

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5476 - L2 Version 4
Chandra X-Ray Center

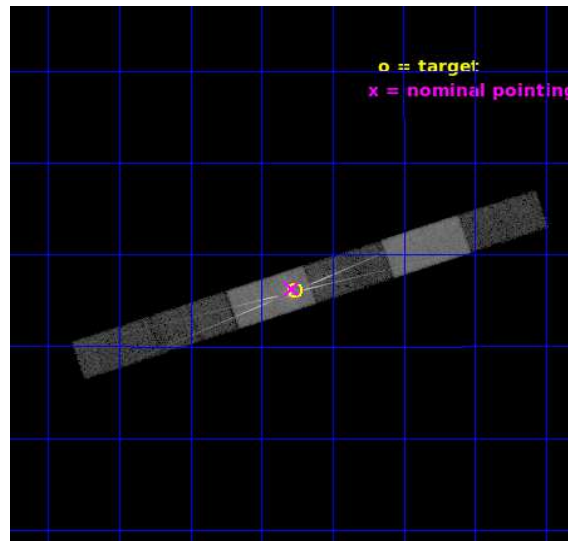
L2 Processing Date : Oct 8 2020

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1 Front

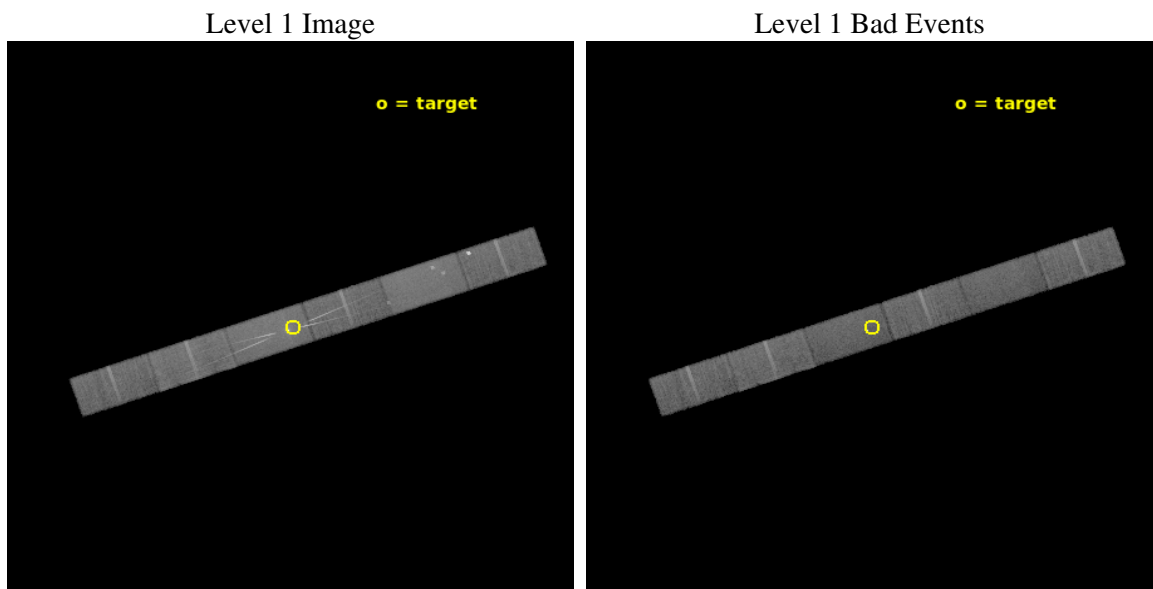
seq_num	400406	Sequence number
obs_id	5476	Observation id
title	X-RAY DIAGNOSTICS OF THE WIND OF HMXB X1908+075: POSSIBLE PROGENITOR BH-NS SYSTEM	Proposal title
observer	Saul Rappaport	Principal investigator
object	4U 1908+075	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	287.691667	Observer's specified target RA [deg]
dec_targ	7.601944	Observer's specified target Dec [deg]
ra_nom	287.69650173911	Nominal RA [deg]
dec_nom	7.6050757963325	Nominal Dec [deg]
roll_nom	161.10068923975	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19177.69986552	Sum of GTIs [s]
livetime	18725.640864876	Livetime [s]
ontime4	19177.69986552	Sum of GTIs [s]
ontime5	19177.69986552	Sum of GTIs [s]
ontime6	19177.69986552	Sum of GTIs [s]
ontime7	19177.69986552	Sum of GTIs [s]
ontime8	19177.69986552	Sum of GTIs [s]
ontime9	19177.69986552	Sum of GTIs [s]
l2events	166055	Number of level 2 events



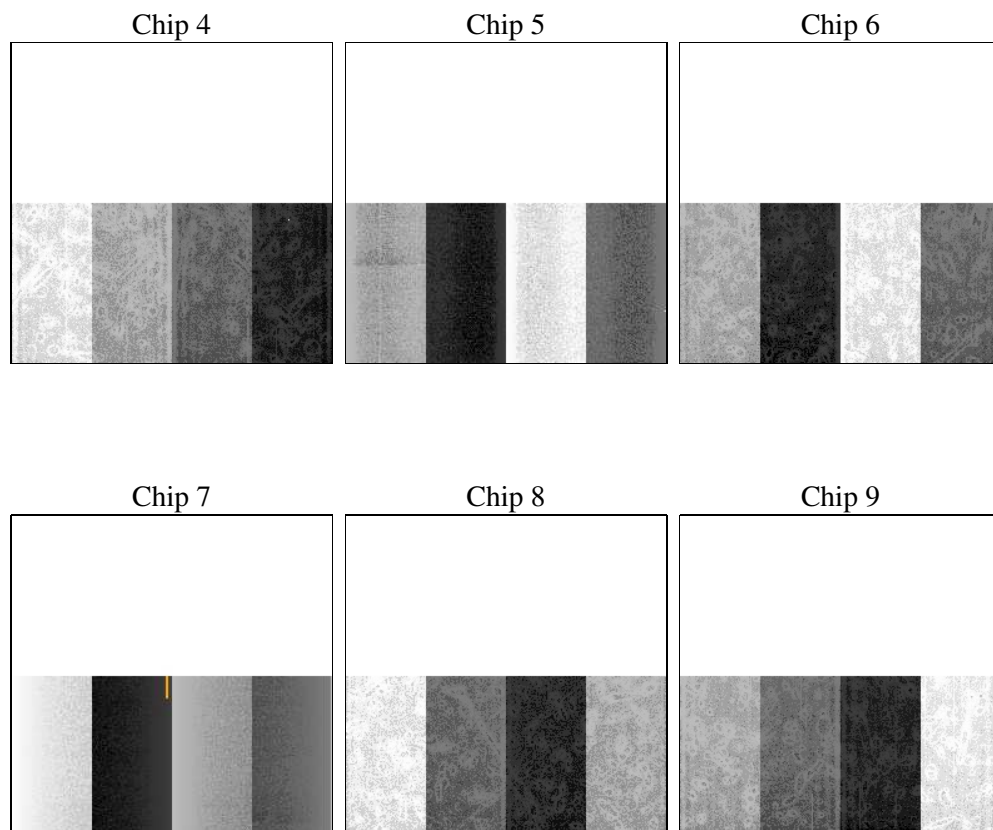
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	19177.69986552	Sum of GTIs [s]
caldsver	4.9.2	 	ontime4	19177.69986552	Sum of GTIs [s]
date	2020-10-09T02:04:22	Date and time of file creation	ontime5	19177.69986552	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	19177.69986552	Sum of GTIs [s]
			ontime7	19177.69986552	Sum of GTIs [s]
			ontime8	19177.69986552	Sum of GTIs [s]
			ontime9	19177.69986552	Sum of GTIs [s]
			l1events	636346	Number of level 1 events
			tgmetho	TGDETECT	Method used to create src1a file
				14064.58	

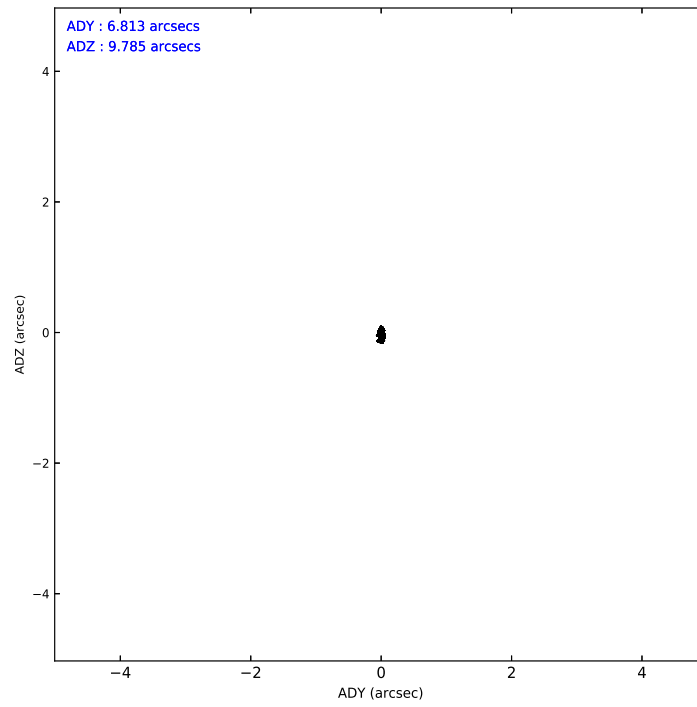
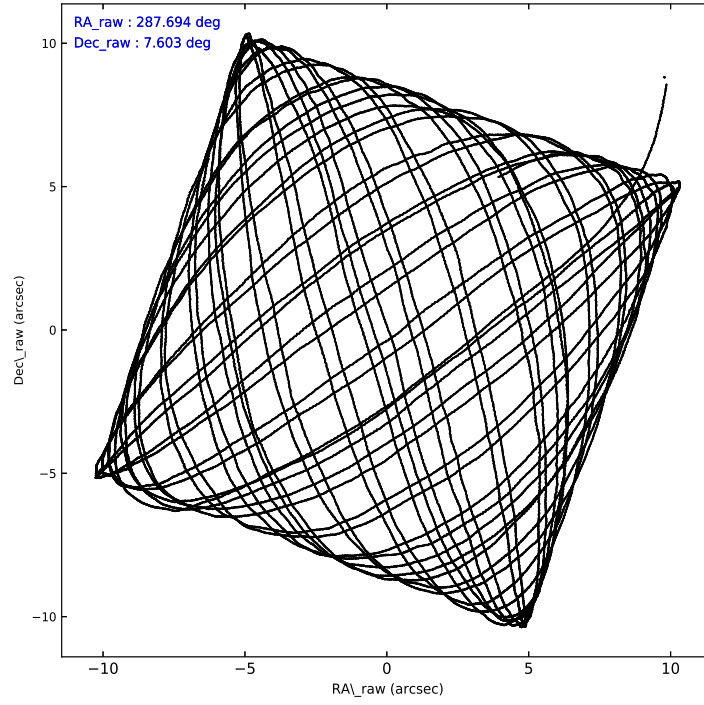
2.1.4 Events

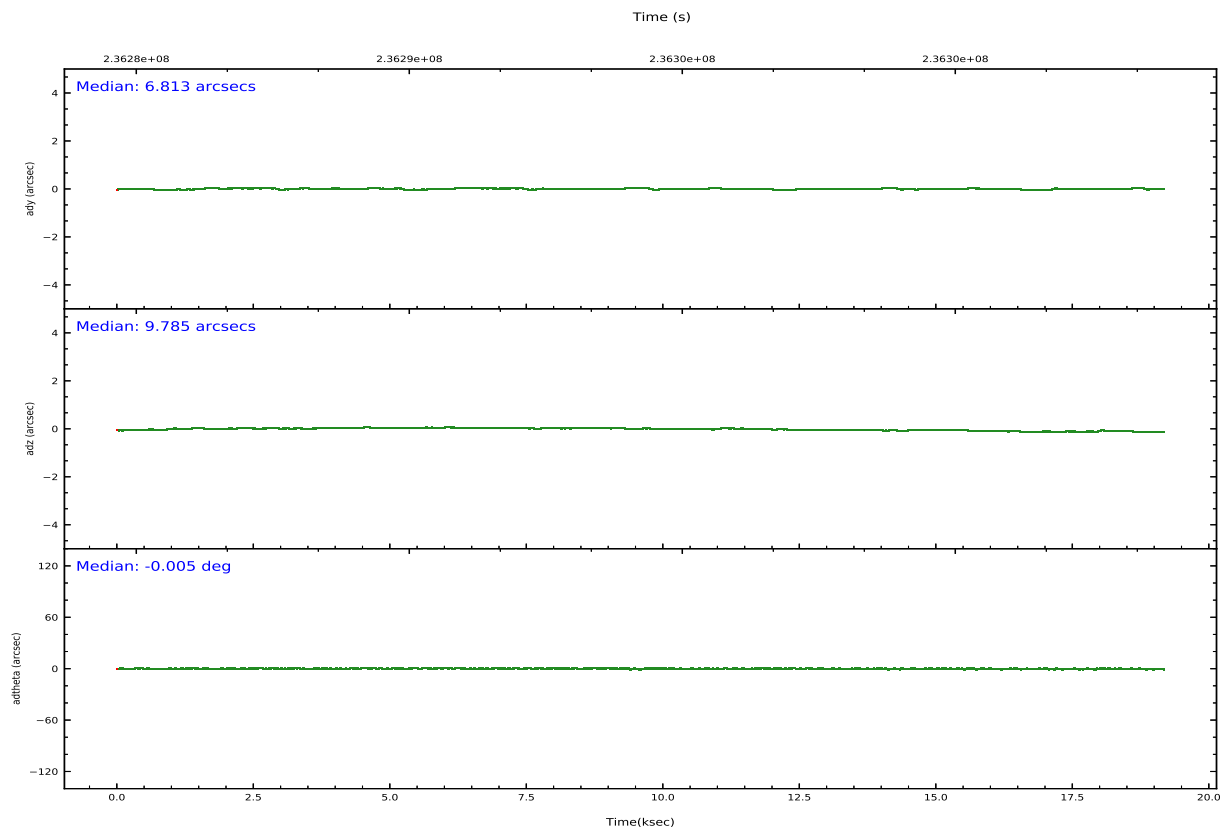
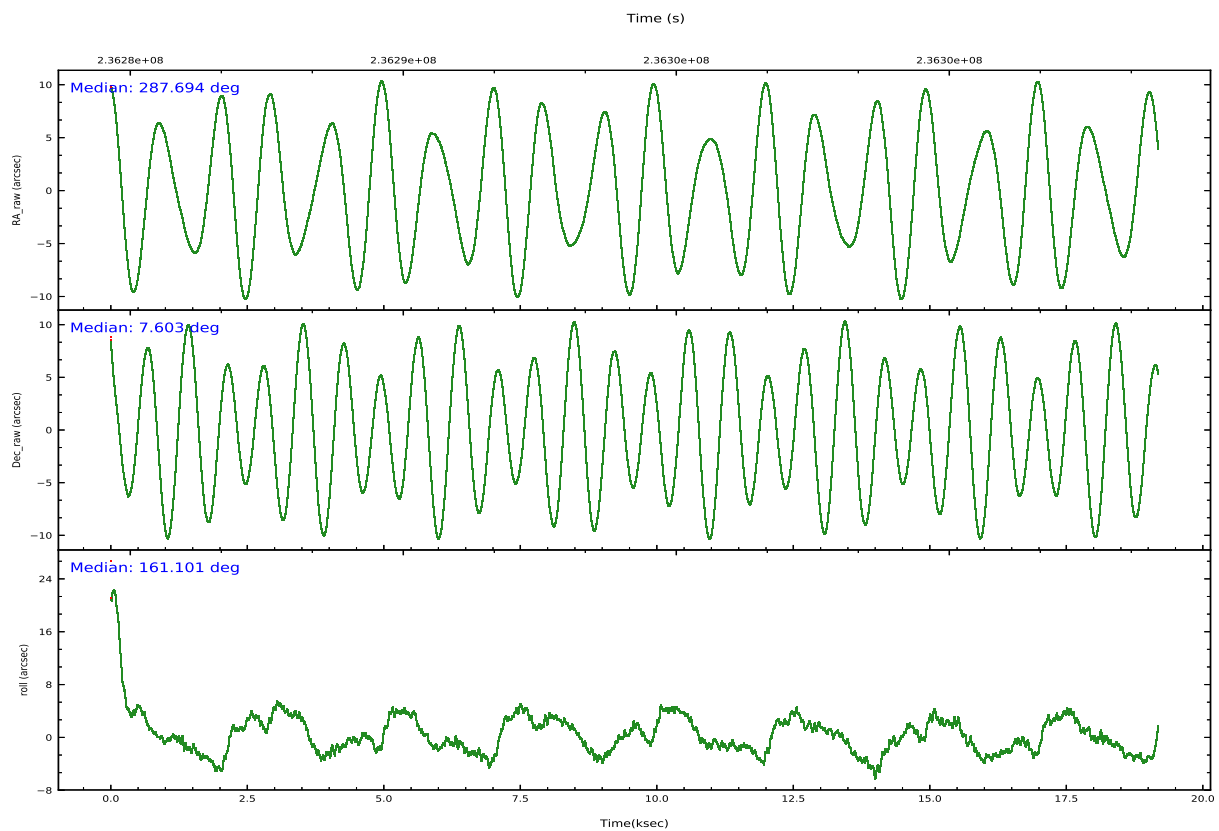
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	99534	116898	95185	138772	105732	80225	grade 0 events	14876	6421	10902	9432	7827	3920
rejected events	78624	63039	74665	65528	82518	70277		14%	5%	11%	6%	7%	4%
rejected %	78%	53%	78%	47%	78%	87%	grade 1 events	89	225	64	395	59	40
								0%	0%	0%	0%	0%	0%
							grade 2 events	2142	15068	3511	15383	4794	1822
								2%	12%	3%	11%	4%	2%
							grade 3 events	1236	2631	1694	6948	2525	1157
								1%	2%	1%	5%	2%	1%
							grade 4 events	1165	2521	1657	6960	2417	1157
								1%	2%	1%	5%	2%	1%
							grade 5 events	3191	8739	3386	11086	4508	3551
								3%	7%	3%	7%	4%	4%
							grade 6 events	1649	27719	2893	35131	5788	1970
								1%	23%	3%	25%	5%	2%
							grade 7 events	75186	53574	71078	53437	77814	66608
								75%	45%	74%	38%	73%	83%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	287.720510	287.69650173911	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	7.608647	7.6050757963325	Subarray start row	1	1
[deg] Pointing Roll	160.943396	161.10068923975	Subarray row count	512	512
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.7
[mm] SIM translation stage pos	-183.992523	-183.985022191653			
[mm] SIM translation stage offset	-6.14	-6.147500391354811			
Phase constraints	Y	Y			
[d] Phase period	4.400700	4.400700			
[d] Phase epoch (MJD)	52631.383000	52631.383000			
Phase start	0.434200	0.434200			
Phase end	0.565800	0.565800			
Phase start error	0.134200	0.134200			
Phase end error	0.134200	0.134200			
[s] Observation start time (MET)	236284825.184000	236283852.30919			
Observation start date	2005-06-27T18:39:21	2005-06-27T18:24:12			
[s] Observation end time (MET)	236303825.184000	236304906.32265			
Observation end date	2005-06-27T23:56:01	2005-06-28T00:15:06			
Read mode	TIMED	TIMED			

2.3 Aspect



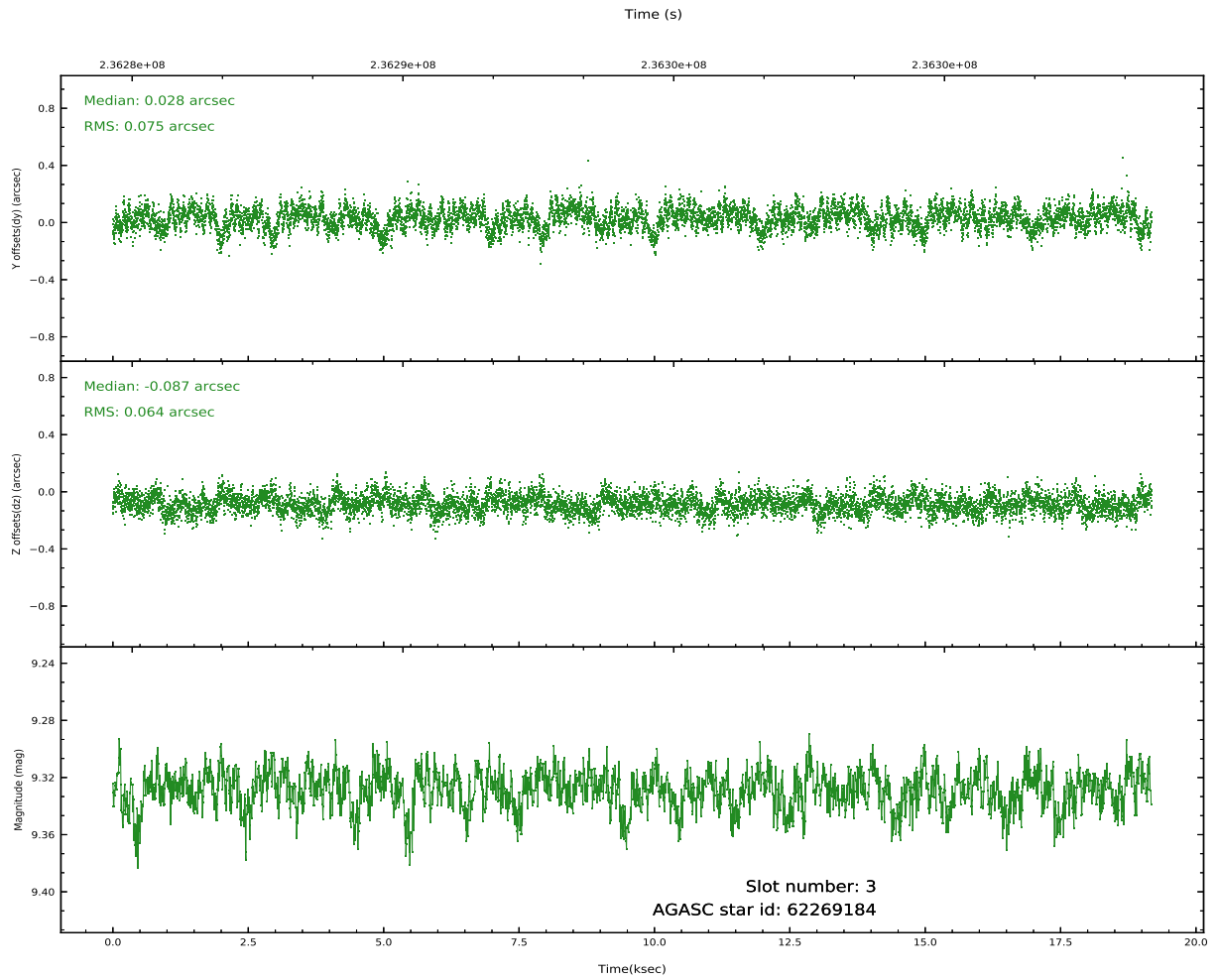
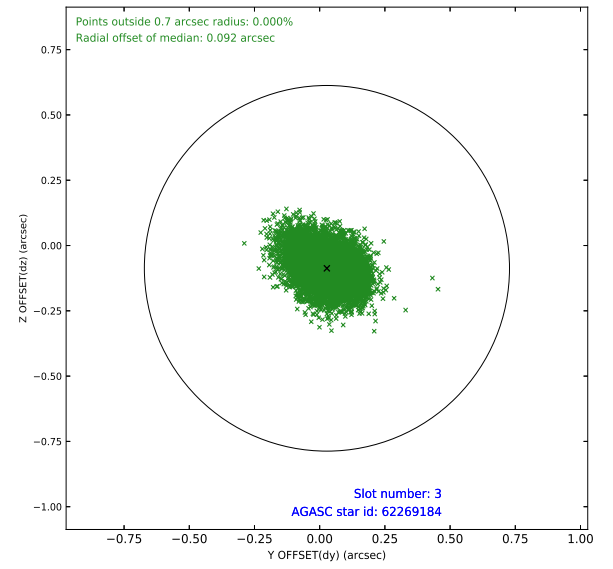
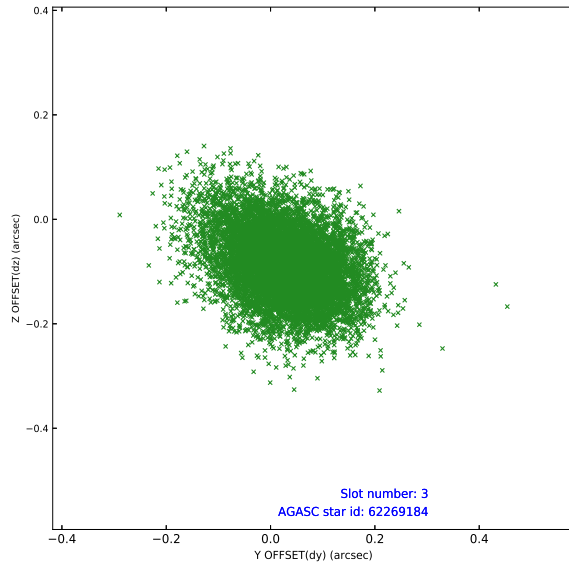


Slot Statistics

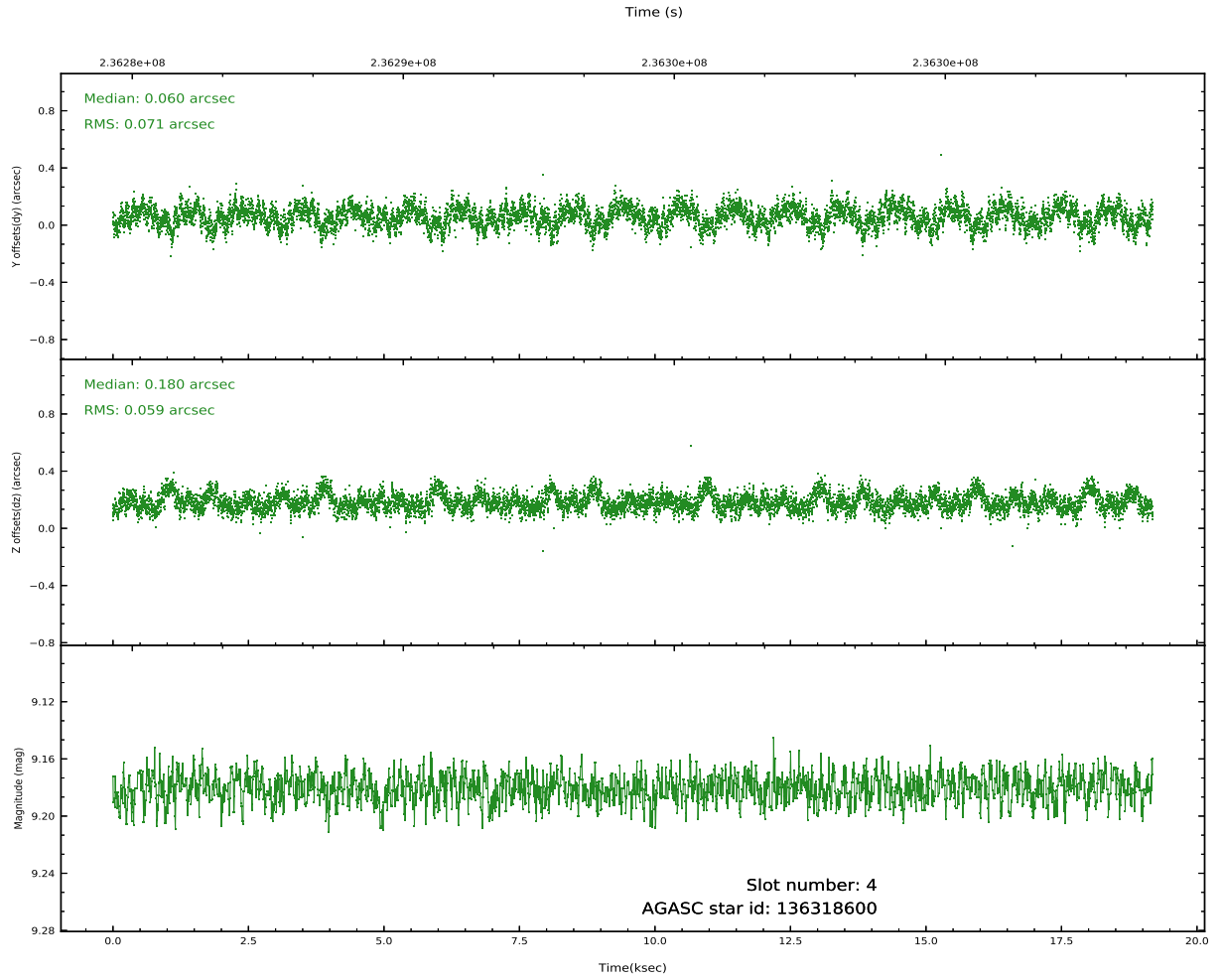
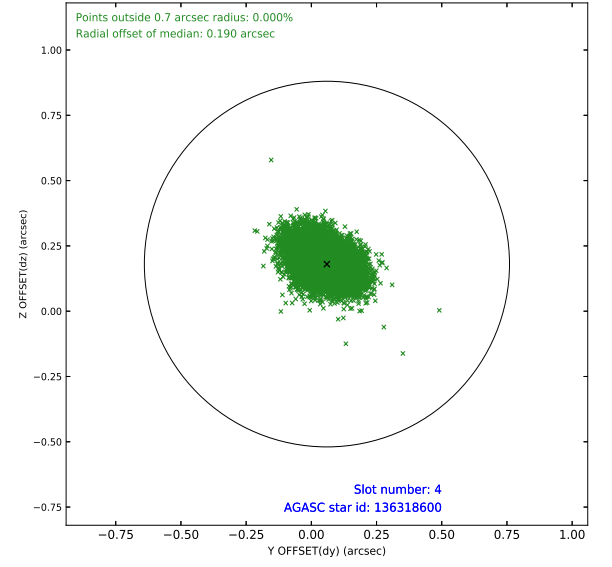
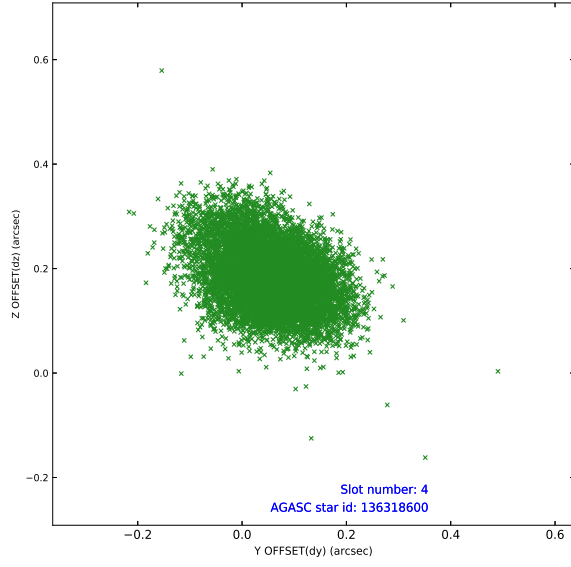
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.08	4679	1.000	-0.095	-0.155	0.007	0.012	0.000000	0.000000	-759.20	-1857
1	FID		ACIS-S-4	7.18	4678	1.000	0.176	0.087	0.006	0.010	0.000000	0.000000	2154.24	50
2	FID		ACIS-S-5	7.23	4678	1.000	-0.113	0.076	0.007	0.011	0.000000	0.000000	-1811.82	44
3	GUIDE	used	62269184	9.33	9354	1.000	0.028	-0.087	0.103	0.172	288.138932	6.932418	-2207.86	1812
4	GUIDE	used	136318600	9.18	9347	1.000	0.060	0.180	0.098	0.162	287.193672	7.971966	2203.10	-623
5	GUIDE	used	136450656	10.09	9355	1.000	-0.300	0.057	0.133	0.215	287.814143	8.235606	422.27	-2242
6	GUIDE	used	136451568	9.68	9346	1.000	0.144	0.019	0.103	0.170	287.608270	8.059160	908.50	-1402
7	GUIDE	used	136446056	9.36	9337	1.000	0.072	-0.176	0.088	0.144	287.496360	7.664883	822.60	69

2.4 Star Slots

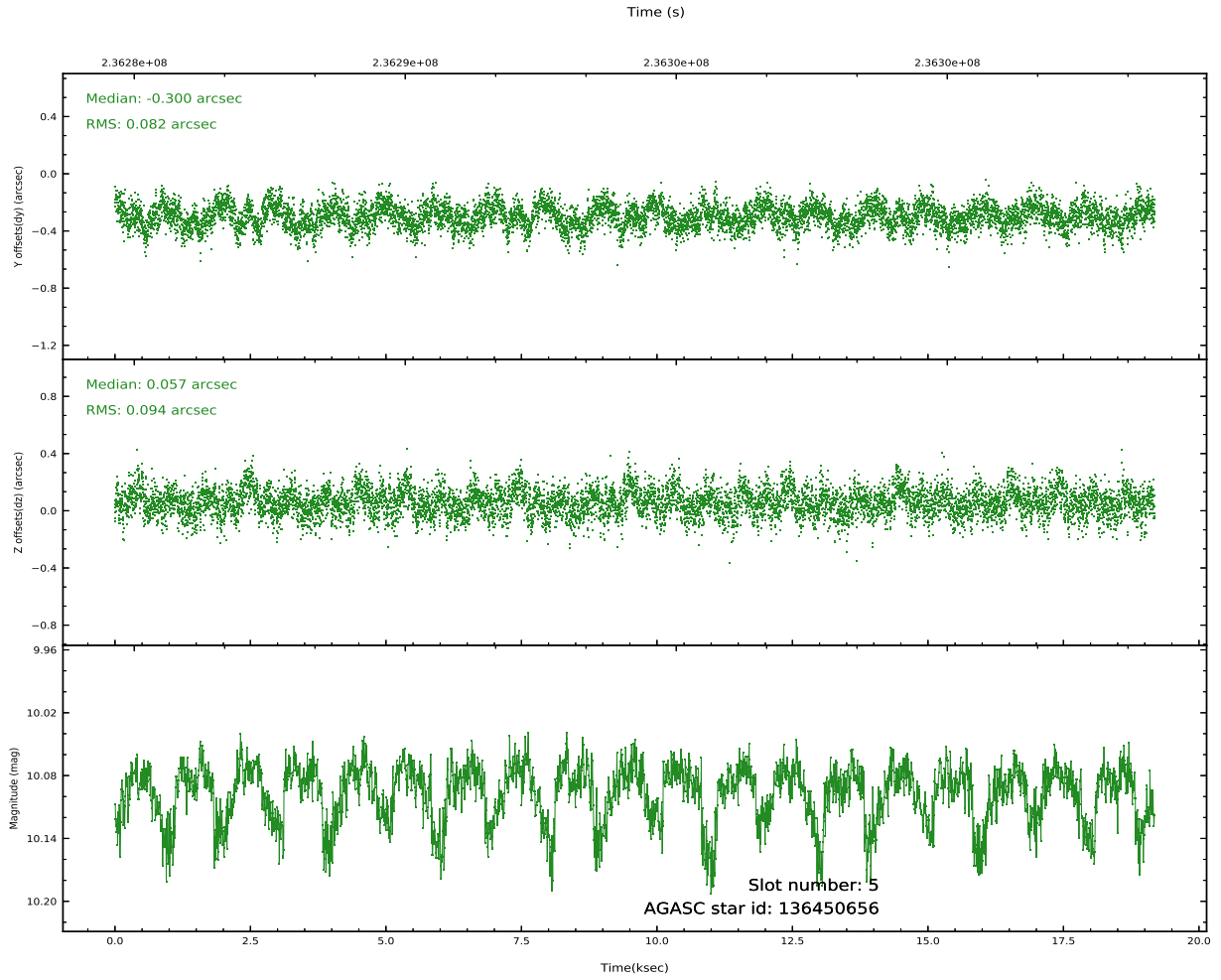
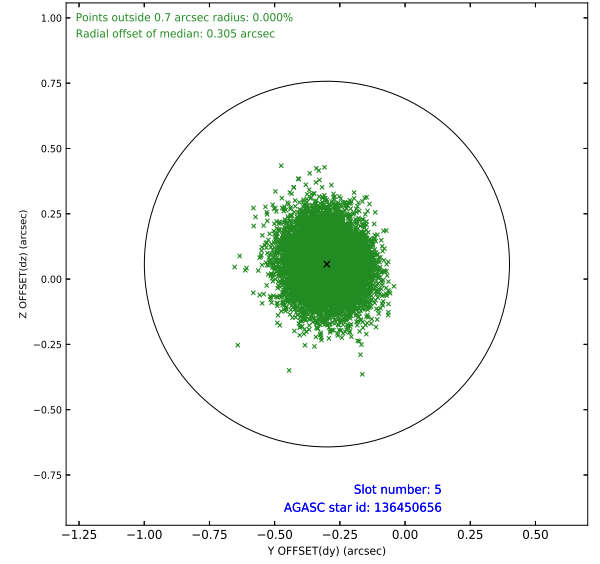
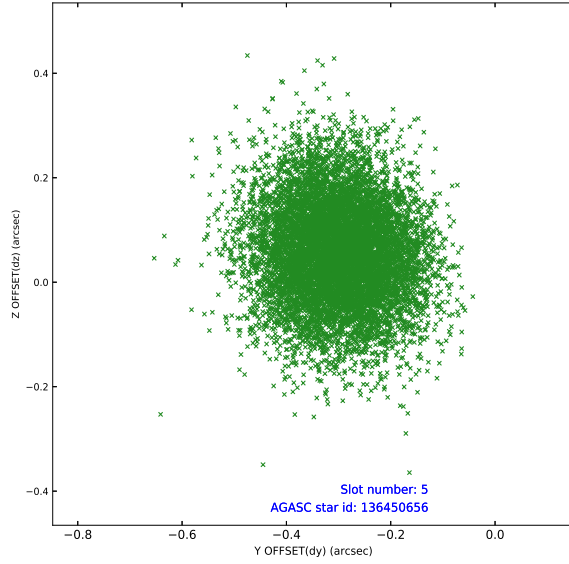
2.4.1 Slot 3



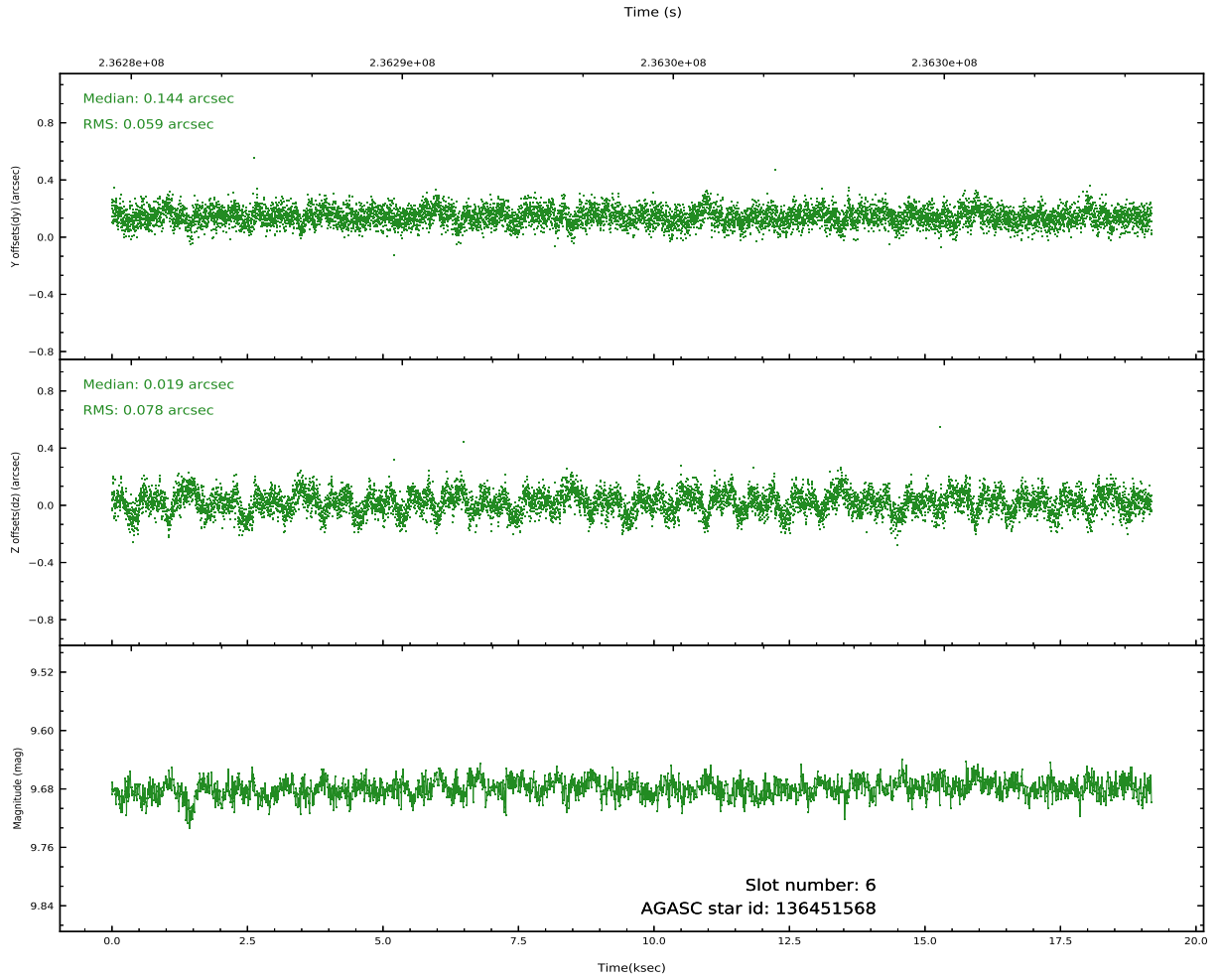
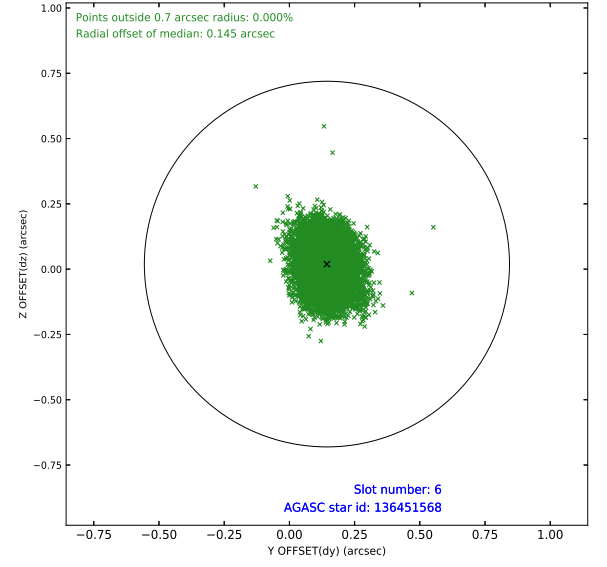
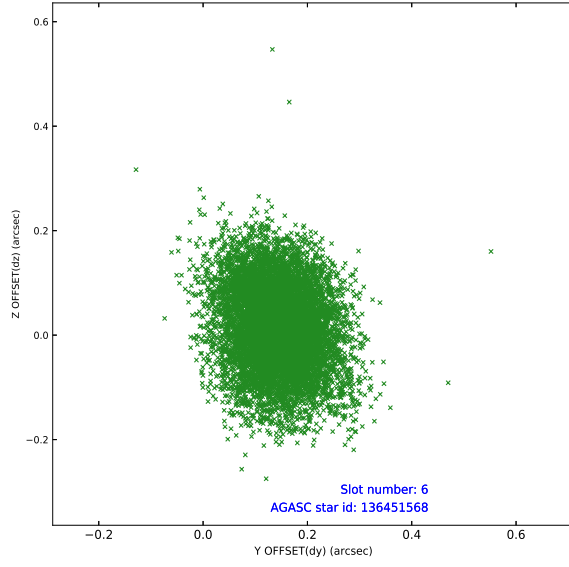
2.4.2 Slot 4



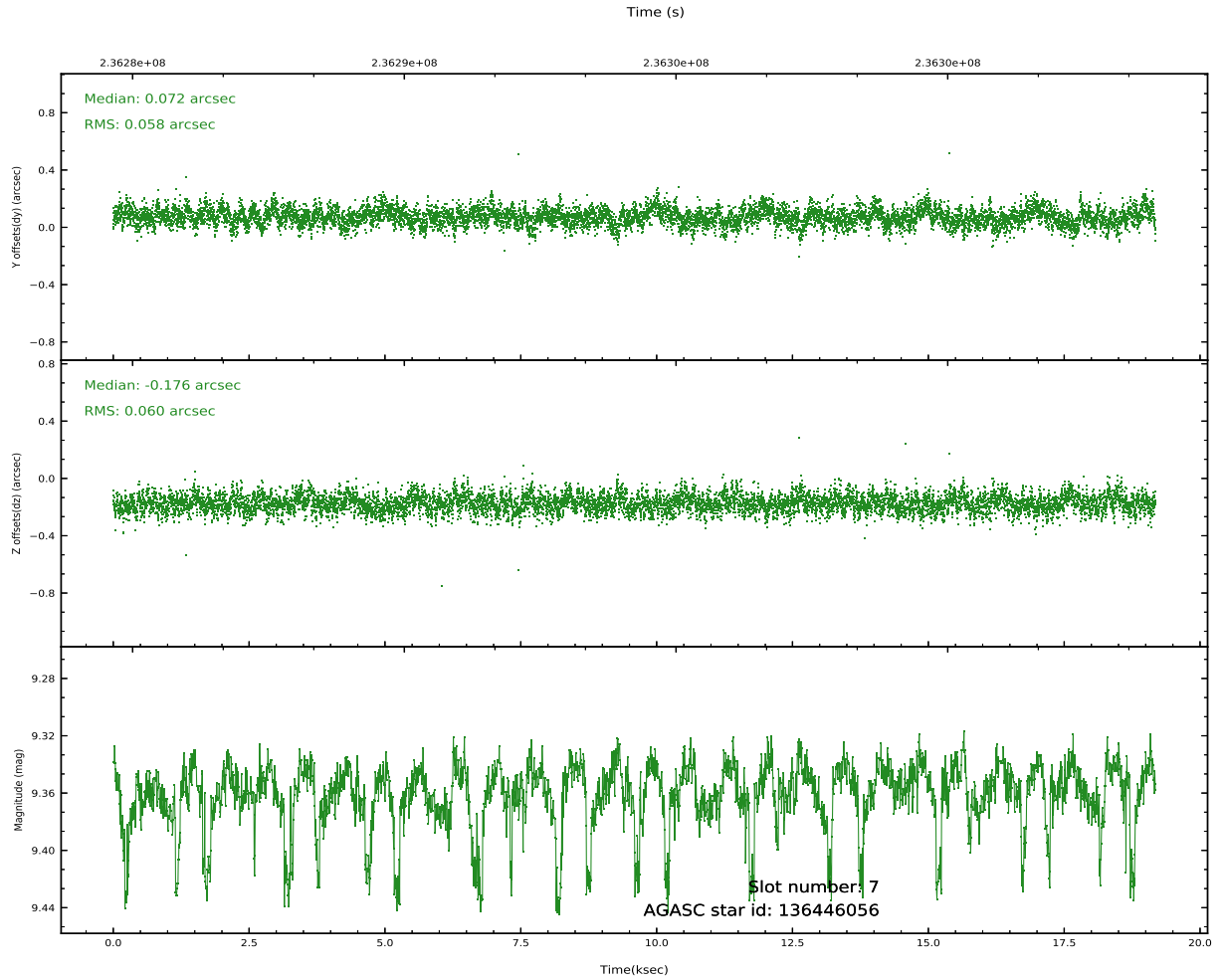
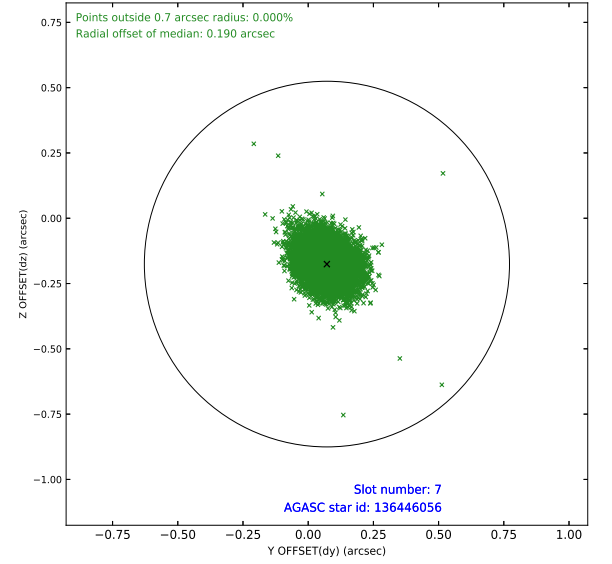
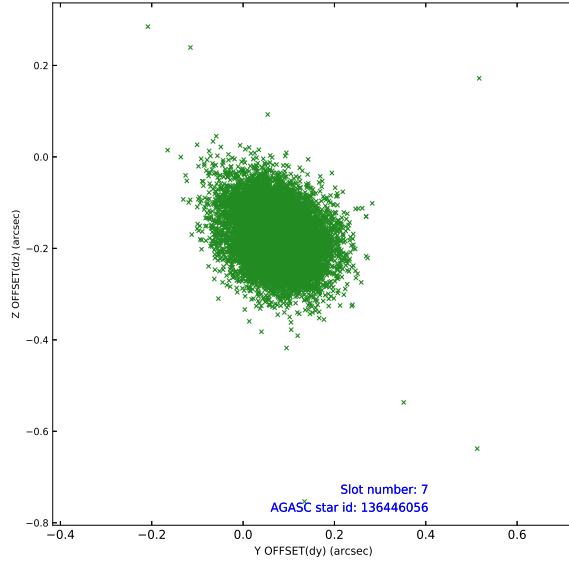
2.4.3 Slot 5



2.4.4 Slot 6

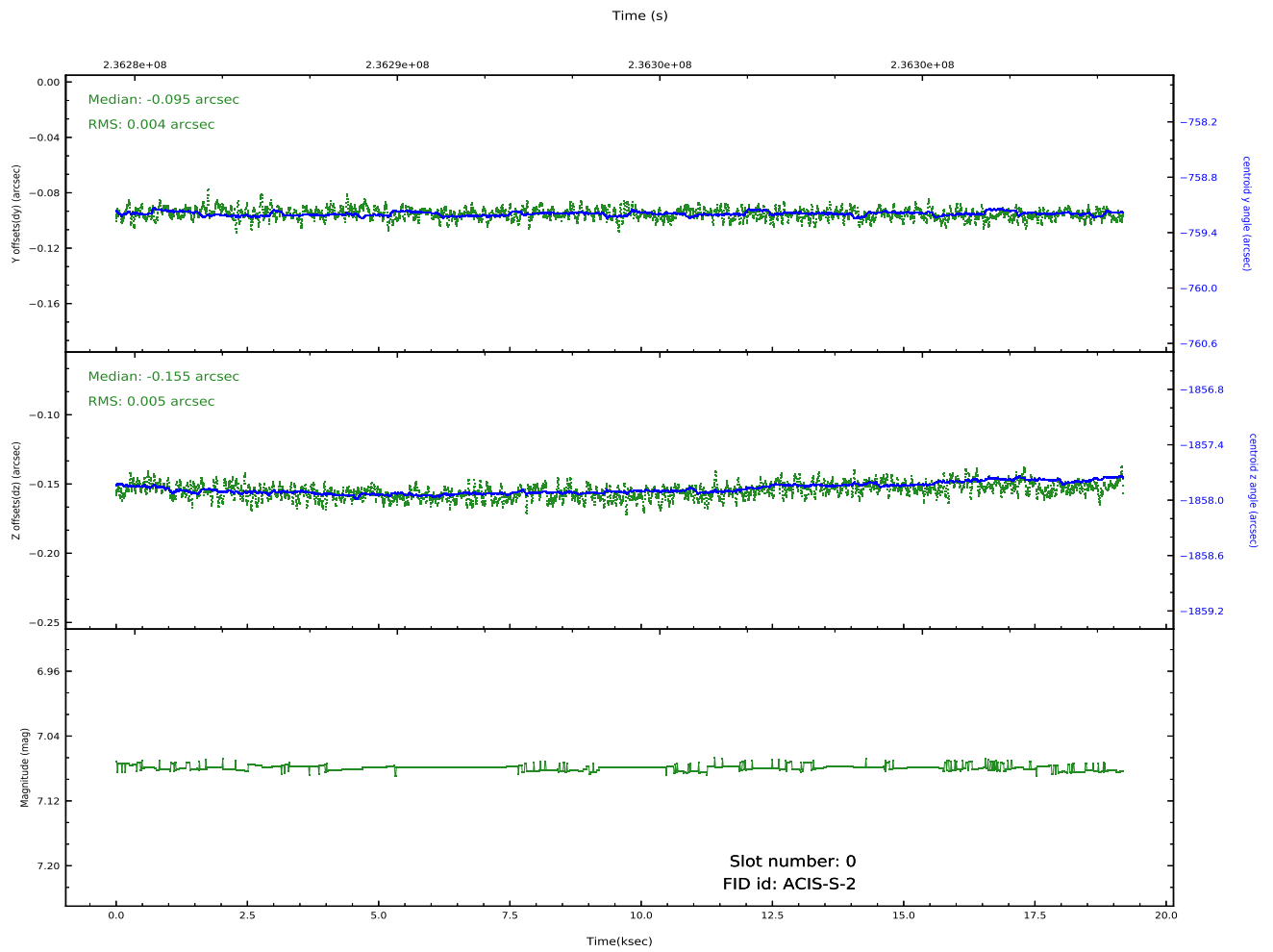
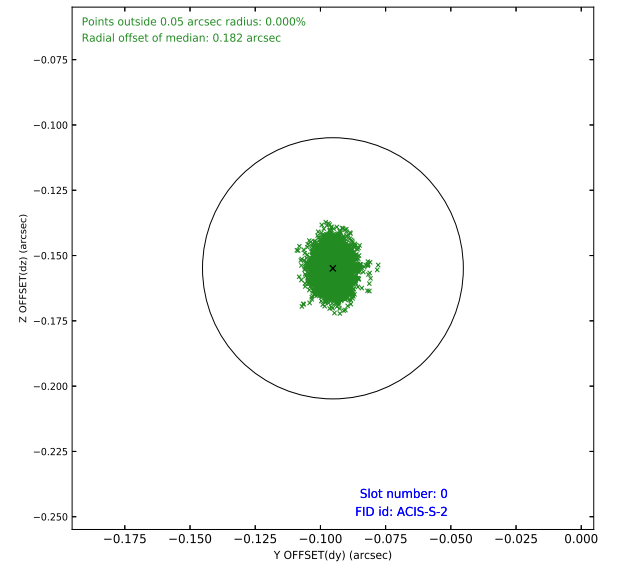
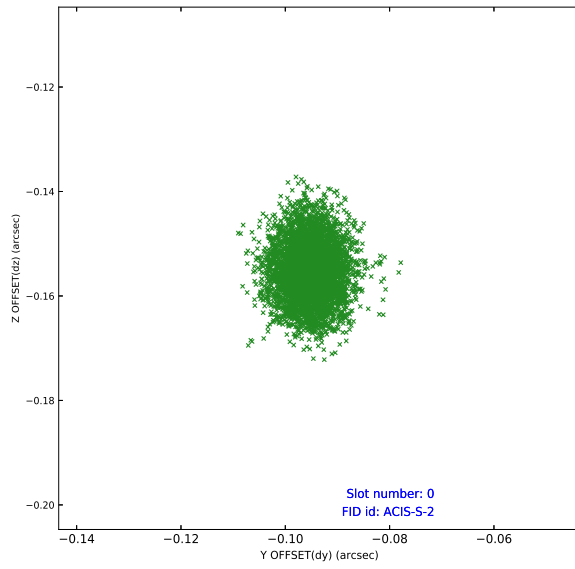


2.4.5 Slot 7

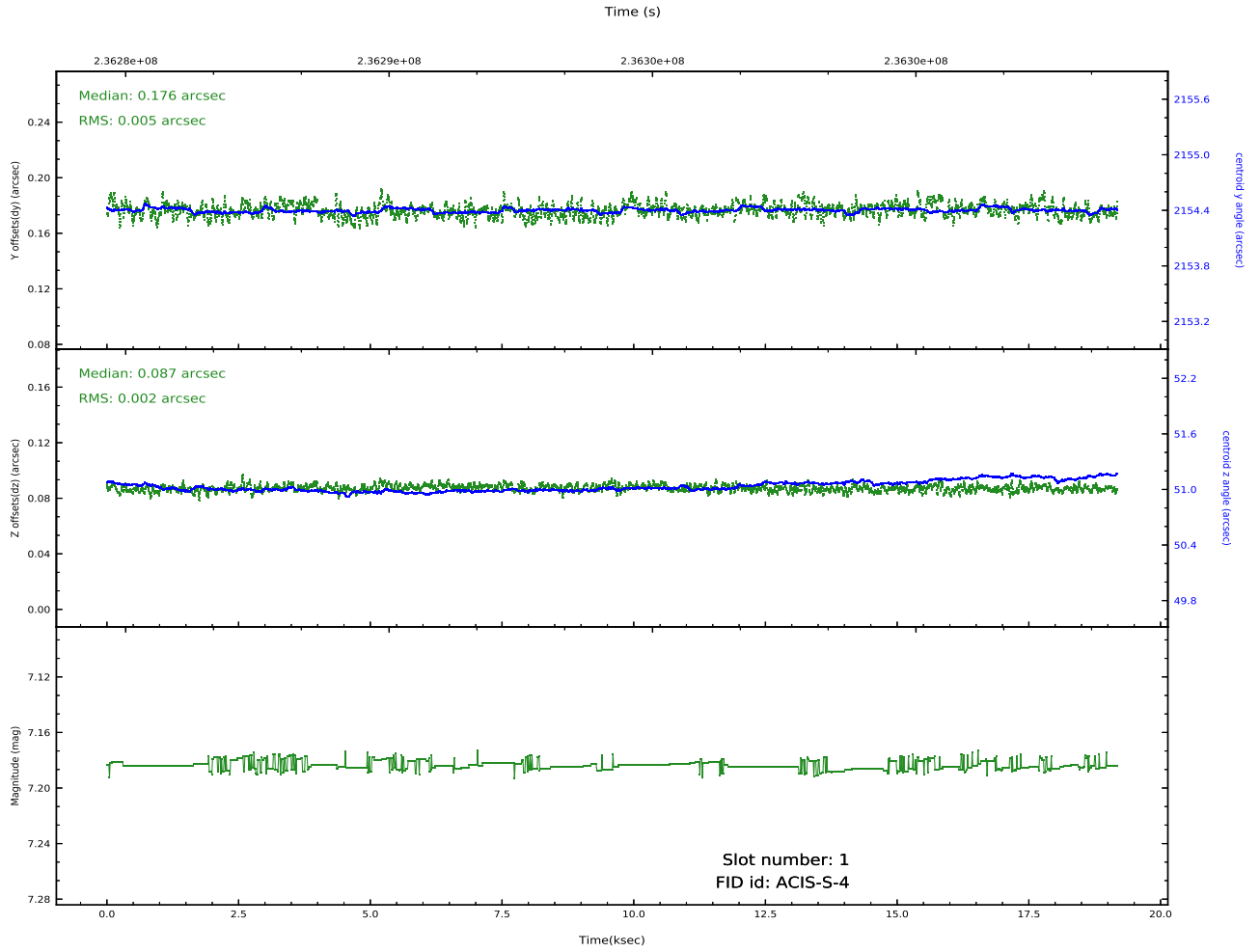
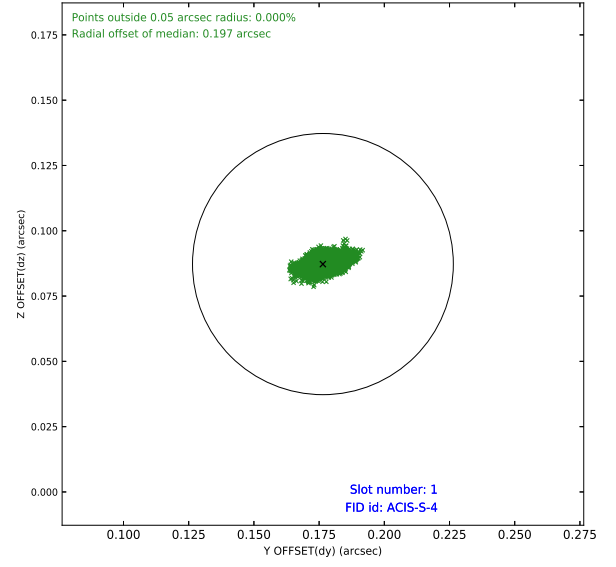
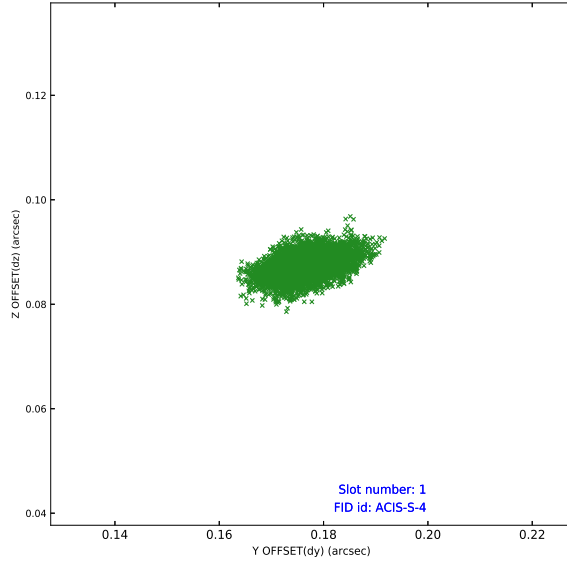


2.5 FID Slots

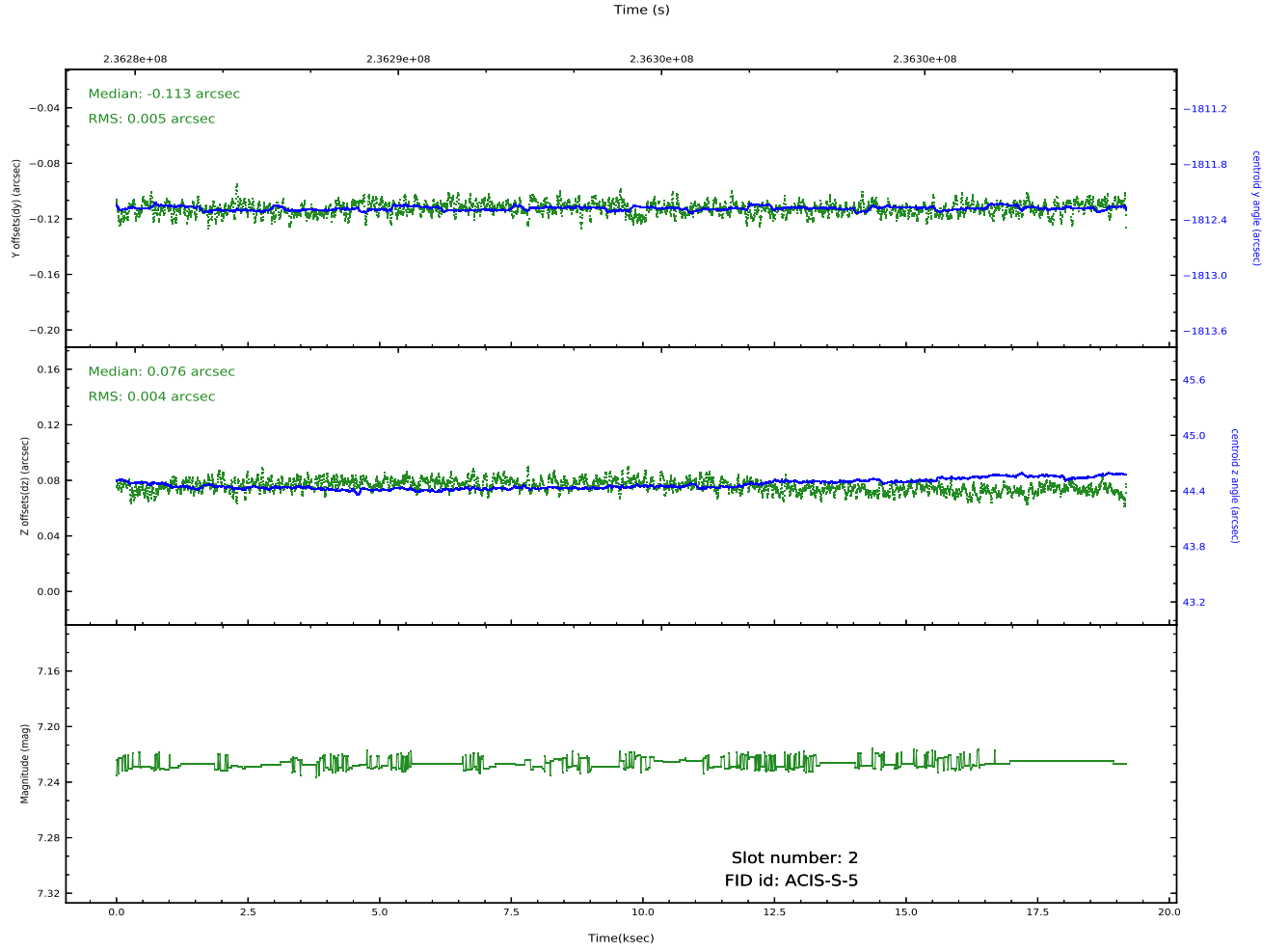
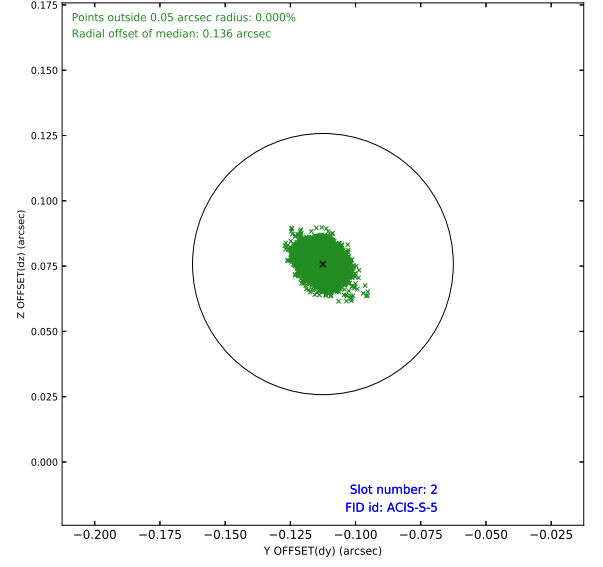
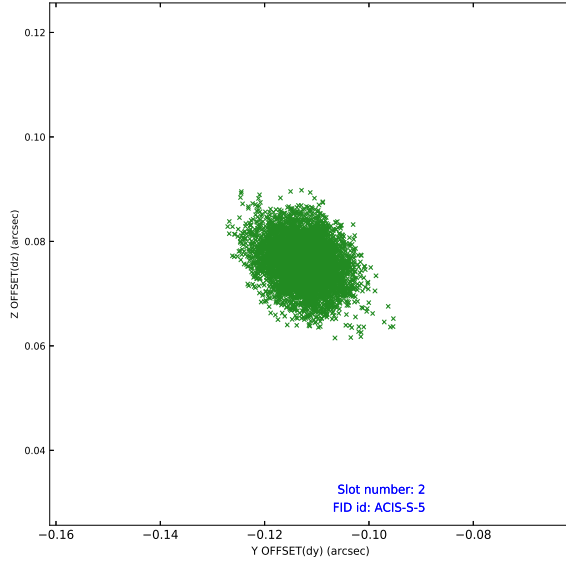
2.5.1 Slot 0



2.5.2 Slot 1

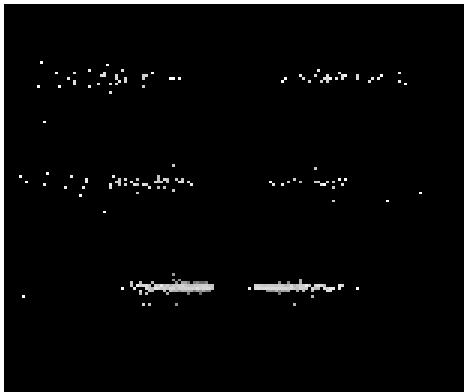


2.5.3 Slot 2

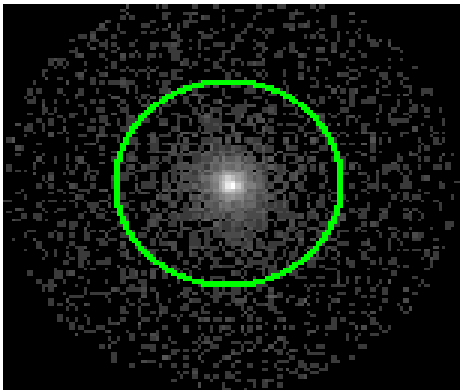


3 Gratings

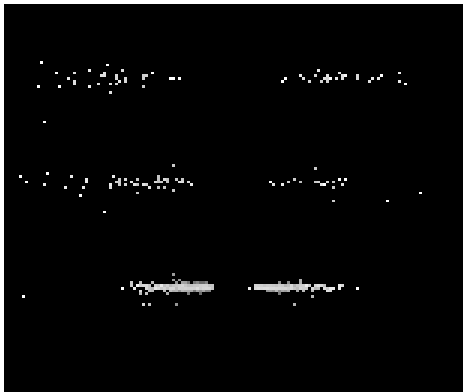
3.1 HEG Arm



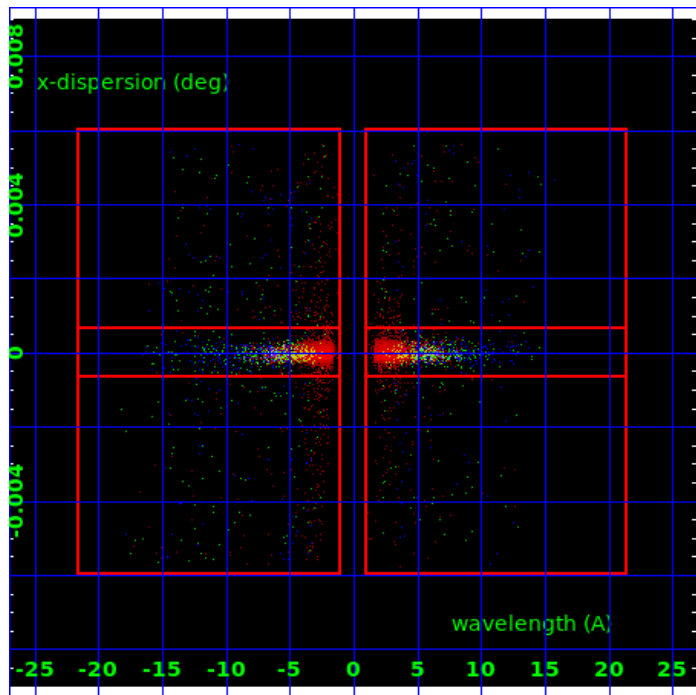
HEG Order Sort 123



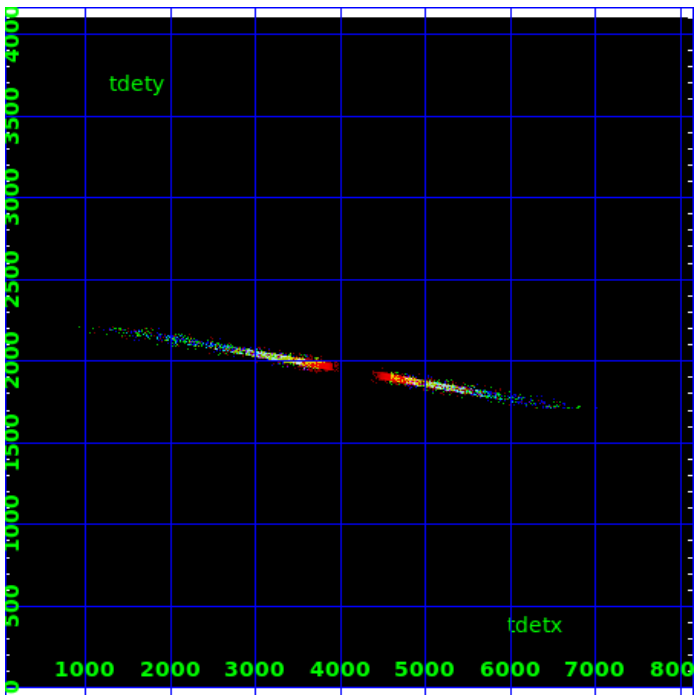
HEG Zero Order



HEG Order Sort ALL

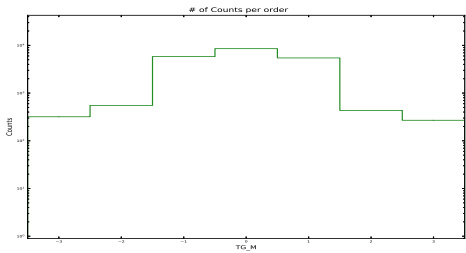


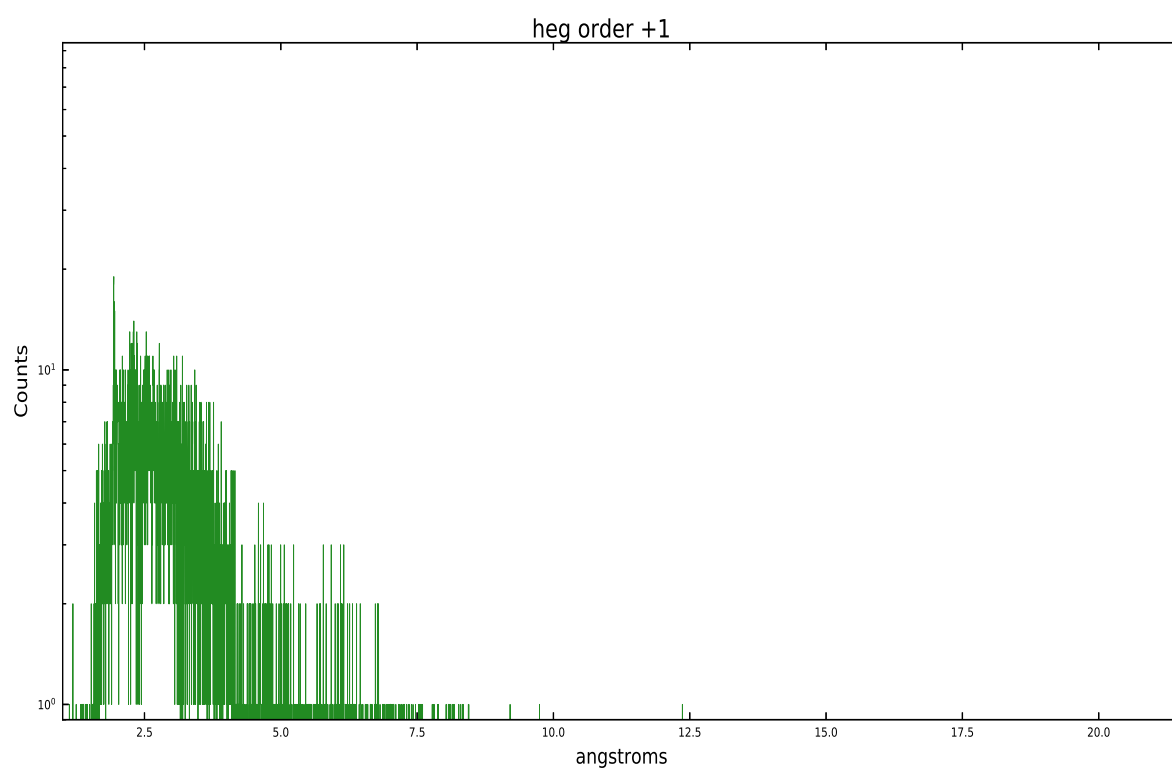
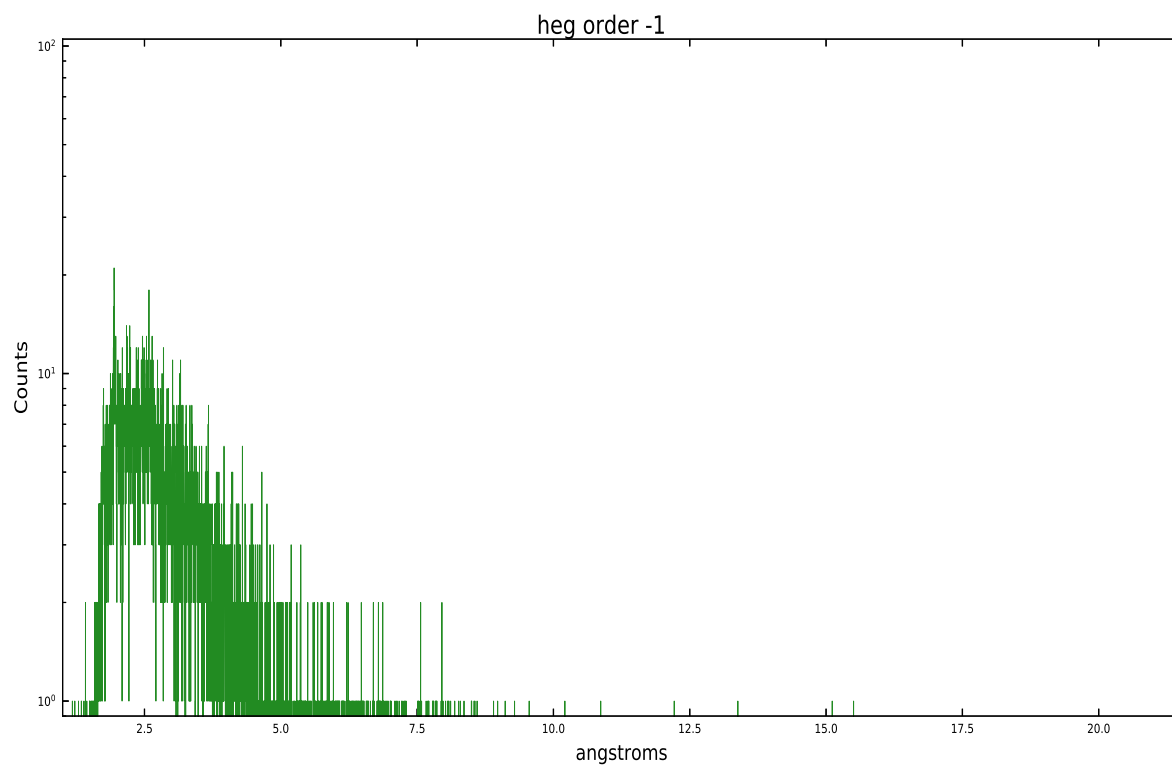
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	319	552	5816	8541	5455	433	269

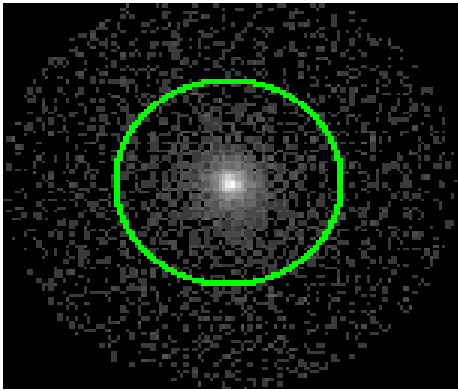




3.2 MEG Arm



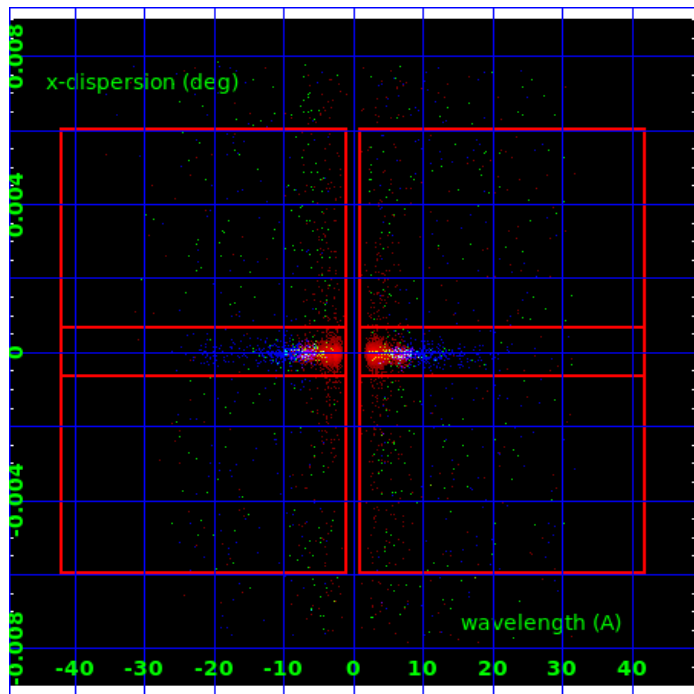
MEG Order Sort 123



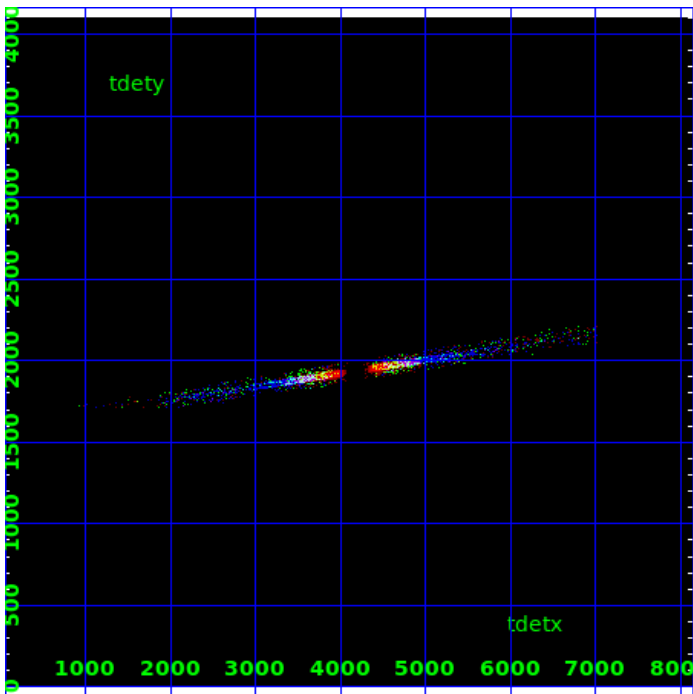
MEG Zero Order



MEG Order Sort ALL

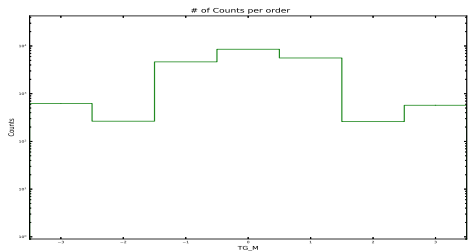


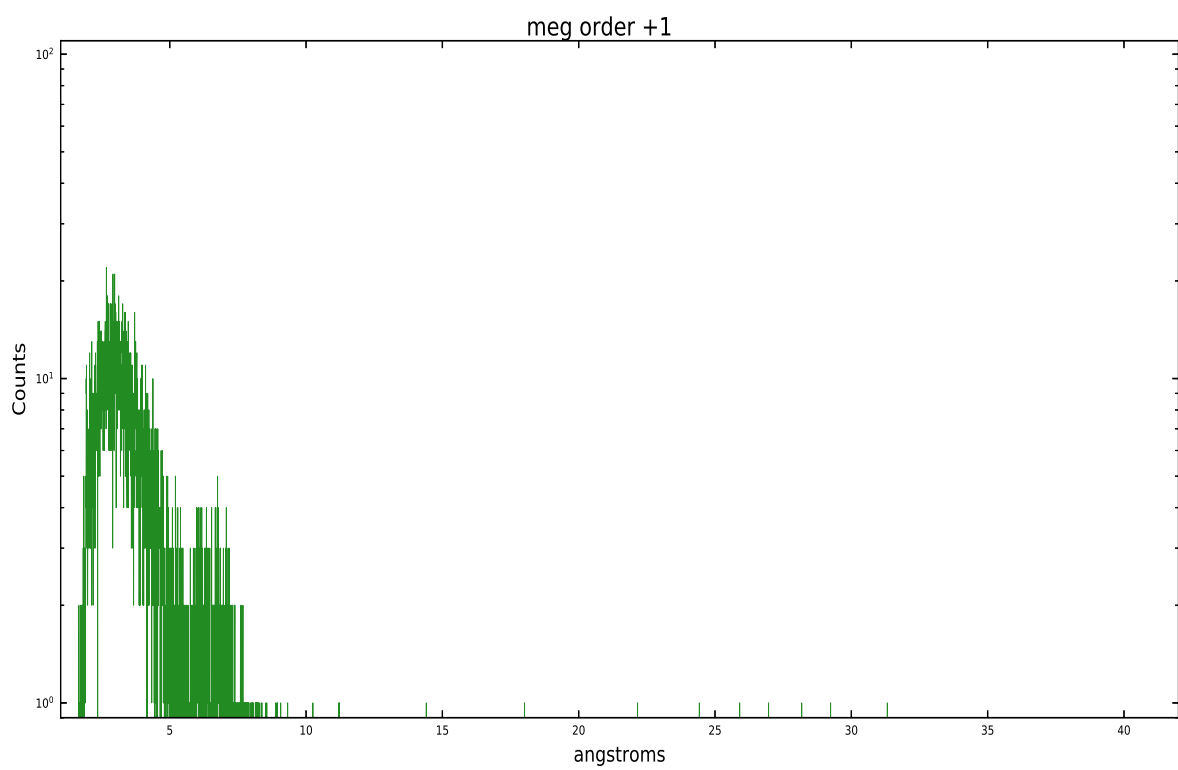
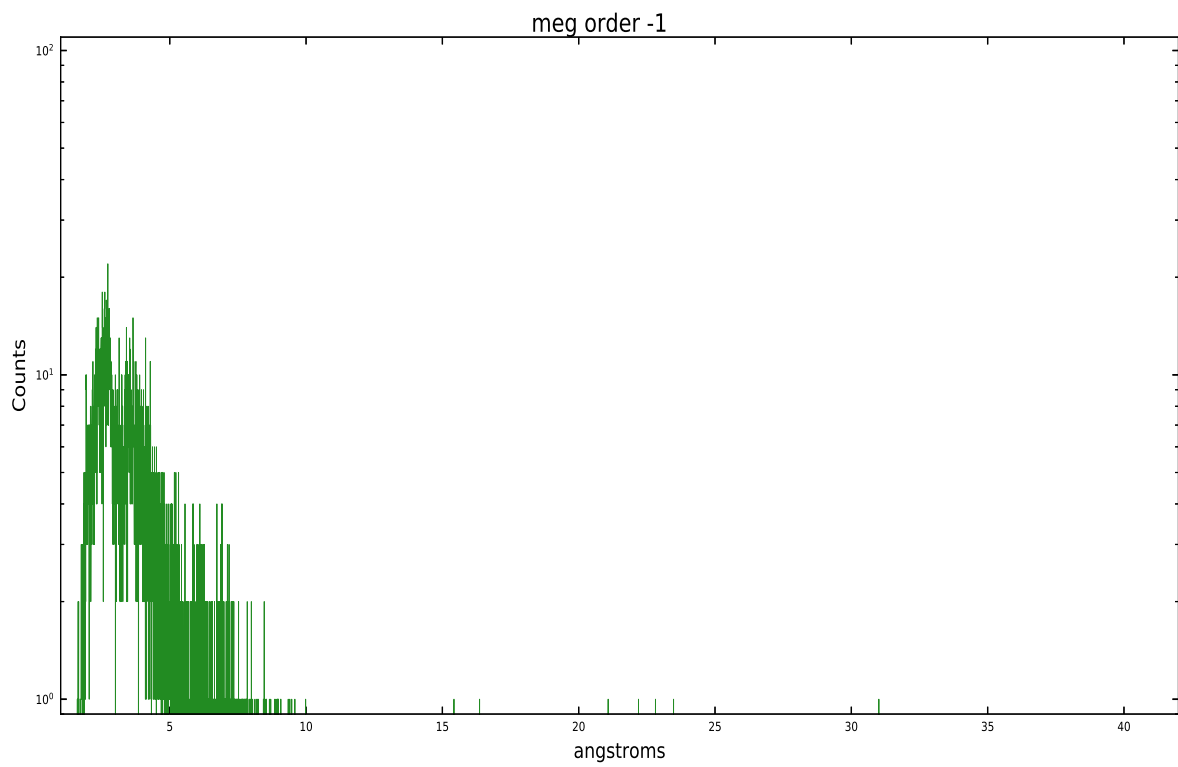
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	624	265	4647	8541	5606	260	572





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	19.17769

A.2 Comments