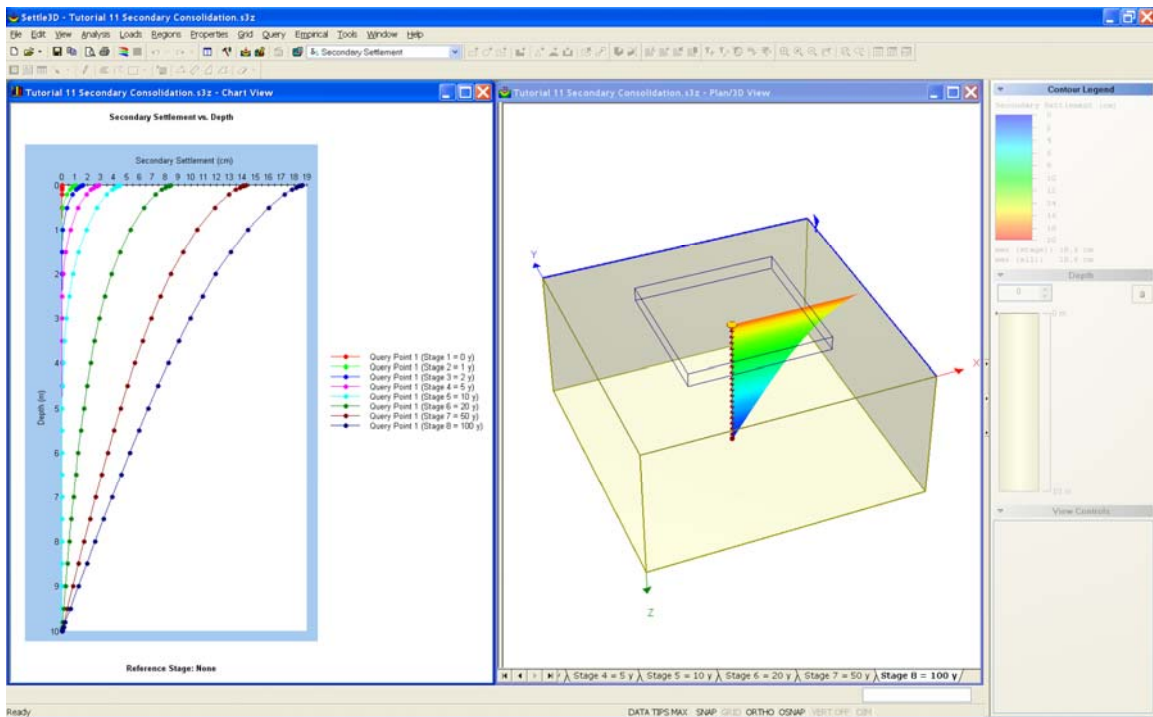


Developer's Tip: Secondary Consolidation

What is the effect of changing load magnitude on secondary consolidation?

When a load is applied to a low permeability soil (clay), you will see a period of primary consolidation as excess pore pressures dissipate. With many types of soil, you may see continuing settlement even after all excess pore pressures have dissipated. This is generally known as secondary settlement, secondary consolidation or creep.

To assist users with the modeling of secondary consolidation, a new *Settle^{3D}* tutorial has been prepared, [click here](#) to view. The tutorial discusses the effect of changing load magnitude on secondary consolidation, and different methods of analysis.



Secondary consolidation versus depth at different times

The image shows the 'Soil Properties' dialog box. The 'Secondary Consolidation' section is highlighted with a red box. The 'Method' is set to 'Standard'. The input fields for C_a and C_{ar} are 0.03 and 0.01, respectively. Other parameters include C_c (0.3), C_r (0.1), e_0 (1.1), C_v (5 m²/y), C_{vr} (5 m²/y), K (0.01 m/y), K_r (0.01 m/y), and $B\text{-bar}$ (1). The 'Primary Consolidation' section is also visible, with 'Material Type' set to 'Non-Linear' and C_c (0.3), C_r (0.1), e_0 (1.1), P_c (100 kPa), OCR (1), and OCM (0 kPa).

Secondary consolidation input parameters in Soil Properties dialog