

Results: Vectorisation

Application	% time	# Loops	Loops Vectorised SVE			Loops Vectorised NEON			Loops Vectorised AVX*		
			Arm	Cray	GCC	Arm	Cray	GCC	Intel	Cray	GCC
BUDE	98.6	4	4	3	3	3	4	3	4	4	3
TeaLeaf (cg)	87.2	8	5	6	8	5	6	8	8	6	6
TeaLeaf (ppcg)	91.2	6	6	6	6	6	6	6	6	6	6
CloverLeaf	62.5	10	9	10	6	8	9	6	10	9	8
MegaSweep	70.3	4	1	4	0	1	1	0	4	1	0
Neutral	85.8	2	0	0	0	0	0	0	0	0	0
MiniFMM	98	8	7	—	5	3	—	5	7	—	5
Total		42	32	29	28	26	26	28	39	26	28

Compiler versions used: Arm 19.2, Cray 9.0a, GCC 8.2



* No difference between AVX2 and AVX-512

<https://uob-hpc.github.io>