

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4564 - L2 Version 5
Chandra X-Ray Center

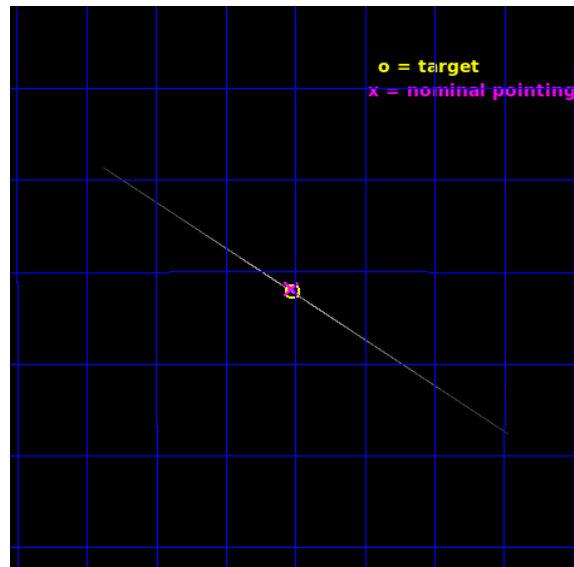
L2 Processing Date : Sep 27 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Parameters	4
2.1.3	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

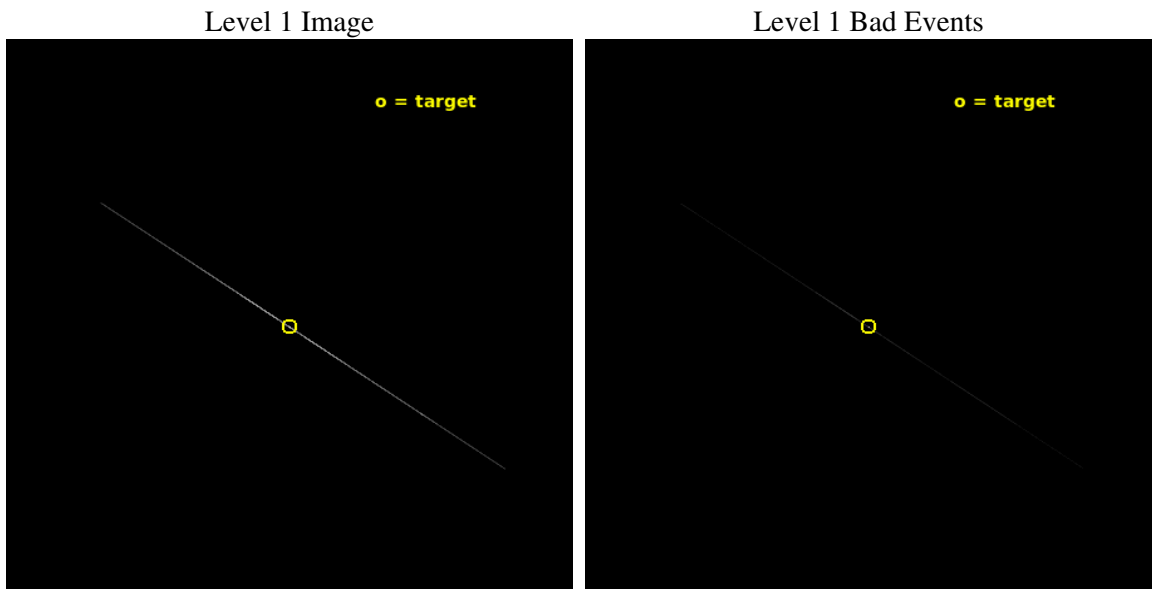
seq_num	400347	Sequence number
obs_id	4564	Observation id
title	High Resolution Spectroscopy of GX 17+2 with the Chandra/HETG	Prop
observer	Dr. Tiziana Di Salvo	Principal investigator
object	GX 17+2	Source name
ra_targ	274.005833	Observer's specified target RA [deg]
dec_targ	-14.036389	Observer's specified target Dec [deg]
ra_nom	274.00628728377	Nominal RA [deg]
dec_nom	-14.030774709146	Nominal Dec [deg]
roll_nom	214.41112818286	Nominal Roll [deg]
revision	5	Processing version of data
ontime	30178.540285677	Sum of GTIs [s]
livetime	30060.655362686	Livetime [s]
ontime4	30180.0	Sum of GTIs [s]
ontime5	30180.0	Sum of GTIs [s]
ontime6	30180.0	Sum of GTIs [s]
ontime7	30178.540285677	Sum of GTIs [s]
ontime8	30178.540307343	Sum of GTIs [s]
ontime9	30178.540289193	Sum of GTIs [s]
l2events	7592661	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	30178.540285677	Sum of GTIs [s]
caldsver	4.9.2	 	ontime4	30180.0	Sum of GTIs [s]
date	2020-09-27T03:47:00	Date and time of file creation	ontime5	30180.0	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	30180.0	Sum of GTIs [s]
			ontime7	30178.540285677	Sum of GTIs [s]
			ontime8	30178.540307343	Sum of GTIs [s]
			ontime9	30178.540289193	Sum of GTIs [s]
			l1events	8433519	Number of level 1 events
			tgmetho	TGDETECT	Method used to create src1a file
			ra_pos	(4000.42, 4055.62)	Grade 0 sky pixel position

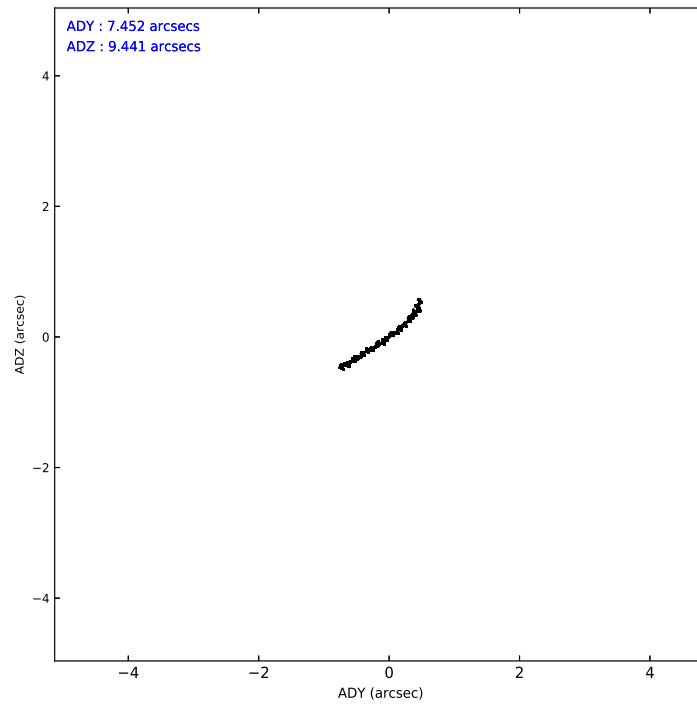
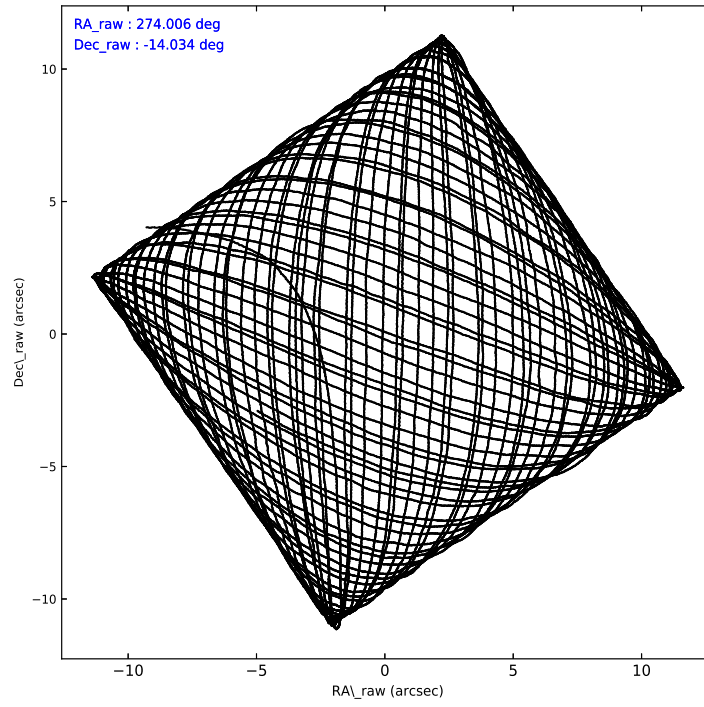
2.1.3 Events

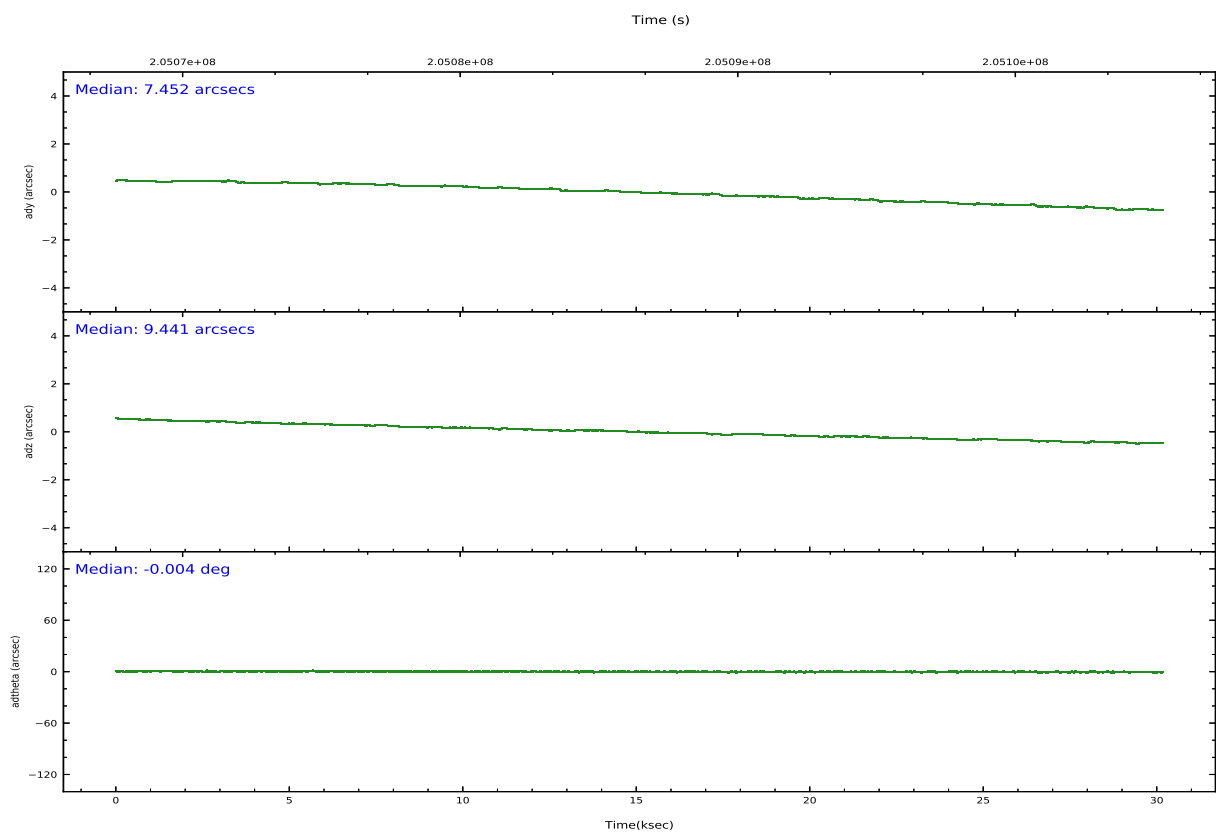
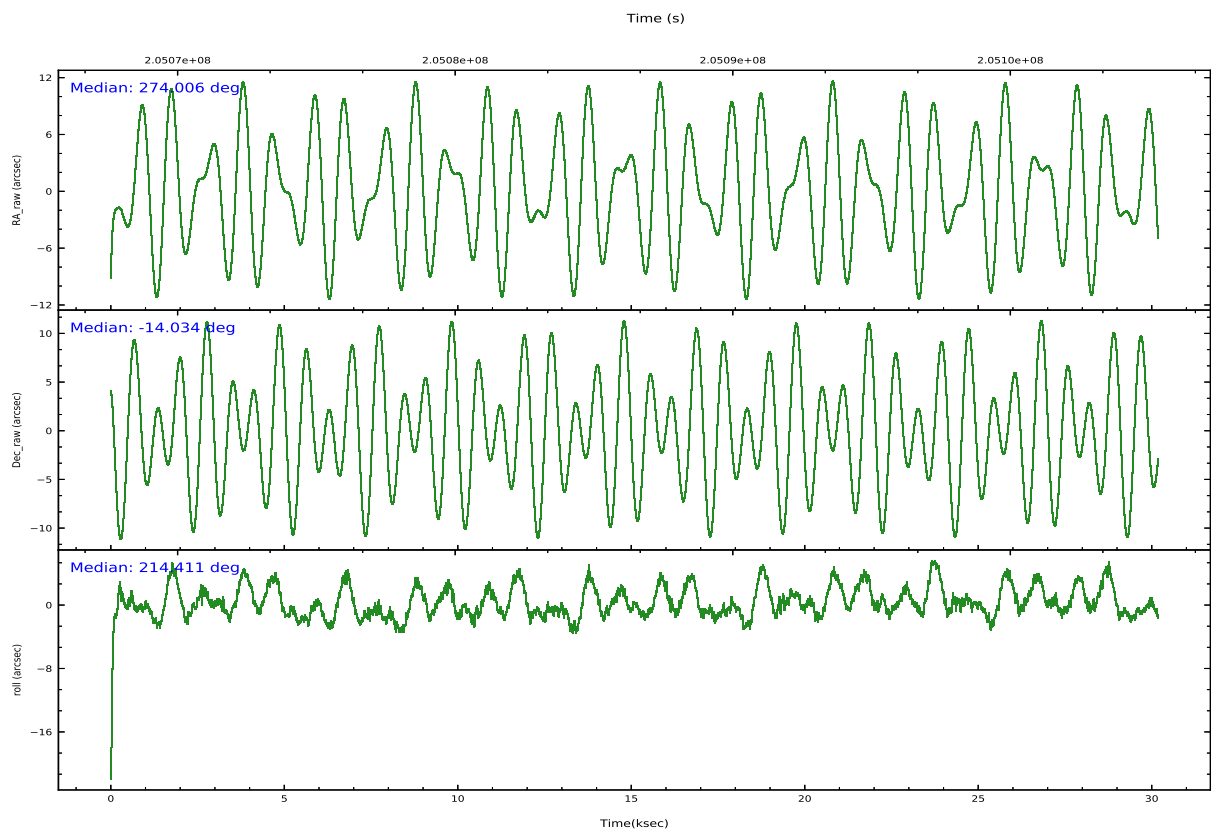
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	114354	489947	2151602	4942972	586332	148312	grade 0 events	13993	82907	60203	613956	178019	26070
rejected events	10358	30344	31176	346576	24532	12881		12%	16%	2%	12%	30%	17%
rejected %	9%	6%	1%	7%	4%	8%	grade 1 events	172	279	398	39543	632	227
								0%	0%	0%	0%	0%	0%
							grade 2 events	66234	185786	1791187	1377992	306598	81267
								57%	37%	83%	27%	52%	54%
							grade 3 events	5667	11713	8156	346626	16473	6037
								4%	2%	0%	7%	2%	4%
							grade 4 events	5831	11483	7932	347911	16602	6359
								5%	2%	0%	7%	2%	4%
							grade 5 events	8425	21670	19129	273048	15316	10357
								7%	4%	0%	5%	2%	6%
							grade 6 events	14032	176109	264597	1943896	52692	17995
								12%	35%	12%	39%	8%	12%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	CC33_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	274.017902	274.00628728377	Subarray requested	NONE	NONE
[deg] Pointing Dec	-14.009458	-14.030774709146	Alternating exposures requested	N	N
[deg] Pointing Roll	214.250655	214.41112818286	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-186.132523	-186.1423047203915			
[mm] SIM translation stage offset	-4	-3.990217862616333			
[s] Observation start time (MET)	205070259.184000	205068980.0908			
Observation start date	2004-07-01T11:56:35	2004-07-01T11:36:20			
[s] Observation end time (MET)	205100259.184000	205100883.72971			
Observation end date	2004-07-01T20:16:35	2004-07-01T20:28:03			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



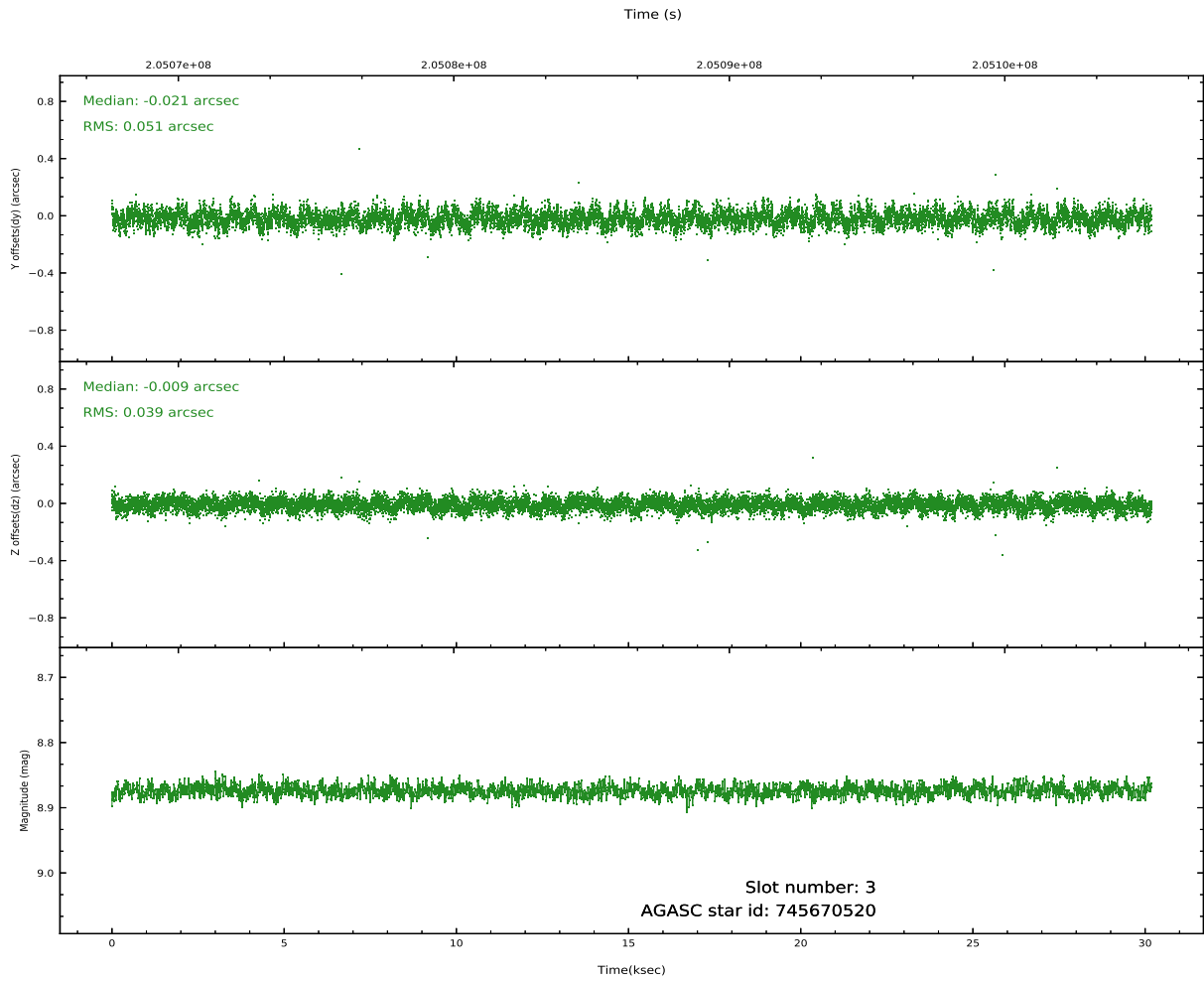
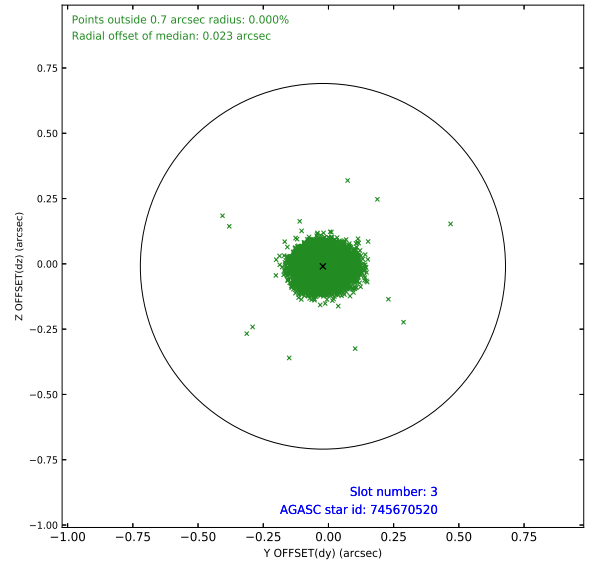
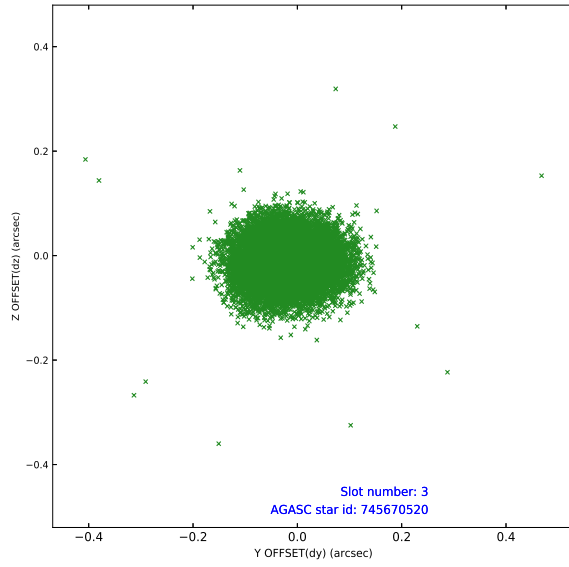


Slot Statistics

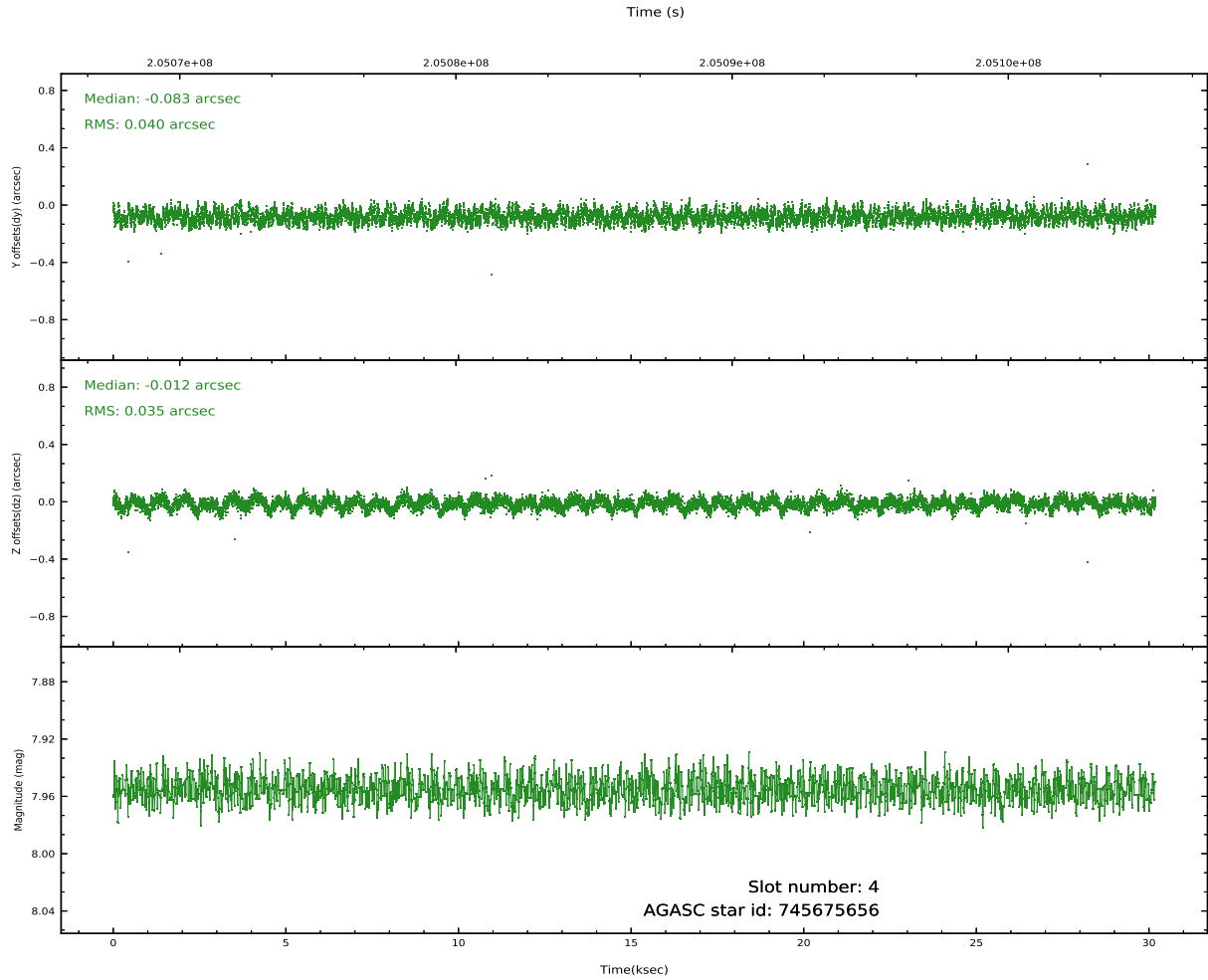
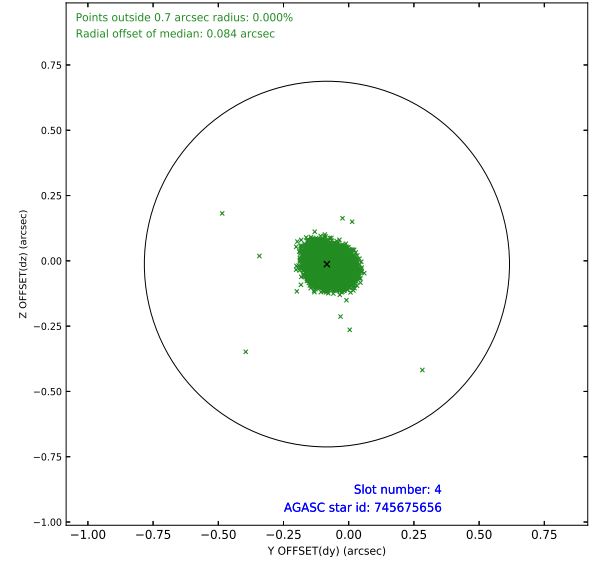
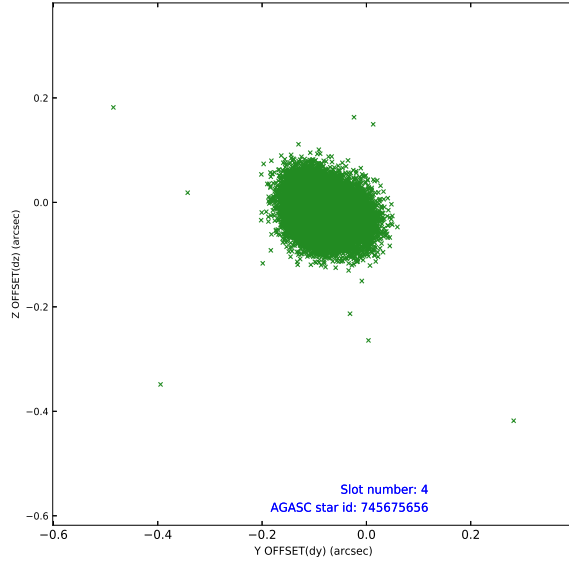
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.09	7363	1.000	-0.081	-0.111	0.018	0.026	0.000000	0.000000	-759.95	-1813
1	FID		ACIS-S-4	7.18	7356	1.000	0.152	0.069	0.007	0.014	0.000000	0.000000	2153.51	95
2	FID		ACIS-S-5	7.23	7363	1.000	-0.102	0.051	0.018	0.027	0.000000	0.000000	-1812.73	89
3	GUIDE	used	745670520	8.87	14714	1.000	-0.021	-0.009	0.067	0.109	274.614741	-13.988466	-1764.57	1113
4	GUIDE	used	745675656	7.96	14723	1.000	-0.083	-0.012	0.057	0.090	274.656383	-13.977352	-1907.33	1162
5	GUIDE	used	745675904	9.19	14656	1.000	0.043	0.014	0.101	0.156	274.379684	-14.452468	-144.52	2029
6	GUIDE	used	745676944	8.90	14709	1.000	0.041	0.009	0.088	0.137	274.121102	-14.245583	180.70	905
7	GUIDE	used	745680576	8.68	14711	1.000	0.025	0.000	0.068	0.110	274.063292	-14.644899	1156.82	1980

2.4 Star Slots

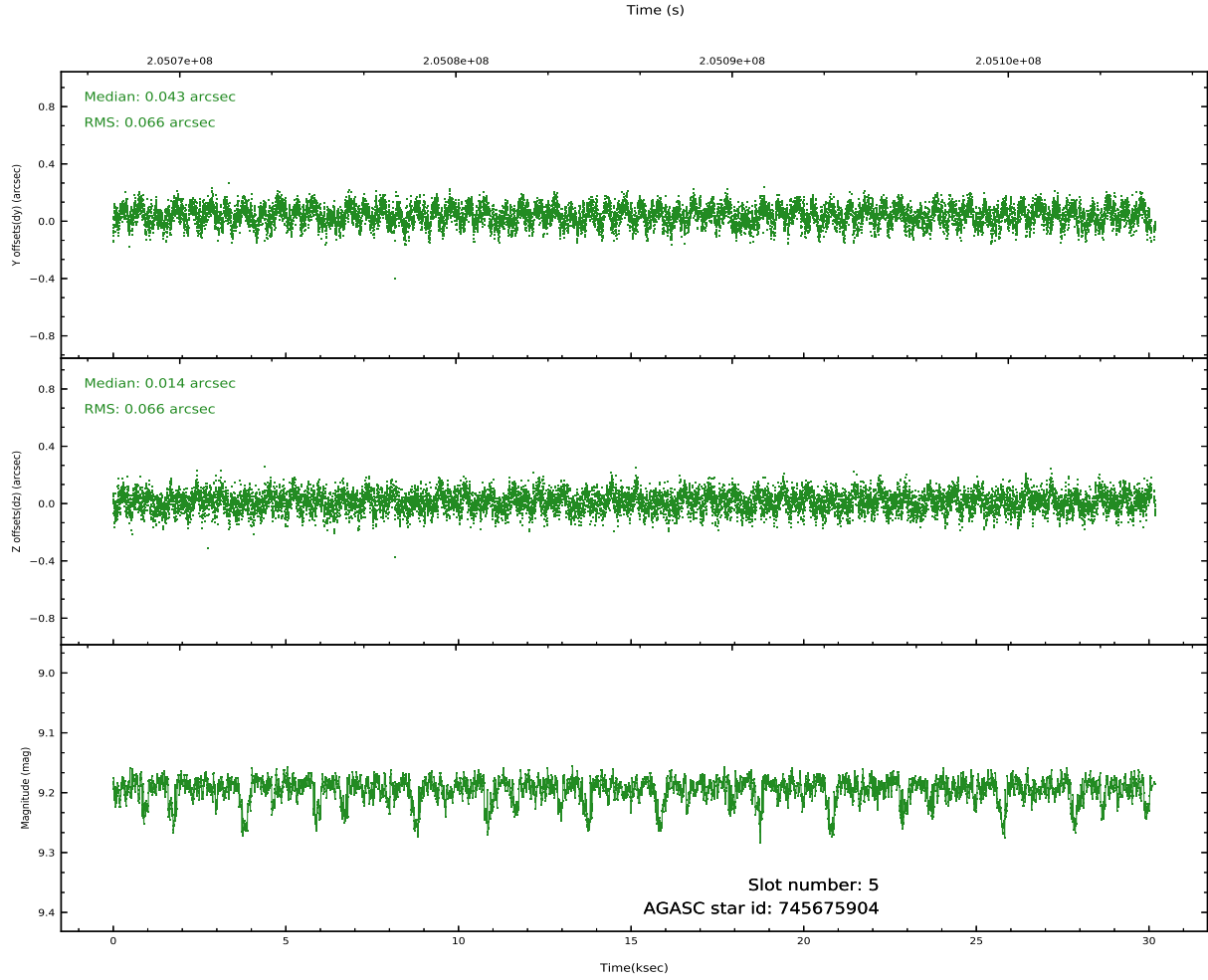
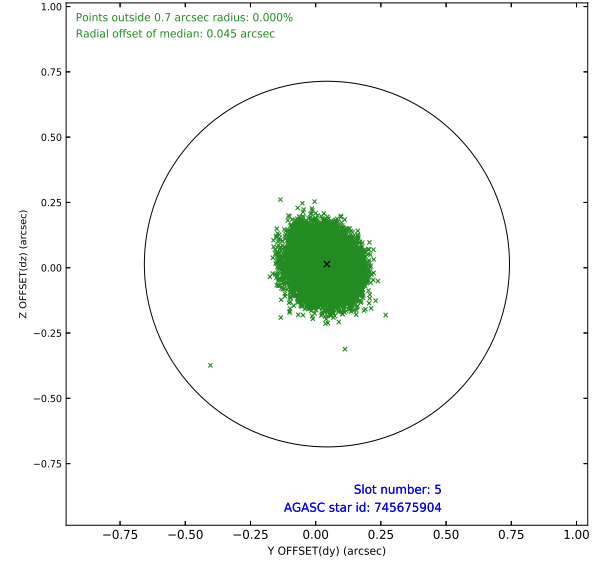
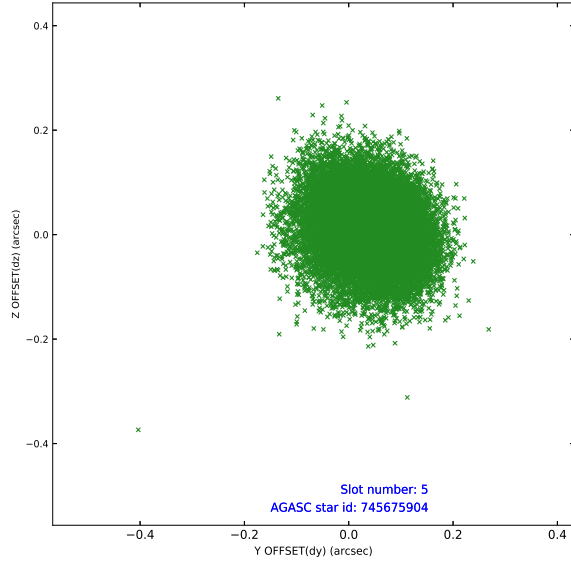
2.4.1 Slot 3



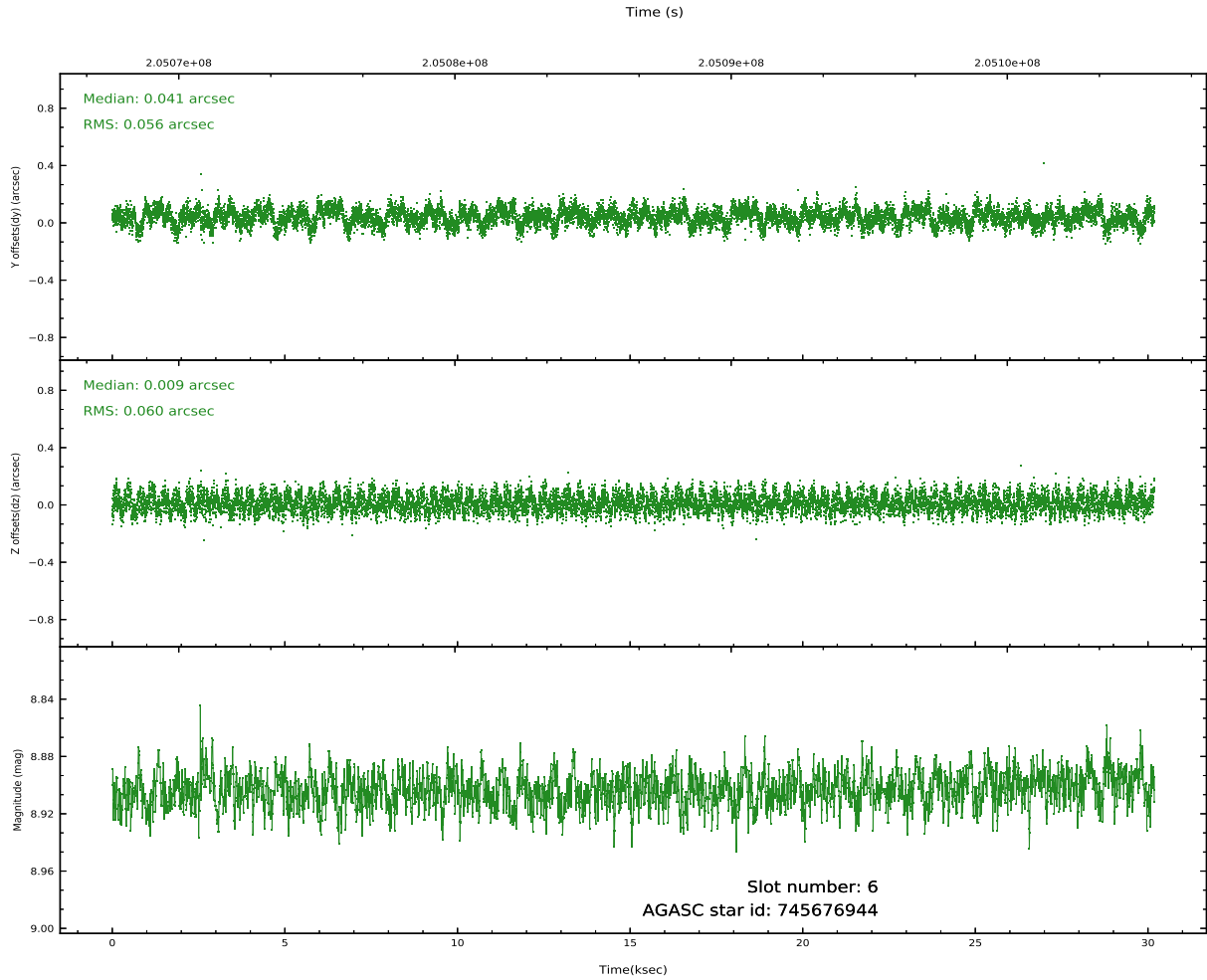
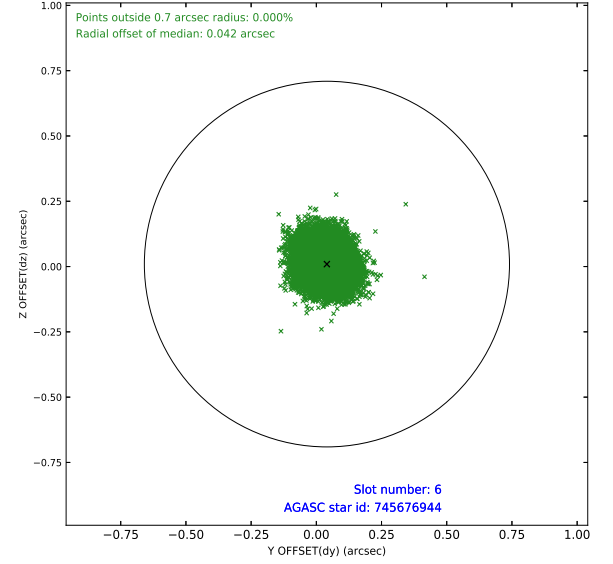
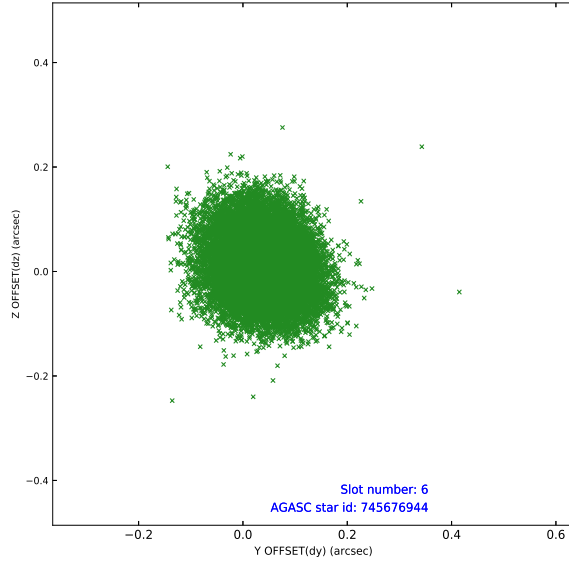
2.4.2 Slot 4



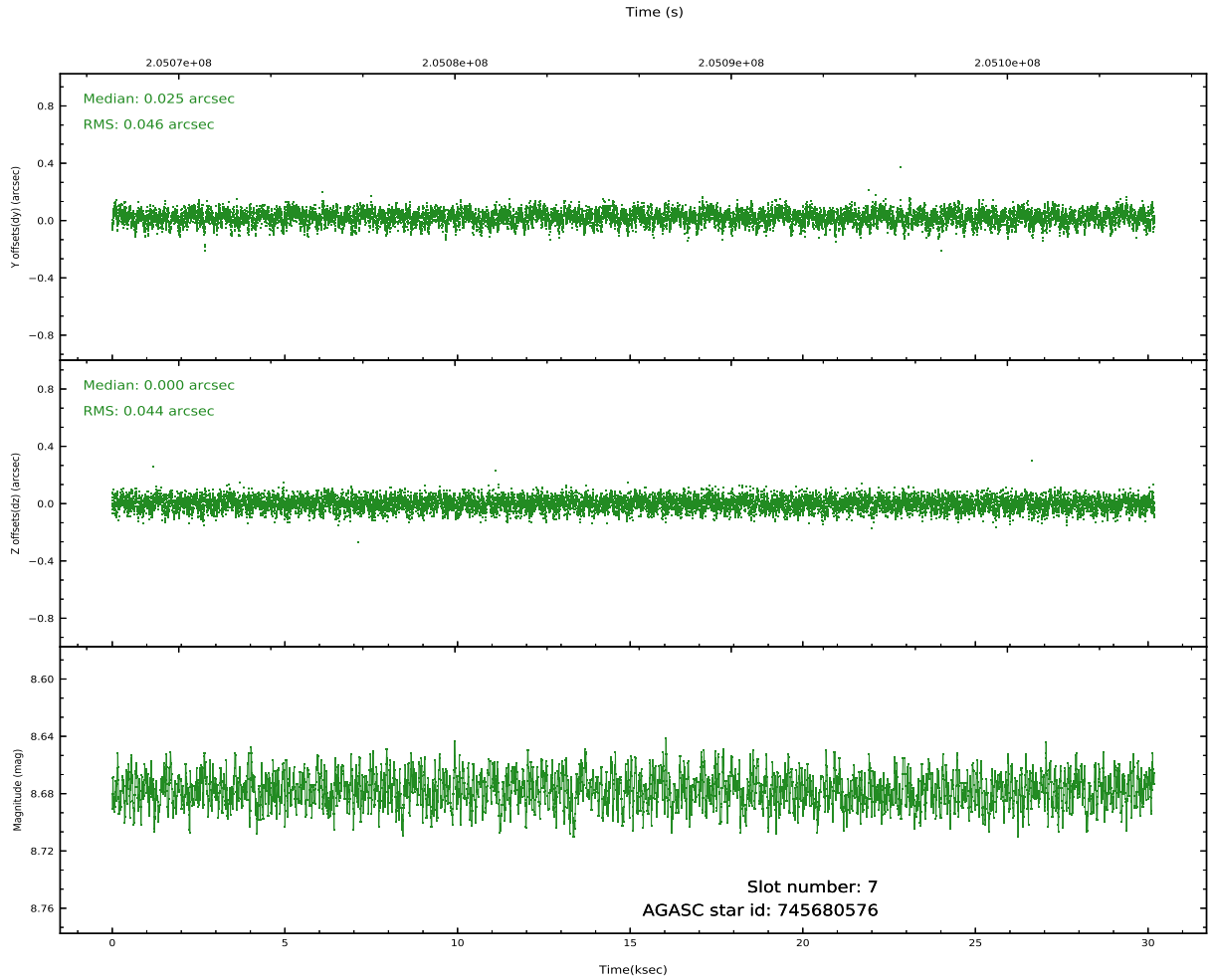
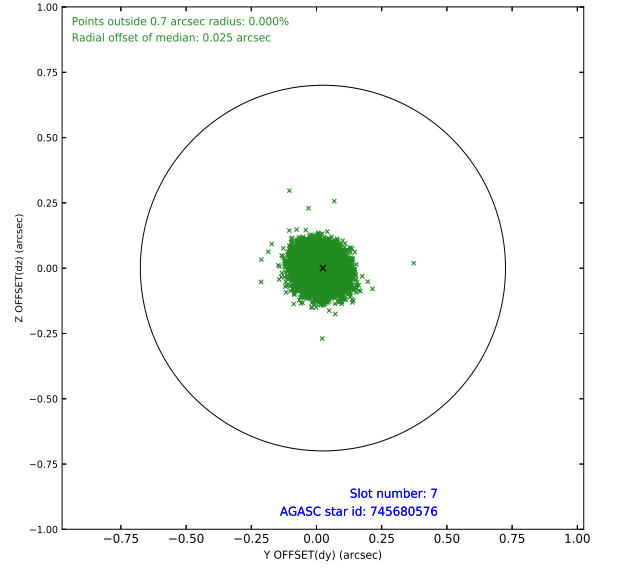
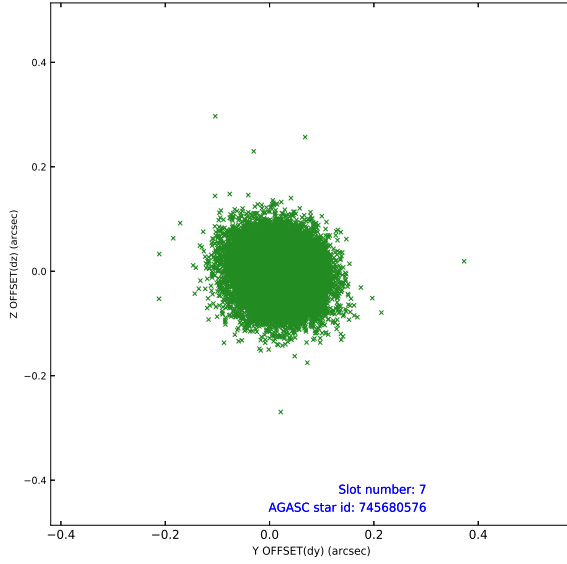
2.4.3 Slot 5



2.4.4 Slot 6

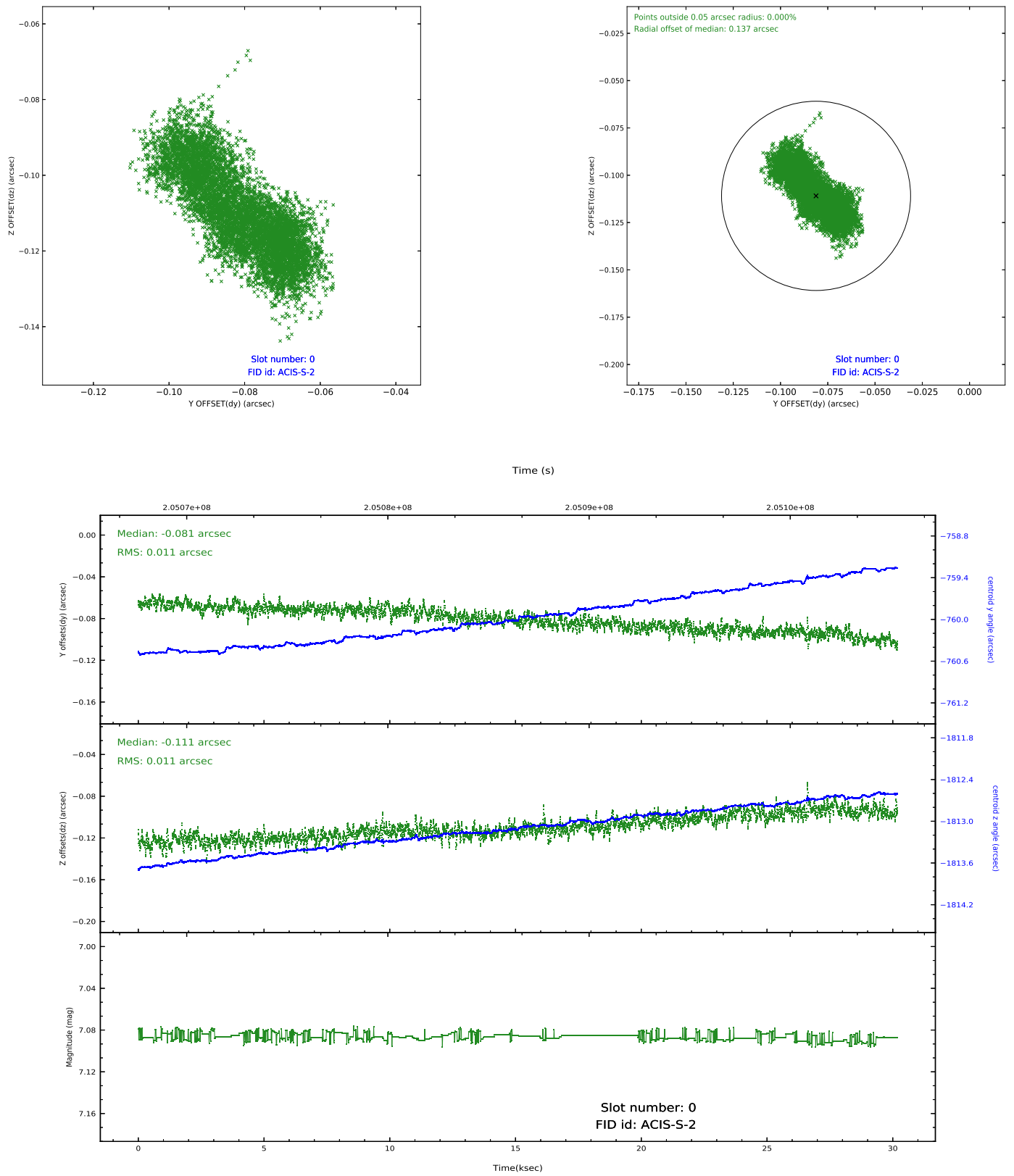


2.4.5 Slot 7

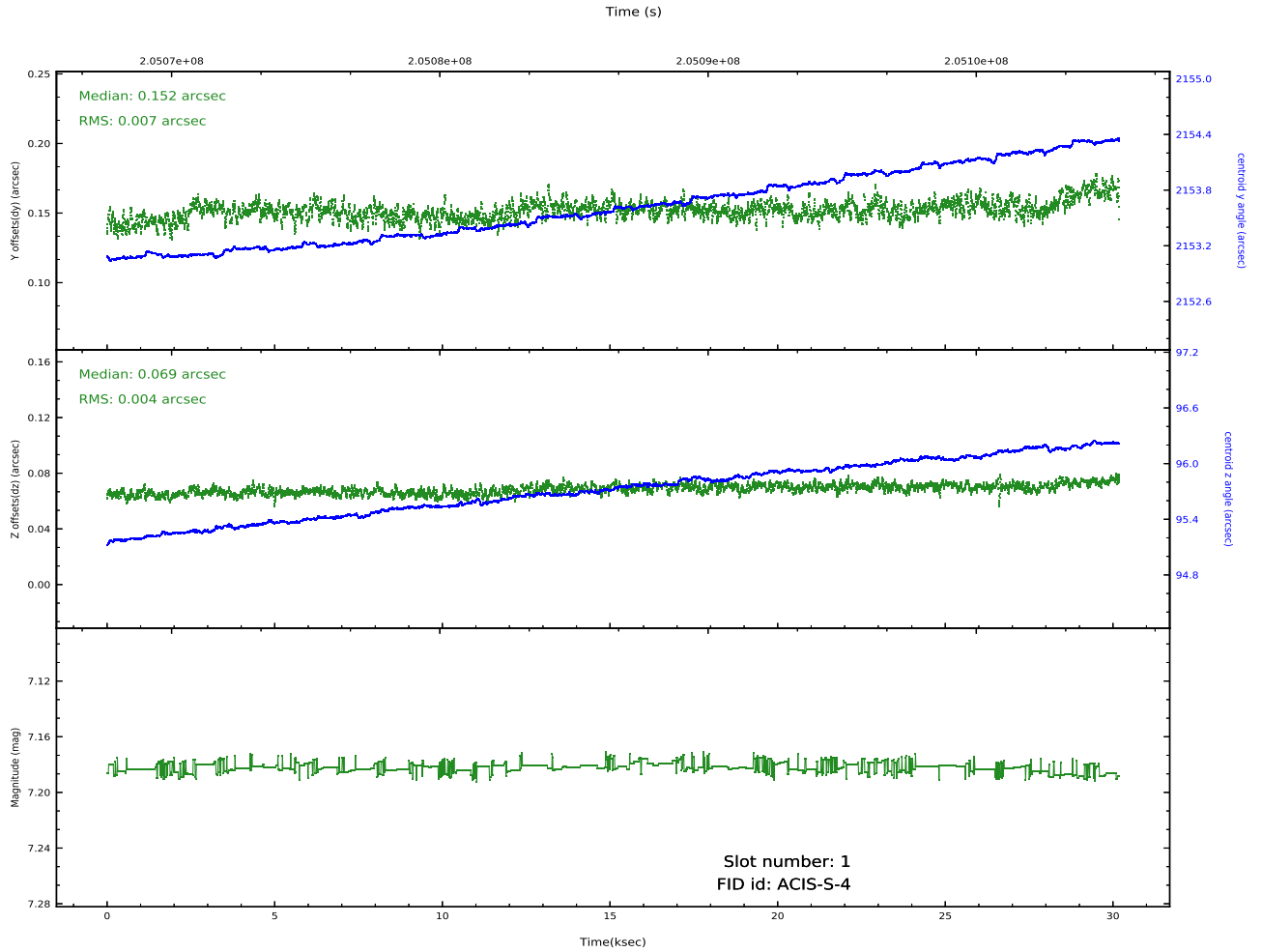
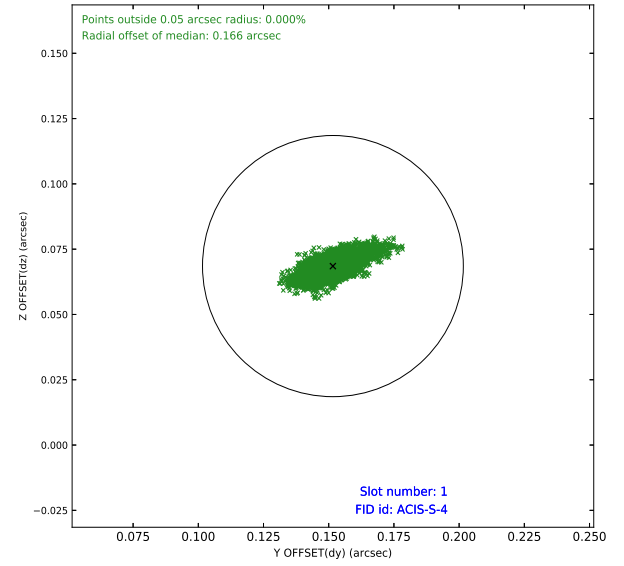
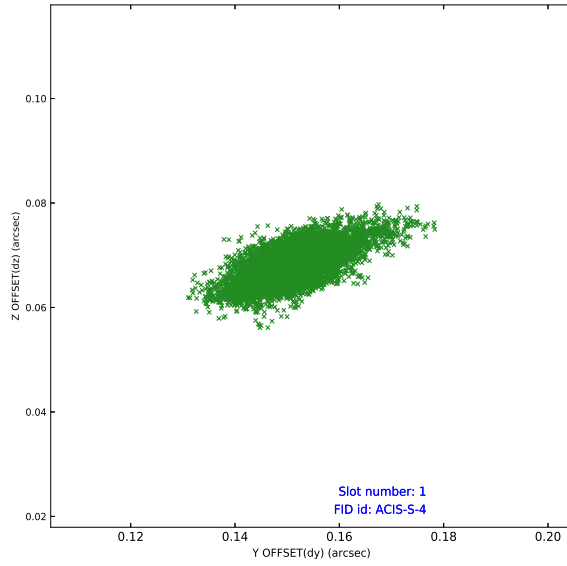


2.5 FID Slots

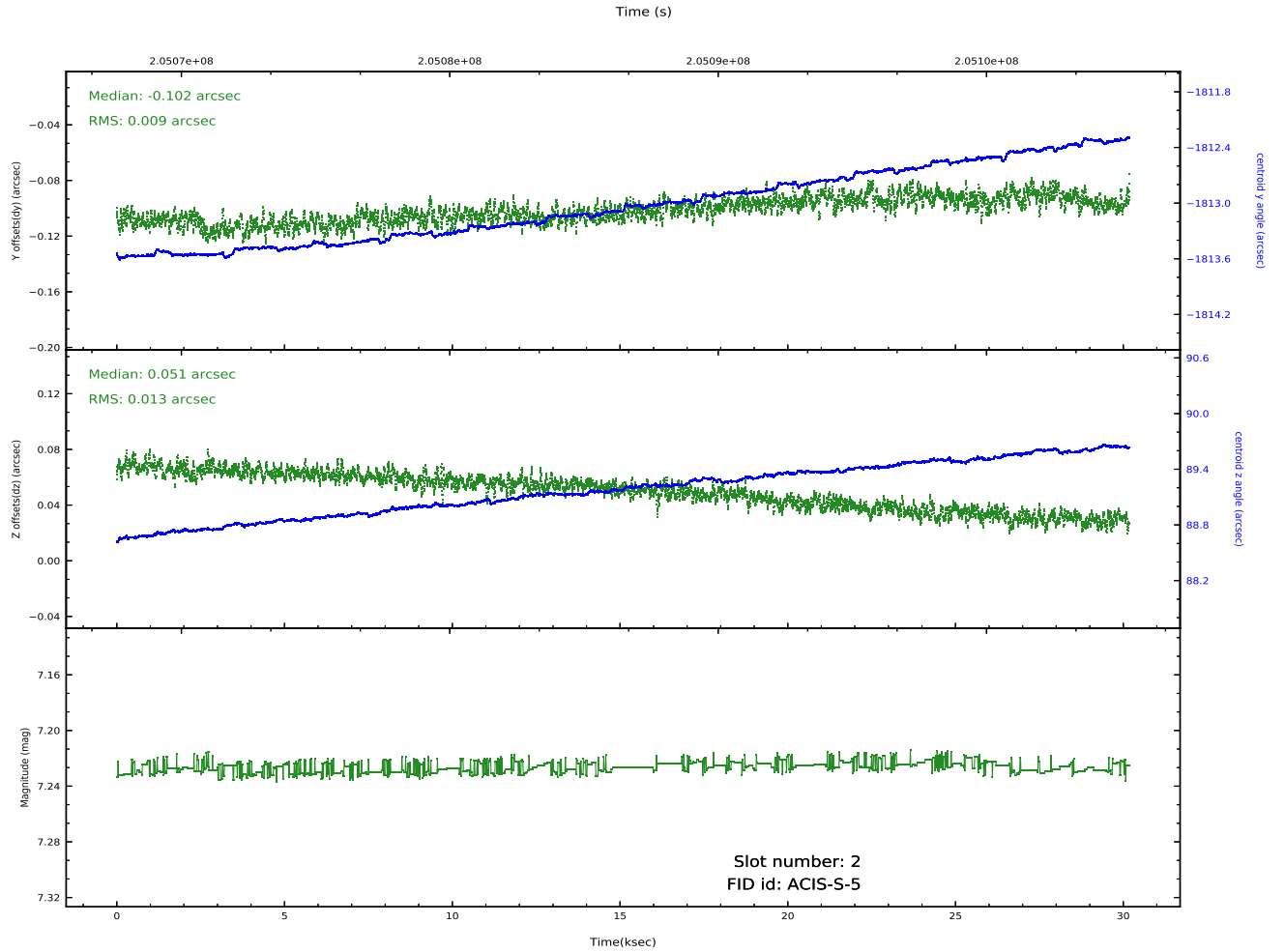
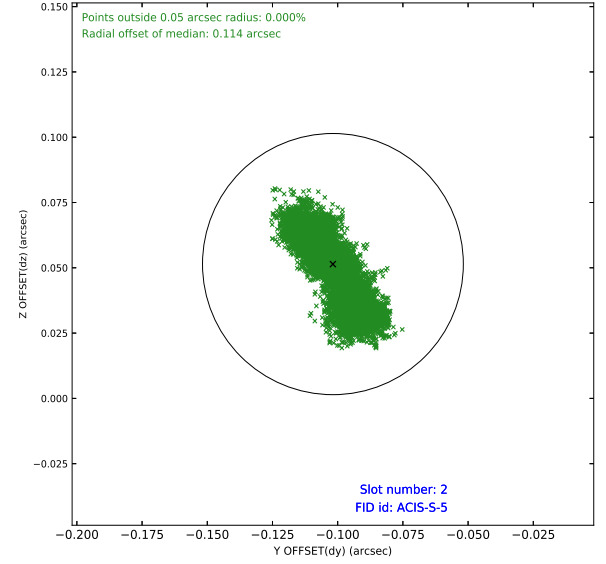
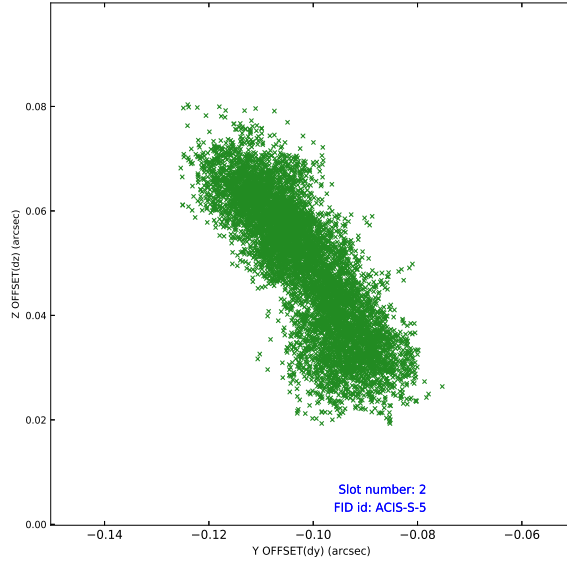
2.5.1 Slot 0



2.5.2 Slot 1

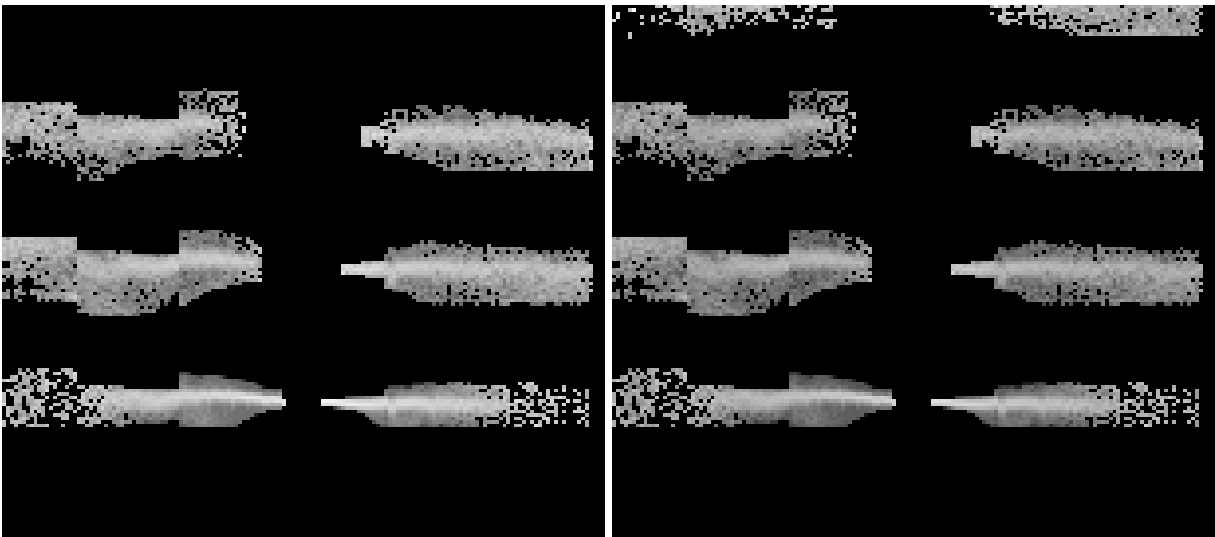


2.5.3 Slot 2



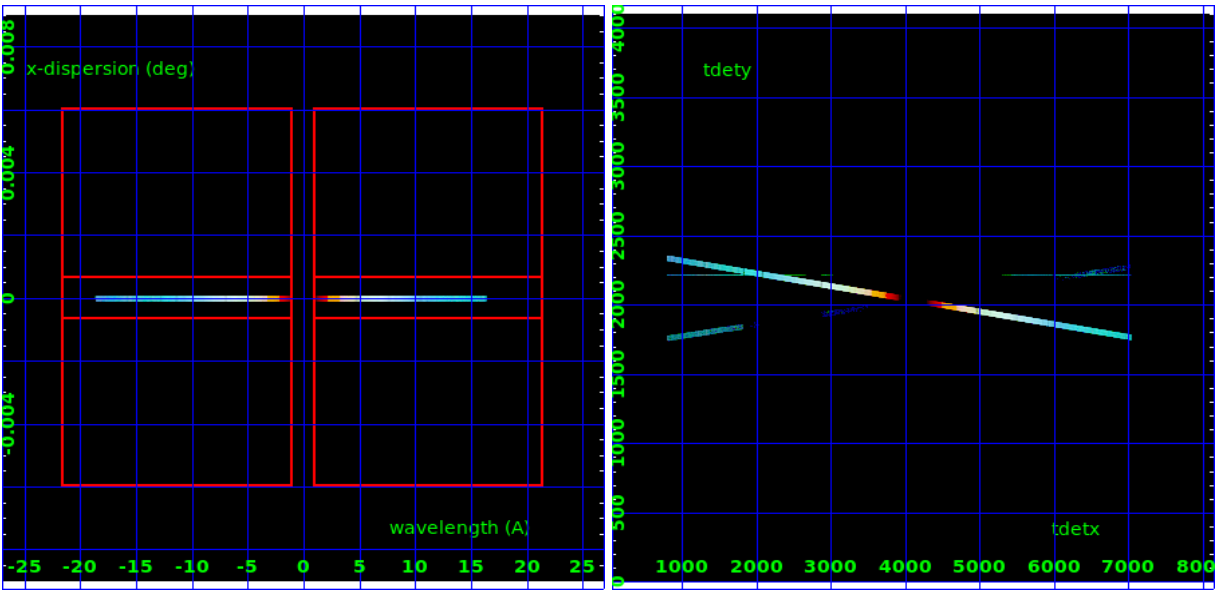
3 Gratings

3.1 HEG Arm



HEG Order Sort 123

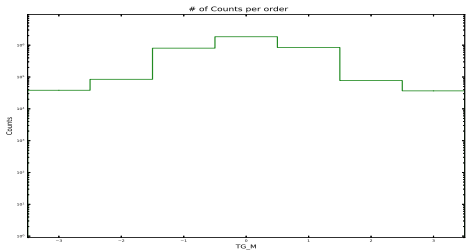
HEG Order Sort ALL

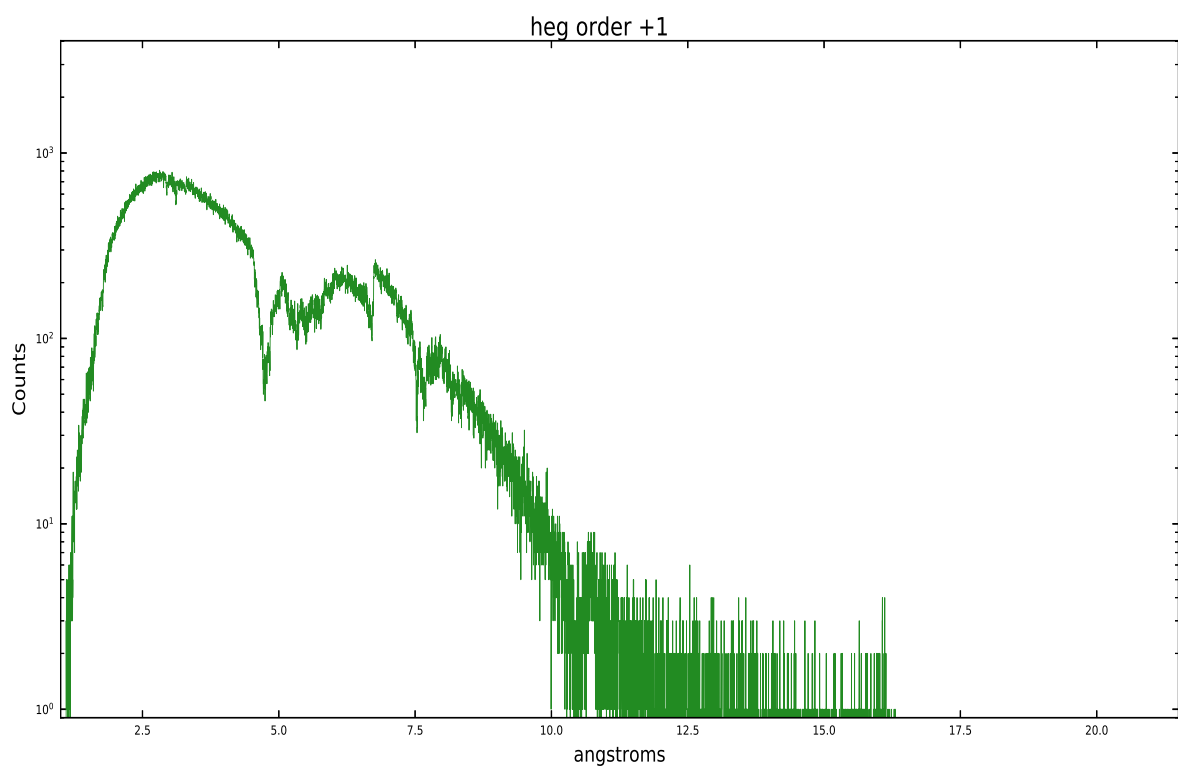
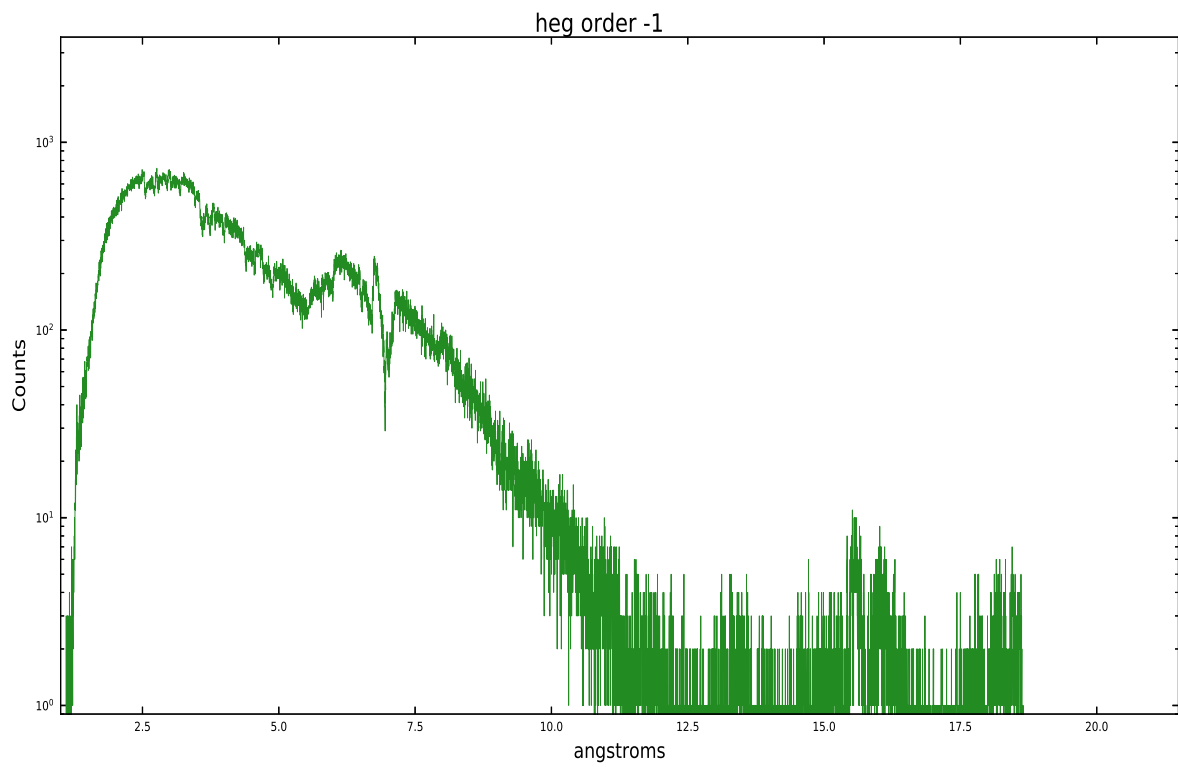


Spot Image HEG

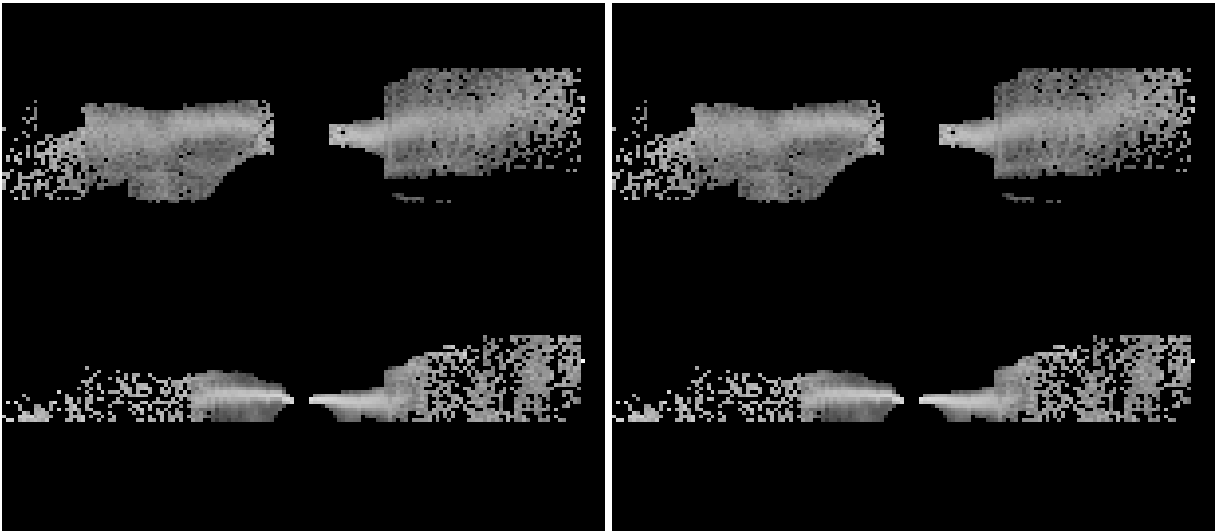
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	38314	84679	806622	1842791	845828	77263	36729



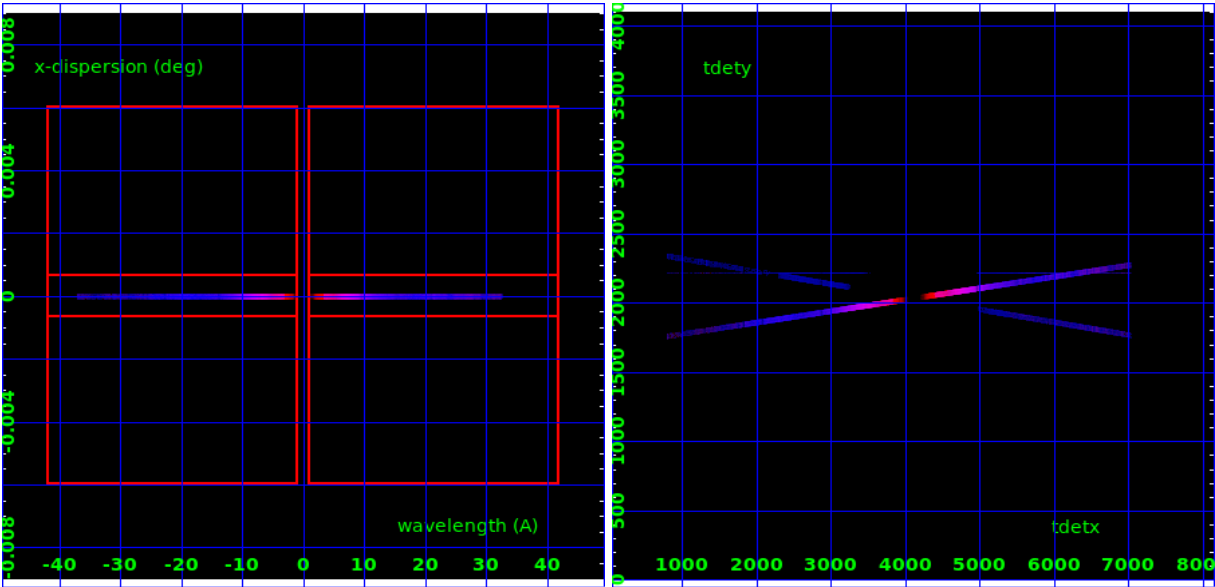


3.2 MEG Arm



MEG Order Sort 123

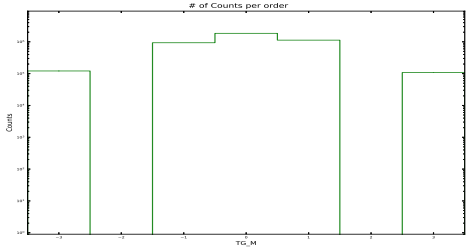
MEG Order Sort ALL

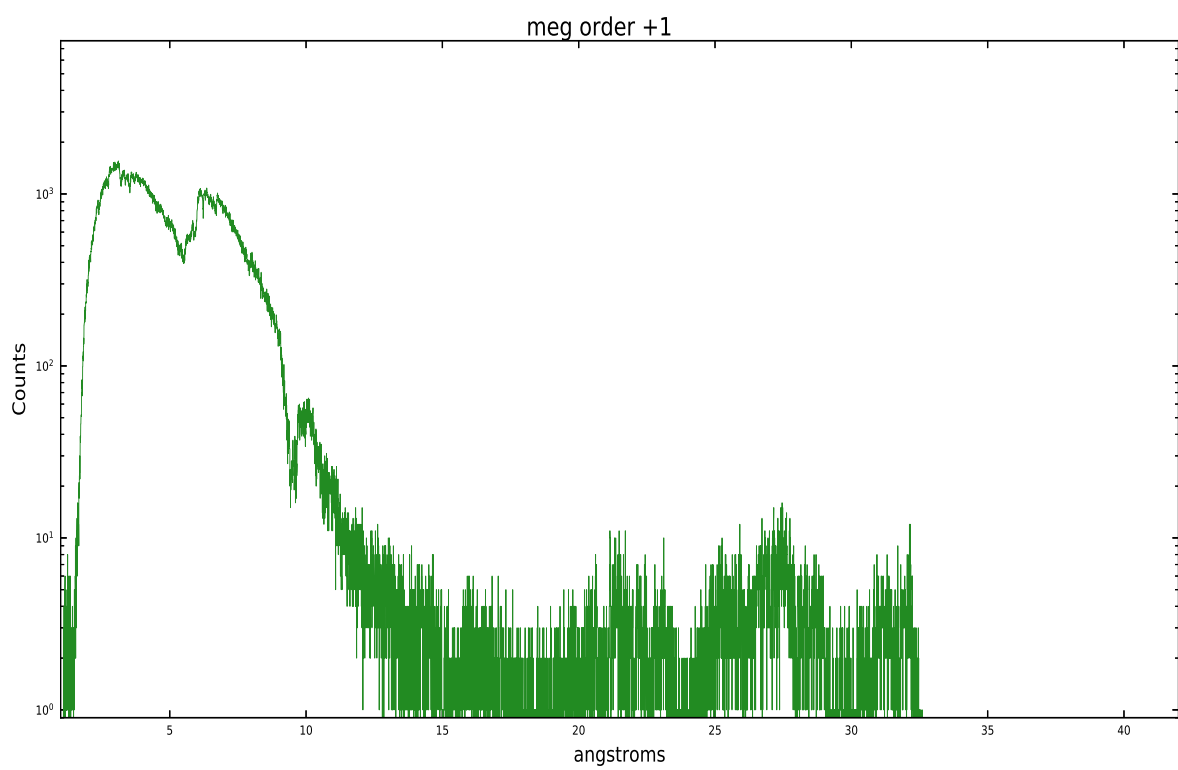
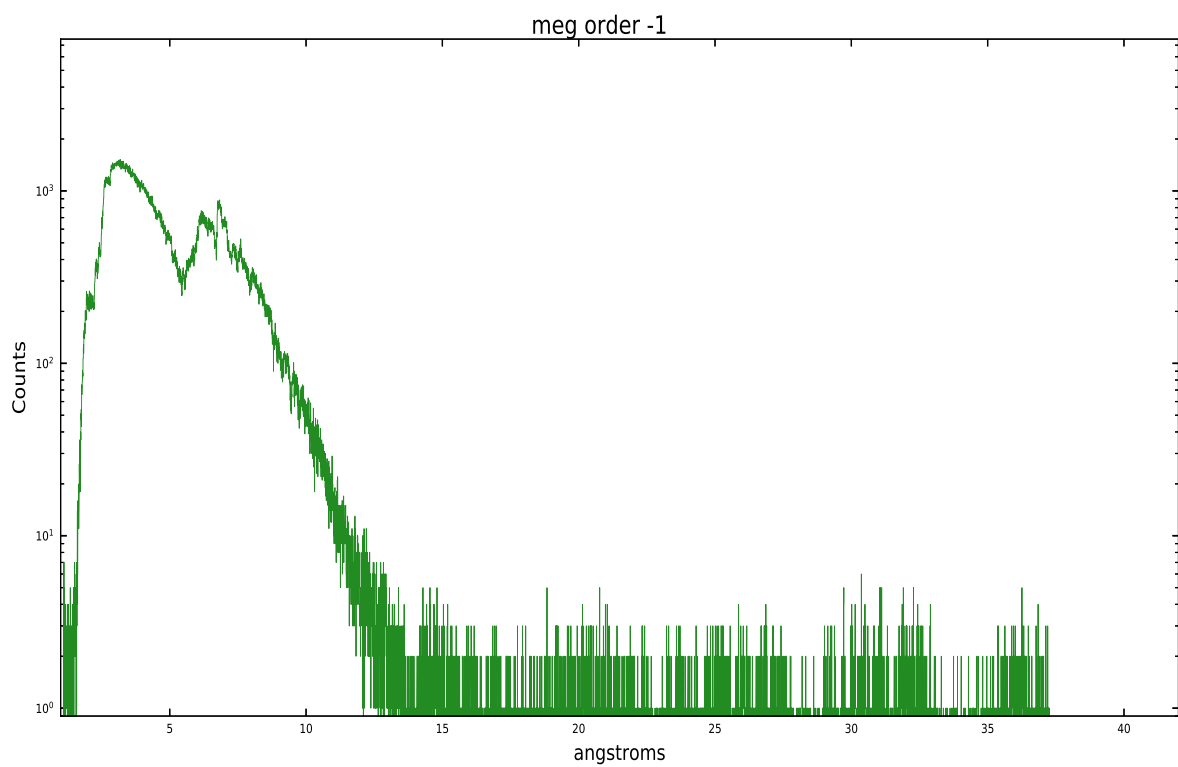


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	121267	0	934959	1842791	1126368	0	107970





A Summary

A.1 Status

V&V Scientist	Melania Nynka
V&V Date (YYYY-MM-DD)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.181

A.2 Comments