

Desempenho do Modelo Global versão MPI (10/04/2006)

Transformada Original - Previsão:48hs														
T126L28 100km			T170L42 80km			T213L42 60km			T254L64 50km			T341L64 40km		
N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup
1	1020,73		1	4041,944		1	7361,958		1	34202,92		1	43116,68	
2	433,754	2,35324631	2	1488,089	2,71619775	2	2576,218	2,85766111	2	8573,454	3,9894	2	21558,34	2
4	247,334	4,12692958	4	789,791	5,11773874	4	1326,879	5,54832656	4	4480,933	7,63299	4	11128,842	3,87431864
6	194,817	5,23942982	6	552,291	7,31850419	6	1012,602	7,27033721	6	3087,29	11,0786	6	7495,313	5,75248559
8	182,821	5,58322075	8	484,632	8,34023341	8	748,128	9,8405059	8	2294,522	14,9063	8	6276,659	6,86936792
16	106,657	9,57021105	16	302,122	13,378516	16	505,558	14,5620443	16	1091,398	31,3386	16	3618,405	11,9159353
32	119,361	8,55162071	32	310,344	13,0240765	32	439,261	16,7598717	32	1346,163	25,4077	32	2467,51	17,473761

T126L28		T170L42 80km		T213L42		T254L64		T341L64	
N cpu	Mem(GB)	N cpu	Mem(GB)	N cpu	Mem(GB)	N cpu	Mem(GB)	N cpu	Mem(GB)
1	1,906	1	4,732	1	7,545	1	16,082	1	No data
2	2,114	2	4,956	2	7,791	2	16,239	2	30,188
4	2,647	4	5,563	4	8,555	4	17,216	4	31,686
6	3,307	6	6,081	6	9,508	6	18,075	6	33,131
8	4,088	8	6,97	8	9,952	8	18,985	8	34,541
16	5,595	16	9,524	16	13,384	16	23,035	16	40,907
32	11,868	32	16,654	32	22,225	32	34,111	32	57,099

Transformada por Blocos (tam=512) - Previsão:48hs														
T126L28 100km			T170L42 80km			T213L42 60km			T254L64 50km			T341L64 40km		
N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup
1	1020,879		1	4246,267		1	7361,669		1	34838,94		1	74913,642	
2	424,312	2,40596306	2	1356,637	3,12999498	2	2482,202	2,96578159	2	8395,233	4,14985	2	21620,656	3,46491069
4	239,591	4,26092382	4	1055,292	4,02378394	4	1350,44	5,45131142	4	4487,705	7,7632	4	11439,87	6,54846969
6	176,895	5,7711015	6	707,36	6,00297868	6	1379,719	5,33562921	6	3217,618	10,8276	6	8144,744	9,19778964
8	149,314	6,83712847	8	448,036	9,47751297	8	1351,724	5,44613323	8	2401,429	14,5076	8	6010,917	12,4629307
16	123,423	8,27138378	16	325,245	13,055595	16	548,429	13,4231943	16	1550,526	22,4691	16	3782,451	19,8055816
32	123,298	8,27976934	32	298,678	14,2168724	32	453,027	16,2499564	32	1087,657	32,0312	32	2523,279	29,6890047

T126L28		T170L42 80km		T213L42		T254L64		T341L64	
N cpu	Mem(GB)	N cpu	Mem(GB)	N cpu	Mem(GB)	N cpu	Mem(GB)	N cpu	Mem(GB)
1	1,538		3,74	1	6,009	1	12,738	1	24,091
2	1,771	2	4,018	2	6,354	2	13,114	2	24,625
4	2,272	4	4,688	4	7,243	4	14,403	4	26,686
6	2,745	6	5,33	6	8,101	6	15,825	6	28,866
8	3,213	8	5,97	8	7,243	8	16,985	8	30,791
16	5,595	16	9,024	16	12,884	16	22,035	16	39,907
32	11,868	32	16,654	32	22,225	32	34,111	32	57,099

Transformada da versão OpenMP - Previsão:48hs														
T126L28 100km			T170L42 80km			T213L42 60km			T254L64 50km			T341L64 40km		

N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup	N cpu	Real Time	Speedup
1	871,3626		1	2751,678		1	5075,831		1	16865,17		1	44997,69	
2	435,6813		2	1375,839		2	2537,915		2	8432,587		2	22498,845	
4	231,5633	3,76295622	4	738,3168	3,7269611	4	1276,712	3,97570551	4	4329,363	3,89553	4	11301,471	3,98157816
6	161,4906	5,39574734	6	490,4394	5,61063755	6	900,1918	5,63861031	6	2944,508	5,72767	6	7975,6085	5,64191306
8	125,3767	6,94995622	8	389,4225	7,06604836	8	714,1	7,10801152	8	2346,232	7,1882	8	6140,0945	7,32850119

T126L28			T170L42 80km			T213L42			T254L64			T341L64		
N cpu	Mem(GB)		N cpu	Mem(GB)		N cpu	Mem(GB)		N cpu	Mem(GB)		N cpu	Mem(GB)	
1			1			1			1			1		
2	1,84		2	4,272		2	6,512		2	13,408		2	2,3792	
4	1,904		4	4,272		4	6,512		4	13,44		4	2,3808	
6	1,936		6	4,304		6	6,544		6	13,472		6	2,384	
8	1,968		8	4,384		8	6,576		8	13,52		8	2,3872	