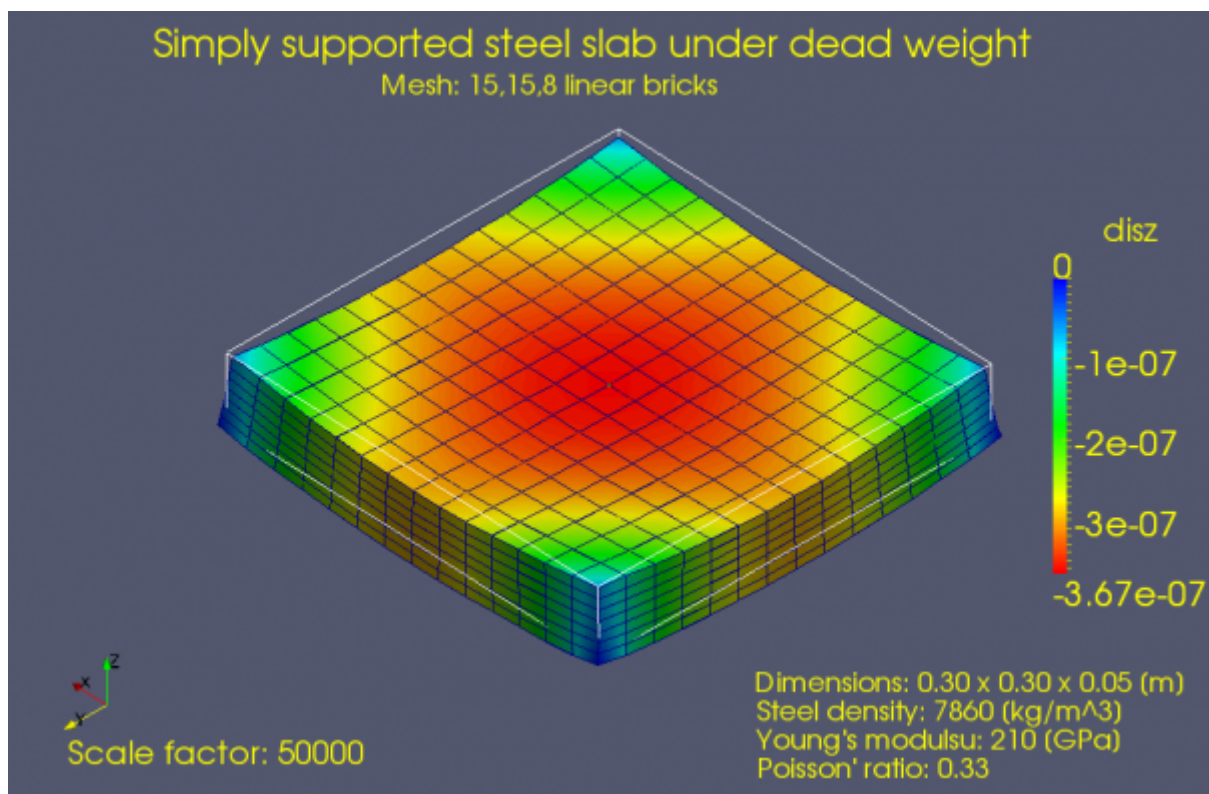Back

Gallery: Steel slab under dead weight

The image was created in ParaView from this data file: tn100_000.vtk [1.4MB]

The simulations was done in Tochnog with this input file (also shown below)slab_gravity.dat

ParaView visualisation

Tochnog input file

<sxh> echo -yes number_of_space_dimensions 3 materi_velocity materi_displacement
materi_strain_total materi_stress number_of_integration_points 8 end_initia

geometry_point 20 0.000 0.000 0.0 0.00001 geometry_point 21 -0.150 -0.150 0.0 0.00001
geometry_point 22 0.150 -0.150 0.0 0.00001 geometry_point 23 0.150 0.150 0.0 0.00001
geometry_point 24 -0.150 0.150 0.0 0.00001

control_mesh_macro 30 -brick 0 15 15 8 control_mesh_macro_parameters 30 0.0 0.0 0.025 0.300
0.300 0.050

group_type 0 -materi group_materi_elasti_young 0 210e9 group_materi_elasti_poisson 0 0.33333
group_materi_density 0 7860 group_materi_memory 0 -total_linear

bounda_unknown 40 -geometry_point 20 -velx -vely bounda_time 40 0.0 bounda_unknown 41 -

geometry_point 21 -velz bounda_time 41 0.0 bounda_unknown 42 -geometry_point 22 -velz bounda_time 42 0.0 bounda_unknown 43 -geometry_point 23 -velz bounda_time 43 0.0 bounda_unknown 44 -geometry_point 24 -velz bounda_time 44 0.0

force_gravity 0 0 -9.81

control_print_vtk 100 -yes

control_timestep 100 1.e-1 1.e-1

end_data </sxh>