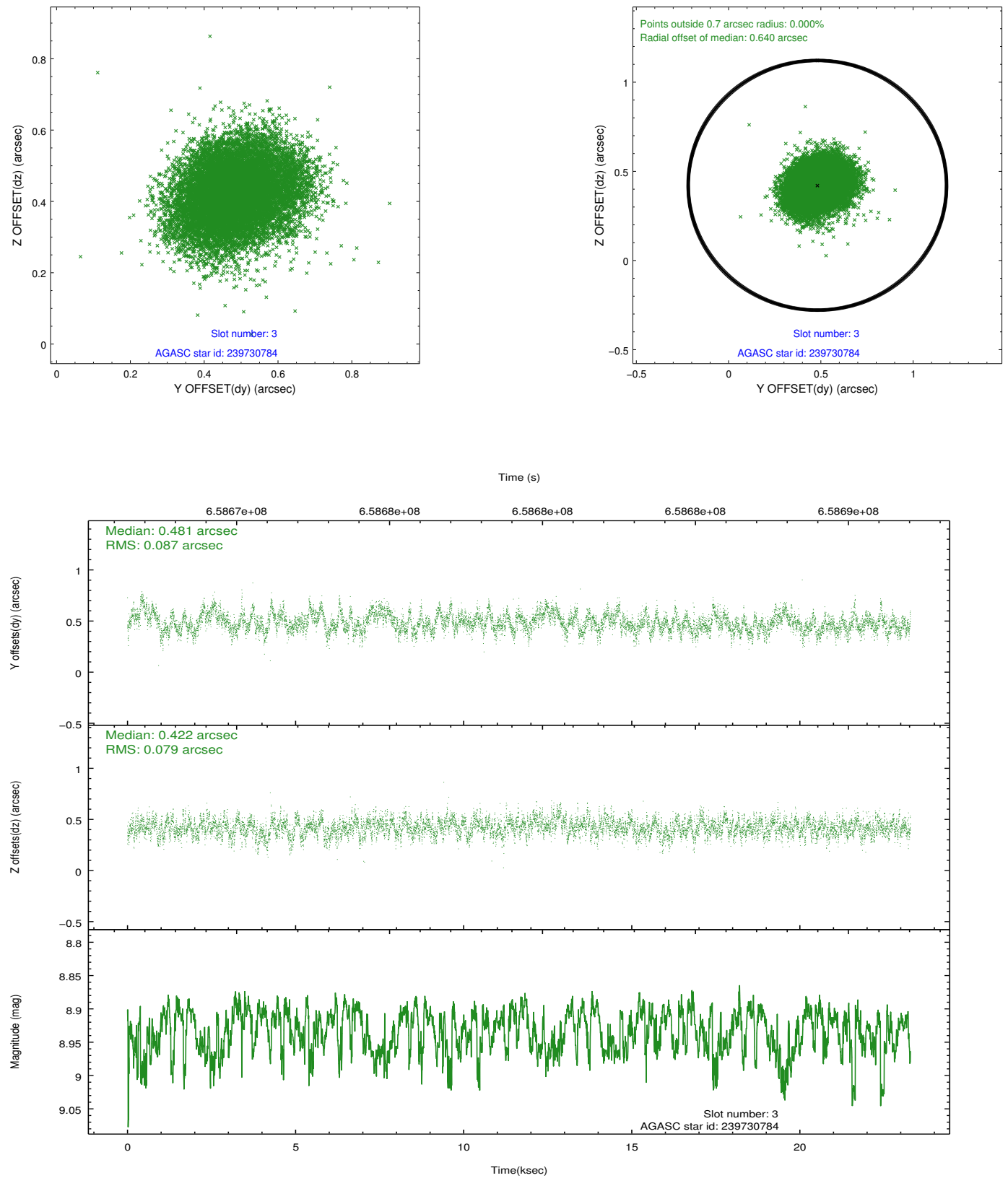


Slot Statistics

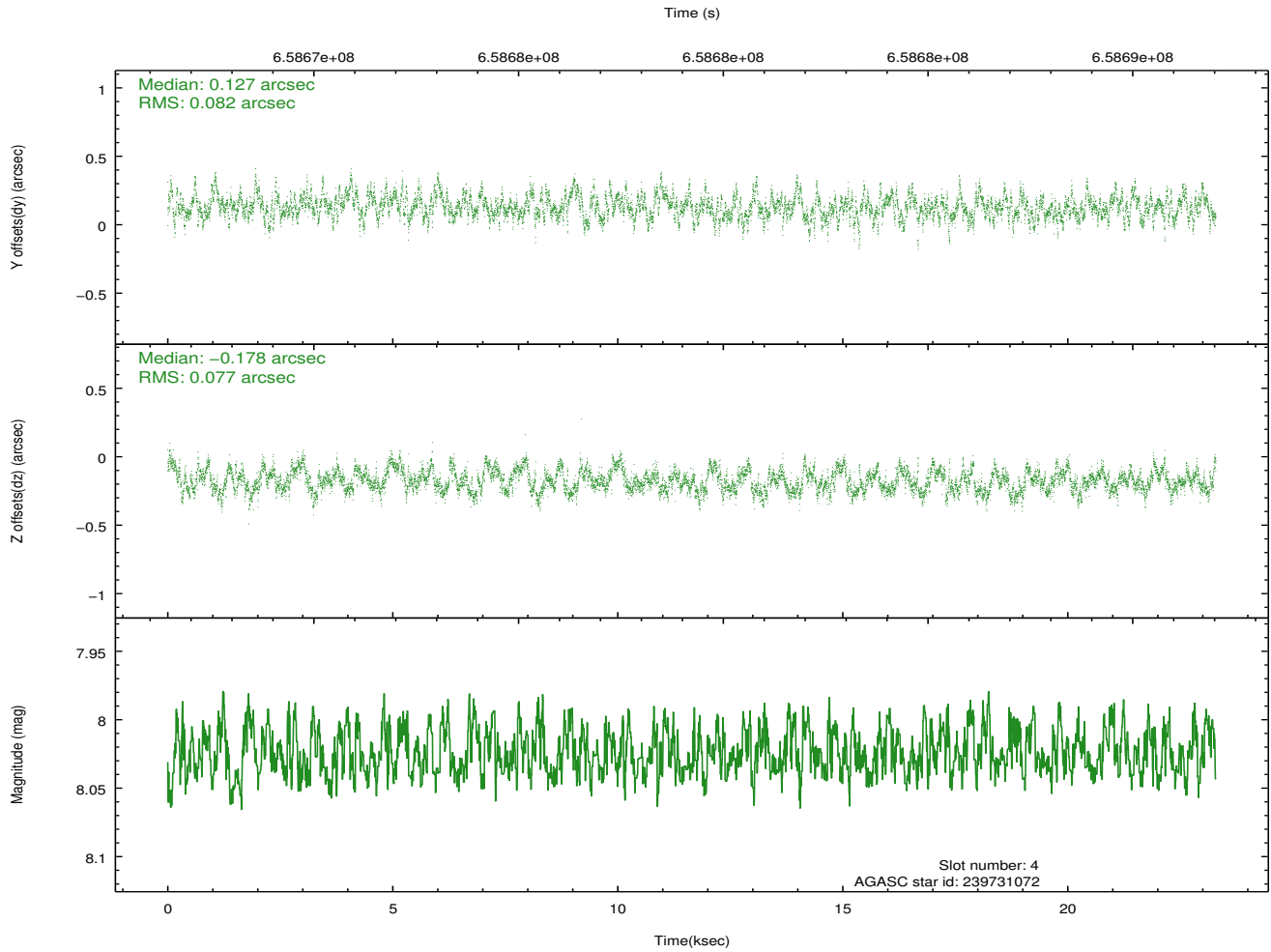
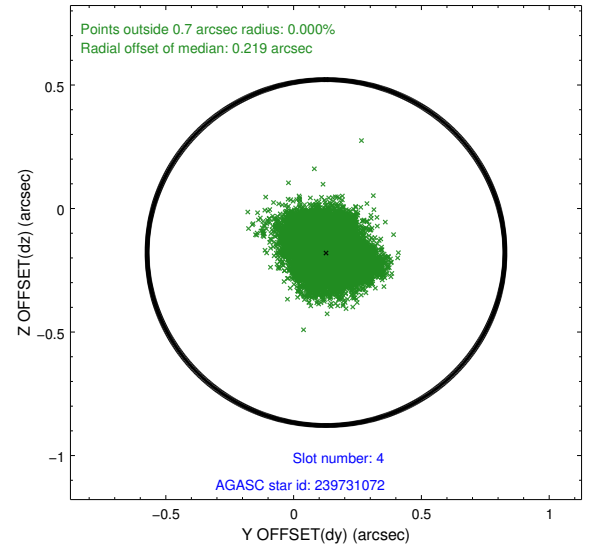
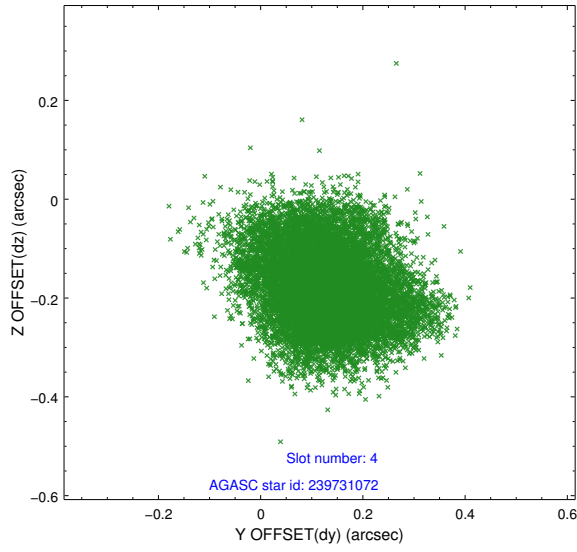
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.03	5682	1.000	-0.357	-0.198	0.029	0.045	0.000000	0.000000	-768.28	-1742
1	FID		ACIS-S-4	7.16	5682	1.000	0.811	0.228	0.017	0.032	0.000000	0.000000	2146.03	166
2	FID		ACIS-S-5	7.13	5682	1.000	-0.479	-0.014	0.029	0.044	0.000000	0.000000	-1821.14	159
3	GUIDE	used	239730784	8.93	11342	1.000	0.481	0.422	0.126	0.201	68.709044	24.244524	-1416.65	-938
4	GUIDE	used	239731072	8.03	11359	1.000	0.127	-0.178	0.121	0.189	68.370351	24.279312	-974.02	87
5	GUIDE	used	240262776	8.49	11353	1.000	-0.550	-0.229	0.092	0.150	67.818644	25.030457	2140.23	1019
6	GUIDE	used	240263016	8.59	11354	1.000	0.105	0.164	0.105	0.177	68.575597	24.979042	1240.74	-1287
7	GUIDE	used	240259472	7.85	11354	1.000	-0.180	-0.176	0.094	0.173	68.090831	25.185490	2412.73	6

2.4 Star Slots

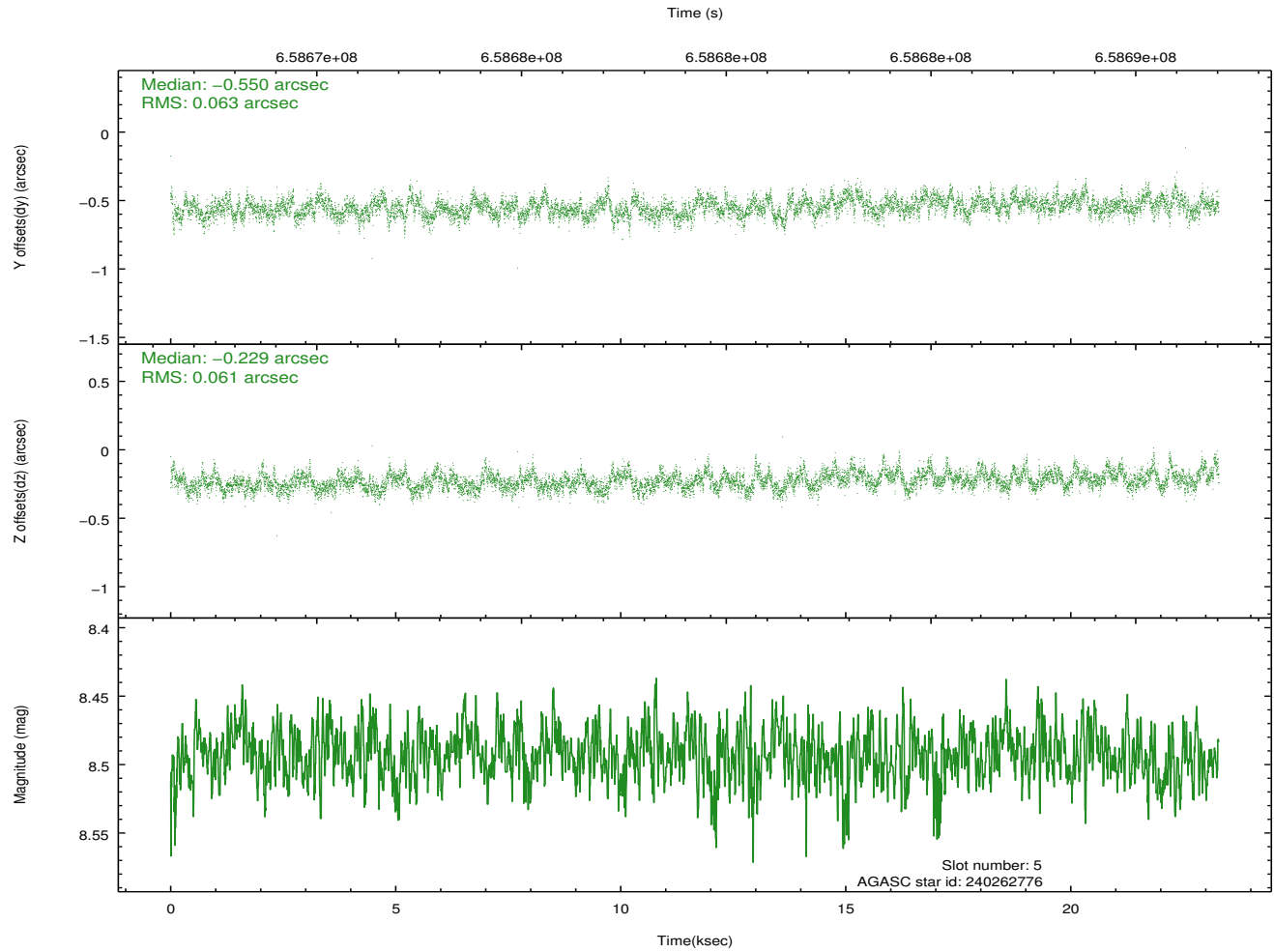
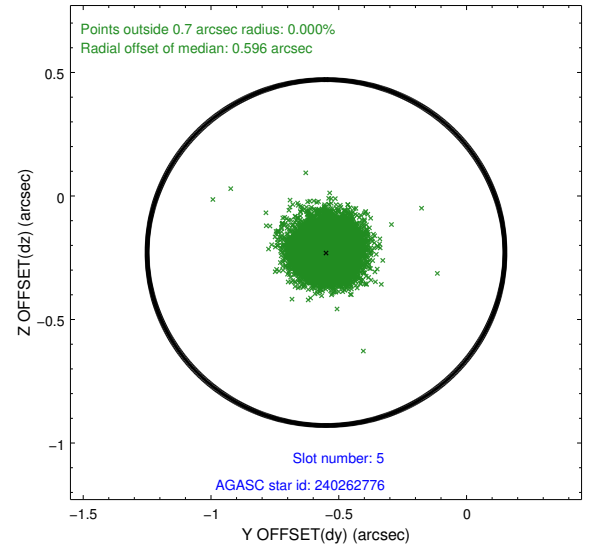
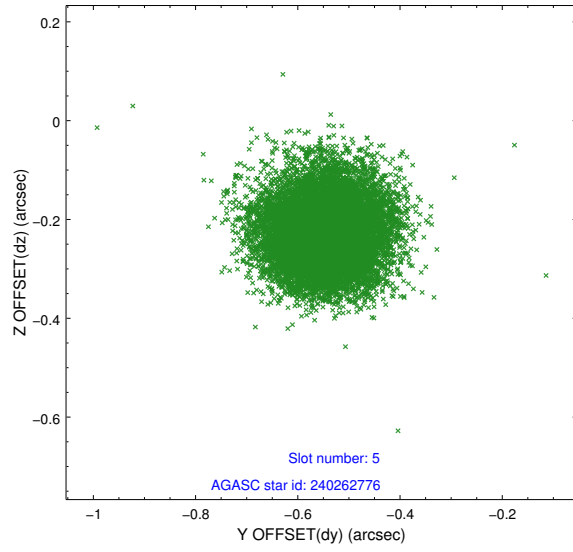
2.4.1 Slot 3



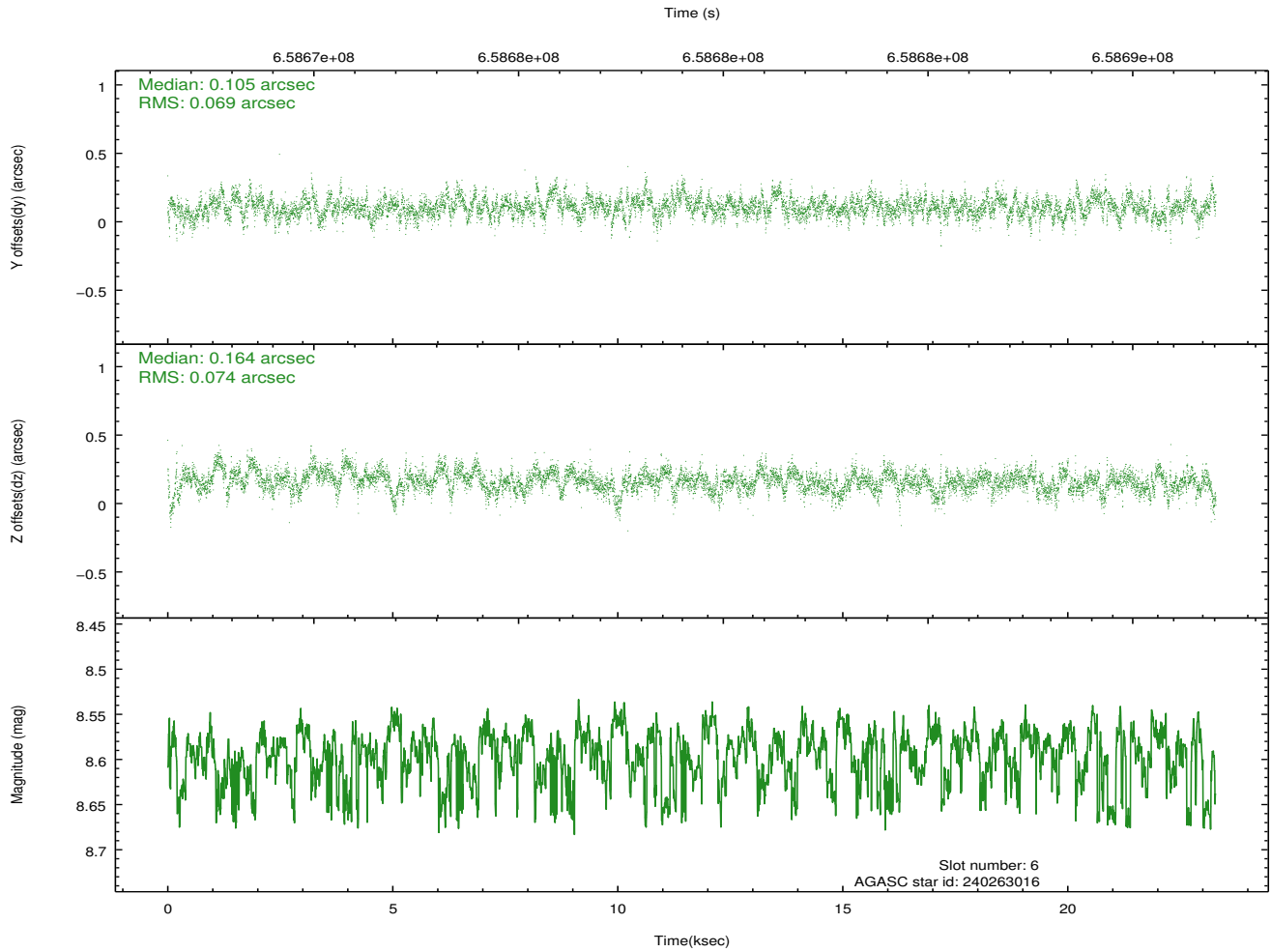
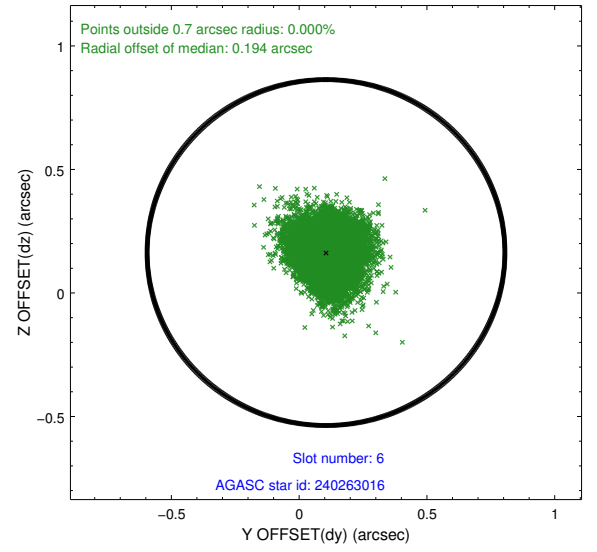
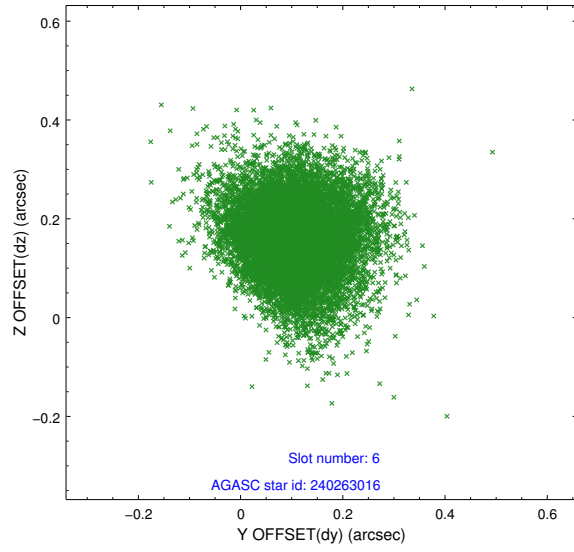
2.4.2 Slot 4



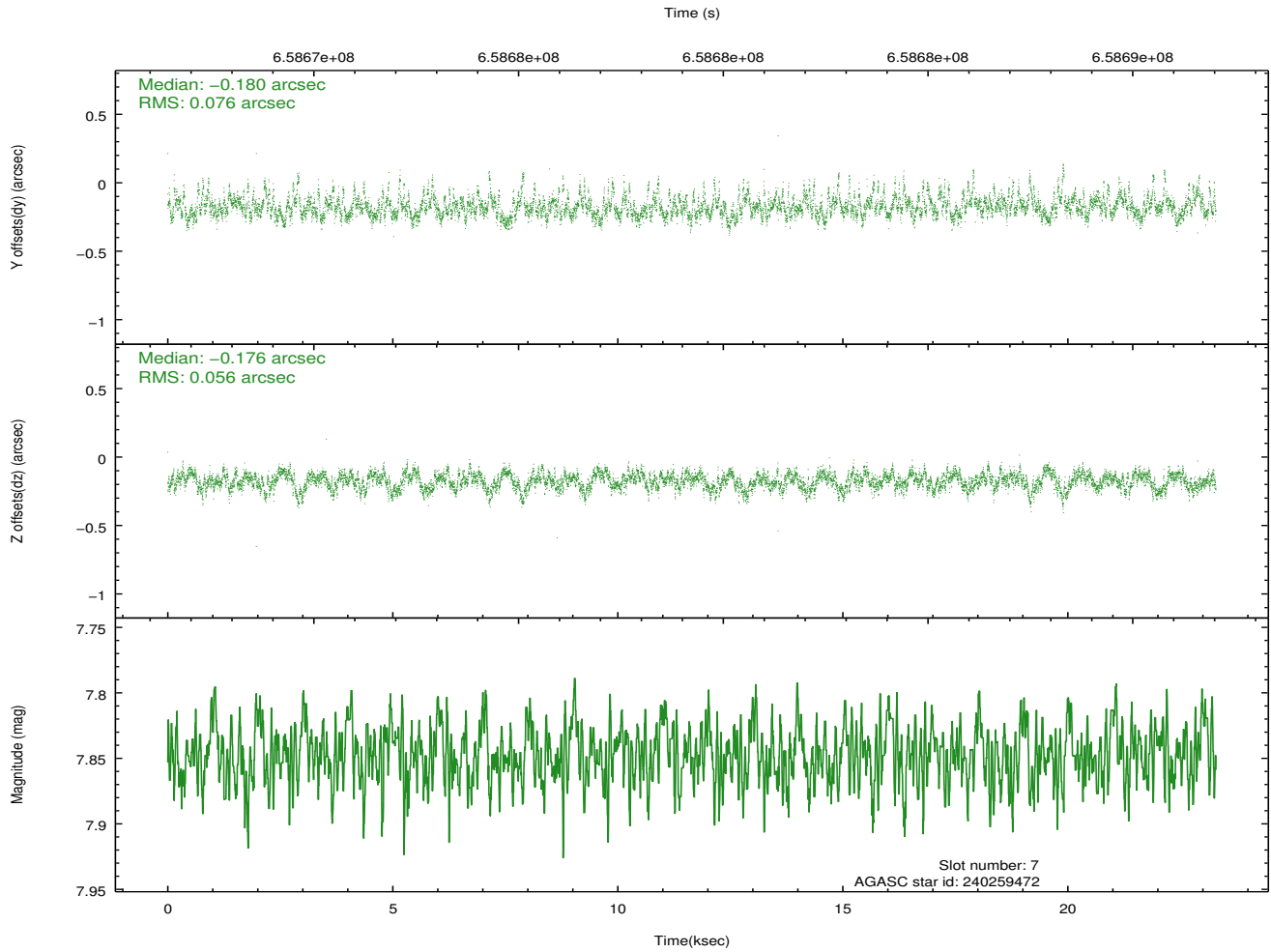
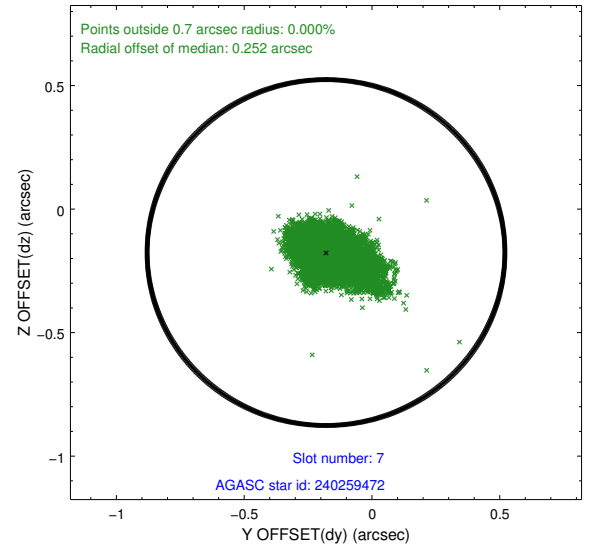
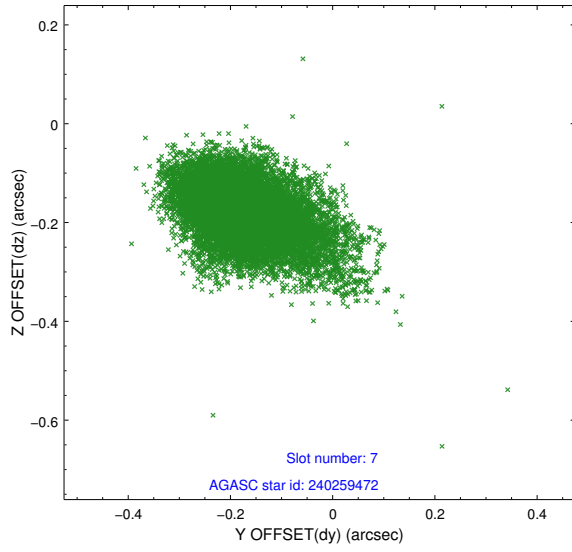
2.4.3 Slot 5



2.4.4 Slot 6

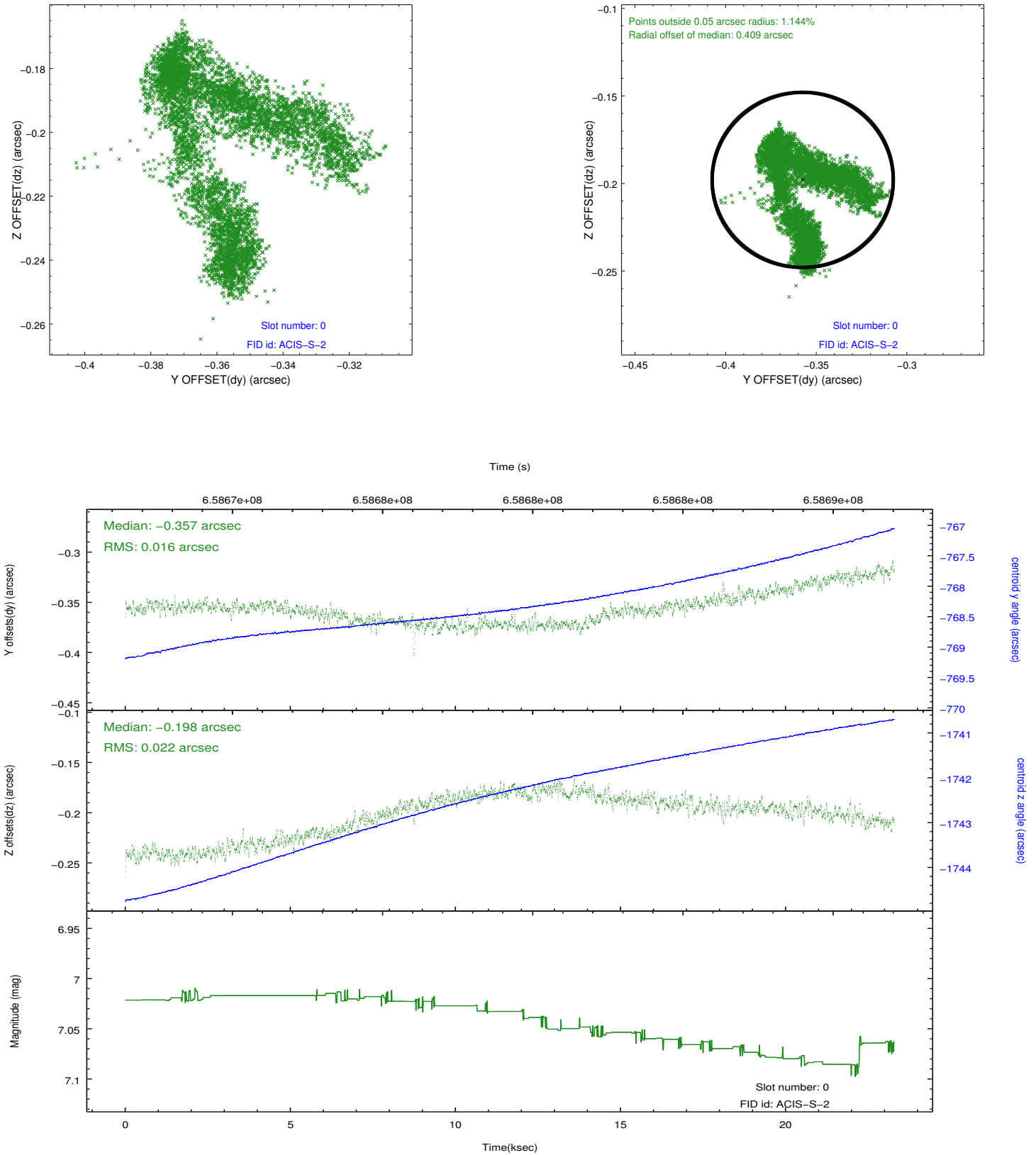


2.4.5 Slot 7

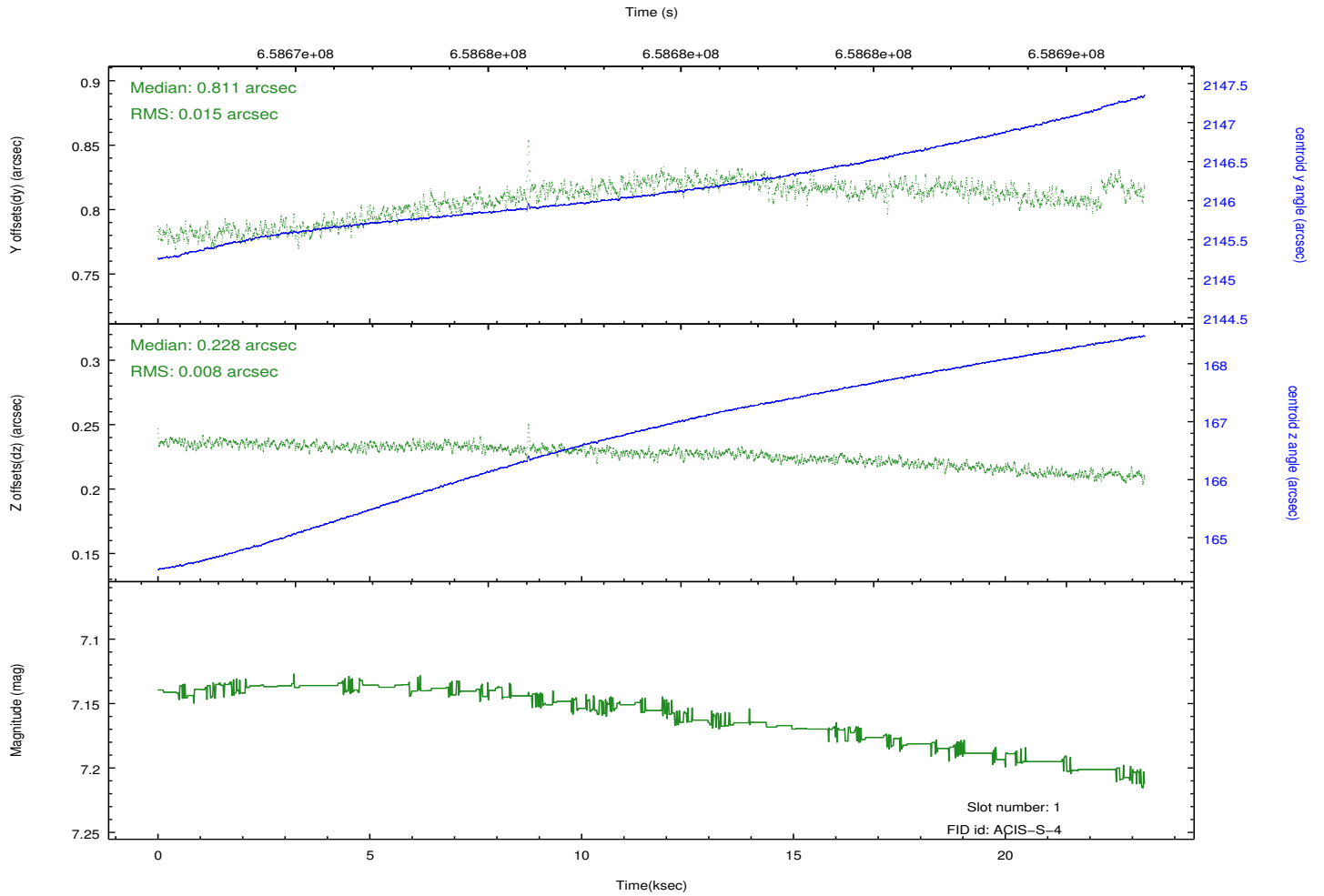
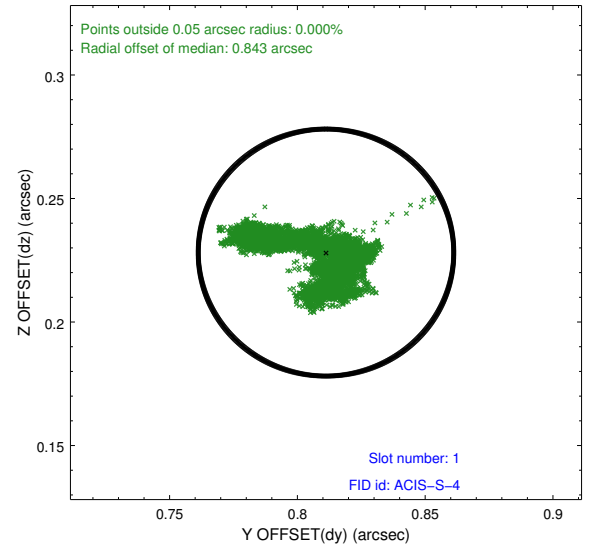
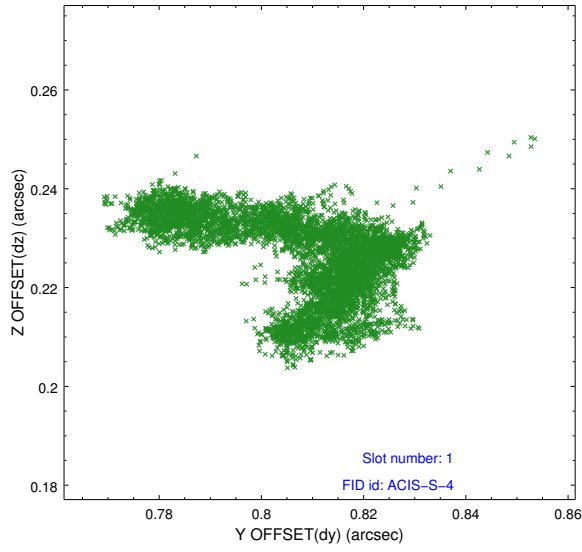


2.5 FID Slots

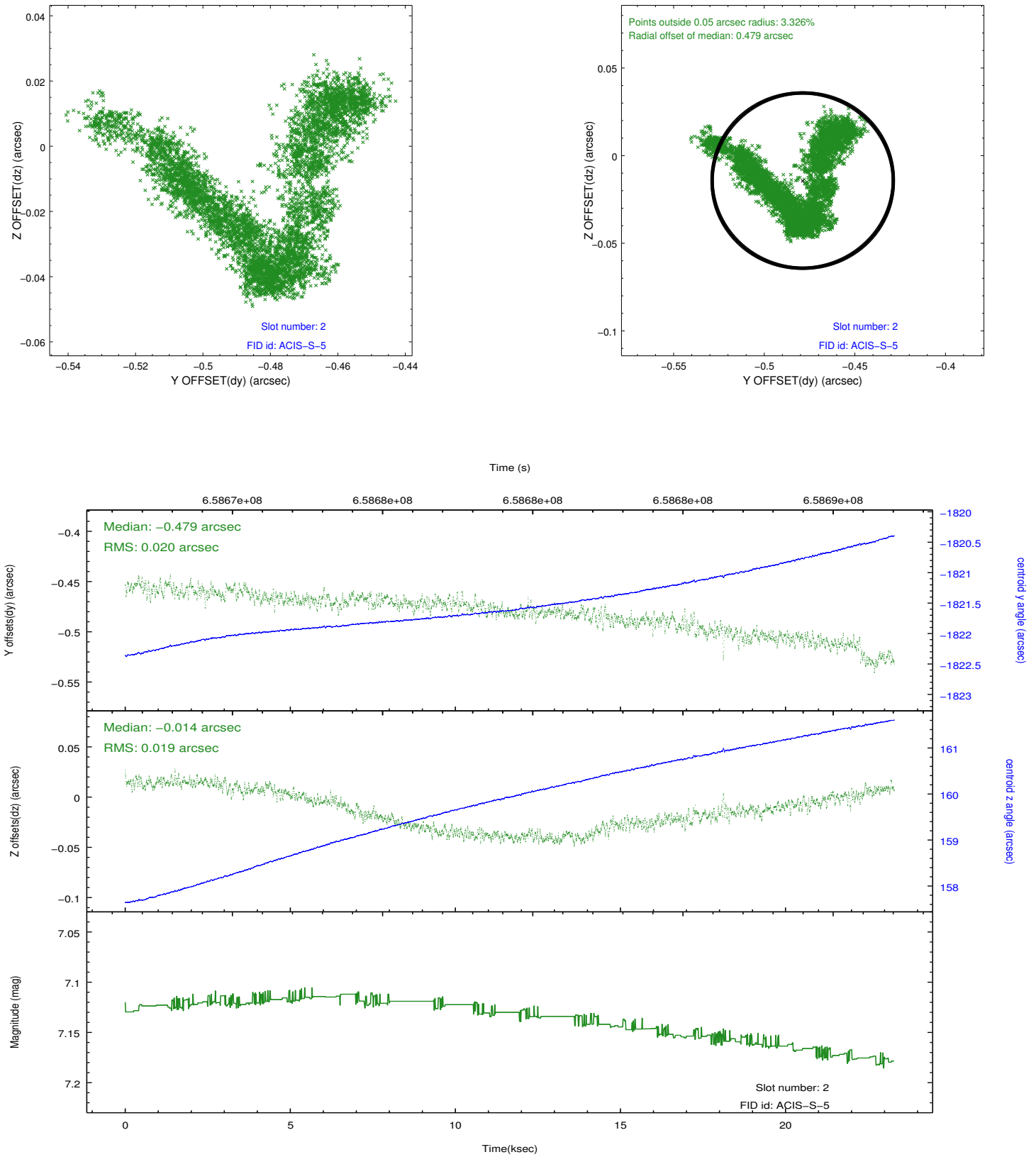
2.5.1 Slot 0



2.5.2 Slot 1

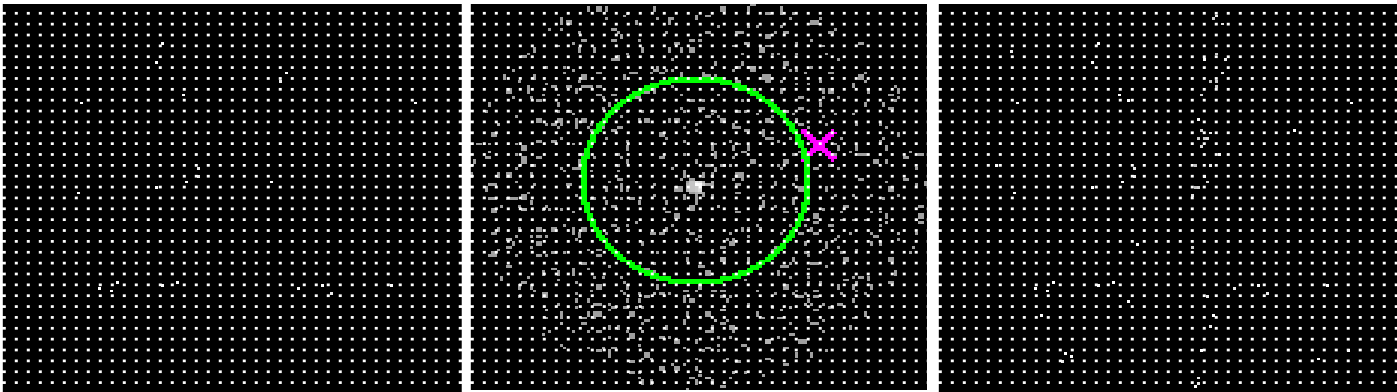


2.5.3 Slot 2



3 Gratings

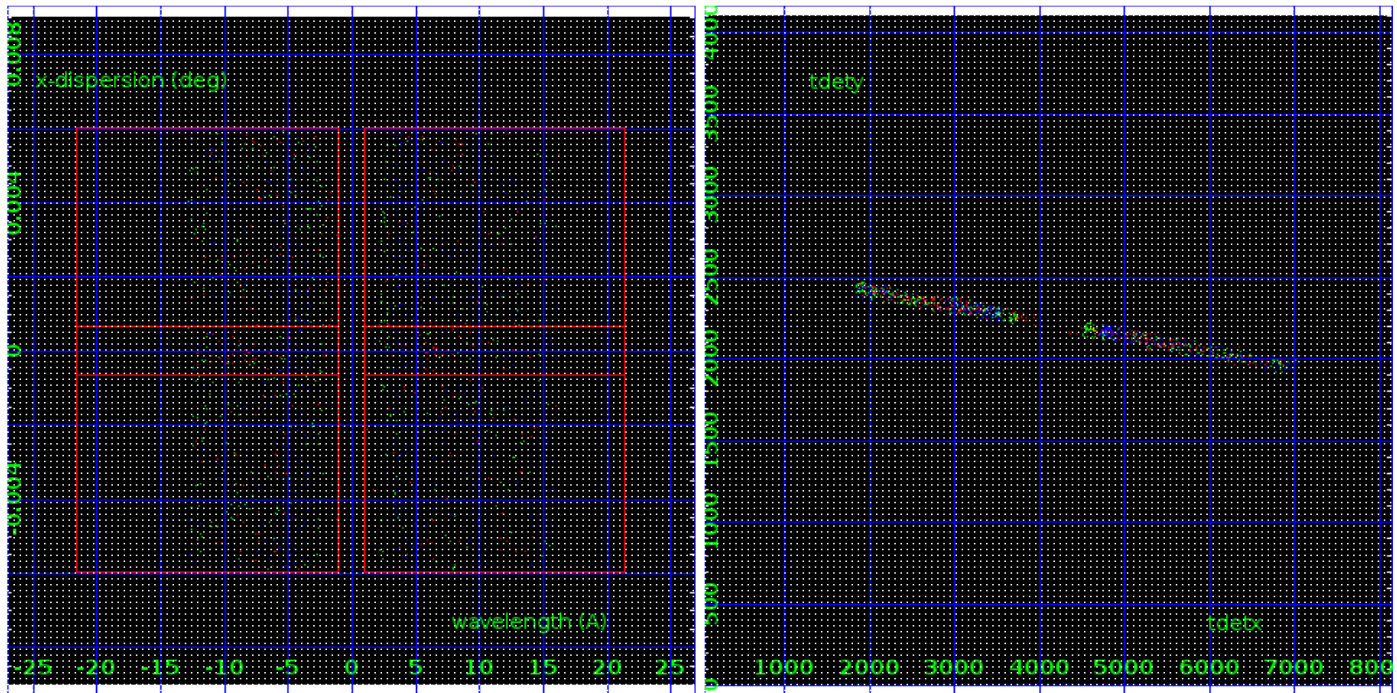
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

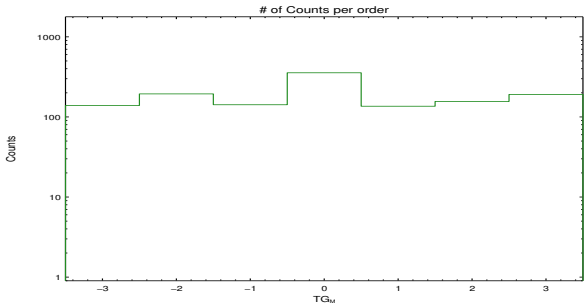
HEG Order Sort ALL

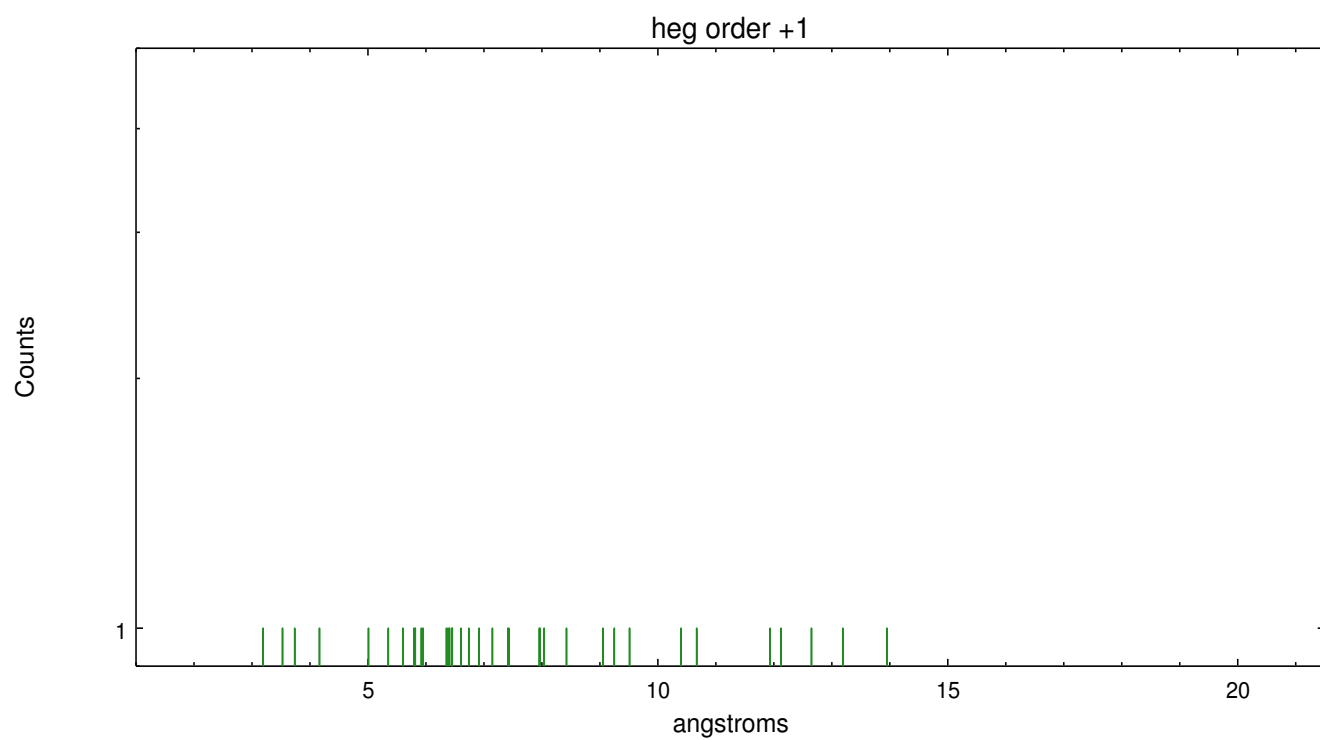
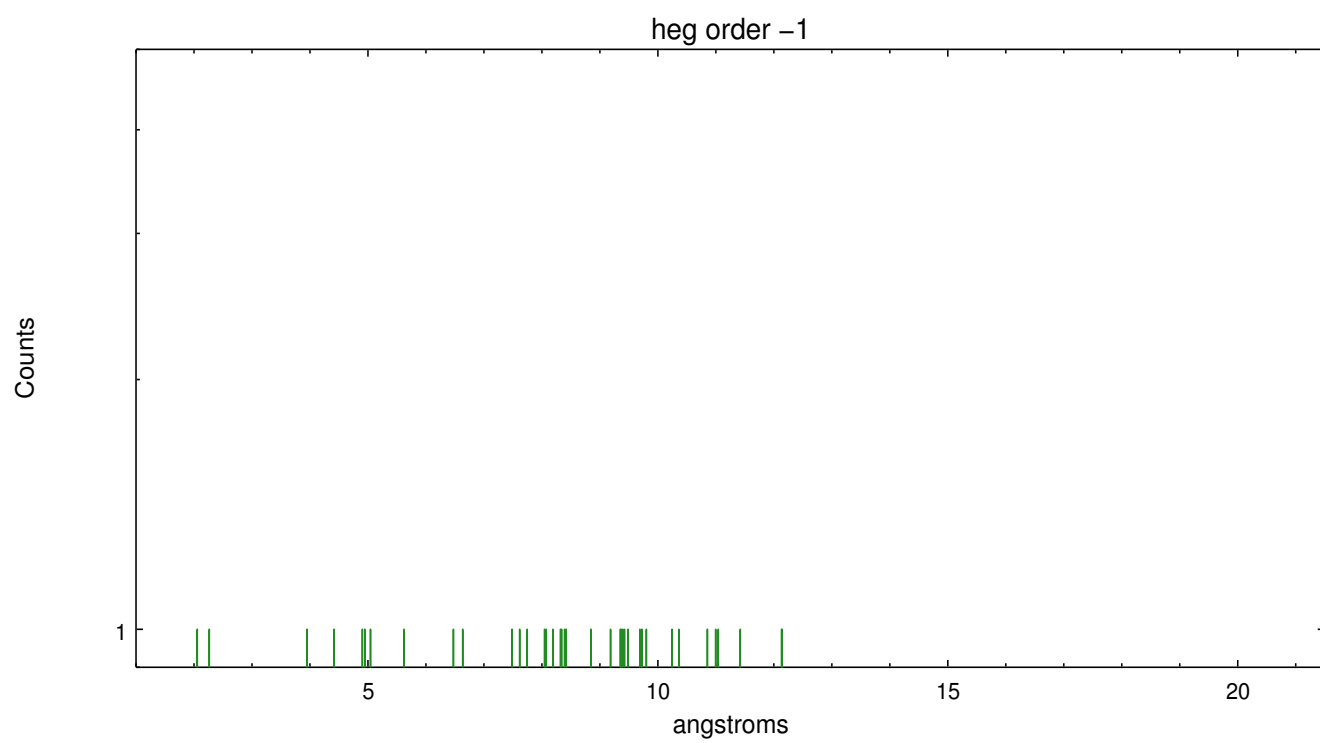


Spot Image HEG

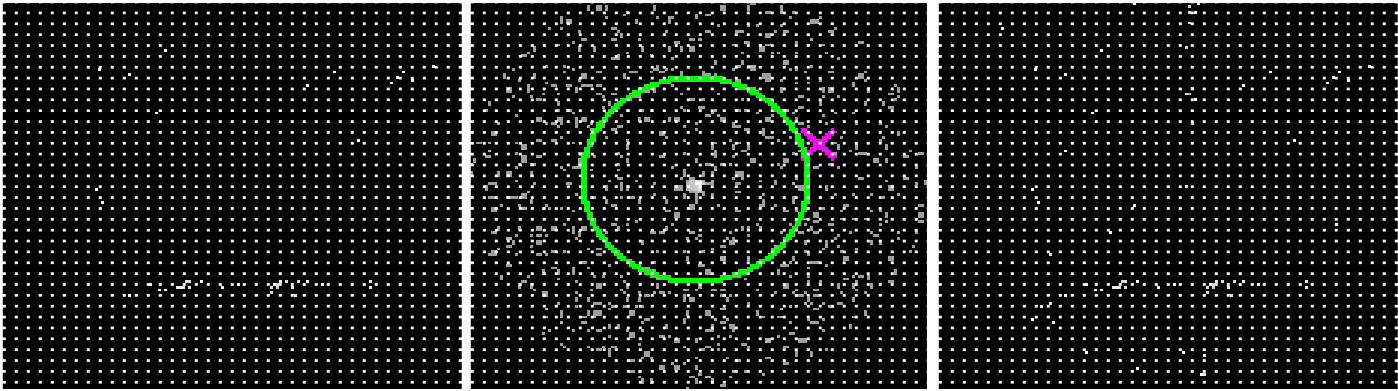
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	139	194	142	356	136	156	191





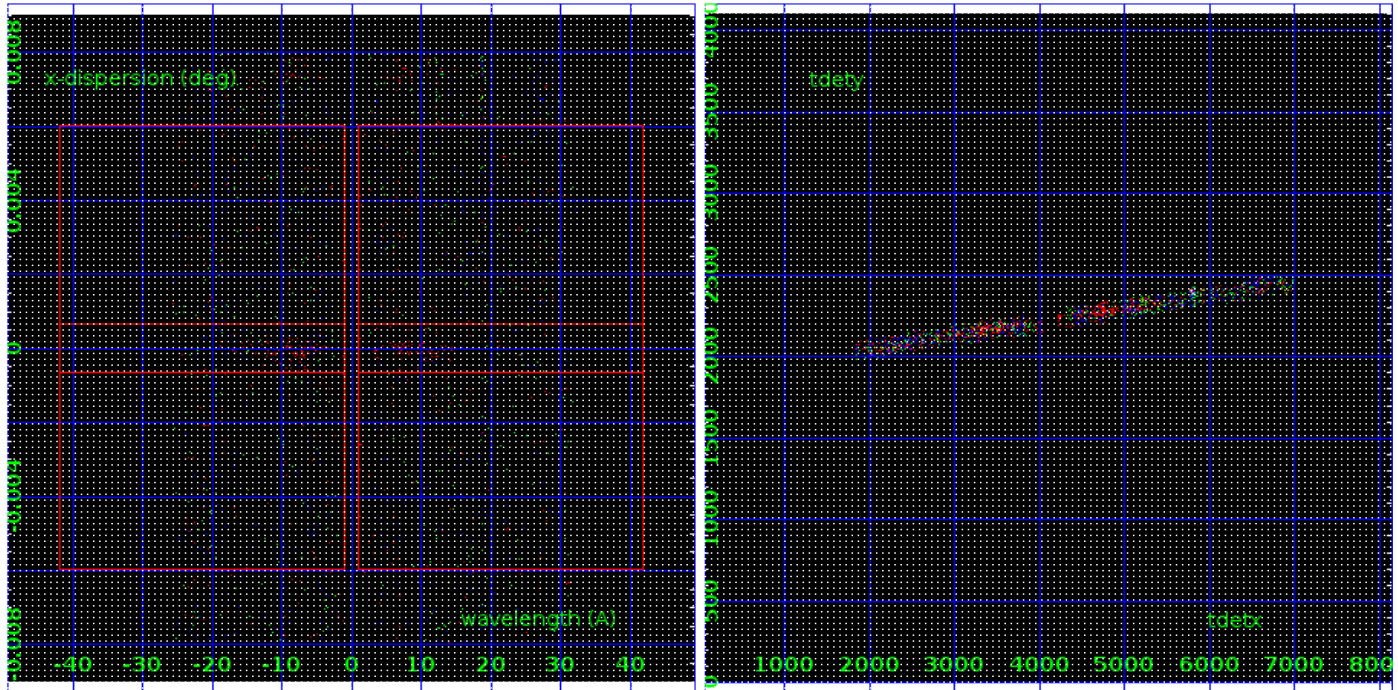
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

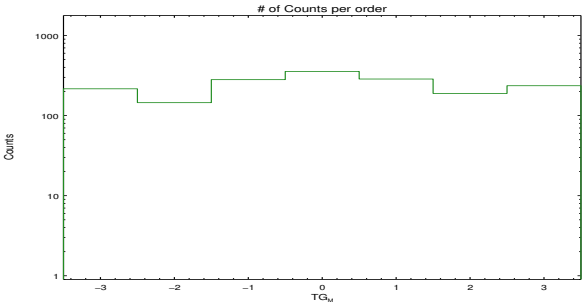
MEG Order Sort ALL

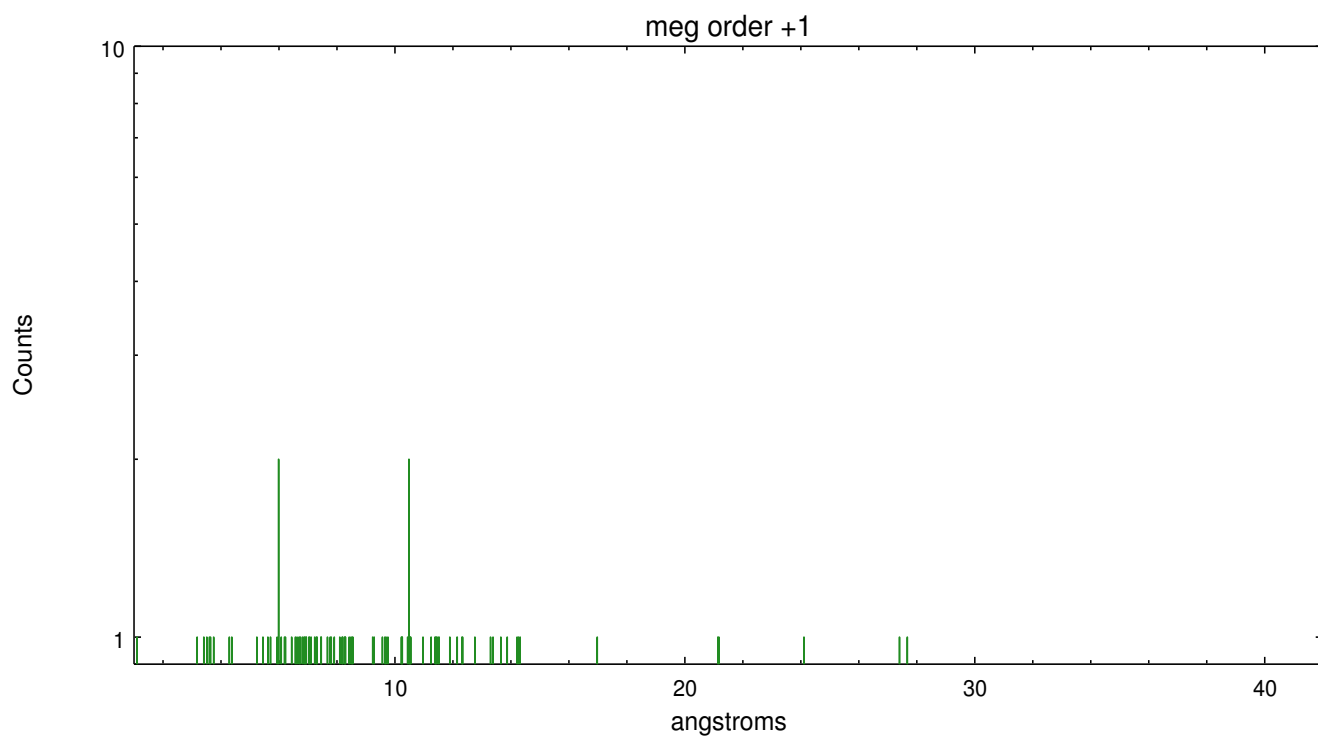
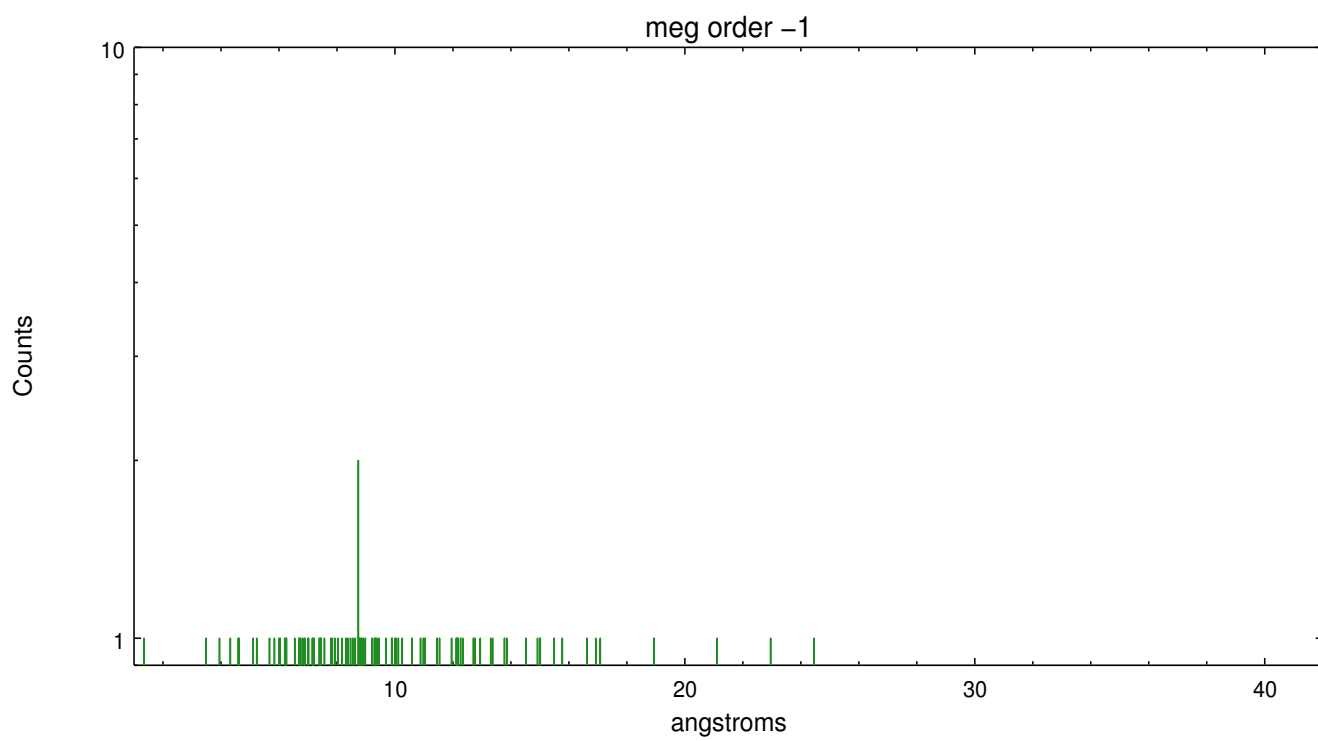


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	216	145	281	356	286	189	236





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2018.11.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.253100178957

A.2 Comments