MÉTODO DOS ELEMENTOS FINITOS

CASOS DE APLICAÇÃO

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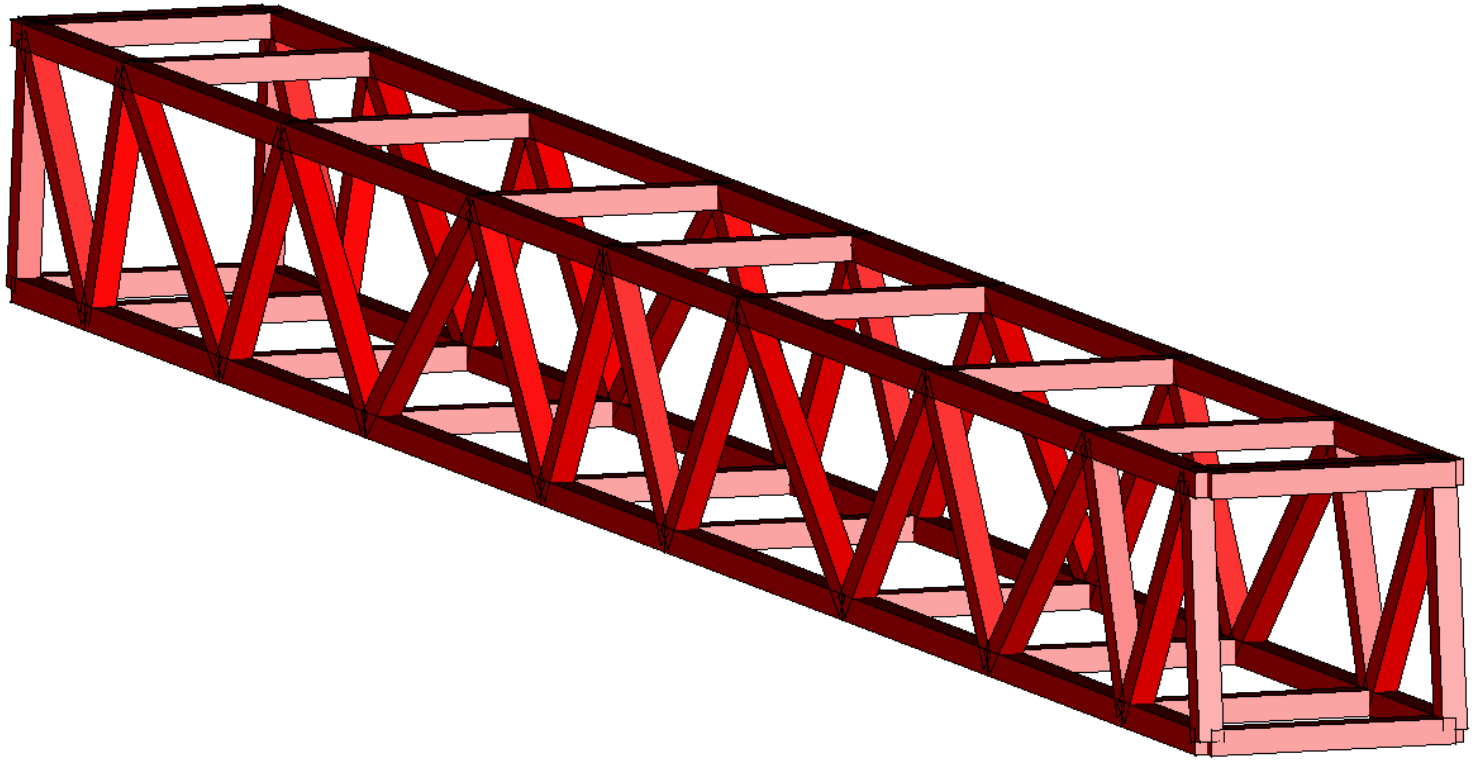
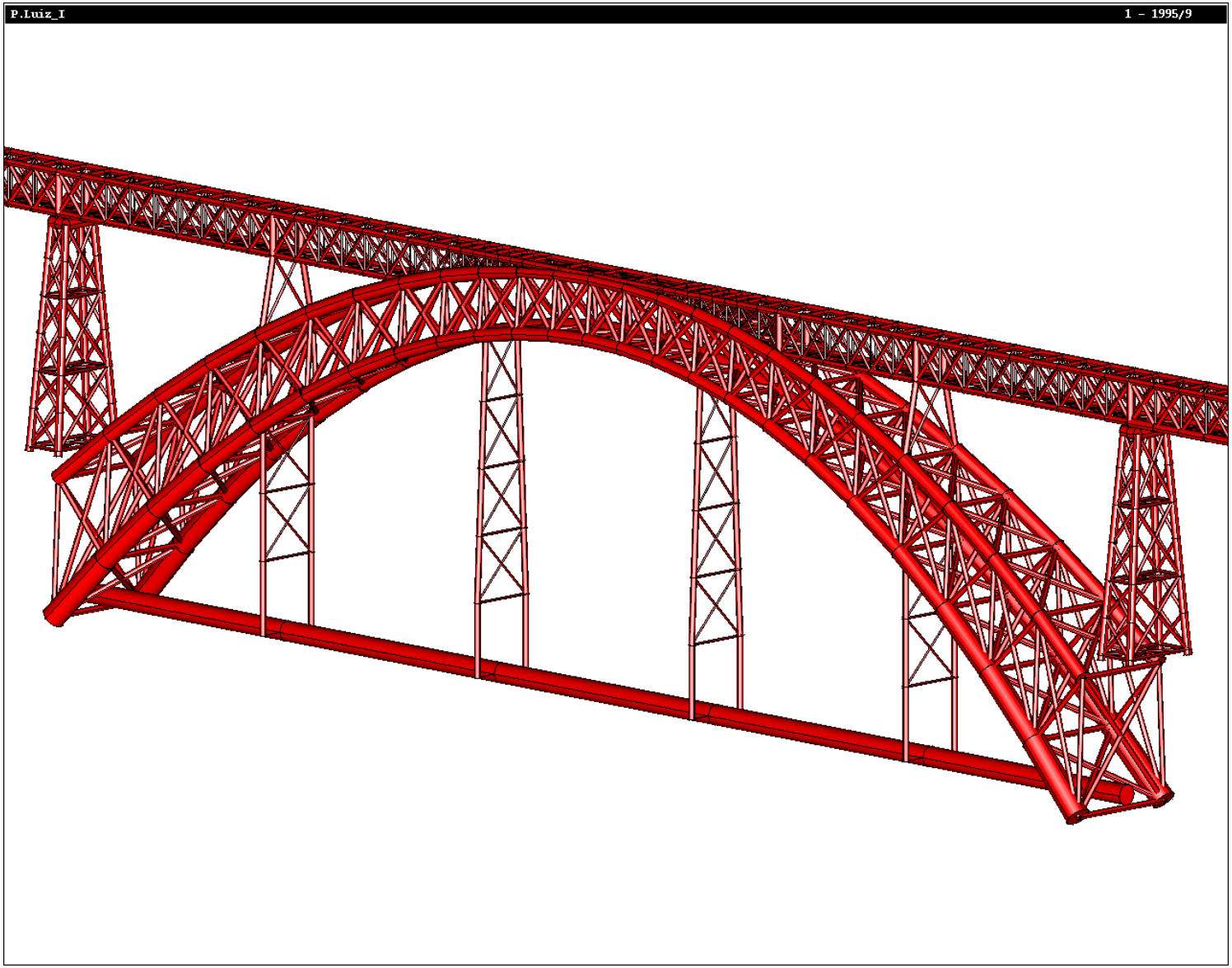
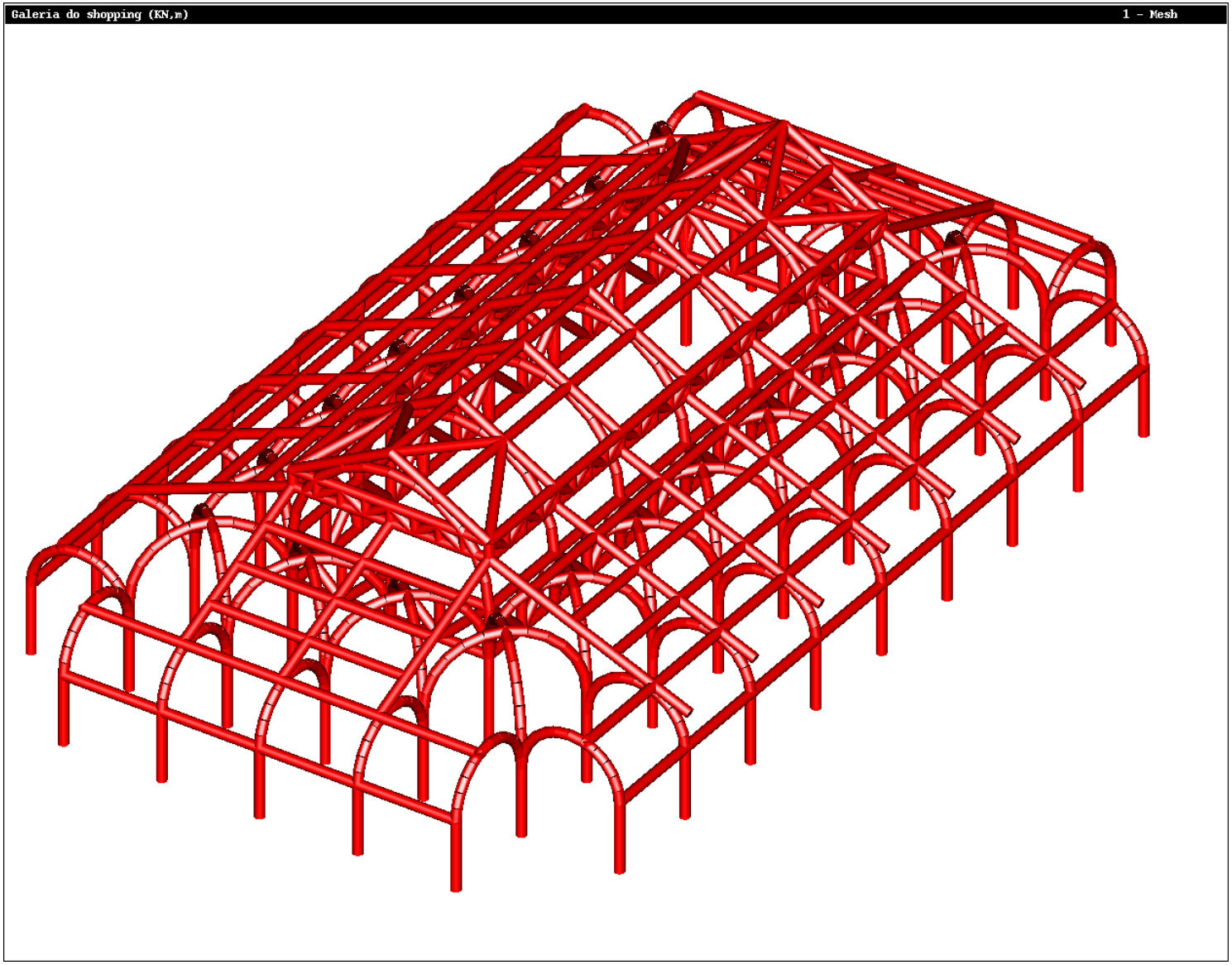
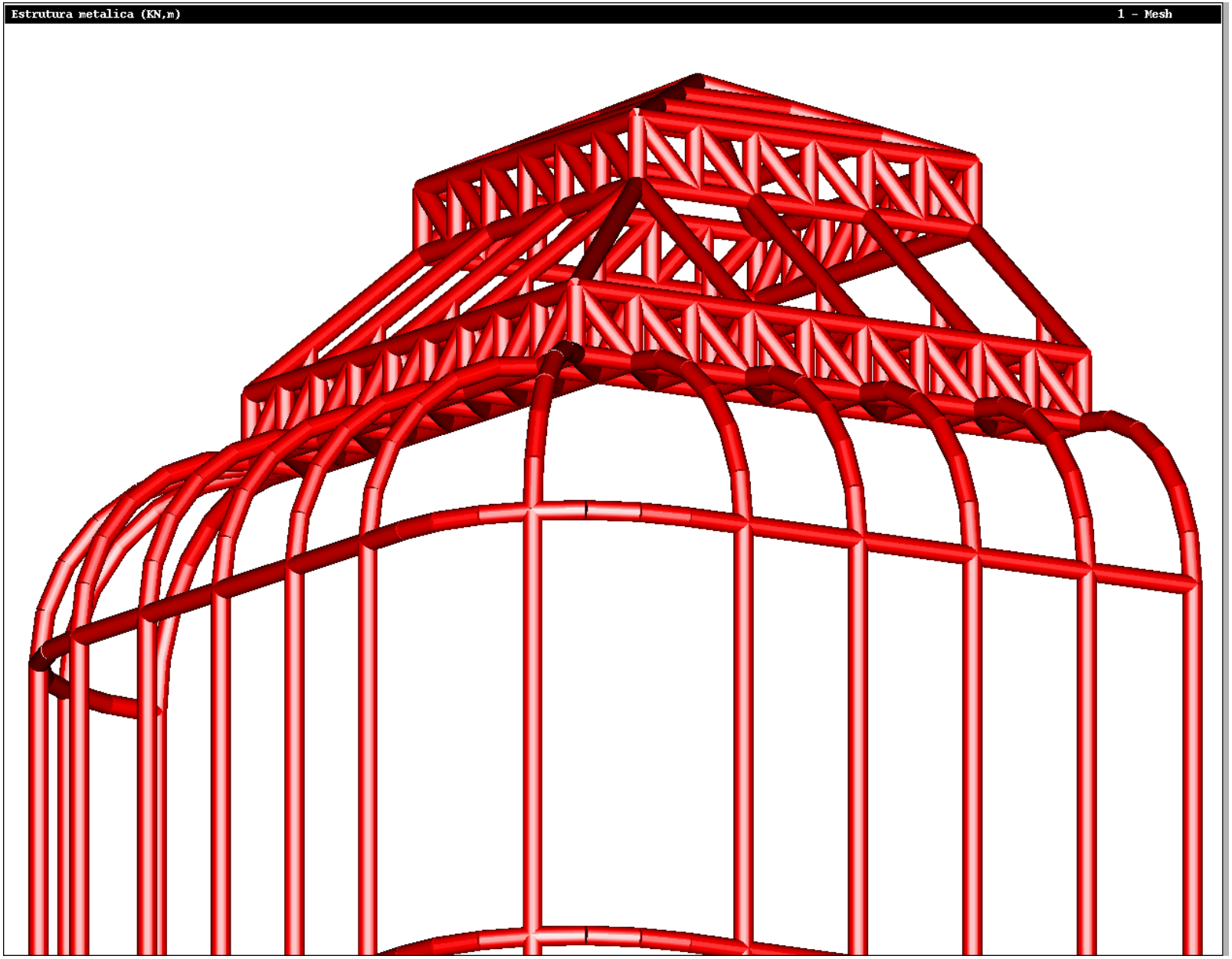
Setembro 2017

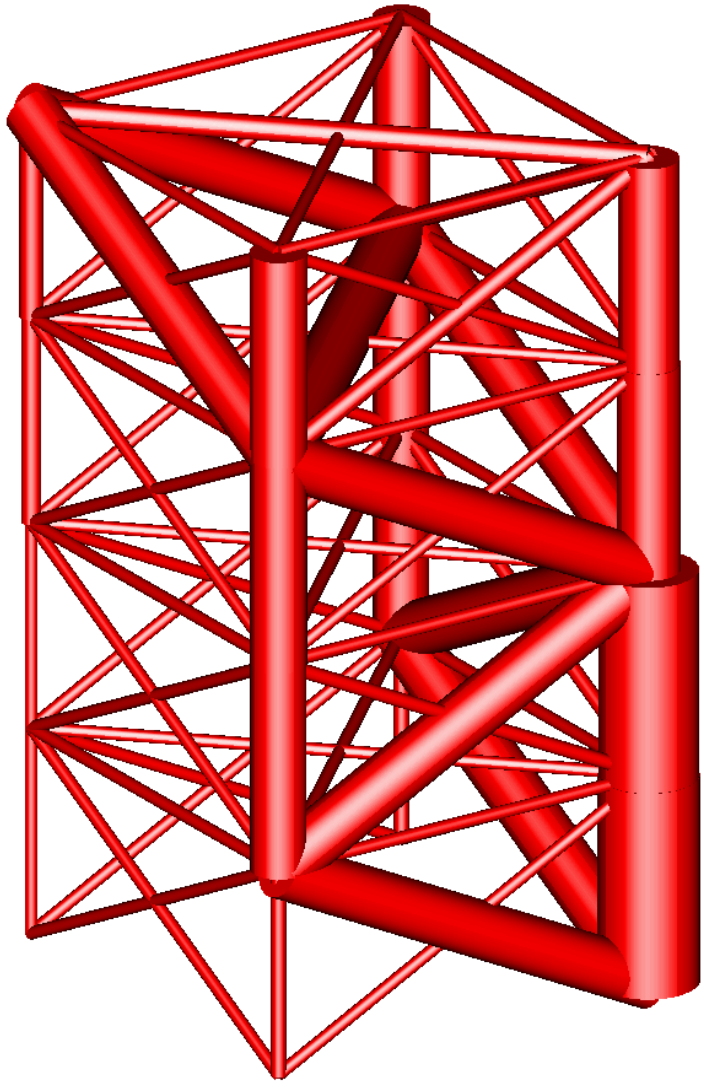


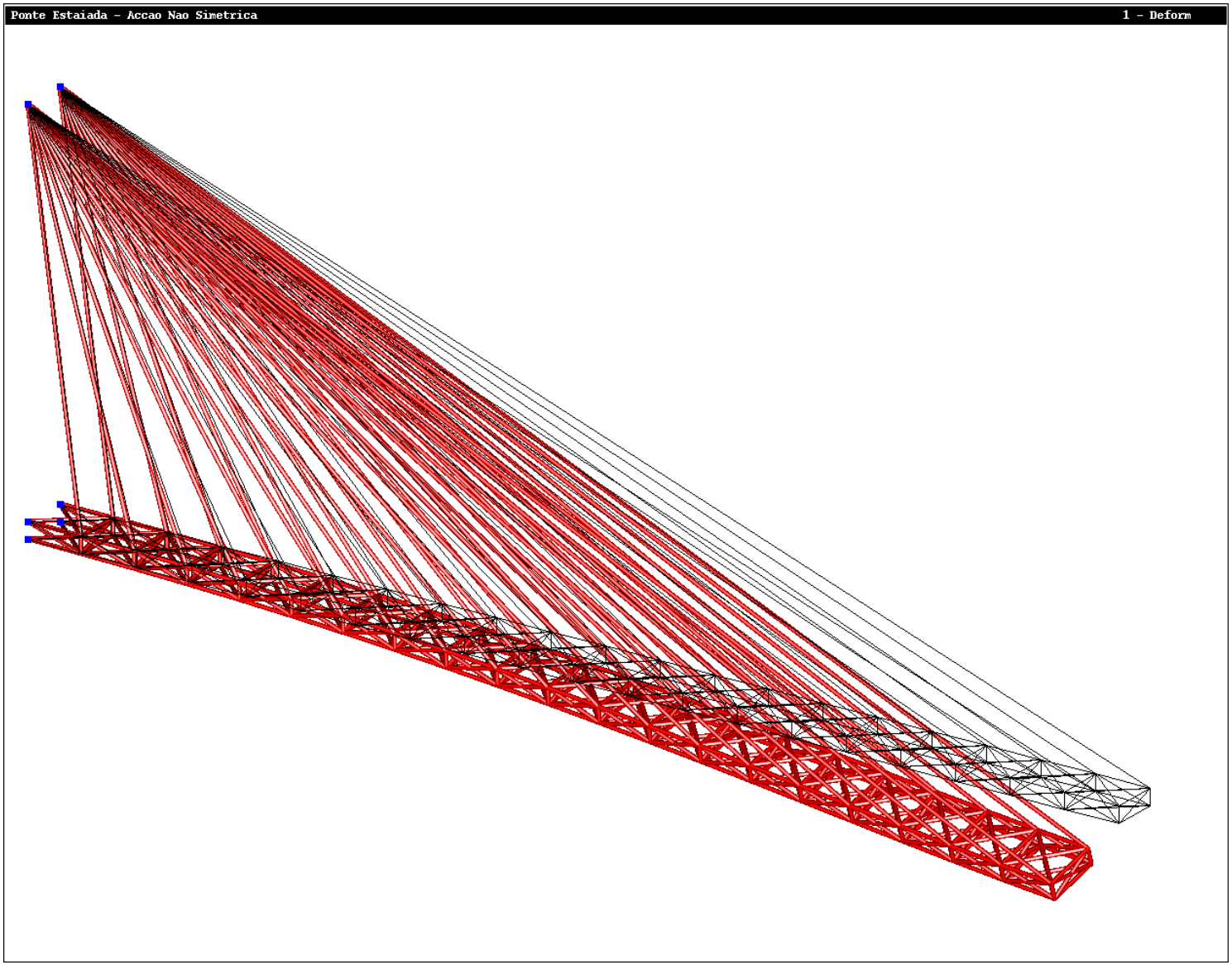

P.Luiz_I
1 - 1995/9

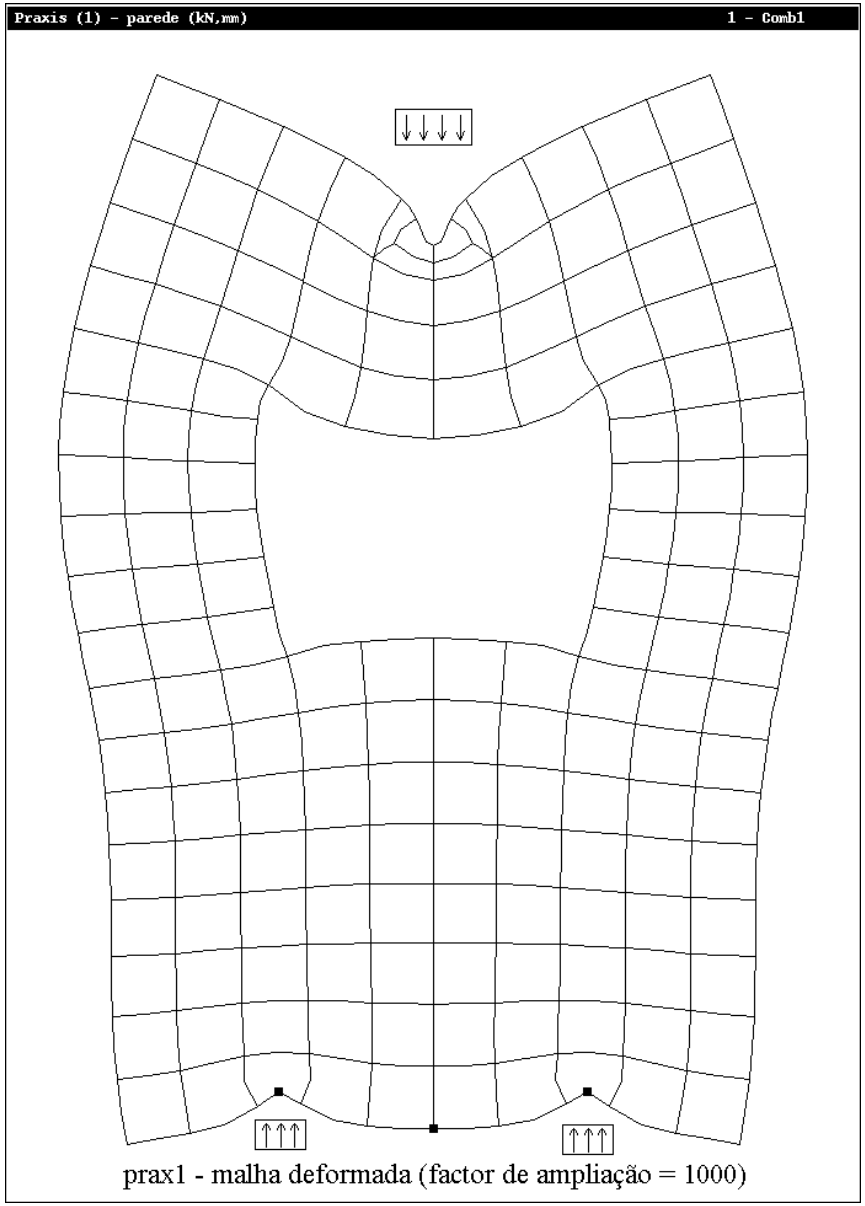

Galeria do shopping (KN,m)
1 - Mesh


Estrutura metalica (KN,m)
1 - Mesh

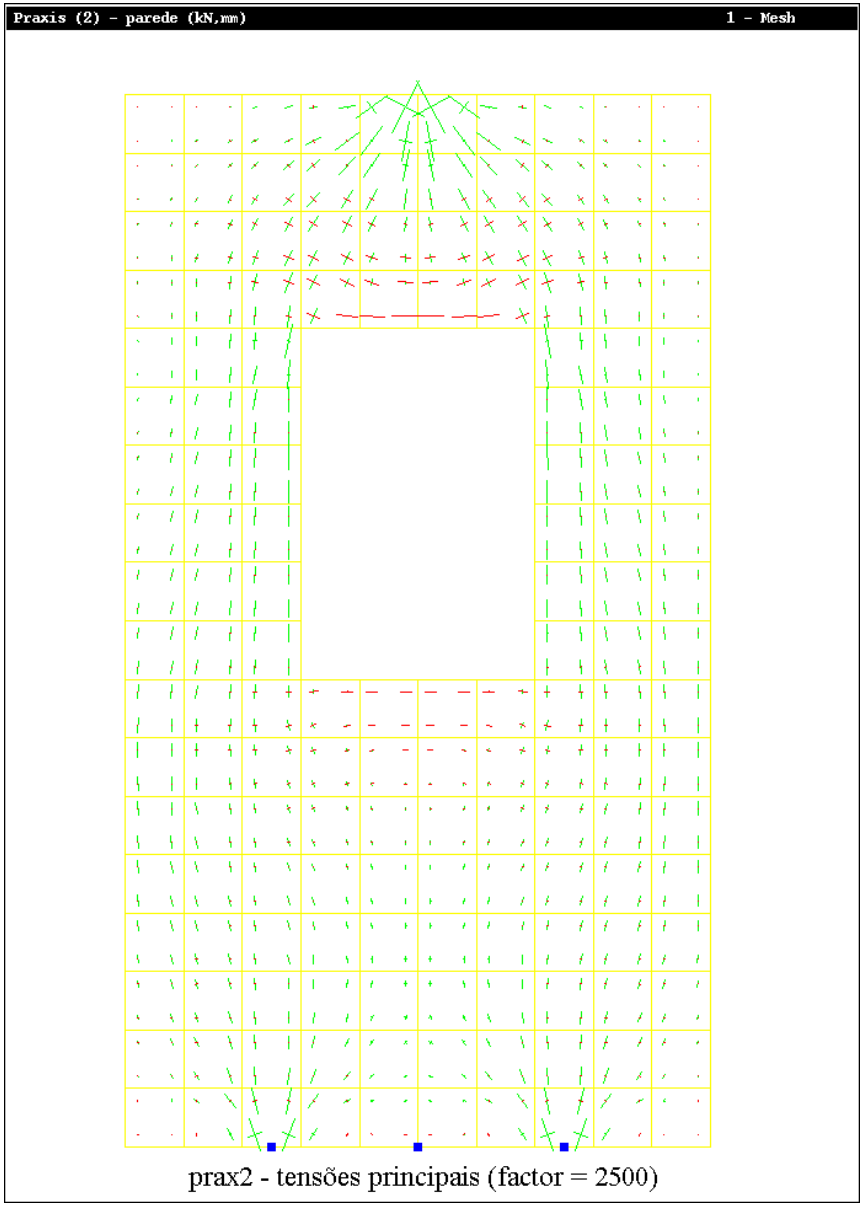
Trelica de 72 barras 1 - Mesh



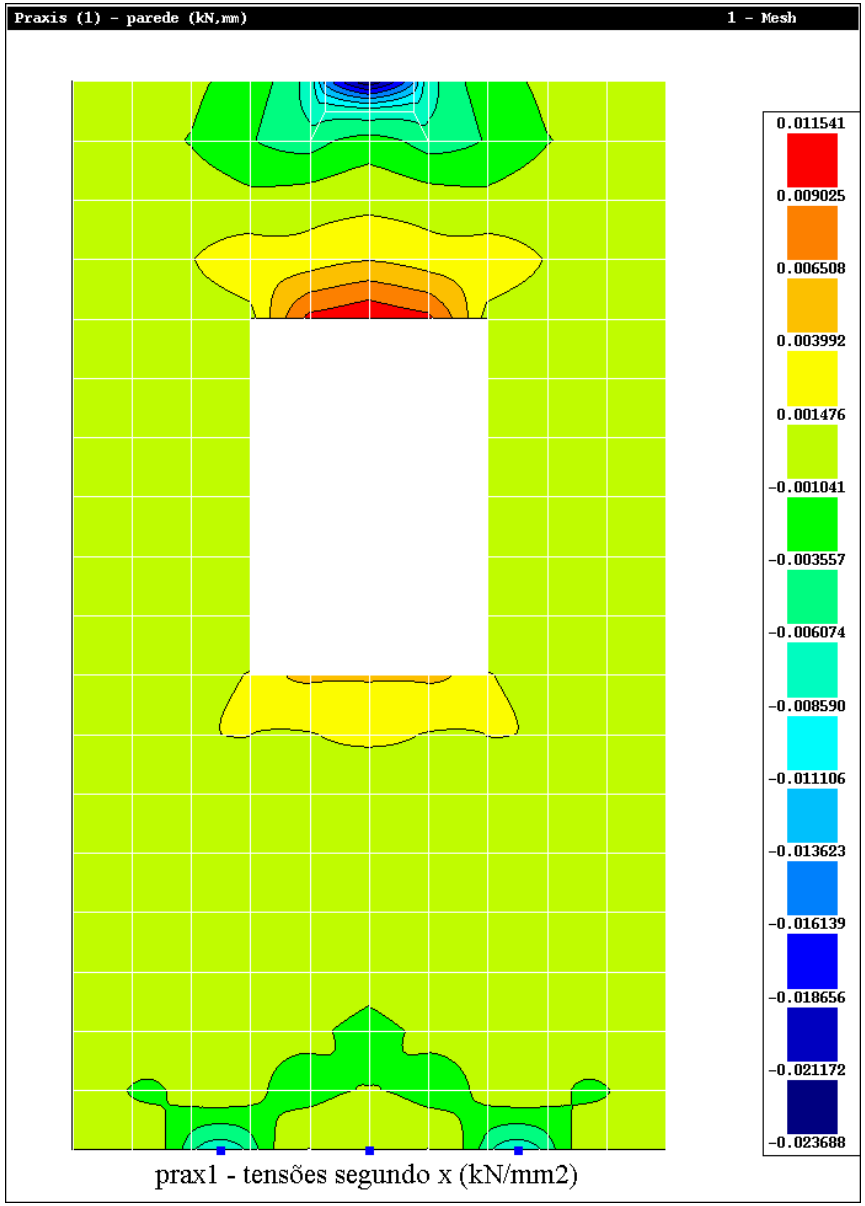

Ponte Estaiada - Accao Nao Simetrica
1 - Deform



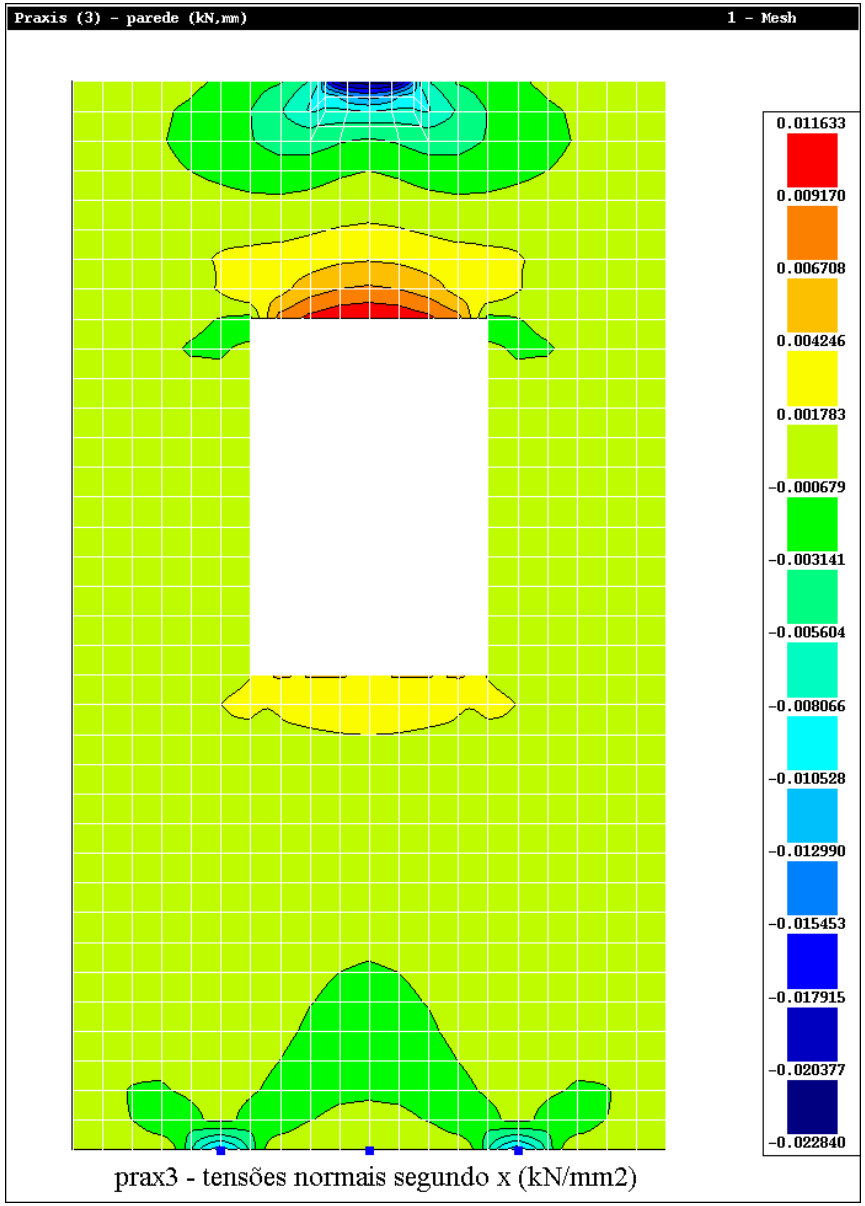
prax1 - malha deformada (factor de ampliação = 1000)



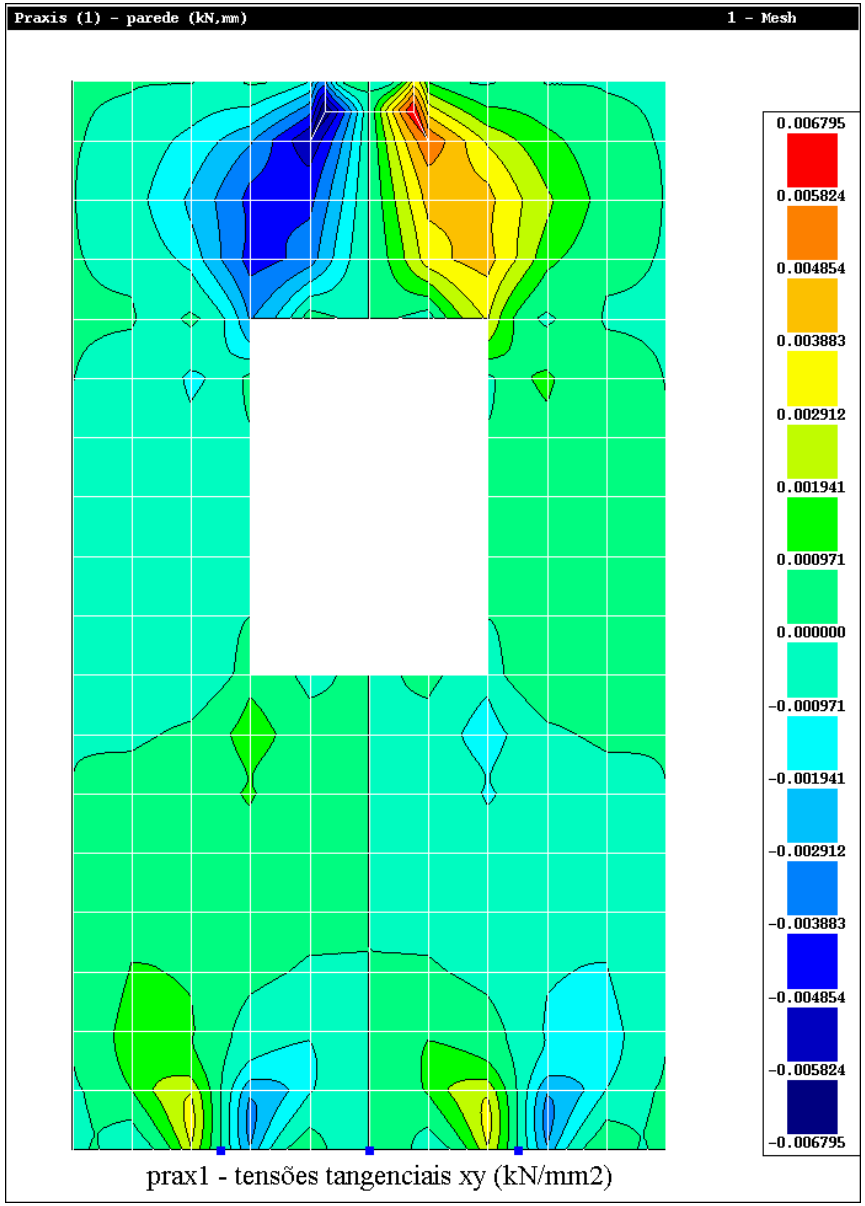
prax2 - tensões principais (factor = 2500)



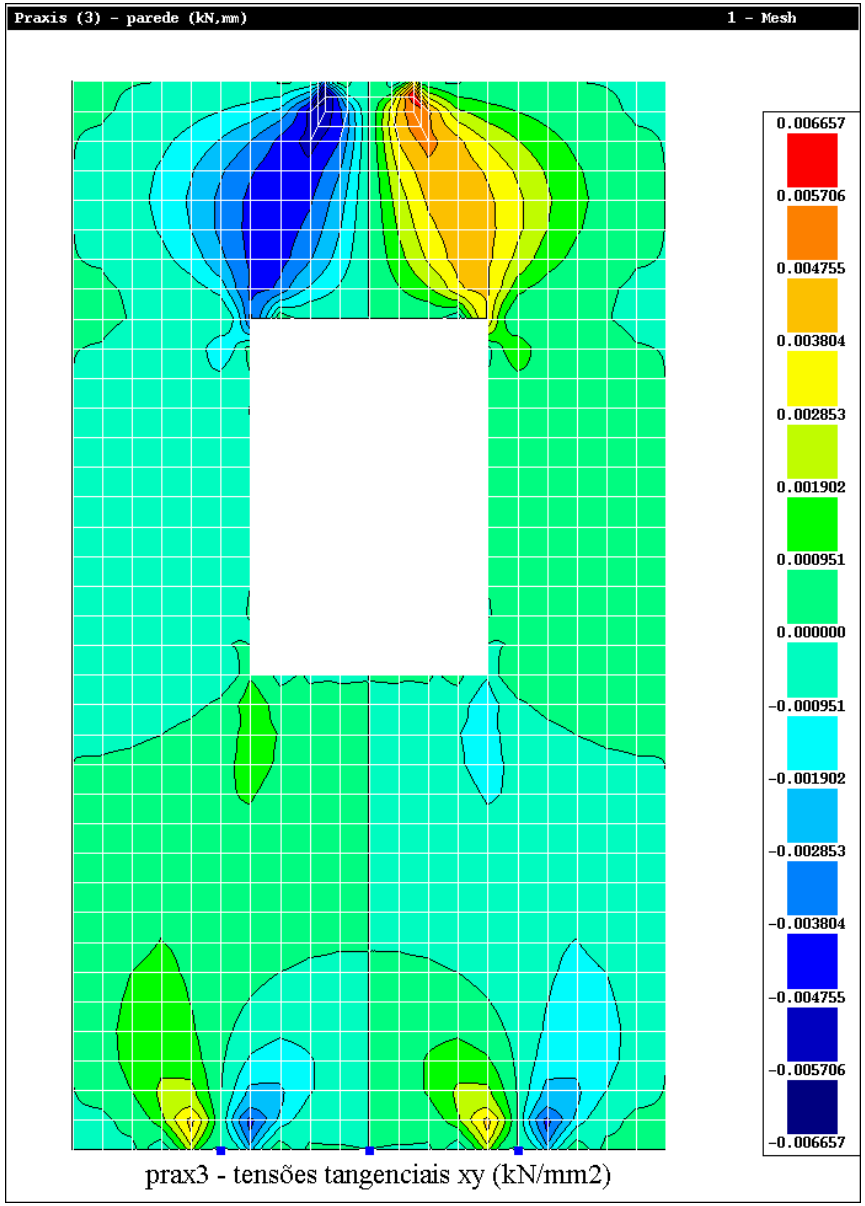
prax1 - tensões segundo x (kN/mm2)



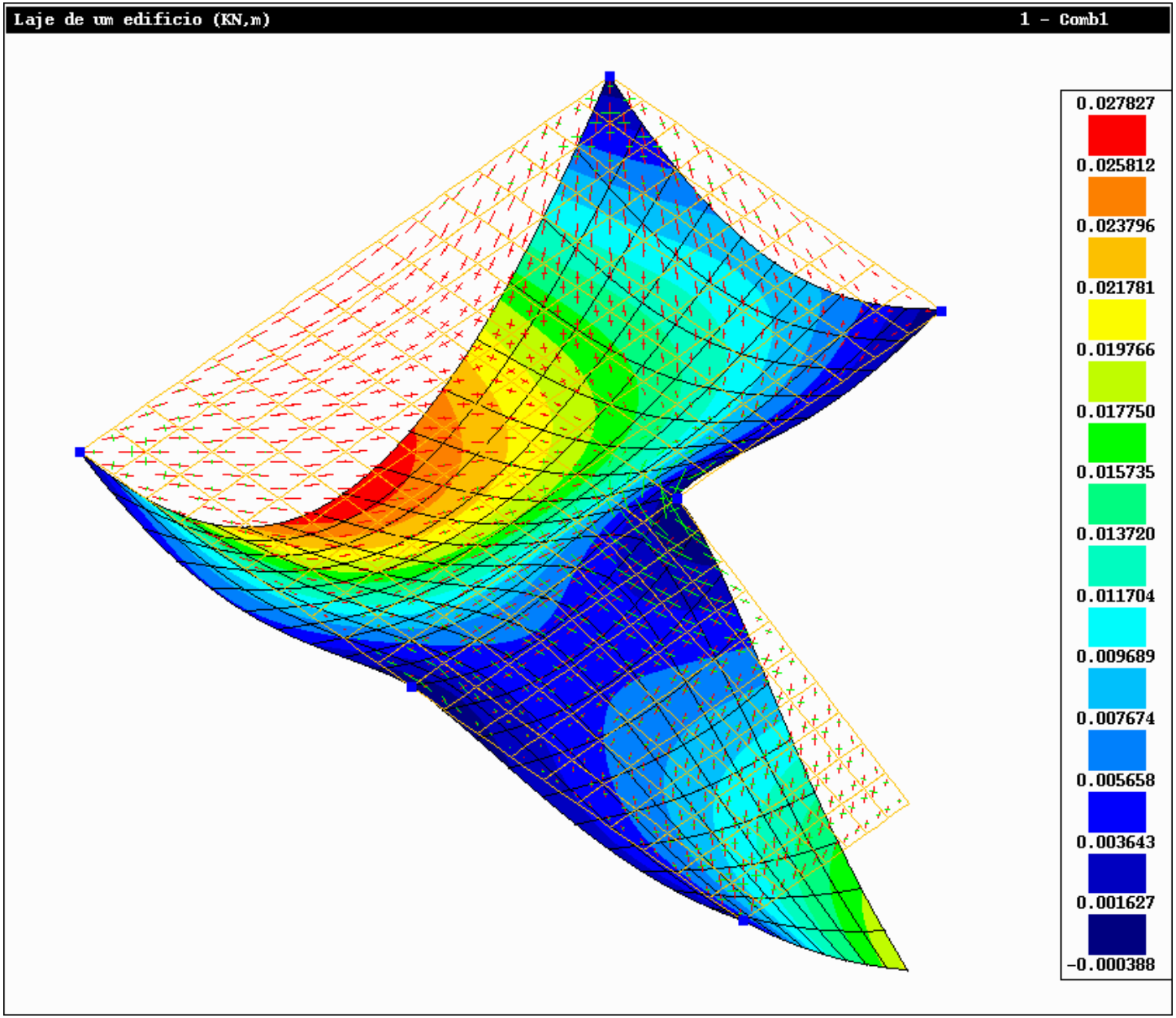
prax3 - tensões normais segundo x (kN/mm2)

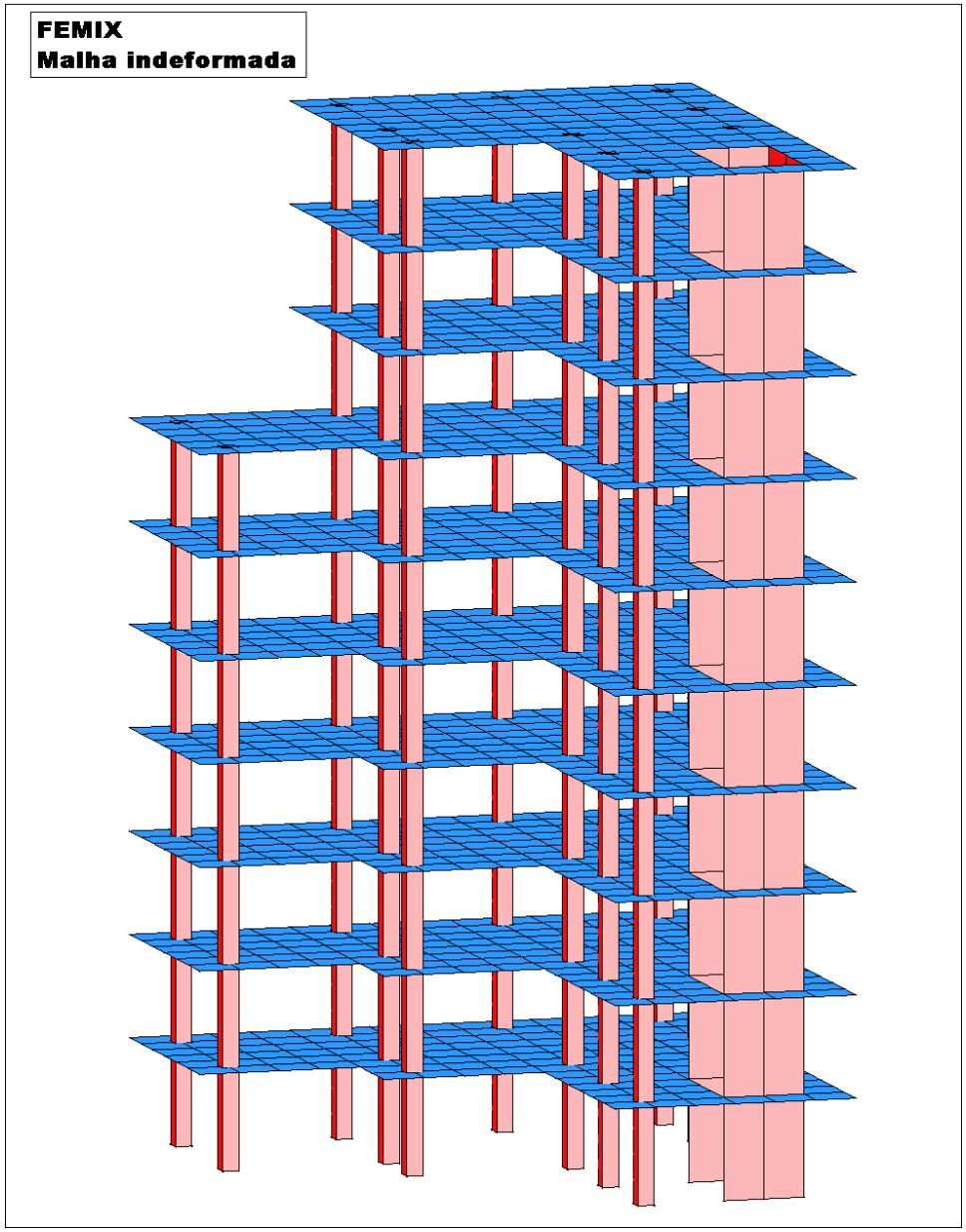


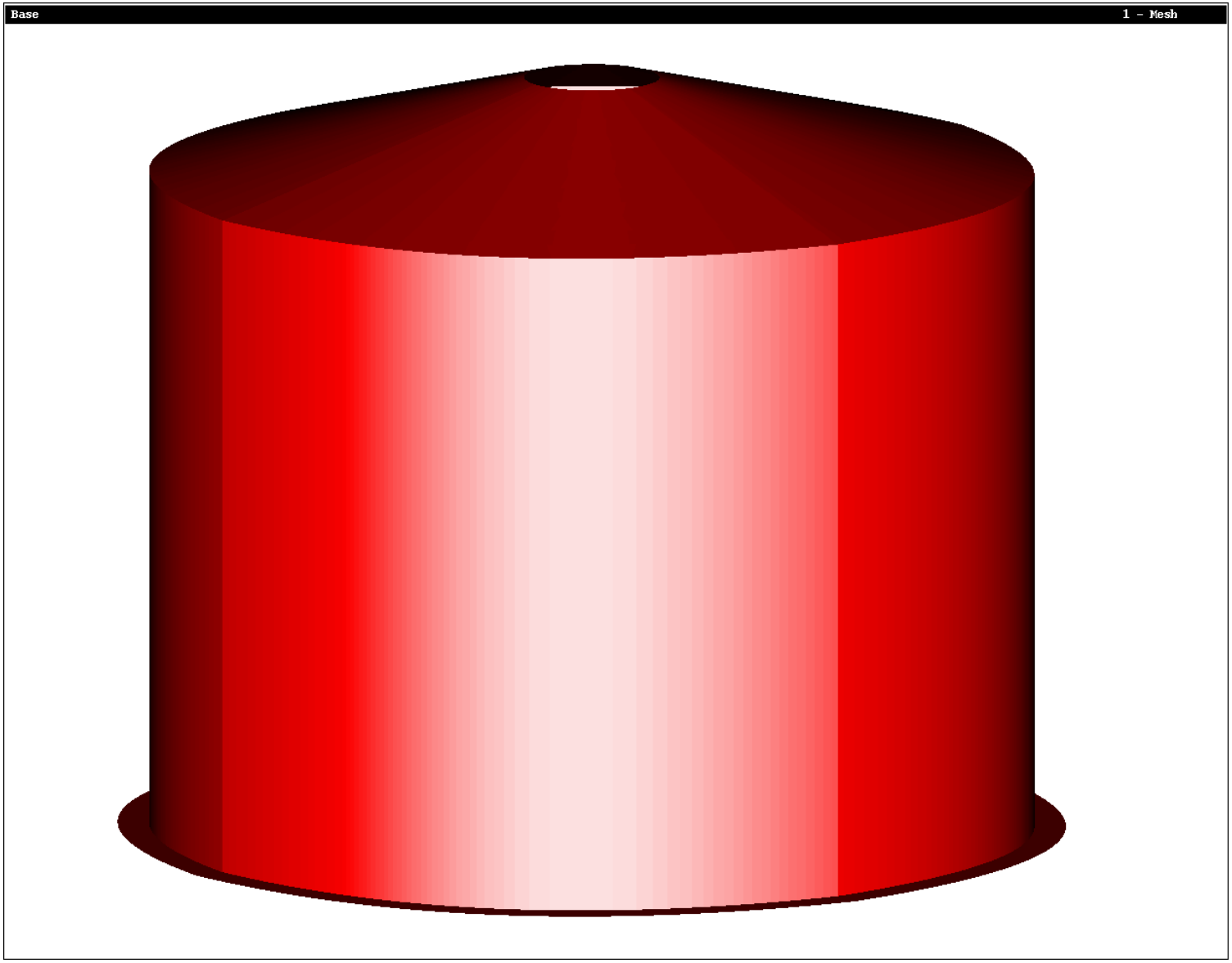
prax1 - tensões tangenciais xy (kN/mm2)

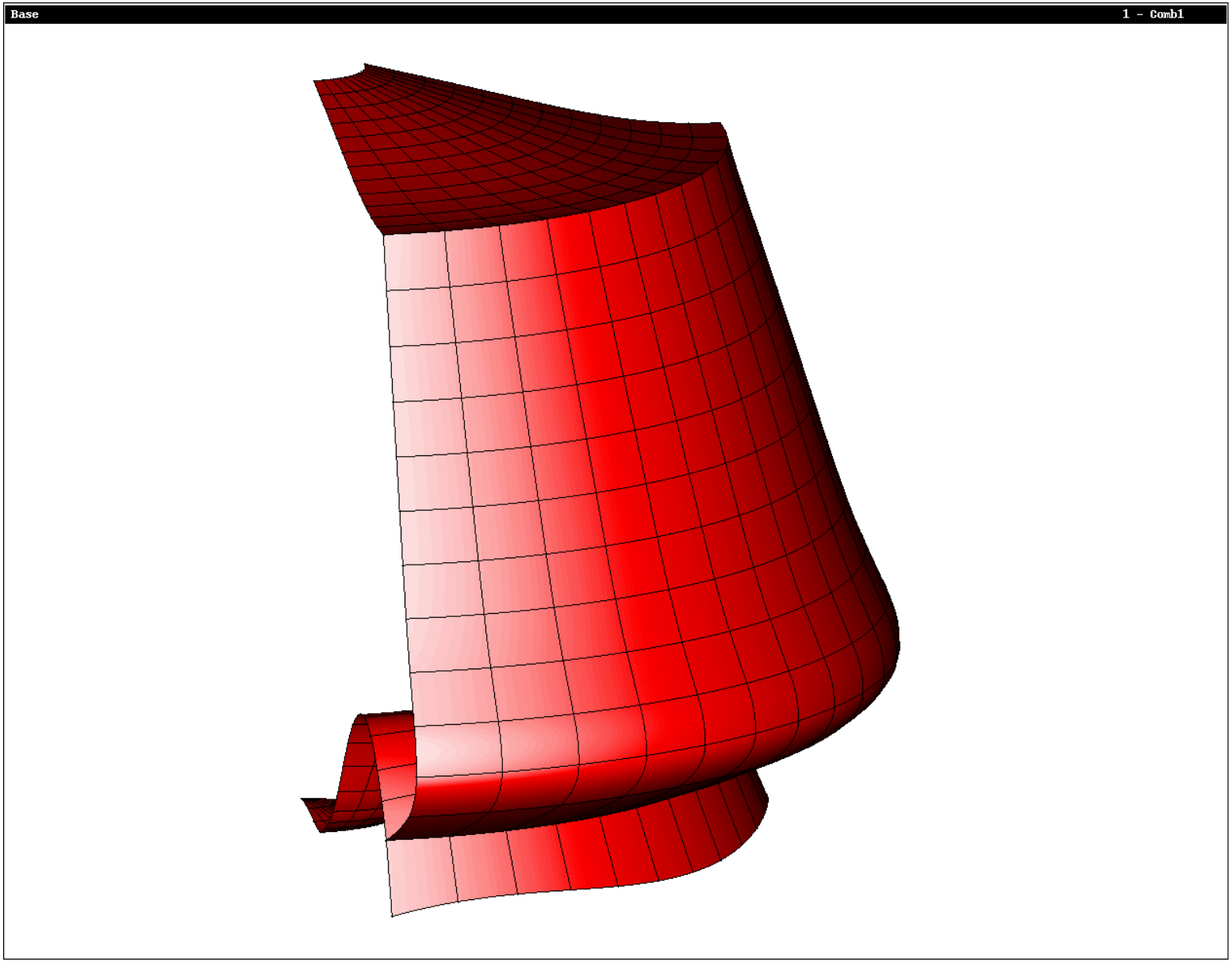


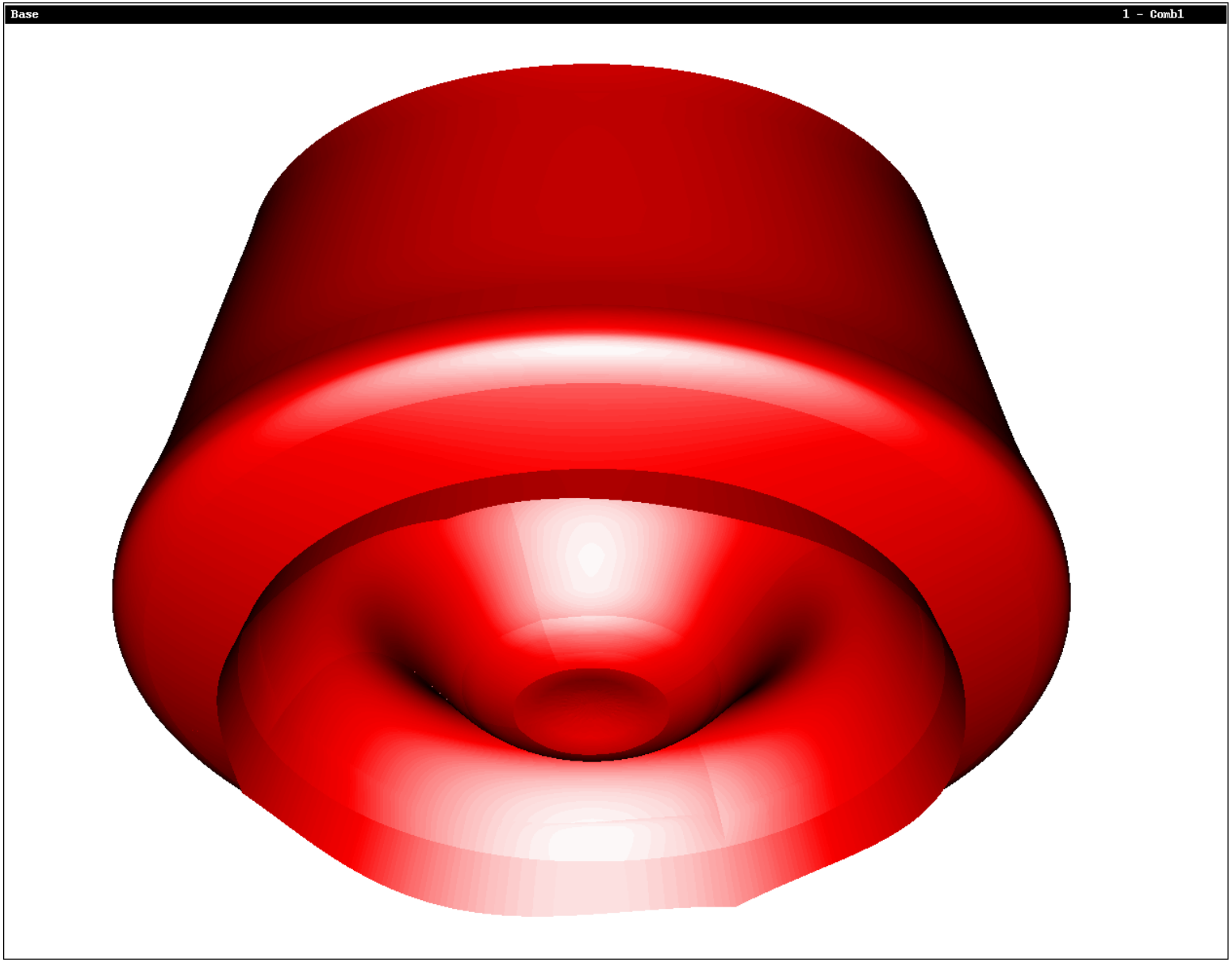
prax3 - tensões tangenciais xy (kN/mm2)

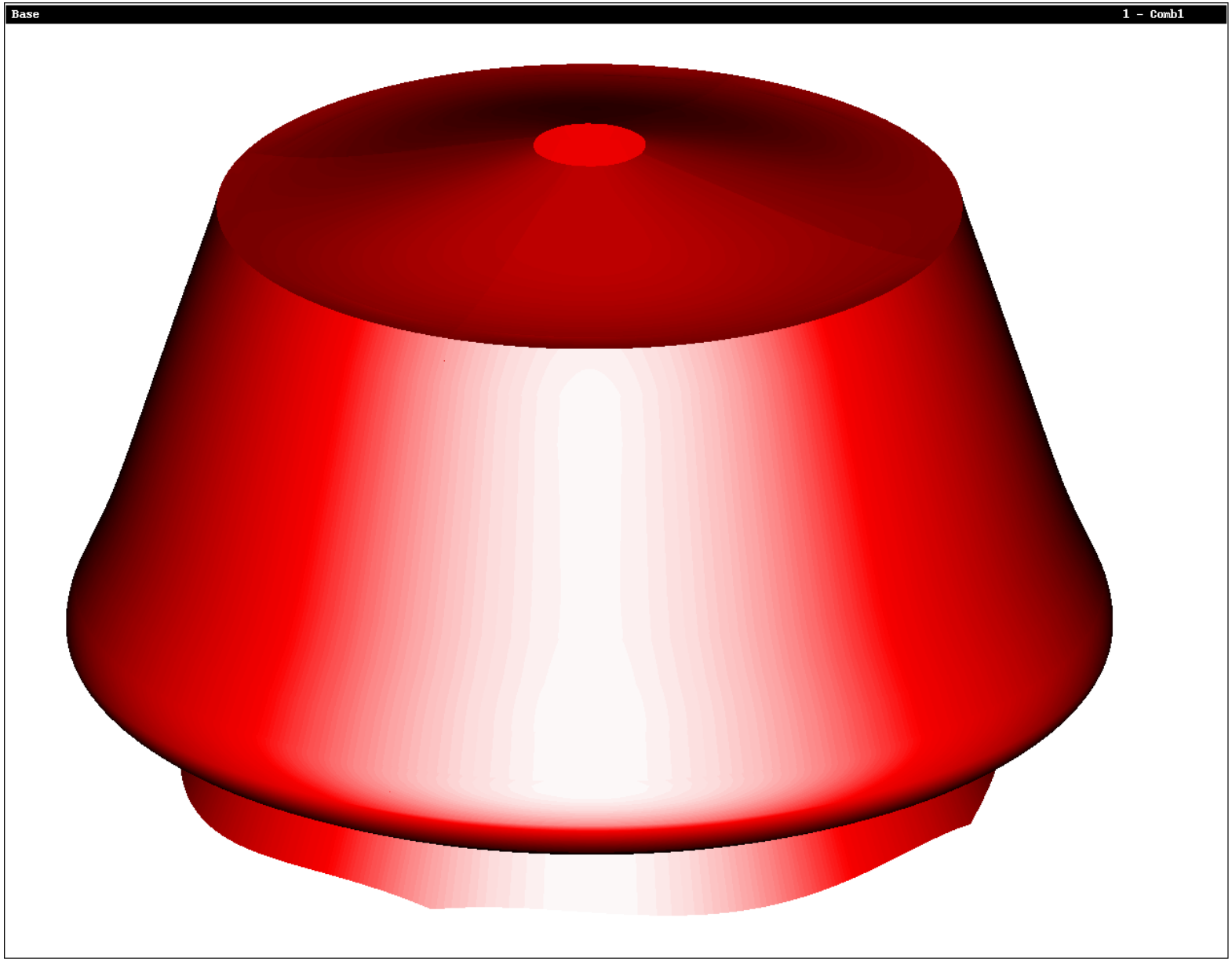

Laje de um edificio (KN,m)
1 - Comb1
0.027827
0.025812
0.023796
0.021781
0.019766
0.017750
0.015735
0.013720
0.011704
0.009689
0.007674
0.005658
0.003643
0.001627
-0.000388

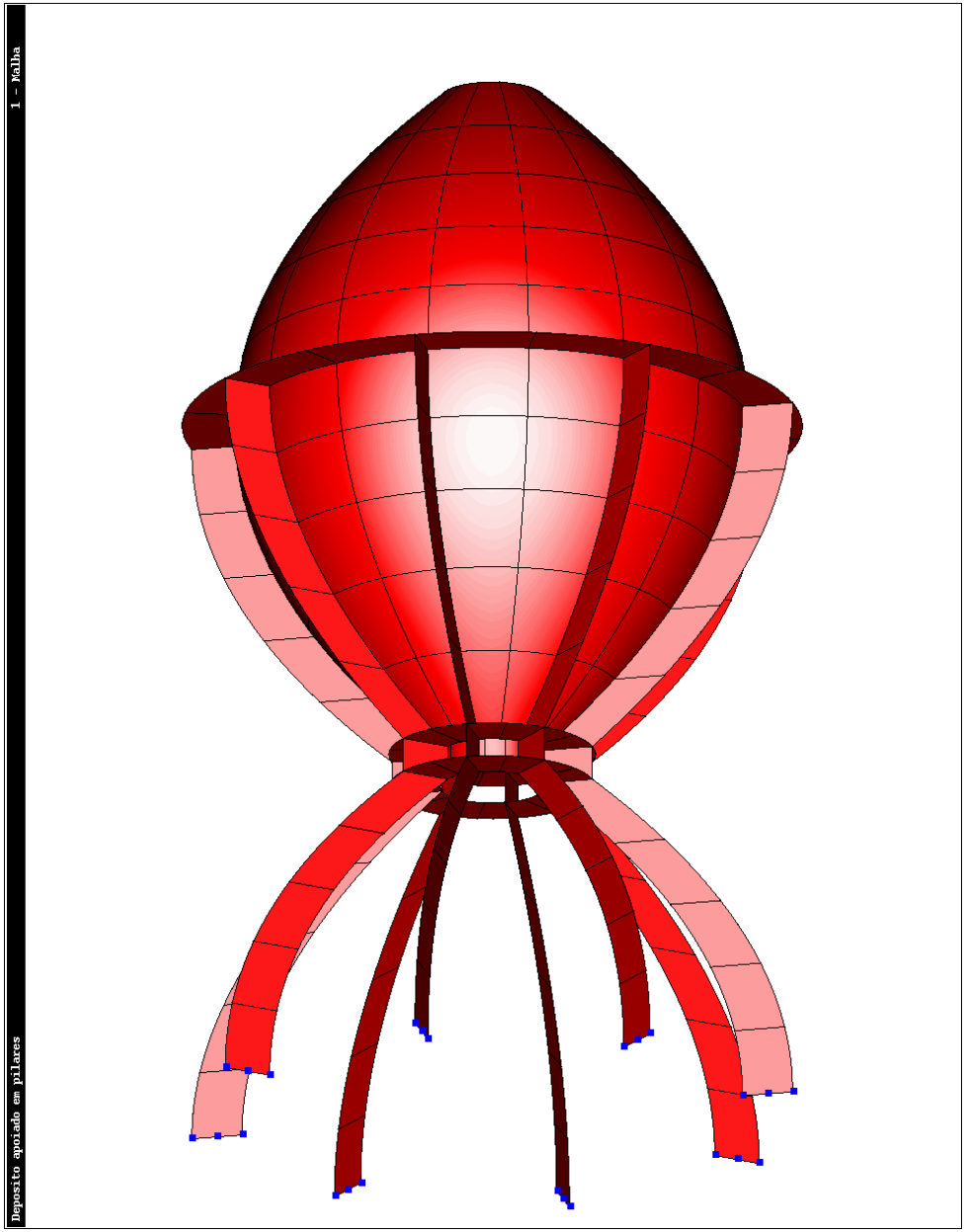

FEMIX
Malha indeformada

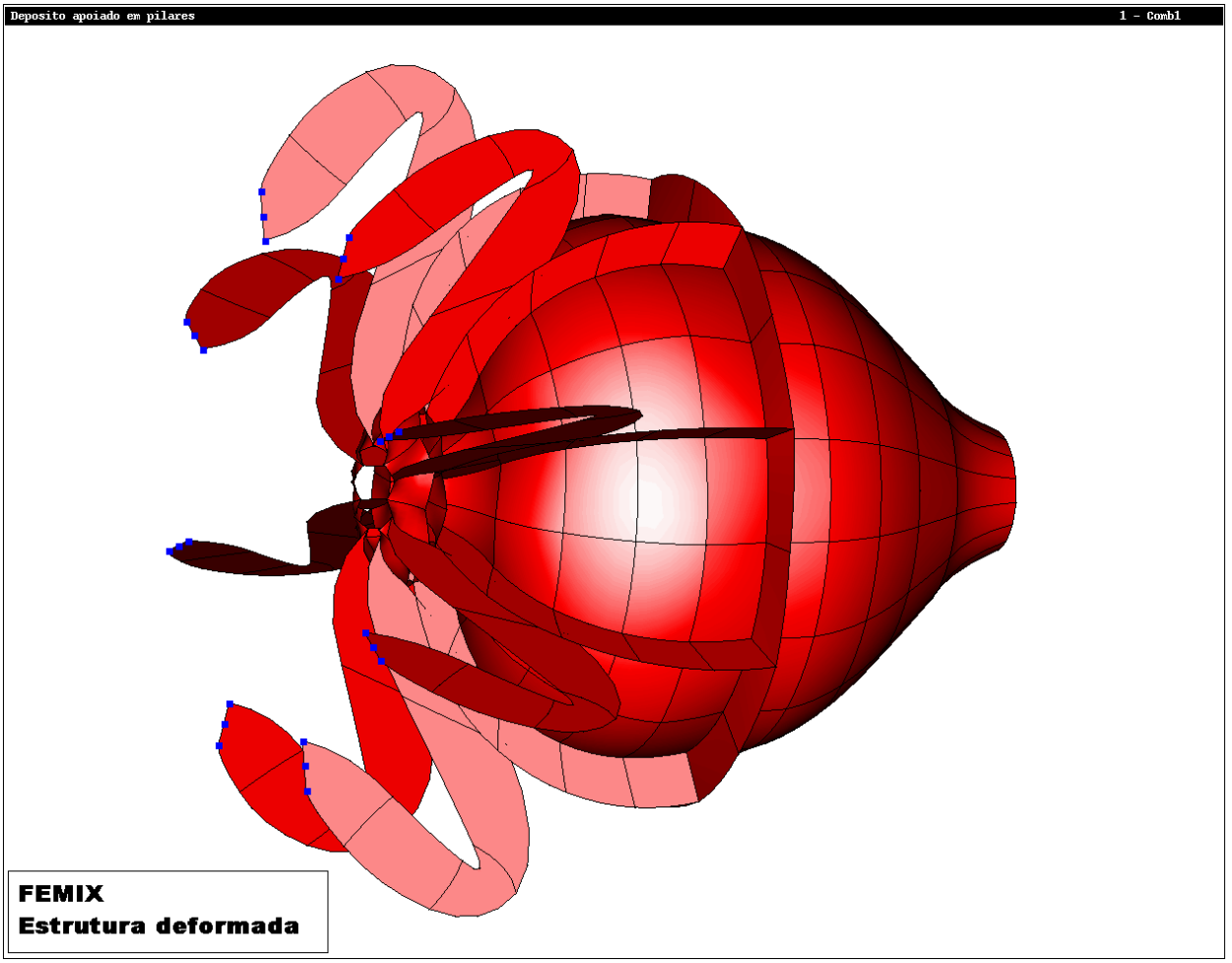

Base
1 - Mesh

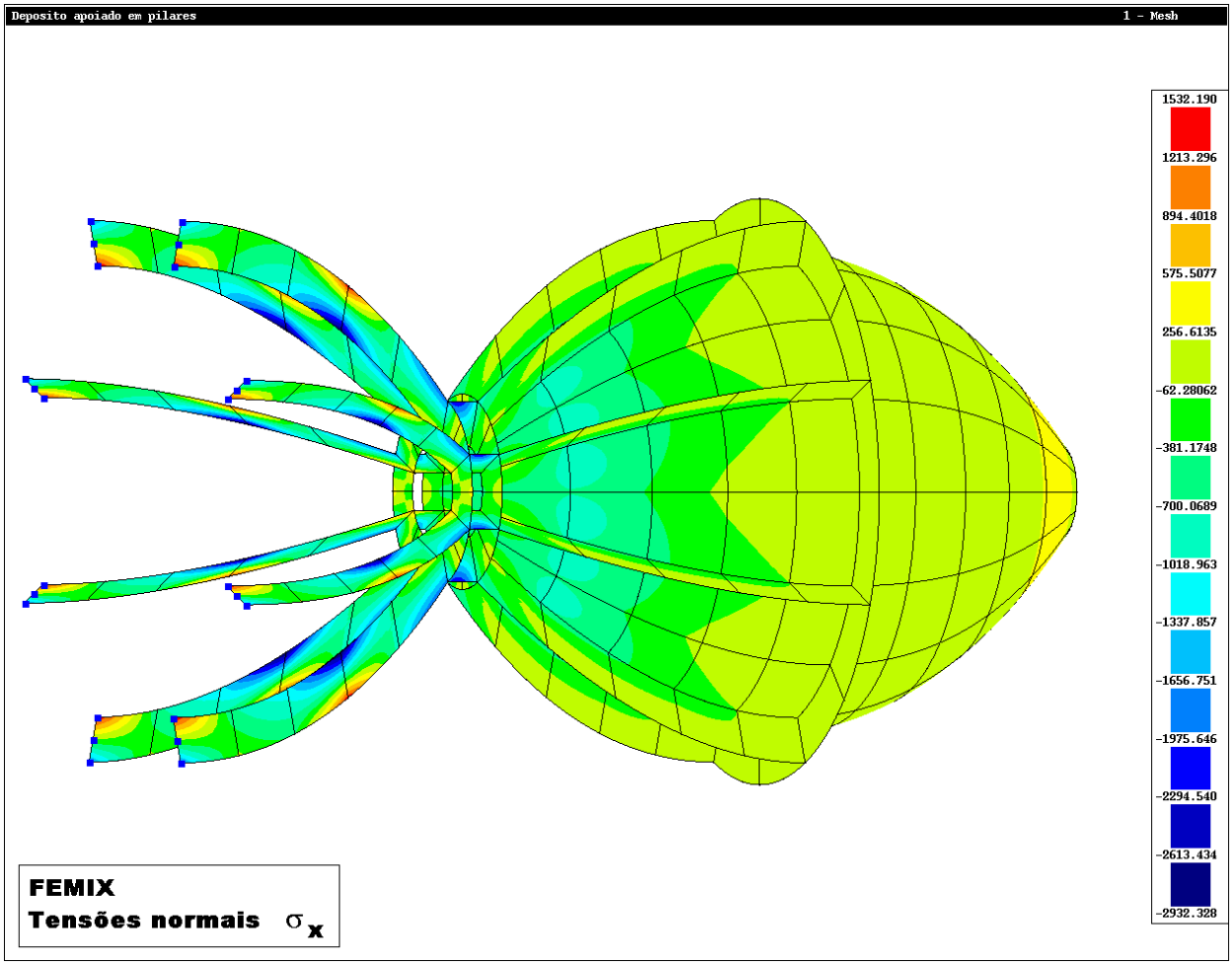

Base
1 - Comb1

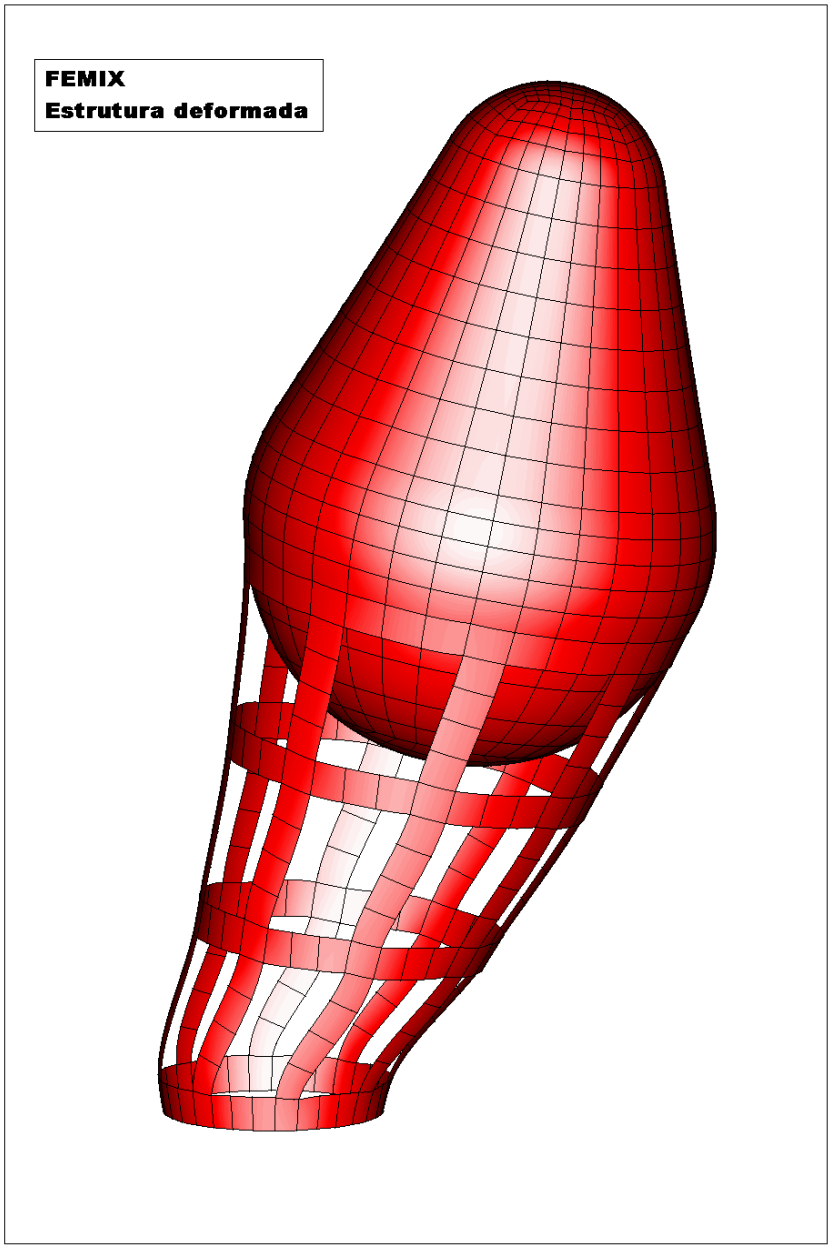

Base
1 - Comb1


Base
1 - Comb1

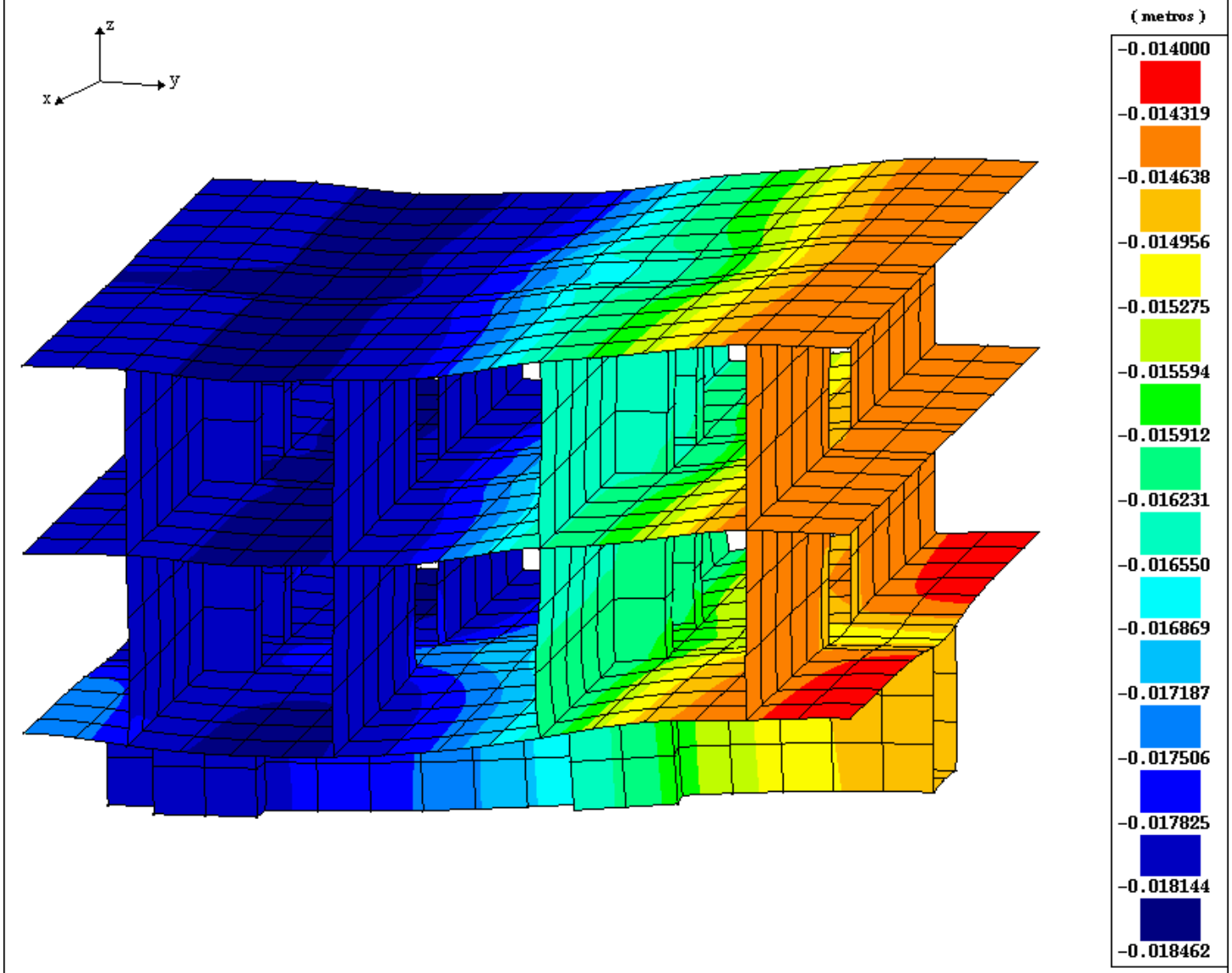

1 - Malha
Deposito apoiado em pilares


Deposito apoiado em pilares
1 - Comb1
FEMIX
Estrutura deformada

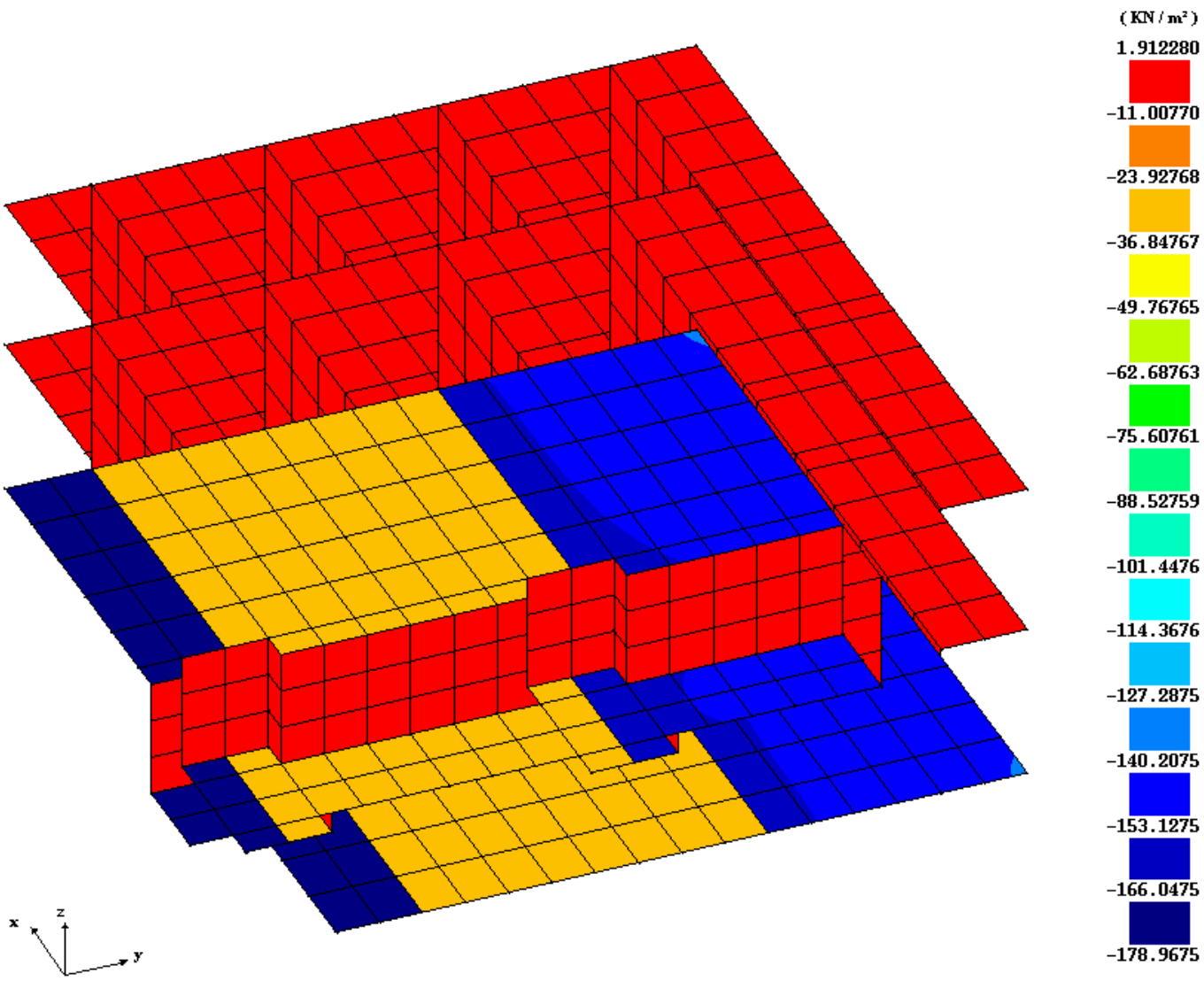

Deposito apoiado em pilares
1 - Mesh
1532.190
1213.296
894.4018
575.5077
256.6135
-62.28062
-381.1748
-700.0689
-1018.963
-1337.857
-1656.751
-1975.646
-2294.540
-2613.434
-2932.328
FEMIX
Tensões normais σx

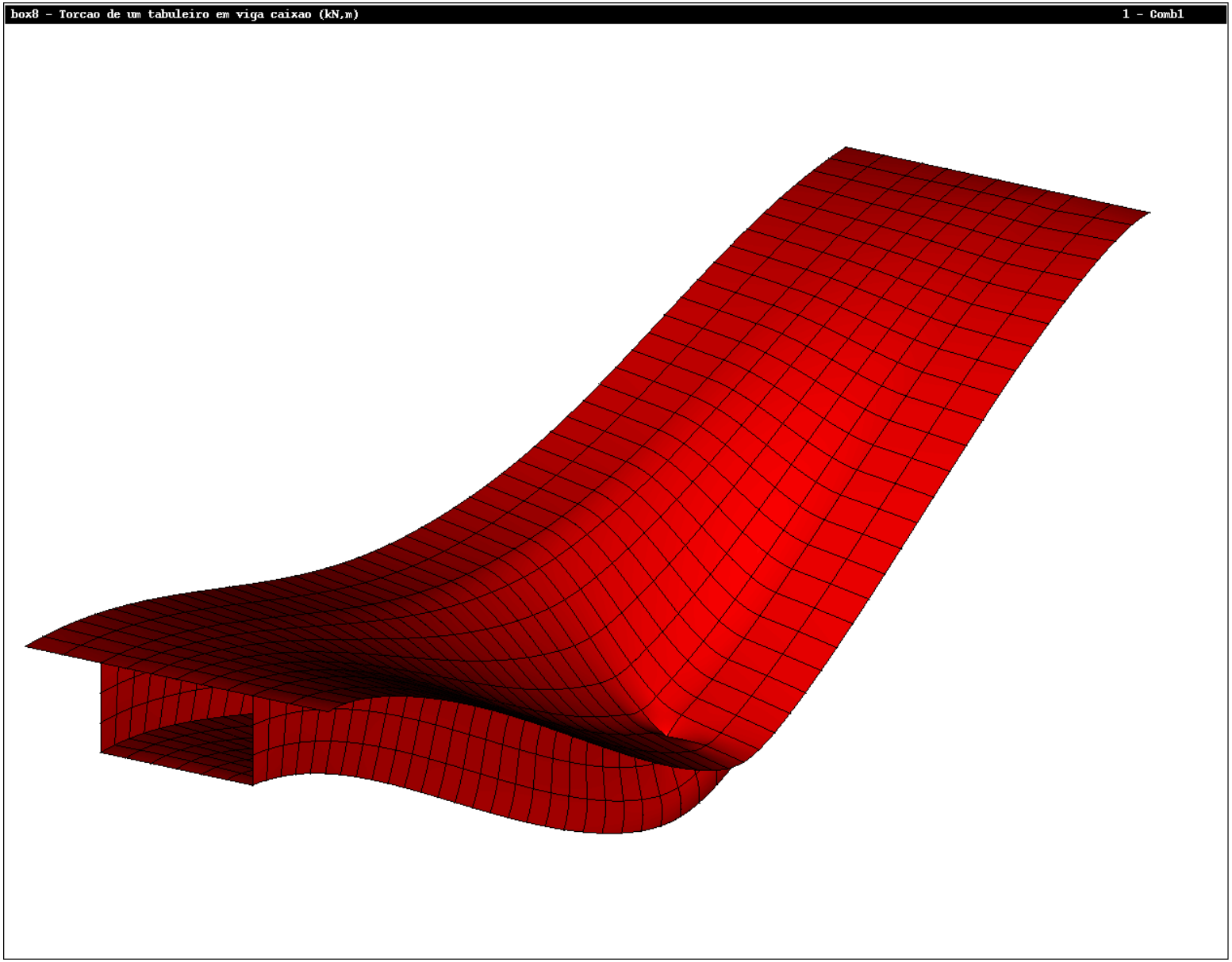

FEMIX
Estrutura deformada

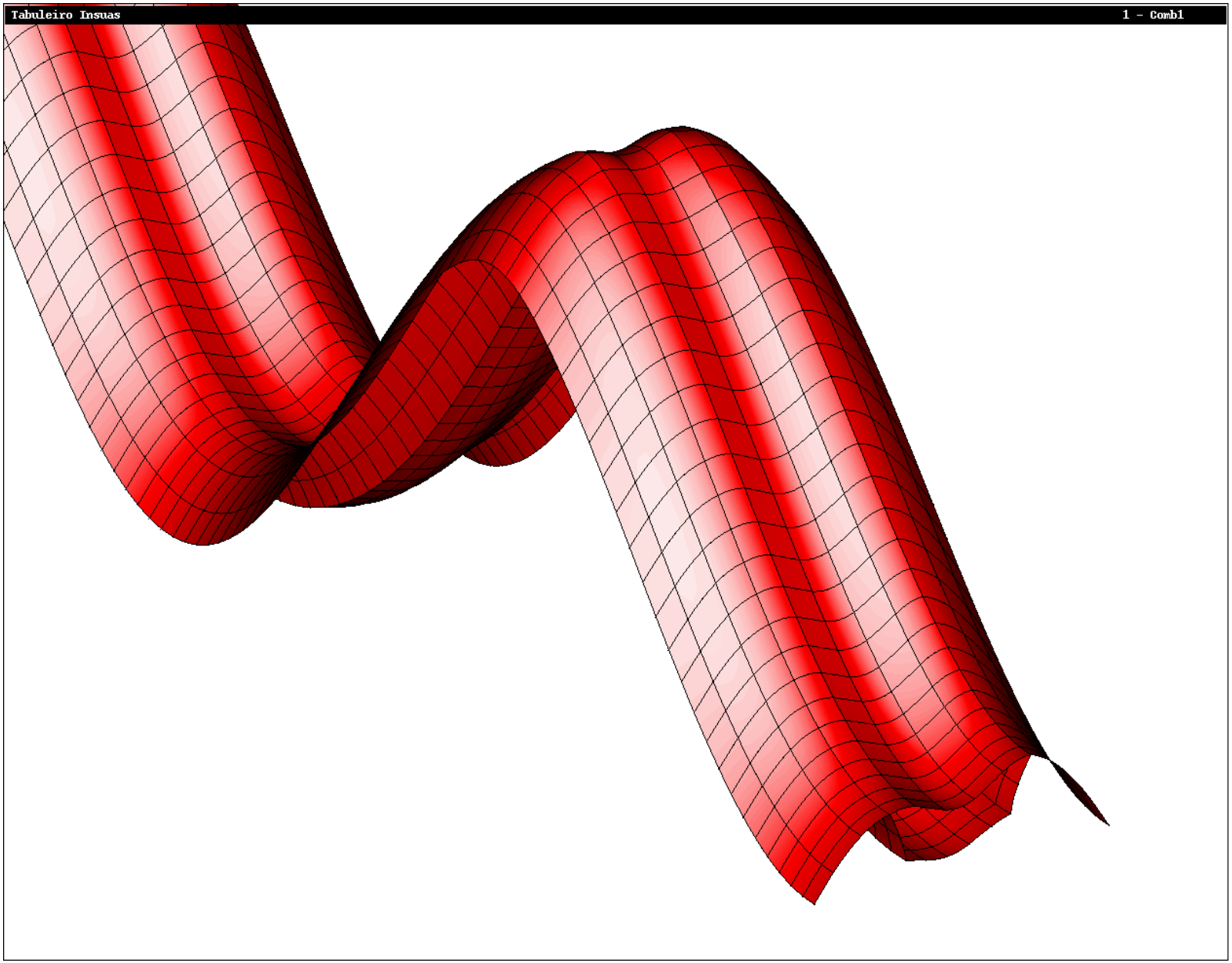
DESLOCAMENTOS SEGUNDO Z

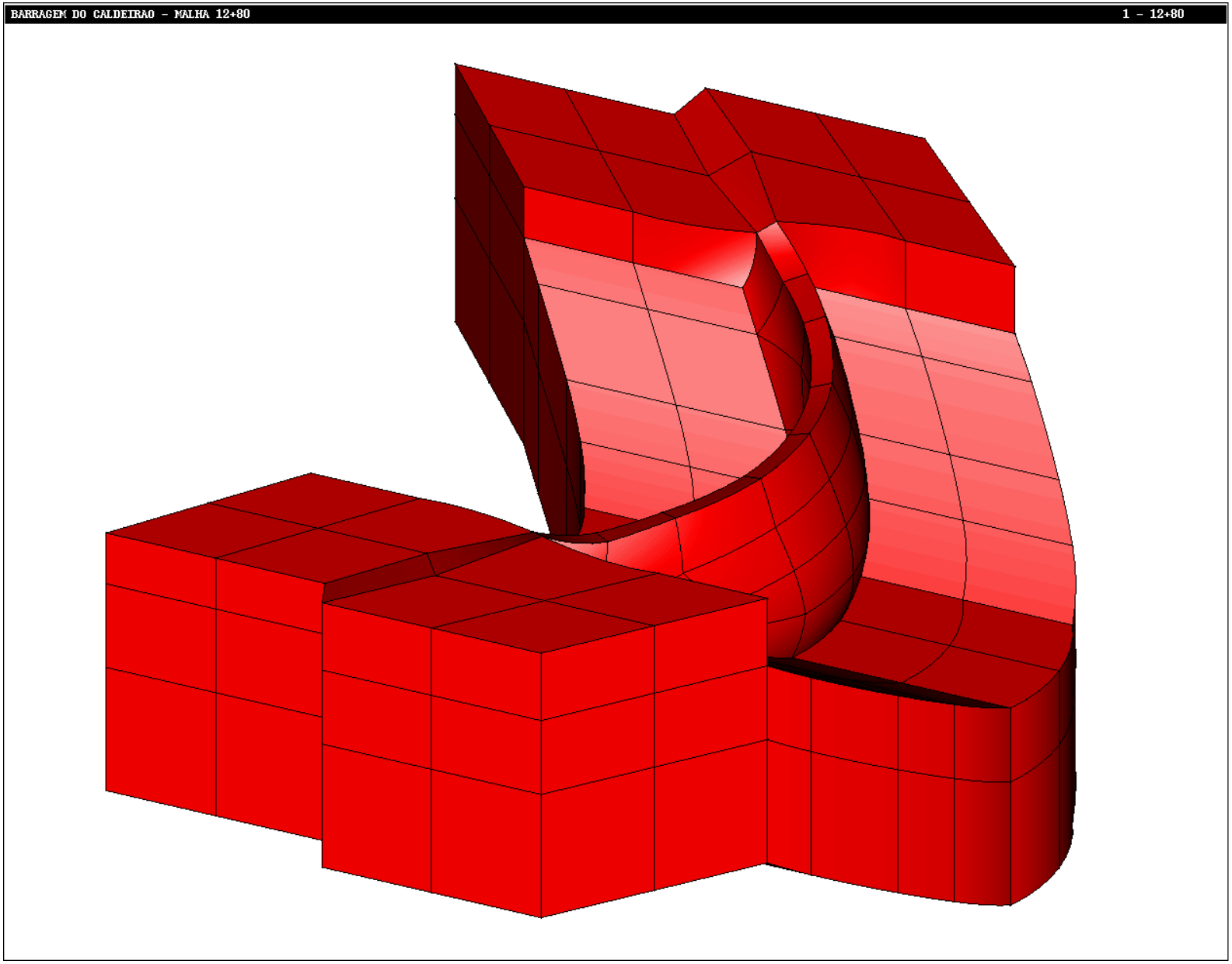


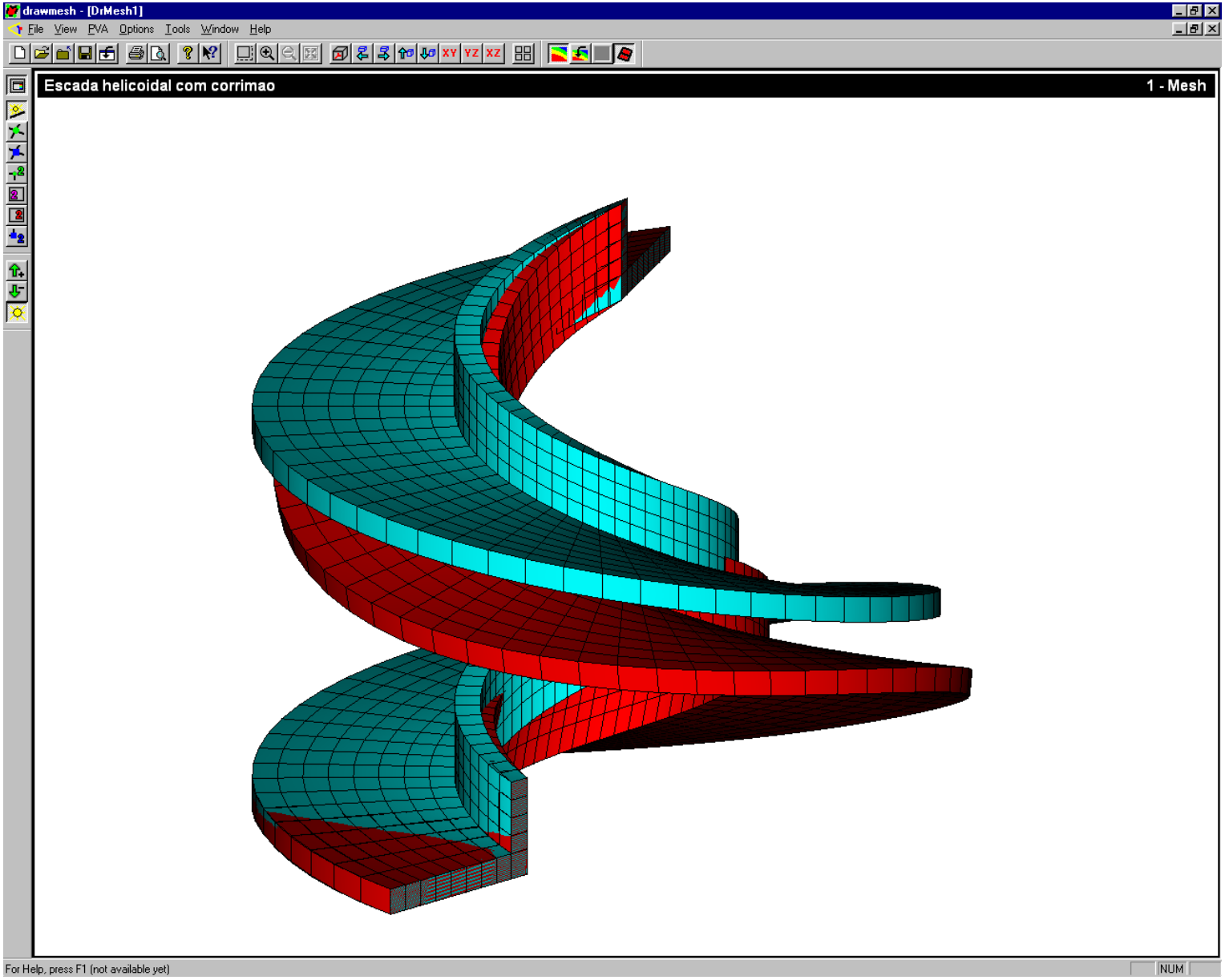
PRESSÕES NO SOLO

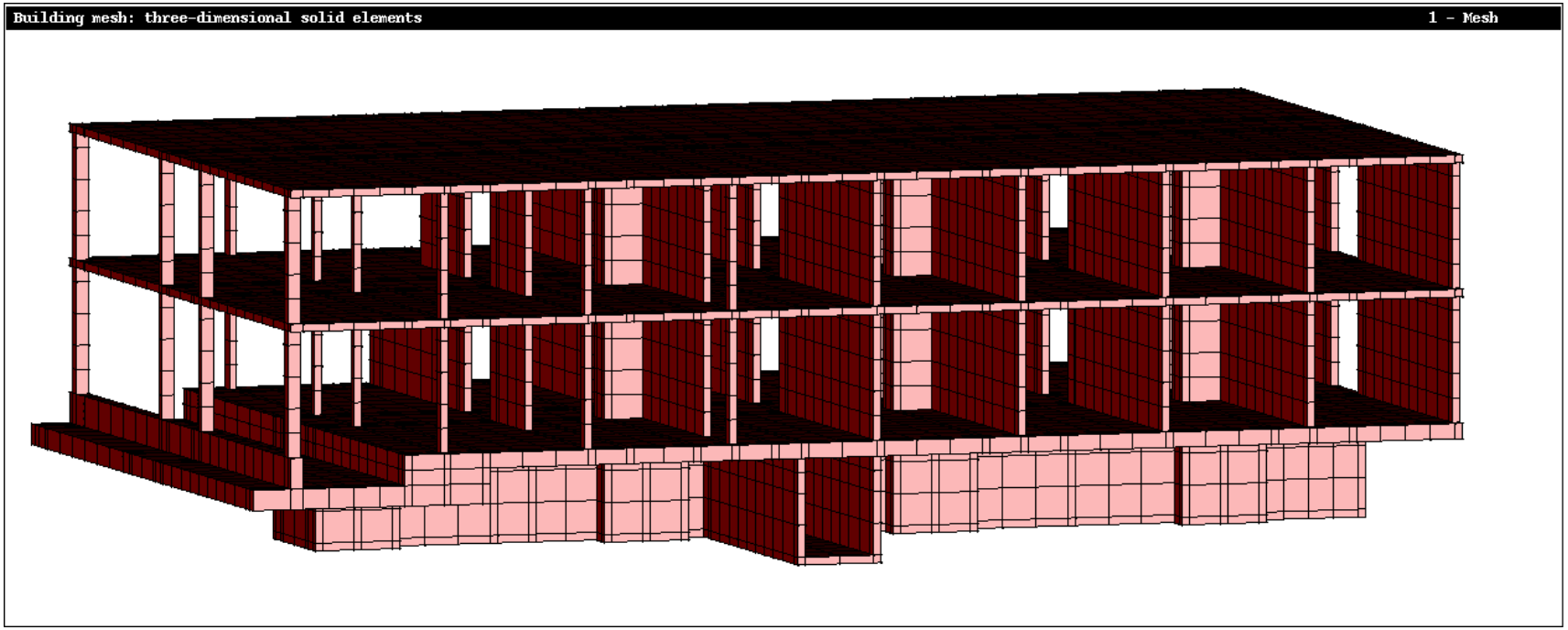


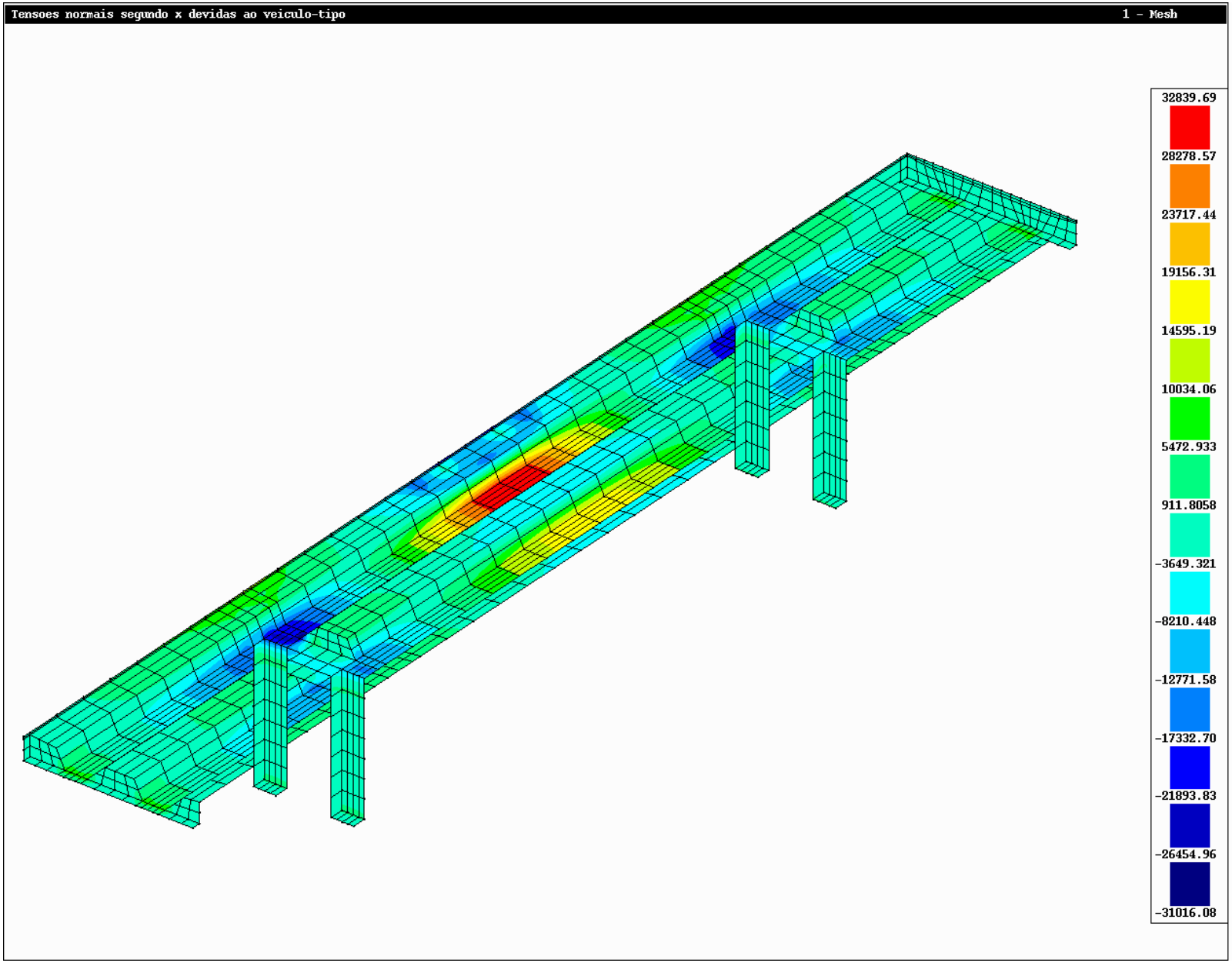

box8 - Torcao de um tabuleiro em viga caixao (kN,m)
1 - Comb1

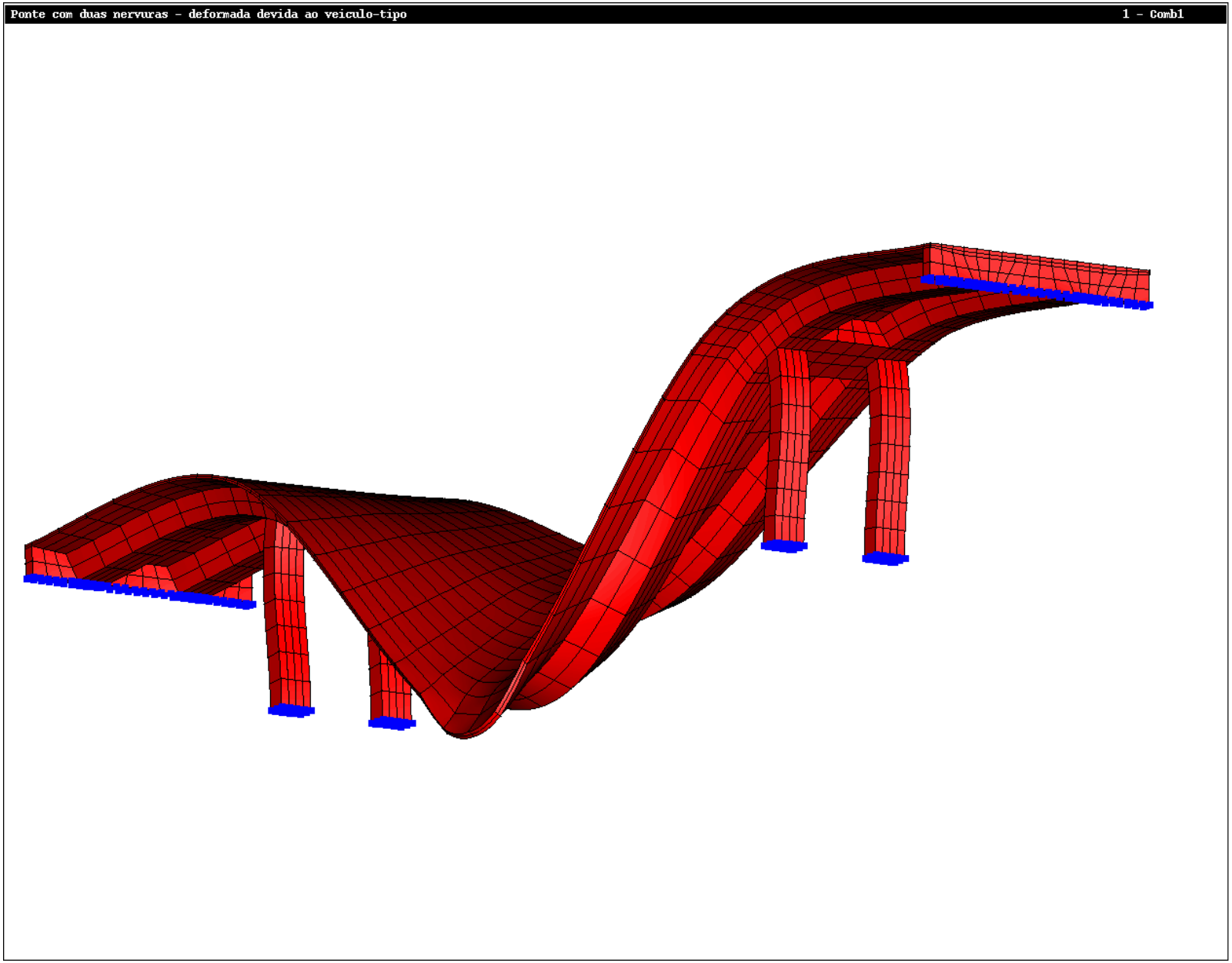

Tabuleiro Insuas
1 - Comb1

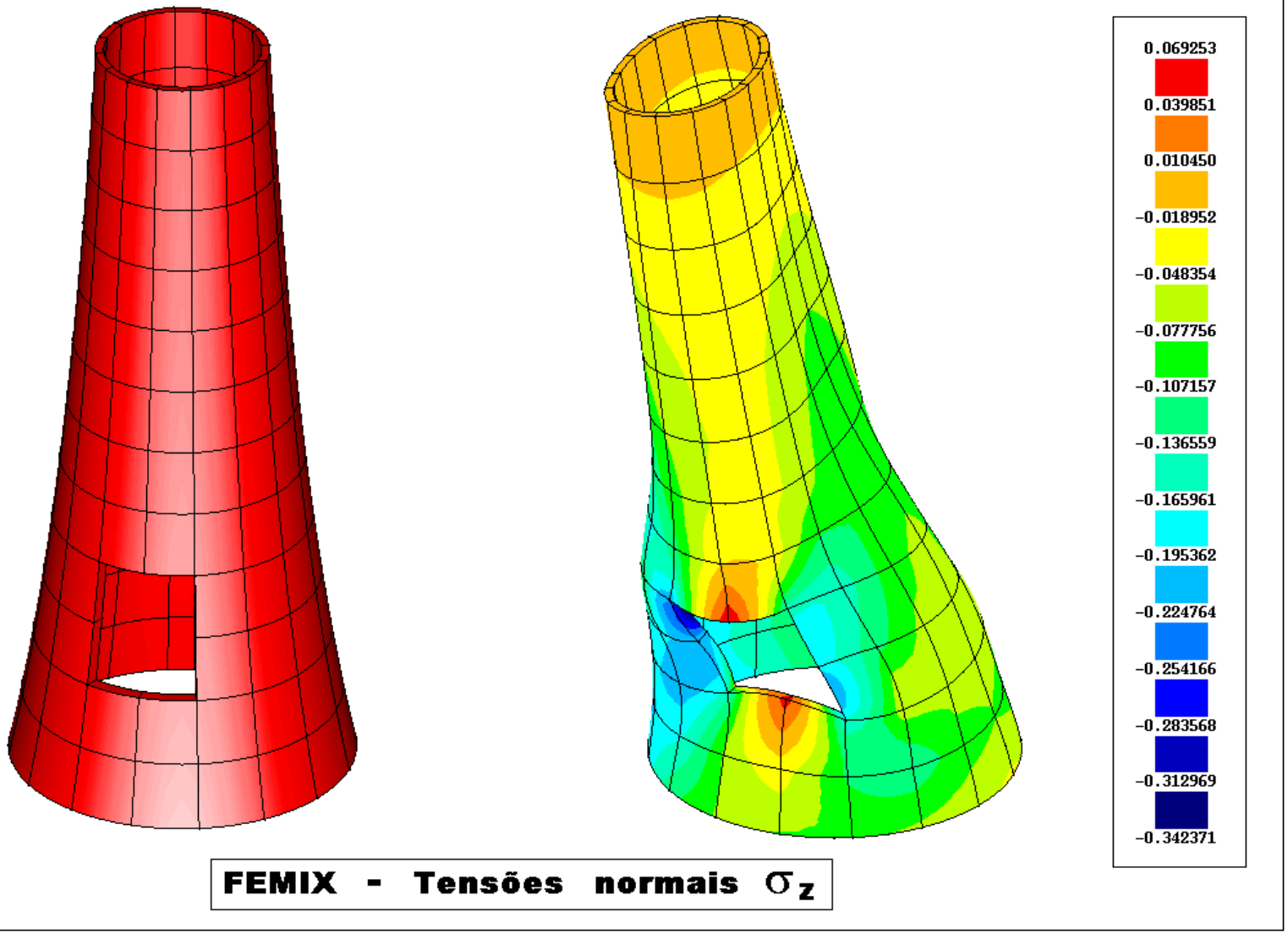

BARRAGEM DO CALDEIRAO - MALHA 12+80
1 - 12+80


drawmesh - [DrMesh1]
File View PVA Options Tools Window Help
XY YZ XZ
Escada helicoidal com corrimao
1 - Mesh
For Help, press F1 (not available yet)
NUM


Building mesh: three-dimensional solid elements
1 - Mesh


Tensoes normais segundo x devidas ao veiculo-tipo
1 - Mesh
32839.69
28278.57
23717.44
19156.31
14595.19
10034.06
5472.933
911.8058
-3649.321
-8210.448
-12771.58
-17332.70
-21893.83
-26454.96
-31016.08


Ponte com duas nervuras - deformada devida ao veiculo-tipo
1 - Comb1


0.069253
0.039851
0.010450
-0.018952
-0.048354
-0.077756
-0.107157
-0.136559
-0.165961
-0.195362
-0.224764
-0.254166
-0.283568
-0.312969
-0.342371
FEMIX - Tensões normais σz