

global store metric: l1tex_t_sectors_pipe_lsu_mem_global_op_st.sum
global load metric: l1tex_t_sectors_pipe_lsu_mem_global_op_ld.sum

A100 note: the FLOP of halo calculation in TCStencil is ignored

stencil implement	r	inner mesh	TFLOP	time (us)	global store sectors	global load sectors	memory traffic(GB)	AI (FLOP/byte)	performance (TFLOP/s)
tc-w/o-tc-star	1	7200	0.0005184	194.46	6,480,000	11,744,979	0.583199328	0.888889913	2.665843875
	2	7200	0.00093312	300.38	16,200,000	13,770,000	0.95904	0.972972973	3.106465144
tc-w/o-tc-box	1	7200	0.00093312	206.59	6,480,000	11,744,967	0.583198944	1.600002897	4.516772351
	2	7200	0.002592	320.51	16,200,000	12,960,000	0.93312	2.777777778	8.087111167
tcstencil-star	1	7200	0.00331776	152.16	3,240,000	28,350,000	1.01088	3.282051282	21.8044164
	2	7200	0.00331776	181.82	3,240,000	34,020,000	1.19232	2.782608696	18.24749753
tcstencil-box	1	7200	0.00497664	173.66	3,240,000	31,185,000	1.1016	4.517647059	28.65737648
	2	7200	0.0082944	198.88	3,240,000	45,360,000	1.5552	5.333333333	41.70555109
tensor core global memory peak							1555		312
FPU global memory peak							1555		78

V100 note: the FLOP of halo calculation in TCStencil is ignored

stencil implement	r	inner mesh	TFLOP	time (us)	global store sectors	global load sectors	memory traffic(GB)	AI (FLOP/byte)	performance (TFLOP/s)
tc-w/o-tc-star	1	7200	0.0005184	376.51	6,481,070	11,745,093	0.583237216	0.888832169	1.37685586
	2	7200	0.00093312	556.54	16,199,395	13,769,040	0.95898992	0.973023783	1.676644985
tc-w/o-tc-box	1	7200	0.00093312	384.51	6,480,038	11,745,158	0.583206272	1.599982793	2.426776937
	2	7200	0.002592	520.48	16,200,250	12,957,600	0.9330512	2.777982602	4.980018445
tcstencil-star	1	7200	0.00331776	274.34	3,240,000	28,354,565	1.01102608	3.281577069	12.09360647
	2	7200	0.00331776	306.69	3,239,990	33,996,606	1.191571072	2.784357625	10.8179595
tcstencil-box	1	7200	0.00497664	313.73	3,240,000	21,481,837	0.791098784	6.290794653	15.86281197
	2	7200	0.0082944	358.05	3,240,000	29,193,390	1.03786848	7.991764043	15.93605902
tensor core global memory peak							900		125
tensor core L2 peak							4198.4		125
FPU global memory peak							900		31.4
FPU L2 peak							4198.4		31.4