

This is a kilometer scale (unit_length 125.0 m¹), very high resolution (very_high_res 1) simulation of a normal fault (displacement_sign -1.0) of 60 degrees dip (faultdipdegrees 60.0). The total fault displacement is 580 m. All the layers are frictional cohesive, but there is mechanical stratigraphy (layered_friction 1), with six layers (mechstratlayers 6) having no friction (friction_layers 0.0). These “weak” intervals are from layers 4-7, 11-14, 18-21, 25-28, 32-35, and 39-42 (layer#start and layer#end).

The figure below shows the last increment colored by total maximum shear strain. Notice that the upper limit of the scale bar is low (0.1), to highlight layer-parallel deformation.

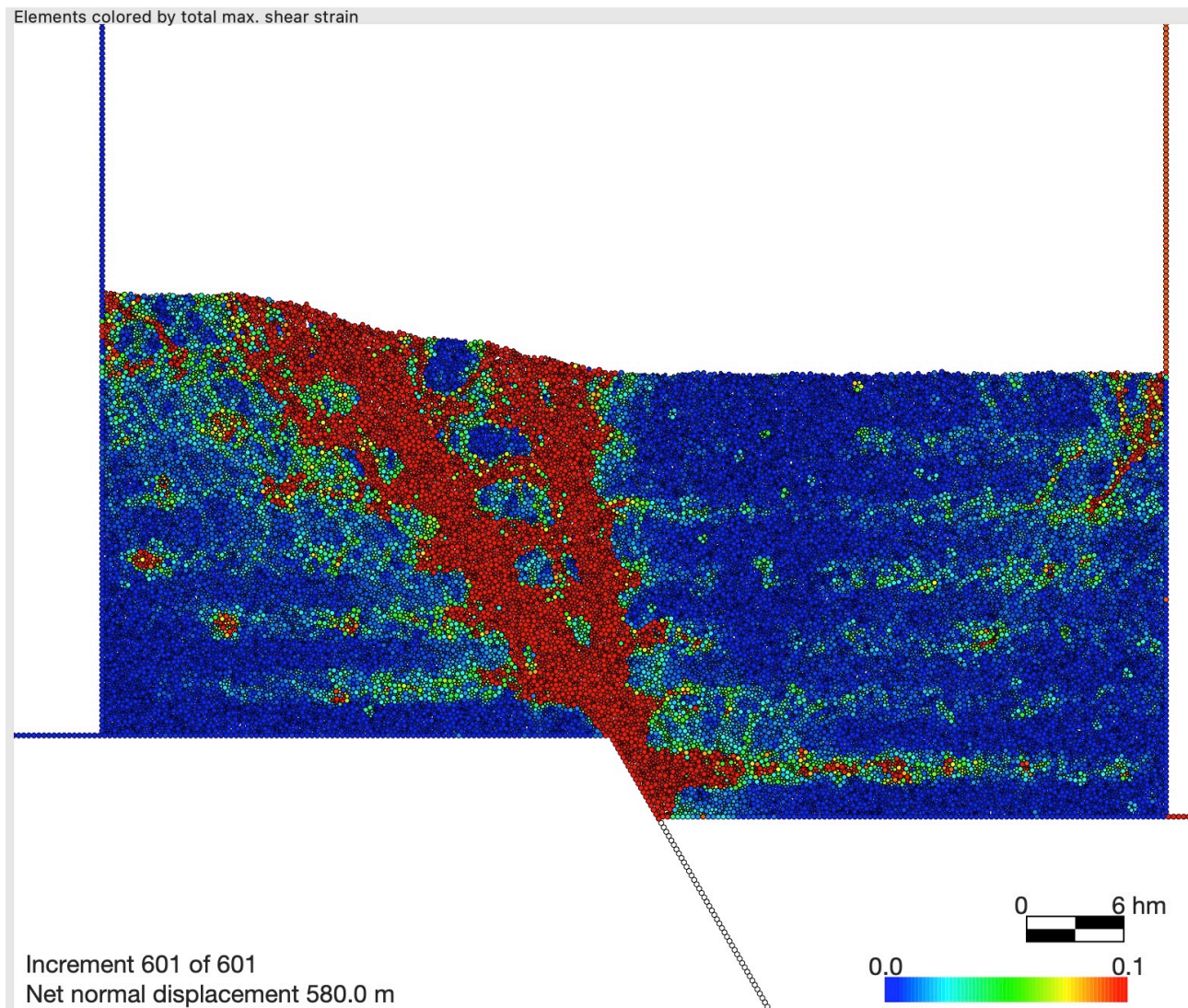


Figure 1. Last increment of mechstratigraphy simulation as displayed in cdem. Total maximum shear strain highlights the layer-parallel deformation, though the strain along layers is smaller than in the fault zones.

¹ Parameters mentioned here are those of the runtime.txt file.