

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6089 - L2 Version 4
Chandra X-Ray Center

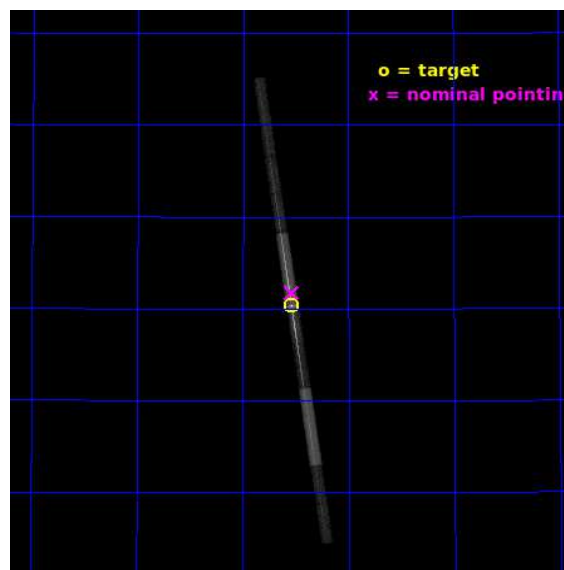
L2 Processing Date : Oct 9 2020

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1 Front

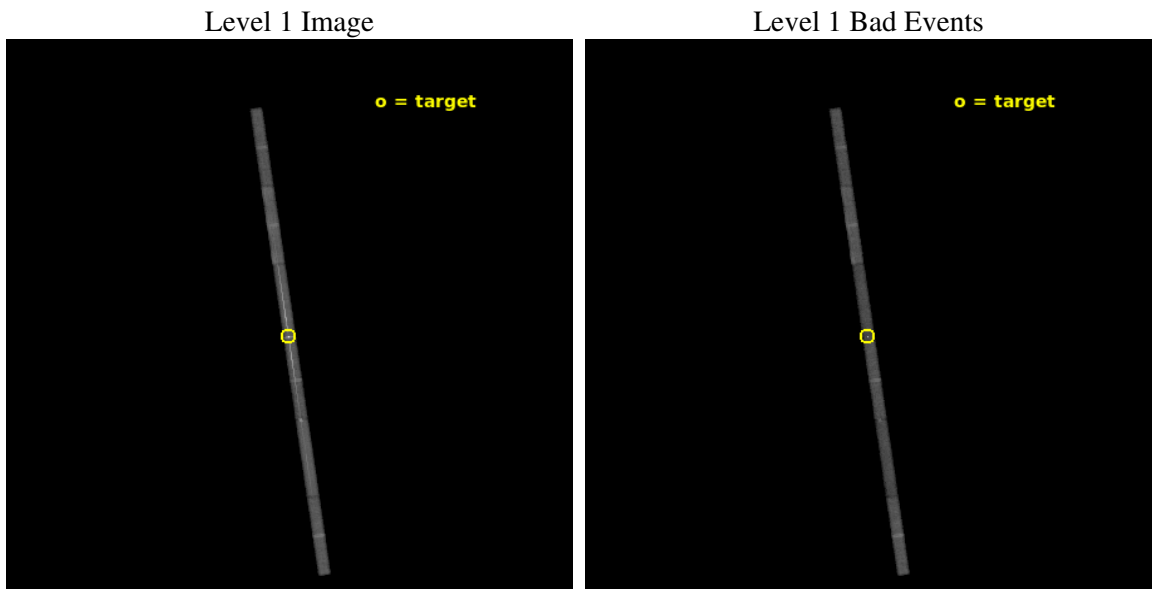
seq_num	790098	Sequence number
obs_id	6089	Observation id
title	AO6 Calibration Observations of 3C273	Proposal title
observer	CXC Calibration	Principal investigator
object	1H1426+428	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	217.135833	Observer's specified target RA [deg]
dec_targ	42.6725	Observer's specified target Dec [deg]
ra_nom	217.13371469775	Nominal RA [deg]
dec_nom	42.696020335878	Nominal Dec [deg]
roll_nom	261.93118444455	Nominal Roll [deg]
revision	4	Processing version of data
ontime	42179.899281681	Sum of GTIs [s]
livetime	39843.907882404	Livetime [s]
ontime4	42179.899281681	Sum of GTIs [s]
ontime5	42179.899281681	Sum of GTIs [s]
ontime6	42179.899281681	Sum of GTIs [s]
ontime7	42179.899281681	Sum of GTIs [s]
ontime8	42179.899281681	Sum of GTIs [s]
ontime9	42179.899281681	Sum of GTIs [s]
l2events	185706	Number of level 2 events



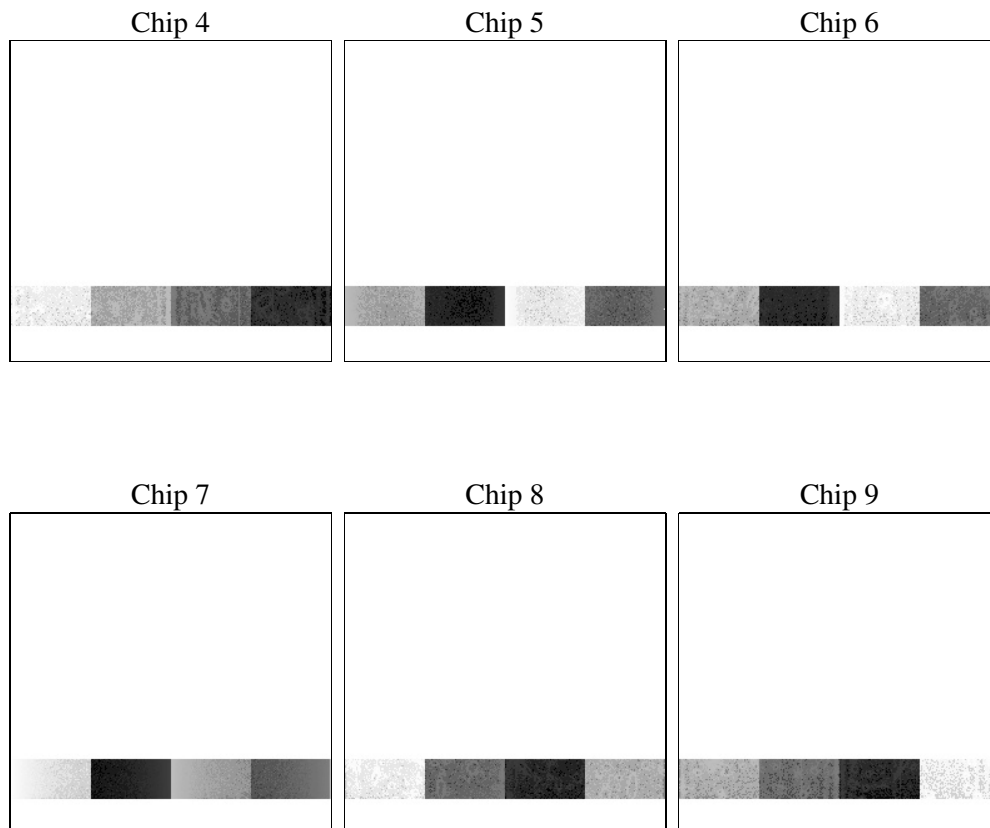
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	42000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	42179.899281681	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	42179.899281681	Sum of GTIs [s]
date	2020-10-09T18:07:30	Date and time of file creation	ontime5	42179.899281681	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	42179.899281681	Sum of GTIs [s]
			ontime7	42179.899281681	Sum of GTIs [s]
			ontime8	42179.899281681	Sum of GTIs [s]
			ontime9	42179.899281681	Sum of GTIs [s]
			l1events	463979	Number of level 1 events
			tgmethod	FINDZO	Method used to create src1a file
			z0_pos	(4085.01, 3024.58)	src1a sky pixel position

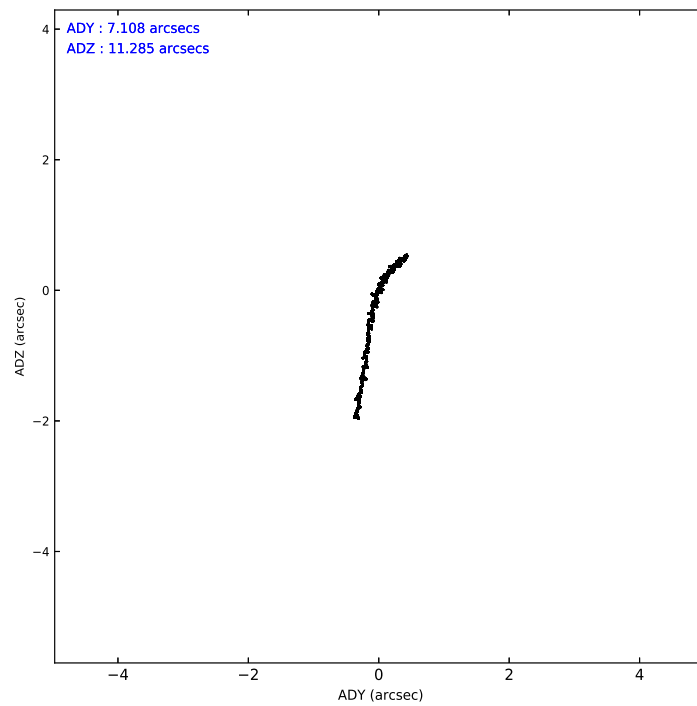
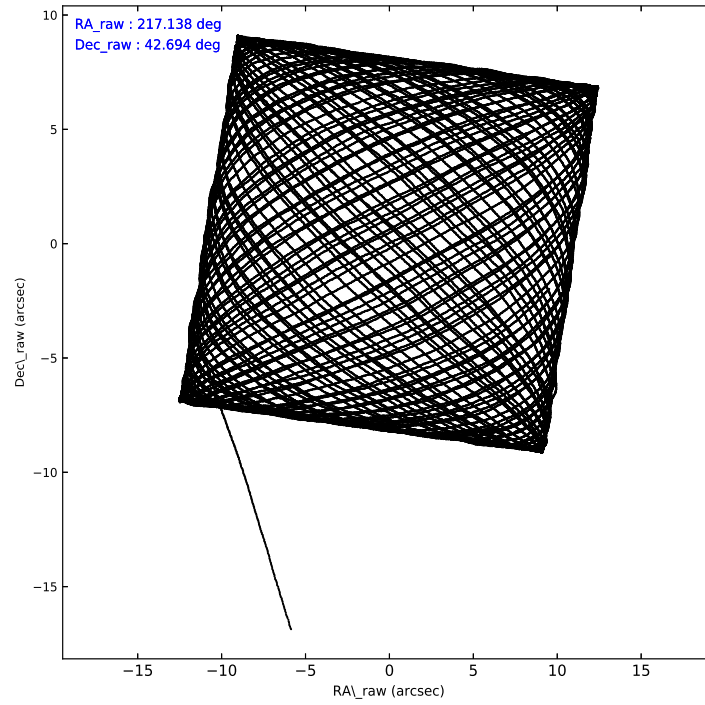
2.1.4 Events

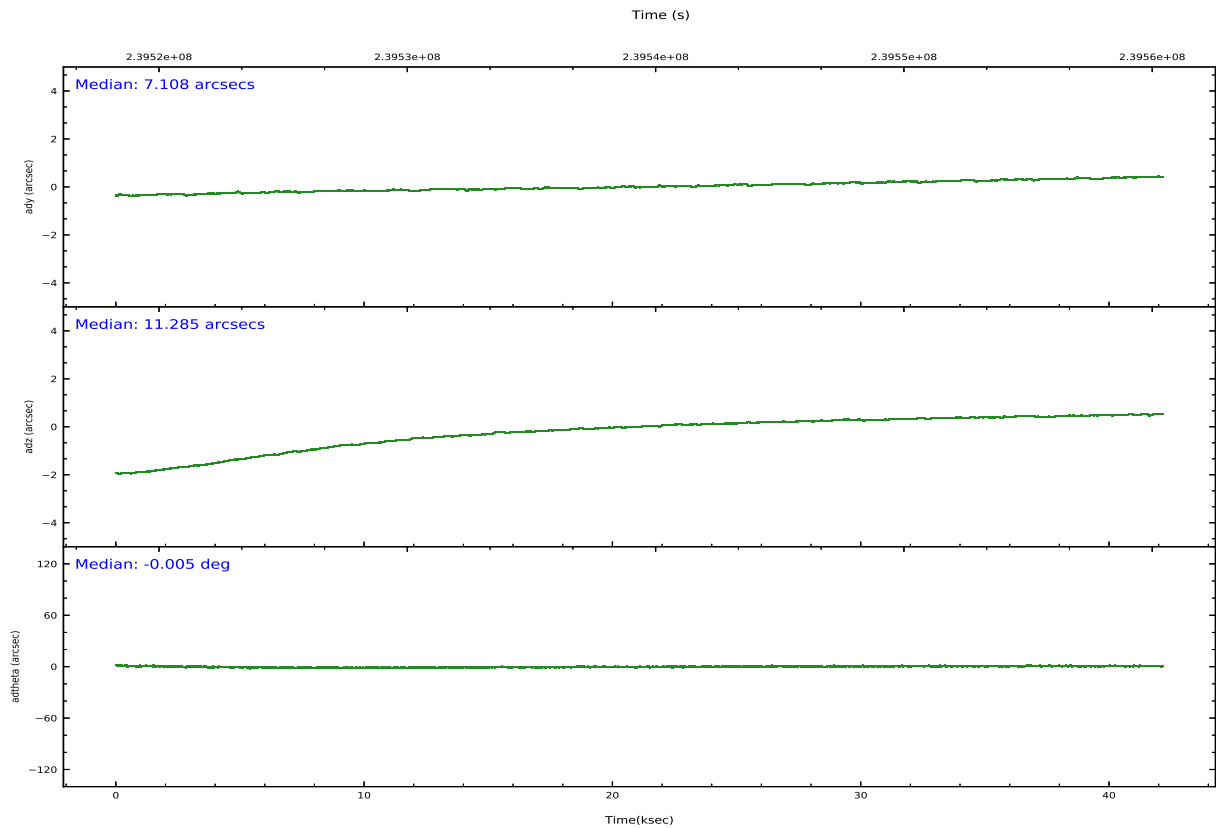
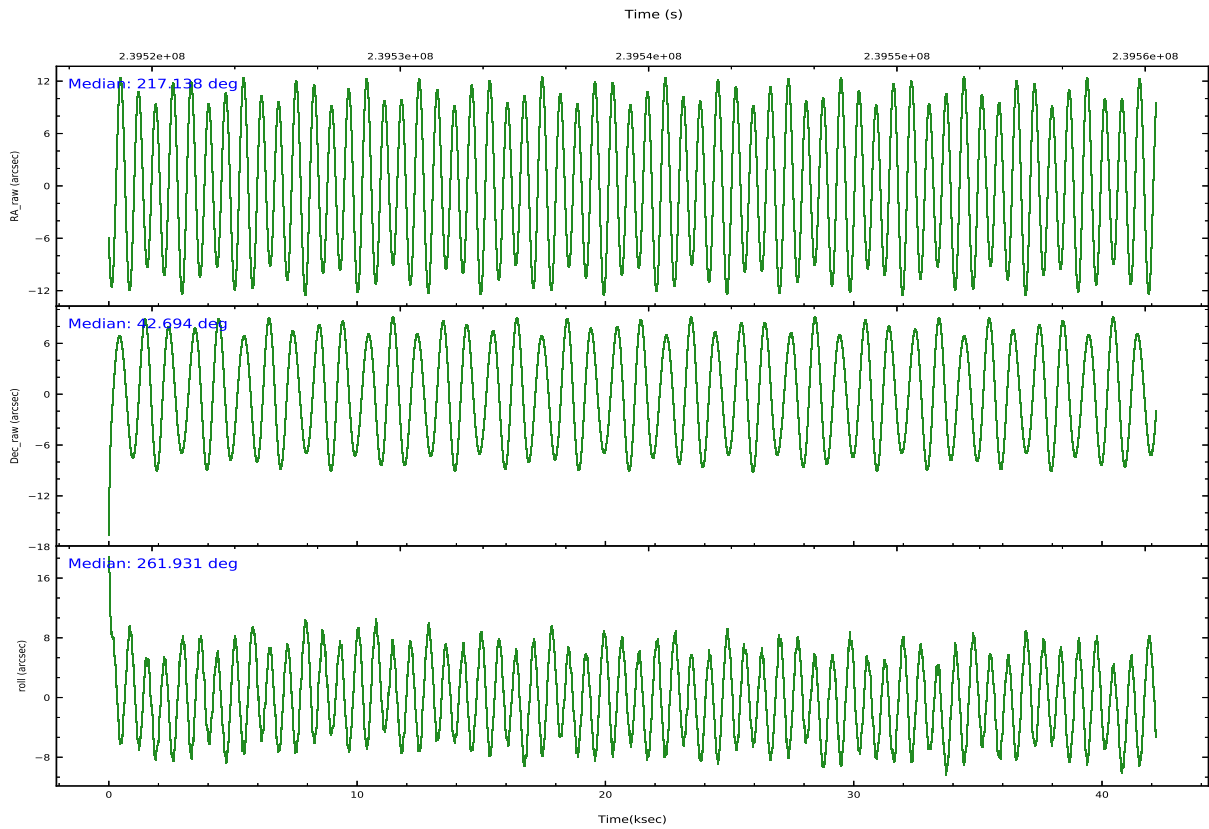
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	57745	67494	78495	141286	72336	46623	grade 0 events	2981	6695	25697	23461	6280	2806
rejected events	50599	31982	43800	38129	54762	39925		5%	9%	32%	16%	8%	6%
rejected %	87%	47%	55%	26%	75%	85%	grade 1 events	31	385	51	788	36	15
								0%	0%	0%	0%	0%	0%
							grade 2 events	1394	8746	3784	25052	2863	1034
								2%	12%	4%	17%	3%	2%
							grade 3 events	903	2825	1786	11938	2270	978
								1%	4%	2%	8%	3%	2%
							grade 4 events	870	3080	1764	11507	2107	951
								1%	4%	2%	8%	2%	2%
							grade 5 events	1638	5639	1684	7892	2202	1678
								2%	8%	2%	5%	3%	3%
							grade 6 events	1032	14530	1779	31532	4132	962
								1%	21%	2%	22%	5%	2%
							grade 7 events	48896	25594	41950	29116	52446	38199
								84%	37%	53%	20%	72%	81%

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	217.123353	217.13371469775	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	42.718612	42.696020335878	Subarray start row	113	113
[deg] Pointing Roll	261.786407	261.93118444455	Subarray row count	128	128
[s] Window start time (MET)	233971264.184000	233971264.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	241833664.184000	241833664.184000	[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)	239518439.184000	239517390.23216			
Observation start date	2005-08-04T04:52:55	2005-08-04T04:36:30			
[s] Observation end time (MET)	239560439.184000	239561247.42167			
Observation end date	2005-08-04T16:32:55	2005-08-04T16:47:27			
Read mode	TIMED	TIMED			

2.3 Aspect





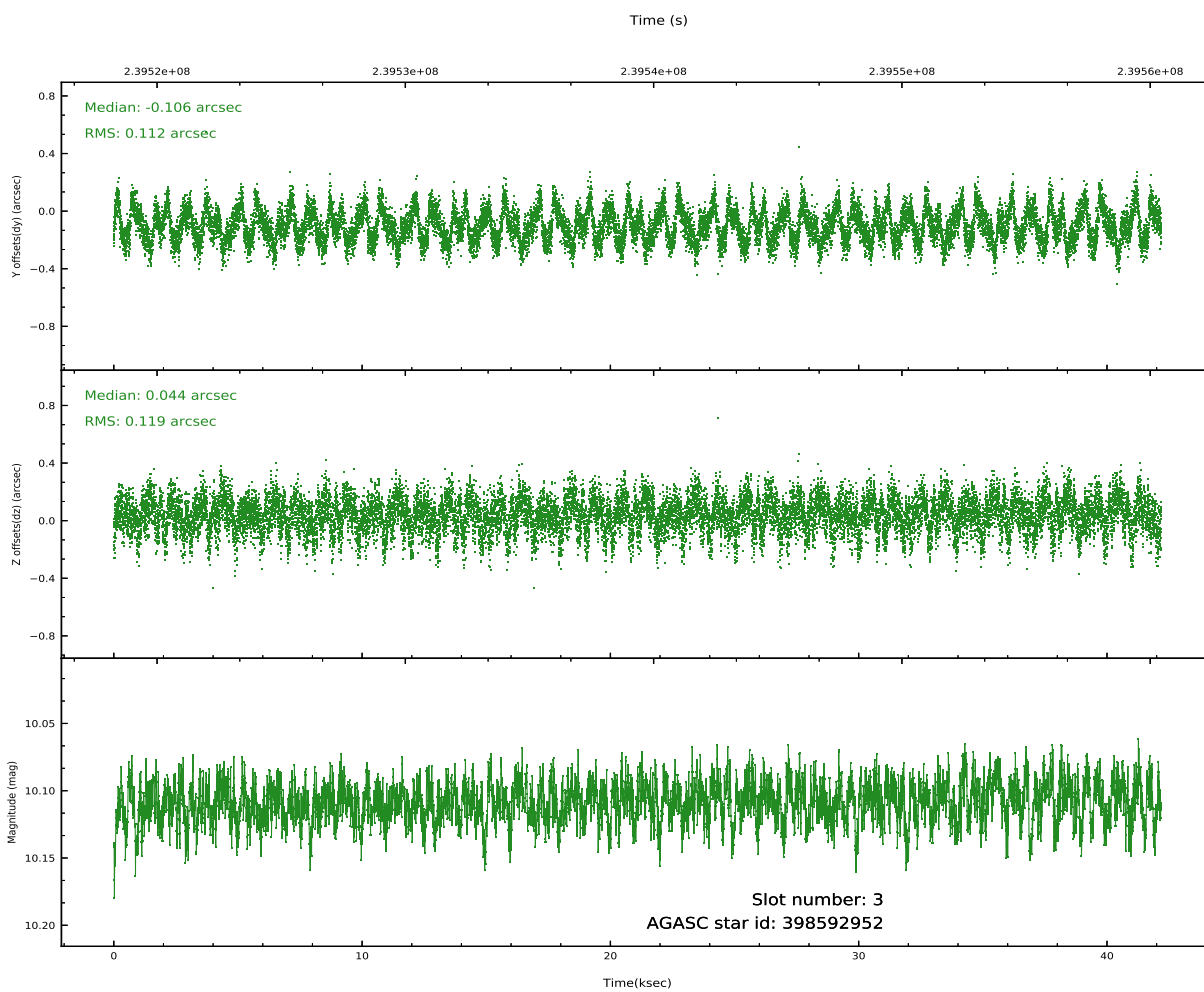
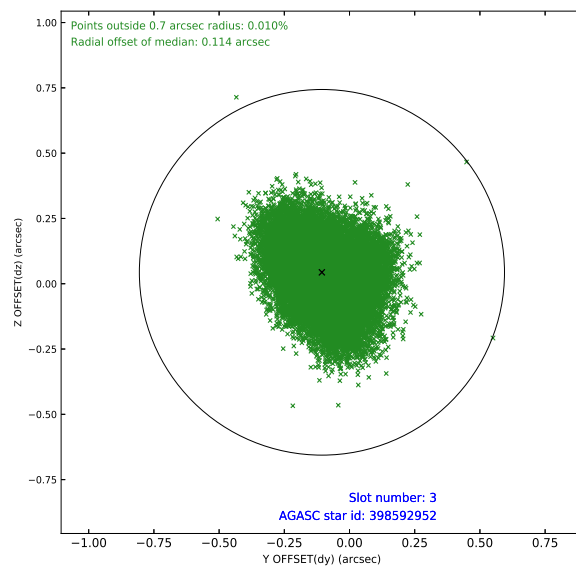
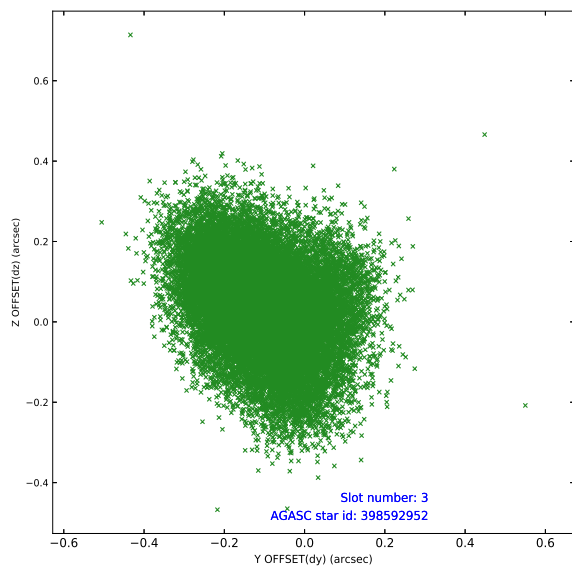
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.09	10287	1.000	-0.100	-0.179	0.025	0.046	0.000000	0.000000	-759.38	-1897
1	FID		ACIS-S-4	7.18	10288	1.000	0.178	0.095	0.019	0.033	0.000000	0.000000	2154.15	11
2	FID		ACIS-S-5	7.23	10288	1.000	-0.113	0.091	0.022	0.042	0.000000	0.000000	-1812.26	5
3	GUIDE	used	398592952	10.11	20556	1.000	-0.106	0.044	0.176	0.277	216.343106	43.029643	-823.98	-2193
4	GUIDE	used	398722720	9.69	20555	1.000	-0.124	0.116	0.131	0.207	218.042263	43.202045	-2080.40	2135
5	GUIDE	used	398723464	9.05	20536	1.000	0.079	-0.138	0.083	0.135	217.255519	42.514001	679.29	452
6	GUIDE	used	398725424	8.78	20568	1.000	-0.077	0.171	0.104	0.162	217.673023	42.542871	413.29	1533
7	GUIDE	used	398197864	9.37	20554	1.000	0.227	-0.194	0.106	0.174	216.112574	42.237784	2083.10	-2420

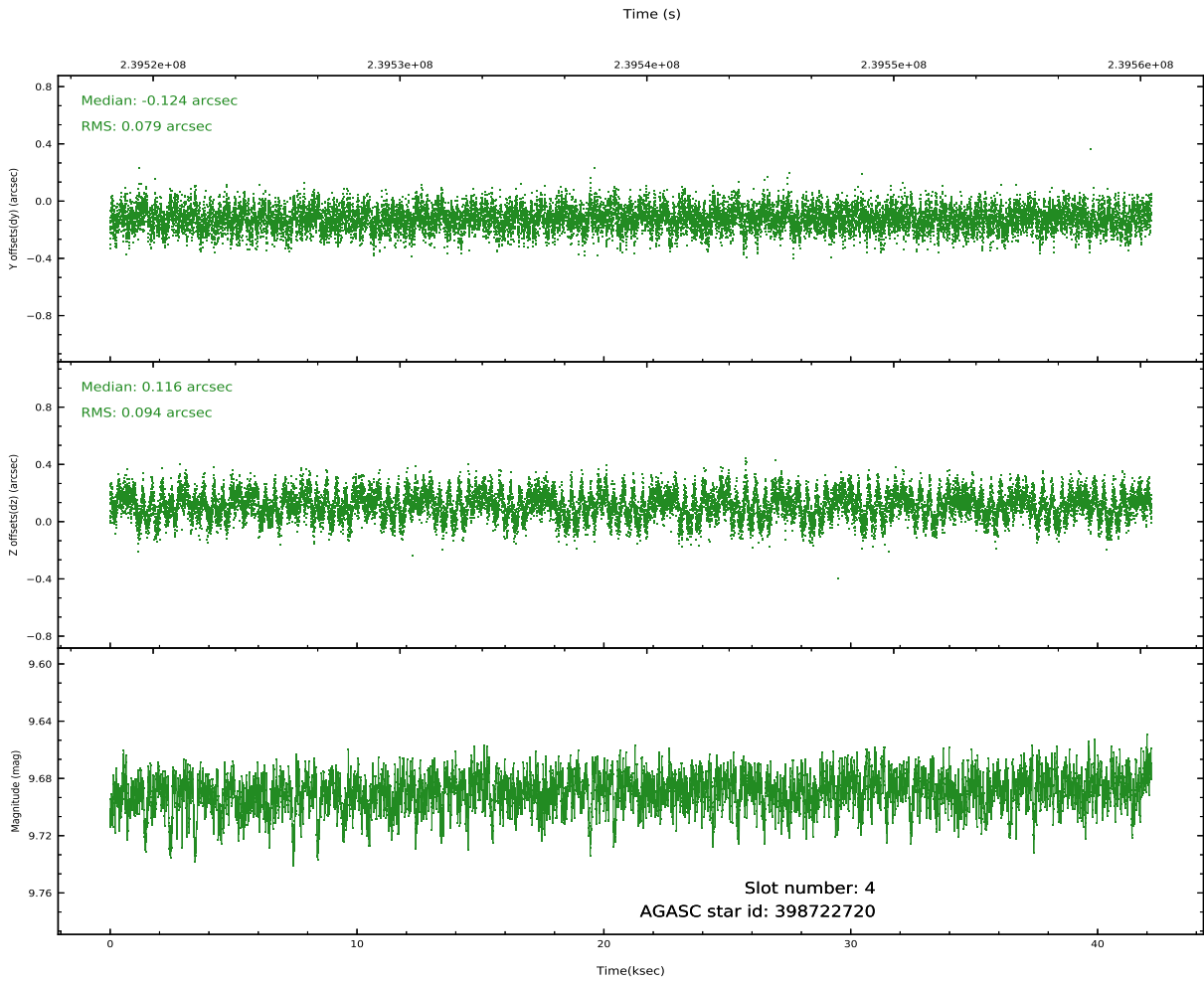
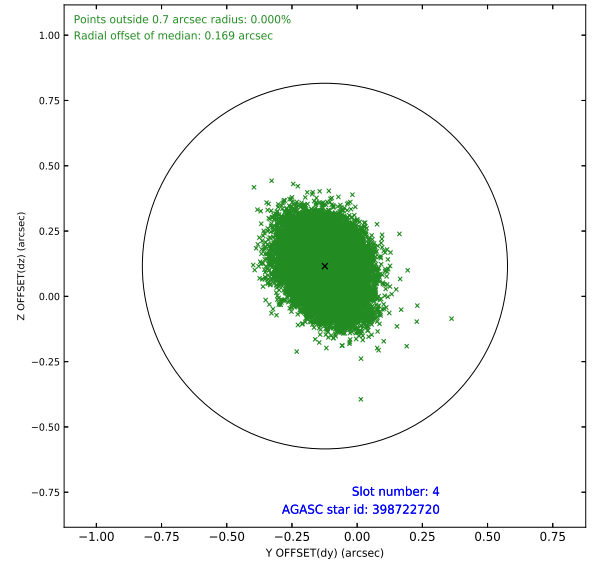
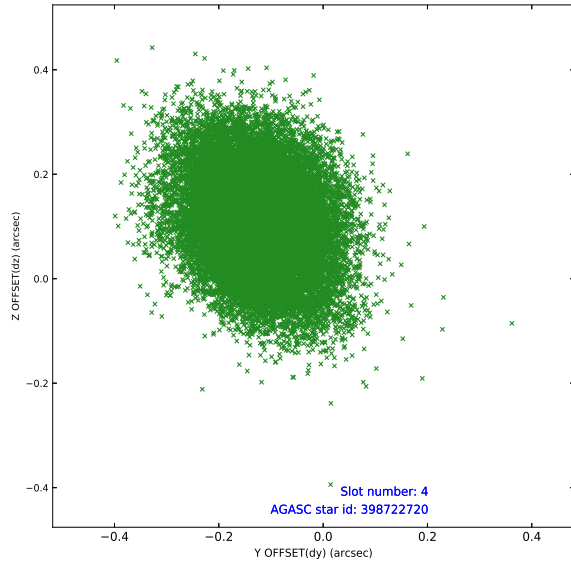
∞

2.4 Star Slots

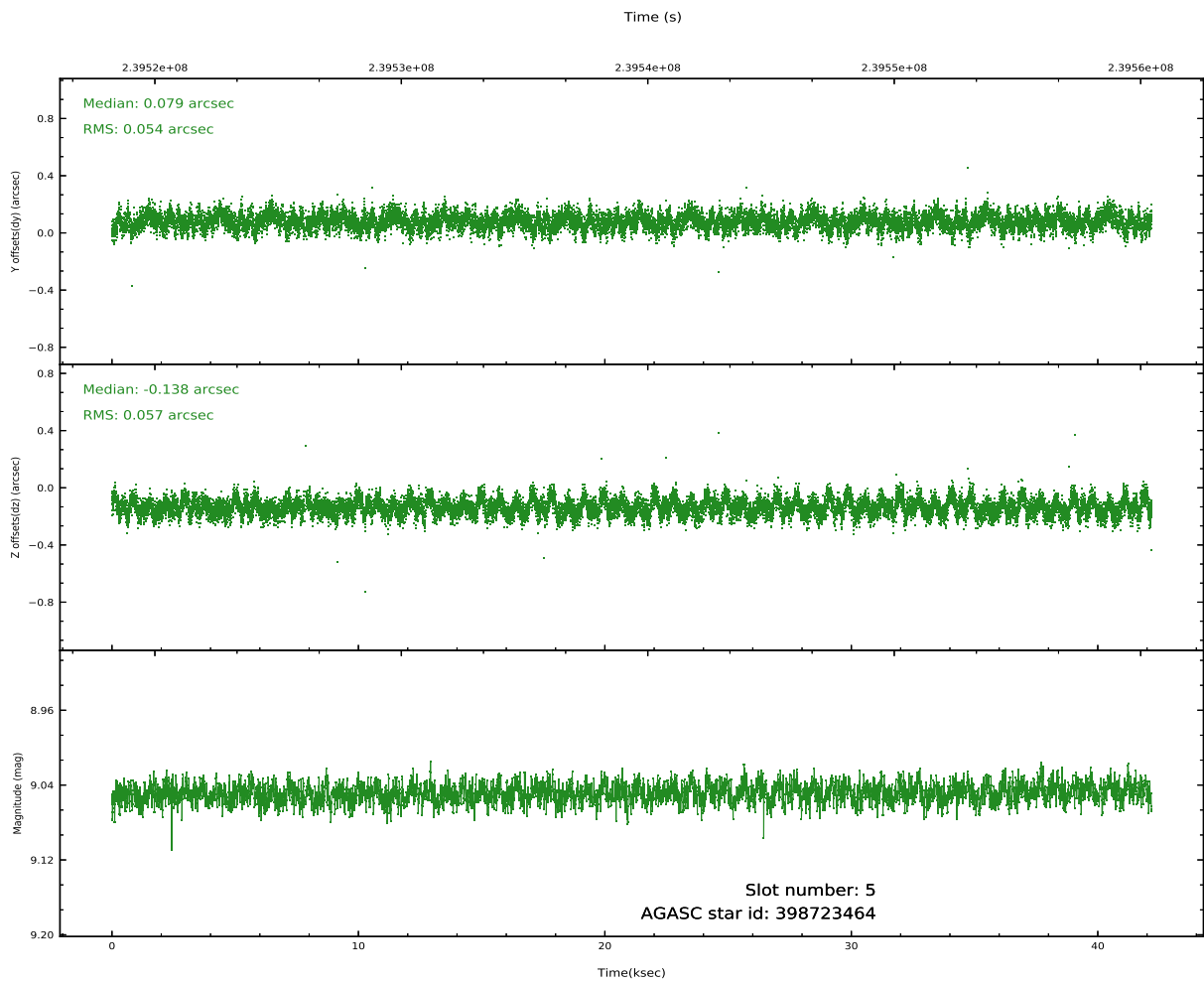
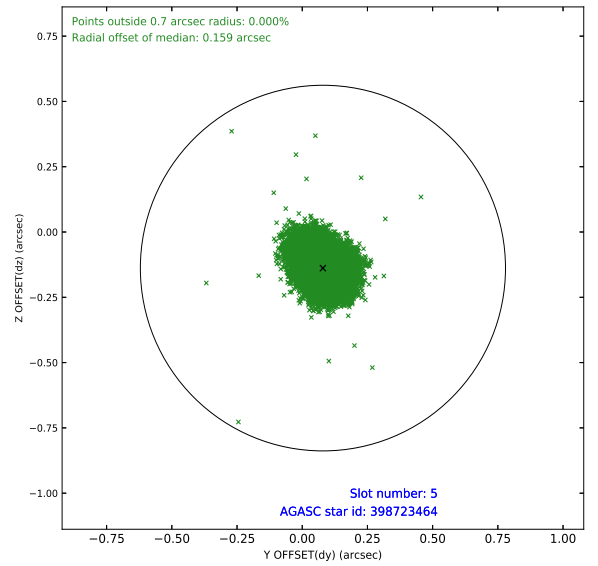
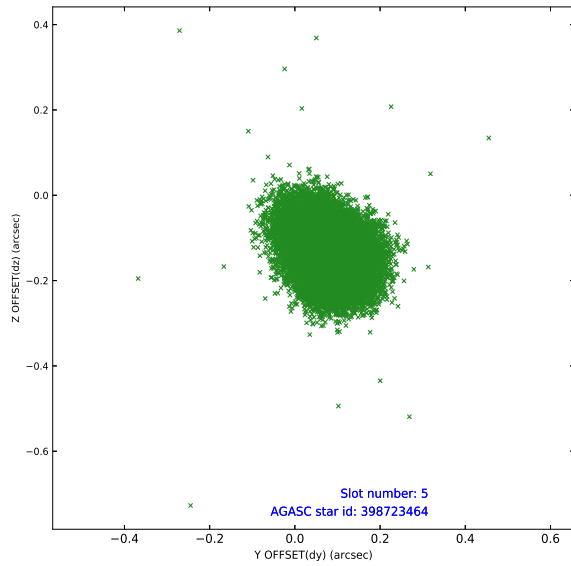
2.4.1 Slot 3



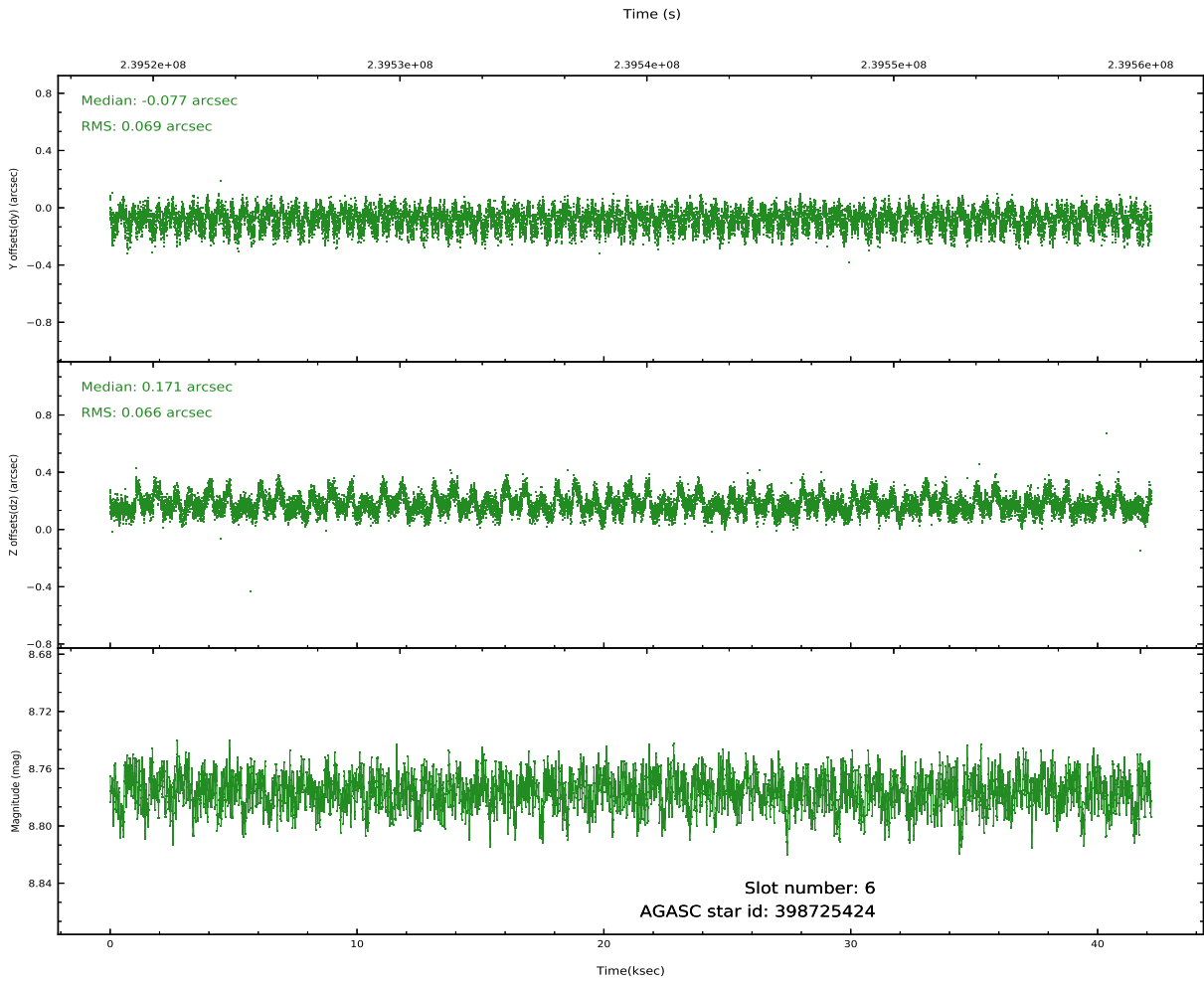
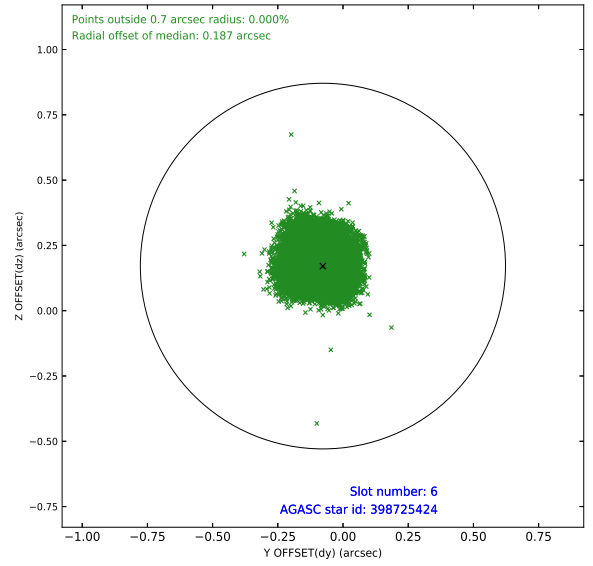
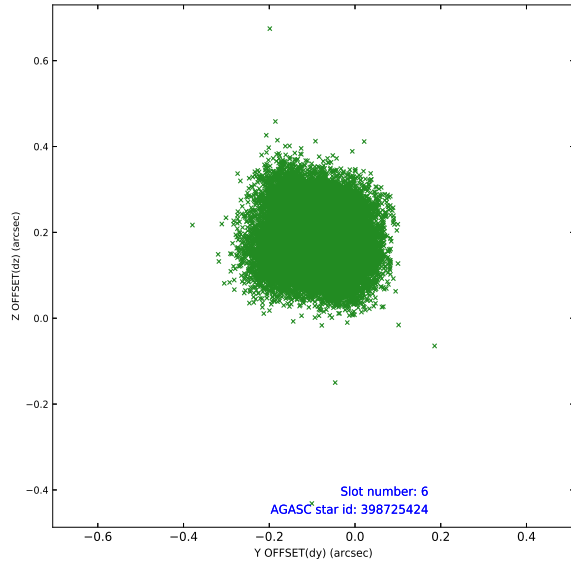
2.4.2 Slot 4



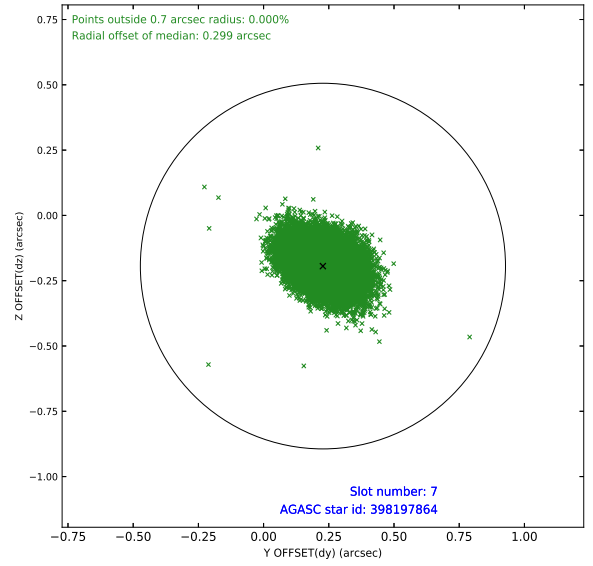
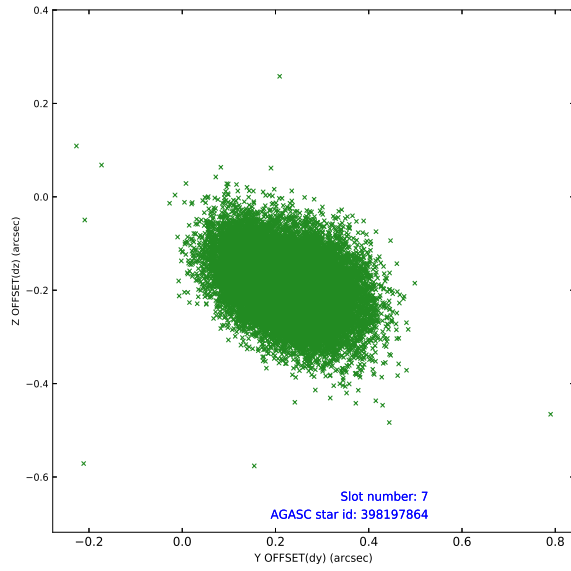
2.4.3 Slot 5



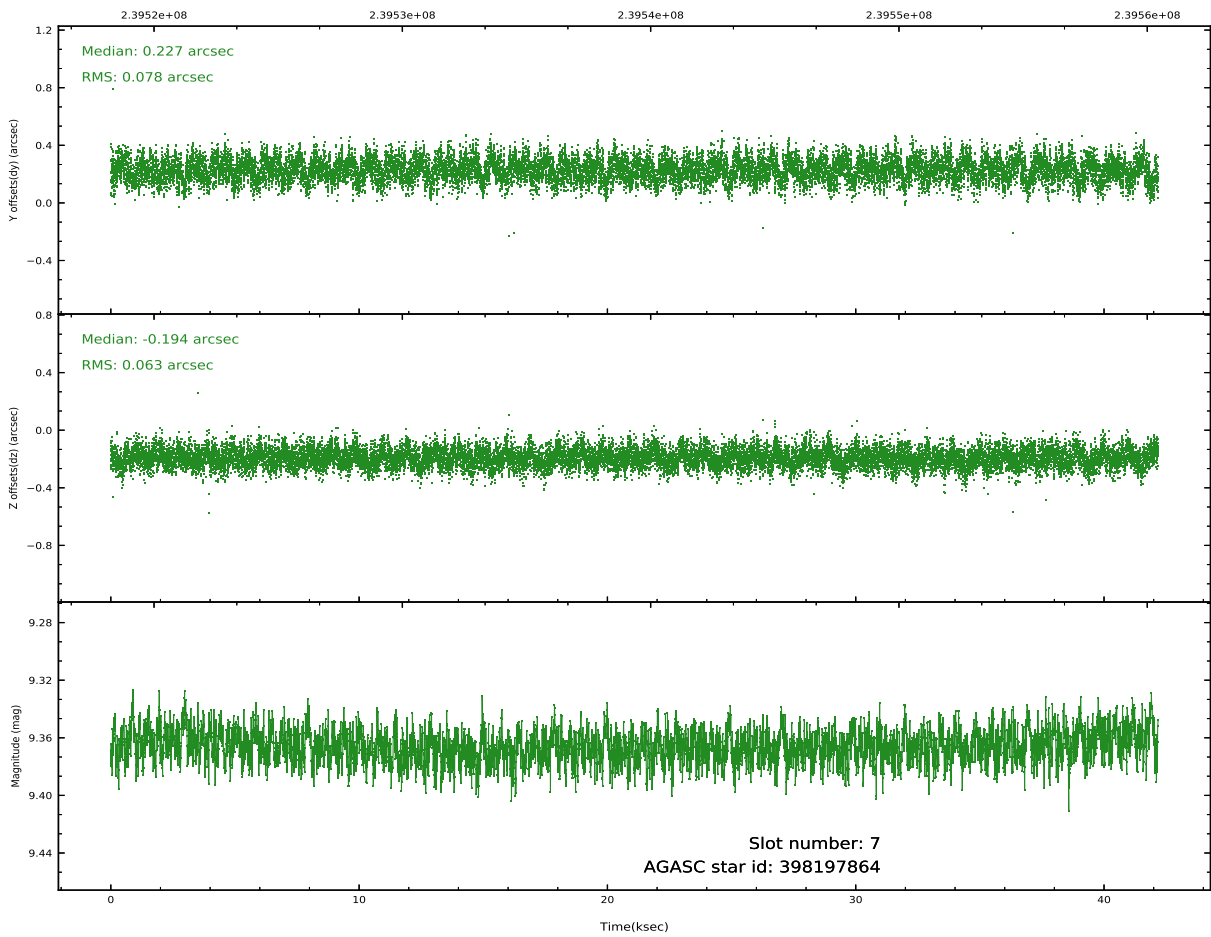
2.4.4 Slot 6



2.4.5 Slot 7

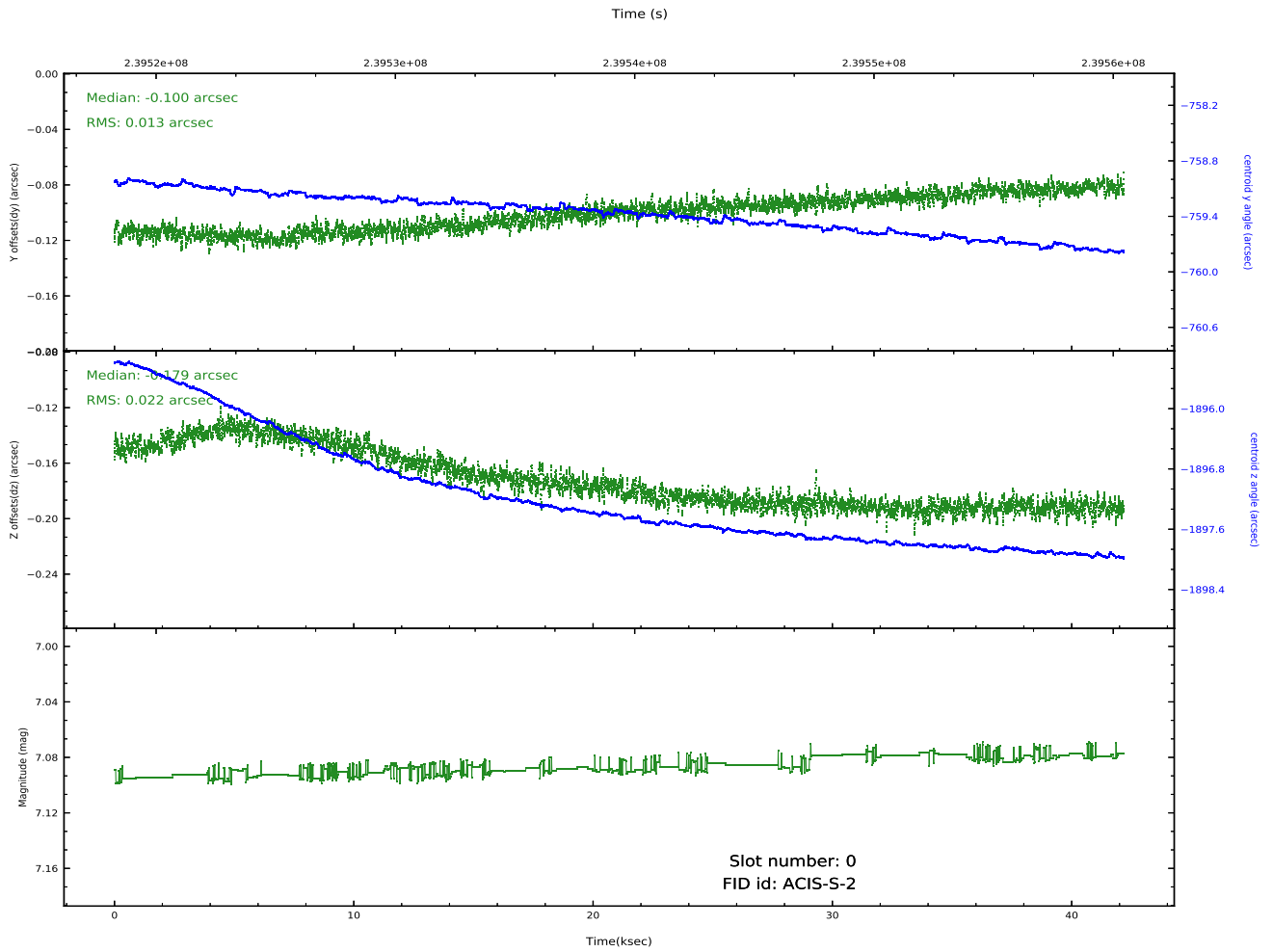
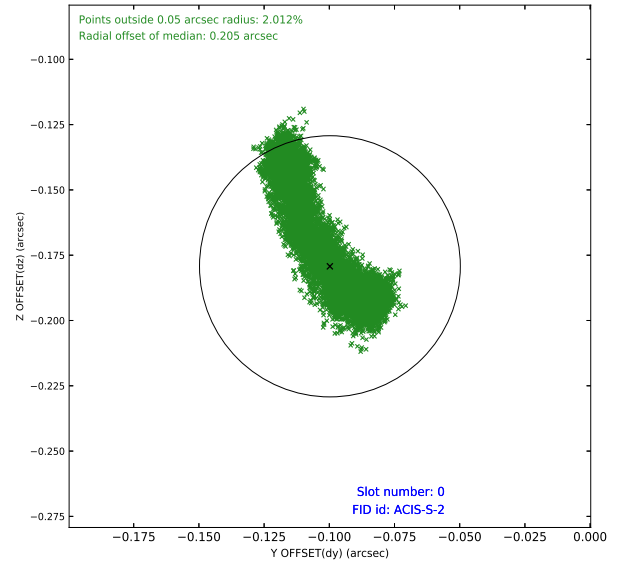
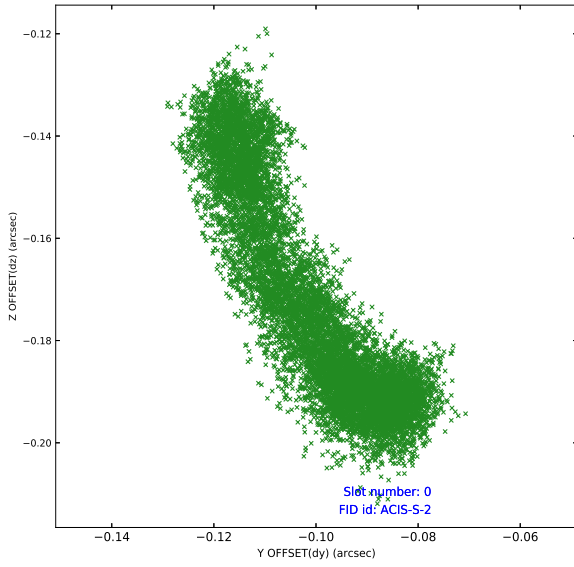


Time (s)

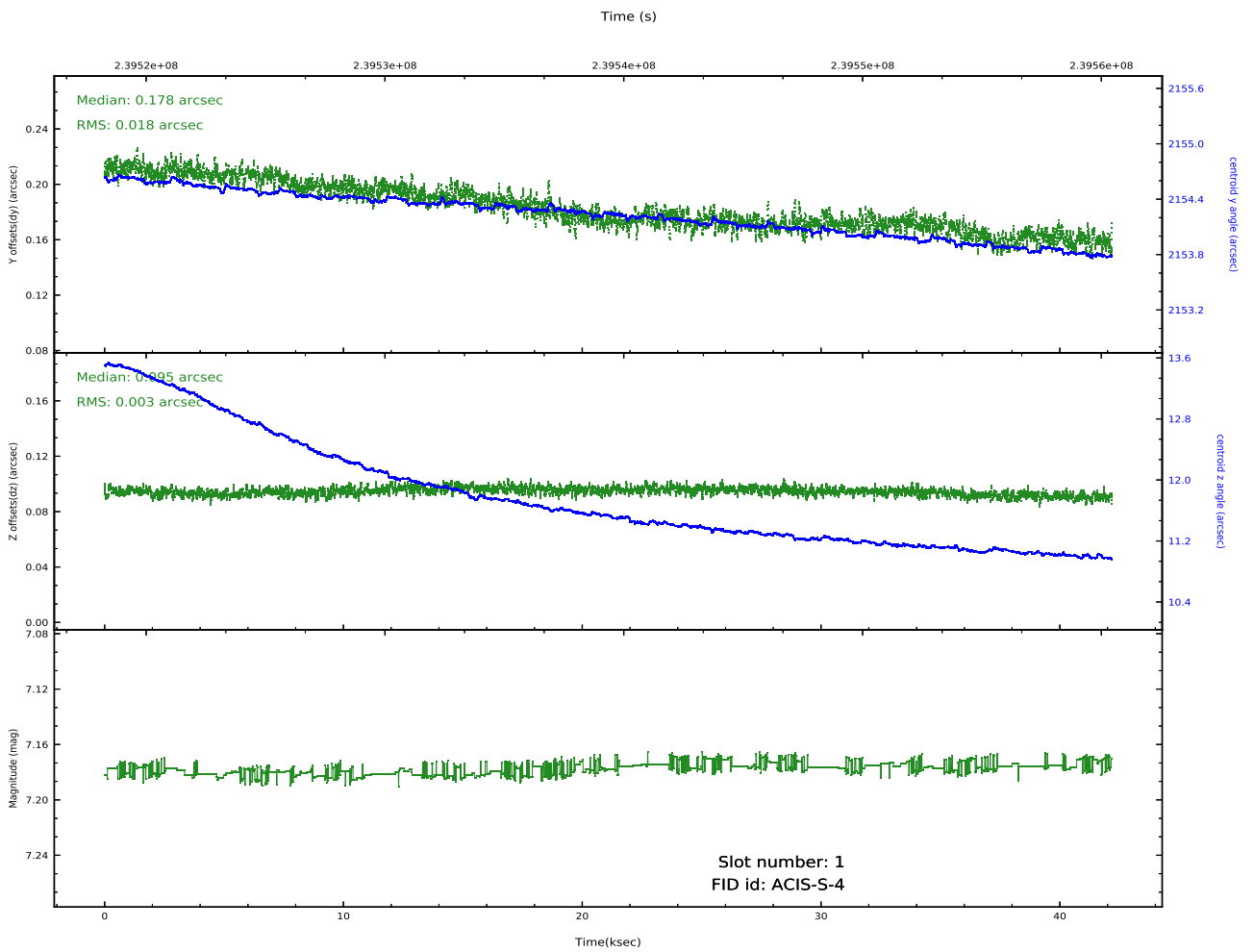
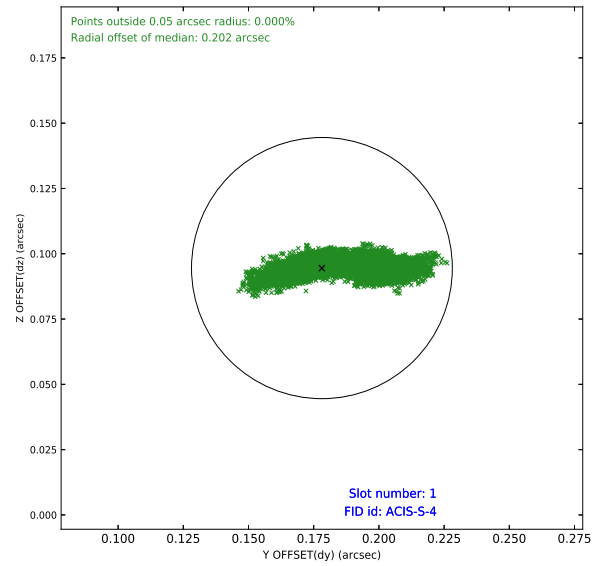
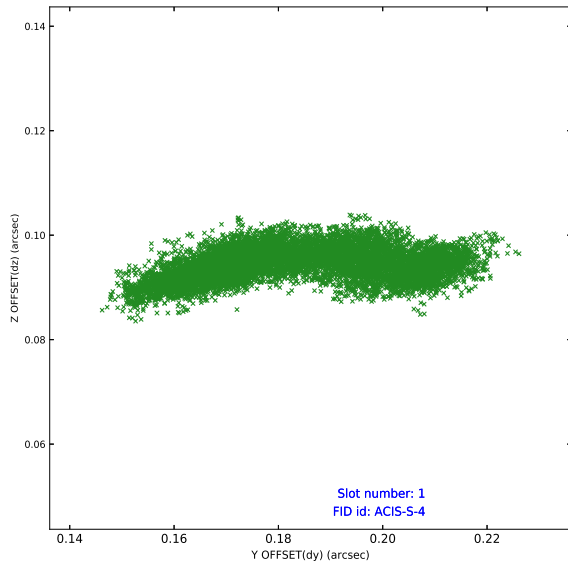


2.5 FID Slots

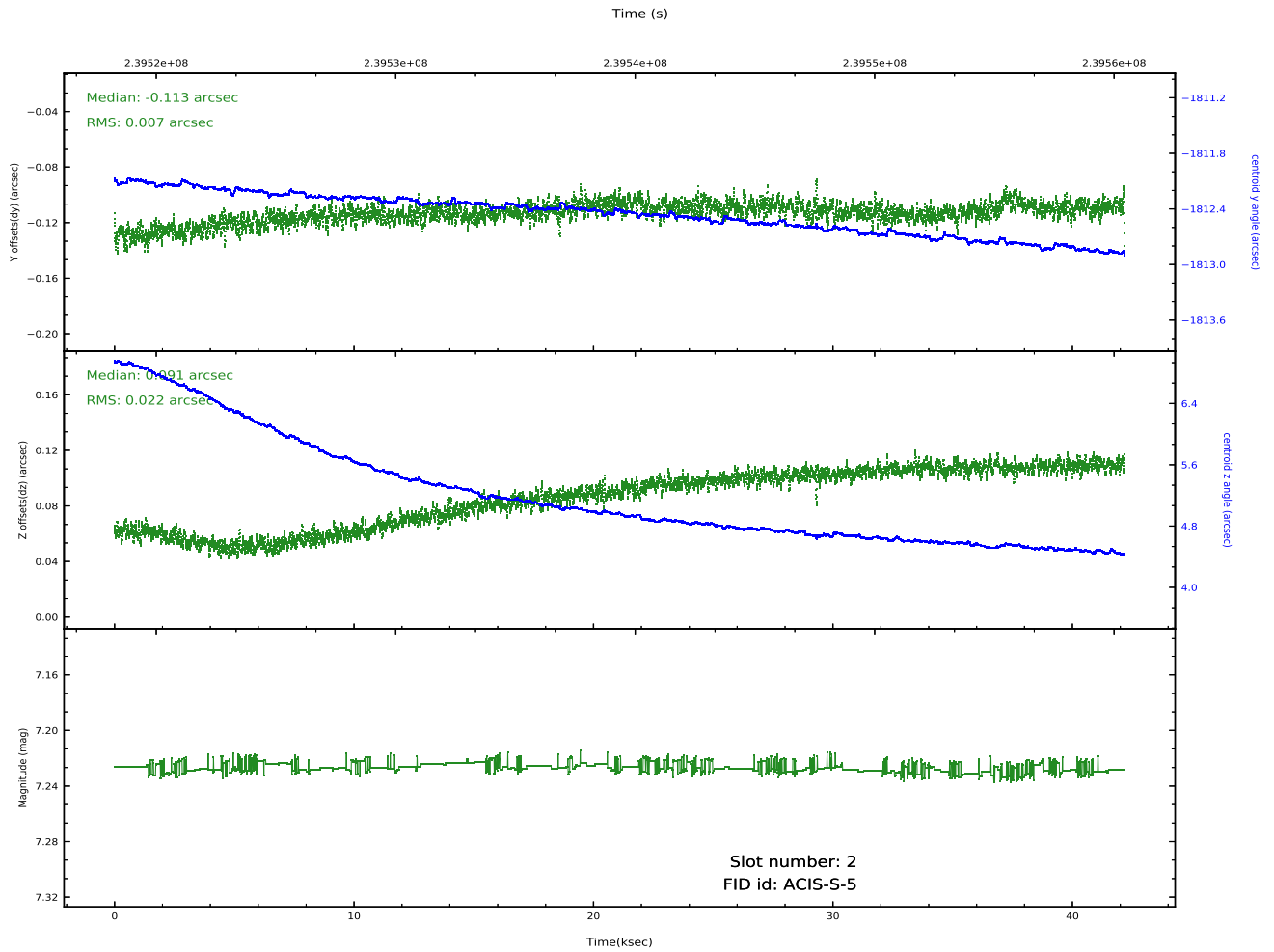
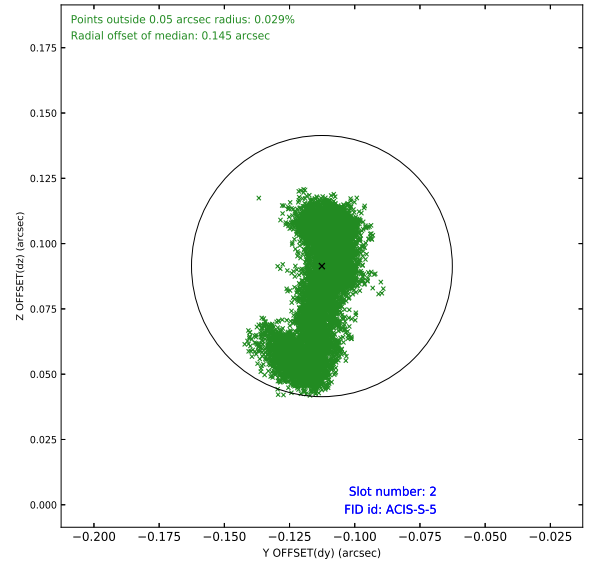
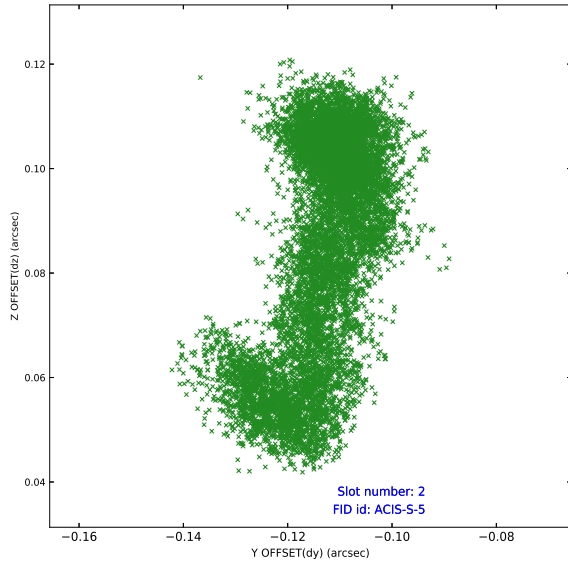
2.5.1 Slot 0



2.5.2 Slot 1

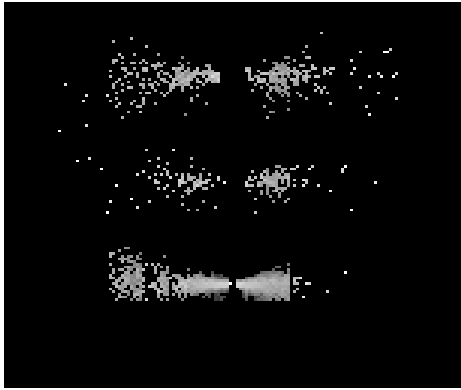


2.5.3 Slot 2

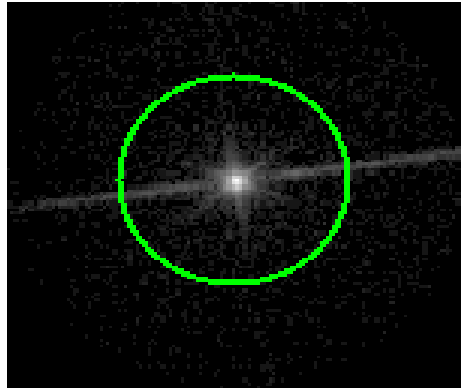


3 Gratings

3.1 LETG Arm



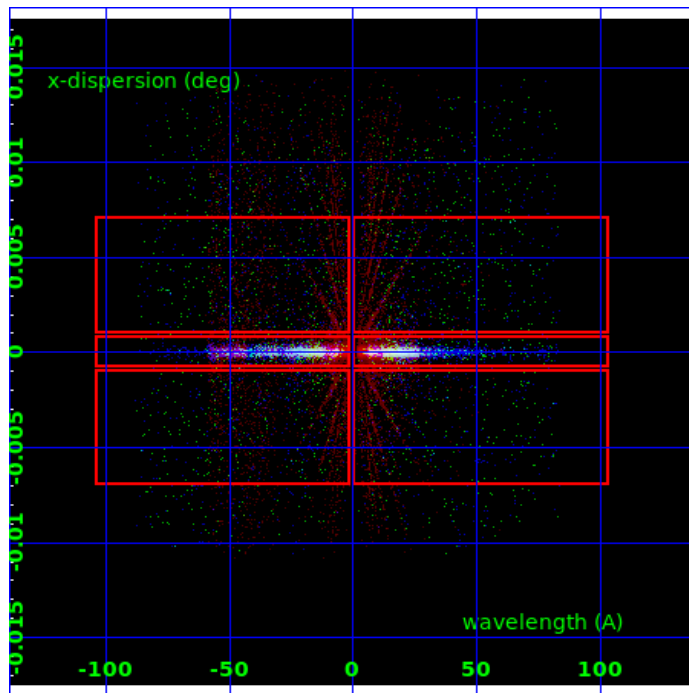
LETG Order Sort 123



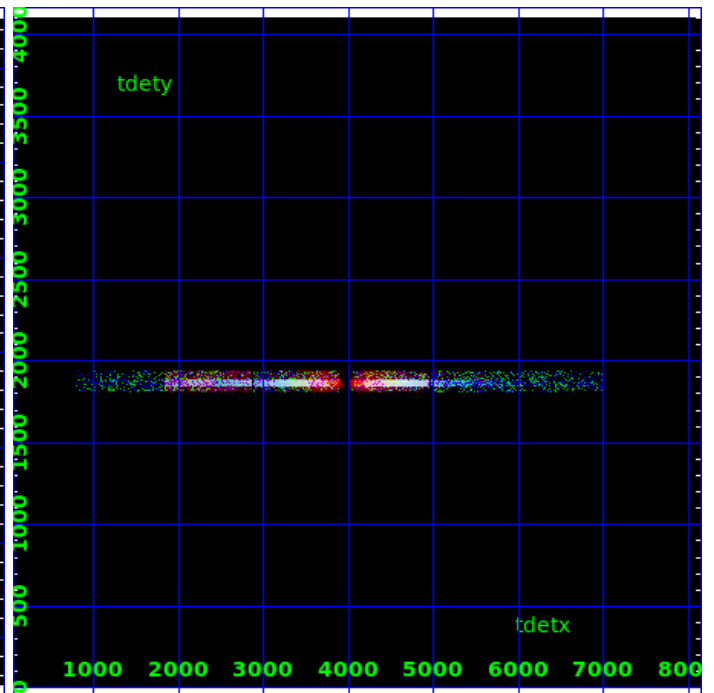
LETG Zero Order



LETG Order Sort ALL

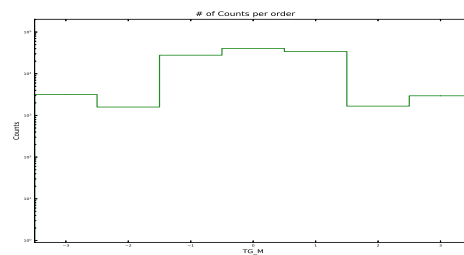


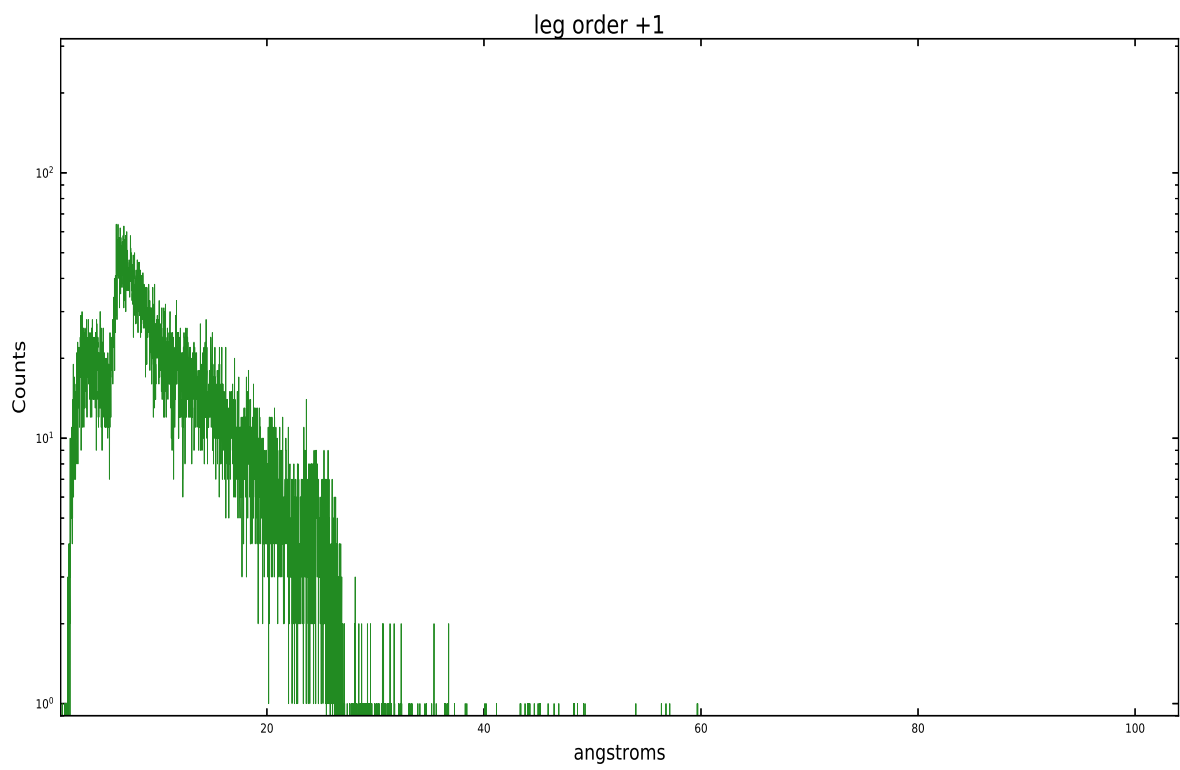
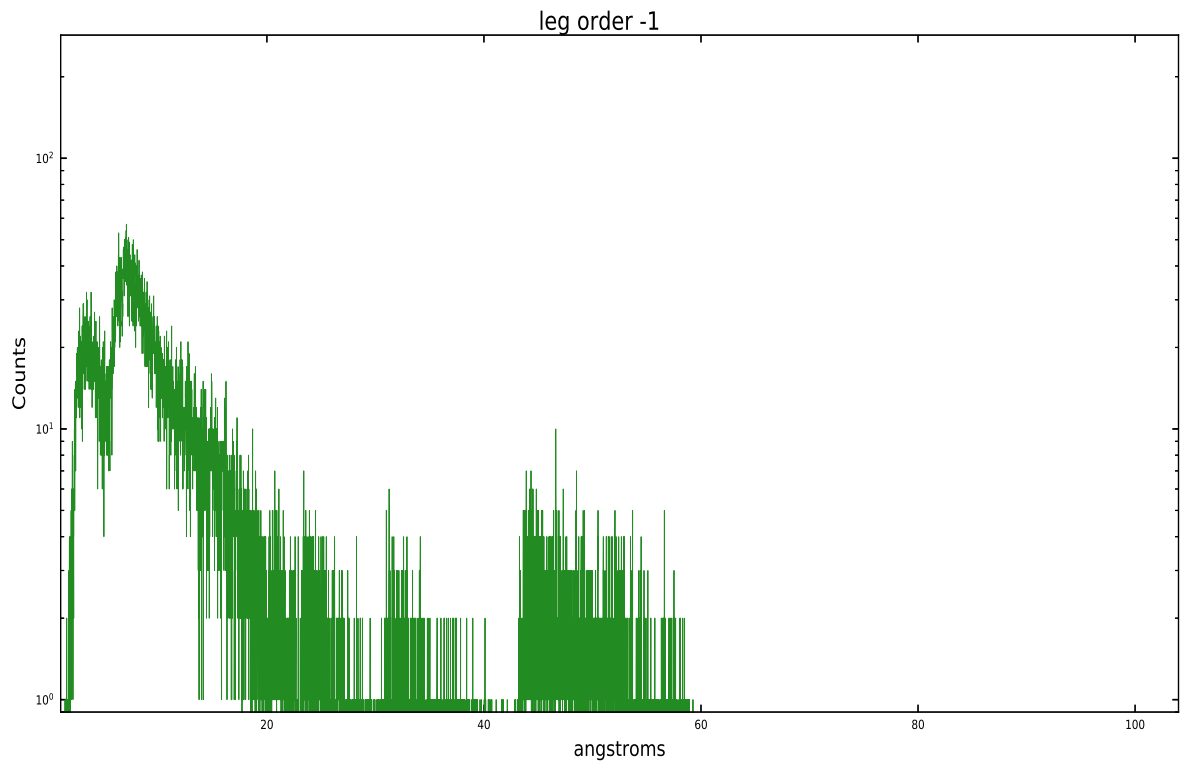
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	3166	1588	27857	40484	34177	1670	2961





A Summary

A.1 Status

V&V Scientist	David Principe
V&V Date (YYYY-MM-DD)	2020.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	42.1799

A.2 Comments