

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21964 - L2 Version 1
Chandra X-Ray Center

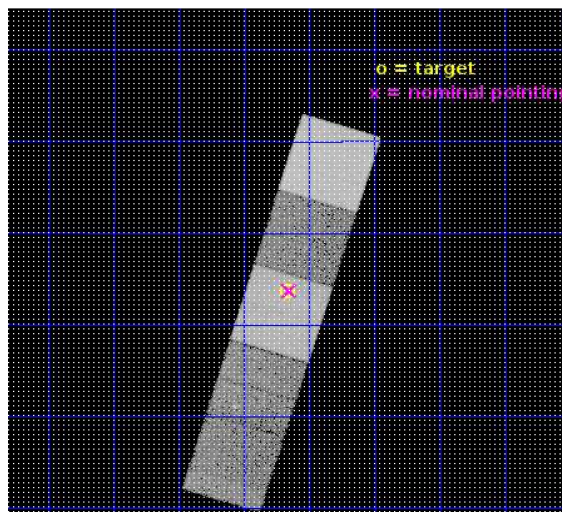
L2 Processing Date : Nov 18 2018

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1 Front

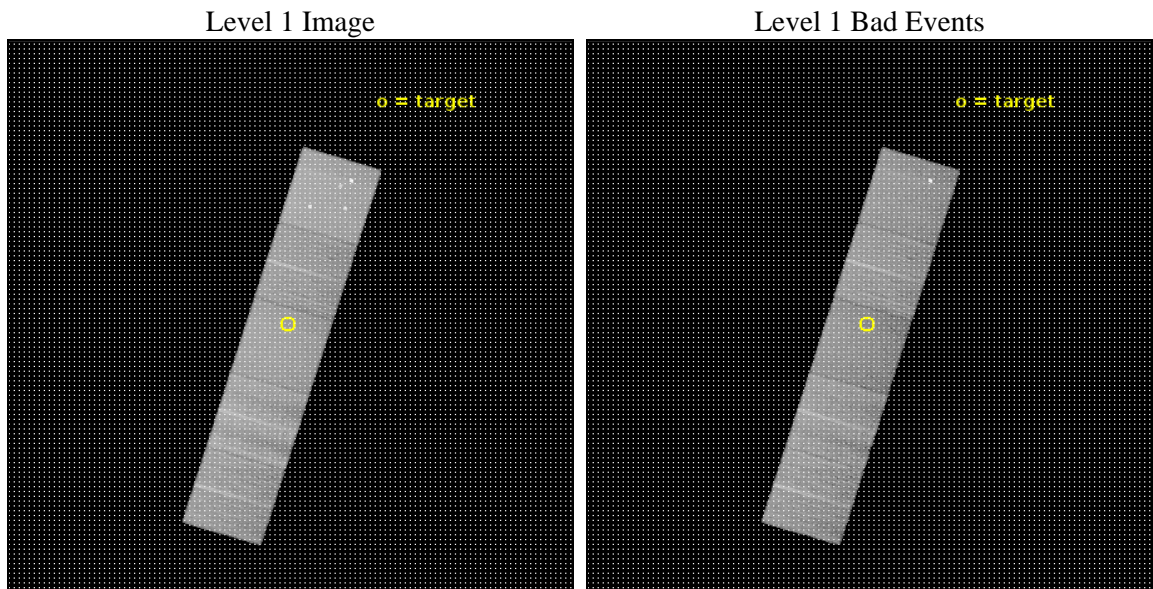
seq_num	201222	Sequence number
obs_id	21964	Observation id
title	V830 Tau: An X-ray Bright T Tauri Star Hosting a Hot Jupiter	Propo
observer	Stephen Skinner	Principal investigator
object	V830 Tau	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.291792	Observer's specified target RA [deg]
dec_targ	24.56205	Observer's specified target Dec [deg]
ra_nom	68.288153492823	Nominal RA [deg]
dec_nom	24.562202442863	Nominal Dec [deg]
roll_nom	107.15813086588	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22002.69039166	Sum of GTIs [s]
livetime	21715.209043548	Livetime [s]
ontime5	22002.649351716	Sum of GTIs [s]
ontime6	22002.608311653	Sum of GTIs [s]
ontime7	22002.69039166	Sum of GTIs [s]
ontime8	22002.567271709	Sum of GTIs [s]
ontime9	22002.526231647	Sum of GTIs [s]
l2events	239420	Number of level 2 events



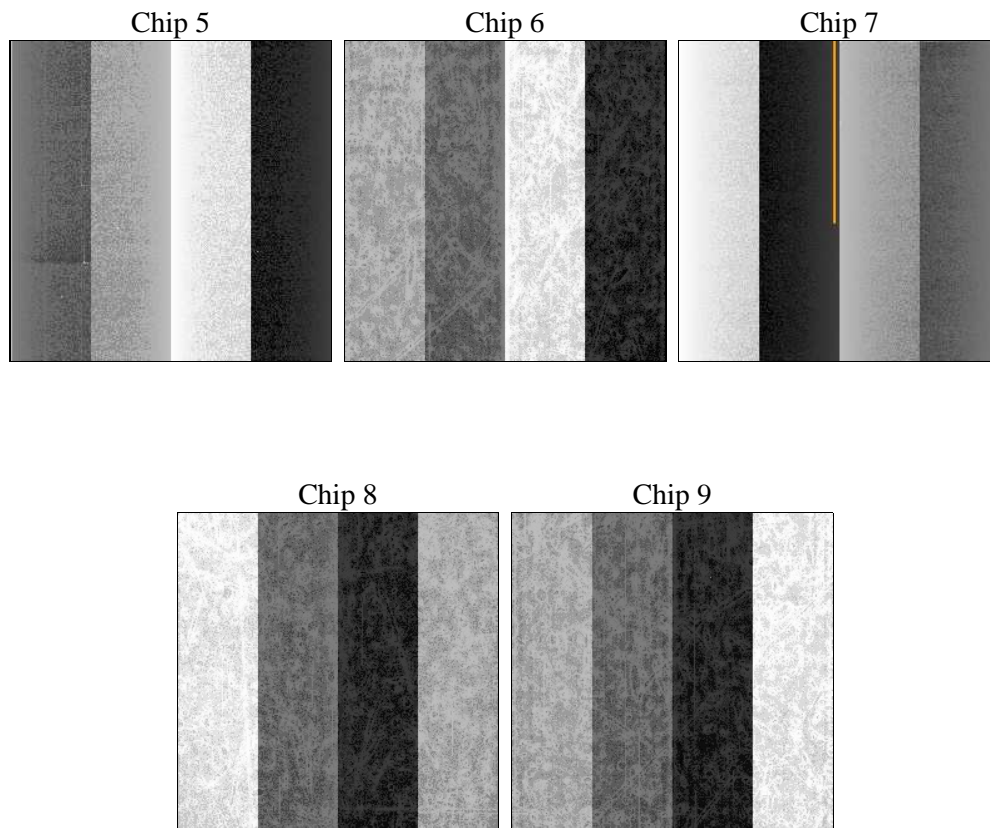
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21904.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	22002.69039166	Sum of GTIs [s]
caldbver	4.8.0.1	 	ontime5	22002.649351716	Sum of GTIs [s]
date	2018-11-18T13:27:43	Date and time of file creation	ontime6	22002.608311653	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	22002.69039166	Sum of GTIs [s]
			ontime8	22002.567271709	Sum of GTIs [s]
			ontime9	22002.526231647	Sum of GTIs [s]
			l1events	971291	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4072.52, 4094.35)	src1a sky pixel position

2.1.4 Events

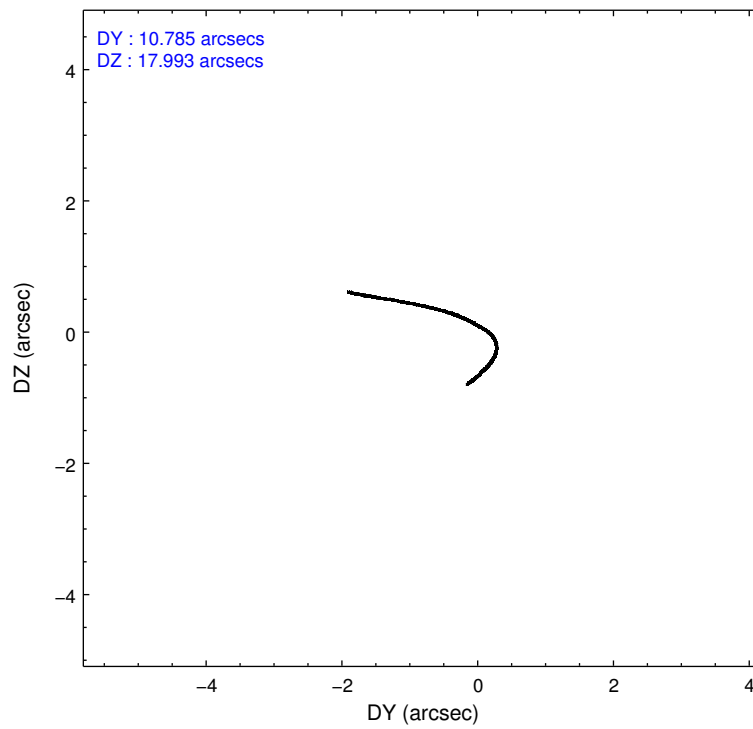
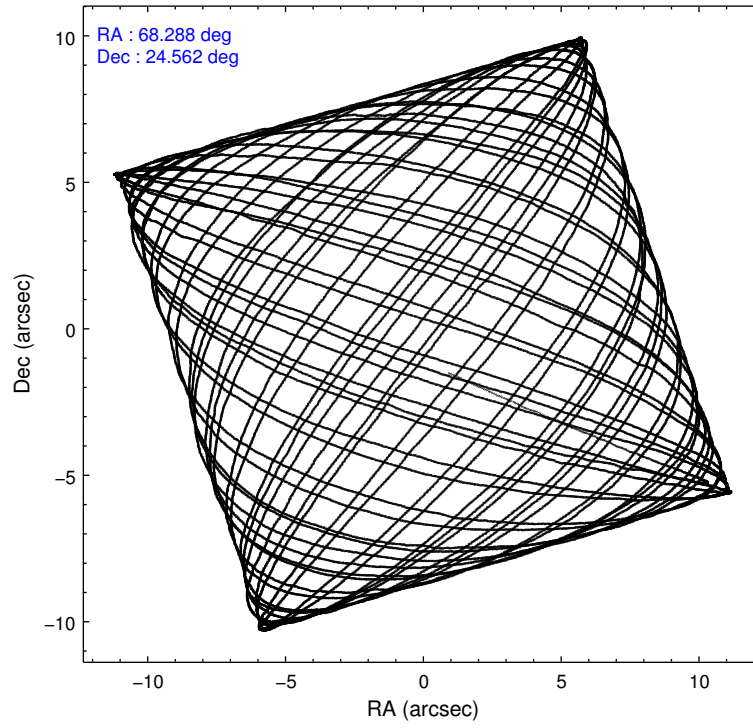
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	250285	165485	187538	208220	159763
rejected events	129828	147508	105505	151942	141331
rejected %	51%	89%	56%	72%	88%

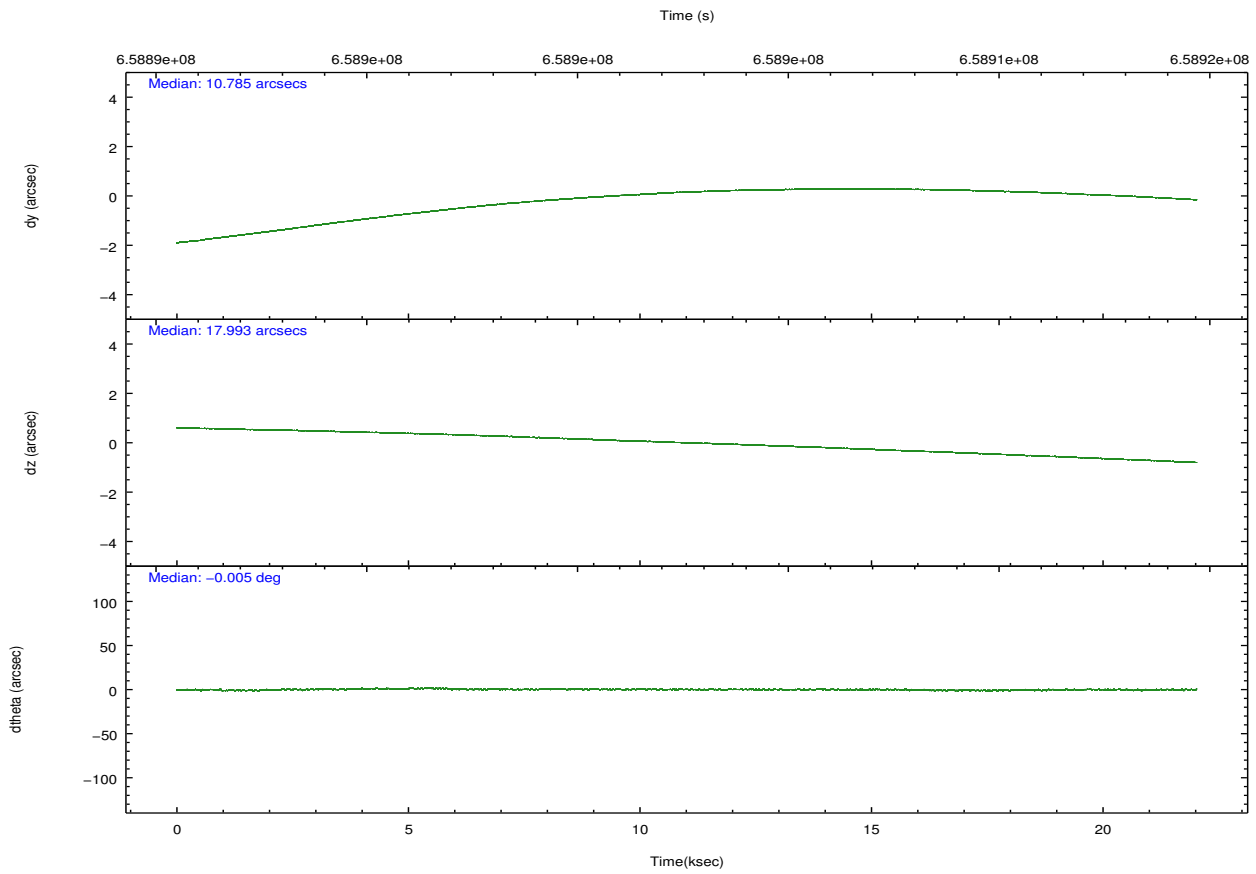
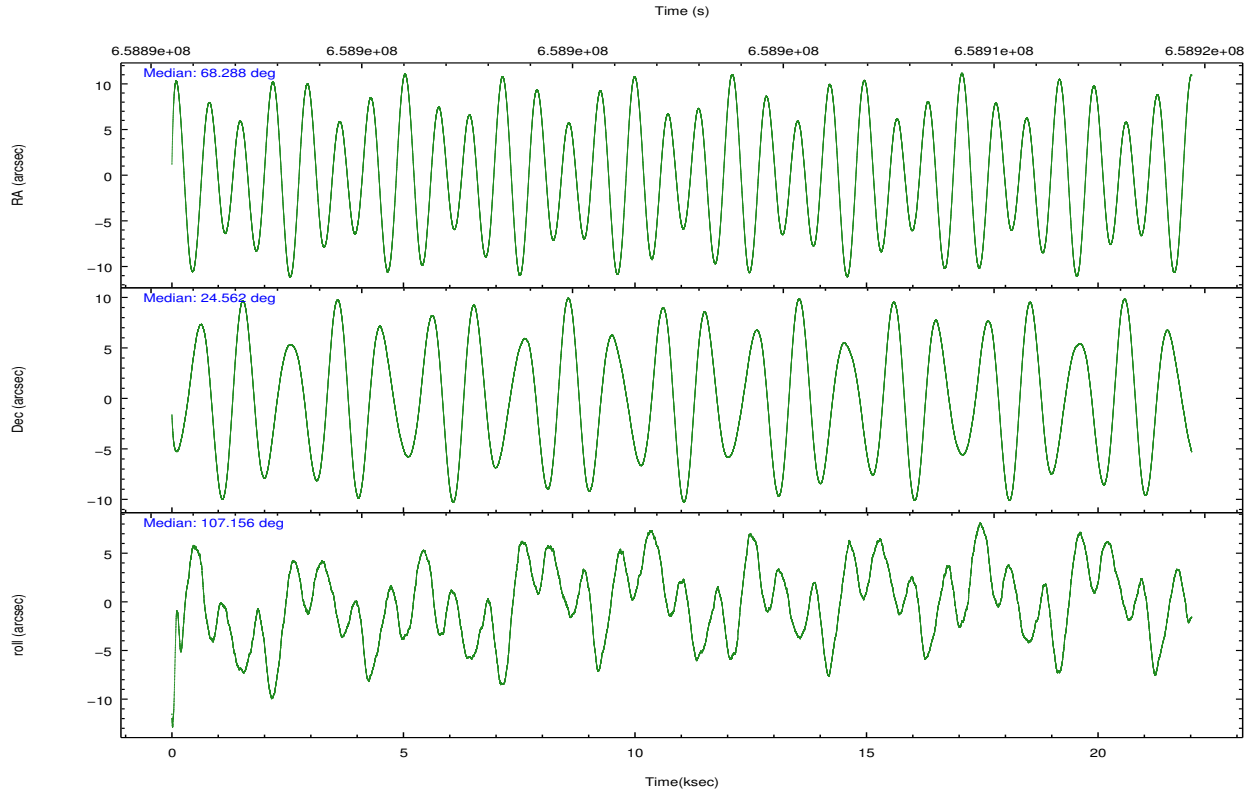
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	13124	6108	6171	14181	6675
	5%	3%	3%	6%	4%
grade 1 events	221	80	200	155	65
	0%	0%	0%	0%	0%
grade 2 events	36021	4325	16990	14244	4114
	14%	2%	9%	6%	2%
grade 3 events	2992	1776	6518	6155	1933
	1%	1%	3%	2%	1%
grade 4 events	3000	1738	6418	5773	1767
	1%	1%	3%	2%	1%
grade 5 events	17354	6984	19455	10873	7994
	6%	4%	10%	5%	5%
grade 6 events	65341	4031	45945	15927	3945
	26%	2%	24%	7%	2%
grade 7 events	112232	140443	85841	140912	133270
	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	68.310540	68.2881534928225	CCD I2 on	N	N
[deg] Pointing Dec	24.543800	24.56220244286291	CCD I3 on	N	N
[deg] Pointing Roll	106.992207	107.1581308658819	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)	658891688.184000	658890541.2983	CCD S5 on	O2	Y
Observation start date	2018-11-18T01:26:59	2018-11-18T01:09:01	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	658913592.184000	658914420.21223	On-chip summing requested	N	N
Observation end date	2018-11-18T07:32:03	2018-11-18T07:47:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





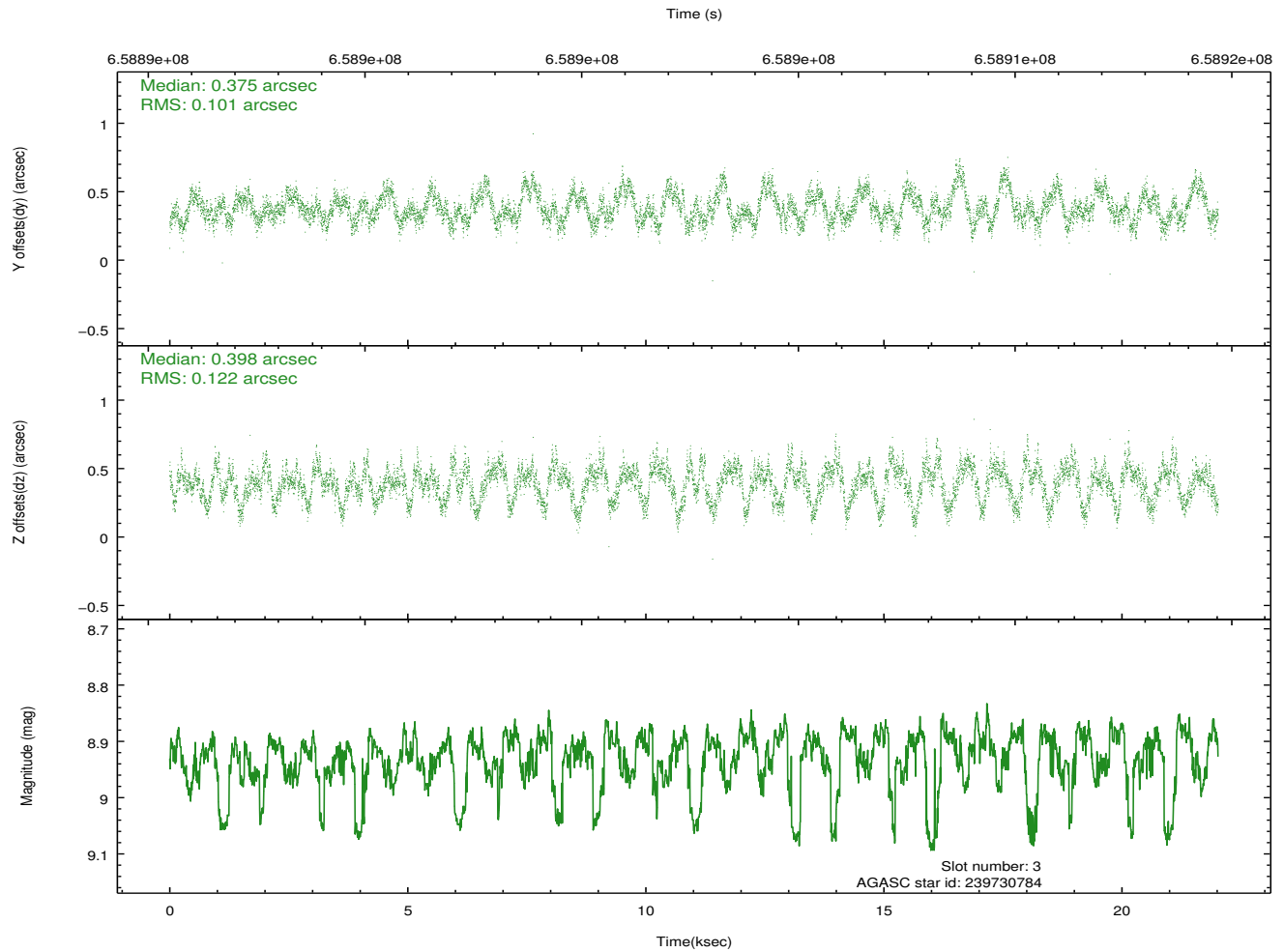
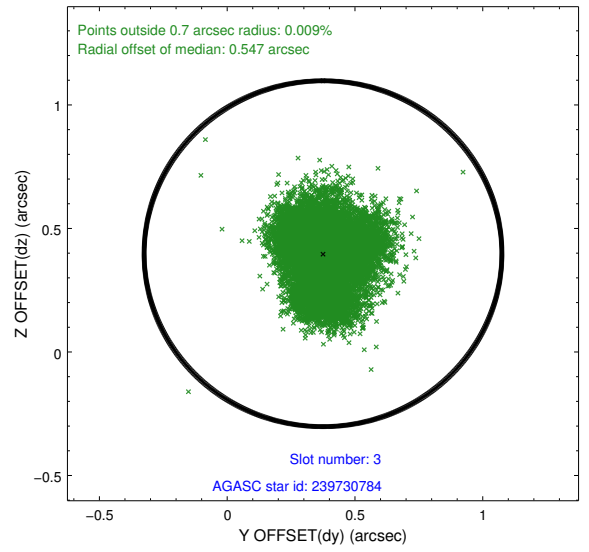
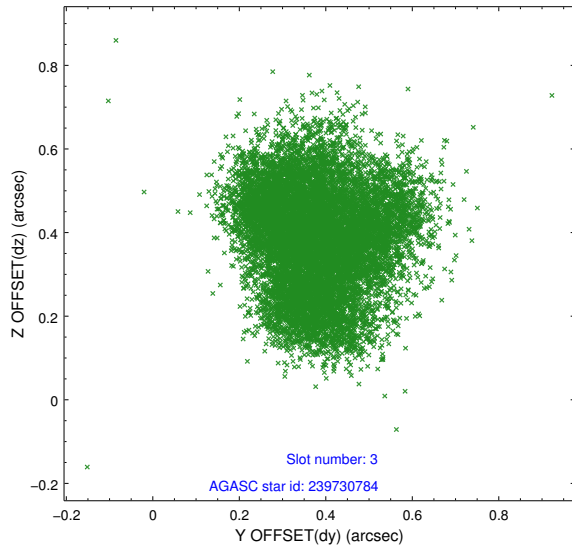
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.00	5372	1.000	-0.259	-0.171	0.011	0.025	0.000000	0.000000	-763.59	-1739
1	FID		ACIS-S-4	7.13	5372	1.000	0.646	0.171	0.012	0.050	0.000000	0.000000	2150.49	169
2	FID		ACIS-S-5	7.11	5372	1.000	-0.417	0.009	0.012	0.028	0.000000	0.000000	-1816.41	162
3	GUIDE	used	239730784	8.93	10732	1.000	0.375	0.398	0.172	0.260	68.709044	24.244524	-1410.56	-936
4	GUIDE	used	239731072	8.01	10739	1.000	0.138	-0.205	0.121	0.183	68.370351	24.279312	-968.05	89
5	GUIDE	used	240262776	8.49	10740	1.000	-0.461	-0.164	0.091	0.149	67.818644	25.030457	2146.07	1023
6	GUIDE	used	240263016	8.62	10740	1.000	0.072	0.126	0.110	0.176	68.575597	24.979042	1246.97	-1284
7	GUIDE	used	240259472	7.83	10741	1.000	-0.126	-0.153	0.090	0.151	68.090831	25.185490	2418.78	9

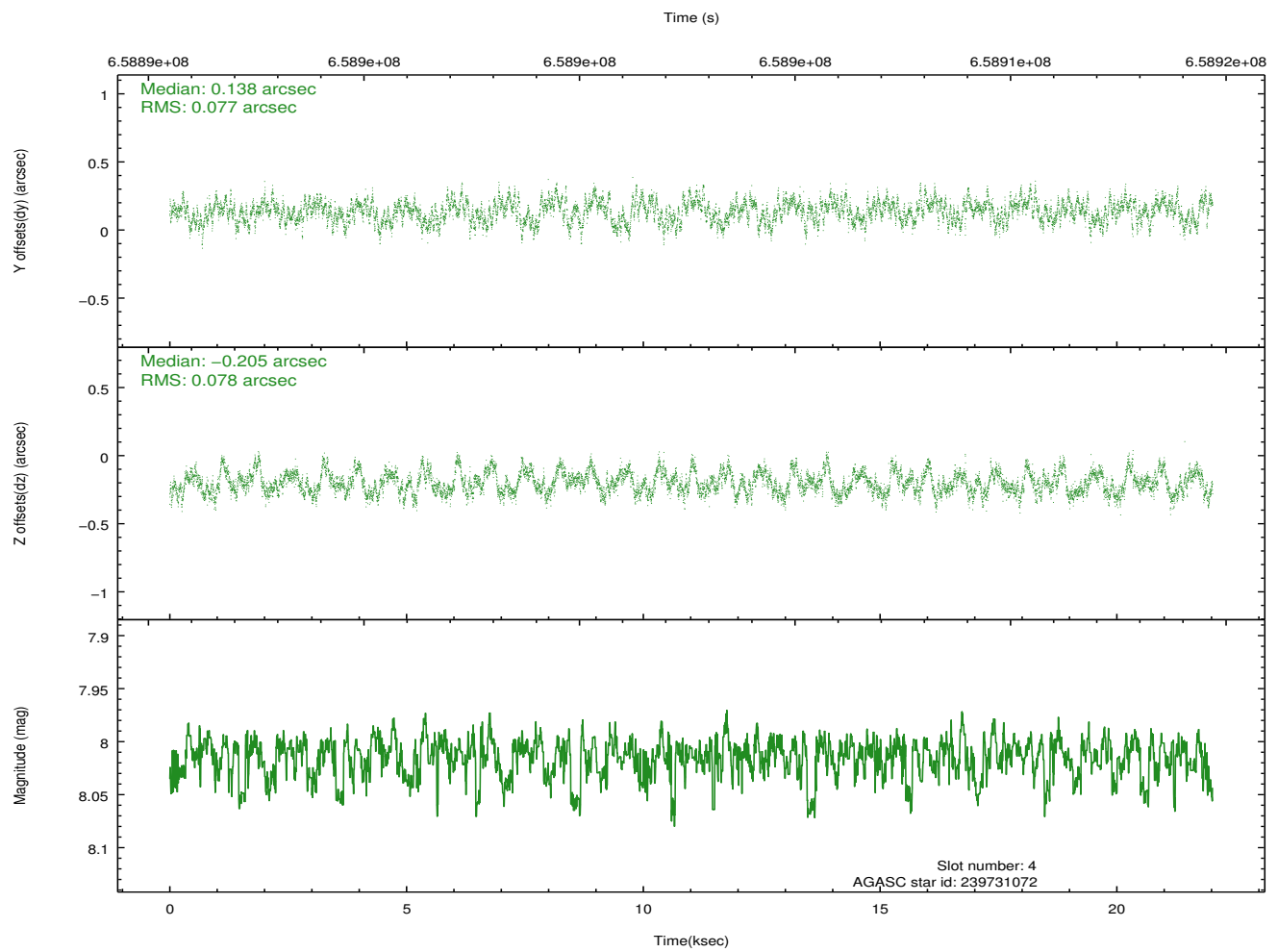
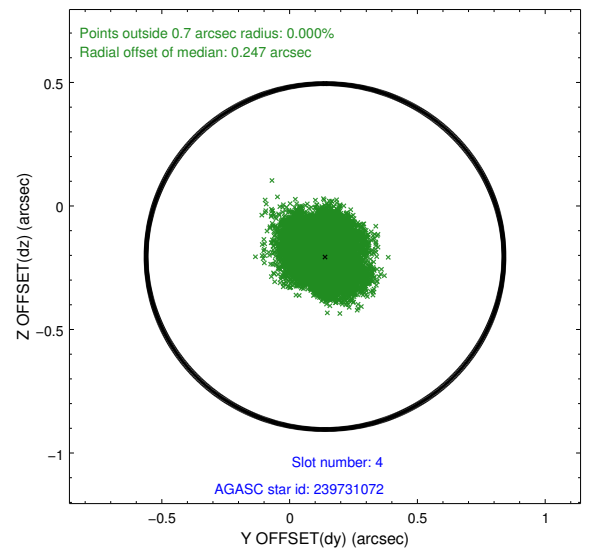
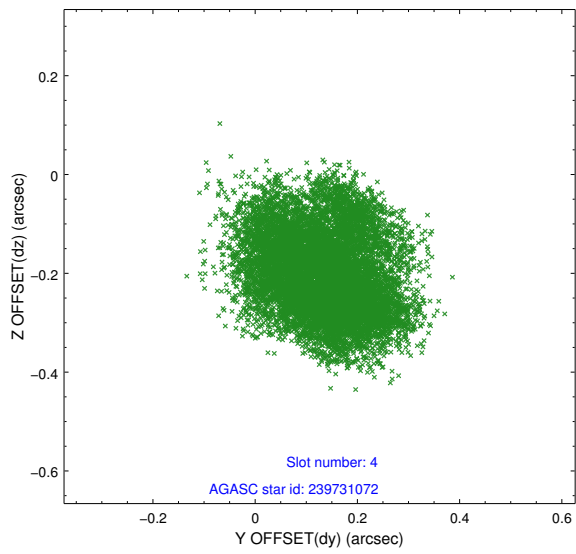
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2.4 Star Slots

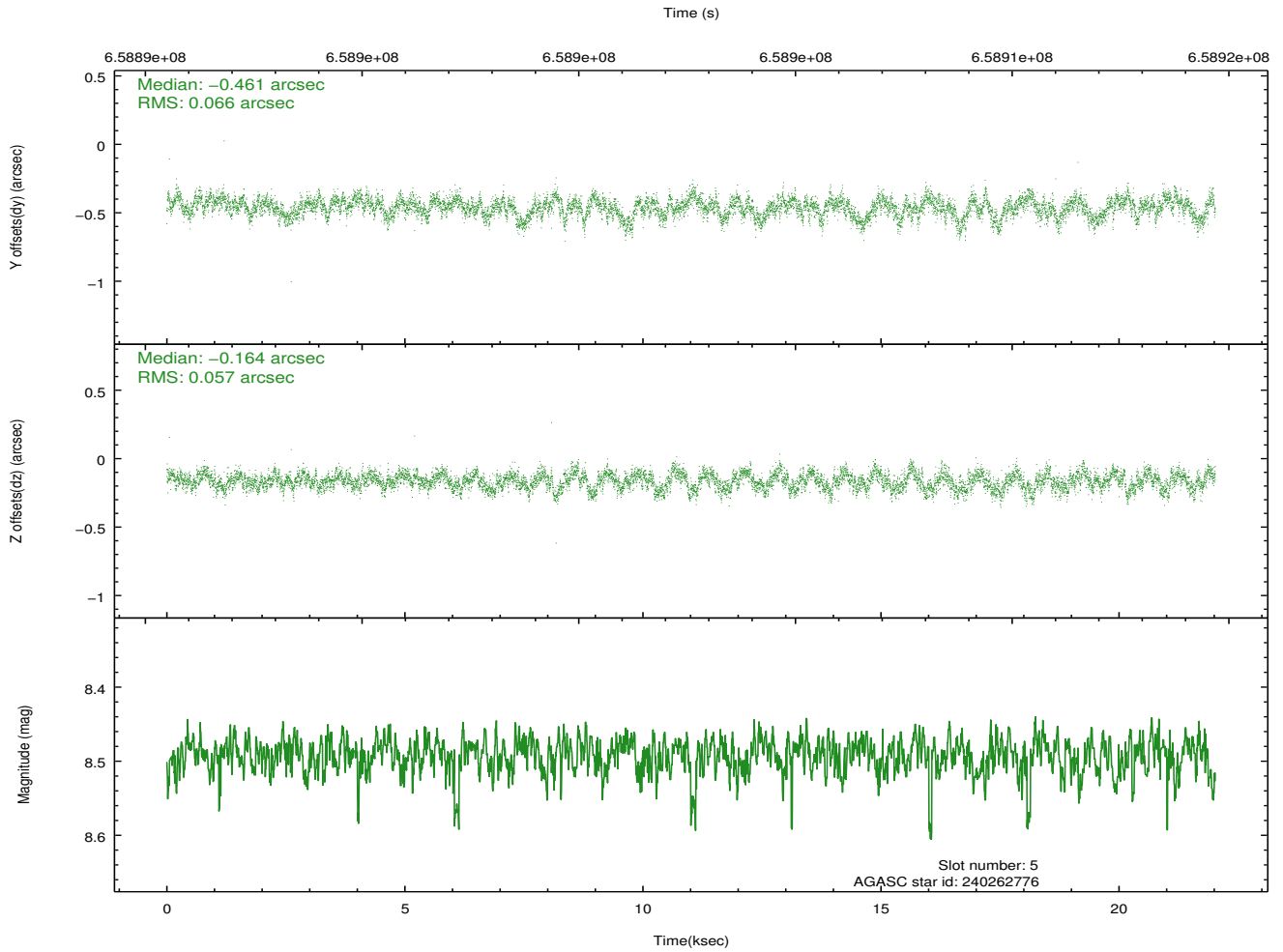
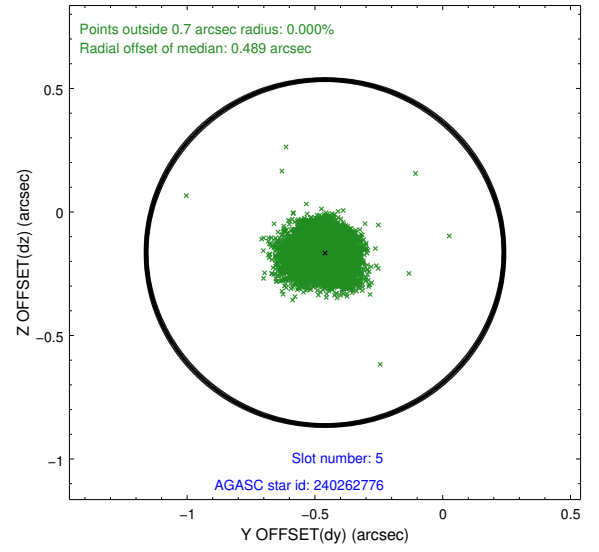
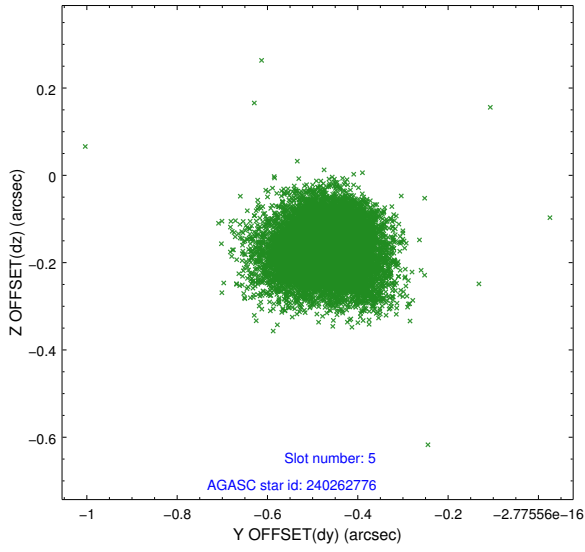
2.4.1 Slot 3



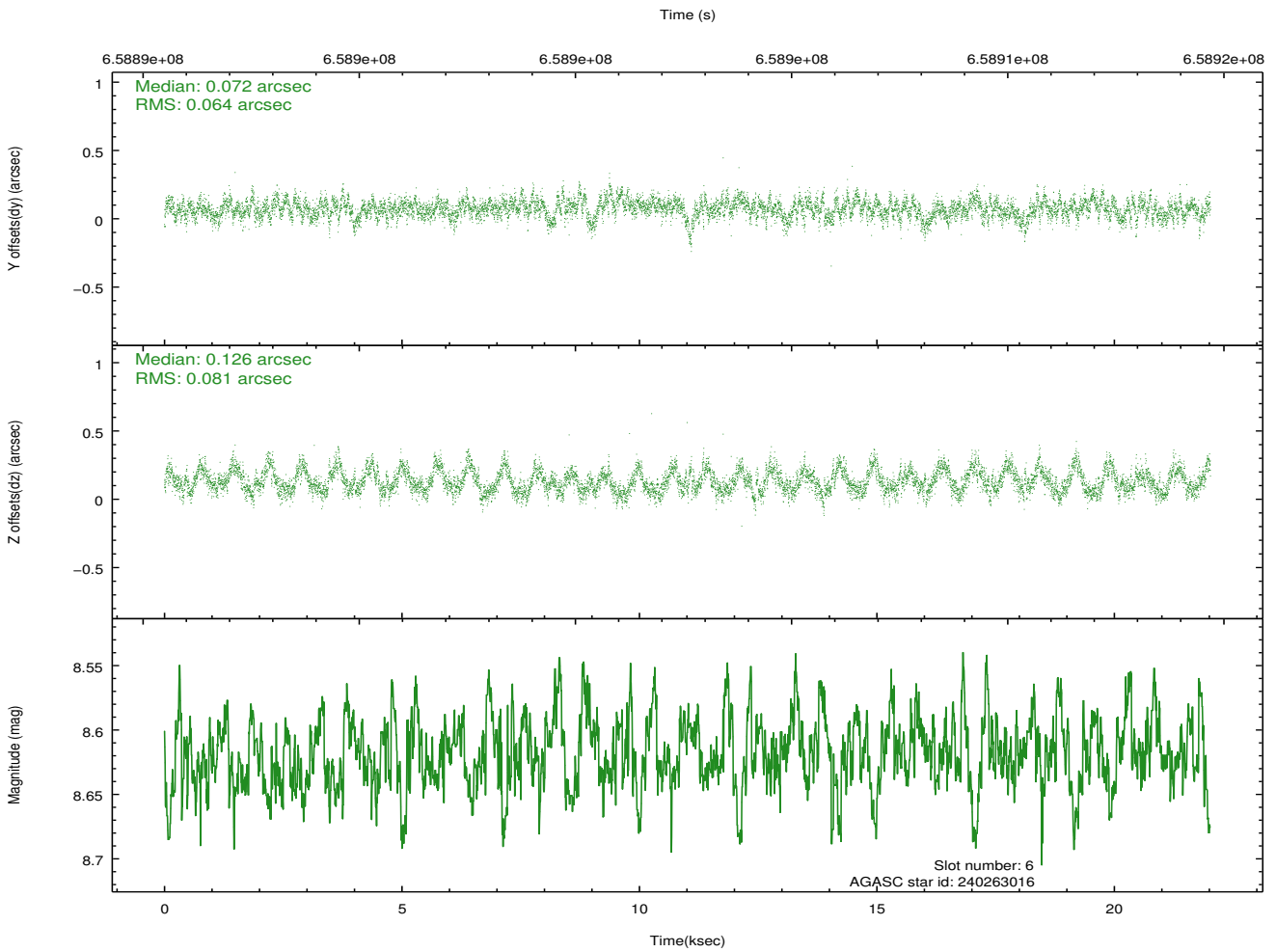
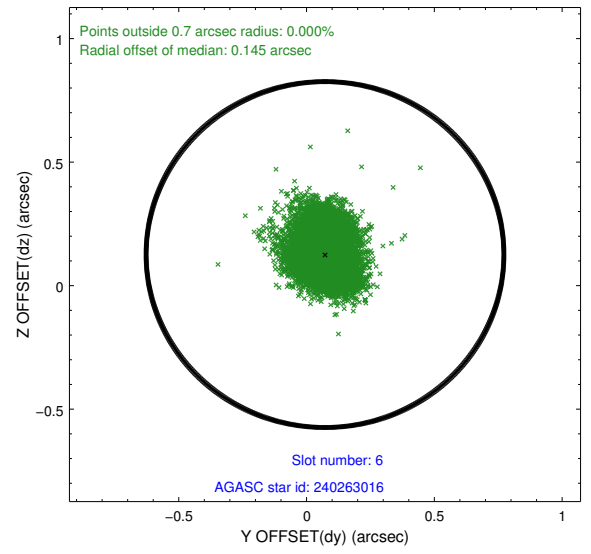
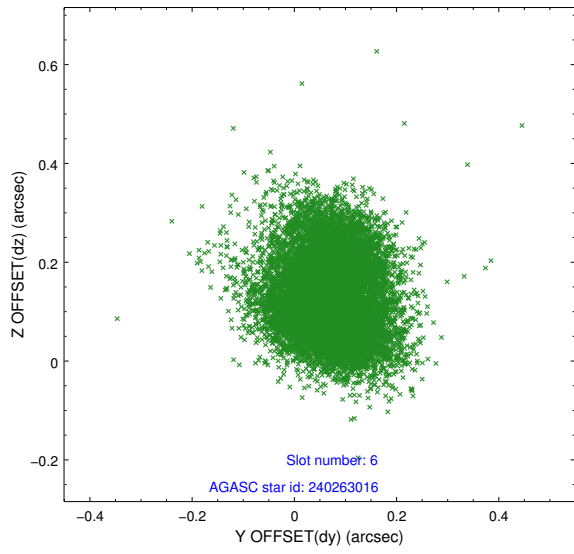
2.4.2 Slot 4



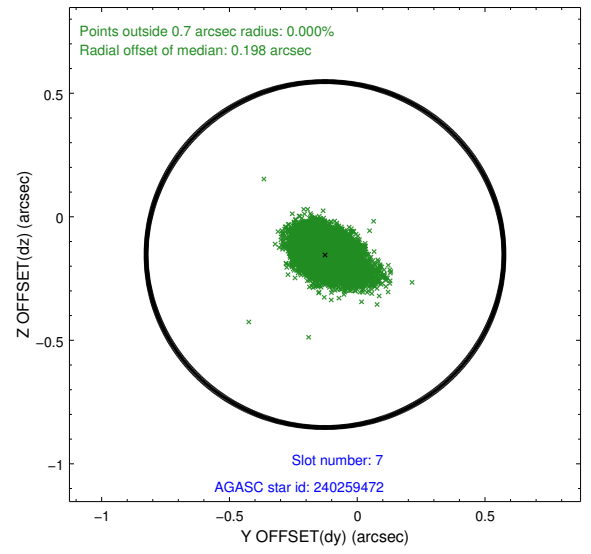
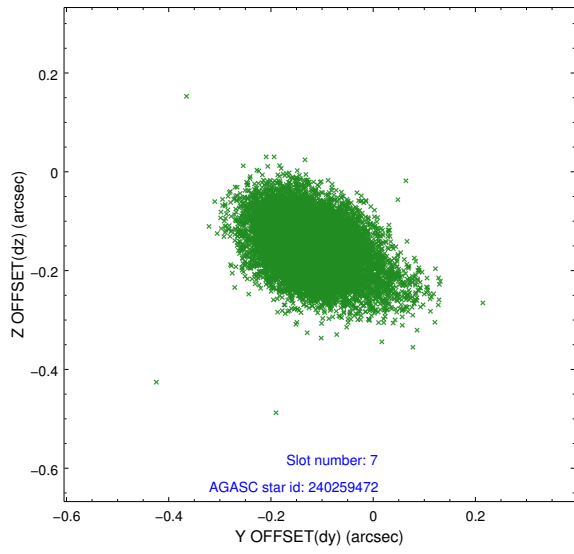
2.4.3 Slot 5



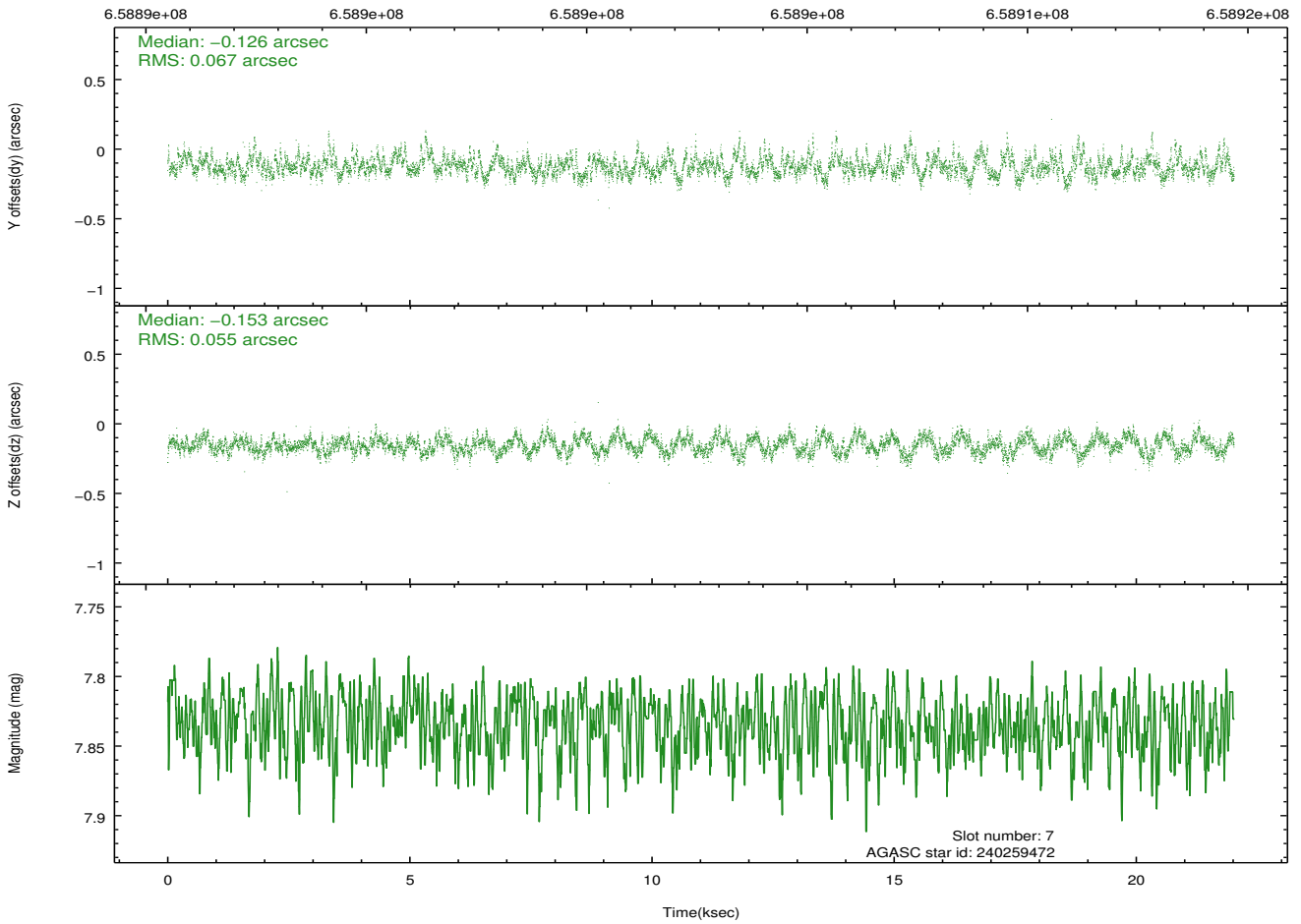
2.4.4 Slot 6



2.4.5 Slot 7

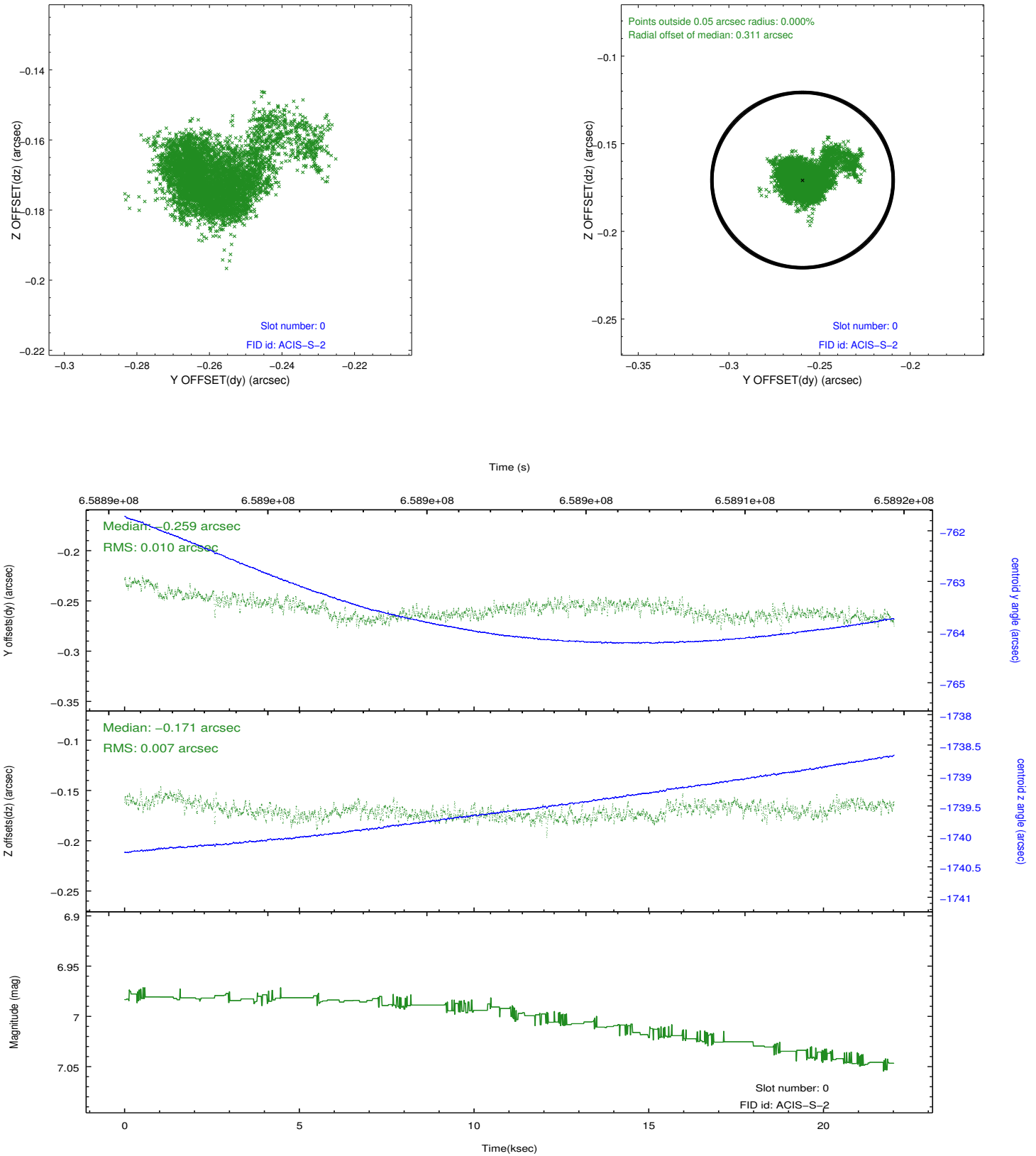


Time (s)

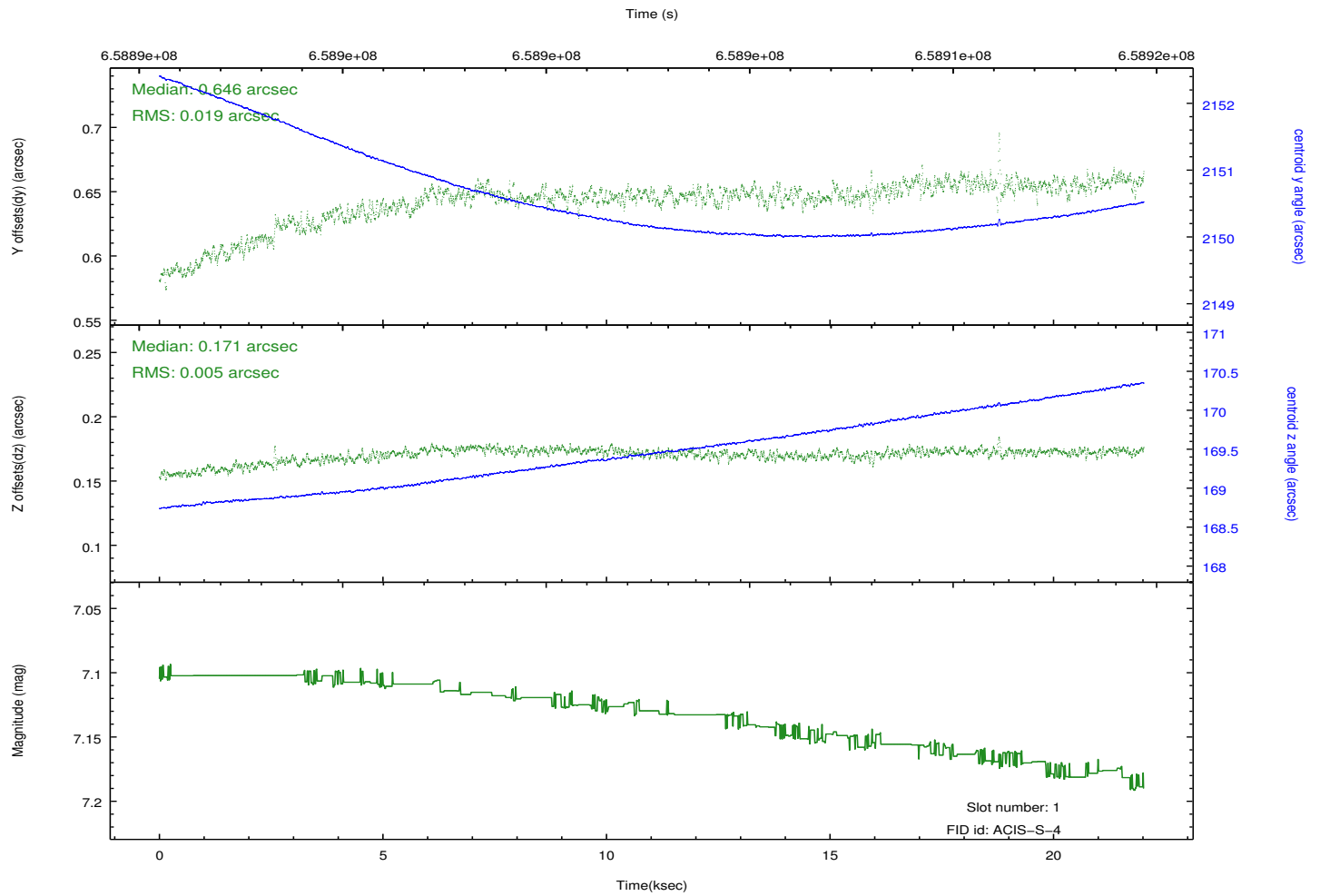
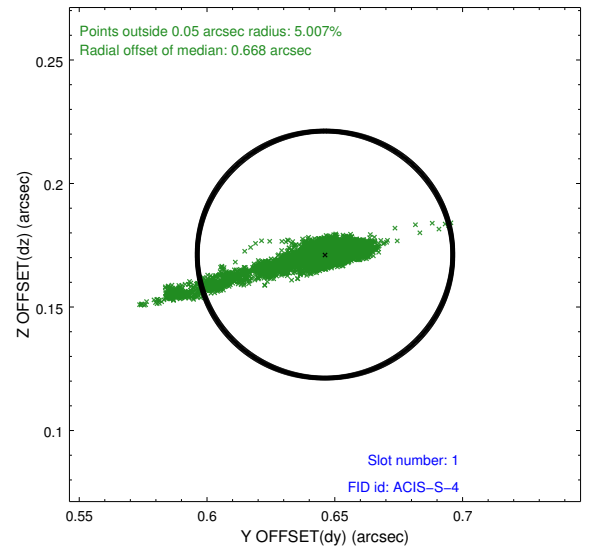
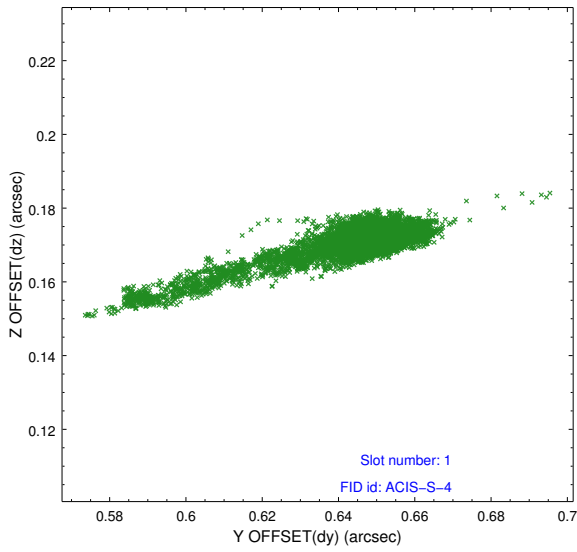


2.5 FID Slots

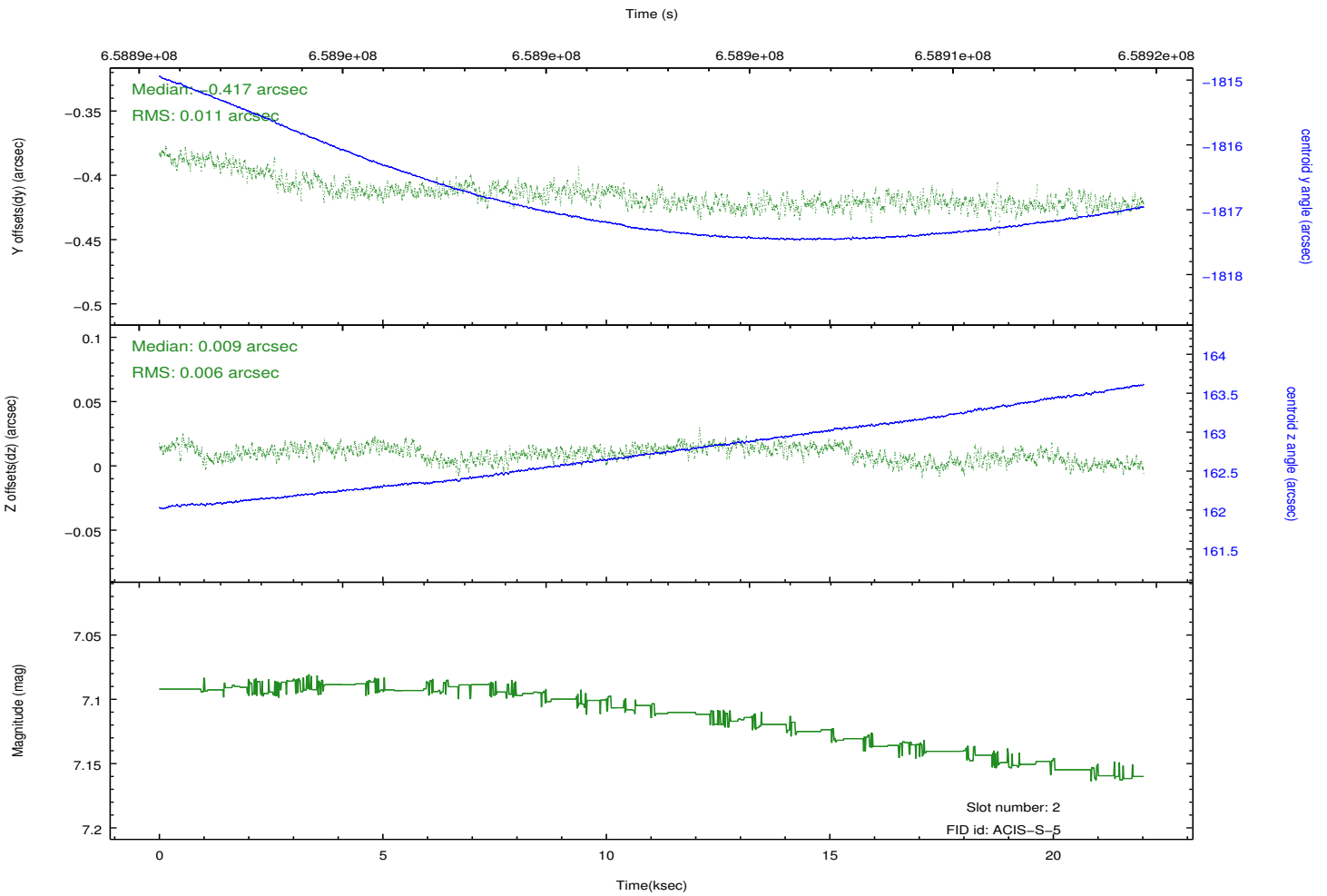
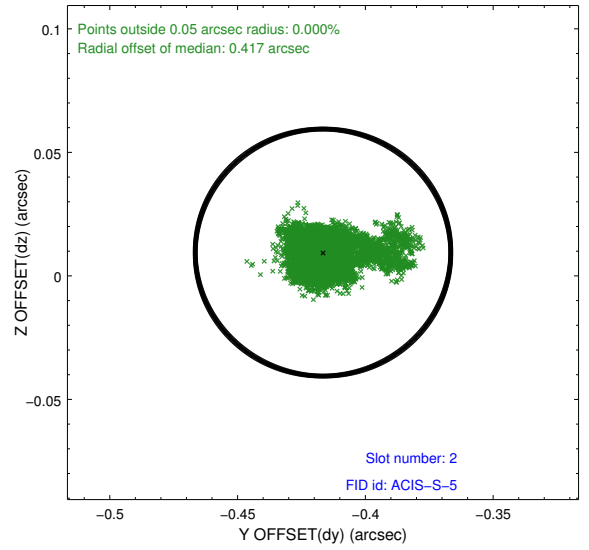
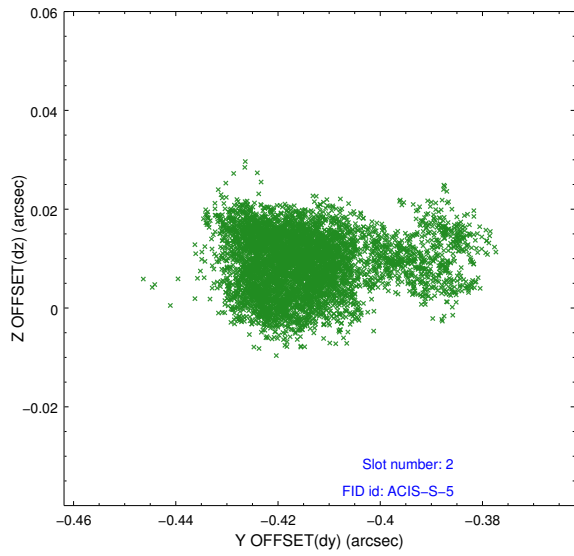
2.5.1 Slot 0



2.5.2 Slot 1

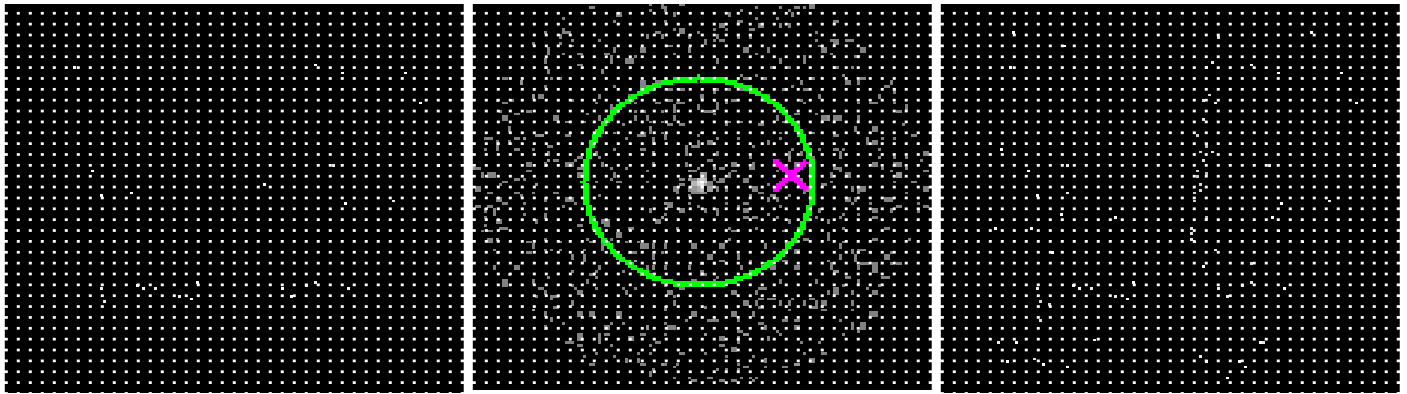


2.5.3 Slot 2



3 Gratings

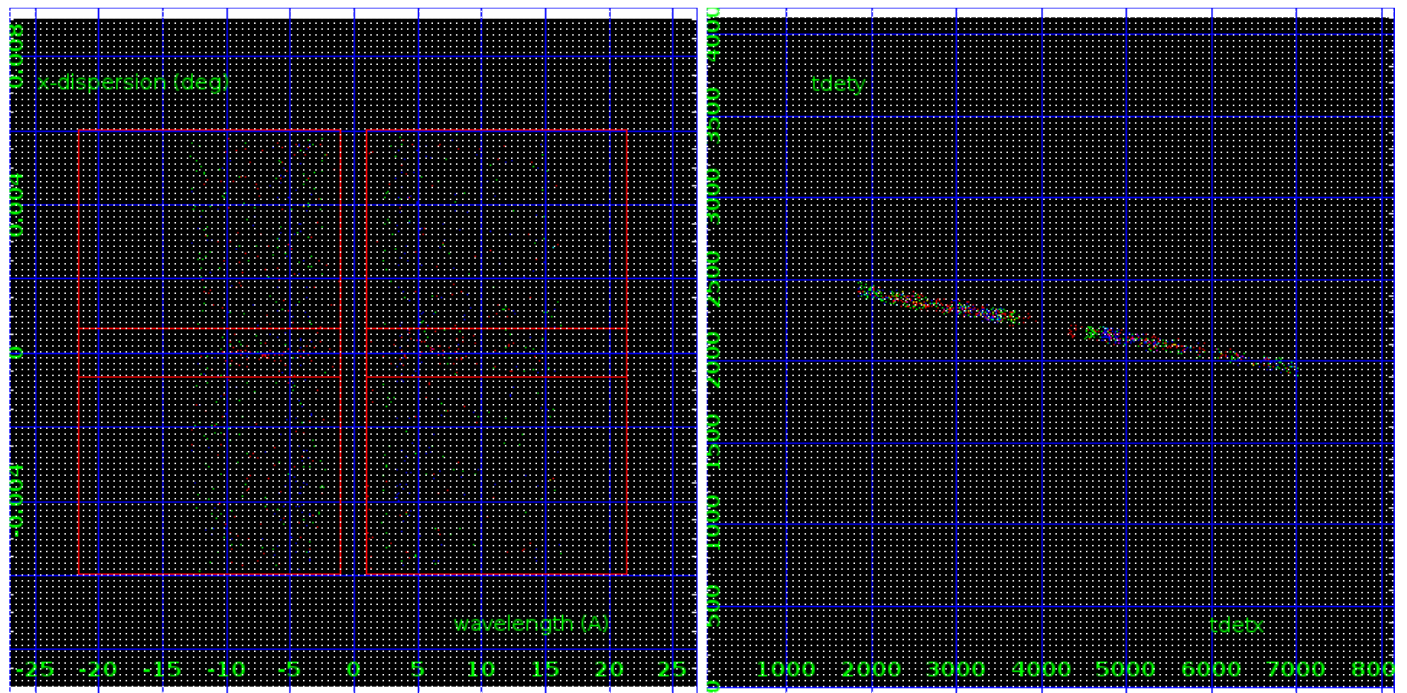
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

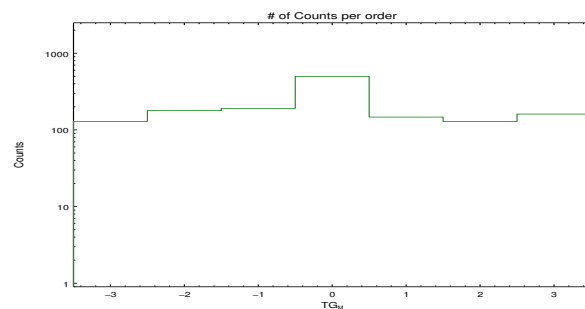
HEG Order Sort ALL

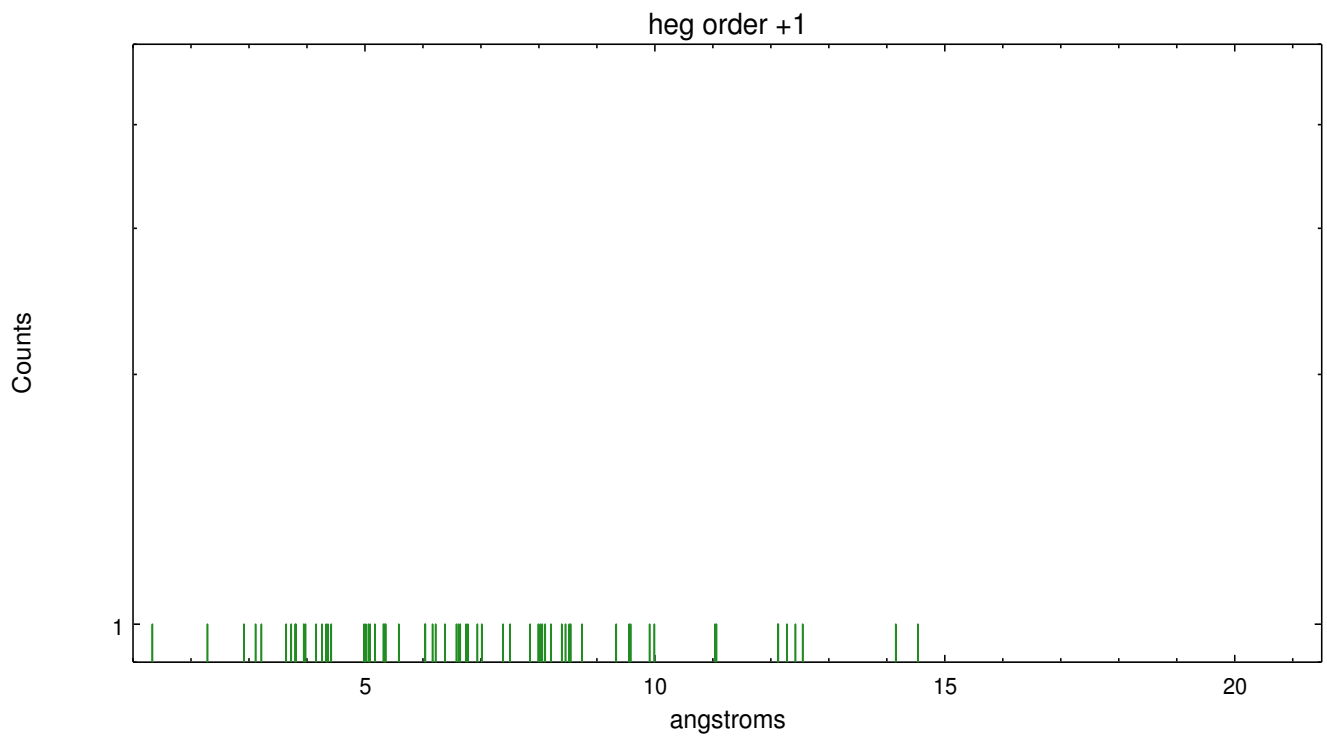
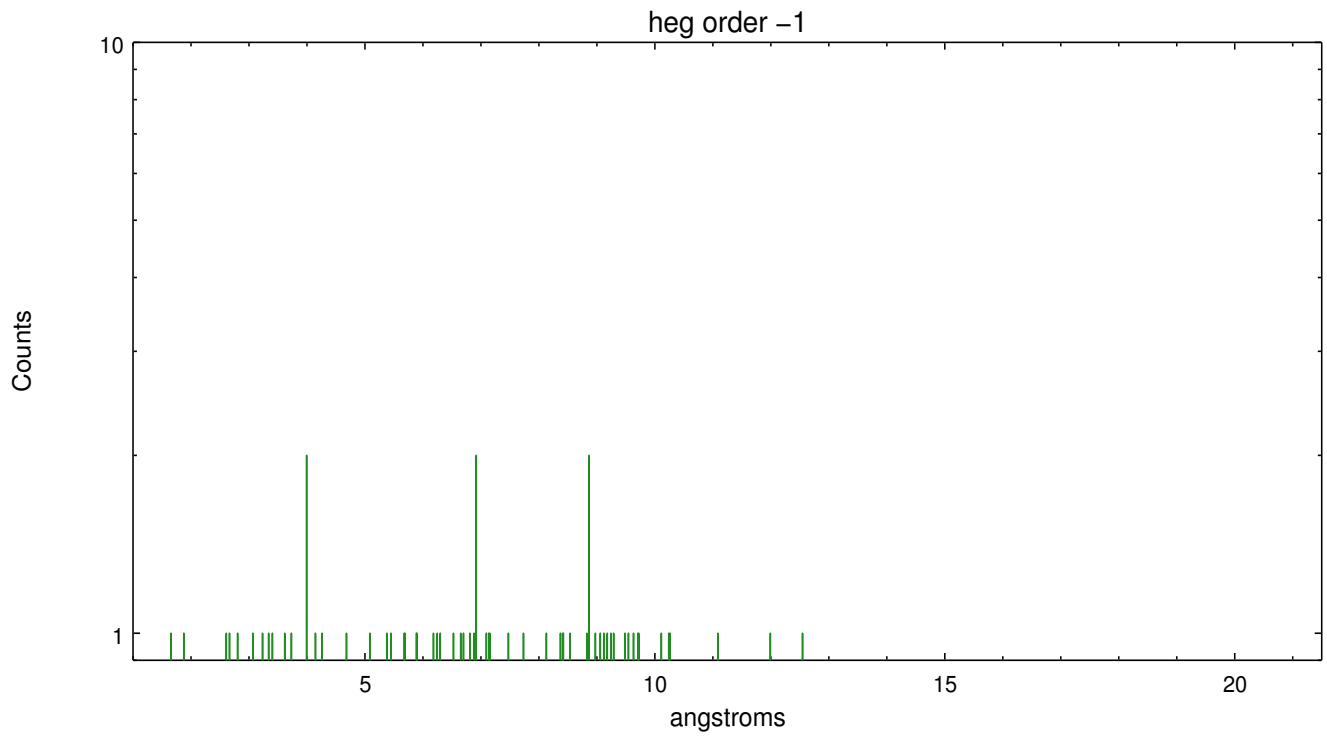


Spot Image HEG

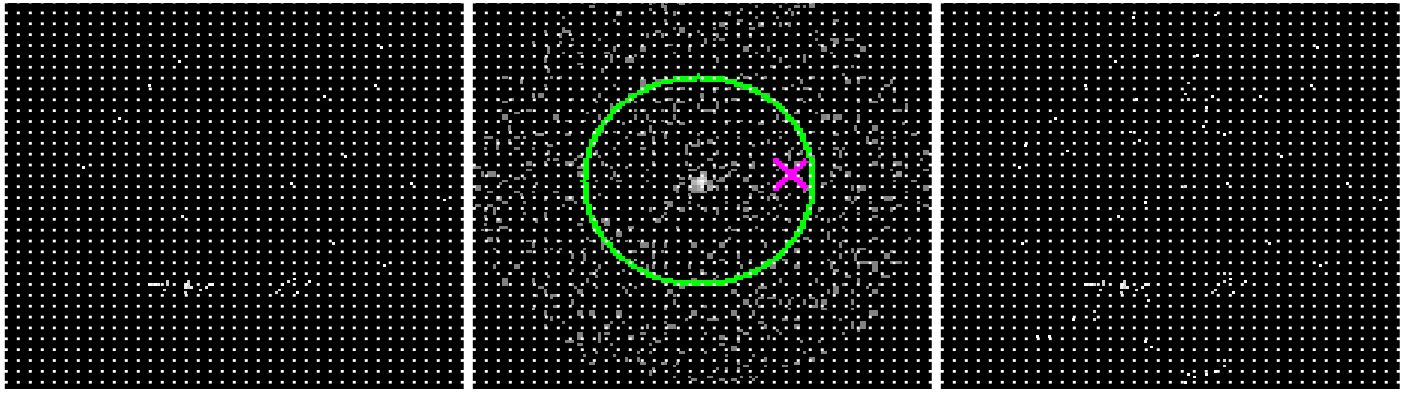
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	129	179	191	499	147	129	161





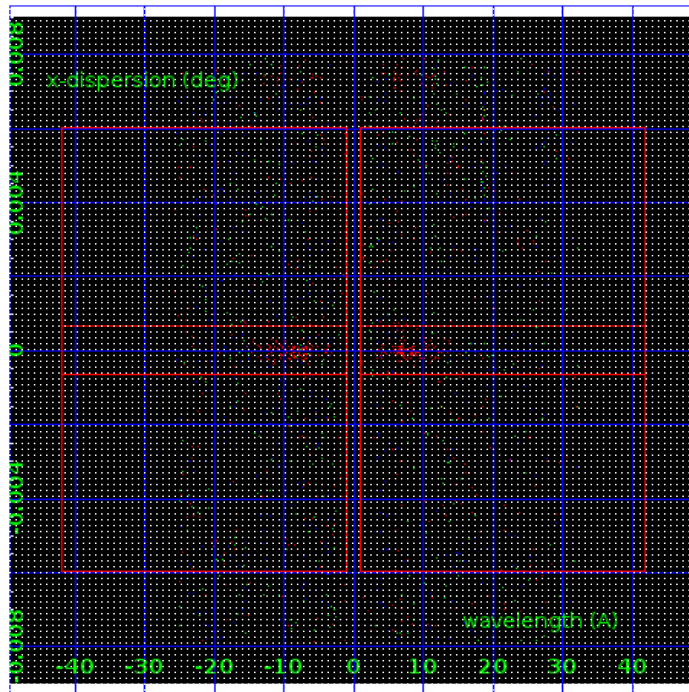
3.2 MEG Arm



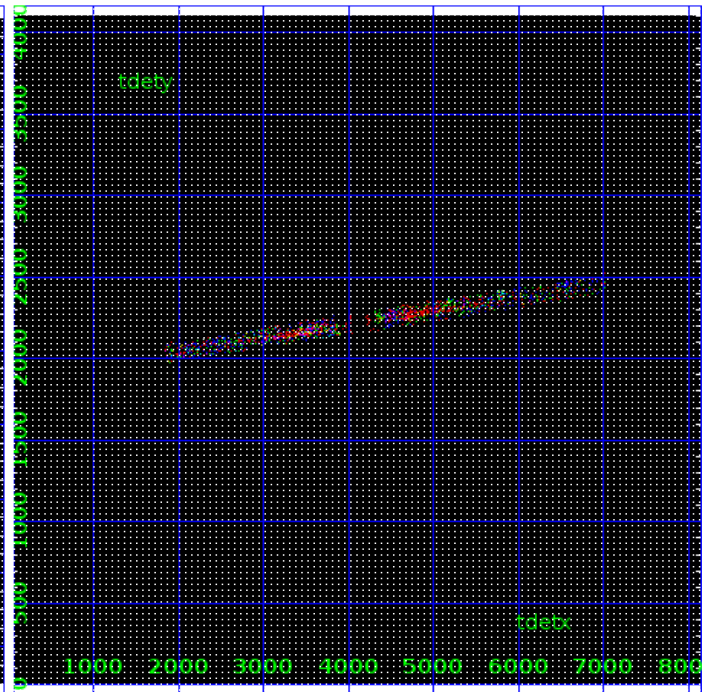
MEG Order Sort 123

MEG Zero Order

MEG Order Sort ALL

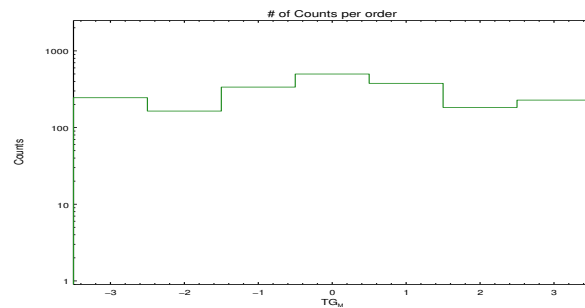


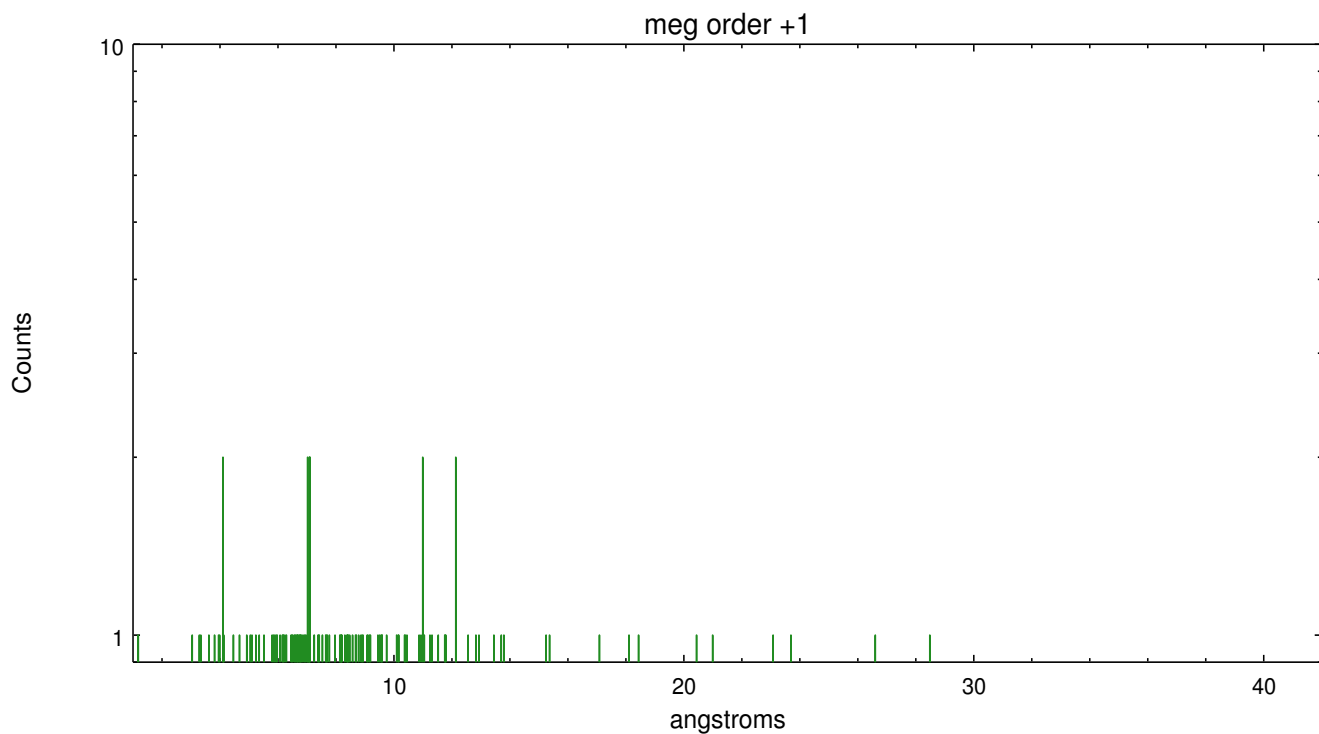
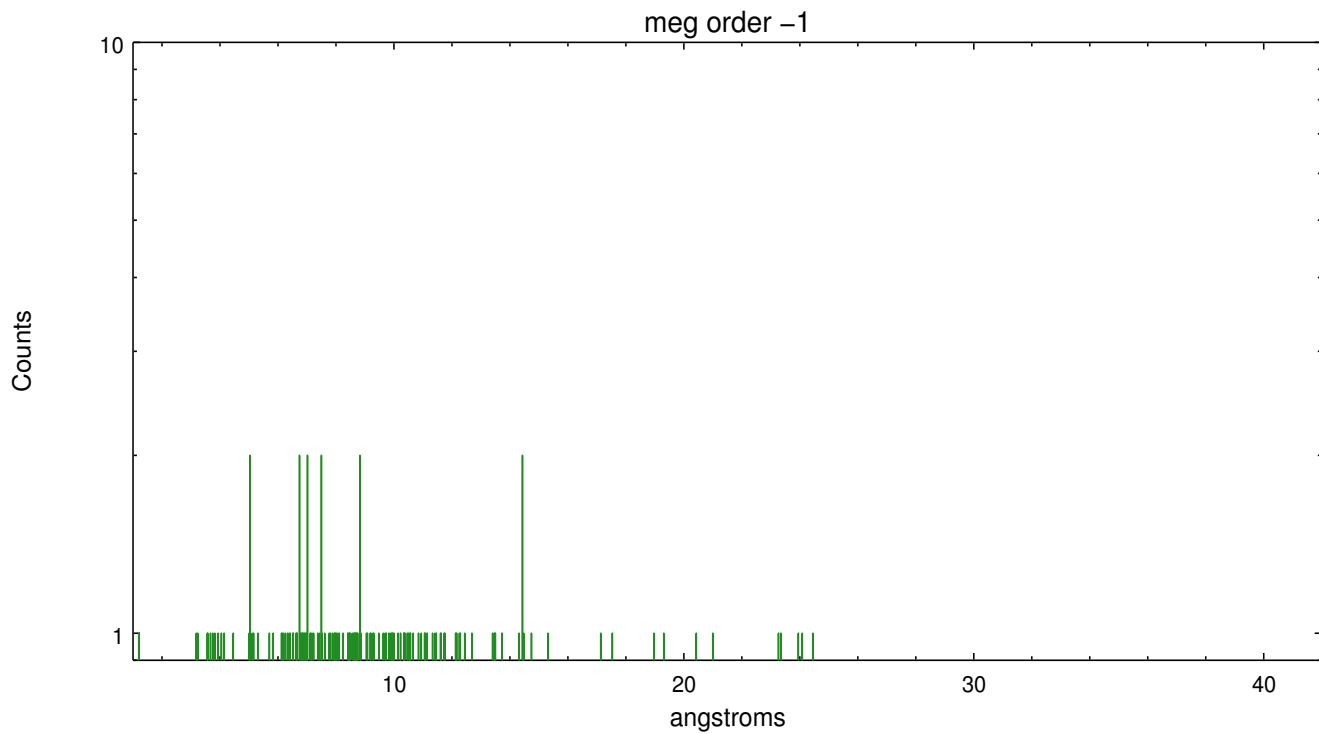
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	245	164	337	499	377	183	228





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	22.00269039166

A.2 Comments

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