

TESTES REALIZADOS UTILIZANDO-SE DOIS COMPUTADORES:

- CFD-11, PROCESSADOR: 2x( XEON X5355, 2.66 GHz - 4 NÚCLEOS ), 32 GB RAM, SO: WINDOWS XP PROFESSIONAL x64 EDITION
- LAPTOP SAMSUNG RF511, PROCESSADOR: INTEL CORE I5-2410 M, 2.30 GHz, 2 NÚCLEOS (4 PROCESSADORES LÓGICOS), 6 GB RAM, SO: WINDOWS 7 HOME PREMIUM x64-BASED PC

OBSERVAÇÕES GERAIS:

Em ambos os casos, foi empregado apenas um núcleo para os testes computacionais. Comparando-se o desempenho dos dois computadores, decidiu-se por realizar a maior parte dos testes no Laptop Samsung, por apresentar menor tempo de simulação, para condições similares (mesmos parâmetros).

De um modo geral, observou-se dos testes computacionais (com  $Dt1 = Dt2$ ) que parece existir um valor ótimo de  $Dt$ , para o qual o tempo de processamento é mínimo. Tal valor de  $Dt$  parece decrescer com o refino de malha, de forma idêntica ao fator de refino de malha, ao menos ao se utilizar o esquema UDS. Para o esquema CDS, observou-se que é obtida a convergência adotando-se  $\beta = 1$  para todas as iterações apenas para as malhas mais grosseiras. Para malhas mais refinadas, foi necessário empregar-se o recurso de se iniciar o valor de  $\beta_1 = 0$ , para as iterações iniciais, e  $\beta_2 = 1$ , para as iterações finais. Mesmo assim, os campos de algumas variáveis de interesse, como a temperatura no centro da tubeira, apresenta oscilações numéricas, conforme pode ser visto posteriormente.

A versão Euler apresenta menor tempo de processamento e menor demanda por memória em relação à versão original Baldwin-Lomax, devido ao fato de terem sido retiradas sub-rotinas e variáveis desnecessárias, além de algumas tomadas de decisão (comandos if).

A sigla NC representa "não convergência", sendo mostrada nos casos em que não se obteve a convergência do modelo a partir dos dados propostos.

Para um dado conjunto de simulações (na mesma malha), os resultados com menor tempo de processamento são destacados em vermelho.

CONFIGURAÇÕES DO COMPUTADOR UTILIZADO: CFD-11

PROCESSADOR: 2x( XEON X5355, 2.66 GHz - 4 NÚCLEOS )

MEMÓRIA: 32 GB RAM

SO: WINDOWS XP PROFESSIONAL x64 EDITION

COMPILADOR: INTEL VISUAL FORTRAN 11.1

PARÂMETROS UTILIZADOS E MANTIDOS CONSTANTES EM TODAS AS SIMULAÇÕES:

kg	=	1	Tipo de malha - Uniforme para eta
coord	=	1	Sistema de coordenadas - cilíndricas
Rg	=	286.9	Constante do gás perfeito
gama	=	1.4	Razão entre calores específicos
po	=	172,506.8	Pressão de estagnação
T0	=	833.33	Temperatura de estagnação
pr	=	101,325.0	Pressão atmosférica ao nível do mar
go	=	9.80655	Aceleração da gravidade ao nível do mar
modvis	=	0	Modelo de viscosidade - Euler
modtur	=	0	Modelo de turbulência - laminar
ccTw	=	0	Condição de contorno na parede - adiabática
tolerance	=	1.0d-6	Tolerância admitida
num	=	1	Número de núcleos utilizados

TESTES: MACH2D, VERSÃO BALDWIN-LOMAX, BETA FINAL: 0 (UDS) - COMPUTADOR: CFD-11  
 AVALIAÇÃO DA VARIAÇÃO DE Dt1 e Dt2.

Caso	Nx-2	Ny-2	RAM	Beta-1	Beta-2	Itb1	Itb2	Dt1	Dt2	It1	It2	Itmax	Imax	Nitm_u	Nitm_p	It	Tcpu [s]	Cd	Fd*
AA.001	56	20	7.3 MB	0.0	0.0	1,000	1,000	4.0E-5	4.0E-5	5	5	1,200	5	2	2	334	0.578	1.047041887891844E+00	9.770312860369638E-01
AA.002	56	20	7.3 MB	0.0	0.0	1,000	1,000	3.0E-5	3.0E-5	5	5	1,200	5	2	2	166	0.282	1.047042754512999E+00	9.770318893512636E-01
<b>AA.003</b>	<b>56</b>	<b>20</b>	<b>7.3 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-5</b>	<b>2.0E-5</b>	<b>5</b>	<b>5</b>	<b>1,200</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>110</b>	<b>0.188</b>	<b>1.047045634478742E+00</b>	<b>9.770418728994513E-01</b>
AA.004	56	20	7.3 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	1,200	5	2	2	186	0.328	1.047035321009685E+00	9.770678699324453E-01
AA.005	56	20	7.3 MB	0.0	0.0	1,000	1,000	9.0E-6	9.0E-6	5	5	1,200	5	2	2	205	0.360	1.047032566533046E+00	9.770673711492947E-01
AA.006	112	40	10.2 MB	0.0	0.0	1,000	1,000	1.4E-5	1.4E-5	5	5	5,000	5	2	2	1,387	11.515	1.016945938812395E+00	9.720373452241274E-01
AA.007	112	40	10.2 MB	0.0	0.0	1,000	1,000	1.3E-5	1.3E-5	5	5	5,000	5	2	2	486	4.187	1.016946333941783E+00	9.720409340284343E-01
AA.008	112	40	10.2 MB	0.0	0.0	1,000	1,000	1.2E-5	1.2E-5	5	5	5,000	5	2	2	348	2.921	1.016944411327320E+00	9.720419549972289E-01
AA.009	112	40	10.6 MB	0.0	0.0	1,000	1,000	1.1E-5	1.1E-5	5	5	5,000	5	2	2	324	2.718	1.016947233367238E+00	9.720476974483141E-01
<b>AA.010</b>	<b>112</b>	<b>40</b>	<b>10.6 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>1.0E-5</b>	<b>1.0E-5</b>	<b>5</b>	<b>5</b>	<b>5,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>298</b>	<b>2.516</b>	<b>1.016944048197770E+00</b>	<b>9.720504127800946E-01</b>
AA.011	112	40	10.6 MB	0.0	0.0	1,000	1,000	9.0E-6	9.0E-6	5	5	5,000	5	2	2	308	2.610	1.016948068698609E+00	9.720595494701129E-01
AA.012	112	40	10.6 MB	0.0	0.0	1,000	1,000	8.0E-6	8.0E-6	5	5	5,000	5	2	2	321	2.688	1.016942482673221E+00	9.720616323168669E-01
AA.013	112	40	10.6 MB	0.0	0.0	1,000	1,000	7.0E-6	7.0E-6	5	5	5,000	5	2	2	365	3.063	1.016942763454410E+00	9.720704418249990E-01
AA.014	224	80	22.9 MB	0.0	0.0	1,000	1,000	6.0E-6	6.0E-6	5	5	5,000	5	2	2	2,439	110.219	1.000833485239077E+00	9.701923165595054E-01
<b>AA.015</b>	<b>224</b>	<b>80</b>	<b>23.1 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>5.0E-6</b>	<b>5.0E-6</b>	<b>5</b>	<b>5</b>	<b>5,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>684</b>	<b>31.297</b>	<b>1.000835653639176E+00</b>	<b>9.702048706689755E-01</b>
AA.016	224	80	22.9 MB	0.0	0.0	1,000	1,000	4.0E-6	4.0E-6	5	5	5,000	5	2	2	719	32.781	1.000831296242862E+00	9.702120306273022E-01
AA.017	224	80	23.1 MB	0.0	0.0	1,000	1,000	3.0E-6	3.0E-6	5	5	5,000	5	2	2	895	41.000	1.000838288045167E+00	9.702355711728500E-01
AA.018	448	160	71.4 MB	0.0	0.0	1,000	1,000	3.0E-6	3.0E-6	5	5	25,000	5	2	2	9,148	2,368.836	9.914735697800238E-01	9.686502045084453E-01
<b>AA.019</b>	<b>448</b>	<b>160</b>	<b>71.5 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-6</b>	<b>2.0E-6</b>	<b>5</b>	<b>5</b>	<b>25,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>1,600</b>	<b>413.516</b>	<b>9.914711399929441E-01</b>	<b>9.68669656020181E-01</b>
AA.020	448	160	71.4 MB	0.0	0.0	1,000	1,000	1.0E-6	1.0E-6	5	5	25,000	5	2	2	2,837	735.107	9.914668116735224E-01	9.686821905677474E-01
AA.021	896	320	264.7 MB	0.0	0.0	1,000	1,000	1.4E-6	1.4E-6	5	5	200,000	5	2	2	4,915	5,935.172	9.864691712962371E-01	9.677797008843884E-01
<b>AA.022</b>	<b>896</b>	<b>320</b>	<b>264.7 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>1.2E-6</b>	<b>1.2E-6</b>	<b>5</b>	<b>5</b>	<b>200,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>3,153</b>	<b>3,782.551</b>	<b>9.864685227907348E-01</b>	<b>9.677842037654526E-01</b>
AA.023	896	320	264.7 MB	0.0	0.0	1,000	1,000	1.0E-6	1.0E-6	5	5	200,000	5	2	2	3,216	3,883.901	9.864684982176222E-01	9.677907770308274E-01
AA.024	1,792	640	1.03 GB	0.0	0.0	1,000	1,000	7.0E-7	7.0E-7	5	5	200,000	5	2	2	34,472	171,709.699	9.839177709521234E-01	9.673525870809274E-01
<b>AA.025</b>	<b>1,792</b>	<b>640</b>	<b>1.03 GB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>6.0E-7</b>	<b>6.0E-7</b>	<b>5</b>	<b>5</b>	<b>200,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>7,763</b>	<b>38,525.987</b>	<b>9.839181936512145E-01</b>	<b>9.673575373899828E-01</b>
AA.026	1,792	640	1.03 GB	0.0	0.0	1,000	1,000	5.0E-7	5.0E-7	5	5	200,000	5	2	2	7,837	38,895.633	9.839178474571910E-01	9.673612229858967E-01





CONFIGURAÇÕES DO COMPUTADOR UTILIZADO: LAPTOP SAMSUNG RF511  
PROCESSADOR: INTEL CORE I5-2410 M, 2.30 GHZ, 2 NÚCLEOS (4 PROCESSADORES LÓGICOS)  
MEMÓRIA: 6 GB RAM  
SO: WINDOWS 7 HOME PREMIUM x64-BASED PC

COMPILADOR: INTEL VISUAL FORTRAN 11.1

PARÂMETROS UTILIZADOS E MANTIDOS CONSTANTES EM TODAS AS SIMULAÇÕES:

kg	=	1	Tipo de malha - Uniforme para eta
coord	=	1	Sistema de coordenadas - cilíndricas
Rg	=	286.9	Constante do gás perfeito
gama	=	1.4	Razão entre calores específicos
po	=	172,506.8	Pressão de estagnação
T0	=	833.33	Temperatura de estagnação
pr	=	101,325.0	Pressão atmosférica ao nível do mar
go	=	9.80655	Aceleração da gravidade ao nível do mar
modvis	=	0	Modelo de viscosidade - Euler
modtur	=	0	Modelo de turbulência - laminar
ccTw	=	0	Condição de contorno na parede - adiabática
tolerance	=	1.0d-6	Tolerância admitida
num	=	1	Número de núcleos utilizados







TESTES: MACH2D, VERSÃO BALDWIN-LOMAX, BETA FINAL: 0 (UDS) - COMPUTADOR: SAMSUNG RF-511  
 AVALIAÇÃO DA VARIAÇÃO DE I<sub>max</sub>.

Caso	Nx-2	Ny-2	RAM	Beta-1	Beta-2	Itb1	Itb2	Dt1	Dt2	It1	It2	Itmax	I <sub>max</sub>	Nitm_u	Nitm_p	It	Tcpu	Cd	Fd*
SC.001	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	2	2	2	844	0.785	1.047043567263500E+00	9.769502187173339E-01
SC.002	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	3	2	2	193	0.211	1.047045182397691E+00	9.769988669118329E-01
SC.003	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	4	2	2	130	0.156	1.047045663241560E+00	9.770249618242433E-01
<b>SC.004</b>	<b>56</b>	<b>20</b>	<b>6.4 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-5</b>	<b>2.0E-5</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>110</b>	<b>0.144</b>	<b>1.047045634478742E+00</b>	<b>9.770418728994507E-01</b>
SC.005	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	6	2	2	101	0.159	1.047042345227878E+00	9.770519671526134E-01
SC.006	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	7	2	2	101	0.145	1.047042311584919E+00	9.770584337317904E-01
SC.007	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	8	2	2	92	0.148	1.047044993216675E+00	9.770655946306467E-01
SC.008	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	9	2	2	93	0.161	1.047044181990707E+00	9.770685304179225E-01
SC.009	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	10	2	2	93	0.171	1.047044425184397E+00	9.770717681633919E-01
SC.010	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	3	2	2	3,470	14.913	1.016945818755739E+00	9.719988608977450E-01
SC.011	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	4	2	2	355	1.719	1.016947348246243E+00	9.720343323526534E-01
SC.012	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	2	2	298	1.719	1.016944048197770E+00	9.720504127800949E-01
<b>SC.013</b>	<b>112</b>	<b>40</b>	<b>9.5 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>1.0E-5</b>	<b>1.0E-5</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>279</b>	<b>1.569</b>	<b>1.016947635421891E+00</b>	<b>9.720652588829040E-01</b>
SC.014	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	7	2	2	261	1.590	1.016944419235104E+00	9.720711386828550E-01
SC.015	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	8	2	2	243	1.721	1.016947206009836E+00	9.720788565620638E-01
SC.016	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	9	2	2	242	1.740	1.016948099615438E+00	9.720851205566702E-01
SC.017	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	10	2	2	242	1.789	1.016947896189671E+00	9.720883416254098E-01
SC.018	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	4	2	2	1,166	27.622	1.000833265197102E+00	9.701856840197915E-01
SC.019	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	2	2	684	18.206	1.000835653639176E+00	9.702048706689754E-01
<b>SC.020</b>	<b>224</b>	<b>80</b>	<b>21.9 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>5.0E-6</b>	<b>5.0E-6</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>614</b>	<b>16.429</b>	<b>1.000835477223472E+00</b>	<b>9.702148582062761E-01</b>
SC.021	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	7	2	2	612	18.599	1.000835849429484E+00	9.702232300673190E-01
SC.022	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	8	2	2	577	17.335	1.000831858123445E+00	9.702234126652618E-01
SC.023	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	9	2	2	577	18.033	1.000832067885083E+00	9.702276697276377E-01
SC.024	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	10	2	2	543	18.304	1.000835208859608E+00	9.702344967633896E-01
SC.025	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	3	2	2	1,926	297.515	9.914712625416604E-01	9.686373063044731E-01
<b>SC.026</b>	<b>448</b>	<b>160</b>	<b>71.3 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-6</b>	<b>2.0E-6</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>1,606</b>	<b>275.599</b>	<b>9.914721562283806E-01</b>	<b>9.686577835970928E-01</b>
SC.027	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	2	2	1,600	295.633	9.914711399929443E-01	9.68669656020178E-01
SC.028	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	6	2	2	1,515	304.491	9.914761242570314E-01	9.686812375850651E-01
SC.029	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	7	2	2	1,513	327.649	9.914764582046699E-01	9.686866524192048E-01
SC.030	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	8	2	2	1,512	351.763	9.914765579588064E-01	9.686900909936728E-01
SC.031	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	9	2	2	1,431	360.923	9.914720365327724E-01	9.686862244644282E-01
SC.032	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	10	2	2	1,429	380.369	9.914713995332554E-01	9.686865783321126E-01
SC.033	896	320	263.1 MB	0.0	0.0	1,000	1,000	1.2E-6	1.2E-6	5	5	50,000	4	2	2	3,582	3,348.629	9.864692772633881E-01	9.677838196600241E-01
<b>SC.034</b>	<b>896</b>	<b>320</b>	<b>263.1 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>1.2E-6</b>	<b>1.2E-6</b>	<b>5</b>	<b>5</b>	<b>50,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>3,216</b>	<b>3,330.928</b>	<b>9.864684982176226E-01</b>	<b>9.677907770308277E-01</b>
SC.035	896	320	263.1 MB	0.0	0.0	1,000	1,000	1.2E-6	1.2E-6	5	5	50,000	6	2	2	3,195	3,621.527	9.864666316581570E-01	9.677926390420509E-01
SC.036	896	320	263.1 MB	0.0	0.0	1,000	1,000	1.2E-6	1.2E-6	5	5	50,000	7	2	2	3,030	3,317.736	9.864711897855852E-01	9.678026123866069E-01
SC.037	896	320	263.1 MB	0.0	0.0	1,000	1,000	1.2E-6	1.2E-6	5	5	50,000	8	2	2	3,025	3,613.357	9.864719388618337E-01	9.678062741315439E-01
SC.038	896	320	263.1 MB	0.0	0.0	1,000	1,000	1.2E-6	1.2E-6	5	5	50,000	9	2	2	3,023	3,902.722	9.864722023380792E-01	9.678083468291523E-01
SC.039	896	320	263.1 MB	0.0	0.0	1,000	1,000	1.2E-6	1.2E-6	5	5	50,000	10	2	2	3,021	4,161.198	9.864724618341012E-01	9.678098843373693E-01

TESTES: MACH2D, VERSÃO BALDWIN-LOMAX, BETA FINAL: 0 (UDS) - COMPUTADOR: SAMSUNG RF-511  
 AVALIAÇÃO DA VARIAÇÃO DE I<sub>max</sub>.

Caso	Nx-2	Ny-2	RAM	Beta-1	Beta-2	Itb1	Itb2	Dt1	Dt2	It1	It2	Itmax	I <sub>max</sub>	Nitm_u	Nitm_p	It	Tcpu	Cd	Fd*
SD.001	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	1	1	278	0.250	1.047043891555760E+00	9.769756185725672E-01
SD.002	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	2	1	269	0.265	1.047040790250988E+00	9.769772863150289E-01
SD.003	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	3	1	249	0.249	1.047038015191324E+00	9.769739458456455E-01
SD.004	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	4	1	218	0.265	1.047060160655059E+00	9.769825212815090E-01
SD.005	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	5	1	197	0.265	1.047083703301224E+00	9.769956782381457E-01
SD.006	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	1	2	120	0.141	1.047043407429614E+00	9.770403136776445E-01
SD.007	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	2	2	110	0.140	1.047045634478742E+00	9.770418728994507E-01
<b>SD.008</b>	<b>56</b>	<b>20</b>	<b>6.4 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-5</b>	<b>2.0E-5</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>100</b>	<b>0.125</b>	<b>1.047037803605251E+00</b>	<b>9.770390212457918E-01</b>
SD.009	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	4	2	100	0.156	1.047037485712029E+00	9.770387568572945E-01
SD.010	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	5	2	90	0.141	1.047056971935808E+00	9.770443034864320E-01
SD.011	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	1	3	102	0.140	1.047043465691506E+00	9.770642542430671E-01
<b>SD.012</b>	<b>56</b>	<b>20</b>	<b>6.4 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-5</b>	<b>2.0E-5</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>92</b>	<b>0.125</b>	<b>1.047044740894472E+00</b>	<b>9.770651626875172E-01</b>
<b>SD.013</b>	<b>56</b>	<b>20</b>	<b>6.4 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-5</b>	<b>2.0E-5</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>81</b>	<b>0.125</b>	<b>1.047035852090331E+00</b>	<b>9.770628058609196E-01</b>
SD.014	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	4	3	81	0.141	1.047035434049973E+00	9.770625658181320E-01
SD.015	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	5	3	81	0.140	1.047035340745148E+00	9.770625270456550E-01
SD.016	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	1	4	101	0.156	1.047043057361485E+00	9.770736657288364E-01
SD.017	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	2	4	93	0.156	1.047044424919301E+00	9.770759042664188E-01
SD.018	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	3	4	82	0.156	1.047039323180053E+00	9.770740128388704E-01
SD.019	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	4	4	82	0.172	1.047039101710461E+00	9.770739511925457E-01
SD.020	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	5	4	72	0.140	1.047050080781768E+00	9.770754129715435E-01
SD.021	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	1	5	96	0.171	1.047043319642200E+00	9.770784591465338E-01
SD.022	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	2	5	83	0.156	1.047041818661975E+00	9.770800215675969E-01
SD.023	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	3	5	83	0.172	1.047041261692183E+00	9.770800499225053E-01
SD.024	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	4	5	61	0.140	1.047002477287109E+00	9.770629614132601E-01
SD.025	56	20	6.4 MB	0.0	0.0	1,000	1,000	2.0E-5	2.0E-5	5	5	10,000	5	5	5	61	0.140	1.047002027312340E+00	9.770627319308099E-01
SD.026	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	1	1	NC	NC	NC	NC
SD.027	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	2	1	NC	NC	NC	NC
SD.028	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	3	1	NC	NC	NC	NC
SD.029	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	4	1	NC	NC	NC	NC
SD.030	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	5	1	NC	NC	NC	NC
SD.031	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	1	2	334	1.420	1.016945220505352E+00	9.720528478287788E-01
SD.032	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	2	2	298	1.435	1.016944048197770E+00	9.720504127800949E-01
SD.033	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	3	2	279	1.528	1.016950424056330E+00	9.720545918495921E-01
SD.034	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	4	2	260	1.528	1.016936913176811E+00	9.720454796195565E-01
SD.035	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	5	2	222	1.466	1.016914957976785E+00	9.720284077891828E-01
SD.036	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	1	3	279	1.466	1.016946596173282E+00	9.720781733864040E-01
SD.037	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	2	3	260	1.498	1.016943840979802E+00	9.720743675029249E-01
SD.038	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	3	3	223	1.419	1.016939276961122E+00	9.720716182477103E-01
SD.039	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	4	3	204	1.404	1.016960228588067E+00	9.720878725927248E-01
<b>SD.040</b>	<b>112</b>	<b>40</b>	<b>9.5 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>1.0E-5</b>	<b>1.0E-5</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>185</b>	<b>1.357</b>	<b>1.016917794597681E+00</b>	<b>9.720564780853098E-01</b>

SD.041	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	1	4	261	1.607	1.016945141306264E+00	9.720869392997515E-01
SD.042	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	2	4	242	1.654	1.016947896193501E+00	9.720902613089647E-01
SD.043	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	3	4	223	1.622	1.016941239246154E+00	9.720834358079004E-01
SD.044	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	4	4	186	1.451	1.016932650864559E+00	9.720805417639721E-01
SD.045	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	5	4	185	1.560	1.016925506863160E+00	9.720696173826484E-01
SD.046	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	1	5	244	1.763	1.016946345017811E+00	9.720938758587594E-01
SD.047	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	2	5	224	1.748	1.016943668314037E+00	9.720911176419027E-01
SD.048	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	3	5	205	1.716	1.016951760532147E+00	9.720987061906587E-01
SD.049	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	4	5	186	1.623	1.016933994869879E+00	9.720845171008634E-01
SD.050	112	40	9.5 MB	0.0	0.0	1,000	1,000	1.0E-5	1.0E-5	5	5	10,000	5	5	5	167	1.576	1.016971085078260E+00	9.721134819134847E-01
SD.051	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	1	1	NC	NC	NC	NC
SD.052	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	2	1	NC	NC	NC	NC
SD.053	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	3	1	NC	NC	NC	NC
SD.054	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	4	1	NC	NC	NC	NC
SD.055	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	5	1	NC	NC	NC	NC
<b>SD.056</b>	<b>224</b>	<b>80</b>	<b>21.9 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>5.0E-6</b>	<b>5.0E-6</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>723</b>	<b>13.993</b>	<b>1.000833632589006E+00</b>	<b>9.702041029334733E-01</b>
SD.057	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	2	2	684	14.836	1.000835653639176E+00	9.702048706689754E-01
SD.058	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	3	2	613	14.773	1.000838707186810E+00	9.702080204385426E-01
SD.059	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	4	2	541	14.414	1.000844691723881E+00	9.702127273762101E-01
SD.060	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	5	2	502	14.633	1.000805611003159E+00	9.701717362634650E-01
SD.061	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	1	3	616	14.040	1.000834279010433E+00	9.702255480129861E-01
SD.062	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	2	3	578	14.586	1.000832252997398E+00	9.702220396284690E-01
SD.063	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	3	3	540	15.085	1.000838863867766E+00	9.702298468930182E-01
SD.064	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	4	3	503	15.256	1.000824292157626E+00	9.702134554124393E-01
SD.065	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	5	3	432	14.180	1.000816213382641E+00	9.702112959281474E-01
SD.066	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	1	4	612	16.302	1.000835125301583E+00	9.702360052845255E-01
SD.067	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	2	4	543	15.662	1.000835208862462E+00	9.702352946434633E-01
SD.068	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	3	4	505	15.850	1.000829223078553E+00	9.702291391121579E-01
SD.069	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	4	4	468	15.943	1.000843445304049E+00	9.702441459297949E-01
SD.070	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	5	4	431	15.771	1.000815868618762E+00	9.702151353383949E-01
SD.071	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	1	5	579	17.347	1.000833029425593E+00	9.702374177400419E-01
SD.072	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	2	5	541	17.628	1.000836186493578E+00	9.702419769695687E-01
SD.073	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	3	5	504	17.535	1.000828839378882E+00	9.702327085827748E-01
SD.074	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	4	5	468	17.643	1.000842348161243E+00	9.702483413952987E-01
SD.075	224	80	21.9 MB	0.0	0.0	1,000	1,000	5.0E-6	5.0E-6	5	5	10,000	5	5	5	396	15.850	1.000853566798992E+00	9.702554513937723E-01
SD.076	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	1	1	4,375	451.621	9.914735979531897E-01	9.686275783610800E-01
SD.077	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	2	1	4,354	565.664	9.914737439794894E-01	9.686228015620932E-01
SD.078	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	3	1	4,010	642.924	9.914739704512990E-01	9.686228924637618E-01
SD.079	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	4	1	3,823	716.571	9.914743129639981E-01	9.686239740227065E-01
SD.080	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	5	1	3,637	797.287	9.914747410521909E-01	9.686251630110808E-01
<b>SD.081</b>	<b>448</b>	<b>160</b>	<b>71.3 MB</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000</b>	<b>1,000</b>	<b>2.0E-6</b>	<b>2.0E-6</b>	<b>5</b>	<b>5</b>	<b>10,000</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>1,692</b>	<b>233.657</b>	<b>9.914749280920226E-01</b>	<b>9.686733286768723E-01</b>
SD.082	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	2	2	1,600	268.039	9.914711399929443E-01	9.686669656020178E-01
SD.083	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	3	2	1,426	278.741	9.914692751500974E-01	9.686661988260862E-01
SD.084	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	4	2	1,335	297.851	9.914813593756407E-01	9.686799818413477E-01
SD.085	448	160	71.3 MB	0.0	0.0	1,000	1,000	2.0E-6	2.0E-6	5	5	10,000	5	5	2	1,244	315.417	9.914605649019713E-01	9.686572104015104E-01







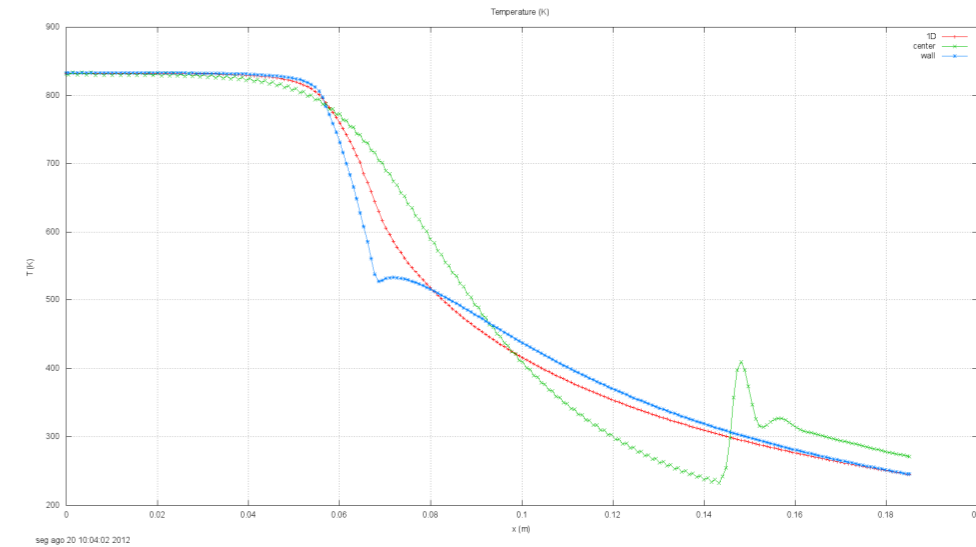
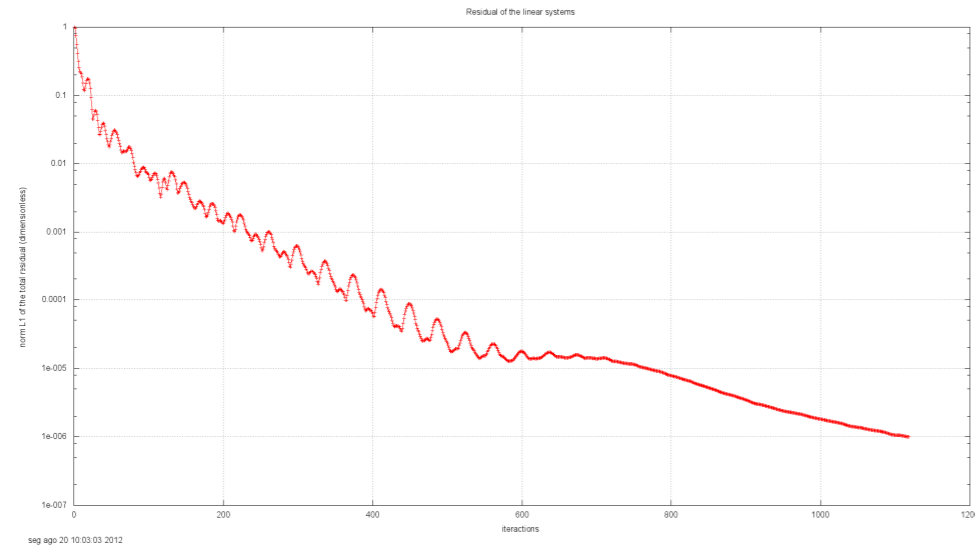
TESTES: MACH2D, VERSÃO EULER, BETA FINAL: 1 (CDS) - COMPUTADOR: SAMSUNG RF-511  
 AVALIAÇÃO DE I<sub>max</sub>, Nitm<sub>u</sub> E Nitm<sub>p</sub>.

Caso	Nx-2	Ny-2	RAM	Beta-1	Beta-2	Itb1	Itb2	Dt1	Dt2	It1	It2	Itmax	I <sub>max</sub>	Nitm <sub>u</sub>	Nitm <sub>p</sub>	It	Tcpu	Cd	Fd*
SG.001	56	20	6.1 MB	1.0	1.0	1,000	1,000	2.0E-5	2.0E-5	5	5	50,000	2	2	2	1,425	1.154	9.799101955324936E-01	9.648611918685938E-01
SG.002	56	20	6.1 MB	1.0	1.0	1,000	1,000	2.0E-5	2.0E-5	5	5	50,000	3	2	2	601	0.546	9.799095995334666E-01	9.648604812449724E-01
SG.003	56	20	6.1 MB	1.0	1.0	1,000	1,000	2.0E-5	2.0E-5	5	5	50,000	4	2	2	601	0.609	9.799093057777489E-01	9.648601053687661E-01
SG.004	56	20	6.1 MB	1.0	1.0	1,000	1,000	2.0E-5	2.0E-5	5	5	50,000	5	2	2	601	0.655	9.799091004188397E-01	9.648598566307112E-01
SG.005	56	20	6.1 MB	1.0	1.0	1,000	1,000	2.0E-5	2.0E-5	5	5	50,000	6	2	2	601	0.702	9.799089552809249E-01	9.648596866280913E-01
SG.006	56	20	6.1 MB	1.0	1.0	1,000	1,000	2.0E-5	2.0E-5	5	5	50,000	7	2	2	601	0.764	9.799088513711107E-01	9.648595676513619E-01
SG.007	56	20	6.1 MB	1.0	1.0	1,000	1,000	2.0E-5	2.0E-5	5	5	50,000	8	2	2	601	0.811	9.799087768736490E-01	9.648594834939147E-01
SG.008	112	40	8.9 MB	1.0	1.0	1,000	1,000	1.2E-5	1.2E-5	5	5	50,000	2	2	2	NC	NC	NC	NC
SG.009	112	40	8.9 MB	1.0	1.0	1,000	1,000	1.2E-5	1.2E-5	5	5	50,000	3	2	2	NC	NC	NC	NC
SG.010	112	40	8.9 MB	1.0	1.0	1,000	1,000	1.2E-5	1.2E-5	5	5	50,000	4	2	2	3,336	13.057	9.808013893028611E-01	9.660894205884182E-01
SG.011	112	40	8.9 MB	1.0	1.0	1,000	1,000	1.2E-5	1.2E-5	5	5	50,000	5	2	2	680	2.964	9.808018573048410E-01	9.660897928417104E-01
SG.012	112	40	8.9 MB	1.0	1.0	1,000	1,000	1.2E-5	1.2E-5	5	5	50,000	6	2	2	676	3.198	9.808020003159353E-01	9.660899423033048E-01
SG.013	112	40	8.9 MB	1.0	1.0	1,000	1,000	1.2E-5	1.2E-5	5	5	50,000	7	2	2	671	3.401	9.808020848436125E-01	9.660900652090912E-01
SG.014	112	40	8.9 MB	1.0	1.0	1,000	1,000	1.2E-5	1.2E-5	5	5	50,000	8	2	2	669	3.650	9.808021393170102E-01	9.660901318986910E-01
SG.015	224	80	19.8 MB	1.0	1.0	1,000	1,000	5.0E-6	5.0E-6	5	5	50,000	2	2	2	NC	NC	NC	NC
SG.016	224	80	19.8 MB	1.0	1.0	1,000	1,000	5.0E-6	5.0E-6	5	5	50,000	3	2	2	NC	NC	NC	NC
SG.017	224	80	19.8 MB	1.0	1.0	1,000	1,000	5.0E-6	5.0E-6	5	5	50,000	4	2	2	1,407	27.736	9.810663649140559E-01	9.665963765383405E-01
SG.018	224	80	19.8 MB	1.0	1.0	1,000	1,000	5.0E-6	5.0E-6	5	5	50,000	5	2	2	1,118	23.619	9.810661210508466E-01	9.665963911634534E-01
SG.019	224	80	19.8 MB	1.0	1.0	1,000	1,000	5.0E-6	5.0E-6	5	5	50,000	6	2	2	1,088	23.806	9.810657581758641E-01	9.665961033787365E-01
SG.020	224	80	19.8 MB	1.0	1.0	1,000	1,000	5.0E-6	5.0E-6	5	5	50,000	7	2	2	1,069	24.804	9.810658990789797E-01	9.665959128746733E-01
SG.021	224	80	19.8 MB	1.0	1.0	1,000	1,000	5.0E-6	5.0E-6	5	5	50,000	8	2	2	1,056	25.880	9.810662214415827E-01	9.665958608693649E-01
SG.022	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	2	2	2	NC	NC	NC	NC
SG.023	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	3	2	2	NC	NC	NC	NC
SG.024	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	4	2	2	NC	NC	NC	NC
SG.025	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	5	2	2	NC	NC	NC	NC
SG.026	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	6	2	2	NC	NC	NC	NC
SG.027	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	7	2	2	NC	NC	NC	NC
SG.028	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	8	2	2	NC	NC	NC	NC
SG.029	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	9	2	2	NC	NC	NC	NC
SG.030	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	10	2	2	NC	NC	NC	NC
SG.031	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	5	3	3	NC	NC	NC	NC
SG.032	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	5	4	4	NC	NC	NC	NC
SG.033	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	5	5	5	NC	NC	NC	NC
SG.034	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	5	6	6	NC	NC	NC	NC
SG.035	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	5	7	7	NC	NC	NC	NC
SG.036	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	6	3	3	NC	NC	NC	NC
SG.037	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	6	4	4	NC	NC	NC	NC
SG.038	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	6	5	5	NC	NC	NC	NC
SG.039	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	6	6	6	NC	NC	NC	NC
SG.040	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	6	7	7	NC	NC	NC	NC

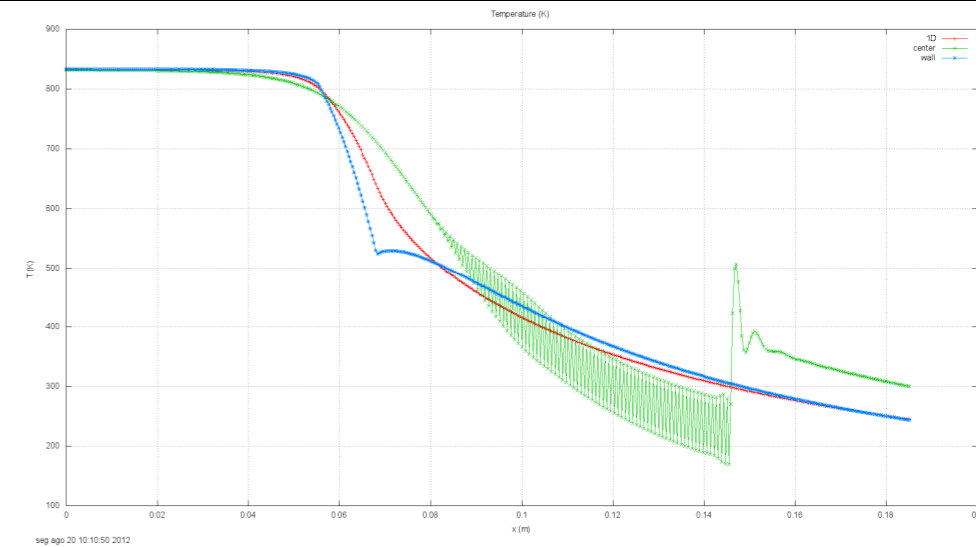
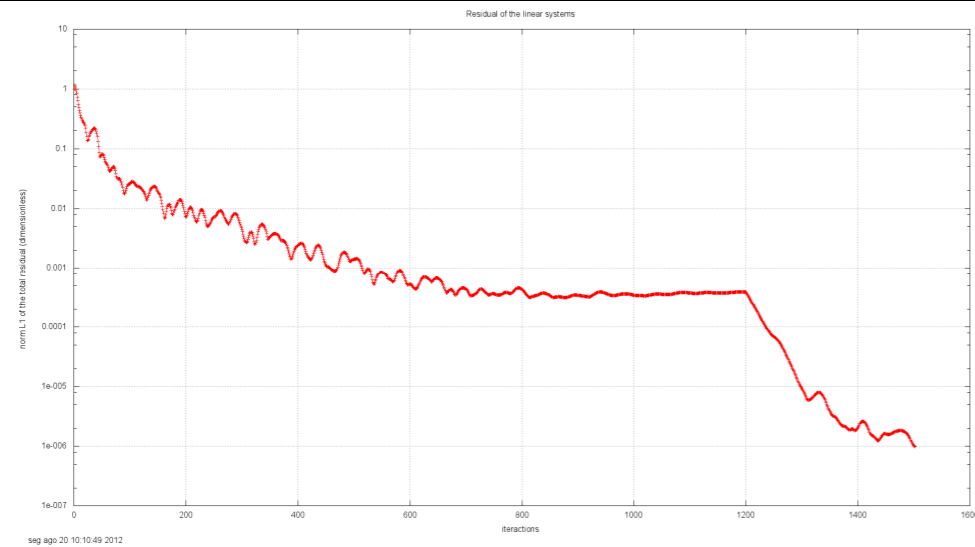
SG.041	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	7	3	3	NC	NC	NC	NC
SG.042	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	7	4	4	NC	NC	NC	NC
SG.043	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	7	5	5	NC	NC	NC	NC
SG.044	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	7	6	6	NC	NC	NC	NC
SG.045	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	7	7	7	NC	NC	NC	NC
SG.046	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	8	3	3	NC	NC	NC	NC
SG.047	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	8	4	4	NC	NC	NC	NC
SG.048	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	8	5	5	NC	NC	NC	NC
SG.049	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	8	6	6	NC	NC	NC	NC
SG.050	448	160	62.5 MB	1.0	1.0	1,000	1,000	2.5E-6	2.5E-6	5	5	50,000	8	7	7	NC	NC	NC	NC
SG.051	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	2	2	2	NC	NC	NC	NC
SG.052	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	3	2	2	NC	NC	NC	NC
SG.053	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	4	2	2	NC	NC	NC	NC
<b>SG.054</b>	<b>448</b>	<b>160</b>	<b>62.5 MB</b>	<b>0.0</b>	<b>1.0</b>	<b>200</b>	<b>1,200</b>	<b>2.5E-6</b>	<b>2.5E-6</b>	<b>5</b>	<b>5</b>	<b>50,000</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>1,502</b>	<b>245.029</b>	<b>9.812400806247974E-01</b>	<b>9.668084127042148E-01</b>
SG.055	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	6	2	2	1,504	268.492	9.812406154213227E-01	9.668091701718767E-01
SG.056	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	7	2	2	1,501	289.100	9.812403275460332E-01	9.668086940437688E-01
SG.057	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	8	2	2	1,499	310.035	9.812400880823483E-01	9.668083061002708E-01
SG.058	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	9	2	2	1,498	331.579	9.812399577535483E-01	9.668080936983711E-01
SG.059	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	10	2	2	1,497	351.250	9.812398361793258E-01	9.668078946616007E-01
SG.060	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	11	2	2	1,433	363.107	9.812417114792992E-01	9.668102000214277E-01
SG.061	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	2	3	3	NC	NC	NC	NC
SG.062	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	3	3	3	1,669	315.541	9.812412338945452E-01	9.668106853332175E-01
SG.063	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	4	3	3	1,372	282.407	9.812431797728801E-01	9.668116852891152E-01
SG.064	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	5	3	3	1,359	308.834	9.812394876569956E-01	9.668060023152463E-01
SG.065	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	6	3	3	1,358	338.162	9.812391849037376E-01	9.668055674364718E-01
SG.066	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	2	4	4	2,795	576.468	9.812377611760867E-01	9.668068026844756E-01
SG.067	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	3	4	4	1,352	316.010	9.812377668512894E-01	9.668032399614295E-01
SG.068	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	4	4	4	1,351	353.731	9.812372871825944E-01	9.668026165484293E-01
SG.069	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	5	4	4	1,350	399.267	9.812368045164759E-01	9.668019468706285E-01
SG.070	448	160	62.5 MB	0.0	1.0	200	1,200	2.5E-6	2.5E-6	5	5	50,000	6	4	4	1,350	430.202	9.812366998663963E-01	9.668018175434870E-01



GRÁFICOS DA NORMA E DA TEMPERATURA PARA BETA2 = 1



Acima, à esquerda: comportamento da norma L1; acima, à direita: temperatura no centro e na parede da tubeira. Caso: SF.009 (malha: 224x80; beta1 = beta2 = 1.0)



Acima, à esquerda: comportamento da norma L1; acima, à direita: temperatura no centro e na parede da tubeira. Caso: SF.011 (malha: 448x160; beta1 = 0.0; beta2 = 1.0)