

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6090 - L2 Version 4
Chandra X-Ray Center

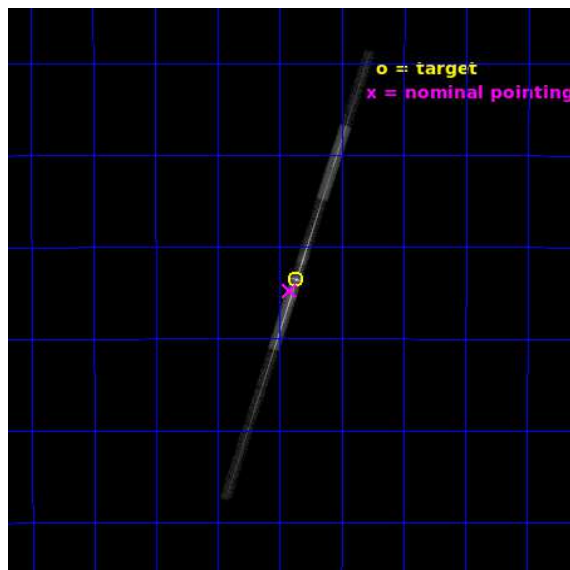
L2 Processing Date : Oct 8 2020

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1 Front

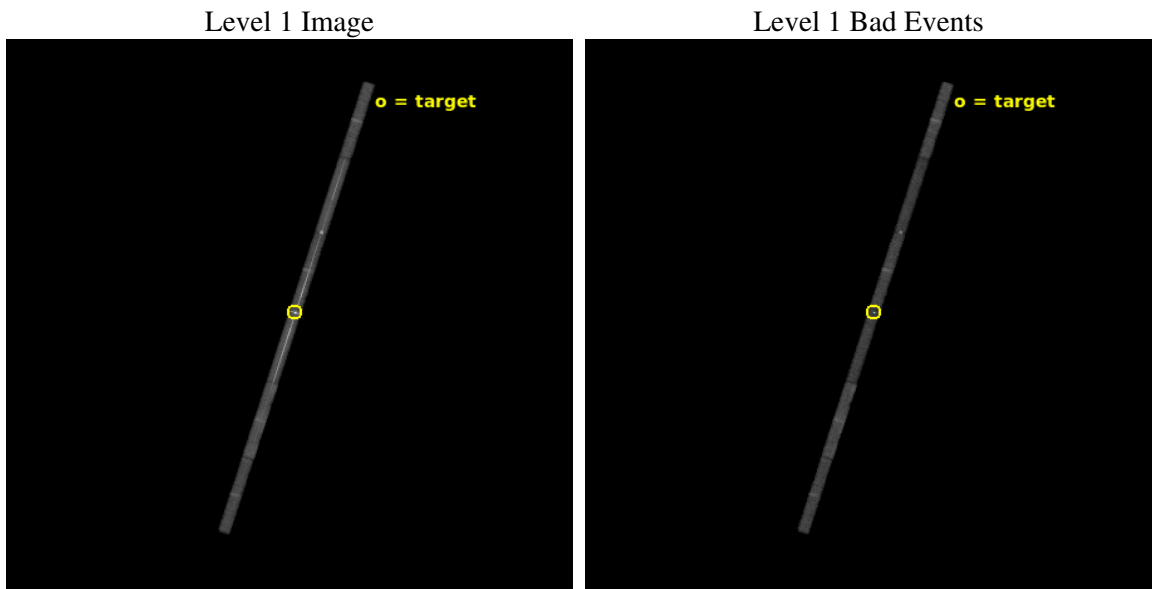
seq_num	790099	Sequence number
obs_id	6090	Observation id
title	AO6 Calibration Observations of PKS2155-304	Proposal title
observer	CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.72929957002	Nominal RA [deg]
dec_nom	-30.246151542453	Nominal Dec [deg]
roll_nom	107.21871970633	Nominal Roll [deg]
revision	4	Processing version of data
ontime	29140.299503744	Sum of GTIs [s]
livetime	27526.462340252	Livetime [s]
ontime4	29140.299503744	Sum of GTIs [s]
ontime5	29140.299503744	Sum of GTIs [s]
ontime6	29140.299503744	Sum of GTIs [s]
ontime7	29140.299503744	Sum of GTIs [s]
ontime8	29140.299503744	Sum of GTIs [s]
ontime9	29140.299503744	Sum of GTIs [s]
l2events	211925	Number of level 2 events



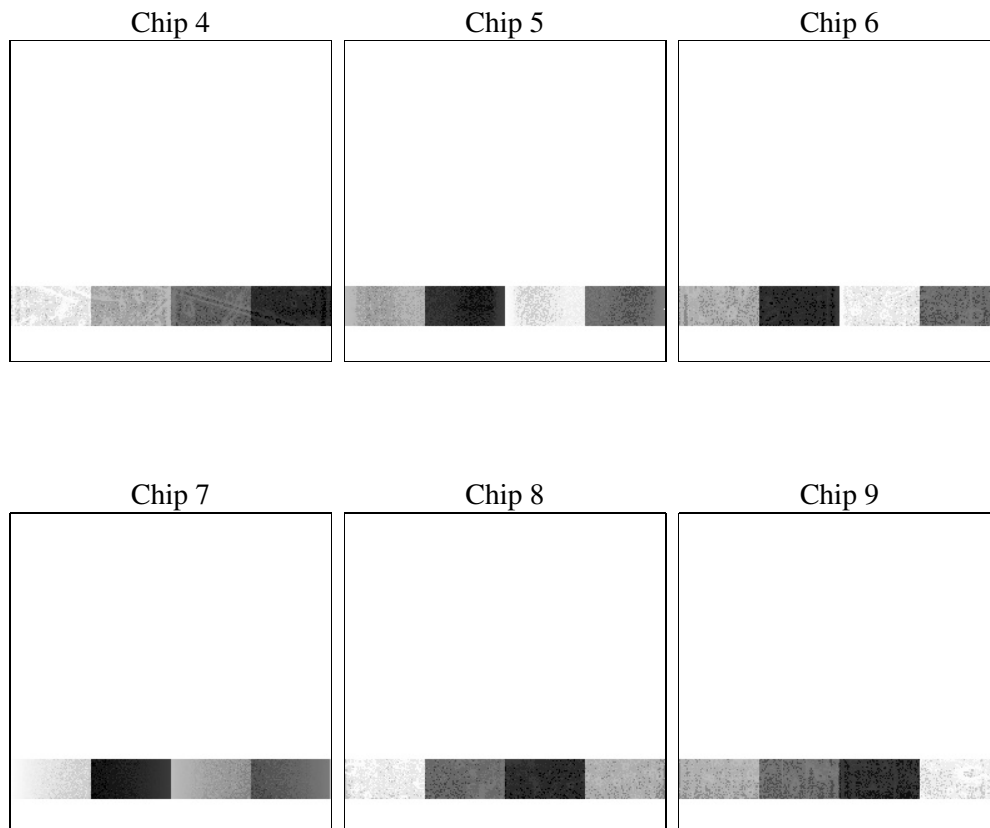
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	29140.299503744	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	29140.299503744	Sum of GTIs [s]
date	2020-10-08T13:13:54	Date and time of file creation	ontime5	29140.299503744	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	29140.299503744	Sum of GTIs [s]
			ontime7	29140.299503744	Sum of GTIs [s]
			ontime8	29140.299503744	Sum of GTIs [s]
			ontime9	29140.299503744	Sum of GTIs [s]
			l1events	448486	Number of level 1 events
			tgmethod	FINDZO	Method used to create src1a file
			z0_pos	(4174.53, 4247.16)	src1a sky pixel position

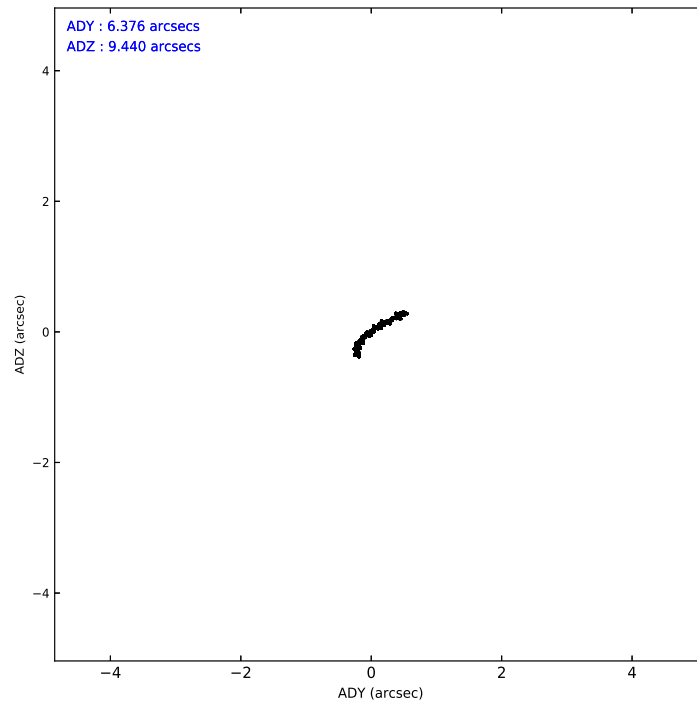
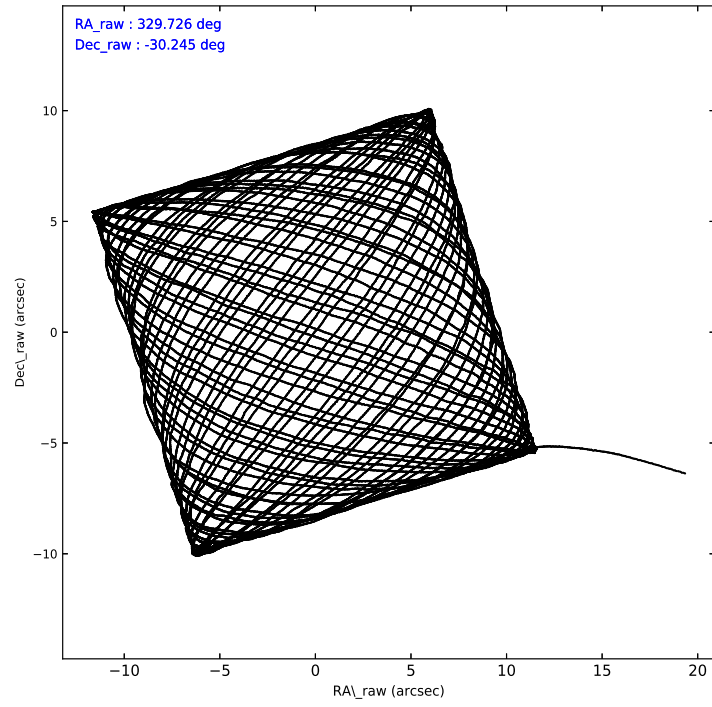
2.1.4 Events

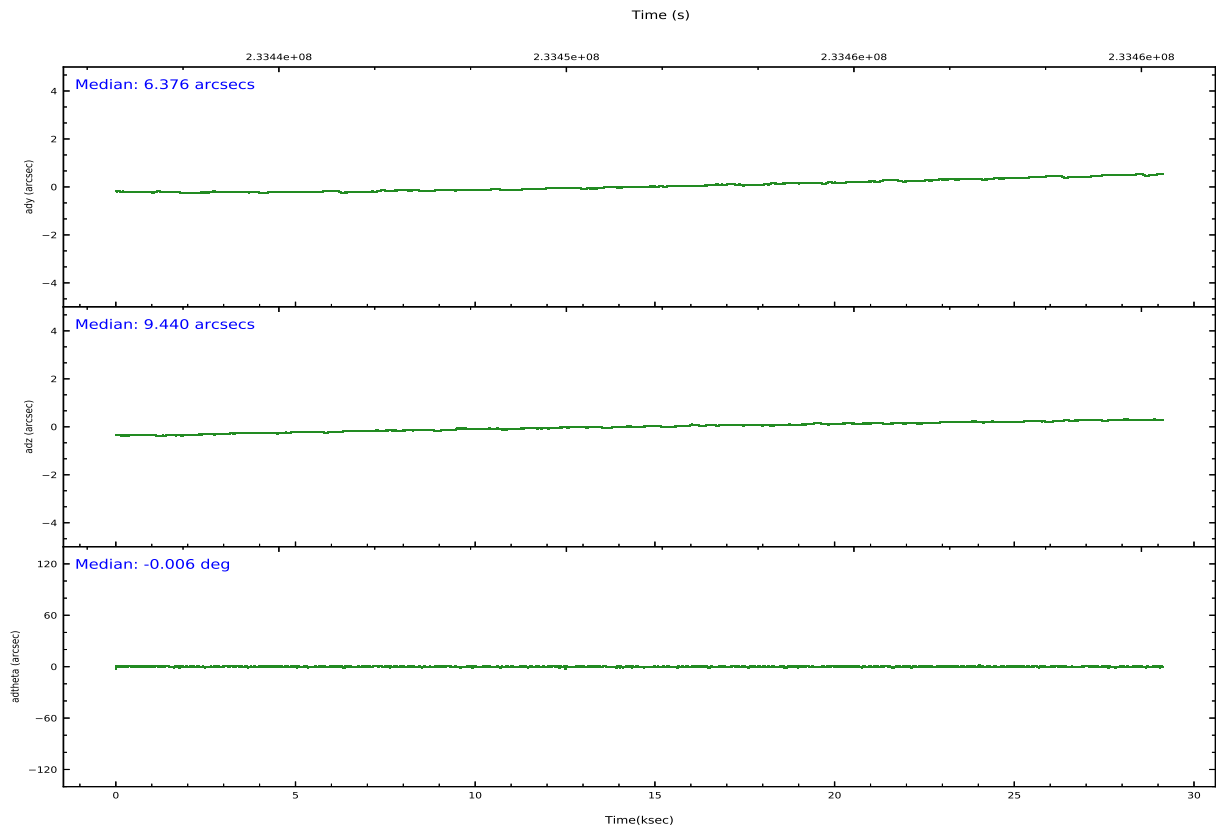
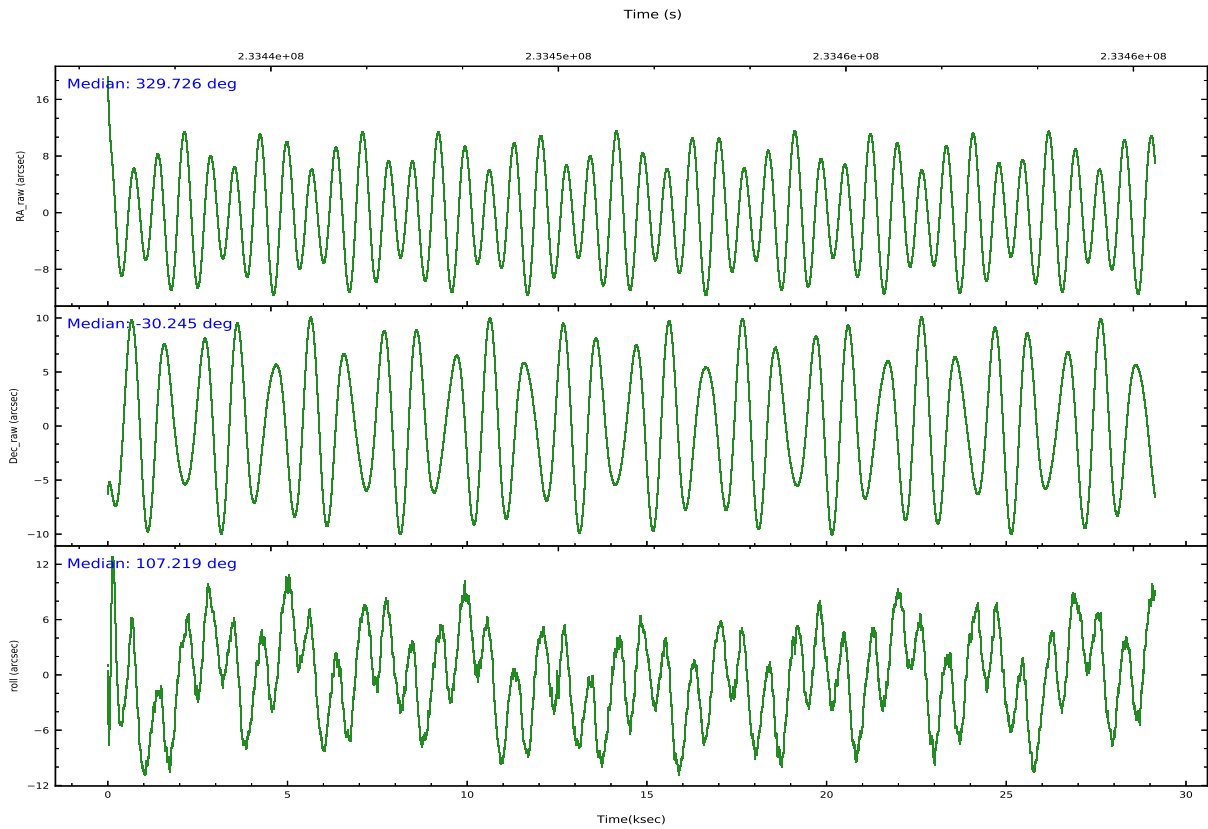
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	45298	67947	79088	163985	56247	35921	grade 0 events	2924	15263	35960	31484	6050	2715
rejected events	39342	28185	33699	44018	42751	30430		6%	22%	45%	19%	10%	7%
rejected %	86%	41%	42%	26%	76%	84%	grade 1 events	7	1500	94	1562	24	11
								0%	2%	0%	0%	0%	0%
							grade 2 events	1031	8457	4634	29261	2219	845
								2%	12%	5%	17%	3%	2%
							grade 3 events	761	2849	1890	13651	1393	690
								1%	4%	2%	8%	2%	1%
							grade 4 events	708	3503	1836	13233	1319	728
								1%	5%	2%	8%	2%	2%
							grade 5 events	1205	5199	1232	9726	1732	1313
								2%	7%	1%	5%	3%	3%
							grade 6 events	795	11910	1504	33716	3035	742
								1%	17%	1%	20%	5%	2%
							grade 7 events	37867	19266	31938	31352	40475	28877
								83%	28%	40%	19%	71%	80%

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	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	329.749062	329.72929957002	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-30.263341	-30.246151542453	Subarray start row	113	113
[deg] Pointing Roll	107.071084	107.21871970633	Subarray row count	128	128
[s] Window start time (MET)	226022464.184000	226022464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	239155264.184000	239155264.184000	[s] Primary exposure time	0.000000	0.7
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.132523	-182.139514760308			
[mm] SIM translation stage offset	-8	-7.993007822699838			
[s] Observation start time (MET)	233435603.184000	233433865.81662			
Observation start date	2005-05-25T19:12:19	2005-05-25T18:44:25			
[s] Observation end time (MET)	233464603.184000	233466445.95561			
Observation end date	2005-05-26T03:15:39	2005-05-26T03:47:25			
Read mode	TIMED	TIMED			

2.3 Aspect





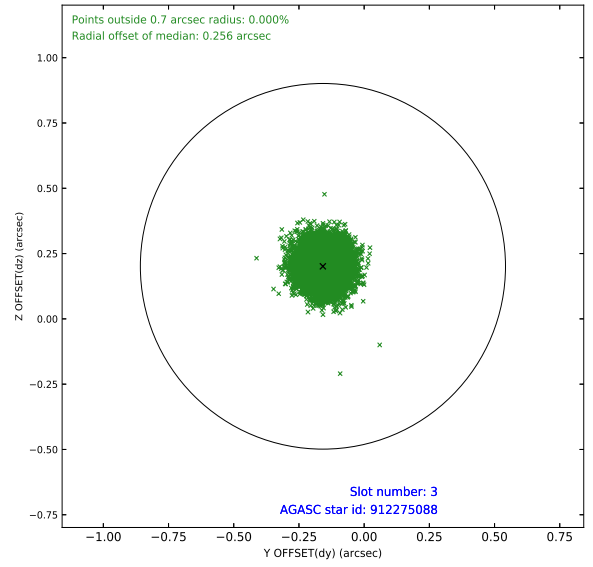
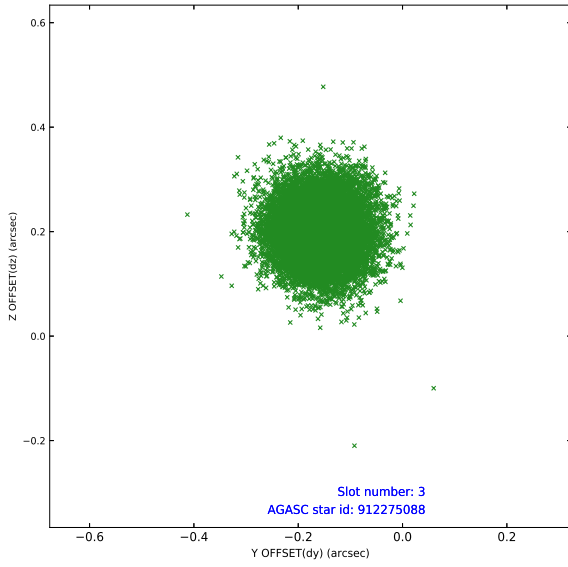
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	7108	1.000	0.038	0.074	0.012	0.018	0.000000	0.000000	937.52	-1890
1	FID		ACIS-S-5	7.23	7107	1.000	-0.150	0.031	0.010	0.017	0.000000	0.000000	-1811.65	6
2	FID		ACIS-S-6	7.41	7107	1.000	0.090	-0.093	0.015	0.024	0.000000	0.000000	403.01	650
3	GUIDE	used	912275088	9.07	14213	1.000	-0.158	0.201	0.073	0.120	329.619228	-29.738698	1924.65	-165
4	GUIDE	used	912276032	9.62	14208	1.000	-0.045	-0.164	0.090	0.148	329.395967	-29.803466	1905.13	568
5	GUIDE	used	981468128	9.35	14208	1.000	0.221	0.158	0.092	0.159	329.756350	-30.158334	355.34	-132
6	GUIDE	used	981469488	9.59	14206	1.000	-0.079	-0.101	0.111	0.174	329.261199	-30.045155	1194.24	1223
7	GUIDE	used	981478152	9.39	14203	1.000	0.063	-0.095	0.099	0.159	329.415589	-30.057192	1013.49	776

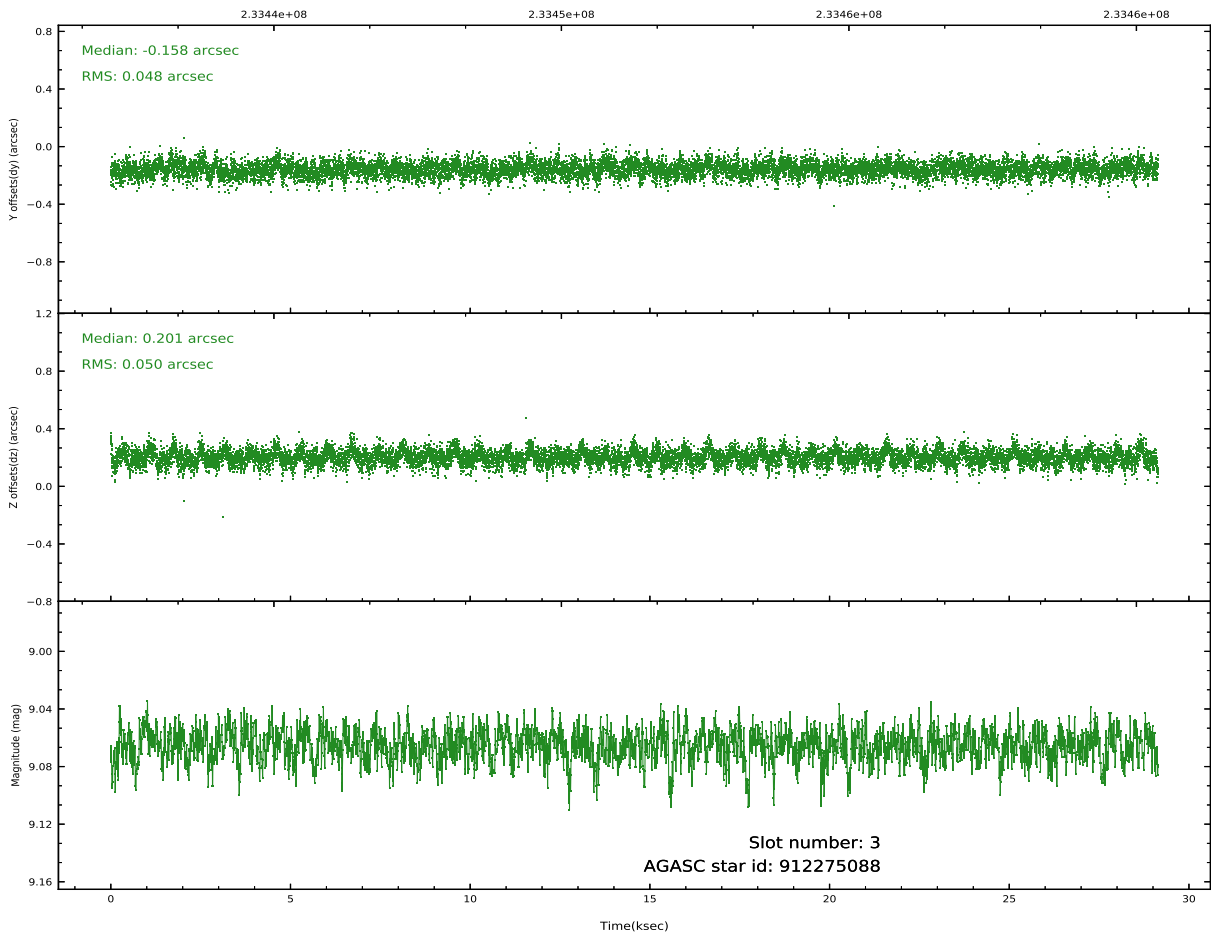
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2.4 Star Slots

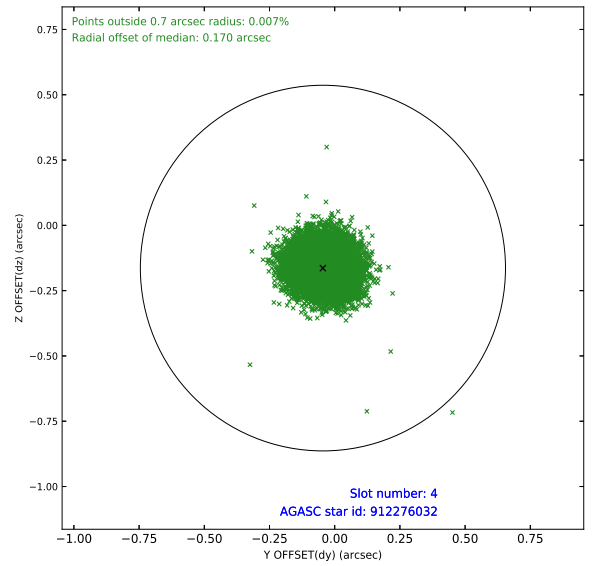
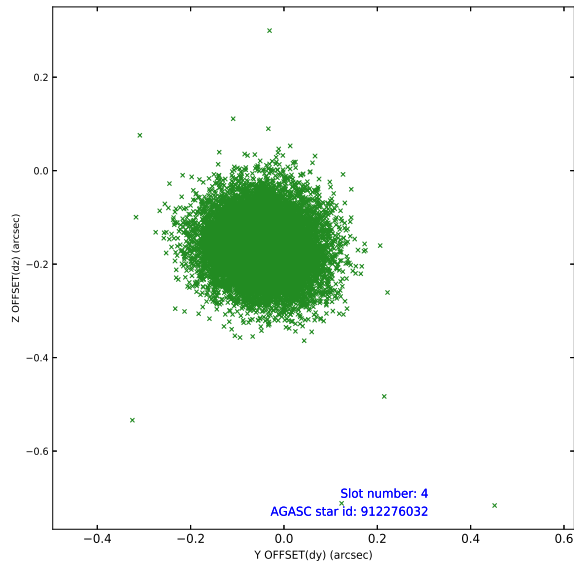
2.4.1 Slot 3



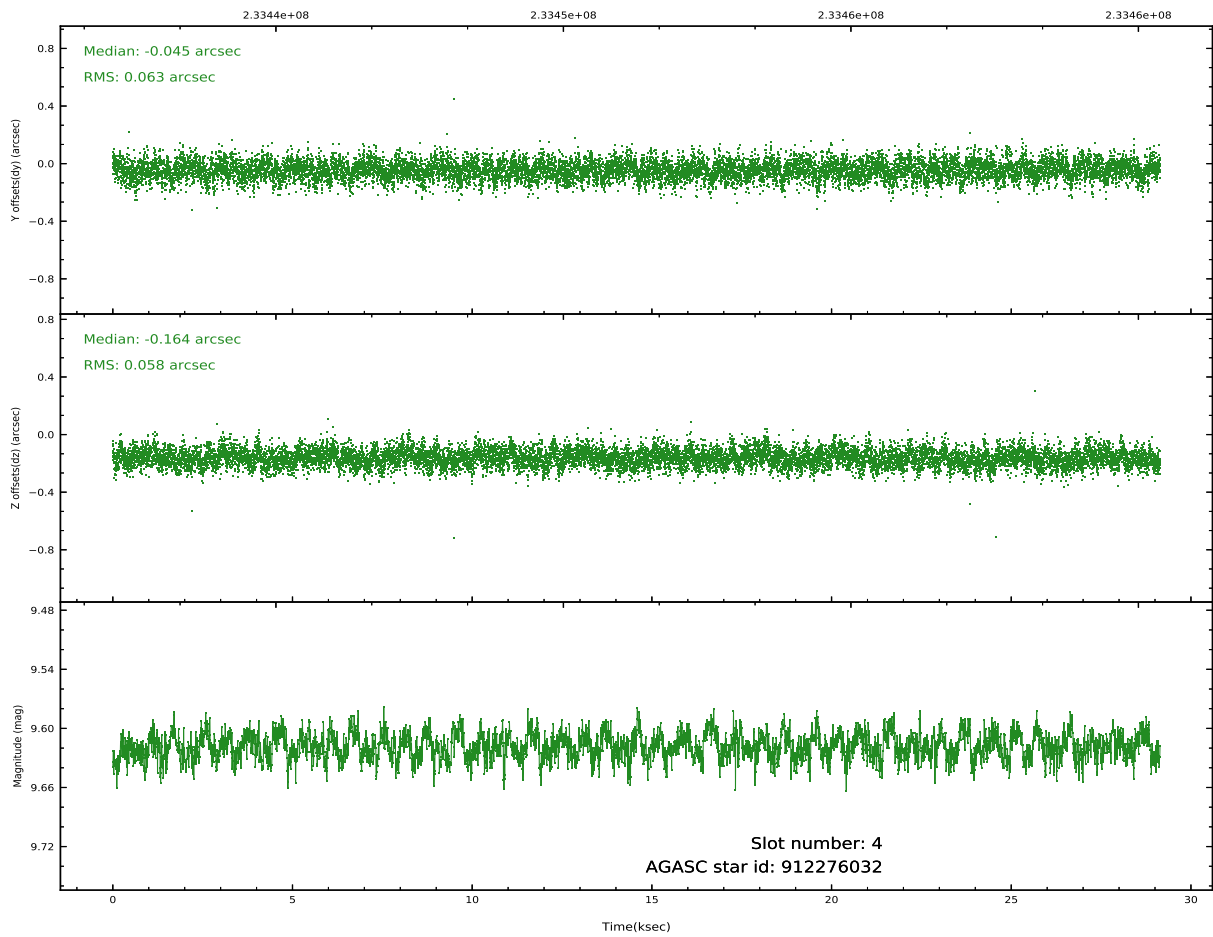
Time (s)



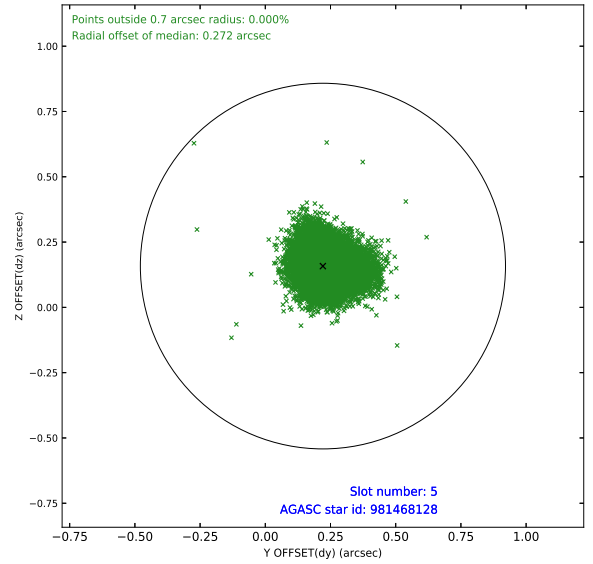
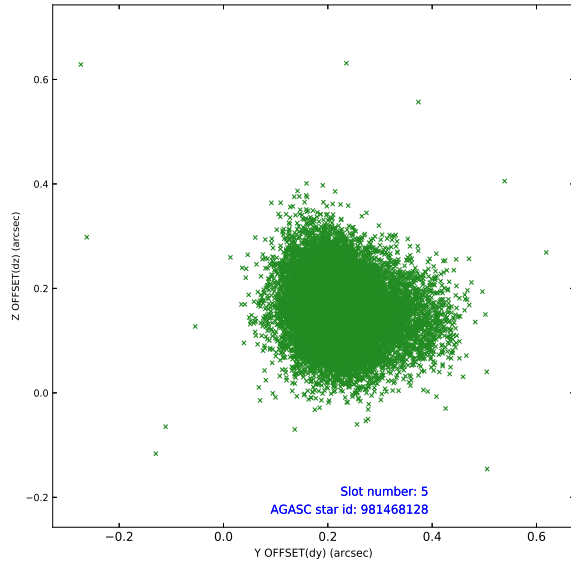
2.4.2 Slot 4



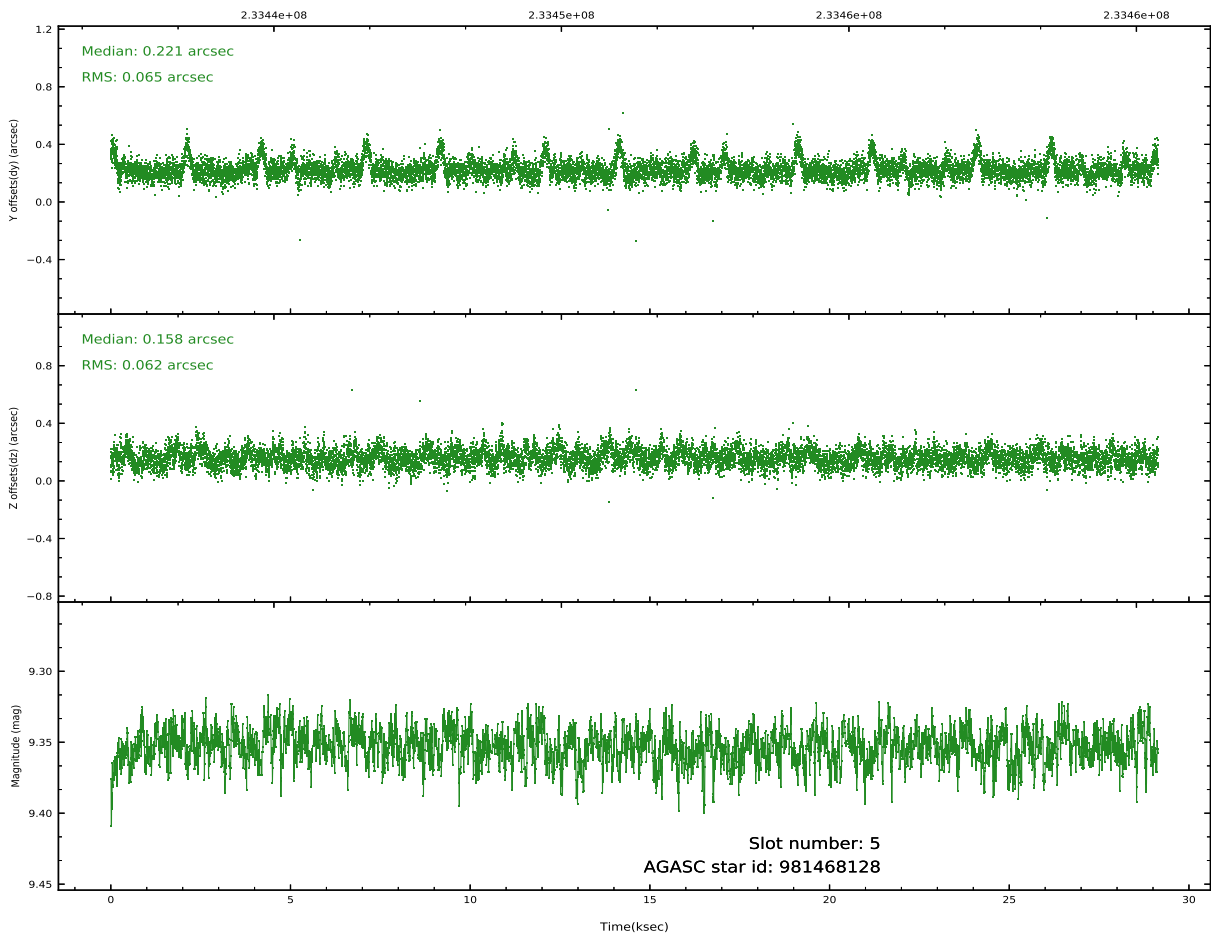
Time (s)



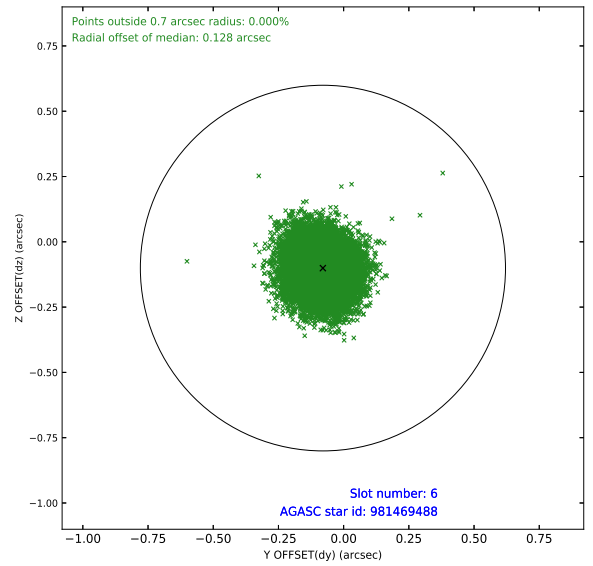
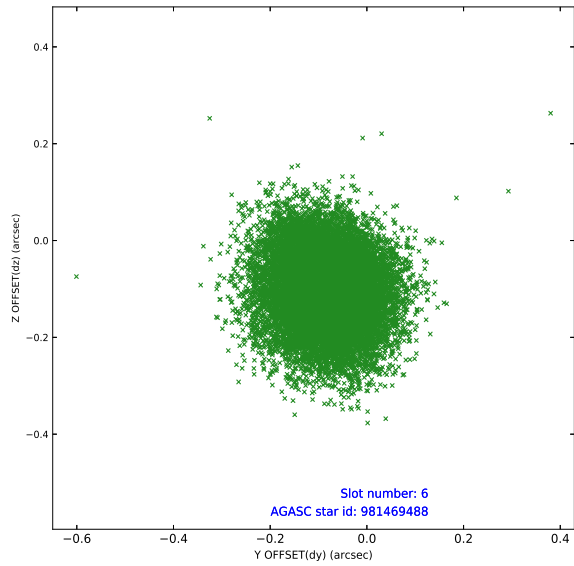
2.4.3 Slot 5



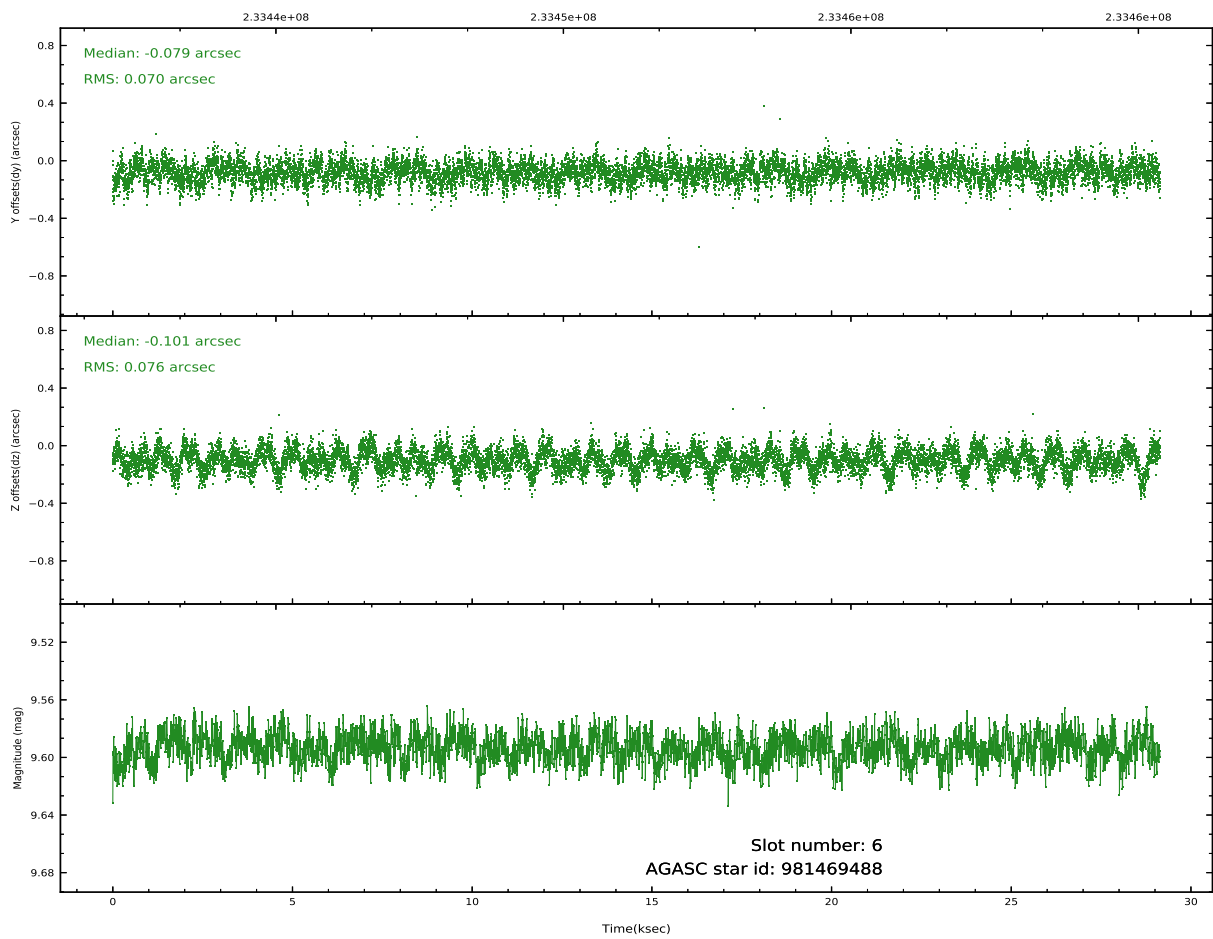
Time (s)



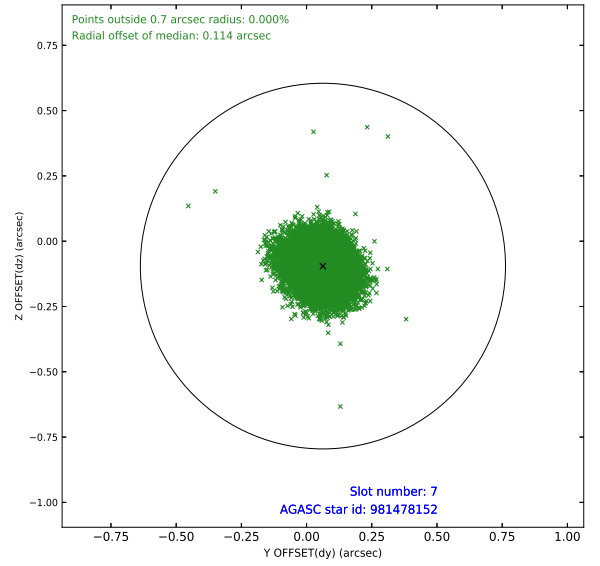
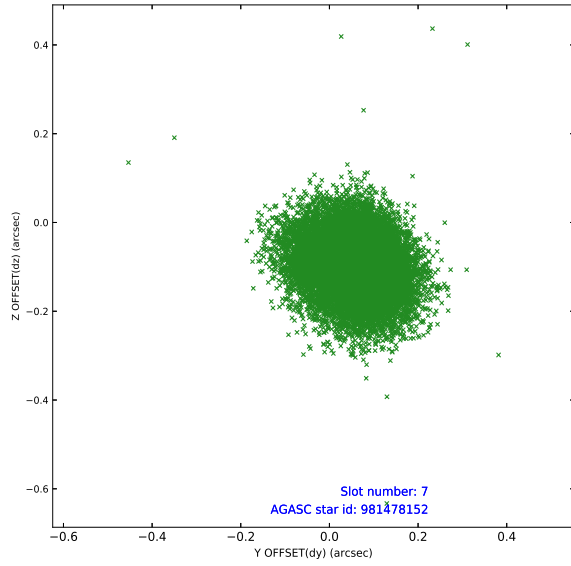
2.4.4 Slot 6



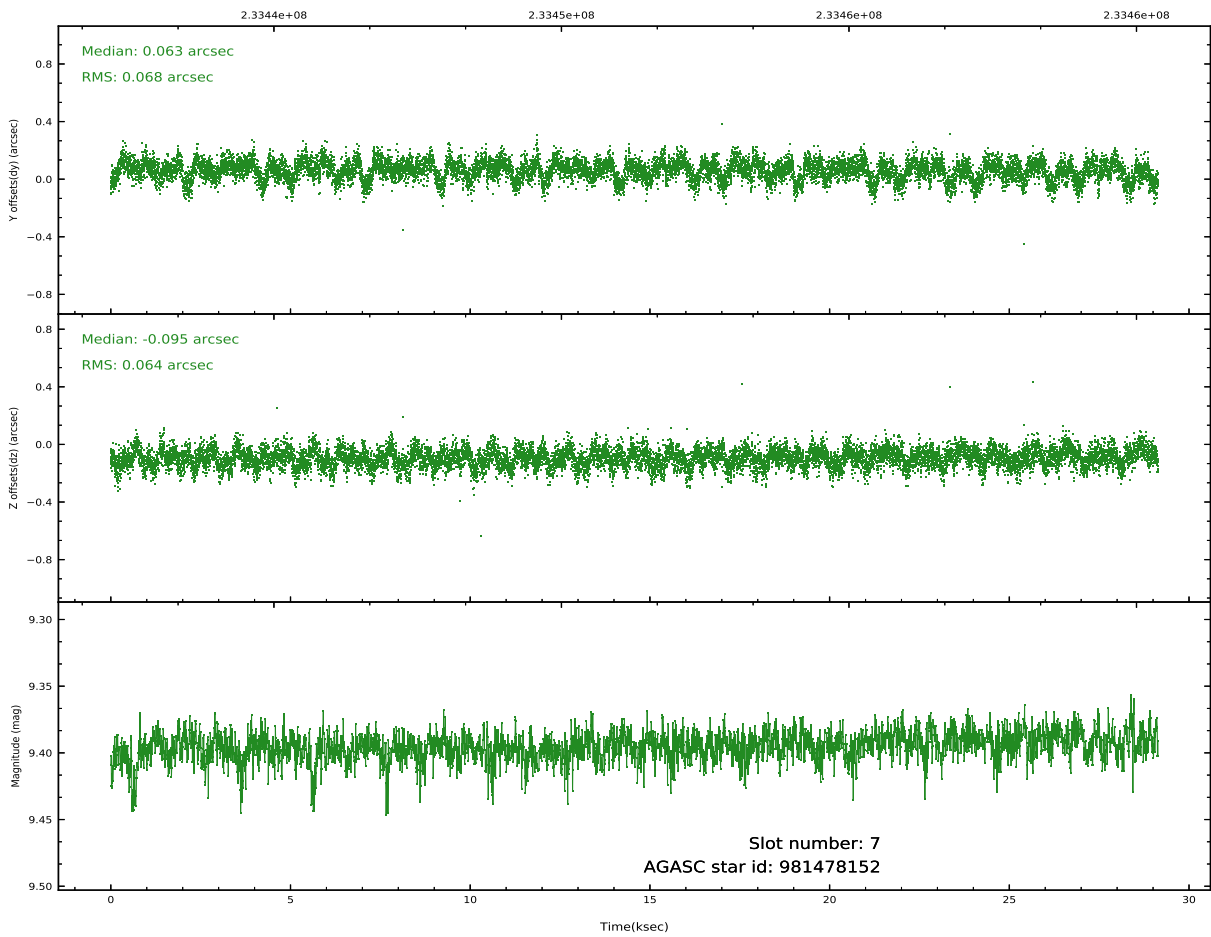
Time (s)



2.4.5 Slot 7

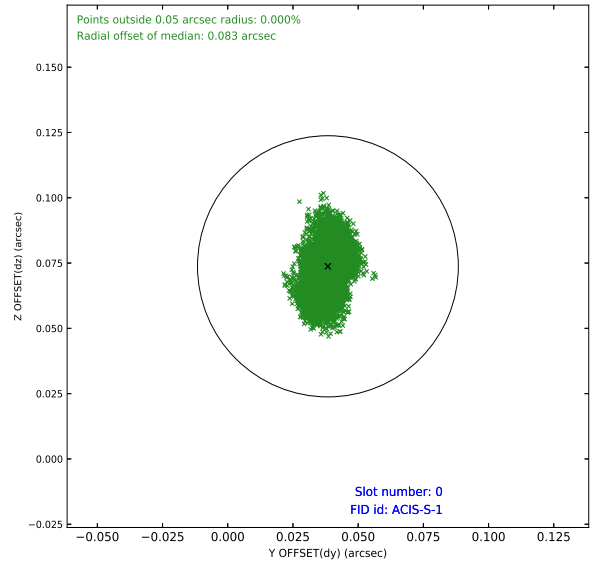
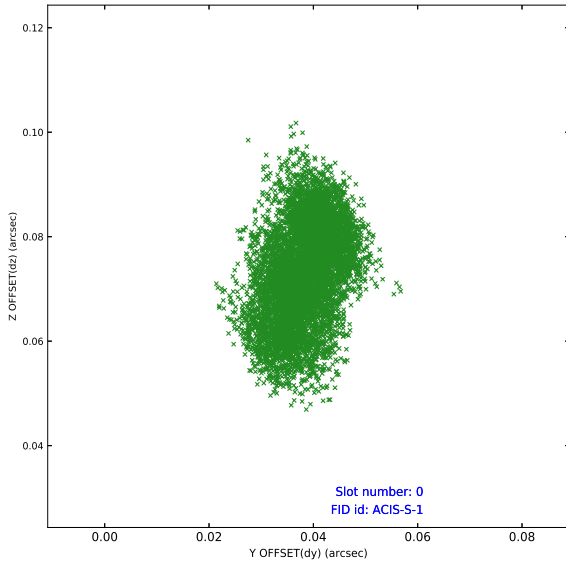


Time (s)

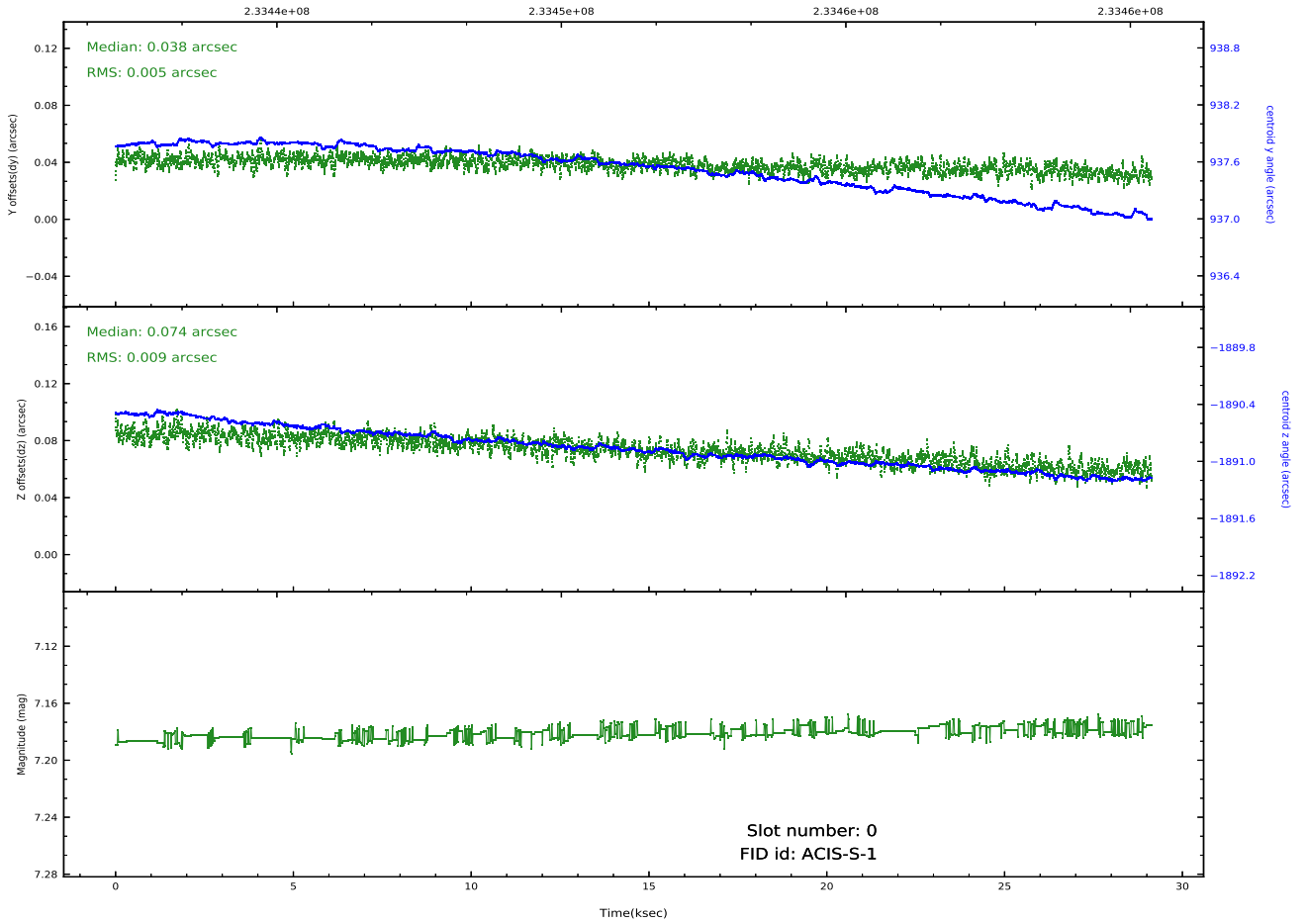


2.5 FID Slots

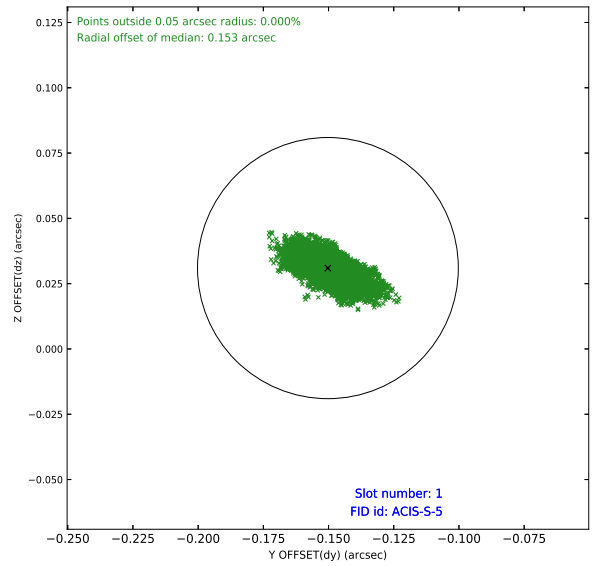
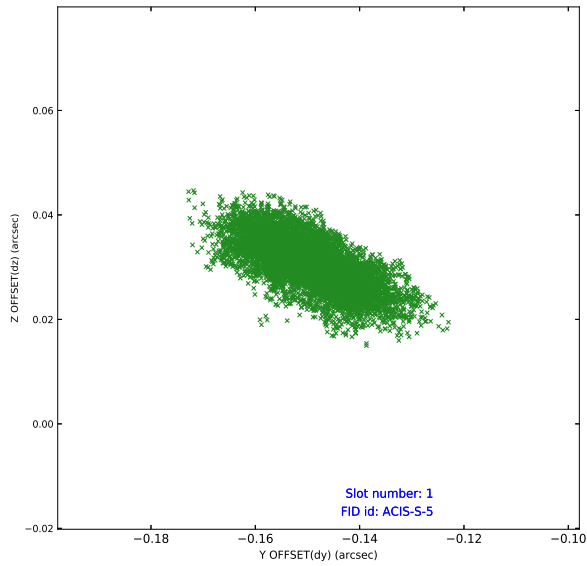
2.5.1 Slot 0



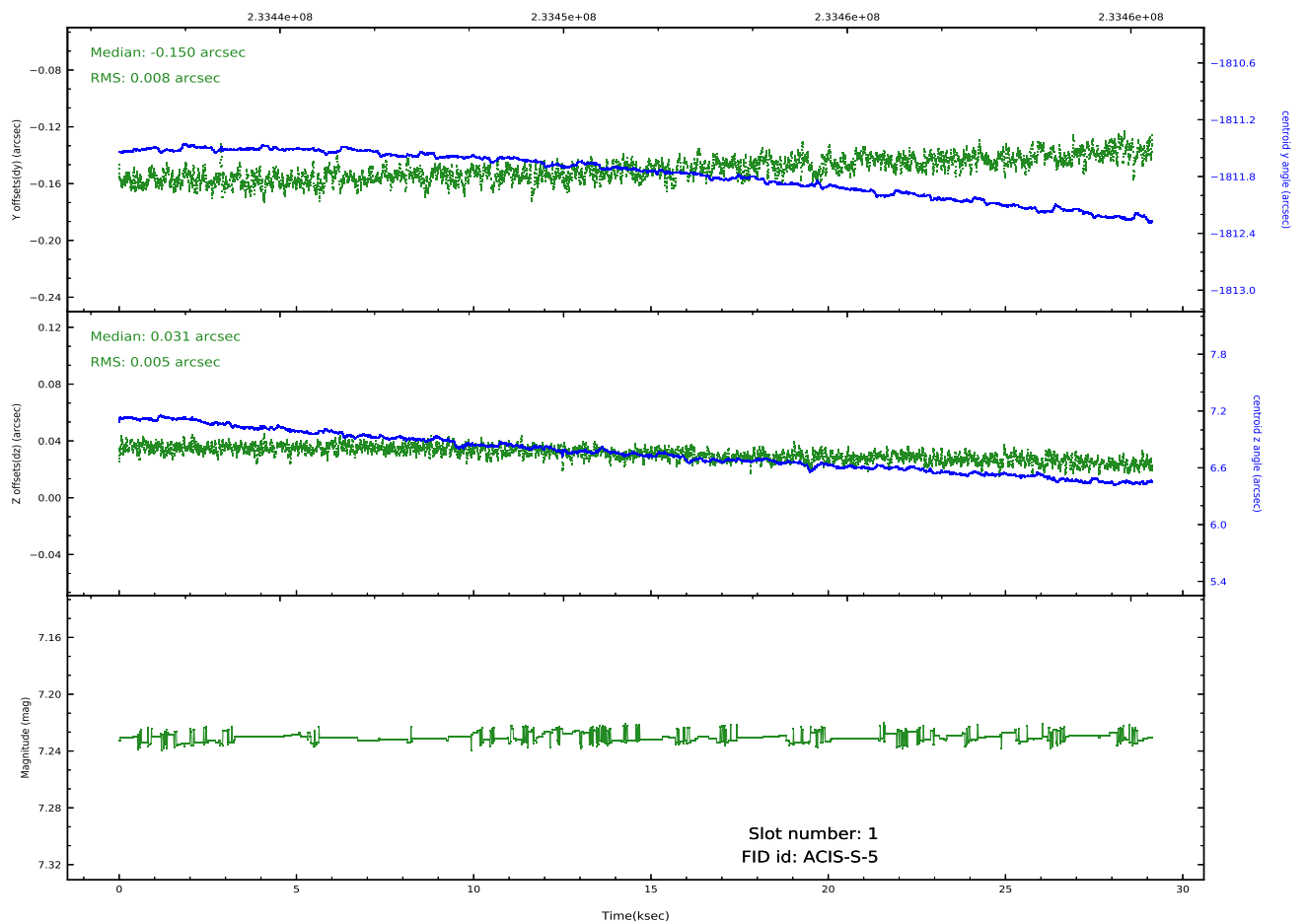
Time (s)



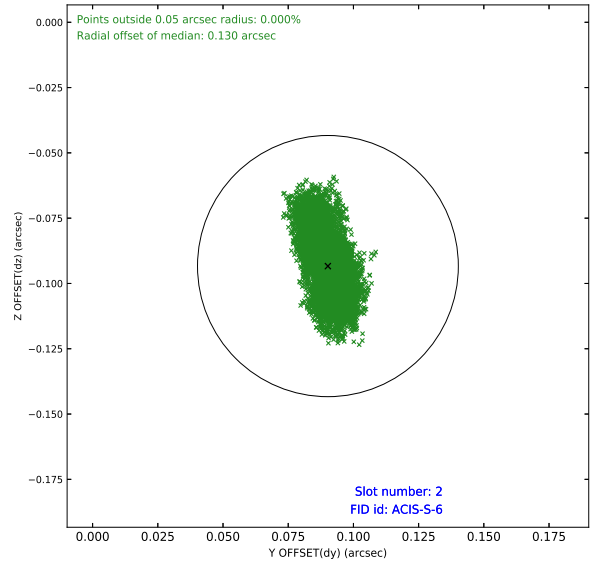
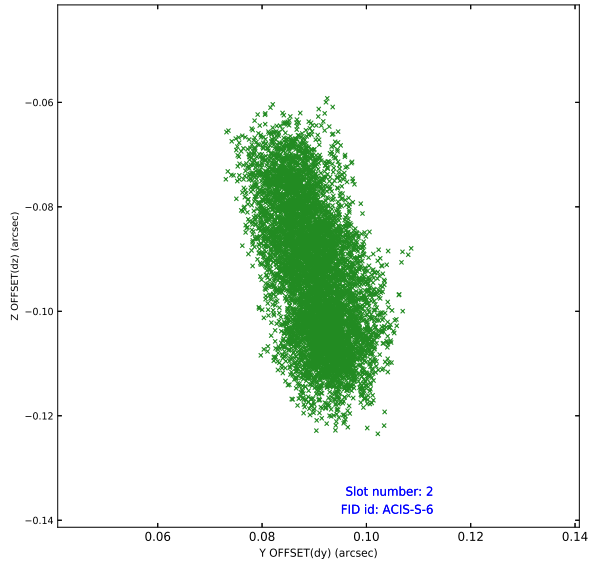
2.5.2 Slot 1



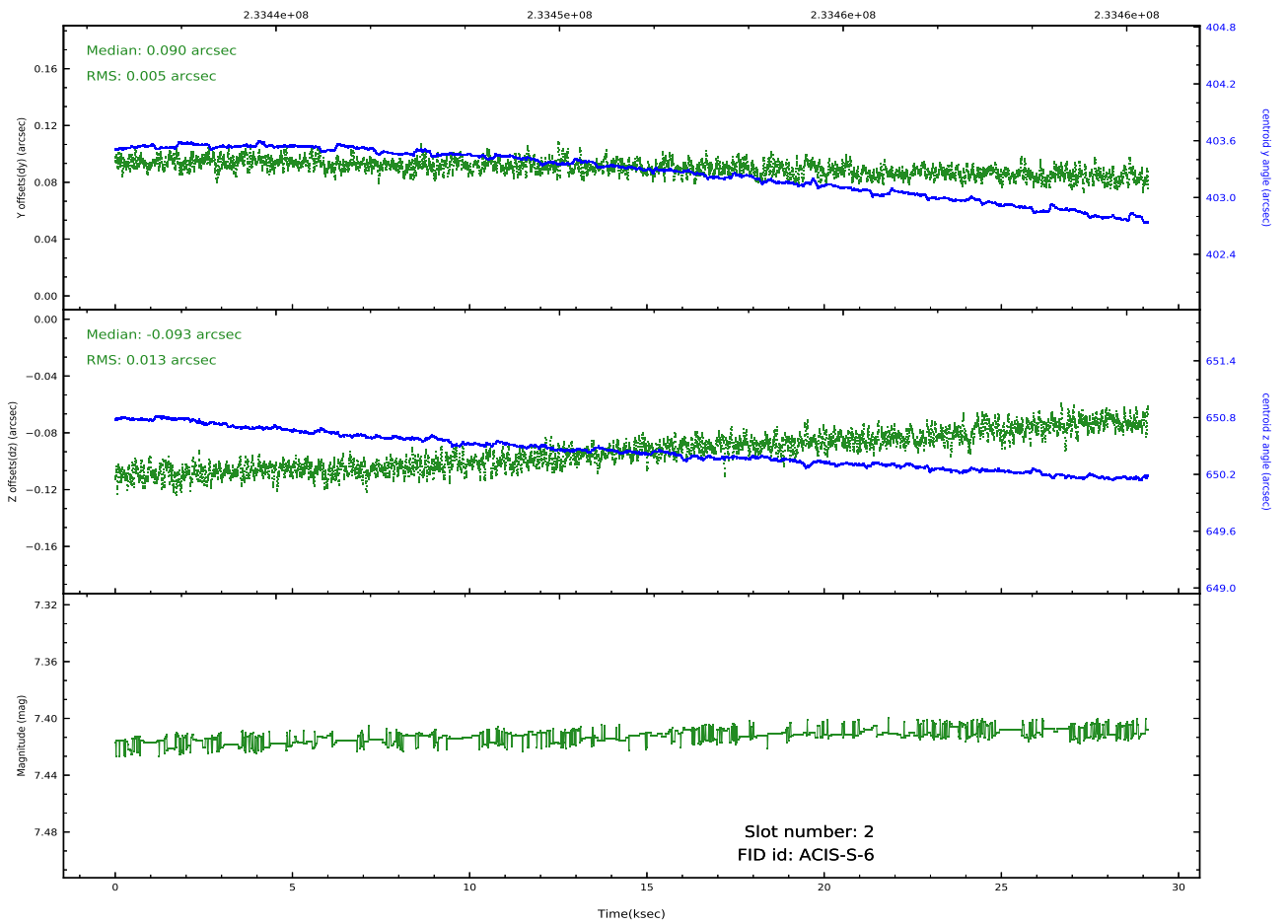
Time (s)



2.5.3 Slot 2

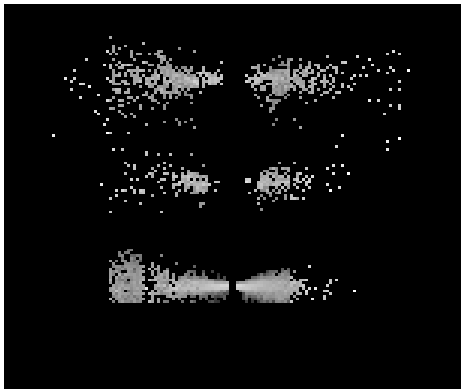


Time (s)

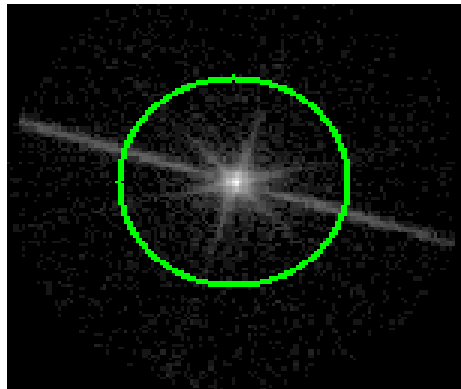


3 Gratings

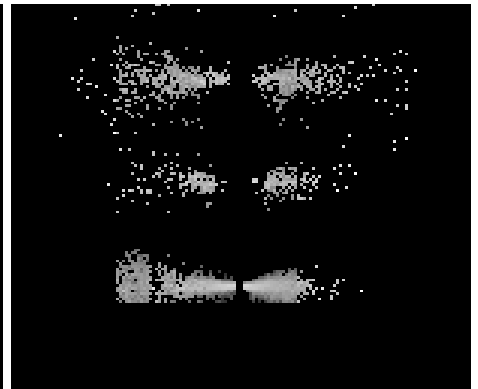
3.1 LETG Arm



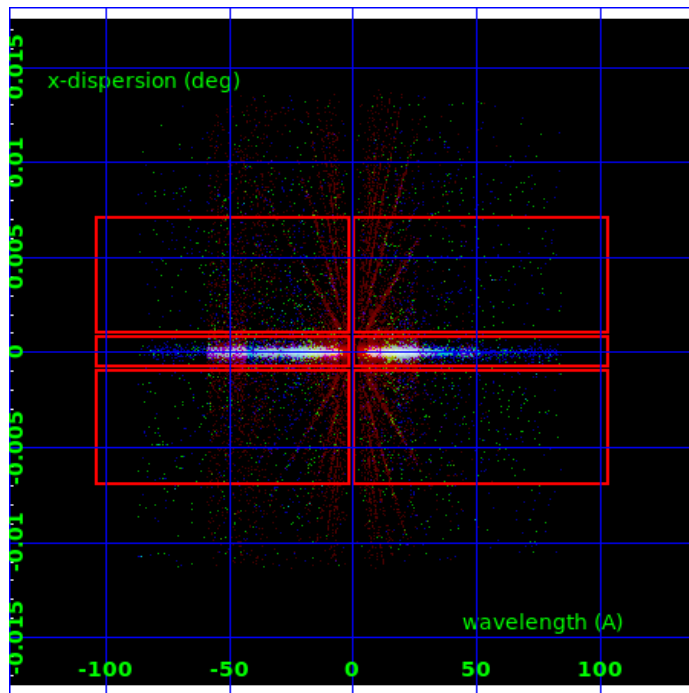
LETG Order Sort 123



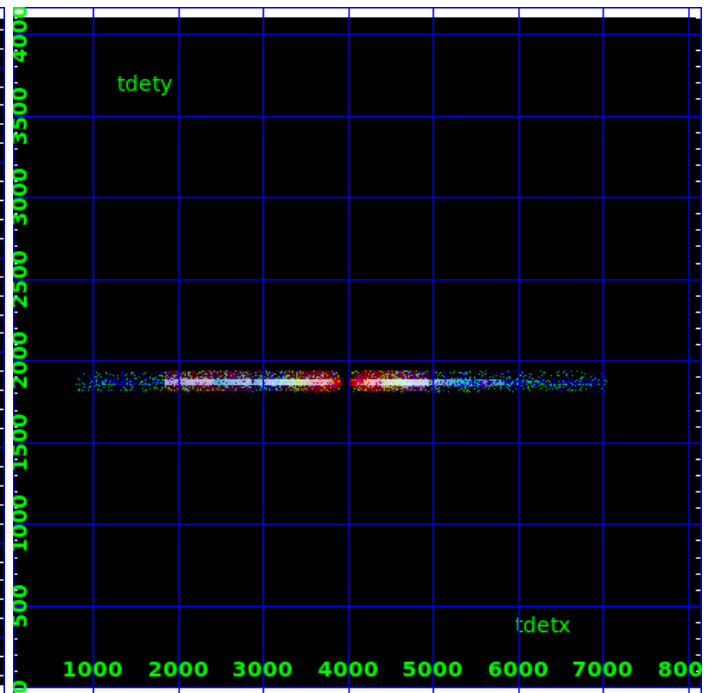
LETG Zero Order



LETG Order Sort ALL

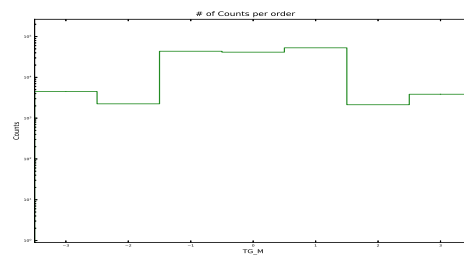


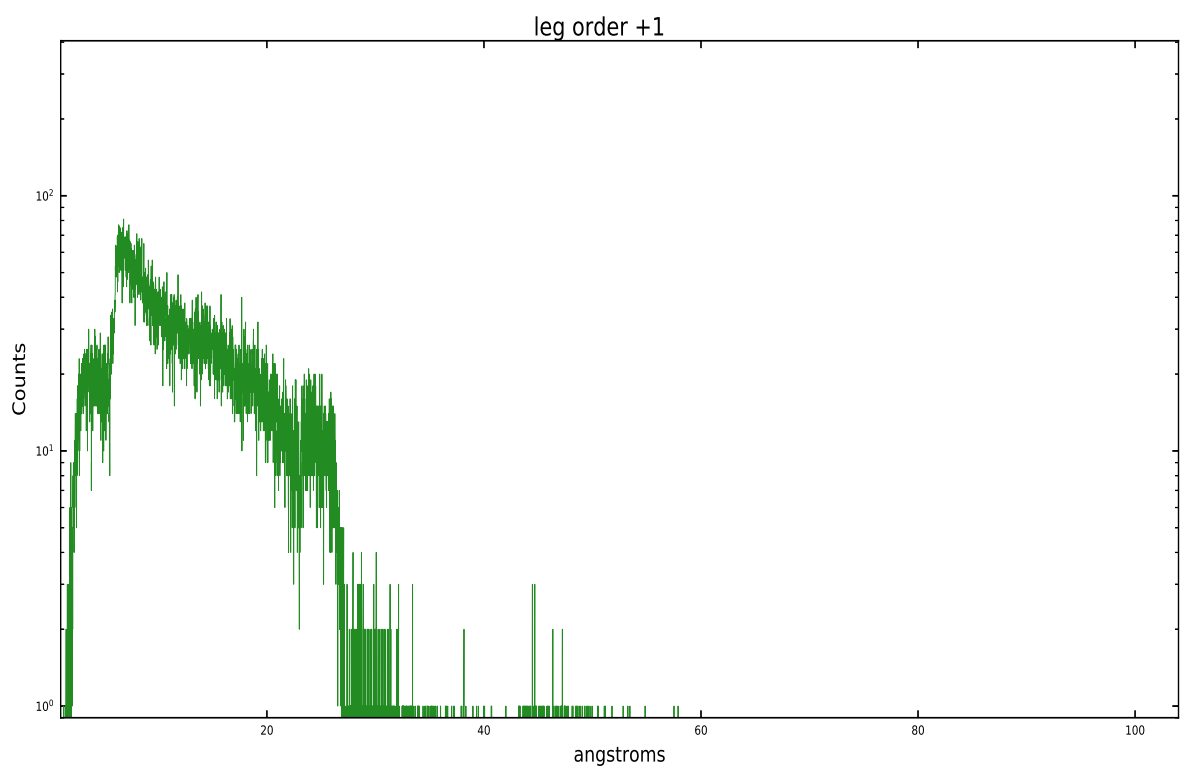
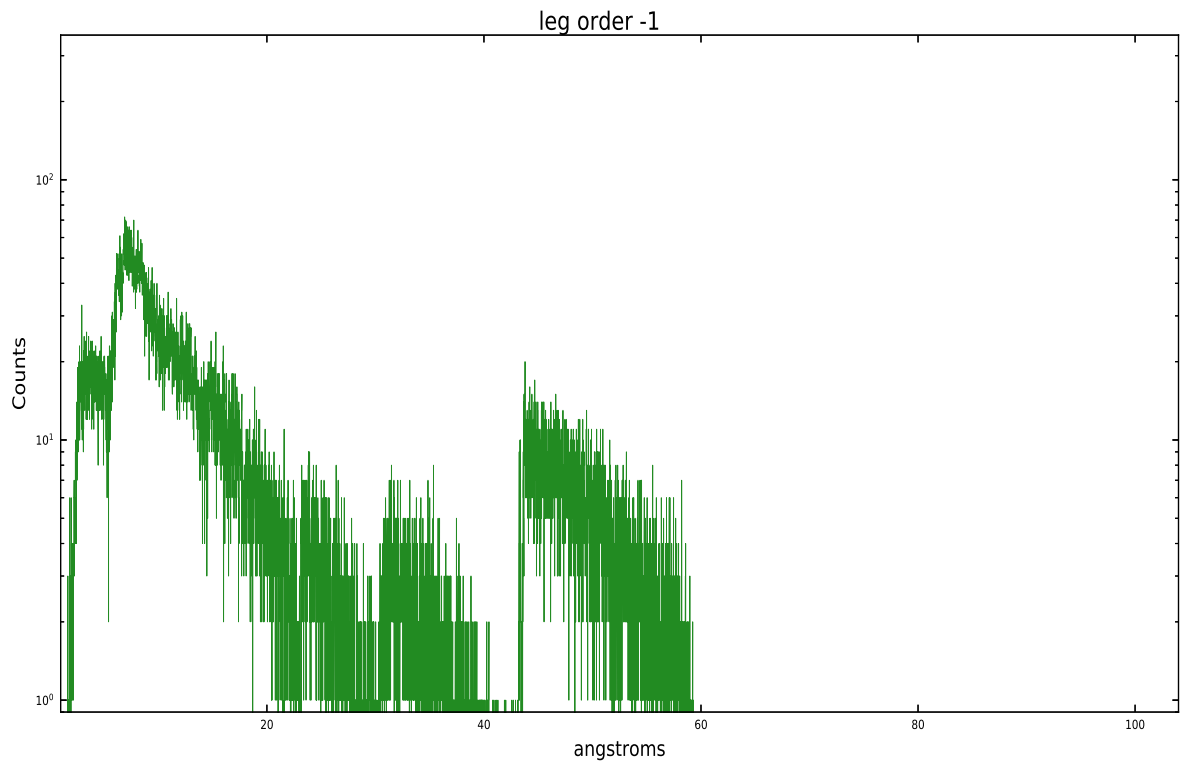
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	4498	2245	43666	41434	53009	2133	3855





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.14029

A.2 Comments