

Not Optimized			
Thomas Algorithm	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	0.04333064	0.04668609	0.34690002
Visual Studio Compiler x64	0.03285394	0.03403039	0.26058069
Intel Compiler x86	0.0403374	0.04386865	0.32967009
Intel Compiler x64	0.03244522	0.03435963	0.2667894
Intel Solver	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	0.04090226	0.04251604	0.31398776
Visual Studio Compiler x64	0.03190187	0.0324302	0.24594994
Intel Compiler x86	0.03669439	0.03722583	0.29871744
Intel Compiler x64	0.03183	0.03265122	0.24820786
Cyclic Reduction	Explicit	Crank Nicolson	ADI
Intel Compiler x86	0.03871538	0.04310831	0.31156853
Intel Compiler x64	0.0310516	0.03314979	0.24346007

Average			
	Thomas Algorithm	Intel Solver	Cyclic Reduction
Visual Studio Compiler x86	0.17791113	0.168707075	n/a
Visual Studio Compiler x64	0.137578147	0.137875492	n/a
Intel Compiler x86	0.176222647	0.168732707	0.165653925
Intel Compiler x64	0.142689037	0.138491527	0.134364858

	Thomas Algorithm	Intel Solver	Cyclic Reduction
Thomas Algorithm		-3.2%	6.3%
Intel Solver	3.4%		2.4%
Cyclic Reduction	-5.9%	-2.3%	

in seconds











/O2 Optimized			
Thomas Algorithm	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	0.03859185	0.04069059	0.30110422
Visual Studio Compiler x64	0.03079925	0.03200033	0.24480119
Intel Compiler x86	0.03861668	0.04079209	0.30157437
Intel Compiler x64	0.03110804	0.03185271	0.24491224
Intel Solver	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	0.03775467	0.04002389	0.29258317
Visual Studio Compiler x64	0.0315448	0.03190842	0.24274098
Intel Compiler x86	0.03666839	0.03818774	0.28507619
Intel Compiler x64	0.03004727	0.03084235	0.23252597
Cyclic Reduction	Explicit	Crank Nicolson	ADI
Intel Compiler x86	0.03457133	0.03597001	0.27860873
Intel Compiler x64	0.02947244	0.03069171	0.23230346

/O2 Optimized			
Thomas Algorithm	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	10.94%	12.84%	13.20%
Visual Studio Compiler x64	6.25%	5.97%	6.06%
Intel Compiler x86	4.27%	7.01%	8.52%
Intel Compiler x64	4.12%	7.30%	8.20%
Intel Solver	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	8.34%	6.23%	7.32%
Visual Studio Compiler x64	1.13%	1.64%	1.32%
Intel Compiler x86	0.07%	-2.52%	4.79%
Intel Compiler x64	5.93%	5.86%	6.74%
Cyclic Reduction	Explicit	Crank Nicolson	ADI
Intel Compiler x86	11.99%	19.85%	11.83%
Intel Compiler x64	5.36%	8.01%	4.80%

Thomas Algorithm	Explicit	Explicit	Crank Nicolson
Visual Studio Compiler x86	0.10936349	0.137144293	0.128421549
Visual Studio Compiler x64	0.06254014	0.131874898	0.059654327
Intel Compiler x86	0.042658178	0.040732174	0.070131176
Intel Compiler x64	0.041213467	0.043143489	0.072961205
Intel Solver	Explicit	Explicit	Crank Nicolson
Visual Studio Compiler x86	0.083369554	0.139623336	0.062266561
Visual Studio Compiler x64	0.011319457	0.017272969	0.016352424
Intel Compiler x86	0.000709058	0.05904472	-0.025188974
Intel Compiler x64	0.059330848	0.008609174	0.058648903
Cyclic Reduction	Explicit	Explicit	Crank Nicolson
Intel Compiler x86	0.119869557	0.072616877	0.198451432

Intel Compiler x64

0.053580905

0.054218462

0.080089379











/Ox Optimized			
Thomas Algorithm	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	0.03738809	0.03947302	0.29261284
Visual Studio Compiler x64	0.02852133	0.02911762	0.22493866
Intel Compiler x86	0.03869437	0.04063887	0.30079181
Intel Compiler x64	0.03104542	0.03183052	0.24638972

Intel Solver	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	0.03519135	0.03650489	0.2866267
Visual Studio Compiler x64	0.03135083	0.03118301	0.2430404
Intel Compiler x86	0.038861	0.03921333	0.31397571
Intel Compiler x64	0.03155597	0.03233699	0.25438477

Cyclic Reduction	Explicit	Crank Nicolson	ADI
Intel Compiler x86	0.03590399	0.03796955	0.28669842
Intel Compiler x64	0.02936803	0.03011645	0.23646767

/Ox Optimized			
Thomas Algorithm	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	13.71%	15.45%	15.65%
Visual Studio Compiler x64	13.19%	14.44%	13.68%
Intel Compiler x86	4.07%	7.36%	8.76%
Intel Compiler x64	4.31%	7.36%	7.65%
Intel Solver	Explicit	Crank Nicolson	ADI
Visual Studio Compiler x86	13.96%	14.14%	8.71%
Visual Studio Compiler x64	1.73%	3.85%	1.18%
Intel Compiler x86	5.90%	5.34%	5.11%
Intel Compiler x64	0.86%	0.96%	2.49%
Cyclic Reduction	Explicit	Crank Nicolson	ADI
Intel Compiler x86	7.26%	11.92%	7.98%
Intel Compiler x64	5.42%	9.15%	2.87%

Crank Nicolson	ADI	ADI
0.15450148	0.132014406	0.156492294
0.144364199	0.060555139	0.136779245
0.073623875	0.085223746	0.087597513
0.073607021	0.082001609	0.076463608

Crank Nicolson	ADI	ADI
0.141385463	0.073157284	0.087140531
0.038457672	0.013219688	0.011829806
0.053390348	0.047851243	0.051079274
0.009623836	0.067441456	0.024886037

Crank Nicolson	ADI	ADI
0.119205787	0.11830139	0.079822279

0.091504049

0.048026017

0.028720932









